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**Spokane, Portland & Seattle Railway Co.**  
**System Lines**

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**Special  
Instructions  
No. 8**

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**Effective 12:01 A. M. Pacific Time**

**Sunday, January 16, 1949**

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**These instructions constitute a part of the  
Time Table currently in effect.**

**Employes whose duties are in any way  
affected by the Time Table must have a copy of  
The Current Special Instructions and Current  
Time Table with them on duty.**

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**E. H. SHOWALTER,  
Superintendent**

**E. B. STANTON,  
Vice President and General Manager**

## TERMINALS SUB-DIVISION

1. **Between Portland and Lake Yard**—Transfers in either direction, without cabooses, between sunset and sunrise, or when weather conditions obscure vision, will display red light on rear end of the rear car.
2. **At Portland**—Between end of double track at 10th Avenue and Union Station, trains and engines will be governed by signals from switch tenders. Westward trains and engines must not pass clearance point at end of double track until proceed signal from switch tender is received.

Eastward trains from S. P. & S. Ry. yard will use westward main track from 15th Avenue to 17th Avenue under protection of flagman, thence through cross-over to eastward main track and must not occupy westward main track while waiting for outbound passenger trains.

S. P. & S. Ry. yard crews and engines in charge of hostlers will not enter upon trackage of Northern Pacific Terminal Company in vicinity of 10th Avenue without first receiving signal from N. P. T. Co. switch tender, and in no case will S. P. & S. Ry. employes handle switch to connection between the S. P. & S. Ry. and the N. P. T. Co., unless switch tender should be absent, and then only when it can be plainly seen there are no N. P. T. Co. engines moving in vicinity of connecting track switch.

Freight trains except caboose hops entering S. P. & S. Ry. yard, will, unless specifically advised to the contrary, head in on 21st Avenue lead, stop east of 14th Avenue and call for track. Trains handling passenger equipment only will head in at 14th Avenue unless otherwise advised. Caboose hops will use main line pocket.

Yard crews when switching over S. P. Co. trackage at East First and Main Streets, Portland, must, before leaving crossing, assure themselves that signals have cleared for S. P. Co. trackage to avoid delay to S. P. Co. trains due to failure of signals to clear. Employes handling switch lock lever must be positive that it is in proper position when they have completed their work in that vicinity. When lever is placed in normal position and door of the box closed, signals on the S. P. Co. will clear. If for any reason, after lever has been restored to normal position, signals on the S. P. Co. tracks fail to clear, the train dispatcher must be notified immediately.

On N. P. T. Co. trackage, trains and engines using tracks 1 to 10 inclusive must run at restricted speed when passing a train receiving or discharging passengers and must not cross under "High Shed" at passenger station without receiving proceed signal from Station Master or his Assistant. In making this movement with yard engines, a member of the crew must ride on leading footboard of engine and when cars are being pushed must ride on front of leading car in direction engine is moving. A flagman must proceed movement of yard engines over crossing in front of baggage room unless a proceed signal is given by Station Master, Baggage Master, or their Assistants.

Fire lanes have been established over railroad crossings at 9th and Front Avenues and 14th and Front Avenues. Fire warning signals consisting of an electric siren and red flashing lamps located at these crossings will be operated only when fire fighting apparatus is going to a fire along the water front. In such cases, siren will be sounded 2 to 3 minutes before apparatus reaches crossing and immediate action must be taken by trains and engines to clear crossing in order there be no delay in fire apparatus reaching scene of fire.

3. **At Willbridge**—Enginemen of eastward diesel-electric powered passenger trains in addition to sounding whistle signal 14(1) as required, will sound this signal as an additional alarm approaching Automatic Block Signal No. 3.6 located just west of Doane Street Yard lead.

4. **At East Portland**—The following governs the use of tracks constituting the East Second Street Yard: Tracks 1, 4, 5 and 6 are owned by the Union Pacific Railroad. Tracks 2 and 3 are owned by the S. P. & S. Railway.

**Track 1** is for S. P. & S. to make delivery of cars to the Union Pacific and the Union Pacific will use this track for other business provided it does not interfere with the S. P. & S. making their deliveries.

**Track 2** is for Union Pacific to make delivery of cars to the S. P. & S. and the S. P. & S. will use this track for other business provided it does not interfere with the Union Pacific making their deliveries.

**Track 3** is for use as a thoroughfare by the S. P. & S. between Portland and East Portland and must not be used by the Union Pacific.

**Track 4** is for use by the Union Pacific as a thoroughfare between Albina and East Portland and must not be used by the S. P. & S.

**Tracks 5 and 6** are for exclusive Union Pacific use and must not be used by the S. P. & S.

These tracks must not be used in any other manner than indicated above.

5. **At North Portland Jct.**—The four tracks located between main track and the stock yards are numbered from east to west (compass direction) as Nos. 1, 2, 3, and 4.

**Track No. 1** is for interchange of cars between the Peninsula Terminal Company and the Union Pacific.

**Track No. 2** is for interchange of cars between the S. P. & S. and the Peninsula Terminal Company.

**Track No. 3** is a run around track **only** for use by Union Pacific, S. P. & S. and Peninsula Terminal Company, and must be left clear.

**Track No. 4** is for interchange of cars between the Union Pacific and the S. P. & S.

6. **Impaired Clearance**—

**At Portland**—Hoyt Street Yard: All tracks except Nos. 1, 2 and 3 in middle yard have impaired horizontal clearance and will not clear a man on side of car.

**At Portland**—Union Station Yard: When U. P. engines 3800 class enter or leave tracks in south end of yard, the boilers extend to outside of curve, creating close clearance with any engine standing or moving on adjacent tracks. Engines standing on south end of any of the odd numbered tracks awaiting arrival of U. P. passenger trains must remain back on straight track a sufficient distance to afford proper clearance, which clearance is indicated by yellow marks painted on ties and on edge of station platform.

S. P. & S. engines Class E-1 not permitted to enter or leave trackage at south end of station account sharp turnouts. Clearance at cab window height with depot sheds is as close as one and one-half inches, which close clearance must be observed by engine crews at all times.

**Overhead Bridge 6.7 and 6.9** at East St. Johns, **Willamette River** and **Columbia Slough Bridge** will not clear man on top of Swift and Co. cars Nos. 117 and 118.

7. **Engine Restrictions**—

**At Portland**—Hoyt Street Yard: Engines S. P. & S. and GN Classes O-1 and heavier not permitted to head in on any yard track except Tracks 1, 2, and 3 in the Middle Yard, account No. 7 turnouts. These classes of power are permitted to back through other yard tracks.

Engines classes O-1 and heavier not permitted to use turnout from Middle Yard lead to old main line at north end of coach yard account heavy curvature.

**Between Nicolai Street, Portland, and Lake Yard** sanding flues of engines is prohibited.

## VANCOUVER DIVISION

### FIRST SUB-DIVISION

1. **At Vancouver**—In making change of engines on westward passenger trains, the outgoing engine, if an H-1 or smaller, will be placed on Fletcher Oil Company spur leading off the eastward main track. If the relief engine is heavier than Class H-1, change will be made at the east yard lead switch.

To avoid delay to first class trains, westward freight trains on which main line connections are to be made will allow not less than 30 minutes to effect connection prior to time eastward first class trains are due to leave Vancouver or prior to time westward first class trains are due to leave Eavan.

2. **At Camas**—Spur track serving the Bag Factory extends 96 feet inside building. Crews handling cars for this building must leave such cars outside and engines must not enter building account impaired side and vertical clearance.

