NORTHERN PACIFIC RAILWAY COMPANY

TACOMA DIVISION

Special Instructions No. 3

In Effect at 12:01 A. M. Pacific or 120th Meridian Time

Saturday, April 1, 1939

These instructions govern Current Time Table. Read carefully and be positive that you have the Current Time Table, also copy of Current Special Instructions.

W. C. SLOAN,
General Manager.

T. F. LOWRY,
Assistant General Manager.

R. T. TAYLOR,
Superintendent.

P. H. McCAULEY,
General Superintendent of Transportation.

SPECIAL INSTRUCTIONS

FIRST SUBDIVISION.

(MAIN LINE)

1. **Between Auburn and East Auburn:** Automatic signal indications governing the use of main tracks between Auburn and East Auburn supercede the superiority of trains. All trains, yard engines, and light engines, moving between these points, including movements to and from Auburn Yard, will be made subject to signal indications. Freight trains, yard engines and light engines moving within these limits must avoid delay to first-class trains and passenger extras.
   Eastward second subdivision trains will be governed by the top light of signal 213: Eastward trains from second to first subdivision will be governed by lower light of signal 213. Westward trains from first subdivision, entering second subdivision westward main track, will be governed by top light of signal 1029. Westward trains from first subdivision moving through crossover to second subdivision eastward main track will be governed by lower light of signal 1029. All switches connected with these movements must be properly lined before signal will indicate "proceed".
   Eastward trains moving from Auburn Yard on outbound track to first subdivision main track, will be governed by dwarf signal near junction switch. Trains using this track, enter the track circuit approximately 500 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. This knife switch must be returned to closed position after being used.
   Eastward trains, moving from Auburn Yard on inbound track to first subdivision main track, will be governed by dwarf signal near junction switch. Trains or engines will stop at this signal and, before lining main track switch, a member of crew must observe switch indicator, which will show "proceed" if main track is unoccupied between Auburn and East Auburn. If switch indicator shows "proceed", main track switch may be opened and signal will show "proceed" if route is clear.
   At Auburn, westward trains or engines on second subdivision westward main track, awaiting arrival or departure of trains to or from first subdivision, must remain east of stop signal, located on westward main track about 500 feet east of first subdivision junction switch.
   Electric switch locks are located at junction switch leading to first subdivision and at both ends of crossover east of Auburn passenger station.
   Trains or engines will not pass signal 1029 in "stop" position except under protection of flag against first-class trains.
   Eastward second subdivision trains or engines, using crossover to first subdivision, will not pass signal 213 if lower light indicates "stop" except under protection of flag against first-class trains. If signals indicate "proceed", movements may be made without flag protection.

2. **At East Auburn** No. 1 transfer track will be used by passenger trains having transfer to make with connecting trains. No. 2 transfer track will be used by passenger trains handling connection to and from Tacoma.
   The time of first-class trains and passenger extras applies at passenger station.
   Eastward trains holding main track meeting westward trains, will stop west of overlap sign opposite Signal 1025 and remain there until westward train has passed Signal 1013.
   Enginemen on passenger trains will keep brakes applied while switching is being done.
   When necessary for a westward passenger train to use transfer track at East Auburn and a member of the crew of the Tacoma connection is available, crossover switches leading from the main track to transfer track may be set for crossover movement as follows: When the westward train has passed the switch at the east end of the siding the inside switch of the crossover may be set for the crossover but switch at main track end of crossover must not be set for crossover movement until the engineman of the westward train has called for the switch by sounding four short blasts of engine whistle and the train is seen to be approaching at restricted speed. Westward passenger trains will approach this crossover prepared to stop and proceed only on signal from trainman at crossover or when crossover switches can be plainly seen to be set for crossover movement.

3. **At Palmer Junction**—Westward trains holding main track, meeting eastward trains, will stop east of the overlap sign about 1,000 feet east of Junction switch.

4. **Between Headworks and Humphrey** all toilets in trains must be kept locked and employees are cautioned against throwing off refuse or articles which might become unsanitary.

5. **At Humphrey**—No. 1 Track will be used as westward siding and No. 2 track as eastward siding.

6. **At Nagrom**—Spur track serviceable for distance of only one hundred feet beyond the derail.

7. **At Lester**—No. 1 Track will be used as Westward Siding, No. 2 Track as Eastward Siding.

8. **At Old Stampede,** located between Tunnel 3 and Tunnel 4, between Martin and Stampede, east spur serviceable for 100 feet only.

9. **At Martin**—Westward passenger trains must not enter Tunnel No. 3 until tunnel has been cleared of smoke.

10. **At Easton**—Normal position of switch leading from East end of West No. 2 Track to Eastward Main Track is for No. 2 Track.

11. **At Cle Elum**—Electric coal bunker, on west extension, will not clear man on side of car or engine.
    Logs will not be handled on this track.
    Track 6 will be used as Eastward Siding, Track 7 as Westward Siding.
    Switch on west leg of wye leading to coal dock track must be left lined for coal dock track.

12. **At Dudley**—No. 1 Track will be used as westward siding and No. 2 Track as eastward siding.

13. **At Ellensburg**—All train movements over Fifth Street Crossing, on Auxiliary Tracks, must be preceded by trainmen. When passenger trains meet at Ellensburg, inferior trains will take siding on City Track, unless otherwise instructed. 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 leading from West No. 1 and East No. 1 tracks is for those tracks and must be left in normal position.

14. **At Yakima**—Freight Trains arriving Yakima Freight Yard will be secured by setting not less than six (6) hand club brakes on head end of eastward, and on rear end of westward trains.
    Time of first class trains and passenger extras applies at passenger station.
    Passenger trains taking siding will use high-line pocket unless otherwise instructed.
    The switch to the 1500-foot spur track used as a switching lead at east end of yard must be left lined for spur to serve as a derail for all yard tracks.
    To avoid blocking street crossings, westward trains with more than 65 cars will not leave the east yard, when meeting trains, until the eastward train arrives.
    Flagman must precede cars shoved or engines backing over Yakima Avenue crossing in addition to gate protection.

15. **Logs**—Westward trains handling logs between Lester and Auburn, will stop at Eagle Gorge for inspection of logs.
    Logs, woodbolts, or veneer blocks, loaded on flat cars, will not be handled through Stampede Tunnel, between Martin and Stampede.

16. **Automatic signals between Lester and Easton**—Attention is particularly directed to signals with two arms, used where traffic is moved in the same direction on parallel tracks.
    The signals governing eastward track between Lester and Stampede govern eastward trains only.
    The signals governing the westward track between Stampede and Lester govern trains in either direction.
    Eastward trains using westward track will be governed by Stop-signal 1400 feet east of Lester.
    When train crosses over from westward to eastward track at Kennedy the lower arm of signal at cross-over governs movement.

When both cross-over switches are open this signal will show clear or caution indication if block is not occupied.
The signals governing eastward track between Martin and Easton are operative for trains in either direction.
Westward trains using eastward track will be governed by Stop-signal 600 feet west of Easton.
When train crosses over at cross-over east of Tunnel No. 2 the lower arm on signal at east end of cross-over will govern the movement and when both cross-over switches are open the signal will show clear or caution indication if block is not occupied.
The signals governing westward track between Easton and cross-over at Tunnel No. 2 cut govern westward trains only.
The signals governing westward track between Tunnel No. 2 cut and Martin govern trains in either direction.
Eastward trains using westward track will be governed by Stop-signal at east switch at Martin and if instructed to cross over to eastward track at cross-over east of Tunnel No. 2 will be governed by lower arm on signal at west end of cross-over, and when both cross-over switches are open this signal will show clear or caution indication if block is not occupied.
Eastward trains using the westward track through to Easton must have train order authority to pass stop signal east of Tunnel No. 2.

17. **Staff system between Stampede and Martin**—No train, engine or self-propelled car will run in either direction until engineman receives from operator a staff which must be retained and delivered to the operator at the opposite end of the block.
The possession of a staff makes the train superior to all other trains between Stampede and Martin.
The eastward train order signal at Stampede, and westward train order signal at Martin, are interlocked with staff machines in the telegraph office at Stampede and Martin, and except when used must be set normally at stop and cannot be cleared until the operator at opposite end of block returns staff to machine, which must not be done until rear of train has passed 300 feet beyond the signal. After signal has been cleared for a train entering the tunnel it must be restored to stop immediately after the rear of the train has passed the signal. To use the switches in Old Stampede yard, the staff must be used to unlock switch levers, and levers will have to be returned to normal position before staff can be removed. These tracks cannot be used for trains or engines getting into clear as the staff which is used for unlocking the switches must be returned to machine at Stampede or Martin. Pusher staff will not unlock switches.
When a helper engine is used behind caboose or on rear of passenger train, operators at Stampede will be prepared to deliver pusher staff to engineman.
When engine is cut off at Old Stampede, the pusher staff will be his authority to return to Stampede. The pusher staff cannot be put into the machine at Martin but must be returned to the machine at Stampede.
In tunnel section between double track switch at Martin and double track switch at Stampede, rear end protection is not required. Headlight will be used both day and night.

18. **Mountain Grade Operation**—
Mountain grade between Easton and Lester.

(a) Engines pushing freight trains between Lester and Easton may be cut off while moving providing the caboose is equipped with vented angle cock and has an operating rod for use by trainmen in closing angle cocks and uncoupling air hose between caboose and helper engine, handled at rear of caboose, on freight train. In using this rod to close angle cocks, the angle cock on the helper engine must be closed before closing angle cock on the caboose, to prevent possible application of brakes on helper engine due to air vent in angle cock on caboose. If caboose is not equipped with these special devices, the train will stop at Martin or Old Stampede to permit trainmen to close angle cocks and uncouple air hose.
Under no conditions will more than one helper engine be placed behind caboose.
When passenger train is furnished two (2) helper engines over Cascade Mountain, the lighter engine must be placed on rear of train.
The following will govern the placing of Helpers in freight train service out of Lester and Easton:
EASTWARD OUT OF LESTER—When trains, except as otherwise provided, require one helper it will be placed ahead of caboose, or ahead of cars of insufficient strength to withstand the push of Helper Engine.

When trains require two Helpers, one will be cut in ahead of caboose and one behind caboose, except when cars on rear of train of insufficient strength to withstand the push of Helper Engine, the rear helper will be cut in just ahead of cars of insufficient strength and the other helper will be cut in not less than fifteen (15) cars ahead of rear helper.

When trains, handled with Class Z-3 or heavier power, consist of 2000 tons or less, the Helper Engine may be placed behind caboose but ahead of cars (if any in train) of insufficient strength to withstand the push of helper engine.

WESTWARD OUT OF EASTON—Same rules will apply to Westward trains out of Easton as to Eastward trains out of Lester, except that on one-helper trains, regardless of tonnage, the helper may be placed behind the caboose, but ahead of cars (if any in train) of insufficient strength to withstand the push of helper.

When necessary to handle more than one caboose on rear of train, either deadhead or occupied, over the Mountain, in either direction, in trains requiring one Helper Engine, all Cabooses will be placed behind the Helper. When two Helpers are required one Helper will be cut in ahead of all Cabooses and the other Helper will be cut in not less than fifteen (15) cars ahead of the Rear Helper. In either case where there are cars in train of insufficient strength to withstand the push of Helper Engine, the Helper Engines must be cut in ahead of such cars.

The following will govern the detaching of helper engines behind caboose on freight trains at Martin and Stampede:

WESTWARD FREIGHT TRAINS—When approaching Telegraph Office at Martin, and train is slowed up to ascertain position of train order signal, the air hose between Caboose and Helper Engine will be separated after turning angle cocks, but coupler pin will not be lifted until rear of train has reached a point approximately five hundred (500) feet East from the double track switch. Conductor will personally see that coupling pin is lifted on caboose and signal given to Engineman of Helper Engine, who will then ease off so as to allow slack to run out gently before getting away from caboose.

EASTWARD FREIGHT TRAINS—The angle cocks will be turned and air hose separated between Helper Engine and Caboose when passing the West Switch at Old Stampede but coupling pin will not be lifted until rear of train has passed Section House. Conductor will personally see that coupling pin is lifted on caboose and that signal is given to Engineman of Helper Engine, who will then ease off so as to allow slack to run out gently before getting away from Caboose.

Following will govern when helpers are used in passenger trains between Easton and Lester:

WESTWARD PASSENGER TRAINS—When one helper is required on Train No. 5, it will be placed on head end of train and will be cut out at Stampede or Lester. On other westward passenger trains, when one helper is required and is being run thru to Lester, it will be placed on head end of train; otherwise, helper will be placed on rear of train and will be cut out at Stampede. If two helpers are required, on westward passenger trains, the rear helper will continue through on rear of train to Stampede where it will be cut off.

EASTWARD PASSENGER TRAINS—When one helper is required on Train No. 4, it will be placed on head end of train and will be cut out at Martin or Easton. On other eastward passenger trains, when one helper is required and is being run thru to Easton, it will be placed on head end of train; otherwise, helper will be placed on rear of train and will be cut out at Martin. If two helpers are required on eastward passenger trains, the rear helper will continue through on rear of train to Martin where it will be cut off.

In cutting out Helpers at Martin and Stampede N. P. Air Brake Rule 1074, and Air Brake Rules 11 to 11-M, page 58 of Air Brake Instruction Book No. 1, must be complied with.

(b) At Martin when block is not clear for eastward trains operator will head them in on eastward siding.

Operators at Martin and Stampede are responsible for the position of the double track switches, and the siding switches adjacent to the Telegraph Office in connection with through train movements only.

(c) Sidings between Tunnel No. 3 and westward switches of sidings west of Tunnel No. 4 will be considered in Stampede station limits. The sidings between Tunnels Nos. 3 and 4 must not be used for meeting or passing trains.

(d) Normal position of double track switches at Easton and Stampede will be for westward trains and at Martin and Lester for eastward trains.

(e) Eastward Freight Trains will stop at Lester for terminal air test and turning up retaining valves, and at Easton for inspection and to cool wheels.

(f) Westward Freight Trains will stop at Easton for terminal air test and turning up retaining valves, and at Lester for inspection and to cool wheels.

(g) In order to facilitate the terminal test of air brakes on freight trains at Lester and Easton, as required by N. P. Air Brake Rule No. 1063, engineman who is handling the air brakes will before the engine is detached to take coal, water, or do station work, make a straight twenty pound reduction from maximum brake pipe pressure with the automatic brake valve. As soon as the brake valve has stopped exhausting engineman will give one blast of the whistle. Trainmen will not close angle cock to detach engine until this signal is given. Immediately after the brakes have been applied a car to car inspection of the brakes will be made. Defect card, Form 684, properly filled out, must be attached to any car on which the air brake has failed to apply. This inspection must be completed within fifteen (15) minutes after the brake application. The air must not be coupled into the train from the helper or road engine until the enginemen have been informed that the inspection has been completed. If, for any reason, the road engine is not detached, the brakes must be applied and the test made as outlined above. Conductors and engineman must fill out air test card before leaving Easton or Lester.

(i) Through Tunnel No. 3—On approaching either Martin, westward, or Stampede, eastward, engineman will increase train line pressure to 90 pounds. Before entering Tunnel No. 3, conductor must know by caboose gauge that this has been done and, if sufficient pressure is not recorded, must take immediate action to stop the train.

(j) When stop is made at Easton, eastward, or Lester, westward, train line pressure will be restored to 70 pounds. Conductor must know by caboose gauge that this has been done, before proceeding.

(k) If for any reason the train breaks in two or more parts while in Tunnel No. 3, train and engineman 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 smoke and gas have 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.

(m) Descending trains will carry 90 pounds train pipe pressure to Lester and to Easton. Following any stops during the descent the engineman must fully recharge the brakes before starting and the conductor must not give the "Proceed" signal until at least 80 pounds is shown by the caboose gauge.

(n) If enginemen handling eastward freight trains find that fan at mouth of Tunnel No. 3, Stampede, is in operation when passing vents, train must be stopped at once and engineer in charge of plant notified to stop the fans.

(o) Conductors in charge of freight trains will wire operators at Martin or Stampede, as the case may be, when they have stockmen or messengers or any one legitimately carried on train in excess of regular train crew so that operators can hand up sufficient number of respirators.

Gas Masks and Pulmotors are maintained at telegraph offices at Martin and Stampede.

(p) Speed of trains through Stampede Tunnel No. 3 must not exceed thirty (30) MPH and must be so controlled that they can be stopped on emerging.

