

Division Managers

Bakersfield

G.F. BACA Road Foreman (661) 395-5135
 A.A. BOLDRA Asst. Trainmaster (661) 395-5182
 J.A. GOODIE Trainmaster (661) 395-5182
 J.A. MARTINEZ Road Foreman (661) 395-5104
 K.L. VALENZUELA Trainmaster (661) 395-5182
 W.R. VAUGHN Asst. Trainmaster (661) 395-5182
 J.E. WATTS Terminal Manager (661) 395-5121
 C.P. YOUNG Trainmaster (661) 395-5182

Fresno

G.R. ANGERER Gen. Constr. Supvr. Signals... (559) 457-7537
 N.S. BEDSTED Division Trainmaster (559) 457-7665
 R.L. CUMMINGS Trainmaster (559) 457-7544
 K.R. DUNCAN Construction Supvr. Signals .. (559) 457-7563
 A.L. GALLYER Trainmaster (559) 457-7544
 R.D. HARM Trainmaster (559) 457-7544
 J.P. HERNDON Road Foreman (559) 457-7642
 F.P. MATTERA Terminal Manager (559) 457-7620
 N.S. McEACHERN Trainmaster (559) 457-7544
 C.M. PALMIERI Asst. Trainmaster (559) 457-7544
 C.L. PARKER Supervisor Structures (559) 457-7564
 R.S. POWELL Supt. Operations (559) 457-7580
 A.G. SILVA Roadmaster (559) 457-7523
 D.D. SWALLOW Field Engineer (559) 457-7552
 K.R. WALTER Supervisor Signals (559) 457-7562

Pittsburg

L.B. HARTMAN Trainmaster (925) 231-2784

Richmond

J.S. DAVIS Terminal Manager (510) 231-2603
 T.E. CARR Road Foreman (510) 231-2701
 S.B. EDENFIELD Trainmaster (510) 231-2700
 A.L. FLEENOR Trainmaster (510) 231-2601
 R.T. GOLDEN Asst. Trainmaster (510) 231-2601
 J.B. JONES Trainmaster (510) 231-2601
 G.N. PHELPS Trainmaster (510) 231-2601

Riverbank

J.P. AUSTIN Trainmaster (209) 942-5431
 T.T. DOUGLAS Trainmaster (209) 942-5431
 P.H. SHAVER Trainmaster (209) 942-5431
 L.A. WITCHER Trainmaster (209) 942-5431

San Bernardino

D.R. GUNTHER Regional Manager Rules (909) 386-4007

Stockton

E.L. FERRIS Terminal Manager (209) 942-5536
 J. FLEMING Mgr. Engineering (209) 942-5475
 J.A. HERNDON Trainmaster (209) 942-5491
 K.R. HUGHES Manager of Safety (209) 942-5506
 R.A. MASON Division Engineer (209) 942-5518
 T.J. MEIWES Supervisor Signals (209) 942-5436
 P.M. MULLEN Road Foreman (209) 942-5422
 M.A. NEUFELD Asst. Roadmaster (209) 942-5571
 T.A. RIBOTA Trainmaster (209) 942-5491
 D.W. ROYAL Trainmaster (209) 942-5491
 J.M. RYAN Terminal Superintendent (209) 942-5522
 S.P. SCHAFFER Trainmaster (209) 942-5491
 J.M. TAYLOR Director Administration (209) 942-5512
 C.A. WANG Roadmaster (209) 942-5474
 R.C. WIELENBERG Asst. Trainmaster (209) 942-5491
 L.A. WITCHER Trainmaster (209) 942-5491
 Roadmaster (209) 942-5420

BNSF



Northern California Division

Timetable No. 5

IN EFFECT AT 0001

Pacific Continental Time

Sunday, February 25, 2001

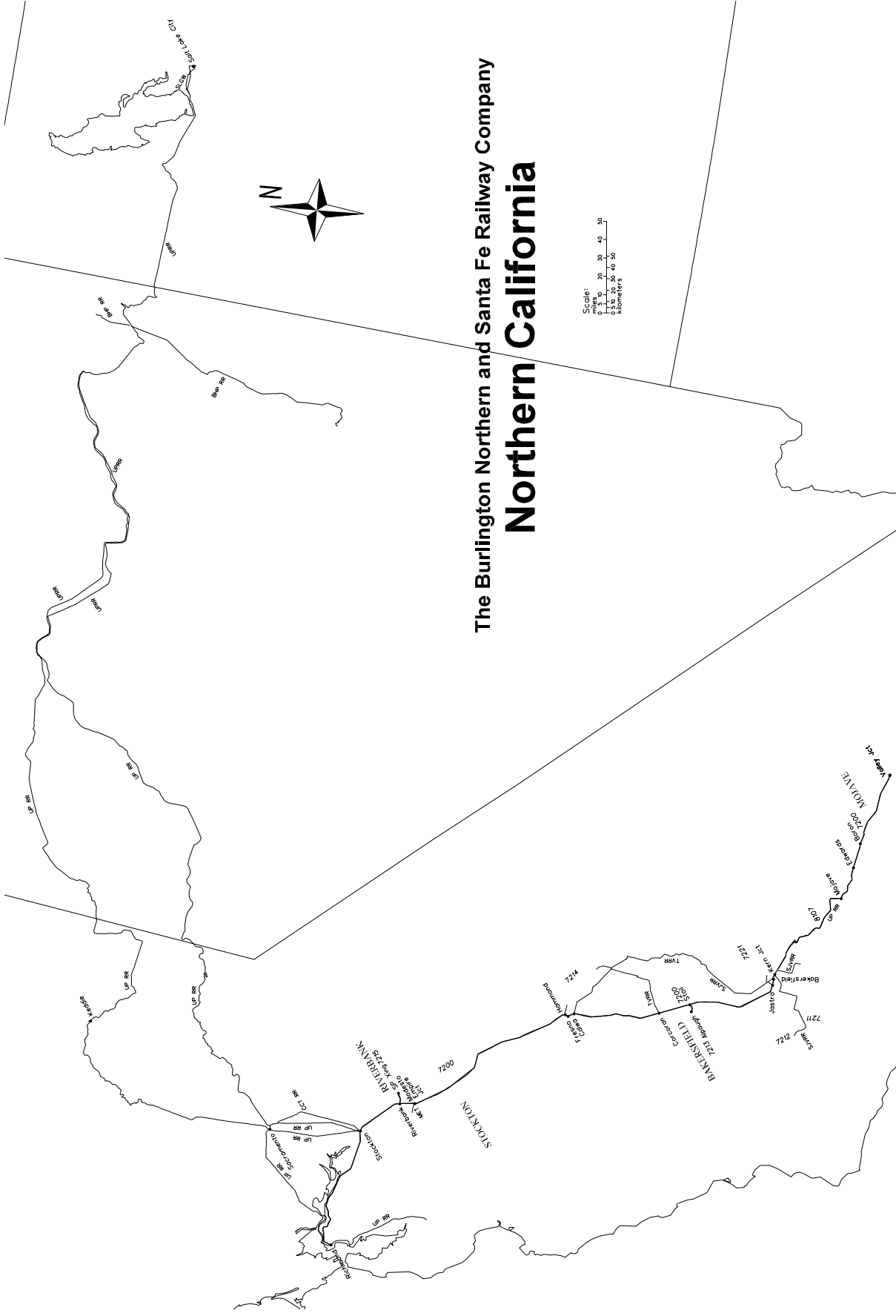
Division Superintendent

F.W. Comiskey

Stockton, California

(209) 942-5510

The Burlington Northern and Santa Fe Railway Company Northern California



WESTWARD	Length of Siding (Feet)	Station Nos.	Mile Post	Bakersfield Subdivision MAIN LINE STATIONS	Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.	EASTWARD
		17400	888.0	BAKERSFIELD	BCPTX	2MT CTC	7200	3.4	
		16386	891.1	JASTRO	X(2)				6.6
	9,015	16376	897.7	UNA				7.7	
	E4,833 W5,963	16368	905.4	SHAFTER				7.6	
	6,568	16359	913.0	WASCO				6.2	
	8,964	16352	919.2	ELMO				5.4	
	9,032	16344	924.6	SANDRINI		CTC		7.7	
	8,948	16340	932.3	ALLENSWORTH				9.8	
	8,999	16322	942.1	ANGIOLA				8.8	
	E5,990 W9,951	16313	950.9	CORCORAN	T			9.4	
	8,879	16308	960.3	GUERNSEY				7.6	
	E8,963 W4,490	16246	967.4	HANFORD - SJV RRX	M			5.3	
	9,055	16237	973.2	SHIRLEY				9.0	
	9,051	16218	982.2	CONEJO				6.1	
	8,959	16210	988.3	BOWLES				4.7	
			993.0	THORPE				1.3	
			994.3	CALWA CROSSING	M			0.6	
		16200	994.9	CALWA	BCPT			107.2	

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	FS	EMER
MP 886.5 to MP 889.4	84					
MP 889.4 to Calwa	55	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

	Passenger	Freight
Bakersfield to Calwa	79 MPH.	55 MPH.*%
MP 961.2 to MP 965.6 Running Track	20 MPH.	20 MPH.

* See System Special Instructions Item 1(B).