3. **At North Bonneville**—Westward freight trains occupying siding for passenger trains will remain into clear at east end of siding, if length permits, to enable passengers on these trains to view the dam. Eastward freight trains will pull down to east switch for same reason.

4. **At Lyle**—Freight trains required to occupy siding during time the Goldendale Branch train and/or No. 4 are at the station must cut their train at platform in front of the depot to enable transfer of mail and express between the two trains.

Trains setting out cars for the Goldendale Branch will place cars on skidway or Branch run-around track.

5. **At Wishram**—Automatic block signal circuit extends through yard and governs main track operation. When either switch of the crossover west of the depot or either switch of the crossover east of the depot is open, it places westward signal 107.7 at the extreme east end of yard in stop position. The use of these crossovers by trains and engines on the time of a westward first-class train delays such train unnecessarily. A signal overlap sign is installed 2000 ft. east of west switch Oregon Trunk lead.

6. **Signal Overlap Signs** are installed near the center of sidings at the following stations:

Fisher  
Washougal  
Mt. Pleasant  
Avery.

When trains meet at above stations, no part of train or engine occupying main track shall pass overlap sign until opposing train has entered siding. Crews of trains occupying siding must not open leaving switch until rear of opposing train has passed overlap.

## 7. Engine Restrictions—

Engines classes E-1 and heavier not permitted on the following tracks:

**Vancouver**—Barracks spur.

**Camas**—Warehouse spurs 1 and 3; mill spurs 1 and 2; and Standard Oil Company spur.

**Skamania**—Industry track.

**Stevenson**—Union Oil Company spur and Standard Oil Company spur.

**Carson**—Spur.

**Home Valley**—Rock spur.

**Hood**—Broughton Lumber Company spur.

**Bingen - White Salmon**—Union Oil Company spur and Standard Oil Company spur.

**At Home Valley** engines heavier than Class O-3 not permitted on Rock spur.

## SECOND SUB-DIVISION

### 1. Register Exception—

**At Pasco**—The S. P. & S. register will be used in compliance with Rule 83(A) in lieu of the register at S. P. & S. Junction.

### 2. Between Pasco and Kennewick—All movements between Pasco passenger station and east switch of siding at Kennewick are governed by block signals, the indications of which supersede the superiority of trains for opposing and following movements on the same track. The end of bonded circuit is located 4500 feet west of west switch at Kennewick. Eastward trains will stop clear of east switch of siding Kennewick if eastbound signal at east switch does not indicate proceed.

Trains to and from the S. P. & S. will display the same classification signals as required arriving S. P. & S. junction on S. P. & S. Ry., but regular trains will use schedules shown on N. P. time table carrying S. P. & S. connections.

### 3. Between Wishram and S. P. & S. Jct.—When dusty conditions are such as to make it impossible for trainmen to make running inspection of trains, eastward freight trains will stop at Roosevelt and westward freight trains at Whitcomb, where an on-the-ground car-to-car inspection of equipment will be made.

### 4. At Wishram—Automatic block signal circuit extends through yard and governs main track operation. Whenever either switch of the crossover west of the depot or either switch of the crossover east of the depot is open, it places westward signal 107.7 at the extreme east end of yard in stop position. The use of these crossovers by trains and engines on the time of a westward first-class train delays such train unnecessarily. A signal overlap sign is installed 2000 feet east of west switch Oregon Trunk lead.

### 5. Signal Overlap Signs are installed near the center of sidings at the following stations:

King  
Finley  
Kennewick.

When trains meet at above stations, no part of train or engine occupying main track shall pass overlap sign until opposing train has entered siding. Crews of trains occupying siding must not open leaving switch until rear of opposing train has passed overlap.

## THIRD SUB-DIVISION

### 1. Between Pasco and Ainsworth Junction—

All trains and engines will be governed by block signals, the indications of which supersede the superiority of trains for both opposing and following movements on the same track. Freight trains and engines must avoid delay to first-class trains and passenger extras as far as possible.

### 2. At Pasco—Dwarf signal located 1000 feet east of M. P. 232 governs eastward movements from siding to main track, the approach lighting section of which extends 400 feet west of the signal. A time release and key switch is located 10 feet east of head block and to operate, trainmen will insert key in switch key box and turn in clockwise direction to actuate dwarf signal. If signal does not then indicate proceed, open door of box, operate push button and wait three (3) minutes for time release, and if signal does not then indicate proceed, be governed by Rule 509(A).

Normal position of dual control switch at intersection of freight yard lead and main track at M. P. 231 is for main track and is electrically operated by remote control by the operator at Pasco.

Normal position of switch at intersection of the back-up track and S. P. & S. Ry. Third Subdivision main track is for S. P. & S. Ry. Third Subdivision main track.

### 3. At Ainsworth Junction—Dual control switch, electrically operated by remote control by the operator at Pasco, normal position for N. P. Ry. Ninth Subdivision.

Upper unit of eastward home signal governs movements to N. P. Ry. Ninth Subdivision. The middle unit governs movements to S. P. & S. Ry. Third Subdivision.

### 4. At Votaw—Siding signal located at the east end of siding governs eastward movements to main track. A time release and key switch is located ten feet east of head block and to operate, trainmen will insert key in switch box and turn in clockwise direction to actuate siding signal. If signal does not indicate proceed, open door of box, operate push button and wait three minutes for time release, and if signal does not then indicate proceed, be governed by Rules 509(A) and 523.

### 5. At Snake River Junction—Normal position of junction switch is for S. P. & S. Ry. 3rd sub-division. Trains from Northern Pacific Ry. must not occupy S. P. & S. Ry. main track until after obtaining Register Check with clearance Form A from operator authorizing movement. Junction switch is equipped with an electric switch lock.

### 6. At Mock—Siding signal located at the west end of siding governs westward movements to main track. A time release and key switch is located ten feet west of headblock and to operate trainmen will insert key in switch box and turn in clockwise direction to actuate siding signal. If signal does not indicate proceed, open door of box, operate push button and wait three minutes for time release, and if signal does not then indicate proceed, be governed by Rules 509(A) and 523.

### 7. At Hooper, Benge and Overlook—Siding signal located at the east end of siding governs eastward movements to main track. A time release and push button switch is located at the headblock and to operate trainmen will unlock switch box No. 1 and operate push button to actuate siding signal. If signal does not indicate proceed, open door of box No. 2, operate push button and wait three minutes for time release, and if signal does not then indicate proceed, be governed by Rules 509(A) and 523.

8. **At Scribner**—Normal position of junction switch is for the Fort Wright line.

Northern Pacific trains approaching Scribner from S. P. & S. will sound whistle signal one short, one long and one short to call for route to Marshall.

Junction switch is equipped with an electric switch lock. The locking device is also equipped with a sealed emergency release for use only when apparatus fails to unlock following normal procedure.

To operate emergency release, break the seal, remove lock pin, depress and hold down push button on the emergency release, while moving lock handle to unlocking position. Wait three minutes and if there is no impending train movement, junction switch may be thrown, and if signal fails to clear, train may proceed under provisions of Rule 509(B). Operators at Scribner will handle junction switch for N. P. route when on duty.

The end of track circuit governing eastward automatic block signal 367.4 at Scribner is located 7000 feet west of that signal and junction switch cannot be operated to admit an eastward train to enter Northern Pacific route until such train has entered the westerly limit of this bonded circuit. Eastward Northern Pacific trains will approach this junction switch at a low rate of speed to enable operator to line switch.

