

**THE  
WESTERN PACIFIC  
RAILROAD CO.**



**SPECIAL  
INSTRUCTIONS**

**1**

**EFFECTIVE SUNDAY, MAY 2, 1965  
AT 12:01 A. M.**

**PACIFIC STANDARD TIME**

**THESE INSTRUCTIONS CONSTITUTE A PART  
OF THE TIMETABLE CURRENTLY IN EFFECT**

**M. M. CHRISTY,**  
*Executive Vice-President and General Manager.*

**L. D. MICHELSON**  
*Assistant General Manager.*

**K. V. PLUMMER, JR.,**  
*Superintendent of Transportation.*

**J. F. LYNCH,**  
*Superintendent.*

**SPEED TABLE**

TIME PER MILE	MILES PER HOUR
36"	100
37"	97.3
38"	94.7
39"	92.3
40"	90
41"	87.8
42"	85.7
43"	83.7
44"	81.8
45"	80
46"	78.3
47"	76.6
48"	75
49"	73.5
50"	72
51"	70.6
52"	69.2
53"	67.9
54"	66.7
55"	65.5
56"	64.3
57"	63.2
58"	62.1
59"	61
1'00"	60
1'01"	59
1'02"	58.1
1'03"	57.1
1'04"	56.2
1'05"	55.4
1'06"	54.5
1'07"	53.7
1'08"	52.9
1'09"	52.2
1'10"	51.4
1'11"	50.7
1'12"	50
1'13"	49.3
1'14"	48.6
1'15"	48
1'16"	47.4
1'17"	46.8
1'18"	46.2
1'19"	45.6
1'20"	45
1'25"	42.4
1'30"	40
1'35"	37.9
1'40"	36
1'45"	34.3
1'50"	32.7
1'55"	31.3
2'00"	30
2'15"	26.7
2'30"	24
2'45"	21.8
3'00"	20
3'30"	17.1
4'00"	15
5'00"	12
6'00"	10
7'00"	8.6
7'30"	8
8'00"	7.5
10'00"	6

# Special Instructions

## ALL SUBDIVISIONS

All times as shown for trains at Stations on schedule pages current timetable are Pacific Standard Time. Trains will continue to operate on Pacific Standard Time during period that Daylight Saving Time is in effect.

**GENERAL RULE M.** Add. Employes are prohibited from riding or walking on the roof of any moving car.

**RULE 10-I.** Add. After stopping, train may proceed when proceed signal is given with a green flag, but must not exceed restricted speed through the restricted area unless otherwise instructed by the foreman in charge.

When a form W train order has expired and "PROCEED PREPARED TO STOP" and "CONDITIONAL STOP" signs have not been removed, and it is evident that the foreman and gang is not working in the designated limits and have left such limits, contact the train dispatcher and be governed by his instructions. If unable to contact the train dispatcher at that point, a flagman will precede the train through the limits of restriction who must carefully examine track and structures. The train dispatcher must be advised of circumstances at first point of communication.

Form W orders, unless annulled, must be retained and observed during a continuous trip or tour of duty.

**RULES 10-H and 10-I.** Add. When green banner is not encountered at the point the restriction ends train will proceed at restricted speed to the first point of communication and be governed by instructions received from the train dispatcher.

**RULE 10-J.** Between Chestnut Jct. and Oroville and between Portola and Pollard Jct., yellow round speed-control boards indicate the maximum permissible speed for passenger trains. Elsewhere, passenger trains will be governed by the higher number of speeds indicated on white oval speed-control boards.

Between Chestnut Jct. and Oroville and between Portola and Pollard Jct., the higher number on white oval speed-control boards indicate the maximum permissible speed for Special Freight Trains under column 2 and the lower number indicates the maximum permissible speed for Other Freight Trains under column 3. Where but one number is shown, it indicates the maximum permissible speed for both Special and Other Freight Trains.

**RULE S-17.** Figures indicating "Car Capacity of Sidings" are number of cars, based on average allowance of 48 feet per car, that tracks will hold between clearance points, plus 250 feet for engine and caboose.

Outside of T.C.S. territory care must be taken to see that flag protection is furnished ahead when taking siding to meet trains unless it is definitely known that train is clear of the main track. After train comes to rest in the siding, the head end must receive a stop signal from the rear end indicating that train is clear of the main track. Until such signal has been received by head end, headlight will be displayed and flag protection provided. This does not in any way relieve the approaching train from complying with provisions of Rule S-90.

**RULE 34.** When seat is available, head brakeman will ride in forward cab of engine.

**RULE S-72.** OUTSIDE OF T.C.S. TERRITORY WESTWARD TRAINS ARE SUPERIOR TO EASTWARD TRAINS OF THE SAME CLASS.

**RULE 82-A.** Trains in T.C.S. territory which change engines at intermediate stations need not obtain a new clearance. Thereafter any clearances issued will indicate the latest engine number. Train dispatcher must be notified promptly of change in engines.

First-class trains must obtain clearance at Oroville Yard and will not require a clearance at Oroville.

**RULES 83, 83-A, 83-B, 83-C.** When a regular train is checked on the train register at Keddie, or identification is made of a train at Keddie or between Keddie and East Moccasin, such identification or train register check may be applied at East Moccasin. Trains will retain their identification between Keddie and East Moccasin.

**RULE 92.** First-class trains must respect schedule shown.

**RULE 101-A.** Freight trains designated by the Superintendent may operate at speeds shown under Column 2, Special Freight Trains pages 34, 35, 36 and 37, when they receive the following message.

"This is your authority to operate at speeds shown under column 2, Special Freight Trains, current Special Instructions between ..... and ....."  
(Station) (Station)  
.....  
Superintendent

Freight trains that do not have this written authority, or when this authority is cancelled, will operate at speeds shown under column 3, Other Freight Trains.

**RULE 101-B.** When tracks are covered by water and it is known they are safe for movement, engines may be operated over them only if the water is below the traction motor frames, not exceeding 5 MPH.

**RULE 104.** All switches connecting sidings with other tracks, except main track, after being used must be left lined for siding.

**RULE 105.** Within T.C.S. territories, siding Tracy, sidings on Third Subdivision (except Keddie), and north siding Winnemucca are included in signal circuits. None of these sidings may be occupied or fouled unless authorized by an absolute signal indication or by permission of the train dispatcher.

**RULE 110.** Freight trains need not stop for train inspection if train is operating normally, except westward trains on Third Subdivision requiring use of retainers must stop for inspection at Belden unless train has been inspected at Keddie, in which case, they may run from Keddie to Elsej for inspection.

Where stops are made for other reasons, inspection of train must be made as often as practicable.

If stops for train inspection are contemplated and if practicable to do so, train dispatcher should be notified in advance of any such stops.

When conditions restrict visibility, the conductor will designate any stops or additional stops for inspection that in his judgment, are necessary.

**RULE 110.** Train orders may be issued to first-class trains at Portola and Oroville Yard which affect their movements on both Second and Third Subdivisions. At Oroville Yard train order must be located on north side of main track in front of telegraph office.

Incoming crews on first-class trains when crew change is made at Oroville, must deliver train orders, clearance and instructions to outgoing crew.

**RULE 509.** When a train becomes disabled in a block between stations, and the conductor or engineer has given train dispatcher assurance it is unable to proceed, the train dispatcher may, after an understanding has been reached with the conductor or engineer of the disabled train, orally authorize another train in opposing direction to enter the block under flag protection to relieve the disabled train. When a train is reported disabled to the train dispatcher, it must thereafter not be moved in either direction until relief train has arrived, or unless otherwise instructed by the train dispatcher.

**RULE 540.** Traffic Control System extends from: Clinton to Eastward Interlocking Home Signal, Weso (MP 535.5). Westward Interlocking Home Signal, Alazon (MP 713.7), to Eastward Interlocking Home Signal, Pollard Jct. (MP 927.2). From absolute signals located just west of tail of wye switch at Niles Jct. to west yard limit San Jose (MP BR-15.25). Keddie to and including east switch Moccasin.

Unless otherwise provided, trains will be authorized by clearance at their initial stations on all Subdivisions, and on San Jose Branch.

Trains originating at intermediate stations will be authorized orally by train dispatcher, except at a station where an operator is on duty.

Conductor, or engineer if there is no conductor, of a train authorized orally, must ascertain from the train dispatcher what instructions are outstanding as to track conditions on that portion of the system over which movement is to be made.

Trains on First and Second Subdivisions which are operated through Stockton and Stockton Yard with the same conductor may be issued Form Y train orders affecting their movement on either or both Subdivisions and may assume corresponding schedules or run extra from Stockton or Stockton Yard without obtaining clearance. When engine crews are changed at Stockton or Stockton Yard, incoming engineer must deliver clearance, train orders and instructions to outgoing engineer.

**RULE 547.** When a train is standing or switching in a block at a station, train dispatcher may authorize another train to flag into the block to perform work. Crew of train so authorized must have an understanding with crew of train occupying the block before entering and must fully protect their movements against any movements by the train originally occupying the block.

The granting of work authority does not relieve trains or engines from complying with the indications of any interlocking signals within the working limits. Any movements within the interlocking limits or to enter the interlocking limits must be made in accordance with interlocking rules, except when a train or yard engine, after entering the limits as prescribed by such rules, finds it necessary to temporarily leave a portion of their train or switch cut within the interlocking limits and permit their engine to leave the interlocking limits in the process of completing a switch movement, they may, after stopping, pass the interlocking signal governing entrance to the interlocking limits in stop position to again couple to their train or switch cut. In such cases if the crossing involved has been left clear, no movement must be made to foul or cross same without first protecting against movement on conflicting route.

**RULE 550.** The areas in which authority will be granted to use switches within work limits when work time is obtained are between:

East switch Kohler and west switch Stockton Yard (MP 90).

East switch Flora St. and west switch Oroville Yard, except electrically-locked switches between switches of sidings and North Channel line switch.

San Jose Branch, Niles Jct. and MP BR-15.25.

When a train or engine is to clear the main track at an electrically-locked switch, after it has entered the block in which the switch is located, the train dispatcher must hold all signals governing movement into that block at STOP and apply red tags to the levers controlling such signals. When movement is clear of main track and switch again normal, crew member will then report to train dispatcher that train or engine is clear. Until crew member so reports train dispatcher must not remove red tags from levers controlling the signals involved.

**RULE 550-A.** Trains and engines must not clear the main track at hand-operated switches not equipped with electric locks in territory where maximum speed is greater than 20 MPH.

**RULE 825.** Modified to extent that engines not exceeding two units or 3500 H.P. may be used behind 400 and 600 series cabooses.

**RULE 826.** When necessary to handle a car ahead of the engine between stations, it must be chained to engine unless air brakes are cut in and operative.

**RULE 831.** When steam shovels, cranes, pile drivers, ditchers, spreaders or similar equipment are handled in trains, other than work trains in service, they must be placed on rear, unless otherwise directed. If picked up at a point where they cannot be placed on rear, they may be placed on head end and switched to rear at first station where possible to do so.

**RULE 1011.** When engine is not detached from California Zephyr trains at Oroville, Portola, Gerlach or Elko it will not be necessary for outgoing engineer to check supplies and equipment.

## AIR BRAKE RULES

**RULE 22.** Retainers will not be used on freight trains unless in the judgment of the engineer their use is necessary. If retainers are necessary, a sufficient number will be used to control the speed of the train while brake pipe pressure is being restored. When used, they will be applied to cars on head end in a block of not less than fifteen cars and in a low-pressure position (horizontal). Should wheels show a tendency to heat, retainers must be alternated.

**RULE 24-C.** On California Zephyr trains, if motive power is changed at any intermediate station or terminal, or continuity of brake pipe is disturbed, air brake test must be made.

At points where engine crews are changed, except when engine is to be detached, the incoming engineer, after making station stop, must make a 20 pound brake pipe reduction with the automatic brake. Release will be made by outgoing engineer upon receiving the proper signal (hand or air whistle). Observation will be made that rear brakes apply and release.

On other passenger trains at points where terminal tests are made, when the continuity of the brake pipe is not disturbed, or motive power not changed, the incoming engineer, after making station stop, must apply the train brakes with a 15 pound brake pipe reduction immediately after stopping and without waiting for a signal.

The brake pipe leakage must be noted, then the reduction increased to a total of 20 pounds. The incoming engineer will notify the outgoing engineer the amount of brake pipe leakage.

Release of the train brakes will be made upon receiving the proper release signal.

## FIRST SUBDIVISION

Nos. 17 and 18 receive and discharge passengers to and from San Francisco at Middle Harbor Road, Oakland Yard.

No. 18 must obtain clearance at Oakland Yard.

No. 17 will stop at Pleasanton to discharge revenue passengers from Salt Lake City or beyond.

Switches of certain tracks are not electrically-locked or signalled. Except in emergency a train must not clear main track on such tracks. If necessary to clear, permission must be obtained from the train dispatcher before again entering main track and provisions of Rule 520 will apply.

Switching may be done at these switches without work authority provided part of train is left at all times on main track within the block being used. Train dispatcher should be advised when such switching is to be done between stations.

**RULE D-71.** Trains have no timetable superiority between Clinton and Chestnut Jct.

Yard engines must obtain information as to when first-class trains are due and avoid delaying them and give way promptly to other trains.

**RULES 83-A and 83-B.** First-class trains need not register at Stockton Yard.

### Oakland.

(a) **RULE D-151.** Before trains are authorized to move against the current of traffic between Clinton and Chestnut Jct. train dispatcher must first contact yardmaster Oakland Yard advising him of such impending train movement. After yardmaster has informed train dispatcher yard engines have been notified and track to be used will be clear, train movement against the current of traffic will be authorized as follows:

Westward: By signal indication per Rule 292-A at absolute signal Clinton.

Eastward: By train order form reading "No. \_\_\_\_\_ use westward main track Chestnut Jct. to Clinton."

(b) Yard engines must move with current of traffic when practicable, using crossovers to move to other track to perform work. Yardmaster may authorize long moves against the current of traffic after obtaining information that opposing trains or yard engines will not be encountered. If impracticable to contact yardmaster and it is

necessary to make a long move against the current of traffic, engine foreman may arrange such move after obtaining similar information. Short moves against the current of traffic may be made at any time except when first-class trains are due or when informed by yardmaster a train will move against the current of traffic.

(c) Street Crossing at Third and Broadway must not be blocked.

A westward train finding an eastward passenger train at passenger station will not pass Franklin St. until eastward train leaves station.

(d) Train and engine movements over Broadway Street crossing will be governed by vehicular traffic signals.

Eastward and westward trains and engines must approach Broadway Street expecting to find signals at STOP.

Trains and engines may proceed without stopping at Broadway Street on green traffic signal.

Lunar white light is located on near right-hand traffic light masts. When lighted, it indicates track circuit control is effective.

Eastward trains and engines, if stopped or delayed between Washington and Broadway Streets, and Westward trains and engines, if stopped or delayed between Webster and Broadway Streets, in excess of one minute and find traffic signals displaying red, must stop within ten (10) feet of curb line of Broadway Street and wait for green traffic signal. Should traffic signal fail to display green and lunar white marker is not lighted, flag protection over street crossing must be provided. Occupancy of the intersection by a train or engine will cause signals governing vehicular traffic to display red.

After having crossed Broadway Street, trains or engines must clear the circuits as soon as possible.

(e) Joint WP and SP drill track between Melrose and Elmhurst must not be used for meeting or passing trains.

(f) 66th and Seminary Avenue Crossings must be cut when blocked more than five minutes.