1(B). Speed—Permanent Restrictions

Westward		
MP 885.2 to MP 888.0—Both Tracks	20 MPH.	20 MPH.
MP 888.0 to MP 889.6—Main 1	79 MPH.	55 MPH.
MP 888.0 to MP 889.3—Main 2	40 MPH.	40 MPH.
MP 889.3 to MP 889.6—Main 1	60 MPH.	55 MPH.
MP 889.3 to MP 889.6—Main 2	40 MPH.	30 MPH.
MP 889.8 to MP 890.1—Main 1	60 MPH.	55 MPH.
MP 889.8 to MP 890.1—Main 2	60 MPH.	50 MPH.
MP 892.9 to MP 893.3	70 MPH.	65 MPH.
MP 967.5 to MP 969.5	45 MPH.	45 MPH.
MP 967.7 to MP 967.8	30 MPH.	30 MPH.
MP 973.7 to MP 975.8	55 MPH.	45 MPH.
MP 993.6 to MP 994.1 (HER)	45 MPH.	45 MPH.
MP 994.2 to MP 994.3	30 MPH.	30 MPH.
MP 994.2 to MP 995.2	40 MPH.	40 MPH.
Eastward		
MP 995.2 to MP 994.2	40 MPH.	40 MPH.
MP 994.3 to MP 994.2	30 MPH.	30 MPH.
MP 993.9 to MP 992.8 (HER)	65 MPH.	65 MPH.
MP 975.8 to MP 973.7	55 MPH.	45 MPH.
MP 969.5 to MP 967.5	45 MPH.	45 MPH.
MP 967.8 to MP 967.7	30 MPH.	30 MPH.
MP 893.3 to MP 892.9	70 MPH.	65 MPH.
MP 890.1 to MP 889.8—Main 1	60 MPH.	55 MPH.
MP 890.1 to MP 889.8—Main 2	60 MPH.	50 MPH.
MP 889.6 to MP 889.3—Main 1	60 MPH.	55 MPH.
MP 889.6 to MP 889.3—Main 2	40 MPH.	30 MPH.
MP 889.2 to MP 888.0—Main 1	79 MPH.	55 MPH.

MP 889.3 to MP 888.0—Main 2	40 MPH.	40 MPH.
MP 888.0 to MP 885.2—Both Tracks	20 MPH.	20 MPH.

1(C). Speed—Switches and Turnouts

Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.

MP 888.0, Crossover	40 MPH.
Jastro, WE Main 2	60 MPH.
Jastro, Crossovers	40 MPH.
Jastro, Porterville Jct. switch	30 MPH.
Una, Both ends siding	40 MPH.
Shafter, Both ends siding and crossover	40 MPH.
Wasco, Both ends siding	40 MPH.
Elmo, Both ends siding	40 MPH.
Sandrini, Both ends siding	40 MPH.
Allensworth, Both ends siding	40 MPH.
Angiola, Both ends siding	40 MPH.
Corcoran, Both ends east siding	30 MPH.
Corcoran, Both ends west siding	40 MPH.
Guernsey, EE Siding	40 MPH.
MP 961.2 Guernsey, Crossover	40 MPH.
Hanford, WE east siding	40 MPH.
Hanford, Both ends west siding	20 MPH.
MP 965.6 Hanford, Crossover	40 MPH.
Shirley, Both ends siding	40 MPH.
Conejo, Both ends siding	40 MPH.
Bowles, Both ends siding	40 MPH.
Calwa, EE Yard, Turnout to Main Track	10 MPH.
Calwa, End of 2 tracks and crossover	30 MPH.

1(D). Speed—Other

Lone Star Spur, MP 901.9 to end of track	10 MPH.
Bakersfield—Tracks 424, 425, 532, 533, and 534	5 MPH.
Bridge 889.8, cars heavier than 143 tons	25 MPH.

Temperature Restrictions

When air temperature exceeds threshold temperatures, all trains will be governed by the following table on main tracks through these limits unless a more restrictive speed is in effect. Temperature degrees are shown in Fahrenheit.

Between Bakersfield and Calwa:

Temperature Range	Trains under 6,000 Tons	Trains over 6,000 Tons	Trains Exceeding 100 TOB	Passenger Trains
Exceeds 110 degrees	Maximum 55 MPH.	Maximum 45 MPH.	Maximum 45 MPH.	No Restrictions
Exceeds 115 degrees	Maximum 45 MPH.	Maximum 40 MPH.	Maximum 40 MPH.	Maximum 70 MPH.
Exceeds 120 degrees	Maximum 40 MPH.	Maximum 30 MPH.	Maximum 30 MPH.	Maximum 50 MPH.

Notify the train dispatcher when your train is restricted by this instruction. If in doubt as to the temperature, contact the train dispatcher.

See Item 1 of the System Special Instructions for additional speed restrictions.

2. Bridge and Equipment Weight Restrictions

Maximum Gross Weight of Car

Bakersfield to Calwa 143 tons, Restriction A

3. Type of Operation

Restricted Limits—in effect:

Kern Jct. to Bakersfield	MP 885.2 to MP 887.5 Main 1
Kern Jct. to Bakersfield	MP 885.2 to MP 888.0 Main 2

CTC—in effect on Main Track and sidings:

Bakersfield to Calwa	MP 889.2 to MP 994.9 MP 887.5 to MP 889.2 Main 1
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Bakersfield to Calwa MP 887.95 to MP 889.2
Main 2

Rule 6.24—Double Track—in effect:

Kern Jct. (Mojave Subdivision)
to Bakersfield MP 885.2 to MP 887.5

Rule 6.26—Multiple Main Track—in effect:

Bakersfield MP 888.0 to MP 887.5

**Signals Not Conforming to Aspects and Indications
Shown in the System Special Instructions**

Aspect	Name	Indication
Red Over Flashing Yellow	Diverging Approach (Rule 9.1.11 does not apply.)	Proceed through diverging route; prescribed speed through turnout; approach next signal preparing to stop, if exceeding 40 MPH immediately reduce to that speed.

4. General Code of Operating Rules Items

Rule 1.14—San Joaquin Valley trains and engines may use main track between Bakersfield and Jastro, joint with BNSF trains and engines.

Rule 5.8.2—Item 11, Sound whistle approaching ALL crossings, public and private. Exception: At Bakersfield, between MP 885.2 and MP 888.8, the engine whistle will not be sounded in advance of street crossings protected by automatic crossing gates except that the engine whistle may be used at the discretion of the engineer to avoid injury to persons or damage to property and must be sounded when approaching roadway workers on or near the track. Engine bell must be rung at all crossings.

Rule 5.16—Passenger Trains Observe and Call Signals—When a signal requires a train to stop at or pass the next signal at restricted speed, the engineer must communicate that fact to a designated member of the crew, including track designation if on multiple tracks, and get an acknowledgment. If no acknowledgment is received, the engineer must ascertain at the next scheduled stop why the message is not being confirmed.

If the engineer fails to control the train movement in accordance with either a wayside signal or other restrictions imposed upon the train, the designated crew member shall at once communicate with and caution the engineer regarding the restriction, and if necessary, take appropriate action to ensure the safety of the train, including stopping all movement if appropriate.

Rule 9.9—All Trains Delayed Within a Block—In CTC, when any train stops or its speed is reduced below 10 MPH, the train must proceed at a speed not exceeding 40 MPH, prepared to stop at the next signal until the next signal is visible, that signal displays a proceed indication, and track is clear to the signal.

5. Trackside Warning Detectors (TWD)

- A. Protecting bridges, tunnels or other structures: None
- B. Other TWD locations
 - MP 900.0—Recall Code 8
 - MP 921.0—Recall Code 8
 - MP 943.7—Recall Code 8
 - MP 962.0—Recall Code 8
 - MP 987.0—Recall Code 8

6. FRA Excepted Track—None

7. Special Conditions

Locomotive Consists—When building locomotive consists, locomotives rated at less than 2000 horsepower and not equipped with a dynamic brake must be placed immediately behind the lead locomotive in the consist.

Bakersfield—Amtrak trains operating between “D” Street, MP 887.8 and “F” Street, MP 887.7 must display ditch lights, sound whistle signal 5.8.2 (11), and ring bell continuously.

When Amtrak trains are shoved, a member of the crew must precede the movement on foot from “D” Street, MP 887.8, to “F” Street, MP 887.7, when not equipped with ditch lights on the leading end of the movement.

Between Kern Junction and Bakersfield, street crossing protection circuits are so designed that following movements must not be nearer than 1,000 feet to preceding movements in order for the crossing protection devices to operate in the proper sequence.

System Special Instructions Amendment—

Item 9, Amtrak Instructions, under “Equipment”, the line reading “Movement with locomotives between cars is prohibited” does not apply on the Northern California Division.

The following will apply:

Movement with locomotive between cars is prohibited unless:

- A. Locomotive is being used in “push-pull” service.
- B. “MU” control cables are connected through the entire train.
- C. Locomotive between cars is not isolated or dead-in-tow.

