



**Run 8 Train Simulator
BNSF Railway
Stockton, Bakersfield and Mojave Subdivisions**

**Timetable No. 1
Effective June 1, 2026
Revised August 5, 2026**

**Produced by
David M. Bernstein**

Run 8 Train Simulator Use Only

Contents

BNSF System Map	3
BNSF California Division Map	4
BNSF Stockton Subdivision	5-8
BNSF Bakersfield Subdivision	9-13
BNSF Mojave Subdivision	14-18
Maximum speeds	19
Timetable Characters	19
Method of Operation Characters	19
Sidings	19
Multiple Main Tracks	19
Duplicate Mile Posts	19
Whistle Quiet Zones	19
Sounding Whistle	20
Restricted Limits	21
Movement at Restricted Speed	21
Movement on Other Than Main Track	21
Crossing Warning Signs	21
Permanent Speed Signs	21
BNSF Track Flags	22
Continental Time	23
Amtrak Schedules	23
Run 8 Locomotive Data	24-25
BNSF Block and Interlocking Signals	26-27
Run 8 Forms	28-34
BNSF Track Flag Placement	35-39
Run 8 Keyboard Bindings	40-41

Introduction

This timetable is authored as a companion to Run 8 Train Simulator. It is a simplified version of an employee timetable tailored for Run 8 operation. The territory covered in this publication is identical to territory covered in Run 8 Train Simulator. **The information contained is based on Run 8 Depot track maps and does not necessarily reflect real life operation. This timetable applies only to rail simulation and is not to be used for real life operation.**

The author worked as a train dispatcher, chief dispatcher and rules consultant for the Southern Pacific Transportation Company, the Atchison, Topeka & Santa Fe Railway Company and the BNSF Railway Company from 1979 to 2015.

Published by David M. Bernstein
E-mail: davebernstein9@protonmail.com

Front cover:

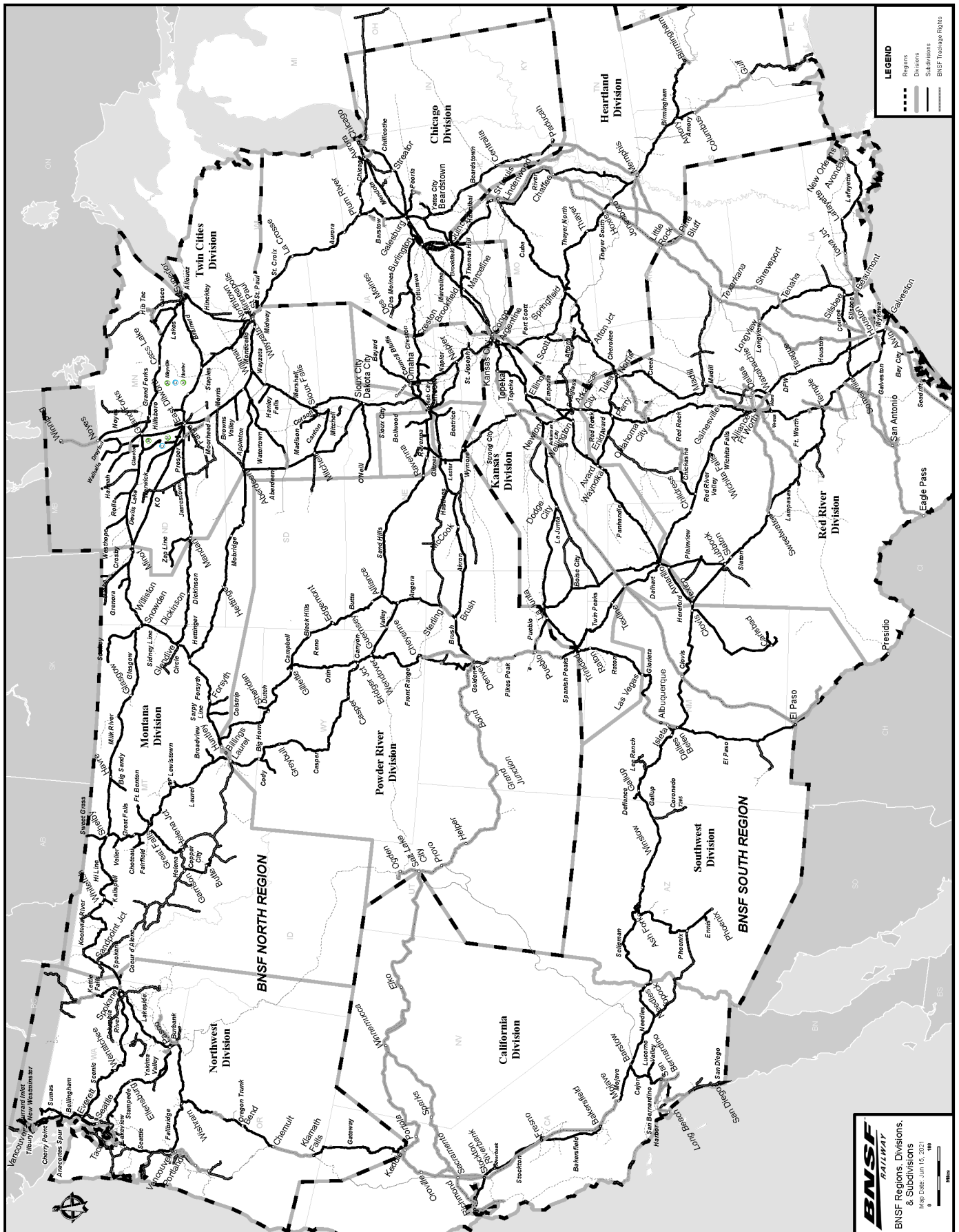
BNSF train ZWSPSTO9 (right) passing a local freight train at Alhambra, CA, on February 20, 2018. (Craig Walker photo).