Freight trains must not exceed twenty (20) MPH in either direction, on either track, between Martin and Hubner or between Stampede Tunnel No. 3 and Lester.
Passenger trains must not exceed thirty (30) MPH in either direction on eastward track between Martin and Hubner or on westward track between Stampede Tunnel No. 3 and Lester.
Passenger trains must not exceed twenty-five (25) MPH in either direction on eastward track between Lester and Stampede Tunnel No. 3 or on westward track between Hubner and Martin.

19. **Ventilating Plant at Tunnel No. 3** will be operated at follows:
Westward trains: Both fans will be operated for twelve minutes after rear end of train passes ventilating plant.
Eastward trains: Both fans will be started five minutes after eastward passenger trains or helpers pass ventilating plant and operated for twelve minutes.

Both fans will be started seven minutes after rear end of eastward freight trains pass ventilating plant and operated for twelve minutes.

EMERGENCY INSTRUCTIONS: If westward train does not pass ventilating plant within ten minutes after train is reported by Martin, ventilating plant engineer will operate both fans for twelve minutes, then operate one fan until train clears either at Stampede or Martin.

In case of work train working in Tunnel No. 3, engineer of plant will follow instructions of man in charge of train. If twelve minute blow is not finished when another train is reported in tunnel from Stampede or Martin, ventilating plant engineer will stop fans at once.

In case of a very strong east wind, ventilating plant engineer may have to let wind clear tunnel, or blow two or three minutes extra.

20. **Helper District**—Between Easton and Lester.

21. **Pusher District**—Between Auburn and Lester.

22. **Yard Limits**—Track between Yard Limit Signs East of Palmer Junction and West of Kanaskat will be operated as one yard.

23. **Bridge and Engine Restrictions**—Engine classes A-2, A-3, Z-5 and Z-6, not permitted.
Single-header engine Classes Z-3 and Z-4, and double-header Classes A, A-1, W-3, and W-5, and Class A or A-1 coupled with Q-5 or Q-6, twenty (20) MPH; double header Class Z-3, ten (10) MPH; Class Z-3 or Z-4 coupled with A, A-1, W-3, or W-5, ten (10) MPH, over Bridge 10, Yakima River, between Thorp and Dudley, and over Bridge 30, Yakima River, between Baker and Nelson.

Engine Class Z-3, double-headed, or Class Z-3, coupled with Class A, A-1, W-3, or W-5, twenty (20) MPH, and engine Class Z-4, twenty (20) MPH, over

Bridge 96, Yakima River, between Selah and Pomona,
Bridge 6-1, Yakima River, between Shoskin and Thorp,
Bridge 28, Cle Elum River, between Cle Elum and Baker,
Bridges 74 and 75, Green River, between Eagle Gorge and Lemolo,
Bridges 78, 78-1 and 79, Green River, between Lemolo and Palmer Jct.,
Bridge 81, Green River, between Palmer Jct. and Kanaskat,
Bridge 100, Green River, between Wynaco and East Auburn.

24. **Speed Restrictions**—On straight track, between Easton and Teanaway and between Dudley and Thrall, passenger trains, sixty-five (65) MPH.
All trains approach Ellensburg and Yakima Passenger Stations at restricted speed. All Eastward Trains approach Lester and all Westward Trains approach Easton at restricted speed expecting to find helper engines occupying the main track.

Cle Elum, twenty-five (25) MPH over important street crossings.

Yakima, ten (10) MPH within corporate limits.
See also Mountain Grade Operation and Bridge and Engine Restrictions.

25. **Register Stations**—

Yakima Passenger Station for first class trains and passenger extras.

Yakima yard office for second class and inferior trains except passenger extras.

Easton.

Lester.

Auburn Yard—For trains originating and terminating and through trains running via yard tracks.

26. **Register Exceptions**—At Lester and Easton, first class trains will register by Form 608. At Easton, Eastward through trains and at Lester, Westward through trains will be furnished check of register Form 602 issued by the operator.

27. **Clearance Exceptions**—At Easton and Lester, all trains must secure clearance.

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

28. **Commercial Spurs**—

	Miles from Yakima	Car Capacity
Crownover	12.5	22
Holmes	34.6	41
Haybow	39.1	11
Taneum	46.6	Conn.
Swauk	50.1	Conn.
Hubner	77.6	Conn.
Nagrom	101.8	1
Baldi	109.9	4
Headworks	115.8	5
Henrys	126.2	Conn.

29. **Lap Sidings**—Selah, Pomona, Thrall, Thorp, Teanaway, Maywood, Eagle Gorge, Covington.

30. **Cross-overs**—Easton, Tunnel 2 Cut, Kennedy, Lester.

SECOND SUBDIVISION.

1. **Card train order Form AB** will govern the movement of trains between Argo and Spokane Street Tower on Colorado Avenue Line and trains must not move in this territory unless conductor and engineman each hold a copy properly filled out.

Card train order Form AB will govern the movement of trains between Reservation and 15th St. Tower via Drawbridge Line and trains must not move in this territory unless conductor and engineman each hold a copy properly filled out, except that trains and engines may use the line between Reservation and UP crossing tower about one-half mile east without Form AB train order protecting against first class trains.

2. **At Seattle**—Trains and light engines entering King Street Station from the East must not pass the stand pipe at East end of yard without proceed signal from the switch tender given with green flag by day or green light by night.

Interlocking at South Portal of King Street Tunnel—Signals are the dwarf type to the right of track governed; where two arms are on one post, upper arm governs trains on main track and lower arm trains diverging from main track.

Trains or engines must not pass over Atlantic Street crossings, Colorado Avenue line, unless they receive signal from crossing flagman with green flag by day and green light by night. One motion of regular proceed signal is for the N. P., two for C. M. St. P. & P., three for the P. C. and four for the U. P.. When no crossing flagman is on duty trains and engines must flag across.

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

To or from Argo	2 long
From West Seattle	1 long, 1 short
To West Seattle Line	1 long, 2 short

3. **At Argo**—Following whistle signals to be used for interlocking routes:

Colorado Avenue Line: 1 long, 1 short, 1 long.

Shore Line: 2 short, 1 long.

Eastward to Westward Main Track through crossover: 4 short.

Eastward Main Track to Coal Spur: 4 short.

4. **At Black River Interlocking**—Trains entering the interlocking to back in on west leg of wye, or working interchange tracks, or making reverse movement between Black River station and interchange track, should notify towerman by phone, so that arrangements can be made to protect movement.

5. **At Auburn**—All trains will approach junction switch and cross-overs at east end of Passenger Station platform at restricted speed.

Westward trains or engines, on westward main track, awaiting arrival or departure of trains to or from first sub-division must remain east of stop signal located about 500 feet east of first subdivision junction switch.

Trains moving to or from first subdivision will be governed by instructions in paragraph 1, of first subdivision special instructions.

6. **At 15th St. Tower**—A single arm semaphore near junction of line leading to Tacoma Union Station and Drawbridge Line is controlled by Towerman and governs single track passenger line between 15th St. Tower and Union Station. No train from the Drawbridge Line or westward main track will enter Union Station when signal is at stop.

No train order signal maintained at 15th St. Tower.

7. **At Tacoma**—No train will proceed from Union Station to Drawbridge Line or westward main track when signal on incline is at stop. This signal is operated by Towerman at 15th St. Tower and is a color light type signal. The lower light governs movement from Union Station to Drawbridge Line. The upper light governs movement, Union Station to westward main track. Trains will call for signal by using push button when ready to leave Union Station.

8. **Yard limits**—Tracks between yard limit boards east of Argo and west of Fremont will be operated as one yard.
Tracks between yard limit boards west of Reservation and east of McCarver St., and South Tacoma will be operated as one yard.

9. **Bridge and Engine Restrictions**—Bridge 36.8, West Seattle line, twenty (20) MPH over bascule span.

Bridge 34, Clark's Creek, beween Puyallup and Reservation, engines N. P. Classes Z-5 and Z-6, and G. N. Classes Q-1, R-1, R-2 and Z-1, twenty (20) MPH.

Bridge 12.3, Tacoma Terminal, Dempsey Tide Flat line, eight (8) MPH; engine Classes G-1, G-2, T, Q and heavier, and wrecking Derricks 41, 42 and 43, not permitted.

Bridge 39, Tacoma Waterway, Drawbridge line, fifteen (15) MPH; engine N. P. Classes A-2, A-3, Z-5, and Z-6 and G. N. Classes Q-1, R-1, R-2 and Z-1 or heavier, not permitted.

Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, will not exceed a speed of ten (10) MPH over the following 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 engineman for quick stop. Engineman will be on lookout for such signal.

Bridge 29-1, Puyallup River, between Meeker and Sumner.

Bridge 24, Stuck River, between Dieringer and Auburn.

Bridge 17-1, White River, between Thomas and Kent.

Flat cars loaded with logs, wood bolts, or veneer blocks in trains not permitted over Birdge 39, Tacoma Waterway, Drawbridge Line, except as authorized in emergency.

10. **Speed Restrictions**—
Great Northern engines of 500, 700 and 1100 Series, twenty-five (25) MPH, engine Classes J-2 and O-5 fifty (50) MPH.

Trains handling logs thirty (30) MPH.

At Seattle—All trains and engines on westward main track run at restricted speed between cross over at West switch Diagonal Wye and King Street Station and all trains and engines on eastward track run at restricted speed between King Street Station and the east switch of Diagonal Wye. 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. In foggy or obscure weather all trains must stop and know before proceeding that there are no trains approaching on intersecting tracks.

Trains and engines, moving east from Second Avenue Yard, will stop at a point 300 feet west of Puzzle Track Switch, just west of Holgate St.

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 a slow 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 moving toward West Seattle, will come to a full stop short of northbound lane. Brakeman or switchman will walk ahead and protect movement over crossing.

Trains arriving King Street Station, Seattle, between 12:01 A. M., and 6:00 A. M., proceed at restricted speed and make certain there are no trains or other obstructions to interfere with their movement, account no switchtender on duty.

Spokane, Horton, Lander and Holgate Streets, fifteen (15) MPH.

King Street Station over switches eight (8) MPH.

Black River Interlocking, passenger trains sixty (60) and freight trains forty (40) MPH.

Auburn over streets within corporate limits twenty (20) MPH.

Kent, Sumner and Puyallup, over streets within corporate limits twenty-five (25) MPH.

Tacoma—Approach cross-over switches at East "D" Street and South 21st Street (on Head of Bay Line) at restricted speed and be governed by signal from switchtender, green flag by day, green light by night.

Between Reservation and U. P. Crossing Tower, on Drawbridge Line, all trains and engines at restricted speed. Trains or engines entering or leaving Union Station between 15th St. Tower and 21st Street ten (10) MPH.

15th St. Tower, while any portion of train passing over switches ten (10) MPH.

Between Tacoma and Reservation (via Head of Bay Line), thirty (30) MPH.

11. **Register Stations**—Seattle (South Portal Tower), Middle Yard. Auburn Yard Office, for trains originating or terminating and for through trains running via yard tracks.
Tacoma, Union Station for first class trains and passenger extras; Yard Office for freight trains.

12. **Register Exceptions**—At Tacoma Union Station, trains 402, 408, 458, and 562 register by Form 608.

13. **Clearance Exceptions**—At Seattle, trains from Middle Yard secure clearance at Spokane St. Tower; trains from Second Avenue Yard at South Portal Tower.
At Meeker, trains originating must secure authority from dispatcher through operator at Puyallup, before entering second subdivision main track. Clearance will be issued at Puyallup. Westward second class and inferior trains originating at Head of Bay Yard, Tacoma, will secure authority from the operator at Reservation, before leaving the Yard, and will get clearance at Reservation.
At Tacoma Union Station, trains 401, 407, 459 and 561 will not require clearance.

14. **Cross-overs**—Seattle, Middle Yard, Argo, Black River, C. M. St. P. & P. Crossing, Kent, Auburn, Sumner, Puyallup, Reservation.

THIRD SUBDIVISION.
(MAIN LINE)

1. **Nelson Bennett Tunnel**—Headlight must be used and Marker Lamps lighted by all trains passing through Tunnel between McCarver Street and Sixth Avenue.
Rock loaded on flat cars must not be handled through Nelson Bennett Tunnel unless secured on cars with side boards.
Logs, wood bolts, or veneer blocks, loaded on flat cars, must not be moved through Nelson Bennett Tunnel.

2. **At Nisqually**—Trains from Seventeenth Subdivision must not pass Signal 245 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. Switch leading to Seventeenth Subdivision and west switch of crossover are electrically locked.

3. **At Saint Clair**—Trains from the Sixteenth Subdivision must not pass Signal 284 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. Switch leading to Sixteenth Subdivision and east switch of crossover are electrically locked.

4. **At Tenino Junction**—Trains from the Fourth Subdivision must not pass Signal 435 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. Switch leading to Fourth Subdivision and west switch of crossover are electrically locked.

5. **At Chehalis Junction**—When the Home Signal will not clear for trains from the Twenty-first Subdivision they will be governed by Interlocking Rules, except that before proceeding on Hand Signals they must be sure there is no immediate movement evident on the C. M. St. P. & P. tracks. The junction and cross-over switches must be operated by hand.

   Trains crossing over from westward track to enter C. M. St. P. & P. will be governed by lower light of westward home signal.

   Switch leading to Twenty-first Subdivision and east switch of west crossover are electrically locked.

6. **At Napavine**—Trains using Newaukum Valley Railway tracks will do so under protection of flag. Cars must be left beyond derailing switch on Napavine Lumber Company's tracks.

7. **At Vader Junction**—Trains from L. P. & N. must not pass Stop Signal to enter Eastward track, Third Subdivision, if Signal indicates stop, except under flag protection; if signal indicates proceed, movement may be made without flag protection.

   Trains crossing over from Westward track to enter L. P. & N. track will be governed by lower arm on Signal 792. If Signal indicates stop, movement may be made under flag protection; if signal indicates proceed, movement may be made without flag protection.

   Switch from L. P. & N. to Eastward Track, on Third Subdivision, and East Switch of Crossover are electrically locked.

8. **At Longview Junction**—Train order signal is not maintained. Trains from Longview using West Leg of Wye to enter Third Subdivision Main Tracks will not pass Stop Signal if signal indicates stop, except under protection of flag. If signal indicates proceed, movement may be made without protection. Switch leading to West Leg of Wye and East Crossover Switch are electrically locked.

   Normal position of switch to the wye just east of Cowlitz River Bridge is for the west leg of wye.
   Normal position of tail track switch on east leg of wye is for the tail track.

9. **At Vancouver**—Junction switch at west end of Columbia River Bridge will be set for N. P. Main Track. Eastward trains approach passenger station at restricted speed and stop before engine reaches point of clearance between N. P. and S. P. & S. tracks.

10. **Logs**—Flat cars loaded with logs, wood bolts or veneer blocks must not be handled in trains after dark except between Chehalis Junction and Centralia, and then only as provided under instructions for all subdivisions.
    Trains handling logs, wood bolts or veneer blocks, loaded on flat cars, through Ostrander Tunnel, will stop before entering tunnel, where a careful inspection of such loads will be made and if found in good condition, train will pass through tunnel and stop; rear brakeman or flagman to follow through tunnel for purpose of inspecting track for fallen logs, wood bolts, or veneer blocks, and if found clear, will so report to conductor and train may proceed.

    Log loading gauges have been placed at Ostrander Tunnel to show tunnel clearance; one on Eastward track, 350 feet from west end of tunnel; and one on Westward track, 350 feet from east end of tunnel.

Gauges are placed in vertical position four feet, six and three-quarters inches from gauge side of outside rail.

Before pulling through this tunnel trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, must have a trainman stationed at gauge to observe that such loads have proper tunnel clearance.

11. **Yard Limits**—Tracks between yard limit boards west of Reservation and east of McCarver St., and South Tacoma will be operated as one yard. Eastward second class and inferior trains originating at Head of Bay Yard will use freight track and enter double track at 11th St., and eastward U. P. second-class and inferior trains originating at 15th St., may run to McCarver St. ahead of delayed first-class trains without train orders, avoiding delay to first-class trains, and must be prepared to protect immediately.

    Track between Yard Limit boards east of Centralia and west of Wabash will be operated as one yard.

    Track between Longview, East Yard and Longview Junction will be operated as one yard. At East Yard, normal position of switches will be for siding.

12. **Drawbridge Interlocking**—
    Bridge 119, Lewis River, 2.5 miles east of Woodland.

    Bridge 14, Chambers Creek, 1.4 miles west of Steilacoom.