9. **At Marshall Junction**—Junction switch is governed by interlocking signals and rules.
10. **At Fort Wright**—Junction switch is governed by interlocking signals and rules.
11. **At Hillyard**—Westward S. P. & S. Ry. Co. trains must secure S. P. & S. clearance Form A before proceeding.
12. **Between Pasco and Ft. Wright**—Cinders must not be dumped on main track at any point where crushed ballast has been placed except at Washtucna and Lamont when taking coal and water. Benches used by enginemen when cleaning ash pans must be removed after being used to avoid hazard.
13. **At Spokane**—Cars in eastward freight trains to be set out must be on head end of train leaving Pasco, and when any through cars are picked up at intermediate points between Pasco and Spokane, such cars must be placed behind the Spokane set-out.
14. **Signal Overlap Signs** are installed near the center of sidings at the following stations:
- Redd
  - Votaw
  - Snake River
  - Scribner
  - Overlook.

When trains meet at above stations, no part of train or engine occupying main track shall pass overlap sign until opposing train has entered siding. Crews of trains occupying siding must not open leaving switch until rear of opposing train has passed overlap.

15. **Engine Restrictions—**

Engines Classes E-1, and heavier, not permitted to go beyond frog of the following tracks:

- Burr Canyon —Spur
- Farrington —Spur
- Kahlotus —Town spur
- Sperry —Elevator spur
- Lamont —Oil spur
- Scribner —Nemour spur
- Ft. Wright —Brick Yard spur

**At Washtucna and Lamont**—Engines must not be run over hopper on Coal Hopper spur tracks.

## FOURTH SUB-DIVISION (GOLDENDALE-LYLE)

1. **Bridge and Engine Restrictions—**  
Engines heavier than Class N-2 not permitted.

## OREGON TRUNK RAILWAY

1. **At O. T. Junction**—Normal position of spring switch is for Oregon Trunk Ry.
2. **At Celilo Wye**—Normal position of switch is for Oregon Trunk Ry.
3. **At Redmond**—Dropping cars over Ochoco Highway crossing is prohibited.
4. **Westward Freight and Mixed Trains** will stop at Madras and turn up retainers on all loaded cars and on alternate empties and stop at South Junction and turn down retainers. Running brake tests will be made on westward trains at point one mile west of Madras. Trainmen will not be required to ride out on top of cars between these points.
5. **Westward Freight Trains** will take water at Tuskan in preference to Dike.
6. **Between South Jct. and Madras** pushing on cabooses of eastward freight trains by pusher engines is prohibited.  
**Pusher engines** of eastbound freight trains which are cut in ahead of caboose at Jersey Wye will run around caboose at Agency and replace same on train at that point.
7. **Bridge and Engine Restrictions—**

**At Sherar**—Engines and loaded cars not permitted on spur track extension east of loading platform.

**At Madras**—Engines U. P. 7000 Class not permitted on Oil spur and Government spur tracks.

Engines Classes Z-6 and heavier not permitted on the following tracks:

- Moody —Outfit spur.
- Sinamox —Outfit spur.
- Oakbrook —Outfit spur.
- Kaskela —Outfit spur.
- Gateway —Warehouse track.
- Paxton —Warehouse track.
- Madras —Industry track, Team spur, Oil spur and Government spur.
- Agency —Runaround track.
- Metolius —Oil spur.
- Redmond —Northwest Poultry spur, Dant & Russell spur and Warehouse track.
- Bend —Standard Oil spur, Pine Tree spur, Haines spur, Caboose spur, Aune spur, Associated Oil spur, Gas spur, Drill spur and Mill spur.

# PORTLAND DIVISION

## FIRST AND SECOND SUB-DIVISIONS

### (PORTLAND-SEASIDE-FORT STEVENS)

1. **At Willbridge**—Eastward trains when waiting to enter double track, will remain a sufficient distance west of Chipman Street in order to provide ample visibility to motorists crossing main tracks of trains approaching from the east on the westward main track.
2. **At United Junction**—Spring switch, normal position for Fourth Subdivision.
3. **At St. Helens**—Trains must not block highway crossing while taking water.
4. **At Clatskanie**—To afford vehicular traffic additional protection when passing over road crossing adjacent to depot, train and engine crews operating over this crossing will be governed by the following:
  1. Cars shall not be left spotted on trackage closer than 125 feet from the crossing on either side.
  2. Engineers will provide adequate warning to drivers of vehicles by standard whistle and bell signals in all cases.
  3. There must be no failure on the part of train crews to provide adequate on-the-ground crossing protection during all switchin movements.
5. **At Warrenton**—Normal position of switch is for First Sub-division.
6. **Telegraphones**—Located at: Goble (Section House); Rainier; Mayger; Clatskanie; Bradwood; Wauna; Westport; Clifton; Knappa; John Day; Astoria.
7. **Impaired Clearance**—

**At Astoria**—Overhead crossing over port dock tracks leading from Pier 1 to Pier 3 have but 17 feet clearance from top of rail. Trainmen must use care when switching in this area.
8. **Bridge and Engine Restrictions**—

Engines heavier than Class D-2 and Class DE single units of 1500 H.P. not permitted west of Astoria.

Engines Classes O-1 and heavier not permitted west of Clatskanie, or on dock and terminal trackage at St. Helens.

Double heading of steam engines prohibited on Portland Division, except between Willbridge and United Jct. When two engines are used in a train the second engine must be cut back not less than ten (10) cars from lead engine.

## THIRD AND FOURTH SUB-DIVISIONS

1. **At United Junction**—Spring switch, normal position for Fourth Sub-division.
2. **At River Junction**—Spring switch, normal position for route to Rafton.
3. **Between Glenwood and Rafton**—A minimum of 16 brakes must be used on full trains of loaded disconnected trucks on necessary descending grades. Brakes will be used in proportion on less than full trains. When starting down descending grades, engineer will control speed of trains to give ample time to apply hand brakes.
4. **At Bowers Junction**—Spring switch, normal position for O. E. Ry.
5. **At Wilkesboro**—Normal position of junction switch is for Third Sub-division.
6. **At Keasey**—When necessary for trains or engines to move west of Keasey, conductor will call Oregon American Lumber Company Dispatcher by telephone from Keasey, and arrange for such movement.
7. **Couplers**—When engines and cabooses, which are equipped with compromise drawbars are in use on any train, both drawbars on the engine and caboose must be either in the high or low position at all times.
8. **Log Restrictions**—Following restrictions must be observed in the handling of logs loaded on disconnected trucks; loads must not exceed eleven (11) feet in width, nor eighty-five (85) feet in length, except by special permission.

The load limit for 80,000 capacity trucks is 12,000 feet, and for 100,000 capacity trucks, 14,000 feet.

There must be a clearance of not less than twelve (12) inches from top of rail to bottom of logs.

In event of trains stalling on grade, enginemen must not take slack to start because of liability of pulling trucks from under loads.

When handling logs on disconnected trucks, trainmen will be required to ride out on trains for purpose of controlling trains over district between Keasey and Zan, Top Hill and Manning, Rockton and Rafton, Glenwood and Washburn, and between Mile Posts 6 and 3. When handling empty trucks with caboose on rear, trainmen will not be required to ride out, but in every case there must be not less than two trainmen in caboose over these districts.

When handling logs on disconnected trucks, trainmen will be required to wear shoes equipped with caulks.

Log trains must not cross overhead crossing just west of Wilkesboro when S. P. Co. trains are passing underneath. If an S. P. Co. train is passing or approaching, log train must come to a stop and wait until S. P. Co. train has cleared the crossing.

8. (Continued)

Whenever from any cause logs are lost from cars or trucks, conductors will file a message at first open telegraph office, addressed to Superintendent, showing number of logs lost, location, brand and whether from trucks or flat cars.

Double heading of trains handling logs on disconnected trucks is prohibited.

