

NORTHERN PACIFIC RAILWAY COMPANY.

TACOMA DIVISION

TIME 34B TABLE

In Effect at 12:01 A. M. Pacific or 120th Meridian Time.
(One hour slower than Mountain or 105th Meridian Time.)

WEDNESDAY, June 21st, 1911.

For the Government of Employees only. The Company reserves the right to vary therefrom at pleasure. Be positive that you have the Current Time Table and destroy all previous numbers. Read carefully the Special Rules and always have for reference a copy of **TRANSPORTATION RULES.**

H. C. NUTT,
General Manager.

I. B. RICHARDS,
General Superintendent.

P. H. McCAULEY,
Superintendent of Transportation.

W. C. ALBEE,
Superintendent.

T. E. COYLE,
Assistant Superintendent.

C. E. McMULLIN,
Superintendent Tacoma Terminals.

J. C. ROTH,
Assistant Superintendent of Transportation.

2
MAIN LINE.

East Bound.

FIRST CLASS TRAINS.

Time Table 34B
Succeeding No. 34A
June 21, 1911.

SECOND CLASS TRAINS.

THIRD CLASS TRAINS.

STATIONS.

Telegraph Offices and Calls

Table listing stations from Tacoma Wharf to Portland, including distances and telegraph office/call information.

Time Over District
Average Speed per Hour

Main schedule table with columns for train numbers (356-360), days, departure times, and freight rates for various routes.

Table for second and third class trains, including freight rates and schedules for various stations.

West Bound.

GRAY'S HARBOR LINE.

East Bound.

| THIRD CLASS TRAINS. | | | SECOND CLASS. | | | FIRST CLASS TRAINS. | | | Water, Coal, Scales, Tables and Wyes | Station Numbers | Distance from Lakeview | Time Table No. 34B Succeeding No. 34A. June 21, 1911. | | | Distance from Mcclips | Capacity of Passing Tracks | FIRST CLASS TRAINS. | | | SECOND CLASS. | | | THIRD CLASS TRAINS. | | | | | |
|---------------------|--------------------------|------------|---------------|----------|----------------|----------------------|----------------|-----------|--------------------------------------|-----------------|---|---|-----------|-----------------------|-----------------------|----------------------------|---------------------|----------|----------|---------------|-----------|---------------|---------------------|----------|----------|----------|----------|----------|
| 967 | 965 | 693 | 587 | 585 | 323 | 365 | 321 | 366 | | | | 324 | 322 | 588 | | | 586 | 694 | 966 | 968 | 366 | 324 | 322 | 588 | 586 | 694 | 966 | 968 |
| Way Frt. | Way Frt. | Freight | Mixed | Mixed | Passenger | Passenger | Passenger | Passenger | | | | Passenger | Passenger | Mixed | | | Mixed | Freight | Way Frt. | Way Frt. | Passenger | Passenger | Passenger | Mixed | Mixed | Freight | Way Frt. | Way Frt. |
| EX. SUN. | EX. SUN. | EX. MON. | EX. SUN. | EX. SUN. | DAILY | DAILY | DAILY | DAILY | | | | DAILY | DAILY | EX. SUN. | | | EX. SUN. | EX. SUN. | EX. SUN. | EX. MON. | DAILY | DAILY | DAILY | EX. SUN. | EX. SUN. | EX. SUN. | EX. SUN. | EX. MON. |
| | 6.10AM | | | | 6.01PM | 2.13PM | * 9.20AM | | 1985 | 0.0 | VA.....LAKEVIEW.....D 2.3 | 115.6 | 100 | 12.01PM | 4.17PM | * 9.20PM | | | | | | | 8.30PM | | | | | |
| | | | | | f 6.05 | f 2.16 | * 9.23 | | CK 2 | 2.3 |COUNTRY CLUB..... 0.6 | 113.3 | No Sdg. | f 11.54AM | f 4.18 | * 9.14 | | | | | | | | | | | | |
| | 6.20 | | | | * 6.06 | * 2.17 | * 9.24 | | CK 3 | 2.9 |AMERICAN LAKE..... 1.4 | 112.7 | 40 | * 11.53 | * 4.12 | * 9.13 | | | | | | | 8.10 | | | | | |
| | 6.25 | | | | f 6.09 | f 2.20 | * 9.27 | | CK 5 | 4.3 |COSGROVE..... 3.7 | 111.3 | 35 | f 11.50 | f 4.08 | * 9.10 | | | | | | | 8.00 | | | | | |
| | 7.00 | | | | 6.16 | 2.29 966 | * 9.32 | | S CK 7 | 8.0 | D.....DU PONT.....D 4.5 | 107.6 | Spur | 11.45 | 4.00 | f 9.02 | | | | | | 8.30 966 | 2.30 2.00 | | | | | |
| | 7.20 | | | | 6.30 | 2.41 | * 9.42 | | W CK 13 | 12.5 |SHERLOCK.....T 5.4 | 103.1 | 25 | 11.31 | 3.45 | * 8.50 | | | | | | | 1.26 | | | | | |
| | 7.45 | | | | 6.45 | 2.56 | * 9.53 | | CK 18 | 17.9 |UNION MILL..... 1.6 | 97.7 | Spur | 11.19 | 3.34 | * 8.39 | | | | | | | 12.46 | | | | | |
| | 7.55 | | | | 6.50 | 3.00 | 9.55 | | CK 20 | 19.5 |LACEY.....T 5.0 | 96.1 | 40 | 11.15 | 3.30 | * 8.37 | | | | | | | 12.26 | | | | | |
| | 8.15AM 366 | | | | 7.05 7.10 | 3.15 3.20 324 | 10.10 | | W T CK 25 | 24.5 | OY.....OLYMPIA.....D 0.7 | 91.1 | 110 | 11.00 10.55 965 | 3.15 3.00 365 | 8.25 | | | | | | | 12.01PM 366 | | | | | |
| | | | | | | | | | | 25.2 | PT. TOWNSEND SOUTHERN C'G. 4.7 (Track Connection) | 90.4 | | | | | | | | | | | | | | | | |
| | | | | | f 7.22 | f 3.33 | * 10.20 | | CK 30 | 29.9 |BELMORE.....T 6.5 | 85.7 | 40 | f 10.44 | f 2.48 | * 8.10 | | | | | | | | | | | | |
| | | | | | 7.38 | 3.47 | f 10.30 366 | | CK 37 | 36.4 | RK.....LITTLE ROCK.....D 1.3 | 79.2 | 43 | 10.30 321 | 2.33 | * 7.55 | | | | | | | | | | | | |
| | | | | | * 7.40 | * 3.49 | * 10.33 | | | 37.7 | ...BORDEAUX JUNCTION... 1.9 | 77.9 | | * 10.23 | * 2.28 | * 7.51 | | | | | | | | | | | | |
| | | | | | f 7.47 322 | f 3.53 | 10.40 | | CK 40 | 39.6 |MIMA..... 4.1 | 76.0 | 13 | f 10.20 | f 2.25 | * 7.47 323 | | | | | | See page 4 | See page 4 | | | | | |
| See page 4 | | See page 4 | | | 8.00 8.10 | 4.10 4.15 | 10.55 11.10 | | W Y CK 44 | 43.7 | HK.....GATE.....D 4.9 | 71.9 | 50 | 10.10 10.00 | 2.15 2.10 | 7.39 | | | | | | 10.10PM | 1.30PM | | | | | |
| | 12.30 1.58 324-968 | | | | 8.21 | 4.26 | 11.18 | | CM 5 | 48.6 | OX.....OAKVILLE.....D 6.9 | 67.0 | 90 | 9.50 | 1.58 967 | 7.29 | | | | | | 9.52 | 1.15 1.00 967 | | | | | |
| | 2.25 | | | | * 8.36 | * 4.42 | * 11.30 | | CM 12 | 55.5 |LYTLE..... 1.1 | 60.1 | 80 | * 9.32 | * 1.38 | * 7.19 | | | | | | 9.24 | 12.20 | | | | | |
| | 2.35 | | | | 8.39 | 4.45 | f 11.32 | | W CM 13 | 56.6 | OR.....PORTER.....D 6.5 | 59.0 | 20 | 9.30 | 1.35 | f 7.17 | | | | | | 9.21 | 12.15PM | | | | | |
| | 3.10 | | | | 8.55 694 | 5.02 | 11.45 968 | | CM 19 | 63.1 | EF.....ELMA.....D 2.5 | 52.5 | 120 | 9.15 | 1.15 | 7.05 | | | | | | 8.55 323 | 11.45AM 321 | | | | | |
| | 3.20 | | | | f 9.00 | f 5.07 | * 11.48 | | | 65.6 |MACKS..... 1.2 | 50.0 | | f 9.10 | f 1.05 | * 6.59 | | | | | | 8.38 | 11.00 | | | | | |
| | 3.50 | | | | 9.05 | 5.11 | 11.53AM | | CM 23 | 66.8 | SP.....SATSOP.....D 5.6 | 48.8 | 37 | 9.07 | 1.01 | f 6.57 | | | | | | 8.35 | 10.50 | | | | | |
| | 4.25 | | | | 9.20 | 5.25 | 12.06PM | | W CM 29 | 72.4 | MO.....MONTESANO.....D 8.6 | 43.2 | 70 | 8.55 | 12.50 | 6.47 | | | | See page 4 | 8.20 | | 10.30 | | | | | |
| | 5.00 | | | | * 9.48 | * 5.45 | * 12.30 324 | | C Y CM 37 | 81.0 |ABERDEEN JCT.....T 3.1 | 34.6 | 42 | * 8.35 | * 12.30 321 | * 6.27 | | | | | | 1.15PM | 9.40 | | | | | |
| | 5.30 | | | | 10.00 | 6.00 6.10 322 | 12.45 586 | | CM 40 | 84.1 | SA.....ABERDEEN.....D 3.5 | 31.5 | 50 | 8.25 585 | 12.15 | 6.15 365 | | | | | | 1.00PM 321 | 9.00 585 | | | | | |
| | 5.55PM 322 | | | | 10.20PM 694 | 6.20 6.30 6.40 | 12.55PM | | W C Y CM 44 | 87.6 | HO.....HOQUIAM.....D 3.3 | 28.0 | 150 | 8.10AM 963-587 | 12.01PM | 6.00PM 967 | | | | | | 7.00PM 365 | 8.20AM 366 | | | | | |
| | | | | | | f 6.40 | | | CM 47 | 90.9 |GRAYS HARBOR CITY..... 4.7 | 24.7 | No Sdg. | f 7.47 | | 1.25 | | | | | | | | | | | | |
| | | | | | | f 6.55 | | | CM 52 | 95.6 |GRAY GABLES..... 1.4 | 20.0 | No Sdg. | f 7.34 | | 1.05 | | | | | | | | | | | | |
| | | | | | | f 7.01 | | | CM 54 | 97.0 |CHENOIS CREEK..... 3.2 | 18.6 | No Sdg. | f 7.26 | | 12.58 | | | | | | | | | | | | |
| | | | | | | f 7.09 | | | CM 56 | 100.2 |TULIPS.....T 3.2 | 15.4 | 40 | f 7.20 | | 12.48 | | | | | | | | | | | | |
| | | | | | | f 7.20 | | | CM 61 | 103.4 |COPALIS CROSSING..... 2.7 | 12.2 | Spur | f 7.08 | | 12.30 | | | | | | | | | | | | |
| | | | | | | f 7.27 | | | CM 62 | 106.1 |KUHN..... 0.4 | 9.5 | No Sdg. | f 7.01 | | 12.26 | | | | | | | | | | | | |
| | | | | | | f 7.30 | | | CM 63 | 106.5 |McGLAUFILIN..... 1.2 | 9.1 | No Sdg. | f 6.59 | | 12.24 | | | | | | | | | | | | |
| | | | | | | f 7.34 | | | CM 64 | 107.7 |ONSLow..... 1.8 | 7.9 | 30 | f 6.55 | | 12.20 | | | | | | | | | | | | |
| | | | | | | f 7.39 | | | CM 66 | 109.5 |STEARNSVILLE..... 1.9 | 6.1 | No Sdg. | f 6.50 | | 12.12 | | | | | | | | | | | | |
| | | | | | | f 7.45 | | | CM 68 | 111.4 |ALOHA..... 1.8 | 4.2 | Spur 12 | f 6.42 | | 12.04PM | | | | | | | | | | | | |
| | | | | | | f 7.50 | | | W CM 69 | 113.2 |PACIFIC..... 1.4 | 2.4 | Spur 7 | f 6.36 | | 11.58AM | | | | | | | | | | | | |
| | | | | | | f 7.55 | | | CM 71 | 114.6 |SUNSET BEACH..... 1.0 | 1.0 | No Sdg. | f 6.33 | | 11.50 | | | | | | | | | | | | |
| | | | | | | | | | Y CM 72 | 115.6 | MC.....MOCLIPS.....D | 0.0 | 40 | 6.30AM | | 11.45AM | | | | | | | | | | | | |
| | 5.50 | 2.05 | 3.10 | 2.00 | .10 | 4.19 | 5.47 | 3.35 | | | Time Over District | | | 5.31 | 4.16 | 3.20 | 2.00 | .15 | | | 3.10 | 3.29 | 5.10 | | | | | |
| | 7.5 | 11.8 | 13.8 | 14.0 | 18.6 | 20.2 | 21.1 | 24.4 | | | Average Speed per Hour | | | 20.9 | 20.5 | 26.3 | 14.0 | 12.4 | | | 13.8 | 7.1 | 8.5 | | | | | |