8. Other Line Segments

Yard Line Segments

Line Segment	Limits
7254	Bakersfield Yard
7255	Calwa Yard

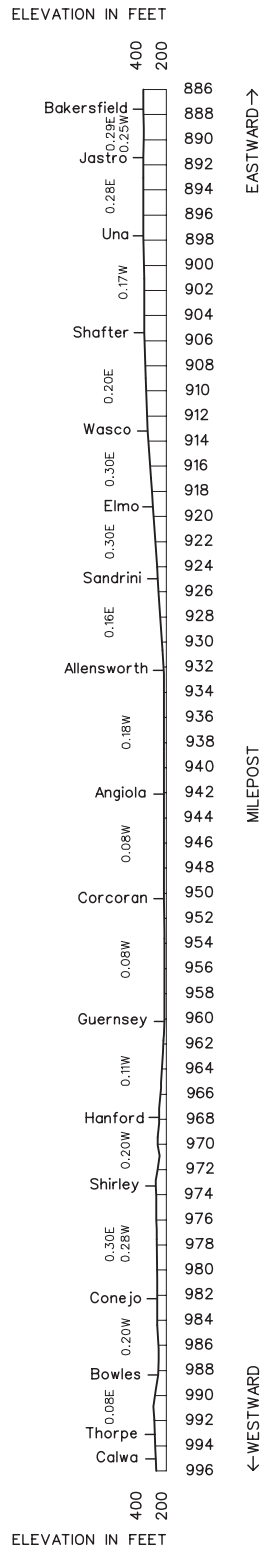
Road Line Segments

Line Segment	Limits
7200	Bakersfield to Calwa

9. Locations Not Shown as Stations

Name	Mile Post Location	Capacity Feet	Switch Opens
Rosedale	895.7	2,088	West
Crome	899.5	1,700	West
Lone Star Spur	901.9	5.6 miles	East
Stoil	936.0	4,693	Both
Blanco	945.9	2,400	Both
Kings Park	964.0	7,571	Both
Laton	976.0	3,515	Both
Monmouth	985.6	1,324	Both

10. Grade Charts



WESTWARD	Length of Siding (Feet)	Station Nos.	Mile Post	Mojave Subdivision MAIN LINE STATIONS		Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.	EASTWARD
			749A.0	VALLEY JCT.	J		CTC	7200	0.9	
			749A.9	HUTT					7.3	
8,011	18540	757.2	HINKLEY			15.8				
8,034	18530	772.9	JIM GREY			11.0				
8,052	18525	784.0	BORON			5.6				
8,004	18519	789.6	SILT			7.5				
8,007	18515	797.1	EDWARDS	T		6.4				
8,019	18509	803.6	BISSELL			6.5				
8,772	18505	810.1	SANBORN			5.6				
	17910	814.7	MOJAVE (BNSF)	JM		0.6				
		380.7	MOJAVE (UP)			10.3	UP RAILROAD	8107		
	17830	370.4	CAMERON			8.0				
E5,040	17820	362.4	SUMMIT SWITCH			1.9				
	17815	360.5	TEHACHAPI			2.0				
		358.5	CABLE-X-OVER			1.9				
	17810	356.7	CABLE			2.5				
6,189	17805	354.1	MARCEL			2.3				
4,800	17795	351.8	WALONG			3.0				
8,960	17790	348.8	WOODFORD			3.3				
8,080	17785	345.5	ROWEN			3.2				
7,530	17780	342.3	CLIFF			2.8				
13,270	17775	339.5	BEALVILLE			4.3				
		335.2	CALIENTE			3.8				
		335.1								
	17765	331.3	ILMON			3.4				
	17760	327.9	BENA			2.9				
	17755	325.0	SANDCUT			4.9				
	17750	320.1	EDISON			3.5				
	17705	316.6	MAGUNDEN			3.0				
	17510	313.6	KERN JCT.	M		2.3				
		885.2								
		886.9	AMTRAK LEAD	R		1.7				
		887.5	EAST BAKERSFIELD			0.6				
	17400	888.0	BAKERSFIELD	BCPTR		136.7				

MP 813.5 to MP 814.5 40 MPH.
 Kern Jct. to Bakersfield (Eastward trains may increase speed when head end passes Kern Jct.) 20 MPH.
 MP 885.2 to MP 888.0, both tracks 20 MPH.
 MP 888.0 to MP 889.3—Main 2 40 MPH.
 MP 888.0 to MP 889.2—Main 1 79 MPH. 55 MPH.
 MP 784.7 Spur 20 MPH.
 MP 785.0 Spur 20 MPH.
 MP 797.1 Spur 20 MPH.

1(C). Speed—Switches and Turnouts

Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated. In CTC sidings, speed limit 40 MPH, except Boron and 30 MPH while head end of train is passing over switch to P.C. Borax Spur, and east and west end house track switches and at Edwards while head end is passing over east and west leg wye switches.
 Valley Jct., Cajon Subdivision Jct. 50 MPH.
 Hutt, Barstow Receiving Yard Lead 30 MPH.
 Hinkley, both ends siding 40 MPH.
 Jimgrey, both ends siding 40 MPH.
 Boron, both ends siding 40 MPH.
 Silt, both ends siding 40 MPH.
 Edwards, both ends siding 40 MPH.
 Bissell, both ends siding 40 MPH.
 Sanborn, both ends siding 40 MPH.
 Kern Jct. to UP 30 MPH.
 Mojave Jct. to UP 25 MPH.

1(D). Speed—Other

Bakersfield—Tracks 424 and 425 5 MPH.

Temperature Restrictions

When air temperature exceeds threshold temperatures, all trains will be governed by the following table on Main Tracks through these limits unless a more restrictive speed is in effect. Temperature degrees are shown in Fahrenheit.

Between Valley Jct. and Mojave:

Temperature Range	Trains under 6,000 Tons	Trains over 6,000 Tons	Trains Exceeding 100 TOB	Passenger Trains
Exceeds 110 degrees	Maximum 55 MPH.	Maximum 45 MPH.	Maximum 45 MPH.	No Restrictions
Exceeds 115 degrees	Maximum 50 MPH.	Maximum 40 MPH.	Maximum 40 MPH.	Maximum 70 MPH.
Exceeds 120 degrees	Maximum 40 MPH.	Maximum 30 MPH.	Maximum 30 MPH.	Maximum 50 MPH.

Notify the train dispatcher when your train is restricted by this instruction. If in doubt as to the temperature, contact the train dispatcher.

See Item 1 of the System Special Instructions for additional speed restrictions.

2. Bridge and Equipment Weight Restrictions
Maximum Gross Weight of Car

Valley Jct. to Bakersfield 143 tons, Restriction A

3. Type of Operation

Restricted Limits—in effect:

Kern Jct. to Bakersfield MP 885.2 to MP 887.5—Main 1
 Kern Jct. to Bakersfield MP 885.2 to MP 888.0—Main 2

CTC—in effect on Main Track and sidings:

Valley Jct. to Mojave MP 749A.0 to MP 814.5
 Bakersfield Main 1 MP 887.5 to MP 889.2
 Bakersfield Main 2 MP 887.95 to MP 889.2
 Amtrak Lead MP 886.9 to MP 887.5

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	FS	EMER
Valley Jct. to Hutt	32	2	3	4	5&7	9
Hutt to Kern Jct.	65	2	3	4	5&7	9
Kern Jct. to MP 886.5	55	1	3	4	5&7	9
MP 886.5 to MP 889.4	84	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

	Passenger	Freight
Mojave Subdivision	70 MPH.	55 MPH.*%
MP 886.9 to MP 887.5 (Amtrak Lead)	20 MPH.	20 MPH.

* See System Special Instructions Item 1(B).

1(B). Speed—Permanent Restrictions

	Passenger	Freight
Eastward and Westward		
MP 749A.0 to MP 749A.8	45 MPH.	50 MPH.
MP 749A.8 to MP 750.5	50 MPH.	60 MPH.
MP 750.5 to 751.3	60 MPH.	60 MPH.

ABS—in effect:

Kern Jct. to Bakersfield Main 1 MP 885.2 to MP 887.5
 Kern Jct. to Bakersfield Main 2 MP 885.2 to MP 888.0

Rule 6.24—Double Track—in effect:

Kern Jct. to Bakersfield MP 885.2 to MP 887.5

Rule 6.26—Multiple Main Track—in effect:

Bakersfield MP 888.0 to MP 887.5

Manual Interlockings Not Controlled by BNSF

<u>Location</u>	<u>Controlling Railroad</u>
Mojave (BNSF), MP 814.7	UPRR

Signals Not Conforming to Aspects and Indications Shown in the System Special Instructions

Aspect	Name	Indication
Red Over Flashing Yellow	Diverging Approach (Rule 9.1.11 does not apply.)	Proceed through diverging route; prescribed speed through turnout; approach next signal preparing to stop, if exceeding 40 MPH immediately reduce to that speed.
Rule 9.53 Flashing Yellow Over Lunar	Approach - Thirty	Proceed; approach next signal not exceeding 30 MPH prepared to enter diverging route at prescribed speed, if exceeding 40 MPH immediately reduce to that speed.

4. General Code of Operating Rules and Air Brake Items

Rule 1.14—BNSF trains may use Union Pacific joint track between Mojave and Kern Jct. San Joaquin Valley trains and engines may use BNSF track between Kern Jct. and Bakersfield.

Rule 5.8.2—Item 11, Sound whistle approaching ALL crossings, public and private. Exception: At Bakersfield, between MP 885.2 and MP 888.8, the engine whistle will not be sounded in advance of street crossings protected by automatic crossing gates except that the engine whistle may be used at the discretion of the engineer to avoid injury to persons or damage to property and must be sounded when approaching roadway workers on or near the track. Engine bell must be rung at all crossings.

Rule 8.3—The following crossovers at Bakersfield may be left lined and locked as last used:

- MP 886.1, Main 1 to Main 2 (Tulare Street)
- MP 887.3, Main 1 to Main 2 (Chester Avenue)
- MP 887.5, Main 2 to Working Lead
- MP 887.7, Main Track to Track 402

Rule 101.13—Eastward and westward trains must make a Running Air Brake Test at Summit Switch as prescribed by Rule 101.13, except when cutting helpers out at this location. When making the Running Air Brake Test, the following must be determined:

1. Retarding force of air brake system.
2. If equipped with a functioning ETD, that normal brake pipe pressure changes occur at rear of the train.