Trainmen in charge of trains handling logs must step out on rear platform of caboose occasionally, particularly during night hours, and, with the aid of an electric lantern, observe if there are any new marks on ties and keep a sharp lookout for logs which may have fallen off cars in their train.

9. **Eastward trains** will stop at Tunnel Spur and turn up retainers and stop at United Jct. and turn down retainers.

10. **At Glenwood**—Atlas Logging Company tracks are numbered from the main track. Tracks 1, 2 and 3 east of loading boom to be used for storing of loads and tracks 4, 5 and 6 west of loading boom to be used for the setting out and storing of empties.

11. **Bridge Restrictions**—Engines Class O-1 and heavier not permitted west of Wilkesboro on Third or Fourth Sub-divisions.

12. **Engine Restrictions**—

**At Glenwood** engines must not enter west end of mill siding, enough cars must be used so engine will not enter turnout.

**At Rafton**—Round-house track No. 2 must not be used by engines or cars beyond round-house door.

Due to sharp curvature, engines not allowed on the east end of Dump 3 track.

13. **Deraills**—

**Glenwood**—Main track just west of head block to South Mill spur.

## OREGON ELECTRIC RAILWAY

1. **At Any Station**—Cars handled in trains or by yard engines in city streets must have air cut in and operative, except when actually switching.

2. **At Portland**—Cars spotted on city streets must be protected by two red lights on each end of end car.

Cars 50 feet and longer must not be handled around heavy curvatures at Pettygrove and Nicolai Streets on 22nd Avenue.

When switching Spencer's spur located in Industrial Center Addition, extreme care must be exercised to avoid danger to children playing in vicinity of tracks and around cars.

3. **At Salem**—All cars delivered by the O. E. Ry. to the S. P. Co. and left on interchange track, between 4:30 P.M. and 7:30 A.M., must be protected by two red lights placed on each end of end car.

Cars exceeding 44 feet in length must not be placed on Fruit Union spur. When necessary to place or remove 50-foot cars on hop track it will be necessary to handle such cars separately.

Eastward trains handling logs on flat cars will stop at water tank, Salem, and make inspection of all such loads, and know before proceeding that logs are riding properly for safe movement through the City of Salem.

Account city ordinance, trains and engines are restricted from crossing Center Street between hours of 7:30 and 8:30 A.M., between 12 o'clock noon and 1:00 P.M., and between 4:30 and 5:30 P.M., daily except Sunday, and on Sundays between hours of 10:30 and 11:00 A.M. and between 12 o'clock noon and 12:30 P.M.

Both spurs serving Oregon Pulp & Paper Company have a chain around rail at clearance point equipped with switch lock, to serve as car stop. These must be kept locked when not in use.

4. **At Albany**—Normal position of Junction switch is for Third Sub-division.

5. **At Lebanon**—Junction switch, O. E. Ry., is located at S. P. Co. MP 688.9. Normal position of switch is for S. P. main track. Normal indication of block signal on O. E. track is "STOP" and will change to "PROCEED" when switch is opened, providing S. P. main track is clear between block signals located on both sides of junction switch.

Telephone connected with telegraph office, S. P. Co., Lebanon, is located in booth near junction switch.

In addition to a clear block signal, eastward O. E. Ry. trains must obtain permission from operator, Lebanon, before entering S. P. Co. main track.

6. **Interchange Tracks** with S. P. Co. are located at Salem, Albany, Lasen and Lebanon. At Albany S. P. Co. will use the old crossover and O. E. Co. the new crossover to make interchanges.

7. **Instructions Governing Absolute-Permissive Block System Operation over S. P. Co. Track Between Greton and Beburg**—

Absolute signal located 306 feet east of Beburg junction switch and 225 feet west of Greton junction switch govern westward and eastward movements from Oregon Electric trackage.

Normal position of Junction switches at Greton and Beburg is for Southern Pacific movement. Normal position of absolute signals at Greton and Beburg governing Oregon Electric movement is "stop." Switch indicators are in use.

Oregon Electric trains will stop at absolute signals; if switch indicators at junction switch indicate "block clear" switch may be set for movement from Oregon Electric trackage. If switch indicators at junction switches indicate "block occupied" wait 10 minutes and if no train is heard or seen approaching, the switch may then be set for movement from Oregon Electric trackage. If signal does not then indicate "proceed" comply with S. P. Co. Rule 744.

Signal 7772 located between Beburg and Greton governs eastward movement for Southern Pacific trains and westward movement for Oregon Electric trains.

Signal 7779 located between Greton and Beburg governs westward movements for Southern Pacific trains and eastward movements for Oregon Electric trains.

Trains stopped by Signals 7772 or 7779 indicating "stop" will send flagman ahead immediately, wait ten minutes then proceed, keeping at least one-half mile behind flagman until train has passed and is clear of junction switch.

Spur track at Fanno is equipped with double switch indicator and dwarf light signal 7775.

Telephone in booth at Beburg and Greton connected with both O. E. and S. P. dispatcher's offices by means of two-way switch.

8. **Instructions Governing Operation over S. P. Co. Tracks between Albany and Lebanon.**

O. E. Ry. trains between Albany and Lebanon will cross S. P. main track through crossovers 300 feet west of Signal 6915; being governed for westward movement by indication of dwarf Signal 6913 located at derail on O. E. Ry. track; and will use Albany and Page sidings between Albany and Tallman Branch junction switch at Page; but must comply with Rules 93 and 842. When no yardmaster or representative present must comply with Rules 83 and 83(C), eastward O. E. Ry. trains obtaining check of register at Albany station, and westward O. E. Ry. trains obtaining check of register by telephone from S. P. Co. operator at Albany, before fouling S. P. Co. main track. Check of register received by telephone must be repeated for verification.

Telephone connected with telegraph office, S. P. Co. Albany, is located in booth at LaFayette Street.

O. E. Ry. trains on S. P. Co. tracks at Albany, on what is known as the "Bridge Line," which extends from the point where O. E. Ry. trains enter Albany siding to Page, are not permitted to take water, fuel or other supplies, pick up or set out cars or perform any other service.

Between Page and Lebanon, picking up and setting out of cars is permissible under joint track operation.

9. **When operating over Southern Pacific trackage, strict compliance must be observed of Rule 3 of the Southern Pacific Company Air Brake Rules and Regulations which reads in part as follows:**

"STANDARD PRESSURES—Pressures for air brake system must be kept as near as possible to standard pressures, which are as follows: Standard brake pipe pressure for freight and mixed trains is 80 lb. Should proper control of a freight train make it necessary, the use of 90 lb. brake pressure is permissible."

Oregon Electric employes operating over joint trackage of the Southern Pacific Company who carry standard watches and who fully comply with S. P. & S. watch comparison and cleaning regulations will be considered as having complied with Southern Pacific requirements.

10. **Impaired Clearance—**

**At Portland**—United Supply Company spur located in the Industrial Center Addition and all tracks in the Hoyt Street Yard except Nos. 1, 2, and 3 in Middle Yard have impaired horizontal clearance and will not clear a man on side of car.

The two parallel tracks located on Twelfth Avenue have only ten feet nine inch-centers. When using both tracks during switching movements care must be used to see that nothing is projecting to foul equipment standing on opposite track.

**At Albany**—S. P. Co. overhead bridge, State Highway bridge and S. P. Co. siding all on Water Street, will not clear a man on top of high car.

**At Tualatin**—Cab ventilators on all steam engines must be lowered and sand dome covers on engines classes O-1 and O-3 must be removed when passing under S. P. Co. overhead bridge 35.8.