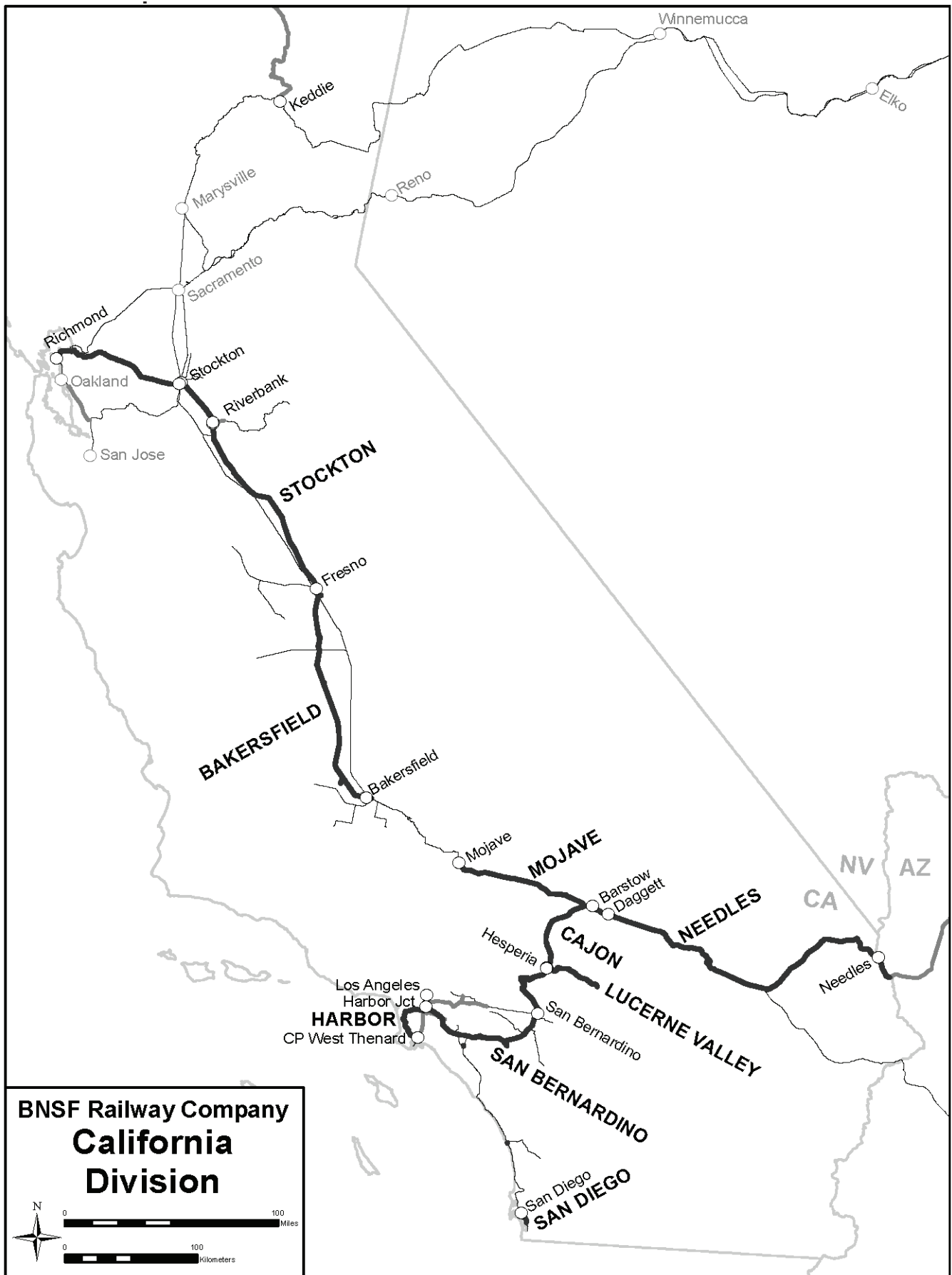
Revisions

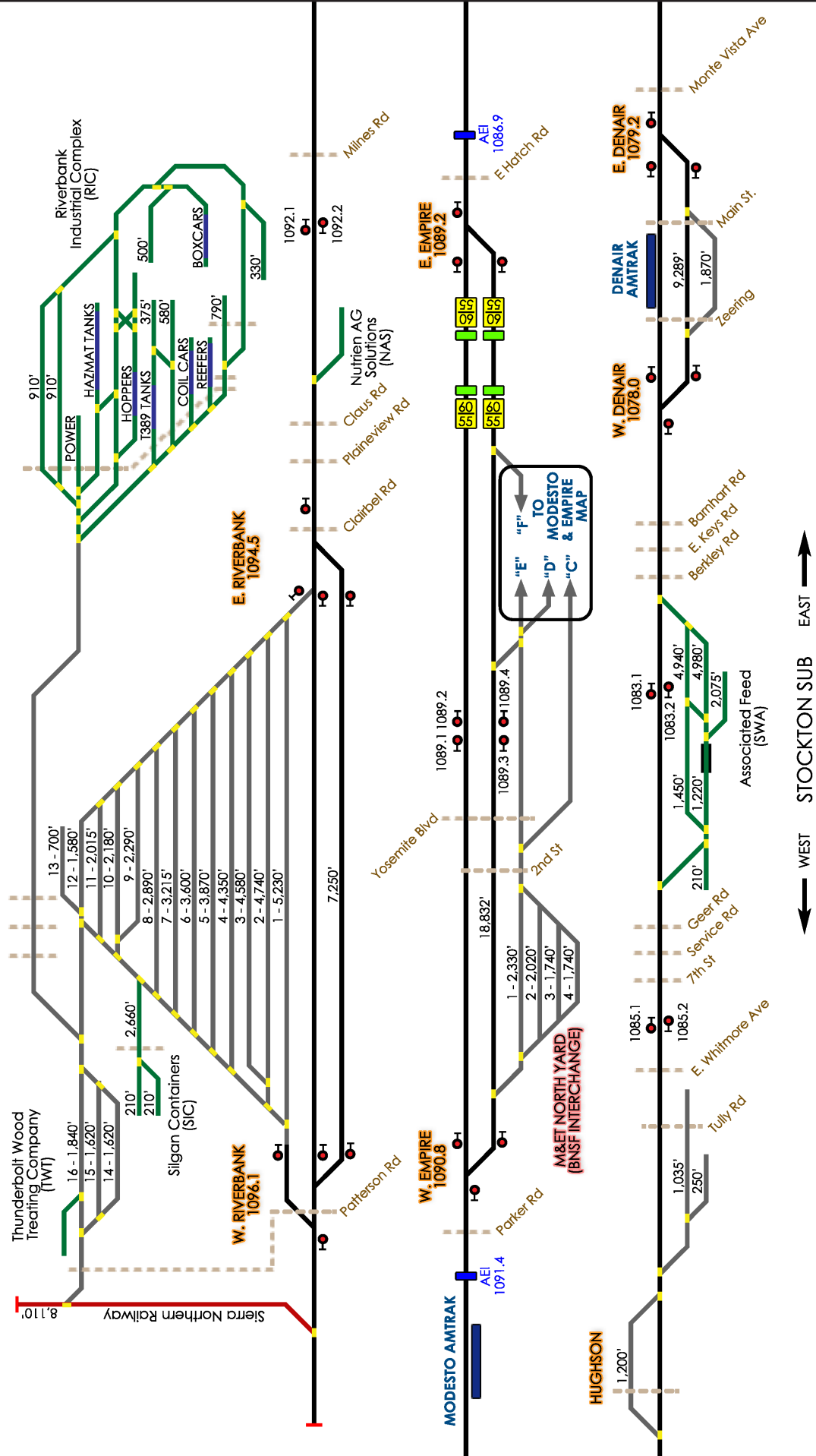
August 5, 2026 Revised page 15, added Silt.

Abbreviations and Acronyms

ABS	Automatic Block Signal System
A&C	Arizona & California Railroad
AMTK	Amtrak
BO	Bad Order
C	Center
C & E	Conductor and Engineer
COFC	Container on Flat Car
CP	Control Point
CTC	Centralized Traffic Control
DISPR	Dispatcher (also DS)
DIV	Division
DT	Double Track
E	East
EBCS	East Bound Controlled Signal
EE	East End
ENG	Engine
ESS	East Siding Switch
EWD	Eastward
FRT	Freight
HER	Head End Restriction
JCT	Junction
MAX	Maximum
MMT	Multiple Main Track
MP	Mile Post
MPH	Miles Per Hour
MT	Main Track
MW	Maintenance of Way
N	North
NBCS	North Bound Controlled Signal
NE	North End
NO	Number
NSS	North Siding Switch
NWD	Northward
OK	Correct
OOS	Out of Service
OPR	Operator
ORIG	Originating
PSGR	Passenger
RL	Restricted Limits
S	South
SBCS	South Bound Controlled Signal
SCRRA	Southern California Regional Rail Auth. (Metrolink)
SDG	Siding
SE	South End
SJVR	San Joaquin Valley Railroad
SSS	South Siding Switch
SUBDIV	Subdivision
SW	Switch
SWD	Southward
TOB	Tons Per Operative Brake (Also TPOB)
TOFC	Trailer on Flat Car
TRK	Track
TRN	Train
TWD	Trackside Warning Detector
UP	Union Pacific Railroad
W	West
WBCS	West Bound Controlled Signal
WE	West End
WSS	West Siding Switch
WWD	Westward
XO	Crossover
YD	Yard
YM	Yardmaster







BNSF STOCKTON SUBDIVISION

Radio Communication

Riverbank to MP 1064.0	Channel 036
MP 1064.0 to MP 1008.0	Channel 068
MP 1008.0 to MP 995.0	Channel 055

Method of Operation:

Riverbank to West Empire MP 1090.8.....	CTC
W. Empire MP 1090.8 to E. Empire MP 1087.1	CTC 2MT
East Empire MP 1087.1 to Fresno MP 998.1	CTC
Fresno MP 998.1 to Calwa MP 995.0	CTC 2MT

Manual Interlockings:

MP 996.8 Sunmaid Crossing controlled by BNSF Train Dispatcher.

Maximum Speeds - Main Tracks:

Eastward Trains			
Limit	Limit	Psg.	Frt.
MP 1096.1	MP 1090.8	79	70
MP 1098.1 End 2 MT	Main Track to Main 2	60	60
MP 1090.8 Main 1 & 2	MP 1088.1 Main 1 & 2	79	70
MP 1088.1 Main 1 & 2	MP 1087.9 Main 1 & 2	60	55
MP 1087.9 Main 1 & 2	MP 1087.1 Main 1 & 2	79	70
MP 1087.1 End 2 MT	Main 2 to Main Track	50	50
MP 1089.2	MP 1071.5	79	70
MP 1071.2	MP 1069.2	70	65
MP 1069.2	MP 1057.0	79	70
MP 1057.0	MP 1055.1	60	60
MP 1055.1	MP 1054.1	79	70
MP 1054.1	MP 1053.7	70	65
MP 1053.7	MP 1047.8	79	70
MP 1047.8	MP 1047.4	75	65
MP 1047.4	MP 1000.0	70	70
MP 1000.0	MP 998.2	35	30
MP 998.2 Main 1 & 2	MP 996.1 Main 1 & 2	40	35
MP 996.1 Main 1 & 2	MP 995.0 Main 1 & 2	40	40

Westward Trains			
Limit	Limit	Psg.	Frt.
MP 995.0 Main 1 & 2	MP 996.1 Main 1 & 2	40	40
MP 996.1 Main 1 & 2	MP 998.2 Main 1 & 2	40	35
MP 998.2	MP 1000.0	35	30
MP 1000.0	MP 1047.4	79	70
MP 1047.4	MP 1047.8	75	65
MP 1047.8	MP 1053.7	79	70
MP 1053.7	MP 1054.1	70	65
MP 1054.1	MP 1055.1	79	70
MP 1055.1	MP 1057.0	60	60

Maximum Speeds - Main Tracks: (continued)

Westward Trains			
Limit	Limit	Psg.	Frt.
MP 1057.0	MP 1069.2	79	70
MP 1069.2	MP 1071.5	70	65
MP 1071.5	MP 1087.1	79	70
MP 1087.1 End 2 MT	Main Track to Main 2	50	50
MP 1087.1 Main 1 & 2	MP 1087.9 Main 1 & 2	79	70
MP 1087.9 Main 1 & 2	MP 1088.1 Main 1 & 2	60	55
MP 1088.1 Main 1 & 2	MP 1090.8 Main 1 & 2	79	70
MP 1090.8 End 2 MT	Main 2 to Main Track	60	60
MP 1090.8	MP 1096.1	79	70

Maximum Speeds - Other Tracks and Turnouts:

Track	Psg.	Frt.
Crossovers		
• Merced MP 1055.6	50	50
• Sunmaid Crossing MP 996.8	40	35
• Calwa MP 995.0	30	30
Sidings except below	40	40
• Riverbank	25	25
• Merced	50	50
West Empire MP1090.8 Turnout MT to Main 2	60	60
East Empire MP 1087.1 Turnout MT to Main 2	50	50
Fresno MP 998.1 Turnout Main Track to Main 2	40	35
All other tracks and turnouts	15	15

Trackside Warning Detectors:

MP	Track(s)	Between	Notes
1076.2	Main	Denair and Ballico	
1066.0	Main	Ballico and Fluhr	
1051.2	Main	Merced and Planada	
1029.3	Main	Sharon and Kismet	
1010.0	Main	Gregg and Figarden	

Joint Operation:

Amtrak trains operate between Riverbank and Calwa.
San Joaquin Valley Railroad trains operated between Hammond and Calwa.

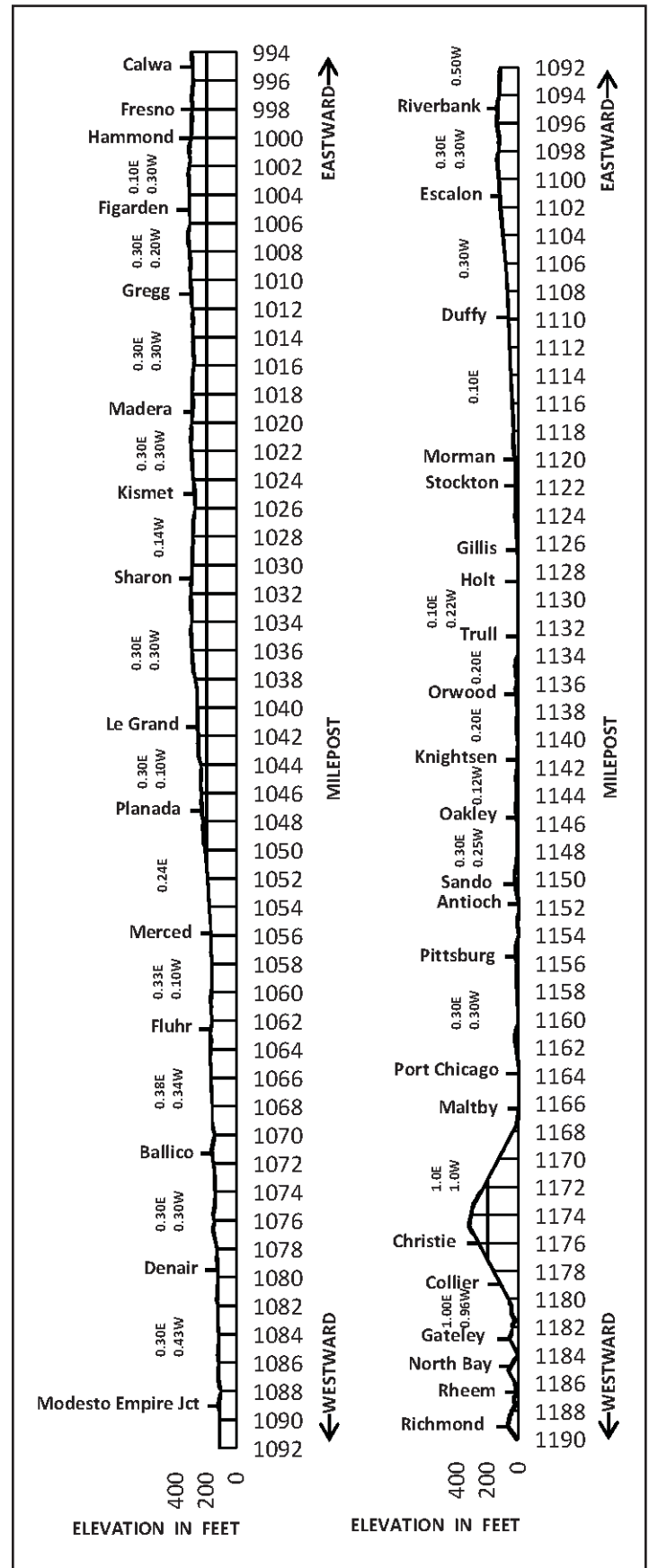
Errors:

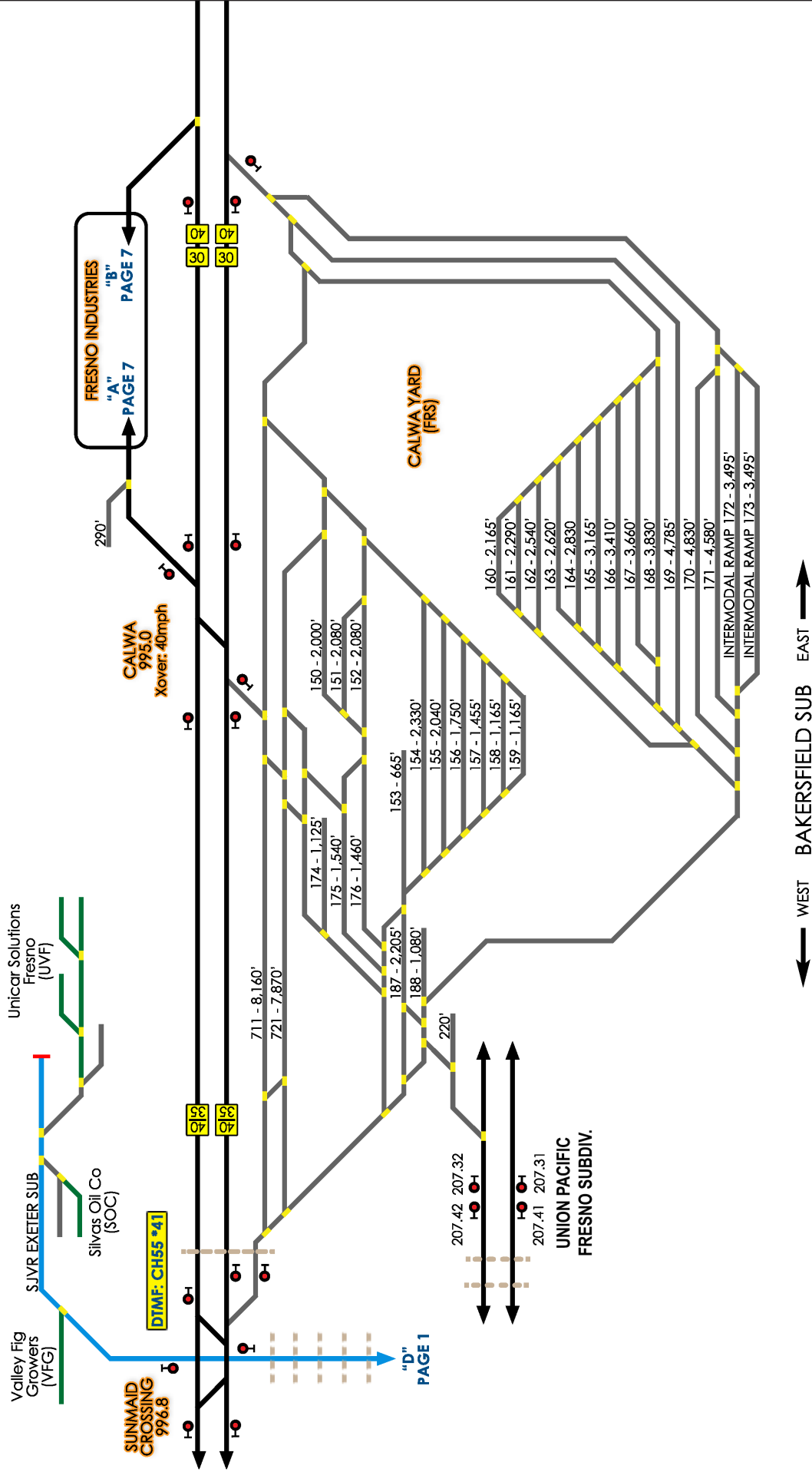
- Eastward Permanent Speed Signs Main 1 and Main 2 MP 1091.2 should display P 60 instead of P 65.
- Run 8 Depot Map E. Empire should be MP 1087.1 instead of MP 1089.2.
- Run 8 Depot Map Signals 1059.1 and 1059.2 should be 1052.1 and 1052.2.

BNSF STOCKTON SUBDIVISION

Other Location Information:

Name	Mile Post	Capacity (feet)	Switch Opens
Northern AG Solutions	1093.0	1460	West
Hughson Team Track	1085.8	1200	Both
Swanson (Associated Feeds)	1083.0	14875	Both
Winton Team Track	1065.5	930	West
Western Industry Park	1058.1	---	West
Merced University Industry Park	1052.2	2640	Both
Kadota (Universal Service Recycling)	1051.6	1370	East
Tuttle (Valley Pacific Refrigeration)	1050.7	1125	Both
Trigo (Pacific Ethanol Madera)	1014.7	10920	Both
Hammond	999.5	2035	Both





BNSF BAKERSFIELD SUBDIVISION

Radio Communication:

Calwa to MP 987.7 Channel 055
 MP 987.7 to East Bakersfield Channel 084

Method of Operation:

Calwa to Floral MP 986.4 CTC 2MT
 Floral MP 986.4 to Shirley MP 972.3 CTC
 Shirley MP 972.3 to Guernsey MP 960.0 CTC 2MT
 Guernsey MP 960.0 to Lopez MP 892.3 CTC
 Lopez MP 892.3 to East Bakersfield MP 887.5 CTC 2MT

Manual Interlockings:

MP 994.7 Calwa Crossing controlled by BNSF Train Dispatcher.
 MP 967.7 Hanford —controlled by BNSF Train Dispatcher.

Maximum Speeds - Main Tracks:

Eastward Trains			
Limit	Limit	Psg.	Frt.
MP 995.0 Main 1 & 2	MP 994.4 Main 1 & 2	40	40
MP 994.4 Main 1 & 2	MP 994.2 Main 1 & 2	30	30
MP 994.2 Main 1 & 2	MP 990.2 Main 1 & 2	79	70
MP 990.2 Main 1	MP 986.4 Main 1	50	50
MP 990.2 Main 2	MP 986.4 Main 2	79	70
MP 986.4 End of 2 MT	Main 1 to Main Track	50	50
MP 986.4	MP 975.8	79	70
MP 975.8	MP 973.5	55	45
MP 973.5	MP 972.3	79	70
MP 972.3 End of 2 MT	Main Track to Main 2	50	50
MP 972.3 Main 1 & 2	MP 969.6 Main 1 & 2	79	70
MP 969.6 Main 1 & 2	MP 967.8 Main 1 & 2	45	45
MP 967.8 Main 1 & 2	MP 967.6 Main 1 & 2	40	40
MP 969.6 Main 1 & 2	MP 967.5 Main 1 & 2	45	45
MP 967.5 Main 1 & 2	MP 960.0 Main 1 & 2	79	70
MP 960.0 End of 2MT	Main 1 to Main Track	50	50
MP 961.6	MP 894.2	79	70
MP 894.2	MP 892.9	70	65
MP 892.9	MP 892.3	79	70
MP 892.3 Main 1	MP 890.1 Main 1	79	70
MP 890.1 Main 1	MP 889.7 Main 1	60	55
MP 889.7 Main 1	MP 889.1 Main 1	60	60
MP 889.1 Main 1	MP 888.0 Main 1	55	55
MP 888.0 Main 1	MP 887.5 Main 1	25	25
MP 892.3 Main 2	MP 890.1 Main 2	79	70
MP 890.1 Main 2	MP 889.7 Main 2	60	50
MP 889.7 Main 2	MP 889.1 Main 2	40	30
MP 889.1 Main 2	MP 888.0 Main 2	40	40
MP 888.0 Main 2	MP 887.5 Main 2	25	25

Maximum Speeds - Main Tracks: (continued)

Westward Trains			
Limit	Limit	Psg.	Frt.
MP 887.5 Main 1	MP 888.0 Main 1	25	25
MP 888.0 Main 1	MP 889.1 Main 1	55	55
MP 889.1 Main 1	MP 889.7 Main 1	60	60
MP 889.7 Main 1	MP 890.1 Main 1	60	55
MP 890.1 Main 1	MP 892.3 Main 1	79	70
MP 887.5 Main 2	MP 888.0 Main 2	25	25
MP 888.0 Main 2	MP 889.1 Main 2	40	40
MP 889.1 Main 2	MP 890.1 Main 2	40	30
MP 890.1 Main 2	MP 892.3 Main 2	79	70
MP 892.3	MP 892.9	79	70
MP 892.9	MP 894.2	70	65
MP 894.2	MP 960.0	79	70
MP 960.0 End of 2 MT	Main Track to Main 1	50	50
MP 960.0 Main 1 & 2	MP 967.5 Main 1 & 2	79	70
MP 967.5 Main 1 & 2	MP 967.6 Main 1 & 2	45	45
MP 967.6 Main 1 & 2	MP 967.8 Main 1 & 2	40	40
MP 967.8 Main 1 & 2	MP 969.6 Main 1 & 2	45	45
MP 969.6 Main 1 & 2	MP 972.3 Main 1 & 2	79	70
MP 972.3 End of 2 MT	Main 2 to Main Track	50	50
MP 972.3	MP 973.5	79	70
MP 973.5	MP 975.8	55	45
MP 975.8	MP 986.4	79	70
MP 986.4 Main 1	MP 990.2 Main 1	50	50
MP 986.4 Main 2	MP 990.2 Main 2	79	70
MP 990.2 Main 1 & 2	MP 994.2 Main 1 & 2	79	70
MP 994.2 Main 1 & 2	MP 994.4 Main 1 & 2	30	30
MP 994.4 Main 1 & 2	MP 995.0 Main 1 & 2	40	40

Maximum Speeds - Other Tracks and Turnouts:

Track	Psg.	Frt.
Crossovers		
• Sunmaid Crossing MP 996.8	40	35
• Calwa MP 995.0	40	35
• Calwa Crossing MP	50	50
• West End Bowles MP 989.8	50	50
• Mingo MP 969.0	40	40
• Wagner MP 967.1	50	50
• Calabrese MP 963.0	50	50
• Guernsey MP 961.6	40	40
• Shafter MP 906.4	40	40
• Gomez MP 889.6	25	25
• Jastro MP 891.1	50	50
• Bakersfield MP 888.0	25	25

BNSF BAKERSFIELD SUBDIVISION

Maximum Speeds - Other Tracks and Turnouts: (continued)