5. Trackside Warning Detectors (TWD)

- A. Protecting bridges, tunnels or other structures: None
- B. Other TWD locations
 - MP 765.0—Recall Code 8
 - MP 788.0—Recall Code 8
 - MP 813.0—Recall Code 8

6. FRA Excepted Track—None

7. Special Conditions

MP 331.3 to MP 381.3—Freight trains operating between these mileposts that exceed the maximum authorized speed by 5 MPH must stop by using an emergency application of the air brakes.

Locomotive Consists—When building locomotive consists, locomotives rated at less than 2000 horsepower and not equipped with a dynamic brake must be placed immediately behind the lead locomotive in the consist.

Bakersfield—Amtrak trains operating between “D” Street, MP 887.8 and “F” Street, MP 887.7 must display ditch lights, sound whistle signal 5.8.2 (11), and ring bell continuously.

When Amtrak trains are shoved, a member of the crew must precede the movement on foot from “D” Street, MP 887.8, to “F” Street, MP 887.7, when not equipped with ditch lights on the leading end of the movement.

Between Kern Junction and Bakersfield, street crossing protection circuits are so designed that following movements must not be nearer than 1,000 feet to preceding movements, in order for the crossing protection devices to operate in the proper sequence.

Monolith—Structures along the south side of CLIC 807 provide close clearance and TRAINMEN MUST NOT RIDE on the side of equipment at this location.

Minimum Dynamic Brake Requirements

Between Mojave and Ilmon when operating on descending grades, it must be known that locomotive consist(s) has the minimum number of operative axles of dynamic brake. If train does not meet the minimum requirements as outlined below, train must not proceed. Helper consist may be added to meet this requirement. For the purpose of this rule, the weight of locomotives with inoperative dynamic brakes is to be included in train’s total trailing tonnage.

Minimum Required Operative Axles of Dynamic Brake for BNSF freight trains, between Mojave and Ilmon.

Total Trailing Train Tonnage	TOB 85 or less	TOB 86 to 95	TOB 96 to 105	TOB 106 to 115	TOB 116 to 125	TOB 126 to 135	TOB 136 or 145
2,000 or less	4	4	4	4	6	6	8
2,001 to 3,000	6	6	6	6	8	8	10
3,001 to 4,000	8	8	8	8	10	10	12
4,001 to 5,000	8	8	10	10	12	12	14
5,001 to 6,000	12	12	12	12	14	14	16
6,001 to 7,000	12	12	12	14	16	16	18
7,001 to 8,000	12	12	12	14	16	16	20
8,001 to 9,000	12	12	14	16	18	20	22
9,001 to 10,000	12	12	14	18	20	22	24
10,001 to 11,000	12	12	14	18	22	24	28
11,001 to 12,000	12	12	16	20	24	26	30
12,001 to 13,000	12	12	18	22	26	28	32
13,001 to 14,000	12	12	18	24	28	30	34
14,001 to 15,000	12	14	20	26	30	32	36
15,001 to 16,000	12	14	20	26	30	34	38
16,001 to 71,000	14	16	22	28	32	36	40
17,001 to 18,000	16	18	24	30	34	38	44

The total minimum operative axles of dynamic brake for trains (including helpers) is in the body of the table above. When using the table to determine TOB, round the figures up to the next whole number. For example: 105.1 TOB becomes 106 TOB.

Note: Air Brake and Train Handling Rule 104.3.2, item B., dynamic brake limitation is 28 axles cut in per consist. Information concerning dynamic brake axle rating is located in the BNSF System Special Instructions, item 2 (B).

Total brake pipe reduction to control train speed must not exceed 18 psi for trains averaging less than 135 TOB and 14 psi for trains averaging 135 or more TOB. If total brake pipe reduction exceeds the above limitations, train must be stopped immediately.

TRAIN MAKE-UP INSTRUCTIONS FOR BNSF TRAINS OPERATING ON UPRR MOJAVE SUBDIVISION USING UPRR TRAIN MAKE -UP AND LOCOMOTIVE PLACEMENT RESTRICTIONS.

BNSF trains identified by the Superintendent or his representative will operate on the UPRR Mojave Subdivision using applicable UPRR Train Make-up and Locomotive Placement Restrictions. BNSF train make-up and helper instructions are still in effect, however, a train will be required to comply with ONLY one set of Train Make-up and Locomotive Placement Restrictions/Instruction. Either the UPRR restrictions of BNSF instructions, as designated.

As part of the job safety briefing process, "Mojave Subdivision Train Make-Up and Locomotive Placement Worksheet" must be completed and reviewed by train and, when applicable, helper crews; and the Assistant Trainmaster on duty at either Bakersfield or Barstow. A computer generated train list will be used to determine train make up and locomotive placement. it must be agreed that train makeup and helper/distributed power placement are correct before train departs. Form will be filed at the initial terminal.

If helpers are placed in train or train consist is changed enroute, train and, when applicable, helper crew will complete a new form and agree to changes. Forms will be filed at destination terminal at tie-up.

Forms are available at on-duty points Bakersfield and Barstow.

When crews are called to relieve trains enroute between Barstow and Bakersfield, it will be their responsibility to contact the ATM on duty at Barstow or Bakersfield to determine whether UPRR or BNSF train make-up and locomotive Placement restrictions/instructions are being used on their train.

TRAIN MAKE-UP RESTRICTIONS

UPRR train make-up restrictions and tonnage rating of locomotives for the Mojave Subdivision are located in the Union Pacific Railroad, Los Angeles Area Timetable No. 1, Effective October 25, 1998, page 13-15.

For the purpose of train make-up of BNSF trains, the instructions in the UPRR Los Angeles Area Timetable No. 1, effective October 25, 1998, Mojave Subdivision, Page 13 Item B are supplemented as follows:

"FOUR-UNIT SOLID DRAWBAR CONNECTED DOUBLE STACK CARS:

- a. If the total weight of the car is 250 tons or more, it is to be considered the equivalent of four cars, each weighing 50 tons and each less than 73 feet in length.

- b. If the total weight of the car is less than 250 tons, it is to be considered the equivalent of four cars, each weighing less than 50 tons and each less than 73 feet in length.

FIVE-UNIT SOLID DRAWBAR CONNECTED DOUBLE STACK CARS:

- a. If the total weight of the car is 300 tons or more, it is to be considered the equivalent of five cars, each weighing 50 tons and each less than 73 feet in length.
- b. If the total weight of the car is less than 300 tons, it is to be considered the equivalent of five cars, each weighing less than 50 tons and each less than 73 feet in length."

UPRR LOCOMOTIVE PLACEMENT RESTRICTIONS

HELPER PLACEMENT ON UPRR MOJAVE SUBDIVISION:

When determining the number of powered axles in a helper consist, refer to BNSF System Special Instructions 2(B).

Locomotive Data Table with the following exceptions:

Model	Power-Axle Rating	Dyn Brake Axle Rating
GP60	6	6
SD60	8	8
SD75	8	8

Not more than 36 axles of power may be used in a helper consist.

Unless otherwise specified, the placement of an entrained or rear helper will be governed as follows:

ANY HELPER

Must be placed ahead of:

- Single-platform two-axle front runner cars in series
- TTOX weighing less than 25 tons.
- Solid drawbar connected four platform four runner cars in series TTFX.
- Rail pickup cars RGAX 4694-4696
- Two axle scale test cars.
- Car designated rear end only.

First car ahead of any helper must not be:

- A flat car weighing less than fifty tons.
- An articulated doublestack car, spine car or solid drawbar connected intermodal car having one or more empty platforms.

8 AXLES OR LESS:

May be placed behind caboose, or rear car of cabooseless train or cut in ahead of 1/2 the tonnage rating of the helper locomotive(s). Within the State of California, not more than one unit operating or isolated may be placed behind a caboose.

9 to 12 AXLES:

My be:

- Placed immediately ahead of caboose or on the rear of a cabooseless train provided the first 10 cars ahead of the helper meet one of the following conditions:
 1. Each weights 50 tons or more; or
 2. All are 73 feet or longer in length; or
 3. All are less than 73 feet in length.

- Cut in ahead of 1/2 the tonnage rating of the helper locomotive(s).

13 to 18 AXLES:

On a "loaded Bulk commodity Unit Train" helper may be placed ahead of caboose or on rear of a cabooseless train.

On other than a "Bulk Commodity Unit Train," helper must be cut in ahead of 1/2 the tonnage rating of the helper locomotive(s);
and

- The first car ahead of the helper must weigh 50 tons or more;
and
- The first ten cars ahead of the helper must meet one of the following conditions:
 1. Each weighs 50 tons or more;
or
 2. all are 73 feet or longer in length;
or
 3. All are less than 73 feet in length;

19 to 24 AXLES:

Must be cut in ahead of 1/2 the tonnage rating of the helper locomotive(s). The first 10 cars ahead of the helper must all weigh 50 tons or more.

24 to 36 AXLES:

May only be used on a "Loaded Bulk commodity Unit Train" and must be cut in ahead of 1/2 the tonnage rating of the helper locomotive(s).