Bridge 35.3 Tualatin River, one mile east of Tualatin.

11. **Trainmen in charge of trains handling logs must step out on rear platform of caboose occasionally, particularly during night hours, and, with the aid of an electric lantern, observe if there are any new marks on ties and keep a sharp lookout for logs which may have fallen off cars in their train.**

**At Tualatin**—Trains handling logs will stop and inspect train for projecting logs before passing under S. P. Co. overhead bridge 35.8 and over Tualatin River bridge 35-3.

**At Bridges 89-0, 99-9 and 126-1**—Conductors of trains handling logs must personally know that such cars are safe to move without loss of lading before passing over bridges.

12. **At Salem and Albany**—Trains and engines, moving on Front Street, Salem, must stop before crossing S. P. Co. trackage at Trade, Cheme-keta, Union and Division Streets, and at all three crossings with the S. P. Co., on Water Street, Albany, and not proceed until flagman has been sent ahead and proceed signal received from him.

13. **Bridge Restrictions—**

Engines Classes 0-1, and heavier, not permitted west of east end of Bridge 43.4, Wilsonville.

**At Salem**—Steam engines not permitted on Bridge 71-6-S, located on old passenger main line.

14. **Engine Restrictions—**

Double header engines, when crossing Bridge 43.4, Wilsonville, must be separated in trains by not less than 5 cars. If both engines are on head-end, train must be stopped, lead engine cut off and move over bridge before train is started.

**At Orenco**—Engines Class O-1 and heavier not permitted beyond a point 500 feet west of west switch of siding, on Second Sub-division.

Steam engines not permitted on the following tracks:

Wilsonville —Hole track.

Salem —All industry tracks.

Melas —Log dump trestle.

Steam engines not allowed to operate between Albany and Eugene except by special authority of Superintendent.

15. **Deraills—**

**Albany** —Clearance point on O. E. Ry. track at junction with S. P. Co. main track.

## ALL SUB-DIVISIONS

1. Rule 83(B) will not apply at initial stations which are not telegraph stations, and at telegraph stations except during office hours, if train order signal is in clear position.
2. Whistle signal 14(K) must also be sounded when passing track and bridge crews.
3. Careless handling of lighted fuses must be avoided to eliminate hazard of starting grass fires on and off the right of way. Fuses and torpedoes must not be placed in coach lockers account of hazard.
4. Car loads of cigarettes and whiskey must be placed in trains next ahead of caboose where they can be watched by trainmen.
5. When blocking trains as prescribed by Rule 91(A), at which time orders are held for a train in either direction, operators must not clear either signal until the orders have been delivered. Clearance issued by authority of the train dispatcher must be handed up to the train for which there are no orders and for which the signal is in stop position.
6. Dropping cars into tracks on which there are occupied outfit cars is prohibited.



7. When necessary to set out equipment due to hot journal, be sure that all traces of fire are extinguished and journal box properly marked.
8. Open cars loaded with rail must not be handled next to caboose if the consist of the train permits handling in another location. Open cars of lumber and piling must not be handled directly behind engine when it can be avoided.
9. Pusher engines must not push on cabooses not equipped with steel center sills.
10. Sign reading: "Impaired Clearance" placed on switch stand or entrance of spur or siding indicates there are platforms or structures located along track which do not provide minimum horizontal clearance. Employees will use care and avoid risk of injury while working on spurs or sidings protected with "Impaired Clearance" signs.
11. In column on time table marked "Car Capacity," suffix letters E or W indicates the end of track at which switch is located.
12. Trains must not pass under overhead crossing of logging roads while log train is passing over the crossing.
13. Whenever descending grades require the use of retaining valves, trains will stop at top of grade and turn up retainers after brakes are released, following the air test, and stop at foot of grade for retainers to be turned down.
14. Station signs indicating "One Mile S" are placed one mile from the switch where trains enter the siding. Where there is no siding, these signs are placed one mile from the depot building or where traffic is received and discharged.
15. When dining cars or other non-platform cars are placed on rear of passenger trains, in addition to keeping the flexible gate closed and fastened in place, the rear door of car must be kept locked.
16. Under Rule 2 of the Consolidated Code of Operating Rules, watches that have been examined and certified to by a designated inspector must also be used by all officers and following employees: Train dispatchers and yardmen.
17. At points where yard engines are employed, Yardmasters and Engine Foremen will record on Form 1208 "DAILY YARDMASTER AND ENGINE FOREMAN WATCH COMPARISON REPORT," a comparison of their watch made with a standard clock before commencing each day's work in compliance with Rule 3 of the Consolidated Code of Operating Rules.
18. As provided by Rule 8(A), the use of Justrite No. 2171 JR electric flagging lanterns equipped with red globes is authorized for displaying red light for signalling purposes.
19. Telephones located in booths, boxes and freight houses must have switch cut out after using and must be kept secured by lock except when being used.
20. **Electric Switch Locks**—To operate, open door of electric switch lock and push the button. This will start operation of clock release, which will run down in three minutes and, at the end of that time, 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. Handling of Explosives—

### Switching Cars Containing Explosives or Poison Gas—

A car placarded "Explosives" or "Poison Gas" shall not be cut off while in motion nor shall be coupled into with more force than is necessary to complete the coupling. No car moving under its own momentum shall be allowed to strike any car placarded "Explosives," or "Poison Gas."

When transporting a car placarded "Explosives" in terminals, yards, side tracks, or sidings, such cars shall be separated from engine by at least one non-placarded car.

Closed cars placarded "Explosives" shall have doors closed before they are moved.

### Switching of Cars Containing Dangerous Articles—

In switching operations where use of hand brakes is not necessary, a placarded loaded tank car, or a cut of cars which includes a placarded loaded tank car shall not be cut off until the preceding car or cars clear the ladder track and the cut of cars containing the placarded loaded tank car, or a placarded loaded tank car shall in turn clear the ladder before another car is allowed to follow.

In switching operations where hand brakes are used, it shall be determined by trial that a car placarded "Dangerous" or that a car occupied by a rider in a cut of cars containing a car placarded "Dangerous" has its hand brakes in proper working condition before it is cut off.

### Placement of Freight Cars Containing Explosives, in Yards, on Sidings, or Sidetracks—

Cars placarded "Explosives" shall be so placed that they will be safe from all probable danger of fire. Freight cars placarded "Explosives" shall not be placed under bridges or overhead highway crossings, nor in or alongside of passenger sheds or stations except for loading or unloading purposes.

### Position in Train of Cars Containing Explosives—

In a train either standing or during transportation thereof, a car placarded "Explosives" shall, when the length of the train permits, be not nearer than the sixteenth car from both the engine or occupied caboose; and shall when the length of the train will not permit them to be so placed be as near as possible the middle of the train. When moved in a train engaged in "pickup" and/or "setoff" service it shall be placed not closer than the second car from the engine or second car from occupied caboose, except as provided in section 589 (i) (1), to avoid unnecessary switching and handling of such car enroute. For the purpose of these regulations a train will be considered in "pickup" and/or "setoff" service when one or more cars are picked up and/or set off at more than three different stations enroute. Local trains engaged in loading and/or unloading of LCL merchandise in their trains will be considered engaged in "pickup" and "setoff" service.

In a freight train or mixed train either standing or during transportation thereof, a car placarded "Explosives" must not be handled next to:

1. Occupied passenger car, other than gas handlers accompanying shipment.
2. Occupied combination car, other than gas handlers accompanying shipment.
3. Cars placarded "Dangerous."
4. Engine.
5. Car placarded "Poison Gas."
6. Wooden under-frame car.
7. Loaded flat car.
8. Open-top car when any of the lading extends or protrudes above or beyond the ends or sides thereof.
9. Car equipped with automatic refrigeration of the gas-burning type.
10. Car containing lighted heaters, stoves, or lanterns.
11. Car loaded with live animals or fowl, occupied by an attendant.
12. Occupied caboose (except as permitted in Section 589 (i) (1)).