Track	Psg.	Frt.
Sidings except below	40	40
• East Siding Corcoran	30	30
Fresno MP 998.1 Turnout Main Track to Main 2	40	35
Floral MP 986.4 Turnout Main 1 to Main Track	50	50
Shirley Turnout Main Track to Main 2	50	50
Lopez Turnout Main Track to Main 2	40	40
East Bakersfield Turnout MT 1 to Amtrak Lead	25	25
All other tracks and turnouts	15	15

Trackside Warning Detectors:

MP	Track(s)	Between
984.5	Main	Floral and Conejo
963.1	Main 1 & 2	Wagner and Guernsey Crossover
945.6	Main	East Corcoran and Angiola
926.5	Main	Allensworth and Sandrini
900.0	Main	Shafter and Una

Joint Operation:

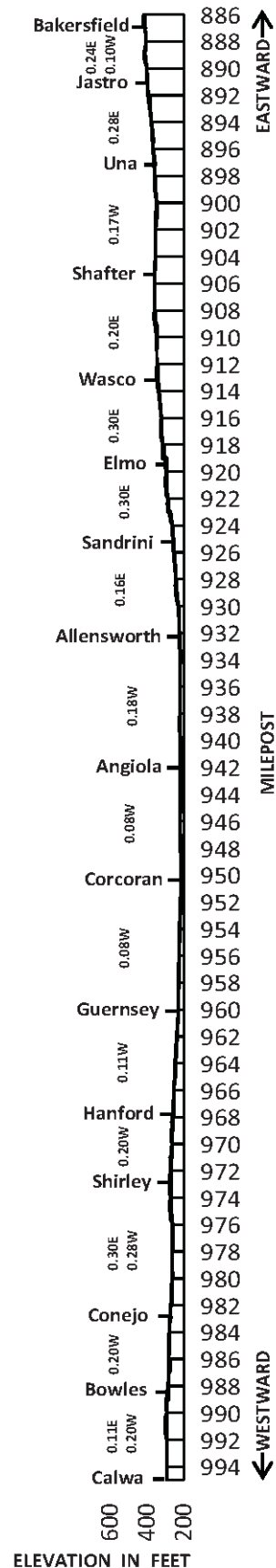
Amtrak trains operate between Calwa and East Bakersfield.
San Joaquin Valley Railroad trains operate between Jastro and East Bakersfield.

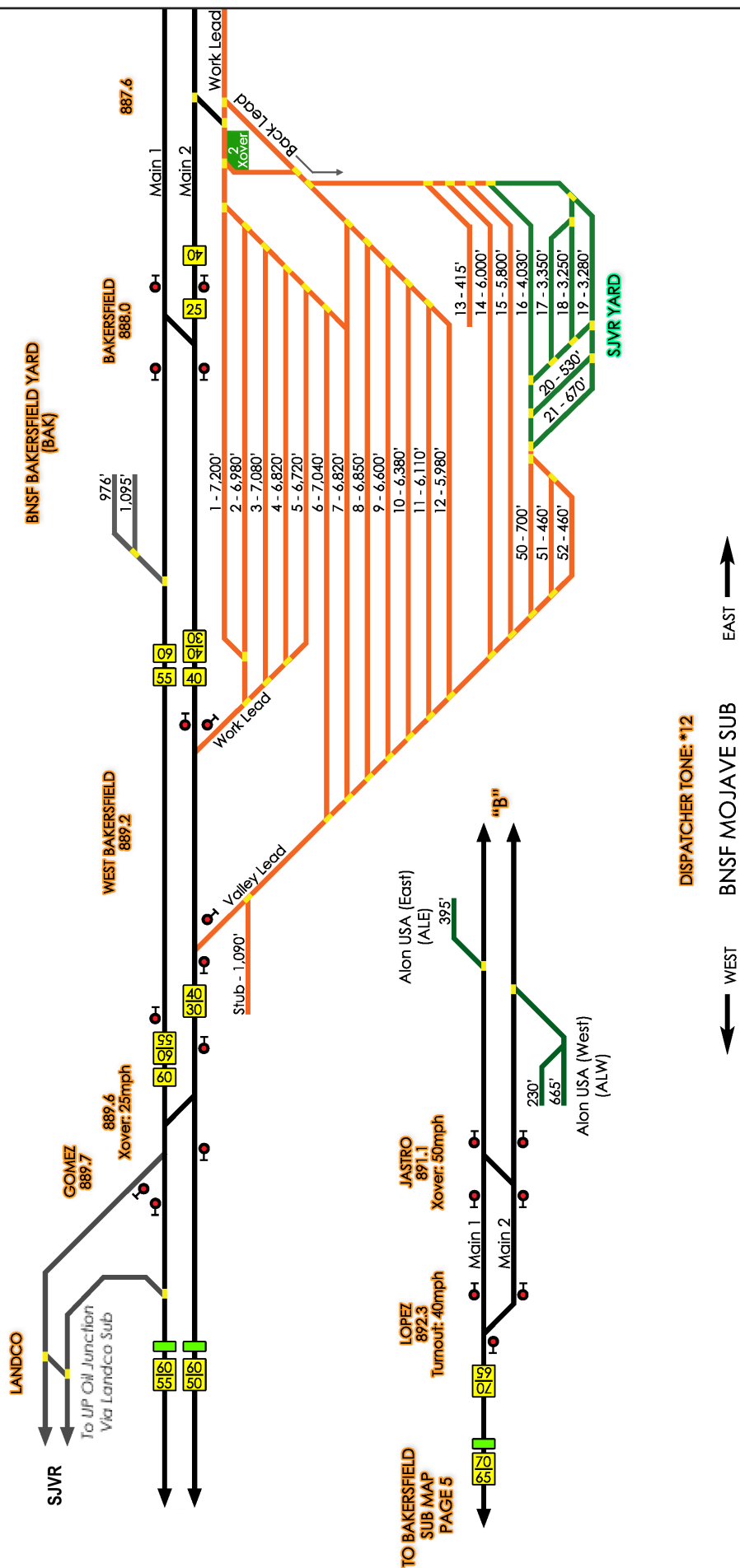
Other Location Information:

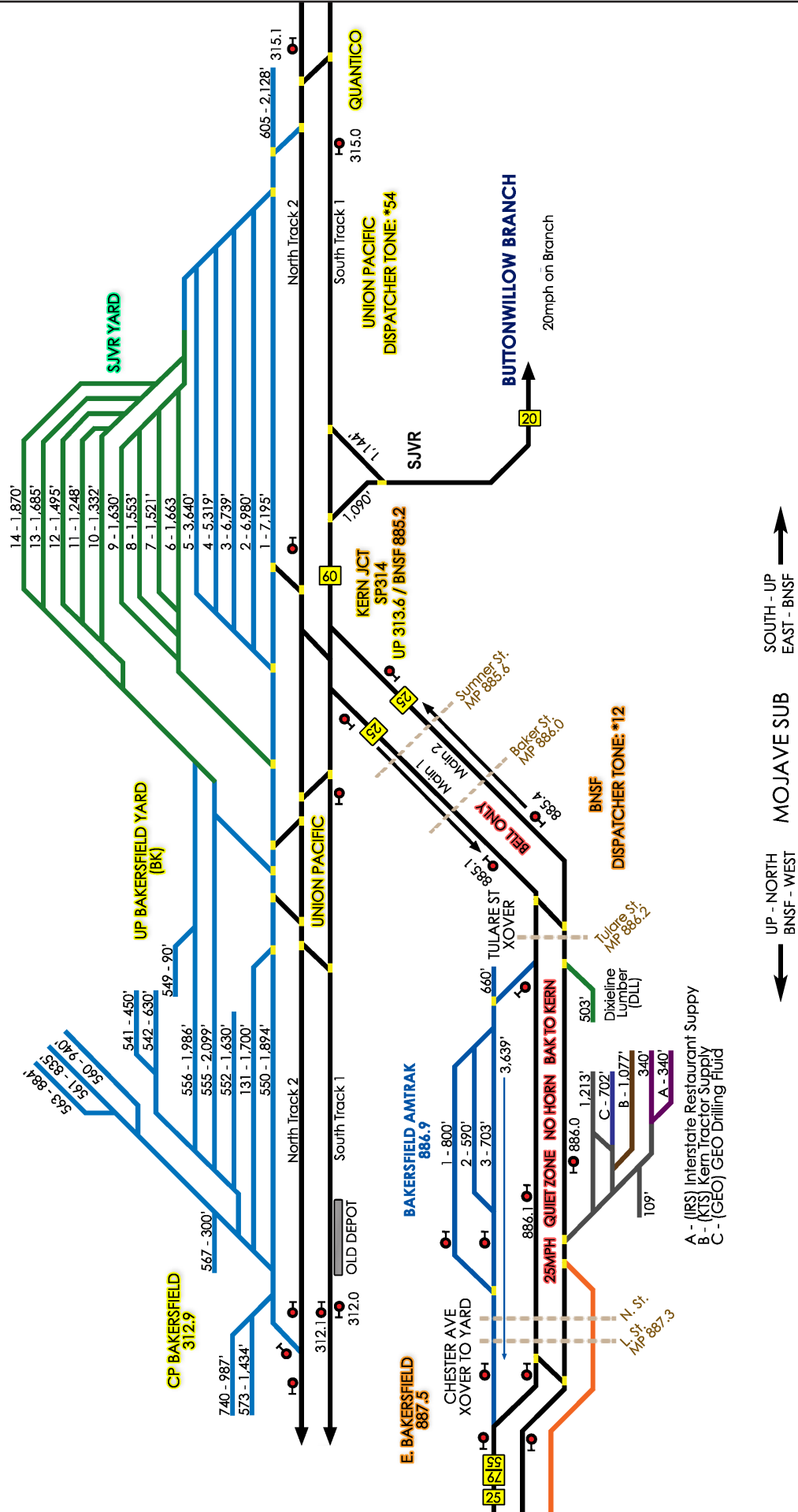
Name	Mile Post	Capacity (feet)	Switch Opens
Monmouth	985.6	1705	Both
Van G Cold Storage	982.4	14775	Both
Laton	976.0	2575	Both
Crown (Kings Park) Pitman Farms	964.4	8450	Both
Kings Park (Main 1) Hanford Milling	964.0	10975	Both
Kings Park (Main 2)	964.0	19284	Both
Guernsey Golden State Feed & Grain	961.8	8775	Both
Stoil	936.0	4560	Both
Lone Star Spur	901.9	5.8 miles	East

Errors:

- Calwa Crossing location is MP 994.7, not as shown on Run 8 Depot Map.
- Floral - correct station name is Anderson.
- Guernsey speed through turnout is 50 MPH and delete reference to siding shown on Run 8 Depot Map.
- MP 892.6 permanent speed sign is missing in the simulator.
- Lopez turnout is 60 MPH, not as shown on Run 8 Depot Map.
- There are several locations with multiple grade crossings with overlapping "W" signs (refer to page 21).