    Bridge 0.59, Cowlitz River, (On Longview Line) 0.6 miles west of Longview Junction.
    If necessary to flag through the Interlocking, flagman must precede train and be sure that derails and rail locks are in proper position.

13. **Pusher District**—Between Centralia and Longview Jct.

14. **Bridge and Engine Restrictions**—Engines N. P. Classes A-2, A-3, Z-5 and Z-6 and G. N. Classes Q-1, R-1, R-2 and Z-1, not permitted.
    Bridge 51, Hannaford Creek, westward main track, between Wabash and Centralia, engines N. P. Classes A-2, A-3, Z-4, Z-5, and Z-6 and G. N. Classes Q-1, R-1, R-2, and Z-1, twenty (20) MPH.
    Bridge 78, Olequa Creek, between Vader and Vader Jct., engines N. P. Classes A-2, A-3, Z-4, Z-5 and Z-6, and G. N. Classes Q-1, R-1, R-2 and Z-1 not permitted. Single and double header engines of the following Classes, twenty (20) MPH: N. P.—A, A-1, Q-5, Q-6, W-3, W-5, Z, and Z-2. G. N.—N-2, O-1, O-4, O-6, O-7, O-8, P-2, Q-2, S-1 and S-2, all with small tenders. U. P.—Nos. 3620 to 3629, 3803 to 3805, 5400 to 5414, 7000, 7800, 9000, 9080 and 9700. C. M. St. P. & P.—L-3, N-1 and N-2.
    Bridge 93-3, Ostrander Creek, between Castle Rock and Ostrander, engines N. P. Classes Z-5 and Z-6 and G. N. Classes Q-1, R-1, R-2, and Z-1, twenty (20) MPH.

    Bridge 0.59, Cowlitz River, Longview Line, engines N. P. Classes Q-5, Q-6, W, W-1, W-2, and W-4 and G. N. Nos. 2500 to 2527 and U. P. Nos. 2100 to 2165 and 3200 to 3227, Eight (8) MPH. Heavier engines and double heading not permitted; lighter engines twenty (20) MPH. Trains handling wrecking derrick 41, 42 or 43, ten (10) MPH.

    Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, must not exceed ten (10) MPH over the following 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 engineman for quick stop. Engineman will be on lookout for such signal.

    Bridge 47, Skookumchuck River, between Bucoda and Wabash.
    " 59, Newaukum River, between Chehalis Jct., and Napavine.
    " 81, Cowlitz River, between Vader Jct., and Castle Rock.
    " 84, Toutle River, between Vader Jct., and Castle Rock.
    " 100, Coweman River, between Kelso and Longview Jct.
    " 105-1, Kalama River, between Longview Jct., and Kalama.

    Flat cars loaded with logs, wood bolts, or veneer blocks must not be handled in trains over,

    Bridge 14, Chambers Creek Lift Bridge, between Sixth Avenue and Steilacoom.
    " 119, Lewis River Drawbridge, between Woodland and Ridgefield.

15. **Speed Restrictions**—U. P. engines of Consolidation or Mikado Class, forty (40) MPH, except Mikado Class with 63-inch drivers or over, freight trains, fifty (50) MPH, passenger trains fifty-five (55) MPH.

    Great Northern engines of 500, 700 and 1100 series twenty-five (25) MPH, engines Classes J-2 and O-5 fifty (50) MPH. C. M. St. P. & P. engine Class C-5 fifty (50) MPH.

    Trains handling logs thirty (30) MPH.

    Due to the difference in curve elevation westward trains, running against current of traffic on eastward track, Napavine to Chehalis Jct., and eastward trains, running against current of traffic on westward track, Evaline to Vader, fifty (50) MPH on curves.

    At Tacoma—Trains approach cross-over switches at 15th St. and 21st St. (entering Union Station) at restricted speed and be governed by signal from switch tender, green flag by day, green light by night.

    At Sixth Avenue, over Sixth Avenue and Day Island crossings, twenty-five (25) MPH, trains running against current of traffic over these crossings, six (6) MPH.

    At Kelso, over Allen St., leading to bridge over Cowlitz River, fifteen (15) MPH.

    At Winlock, Napavine, Chehalis, Centralia, Bucoda, Ridgefield, over highway crossings within corporate limits, twenty-five (25) MPH.

    See also Bridge and Engine Restrictions.

16. **Register Stations**—
    Tacoma, Union Station, for First Class trains and Passenger Extras; Yard Office, for Second Class and Inferior Trains except Passenger Extras.
    Centralia Telegraph Office.
    Chehalis for 21st subdivision trains.
    Longview Freight Station for trains originating and terminating.
    Vancouver Telegraph Office,
    Portland Telegraph Office.

17. **Register Exceptions**—At Tacoma Union Station: Trains 401, 407, and 561 register by Form 608.
    At Vancouver: All trains register by Form 608 and will be furnished check of register by train order, or register check Form 602, issued by operator.

18. **Clearance Exceptions**—At Tacoma, unless otherwise provided, eastward second class and inferior trains originating at Head of Bay Yard and eastward U. P. trains originating at 15th St., may run with the current of traffic to McCarver St., without clearance, but must secure clearance at McCarver St., for movement beyond.

    At Tacoma Union Station: Trains 402, 408, and 458 will not require clearance.

    At Tenino Jct., Longview and Vancouver Jct: Trains originating will not require clearance.

    At Centralia, all trains must secure clearance.

    At Chehalis Jct: N. P. trains originating will not require clearance.

19. **Derails**—At Vancouver Junction derail on west leg of wye.

20. **Commercial Spurs**—

	Miles from Tacoma	Car Capacity
Pioneer	13.0	60
Gravel Center (Glacier Gravel Co.)	14.0	15
Cascade Paper Co. (West Tacoma)	14.4	6
Olegard	26.1	4
Plumb	37.6	4
Chain Hill Lumber Co.	41.2	4
Evaline	68.2	5
Olequa	80.5	7
Cascade Timber Co.	85.0	10
Carrolls	103.0	9
Knapp	127.2	4

21. **Cross-overs**—Tacoma, McCarver St., Sixth Avenue, Steilacoom, Ketron, Nisqually, Saint Clair, Kyro, East Olympia, Tenino Jct., Bucoda, Centralia, Chehalis, Chehalis Jct., Napavine, Winlock, Vader, Vader Jct., Castle Rock, Ostrander, Kelso, Longview Jct., Kalama, Woodland, Ridgefield, Felida, Vancouver Jct., Vancouver.

FOURTH SUBDIVISION.
(PRAIRIE LINE)

1. **Card train order form AB**—Will govern the movement of trains between Reservation and 15th St. Tower via Drawbridge Line and trains must not move in this territory unless conductor and engineman hold a copy properly filled out.

2. **At 15th St. Tower**—A single arm semaphore near junction of Line Leading to Tacoma Union Station and Drawbridge Line is controlled by Towerman and governs single track passenger line between 15th St. Tower and Union Station. No train from the Drawbridge Line or westward main track will enter Union Station when signal is at stop.

   No train order signal maintained at 15th St. Tower.

3. **At Tacoma**—No train will proceed from Union Station to Drawbridge Line or westward main track when signal on incline is at stop. This signal is operated by Towerman at 15th St. Tower, and is a color light type signal. The lower light governs movement from Union Station to Drawbridge Line. The upper light governs movement Union Station to westward main track. Trains will call for signal by using push button when ready to leave Union Station.

4. **At South Tacoma,** normal position of double track switch is for westward track. Siding will be used as storage track.

5. **At Tenino Jct.**—Switch leading to Third Subdivision and west switch of crossover are electrically locked.

6. **Logs**—Flat cars loaded with logs, wood bolts or veneer blocks must not be handled in trains after dark except between South Tacoma and Tacoma, and then only as provided under instructions for all Subdivisions.

   Trains handling logs will run via Half Moon yard pulling train in reverse order to River St. Yard.

7. **Mountain Grade**—15th Street, Tacoma, to 2½ miles east.
   At South Tacoma—Freight train air brake tests as required by the Rules, and instructions outlined in Air Brake Instruction Book No. 1, must be made before beginning descent of Tacoma Hill. Record of test will be made as prescribed by Rule 1063 and delivered to the Operator.

   Descending trains will carry 90 pounds train pipe pressure South Tacoma to Tacoma. Following any stops during the descent the Engineman must fully recharge the brakes before starting and the Conductor must not give the "Proceed" signal until at least 80 pounds is shown by the caboose gauge.

   Immediately following departure from Lakeview Enginemen of Westward Freight Trains will increase train line pressure to 90 pounds. On reaching designated track, Tacoma Yard, restore train line pressure to 70 pounds.

   Retaining valves will be turned up on all loaded cars and on one-half the empty cars in mixed trains of loads and empties, using retaining valves on one-half the empties, beginning at the head end and alternating on every other car.

   On trains of all empty cars one-half the retaining valves will be turned up beginning at the head end and alternating by using retaining valve on every other car.

   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 westward movements from South Tacoma.

   At Tacoma—Enginemen on westward trains, after stopping west of 15th St. Tower to allow helper engine to be coupled on at rear of train, will leave train brakes applied with a 20-pound brake pipe reduction, then close the double-heading cock to brake valve. Helper engineman, after coupling is made, will release train brakes, following this by making the required "Brake Pipe Test" before starting train movement to depot. At time of brake pipe test a member of the train crew must observe that brakes have applied on car next to road engine before signal to release brakes and proceed signal is given. Upon completion of stop made at depot, and leaving train brakes applied as required, the angle cocks on helper engine and next car will be closed and hose parted. Engineman on road engine will open double-heading cock to brake valve to release train brakes, following which a "Brake Pipe Test" must be made before departure.

   At Union Station—Engineman on eastward trains, after stop is made, will leave train brakes applied with a 20-pound brake pipe reduction, then close the double-heading cock to brake valve.

   Helper engineman, after coupling to rear of train, will release train brakes, following which a "Brake Pipe Test" must be made before departure. Train brakes will be under his control until stop is made west of 15th St. Tower and left applied with a 20-pound reduction before closing the double-heading cock to brake valve. Engineman on road engine will then open double-heading cock to brake valve, release train brakes, following which a "Brake Pipe Test" must be made.

   Westward trains will approach Pacific Avenue at restricted speed and be governed by Home Signal at Pacific Avenue and controlled from 15th St. Tower.

   Top arm of this signal governs movements on Westward main track; lower arm governs movements on westward main track over cross-over to Drawbridge Line or from Westward track through pocket back of westward track.

   Automatic Signals 07 and 08 control the short piece of single track between Half Moon yard, Tacoma, and double track switch on Fourth subdivision. Trains or engines using cross-over to enter single track between these signals must do so expecting to find track occupied.

8. **Pusher District**—Between Tacoma and South Tacoma.

9. **Yard Limits**—Tracks between yard limit boards west of Reservation and east of McCarver St. and South Tacoma operated as one yard.

10. **Bridge and Engine Restrictions**—
    Engines, N. P. Classes A-2, A-3, Z-5, and Z-6, and G. N. Classes Q-1, R-1, R-2, and Z-1, not permitted.

    Bridge 22-1, Nisqually River, between Roy and Yelm, engines N. P. Classes Z-5, and Z-6, not permitted. Engines N. P. Classes Q-5 and Q-6, and G. N. Classes P-2, J-2, and O-5, thirty-five (35) MPH. Engines N. P. Classes A, A-1, W-3, W-5, and Z-3, and G. N. Classes N-2 and Q-2 with 17000-gallon tenders, twenty (20) MPH. Engines N. P. Classes A-2, A-3, and Z-4, and G. N. Classes Q-1, R-1, R-2, and Z-1, ten (10) MPH.

    Bridge 33, Des Chutes River, between Rainier and West Tenino, engines N. P. Classes A, A-1, Q-5, Q-6, W-3, and W-5, and G. N. Classes P-2, J-2, and O-5, thirty-five (35) MPH. Engines N. P. Classes A-2, A-3, Z-4, and Z-6, and G. N. Classes Q-1, and S-1, twenty (20) MPH. Engines N. P. Classes Z-5, and G. N. Classes R-1 and R-2, ten (10) MPH.

    Trains with logs, ten (10) MPH over Bridge 22-1.

11. **Speed Restrictions**—
    Great Northern engines Classes J-2 and O-5 fifty (50) MPH, engines series 500, 700 and 1100 twenty-five (25) MPH.
    At Roy, over crossings within corporate limits twenty-five (25) MPH.

    At South Tacoma, entering double track fifteen (15) MPH.

    At Tacoma, between Wilkeson St. and Commerce St., on descending grade, passenger trains thirty (30), freight trains twenty (20) MPH.

    Between Commerce St. and 15th St. Tower while any portion of train passing between these points six (6) MPH.

    Trains or engines entering or leaving Union Station between 15th St. Tower and 21st St. ten (10) MPH.

    15th St. Tower—While any portion of train passing over switches ten (10) MPH.

    See also Mountain Grade and Bridge and Engine Restrictions.

12. **Register Stations**—Tacoma, Union Station for First Class Trains and Passenger Extras; Yard Office, for Second Class and Inferior Trains except Passenger Extras.
    15th St. Tower.
    South Tacoma for Westward Trains.

13. **Register Exceptions**—At Tacoma Union Station, Train 459 register by Form 608. At 15th St. Tower trains will register by Form 608, and will be furnished check of register by train order, or register check, Form 602, issued by operator. Train 459 will not register at South Tacoma.

14. **Clearance Exceptions**—At Tacoma Union Station, Train 562 will not require clearance.

At 15th St. Tower, eastward trains must secure clearance.

At Lakeview, Train 423 will not require clearance if train order signal is in proceed position.

At Tenino Jct., clearance not required.

15. **Commercial Spurs**—

	Miles from Tacoma	Car Capacity
Wetico Conn. W. T. Co.	32.9	10
Russell Shingle Co.	38.1	6
Mutual	38.6	15

16. **Lap Siding**—Rainier.

17. **Cross-overs**—15th St. Tower, Tacoma.

FIFTH SUBDIVISION.
(SUMAS BRANCH.)

1. **Card train order Form AB** will govern the movement of trains and engines between Lowell, Belt Yard and Everett and between Everett and G. N. Junction, trains and engines must not move in this territory unless conductor and engineman each hold a copy properly filled out. N. P. Eastward trains secure card order at Delta Wye authorizing movement from G. N. Junction to Everett and Westward trains will turn in card authorizing movement Everett to G. N. Junction at Delta Wye.

2. **At Seattle** Interlocking at South Portal of King Street Tunnel—Signals are of the dwarf type to the right of track governed; where two arms are on one post, upper arm governs trains on main track and lower arm trains diverging from main track.

Westward trains are governed by the semaphore block signal about 50 feet south of the south portal.

Eastward trains are governed by the semaphore block signal 250 feet north of the portal.

3. **At North Portal**—No train order signal maintained. Westward movements from King St. Tunnel are governed by a color light home signal located about 300 feet east of Tower. Upper light governs route to G. N. main track; middle light governs route to N. P. main track; lower light governs diverging routes. Westward movements from old main track are governed by a color light home signal located 200 feet east of Tower. Upper light governs route to N. P. main track; lower light governs route to G. N. main track as well as diverging routes. Whistle Signal: 4 long to N. P. main track; 2 long, 1 short to G. N. main track. Westward movements from waterfront are governed by a color light dwarf signal located 200 feet east of Tower. Whistle Signal: 3 long to N. P. main track; 1 long to Pier 14 Lead. Eastward movements from N. P. main track are governed by a color light home signal located 1000 feet west of Tower. Upper light governs route to tunnel; lower light governs diverging routes. Whistle Signal: 1 long to tunnel; 3 long to waterfront; 4 long to old main track; 5 long to G. N. running track; 1 short from American Can Spur to main track.

Eastward movements from Pier 14 Lead are governed by a color light dwarf signal located opposite Tower. Whistle Signal: 1 long to waterfront.

Westward reverse movements from Tunnel are governed by a color light dwarf signal located 300 feet east of Tower. A color light dwarf signal is located about 50 feet west of north portal, King St. Tunnel, and governs reverse movement through the tunnel section only.

4. **At Fremont**—Passenger Station is one-half mile west of siding. Time of first class trains applies at passenger station.

5. **At Bromart and Edgecomb**—Normal position of Junction Switch is for Thirteenth Subdivision.

6. **At G. N.-Snohomish**—No N. P. train order signal maintained.

7. **At G. N. Junction**—No train order signal maintained.