**Position in Train of Loaded Placarded Tank Cars—**

In a train either standing or during transportation thereof, a placarded loaded tank car shall not, when the length of train permits, be nearer than the sixth car from the engine or occupied caboose, but in no instance nearer than the second car from the engine or occupied caboose unless the remainder of train consists of placarded loaded tank cars or the train is engaged in "pickup" and/or "setoff" service. For the purpose of these regulations a train will be considered in "pickup" and/or "setoff" service when a car or cars are picked up and/or set-off at more than three different stations enroute. Local trains engaged in loading and/or unloading of LCL merchandise in their trains will be considered engaged in "pickup" and "setoff" service.

In a freight train or mixed train either standing or during transportation thereof, a placarded loaded tank car must not be handled next to:

1. Occupied passenger car, other than gas handlers accompanying shipment.
2. Occupied combination car, other than gas handlers accompanying shipment.
3. Any car placarded "Explosives."
4. Engine (except when train consists only of placarded loaded tank cars).
5. Any car placarded "Poison Gas."
6. Wooden under-frame car.
7. Loaded flat cars.
8. Open-top cars when any of the lading extends or protrudes above or beyond the ends or sides thereof.
9. Car equipped with automatic refrigeration of the gas-burning type.
10. Car containing lighted heaters, stoves, or lanterns.
11. Car loaded with live animals or fowl, occupied by an attendant.
12. Occupied caboose (except when train consists only of placarded loaded cars).

**Position in Train of Cars Placarded "Poison Gas" or Containing Poison Liquids Class A—**

In a train either at rest or during transportation a car placarded "Poison Gas" or containing poison liquid Class A shall not be next to other freight cars placarded "Explosives" or cars placarded "Dangerous."

**Position in Train of Cars Placarded "Explosives" and "Poison Gas" or Containing Poison Liquids When Accompanied by Cars Carrying Gas Handling Crews—**

A car placarded "Poison Gas" or containing poison liquids Class A in drums, tanks or bombs, or a car placarded both "Explosives" and "Poison Gas" shall at all times be next to and ahead of the car occupied by gas handling crews, when accompanying such car.

**Cars Containing Explosives or Poison Gas and Tank Cars Placarded "Dangerous" in Passenger or Mixed Trains.**

Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars requiring "Dangerous" placards shall not be transported in a passenger train. Such cars may be transported in mixed trains but only at such times and between such points that freight train service is not in operation.

Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars placarded "Dangerous" shall not be transported next to occupied cabooses or cars carrying passengers in mixed trains except as provided in Sec. 589 (i) (1).

When a car containing explosives, Class B, or dangerous articles other than explosives requiring labels (not including Class A poison gases or liquids) is moved in a mixed train and such car is not occupied by an employee of the carrier, placards must be applied to the car as required by these regulations.

In a freight train or mixed train either standing or during transportation thereof, a car placarded "Dangerous—Class D Poison" must not be handled next to cars placarded "Explosives" or next to carload shipments of undeveloped film.

**22. Instructions to Engine and Train Crews to Prevent Hazards from Dangerous Gases in the Event of Diesel Locomotives Stopping in Tunnels.**

Dangerous gases, not readily detected even in dangerous quantities, are present in exhaust from Diesel locomotives, Clarkson steam generators and engines of the Waukesha air conditioning equipment, which if in sufficient concentration could result in incapacitation or fatalities. In the event that a Diesel locomotive is stopped in a tunnel, with indications of remaining in tunnel for an unusual period, the Diesel engine must be promptly shut down and the Clarkson steam generator also shut off. Passenger cars equipped with Waukesha air conditioning must have both the ice engine and engine generator shut off, fresh air intakes must be closed and circulating fans shut off.

During freezing weather cooling water must be drained from the Diesel locomotive to prevent freezing and damage to the engine.

When Diesel propulsion engines are shut off air brakes must be fully applied and sufficient hand brakes applied throughout train to insure against any movement in the event air brakes leak off.

Prevailing conditions should be carefully considered as such action may not be necessary where exhaust from Diesel engines and steam generators are being carried away from train by air currents, but the first consideration must be for the safety of passengers and crew members and dispatchers should be notified immediately so that arrangements can be made for the protection of passengers and equipment.

23. Do not throw tinfoil, cigarette or gum wrappers, or any package containing tinfoil on the floor in the cabs of electric or Diesel engines. By doing so, this material is drawn into the air ducts and lodges in the electric or Diesel machinery which results in a short and damage to the machines.

Trainmen riding in cab end of Diesel-electric Units must keep their hands and feet off of instrument panels and brake equipment to avoid damage to same as well as the placing of braking equipment in some undesired position which would result in hazard.

**24. On Diesel road engines consisting of one or more units in freight and passenger service, the following will govern in the event of emergency:**

In the event that enginemen observe Diesel engine emitting fire, smoke or water; or in the event of derailment, fire in one of the units; or broken connecting rod or other rotating part in the one of the engines causing excessive pounding, the enginemen should immediately shut down all the engines from the operating position in the engineer's control station in the cab. This can be done on EMD road engines by pushing the button at the end of the throttle handle with the thumb and then moving the throttle forward to the farthest position, and on American-type locomotives by pushing the red emergency stop button on the control stand. On both types of locomotives the fuel pump switch at the control box should be pulled; and in the event of fire the emergency fuel cut-off valve cord should be pulled.

If there is any question in the engineer's mind as to what is occurring in the trailing cabs, all the units should be shut down from the operating cab as stated above and details investigated when the train has stopped.

In the event of a fire in the engine, fire fighting equipment should be operated in accordance with the instructions mounted in each engine cab.

25. **On locomotive, tender and freight car wheels**, flat spots two and one-half inches or longer, or if there are two or more adjoining spots each two inches or longer; and on passenger train equipment one inch or longer, are condemnable, and when discovered in train, conductor and engineer must immediately report to chief dispatcher and be governed by his instructions.

26. **Streamliner cars** are equipped with diaphragm full width of the car and there is no clearance between the ends of these cars when coupled. Employees must stay entirely in the clear while these cars are being switched or coupled.

To couple a conventional coupler with a streamlined passenger car equipped with tight lock coupler, knuckle of the tight lock coupler must be closed and lock block down in its proper locked position before coupling is attempted.

The slightest accumulation of snow, ice or dirt on contact surfaces of knuckles, knuckle locks and coupler body, will prevent lock blocks from dropping into locked position. Therefore, it is necessary to see that all of the contact surfaces are clean and free of snow, ice and dirt before attempting to make a coupling.

27. On the Terminals, First, Second and Third Subdivisions of the Vancouver Division, advance warning reduce speed signs set in an upward angle of 45 degrees are located 4500 feet in advance of the slow boards and indicate by figures the permissible speed. Slow boards, hexagon shaped, are located at the beginning of the restricted territory and also indicate by figures the permissible speed through the restricted area.

On the Oregon Trunk Railway and on all other Subdivisions of the S. P. & S. System, advance warning reduce speed signs are located 1500 feet in advance of the slow boards.

Resume speed signs bearing the letters "RS" indicate the end of the restricted territory.

28. **Use of Mars Headlight on Engines so Equipped—**

The Mars headlight can be displayed with either stationary or oscillating white light at the same time that the standard headlight is in use, but cannot be displayed with either stationary or oscillating red light when the standard headlight is in use.