West Bound.

GATE LINE.

East Bound.

West Bound.

OCOSTA BRANCH.

East Bound.

Table for GATE LINE, Time Table No. 34B, Succeeding No. 34A, June 21, 1911. Columns include Third Class, Second Class, First Class (387, 385, 383, 381), Stations (Centralia, Blakeslee, Grand Mound, Rochester, Gate), and various time and distance metrics.

Table for OCOSTA BRANCH, Time Table No. 34B, Succeeding No. 34A, June 21, 1911. Columns include Second Class (583, 581), Stations (Aberdeen Jct., Junction City, Cosmopolis Jct., South Aberdeen, West Aberdeen, South Arbor, Markham, Ocosta), and various time and distance metrics.

Special Rules Gray's Harbor and Gate Line.

Registering Stations—Lakeview, Olympia, Gate, Elma, Aberdeen, Junction, Hoquiam and Moclips. When No. 322 and No. 385 meet at Aberdeen No. 322 will take siding. Clearance will not be issued at Olympia, Elma and Aberdeen Jct., unless red signal is displayed. Trains will register by ticket at Lakeview; will not be required to procure clearance unless red signal is displayed. Trains from Grays Harbor Line must ascertain Main Line rights before occupying Main Line at Lakeview. Engineers will not be required to consult register, except at initial or starting point. Bulletin Stations—Olympia, Hoquiam and Moclips. Standard Clocks—Tacoma. Maximum grades, 3 1/4 miles west of Sherlock; 3 miles east to 2 miles west of Olympia. Speed of trains when backing up must not exceed twenty miles per hour. Junction switches will be set for line Olympia to Moclips. No. 365 and No. 366 will stop on flag at Burrows, 2.0 miles west of Chenoa Creek; Wilderness, 1.8 miles west of Tulips, and at Bale, 0.9 miles west of Copalis Crossing. Malones 5 miles east of Elma. No. 323 and No. 324 will stop at Malone on flag. No. 321 will stop on flag at Dupont to let off Passengers. No. 323 and No. 324 will stop on flag at Nisqually Gun Club, two miles east of Sherlock. No. 322 will stop at Little Rock on Saturdays, only, to take on passengers, and will stop on flag at Union Mills Saturdays only. No. 323 and No. 366 will stop on flag at Overton, three miles east of Little Rock. When No. 324 meets No. 321 at Aberdeen Junction No. 321 will take siding on Ocosta line. When No. 382 and No. 383 meet at Blakeslee, No. 382 will take siding. No. 321 will wait at Gate for connection with No. 383. Trains will approach Gate looking out for trains to and from Gate line turning on wye. No. 585 has right over No. 586 and No. 366, Aberdeen Junction to Aberdeen. No. 381 has right over No. 382. No. 383 has right over No. 384. No. 385 has right over No. 386, and No. 387 has right over No. 388 between Centralia and Gate. No. 965 has right over No. 966, Lakeview to Olympia. No. 381 will turn on wye on arrival at Gate. Yard limits at Centralia extends to a point 2200 feet west of the west switch of the new yard at Blakeslee on Gate Line. Capacity of this yard 300 cars. Telegraphones are located in Section House at Sherlock, in Depot at Lacey, and in Section House at Belmore, and are connected with telegraph office at Olympia, and may be used by train crews in emergency. Class S or S4 engines will not exceed 8 miles per hour over Satsop river bridge. All trains will stop 400 feet from and will not proceed until following draw bridges are known to be closed: Wishka River, 3/4 mile east of Aberdeen; Hoquiam River, 3/4 mile east of Hoquiam. Deraill switches at east end of house track at Elma, at Nances Spur, at Macks spur, and at Java spur west of Elma, at east end of Satsop Siding, and at Ninemire & Morgan's spur, two miles west of Aberdeen, must be kept set in derailing position when not in use. The movement of Port Townsend Southern trains from transfer track near Port Townsend Southern crossing to Northern Pacific depot, and from Northern Pacific depot to transfer track, will be protected by flag. All Northern Pacific trains will approach these points with train under control, expecting to be flagged by flagman of Port Townsend Southern train. Normal position of crossing gates at Olympia where Northern Pacific tracks cross those of the Port Townsend Southern Ry. will be closed and locked across the Port Townsend Southern Tracks; and when train of that company desires to use crossing, gates will be swung across Northern Pacific track. Danger signal will be maintained day and night on gates, which will consist of switch light at night. All Northern Pacific trains must approach this crossing prepared to stop, but full stop will be not required if it is found that crossing is clear and gates are in normal position. The tunnel district at Olympia is protected by automatic electric signals as follows: No. 1 large disc just west of passenger station. No. 2 small starting signal just east of passenger station. No. 3 switch indicator at east switch of team track. No. 4 large disc just east of tunnel. Trains and engines will be governed as follows: East bound—must not pass signal No. 1 or No. 2 at "Danger" and finding signals in this position must protect against west bound trains coming out of tunnel. East bound trains standing at station must be particular to get clear indication on Signal No. 2 before proceeding east of same. Crews switching at east end of team track must have clear indication on No. 3 signal before throwing switch and thereafter while switching will find this signal at "Danger" when cars or engines are on main line and can continue to switch with switch indicator at "Danger." but when main line has been cleared and switch has been closed signal must show clear before switch is thrown or main line obstructed. Cars on team track must be left west of clearahs post as cars overhauling this point will set signals No. 1, No. 2 and No. 3 at "Danger." Trains or engines on Jefferson Street line must get clear o. 4 signal before throwing switch or proceeding out of Jefferson Street line at east end of tunnel. West Bound—west boundst trains or engines must not pass No. 4 signal at "Danger." Signals at "Danger" show red banner by day and red light by night and when at safety a clear disc by day and white light by night. Train and enginemens must observe position of signal before engine reaches the signal and not pass signal at "Danger," finding signals in this position will be governed by Rule No. 299. In case of failure of signal appar atus, all signals will indicate danger and after five minutes have elapsed, train will proceed through the block under protection of flagman in advance. No. 322 will slow up sufficiently at South Tacoma to allow Agent to throw on Railway Mail. Sige track, length 2000 feet, located on the Mason County Logging Co.'s road, 1,985 feet from main line switch at Bordeaux Junction. Mason County Logging Company will deliver loads to Northern Pacific Ry. Co. at this siding, and N. P. crews will leave empties for Logging Company at same location. N. P. train crews will not operate on Mason County Co.'s line, beyond siding.

Register Stations—Aberdeen Junction, Cosmopolis and Ocosta. Bulletin Station—Cosmopolis. No. 583 has right over No. 584, Cosmopolis to Ocosta. 583 and 584 will stop on flag at Redmon Creek, located one mile east of Ocosta, for transfer of passengers, baggage and express destined to and from Westport. All trains will stop 400 feet from and will not proceed until following draw bridges are known to be closed. Chehalis River, between Aberdeen Junction and Cosmopolis Junction; Johns River, 3/8 mile west of Markham. Junction switches will be set for line Junction City to Ocosta. Trains will come to full stop before passing over grade crossings of O.-W. R. & N. Co. at various industry tracks in South Aberdeen and Cosmopolis.

West Bound.

YACOLT BRANCH.

East Bound.

Table for YACOLT BRANCH, Time Table No. 34B, Succeeding No. 34A, June 21, 1911. Columns include First Class (389, 390), Stations (Yacolt, Wall, Heison, Crawford, Battle Ground, Brush Prairie, Laurin, Homan, Barberton, Hidden, Vancouver Jct.), and various time and distance metrics.

Registering Stations—Yacolt and Vancouver Junction. Engineers will not be required to consult register except at initial or starting point. Bulletin Stations—Vancouver and Yacolt. Standard Clocks—Vancouver. Deraill switches located on Daly Spur and on Smith Spur must be kept in derailing position when not in use. Trains from Yacolt Branch must ascertain main line rights before occupying main line at Vancouver Junction. No. 389 and No. 390 will stop on flag at Lucia and Dole for passengers. The east switch of the north leg of the wye at Yacolt will be kept set and locked for the north leg of the wye. Deraill has been installed about three hundred feet south of and south end of passing track switch at Rileys, north of Yacolt. This deraill must be kept open and locked at all times when not in use.

SPECIAL RULES FOR MAIN LINE.

Maximum speed of passenger trains is one minute or 60 seconds per mile. This speed must not be exceeded.

Registering Stations—Tacoma, Tacoma Wharf, South Tacoma, Tenino, Centralia, Sopenah, Carrolls, Vancouver and Portland.

Chehalis is registering station for South Bend Branch Trains.

Passenger trains will register by ticket at South Tacoma, Tenino, Sopenah and Carrolls.

No. 679, No. 680, No. 691, No. 692 and No. 699 will register by ticket at Tenino, Sopenah and Carrolls.

Trains running via Grays Harbor Line will register at Lakeview.

Clearance will not be issued at South Tacoma, except when red signal is displayed.

Clearance will not be issued to west bound trains at Sopenah and to east bound trains at Carrolls or Tenino unless red signal is displayed.

Clearance will be issued to west bound trains entering double track at Tenino and Carrolls and to east bound trains at Sopenah. All trains will obtain clearance at Vancouver and Centralia.

At Tacoma and Tacoma Wharf no clearance required.

Engineers will not be required to consult register, except at initial or starting point.

Bulletin Station—Tacoma Wharf, Tacoma and Portland (Centralia and Vancouver are bulletin stations for trains originating at those points).

Standard Clocks—Tacoma, Centralia, Vancouver and Portland.

Junction switch at east end of Columbia River bridge, Vancouver, will be kept set and locked for N. P. main line.

All trains will come to a full stop at fixed danger signals located 200 feet from draw spans of the Willamette and Columbia River bridges between Will-bridge and Vancouver. Engineers will then sound four short blasts of whistle for draw, and will not proceed until signalled ahead by green signal in hands of flagman on deck of draw span, which signal must be answered by engineer in usual manner.