A - (IRS) Interstate Restaurant Supply
 B - (KTS) Kern Tractor Supply
 C - (GEO) GEO Drilling Fluid

BNSF MOJAVE SUBDIVISION

Radio Communication:

East Bakersfield and Kern Junction Channel 084 Tone 12
 Kern Junction and Mojave (UP) Channel 014 Tone 54
 Mojave and Valley Junction Channel 065 Tone 13
 Barstow Yard Channel 032 Tone 13

Method of Operation:

East Bakersfield MP 887.5 to Kern Jct. MP 885.2 DT ABS
 Mojave MP 814.9 and Valley Junction MP 749.1A CTC
 Cajon Connector CTC
 Mojave Connector CTC

CTC in effect on other than main track:

- On all sidings
- On Amtrak Lead between MP 887.5 and MP 886.9
- On Cajon Connector between Desert MP 749.6 and Jewell.
- On Mojave Connector between Hutt MP 749.9A and Valley Jct.

Designation of Multiple Main Tracks:

- East Bakersfield - Kern Jct. - Viewing westward the track to the right is Main 1 and the track to the left is Main 2.

Manual Interlockings:

MP 885.2 Kern Junction controlled by UP Train Dispatcher.
 MP 814.7 Mojave controlled by UP Train Dispatcher.

Maximum Speeds - Main Tracks:

Eastward Trains			
Limit	Limit	Psg.	Frt.
MP 887.5 Main 1 & 2	MP 885.2 Main 1 & 2	25	25
MP 814.9	MP 813.9	40	40
MP 813.9	MP 751.3	70	70
MP 751.3	Hutt	40	40
Hutt (Mojave MT)	Valley Junction	45	45
Hutt (Mojave Conn.)	West D Yard	30	30
Desert (Cajon Conn.)	Jewell	25	25

Westward Trains			
Limit	Limit	Psg.	Frt.
Valley Junction	Hutt (Mojave MT)	45	45
West D Yard	Hutt (Mojave Conn.)	30	30
Jewell	Desert (Cajon Conn.)	25	25
Hutt MP 749.9	MP 751.3	45	45
MP 751.3	MP 813.9	70	70
MP 813.9	MP 814.9	40	40
MP 885.2	MP 887.5	25	25

Maximum Speeds - Other Tracks and Turnouts:

Track	Psg.	Frt.
Controlled sidings except below: • Boron	40 30	40 30
Crossover East Bakersfield	25	25
Amtrak Lead between MP 887.5 and MP 886.9	25	25
Mojave Turnout UP Main 2 to BNSF Main Track	25	25
All other tracks and turnouts	15	15

Trackside Warning Detectors:

MP	Track(s)	Between
813.0	Main	Mojave and Sanborn
788.0	Main	Silt and Boron
766.0	Main	Jim Grey and Hinkley

Joint Operation:

Amtrak trains operate between East Bakersfield and Bakersfield Amtrak.

SJVR trains operate between East Bakersfield and Kern Jct.

BNSF trains operate on Union Pacific between Kern Jct. and Mojave.

Whistle Quiet Zone:

Location	Mile Post	Crossing Name
Bakersfield all crossings between	887.2	L Street
	885.4	Sumner Street
Refer to page 19. Note crossing warning signs are not displayed properly in Run 8 Simulator.		

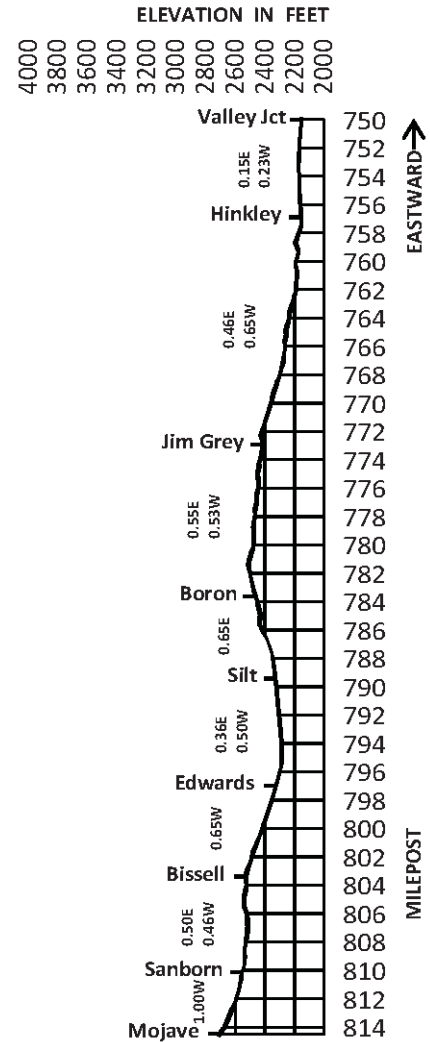
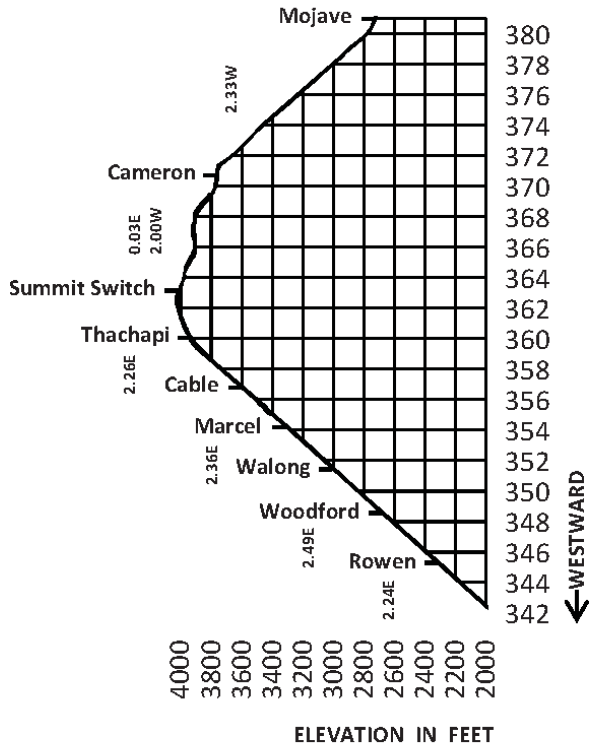
Other Location Information:

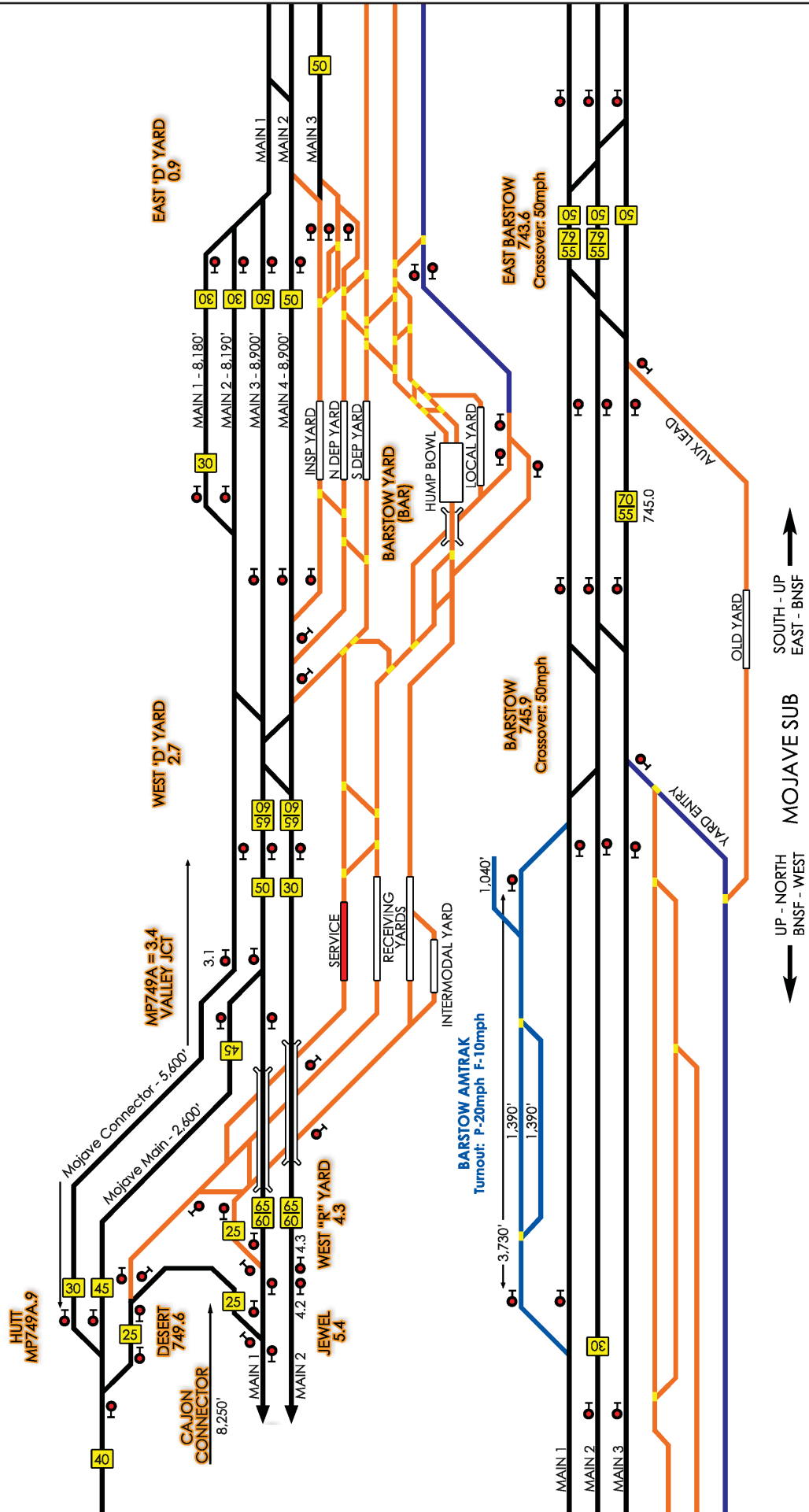
Name	Mile Post	Capacity (feet)	Switch Opens
Bakersfield Amtrak Station Track 1	886.9	800	Both
Bakersfield Amtrak Station Track 2	886.9	590	Both
Bakersfield Amtrak Station Track 3	886.9	703	Both
Edwards Government Spur	797.1	4755	Both
P.C. Borax Company Spur (off siding)	784.7	11116	East

Notes:

1. Between Mojave and Valley Jct. correct maximum freight train speed is 70 MPH, not 55 MPH shown on Run 8 Depot Maps.
2. Between East Bakersfield and Kern Jct. the crossing warning signs are improperly displayed (no QZ or number plates).

BNSF MOJAVE SUBDIVISION





SPECIAL INSTRUCTIONS

1. Maximum Speeds

All speeds are subject to modification by speed restrictions indicated in timetable individual subdivision special instructions.

Passenger trains will be governed by freight train speed, including temporary speed restrictions governing freight trains, if passenger train speed is not specified under timetable individual subdivision special instructions.

All trains consisting entirely of passenger equipment as well as locomotives without cars (light engines) will be considered passenger trains and may operate at passenger speeds where provided. This includes Amtrak, commuter trains, business cars and passenger equipment modified to serve as track inspection, track geometry or similar test cars.