**San Leandro.** Absolute signal governing movement from siding to main track, lock 430-C, will display aspect per Rule 288 when main track switch is in reverse position and will continue to display aspect per Rule 288 for movement from siding as long as main track switch is in reverse position.

When signal displays aspect per Rule 288, trains and engines may proceed at restricted speed prepared to stop until the next signal in advance can be determined.

### Hayward.

(a) Freight trains doing switching will leave train outside of limits of bonded rails operating crossing bells at "A," "B" and "C" Streets and will use engine whistle or horn and bell only when necessary to prevent accident.

(b) Trainmen must not ride cars beyond a point 548 feet from point of switch on Hayward Building Material Company spur. Sign has been placed at this point, reading: "STOP: Trainmen must not operate beyond this point."

(c) A lunar white marker light on 7-foot mast is located to the right of the siding at MP 20.15. Eastward trains moving on siding finding this lunar white marker light illuminated may proceed to east siding switch and be governed by signal indication displayed there. Eastward trains finding this marker light extinguished must stop before passing it and contact train dispatcher for instructions.

Train dispatcher's telephones are located in booth adjacent to marker light mast and in baggage room.

**Decoto.** Eastward trains setting out, picking up or doing other work stop clear of and west of the "F" Street grade crossing (No. 4-26.4), leaving sufficient room for cars picked up and engine west of that crossing.

**Fremont.** Look out for heavy movement of gravel trucks using Shinn Road crossing over main track, siding and back track 800 feet west of Station. Engineers must prolong horn or whistle signal 14 (1) approaching and passing over this crossing on any of the above named tracks.

Train dispatcher's telephone located in baggage room.

**Niles Tower. RULE 670.** Reverse movements may be made within interlocking limits without obtaining permission from the towman provided a portion of the train or engine is between interlocking home signals.

**Rhodes and Jamieson Spur.** Switch is electrically-locked and is protected by hand-throw derail. Derail is not electrically-locked and must remain in derailing position until release of electrically-locked switch is obtained. Derail actuates signals on main track when not in derailing position.

**Trevarno. Drill track.** Switch is electrically-locked and is protected by hand-throw derail. Derail is not electrically-locked and must remain in derailing position until release of electrically-locked switch is obtained. Derail actuates signals on main track when not in derailing position.

**Altamont.** Water cars spotted on house track are connected with underground water line. They must not be moved except on special instructions.

#### **Tracy.**

(a) Engines must move with extreme care not exceeding 3 MPH while moving over frogs and switches and around curves on Tomato Spurs.

(b) Main track and inside crossover switches at east end are dual-control. When either switch is placed in hand-throw position the other switch is disconnected from power operation and it is then unnecessary to place it in hand-throw position.

Signals governing movement over inside dual-control switch are controlled by train dispatcher. When signals display aspect per Rule 288, movements may be made to or from SP interchange and engines may drill over this switch without placing it in hand-throw position. If signals display STOP aspect per Rule 292 and reason is not apparent or if call light is lighted on adjacent telephone booth, train dispatcher must be contacted promptly.

**San Joaquin River Bridge.** Train dispatcher's telephone located in booth on north side of track east end of bridge.

#### **Army Supply Depot (Lathrop).**

(a) At west end, normal position of all switches in switching lead lined for switching lead. Do not exceed 10 MPH on switching lead or interchange trackage with Army Supply Depot.

(b) Tracks 2 and 3 are to be used for setting out and picking up cars.

#### **Stockton Yard.**

(a) Eastward trains, caboose hops and light engines will be governed by signal indication entering Stockton Yard.

Eastward trains which head in at MP 90, call yardmaster on phone located near absolute signal for track instructions.

Eastward trains which head in at MP 90.85, call yardmaster on talk-back speaker for track instructions.

(b) Unless instructed by yardmaster, No. 3 lead will not be used for train movements.

(c) Switch leading to Tidewater Southern main track just west of Bridge 90.4, normal position lined for entering and leaving No. 1 lead.

Diverging switch between No. 1 and No. 2 leads at east end of Bridge 90.4, normal position toward No. 2 lead and trains entering No. 1 lead at this point must be sure switch lined back to normal position.

## **SECOND SUBDIVISION**

**RULES 83-A and 83-B.** First-class trains need not register at Oroville Yard.

South Sacramento is register station for Sacramento Northern trains originating and terminating only.

Sacramento Northern trains need not register at Stockton Yard.

#### **Stockton Yard.**

Charter Way. Westward signal is a two-unit signal and diverging route may be to either "B" lead or Diner Siding.

When either of the dual-control switches in this block is placed in hand-throw position the other switch is disconnected from power operation and it is not necessary to place it in hand-throw position when switching over it unless it is used.

#### **Stockton.**

North Channel Line. Governed by absolute signals and electric lock. Eastward signal is a two-unit signal with "S" unit. When the "S" unit is illuminated electric lock is released and must be unlocked before switch is changed by hand operation.

Engines and cars must be brought to a stop at Country Club Highway crossing and must be preceded by flagman over crossing.

Bridge over Smith Canal will not clear man on top of car.

#### **Thornton.**

An electrically-operated steel pedestrian bridge over cannery track, located about two car lengths west of Door No. 12. This bridge is controlled by electric switch pushbuttons inside a wall box, secured by switch lock, adjacent to bridge.

Before commencing switching on this track, crew must insure that bridge is in fully raised position. If bridge is in down position, press electric pushbutton marked "Raise" until bridge comes to rest in fully raised position.

#### **South Sacramento.**

(a) Campbell Soup Co. track. West crossover switches both electrically-locked. After lock is released main track switch must be opened before inside switch can be opened and inside switch must be closed before main track switch can be closed.

(b) Two dual-control switches at east end. Easterly switch connects with No. 1 track on north side and westerly switch connects with yard tracks on south side of main track. Power-operated switch point derail in No. 1 track connected with dual-control switch but operates separately when either switch or derail is in hand-throw position. When either dual-control switch or power derail is placed in hand-throw position the other switch and derail are disconnected from power operation and it is not necessary to place other switch in hand-throw position when switching over it unless it is used.

Westward absolute signal at east end is a two-unit signal with two marker lights on bracket which, when signal indication is per Rule 287, will show whether switch to north or south side is open.

(c) Both switches of crossover from main track to No. 1 track at west end of train yard electrically-locked. After lock is released, main track switch must be opened before inside switch can be opened and inside switch must be closed before main track switch can be closed.

#### **Sacramento.**

(a) **RULE 509.** Train dispatcher may issue Form B covering blocks Globe to east end South Sacramento, inclusive, in either direction.

(b) Normal position of switch at tail of wye "R Street Line" is lined for west leg of wye.

(c) Lunar white marker displayed in connection with aspect per Rule 287 on westward absolute signal at east switch Haggin, indicates that switches are lined for movement to Sacramento Northern yard.

When aspect per Rule 287 is displayed without display of lunar white marker it indicates switches are lined to siding.

#### **Marysville.**

(a) Inside crossover switch on siding and hand-throw tandem derails on east end of tracks 1 and 2 are not electrically-locked and must NOT be operated before obtaining electric lock 346 B.

(b) SN connection switch on siding must be locked for siding when not in use. All movements on siding must be made at yard speed.

#### **SP Connection MP 180.42.**

The hand-operated switch is east connected to main track, equipped with electric lock and protected by separate hand-operated derail located on turnout approximately 110 feet west of main track switch.

Instructions for operation of electric lock located in telephone box adjacent to main track switch. Electric lock switch must be operated before derail, otherwise electric lock will not release. See operating Rule 550.

Eastward SP trains and engines at MP 180.42 must contact train dispatcher to obtain permission to operate electric lock and for instructions to move MP 180.42 to Oroville Yard. Westward SP trains and engines must contact train dispatcher for instructions to move Oroville Yard to MP 180.42. Refer to page 2, Rule 540.

### THIRD SUBDIVISION

**RULE 10-J.** Blue rectangular speed control boards indicate the maximum permissible speed of Special Freight Trains and will be displayed on the same post below the white oval speed control board.

**RULES 83-A and 83-B.** Keddie is register station for trains originating and terminating only.

Nos. 17 and 18 register by ticket at Portola.

#### Oroville.

A sign reading "Diesel Stop" painted on a yellow marker post located between main track and siding 804 feet east of east end passenger station building.

Engineers of eastward passenger trains should endeavor to stop with cab of engine opposite this post so that water tanks of engine can be filled without respotting.

Engineers of westward passenger trains should endeavor to stop just to clear of westward leaving signal at west end of siding.

**Intake.** The trackage south of electric locked connection and derail located 275 feet from switch is joint trackage for interchange purposes.

**Grays Flat Spur, MP 272.6.** Cars must not be left at top of hill or on descending grade on this spur.

#### Keddie.

(a) When calling in flagman from east on Fourth Subdivision enginemen will sound six long blasts of horn.

(b) All switches leading in or out of siding (No. 1 track), except inside switch at upper crossover, must be left lined for the siding. Inside crossover switch at the west end of siding is dual-control, power-operated and, when in power position, works simultaneously with west siding main track crossover switch. When west siding main track crossover switch is in hand-operated position, inside crossover switch must also be hand operated.

(c) Hand-operated switch located 20 feet east of the inside west crossover switch Keddie siding must be left lined for the siding.

(d) Movement of trains or engines between yard tracks and tail track east of upper crossover may be made by first obtaining release of electric lock 126A from the train dispatcher. After obtaining release of electric lock and reversing switch, then line inside switch of upper crossover to tail track. Movements must not be made in either direction until this has been done. Signal will display aspect per Rule 287 for eastward movement to tail track.

Hayes derail on tail track, pipe-connected to inside switch to upper crossover.

Switches must not be lined back until movement completed and engine or cars are clear of section of tail track between dwarf signal and derail.

(e) Main track switch and derail at east end of house track is not pipe-connected.

Separate switch stand and electric lock 106A installed on this derail. The switch stand and electric lock is located 25 feet from track on south side of derail. Electric locks 106 and 106A can be unlocked by train dispatcher when either door of electric locks is opened.

(f) Emergency water facilities for supplying water for steam heat units on passenger engines located adjacent to telephone booth just east of telegraph office.

(g) Within the limits of the open ditch, train service employees will not be permitted to work trains along the north or bank side of Track No. 4, except in cases of emergency.

### DRAGGING EQUIPMENT DETECTORS

**West switch Poe.** Indicator lamp 50 feet west of detector.

**Signal 2238.** Indicator lamp 50 feet east.

When indicator lamp is actuated, it will display a lighted "D" and trains must be stopped promptly before reaching West Branch Bridge, and inspection made.

### FOURTH SUBDIVISION

Markers must be burning through Tunnels 1, 2, 3 and 6.

Flashing lunar white indicator light displaying letter "C" located at MP 8.4. When lighted and flashing it indicates signal at MP 7.7 displaying aspect per Rule 281 or Rule 285.

When lunar indicator is not flashing, westward trains approach signal at MP 7.7 prepared to stop.

**RULE 827.** Permasco car skates at Moccasin, Greenville, Lassen View, Robbers Creek, Lodge Pole, Jellico, Willow Springs and Little Valley.

When setting cars out on any of these sidings see they are used. If cars already on siding, arrange to couple cars to be set out with the cars already there, resetting skates under outside pair of wheels of truck of first car on the down hill side. When coupling into car or cars on siding make coupling carefully and see skates removed before cars are pulled or pushed.

When all cars are removed from siding crew making pickup will see skates are re-hung on post or pole in place provided.

In addition to the use of Permasco car skates, provisions of second paragraph Rule 827 pertaining to use of hand brakes are also applicable.

**Keddie.** (a) When calling in flagmen from east on Fourth Subdivision enginemen will sound six long blasts of horn.

(b) Upper unit of 2-unit absolute signal governs eastward movement from Keddie Yard to the Fourth Subdivision. **RULE 509** is applicable.

Absolute dwarf signal on Fourth Subdivision lead when displaying aspect per **RULE 288** will govern westward movement from Fourth Subdivision to siding or yard.

(c) Within the limits of the open ditch, train service employees will not be permitted to work trains along the north or bank side of Track No. 4, except in cases of emergency.

**Indian Creek.** Switch is not equipped with electric lock. Be governed by **RULE 550-A** page 3.

**Box.** Engines or cars must not be moved over road crossing on Box Spur just east of Greenville without being brought to a stop and road traffic flagged in both directions by a member of crew.

**Clear Creek Junction.** The 33-car siding is the interchange track with Almanor Railroad Company and trackage between Western Pacific main track switch and yard limit board 2000 feet beyond end of the 33-car siding toward Chester is joint track for interchange purposes. Movements over this trackage are under operating rules governing operations within yard limits. Switch point derail on Almanor RR main track 400 feet from junction switch.

Normal position junction switch lined for Western Pacific main track.

**Westwood.** No. 2 track and old electric siding connected with No. 2 track at west end will be used as siding.

Derails on west end old electric siding and house track must be kept in derail position except when being used. East switch of old electric siding must be left lined for siding.

**Poison Lake.** Switch point derail at clearance point west end of log loading track. This derail must be left in derailing position except when track is actually being switched.

**Jellico.** Log loading track off siding, capacity 40 cars, connected both ends with derail at east end and which must be left in derailing position except when track is actually being switched. Track is restricted to use of outfit cars only.

## OPERATION OF TRAINS AND ENGINES BETWEEN EAST AND WEST TRAIN YARD SWITCHES PORTOLA

(A) Signal aspect per Rule 288 displayed by automatic signals or indicators between east train yard switch MP 322.13 and west train yard switch MP 320.25, authorizes yard switching or engine movement on main track within these limits.

(B) The absence of signal aspect per Rule 288, or its removal, is an indication that the train dispatcher desires the main track cleared for through train movements. Howlers controlled by the train dispatcher are located throughout the yard, and when operated the main track must be cleared immediately.

(C) In addition, train dispatchers will furnish information to operator as to times passenger trains are expected to reach Portola. Employees in charge of yard engines, light engines, and similar moves must ascertain from operator whether these trains are due before occupying main track and not delay them.

(D) When main track is used on authority of signal aspect per Rule 288, all movements must be made at yard speed.

(E) When a westward train or engine is stopped at absolute signal at east train yard switch, MP 322.13, or an eastward train or engine is stopped at absolute signal at west train yard switch, MP 320.25, by a STOP indication and train or engine is instructed by the train dispatcher to proceed under flag protection per Rule 509(A)2, it must be preceded by a flagman. When next signal or indicator in advance can be seen displaying aspect per Rule 288, and intervening track to such signal can be seen to be clear, train or engine may pick up flagman and proceed at yard speed.

(F) Eastward absolute signals at west train yard switch are under electrically-coordinated joint control of train dispatchers for the Third Subdivision, Sacramento, and Fifth Subdivision, Elko.

Permission to take switch or derail at west end train yard in hand-throw must be obtained from Sacramento train dispatcher. Sacramento train dispatcher will in turn contact Elko train dispatcher for his concurrence.

When west train yard switch is in hand-operated position, derailing switch, if used, must also be hand-operated.

(G) Train washer located on main track between west pocket track switch and east switch west siding.

Automatic Signals 3210 and 3211 located adjacent to washer are equipped with marker lights indicating the position of washing arches.

All aspects displayed by these signals are subject to the restrictions imposed by the marker lights and the following will govern:

**LUNAR:** Washer clear — Movement may be made through washer not exceeding 10 MPH.

**PURPLE:** Washing position — Restricted clearance. All trains and engines to be washed STOP and then proceed not exceeding 2 MPH.

Lunar light must be displayed for all non-washing movements. If lunar light not displayed for non-washing movements, trains and engines must STOP, check all washing arches, see they are locked in clear, then movement may be made through washer not exceeding 10 MPH.