8. **Delta Wye Interlocking**—Westward trains will call for route by one long, one short, one long blast of whistle. Eastward trains by one long, one short, two long blasts of whistle.

No train order signal maintained at Delta Wye.

9. **At Sedro-Woolley**—G. N. crossings are protected against eastward N. P. trains by an automatic return derail switch 200 feet west of first crossing, and may be run through by westward trains, but must be manually operated by eastward trains. Derail must be left in derail position when N. P. track is not in use.

10. **At Deming**—Distant signals 3000 feet east and west of C. M. St. P. & P. crossing two miles west of Deming, regulate approach to gate governing movement of trains over this crossing. Normal position of gate is against C. M. St. P. & P. trains. Light on revolving gate post on south side of track immediately west of crossing displays yellow indication when set against C. M. St. P. & P. trains and red indication when against N. P. trains. All trains approach at restricted speed but may proceed without stopping if yellow light displayed on gate post.

11. **Draw Spans**—Bridge 4, Lake Washington Canal, between Interbay and Fremont, Westward interlocking signal at Bridge 4, upper arm governs movement to Fremont, lower arm to Ballard. Bridge 85, Skagit River, between Clear Lake and Sedro-Woolley.

12. **Logs**—Trains with logs must not run via King St. Tunnel.

13. **Yard Limits**—Tracks between yard limits east of Argo and west of Fremont will be operated as one yard.

14. **Bridge and Engine Restrictions**—
Engine Classes A, A-1, A-2, A-3, Z-5, and Z-6 not permitted.
Bridge 4, Lake Washington Canal, between Interbay and Fremont, twenty (20) MPH over Bascule Span.

Bridge 61-1, Stillaguamish River between Arlington and Arlington Junction singleheader engines Classes Z-3 and Z-4 and doubleheader Classes W-3 and W-5, twenty (20) MPH.

Bridge 85, Skagit River, between Clear Lake and Sedro-Woolley, twenty (20) MPH over draw span.

Bridge 110, North Fork of Nooksack River, between Standard and Deming, engines Classes A, W-3, W-5, Z-3, Z-4, ten (10) MPH, Classes Q-5, Q-6, Z, and Z-2, twenty (20) MPH.

All Bridges: Engines Classes A-2, A-3, Z-5, and Z-6, not permitted.

At Sedro-Woolley, engines heavier than Class W not permitted on Norlum Spur and Class W engines restricted to ten (10) MPH.

15. **Speed Restrictions**—
At Seattle, between North Portal and Bay St., six (6) MPH.
At Interbay, through crossover, 1000 feet east of station, ten (10) MPH.

At University, approach public crossing just east of station at restricted speed, not exceeding ten (10) MPH over crossing, protecting all switch movements by flagman.

At P. S. & C. crossing, between Big Lake and Clear Lake, approach at restricted speed and be governed by day indication of signal. No light maintained on signal.

Passenger trains; steam, forty-five (45), motor, fifty (50) MPH.
Freight trains; between Seattle and Bromart, and between Sedro-Woolley and Sumas, forty (40) MPH; between Edgecomb and Sedro-Woolley, thirty-five (35) MPH.

Engines, Class W-3, between Woodinville and Bromart and between Edgecomb and Sumas, thirty (30) MPH.

Log trains; twenty (20) MPH.

Trains handling steam wrecking derrick, pile driver, or locomotive crane, twenty-five (25) MPH.

See also, Bridge and Engine Restrictions.

16. **Register Stations**—
Seattle (South Portal Tower), Woodinville, G. N.-Snohomish, Everett for N. P. trains.
Wickersham, Sumas.
Arlington for fourteenth subdivision trains.

17. **Register Exceptions**—Trains will register by Form 608 at G. N.-Snohomish.

Trains 443 and 444 register by Form 608 at Woodinville, Everett and Wickersham.

18. **Clearance Exceptions**—Westward trains via waterfront will secure clearance at North Portal.

At Bromart and Edgecomb, clearance not required.

At G. N.-Snohomish, eastward trains must secure clearance.

At Arlington Junction, clearance not required. Trains originating secure clearance at Arlington.

19. **Commercial Spurs—**

	Miles from King St. Station	Car Capacity
Keith	12.2	13
Navalair Jct.	13.6	Conn
Lake Forest Park	18.6	2
Kenmore	19.8	22
Wayne	21.8	3
Cathcart	33.7	12
Days	69.2	2
Tiloh	80.7	12
Skagit Junction	85.5	7
Norlum Spur	87.6	Conn.
Hospital Spur (on Norlum Spur)	90.3	12
Hoogdale	92.2	4
Prairie	95.8	4
Saxon	102.1	Conn.
Coyne	109.2	9
Van Zandt	109.4	8
Lawrence	116.3	6

SIXTH SUBDIVISION.
(ROSLYN BRANCH.)

1. **At Roslyn,** No train order signal maintained.
Eastward trains departing must keep at least twenty (20) minutes apart.

2. **At Cle Elum,** Eastward trains must stop 1200 feet west of wye switch.
Switch on west leg of wye, leading to coal dock track, must be left lined for coal dock track.

3. **Derail**—On main track at M. P. 1 plus 3180 feet, between Cle Elum and Mine 5, to be used in connection with main track dropping of caboose or cars in switching the washer plant, and derail must be left in a clear position at all other times.

4. **Highway crossing**—On track leading to Mine 9, between Cle Elum and Mine Five, trains will stop before passing and trainmen protect movement of cars or engine over crossing.

5. **Mountain Grade:** Between Cle Elum and 4.2 miles west.

6. **Bridge and Engine Restrictions**—Engines Classes A-2, A-3, Z-5 and Z-6 not permitted.

7. **Speed Restrictions**—Thirty (30) MPH.
Cle Elum ten (10) MPH through city limits.
Trains handling steam wrecking derrick, pile driver or locomotive cranes, twenty (20) MPH.

8. **Register Station**—Cle Elum.

9. **Clearance Exceptions**—No. 474 will not require clearance at Ronald.

SEVENTH SUBDIVISION.
(BUCKLEY LINE AND BRANCHES.)

1. **At Enumclaw**—While using main track of White River Lumber Co., between Junction Switch with C. M. St. P. & P. and yard limit board 2000 feet east, all movements will be made in accordance with Transportation Rule 93.
All movements of engines and cars over highway crossing on track between Northern Pacific and White River Company's tracks must be protected by flagman.

2. **At Fairfax**—The Manley Moore Lbr. Company engines and logging trains are authorized to use N. P. tracks between their interchange track and connection with their logging road west of coal bunkers, protecting against N. P. trains.

3. **At Wilkeson**—Normal position of junction switch is for Fairfax Line.

4. **Bridge and Engine Restrictions—**
Between Palmer Jct. and Meeker, Engines Classes A-2, A-3, Z-5, and Z-6 not permitted.
Between Cascade Jct., Wilkeson and Fairfax, Engine Classes A, Q-5, Q-6, W-3, W-5 and heavier not permitted.
Between Bayne Jct. and Kanaskat Jct., Engines heavier than Class S-4 not permitted.

At Wilkeson, engines must not use loading track at W. C. & C. bunkers, account restricted clearance.
Bridge 16, South Prairie Creek, between Cascade Jct. and Buckley, engine Classes A, W-3, W-5 and Z-3, twenty (20) MPH. Engines Class Z-4, ten (10) MPH. Engine Classes A-2, A-3, Z-5 and Z-6, not permitted.
Bridge 16-1, South Prairie Creek, between Cascade Jct. and Buckley, engine Classes A-2, A-3, Z-4, and Z-6, twenty (20) MPH. Engines Class Z-5 ten (10) MPH.
Bridge 0, South Prairie Creek, just east of Cascade Jct. on Wilkeson line, and
Bridge 4, Gale Creek, at Wilkeson, engine Classes T, W, W-1, W-2, W-4, and Z-1, ten (10) MPH. Engine Classes A, Q-5, W-3, and heavier, not permitted.

5. **Speed Restrictions—**
Between Palmer Jct. and Meeker thirty (30) MPH. Trains handling logs twenty (20) MPH.
Between Cascade Jct. and Fairfax twenty (20) MPH, backing up fifteen (15) MPH. Trains handling logs twelve (12) MPH.
Between Bayne Jct. and Kanaskat Jct. fifteen (15) MPH.
Trains handling steam wrecking derrick, pile driver or locomotive crane between Palmer Jct. and Meeker twenty (20) MPH, between South Prairie and Fairfax ten (10) MPH.
At Enumclaw, through corporate limits ten (10) MPH.
At Buckley, through corporate limits six (6) MPH.
At Orting, through corporate limits ten (10) MPH.
See also Bridge and Engine Restrictions.

6. **Register Stations**—Enumclaw.

7. **Clearance Exceptions**—Eastward trains will obtain clearance at Puyallup instead of Meeker.
At Kanaskat Jct. and Palmer Jct., clearance not required.

8. **Derails**—At Fairfax derail on Montezuma Line ten (10) feet West of Hill Track Switch.
At Wilkeson derail on Main Track in front of Coal Bunkers.

9. **Commercial Spurs—**

	Miles from Kanaskat Jct.	Car Capacity
Dencla	1.5	5
Occidental	3.3	18
Fleet	4.5	3
Webstone	13.8	4
McMillin	30.4	10
Brew Mill Spur	33.8	1

EIGHTH SUBDIVISION.
(GREEN RIVER BRANCH.)

1. At Kerriston, track must not be used beyond the sign "Engine Stop", located at west end of Bridge 14.

2. Between Kerriston and Kerriston Jct., in Sullivan's Cut, east of M. P. 10, rock and slides may be expected.

3. At Selleck, the Pacific States Lumber Company's main lead and the Cascade Timber Company's tracks may be used to a point 500 feet beyond the east switch of the Cascade Timber Company's interchange tracks. Before passing the Pacific States Lumber Company's office, the conductor must secure the authority of their train dispatcher to cover movement between Selleck and the Cascade Timber Company's interchange tracks. Movement may then be made at restricted speed, using extreme caution while passing through Selleck Mill Yards and looking out for engines and cars of the Pacific States Lumber Company and the Cascade Timber Company. The normal position of the switch leading to the Pacific States Lumber Company track is for their track and must be left in normal position after being used.

4. At Kanaskat, normal position of wye switch is for west leg of wye.

5. **Bridge and Engine Restrictions—**
Between Kanaskat and Kerriston, engines heavier than Class S-4 not permitted.
Bridge 6-1, Cedar River, between Kerriston Jct. and Halmar, engine classes S-2, S-3, S-4, Q and Q-1, and double header engines Class F-1, eight (8) MPH. Engines Classes Q-2 and heavier, and Wrecking Derricks 41, 42 and 43, not permitted.

6. **Speed Restrictions—**
Trains handling steam wrecking derrick, pile driver, or locomotive crane, ten (10) MPH.
Between Kanaskat and Halmar, fifteen (15) MPH. Trains handling logs twelve (12) MPH.
Between Halmar and Kerriston ten (10) MPH.
At Selleck—Restricted speed between one thousand feet west of siding and Cascade Timber Co. interchange tracks.
See also, Bridge and Engine Restrictions.

7. **Derails**—At Halmar, derail in main track sixty feet from West Wye Switch, also 550 feet from Wye Switch on Northwest Lumber Company's Spur. This forms tail end of wye and switch must be left in derail position. Bagley Jct. derail on main track, 350 feet west of Bagley Jct.
At Selleck, derail in main track 3350 feet West of Selleck.

8. **Register Station**—Kanaskat.

9. **Clearance Exceptions**—At Kerriston and Bagley Jct., clearance not required.

10. **Commercial Spur—**

	Miles from Kanaskat	Car Capacity
Monroe Shingle Co.	13.8	2

NINTH SUBDIVISION.
(CROCKER BRANCH.)

Abandoned.

TENTH SUBDIVISION.
(ORTING BRANCH.)

1. **At Puyallup River Jct.—**
N. P. trains will look out carefully for St. Paul & Tacoma Lumber Company's engines and logging trains, using main track within yard limits.
Between One (1) P. M. and Twelve (12) midnight N. P. trains will protect against St. Paul & Tacoma Lumber Company's logging engines and trains using main track between Puyallup River Jct. and Lake Kapowsin.

2. **Bridge and Engine Restrictions—**
Engines heavier than Class W not permitted between Orting and Puyallup River Jct.
At spur, 450 feet east of M. P. 5, between Orting and Puyallup River Jct., engines must not go beyond clearance point.
At Lake Kapowsin, engines or loaded cars must not be placed on trestle on interchange track of the St. Paul and Tacoma Lbr. Co.
Bridge 8, Puyallup River, at Puyallup River Jct., engine Classes F-1, Q, S-4, and S-10 and single-header Classes Q-1 and Y to Y-5, eight (8) MPH. Engine Classes Q-3, T, and heavier and double-header Q-1 and Y to Y-5, and Wrecking Derricks 41, 42 and 43, not permitted.

3. **Speed Restrictions—**
Between Orting and Puyallup River Jct. twenty (20) MPH, trains handling logs twelve (12) MPH.
Between Puyallup River Jct. and Lake Kapowsin ten (10) MPH.
Trains handling Steam Wrecking Derrick, Pile Driver or Locomotive Crane ten (10) MPH.
See also Bridge and Engine Restrictions.

4. **Clearance Exceptions**—At Orting, clearance not required if train order signal is in proceed position, except during assigned hours of telegraph service.
At Lake Kapowsin, clearance not required.

5. **Derails**—At Lake Kapowsin, 100 feet west of first west switch.

6. **Commercial Spurs—**

	Miles from Orting	Car Capacity
Electron	8.5	3

ELEVENTH SUBDIVISION.
(BELT LINE.)

1. **At Kirkland**—Passenger Station is 2250 feet east of siding.

2. **Yard Limits**—Tracks between yard limit sign west of Renton and the connections with double track at Black River will be operated as one yard.

3. **Bridge and Engine Restrictions**—Engine Classes A, A-1, A-2, A-3, Z-5 and Z-6 not permitted.
Bridge 11, between Wilburton and Quendall, fifteen (15) MPH.
Bridge 23, Sammamish River, between Kirkland and Woodinville, engine Classes A, Q-5, Q-6, W-3, W-5, Z, Z-2, Z-3 and Z-4, twenty (20) MPH. Trains handling Wrecking Derrick 41, 42 or 43, twenty (20) MPH. Engine Classes A-2, A-3, Z-5 and Z-6 not permitted.

4. **Speed Restrictions**—Thirty (30) MPH.
Trains handling logs, steam wrecking derrick, pile driver, or locomotive crane, twenty (20) MPH.
See also Bridge and Engine Restrictions.

5. **Register Stations—**
Black River and Woodinville.

6. **Register Exceptions**—At Black River all trains register by Form 608.

7. **Clearance Exceptions**—At Black River, trains originating will not require clearance, if train order signal is in proceed position, except during assigned hours of telegraph service.

8. **Derails**—At Renton, derails in main track 75 feet East and 75 feet West of P. C. Crossing, and operated by Switch Stand between P. C. Tracks. Normal position of derails is against N. P. trains.

9. **Commercial Spurs—**

	Miles from Black River	Car Capacity Conn.
Lakeside	3.8	3
Speigel	4.4	4
May Creek	6.7	3
Kardong	12.6	5
Midlakes	12.7	4
Redbell	16.3	

TWELFTH SUBDIVISION.
(SNOQUALMIE BRANCH.)

1. **At North Bend**—Normal position of west wye switch will be for the wye.

2. **At Preston**—Trains departing must keep at least fifteen (15) minutes apart.

3. **Bridge and Engine Restrictions—**
Between Woodinville and Earlmont, engine Classes heavier than W-3, not permitted.
Between Earlmont and North Bend, engine Classes heavier than Q-1 and S-4, and Wrecking Derricks 41, 42, and 43, not permitted.
All high trestles, fifteen (15) MPH.
Bridge 31-2, between Fall City and Snoqualmie Falls, ten (10) MPH.
Bridge 6-1, Sammamish River, between Willows and Redmond,
Bridge 27-1, Raging River, between Preston and Fall City,
Bridge 35, Snoqualmie River, between Snoqualmie and North Bend,
Engine Classes Q, Q-1, S-4, and S-10, ten (10) MPH.
Bridge 5-4, Snoqualmie Falls Spur, engine Classes F-1 and P, twenty (20) MPH. Engine Classes Q, S-4, and S-10 and single header Class Q-1, ten (10) MPH. Engine Classes L-9, T, and heavier, and double header Class Q-1, not permitted.