Unless defined differently in the timetable individual subdivision special instruction, tons per operative brake (TOB) is defined as the gross trailing tonnage of the train divided by the total number of control valves.

Train or Equipment	MPH
Freight trains under 100 TOB	60
Freight trains 100 TOB and over	45
Freight trains handling empty equipment	55
Exceptions:	
• Empty intermodal / automotive equipment	70
• Empty unit coal trains	60
Key Trains	50
Solid consists of military equipment	55
Non-signaled territory	49
Against the current of traffic (double track territory)	49
Through turnouts	15*
Freight trains are authorized to operate at 70 MPH if the following requirements are met: 1. Train does not contain empty cars other than intermodal equipment. 2. Train does not exceed 8,500 feet. Exception: Trains operating with distributed power equipment with remote DP automatic brake valve cut in may operate at 70 MPH up to 10,000 feet in length. 3. Train does not average more than 80 TOB. Exceptions: a) Trains consisting entirely of intermodal equipment must not average more than 90 tons per operative brake. b) Trains consisting entirely of double stack equipment must not average more than 105 tons per operative brake.	
Intermodal equipment in Run 8 Simulator is defined as: • Autorack • Intermodal well car • Piggyback trailer • Smooth side well car	

2. Timetable Characters

A Automatic Interlocking
 g Gate, normal position against conflicting route
 G Gate, normal position against this subdivision
 J Junction
 M Manual interlocking
 P Passenger station
 R Restricted Limits
 S Railroad crossing protected by permanent Stop sign
 T Turning facility
 U Railroad crossing not protected by signals or gates
 X Crossover(s)
 Y Yard Limits

3. Methods of Operation Column

ABS Automatic Block Signal System
 CTC Centralized Traffic Control
 DT Double Track
 #MT Multiple Main Tracks (# is the number of main tracks)
 6.28 Other Than Main Track

4. Sidings

Siding length in the timetable is distance in feet between fouling points. Sidings may be preceded by letters N (north), S (south), E (east), W (west) or C (center).

Sidings may be followed by numbers (1) MT 1, (2) MT 2, (3) MT 3

5. Multiple Main Tracks

Unless otherwise indicated in the individual subdivision special instructions, when using main tracks in westward or southward timetable direction, they will be numbered consecutively from right to left beginning from Main 1. When using in eastward or northward timetable direction, they will be numbered from left to right beginning with Main 1.

6. Duplicate Mile Posts

Duplicate mile posts on a subdivision are identified by an alpha suffix (e.g. MP 345X, MP 420Z). Timetable individual subdivision special instructions will list where duplicate mile posts are in effect.

7. Whistle Quiet Zone

Within designated whistle quiet zones, whistle signal (7) must not be sounded approaching public crossings at grade except when:

- Necessary to provide warning in an emergency.
- Notified automatic warning devices are malfunctioning.
- Notified automatic warning devices are out of service.

or

- The whistle quiet zone is not in effect during specified hours.

An employee may sound the train horn to provide warning to crews on other trains in an emergency situation, vehicle operators, pedestrians, trespassers or animals if, in the employee's sole judgment, such action is appropriate to prevent imminent injury, death, or property damage.

SPECIAL INSTRUCTIONS

8. Sounding Whistle

The whistle may be used at anytime as a warning regardless of any whistle prohibitions.

When other employees are working in the immediate area, sound the required whistle signal before moving.

The required whistle signals are illustrated by “o” for short sounds and “—” for longer sounds

Sound		Indication
(1)	Succession of short sounds	Use when persons or livestock are on the track at other than road crossings at grade. In addition, use to warn railroad employees when an emergency exists, such as a derailment. When crews on other trains hear this signal, they must stop until it is safe to proceed.
(2)	—	When stopped: air brakes are applied, pressure equalized.
(3)	— —	Release brakes. Proceed.
(4)	o o	Acknowledgment of any signal not otherwise provided for.
(5)	o o o	When stopped: back up. Acknowledgment of hand signal to back up.
(6)	o o o o	Request for signal to be given or repeated if not understood.
(7)	— — o —	When approaching public crossings at grade with the engine in front, sound signal as follows: A. At speeds in excess of 45 MPH, start signal at or about the crossing sign but not more than 1/4 mile before the crossing. B. At speeds of 45 MPH or less, start signal at least 15 seconds, but not more than 20 seconds, before entering the crossing. C. If no crossing sign start signal at least 15 seconds, but not more than 20 seconds before entering crossing but not more than 1/4 mile before the crossing. D. If movement starts less than 1/4 mile from a crossing, signal may be sounded less than 15 seconds before the crossing when it is clearly seen traffic is not approaching the crossing, traffic is not stopped at the crossing or when crossing gates are fully lowered. Prolong or repeat signal until the engine completely occupies the crossing(s).
(8)	— o	Regardless of any whistle prohibitions: Approaching men or equipment or other individuals on or near the track. After sounding initial warning for men or equipment or other individuals, sound whistle signal (4) intermittently until the head end of train has passed the men or equipment or other individuals. Whistle warning is not required: • When there is an adjacent track and men or equipment or other individuals are beyond the farthest rail of the adjacent track. • For members of the same crew associated with movement of their engine unless necessary to warn or alert a crew member Do not sound whistle in designated mechanical servicing and repair facilities, unless for an emergency or when approaching roadway workers.

SPECIAL INSTRUCTIONS

9. Restricted Limits (Rule 6.14)

Within restricted limits, trains or engines are authorized to use the main track not protecting against other trains or engines. All movements must be made at restricted speed.

10. Movement at Restricted Speed (Rule 6.27)

When required to move at restricted speed, movement must be made at a speed that allows stopping within half the range of vision short of:

- Train.
- Engine.
- Railroad car.
- Men or equipment fouling the track.
- Stop signal.
- or
- Derail or switch lined improperly.

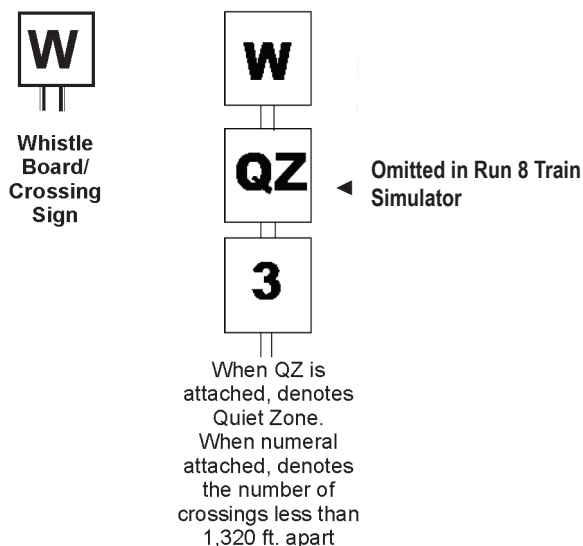
When a train or engine is required to move at restricted speed, the crew must keep a lookout for broken rail and not exceed 20 MPH. Comply with these requirements until the leading wheels reach a point where movement at restricted speed is no longer required.

11. Movement on Other Than Main Track (Rule 6.28)

Except when moving on a main track or on a track where a block system is in effect, trains or engines must move at a speed that allows them to stop within half the range of vision short of:

- Train.
- Engine.
- Railroad car.
- Men or equipment fouling the track.
- Stop signal.
- or
- Derail or switch lined improperly

12. Crossing Warning Signs



13. Permanent Speed Signs

Reduced speed limits may be designated by Advance Warning sign (diagonally upward), Reduce Speed sign (rectangle) and Resume Speed sign (vertical).

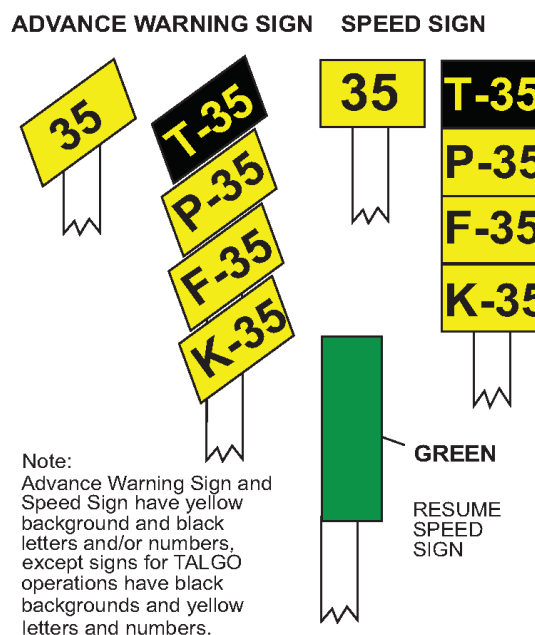
The Advance Warning sign will be placed two miles in advance of the location where the lower speed takes effect. At the point where the reduced speed applies, a speed sign will repeat the permissible speed. The lower speed will be in effect until a Resume Speed sign or another Speed sign is displayed.

At the end of a reduced speed zone, a train or engine will be governed by a Speed sign displaying a higher speed or a Resume Speed sign which will authorize the maximum permissible speed on that subdivision. In either case, the speed must not be increased until the entire train has passed the sign displayed or has cleared the limits of the restriction. Signs reading "K-END" indicate the end of Key Train municipal area limits. Resume speed signs are not displayed at the end of Key Train municipal area limits.

Locations where reduced speeds are required, but which are not indicated by signs, are listed in the special instructions for each subdivision.

Permanent speed signs will not be placed for trains moving against the current of traffic unless otherwise indicated.

These signs, as illustrated, apply to train and engine movements as follows:



Figures preceded by letter P apply to passenger trains, except TALGO, if there is a TALGO sign.

Figures preceded by letter F apply to freight trains.

Figures preceded by letter T apply to TALGO passenger trains.

Figures preceded by the letter K apply to Key Trains.

Figures not preceded by a letter apply to all trains.

SPECIAL INSTRUCTIONS

14. Track Flags



Flags for Temporary Track Conditions

5.4.1 Temporary Restrictions

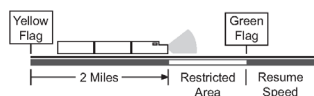
Track bulletins, track warrants, or general orders may restrict or stop train movements because of track conditions, structures or men or equipment. Yellow flags are used to indicate temporary speed restrictions. Yellow-red flags are used to indicate when a train may be required to stop. When flags are not displayed, that information will be included in the track bulletin, track warrant, or general order.

When a restriction spans adjoining subdivisions, separate temporary restrictions may be in effect on each subdivision. Only one set of flags may be displayed in advance of the entire restriction in each direction.

5.4.2 Display of Yellow Flag

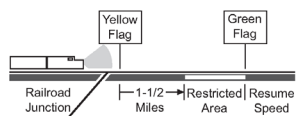
A. Restriction Is In Effect

Two Miles Ahead of Restricted Area. Yellow flags warn trains to restrict movement because of track conditions or structures. To make sure train movement is restricted at the right location, employees must display a yellow flag 2 miles before the restricted area.



[Diagram A.]