Trains and switch engines using track leading to the wharf at Vancouver will come to a full stop before crossing S. P. & S. Ry. crossing, and will not proceed until a flagman has been sent ahead to flag the crossing.

All trains using tracks between Vancouver and Portland will be governed by instructions and card order issued by Superintendent S. P. & S. Ry. at Vancouver. At Vancouver west bound trains will stop at passenger station before engine reaches point of clearance between N. P. & S. P. & S. tracks, and must be under full control before passing Station Semaphore, expecting to find main line occupied.

Conductors and engineers will provide themselves with current time table of Northern Pacific Terminal Co. and will be governed by Special Rules thereon while in Portland Yard. Also provide themselves with current time table of S. P. & S. Railway Co. governing use of tracks between Portland and Vancouver.

Freight trains leaving Tacoma Yard, or switch engines taking transfer to South Tacoma, will not pass crossover track above 15th Street leading from passenger yard to outgoing track without receiving signal from switch tender, who will not allow trains or transfers to pass this crossover when any passenger train is backing out or waiting in the passenger station. East bound trains will be under absolute control approaching Pacific Avenue at Tacoma and will not pass Pacific Avenue crossing without signal from switch tender indicating that crossovers at Pacific Avenue are clear. All trains which will use the Draw Bridge Line at Tacoma without entering passenger station will stop above Pacific Avenue and not proceed beyond there until engineer is furnished with a bridge card and an understanding established with Tower man covering movement of train over Draw Bridge Line. If it is found that freight trains cannot use Draw Bridge Line and passenger train will be delayed on this account, conductor will arrange to enter Half Moon yard and be handled via freight tracks to Tidewater.

Between Tidewater and Tacoma Engineer will obtain card order at Tidewater or Tacoma as authority to use draw-bridge line. Interlocking signals at east and west approach to draw-bridge control use of bridge, and trains will not proceed unless home semaphore shows clear indication.

No engine heavier than N. P. Class "W" loaded weight of which is as follows: Weight of Drivers, 203,000 lbs.; Weight of Engine and Tender, 407,500 lbs. Will be run over Bridge No. 254, Tacoma Draw Span.

No two Engines of any class will double head over this bridge where the combined weight is greater than N. P. Class W. Speed of all trains must not exceed ten (10) miles per hour over Tacoma Draw Span.

Class S or heavier engines must not be used on incline track at Kalama, known as the Salmon track. When doing switching on this track enough car must be used so that engines will not need to go on this track.

No engines heavier than Class S-4 will use trestle, Kalama, Wye.

All trains must not exceed ten miles per hour through corporate limits of Roy, Centralia, Chehalis, Winlock and Castle Rock, and fifteen miles per hour through corporate limits of Ridgefield.

Deraill Switches are located as follows and must be kept set in derailling position when not in use: Tacoma (Harrison Bros. spur); Tacoma (Keystones Lumber Co. spur); Rainier (Bob White Lumber Co. spur); Tenino (Derrickson spur, 2 miles east); Tenino (Stone Quarry); Wabash (Interlocking deraill one O.-W. R. & N. Co. connection); Chehalis (east end of house track); Chehalis (west end of flour mill track); Napavine (Sommerville spur and Pitcher's spur); Winlock (west end of house track).

Tacoma Yard extends to South Tacoma, and Chehalis Yard to west wye switch at Chehalis Junction.

No. 303 and No. 333 will stop on flag Sundays only at Lewis River Bridge, west of Woodland.

No. 303 will stop at Lakeview to let off passengers from points south of Lakeview. No. 307 will stop at Lakeview on flag to pick up passengers for points south of Lakeview.

Evaline is a flag stop for trains 307 and 308.

No. 334 will stop at McIntosh Saturdays on flag. No. 333 will stop at McIntosh Sundays on flag.

No. 358 and No. 359 will stop on flag at any station between Tacoma and Portland to receive or discharge passengers holding Great Northern tickets reading Spokane or points east thereof.

No. 359 will stop at Tenino to let off passengers from points Tenino and north, and to pick up Portland passengers.

Lap Sidings—Roy, Rainier, and Castle Rock. Trains taking siding will head in at Lap.

First-class trains (15) minutes or more late, and extra trains running on schedule, will observe same precautions in yard limits at Centralia, Chihalis, Kalama, Vancouver and Portland, as are required of second and inferior class trains by Rule 298F.

Telephones are located at Chehalis and Chehalis Junction. All trains from the South Bend line, before leaving Chehalis Junction, will ascertain, by telephone, position of all main line trains, and secure train and block rights authorizing them to use track between Chehalis Junction and Chehalis before proceeding.

Conductors and Engineers must supply themselves with copy of Block Signal Rules governing the use of track between Vancouver and South Tacoma.

Maximum grades, Tacoma Yard office to two and one-half miles west.

Between Centralia and Wabash, the third, or extreme right hand track going east, will be used as a switching lead for the east end of Centralia Yard, as far as the yard limit board; outside of yard limits any trains using this track will obtain train order authority from dispatcher at Tacoma by the use of telephone, which is located in the building formerly used for telegraph office. Communication with the dispatcher can be had by use of telephone located on the dispatcher's wire, in accordance with the instructions which will be found posted beside the telephone. Under such authority the third track will be used by trains to or from the Centralia Eastern Railway and the Tone Branch of the O.-W. R. & N. Co. at Wabash, and for such east bound main line freight trains as may be designated by yardmaster, Centralia. No cars will be left on this third track either by train crews or yard crews without train order authority.

Special Rules Governing Use of Double Track Between Tenino and Sopenah and Carrolls and Vancouver.

- (1) Double track extends from a point 400 feet west of depot at Tenino to a point 75 feet west of passenger depot at Sopenah and from a point directly in front of depot at Carrolls to passenger station Vancouver, except single track across Lewis River Bridge, 3.0 miles east of Ridgefield, and single track across Kalama River Bridge, 1.8 miles east of Kalama, and single track from west end of passenger station platform at Centralia to a point 1,700 feet west thereof.
 - (2) Trains must keep to the right unless otherwise provided.
 - (3) Before clearing any train entering double track at junction or initial points, or allowing any train to cross over to opposite track for the purpose of running on such track, operators must secure train dispatcher's authority.
 - (4) Upon receiving proper block clearance and displaying classification signals, any train may proceed without further orders, inferior class trains keeping clear of first class trains.
 - (5) Any train having work to do, or liable to be delayed by any cause, will report to the superintendent, and will not occupy the main track on the time of first class trains without permission.
 - (6) When a train crosses over to or obstructs the opposite track, unless otherwise provided, it must first be protected as prescribed by Rule 299 in both directions on that track and permission of Block Operator secured.
 - (7) Work extras must move with current of traffic unless otherwise directed.
 - (8) Any train making reverse movement on double track against the current of traffic must receive either clearance or clearance and caution card at every block office they pass.
 - (9) If a train should part while in motion, the enginemen and trainmen of the front portion must give train parted signal to trains running on the opposite track. A train receiving this signal or being otherwise notified that a train on the opposite track has parted must immediately reduce speed and proceed with caution until the separated train is passed.
 - (10) Caution must be used by engineers of trains approaching stations where any train is receiving or discharging passengers, full stop being made before passing such train. See Rule No. 304, Transportation Rules.
 - (11) To insure personal safety, operators having train orders to deliver to passing trains should stand to the right hand side of train and avoid standing between tracks when possible to do so.
- The single track between depot and the double track switch at Centralia will be operated under Yard Limit rules. Before using single track trains must have time table, or train order rights, or be fully protected by flag. All trains will ascertain position double track switch before using, and will run under full control on the single track between the depot and the double track switch.
- Trains will be governed by automatic block signals between Tacoma and South Tacoma, and between Kalama and Vancouver. See Special Rules, page 10.

West Bound.

SOUTH BEND BRANCH.

East Bound.

| THIRD CLASS. 969 | FIRST CLASS. | | Water, Coal, Scales, Tables and Wyes | Station Numbers | Distance from Chehalis Junction | Time Table No. 34B Succeeding No. 34A June 21, 1911. | | | Distance from South Bend | Capacity of Passing Tracks | FIRST CLASS. | | THIRD CLASS. 970 |
|------------------------|--------------|----------------|--------------------------------------|-----------------|---------------------------------|--|-----|------|--------------------------|----------------------------|--------------|--------------------|---------------------|
| | 393 | 391 | | | | 392 | 394 | | | | | | |
| Freight | Passenger | Passenger | | | | STATIONS. | | | | | Passenger | Passenger | Freight |
| See page 1 | See page 1 | See page 1 | | | | Telegraph Offices and Calls | | | | | See page 2 | See page 2 | See page 2 |
| EXCEPT SUNDAY | DAILY | DAILY | | | | | | | | | DAILY | DAILY | EXCEPT SUNDAY |
| 6.45 AM | 8.00 PM | 12.80 PM | Y | 2032 | 0.0 | CHEHALIS JCT..... | 3.4 | 56.5 | Y | | 9.40 AM | 6.30 PM | 8.35 PM |
| 7.05 | 8.10 | 12.40 | | CW 2 | 3.4 | LITTELL..... | 1.3 | 53.1 | 5 | | 9.26 | 6.17 | 8.10 |
| 7.15 | 8.18 | 12.44 | | CW 5 | 4.7 | ADNA..... | 5.4 | 51.8 | 37 | | 9.21 | 6.12 | 8.25 |
| 7.55 | 8.29 | 12.58 | W 2.4 m West | 10 | 10.1 | CERES..... | 6.1 | 46.4 | 58 | | 9.06 | 5.55 | 1.55 |
| | | | | | 16.2 | LUEDINGHAUS R. R. CROSSING | 0.1 | 40.3 | | | | | |
| | | | | | | No Track Connection | | | | | | | |
| 8.45 AM 8.50 392 | 8.45 | 1.15 970 | | CW 16 | 16.3 | DRYAD..... | 1.3 | 40.2 | 90 | | 8.50 969 | 5.40 | 1.15 391 |
| 9.05 | 8.50 | 1.19 | | CW 17 | 17.6 | DO..... | 4.7 | 38.9 | Spur | | 8.45 | 5.35 | 1.00 |
| 10.15 | 9.05 | 1.35 | W | CW 22 | 22.3 | PE ELL..... | 1.4 | 34.2 | 75 | | 8.35 | 5.22 | 12.80 |
| | | | | | 23.7 | McCORMICK R. R. CROSSING | 0.6 | 32.8 | | | | | |
| | | | | | | Track Connection | | | | | | | |
| 10.35 | 9.12 | 1.41 | W | CW 24 | 24.3 | McCORMICK..... | 1.8 | 32.2 | Spur | | 8.21 | 5.15 | 12.10 PM |
| 11.00 | 9.20 | 1.50 | | CW 26 | 26.1 | WALVILLE..... | 1.2 | 30.4 | Spur | | 8.16 | 5.11 | 11.55 AM |
| | | | | | 27.3 | WALVILLE R. R. CROSSING | 1.6 | 29.2 | | | | | |
| | | | | | | No Track Connection | | | | | | | |
| 11.40 AM 970 | 9.35 | 2.00 | T | CW 29 | 28.9 | PLUVIUS..... | 6.4 | 27.6 | 36 | | 8.07 | 5.05 | 11.40 969 |
| 12.15 PM | 10.00 | 2.25 | W | CW 35 | 35.3 | FRANCES..... | 1.3 | 21.2 | 35 | | 7.45 | 4.40 | 10.20 |
| 12.25 | 10.04 | 2.30 | | CW 37 | 36.6 | GLOBE..... | 1.4 | 19.9 | Spur | | 7.39 | 4.36 | 9.40 |
| 12.35 | 10.08 | 2.34 | | CW 38 | 38.0 | LEBAM..... | 4.3 | 18.5 | 14 | | 7.36 | 4.32 | 9.30 |
| 1.10 | 10.18 | 2.45 | | CW 42 | 42.3 | HOLCOMB..... | 4.2 | 14.2 | 30 | | 7.24 | 4.22 | 9.00 |
| 1.30 | 10.28 | 2.58 | | CW 46 | 46.5 | MENLO..... | 4.0 | 10.0 | 9 | | 7.13 | 4.12 | 8.35 |
| 2.00 | 10.38 | 3.10 | S | CW 50 | 50.5 | WILLAPA..... | 2.6 | 6.0 | 16 | | 7.02 | 4.02 | 8.10 |
| 2.30 | 10.50 | 3.20 | | CW 53 | 53.1 | RAYMOND..... | 3.4 | 3.4 | 45 | | 6.57 | 3.56 | 8.00 |
| 3.00 PM 394 | 11.00 PM | 3.30 PM 394 | W C T | CW 57 | 56.5 | SOUTH BEND..... | | 0.0 | 150 | | 6.45 AM | 3.45 PM 969-391 | 7.30 AM |
| EXCEPT SUNDAY | DAILY | DAILY | | | | | | | | | DAILY | DAILY | EXCEPT SUNDAY |
| 8.15 | 3.00 | 3.00 | | | | Time Over District | | | | | 2.55 | 2.45 | 8.05 |
| 6.2 | 18.9 | 18.9 | | | | Average Speed per Hour | | | | | 19.1 | 20.5 | 6.9 |