SUPPLEMENTAL INSTRUCTIONS FOR BNSF TRAINS OPERATING IN COMPLIANCE WITH BNSF TRAIN MAKE UP INSTRUCTIONS ON UPRR MOJAVE SUBDIVISION BETWEEN ILMON AND MOJAVE

BNSF trains operating on UPRR Mojave Subdivision may use either BNSF or UPRR train make-up restrictions/instructions as designated by the superintendent or his representative. However, only one company's restrictions/instructions will be used on any given train.

When a train contains helpers, minimum tonnage restrictions will apply to the first five cars immediately ahead of the helpers.

Cars in restricted portion of train must conform to the following minimum weight restrictions.

- Articulated double stack cars (counted as 3 cars-QY) 150 ton
- Articulated double stack cars (counted as 2 cars-QV) 100 ton
- Articulated three pack cars (counted as 2 cars-QC, QM) 100 ton
- Articulated five pack cars (counted as 3 cars-Q5, QO, QE) 150 ton
- All other cars 50 ton

If helpers are on rear of train, 89-foot or longer flat cars loaded with a single trailer/container must not be placed within the restricted portion of the train.

On trains with helpers, two axle cars weighing less than 35 tons must be placed behind the helpers with no more than 1,500 tons trailing. Caboose must be placed at the rear of the train.

Maximum train length shall be 7,000 feet. Maximum tonnage of train, except unit trains, must not exceed 11,000 tons.

Helper consist will not have less than eight actual axles, and will not exceed a powered axle rating of 24 axles.

Cars measuring less than 42 feet in length must be entrained in the rear 4,000 tons of train. **Cars greater than 41 feet 6 inches can be considered as 42 feet.

Trains containing a solid block of 20 or more loaded bi-levels and/or tri-levels must not exceed 6,500 feet in length excluding engines.

Caboose are not to be moved other than at rear of train, unless specifically authorized.

Scale test cars and cars designated as rear-end-only must be entrained within the rear five cars of train. A scale test car must not be handled as the rear car in a train.

Following train make-up restrictions apply to OTTX cars:

- (a) Empty cars must be entrained at rear of train.
- (b) Loaded cars must be entrained as close to the rear as train makeup permit.
- (c) Trains containing loaded OTTX cars must not exceed 6,100 feet.
- (d) Trains having more than 10 OTTX cars, loaded or empty, must not exceed 4,500 feet.

Cars SP-345000-345999 are to be moved only in unit trains.

Loaded continuous welded rail (CWR) trains must be handled separately from other trains. Short ribbon rails 700 feet or less in length may be moved mixed trains providing tonnage behind loaded ribbon rail cars does not exceed 2,000 tons. A box car or high-side gondola car must be positioned on each end of CWR train as a buffer car during all movements except preparatory to and during unloading or loading.

ADDITIONAL INSTRUCTIONS FOR EASTWARD TRANS

When train tonnage exceeds 3,000 tons, minimum tonnage restrictions will apply to head portion of train by car count as follows:

- 3001-3199 tons first 10 cars of train
- 3200-3399 tons* first 11 cars of train
- 3400-3599 tons* first 12 cars of train
- 3600-3799 tons* first 13 cars of train
- 3800-3999 tons first 14 cars of train
- 4000 tons & over* first 15 cars of train

EXCEPTION: Minimum tonnage restrictions do not apply to empty unit trains, consisting of entirely the same equipment, provided train does not exceed 3800 tons.

Cars in restricted head portion of train must conform to the following minimum weight restrictions:

- Two axle cars 35 tons
- Articulated double stack cars (counted as 3 cars - QY) 150 tons
- Articulated double stacks cars (counted as 2 cars-QV) 100 tons
- Articulated three pack cars (counted as 2 cars -QC, QM) 100 tons
- Articulated five pack cars (counted as 3 cars-Q5, QO, QE) 150 tons
- All other cars 50 tons

89-foot or longer flat cars loaded with a single trailer/container must not be placed in the restricted head portion of the train.

Unless otherwise instructed, all eastward trains heavier than 4,500 tons will have helpers positioned or entrained according to the following tables:

TRAIN TONNAGE	CUT-IN AHEAD	MAXIMUM POWERED AXLES
4501-5499	1800 tons	12
5500-6299	2700 tons	18
6300-8000	Greater of 3600 tons or 1/2 trailing tonnage	24

Additional instructions for westward trains:

When train tonnage exceeds 3,800 tons, minimum tonnage restrictions will apply to head portion of train by car count as follows;

- 3801-3999 tons* First 5 cars of train
- 4000-4199 tons* first 6 cars of train
- 4200-4399 tons* first 7 cars of train
- 4400 tons and over * first 8 cars of train

Cars in restricted head portion of train must conform to the following minimum weight restricts:

- Two axle cars 35 tons
- Articulated double stack cars (counted as 3 cars-QY) 150 tons
- Articulated double stack cars (counted as 2 cars -QV) 100 tons
- Articulated three pack cars (counted as 2 cars-QC, QM) 100 tons
- Articulated five pack cars (counted as 3 cars-Q5, QO, QE) 150 tons
- All other cars 50 tons

89-foot or longer flat cars loaded with a single trailer/container must not be placed within the first 10 cars of the train.

Unless other wise instructed, all westward trains heavier than 5,100 tons will have helpers positioned or entrained according to the following table:

TRAIN TONNAGE	PLACEMENT	MAXIMUM POWERED AXLES
5100-7999	Rear of Train	12
8000 tons or over	Cut in ahead of 2400 tons	24

Flash Flood Warnings—Refer to Item 33, System Special Instructions. The following locations have been identified as “critical areas” and are limited to Restricted Speed:

- Bridge MP 755.6
- Bridge MP 770.7
- Bridge MP 773.2
- Bridge MP 775.7
- Bridge MP 775.9

System Special Instructions Amendment—

Item 9, Amtrak Instructions, under “Equipment”, the line reading “Movement with locomotives between cars is prohibited” does not apply on the Northern California Division.

The following will apply:

Movement with locomotive between cars is prohibited unless:

- A. Locomotive is being used in “push-pull” service.
- B. “MU” control cables are connected through the entire train.
- C. Locomotive between cars is not isolated or dead-in-tow.

8. Line Segments

Yard Line Segments

Line Segment Limits

- 7253 Barstow Yard
- 7254 Bakersfield Yard

Road Line Segments

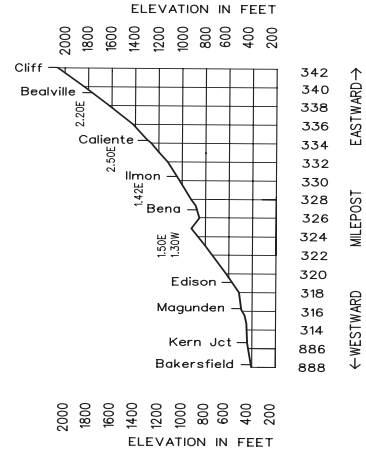
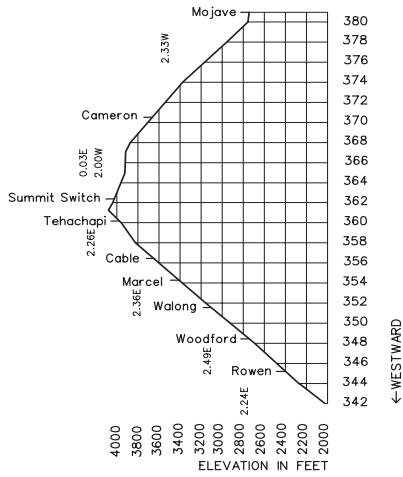
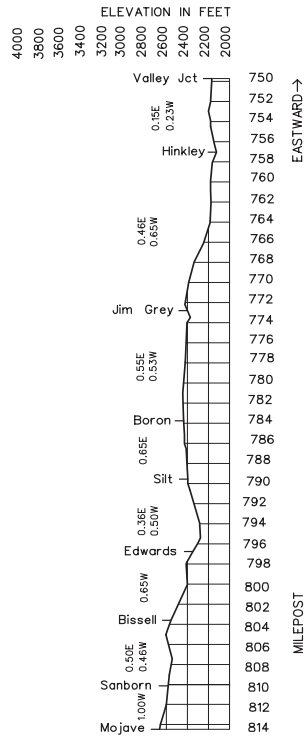
Line Segment Limits

- 7200 Valley Jct. to Mojave
- 8107 Mojave to Kern Jct. (UP Railroad)
- 7200 Kern Jct. to Bakersfield

9. Locations Not Shown as Stations

Name	Mile Post Location	Capacity Miles	Switch Opens
P.C. Borax Co. Spur	784.7	7.4 miles	East
Government Spur	785.0	3.7 miles	East
Government Spur	797.1	6.5 miles	Both

10. Grade Charts



WESTWARD ↓	Length of Siding (Feet)	Station Nos.	Mile Post	Riverbank Subdivision BRANCH LINE STATIONS		Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.	EASTWARD ↑
				UP RRX	U					
			6.5	UP RRX	U				0.1	
		15660	6.4	OAKDALE	R		TWC	7215	6.4	
		15650	0.0	RIVERBANK	JTR				6.5	

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	FS	EMER
Riverbank to Oakdale	36	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

Riverbank Subdivision **Freight** 25 MPH.

1(B). Speed—Permanent Restrictions—None

1(C). Speed—Switches and Turnouts—None

1(D). Speed—Other

Riverbank—Speed limit 5 MPH trains and engines on east leg of wye Track 7958 approaching and passing over Patterson Road either direction. All locomotive cranes/pile drivers, and Jordan spreaders 10 MPH.