Less than Two Miles Ahead of Restricted Area. When the restricted area is close to a terminal, junction, or another area or if restriction is on a siding, employees will display a yellow flag less than 2 miles before the restricted area. This information will also be included in the track bulletin, track warrant, or general order.

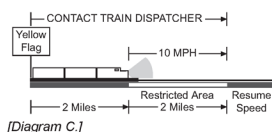


[Diagram B.]

Once the Train Reaches the Restricted Area. The speed specified by track warrant, bulletin, general order, or radio speed restriction must not be exceeded until the rear of the train clears the restricted area.

When a yellow flag is displayed and no restriction is in effect as specified by a mandatory directive, once the train is 2 miles beyond the yellow flag, crew members must:

1. Continue moving the train not exceeding 10 MPH.
2. Resume speed only after:
 - a. The crew has received a mandatory directive associated with the yellow flag.
 - b. The rear of the train has passed a green flag.
 - or
 - c. The rear of the train has traveled 4 miles beyond the yellow flag and the train dispatcher has verified that no mandatory directive specifying a temporary speed restriction is in effect.



[Diagram C.]

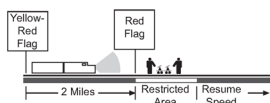
5.4.3 Display of Yellow-Red Flag

Employees may display yellow-red flags from one hour before to one hour after a track bulletin Form B is in effect. During that time the employee in charge may provide a train instruction to proceed without restriction, specifying the Track Bulletin number (specifying line number when necessary) and advising no red flag displayed.

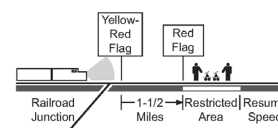
The display of yellow-red flags as described does not extend the authorized working time beyond the times listed on the track bulletin Form B.

A. Restriction Is In Effect

Two Miles Ahead of Restricted Area. Yellow-red flags warn a train to be prepared to stop because of men or equipment. To make sure the train is prepared to stop at the right location, employees must display a yellow-red flag 2 miles before the restricted area.



Less Than Two Miles Ahead of Restricted Area. When the restricted area is close to a terminal, junction, or another area, employees will display the yellow-red flag less than 2 miles before the restricted area. This information will also be included in the track bulletin, track warrant, or general order.



[Diagram B.]

B. Restriction Is Not In Effect

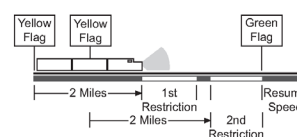
When a yellow-red flag is displayed and no restriction is in effect as specified by a track bulletin, track warrant, or general order, a crew member must attempt to contact the employee in charge of the yellow-red flag. Crew members must be prepared to stop short of a red flag 2 miles beyond the yellow-red flag. If a red flag is displayed, proceed as outlined in Rule 5.4.7 (Display of Red Flag). If no red flag is displayed and no instructions have been provided by the employee in charge of the yellow-red flag:

1. Move at restricted speed.
2. Increase speed only after:
 - a. A crew member has received instructions from the employee in charge.
 - or
 - b. The leading wheels of movement are 4 miles beyond the yellow-red flag, and the train dispatcher has verified that no track bulletin or track warrant protecting men or equipment is in effect at that location.

5.4.5 Display of Green Flag

A green flag indicates the end of a temporary speed restriction. If a series of locations require reduced speeds, the green flags could overlap yellow flags. When this is the case, employees must:

- Place a yellow flag before each speed restriction.
- Place a green flag at the end of the last speed restriction.



[Diagram A.]

5.4.7 Display of Red Flag

A red flag is displayed where trains must stop. When approaching a red flag the train must stop short of the red flag and not proceed unless the employee in charge gives instructions, including the milepost location of the red flag. A crew member must attempt to contact the employee in charge to avoid delay, giving the location of the red flag and the track being used. If instructions to proceed are received before the train stops, the train may pass the red flag without stopping.

If track bulletin Form B is not in effect, instructions must include speed and distance. This speed must not be exceeded until the rear of the train has passed the specified distance from the red flag, unless otherwise instructed by the employee in charge.

Displayed Between Rails. When a red flag is displayed between the rails of a track, the train must stop and not proceed until the flag has been removed by an employee of the class that placed it.

5.4.8 Flag Location

Flags will be displayed on all main tracks and sidings leading to the track affected.

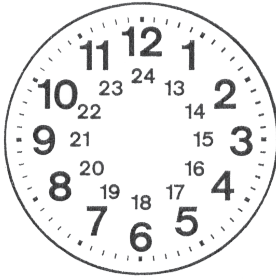
Flags must be displayed to the right of the track as viewed from an approaching train. In multiple main track territory or where sidings are adjacent to main track(s), they will be placed on the field side of outside tracks. Red flags may be displayed between the rails as outlined in Rule 5.4.7 (Display of Red Flag). Flags will be placed in this manner unless otherwise specified by track bulletin, track warrant, special instructions, or general order.

When flags are displayed beyond the first rail of an adjacent track, the flags will not apply to the track on which the train is moving.

Note: Rule 5.4.6 does not apply on BNSF Railway.

SPECIAL INSTRUCTIONS

14. Continental Time



Continental time (24 hour clock) has been adopted by most railroads for operating purposes. The following table provides conversion between Continental Time and the common 12 hour clock. For example, 1627 is converted to 4.27 p.m.

Continental Time	12 Hour Clock	Continental Time	12 Hour Clock
0000	Midnight	1200	Noon
0001	12.01 a.m.	1201	12.01 p.m.
0100	1.00 a.m.	1300	1.00 p.m.
0200	2.00 a.m.	1400	2.00 p.m.
0300	3.00 a.m.	1500	3.00 p.m.
0400	4.00 a.m.	1600	4.00 p.m.
0500	5.00 a.m.	1700	5.00 p.m.
0600	6.00 a.m.	1800	6.00 p.m.
0700	7.00 a.m.	1900	7.00 p.m.
0800	8.00 a.m.	2000	8.00 p.m.
0900	9.00 a.m.	2100	9.00 p.m.
1000	10.00 a.m.	2200	10.00 p.m.
1100	11.00 a.m.	2300	11.00 p.m.

All railroad operations within California are conducted in the Pacific Continental Time Zone. Arizona observes Mountain Standard Time year round.

Time Change		
Time	Date	Clock
Standard	0200 Sun. November 3, 2025	- 1 hour
Daylight Savings	0200 Sun. March 8, 2026	+1 hour
Standard	0200 Sun. November 1, 2026	- 1 hour

15. Amtrak Schedules

Southwest Chief		
3	AMTRAK [®]	4
Daily		Daily
2302 2309	Kingman, AZ (MT)	0157 0145
0009 0014	Needles, CA (PT)	2340 2338
0338 0343	Barstow, CA	2105 2102
0422	Victorville, CA	2014
0546 0551	San Bernardino, CA	1903 1856
0610	Riverside, CA	1838
0709	Fullerton, CA	1755
0757	Los Angeles, CA	1719

Amtrak Gold Runner						
702	710	712	714	716	718	AMTRAK [®]
Daily	Daily	Daily	Daily	Daily	Daily	
0722	0923	1123	1323	1523	1923	Stockton
0756	0956	1156	1356	1556	1956	Modesto
0812	1012	1212	1412	1609	2009	Denair
0845	1045	1245	1445	1645	2045	Merced
0919	1119	1319	1519	1719	2119	Madera
0949	1149	1349	1549	1749	2149	Fresno
1024	1224	1424	1624	1824	2224	Hanford
1041	1240	1440	1640	1840	2240	Corcoran
1120	1317	1517	1717	1917	2312	Wasco
1157	1357	1557	1757	1957	2357	Bakersfield

Amtrak Gold Runner						AMTRAK [®]
711	713	715	717	719	703	
Daily	Daily	Daily	Daily	Daily	Daily	
0412	0812	1212	1412	1612	1812	Bakersfield
0439	0839	1239	1439	1639	1839	Wasco
0514	0914	1319	1519	1719	1919	Corcoran
0534	0934	1339	1539	1739	1939	Hanford
0612	1016	1416	1616	1816	2016	Fresno
0638	1042	1442	1642	1842	2042	Madera
0723	1123	1523	1723	1923	2119	Merced
0745	1145	1545	1745	1945	2141	Denair
0803	1203	1603	1803	2003	2157	Modesto
0840	1240	1640	1840	2040	2229	Stockton

RUN 8 SIMULATOR LOCOMOTIVE DATA

Model	Length (feet)	Full Weight (tons)	Axles	Horse Power	Power Axles	DB Axles	Fuel Capacity (gallons)
Amtrak (AMTK)							
MP15	48	126	4	1500	4	0	1600
P42	69	134	4	4250	4	4	2200
Arizona & California (ACR)							
SD45-2	69	195	6	3600	6	6	4000
Atchison, Topeka & Santa Fe (ATSF)							
C44-9W	74	208	6	4400	8	8	4800
SD40-2	69	195	6	3000	6	6	4000
SD45-2	69	195	6	3600	6	6	4000
BNSF Railway (BNSF)							
C44-9W	74	208	6	4400	8	8	4800
ES44DC	73	205	6	4400	8	8	5000
GP40-2	60	138	4	3000	4	6	3800
MP15	48	126	4	1500	4	0	1600
SD40-2	69	195	6	3000	6	6	4000
SD45-2	69	195	6	3600	6	6	4000
SD70ACe	74	210	6	4500	9	9	4900
Burlington Northern (BN)							
MP15	48	126	4	1500	4	0	1600
SD40-2	69	195	6	3000	6	6	4000
Canadian National (CN)							
SD40-2	69	195	6	3000	6	6	4000
Cargill (CARG)							
SD40-2	69	195	6	3000	6	6	4000
Chessie System (BO)							
SD40-2	69	195	6	3000	6	6	4000
Conrail (CR)							
GP40-2	60	138	4	3000	4	6	3800
SD40-2	69	195	6	3000	6	6	4000
SD45-2	69	195	6	3600	6	6	4000
CSX Transportation (CSXT)							
C44-9W	74	208	6	4400	8	8	4800
ES44DC	73	205	6	4400	8	8	5000
GP40-2	60	138	4	3000	4	6	3800
MP15	48	126	4	1500	4	0	1600
SD40-2	69	195	6	3000	6	6	4000
SD45-2	69	195	6	3600	6	6	4000
SD70ACe	74	210	6	4500	9	9	4900
Denver & Rio Grande Western (DRGW)							
GP40-2	60	138	4	3000	4	6	3800
SD40T-2	69	195	6	3000	0	6	4000