Registering Stations—Chehalis and South Bend.

Standard Clock—Centralia.

Bulletin Station—South Bend.

Speed of passenger trains must not exceed 30 miles per hour, and speed of freight trains must not exceed 20 miles per hour, between Pluvius and Pe Ell.

All trains will stop 400 feet from draw span over South Fork Willapa River, three miles east of South Bend, and will not proceed until draw is known to be closed.

Chehalis Yard includes west "Wye" switch at Chehalis Junction.

Maximum grades between Pe Ell and Frances.

Engineers will not be required to consult register except at initial or starting point.

Deraill Switches are located as follows and must be kept in derailling position when not in use: Lebam Mill Spur, Trap Creek Spur, Cram Spur and Wheaton.

Trains from South Bend Branch must ascertain Main Line rights by telephone before occupying Main Line at Chehalis Junction.

Nos. 391 and 392 will stop on flag at Trap Creek.

Trap Creek is flag stop for train 393.

| West Bound. | | | | BUCKLEY LINE. | | | | | | | | | | East Bound. | | | West Bound. GREEN RIVER BRANCH. | | | | East Bound. | | | | | | | | |
|------------------------------|--|--|--|-------------------------------|--|--|--|--|--|--|--|--|--|-------------|--|--|---------------------------------|--|--|--------------|-------------|--|--|--|--|--|--------------|--|--|
| THIRD CLASS. | | | | FIRST CLASS TRAINS. | | | Time Table No. 34B Succeeding No. 34A June 21, 1911. | | | | | | | | | | THIRD CLASS. | | | FIRST CLASS. | | | | Time Table No. 34B Succeeding No. 34A June 21, 1911. | | | FIRST CLASS. | | |
| 971 | | | | 397 367 395 | | | STATIONS. | | | | | | | | | | 972 | | | 395 | | | | 398 | | | | | |
| Way Freight | | | | Passenger Passenger Passenger | | | Telegraph Offices and Calls | | | | | | | | | | Way Freight | | | Passenger | | | | Passenger | | | | | |
| EXCEPT SUNDAY | | | | DAILY DAILY DAILY | | | | | | | | | | | | | EXCEPT SUNDAY | | | DAILY | | | | DAILY | | | | | |
| 6.30AM | | | | 5.10PM 9.40AM 7.10AM | | | KANASKAT..... | | | | | | | | | | 1.30PM | | | 6.05AM | | | | 8.20PM | | | | | |
| 6.45 | | | | 5.15 * 9.45 7.14 | | | JC.....PALMER JCT.....N | | | | | | | | | | 1.00 | | | 6.35 W | | | | 7.40 | | | | | |
| 6.50 | | | | 5.16 * 9.47 7.15 | | | PALMER..... | | | | | | | | | | 12.45 | | | 6.38 C J | | | | 7.35 | | | | | |
| 7.05 | | | | 5.19 f 9.51 7.18 | | | BAYNE..... | | | | | | | | | | 12.30 | | | 6.50 C J | | | | 7.15 | | | | | |
| 7.10 | | | | f 5.22 * 9.55 7.20 | | | CUMBERLAND..... | | | | | | | | | | 12.01PM | | | 7.00AM W Y | | | | 7.10PM | | | | | |
| 7.15 395 7.45 | | | | * 5.24 * 10.00 * 7.22 | | | NAVY..... | | | | | | | | | | 11.50AM | | | | | | | | | | | | |
| 8.20 368 | | | | 5.37 10.13 7.34 | | | CW.....ENUMCLAW.....D | | | | | | | | | | 11.20 | | | DAILY | | | | DAILY | | | | | |
| 9.25 10.45 367 972 396 | | | | 5.50 10.21 7.44 | | | BK.....BUCKLEY.....D | | | | | | | | | | 10.21 9.00 367 971 396 | | | .55 | | | | 1.10 | | | | | |
| 11.00 | | | | * 6.00 * 10.30 * 7.53 | | | CASCADE JCT..... | | | | | | | | | | 8.20 | | | 15.1 | | | | Average Speed per Hour | | | | | |
| 11.10AM 12.15PM | | | | 6.03 10.33 8.03 | | | SO.....SOUTH PRAIRIE.....D | | | | | | | | | | 8.15 7.55 368-395 | | | | | | | | | | | | |
| 12.35 | | | | f 6.11 * 10.40 8.10 | | | ARLINE..... | | | | | | | | | | 7.35 | | | | | | | | | | | | |
| 12.40 | | | | f 6.15 * 10.42 f 8.12 | | | CROCKER..... | | | | | | | | | | 7.30 | | | | | | | | | | | | |
| 1.10 | | | | 6.25 f 10.50 8.18 | | | ORTING..... | | | | | | | | | | 7.10 | | | | | | | | | | | | |
| 1.24 | | | | 6.33 * 10.58 8.27 | | | McMILLIN..... | | | | | | | | | | 6.50 | | | | | | | | | | | | |
| 1.30 | | | | 6.38 * 11.02 8.37 | | | ALDERTON..... | | | | | | | | | | 6.35 | | | | | | | | | | | | |
| 1.40 | | | | * 6.43 * 11.07 * 8.40 | | | MEEKER..... | | | | | | | | | | 6.20 | | | | | | | | | | | | |
| 2.00 | | | | 6.53 11.15 9.00 | | | PUYALLUP..... | | | | | | | | | | 6.10 | | | | | | | | | | | | |
| 2.45PM | | | | 7.10PM 11.30AM 9.25AM | | | TACOMA..... | | | | | | | | | | 5.30AM | | | | | | | | | | | | |
| EXCEPT SUNDAY | | | | DAILY DAILY DAILY | | | | | | | | | | | | | EXCEPT SUNDAY | | | | | | | | | | | | |
| 8.15 | | | | 2.00 1.50 2.05 | | | Time Over District | | | | | | | | | | 8.00 | | | | | | | | | | | | |
| 5.5 | | | | 22.9 25.0 22.0 | | | Average Speed per Hour | | | | | | | | | | 5.7 | | | | | | | | | | | | |

Registering Station.—Kanaskat. Engineers will not be required to consult register except at initial or starting point. Derailing switches west of main line log landings will be set for derail. Trains will look out for engines of Logging Co. using track east of derail switch located 1,100 feet west of Spur No. 1 at Kerriston. Trains will look out for engines of Cascade Timber Co. handling logs between their siding and Kangley. Maximum grade. s Derailing switch is located 250 feet east of Kangley Jct., on Kangley Line. See special rules, page 8.

Speed of trains over crossover switches at Tidewater and Puyallup and over 15th Street Bridge, entering Tacoma passenger yard, must not exceed ten miles per hour. Trains entering Tacoma Union Station from Tacoma Division Main Line or Draw Bridge Line, will not exceed five miles per hour over switches at the north end of passenger yard, and over switches at Fifteenth street. Trains running via the head of Bay will use extreme care and not exceed eight miles per hour around curve at south end of passenger yard. Tacoma yard extends to Tidewater. Trains originating or terminating at Tacoma will run via Head of Bay yard. Trains from Seattle Line for Tacoma Division main line or vice versa, will run via Draw Bridge Line. Tacoma Division trains using track between Tidewater and Puyallup will provide themselves with copy of Seattle Division time card and be governed by instructions issued by Superintendent Seattle Division. **Registering Stations.**—Tacoma Wharf, Tacoma, Puyallup, South Prairie and Palmer Junction. Crocker and Orting are registering stations for trains terminating there. (See Special Rules Staff Operation, page 7.) Engineers will not be required to consult register, except at initial or starting point. At Puyallup and Palmer Junction all trains register by ticket, and no clearance required unless red signal displayed. At Tacoma Wharf and Tacoma no clearance required. **Bulletin Stations.**—Tacoma Wharf, Tacoma, South Prairie. **Standard Clock.**—Tacoma. South Prairie Yard extends to Cascade Junction. Trains will approach Cascade Junction under full control, looking out for branch line trains. Speed of passenger trains must not exceed thirty miles per hour, and speed of freight trains twenty miles per hour, from Buckley to Cascade Junction. Speed must not exceed ten miles per hour within the corporate limits of Puyallup, Orting, Buckley and Enumclaw. Buckley Line extends to Puyallup, and the new or extreme left hand track coming west between Meeker and Puyallup is main track for Buckley Line, and also is passing track and operated under yard limits. Puyallup yard limits extend from Meeker to Puyallup. Buckley Line trains in either direction will use East bound main track of Seattle Line in running around water tank at Meeker. All trains must approach this point under full control and be sure track is clear before proceeding. Buckley Line trains will protect by flag when using this gauntlet. In order to fully safeguard operation of the track known as the Buckley Line between Meeker and Puyallup and which track is also used as a passing track for main line trains, and for safeguarding the gauntlet in front of the tank in which Buckley Line trains use the east bound line, following will govern during foggy weather: Conductors and engineers of trains from Buckley Line, before leaving Meeker, will obtain from operator at Puyallup by telephone, block, indicating position of trains on east bound track between Puyallup and Meeker, and, in addition to this, before using gauntlet, will fully protect by flag. Will also ascertain from operator the position of trains on Buckley Line between Puyallup and Meeker. No trains, either main line or Buckley Line, will use this portion of the track during foggy weather without obtaining block from operator at Puyallup, and in addition to such precaution, will keep under full control, moving at slow speed, taking such precautions that in case track is occupied, that there will be no possibility of accident. Trains from Buckley Line that have loads for Seattle Line will leave them at Meeker on siding located between east and west legs of the wye. Any loads for the industries at Meeker will be taken to Puyallup, and from there handled to the industries by using West bound main line to passing track switch just west of the Jurin Mill under protection of flag, while occupying main track. Block must be obtained and the work handled in such way as not to delay passenger trains. Trains from Buckley Line must ascertain main line rights before occupying main line at Puyallup. Double track switches at Cascade Junction and South Prairie will be set for east bound track, and cross-over switch at west end of west bound track, near water tank, will be set for passing track.