Temperature Restriction

When air temperature meets the threshold temperature of 100 degrees F between the hours of 1400 and 1900, operate at 10 MPH.

See Item 1 of System Special Instructions for additional speed restrictions.

2. Bridge and Equipment Weight Restrictions

Maximum Gross Weight of Car

UP RRX to Riverbank 143 tons, Restriction D

3. Type of Operation

Restricted Limits—in effect:

Oakdale (BNSF track only) MP 6.0 to MP 6.5

Riverbank MP 0.0 to MP 1.0

TWC—in effect:

Riverbank to Oakdale MP 1.0 to MP 6.0

4. General Code of Operating Rules Items

Rule 1.14—Union Pacific may use joint track between Riverbank and Oakdale.

Rule 5.8.2—Item 11, Sound whistle approaching ALL crossings, public and private.

5. Trackside Warning Detectors (TWD)—None

6. FRA Exempted Track—None

7. Special Conditions—

Locomotive Consists—When building locomotive consists, locomotives rated at less than 2000 horsepower and not equipped with a dynamic brake must be placed immediately behind the lead locomotive in the consist.

System Special Instructions Amendment—

Item 9, Amtrak Instructions, under “Equipment”, the line reading “Movement with locomotives between cars is prohibited” does not apply on the Northern California Division.

The following will apply:

- A. Locomotive is being used in “push-pull” service.
- B. “MU” control cables are connected through the entire train.
- C. Locomotive between cars is not isolated or dead-in-tow.

8. Line Segments

Yard Line Segments

Line Segment Yard

7256 Riverbank Yard

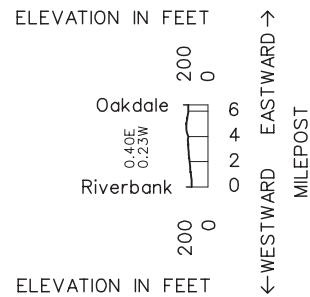
Road Line Segments

Line Segment Limits

7215 Riverbank to Oakdale

9. Locations Not Shown as Stations

10. Grade Charts



WESTWARD ↓	Length of Siding (Feet)	Station Nos.	Mile Post	Stockton Subdivision MAIN LINE STATIONS		Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.	EASTWARD ↑
		16200	994.9	CALWA	BCPT		2MT CTC		1.8	
			996.7	SJ RRX - SUNMAID CRSG.	MX(2)				1.3	
		16200	998.1	FRESNO	BC		CTC	7200	1.6	
		16095	999.7	HAMMOND	J				5.3	
	8,514	16089	1005.0	FIGARDEN					6.3	
		8,950	16083	GREGG					8.3	
		8,984	15884	MADERA					5.8	
		9,083	15876	KISMET					5.7	
		13,900	15872	SHARON					10.4	
		8,978	15866	LE GRAND					5.8	
		9,688	15862	PLANADA					8.8	
		10,314	15780	MERCED					6.8	
		8,989	15768	FLUHR					8.8	
		8,999	15760	BALLICO					7.9	
		8,964	15756	DENAIR					9.6	
			15695	MODESTO EMPIRE JCT.	J	2MT CTC			6.4	
		7,231	15650	RIVERBANK	JBPT	CTC			1.7	
			1097.3	STANISLAUS					4.1	
		9,254	15640	ESCALON					8.2	
		8,968	15630	DUFFY			2.3			
			1111.9	EAST MARIPOSA			2.9			
			1114.8	WEST MARIPOSA			2.1			
		7,298	1116.9	WALNUT			2.8			
			15000	MORMON	BPCT		0.8			
			1120.5	KEDDIE JCT.	JM		0.2			
			1120.7	UP CROSSING	JM		0.7			
		6,794	15000	STOCKTON	T	0.8				
			1122.2	WEST STOCKTON		4.4				
			14480	GILLIS		2.3				
			14470	HOLT		4.7				
			14460	TRULL		3.8				
		3,558	14440	ORWOOD	M	CTC	2.4			
			1139.2	BIXLER		2MT CTC	7.2			
			14390	OAKLEY		4.4				
		5,580	14349	SANDO		TWC ABS	1.6			
			14339	ANTIOCH		3.9				
		5,800	14330	PITTSBURG	BCP	8.3				
		3,600	14319	PORT CHICAGO	J	CTC	2.9			
		3,456	11210	MALTBY		TWC ABS	6.5			
			11230	GLEN FRAZER	P		2.6			
		4,936	11240	CHRISTIE			3.1			
		5,184	11250	COLLIER			3.5			
		5,310	11270	GATELEY			3.9			
		5,373	11280	RHEEM			2.5			
			11300	RICHMOND	BCPTY		195.2			

Spring switches are located at both ends of the following sidings:
Sando, Pittsburg, Christie, Collier, Gateley, Maltby, and Rheem.

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	FS	EMER
Calwa to MP 1008.0	55	1	3	4	5&7	9
MP 1008.0 to MP 1146.4	36	1	3	4	5&7	9
MP 1146.4 to Richmond	45	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

	Passenger	Freight
Calwa to Port Chicago	79 MPH.	55 MPH.*%
Port Chicago to Richmond		55 MPH.*%
Freight trains on descending grades, with dynamic brakes not in use, must not exceed:		
Westward MP 1175.0 to MP 1181.0		30 MPH.
Eastward MP 1174.0 to MP 1167.0		30 MPH.

*See System Special Instructions Item 1(B).

1(B). Speed—Permanent Restrictions

Westward		
MP 995.2 to MP 995.5	40 MPH.	40 MPH.
MP 995.5 to MP 998.1	40 MPH.	35 MPH.
MP 998.1 to MP 999.8	35 MPH.	30 MPH.
MP 1047.5 to MP 1047.9	75 MPH.	65 MPH.
MP 1053.7 to MP 1054.1	70 MPH.	65 MPH.
MP 1055.1 to MP 1057.0 (HER)	60 MPH.	60 MPH.
MP 1057.2 to MP 1057.7 (HER)	70 MPH.	
MP 1069.1 to MP 1070.5	70 MPH.	65 MPH.
MP 1083.2 to MP 1083.8 (HER)	70 MPH.	
MP 1087.9 to MP 1088—Both Main Tracks	60 MPH.	55 MPH.
MP 1119.1 to MP 1119.5	60 MPH.	55 MPH.
MP 1120.0 to MP 1121.7	20 MPH.	20 MPH.
MP 1133.7 to MP 1133.5	50 MPH.	50 MPH.
MP 1136.2 to MP 1136.4	35 MPH.	25 MPH.
MP 1139.5 to MP 1139.8—Main 1	60 MPH.	55 MPH.
MP 1139.5 to MP 1139.8—Main 2	60 MPH.	55 MPH.
MP 1151.2 to MP 1152.1 (HER)	60 MPH.	60 MPH.
MP 1155.4 to MP 1155.7	70 MPH.	60 MPH.
MP 1161.3 to MP 1161.9	45 MPH.	45 MPH.
MP 1162.8 to MP 1163.3	65 MPH.	65 MPH.
MP 1167.3 to MP 1170.5	45 MPH.	45 MPH.
MP 1170.5 to MP 1180.9	35 MPH.	35 MPH.
MP 1180.9 to MP 1185.1	45 MPH.	45 MPH.
MP 1185.1 to MP 1185.4	35 MPH.	35 MPH.
MP 1185.4 to MP 1189.0	45 MPH.	45 MPH.
Eastward		
MP 1189.0 to MP 1185.4	45 MPH.	45 MPH.
MP 1185.4 to MP 1185.1	35 MPH.	35 MPH.
MP 1185.1 to MP 1180.9	45 MPH.	45 MPH.
MP 1180.9 to MP 1170.5	35 MPH.	35 MPH.
MP 1170.5 to MP 1167.3	45 MPH.	45 MPH.
MP 1163.3 to MP 1162.8	65 MPH.	65 MPH.
MP 1161.9 to MP 1161.3	45 MPH.	45 MPH.
MP 1155.7 to MP 1155.4	70 MPH.	60 MPH.
MP 1152.1 to MP 1151.2 (HER)	60 MPH.	60 MPH.
MP 1139.8 to MP 1139.5—Main 1	60 MPH.	55 MPH.
MP 1139.8 to MP 1139.5—Main 2	60 MPH.	55 MPH.
MP 1136.4 to MP 1136.2	35 MPH.	25 MPH.
MP 1133.5 to MP 1133.7	50 MPH.	50 MPH.
MP 1121.7 to MP 1120.0	20 MPH.	20 MPH.
MP 1119.5 to MP 1119.1	60 MPH.	55 MPH.
MP 1118.5 to MP 1117.9 (HER)	75 MPH.	
MP 1088.1 to MP 1087.0—Both Main Tracks	60 MPH.	55 MPH.
MP 1084.9 to MP 1084.3 (HER)	70 MPH.	
MP 1070.5 to MP 1069.1	70 MPH.	65 MPH.
MP 1058.3 to MP 1057.7 (HER)	70 MPH.	
MP 1057.0 to MP 1055.1 (HER)	60 MPH.	60 MPH.
MP 1054.1 to MP 1053.7	70 MPH.	65 MPH.
MP 1047.9 to MP 1047.5	75 MPH.	65 MPH.
MP 999.8 to MP 998.1	35 MPH.	30 MPH.
MP 998.1 to MP 995.5 (HER)	40 MPH.	35 MPH.
MP 995.5 to MP 995.2	40 MPH.	40 MPH.