4. **Speed Restrictions—**
Trains handling steam wrecking derrick, pile driver, or locomotive crane fifteen (15) MPH.
Between Woodinville and Fall City twenty-five (25) MPH.
Trains handling logs twenty (20) MPH.
Between Fall City and North Bend, fifteen (15) MPH.

5. **Register Stations**—Woodinville and North Bend.

6. **Derails**—At Tanner, derail in main track 915 feet West of C. M. St. P. & P. Crossing.

7. **Commercial Spurs**—

	Miles from Woodinville	Car Capacity
Hollywood	1.9	5
Earlmont	4.8	8
Tanner	38.1	9
Weeks	38.3	Conn.

THIRTEENTH SUBDIVISION.
(HARTFORD LINE.)

1. **At Bromart and Edgecomb,** the normal position of junction switch is for the Thirteenth Subdivision.

2. **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 and also for the rock cars loading on the siding.

3. **Draw Span**—Bridge 38, Snohomish River just east of Snohomish.

4. **Bridge and Engine Restrictions**—Engine Classes heavier than W-3 not permitted.
Draw Span, Bridge 38, Snohomish River, ten (10) MPH.

5. **Speed Restrictions**—Passenger Steam Train forty (40), Motor Car forty-five (45), Freight Trains twenty-five (25) MPH.
Trains handling logs, steam wrecking derrick, pile driver, or locomotive crane, twenty (20) MPH.
At Snohomish, ten (10) MPH, over highway crossing just west of Snohomish River Bridge.
See also, Bridge and Engine Restrictions.

6. **Clearance Exceptions**—At Bromart and Edgecomb, clearance not required.

FOURTEENTH SUBDIVISION.
(DARRINGTON BRANCH.)

1. **Bridge and Engine Restrictions**—Engine Classes heavier than Y-2 not permitted.
Bridges 2 and 7, Stillaquamish River between Arlington Jct. and Cavano.
Bridge 10, Deer Creek, between Cavano and Oso.
Bridge 11, Stillaquamish River, between Oso and Halterman.
Bridge 22-1, Squire Creek, between Fortson and Darrington.
Engine Classes W-3 and heavier, not permitted.
Single header engine Classes W, W-1, W-2, W-4, T, Q-3, and Q-4, eight (8) MPH.
Trains handling Wrecking Derricks 41, 42 or 43 ten (10) MPH over Bridges 2, 7 and 11.
Bridge 18, Boulder Creek, between Tulker and Fortson, engine Classes Q-3, T, and heavier, and double-header Q-1 and Y to Y-5, and Wrecking Derricks 41, 42 and 43, not permitted. Engine Classes F-1, Q, S-4, and S-10 and single header Classes Q-1 and Y to Y-5, eight (8) MPH.
Trains handling logs ten (10) MPH over truss bridges Nos. 2, 7, 11 and 22.

2. **Speed Restrictions**—
Twenty-five (25) MPH.
Trains handling logs, steam wrecking derrick, pile driver, or locomotive crane fifteen (15) MPH.

3. **Register Stations**—Arlington and Darrington.

4. **Clearance Exceptions**—At Arlington Jct. and Darrington, clearance not required.

5. **Derails**—At Darrington, derail in main track 300 feet West of Station.

6. **Commercial Spurs**—

	Miles from Arlington Jct.	Car Capacity
Cooper	4.5	3
Cicero	7.4	2
Sheomet	21.7	3
Alvey	21.9	12
Cobridge	22.9	Conn.
Barco	23.4	Conn.
Andron	26.7	Conn.

FIFTEENTH SUBDIVISION.
(BELLINGHAM BRANCH.)

1. **At Bellingham,** flagman must precede all trains between Champion and Laurel Sts.
Trains must stop and be preceded by flagman crossing Holly St.
Normal position of gate at G. N. crossing is against N. P. trains.

2. **Between Park and Larson** all toilets in trains must be kept locked and employes are cautioned against throwing off refuse or articles which may become unsanitary.

3. **Bridge and Engine Restrictions**—Engine Classes heavier than W-3 not permitted.

4. **Speed Restrictions**—Passenger Steam Trains thirty (30); Motor Car thirty-five (35); Freight trains twenty (20) MPH. Enginemen on all trains exercise judgment in speed where trouble may be expected.
Over Street Car crossings at Kentucky Street and between that point and Bellingham Station eight (8) MPH.
Over highway crossing between Silver Beach and Larson fifteen (15) MPH.
Trains handling logs, steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) MPH, except between Mile Posts 5 and 8 ten (10) MPH.

5. **Register Stations**—Wickersham and Bellingham.

6. **Derails**—At Bellingham, derail in main track 568 feet East of G. N. Crossing, between Bellingham and South Bellingham.

7. **Commercial Spurs**—

	Miles from Wickersham	Car Capacity
Matson	14.7	7
Futurity	15.3	4
Upright Shingle Co.	15.4	7

SIXTEENTH SUBDIVISION.
(GRAYS HARBOR LINE.)

1. **At Saint Clair**—Switch leading to third subdivision and east switch of crossover are electrically locked.

2. **At Olympia**—
Tunnel district is protected by Color Light Type Automatic signals. Signal 93 located 275 feet east of tunnel, signal 94 located 275 feet west of tunnel, dwarf signal 96 between main track and siding opposite governs movement of trains between these signals and dwarf signal 96 governs eastward movement out of siding, normal indication "Stop". Siding switch must be lined before signal will indicate "PROCEED."
Trains or engines from Jefferson Street line must have PROCEED indication from signal 93 before opening main track switch, eastward trains or engines from siding must have PROCEED indication from signal 94 before opening siding switch. Westward trains finding signal 93 and Eastward trains finding signals 94 or 96 in STOP position may proceed through tunnel only under protection of flag. Speed of all trains through tunnel must be so controlled that they can be stopped on emerging. Connection leading from N. P. Jefferson Street Spur to U. P. Scale Track, at Eighth Street, just East of Tunnel has no clearance with the U. P. siding for a distance of 150 feet from a point 195 feet from switch connection on Jefferson Street Spur.
Trains or Yard Engines moving to or from N. P. Jefferson Street Spur and U. P. Scale Track must protect themselves and make certain that no U. P. trains are moving on either their Main Track or siding while movement is being made either to or from Scale Track.
Tumwater Spur Crossing, normal position of gates against spur, trains approach at restricted speed.
Des Chutes River Drawbridge, gates 50 feet each side will be turned across main track when bridge is raised.
Track next to Bay used exclusively for repair track from west switch to 650 feet east of switch.

3. **At Bordeaux Junction** on the Mason County Logging Company tracks a siding is 1985 feet from the Junction switch where interchange of cars will be made. N. P. trains will look out for the Logging Co. trains and must not block their passenger trains

from connecting with First Class Trains. Normal position of switch leading to spur track at Bordeaux Junction which is used by Mason County Logging Company's trains in making connection with N. P. passenger trains will be left for spur, derailing switch is located between this spur and N. P. main track and must be left in derailing position after using.

4. **At Gate,** normal position of the main track junction switch is for the Eighteenth Subdivision.

5. **At Montesano**—Passenger Station is one-half mile west of siding. Time of first class trains applies at passenger station. Switch leading to industry spur west end of team track to be left set for spur to act as derail.

6. **At Aberdeen,** the normal position of switch at the end of double track, 250 feet east of passenger station, is for eastward trains, and normal position of Junction switch, ten feet east of double track switch, is for the U. P. track.

   Restricted clearance between coach track No. 1 just east of passenger station and U. P. main track, at turn out. Trains and engines using coach track No. 1 must protect against trains using U. P. track.

   Restricted clearance at umbrella shed passenger station. Westward trains will stop East of Chehalis Street when Wishkah River draw bridge signals do not indicate clear route.

7. **At Hoquiam,** no train order signal maintained.

8. **Drawbridge Interlocking—**

   Bridge 68, Wishkah River, Aberdeen.

   Bridge 72, Hoquiam River, Hoquiam.

   At Hoquiam River drawbridge, gauntlet extends 496 feet from the double track frog to the double track switch points. The second signal east of drawbridge may indicate clear while a train or engine occupies the gauntlet.

   All trains handling rock stop before reaching Hoquiam River Bridge and make inspection of rock before passing over bridge.

9. **Yard Limits**—Tracks between the yard limit boards east of Carlisle and west of Stearnsville will be operated as one yard.

10. **Bridge and Engine Restrictions—**

    Bridge 46, Cloquallum River between Malone and Elma.

    Engine Classes A-2, A-3, Z-5, and Z-6 not permitted.

    Engine Classes A, A-1, W-3, W-5, Z-3, and Z-4, ten (10) MPH.

    Engine Classes G-1, G-2, Q-5, Q-6, W, Z, and Z-2, twenty (20) MPH.

    Bridge 82, Chenois Creek; Bridge 84, Berg Slough, between Hoquiam and Tulips; Bridge 86, Humptulips River between Tulips and Copalis; Bridge 91-1, Copalis River between Carlisle and Onslow; Bridge 97, Joe Creek, between Aloha and Pacific Beach.

    Engine Classes Q-5, W-3, Z, Z-1, and heavier, not permitted. Single header engines Classes W, W-1, W-2, and W-4, ten (10) MPH. Double header engines Classes Q, Q-1, Q-3, Q-4, S-4, S-10, and T, twenty (20) MPH.

    Bridge 9, Des Chutes River, at Olympia; Bridge 68, Wishkah River, at Aberdeen; Bridge 72, Hoquiam River, at Hoquiam, Twenty (20) MPH over draw span.

    Trains handling Wrecking Derricks 41, 42 or 43, twenty (20) MPH over Bridges 46 and 84 and ten (10) MPH over Bridge 91-1.

    At Olympia—Class W engines are permitted on the west side main track as far as Buchanan's mill but no power will be permitted beyond Bent 14 on the trestle of the west side log rollway. Heavier than F-1 power not permitted on the trestle leading to Tumwater and on Jefferson Street or Port Dock tracks.

    At Aloha: Engines heavier than Class F-1 not permitted on Mill Spur.

11. **Speed Restrictions—**
    Between Saint Clair and Hoquiam, Passenger Steam Train forty-five (45), Motor Car fifty (50), Freight Trains thirty-five (35) MPH. Trains handling logs, steam wrecking derrick, pile driver or locomotive crane, twenty (20) MPH.

    Between Hoquiam and Moclips, twenty-five (25) MPH, trains handling logs twenty (20) MPH. Trains handling steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) MPH.

    At Olympia around curve East end of subway fifteen (15) MPH.

    At Gate approach Eighteenth Subdivision Junction Switch at restricted speed.

    At Aberdeen and Hoquiam, all trains and engines at restricted speed within yard limits.

    At Aberdeen, over streets and crossings ten (10) and elsewhere within City Limits twenty (20) MPH.

    Passing through paved street between Wishkah River Drawbridge and Log Rollway, one mile East of Aberdeen, five (5) MPH.

    See also Bridge and Engine Restrictions.

12. **Register Stations—**
    Saint Clair.
    Olympia, for trains originating and terminating.
    Gate.
    Aberdeen.
    Hoquiam.

13. **Register Exceptions**—At Saint Clair trains will register by Form 608 and will be furnished register check Form 602 by operator. At Gate, trains 461 and 464 will register by Form 608 and will be furnished register check Form 602 by operator.

14. **Clearance Exceptions**—At Saint Clair, Westward Trains will not require clearance, except during assigned hours of telegraph service, if train order signal is in proceed position.

    At Aberdeen Jct., trains originating will not require clearance.

    At Hoquiam, all trains must secure clearance.

    At Moclips, clearance not required.

15. **Commercial Spurs—**

	Miles from St. Clair	Car Capacity
Black Lake	13.2	3
Schafer	54.0	10
Brannon	59.4	6
Consolidated Plywood Mill Co.	66.5	18
Charman	87.4	3
Morrow Logging Co.	88.1	12
Neff Logging Co.	89.4	4
Joe Creek	97.4	2
Hobi	97.8	3

SEVENTEENTH SUBDIVISION.
(AMERICAN LAKE LINE.)

1. **At Nisqually**—Switch leading to Third Subdivision and west switch of crossover are electrically locked.

2. **At Fort Lewis—**
   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, speed restricted to fifteen (15) MPH.

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

   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 and derail on track leading to Black Powder Mill.

   Cantonment Tracks, speed restricted to fifteen (15) MPH.

   Trains must stop and flagman protect movement when backing or pushing cars ahead of engine over Street crossings.

   All movement over Pacific Highway must be protected by flagman.

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

   House track switch will be set for house track to act as derail for east end of siding.

3. **Bridge and Engine Restrictions**—Engine Classes heavier than W-3 not permitted.

   At Fort Lewis on Dupont Spur, engines heavier than Q-1 not permitted.

4. **Speed Restrictions**—Passenger Steam Trains forty (40), Motor Car fifty (50), Freight Trains thirty (30) MPH.

   At Camp Murray, ten (10) MPH over road crossing just west of station.

   At Fort Lewis, approach road crossings at east and west end Green Park at restricted speed.

   Trains handling logs, steam wrecking derrick, pile driver, or locomotive crane, twenty (20) MPH.

5. **Register Stations**— Nisqually Lakeview

6. **Register Exceptions**—At Nisqually and Lakeview trains register by Form 608 and will be furnished register check by train order or Form 602 by operator.

7. **Clearance Exceptions**—At Nisqually and Lakeview trains will not require clearance if train order signal is in proceed position.

EIGHTEENTH SUBDIVISION.
(GATE LINE.)

1. **Movement of Trains Between Centralia and Blakeslee Junction.** N. P. track will be known as Route 2; U. P. track will be known as Route 1. Both routes are included in Centralia yard limits. Eastward movements will be made over Route 2. Westward movements will be made over Route 1.

   Second class and inferior trains may run ahead of first class trains, Blakeslee Junction to Centralia Yard without train order authority.

2. **Blakeslee Junction Interlocking—**
   If a home signal does not indicate proceed the time release may be operated according to instructions inside of box on instrument house at crossing.

   Spring Switch, trailing from west end of connection from Route 1 to N. P. main track, normal position for N. P. main track.

   Handthrow Switch, at East end of connection leading from N. P. main track to Route 1 normal position for connection.

   Spring Switch trailing from each end of connection between Route 2 and U. P. main track, normal position of west switch for the connection, of the east switch for N. P. main track.

3. **Bridge and Engine Restrictions—**
   Between Centralia and Gate, engine Classes heavier than W-3 not permitted. Between Centralia and Blakeslee Junction, on Route 1 (U. P.), engine Classes Q-5, Q-6 and W-3 not permitted.

   Bridge 1, Skookumchuck River, between Centralia and Blakeslee Junction, Route 2 (N. P.), engine Classes A-2, A-3, Z-5, and Z-6, not permitted; engine Classes A, W-3, W-5, Z-3, and Z-4, ten (10) MPH; engine Classes Z and Z-2, twenty (20) MPH.

4. **Speed Restrictions—**
   Passenger Steam Trains forty (40), Motor Cars fifty (50), Freight Trains thirty (30) MPH. Trains handling logs twenty (20) MPH.

   At Centralia—Over streets within corporate limits twenty-five (25) MPH.

   Between Centralia and Blakeslee Junction—Eastward first class trains will move at restricted speed, Blakeslee Junction to Centralia Passenger Station, and westward first class trains will move at restricted speed, Centralia Passenger Station to connection with Route 1.

   At Blakeslee Junction—Over C. M. St. P. & P. and U. P. crossings fifteen (15) MPH.

   Between Centralia and Gate trains handling steam wrecking derrick, pile driver, or locomotive crane, twenty (20) MPH.

   See also Bridge and Engine Restrictions.

5. **At Gate** normal position of main track junction switch is for Eighteenth Subdivision.

6. **Register Stations**— Centralia Passenger Station. Gate.

7. **Clearance Exceptions**—At Blakeslee Junction, trains originating will not require clearance.

NINETEENTH SUBDIVISION.
(ELMA BRANCH.)