Maximum grades, one mile west of Buckley to Cascade Junction. **Engines of any class must not be double headed over Bridge 228, Buckley loop, between Cascade Junction and Buckley.** No engine heavier than N. P. class "W" loaded weight, of which is as follows: Weight of drivers, 207,000 lbs.; weight of engine and tender, 456,800 lbs will be run over Bridge No. 254, Tacoma Draw Span. No two Engines of any class will double head over this bridge where the combined weight is greater than N. P. Class W. Speed of all trains must not exceed ten (10) miles per hour over Tacoma Draw Span. Trains will keep to the right on double track between Cascade Junction and South Prairie water tank and between Tidewater and Tacoma Wharf. **Derail Switches** at Valley Mill Co.'s Spur, one mile west Buckley, west end of passing track at South Prairie and west end of Crocker Yard. East end of Mill Siding, Meeker, must be kept in derailing position when not in use. At Puyallup the upper semaphore arms govern movement of trains using Seattle Line; lower semaphore arms govern movements to and from Buckley Line. **NOTE.**—No. 398 will wait at Puyallup for connection with No. 323. No. 396 will connect with No. No. 321 at Puyallup. No. 368 will connect with Seattle Division No. 280, at Kanaskat. No. 367 will connect with Seattle Division No. 3. No. 368 will connect with Seattle Division No. 4 at Kanaskat. No. 367 and No. 368 will stop on flag at Cumberland for passengers to or from points east of Palmer Junction. Between Tidewater and Tacoma engineer will obtain card order at Tidewater or Tacoma as authority to use draw-bridge line. Interlocking signals at east and west approach to drawbridge control use of bridge, and trains will not proceed unless home semaphore shows clear indication. Trains will approach cross-over switches on double track between Cascade Junction and Tacoma Wharf, located at East L Street (near head of Bay Yard Office), East D Street (near Round House) and South Twenty-first Street (entering Passenger Station), under full control and will not proceed until tracks are known to be clear and signal is received from Switch Tender. Conductors of trains carrying logs, before using double tracks, will carefully inspect loading; and, if insecure, will obtain orders insuring that other trains will not be met while running. Trains will not exceed 25 miles per hour around curves on Buckley Loop between Cascade Jct. and Buckley. At Tacoma, a signal of the single arm semaphore pattern located near junction of temporary line leading to passenger station and the draw bridge line at 15th Street; another signal of the same pattern at the North end of passenger yard. The two signals controlled by switch tender at 15th Street and govern single track passenger line between 15th Street and Tacoma passenger station. No train from the draw bridge line or Tacoma Division Main Line will enter passenger station when signal at 15th Street is at "Danger" and no train will proceed from passenger station yard to draw bridge line or Tacoma Division Main Line when signal at that point must positively know that switches are lined up for clear track before passing. Push button operating signal to tower at 15th Street is located on post under concourse. Switch crews will operate for Tacoma Division Main Line trains and conductors attend to it for Seattle bound trains. Train register is located in telegraph office, entrance from stairway on south side of depot. Maximum speed of passenger trains is one minute, 60 seconds, per mile. This speed must not be exceeded. **THIS TIME CARD CONFERS NO RIGHTS ON TACOMA DIVISION TRAINS BETWEEN PALMER JUNCTION AND KANASKAT. No. 395, No. 396, No. 367, No. 368, No. 397, No. 398, No. 971, and No. 972, will be handled by Train Order, and run as Extras between Palmer Junction and Kanaskat.** Conductors and Engineers will provide themselves with current time table of Seattle Division, governing use of track between Kanaskat and Palmer Junction.

| West Bound. | | BURNETT BRANCH. | | | | East Bound. | |
|---------------------|------------|---|-----------------|------------------------|-----------------------------|----------------------------|----------------------------|
| FIRST CLASS. | | Time Table No. 34B Succeeding No. 34A June 21, 1911. | | | | FIRST CLASS. | |
| 373 | 375 | Water, Coal, Scales, Tables and Wyes | Station Numbers | Distance from Spiketon | STATIONS. | Distance from Cascade Jct. | Capacity of Passing Tracks |
| Passenger | Passenger | | | | | | |
| DAILY | DAILY | | | | Telegraph Offices and Calls | | |
| 6.21PM | 7.26AM | | C C 4 | 0.0 |SPIKETON..... 2.1 | 3.4 | 45 |
| 6.26 | 7.34 | | C C 2 | 2.1 | BN.....BURNETT.....D 1.3 | 1.3 | 45 |
| * 6.31PM | * 7.39AM | | 1949 | 3.4 |CASCADE JCT..... | 0.0 | No Sdg. |
| DAILY | DAILY | | | | | | |
| .10 | .13 | | | | Time Over District | | .15 .10 |
| 20.4 | 15.6 | | | | Average Speed per Hour | | 13.6 20.4 |

Registering Stations.—Burnett and Cascade Junction. Engineers will not be required to consult register except at initial or starting point. Switches above Burnett will be set to protect cars at quarries by derail. Speed of trains when backing up must not exceed 20 miles per hour.

Speed must not exceed six miles per hour within the corporate limits of Burnett. Derail Switch east station platform at Spiketon must be set and locked for derail when not in use.

| West Bound. | | ORTING BRANCH. | | | | East Bound. | |
|---------------------|--|---|-----------------|----------------------------|---------------------------------|----------------------|----------------------------|
| FIRST CLASS. | | Time Table No. 34B Succeeding No. 34A June 21, 1911. | | | | FIRST CLASS. | |
| | | Water, Coal, Scales, Tables and Wyes | Station Numbers | Distance from End of Track | STATIONS. | Distance from Orting | Capacity of Passing Tracks |
| | | | | | | | |
| | | | | 0.0 |END OF TRACK..... 1.3 | 10.0 | |
| | | | | 1.3 | TACOMA & EASTERN CROSS'G 1.4 | 8.7 | |
| | | | C E 8 | 2.7 |PUYALLUP RIVER..... 7.3 | 7.3 | 10 |
| | | | W T 1958 | 10.0 | OG.....ORTING.....D | 0.0 | 200 |

Registering Station.—Orting. Engineers will not be required to consult register except at initial or starting point. Junction switch, one mile east of Orting station will be set for cross-over, and track from cross-over to station will be used as a main line passing track.

Maximum grades on St. Paul & Tacoma Lumber Co.'s line east of Puyallup River. See special rules, page 8.

Derailing switch 200 feet east of Junction switch must be left set for derail. Derail at Fisks must be left set for derail.

| West Bound. | | WILKESON BRANCH. | | | | East Bound. | |
|---------------------|--|---|-----------------|-----------------------|---------------------------------|----------------------------|----------------------------|
| FIRST CLASS. | | Time Table No. 34B Succeeding No. 34A June 21, 1911. | | | | FIRST CLASS. | |
| 377 | | Water, Coal, Scales, Tables and Wyes | Station Numbers | Distance from Fairfax | STATIONS. | Distance from Cascade Jct. | Capacity of Passing Tracks |
| Passenger | | | | | | | |
| DAILY | | | | 0.0 | FX.....FAIRFAX.....D 1.7 | 15.5 | 5 |
| 6.10AM | | | C B 15 | 0.0 |MELMONT..... 4.5 | 13.8 | 5 |
| 6.17 | | | C B 13 | 1.7 | CARBON COAL CO. CROSSING 0.6 | 9.3 | |
| | | | | 6.2 | CB.....CARBONADO.....D 3.8 | 8.7 | 5 |
| 6.85 | | | C B 8 | 6.8 | WX.....WILKESON.....D 4.9 | 4.9 | 90 |
| 6.55 | | | S T C B 5 | 10.6 |CASCADE JCT..... | 0.0 | No Sdg. |
| * 7.10AM | | | 1949 | 15.5 | | | |
| DAILY | | | | | Time Over District | | 1.04 |
| 1.00 | | | | | Average Speed per Hour | | 15.4 |

Maximum Grades.
Registering Stations.—Fairfax and Cascade Junction. Engineers will not be required to consult register except at initial or starting point. Derailing switch at Cascade Junction will be set for derail. Derailing switch located 200 feet east of east switch at Montezuma will be kept set and locked for derail.

Carbonado Junction switch at Wilkeson and Fairfax Junction switch at Carbonado will be set for Fairfax Line. Speed of trains when backing up must not exceed 20 miles per hour.

Trains will stop at railroad crossing near Fairfax Junction, between Carbonado and Fairfax.

Derail switches at west end of coal track at Melmont and 200 feet east of Cascade Junction must be kept set in derailing position when not in use.

Switch east of depot at Fairfax will be set to protect cars at Bunkers by derail.

Trains between Fairfax and Montezuma will look out for logging train of Washington Manufacturing Company, switching at Montezuma.

No. 377 has right over No. 378 Fairfax to Cascade Junction.

| West Bound. | | ELMA BRANCH. | | | | East Bound. | |
|---------------------|--|---|-----------------|-----------------------|------------------------------|---------------------|----------------------------|
| FIRST CLASS. | | Time Table No. 34B Succeeding No. 34A June 21, 1911. | | | | FIRST CLASS. | |
| | | Water, Coal, Scales, Tables and Wyes | Station Numbers | Distance from Simpson | STATIONS. | Distance from Elma | Capacity of Passing Tracks |
| | | | | | | | |
| | | | | 0.0 |SIMPSON..... 1.2 | 10.0 | 7 |
| | | | C H 10 | 0.0 |SMITHS SPUR..... 1.1 | 8.8 | 4 |
| | | | C H 9 | 1.2 |HILLGROVE..... 0.2 | 7.7 | 4 |
| | | | C H 7 1/2 | 2.3 |McCLEARY..... 2.6 | 7.5 | 8 |
| | | | C H 7 | 2.5 |RAYVILLE..... 0.9 | 4.9 | 4 |
| | | | C H 5 | 5.1 |WHITE'S..... 4.0 | 4.0 | 5 |
| | | | C H 4 | 6.0 |ELMA.....D | 0.0 | 60 |
| | | | C M 19 | 10.0 | | | |

Train service irregular—dependent on amount of business to be handled.
Registering Station.—Elma. Engineers will not be required to consult register except at initial or starting point. Kraft, 2.0 miles west of Elma, is spur for carload shipments.

Note.—All trains will run slow between Simpson and Hillgrove account light rails. Switch in main track just above switch leading to Siding at Simpson must be left to act as derail. See Special Rules, page 8.

| West Bound. | | CROCKER BRANCH. | | | | East Bound. | |
|---------------------|--|---|-----------------|-----------------------|--------------------------|-----------------------|----------------------------|
| FIRST CLASS. | | Time Table No. 34B Succeeding No. 34A June 21, 1911. | | | | FIRST CLASS. | |
| | | Water, Coal, Scales, Tables and Wyes | Station Numbers | Distance from Wingate | STATIONS. | Distance from Crocker | Distance from Cascade Jct. |
| | | | | | | | |
| | | | | 0.0 |WINGATE..... 5.2 | 5.2 | 140 |
| | | | W S C D 5 | 0.0 |CROCKER..... | 0.0 | 100 |
| | | | 1955 | 5.2 | | | |

Registering Station.—Crocker. Switches below station at Wingate will be set to act as derail.

Engineers will not be required to consult register except at initial or starting point. Derailing switches at Crocker, and in main track 550 feet west of depot at Wingate, must be left set for derail. See special rules, page 8.

Maximum grades.