1(C). Speed—Switches and Turnouts

Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.

MP 996.8 Sunmaid Crossing, 2 crossovers	30 MPH.	30 MPH.
MP 996.8 Calwa, Turnout, yard lead to Main 2	15 MPH.	15 MPH.
Fresno—End of two tracks	30 MPH.	30 MPH.
Figarden—Both ends siding	40 MPH.	40 MPH.
Gregg—Both ends siding	40 MPH.	40 MPH.
Madera—Both ends siding	40 MPH.	40 MPH.
Kismet—Both ends siding	40 MPH.	40 MPH.
Sharon—Both ends siding	40 MPH.	40 MPH.
Legrand—Both ends siding	40 MPH.	40 MPH.
Planada—Both ends siding	40 MPH.	40 MPH.
Merced—EE siding	40 MPH.	40 MPH.
Merced—WE siding	30 MPH.	30 MPH.
Fluhr—Both ends siding	40 MPH.	40 MPH.
Balico—Both ends siding	40 MPH.	40 MPH.
Denair—Both ends siding	40 MPH.	40 MPH.
Modesto Empire Jct.—Turnouts	60 MPH.	50 MPH.
Riverbank—Both ends siding	40 MPH.	40 MPH.
Escalon—Both ends siding	40 MPH.	40 MPH.
Duffy—Both ends siding	40 MPH.	40 MPH.
East Mariposa, turnout	40 MPH.	40 MPH.
West Mariposa, crossover	40 MPH.	40 MPH.
Walnut—Both ends siding	40 MPH.	40 MPH.
MP 1117.6—Walnut crossover	30 MPH.	30 MPH.
MP 1120.4—Crossover WE Mormon Yard	10 MPH.	10 MPH.
CP 11205—Switch	10 MPH.	10 MPH.
CP 11207	15 MPH.	15 MPH.
CP 11222—WE siding	30 MPH.	30 MPH.
CP 11222—Crossover	15 MPH.	15 MPH.
Stockton—EE siding	15 MPH.	15 MPH.
Holt—MP 1128.9 End of two tracks	60 MPH.	50 MPH.
Trull—MP 1133.6 End of two tracks	50 MPH.	50 MPH.
Orwood—Both ends siding	10 MPH.	10 MPH.
Bixler—Main 1	60 MPH.	50 MPH.
Oakley—Main 1	60 MPH.	50 MPH.
Sando—EE siding	30 MPH.	30 MPH.
Sando—WE siding	15 MPH.	15 MPH.
Pittsburg—Both ends siding	30 MPH.	30 MPH.
Port Chicago—UP connection	50 MPH.	50 MPH.
Maltby—Both ends siding	30 MPH.	30 MPH.
Christie—Both ends siding	10 MPH.	10 MPH.
Collier—Both ends siding	30 MPH.	30 MPH.
Gateley—Both ends siding	10 MPH.	10 MPH.
Rheem—Both ends siding	30 MPH.	30 MPH.

1(D). Speed—Other

Mormon—Freight lead, MP 1117.8 to MP 1119.1 20 MPH.

Maltby

Speed limit for westward trains leaving Maltby siding is 15 MPH until private road crossing, located at MP 1167.4, is occupied.

Tunnel No. 3, MP 1173.56 to MP 1174.62, cars with car kind code M3F 13 MPH.

Temperature Restrictions

When air temperature exceeds threshold temperatures, all trains will be governed by the following table on Main Tracks through these limits unless a more restrictive speed is in effect. Temperature degrees are shown in Fahrenheit.

Between Calwa and MP 1121.4:

Temperature Range	Trains under 6,000 Tons	Trains over 6,000 Tons	Trains Exceeding 100 TOB	Passenger Trains
Exceeds 110 degrees	Maximum 55 MPH.	Maximum 45 MPH.	Maximum 45 MPH.	No Restrictions
Exceeds 115 degrees	Maximum 45 MPH.	Maximum 40 MPH.	Maximum 40 MPH.	Maximum 70 MPH.
Exceeds 120 degrees	Maximum 40 MPH.	Maximum 30 MPH.	Maximum 30 MPH.	Maximum 50 MPH.

Between MP 1121.4 and Richmond:

Temperature Range	Trains under 6,000 Tons	Trains over 6,000 Tons	Trains Exceeding 100 TOB	Passenger Trains
Exceeds 95 degrees	Maximum 55 MPH.	Maximum 45 MPH.	Maximum 45 MPH.	No Restrictions
Exceeds 100 degrees	Maximum 45 MPH.	Maximum 40 MPH.	Maximum 40 MPH.	Maximum 70 MPH.
Exceeds 105 degrees	Maximum 40 MPH.	Maximum 30 MPH.	Maximum 30 MPH.	Maximum 50 MPH.

Notify the Train Dispatcher when your train is restricted by this instruction. If in doubt as to the temperature, contact the train dispatcher.

See Item 1 of the System Special Instructions for additional speed restrictions.

2. Bridge and Equipment Weight Restrictions

Maximum Gross Weight of Car

Calwa to Richmond 143 tons, Restriction B

3. Type of Operation

Rule 6.13—Yard Limits

Richmond MP 1187.3 to MP 1189.0

CTC—in effect on Main Track and sidings:

Calwa to Oakley MP 994.9 to MP 1146.4

Port Chicago, UP Jct. MP 1163.5 to MP 1163.7

TWC—in effect:

Oakley to Port Chicago MP 1146.4 to MP 1163.5

Port Chicago to Richmond MP 1163.7 to MP 1189.0

ABS—in effect:

Oakley to Port Chicago MP 1146.4 to MP 1163.5

Port Chicago to Richmond MP 1163.7 to MP 1188.3

Rule 6.26, Multiple Main Tracks

Calwa to Fresno MP 994.9 to MP 998.1

Modesto Empire Junction MP 1087.1 to MP 1090.8

Holt to Trull MP 1128.8 to MP 1133.6

Bixler to Oakley MP 1138.4 to MP 1146.3

Signals Not Conforming to Aspects and Indications Shown in the System Special Instructions

Aspect	Name	Indication
Red Over Flashing Yellow	Diverging Approach (Rule 9.1.11 does not apply.)	Proceed through diverging route; prescribed speed through turnout; approach next signal preparing to stop, if exceeding 40 MPH immediately reduce to that speed.

4. General Code of Operating Rules Items

Rule 1.14—UPRR Trains may use joint track between Keddie Jct. and Riverbank and between Keddie Jct. and Port Chicago. BNSF trains may use Union Pacific joint track between Stege and Oakland, Stege and Warm Springs and Stockton and Keddie. SJVR trains may use joint track between Calwa and Hammond.

Rule 5.8.2—Item 11, Sound whistle approaching ALL crossings, public and private.

Rule 5.16—Passenger Trains—Observe and Call Signals:
When a signal requires a train to stop at or pass the next signal at Restricted Speed, the engineer must communicate that fact to a designated member of the crew, including track designation if on multiple tracks, and get an acknowledgment. If no acknowledgment is received, the engineer must ascertain at the next scheduled stop why the message is not being confirmed. If the engineer fails to control the train movement in accordance with either a wayside signal or other restrictions imposed upon the train, the designated crew member shall at once communicate with and caution the engineer regarding the restriction and, if necessary, take appropriate action to ensure the safety of the train, including stopping all movement if appropriate.

Rule 9.9—All Trains—Train Delayed Within a Block:
In CTC, when any train stops or its speed is reduced below 10 MPH, the train must proceed at a speed not exceeding 40 MPH, prepared to stop at the next signal until the next signal is visible, that signal displays a proceed indication, and track is clear to the signal.

Rule 9.10—is amended on the Stockton Subdivision as follows:
Paragraph under the heading "Exception" is amended to read: Within ABS limits, a train having authority to enter the Main Track at a switch where there is no governing signal will:

- be governed by Main Track signal provided it can be determined by signal indication that no train is approaching from the rear; or,
- be governed by Main Track signal after meeting a train while that train is still in the block to the rear.

Rule 9.13—At Christie, eastward train on siding must remain West of spotting section until ready to depart. Spotting section is designated by sign near signal at east end of siding. Eastward train, when ready to proceed, must occupy spotting section between sign and signal; signal will clear in 45 seconds if westward train on Main Track is West of signal at MP 1175.4, governing movement eastward on Main Track at east end of Christie, or if Main Track is clear between signals at MP 1173.3, governing movement westward at MP 1178.6, governing movement eastward on Main Track at east end of Collier. If train is occupying section of Main Track between signal at MP 1175.4, governing movement eastward on Main Track at east end of Christie and signal at MP 1178.6, governing movement eastward on Main Track at east end of Collier, the signal will not clear before two and one-half minutes.