Employees are prohibited from riding on sides or tops of trains, cars or engines while passing through train washer in operating position.

No. 17, California Zephyr, will make station stop so that baggage car will be spotted at west end of hard-surface platform. In event it is too cold to wash train, engineer will be notified accordingly.

(H) Derail at west end of west siding is hand-operated independent of switch. Derail will actuate signals on main track when not in derailing position.

(I) Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into yard will indicate to such trains the number of the track on which they are to yard their trains.

When indicator is dark yardmaster must be contacted at head-in switch to obtain track assignment.

## FIFTH SUBDIVISION

**RULES 83-A and 83-B.** Nos. 17 and 18 register by ticket at Portola.

### Gerlach.

When engine crews change at Gerlach, incoming engine crew must deliver train orders and instructions to outgoing crew.

### Winnemucca.

(a) Absolute signals and dual-control switches located at each end of north siding and each end No. 1 track south yard.

(b) Crossover to house track: Main track and inside switch of crossover are individually electrically-locked. Both switches must be released before movement is started and one or both switches must be kept open until the movement is completed.

(c) An engine foreman may permit road crews to use his switching authority for moves, such as engine to or from train, etc., but must insure that there is no hazard by reason of his own switching operations.

## SIXTH SUBDIVISION

**RULE 82-A.** Train orders may be issued at Winnemucca governing movements east of T.C.S. limits.

**RULES 83-A and 83-B.** No. 18 register by ticket at Elko.

**RULE 97.** Eastward extra trains must have train order or clearance authority for movement before leaving interlocking limits, Weso.

**RULES 82-A and 540.** Weso. Westward trains may leave Weso without contacting the train dispatcher when westward interlocking signal indicates PROCEED and will retain their identity Weso to Winnemucca.

## OPERATION OF SP TRAINS BETWEEN FLANIGAN AND WESO INCLUSIVE FIFTH AND SIXTH SUBDIVISIONS

**RULE 801.** SP trains and engines are authorized to operate over WP tracks between Flanigan and Weso, subject to WP Rules, Timetable, Special Instructions, and Timetable Bulletins.

**RULES 82-A and 204.** Wendel. SP trains will be authorized by clearance at Wendel which will be authority for movement on WP track Flanigan to Winnemucca. Train orders may be issued at Wendel which will affect movement Flanigan to Winnemucca.

**Winnemucca.** Westward SP trains will be authorized by clearance at WP Winnemucca which will be authority for movement Winnemucca to Flanigan.

Eastward SP trains will be authorized by clearance at WP Winnemucca which will be authority for movement on WP track Weso to Carlin.

After having been properly cleared, will be governed by signal indication without member of crew contacting train dispatcher.

**Carlin.** Train orders may be issued to westward SP and WP trains at SP Carlin which will affect their movement between Weso and Winnemucca and at Winnemucca.

**RULES 83-A and 83-B.** Eastward and westward SP trains will register by ticket at WP Winnemucca. Train order form "R" will be issued to eastward SP trains at WP Winnemucca on overdue superior WP and SP trains at Weso.

## TRAFFIC CONTROL AND INTERLOCKING SIGNAL INDICATIONS

### FLANIGAN

Connection to SP at MP 384.4. Connection switch east connected and is equipped with a dual-control power-operated switch.

Absolute signal governing westward movement over SP crossing at MP 384.3 also governs movement over connection. "S" light indicators mounted on signal indicate as follows:

"S" light illuminated to the right of the mast indicates route lined to SP connection.

"S" light illuminated to the left of the mast indicates route lined for WP into Flanigan siding.

Movement through connection to WP main track is governed by upper unit of absolute signal located at clear point west end SP double track Flanigan, (SP MP 336.51).

All signals governing movement through SP crossing MP 384.3 and SP connection MP 384.4 are absolute signals under control of WP train dispatcher. "SA" and "P" apply to SP trains only, WP Rules 509 and 663 apply.

SP trains may enter or leave WP track on PROCEED signal indication, without member of crew contacting train dispatcher, but must contact WP train dispatcher promptly if they are unable to comply with authority granted by signal aspect.

#### WESO

SP trains diverging from SP track to WP track Weso will be governed by instructions contained on pages 15 and 16, applicable to WP westward trains.

### SIXTH AND SEVENTH SUBDIVISIONS Use of WP Portion of Paired Track Between Weso and Alazon Inclusive

(A) Between Weso and Alazon, track of WP and SP will be used jointly. All eastward trains of both companies will use WP track, and all westward trains of both companies will use SP track, unless otherwise instructed by train order, except as provided in Sections (T) and (X) hereof. Each railroad will be operated under single track rules.

(B) Train dispatchers will use following form of train order to authorize movement of a westward train or to create a work extra.

**Example 1:** "Eng.....run extra on WP track.....to....."  
This form of order must be given to all opposing trains on WP track.

**Example 2:** "Eng.....works extra on WP track.....M  
until....M between.....and....."  
This form of order must be given to trains before entering territory covered.

When moving westward on WP track between Alazon and Weso, maximum speed of passenger trains and light engines is 59 MPH, and for freight and mixed trains 49 MPH, but all other speed restrictions must be observed. Unless proceed signal received or it is known that warning devices are operating, such trains and engines must stop approaching road crossings where automatic warning devices are installed, and may proceed after member of crew protects crossing.

(C) **RULE 19.** When the rear car of an SP passenger train is equipped with a combination oscillating red light and auxiliary green marker light, oscillating red light must be displayed by day as well as by night when train is on main track, and when so displayed, will be considered as markers. Oscillating red light must be extinguished and green marker light displayed when train has stopped clear of main track to be met or passed by another train.

(D) **RULES 20 AND 21.** Between Weso and Alazon, sections of SP schedules other than last section will display green lights, illuminated by day and night, but will not display green flags. On SP trains lead engine only will display signals and train indicators.

(E) **RULE 82-A.** SP trains, unless otherwise directed, must not leave Winnemucca without clearance or train order authority for movement on WP at Weso.

A clearance authorizing an eastward SP first-class train at Winnemucca for movement over the WP at Weso will apply only to Carlin, where another clearance must be obtained authorizing train Carlin to Alazon.

(F) **RULES 82-A AND 83** will not apply to SP trains at Elko, but they will be governed by train-order signal, and at Carlin will be governed by train register and second paragraph of Rule 83-B.

(G) **RULES 83-A and 83-B.**

**Winnemucca.** Eastward SP first-class trains register by ticket at SP Winnemucca. SP operator will transmit registration to WP operator Winnemucca who will enter same on register Winnemucca.

**Weso.** Eastward SP inferior trains arriving Weso when superior trains are overdue, may run ahead of such trains Weso to Carlin when interlocking signal at Weso displays PROCEED indication. Under same conditions, eastward WP inferior trains may run ahead of such trains Weso to Elko.

**Carlin.** Register station for eastward first-class trains only. Registration will be by ticket and SP operator will enter same on joint register SP station Carlin.

An eastward first-class train which does not reach East Carlin within 15 minutes from its leaving time as registered at Carlin will run expecting to find a train running ahead, East Carlin to Elburz.

**Elko.** Eastward SP first-class trains register by ticket. Other eastward SP trains will not register.

(H) **RULE 83-B.** When an eastward schedule or section is checked on register at WP Winnemucca, or at Sparks, or visual identification is made between Sparks and Weso, such identification or register check may be applied at Weso.

(I) **RULE 83-B.** Second paragraph will not apply at Carlin to work extras and westward extras. Such trains must not leave Carlin until it has been ascertained whether all regular trains due have arrived or left.

(J) **RULE 96.** Sections of regular trains may be created Weso to West Carlin or Carlin.

(K) **RULE 97.** Eastward extras between Weso and Alazon may be authorized by clearance as follows:

Eastward SP extras may be authorized by clearance issued at SP Winnemucca which will confer authority to run extra Weso to Carlin.

Eastward SP extras may be authorized by clearance at Carlin which will confer authority to run extra Carlin to Alazon.

Eastward WP extras may be authorized by clearance at Winnemucca which will confer authority to run extra Winnemucca to Elko.

Eastward WP extras may be authorized by clearance at Elko which will confer authority to run extra Elko to Alazon.

Any other eastward extra movements must be authorized by train order.

When necessary to annul the authority of an extra which has been authorized by clearance, a train order will be issued in the following form:

"Eng..... is annulled as an extra from ....."

(L) **RULE 204.** Train orders may be issued to eastward SP trains at SP Winnemucca which will affect their movement between Weso and Carlin.

Train orders may be issued to eastward SP trains on Sixth Subdivision which will affect their movement on the Seventh Subdivision between Elko and Alazon.

Train orders may be issued to westward SP and WP trains at SP Carlin which will affect their movement on WP between Weso and Winnemucca and at Winnemucca.

(M) **RULE 221.** First and second paragraphs apply only to eastward SP trains at Elko.

(N) **RULE 340.** Add. Before opening a main track switch, train or engine crew must know by view of entire block to be entered that no train or engine is approaching within or adjacent to the block, and, when the view is obstructed or during inclement weather, flag or other authorized protection must be provided.

Train or engine must remain clear of main track three minutes after the switch is opened.

**RULE 340** does not apply at spring switches.



(O) **RULES 509 and 510.** When a block signal indicates STOP (in either direction) trains will be governed by Rules 509 or 510.

Signals in paired track territory which are not equipped with number plates are STOP signals. When these signals display STOP indication, member of crew will contact train dispatcher in accordance with Rule 509.

At Preble, Barth, Elburz and Deeth, when signals indicate STOP and train dispatcher knows there is no opposing movement involved, he may orally authorize train to proceed at restricted speed to the next governing signal.

When member of crew is unable to contact train dispatcher within five minutes, train may proceed at restricted speed to the next governing signal without sending a flagman ahead.

(P) At locations designated between Weso and Alazon, letter type indicators will be used. The following letters, when illuminated, will indicate:

"S" Take siding.

"M" Proceed on main track.

When the letter "S" is illuminated, train must take siding.

When the letter "M" is illuminated, train is given superiority over all eastward trains as specified below:

ILLUMINATED LETTER	LOCATED	APPROACHING	AUTHORITY IS AS FOLLOWS
"S"	On Signal 6188	West switch Beowawe	Enter siding and remain until letter "M" displayed.
"M"	On Signal 6202	East switch Beowawe	Enter main track and proceed unless restricted by the letter "S" at Cluro.
"S"	On Signal 6262	West switch Cluro	Enter siding and remain until letter "M" displayed.
"M"	On Signal 6274	East switch Cluro	Enter main track. SP trains proceed to Carlin, WP trains proceed to Elko.

When Signal 6262 displays aspect per Rule 291 and letter "S" is illuminated, train may pass Signal 6262 at restricted speed in order to enter Cluro siding.

(Q) **West Carlin.** Main track detour switch at MP 643.4 is interlocked.

Interlocking limits extend from home signal MP 643.4, located 100 feet west of remote-controlled switch, to dwarf home signal, located 350 feet east on main track, governing westward movements, and to dwarf home signal, located 350 feet east on detour, governing westward movements to main track.

If signals indicate STOP be governed by Rule 663. If route is not properly lined, call signal operator and obtain authority to operate this dual-controlled switch by hand.

SP light engines are authorized to use WP main track at Carlin providing Signal 643.4 indicates proceed on WP main track. If signal 643.4 indicates movement over west detour to SP yard, SP light engines will enter detour and proceed to SP yard at Carlin.

West Carlin detour extends from remote-controlled switch on WP main track at West Carlin to connection with SP main track at west end of Carlin yard.

(R) **Carlin.** When trains on which crew changes are made at Carlin, are departing, they must move at restricted speed until reaching a point where next signal indication can be clearly seen and intervening track can be seen to be clear.

(S) **East Carlin.** Detour extends from east lead on SP to East Carlin on WP. Spring switch at junction is normally lined for WP main track. Westward trains or engines must stop and examine switch points before moving over this switch.

Signals governing eastward movement over spring switch at East Carlin Detour bear the letter "A." Trains finding these signals displaying aspect per Rule 292 will be governed by WP Rule 509.

"M" Indicator mounted on absolute signal governing eastward movement from east detour through spring switch to WP main track when illuminated authorizes SP eastward inferior trains to run ahead of eastward superior trains from East Carlin to Elburz, being governed by signal indications displayed.

Approach clearing circuit extends 1000 feet west of absolute signal on East Carlin Detour, and is indicated by an approach circuit sign. This circuit is equipped with timing device which will normally require 80 seconds for signal to clear after train enters circuit.

Occupancy of approach circuit indicates to WP train dispatcher that train desires to leave Carlin via the East Detour, but trains or engines must not depart until permission is obtained from WP train dispatcher.

Occupancy of this approach circuit during switching operations should be avoided.

Eastward superior trains must run expecting to find inferior trains moving in advance East Carlin to Elburz on authority of the "M" indication. This does not relieve inferior trains from providing flag protection if stopped or delayed.

(T) Eastward SP freight trains and other trains when so directed, also engines moving between WP and SP yards will use East Carlin and/or West Carlin detours.

(U) **Elko.** Crossover, Third St. WP Elko yard. Inside siding switch of crossover electrically-locked. Release of electric lock must be obtained before main track switch is lined. Instructions for operating the lock are posted in electric lock case.

Dwarf signal governing westward movements, located between main track and siding, at MP 665.5. Approach lighting circuit starts 300 feet east of Signal 6655.

(V) Spring switch, 12th Street, east end of old main track, WP Elko yard, normally lined for eastward main track and may be trailed through eastward onto main track.

**RULE 291.** Eastward trains leaving Elko on old main track finding Signal 6660 displaying aspect per Rule 291 must stop short of signal and operate push button. Eastward trains leaving Elko on main track finding Signal 6662 displaying aspect per Rule 291 must stop and operate push button when there is an eastward train on old main track. Instructions for operating push buttons are posted in push button housings.

Telephone located on instrument case south side of tracks opposite Signal 6662 for purpose of contacting train dispatcher when Signal 6660 or 6662 does not clear promptly after push button operation. If signal continues to display aspect per Rule 291 after expiration of time release interval, train may proceed at restricted speed after obtaining permission from train dispatcher.

Westward trains and engines must stop and examine switch points before moving over spring switch, East Elko.

Dwarf signal located 250 feet west of spring switch at east end old main track Elko, governs movements against current of traffic on main track to dwarf signal 6655 located at 4th St., Elko.

(W) East detour extends from SP siding to WP freight yard, Elko.

(X) Westward WP freight trains and other trains when so directed, also engines moving between WP and SP yards will use East Elko and/or West Elko detours.

(Y) **Weso.** Interlocking. Remote-controlled by WP train dispatcher. Westward home signal governs movements through interlocking limits and to enter T.C.S. on WP main track. When STOP indication is displayed and movement via WP is desired, WP Rule 509 and SP Rule 663 will apply. When STOP indication is displayed and movement via SP is desired, SP Rule 663 will apply.

("A" applies to WP only and "SA" applies to SP only.)

Westward inferior trains must arrive Weso sufficiently in advance of superior WP trains to avoid delaying them between Weso and Winnemucca.

Switches on SP end of crossovers are dual-control. Permission of WP train dispatcher is required for hand operation, except for SP movements made as prescribed by SP Rule 663, and be governed by SP Rules 771 and 772.

Spring switches on WP end of crossovers are normally lined for WP track. WP Rule 519 applies.

Electric lock on west crossover spring switch releases when the power switch on this crossover has been reversed by the WP train dispatcher.