1. **Mountain Grade**—Stimson to Marmac.
   At Stimson—Freight train air brake tests as required by Rules, and instructions outlined in Air Brake Instruction Book No. 1, must be made before beginning descent of mountain grade Stimson to Shelton. Record of test will be made as prescribed by Rule 1063 and delivered to operator at Shelton.
   Descending trains will carry 90 lbs. train pipe pressure Stimson to Shelton. Following any stops during descent, the Engineman must fully recharge the brakes before starting, and the Conductor must not give the "Proceed" signal until at least 80 lbs. is shown by the caboose gauge.
   Immediately following departure from McCleary Engineman of Eastward Freight Trains will increase train line pressure to 90 lbs. On reaching Shelton restore train line pressure to 70 lbs.
   Retaining valves will be turned up on all loaded cars and on one-half the empty cars in mixed trains of loads and empties, using retaining valves on one-half the empties, beginning at the head end and alternating on every other car.
   On trains of all empty cars one-half the retaining valves will be turned up beginning at the head end and alternating by using retaining valve on every other car.

2. **At McCleary Junction**—N. P. trains using wye or main track between McCleary Junction and McCleary, will protect against McCleary Timber Company's trains.

3. **At Shelton**—N. P. engines may operate over Simpson Logging Company main tracks between junction with N. P. main track at Olympic highway and east switch of N. P. interchange yard, and from west switch N. P. interchange yard to yard limit board, 786 feet west. N. P. crews occupying Simpson Logging Company tracks within these limits must be protected as per Transportation Rule 99. N. P. trains will look out for Simpson Logging Company engines and derrick working on main track in Shelton Yard.

4. **Bridge and Engine Restrictions—**
   Engines heavier than Classes W and W-1 not permitted.
   Bridge 1, County Road, and Bridge 2, Cloquallum River, between Elma and White, engine Classes A-2, A-3, Z-4, Z-5, and Z-6 not permitted; engine Classes A, W-3, W-5, Z-2 and Z-3, twenty (20) MPH.

5. **Speed Restrictions**—Twenty (20) MPH.
   Trains handling logs, steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) MPH.
   See also Bridge and Engine Restrictions.

6. **Register Station**—Elma.

7. **Clearance Exceptions**—At Shelton, clearance not required.

8. **Commercial Spurs—**

	Miles from Elma	Car Capacity
Whystar	13.3	2
Doubling Spur	20.3	12
Reed Shingle Co.	24.3	9

TWENTIETH SUBDIVISION.
(OCOSTA BRANCH.)

1. **Bridge and Engine Restrictions—**
   Engine classes T and heavier not permitted. On Michigan Mill and Bishop Tracks, Engines heavier than F-1 not permitted.
   Bridge 1, Chehalis River, between Aberdeen Jct. and Junction City, engine Classes Q-3, T, and heavier, and Wrecking Derricks 41, 42 and 43, not permitted; engine Classes F-1, Q, Q-1, S-4 and S-10, eight (8) MPH; engine Classes lighter than F-1, fifteen (15) MPH.

2. **Speed Restrictions—**
   Between Aberdeen Jct. and Mile Post 3, twenty (20) MPH.
   Between Mile Post 3 and Markham, twelve (12) MPH.
   Between Aberdeen Jct. and Markham trains handling logs, steam wrecking derrick, pile driver, or locomotive crane, ten (10)MPH.
   See also Bridge and Engine Restrictions.

3. **Clearance Exceptions**—At Aberdeen Jct. and Markham, clearance not required.

TWENTY-FIRST SUBDIVISION.
(WILLAPA HARBOR LINE.)

1. **At Chehalis Jct.—**
Switch leading to Third Subdivision and east switch of west crossover are electrically locked.

2. **Between Chehalis Jct. and Littell—**
Automatic interlocking protects crossing of Chehalis Western Ry. 2600 feet west of Mile Post 1. Trains moving over crossing will be governed by signal located 500 feet from crossing. If stopped at signal and no conflicting movement is evident, time release in box near crossing may be operated in accordance with instructions posted inside box. If signal fails to clear after operating time release, and no conflicting movement is evident, train may proceed at slow speed, under protection.

3. **Between Chehalis Jct. and Dryad Jct.—**
Track will be used jointly by N. P. and C. M. St. P. & P. operated by and in accordance with N. P. Transportation Rules, Time Table, and Special Instructions.
At Chehalis Jct., westward trains from C. M. St. P. & P. to Twenty-first Subdivision, will stop at signal located on C. M. St. P. & P. track, line the switch to eastward N. P. track, and, if signal indicates "proceed", train may enter eastward track; then, if train rights permit, line the switch for the Twenty-first Subdivision.
Eastward trains, from Twenty-first Subdivision, to enter C. M. St. P. & P. tracks, will be governed by lower light on home signal on Twenty-first Subdivision.

4. **Mullenix Spur—**
Derail located 250 feet from main track switch, and safety switch located 200 feet beyond derail. Normal position of safety switch is for the safety spur.
Movements over Ocean Beach Highway, crossing this spur, must be protected by a flagman.

5. **At Raymond—**
All trains stop before passing over Ocean Beach Highway, 250 feet West of Station, and all switching movements over this crossing must be protected by a Flagman.
Drawbridge over Willapa River, West of Station, Bridge Tenders on duty 7:30 A. M. to 4:30 P. M. Bridge will be left open when Tenders not on duty. Trains will not pass over Drawbridge until proceed signal is received from Drawbridge Tender, using a yellow flag by day and a yellow light by night.

6. **Yard Limits**—Tracks between yard limit boards west of Willapa and east of Willapa Jct. to be operated as one yard.

7. **Drawbridge**—Bridge 53, Willapa River, West of Raymond.

8. **Mountain Grade—**
Mile Post 30 to 2000 feet west of Mile Post 34, between Pluvius and Frances. This grade reaches a maximum of one and eight-tenths percent for short distances, and westward descending trains will use retainers as prescribed by that part of Rule 1064 governing procedure down lesser grades.

9. **Bridge and Engine Restrictions—**
Engine Classes A, Q-5, Q-6, W-3, W-5 and heavier not permitted.
Bridge 0, Newaukum River, and
" 2, Chehalis River, between Chehalis Jct. and Littell,
" 5, Chehalis River, between Adna and Milburn,
" 6, Chehalis River, between Millburn and Ceres,
" 16-1, Chehalis River, between Dryad and Dryad Jct.,
" 23, Chehalis River, between PeEll and McCormick,
" 38, Willapa River, between Lebam and Lewco,
Bridges 42 and 45, Willapa River, between Holcomb and Menlo,
Engine Classes A, Q-5, Q-6, W-3, W-5, and heavier, and doubleheader engine Classes W, W-1, W-2, and W-4, not permitted. Single header engine Classes W, W-1, W-2, W-4, and Z-1, twenty-five (25) MPH.
Draw Span of Bridge 53, Willapa River, between Raymond and South Bend twenty (20) MPH.
Trains handling Wrecking Derricks 41, 42 or 43, ten (10) MPH over Bridges 0, 2, 23 and 38.

10. **Speed Restrictions—**
Between Chehalis Jct. and PeEll, and between Frances and South Bend, Passenger Steam Train forty (40), Motor Car forty-five (45), Freight Trains thirty (30) MPH. Engines backing up with or without cars, trains handling logs, steam wrecking derrick, pile driver, or locomotive crane, twenty (20) MPH.
Between Pe Ell and Frances, Passenger Trains thirty (30), Freight Trains twenty-five (25) MPH.
Trains handling steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) MPH.
See also Bridge and Engine Restrictions.

11. **Register Stations**—South Bend. Dryad Jct. Chehalis.

12. **Clearance Exceptions**—At Chehalis Jct., N. P. trains will not require clearance. At Dryad Jct., trains originating will not require clearance.

13. **Commercial Spurs—**

	Miles from Chehalis Jct.	Car Capacity
Mullenix Spur	27.5	Conn.
Willapa Logging Co. Gravel Spur	42.1	6
Willapa Logging Co. Gravel Spur	45.8	8

TWENTY-SECOND SUBDIVISION.
(YACOLT BRANCH.)

1. **Bridge and Engine Restrictions—**
Engine classes heavier than W-1 not permitted.
Bridge 23, Lewis River, between Lucia and Yacolt; engine Classes A, Q-5, Q-6, W-3, W-5, and heavier, not permitted. Single or double header engine Classes W, W-1, W-2, W-4, and Z-1, eight (8) MPH.

2. **Speed Restrictions—**
Twenty (20) MPH. Trains handling logs approaching and passing through tunnel west of Yacolt, ten (10) MPH.
Trains handling steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) MPH, except approaching and passing through tunnel West of Yacolt ten (10) MPH.
See also Bridge and Engine Restrictions.

3. **Register Station**—Vancouver Jct.

4. **Clearance Exceptions**—At Vancouver Jct. and Yacolt, clearance not required.

5. **Derails**—At Vancouver Jct. derail on West Leg of Wye 200 feet from Third Subdivision end of Wye Switch.

6. **Commercial Spurs—**

	Miles from Yacolt	Car Capacity
Ampere	24.5	20

TWENTY-THIRD SUBDIVISION.
(MOXEE BRANCH.)

1. **Bridge and Engine Restrictions—**
Bridge 1, Yakima River, between Yakima and Terrace Heights; engines, Classes Q-3, T, and heavier, and doubleheader Q-1 and Y to Y-5, and Wrecking Derricks 41, 42 and 43, not permitted; engines Classes Q, S-4, and S-10, and singleheader Classes Q-1, and Y to Y-5, eight (8) MPH.

2. **Speed Restrictions—**
Twenty (20) MPH. Trains handling steam wrecking derrick, pile driver, or locomotive crane, ten (10) MPH.
See also Bridge and Engine Restrictions.

3. **Register Station—**
Yakima.

4. **Clearance Exceptions**—At Moxee City, clearance not required.

TWENTY-FOURTH SUBDIVISION.
(NACHES AND TIETON BRANCHES.)

1. **At Brace,** normal position of switch is for Tieton Branch.

2. **At Tieton, Naches, and Gleed**—No train order signals maintained.

3. **Mountain Grade**—Tieton Branch, Mile Post 6 to Mile Post 8, between Weikel and Cowiche.

4. **Bridge and Engine Restrictions—**
Bridge 4, Naches River, between Brace and Jacobson, engines Classes Q-3, T, and heavier, and doubleheader Q-1 and Y to Y-5, and Wrecking Derricks 41, 42 and 43, not permitted; engines Classes Q, S-4, and S-10, and single header Q-1 and Y to Y-5, eight (8) MPH.

5. **Speed Restrictions**—
Twenty (20) MPH. Trains handling steam wrecking derrick, pile driver, or locomotive crane, ten (10) MPH.
Between Brace and Weikel, ten (10) MPH.
See also Bridge and Engine Restrictions.

6. **Register Stations**—
Yakima yard office.

7. **Derails**—At Naches, derail on main track 200 feet East of East Switch.

ALL SUBDIVISIONS.

1. Transportation Rule 11 is modified as follows: A train finding a fusee burning on or near its track may proceed at restricted speed without stopping.
2. Lights will be displayed at night on all main line train order signals. On branch line subdivisions where lights are not displayed on day-office train order signals, all trains will positively ascertain position of signal and be governed by the day indication.
3. Transportation Rule D-97 applies to all divisions.
4. Transportation Rule 105 is modified as follows: When a siding of an assigned direction is blocked with cars, or taken out of service for any reason, the siding of the opposite direction will be used as a single siding. At lap sidings, unless otherwise provided, trains taking siding must head in at the lap.
5. IN AUTOMATIC BLOCK SIGNAL TERRITORY: When moving with the current of traffic, or on single track where the automatic block signals governing the track in use are of the semaphore type and can be plainly seen from the rear of a standing train to be at stop, such signal being not less than one-half mile from the rear of such train, it will not be necessary to protect the train by a flagman. Under all other circumstances Rule 99 must be observed.
Transportation Rule 501-B is modified as follows: INDICATION—Approach next signal prepared to stop. Block is clear; second block in advance is not clear.
Transportation Rule 509(B) is modified as follows: It must be understood that such signal indication may be due to an opposing train proceeding into the same block at the opposite end, under an approach signal indication Rule 501-B, and before proceeding into the block every precaution consistent with running orders and the nature of the track ahead should be taken to insure safe movement through the block.
When a train dispatcher desires to advance a train from a station where by rule it should enter the siding before passing a train order office, he may instruct the operator to use white signal as prescribed by Transportation Rule 12c. The engineman may then continue to move his train on the main track to the signal at restricted speed and there be governed by train orders addressed to his train.
6. Transportation Rule 606: Emergency Signals are not used at interlockings or drawbridges operated by the Northern Pacific Railway.
7. Transportation Rule 728 is modified as follows: The red flag by day, and in addition the red light at night, will be placed twenty (20) rail lengths distant from the point of obstruction instead of fifty (50) rail lengths. The flagman will be located with the yellow signals, one mile distant beyond the red signals. On the approach of a train the flagman will display the yellow signals which must be acknowledged by the enginemen in accordance with Rule 14(g). In territory authorized by the Superintendent, the yellow signals will be placed as prescribed and the flagman will not be required except during fog, storms or otherwise bad weather.
8. When a siding is to be used temporarily as a main track, the switches will be set and locked for the siding and must be protected by flagman until train order covering the movement is issued to all trains, and the section foreman of that section notified, the flagman to remain until released by the train dispatcher.
9. Except at Lester and Easton, helper engines waiting to help trains will keep clear of main track until train to be helped has arrived and stopped.
10. In case of failure of communicating signal system on passenger trains, and on freight trains when conditions permit, enginemen will receive "proceed" signal before passing any station.

11. Engines coupling to passenger trains, and in making coupling between passenger cars, engine or cars must be brought to a full stop not more than thirty or less than ten feet from the train, before making coupling.
12. Speed Restrictions—Except as otherwise provided;
Passenger trains, sixty (60) MPH.
Freight trains, fifty (50) MPH, except when restricted to lower rate of speed by engine speed restriction.
Engines—All A, Q and P classes, and Classes S-4 and T, sixty (60) MPH, except when used on passenger trains where higher speed is authorized; Z-6, sixty (60) MPH, other Z classes, thirty-five (35) MPH. All other classes fifty (50) MPH. Switch engines under steam, moving between stations, fifteen (15) MPH.
All Trains and Engines—Fifteen (15) MPH through crossovers, turnouts and gauntlets; twenty-five (25) MPH passing telegraph offices where orders are delivered; thirty (30) MPH over interlocked crossings, and when handling steam wrecking derrick, pile driver or locomotive crane; twenty-five (25) MPH when handling logs.
To avoid damage to rail and bridges by moving locomotives having main or side rods down, over the road at too high a speed, the following speeds will be maximum permitted:

ON MAIN LINE—
With main and side rods removed:
All A and Q classes ..... 30 MPH
All other classes ..... 25 MPH
With main rods removed and side rods in place:
All A and Q classes ..... 35 MPH
All other classes ..... 30 MPH

ON BRANCH LINES—
With either or both main and side rods removed:
All A and Q classes ..... 25 MPH
All other classes ..... 20 MPH

OVER BRIDGES—Main or Branch Line .... 20 MPH

In moving over bridges with speed restrictions against the class of engine being so moved, a further restriction of one-half the restricted speed for that class of engine shall be observed.

13. Bridge Restrictions for Single and Double Header Engines—
Where no mention is made of single or double heading, the instructions apply alike to single and double header engines of each class.
An engine of any class double-headed with an engine of lighter class will carry the same restrictions as if the heavier engine were double-headed with its own class, unless instructions to the contrary have been issued.
14. Spring Switches—
Maximum speed for all facing point and trailing point movements through switch fifteen (15) MPH.
Trailing movements on the track for which the switch is normally lined may be made at normal speed.
Trains trailing through or stopping on a spring switch must not back up or take slack until points have been thrown by hand.
Flying switches over or through spring switches are prohibited.
When operated by hand, lever must be moved slowly, keeping a steady pressure on the handle until the switch is thrown and the handle is in the notch on the switch stand provided for it.
When signal governing block in which spring switch is located is at stop, or where automatic block signals do not govern account trains running against current of traffic, facing point movements must not be made over switch until points have been examined.
Sand must not be used over points of spring switches.
15. At points where there are close clearances, trainmen will work on the opposite side of train from them; and, if necessary, the fireman will receive the signals and communicate them to the engineman.
16. Before moving a work or wrecking train, the whistle signal (14-b) or (14-h) must be sounded for the protection of men working about such trains.
17. Gas-electric motor cars, when handled in freight trains, must be behind caboose.
Test of hand brakes of gas electric motor cars must be made once each trip. If crew has charge of moving car prior to leaving initial station, test will be made during such movement; otherwise as soon as possible after leaving initial station. On cars equipped with "Deadman's Control", conductor and engineman will cooperate in making test.