The Mars white light may be used in a stationary position as a substitute headlight in case of failure of the standard headlight, but will normally be used as an oscillating light during the time full display of standard headlight is required. The Mars oscillating red light will be used when head end protection is required, either by day or by night by engineer control, if the train becomes disabled or is stopped suddenly due to unusual occurrence with the possibility of an adjacent track being obstructed, or if it overruns the clearance point at a meeting or waiting point, or at the end of double track or at a junction, or in any other emergency situation.

The engineer of an approaching train, finding oscillating red light displayed, must stop and then be governed by conditions existing. If on an adjacent track which he finds unobstructed and safe for operation, he may proceed at restricted speed until the standing train displaying the oscillating red light has been passed. The Mars red light will be displayed in stationary position when a train is occupying the main track at a meeting point with an opposing train until the headlight of the opposing train has been dimmed, per Rule 17(B), after which the red headlight will be extinguished and the standard white headlight turned on dim until opposing train is into clear on siding.

The use of the red headlight does not in any manner relieve the train or engine men of responsibility for compliance with the provisions of Rules 99 and 102.

29. During or following snow storms or violent wind storms, spring switches should be examined before heading in or out through the switch in facing or trailing movement, to be sure that the switch is in proper operating condition.

During severe storms and circumstances are such that trackmen are not stationed at spring switches to be sure that they are kept clear of ice or snow, the crew of a train must know that the switch is in proper operating condition before heading in or out through it.

30. Except in case of fog, storms, or otherwise bad weather, yellow signals may be used, without flagmen, when placed as prescribed by Rule 10(h) to indicate approach to a red signal, on the subdivisions shown below:

#### **Vancouver Division**

Fourth Sub-division (Goldendale Branch).

#### **Portland Division**

Second and Third Sub-divisions.

Fourth Sub-division only between Bowers Jet. and Keasey.

#### **Oregon Electric Ry.**

Second, Third and Fourth Sub-divisions;

and also in special cases on other districts authorized by the Superintendent when protected by train order.

31. Provisions of fourth paragraph of Rule 854 of the Consolidated Code of Operating Rules and General Instructions are applicable within as well as outside of yard limits regardless of whether or not there are first class trains in the same direction due or overdue.

This means that regardless of location, when a passenger train stops even though momentarily, the flagman properly clothed and with necessary flagging equipment must appear on the ground and if time permits, at the rear of the rear car prepared to provide protection.

### 32. Tunnel Locations—

#### Vancouver Division—First, Second and Third Subdivisions—

	Length
No. 1—2.9 miles west of Prindle.....	2,381 ft.
No. 2—1.7 miles east of Cooks.....	122 ft.
No. 3—2.1 miles east of Cooks.....	416 ft.
No. 4—2.6 miles east of Cooks.....	267 ft.
No. 5—3.2 miles east of Cooks.....	394 ft.
No. 6—3.9 miles east of Cooks.....	657 ft.
No. 7—7.2 miles east of Bingen-White Salmon.....	966 ft.
No. 8—7.5 miles east of Bingen-White Salmon.....	755 ft.
No. 9—7.7 miles east of Bingen-White Salmon.....	392 ft.
No. 10—7.9 miles east of Bingen-White Salmon.....	575 ft.
No. 11—0.6 miles east of Lyle.....	269 ft.
No. 12—2.1 miles east of Wishram.....	385 ft.
No. 13—1.1 miles east of Plymouth.....	699 ft.
No. 14—5.1 miles west of Farrington.....	203 ft.
No. 15—2.5 miles west of Farrington.....	323 ft.
No. 16—3.2 miles east of Farrington.....	2,494 ft.
No. 17—0.9 miles west of Kahlotus.....	2,220 ft.
No. 18—4.1 miles east of Hooper.....	369 ft.
No. 19—0.6 miles west of Ft. Wright.....	2,134 ft.

#### Oregon Trunk Ry.—

No. 1—1.4 miles west of Moody.....	795 ft.
No. 2—3.4 miles west of Sherar.....	800 ft.
No. 3—0.5 miles west of Frieda.....	519 ft.
No. 4—0.6 miles east of Davidson.....	584 ft.
No. 5—1.8 miles west of Gateway.....	542 ft.

#### Portland Division—First Subdivision—

No. 1—1.2 miles east of Mayger.....	188 ft.
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#### Portland Division—Fourth Subdivision—

No. 1—1.0 mile west of Tunnel Spur.....	4,103 ft.
No. 2—0.3 mile west of Top Hill.....	782 ft.

### 33. Location, Capacity and Facilities of Stockyards—

#### Vancouver Division—

Location	No. of Pens	Capacity in Cars	Facilities
Lyle.....	4	10	Water
Wishram.....	6	20	Water
Maryhill.....	2	5	None
Roosevelt.....	4	10	Water
Whitcomb.....	2	4	None
Paterson.....	2 cattle 3 sheep	5 20	None
Plymouth.....	2	5	Water
Kennewick.....	1 cattle 1 sheep	2 8	None
Pasco.....	27	40	Water
Harder.....	2	5	None
Washtucna.....	2	2	Water
Hooper.....	2 cattle 1 sheep	2 4	None
Ankeny.....	2	2	None
Benge.....	2	2	Water
Macall.....	2	2	None
Rockwell.....	2	4	None
Lamont.....	1	2	None
Rodna.....	2	5	None
Amber.....	2	3	None
Centerville.....	1	2	Water near
Goldendale.....	3	5	Water

#### Oregon Trunk Ry.—

Maupin.....	1	2	{ Water & Feed Racks
Kaskela.....	1	1	None
South Junction.....	4	10	Water
Gateway.....	4	12	Water
Madras.....	4	12	Water
Terrebonne.....	4	8	{ Water & Feed Racks
Redmond.....	4	8	{ Water, Feed Racks & Scales
Deschutes.....	2	4	Feed Racks
Bend.....	7 cattle 2 sheep	15 5	{ Water, Feed Racks & Scales

#### Portland Division—

Quincy.....	1	1	Water
Clifton.....	1	1	None

#### Oregon Electric Ry.—

Albany Yard.....	4	5	Water
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34. **Bulletin Stations—**

Portland —Union Station telegraph office.  
 Roundhouse.  
 Yard office.

Vancouver —Telegraph office and roundhouse.  
 Yard office (yard men only).

Wishram —Telegraph office and roundhouse.

Bend —Telegraph office and roundhouse.

Goldendale —Telegraph office.

Lyle —Telegraph office.

Pasco —Passenger Station telegraph office.  
 Roundhouse.

Spokane —G. N. passenger station.

Hillyard —Roundhouse.

Astoria —Passenger Depot and Round House.

Seaside —Passenger Depot.

Salem —Depot.

Albany —Yard Office and Round House.

Eugene —Depot.

Sweet Home —Depot.

Vernonia —Depot.

35. **Watch Inspectors—**

Ball Railroad Time Service of Ohio. 284 Endicott Bldg., St. Paul, Minn.

Roy and Molin..... 316 S. W. Alder St., Portland

Zell Brothers..... 629 S. W. Broadway, Portland

N. L. Nielsen..... 31 N. Russell St., Portland

W. L. Runyan..... Vancouver

Robt. G. Tyack..... Goldendale

Craters Jewelry..... Pasco

Swanson Jewelry Co..... No. 9, Washington St., Spokane

H. H. Trowbridge..... 5022 Market St., Spokane

Archie A. Symons..... Bend

Loop-Jacobsen..... Astoria

L. H. Mason..... St. Helens

Stevens & Son..... 339 Court Street, Salem

F. M. French & Sons..... Albany

Seth Laraway..... Eugene

W. E. White..... Sweet Home

Kullander's Jewelry Store..... Vernonia

36. **Standard Time Clocks—**

Portland —Union Station telegraph office.  
 Roundhouse and Yard Office.