COMMERCIAL SPURS.

| MAIN LINE. | MAIN LINE—Cont. | ORTING BRANCH. | BUCKLEY LINE. | GATE LINE—Cont. | SOUTH BEND BRANCH—Cont. | GRAY'S HARBOR LINE. |
|---------------------------------|-------------------------|-----------------------------------|----------------------------------|-----------------------------------|------------------------------|--------------------------------|
| DISTANCE FROM TACOMA. | | DISTANCE FROM ORTING. | DISTANCE FROM PALMER JCT. | | | DISTANCE FROM LAKEVIEW. |
| Stone..... 37.4 | Byckford..... 53.7 | Veneer..... 3.1 | Big 6..... 1.6 | Foran..... 3.0 | Lewis..... 40.2 | Molberg..... 16.0 |
| Mentzer..... 38.3 | Newaukum..... 57.6 | Fisks..... 5.2 | Occidental..... 1.8 | Duby..... 12.0 | Trap Creek..... 41.2 | Standard Oil Co..... 23.4 |
| Tenino Stone Co..... 39.5 | Evaline..... 65.0 | Dempsey Lumber Co..... 8.3 | Nolte..... 1.8 | SOUTH BEND BRANCH. | | Black Lake..... 28.2 |
| Blumauer..... 40.5 | Capitol Mills..... 69.7 | Electron Rock Crusher..... 8.6 | Rosemar..... 4.0 | DISTANCE FROM CHEHALIS JC. | | Overton..... 33.4 |
| Great Western Coal Co..... 41.3 | Metcalf..... 94.4 | | Blackburn..... 11.1 | Harmos..... 6.4 | Turney..... 54.0 | Ames..... 45.6 |
| Martin Lbr. Co..... 49.2 | Hermione..... 109.1 | WILKESON BRANCH. | Webstone..... 12.5 | Donahue..... 12.0 | Mayfair..... 55.5 | Bagshaw..... 50.5 |
| Salzer..... 51.4 | | DISTANCE FROM CASCADE JCT. | Valley Mill..... 13.9 | Meskill..... 12.5 | YACOLT BRANCH. | |
| Carlisle..... 51.5 | | Brierhill Coal & Coke Co..... 4.5 | Broomfield..... 19.1 | Mays..... 13.0 | DISTANCE FROM YACOLT. | |
| | | Wilson's Mill..... 3.2 | Firville..... 22.8 | Onn..... 16.9 | McCutcheon..... 0.9 | Malone..... 58.1 |
| | | | | Cases..... 27.8 | Dole..... 2.4 | Java..... 60.5 |
| | | | | Ashlock..... 28.1 | Bouton Perkins..... 4.7 | Vance..... 64.9 |
| | | | | Siler..... 29.6 | Lucia..... 4.9 | Weatherwax..... 73.9 |
| | | | | Custer..... 34.6 | Daley..... 7.9 | Ninemire & Morgan..... 86.4 |
| | | | | Guerrier..... 35.0 | Smith..... 10.0 | |
| | | | | Soule..... 35.8 | Tenny..... 13.2 | |

FREIGHT TRAINS AUTHORIZED TO CARRY ADULT MALE PASSENGERS, WHEN PROVIDED WITH PROPER TRANSPORTATION.

ORTING LOG TRAIN.—Between Orting and End of Track on Orting Branch.

ELMA LOG TRAIN.—Between Elma and End of Track on Elma Branch.

OLYMPIA LOG TRAIN.—Between Olympia and Bordeaux.

AUTHORIZED SURGEONS, O.-W. R. R. & N. CO.

SEATTLE—

Dr. Montgomery Russell, Division Surgeon.
Dr. F. R. Underwood, Assistant Surgeon,
618-20-22 Leary Bldg.
District between Seattle and Tacoma.
Dr. E. B. Burwell, Oculist and Aurist, 300-1
Cobb Bldg.

AUBURN—

Dr. F. D. Merritt, District Surgeon.
District between Seattle and Tacoma.

TACOMA—

Dr. Chas. James, District Surgeon, 514 Cali-
fornia Bldg.
District between Auburn and Tenino.

TENINO—

Dr. Chas. E. Robson, District Surgeon.
District between Tacoma and Centralia.

WINLOCK—

Dr. Irvin W. Weichbrod, District Surgeon.
District between Castle Rock and Centralia.

CENTRALIA—

Dr. David Livingstone, District Surgeon.
District between Winlock and Tenino, and
Elma and Hannaford Creek Branch.

CASTLE ROCK—

Dr. T. C. Campbell, District Surgeon.
District between Kelso and Winlock.

KELSO—

Dr. C. W. Bales, District Surgeon.
District between Kalama and Castle Rock.

KALAMA—

Dr. Luther M. Simms, District Surgeon.
District between Vancouver and Kelso.

VANCOUVER—

Dr. J. T. Guerin, District Surgeon.
District between Kalama and Albina.

ALBINA—

Dr. Curtis C. Holcomb, District Surgeon.
District between Vancouver and Portland.

PORTLAND—

Dr. Kenneth A. J. Mackenzie, Chief Sur-
geon.
Dr. Geo. Ainslie, Consulting Oculist and
Aurist.
Dr. Frank M. Taylor, Assistant Surgeon.
Dr. D. H. Jessup, Assistant Surgeon.

AUTHORIZED SURGEONS, N. P. RY. CO.

Location of Stretchers (S).

| | | | | | | |
|---|---|---------------------------------------|---------------------------------|-------------------------------|------------------------------------|---|
| DR. S. W. MOWERS, Chief Surgeon, Western Div., Tacoma. | DR. W. B. PENNY, Wilkeson, Wn. Orting (S). | Tacoma Baggage Room (S). | DR. G. W. KENNICOTT, Chehalis. | DR. H. C. WATKINS, Hoquiam. | DR. T. C. CAMPBELL, Castle Rock. | DR. P. B. WING, Oculist, Tacoma. |
| DR. J. H. SHEETS, Buckley (S). | Puyallup (S). | Tacoma Wharf (S). | DR. J. W. MOWELL, Olympia (S). | DR. PAUL SMITS, Aberdeen. | DR. L. M. SIMS, Kalama (S). | DR. W. G. CAMERON, Specialist, Ta- coma. |
| P. B. SWEET, Kangley, Wn. | Tacoma Hospital (S). | Tacoma (Toolcar) (S). | DR. J. H. DUMON, Centralia (S). | DR. A. B. MACLEAN, Pe Ell. | DR. J. McCHESNEY, St. John's. | DR. J. F. DICKSON, Oculist, Portland |
| | Tacoma Round House (S). | DR. P. B. SWEARINGEN, So. Tacoma (S). | DR. E. P. FRENCH, Elma. | DR. W. GRUWELL, So. Bend (S). | DR. J. T. GUERIN, Vancouver (S). | DR. A. W. STEVENSON, Yacont (S). |
| | | DR. E. L. CARLSEN, So, Tacoma (S). | DR. F. L. CABR, Montesano (S). | DR. I. A. WEICHBROD, Winlock. | DR. ANDREW C. SMITH, Portland (S). | |

Note.

Surgeons will attend, when called upon officially, to all cases of ACCIDENT occurring to employes or passengers. In cases of SICKNESS it is the intention to limit medical service to the locality or town where a surgeon resides, unless some urgent necessity exists, for which distinct official authority must be had in accordance with established regulations.

Railway Officials are required to call on the nearest authorized surgeons whenever practicable, when surgical or medical services are needed. When such are accessible, the Association will not be responsible for bills for medical services rendered by any other physician. In the event of a sudden emergency, arising from accident, if necessary proper surgical aid should be procured until the ar-

rival of a regularly appointed surgeon, when the case should be placed in his charge, and in no case should the services of any but an authorized company surgeon be continued at the expense of the Railway Company or of the Association after such surgeon is able to assume charge of the case.

Boarding and Nursing are furnished ONLY AT OUR OWN HOSPITALS. We are not responsible for bills incurred elsewhere unless specially authorized or approved by the Chief Surgeon, and then only in critical cases of injury or illness occurring in the discharge of duty.

AUTHORIZED SURGEONS, G. N. RY. CO.

DR. J. A. LA GASA, Tacoma

TACOMA TERMINAL DIVISION

Tacoma Terminal embraces Northern Pacific lines from Tidewater at the west line of East "Q" Street to Mile Post 8+942 feet, or approximately 2½ miles west of South Tacoma.

Registering Stations.—Tacoma yard office, Tacoma and South Tacoma.

Bulletin Stations.—Tacoma yard office and Tacoma.

Standard Clock.—Tacoma.

Passenger trains will register by ticket at South Tacoma. Clearance will not be issued at South Tacoma unless RED signal is displayed. At Tacoma yard office and Tacoma no clearance required.

Derail Switches are located as follows, and must be kept set in derailing position when not in use: Harrison Bros. Spur and Keystone Lumber Co. Spur.

Freight trains leaving Tacoma yard, or switch engine taking transfer to South Tacoma, will not pass cross-over track above 15th Street leading from passenger yard to outgoing track without signal from switch tender, who will not allow trains or transfers to pass this cross-over when any passenger train is backing out of or waiting in the passenger station. East bound trains will be under absolute control approaching Pacific Avenue at Tacoma and will not pass Pacific Avenue crossing without signal from switch tender, indicating that cross-overs at Pacific Avenue are clear. All trains which will use the Draw Bridge Line at Tacoma without entering passenger station will stop above Pacific Avenue and not proceed beyond there until engineer is furnished with a bridge card and an understanding established with tower man covering movement of train over Draw Bridge Line. If it is found that freight trains cannot use Draw Bridge Line and passenger train will be delayed on this account, conductor will arrange to enter Half Moon Yard and be handled via freight tracks to Tidewater.

Maximum Grades.—Tacoma Yard Office to two and one-half miles west. Speed of trains over cross-over switches at Tidewater and over 15th Street Bridge, entering Tacoma Passenger Yard, must not exceed ten (10) miles per hour, and five (5) miles per hour over switches at north end of passenger yard.

No engine heavier than N. P. class "W," loaded weight of which is as follows—weight on drivers, 207,000 lbs.; weight of engine and tender, 456,800 lbs., will be run over Bridge No. 254, Tacoma Draw Span.

No two engines of any class will double-head over this bridge where the combined weight is greater than N. P. class "W." Speed of all trains must not exceed ten (10) miles per hour over Tacoma Draw Span.

Trains will keep to the right on double track between Tidewater and Tacoma Wharf and between Tacoma and South Tacoma. Between Tidewater and Tacoma, engineer will obtain card/order at Tidewater or Tacoma as authority to use Draw Bridge Line. Bridge card to be delivered to operator at Tidewater or to Chief Dispatcher at Tacoma. Interlocking signals at east and west approach to Draw Bridge control use of bridge and trains will not proceed unless Home signal shows clear indication.

Trains will approach Tidewater under full control and will not proceed until tracks are known to be clear and signal is received from switch tender.

Distance Signal located on drawbridge line 1500 feet east of home signal just east of Tacoma draw span, bridge 254, has been made semi-automatic. When home signal is clear, distance signal will be clear; when home signal shows stop position, distance signal will show stop position. Trains will observe automatic block rules, coming to full stop at distance signal, when same shows stop position, then proceed under full control to home signal.

Trains will approach cross-over switches on double track between Tidewater and Tacoma Wharf located at East L Street (near Head of Bay Yard Office), East D Street (near Round House) and South Twenty-first Street (entering Passenger Station) under full control, and will not proceed until tracks are known to be clear and signal is received from switch tender.

At Tacoma a signal of the single arm semaphore pattern, located near junction of line leading to passenger station and the Draw Bridge Line at 15th Street; another signal of the same pattern at the north end of Passenger Yard. The two signals are to be controlled by switch tender at 15th Street, and will govern single track passenger line between 15th Street and Tacoma passenger station. No train from the Draw Bridge Line or Tacoma Division main line will enter passenger station when signal at 15th Street is at "Danger" and no train will proceed from passenger station yard to Draw Bridge Line or Tacoma Division main line when signal at the north end of yard is at "Danger."