Obtain permission from the WP train dispatcher for movement from WP track to SP track over crossovers and be governed by SP Rule 663.

Westward movement from WP A.B.S.S. to WP "enter T.C.S." will be made by signal indication. If signal fails to display proceed indication WP Rule 509 will apply.

If communication has failed and the WP train dispatcher cannot be contacted movement may be made on all routes, except westward to WP track, observing SP Rule 663.

Instructions for operation of dual-control switches and electric switch locks are posted in telephone booths located at interlocking signal.

**(Z) Alazon.** Interlocking. Remote-controlled by SP operator Wells. Eastward home signal governs movements through interlocking limits and to enter T.C.S. on WP main track. When STOP indication is displayed and movement via WP is desired, WP Rule 509 and SP Rule 663 will apply. When STOP indication is displayed and movement via SP is desired, SP Rule 663 will apply.

("A" applies to WP only and "SA" applies to SP only.)

Dual-control switches within interlocking limits are under control of SP operator at Wells. When necessary to hand-throw these switches, permission must be obtained from operator and be governed by SP Rules 771 and 772.

West switch of crossover between SP and WP main tracks is a spring switch and normal position is for SP main track. Movements over this switch must be made in accordance with SP Rule 535.

Eastward inferior WP trains must arrive Alazon sufficiently in advance of superior WP trains to avoid delaying them between Alazon and Wells.

#### ENGINE WHISTLE SIGNALS

**Weso:** Westward WP trains on SP track must sound whistle signal o — — at sign reading "WP WHISTLE" located at SP MP 425.10 approaching Tule.

**Carlin:** Westward: Approaching east end yard:

SP freight trains, o — o,

WP trains, — o.

**Alazon:** Eastward WP trains must sound whistle signal o — — at sign reading "WP WHISTLE" located at MP 709, pole 2.

#### WESTWARD AUTOMATIC BLOCK SIGNAL SYSTEM CIRCUITS

(a) Signals 6511 (200 feet east of Tunnel 42) and 6497 (200 feet east of Tunnel 41); "Block System Limit" sign opposite Signal 6490, controlled from 3750 feet east of East Carlin detour switch.

(b) Signals 6369 (100 feet east of Tunnel 40) and 6357 (624 feet east of Tunnel 39); "Block System Limit" sign opposite Signal 6352, controlled from 2400 feet east of MP 632.

(c) Signals 6313 (3650 feet west of MP 632) and 6287. "Block System Limit" sign opposite Signal 6274, controlled from 1000 feet east of MP 623.

#### SEVENTH SUBDIVISION

**RULES 83-A and 83-B.** No. 18 register by ticket at Elko. Nos. 17 and 18 register by ticket at Wendover.

**RULES 510-B and 548.** Westward freight trains having instructions to cut off helper at MP 752.6, must stop with rear of train west of grade signal 7526. After helper engine is detached it must occupy track circuit extending 500 feet west of grade signal 7526 and crew member must contact train dispatcher for permission to move eastward. Train dispatcher will display proceed indication on signal 7526 to authorize eastward movement.

In event grade signal 7526 fails to display a proceed indication promptly, train dispatcher must be notified. If train dispatcher knows there is no opposing movement between MP 752.6, and Sage, he may instruct engineer to proceed at restricted speed to the next governing signal. If there is lack of communication, helper engine will move westward to the absolute signal at east switch Spruce and contact train dispatcher.

**Alazon. RULES 82-A and 540.** Eastward trains may leave Alazon without contacting the train dispatcher when eastward interlocking signal indicates PROCEED and will retain their identity Alazon to Wendover.

**Wells.** Engines must not exceed 10 MPH on straight track and 5 MPH on turnouts in UP yard.

Trains having work to do, must clear road crossings east of WP depot, cutting train if necessary.

**Shafter.** Engines must not exceed 10 MPH on straight track and 5 MPH on turnouts in NN yard and are prohibited from using NN rip track.

#### EIGHTH SUBDIVISION

**RULES 83-A and 83-B.** Nos. 17 and 18 register by ticket at Wendover.

**Blair Spur.** All movements over Highway 40 crossing on this spur must be protected by a member of the crew in order to warn highway traffic that crossing is to be blocked. Red flags will be used during the day and fusees at night to warn highway traffic.

**Marblehead Spur.** All movements must be at restricted speed. Normal position for the east or north switch of the wye will be in a position lined and locked for the wye. Trainmen must insure that all cars set out are properly secured. Derail located 108 feet west of west switch of run-around track must be left in derailing position, except when track is being switched. Look out for drifted sand on rails of this spur.

#### SALT LAKE CITY AND ROPER YARD INSTRUCTIONS

##### Salt Lake City.

WP trains have no timetable superiority on WP passenger running track between westward home signal located between 5th and 6th West Sts. and SLCUD and RR Co. trackage.

Whistle and bell must be restricted to minimum use prescribed by rule or law, except in emergencies.

Salt Lake City Union Depot and RR Co. Rule No. 1 reads:

"Trains have no timetable superiority between 1st So. and 9th So. Sts., SLCUD and RR Co. trackage on 4th West St., Salt Lake City. Yard engines and other engines occupying these tracks must make way for passenger trains without unnecessarily delaying them. Trains, yard engines and other engines must move on Depot Co. tracks prepared to stop within one-half the range of vision."

Salt Lake City Union Depot and RR Co. Rule No. 3 reads:

"Trains, yard engines, light engines and others using SLCUD and RR Co. tracks will leave switches as found, except switches will be left lined for No. 3 track. Switch connection with WP main track and SLCUD and RR Co. track just east of 1st South St. will be lined for WP main track."

Automatic street crossing signals are in service 2nd and 4th South Sts. at 4th West St. Control circuits are marked by rail joints painted yellow.

When a train, engine or yard movement, has stopped or been delayed within circuit control limits, additional movements must proceed slowly until positive determination is made that crossing signals have operated a sufficient time to stop traffic. In event crossing signals are not operating, movement over crossing must be protected by a crew member. Unnecessary occupancy of control circuits must be avoided.

Indication signal will be placed on mast east of 2nd and 4th South Sts. and will display flashing lunar lights when crossing signals are operating.

Eastward and westward trains when ready to depart will proceed slowly into control circuit to activate crossing signal.

Unless otherwise instructed, Nos. 17 and 18 use track No. 3.

**Salt Lake City and Roper.** Eastward and westward freight trains will enter and leave D&RGW running tracks through interlocking between Pollard Jct. and 1st So. St., Salt Lake City. Trains must keep to the right. Movement against current of traffic on these two running tracks will be made in accordance with D&RGW Operating Rule 93. Eastward trains arriving Roper, unless otherwise instructed, will stop at 21st So. St. and get head in from yardmaster through the two-way speaker located near 21st So. St.

Audible annunciator located 430 feet west of 13th South Street. A sign reading, "Grant Tower Annunciator" has been installed at this location and the following whistle signals will be given:

WP trains and engines departing,            0 0 0 0.

Ogden trains and engines departing,            \_\_\_\_\_.

When operating in joint yard territory east of T.C.S. limits, Pollard Jct. (MP 927.2), WP crews will obey instructions of terminal officers, including D&RGW officers having supervision over the terminal and, in addition to WP rules, will be governed by D&RGW Rule 93, which reads as follows:

"Yard limits will be indicated by yard limit signs. Within yard limits, the main track may be used clearing first-class trains as prescribed by the rules. Second- and inferior-class trains, extra trains and engines must move on all tracks within yard limits prepared to stop unless the track is seen or known to be clear."

### SAN JOSE BRANCH

Electric locks applied to main track switches and associated derails at the following locations:

Irvington.....MP BR-3.35

Warm Springs.....MP BR-6.75

Curtner.....MP BR-7.95

These locks cannot be released by train dispatcher to enter main track. Therefore trains and engines must not clear main track at these locations unless specifically instructed to do so by train dispatcher. Rules 520 and 547 will apply at all switches between Niles Junction and MP BR-15.25 not protected by absolute signals or electrically-locked.

#### Niles Junction.

(a) Absolute signals governing eastward movements on branch, located at clearance point of switch at tail of wye.

(b) Switch at tail of wye is a spring switch, normal position lined for movements toward east leg of wye. This switch is equipped with electric switch indicator displaying yellow light when switch is in normal position. If yellow indicator lamp is found not illuminated by a westward train or engine, it must stop and examine spring switch at tail of wye before passing over it to make sure that point is fully closed.

Crews switching over this spring switch must stop and examine switch points if yellow indicator lamp is not illuminated after trailing movement is completed. This inspection must be made regardless of direction of movement to be made after using switch. Rule 519 applies.

(c) A lunar white marker light on 11 foot mast is located at MP BR-0.8 just east of Morrison Canyon Road governing movement of westward trains to the east leg of the wye.

Such trains finding lunar white marker light illuminated may proceed; those finding marker light extinguished must stop before passing and contact train dispatcher for instructions, unless train consists of less than forty cars including caboose, it may pass marker

light without stopping and pull ahead to next absolute signal, making sure Morrison Canyon Road crossing is open and clear for vehicular traffic.

Movement on either east or west leg of wye must be made at yard speed.

#### Milpitas.

(a) Track adjoining south side of main track west of office is known as "West Siding" and track adjoining south side of main track east of office is known as "East Siding."

(b) Absolute signals installed at crossovers, MP BR-11.65, just east of office building.

(c) Derail on west leg of wye located at clearance point. Derail on east leg of wye located 392 feet west of main track switch.

**RULES 341 and 509 (B).** When instructed by the train dispatcher to line crossover switches to enter west or east siding, both switches to crossover to be used must be lined before any portion of train or engine passes absolute signal and thereafter, to enter siding only, trains may pass absolute signal displaying aspect per Rule 292.

Crossover movement from either east or west siding to main track may be made by signal indication after train dispatcher has authorized lining of crossover switches by display of illuminated "S" indicator per Rule 292-A.

Dwarf signals located adjacent to crossover govern crossover movements to main track only and do not apply to siding movements. Except when in use for movement through crossover these signals will be dark.

(d) Trains setting out, picking up or doing other work will contact train dispatcher for instructions when ready to depart.

(e) At the Ford plant there are electrically-locked derails on Tracks F-1 and F-2, located 200 feet west of the west track entrance and 227 feet east of the east track entrance to the assembly building. The doors to the track entrances at each end of the building cannot be closed until the derails are lined in derailing position and locked. Unless requested by the Ford Motor Co. cars must not be left on either track at either end of the building between the derails and point of entrance to the building.

In addition, at the west end, not more than two cars may be left (while switching or otherwise) on either Tracks F-1 or F-2 between the diverging switch to these tracks and the derails. If Ford Co. orders two cars left on either Tracks F-1 or F-2 as above the east car must be left as close to derail as safety permits to allow clearance on west end of these cars.

Hayes type derails installed on Track F-4, 388 feet east of west switch to Track F-3 and on Track F-5, 238 feet east of entrance switch.

Gates, doors to buildings and derails on both east and west ends of Ford plant are controlled and operated by Ford security police.

#### San Jose Yard.

Westward absolute signal located opposite west yard limit sign, MP BR-15.25.

After obtaining clearance, westward trains must contact train dispatcher by telephone before leaving yard tracks at William Street for authority to proceed to absolute signal at MP BR-15.25.

### LOYALTON BRANCH

Trains or engines moving over Highway crossing No. 4-E-12.4 Loyalton must come to a complete stop then be protected by a member of the crew in order to warn highway traffic that crossing is to be blocked.

### RENO BRANCH

**RULE 82-A.** Is modified to the extent that trains may be authorized at Portola to operate on the Reno Branch.

No. 220 may leave Reno Jct. without clearance.

**RULE 204.** Train orders may be issued to trains at Portola which affect their movement on the Reno Branch.

**Rocky Mount No. 2.** No derail, keep hand brakes set and do not leave cars east of first road crossing.

**DERAIL** located on main track at MP 31.69 which is 630 feet east of Rocky Mount No. 2, must be lined and locked for main track except when switching is being done on Vaughn Mill No. 1, Vaughn Mill No. 2, Rocky Mount No. 1, or on Rocky Mount No. 2 spurs. This derail must first be opened and locked open while switching is being done and not be relined for main track until switching is completed and cars properly coupled to engine, and have been charged to full air pressure.

**Reno.** Movements over street crossings east and west of Nevada Transportation Company warehouse must be protected by flagman.

Trains or engines must approach East 6th Street carefully. This crossing is protected by flasher lights and bell signals.

Flasher light and bell signals, 4th St.—Engines or cars must stop within 30 feet of and before fouling outer edge of sidewalks on either side of 4th Street, before entering or occupying either crossing from either direction.

Yellow marker lights installed on top of instrument case will be illuminated upon occupancy of track circuit and after 15 to 18 seconds will flash. Movement into or through the crossing may then be made. If yellow marker fails to light, flag protection must be provided unless signals are known to be operating. This to provide 20 second operation of signals prior to occupancy of crossing by engine or cars as required by Nevada State Law.

Cars or engines must not be spotted within signal circuit limits as indicated by illumination or flashing of marker lights on these instrument cases.

### ELLERBECK BRANCH

**USS&R Co. Spur** is on 1% grade, has derail 192 feet from switch. Engines or cars must not pass beyond PROTECTIVE SIGN. Cars left there must be properly secured.

**Wye.** East switch east leg of Wye must be left lined for straight track as derail.

**Flux.** Solar Salt Co., spur track, west connected, located 175 feet west of old west switch, length 675 feet. Derail installed.

Conveyor located on tail track east of east switch of run-around track has impaired side and overhead clearance, will not clear high car or engine, and trainmen must not ride side or top of cars east of impaired clearance sign.

**Dolomite.** Look out for poor footing both sides of track on curve just east of plant, and all tracks vicinity plant.

### INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

At certain Interlocking Crossings aspects per Rules 281 through 292 will be supplemented by semaphore arms as follows:

**RULE 281.** A single semaphore arm 60 degrees below horizontal position.  
NAME. CLEAR.  
INDICATION. PROCEED.

**RULE 292.** A single square-ended red semaphore arm in horizontal position.  
NAME. STOP.  
INDICATION. STOP.

**MP 5.8—SP Crossing and MP 5.9—Chestnut Junction, Magnolia Tower.** Interlocking. Towerman on duty.

Eastward: Two-unit home signal 490 feet west of Crossing. Upper unit governs movement to eastward main track; lower unit to westward main track. Single unit dwarf signal 490 feet west of Crossing governs movement from No. 1 track to either eastward or westward main track.

Westward: Three-unit home signal on westward main track 700 feet east of Crossing; upper unit governs movement to SP; middle unit to WP yard; lower unit to OT Interchange. Color-light dwarf signal 490 feet east of Crossing governs movement from eastward main track to WP yard or SP.

Eastward whistle signals:  
Old yard to eastward main track, —.  
to westward main track, — o —.  
No. 1 track, old yard, to eastward main track, o —.  
to westward main track, o — o.

**MP 7.2 SP Crossing. Both Main Tracks. No Interlocking.**

Protected by manually-operated gates. When SP engines or cars are using SP track, gates will be across both WP tracks and indicate STOP to movements on WP in either direction. Trains must approach under control and not proceed over this Crossing unless it is known to be clear.

**MP 7.7 Clinton, SP Crossing. Interlocking. Remote-Controlled.**

Spring switch located 60 feet west of Crossing at end of double track normally lined for westward main track and may be trailed through eastward on eastward main track.