18. Precautions must be taken on double track to prevent accidents from swinging doors or other loose construction attached to cars or locomotives.

19. Logs—Conductors of all trains picking up logs, wood bolts, or veneer blocks, loaded on flat cars, 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, 11 feet 6 inches, as per clearance table pages 34 to 37, inclusive.
Lost logs must be reported and when they obstruct traffic or other tracks, or damage roadway, trains must be stopped and effort made to clear obstruction. Special precautions should be observed to avoid logs falling from cars when using overhead crossings and in all cases of obstructions, take prompt action to protect trains.
Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, will be governed by the following instructions:
Double Track—Must not be handled in trains after dark, except as otherwise provided, in which case a Trainman will be stationed on rear platform of caboose with lighted lantern or fusee, to watch for logs, wood bolts, or veneer blocks that may be lost from cars and obstruct opposite track and take prompt action to protect trains in case of obstruction.
Such trains must not meet or be passed by trains between stations on opposite double track and must be standing when trains on opposite track meet or pass such train.
Conductors will notify Dispatcher when logs, wood bolts, or veneer blocks, loaded on flat cars are in their train, and secure train order that trains on opposite track will be held at next station until they have arrived.
Such trains during daylight hours must, when running between stations, have a Trainman stationed on rear platform of caboose to watch for logs, wood bolts, or veneer blocks that may be lost from cars and obstruct opposite track and take prompt action to protect trains in case of obstruction.
Single Track—Such trains must be standing when meeting or being passed by passenger trains. When running, a trainman must be stationed on rear platform of caboose to watch for logs, wood bolts, or veneer blocks that may have fallen from cars.
These rules will not apply to logs, wood bolts, or veneer blocks loaded in gondola cars properly secured, staked and wired.

20. ELECTRIC SWITCH LOCKS—To operate, open door of electric switch lock and, if indicator shows "proceed", move lock lever to the left, which will unlock switch and permit it to be opened. If indicator shows "stop", and conflicting train movement is not evident, open door of release box and push the push button. This will start operation of clockwork release which will run down in two minutes and, at the end of that time, indicator will show "proceed" and switch can be unlocked by moving lever to the left. Restore lock lever, close and lock doors of electric locks and release boxes when switches are restored to normal position.

21. BULLETIN STATIONS—
Yakima, Passenger Station, Yard Office, Roundhouse.
Ellensburg.
Cle Elum.
Easton.
Lester.
Auburn, Yard Office, Round House.
Seattle, South Portal Tower, Middle Yard, Round House.
Tacoma, Union Station, Yard Office, Round House.
Centralia, Passenger Station, Yard Office, Round House.
Vancouver, Passenger Station.
Portland, Telegraph Office.
Everett, Yard Office, Round House.
Sumas.
Enumclaw.
Bellingham.
Hoquiam, Passenger Station, Round House.
Elma.
South Bend.

22. STANDARD TIME CLOCKS—
Yakima, Passenger Station, Yard Office.
Ellensburg.
Cle Elum.
Easton.
Lester.
Auburn Yard Office.
Seattle, South Portal Tower, Middle Yard Office, Round House.
Tacoma, Union Station, Yard Office, Round House.

Centralia, Passenger Station, Yard Office, Round House.
Longview, Freight Station.
Vancouver, Passenger Station.
Everett.
Bellingham.
Hoquiam, Telegraph Office.

23. WATCH INSPECTORS—
Yakima—Carson and Stedman.
Ellensburg—M. W. Davies.
Cle Elum—M. W. Davies.
Easton—G Davies.
Lester—G. Davies.
Auburn—R. DeBarthe.
Seattle—Arnt Setter, 521 Second Ave.
Weisfield and Goldberg, Inc., 414 Pike St.
Tacoma—Mierows, 1105 Broadway.
Centralia—C. R. Ahern.
Vancouver—Joseph Carter.
Portland—Weisfield and Goldberg, Inc., 310 So. Washington St
Everett—C. M. Smith.
Sedro-Woolley—Horace Condy.
Snohomish—H. L. Emmons.
Bellingham—Erving H. Easton.
Aberdeen—J. A. Johnson.
Hoquiam—Fred Straub.
Olympia—Talcott Bros.
South Bend—S. Holte.
North Bend—D. H. Phillips.
Sumas—Henrickson Jewelry Company.

NOTE:

Schedule meeting or passing stations are indicated by figures in full-faced type; numbers of the trains meeting, passing, or being passed will not be shown.

MAXIMUM CLEARANCES

		LIMIT OF LOAD—MEASUREMENT. HEIGHT ABOVE TOP OF RAIL										
		1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7ft. 6in. Wide	8 ft. Wide	Max. Height	Max. Width
.....	Main Line (Seattle Middle Yard-Reservation).....	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	11′ 6″
.....	West Seattle Line.....	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	11′ 6″
.....	Lake Union Line.....	20′ 7″	20′ 7″	20′ 7″	18′ 3″	18′ 3″	17′ 4″	16′ 4″	15′ 10″	15′ 4″	20′ 7″	11′ 6″
1st Subdivision.....	Main Line (Yakima-East Auburn).....	17′ 8″	17′ 7″	17′ 6″	17′ 3″	17′ 0″	16′ 8″	16′ 4″	16′ 2″	16′ 0″	17′ 8″	11′ 6″
2nd Subdivision....	Reservation—South Tacoma (Via Drawbridge Line).....	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	11′ 6″
2nd Subdivision....	Tacoma Tideflats.....	18′ 9″	18′ 9″	18′ 9″	18′ 9″	18′ 9″	18′ 8″	18′ 8″	18′ 8″	18′ 7″	18′ 9″	11′ 6″
3rd Subdivision....	Main Line (Reservation-McCarver St. via Head of Bay Line)	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	11′ 6″
3rd Subdivision....	Main Line (McCarver St.-Tenino).....	20′ 5″	20′ 2″	19′ 10″	19′ 5″	18′ 11″	18′ 5″	17′ 10″	17′ 6″	17′ 2″	20′ 5″	11′ 6″
3rd Subdivision....	Main Line (Tenino-Portland).....	19′ 4″	19′ 4″	19′ 4″	19′ 0″	19′ 0″	19′ 0″	18′ 11″	18′ 8″	18′ 5″	19′ 4″	11′ 6″
3rd Subdivision....	Between Longview and Longview Jct.....	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 1″	19′ 8″	19′ 4″	19′ 1″	18′ 11″	20′ 3″	11′ 6″
4th Subdivision....	South Tacoma—Tenino.....	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 1″	20′ 11″	21′ 4″	11′ 6″
5th Subdivision....	Main Line (Seattle "Middle Yard" to Sumas via Marysville)	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 2″	20′ 3″	11′ 6″
5th Subdivision....	Argo-Bell Street (Via Seattle Tunnel).....	18′ 7″	18′ 7″	18′ 7″	18′ 7″	18′ 7″	18′ 0″	17′ 0″	16′ 6″	16′ 0″	18′ 7″	11′ 0″
6th Subdivision....	Roslyn Branch.....	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	11′ 6″
7th Subdivision....	Buckley Line.....	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 4″	21′ 2″	21′ 1″	21′ 5″	11′ 6″
7th Subdivision....	Wilkeson Branch. No Restriction.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11′ 6″
8th Subdivision....	Green River Branch.....	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	11′ 6″
10th Subdivision....	Orting Branch.....	18′ 9″	18′ 9″	18′ 9″	18′ 6″	18′ 3″	17′ 11″	17′ 7″	17′ 5″	17′ 3″	18′ 9″	11′ 6″

11th Subdivision....	Belt Line (Black River-Woodinville).....	21′ 6″	21′ 5″	21′ 5″	21′ 5″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 6″	11′ 6″
12th Subdivision....	Snoqualmie Branch.....	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	11′ 6″
13th Subdivision....	Hartford Line (Bromart-Edgecomb).....	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 2″	21′ 1″	20′ 11″	21′ 3″	11′ 6″
14th Subdivision....	Darrington Branch.....	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	11′ 6″
15th Subdivision....	Bellingham Branch.....	19′ 2″	19′ 2″	17′ 11″	17′ 11″	17′ 11″	17′ 11″	17′ 11″	17′ 11″	17′ 1″	19′ 2″	11′ 6″
16th Subdivision....	Grays Harbor Line (St. Clair-Gate).....	17′ 7″	17′ 7″	17′ 6″	17′ 5″	17′ 5″	17′ 4″	17′ 4″	17′ 3″	17′ 3″	17′ 7″	11′ 6″
16th Subdivision....	Grays Harbor Line (Gate-Aberdeen Jct.).....	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 3″	21′ 1″	20′ 11″	21′ 4″	11′ 6″
16th Subdivision...	Grays Harbor Line (Aberdeen Jct.-Moclips).....	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	11′ 6″
16th Subdivision....	Tumwater Spur.....	16′ 11″	16′ 9″	16′ 7″	16′ 6″	16′ 3″	16′ 1″	15′ 10″	15′ 9″	15′ 7″	16′ 11″	11′ 6″
17th Subdivision....	American Lake Line.....	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	11′ 6″
18th Subdivision....	Gate Line (Gate-Centralia).....	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 3″	21′ 2″	21′ 1″	21′ 5″	11′ 6″
.....	Mendota Branch.....	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	11′ 6″
19th Subdivision....	Elma Branch.....	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	11′ 6″
20th Subdivision....	Ocosta Branch.....	20′ 10″	20′ 10″	20′ 10″	20′ 10″	20′ 10″	20′ 4″	19′ 8″	19′ 4″	19′ 1″	20′ 10″	11′ 6″
21st Subdivision....	Willapa Harbor Line.....	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 2″	21′ 1″	21′ 1″	21′ 3″	11′ 6″
22nd Subdivision.....	Yacolt Branch.....	18′ 1″	18′ 1″	18′ 1″	18′ 1″	18′ 0″	18′ 0″	18′ 0″	18′ 0″	18′ 0″	18′ 1″	11′ 6″
23rd Subdivision....	Moxee Branch.....	18′ 9″	18′ 6″	18′ 4″	18′ 1″	17′ 10″	17′ 8″	17′ 5″	17′ 4″	17′ 3″	18′ 9″	11′ 6″
24th Subdivision....	Naches Branch.....	19′ 4″	19′ 4″	19′ 4″	19′ 4″	19′ 4″	19′ 4″	19′ 1″	19′ 1″	19′ 1″	19′ 4″	11′ 6″
24th Subdivision....	Tieton Branch.....	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	11′ 6″

MAXIMUM CLEARANCES

		LIMIT OF LOAD—MEASUREMENT. HEIGHT ABOVE TOP OF RAIL									
		8 ft. 6 in.	9 ft.	9 ft. 6 in.	10 ft.	10 ft. 2 in.	10 ft. 6 in.	11 ft.	11 ft. 6 in.	Max. Height	Max. Width
.....	Main Line (Seattle Middle Yard-Reservation)	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20 ′ 3″	20′ 3″	20′ 3″	20′ 3″	11′ 6″
.....	West Seattle Line	20′ 11″	20′ 7″	20′ 2″	19′ 10″	19′ 9″	19′ 6″	19′ 2″	18′ 9″	21′ 3″	11′ 6″
.....	Lake Union Line	14′ 10″	14′ 5″	14′ 0″	13′ 5″	13′ 3″	12′ 11″	12′ 5″	11′ 11″	20′ 7″	11′ 6″
1st Subdivision....	Main Line (Yakima-East Auburn)	15′ 10″	15′ 8″	15′ 5″	15′ 3″	15′ 1″	14′ 8″	14′ 1″	13′ 6″	17′ 8″	11′ 6″
2nd Subdivision....	Reservation—South Tacoma (Via Drawbridge Line)	21′ 2″	20′ 11″	20′ 7″	20′ 4″	20′ 3″	20′ 0″	19′ 9″	19′ 6″	21′ 4″	11′ 6″
2nd Subdivision....	Tacoma Tideflats	18′ 4″	18′ 2″	17′ 11″	17′ 9″	17′ 8″	17′ 6″	17′ 4″	17′ 1″	18′ 9″	11′ 6″
3rd Subdivision....	Main Line (Reservation-McCarver St. via Head of Bay Line)	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	11′ 6″
3rd Subdivision....	Main Line (McCarver St.-Tenino)	16′ 9″	16′ 4″	15′ 11″	15′ 5″	15′ 2″	14′ 10″	14′ 2″	13′ 6″	20′ 5″	11′ 6″
3rd Subdivision....	Main Line (Tenino-Portland)	18′ 2″	17′ 11″	17′ 7″	17′ 3″	17′ 1″	16′ 9″	16′ 3″	15′ 8″	19′ 4″	11′ 6″
3rd Subdivision....	Between Longview and Longview Jct	18′ 8″	18′ 6″	18′ 3″	18′ 1″	18′ 0″	17′ 11″	17′ 8″	17′ 6″	20′ 3″	11′ 6″
4th Subdivision....	South Tacoma—Tenino	20′ 8″	20′ 6″	20′ 4″	20′ 2″	20′ 1″	20′ 0″	19′ 10″	19′ 8″	21′ 4″	11′ 6″
5th Subdivision....	Main Line (Seattle "Middle Yard" to Sumas via Marysville)	19′ 11″	19′ 9″	19′ 6″	19′ 3″	19′ 2″	18′ 11″	18′ 8″	18′ 4″	20′ 3″	11′ 6″
5th Subdivision....	Argo-Bell Street (Via Seattle Tunnel)	15′ 6″	15′ 0″	14′ 4″	13′ 7″	13′ 3″	12′ 6″	11′ 0″	.....	18′ 7″	11′ 0″
6th Subdivision....	Roslyn Branch	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	11′ 6″
7th Subdivision....	Buckley Line	20′ 11″	20′ 10″	20′ 8″	20′ 7″	20′ 6″	20′ 5″	20′ 4″	20′ 2″	21′ 5″	11′ 6″
7th Subdivision....	Wilkeson Branch. No Restriction	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8th Subdivision....	Green River Branch	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	11′ 6″
10th Subdivision....	Orting Branch	17′ 1″	17′ 0″	16′ 10″	16′ 8″	16′ 7″	16′ 6″	16′ 5″	16′ 3″	18′ 9″	11′ 6″

11th Subdivision....	Belt Line (Black River-Woodinville)	21′ 3″	21′ 3″	21′ 3″	21′ 1″	21′ 0″	20′ 10″	20′ 8″	20′ 6″	21′ 6″	11′ 6″
12th Subdivision....	Snoqualmie Branch	21′ 0″	20′ 10″	20′ 6″	20′ 3″	20′ 2″	20′ 0″	19′ 8″	19′ 4″	21′ 0″	11′ 6″
13th Subdivision....	Hartford Line (Bromart-Edgecomb)	20′ 9″	20′ 7″	20′ 4″	20′ 2″	20′ 1″	19′ 11″	19′ 9″	19′ 7″	21′ 3″	11′ 6″
14th Subdivision....	Darrington Branch	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	11′ 6″
15th Subdivision....	Bellingham Branch	16′ 10″	16′ 8″	16′ 4″	16′ 2″	16′ 2″	16′ 0″	15′ 9″	15′ 6″	19′ 2″	11′ 6″
16th Subdivision....	Grays Harbor Line (St. Clair-Gate)	17′ 2″	17′ 2″	17′ 1″	17′ 0″	17′ 0″	16′ 11″	16′ 10″	16′ 9″	17′ 7″	11′ 6″
16th Subdivision....	Grays Harbor Line (Gate-Aberdeen Jct.)	20′ 10″	20′ 9″	20′ 7″	20′ 5″	20′ 4″	20′ 1″	19′ 9″	19′ 6″	21′ 4″	11′ 6″
16th Subdivision....	Grays Harbor Line (Aberdeen Jct.-Moclips)	20′ 6″	20′ 6″	20′ 6″	20′ 5″	20′ 5″	20′ 4″	20′ 2″	20′ 1″	20′ 6″	11′ 6″
16th Subdivision....	Tumwater Spur	15′ 5″	15′ 3″	15′ 1″	15′ 0″	14′ 11″	14′ 10″	14′ 8″	14′ 4″	16′ 11″	11′ 6″
17th Subdivision....	American Lake Line	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	21′ 7″	11′ 6″
18th Subdivision....	Gate Line (Gate-Centralia)	20′ 11″	20′ 10″	20′ 8″	20′ 7″	20′ 6″	20′ 5″	20′ 4″	20′ 2″	21′ 5″	11′ 6″
.....	Mendota Branch	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	25′ 0″	11′ 6″
19th Subdivision....	Elma Branch	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	11′ 6″
20th Subdivision....	Ocosta Branch	18′ 9″	18′ 6″	18′ 2″	17′ 10″	17′ 9″	17′ 7″	17′ 3″	16′ 11″	20′ 10″	11′ 6″
21st Subdivision....	Willapa Harbor Line	21′ 0″	20′ 10″	20′ 8″	20′ 6″	20′ 6″	20′ 4″	20′ 3″	20′ 1″	21′ 3″	11′ 6″
22nd Subdivision....	Yacolt Branch	17′ 9″	17′ 5″	16′ 3″	15′ 2″	14′ 9″	13′ 11″	10′ 9″	5′ 6″	18′ 1″	11′ 6″
23rd Subdivision....	Moxee Branch	17′ 1″	17′ 0″	16′ 11″	16′ 10″	16′ 9″	16′ 8″	16′ 7″	16′ 6″	18′ 9″	11′ 6″
24th Subdivision....	Naches Branch	19′ 1″	19′ 0″	18′ 11″	18′ 10″	18′ 9″	18′ 7″	18′ 4″	18′ 1″	19′ 4″	11′ 6″
24th Subdivision....	Tieton Branch	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	11′ 6″