Trains entering passenger station via Head of Bay will use extreme care and not exceed eight (8) miles per hour around curves at south end of passenger yard. As there are no switch tenders at switches at the north end of passenger yard, trains coming into the yard at that point must positively know that switches are lined up for clear track before passing them. Push button operating signal to Tower man will be located on post under Concourse. Switch crew will operate for Portland bound trains and Conductors attend to it for Seattle bound trains.

J. S. DEAN,
Chief Dispatcher, Tacoma

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

BUCKLEY LINE—EAST BOUND.

| | Class Z | | Class W | | Class Y-5 | | Class Y-2 | | Class F-1 | | Class S | | Class E-4 | | Class E-3 or D-3 | | Class C-6 | |
|-------------------------------|---------|------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|------------------|------|-----------------|------|
| | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars |
| Tacoma to South Prairie..... | | | 1150 | 38 | 1100 | 37 | 950 | 32 | 900 | 30 | 800 | 27 | 500 | 17 | 475 | 16 | 350 | 12 |
| South Prairie to Buckley..... | | | 600 | 20 | 625 | 21 | 500 | 17 | 450 | 15 | 400 | 14 | 250 | 9 | 235 | 8 | 175 | 6 |
| Buckley to Palmer Jct..... | | | 1100 | 37 | 1100 | 37 | 900 | 30 | 900 | 30 | 800 | 27 | 500 | 17 | 475 | 16 | 350 | 12 |
| Tacoma to South Prairie..... | | | Maximum 80 Cars | | Maximum 80 Cars | | Maximum 80 Cars | | Maximum 60 Cars | | Maximum 80 Cars | | Maximum 60 Cars | | Maximum 60 Cars | | Maximum 40 Cars | |

BUCKLEY LINE—WEST BOUND.

| | | | | | | | | | | | | | | | | | | |
|-----------------------|--|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|
| Palmer to Tacoma..... | | | Maximum 80 Cars | | Maximum 80 Cars | | Maximum 80 Cars | | Maximum 80 Cars | | Maximum 80 Cars | | Maximum 60 Cars | | Maximum 60 Cars | | Maximum 60 Cars | |
|-----------------------|--|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|

MAIN LINE—WEST BOUND.

| GRADES. | Class W | | Class Y-2 | | Class F-1 | | Class S | | Class P | | Class E-4 | | Class E-3 | | Class D-3 | | Class C-6 | |
|------------------------------|---------|------|-----------|------|-----------|------|---------|------|---------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars |
| South Tacoma to Rainier..... | 1600 | 53 | 1350 | 45 | 1200 | 40 | 1150 | 38 | 1050 | 35 | 850 | 28 | 825 | 27 | 825 | 27 | 700 | 23 |
| Rainier to Chehalis..... | | 60 | | 60 | | 60 | | 60 | | 60 | | 60 | | 50 | | 50 | | 40 |
| Chehalis to Napavine..... | 1200 | 38 | 1000 | 34 | 900 | 30 | 850 | 28 | 750 | 25 | 550 | 18 | 525 | 17 | 525 | 17 | 400 | 13 |
| Napavine to Portland..... | | 60 | | 60 | 1500 | 50 | 2000 | 60 | 1400 | 47 | 1200 | 40 | 1175 | 39 | 1175 | 39 | 1050 | 35 |

MAIN LINE—EAST BOUND.

| | | | | | | | | | | | | | | | | | | |
|--------------------------|------|----|------|----|------|----|------|----|------|----|------|----|------|----|------|----|------|----|
| Portland to Winlock..... | 1750 | 58 | 1550 | 52 | 1400 | 47 | 1350 | 45 | 1250 | 41 | 1050 | 35 | 1025 | 34 | 1025 | 34 | 900 | 30 |
| Winlock to Napavine..... | 1260 | 42 | 1110 | 37 | 1010 | 33 | 960 | 32 | 860 | 29 | 660 | 22 | 635 | 21 | 635 | 21 | 510 | 17 |
| Napavine to Rainier..... | 1500 | 50 | 1250 | 41 | 1100 | 36 | 1050 | 35 | 950 | 31 | 750 | 25 | 725 | 24 | 725 | 24 | 600 | 20 |
| Rainier to Tacoma..... | | 60 | 1900 | 63 | 1750 | 58 | 1700 | 57 | 1500 | 50 | 1300 | 43 | 1275 | 42 | 1275 | 42 | 1150 | 38 |

Hereafter the above table of ratings will govern on ruling grades. These ratings are based on a normal number of cars of thirty tons each.

To find the rating of an engine when train contains more or less than normal number of cars, add five tons to the rating of each car less than the normal, and subtract five tons from

the rating for each car in excess of the normal.

Restrictions Governing Class of Power That May be Used on Tacoma Division.

Buckley Line.—All classes except Class Z Mallet Engines.
Wilkeson Branch, Cascade Jct. to Wilkeson and Wilkeson to Carbonado.—No engine heavier than S.
Carbonado to Fairfax.—No engine heavier than F-1.
Burnett Branch.—All classes except Q. T., W X Y and Z.
Crocker Branch.—No engine heavier than F-1.
Orting Branch.—No engine heavier than F-1.
Green River Branch.—No engine heavier than F-1.
Main Line.—All classes.
Grays Harbor Line, Lakeview to Gate.—No engine heavier than P compound passenger engine and S at slow speed.
Grays Harbor and Gate Line, Gate to Hoquiam.—No engine heavier than S-4.
Grays Harbor Line, Hoquiam to Moclips.—No engine heavier than F-1.
Ocosta Branch, Aberdeen Jct. to Cosmopolis.—No engine heavier than F-1.
Cosmopolis Jct. to Ocosta.—No engine heavier than mogul.
Elma Branch.—No engine heavier than F-1.
South Bend Branch.—No engine heavier than S, except Draw Span between Raymond and South Bend; no engine heavier than mogul.
Yacolt Branch.—No engine heavier than S-4.
 No engine heavier than N. P. class W, loaded weights of which is as follows: Weight on drivers, 203,000 lbs.; weight of engine and tender, 407,500 lbs.
 No two engines of any class will double head over this bridge where combined weight is greater than N. P. Class W.
 Speed of trains will be restricted to ten (10) miles per hour over this bridge.
 Double headers will not be run over the following bridges when road engine is heavier than mogul.
 No. 2 and No. 13 between Centralia and Gate.

TONNAGE RATING—ENGINES OF O.-W. R. & N. CO. BETWEEN SEATTLE AND PORTLAND.

Rating of Locomotives in Tons of 2000 Pounds

| CLASSIFICATION | Engine Numbers | EAST BOUND | | | | | | | WEST BOUND | | | | | | |
|----------------|---|------------------------|------------------|-------------------|---------------------|----------------------|-----------------------|-------------------|-----------------------|----------------------|----------------------|-----------------------|-----------------------|----------------------|------|
| | | Portland to Kalama | Kalama to Olequa | Olequa to Winlock | Winlock to Napavine | Centralia to Rainier | Rainier to So. Tacoma | Tacoma to Seattle | Seattle to Tacoma Jct | Tacoma Jct to Tacoma | Tacoma to So. Tacoma | So. Tacoma to Rainier | Centralia to Napavine | Napavine to Portland | |
| T-63 | $\frac{20}{24}$ 113... | 136-146..... | 1580 | 1200 | 990 | 720 | 790 | 1120 | 1280 | 1280 | 655 | 315 | 900 | 655 | 1580 |
| | | 170-207..... | 1900 | 1440 | 1190 | 870 | 960 | 1310 | 1540 | 1540 | 800 | 370 | 1080 | 800 | 1900 |
| T-69 | $\frac{22}{28}$ 159... | 250-305..... | 2200 | 1680 | 1380 | 1000 | 1110 | 1560 | 1790 | 1790 | 900 | 440 | 1250 | 900 | 2200 |
| C-57 | $\frac{15\frac{1}{2} \times 26}{30}$ 176... | 330-349..... | 2335 | 1790 | 1475 | 1075 | 1190 | 1680 | 1900 | 1900 | 985 | 500 | 1335 | 985 | 2335 |
| C-57 | $\frac{22}{30}$ 187... | 350-400..... | 2940 | 2250 | 1860 | 1360 | 1490 | 2120 | 2380 | 2380 | 1220 | 560 | 1680 | 1220 | 2940 |
| Mik-57 | $\frac{23\frac{3}{4}}{30}$ 208... | 500-540..... | 3100 | 2340 | 1930 | 1400 | 1550 | 2200 | 2490 | 2490 | 1250 | 580 | 1700 | 1250 | 3100 |
| M-63 | $\frac{20}{28}$ 147... | C. R. Y. y P. 504-526. | 2050 | 1550 | 1300 | 940 | 1035 | 1500 | 1710 | 1710 | 840 | 400 | 1150 | 840 | 2050 |
| T-57 | $\frac{20}{26}$ 132... | 720-727..... | | | | | | | | | | | | | |
| M-63 | $\frac{15\frac{1}{2} \times 26}{28}$ 144... | 1740-1798..... | 1800 | 1320 | 1130 | 840 | 910 | 1280 | 1460 | 1460 | 750 | 350 | 1020 | 750 | 1800 |
| S-55 | $\frac{19}{26}$ 130... | 552..... | | | | | | | | | | 380 | | | |

These ratings include total weight of train, exclusive of engine and tender, which the different classes of locomotives will haul in each direction between the stations shown.

Between stations for which no rating is shown, maximum will apply.

CLASS

- "E" —Eight Wheelers
- "A" —Atlantic Type
- "P" —Pacific Type
- "T" —Ten Wheelers
- "M" —Moguls
- "Mik" —Mikado
- "C" —Consolidation Engines
- "TW" —Twelve Wheelers
- "S" —Switch

Example.—Consolidation engine having 57 inch drivers, cylinders 22-inch diameter and 30-inch stroke, and weighing 187,000 pounds on drivers:

C-57 $\frac{22}{30}$ 187

Ratings for time freight trains, Albina to Tacoma, is 10% less than tabulated rating as shown between Winlock and Napavine and between Centralia and Tacoma.

RULES GOVERNING AUTOMATIC SIGNALS BETWEEN SOUTH TACOMA AND HALF MOON YARD, TACOMA.

Automatic signals of the three position semaphore type govern East and West bound main line between South Tacoma and Half Moon Yard, Tacoma.

First semaphore on East bound main line is located about 1,500 feet east of passenger station, South Tacoma; the last semaphore before reaching Half Moon Yard, Tacoma, located just east of 15th Street viaduct, and governs the use of track between that point and the overhead bridge at 9th Street; the first semaphore on West bound main line located about 2,000 feet west of the overhead bridge at 11th Street; the last one is located one-half mile east of South Tacoma Station, and governs the use of the track to the South Tacoma Station. The semaphore shows three indications, as follows:

When semaphore arm is 90 degrees upward or light shows green, it indicates "Clear."

When semaphore arm is 45 degrees upward or light shows yellow, it indicates "Caution."

When semaphore arm is at horizontal position or light shows red, it is a signal to stop, block not clear.

All semaphore arms that govern are displayed to the right of signal mast as seen from approaching train. When semaphore arm is in horizontal position or light shows "red," it is a signal to stop, block immediately ahead is occupied. When semaphore is 45 degrees upward or light shows "yellow," it is caution signal, and indicates block immediately ahead is not occupied but next semaphore ahead is at Danger. When semaphore is 90 degrees upward or light shows "green," it indicates that block ahead is clear and the next signal is also clear. Train approaching semaphore and finding it at Danger, will come to full stop, and will proceed under full control, expecting to find block occupied. Train approaching semaphore and finding it at Caution, will proceed, expecting to find next signal in advance at Danger. Train approaching semaphore and finding it at Clear indication, will proceed, expecting to find next signal immediately ahead Clear.