- 5. Trackside Warning Detectors (TWD)**
- A. Protecting bridges, tunnels or other structures
 - MP 1130.9 (DED only)—WWD only
 - MP 1139.4 (DED only)—EWD only
 - MP 1144.5—Recall Code 8
 - Protects Bridge MP 1136.5 and Tunnel MP 1170.2
 - MP 1180.5—EWD only—Protects Tunnel MP 1175.4
 - B. Other TWD locations
 - MP 1010.0—Recall Code 8
 - MP 1029.3—Recall Code 8
 - MP 1051.1—Recall Code 8
 - MP 1076.2—Recall Code 8
 - MP 1099.1—Recall Code 8
 - MP 1123.0—Recall Code 8
 - MP 1130.9 (DED only)—EWD only
 - MP 1139.4 (DED only)—WWD only
 - MP 1168.9—Recall Code 8
 - MP 1180.5—WWD only
 - C. Other detectors
 - MP 1171.3, 1171.5—Slide Detector
 - MP 1170.1 & EWD, rotating red light MP 1171.5

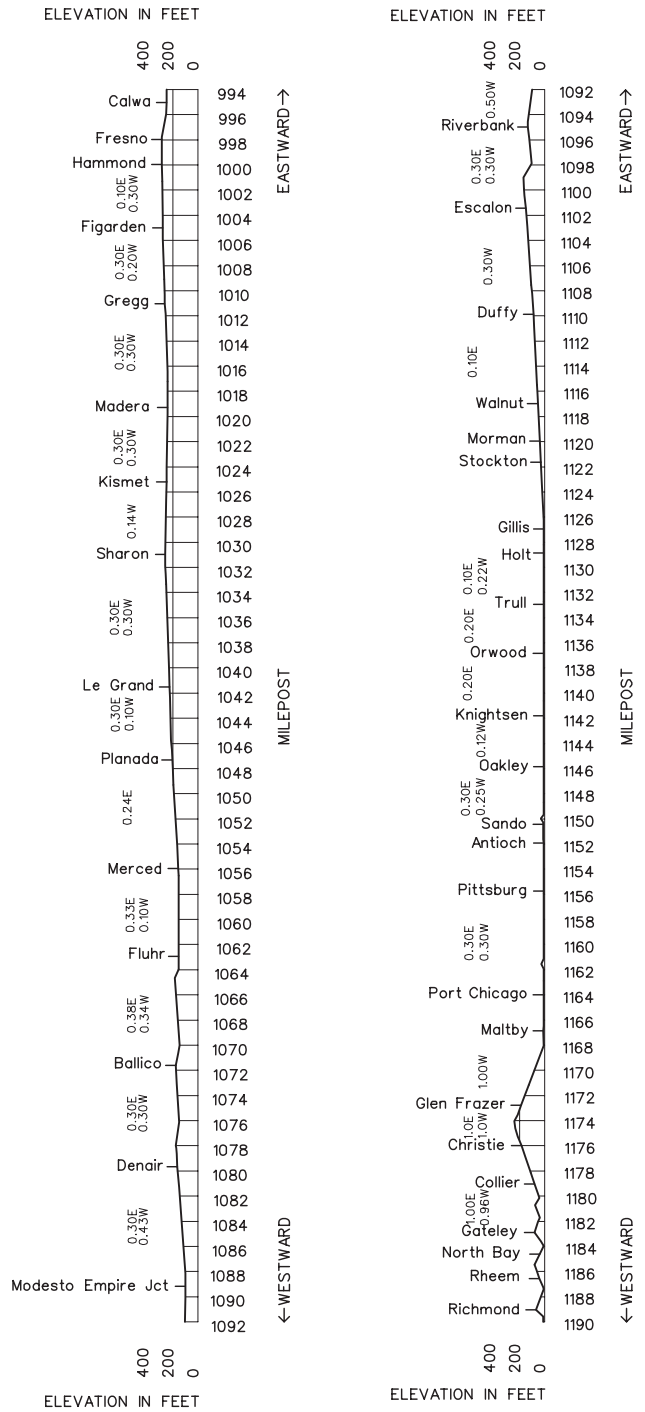
- 6. **FRA Excepted Track**—None
 - 7. **Special Conditions**
 - Close Clearance, Overhead and Side Obstructions**
 - MP 1088.6—Syphon—north headwall—south headwall
 - MP 1091.4—Syphon—north headwall
 - Glen Frazer—Tunnel No. 1, Tunnel No. 2, Tunnel No. 3
 - East Antioch—Track 528, trainmen must not ride on south side of equipment.
 - MP 1165.8—Monsanto Chemical, tracks 1371 and 1372, structure located 503 feet west of east switch of the crossover alongside track has impaired overhead and side clearance. Cars should not be placed nor engine operated beyond this point (beside, or West of, these structures).
 - Richmond—Budway, CLIC 131, the loading dock will not clear man on side of car.
 - Oakland—Gary Steel: CLIC 690, a lighted sign reading: "STOP THIS STRUCTURE WILL NOT CLEAR MAN ON TOP OF CARS" has been placed over doorway into building.
 - Flash Flood Warnings**—Refer to Item 33, System Special Instructions. The following locations have been identified as "critical areas" and are limited to restricted speed:
 - Bridge MP 1128.66
 - Locomotive Consists**—When building locomotive consists, locomotives rated at less than 2000 horsepower and not equipped with a dynamic brake must be placed immediately behind the lead locomotive in the consist.
 - System Special Instructions Amendment**—Item 9, Amtrak Instructions, under "Equipment", the line reading "Movement with locomotives between cars is prohibited" does not apply on the Northern California Division.
- The following will apply:
Movement with locomotive between cars is prohibited unless:
- A. Locomotive is being used in "push-pull" service.
 - B. "MU" control cables are connected through the entire train.
 - C. Locomotive between cars is not isolated or dead-in-tow.

- 8. **Line Segments**
 - Yard Line Segments**
 - Line Segment Limits**
 - 7255 Calwa
 - 7257 7256 Riverbank Yard
 - 7258 Richmond
 - Road Line Segments**
 - Line Segment Limits**
 - 7200 Calwa to Richmond MP 994.9 to MP 1189.0

9. Locations Not Shown as Stations

Name	Mile Post Location	Capacity Feet	Switch Opens
Trigo	1014.7	6,650	Both
Tuttle	1050.7	2,339	Both
Kadota	1052.1	1,072	Both
Swanson	1083.0	6,850	Both
Hughson	1085.8	2,047	Both
Claus	1092.8	2,228	Both
Woodsbro	1125.0	4,250	East
Gillis	1126.6	4,881	Both
Middle River	1134.8	2,300	East
DuPont	1147.6	3,373	Both
East Antioch	1149.2	6,350	Both
Zee	1149.8	3,163	Both
Monsanto	1165.8	2,304	Both
Pinole	1181.5	500	East
North Bay	1184.5	2,230	Both
San Pablo	1187.7	584	East

10. Grade Charts



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GCOR and MWOR Rule 15.2A—Verbal Permission:

When granting verbal permission, begin the communication using the following words:

“Foreman (name and/or Gang No.) ____ using track bulletin No. ____ (and/or Line No. ____) between MP ____ and MP ____ (specifying subdivision when necessary).”

1. To permit a train to pass a red flag (or red light) without stopping, add the following:

- “(Train) may pass red flag (or red light) located at MP ____ without stopping (specifying track when necessary).”

Unless otherwise restricted, the train may pass the red flag (or red light) at restricted speed without stopping.

2. To permit a train to proceed at other than restricted speed, add one of the following:

- “(Train) may proceed through the limits at ____ MPH (or at maximum authorized speed) (specifying track when necessary).”

Unless otherwise restricted, the train may proceed at speed specified.

- “(Train) may proceed at ____ MPH between MP ____ and MP ____ and then proceed at .. ____ MPH (or at maximum authorized speed) (specifying track when necessary) until entire train has passed through the limits.”

Unless otherwise restricted, the train may proceed through the limits at the speeds specified. Not more than two speeds may be authorized. The second speed authorized must not be less than the first speed.

3. To require the train to move at restricted speed, but less than 20 MPH, add the following:

- “(Train) must proceed at restricted speed but not exceeding ____ MPH (specifying distance and track when necessary).”

The above will apply when movement is to be made at restricted speed, but less than 20 MPH. Unless otherwise restricted, the train must proceed at restricted speed and not exceed the speed specified.

Northern California Division

Safety Hotline

(909) 386-4700

Report Unsafe Motorist

1-800-697-6736

Report Trespassers

1-800-832-5452

Speed Tables

SPEED TABLE								
Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour
Min.	Sec.		Min.	Sec.		Min.	Sec.	
-	36	100	-	58	62.1	1	40	36.0
-	37	97.3	-	59	61.0	1	42	35.3
-	38	94.7	1	-	60.0	1	44	34.6
-	39	92.3	1	02	58.0	1	46	34.0
-	40	90.0	1	04	56.2	1	48	33.3
-	41	87.8	1	06	54.5	1	50	32.7
-	42	85.7	1	08	52.9	1	52	32.1
-	43	83.7	1	10	51.4	1	54	31.6
-	44	81.8	1	12	50.0	1	56	31.0
-	45	80.0	1	14	48.6	1	58	30.5
-	46	78.3	1	16	47.4	2	-	30.0
-	47	76.6	1	18	46.1	2	05	28.8
-	48	75.0	1	20	45.0	2	10	27.7
-	49	73.5	1	22	43.9	2	15	26.7
-	50	72.0	1	24	42.9	2	30	24.0
-	51	70.6	1	26	41.9	2	45	21.8
-	52	69.2	1	28	40.9	3	-	20.0
-	53	67.9	1	30	40.0	3	30	17.1
-	54	66.6	1	32	39.1	4	-	15.0
-	55	65.5	1	34	38.3	5	-	12.0
-	56	64.2	1	36	37.5	6	-	10.0
-	57	63.2	1	38	36.8	12	-	5.0

FEET	TENTHS OF A MILE
528	.1
1,056	.2
1,584	.3
2,112	.4
2,640	.5
3,168	.6
3,696	.7
4,224	.8
4,752	.9