TONNAGE RATINGS—FREIGHT ENGINES

DISTRICTS	Class Z 3 Tons	Class W 3 Tons	Class W 1 Tons	Class W Tons	Class Y 2 Tons	Class S 4 Tons	Class F 1 Tons
First Subdivision—Eastward.							
Auburn to Lester	2500	1700	1200	1100	900	800	
Lester to Easton. Maximum 80 cars	1250	750	600	550	450	400	
Easton to Yakima	Car Limit	Car Limit					
First Subdivision—Westward.							
Tacoma to Auburn			3600				
Yakima to Thrall	3600	3125		2100		1550	
Thrall to Ellensburg	5000	4000		3800		2450	
Ellensburg to Easton	3600	2300	1800	1700	1300	1200	
Easton to Lester. Maximum 80 cars	1250	750	600	550	450	400	
Lester to Auburn	Car Limit	Car Limit					
Fifth Subdivision—Eastward.							
Sumas to Wickersham		3150	2600	2500	2300	2000	1700
Wickersham to Hoogdale		2900	2500	2400	2100	1800	1600
Hoogdale to Clear Lake		5000	4600	4500	4000	3500	3000
Clear Lake to Edgecomb		2950	2500	2400	2100	1800	1600
Edgecomb to Bromart		5000	4700	4600	4200	3000	2500
Bromart and Snohomish to Maltby		1200	975	900	800	660	625
Maltby to Woodinville		5000	4100	4000	4000	3170	3000
Woodinville to Lake		3150	2900	2800	2600	2500	2200
Lake to Keith		2850	2400	2300	2100	1650	1500
Keith to Seattle		3150	2900	2800	2600	2500	2200
Fifth Subdivision—Westward.							
Seattle to Interbay		5000	4600	4500	4000	3500	3000
Interbay to Keith		1750	1325	1250	1100	1000	900
Keith to Woodinville		3650	3100	3000	2500	2200	2000
Woodinville to Maltby		1100	905	830	780	635	600
Maltby to Bromart		2350	1900	1800	1600	1500	1400
Bromart and Snohomish to Arlington		4150	3700	3600	3200	2700	2500
Arlington to McMurray		2400	2150	2050	1900	1650	1400
McMurray to Sedro-Woolley		4150	3700	3600	3200	2500	2000
Sedro-Woolley to Thornwood		1750	1400	1300	1050	1000	950
Thornwood to Sumas		3150	2600	2500	2300	2000	1700
Eleventh Subdivision—Eastward.							
Woodinville to Kirkland		2350	1900	1800	1600	1215	1150
Kirkland to Black River		5000	4600	4500	4000	3500	3000
Eleventh Subdivision—Westward.							
Black River to Woodinville		2650	2350	2250	2000	1700	1500

TONNAGE RATINGS—FREIGHT ENGINES —Continued.

DISTRICTS.	Class W 3 Tons	Class W 1 Tons	Class W Tons	Class Y 2 Tons	Class S 4 Tons	Class F 1 Tons
Twelfth Subdivision—Eastward.						
North Bend to Fall City				1585	1740	1650
Fall City to Preston				700	580	550
Preston to Woodinville				2300	2000	1700
Twelfth Subdivision—Westward.						
Woodinville to Issaquah				2500	2100	1700
Issaquah to Preston				700	550	450
Preston to Fall City				900	800	700
Fall City to North Bend				2000	1600	1500
Thirteenth Subdivision—Eastward.						
Edgecomb to Getchell	1350	1075	1000	800	750	700
Getchell to Snohomish	5000	4600	4500	4000	3500	3000
Thirteenth Subdivision—Westward.						
Bromart and Snohomish to Hartford	2150	1800	1700	1500	1200	1100
Hartford to Getchell	1650	1300	1200	1100	900	800
Getchell to Edgecomb	5000	4600	4500	3500	3500	3000
Fourteenth Subdivision—Eastward and Westward.						
Arlington and Darrington				5000	4500	3000
Fifteenth Subdivision—Eastward.						
Bellingham to Larson	1050	800	725	600	555	525
Larson to Wickersham	3200	2500	2400	2200	2000	1800
Fifteenth Subdivision—Westward.						
Wickersham to Mirror Lake	1080	835	760	750	580	550
Mirror Lake to Silver Beach	2650	2250	2150	1750	1500	1250
Silver Beach to Larson	2150	1800	1700	1500	1300	1100
Larson to Bellingham	Max	i m u	m 80	Cars	.	

TONNAGE RATINGS—FREIGHT ENGINES—N. P. RY.

SUBDIVISION	DISTRICT	CLASS OF ENGINE										
		Class W-3	Class W		Class Y-2		Class F-1		Class S		Class P	
		Tons	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars
Third Eastward	Tacoma to Chehalis	4500	3500	.....	3300	.....	2000	80	1800	80	1500	50
	Chehalis to Napavine	1975	1350	70	1250	70	900	60	850	60	750	60
	Napavine to Portland	.....	.....	.....	.....	.....	3000	75	3000	75	1400	47
Third Westward	Portland to Vader	4000	3000	.....	2800	.....	2500	80	2500	80	1250	60
	Vader to Napavine	2350	1700	.....	1500	.....	1100	.....	1000	32	860	29
	Napavine to Tacoma	4500	3500	.....	3300	.....	2500	80	2500	80	2300	50
Sixteenth Westward	St. Clair to Lacey	.....	1000	.....	900	.....	800	40	800	40	.....	.....
	Lacey to Olympia	.....	2500	.....	2400	.....	.....	70	.....	70	.....	.....
	Olympia to Belmore	.....	1000	.....	900	.....	600	35	600	35	.....	.....
	Belmore to Gate	.....	1500	.....	1400	.....	1200	40	1200	40	.....	.....
	Gate to Hoquiam	.....	3500	.....	3300	.....	2200	99	2200	99	.....	.....
	Hoquiam to Moclips	.....	4000	.....	4000	.....	2500	99	2500	99	.....	.....
Sixteenth Eastward	Moclips to Hoquiam	.....	4000	.....	4000	.....	2500	99	2500	99	.....	.....
	Hoquiam to Gate	.....	3500	.....	3300	.....	2000	99	2000	99	.....	.....
	Gate to Olympia	.....	2700	.....	2500	.....	1500	50	1500	50	.....	.....
	Olympia to Lacey	.....	1000	.....	900	.....	550	30	550	30	.....	.....
	Lacey to St. Clair	.....	1350	.....	1250	.....	1050	40	1050	40	.....	.....
Seventeenth Eastward	Lakeview to Nisqually	.....	2500	.....	2300	.....	2000	80	2000	80	.....	.....
Seventeenth Westward	Nisqually to Fort Lewis	.....	1000	50	800	40	550	30	550	30	.....	.....
	Fort Lewis to Murray	.....	2000	.....	1800	.....	1500	.....	1500	.....	.....	.....
	Murray to Lakeview	.....	2500	.....	2300	.....	2000	.....	2000	.....	.....	.....
Fourth Eastward	Tacoma to South Tacoma	900	600	20	500	20	400	15	400	15	300	15
	South Tacoma to Rainier	.....	2000	.....	1800	70	1200	60	1150	60	1050	60
	Rainier to West Tenino	.....	3200	.....	.....	.....	.....	60	.....	60	.....	60
Fourth Westward	West Tenino to Rainier	.....	1700	.....	1500	.....	1100	.....	1050	35	950	31
	Rainier to Tacoma	.....	3200	.....	3000	.....	1800	80	1800	75	1500	50
Seventh Westward	Palmer Jct. to Tacoma	.....	.....	.....	.....	.....	.....	80	.....	80	.....	.....
	Fairfax to South Prairie	.....	.....	.....	.....	.....	2000	45	2000	45	.....	.....
Seventh Eastward	Tacoma to Orting	.....	3000	.....	2800	.....	1800	80	1800	80	.....	.....
	Orting to South Prairie	.....	1500	80	1400	60	900	60	800	60	.....	.....
	South Prairie to Buckley	.....	800	20	700	17	450	15	400	14	.....	.....
	Buckley to Palmer Jct	.....	1650	80	1450	60	900	60	800	60	.....	.....
	South Prairie to Wilkeson	.....	.....	.....	.....	.....	400	25	400	25	.....	.....
	Wilkeson to Carbonado	.....	.....	.....	.....	.....	400	25	400	25	.....	.....
	Carbonado to Fairfax	.....	.....	.....	.....	.....	500	30	500	30	.....	.....

TONNAGE RATINGS—FREIGHT ENGINES—N. P. RY.—Continued.

SUBDIVISION	DISTRICT	CLASS OF ENGINE									
		Class W-3	Class W		Class Y-2		Class F-1		Class S		Class P	
		Tons	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars
Eighth Westward	Kerriston to Kanaskat	.....	.....	.....	.....	.....	600	30	600	30	.....	.....
Eighth Eastward	Kanaskat to Kerriston	.....	.....	.....	.....	.....	400	25	400	25	.....	.....
Tenth Eastward	Orting to Lake Kapowsin	.....	.....	.....	.....	.....	600	.....	600	.....	.....	.....
Eighteenth Westward	Centralia to Gate	.....	3500	.....	3300	.....	2200	70	2200	70	.....	.....
Eighteenth Eastward	Grand Mound to Centralia	.....	3500	.....	3500	.....	3000	70	3000	70	.....	.....
	Rochester to Grand Mound	.....	3500	.....	3500	.....	2400	70	2400	70	.....	.....
	Gate to Rochester	.....	3500	.....	3300	.....	2000	70	2000	70	.....	.....
Twenty First Westward	Chehalis Jct. to Adna	.....	2900	.....	2800	.....	2000	60	2000	60	.....	.....
	Adna to Pe Ell	.....	2500	.....	2500	.....	1500	50	1400	50	.....	.....
	Pe Ell to McCormick	.....	1700	.....	1600	.....	800	30	800	30	.....	.....
	McCormick to Pluvius	.....	1000	.....	900	.....	550	30	550	30	.....	.....
	Pluvius to South Bend	.....	.....	.....	.....	.....	.....	70	.....	70	.....	.....

Twenty First Eastward	South Bend to Frances	.....	2100	.....	2000	.....	1800	60	1800	60	.....	.....
	Frances to Pluvius	.....	900	.....	800	.....	500	25	500	25	.....	.....
	Pluvius to Chehalis Jct	.....	.....	.....	.....	.....	.....	70	.....	70	.....	.....
Twenty Second Westward	Yacolt to Vancouver Jct	.....	.....	.....	.....	.....	1800	45	1800	45	.....	.....
Twenty Second Eastward	Vancouver Jct. to Homan	.....	1000	.....	.....	.....	550	35	550	35	.....	.....
	Homan to Yacolt	.....	1500	.....	.....	.....	800	45	800	45	.....	.....
Nineteenth Eastward	Elma to Hillgrove	.....	1800	.....	1700	.....	1200	70	800	70	.....	.....
	Hillgrove to Stimson	.....	1550	.....	1450	.....	1100	.....	.....	.....	.....	.....
	Stimson to Shelton	.....	1100	.....	1000	.....	700	.....	550	.....	.....	.....
Nineteenth Westward	Shelton to Marmac	.....	1800	.....	1700	.....	1200	.....	400	.....	.....	.....
	Marmac to Stimson	.....	600	.....	500	.....	400	.....	.....	.....	.....	.....
	Stimson to Elma, Descending	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

RAILROAD CROSSINGS AND INTERLOCKINGS.

Second Subdivision.
SEATTLE.
South Portal of King Street Tunnel—Interlocked.
BETWEEN 15TH ST. TOWER AND RESERVATION.
UP Crossing—Interlocked.
Bridge 39, Drawbridge Line—Interlocked.
RESERVATION.
Junction UP—Interlocked.
BETWEEN BLACK RIVER AND ARGO.
CMStP&P Crossing—Interlocked.
BETWEEN ARGO AND MIDDLE YARD.
UP and PCR Crossings—Interlocked.
West Seattle Line.
Bridge 36.8, Duwarmish River—Interlocked.

Third Subdivision.
CHEHALIS JCT.
CMStP&P Crossings—Interlocked.
Bridge 119, LEWIS RIVER DRAWBRIDGE—Interlocked.
Bridge 14, CHAMBERS CREEK DRAWBRIDGE—Interlocked.
Bridge 0.59, COWLITZ RIVER (On Longview Line)—Interlocked.

Fifth Subdivision.
Seattle.
North and South Portals of King St. Tunnel—Interlocked.
Delta Wye—Interlocked.
BETWEEN BIG LAKE AND CLEAR LAKE.
PS&C Crossing—Interlocked.
BETWEEN SEDRO WOOLLEY AND THORNWOOD.
Two GN Crossings.
BETWEEN DEMING AND NOOKSACK.
CMStP&P Crossing.
BETWEEN NOOKSACK AND SUMAS.
CMStP&P Crossing.
Draw Spans.
Bridge 4, Lake Washington Canal—Interlocked.

Eleventh Subdivision.
AT RENTON.
PCR Crossing.
AT BRIQUETTEVILLE.
PCR Crossing.
WOODINVILLE.
12th Subdivision Crossing.

Twelfth Subdivision.
WOODINVILLE.
11th Subdivision Crossing.

Sixteenth Subdivision.
OLYMPIA.
Tumwater Spur Crossing.
BETWEEN BRADY AND MONTESANO.
Shaffer Bros. Ry. Crossing—Automatic Interlocking.
DRAWBRIDGES.
ABERDEEN. Bridge 68, Wishkah River—Interlocked.
HOQUIAM. Bridge 72, Hoquiam River—Interlocked.

Eighteenth Subdivision.
BETWEEN ROCHESTER AND GATE.
CMStP&P Crossing.
BLAKESLEE JUNCTION.
UP and CMStP&P Crossings—Automatic Interlocking.

Twentieth Subdivision.
SOUTH ABERDEEN.
UP Crossing.

Twenty-First Subdivision.
Chehalis Jct.
CMStP&P Crossing—Automatic Interlocking.
Between Chehalis Jct. and Littell.
Chehalis Western Ry. Crossing—Automatic Interlocking.

Twenty-Fourth Subdivision.
YAKIMA.
YVT Crossing.

SPEED TABLE.

Time per Mile Min.	Sec.	Miles per Hour
1	..	60
1	1	59
1	2	58
1	3	57.1
1	4	56.2
1	5	55.3
1	6	54.5
1	7	53.7
1	8	52.9
1	9	52.1
1	10	51.4
1	12	50
1	15	48
1	20	45
1	25	42.3
1	30	40
1	40	36
1	45	34.3
1	50	32.7
2	..	30
2	10	27.6
2	15	26.6
2	20	25.7
2	30	24
2	40	22.5
2	45	21.8
2	50	21.2
3	..	20
3	9	19
3	20	18
3	31	17
3	45	16
4	..	15
5	..	12
6	..	10
7	30	8
10	..	6

I. P. IVERSEN,
Assistant Superintendent.

J. F. ALSIP,
Assistant Superintendent.

W. A. GERDON,
Trainmaster.

C. H. BURGESS,
Trainmaster.

T. J. REGAN,
Trainmaster.

W. G. ASHWORTH,
Trainmaster.

F. KERGAN,
Chief Dispatcher.