Trains occupying East bound main line between 15th Street viaduct and 9th Street bridge, Half Moon Yard, will hold signal at 15th Street viaduct at Danger. Trains occupying West bound main line between passenger station South Tacoma and the semaphore located one-half mile east, will hold this semaphore at Danger.

All main line switches and both ends of crossover switches within automatic block limits are provided with switch instruments so connected to switch point that the opening of any switch will hold signal of that block at Danger until switch is again closed. The opening of switch at either end of main track crossover will hold signals on both tracks at Danger. If either end of crossover leading to siding is opened, it will hold the signal at Danger that controls block on track to which it is connected. Neither switch or crossover should, therefore, be opened until movement of train is to be made.

Switch indicators of semaphore pattern are located at both ends of crossover switches leading from West bound to East bound main line just east of Pacific Avenue crossing. When indicator arm is in horizontal position it is an indication that block is occupied; when indicator arm is downward it indicates Clear, block not occupied. The opening of either end of crossover switches will set indicator at horizontal or Danger position; in case indicator does not go to Danger when switch points are opened, it is an indication that the signals governing the block have not gone to Danger and that signals are out of order. In such cases movement must be made under protection of flag. Trainmen or yard crews desiring to occupy main line, or to move from West bound track to East bound track, must not open switch leading to that track when indicators show Danger, but must wait until the approaching train shall have passed the switch and out of the block.

If switch indicator shows Danger, provided that after waiting five (5) minutes train does not appear or indicator does not go Clear position, switches may be used provided movement is fully protected by flag.

Passenger trains must not proceed through crossover from Pacific Avenue passenger yard to outgoing main line when block on East bound main line is occupied, until it is positively known that descending train has stopped and will be held above crossovers until passenger train has passed and is clear of the crossover switches.

Cars and engines on side tracks must stand back of insulated joints in order that semaphore will not be held at Danger. Freight trains must clear block before passenger trains are due to enter same. Whenever a train is mentioned in these rules—the term "Train" applies to either a road or switch engine with or without cars. The practice of dumping cinders from engines within automatic block limits is prohibited as it interferes with operation of signals.

The semaphore located at 15th Street on East bound track and the one located one-half mile east of South Tacoma on West bound main track are of the cantilever pattern. These signals are equipped with a bracket upon which is erected a post four feet in length, four inches in diameter. The post is equipped with a yellow light at night, indicating that the semaphore upon which they are attached governs main line and NOT the side track.

Before using the crossover switches above Bailey Street and below Tacoma Avenue, in order to cross over from one Main Line to the other, after throwing the first switch wait three (3) minutes before throwing the next switch and crossing over. This in order to be sure that no train has entered the block before crossover switch had been thrown setting signals at danger.

RULES GOVERNING AUTOMATIC SIGNALS IN DOUBLE TRACK DISTRICT, BETWEEN KALAMA AND VANCOUVER.

1 Indications, automatic signals:

- (A) Semaphore arm in horizontal position or red light by night, **STOP.**
- (B) Semaphore arm 45 degrees upward, or yellow light by night, **CAUTION.**
- (C) Semaphore arm 90 degrees upward, or green light by night, **CLEAR.**

2 Governing arm is that seen to the right of the signal mast by approaching train.

3 Trains finding semaphore arm in stop position will, after coming to full stop, proceed with caution, expecting to find train in block, open switch, broken rail, or car foul of the main track.

4 Trains finding semaphore arm at caution will proceed under control, prepared to stop at next signal.

5 Signal light not burning, or white light by night, will be considered a "Stop" signal, and position of signal must be ascertained, and report of circumstances made at next telegraph office.

Indicators of miniature semaphore pattern with push buttons underneath are located at all switches and cross-overs except at Hermione and Knapps, and the house track switch at Ridgefield.

Normal position of indicators is "Stop."

To ascertain whether block is occupied or not, before throwing switch, push the button underneath the indicator. If block is clear when button is pushed, indicator will show clear position and remain in that position as long as pressure is maintained, on the button, and switch should immediately be thrown in order to place signals at stop position. If indicator does not clear when button is pushed, there is a train in the block or approaching, and switch must not be thrown. If indicator cannot be cleared after waiting five (5) minutes and a train does not appear, switches may be used provided movement is fully protected by flag.

Indicators at main track cross-overs show condition of opposite track and not the track on which they are located.

Indicators on side track cross-overs are located on siding end of cross-overs, and indicate condition of main track to which cross-over leads.

Indicators at single switches indicate the condition of track to which switch leads.

Switch instruments are connected to main line switches and both end of cross-over switches within automatic signal limit. The opening of any switch will set and hold signal of that block at "Stop" until switch is again closed. The opening of any switch at either end of main track cross-over will hold signals on both tracks at "Stop." If either end of a siding cross-over is opened, it will set and hold the signal at "stop" that controls block on main track to which it leads. Neither switch or cross-over must, therefore, be opened until movement of train is to be made and must be closed immediately after movement has been made and switches locked. When it is necessary to stop at any signal, stop must be made thirty feet before reaching signal in order not to foul track circuits. Cars and engine on side tracks must stand back of insulated joints in order that signals will not be held at "stop." Whenever a train is mentioned in these rules, the term "train" applies to either a road or switch engine, with or without cars. The practice of dumping cinders from engines within Automatic Block Limits, is prohibited, as it interferes with operation of signals.

Signal 105.8, on east bound track, located 3,000 feet west of Kalama depot, operates in three positions, going to "stop" position when head end of train passes signal, will go to "caution" when the rear of train passes 3,200 feet beyond signal, and will go to "clear" when rear of train has passed a point 200 feet west of east switch of the passing track at Kalama.

Signals governing east bound trains are numbered and located as follows:

EAST-BOUND FROM VANCOUVER:

| | |
|---|---|
| 133.8—1500 feet east of Mile Post No. 134 | 119.8—4700 feet east of Mile Post No. 120 |
| 133.2—4500 feet east of Mile Post No. 134 | 117.8— 400 feet east of Mile Post No. 118 |
| 132.8—2300 feet east of Mile Post No. 133 | 115.8— 900 feet east of Mile Post No. 116 |
| 131.0—4800 feet east of Mile Post No. 132 | 114.6—1600 feet east of Mile Post No. 115 |
| 128.8— 600 feet east of Mile Post No. 129 | 113.6—1800 feet east of Mile Post No. 114 |
| 127.2—3700 feet east of Mile Post No. 128 | 112.4—3200 feet east of Mile Post No. 113 |
| 125.6—2700 feet east of Mile Post No. 126 | 110.2—2700 feet east of Mile Post No. 111 |
| 123.8— 400 feet east of Mile Post No. 124 | 108.6—2280 feet east of Mile Post No. 109 |
| 122.2—4200 feet east of Mile Post No. 123 | 107.0—4700 feet east of Mile Post No. 108 |
| 120.6—2800 feet east of Mile Post No. 121 | 105.8—2200 feet east of Mile Post No. 106 |

Signals governing west bound trains, are numbered and located as follows:

WEST-BOUND FROM KALAMA:

| | |
|---|--|
| 105.7—3400 feet west of Mile Post No. 105 | 120.7—3200 feet west of Mile Post No. 120 |
| 107.1— 500 feet west of Mile Post No. 107 | 122.3—2000 feet west of Mile Post No. 122 |
| 108.5—3000 feet west of Mile Post No. 108 | 123.9—4800 feet west of Mile Post No. 123 |
| 110.3— 800 feet west of Mile Post No. 110 | 125.5—2600 feet west of Mile Post No. 125 |
| 111.9—3600 feet west of Mile Post No. 111 | 127.3—1600 feet west of Mile Post No. 127 |
| 113.7—3400 feet west of Mile Post No. 113 | 129.1— 400 feet west of Mile Post No. 129 |
| 114.7—3600 feet west of Mile Post No. 114 | 130.7—3800 feet west of Mile Post No. 130 |
| 115.9—4400 feet west of Mile Post No. 115 | 132.5—1800 feet west of Mile Post No. 132 |
| 117.9—4800 feet west of Mile Post No. 117 | 133.3— 900 feet west of Mile Post No. 133. |
| 119.1— 500 feet west of Mile Post No. 119 | |

Signal No. 133.3, located 5,150 feet east of passenger station, Vancouver, has two positions, viz.: "Danger" and "Caution" and governs use of track to the S. P. & S. connection, just west of passenger station, Vancouver.

East bound track between Vancouver passenger station and signal No. 133.8, 1,850 feet east of station, will be operated under Yard Limit rules.

A train having work to do which may detain it more than ten minutes, must obtain permission from Operator at the last station, before entering the block in which work is to be done.

Operator must obtain authority to give this permission, from the Dispatcher.

Except as affected by these rules, all block signal and train rules, remain in force.

RULES GOVERNING INTERLOCKING PLANTS LEWIS RIVER DRAW SPAN BETWEEN WOODLAND AND RIDGEFIELD.

Automatic signal No. 115.9 west of Woodland is distant signal on west bound track; signal 117.8, east of Ridgefield, is distant signal on east bound track.

Home signals located 1010 feet from draw span.

Dwarf signals, 660 feet from draw span, between tracks.

Home signals govern as follows:

Upper arm governs trains moving in the direction of traffic, or using the right hand track

Arm horizontal, stop.

45 degrees upward, caution.

90 degrees upward or vertical, proceed.

Lower arm governs trains moving with traffic to the double track switch and which are to be diverted to the left hand track after crossing bridge, or, slow speed movements with traffic, when for any reason the proper indication cannot be given with the upper arm, in which case position of lower arm will govern. Lower arm has two positions only: Horizontal, stop; 45 degrees upward, caution.

Trains will not run against traffic even though proper signal to do so is received, without regular train order authority.

Under these instructions vertical indication will not be given with both arms of the semaphore at the same time, but engineers

will be governed by the position of the arm which accords with movement they have been authorized to make, whether with or against traffic.

Dwarf Signals, arm horizontal, stop; 45 degrees upward, proceed with caution.

These dwarf signals have only two positions and govern back up movements with or against traffic and govern trains moving against traffic to the double track switch.

Night indications of signals, when displayed on arms governing: Red, stop; yellow, caution; green, proceed; white light, stop (to govern in case of broken lens. A light failure, either a white light or a light extinguished, will be considered stop and reported from first office).

Derails are located 55 feet beyond signals and are open when signals are at danger. Trains must come to a full stop at least thirty feet in advance of signal and wait until either "proceed" or "caution" signal is displayed.

If, for any reason signals become inoperative, trains will proceed after proper hand signals are given and it is known that derails are closed and bridge is clear. Hand signals shall consist of a green flag by day, and a green light by night, and are not to be recognized unless given from track.

Except as noted, the automatic signals between Vancouver and Kalama govern in the direction of traffic only.

SPECIAL RULES REGARDING USE OF STAFF ON BRANCH LINES.

Du Pont Spur, Elma Branch, Cosmopolis Branch, Hoquiam River Spur, Centralia Eastern, Smelter line at Tacoma, Orting Branch, Crocker Branch and Green River Branch are operated under staff system. Before using these tracks, trains will obtain staff which is located in staff box at each junction. All other trains using these tracks must be operated under protection of flag. For completion

of Dispatcher's record of service, operator at main line junction point will telegraph copy of register showing departure and arrival and mileage made on branch. If there is no operator at junction point, conductor will telegraph this information from next open telegraph office.