Vancouver —Telegraph office and Roundhouse.

Wishram —Telegraph office.

Pasco —Telegraph office and Roundhouse.

Spokane —G. N. Passenger Station.

Hillyard —Yard office, Roundhouse.

Bend —Telegraph office.

Astoria —Telegraph office.

Seaside —Telegraph office.

Vernonia —Telegraph office.

Salem —Telegraph office.

Albany —Yard office.

Eugene —Telegraph office.

J. L. MONAHAN, Assistant Superintendent

C. F. CROFFUT, Trainmaster

H. M. BATES, Trainmaster

R. G. HASKELL, Trainmaster

F. S. BARLOW, JR., Trainmaster

H. J. TIERNEY, Trainmaster

A. BERGH, Trainmaster

A. W. GEORGE, Trainmaster

M. L. BUNTIN, Chief Dispatcher

F. C. WAGER, Mechanical Superintendent

C. E. BARNES, Master Mechanic

W. C. ABBOTT, Traveling Engineer

J. M. WASSENAR, Traveling Engineer

J. T. CRAINE, Traveling Engineer

## CLEARANCE TABLE

	HEIGHTS ABOVE TOP OF RAIL											GOVERNING STRUCTURE			
	1' Wide	2' Wide	3' Wide	4' Wide	5' Wide	6' Wide	7' Wide	8' Wide	8' 6" Wide	9' Wide	10' Wide		11 Wide	11'-6" Wide	
Portland—Vancouver.....	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	17'	Willamette River Bridge Columbia River Bridge
Vancouver—Spokane.....	20'	20'	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	17'	
Lyle—Goldendale.....	20'	20'	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	17'	All Tunnels
Wishram—Bend.....	20'	20'	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	17'	
Portland—Holladay.....	18' 6"	18'	17' 6"	17'	17'	16' 6"	16' 6"	16' 6"	16' 6"	16' 6"	16' 6"	16' 6"	16' 6"	17'	None
Warrenton—Fort Stevens.....	20'	20'	20'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	17'	
O. E. Ry.—S. P. & S. Portland Yard Limits	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'	Mayger Tunnel
Forest Grove Jct.—Forest Grove.....	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'	
Bowers Jct.—Eugene.....	16'	16'	16'	16'	16'	16'	16'	16'	16'	16'	16'	16'	16'	16'	Track Centers
Lebanon—Dollar.....	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'	
Orengo—Bowers Junction.....	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'	None
United Junction—Wilkesboro.....	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'	
Wilkesboro—Keasey.....	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	17'	None
Wilkesboro—Glenwood.....	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'	
	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'	Tualatin S. P. Overhead
														16'	None
														17'	
														16'	Cornelius Tunnel
														18'	
														17'	None
														16'	
														18'	Tophill Tunnel
														18'	None
														18'	

Conductors must be absolutely positive that loads do not exceed these dimensions and must not move cars of greater dimensions without instructions from Superintendent.

## LOCOMOTIVE TONNAGE RATINGS

SUB-DIVISION	VANCOUVER DIVISION District	Ruling Grade %	CLASS OF ENGINE															
			GN O-1 O-3 O-4	GN R-1	GN N-3 Z-6 Z-8	E-1	NP W-3 W-5	N-2 Sup.	DE 1500	DE 3000	DE 6000							
Oregon Trunk—Eastward	Wishram to South Junction	.6	3200	6200	6000													
	South Junction to Madras	1.5	1400	2600	2400													
	Madras to Bend	1.0	2200	4318	3820													
Oregon Trunk—Westward	Bend to Wishram	Down							Car Limit									
	Vancouver to Pasco	.2	6600	9000	9000				8000		5000						Car Limit	
	Pasco to Vancouver	Down							Car Limit									
First and Second—Eastward	Pasco to Snake River	.2	6600	9000	9000				8000								Car Limit	
	Snake River to Mock	.4	3200	7200	7050				4500								8000	
	Mock to Ft. Wright	Down							Car Limit									
Third—Westward	Ft. Wright to Hillyard	1.0	1800	4100	3950				2400									6400
	Hillyard to Ft. Wright	Down							Car Limit									
	Ft. Wright to Mock	1.0	1800	4000	3820				2400									6400
Fourth—Eastward	Mock to Pasco	Down							Car Limit									
	Lyle to Goldendale	2.2							Car Limit									
	Goldendale to Lyle	Down							Car Limit									

## LOCOMOTIVE TONNAGE RATINGS

SUB-DIVISION	OREGON ELECTRIC District	Ruling Grade	CLASS OF ENGINE									
			N-2 Sup.	O-1 O-3	DE 660	DE 1000	DE 1500 Car Limit	DE 3000 Car Limit	DE 1500 Car Limit	DE 3000 Car Limit		
First—Westward	Bowers Jct. to Tualatin	Down	3500	4000	1750	3500	1800	3600				
	Tualatin to Tonquin	1.1	1600	2000	800	1600	Car Limit					
	Tonquin to Wilsonville	Down			Car	Limit						
	Wilsonville to West Woodburn	1.2	2000	2400	1000	2000	2500	5000				
First—Eastward	West Woodburn to Eugene	.4	3000	3500	1250	2500	3000	6000				
	Eugene to Albany	Down			1500	3000	3500	6500				
	Albany to Salem	.4	6000	6500	1350	2700	3500	6500				
	Salem to Wilsonville	1.0	4175	5000	1250	2500	3200	5500				
Second—Westward	Wilsonville to Bowers Jct.	1.0	1850	2200	800	1600	2000	4000				
	Forest Grove Jct. to Forest Grove	1.0			750	1500	2000					
	Forest Grove to Forest Grove Jct.				800	1600	1800					
	Albany to Sweet Home		1850		800	1600	1800	3600				
Third—Westward	Sweet Home to Albany	Down			Car	Limit						
	Sweet Home to Dollar	2.4	750									
	Dollar to Sweet Home	1.75	1050									

## LOCOMOTIVE TONNAGE RATINGS

SUB-DIVISION	PORTLAND DIVISION District	Ruling Grade	CLASS OF ENGINE									
			N-2 Sup	O-1 O-3	DE 660	DE 1000	DE 1500	DE 3000	DE 660	DE 1000	DE 1500	DE 3000
First—Westward	Willbridge to St. Helens	.56	3500	4500	4500	Limit	2800	3400				
	St. Helens to Astoria	Down		Car	Limit							
	Astoria to St. Helens	.67	4500	4500	4500	3200	3600					
	St. Helens to Willbridge	Down		Car	Limit							
Third—Westward	Wilkesboro to Glenwood	2.2	900									
	Glenwood to Wilkesboro	.8	2000									
	United Jct. to Ban Spur	2.0	950	1100	1100	450	900	1100	2200			
	Rafton to Ban Spur	2.5	750	900	900	500	700	900	1800			
Fourth—Eastward	Ban Spur to Rockton-Manning	1.5	1100	1250	1250	500	1000	1300	2600			
	Manning to Tophill	2.2	700	1050	1050	Limit						
	Tophill to Vernonia	Down		Car	Limit							
	Vernonia to Brauns	.8	2500									
Fourth—Eastward	Brauns to Tophill	1.5	1100									
	Tophill to North Plains	Down		Car	Limit							
	North Plains to Rockton	1.0	1850			800	1600					