Home signal east of Crossing is a two-unit signal with "S" unit on mast. Upper unit governs movement over Crossing to westward main track; lower unit to eastward main track after spring switch has been lined. The "S" unit must be illuminated before spring switch is changed. Trains or engines moving from eastward main track to westward main track or vice versa must move beyond home signal and receive proper signal indication for reverse movement. If authorized to pass this signal in STOP position, in addition to observing Rule 663, spring switch must be examined and points found to fit properly for movement desired.

That part of paragraph (D) Rule 663, referring to waiting time, is modified to three minutes instead of ten minutes at this Crossing.

**MP 10.6 and MP 10.7 Melrose, SP Crossings. Interlocking. Remote-Controlled.**

That part of paragraph (D) Rule 663, referring to waiting time, is modified to five minutes instead of ten minutes at this crossing.

**MP 13.7 Elmhurst, SP Crossing. Interlocking. Remote-Controlled.**

**RULE 509** also applies. That part of paragraph (D) Rule 663, referring to waiting time, is modified to five minutes instead of ten minutes at this Crossing.

**MP 30.3 Niles Tower, SP Crossing. Interlocking. Towerman on duty.**

**MP 42.7 and MP 42.97 Radum, SP Crossings. Interlocking. Automatic.**

That part of paragraph (D) Rule 663, referring to waiting time, is modified to five minutes instead of ten minutes at this Crossing.

In order to avoid delay to trains on opposing route while doing work at Radum, train must be left outside of interlocking plant circuit governed by home signals.

**MP 74.05, SP Crossing. Interlocking. Automatic.**

While doing work on tracks adjoining this Crossing, train or cars must be left outside of interlocking plant circuit governed by home signals in order to avoid delay to trains on opposing route.

Signals are approach clearing. If train or engine fails to reach home signal within eleven minutes after proceed aspect is displayed, train or engine must expect to find STOP aspect displayed. Secondary clearing circuits extending 500 feet in approach to home signals, must be occupied before signal may again display proceed aspect.

**MP 84.45 SP Crossing. Interlocking. Remote-Controlled. Under control SP train dispatcher.**

When interlocking signals display STOP aspect and reason not apparent, contact SP train dispatcher. When westward home interlocking displays STOP aspect, westward trains will stop to clear Lathrop highway crossing.

WP emergency release box located adjacent to Crossing must be operated only on instructions from SP train dispatcher. If unable to contact SP train dispatcher and no trains can be seen or heard approaching, operate emergency release and observe Rules 663 (B), (C), (D) and 509.

When switching is done on main track at West Lathrop or cross-over west end of Army Supply Depot track, SP train dispatcher must be notified by telephone, length of time to be used so signal lineup may be changed if necessary and must also be notified when switching is completed.

**MP 90.5 Ortega, Hunter Street Line, SP Crossing.** Interlocking. Remote-Controlled.

Movements over SP Crossing will be made in accordance with signal indication.

Westward interlocking signal is also absolute signal. **RULE 509** also applies.

Electric locks on WP main track switch to Hunter Street Line and derail located north side SP Crossing are under control of WP train dispatcher. Both switch and derail are equipped with spring device for trailing movements.

Instructions for handling movements over SP Crossing posted in telephone shelters adjacent to both switch and derail.

**MP 93.2 AT&SF Tower, AT&SF Crossing.** Interlocking. Towerman on duty.

**RULE 509** also applies. Limits of AT&SF Stockton Tower No. 2 have been extended to include that portion of main track and siding on the AT&SF to Commerce Street and signal indications will supersede the superiority of trains for both opposing and following movements on the same track. The movement of trains and engines in these limits will be supervised by the Tower who will issue instructions as may be required. The Tower must be advised in advance of any known condition that will delay the train or engine or prevent it from making usual speed.

Speed limit between Stockton Tower and Commerce Street — 20 MPH.

Following fixed signals and indications are effective in above specified territory:

Red — Stop and communicate with Tower for instructions.

Flashing Red — Proceed prepared to stop short of train, obstruction or switch not properly lined but not exceeding 20 MPH.

Red over Yellow — Same as Flashing Red.

Telephones to AT&SF Tower located in booth at Hazelton Avenue Lead and Commerce Street.

WP train dispatchers telephone located in booth at Hazelton Avenue Lead.

Absolute signal governing movement from Hazelton Avenue Lead may display aspect per Rules 288 or 292 for movement to WP main track at MP 93.2. When aspect per Rule 288 is displayed, proceed to next governing signal.

Signal governing movement from Commerce Street to AT&SF main track or siding may display aspect per Rules 288 or 292. When aspect per Rule 288 is displayed, this authorizes movement to AT&SF main track and siding. When aspect per Rule 292 is displayed, crew must contact tower for instructions.

Next governing signal on AT&SF main track and siding will authorize movement to WP main track. If aspect per Rule 292 is displayed, authority for movement may be obtained through towerman.

Dwarf signals at Center Street govern movement from AT&SF main track and siding to Commerce Street.

Following whistle signals will be observed:

From WP to AT&SF enroute Hazelton Avenue.....000 —  
From WP to AT&SF enroute Commerce Street.....— 0.  
From AT&SF to WP main track and WP main track either  
direction .....

**MP 93.8 Weber Avenue, SP Crossing.** Interlocking. Remote-Controlled.

**RULE 509** also applies. That part of paragraph (D) of Rule 663, referring to waiting time, is modified to five minutes instead of ten minutes at this Crossing.

**MP 95.1 El Pinal, SP Crossing.** Interlocking. Remote-Controlled. Under control of SP train dispatcher.

When interlocking signals display STOP aspect and reason not apparent, contact SP train dispatcher.

SP dispatchers telephone and WP emergency release box located adjacent to crossing. Emergency release must be operated only

on instructions from SP train dispatcher. If unable to contact SP train dispatcher and no trains can be seen or heard approaching, operate emergency release and observe Rules 663 (B), (C), (D) and 509.

**MP 137.5 "X" Street, CCT and SN Crossing.** Interlocking. Remote-Controlled.

Dwarf signals with "S" indicators on Sacramento Valley Tractor Co. spur and west end interchange track. For movement out of spur or interchange track, first contact train dispatcher, then when "S" is illuminated line switch and signal should clear for movement.

**RULE 509** also applies. That part of paragraph (D) of Rule 663, referring to waiting time, is modified to three minutes instead of ten minutes at this Crossing.

**MP 138.0 "R" Street, SP Crossing.** Interlocking. Remote-Controlled.

**RULE 509** also applies. Low dwarf absolute signal bearing letter "A" located 80 feet east of "S" Street on west leg of wye governs movement from west leg of wye to main track only and does not apply to movements to California Builders Supply spur. When switch is lined for movement to California Builders Supply spur, this signal will display aspect per Rule 288.

Interlocking Home signals located 75 feet west and 200 feet east of SP Crossing west leg of wye govern movements over SP Crossing only. When these signals display aspect per Rule 288, movement may be made over SP Crossing at yard speed. If aspect per Rule 288 is not displayed, paragraph (D) Rule 663 will apply and waiting time modified to three minutes.

Switches leading to California Builders Supply spur and CALPAK 15 spur are manually operated. These switches will be lined and locked normally for through movements on west leg of wye. Movements into and out of these spurs can be made without contacting train dispatcher.

Rule 670 is modified at this location to permit reverse movements to be made within interlocking limits provided a portion of switch cut or engine is between interlocking home signals.

That part of paragraph (D) Rule 663, referring to waiting time, is modified to three minutes instead of ten minutes at this Crossing. **RULE 509** also applies.

**MP 152.5 Sankey, SN Crossing and Connection.**

**RULES 509 and 546** apply. Westward absolute signal is a two-unit signal. Upper unit governs movements on WP main track. Lower unit governs movements to SN main track.

**MP 180.2 Binney Junction, SP Crossing.** Remote-controlled. Under control SP train dispatcher.

When interlocking signals display STOP aspect and reason not apparent, contact SP train dispatcher.

SP dispatchers telephone and WP emergency release box located adjacent to crossing. Emergency release must be operated only on instructions from SP train dispatcher. If unable to contact SP train dispatcher and no trains can be seen or heard approaching, operate emergency release and observe Rules 663 (B), (C), (D) and 509.

**MP 384.3 SP Crossing & Conn.** Interlocking. Remote-controlled. When using dual-control switch east end Flanigan siding in hand-throw position, movement must be made in accordance with Rules 545 and 663.

**MP 765.9 NN Crossing.** Interlocking. Remote-controlled. When using dual-control switch west end Shafter siding in hand-throw position movement must be made in accordance with Rules 545 and 663.

Derail installed in NN connection at clearance point for Shafter siding. Connection switch and derail equipped with electric locks which normally are in released position. If lock fails to release when padlock is removed, follow instructions in phone booth nearby.

**MP 912.1 KCC Crossing & Tfr.** Interlocking. Automatic.

**MP 926.3 UP Crossing. Interlocking. Automatic.**

Signals are approach clearing. If movement over crossing is not completed within six minutes after train enters approach circuit, signals may revert to STOP indication. Approach clearing circuits are provided approximately 8450 feet west of eastward interlocking home signal, and 5650 feet east of westward interlocking home signal. Push button time release and instructions for operating are located at crossing.

**MP 926.7 UP Crossing. No Interlocking.**

Trains moving between Pollard Jct. and Buena Vista under provisions of Rule 509 must approach crossing at yard speed, and not proceed across this crossing unless it is known to be clear.

**MP 927.2 Pollard Jct.****MP 927.4 D&RGW Crossing****D&RGW RULE 290.****Aspect.**

Red over red over lunar,  
or red over lunar,  
or lunar.

Interlocking.  
Towerman on duty.  
WP Rules apply.

**Name.**

Restricting.

**Indication.**

Proceed at restricted speed:

- (1) Within ABS to next signal governing in the same direction.
- (2) At interlocking outside ABS through interlocking limits.
- (3) Onto non-signaling track until entire train is through turnout.

**D&RGW RULE 508.** The absence of a light or white light displayed where a color or lunar light should be, on an ABS, must be regarded as the most restrictive indication that can be given by that signal.

The following signals may display lunar aspect: Signal 66A governs movements entering Roper Yard from north and west; Signal 66B governs movements entering spurs lined to south or east-bound track to Roper Yard; Signal 68B governs movements departing Roper Yard to north and west; Signal 72 governs westbound movements out of Roper Yard on the eastbound running track; Signal 74 governs movements west out of Saucer No. 2.

**MP 928.7, UP Crossing. Interlocking. Automatic. WP Rules apply.****SAN JOSE BRANCH****MP 19.6 Valbrick, SP Crossing. No interlocking.****MP 20.2 Willow Glenn, SP Crossing. Interlocking.**

Home signals 225 feet east and west of Crossing. No approach signals.

All trains must come to STOP at home signals, and a member of crew go to Crossing and carefully follow instructions pasted inside of derail lock box at Crossing before proceeding over Crossing.

**MP 22.3 West San Jose, SP Crossing. No interlocking.**

Protected by Stop Boards. All trains, engines and cars shall come to a STOP before proceeding across this Crossing and shall not thereafter proceed until it has been ascertained that no trains, engines or cars are approaching from either direction upon the conflicting route within a distance and at a speed which will in any way render them liable to conflict with the movement about to be made over the Crossing.

Southern Pacific Company shall have precedence in the use of the Crossing.

**YARD OPERATIONS****OAKLAND—BETWEEN CLINTON AND EAST SWITCHING LIMIT****STOCKTON—BETWEEN WEST AND EAST SWITCHING LIMITS****SACRAMENTO—BETWEEN WEST AND EAST SWITCHING LIMITS****OROVILLE—BETWEEN WEST AND EAST SWITCHING LIMITS**

(A) **RULE 547.** Will apply within above limits, with work authority limited to not more than four blocks at any one time. Engine foreman must obtain authority from train dispatcher whenever switching is to be done in a block or blocks and, when switching is completed, engine foreman personally must release block or blocks to the train dispatcher.

When initially entering a block at a switch where there is no signal or electric lock, permission must be obtained from the train dispatcher and three minutes must elapse after switch is opened before engine or cars foul main track.

A yard engine may be granted work authority including a block in which a train is standing (provided such train has not been granted block work authority) for the purpose of switching such train. When such authority is granted signal indication is not required for entrance to the block nor must three minutes elapse after opening switch not protected by signal or electric lock to enter the block provided train to be switched can be seen stopped in the block. If it becomes necessary to switch such train from both ends or for a second engine to enter the same block on end of train opposite the end on which train is to be worked, to perform other work, both engines may be granted authority to work in the same block. Under such arrangements a portion of the train must be left at all times in the block originally occupied and after switching is completed the work authority will be considered cancelled.

(B) Certain switches within above limits are not electrically-locked or signalled. Switch crews using such switches within a block under work authority may leave and return to the main track without additional authority from the train dispatcher provided they have left a car or cars on main track or main track switch open with a man in charge.

If main track has been cleared and switches restored to normal position new authorization must be obtained from the train dispatcher before returning to the main track.

(C) Engine foreman must notify train dispatcher when leaving or intending to leave main track at an intermediate switch except when working under work authority. A block must not be released to the train dispatcher in advance when work authority has been granted but blocks must be released promptly when switching has been completed or specified time has expired in order to avoid delay to trains.

**OAKLAND**

- (a) Block limits are as follows:  
Clinton, MP 7.7 to absolute signal MP 8.8  
Absolute signals MP 8.8 to MP 9.9  
Absolute signal MP 9.9 to west switch Kohler  
West switch Kohler to east switch Kohler  
East switch Kohler to absolute signal MP 13.7.

(b) Train dispatcher must be notified when yard engines intend to enter T.C.S. on main track at Clinton and thereafter signal indications will govern.

**STOCKTON**

- (a) Block limits are as follows:  
East switch Wyche to MP 90  
MP 90 to MP 90.85  
MP 90.85 to west switch Diner Siding  
West switch Diner Siding to east switch Diner Siding  
East switch Diner Siding to AT&SF Crossing  
AT&SF Crossing to Weber Avenue Crossing  
Weber Avenue Crossing to west switch Flora Street  
West switch Flora Street to east switch Flora Street  
East switch Flora Street to North Channel Line  
North Channel Line to west switch Hammer Lane.

(b) Work authority is not required for straight moves to or from SP Transfer or through other switches protected by electric locks.

(c) Main track and inside crossover switches at west end of train yard, MP 90.85, are dual-control. When either switch is placed in hand-throw position the other switch is disconnected from power operation and it is then unnecessary to place it in hand-throw position.

Dwarf signals governing movement on No. 1 lead track over inside switch of power-operated crossover MP 90.85, are absolute signals controlled by the train dispatcher. When these signals display aspect per Rule 288, movement may be made over this switch without placing it in hand-throw position.

These signals may be set to display STOP per Rule 292 by the train dispatcher at any time. If these signals display STOP indication per Rule 292 and reason is not apparent or if call light is lighted on signal house north of main track, contact train dispatcher promptly by telephone.

### SACRAMENTO

(a) Block limits are as follows:

- East switch Pollock to west switch South Sacramento
- West switch South Sacramento to east switch South Sacramento
- East switch South Sacramento to absolute signal SN-CCT Crossing X Street
- Absolute signal SN-CCT Crossing X Street to absolute signal SP Crossing R Street
- Absolute signal SP Crossing R Street to absolute signal west switch Haggin
- Absolute signal west switch Haggin to absolute signal east switch Haggin
- Absolute signal east switch Haggin to absolute signal Globe.

(b) Flashing red aspect displayed by indicator on signal mast in front of yard office South Sacramento authorizes switching movements between absolute signals at east and west ends of train yard without contacting train dispatcher. All movements so authorized must be made at yard speed. It will not be necessary to wait three minutes before entering main track after opening non-locked switches in this block when flashing red aspect is displayed on the indicator.

When the flashing red aspect is extinguished it will terminate the authority and main track must be cleared as promptly as possible. If unable to clear the main track within five minutes, the train dispatcher must be contacted.

(c) Flashing red aspect displayed by indicator on instrument house in vicinity of east train yard is authority to place power switches at east end of train yard in hand-throw position and to make switching movements in block between eastward absolute signals east switch South Sacramento and eastward absolute signal "X" Street. All movements so authorized must be made at yard speed.

When flashing red aspect is extinguished it will terminate switching authority and main track must be cleared promptly and power switches returned to motor position. If unable to clear main track within five minutes, the train dispatcher must be contacted.

Power switch to be used must be placed in hand-throw position before passing absolute signals and must be restored to motor position immediately when switching movements are completed.

(d) In connection with the power-operated derail at east end of No. 1 track, South Sacramento, it is permissible for a yard engine to make an eastward move over it by signal indication, then, without reaching main track, move westward without placing the derail in hand-throw position. However, if there are a series of such moves the derail must be placed in hand-throw position to avoid hazard of train dispatcher changing lineup during the switching operations.

(e) At South Sacramento authority to place power switches at east end in hand-throw position will carry with it authority to switch in the block between east switch South Sacramento and eastward absolute signal at "X" Street and at west end authority to switch in the block between west switch South Sacramento and Pollock, as well as between east and west switches South Sacramento. This means that two yard engines may be granted authority to switch over power switches at each end of South Sacramento at the same

time but, only the yard engine which has specific authority from the train dispatcher to do so may use the main track block between east and west switches. The foregoing not in conflict with instructions in paragraphs (b) and (c).

It will not be necessary for train dispatcher to record switching authority in connection with permission to use these power switches except when authority includes the main track block between east and west switches.

(f) An engine foreman may permit road crews to use his switching authority for moves, such as engine to or from train, etc., or other switch crews crossing over, but must insure that there is no hazard by reason of his own switching operations. Train dispatcher may not issue switching authority (including operation of power switches in hand-throw position) to more than one person at a time (except to switch both ends of a train).

### OROVILLE

(a) **RULE 547.** Train dispatcher may grant permission to different engines in different parts of the same block to operate a dual-control switch by hand or use the main track for switching and will not be required to protect work limits by absolute signals in each direction or apply red tags to the signal levers. However, he must not grant such permission if a train or engine is moving by signal indication in the block toward point where work is to be done or is closely approaching such block.

(b) Switch to house track, Oroville, operates derails on east end of house track and east end of team track simultaneously.

(c) **Oroville Yard.** Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into yard will indicate to trains or engines the number of the track on which they are to yard their trains.

When indicator is dark yardmaster must be contacted at head-in switch to obtain track assignment unless previously received.

(d) Main track and inside crossover switches at east end of train yard, MP 203.75, are dual-control. When either switch is placed in hand-throw position the other switch is disconnected from power operation and it is then unnecessary to place it in hand-throw position.

Signals governing movement over inside dual-control switch are controlled by the train dispatcher. When these signals display aspect per Rule 288, movements may be made over this switch without placing it in hand-throw position. If signals display STOP aspect per Rule 292 and reason is not apparent or if call light is lighted on adjacent telephone booth, train dispatcher must be contacted promptly.

(e) East drill track switch is located just west of Mitchell Ave. crossing. Switch is electrically-locked.

Ehman Spur switch leading from east drill track is located 379 feet west of east drill track switch and when in normal position it is lined for Ehman Spur, also electrically-locked and serves as derail.

Electric locks on both these switches work simultaneously but switches are not pipe-connected to one another and must be hand operated separately.

### SACRAMENTO NORTHERN CREWS

Eastward SN trains and engines at Haggin must contact train dispatcher for instructions to move Haggin to Globe. It will not be necessary to obtain similar instructions at SN-WP connection at Sankey for movement beyond if leaving signal on SN displays a proceed aspect.

When westward SN trains or engines at Marysville have contacted train dispatcher for instructions to move Marysville to SN-WP connection at MP 175.63 or Sankey, it will not be necessary to obtain similar instructions at Globe for movement beyond, except to obtain permission to operate electric lock.

### SANKEY

Eastward absolute signal on SN is a two-unit signal. Upper unit governs movements to WP main track. Lower unit governs movements on SN main track. WP Operating Rules 509 and 546 apply.

**MARYSVILLE**

(a) All switches for entrance to WP main track are governed by absolute signals or electric locks. Movements of SN trains or yard engines will be made by signal indication or by permission of the WP train dispatcher. WP Rules will apply.

(b) **RULE 547.** Governs switching operations. Block limits are: Absolute signal at SN Connection MP 175.63 to west siding switch Marysville.

West siding switch Marysville to east siding switch Marysville.

East siding switch Marysville to west siding switch Tambo.

Engine foreman must obtain authority from train dispatcher whenever switching is to be done in a block or blocks and, when switching is completed, engine foreman personally must release block or blocks to the train dispatcher.

A yard engine may be granted work authority including a block in which a train is standing (provided such train has not been granted block work authority) for the purpose of switching such train.

Work authority is not required for straight moves across WP main track through switches protected by electric locks.

(c) Instructions for operating electric locks are posted in telephone booths adjacent thereto.

Permission must be obtained from train dispatcher before electric locks can be released and he must be notified after movement is completed and electric lock has been locked.

(d) Switch point derail on California Packing Corp. Spur 172 feet west of main track switch at MP 179.2.

**YARD LIMITS**

West MP	East MP
WP Mole	Oakland ..... 7.7
BR-15.25	San Jose ..... BR-23.0
K-38.25	Westwood ..... SP-409.45
	(2¼ miles west of Mason)
K-111.2	Bieber ..... GN-86.5
	(3.1 miles east of station)
BI-32.43	Reno ..... End of Branch
642.96	Carlin ..... 647.13
663.6	Elko ..... 666.76
926.06	Salt Lake City ..... Yard limit signs

**SWITCHING LIMITS**

West MP	East MP
7.7	Oakland ..... 13.78
28.5	Fremont ..... 31.38
	Niles Junction (San Jose Branch) ..... BR-0.82
70.14	Tracy ..... 73.05
89.34	Stockton ..... 96.59
133.4	Sacramento ..... 140.69
177.62	Marysville ..... 180.24
201.44	Oroville ..... 210.04
280.0	Keddie ..... 282.47
	Keddie (4th Subdivision) ..... K-0.48
319.94	Portola ..... 323.09
437.03	Gerlach ..... 439.45
530.02	Winnemucca ..... 533.6
764.96	Shafter ..... 767.73
805.28	Wendover ..... 808.31
926.06	Salt Lake City .....

**WATCH INSPECTORS**

LOCATION	NAME	TITLE
San Francisco.....	K. I. Dunlap.....	Manager of Time Service
San Francisco.....	A. Solar.....	Watch Inspector
Oakland.....	Evan J. Sawyer.....	Watch Inspector
Oakland.....	Don J. Allphin.....	Watch Inspector
Oakland.....	Leslies Jewelry.....	Watch Inspector
San Lorenzo.....	Kurt J. Prosch.....	Watch Inspector
Fremont.....	Hoyle Easley.....	Watch Inspector
San Jose.....	Frank Scholes.....	Watch Inspector
Stockton.....	W. K. Bank & Son.....	Watch Inspector
Sacramento.....	Grebitus & Son.....	Watch Inspector
Roseville.....	Verne Martin.....	Watch Inspector
Marysville.....	John J. Fargo.....	Watch Inspector
Oroville.....	Phillip K. Schmidt.....	Watch Inspector
Quincy.....	C. C. Foltz.....	Watch Inspector
Reno.....	R. Hertz & Bros.....	Watch Inspector
Winnemucca.....	Bosch & Son.....	Watch Inspector
Elko.....	W. N. Blohm.....	Watch Inspector
Salt Lake City.....		
460 West 2nd South St.	H. B. Miller Co.....	Watch Inspector
Salt Lake City.....		
12 W. Broadway.....	Wilfred Burrell.....	Watch Inspector



## RAILROAD SURGEONS

LOCATION	NAME	TITLE
San Francisco	Dr. G. F. Cushman	Chief Surgeon
San Francisco	Dr. C. E. Smith	Asst. Chief Surgeon
San Francisco	Dr. Ruth Fleming	Local Surgeon
San Francisco	Dr. R. H. Bacon	Local Surgeon
San Francisco	Dr. F. D. Fellows	Aurist
San Francisco	Dr. Wm. H. Spencer	Oculist
San Francisco	Dr. W. J. Ferguson	Oculist
Oakland	Dr. J. P. Evans	Local Surgeon
Oakland	Dr. R. F. Westerfield	Local Surgeon
Oakland	Dr. M. O. Kling	Local Surgeon
Oakland	Dr. J. D. Rosen	Local Surgeon
Oakland	Dr. L. L. Coleman	Local Surgeon
Oakland	Dr. Joseph R. Carlisle	Oculist
Hayward	Dr. H. C. Crockett	Local Surgeon
Hayward	Dr. Bruce Fisher	Local Surgeon
Fremont	Dr. E. C. Grau	Local Surgeon
Pleasanton	Dr. Harold J. Shanks	Local Surgeon
San Jose	Dr. R. A. Larocca	Local Surgeon
San Jose	Dr. W. A. Johnson	Local Surgeon
Tracy	Dr. John C. Kimball	Local Surgeon
Tracy	Dr. John V. Hume	Local Surgeon
Stockton	Dr. E. G. Hermosillo	Local Surgeon
Stockton	Dr. P. H. McHugh	Local Surgeon
Stockton	Dr. H. F. Quinn	Local Surgeon
Stockton	Dr. V. S. Solis	Local Surgeon
Stockton	Dr. O. R. Vannucci	Local Surgeon
Stockton	Dr. J. D. Wilson	Local Surgeon
Stockton	Dr. D. R. Powell	Oculist
Stockton	Dr. Wm. H. Plageman	Oculist
Lodi	Dr. W. G. Fessler	Local Surgeon
Lodi	Dr. S. W. Leiske	Local Surgeon
Sacramento	Dr. D. O. Kilroy	Local Surgeon
Sacramento	Dr. P. W. Frame, Jr.	Local Surgeon
Sacramento	Dr. A. Calkin	Local Surgeon
Sacramento	Dr. B. A. Daley	Local Surgeon
Sacramento	Dr. R. M. Zinky	Local Surgeon
Sacramento	Dr. John A. Berg	Oculist
Sacramento	Dr. R. L. Alexander	Oculist
Sacramento	Dr. J. J. Fisher	Oculist
Marysville	Dr. P. B. Hoffman	Local Surgeon
Oroville	Dr. Chas. Benninger, Jr.	Local Surgeon
Oroville	Dr. C. Craviotto	Local Surgeon
Oroville	Dr. J. E. Patrick	Local Surgeon
Oroville	Dr. E. S. Fortner, Jr.	Local Surgeon
Oroville	Dr. W. H. Bunstock	Local Surgeon
Oroville	Dr. R. D. Bethel	Oculist
Quincy	Dr. D. J. Bleiberg	Local Surgeon
Quincy	Dr. D. H. Mansell, Jr.	Local Surgeon
Quincy	Dr. H. T. Unsell	Local Surgeon
Quincy	Dr. M. Christian	Local Surgeon
Quincy	Dr. R. D. Beye	Local Surgeon
Greenville	Dr. W. C. Batson	Local Surgeon
Westwood	Dr. H. G. Levin	Local Surgeon
Bieber	Dr. A. O. Meier	Local Surgeon
Portola	Dr. C. W. Brown	Division Surgeon
Portola	Dr. W. S. Bross, Jr.	Asst. Division Surgeon
Reno	Dr. G. O. Bradley	Local Surgeon
Reno	Dr. G. G. Lenz	Local Surgeon
Reno	Dr. G. R. Magee	Oculist
Reno	Dr. G. F. Magee	Oculist
Winnemucca	Dr. K. L. Hartoch	Local Surgeon
Winnemucca	Dr. C. D. Lusty	Local Surgeon
Elko	Dr. T. K. Hood	Local Surgeon
Elko	Dr. H. S. Collett	Local Surgeon
Elko	Dr. L. A. Moren	Local Surgeon
Elko	Dr. J. M. Read	Local Surgeon
Elko	Dr. E. H. Bastien	Oculist
Elko	Dr. G. T. Manilla, Jr.	Local Surgeon
Wells	Dr. B. Brian Tilby	Local Surgeon
Tooele	Dr. T. M. Aldous	Local Surgeon
Salt Lake City	Dr. E. V. Long	Local Surgeon
Salt Lake City	Dr. H. B. Harmon	Local Surgeon
Salt Lake City	Dr. J. H. Quinn	Oculist
Salt Lake City	Dr. B. J. Fairbanks	Oculist

## SPURS AND COMMERCIAL TRACKS

STATIONS	Mile Post	Connected	Capacity
ESTUDILLO	16.5	1 E	11
CARPENTER	24.9	Both Ends	39
UNION CITY	25.9	Both Ends	..
DECOTO	26.6	Both Ends	18
PABRICO			
Pacific States Steel	27.8	Both Ends	75
EBERLY	28.9	Both Ends	20
RADUM	43.4	Both Ends	33
RHODES and JAMIESON	44.6	1 E	50
TREVARNO			
Interchange	49.0	1 W	24
Drill track	49.16	1 W	..
LOX	50.3	1 W	30
LYOTH			
U.S.Q.M. & SP Conn.	73.8	1 W	..
(Spur leads from east end			
Tracy siding)			
RHODES	75.6	Both Ends	26
ARMY SUPPLY DEPOT			
(LATHROP)	85.76	Both Ends	130
FRENCH CAMP	88.35	Both Ends	29
TERMINOUS JCT.	105.3		
Track 1		1 W	25
Track 2		1 W	70
VILLINGER	107.8	1 W	13
LAS VINAS	109.5	1 W	24
GLANNVALE	118.5	1 W	13
ALBERT	127.2	1 W	9
BOMBAY	146.6	1 E	13
VISTA ROBLES	198.8	1 E	33
ZEPHYR	210.4	1 W	..
INTAKE	232.36	1 E	..
JARBO	236.1	Both Ends	17
GRIZZLY	246.1	1 E	11
ROCK CREEK	249.1	1 E	5
DALITE	256.8	1 W	12
GRAY'S FLAT	272.6	1 W	74
INDIAN CREEK	3.1	1 W	14
CHENEY	13.9	1 E	16
CHENEY (South)	13.9	Both Ends	7
BOX	15.5	1 W	34
POISON LAKE	70.4	1 W	40
LITTLE VALLEY			
LUMBER CO.	95.4	1 W	12
SULPHUR	474.5	1 W	30
KNIGHT	570.1	1 E	6
RUSSELL	582.5	1 E	6
JENKINS	592.1	1 E	12
DUGGAN	631.9	1 E	20
CARLIN	644.6	1 E	25
TONKA	650.1	1 E	28
TULASCO	708.8	1 E	20
TOBAR	733.5	Both Ends	50
BLAIR	808.7	1 W	90
SILSBEE	811.6	1 W	60
ARAGONITE	861.5	1 E	5
MARBLEHEAD	870.8	Both Ends	36
TIMPIE	885.7	Both Ends	75
NEW SOLAR	893.4	1 W	52
SPRAY	906.3	1 E	110
LAGO	907.8	Both Ends	80
GARFIELD PIT	911.7	Both Ends	122
PHOSPHATE	913.2	1 E	..
SALTUS	915.0	Both Ends	5
TERMINAL	922.1	1 W	20
GERSTNER	926.33	1 W	10
LANG	926.34	1 W	10
FISHER	926.70	1 E	25
GENERAL CABLE	927.15	1 E	5

## TRACKS ON WHICH ENGINE MOVEMENTS RESTRICTED

Location and Description of Track	Class of Engine	Prohibited
<b>Radum</b> .....	All .....	Beyond frog on all tracks except 1 and 2.
<b>Stockton</b> N. Channel Line* .....	All Road ....	Beyond frog.
<b>Marysville</b> Old SN freight Connections .....	All .....	Beyond frog.
<b>Craig, Outfit Spur</b> .....	All .....	Beyond restricting sign.
<b>Oroville</b> Ehman Spur .....	All, except one unit ..	Beyond restricting sign.
<b>Belden, House Spur</b> .....	All .....	Beyond MP 260.
<b>Westwood</b> Standard Oil Spur** .....	All .....	Beyond 220 feet from frog.
<b>Poison Lake</b> Log Loading Track .....	All .....	Beyond 1125 feet from derail.
<b>Portola, scale track</b> .....	All .....	Live rail.
<b>Portola, scale track</b> .....	All, except one unit..	Dead rail.
<b>Sulphur</b> .....	All .....	Beyond 300 feet east of ore ramp.
<b>Jungo</b> .....	All .....	West of loading ramp No. 1 or 2 spur.
<b>Deeth, stock track</b> .....	All .....	Beyond 50 feet from frog.
<b>Wells, stock track</b> .....	All .....	Beyond 300 feet from frog.
<b>Wendover, Army Base track</b>	All .....	Beyond WP ownership.
<b>Blair, scale track</b> .....	All .....	Live rail.
<b>Spray</b> .....	All over 4 units ....	Beyond frog.
<b>Saltus</b> .....	All .....	Morton Salt RR.
<b>Terminal</b> .....	All .....	Beyond 2nd gate.
<b>Fisher Brewery</b> .....	All, except one unit..	Beyond frog.
<b>Roper Yard scale, track 21.</b>	All .....	Live rail.

\* All yard engines, except S-50 class (501-511), must be separated from any loaded cars by at least 1 empty while handling cars over Smith Canal drawbridge, North Channel Line, Stockton.

\*\* Necessary to have hold of at least 4 cars to switch Standard Oil spur.

## BRANCHES

Location and Description of Track	Class of Engine	Prohibited
<b>Tracy Branch</b> Spur MP 0.5 .....	All .....	Beyond frog.
<b>Reno, scale track</b> .....	All .....	Live rail.
<b>Loyalton Branch</b> .....	All over 2 units	Entire branch.
<b>Loyalton,</b> Standard Oil Co. spur ....	All, except one unit..	Beyond frog.
<b>Ellerbeck Branch</b> .....	All over 2 units ....	Between Flux and Dolomite.

## ADDITIONAL RESTRICTIONS ON SPURS FROM SIDINGS AND MAIN TRACK BETWEEN PORTOLA AND ROPER

Except as shown below, engines or cars, other than empty cars, outfit cars, or equipment cars in outfits, are restricted beyond 150 feet from frog without authority.

EXCEPTIONS: Hawley, Scotts, Doyle, Herlong, Floka, Antelope, Dunphy, Wells house track, Tobar, Shafter, Blair, Silsbee, Aragonite, Marblehead, Timpie, New Solar, Spray, Lago, Garfield Pit, Phosphate, Saltus, Terminal, Gerstner, Lang, Fisher, General Cable.

## TONNAGE RATING

Engine Number	1st Sub-division	2nd Sub-division	3rd Sub-division	4th Subdivision		San Jose Branch			
				Keddle to Greenville and Almanor to Bieber	Greenville to Almanor				
<b>Eastward</b>									
801-805	875	1985	605	415	285	875			
904-912	1825	2500	1095	835	585	1825			
913-924	2275	3060	1375	1080	810	2275			
501-511	1050	2645	880	600	435	2800			
551-564	1450	3340	1150	790	535	3160			
581-585	1450	3340	1150	790	535	3160			
601-606									
701-713	2350	3925	1500	1175	875	3340			
725-732									
801-D									
2001-2010	2600	4175	1750	1425	1125	3590			
3001-3022									
<b>Westward</b>									
801-805	780	1985	Descending grade No tonnage limit	350	765	880			
904-912	1375	2725		755	1485	1825			
913-924	1710	3400		1035	1825	2275			
501-511	880	2645		530	1350	2800			
551-564	1150	3340		660	1855	3160			
581-585	1150	3340		660	1855	3160			
601-606									
701-713	1715	4150		1125	2350	3340			
725-732									
801-D									
2001-2010	1965	4400	1375	2600	3590				
3001-3022									
Engine Number	5th Sub-div.	6th Sub-div.	7th Subdivision		8th Sub-div.	Reno Branch	Loyalton Branch	Warner Branch	
<b>Eastward</b>									
801-805	920	1530	770		875	470		400	
904-912	1500	2840	1500		1500	925		700	
913-924	1850	3400	1850		1850	1150		870	
501-511	880	2645	880		880	800	2645	435	
551-564	1150	3340	1150		1150	900	3340	535	
581-585	1150	3340	1150		1150	1050	3340	535	
601-606									
701-713	1825	4150	1825		1825	1500	4150	870	
725-732									
801-D									
2001-2010	2075	4400	2075		2075	1750	4400	1120	
3001-3022									
<b>Westward</b>									
801-805	800	1530	620		750	350		1530	
904-912	1500	2840	1150		1500	585		2275	
913-924	1850	3400	1540		1850	810		2840	
501-511	880	2645	880		1000	435	2645	1900	
551-564	1150	3340	1150		1250	550	3340	2350	
581-585	1150	3340	1150		1250	700	3340	2350	
601-606									
701-713	1825	4150	1715		1825	1825	1000	4150	2835
725-732									
801-D									
2001-2010	2075	4400	1965		2075	2075	1250	4400	3085
3001-3022									

Ratings shown above are for one unit engine, and for actual tonnage, and based on maximum grade each subdivision.

Between points where grades are less than maximum, greater tonnage can be handled.

When units 801-A and 802-A are equipped with freight gears, they have the same tonnage rating as one unit of a 913-924 class engine.

SPEED RESTRICTIONS IN MILES PER HOUR	1 Passenger Trains		2 Special Freight Trains		3 Other Freight Trains	
	BETWEEN					
	Maxi- mum	Restric- tions	Maxi- mum	Restric- tions	Maxi- mum	Restric- tions
<b>First Subdivision</b>						
Chestnut Jct. and Oak St., Oakland..	15	..	15	..	15	..
Over Washington and Franklin Streets, Oakland .....	..	8	..	8	..	8
Oak St., Oakland and SP Crossing, MP 10.6 .....	20	..	20	..	20	..
MP 7.2 over SP Crossing .....	..	10	..	10	..	10
*MP 7.7 over SP Crossing, Clinton ..	..	15	..	15	..	15
MP 9.5 just west 29th Ave. and MP 9.8 just east of Fruitvale Ave. ....	..	10	..	10	..	10
*SP Crossing MP 10.6 and East Oak- land Swg. Limit .....	35	..	35	..	25	..
*MP 13.7 over SP Crossing .....	..	30	..	30	..	..
East Oakland Swg. Limit and MP 29.7 Bridge 14.55 just west of San Leand- ro depot and Williams St., 5 blocks east of depot. ....	70	..	60	..	50	..
Over "A" and "B" Streets, Hayward ..	..	20	..	20	..	15
MP 23.93 and MP 24.31 .....	..	45	..	45	..	30
MP 29.25 and MP 29.6 on curve .....	..	50	..	45	..	35
MP 29.7 and MP 39 .....	..	45	..	40	..	30
*MP 30.3 over SP Crossing .....	55	..	50	..	40	..
MP 30.3 and MP 35 on curves and through Tunnel 1 .....	..	30	..	25	..	20
MP 36.4 and MP 38.7 on curves and at SP underpass .....	..	45	..	40	..	30
MP 39 and MP 52 .....	70	..	60	..	50	..
MP 39.9 and MP 40.3 on curve .....	..	60	..	55	..	45
City Limits, Pleasanton .....	..	50	..	45	..	40
*MP 42.7 and MP 42.97 SP Crossings City Limits, Livermore .....	..	50	..	40	..	35
MP 49.6 and MP 50.1 on curve and at SP underpass .....	..	45	..	45	..	45
MP 51.5 and MP 51.9 on curve .....	..	60	..	55	..	..
MP 52 and MP 60.5 .....	..	60	..	55	..	..
MP 52.3 and MP 58.2 on curves .....	50	..	45	..	35	..
MP 60.5 and MP 68 .....	..	45	..	40	..	..
MP 61.8 and MP 62.1 on curve .....	79	..	60	..	50	..
MP 63.3 and MP 67 on curves .....	..	60	..	55	..	45
MP 67.3 and MP 68 on curve .....	..	50	..	45	..	40
MP 68 and Stockton Depot .....	..	..	..	..	..	45
MP 71.8 and MP 72.2 on curve .....	79	..	60	..	60	..
*MP 74.05 SP Crossing .....	..	70	..	..	..	50
MP 79.8 and East End Bridge 80.28 ..	..	55	..	50	..	40
MP 81.8 and MP 83.4 on curve .....	..	50	..	40	..	30
*MP 84.45 SP Crossing .....	..	70	..	..	..	50
MP 88.3 and MP 89.9 on curves .....	..	55	..	50	..	40
MP 90.4 and MP 90.55 on curve .....	..	..	..	..	..	50
MP 90.55 and MP 92.4 .....	..	50	..	45	..	35
MP 92.4 and Charter Way on curves ..	..	..	..	50	..	40
Charter Way and Stockton Depot, Main Track .....	..	50	..	45	..	30
Other Tracks .....	..	20	..	20	..	20
..	..	12	..	12	..	12
<b>Second Subdivision</b>						
Stockton Depot and MP 122 .....	70	..	55	..	50	..
Stockton Depot and MP 94.2, Main Track .....	..	20	..	20	..	20
Other Tracks .....	..	12	..	12	..	12
MP 94.2 and MP 95.1 .....	..	40	..	40	..	30
*MP 95.1 over SP Crossing .....	..	40	..	40	..	30
MP 95.1 and MP 97.3 .....	..	..	..	50	..	45
MP 116.07 Mokelumne River Bridge Over Bridges 116.28 and 116.37 .....	..	45	..	40	..	35
MP 122 and MP 133.5 .....	..	45	..	40	..	35
MP 133.5 and MP 140.1 .....	55	..	40	..	35	..
MP 135.95 and "C" St., Sacramento "C" St. and MP 140.1 .....	60	..	60	..	40	..
..	..	15	..	15	..	15
..	..	20	..	20	..	20

SPEED RESTRICTIONS IN MILES PER HOUR	1 Passenger Trains		2 Special Freight Trains		3 Other Freight Trains	
	BETWEEN					
	Maxi- mum	Restric- tions	Maxi- mum	Restric- tions	Maxi- mum	Restric- tions
<b>Second Subdivision (continued)</b>						
MP 140.1 and MP 197 .....	70	..	60	..	50	..
MP 140.1 and MP 142 .....	..	..	..	..	..	45
MP 177.5 and MP 179.1 .....	..	45	..	40	..	30
*MP 180.2 SP Crossing .....	..	50	..	45	..	35
MP 197 and Oroville .....	79	..	60	..	50	..
MP 201.7 and MP 201.9 on curve ..	..	45	..	40	..	35
MP 202 and MP 202.5 on curve .....	..	70	..	..	..	..
MP 204.7 and MP 205.1 on curve .....	..	50	..	45	..	35
<b>Third Subdivision</b>						
Oroville and MP 232.2 .....	40	..	35	..	35	..
MP 232.2 and MP 273.5 .....	35	..	30	..	30	..
MP 232.2 and MP 238.9 .....	..	30	..	..	..	25
MP 244.2 and MP 244.94 .....	..	30	..	..	..	25
MP 248.6 and MP 252.57 .....	..	30	..	..	..	25
Over Bridge 252.6 .....	..	25	..	20	..	20
MP 252.65 and MP 271.5 .....	..	30	..	..	..	25
MP 273.5 and MP 275.3 .....	40	..	30	..	30	..
MP 275.3 and MP 282.9 .....	30	..	25	..	25	..
West wye switch, Keddie .....	..	..	..	..	..	15
MP 282.9 and MP 320.3 .....	45	..	35	..	30	..
MP 282.9 and MP 283.76 .....	..	35	..	..	..	..
MP 286.04 and MP 287.05 .....	..	35	..	..	..	..
MP 287.05 and MP 287.65 .....	..	40	..	..	..	..
MP 288.94 and MP 291.85 .....	..	40	..	..	..	..
MP 291.85 and MP 294 .....	..	35	..	..	..	..
MP 294 and MP 295.1 .....	..	35	..	..	..	25
MP 295.1 and MP 296.15 .....	..	40	..	..	..	..
MP 298.53 and MP 299.75 .....	..	30	..	30	..	25
MP 300.82 and MP 300.97 .....	..	35	..	..	..	..
MP 304 and MP 305.17 .....	..	35	..	..	..	..
MP 306.11 and MP 307.25 .....	..	40	..	..	..	..
MP 310.7 and MP 314.25 .....	..	40	..	..	..	..
MP 314.25 and MP 314.35 .....	..	35	..	..	..	..
MP 316.1 and MP 316.98 .....	..	35	..	30	..	..
MP 320.3 and Portola .....	20	..	20	..	20	..
<b>SPEED RESTRICTIONS</b>						
IN MILES PER HOUR						
BETWEEN						
<b>Fourth Subdivision</b>						
Keddie and Moccasin .....	35	..	25	..	..	..
Moccasin and West switch Greenville ..	40	..	40	..	..	..
West switch Greenville and MP 17... West switch Greenville and MP 17 westward trains .....	35	..	35	..	..	25
MP 17 and Clear Creek Jct. ....	..	..	..	25	..	..
Clear Creek Jct. and Mason .....	35	..	30	..	..	..
Clear Creek Jct. and Westwood, on curves .....	..	25	..	25	..	..
Mason and Halls Flat .....	45	..	45	..	..	..
Halls Flat and Pit River .....	35	..	25	..	..	..
Halls Flat and Pit River, on curves ..	..	25	..	..	..	..
Pit River and Bieber .....	40	..	30	..	..	..

SPEED RESTRICTIONS IN MILES PER HOUR BETWEEN	1 Passenger Trains		2 Special Freight Trains		3 Other Freight Trains	
	Maxi- mum	Restri- ctions	Maxi- mum	Restri- ctions	Maxi- mum	Restri- ctions
	<b>Fifth Subdivision</b>					
Portola and MP 321.7	20		20		20	
MP 321.7 and MP 324.1	55		50		40	
MP 323.4 and MP 323.7 on curve		40		35		30
MP 324.1 and MP 341.5	79		65		55	
MP 341.5 and MP 352.7	60		55		45	
MP 341.5 and MP 342.5 on curve					40	
MP 343.7 and MP 343.9 on curve		50		45		40
MP 345.5 and MP 346.8 on curves		55		50		
MP 347.5 and MP 348.5 on curves		50		45		35
MP 352.7 and MP 363.2	70		65		55	
MP 352.7 and MP 353 on curve		65		60		45
MP 363.2 and MP 384.2	79		65		55	
MP 384.2 and MP 390.7	65		60		50	
*MP 384.3 SP Crossing	40		30		30	
MP 384.4 WP— SP Conn. turnout	20		20		20	
MP 389.8 and MP 390.3 on curve					45	
MP 390.7 and MP 398.5	60		50		40	
MP 390.7 and MP 392.1 on curves		45		40		35
MP 393.5 and MP 394.2 on curves		50		45		
MP 395.3 and MP 397.8 on curves		45		40		35
MP 398.5 and MP 404.7	65		60		50	
MP 398.8 and MP 399.3 on curves					45	
MP 404.7 and MP 488.3	79		60		55	
MP 429.5 and MP 430.3 on curve		60		55		50
MP 433.5 and MP 434.1 on curve		60		55		50
MP 480.2 and MP 481.2 on curves		70		50		50
MP 483.6 and MP 483.9 on curves		65		50		50
MP 487.7 and MP 488 on curves		70		50		50
MP 488.3 and MP 496	60		55		40	
MP 489.9 and MP 491.2 on curves		50		45		
MP 492.4 and MP 492.7 on curves		55		50		
MP 493.9 and MP 494.9 on curves		45		40		35
MP 495.3 and MP 495.6 on curve		55		50		
MP 496 and Winnemucca	79		65		60	
MP 510 and MP 510.4 on curve		70				55
MP 513 and MP 513.2 on curve						55
MP 519.9 and MP 520.6 on curve						55
MP 521 and MP 521.9 on curves		65		60		50
MP 523.1 and MP 523.4 on curve						55
MP 524.8 and MP 525 on curve						55
MP 527.5 and MP 527.7 on curve						55
MP 530.4 and MP 530.7 on curve						55
MP 532.1 and MP 532.5 on curve						45
<b>Sixth Subdivision</b>						
Winnemucca and MP 628.3	79		65		60	
Using turnouts, Weso		30		25		25
MP 536.7 and MP 537.1		75				
MP 625.5 and MP 625.8		70				
MP 628.3 and MP 638.3	50		45		40	
MP 628.3 and MP 629.1						35
MP 635.5 and MP 636.8						35
MP 638.3 and MP 648.3	79		65		60	
West Carlin and East Carlin		35		20		20
Using turnouts, West and East Carlin		20		15		15
MP 648.3 and MP 651	65		60		50	
MP 650.4 and MP 651		50		50		40
MP 651 and MP 652.6	70		65		50	
MP 652.6 and Elko	79		65		60	
MP 664.4 and MP 665.4 (Elko Yard)		35		15		15
<b>Seventh Subdivision</b>						
Elko and Alazon	79		65		60	
MP 665.4 and MP 666.4 (Elko Yard)		35		15		15
MP 673.9 and MP 674.8						55
MP 674.8 and MP 681.1		55		50		45
Using turnouts, Alazon		30		25		25
Alazon and MP 720.5	70		60		50	
MP 715.2 and MP 717.1 on curves		65				45
MP 720.5 and MP 735	79		65		55	

SPEED RESTRICTIONS IN MILES PER HOUR BETWEEN	1 Passenger Trains		2 Special Freight Trains		3 Other Freight Trains	
	Maxi- mum	Restri- ctions	Maxi- mum	Restri- ctions	Maxi- mum	Restri- ctions
	<b>Seventh Subdivision (continued)</b>					
MP 735 and MP 748	79		65		60	
MP 748 and MP 753.2	79		65		55	
MP 753.2 and MP 755.2	45		45		30	
MP 755.2 and MP 759.8	79		60		55	
MP 755.5 and MP 755.8 on curves					40	
MP 758.4 and MP 758.7 on curve		60		55		45
MP 759.4 and MP 759.8 on curve		75				50
MP 759.8 and MP 768.2	79		65		60	
*MP 765.9 NN Crossing		75				40
MP 768.2 and MP 773	70		65		55	
MP 771 and MP 771.5 on curve						45
MP 772.7 and MP 773 on curve		65		60		45
MP 773 and MP 774	70		60		45	
MP 774 and MP 775.3	79		60		60	
MP 775.3 and MP 782	55		50		40	
MP 776.6 and MP 778.1 on curves		40		35		30
MP 778.7 and MP 779.2 on curve		35		30		25
MP 782 and MP 784.5	45		40		30	
MP 782 and MP 782.7 on curve		35		30		25
MP 783.5 and MP 784.5		35		30		25
MP 784.5 and Wendover	70		65		55	
MP 784.6 and MP 784.9		60		55		40
MP 785.1 and MP 786.5		65		60		45
MP 795.4 and MP 795.7		55		50		40
MP 796 and MP 796.4		65		55		45
MP 799.5 and MP 800		45		40		35
MP 805.3 and MP 806 on curve						50
<b>Eighth Subdivision</b>						
Wendover and MP 856.6	79		60		60	
MP 806.5 and MP 807 on curve						50
MP 849.7 and MP 849.8 on curve						55
MP 856.6 and MP 880	79		60		55	
MP 856.6 and MP 856.9 on curve		65				50
MP 859.7 and MP 860 on curve		70				
MP 860.9 and MP 861.1 on curve		70				
MP 862.7 and MP 863.3 on curve		70				
MP 864.3 and MP 864.7 on curve		65				40
MP 865.2 and MP 866.1 on curve		70				
MP 866.8 and MP 867.5 on curve		70				
MP 867.5 and MP 868.4 on curve		60		55		45
MP 868.5 and MP 869.3 on curve		65				50
MP 869.8 and MP 872 on curve		70				
MP 878.7 and MP 879 on curve		60		55		45
MP 880 and MP 901	79		65		60	
MP 886.5 and MP 886.7 on curve		70				50
MP 901 and MP 908.1	79		60		60	
MP 901 and MP 902.1 on curve						55
MP 907.7 and MP 908.1 on curve						55
MP 908.1 and MP 925.7	79		65		60	
MP 909.9 and MP 910.4 on curve						50
MP 911.2 and MP 911.3 on curve						55
*MP 912.1 KCC Crossing		65		60		45
MP 912.3 and MP 912.6 on curve		65		60		45
MP 915.1 and MP 915.6 on curve		70				55
MP 920.6 and MP 920.9 on curve						55
MP 925.3 and MP 925.7				40		40
MP 925.7 and Pollard Jet	20		20		20	
Pollard Jet, and Salt Lake City (U.D.)	12		12		12	
Pollard Jet, and Roper Yard			15		15	

\*Trains approaching interlocked crossings must reduce to speed shown before engine passes home signal.

Between Chestnut Jct. and Oroville, and between Portola and Salt Lake, passenger trains containing conventional equipment equipped with passenger trucks may make speed shown in Column 1, and passenger trains with such equipment not equipped with passenger trucks will not exceed speeds shown in Column 2.

SPEED RESTRICTIONS IN MILES PER HOUR BETWEEN	1 Passenger Trains		2 Freight Trains	
	Maxi- mum	Restric- tions	Maxi- mum	Restric- tions
	<b>San Jose Branch</b>			
Niles Jct. and MP 7.5 .....	35	..	35	..
MP 0.0 and MP 0.3 .....	..	15	..	15
MP 7.5 and MP 10.5 .....	30	..	25	..
MP 10.5 and city lmts. San Jose MP 15.7 .....	20	..	20	..
MP 15.7 and MP 23 within city limits, San Jose .....	12	..	12	..
<b>Tracy Branch</b> .....	12	..	12	..
<b>Loyalton Branch</b> .....	15	..	15	..
<b>Reno Branch</b>				
Reno Jct. and MP 30 .....	25	..	25	..
Martin Spur .....	..	10	..	10
MP 30 and Reno .....	15	..	15	..
SP-WP Interchange Connection, Reno .....	..	5	..	5
<b>Ellerbeck Branch</b> .....	15	..	15	..
<b>Warner Branch</b> .....	20	..	20	..

On curves speed will be reduced below the maximums or restrictions provided where necessary, on all Subdivisions and Branches to insure safety.

Light engines when operated from leading control cab in direction of movement must not exceed speeds as shown in column 2 on Fourth Subdivision and Branches, or column 3 on other Subdivisions.

**SPEED RESTRICTIONS FOR ENGINES:** Maximum speed in miles per hour shown below is subject to further restrictions applicable to certain territories as shown in Speed Restrictions for Trains:

#### WESTERN PACIFIC

Class	Unit	Engine	Class	Unit	Engine
	Maximum	Speed		Maximum	Speed
	HP			HP	
D-176 (801-805)*	1500	79	S-57 (559-564 in		
D-62 (801-D)	1500	65	multiple)	1000	30
D-225 (904-912)	1350	65	S-60 (581-585)	1000	65
D-239 (913-924)	1500	65	S-62 (601-606)	1200	30
S-50 (501-503)	600	45	RS-62 (701-713)	1500	65
S-50 (504-511)	660	35	RS-62 (725-732)	1750	65
S-57 (551-564)	1000	35	RS-64 (2001-2010)	2000	65
			RS-65 (3001-3022)	2500	70

\*Units 801A and 802A are equipped with freight gears. Maximum speed 65 MPH.

#### SOUTHERN PACIFIC

DF-1 to 12 with 60/17 gear ratio trucks .....	79
DF-1 to 14 with 62/15 gear ratio trucks .....	70
DF-1 to 15 with 61/16 gear ratio trucks .....	75
DF-100, 115, 119, 123, 126, 127 .....	65
DF-114, 117 with 62/15 gear ratio trucks .....	65
DF-114, 117 with 65/12 gear ratio trucks .....	55
DF-116, 118, 120, 121, 122, 124, 125, 500, 501, 502, 600, 601, 604, 605, 607 to 616, 800 .....	70
DF-101, 103 to 107, 109 to 112 .....	35
DF-602, 603, 606 with 61/16 gear ratio trucks .....	75
DF-602, 603, 606 with 60/17 gear ratio trucks .....	79
DF-617 to 622 .....	75
DP .....	79
DS-1, 4, 5 .....	45
DS-6 to 12, 100 to 108, 110 to 115, 117 to 122, 607 .....	60
DS-109, 303, 400 to 402, 600 to 606 .....	65
DS-200 to 205, 300 to 302 .....	35
DS-500 to 506 .....	55

Foreign railroad diesel units, when used, will be permitted maximum freight train speeds but will not exceed maximum speed stencilled in cab of each unit.

#### OTHER MAXIMUM SPEEDS Maximum MPH

Engines operated in a movement other than from the leading control unit in the direction of movement must not exceed speeds shown in column 2 Fourth Subdivision and Branches or column 3 on other Subdivisions. On curves and approaching highway or street crossings at grade .....	20
Where conditions require, speed must be further reduced to insure safety.	
Through turnouts including west leg of wye Keddie, cross-overs, on sidings and on all inside tracks* (except on "Other Tracks between Charter Way and MP 95) except as otherwise provided for .....	10
*On inside tracks when curvature or other conditions require, speed will be further reduced to insure safe operation.	
Through turnouts with power-operated switches in reverse position— Kohler to Wyche inclusive, except east leg of wye switch, Niles Junction. Westward trains leaving Stockton Yard, after receiving signal from rear to indicate rear end has passed Tidewater Southern Jct., Hammer Lane, Phillips, Del Paso to Craig inclusive, Kramm, Eley, James, East switch Portola to East switch Winnemucca inclusive, West switch Wells to Pollard Jct. inclusive. and through sidings at the stations and within the limits listed above .....	20
Trains or engines trailing through spring switch old main track to main track East Elko .....	20
Passenger trains with 400 series caboose may make authorized passenger train speeds.	
All trains with other series cabooses .....	65
Trains handling WP derrick No. 37 — straight track .....	35
On curves 5 MPH less than speed prescribed in column 2, Fourth Subdivision and Branches and column 3 other Subdivisions but not exceeding .....	30
Trains handling derricks (other than WP derrick No. 37), steam shovels, cranes, rotary plows or pile drivers on own wheels — Third and Fourth Subdivisions .....	20
All other Subdivisions and Branches .....	25
Trains handling logs loaded on flat cars .....	20
When two trains meet, either of which is handling logs, the standing train will remain standing until other train has cleared or come to a stop unless necessary to saw by. Maximum speed of train passing .....	15
Trains handling loaded air dump cars .....	25
Scale test cars on own wheels must be handled next to caboose and trains handling such cars will not exceed— Between Oakland and Roper .....	30
Between Keddie and Bieber .....	25
Branches .....	20
North Channel Line, Stockton .....	12

## MISCELLANEOUS

Trains handling engines dead in train must not exceed the maximum speed for such class engine.

Engines dead in train must be cut in not exceeding five cars behind road engine.

Freight engines dead in train must have automatic brake valves cut out in cabs and brake valve handles locked in running position; independent brake valve handles locked in running position (locking pins are provided for this); dead engine features cut in; all isolation switches placed in "start" position; all switches at engineer's control stand locked in "off" position and main battery switches pulled; reversers locked in neutral position in all units. Distributing valve pops must be set to 25 pounds pressure. Same procedure should be followed on passenger engines.

Yard engines dead in train must have automatic brake valve cut out and handle placed in running position; distributing valve pop set to 15 pounds pressure; dead engine feature cut in; main battery switch pulled and reversers locked in neutral position.

During freezing weather engine water cooling system must be drained on any type engine being towed.

Coupling snow plow ends of engines to passenger equipment or to other engines is prohibited.

When the plow end of Jordan Spreaders 6, 7 or 13 are to be coupled to other cars or engines an empty flat car must be placed next to plow end, to prevent damage to engine or equipment.

Train and engine radios must be in OFF position, and must not be used between the hours of 6:30 AM and 4:00 PM between MP-626 and MP-634, inclusive, to reduce hazard incident to blasting operations of Nevada Barth Co. in this area.

## TUNNEL LOCATIONS

## OAKLAND TO ROPER

Tunnel Number	West Portal Mile Post	East Portal Mile Post	Length Feet
1	32.12	32.94	4320.9
2	33.39	33.47	407.3
3	57.67	57.75	414.7
4	224.66	225.12	2410.0
5	227.34	227.90	2922.5
6	228.14	228.63	2583.0
7	229.54	230.38	4406.5
8	230.42	232.11	8856.3
9	236.37	236.48	551.8
10	237.01	237.05	231.8
11	237.33	237.37	223.8
12	237.69	237.70	51.4
13	244.92	244.96	195.9
14	246.25	246.29	244.9
15	250.10	250.69	3117.81
16	257.43	257.54	600.9
17	257.85	257.91	324.5
18	258.08	258.11	150.1
19	258.16	258.19	164.0
20	258.32	258.38	291.5
21	258.85	258.93	405.0
22	259.55	259.61	306.1
23	262.87	263.11	1257.7
24	263.89	264.01	616.1
25	265.20	265.23	186.4
26	271.58	271.66	446.0
27	278.42	278.49	364.4
28	278.96	279.06	608.6
29	279.19	279.30	587.8
30	279.55	279.65	537.5
31	280.08	280.21	687.3
32	280.37	280.48	595.2
33	283.06	283.30	1270.7
34	283.71	283.77	304.6
35	297.18	298.57	7343.7
36	316.00	316.14	762.7
37	340.34	341.47	6001.7
39	635.37	635.57	1080.7
40	636.8	636.86	322.0
41	649.24	649.68	2341.8
42	650.71	650.91	1071.7
43	753.69	754.76	5675.9

## KEDDIE TO BIEBER

Tunnel Number	West Portal Mile Post	East Portal Mile Post	Length Feet
1	0.00	0.12	685.9
2	0.97	1.08	588.3
3	2.61	2.73	621.0
4	3.39	3.47	470.2
5	3.71	3.76	278.7
6	21.03	21.24	1103.0