RUN 8 SIMULATOR LOCOMOTIVE DATA

Model	Length (feet)	Full Weight (tons)	Axles	Horse Power	Power Axles	DB Axles	Fuel Capacity (gallons)
Florida East Coast (FEC)							
SD40-2	69	195	6	3000	6	6	4000
GCFX (GCFX)							
SD40-2	69	195	6	3000	6	6	4000
GMTX (GMTX)							
MP15	48	126	4	1500	4	0	1600
Kansas City Southern (KCS)							
SD70ACe	74	210	6	4500	9	9	4900
Modesto & Empire Traction (MET)							
MP15	48	126	4	1500	0	0	1600
Norfolk Southern (NS)							
ES44DC	73	205	6	4400	8	8	5000
MP15	48	126	4	1500	4	0	1600
SD45-2	69	195	6	3600	6	6	4000
SD70ACe	74	210	6	4500	9	9	4900
San Joaquin Valley (SJVR)							
GP40-2	60	138	4	3000	4	6	3800
Seaboard Coast Line (SCL)							
SD45-2	69	195	6	3600	6	6	4000
Seaboard System (SBD)							
SD40-2	69	195	6	3000	6	6	4000
SD45-2	69	195	6	3600	6	6	4000
Soo Line (SOO)							
SD40-2	69	195	6	3000	6	6	4000
Southern Pacific (SP)							
C44-9W	74	208	6	4400	8	8	4800
ES44DC	73	205	6	4400	8	8	5000
GP40-2	60	138	4	3000	4	6	3800
MP15	48	126	4	1500	4	0	1600
SD40-2	69	195	6	3000	6	6	4000
SD40T-2	69	195	6	3000	6	6	4000
Trona (TRON)							
SD45-2	69	195	6	3600	6	6	4000
Union Pacific (UP)							
C44-9W	74	208	6	4400	8	8	4800
ES44DC	73	205	6	4400	8	8	5000
GP40-2	60	138	4	3000	4	6	3800
MP15	48	126	4	1500	4	0	1600
SD40-2	69	195	6	3000	6	6	4000
SD40T-2	69	195	6	3000	6	6	4000
SD70ACe	74	210	6	4500	9	9	4900
Western Pacific (WP)							
GP40-2	60	138	4	3000	4	6	3800

BNSF Railway — SIGNAL ASPECTS AND INDICATIONS

All signals are subject to modification indicated under individual subdivision special instructions.

DISTANT SIGNALS

Aspects shown in Rules 9.1.3 through 9.1.8 may be displayed with a "D" sign on the signal mast to identify the signal as a distant signal. When a "D" sign is displayed, if train is delayed per Rule 9.9 and Rule 9.9.1 between a distant signal and the next signal, proceed prepared to stop short of the next signal.

Absolute signals at automatic switches, outside of block system limits, convey main track distant signal information for the other end of the siding.

BLOCK AND INTERLOCKING SIGNALS

Aspects shown in Rules 9.1.3 through 9.1.8 and 9.1.13 may be displayed on signals with or without a number plate on signal mast.

Rule	Aspects of Color Light and Semaphore Signals	Cab Signal Aspects	Name	Indication	Track Line
9.1.3			CLEAR	Proceed.	
9.1.4			APPROACH LIMITED	Proceed prepared to pass next signal not exceeding 60 MPH and be prepared to enter diverging route at prescribed speed.	
9.1.5			ADVANCE APPROACH	Proceed prepared to pass next signal not exceeding 50 MPH and be prepared to enter diverging route at prescribed speed.	
9.1.6			APPROACH MEDIUM	Proceed prepared to pass next signal not exceeding 40 MPH and be prepared to enter diverging route at prescribed speed.	
9.1.7			APPROACH RESTRICTING	Proceed prepared to pass next signal at restricted speed. Freight trains exceeding 30 MPH immediately reduce to that speed. (Note: Speed is 40 MPH for freight trains in PTC Full Enforcement Mode).	
9.1.8			APPROACH	Proceed prepared to stop at next signal. Trains exceeding 30 MPH immediately reduce to that speed. (Note: Speed is 40 MPH for passenger and trains in PTC Full Enforcement Mode).	
9.1.9			DIVERGING CLEAR	Proceed on diverging route not exceeding prescribed speed through turnout.	
9.1.10			DIVERGING APPROACH DIVERGING	Proceed on diverging route not exceeding prescribed speed through turnout prepared to advance on diverging route at the next signal not exceeding prescribed speed through turnout.	
9.1.11			DIVERGING APPROACH MEDIUM	Proceed on diverging route not exceeding prescribed speed through turnout prepared to pass next signal not exceeding 35 MPH. (Note: Speed is 40 MPH for trains in PTC Full Enforcement Mode.)	
9.1.12			DIVERGING APPROACH	Proceed on diverging route not exceeding prescribed speed through turnout; approach next signal prepared to stop. Trains exceeding 30 MPH immediately reduce to that speed. (Note: Speed is 40 MPH for passenger and trains in PTC Full Enforcement Mode.)	
9.1.13			RESTRICTING	Proceed at restricted speed.	
9.1.15			STOP	Stop.	

SPECIAL ASPECTS WHICH ARE NOT PART OF AUTOMATIC BLOCK, CTC AND INTERLOCKING SYSTEMS			
Rule	Aspects	Name	Indication
9.1.16		TAKE SIDING INDICATOR	When illuminated, hand operate switch to enter next siding or to leave siding and enter main track.
9.1.22		SLIDE FENCE INDICATOR	When illuminated continuously or when not illuminated, slide fence has been activated; proceed at restricted speed.
9.1.23		SLIDE FENCE INDICATOR	When flashing, slide fence has not been activated.
9.1.24		RESUME SPEED	End of slide fence restriction; resume speed.
9.1.25		HIGH WATER INDICATOR	When red or not illuminated, high water may be present; proceed at restricted speed through detection limits identified by timetable.
9.1.26		HIGH WATER INDICATOR	When green, no high water has been detected.

General Signal Instructions

In addition to Rule 9.1 of the General Code of Operating Rules, the following General Signal Instructions apply on BNSF Railway:

- Dwarf signals will display the same aspects and indications as high signals.
- The following symbols are used in diagrams of signal aspects.



To indicate a number plate.



To indicate position of semaphore arm.



To indicate a flashing light.



To indicate grade marker.



To indicate color light signal head.

Wayside Horn System (WHS)

Flashing - operating as intended.



Steady or not illuminated - not operating as intended.

PTC Display Information

Track Line			Track Line Overlays		
Color	Symbol	Description	Color	Symbol	Description
Red		Unauthorized track	Red-hash overlay		Stop required
Yellow		Authorized speed restricted track	Yellow-hash Overlay		Restricted Speed
Green		Authorized track	Blue-hash Overlay		Work Zone (Form B) Limits
Grey		Non-enforcing or unknown track			

12 14 20

MOVEMENT PROCEDURES		
GCOR Rule 6.32.2		
Procedure 1	Procedure 2	Procedure 3
<i>Crew is notified of an automatic crossing warning system activation failure or devices are disabled:</i>	<i>Crew is notified of an automatic crossing warning system false or partial activation:</i>	<i>Crew is notified of passive warning device (cross-bucks, stop signs, etc.) damaged or missing:</i>
Stop before fouling the crossing After a crew member is on the ground at the crossing to warn traffic, proceed over the crossing as directed by that crew member.	- Stop before fouling the crossing - After a crew member is on the ground at the crossing to warn traffic, proceed over the crossing as directed by that crew member; or If devices are seen to be working or when instructed by the train dispatcher or proper authority, proceed over the crossing not exceeding 15 MPH without stopping until the head end of the train completely occupies the crossing. - The train may then proceed.	Stop before fouling the crossing After a crew member is on the ground at the crossing to warn traffic, proceed over the crossing as directed by that crew member.

INSTRUCTIONS / EXAMPLES

FORM A - EXAMPLE

Example: D26 is informed of a NEW Form A restriction from a Track Inspector.

- ☐ Restriction Number: **1001**
- ☐ Subdivision: **Bakersfield**
- ☐ Limits (MP to MP): **891.9 to 892.1**
- ☐ Speed required for Passenger & Freight: **50/30**
- ☐ Track(s): **MAIN 1**

FORM A		To: <i>BNSF 5469 West</i>		Date: <i>12/06/20</i>		
Number	Subdiv	MP	Limits to MP	Speed MPH Psg Frt	Track(s)	Flags At MP MP
<i>1001</i>	<i>Bakersfield</i>	<i>891.9</i>	<i>892.1</i>	<i>50</i> <i>30</i>	<i>MAIN 1</i>	N/A N/A
Comments:						
OK <i>1305</i> DISPR <i>HBD</i>						

Form A - Verbiage Example

DS: "DS 26 calling BNSF 5469 West, over."

Train: "BNSF 5469 West answering, over."

DS: "I have a Form A restriction for you to copy. Can I get your Name, Title, Location when you're ready to copy, over."

Train: "Conductor Briskey, Milepost 885.0, ready to copy, over."

DS: "This is verbally issued Form A Restriction 1001, addressed to the BNSF 5469 West on the Bakersfield Subdivision, between the MP 891.9 & MP 892.1, speed for Passenger 50mph, speed for Freight 30mph, on Main Track 1, over."

Train: "Form A Restriction 1001, addressed to the BNSF 5469 West on the Bakersfield Subdivision, between the MP 891.9 & MP 892.1, speed for Passenger 50MPH, speed for Freight 30MPH, on Main Track 1, over."

DS: "Show verbally issued Form A Restriction 1001 OK at 1305, 1-3-0-5, HBD, over."

Train: "Verbally issued Form A Restriction 1001 OK at 1305, 1-3-0-5, HBD, over."

DS: "That is correct. DS out."

FORM B - EXAMPLE

Example: D26 is informed of a NEW Form B restriction from a MOW Foreman.

- ☐ Restriction Number: **6002**
- ☐ Subdivision: **Bakersfield**
- ☐ Limits (MP to MP): **891.1 to 892.3**
- ☐ Track(s): **MAIN 1 & MAIN 2**
- ☐ Employee in Charge: **BRISKEY**

FORM B		To: BNSF 5469 West		Date: 12/06/20		
No. 6002	Limits	Time/Date	Tracks(s)	Flags At	Foreman/Gang	Stop
Subdivision	MP 891.1	N/A	MAIN 1	N/A	BRISKEY	REQUIRED
Bakersfield	MP 892.3	N/A	MAIN 2	N/A		
Comments:				OK	1458	DISPR HBD

Form B - Verbiage Example

DS: "DS 26 calling BNSF 5469 West, over."

Train: "BNSF 5469 West answering, over."

DS: "I have a Form B restriction for you to copy. Can I get your Name, Title, Location when you're ready to copy, over."

Train: "Conductor Smith, Milepost 885.0, ready to copy, over."

DS: "This is verbally issued Form B Restriction 6002, addressed to the BNSF 5469 West on the Bakersfield Subdivision, between the MP 891.1 & MP 892.3, Tracks, Main 1, and Main 2, Employee in Charge Briskey, over."

Train: "Form B Restriction 6002, addressed to the BNSF 5469 West on the Bakersfield Subdivision, between the MP 891.1 & MP 892.3, Tracks, Main 1, and Main 2, Employee in Charge Briskey, over."

DS: "Show verbally issued Form B Restriction 6002 OK at 1305, 1-4-5-8, HBD, over."

Train: "Verbally issued Form B Restriction 6002 OK at 1305, 1-4-5-8, HBD, over."

DS: "That is correct. DS out."

CROSSING WARNING NOTIFICATION - EXAMPLE

Example: D26 is informed of a NEW Crossing Malfunction at Reina Rd. Milepost 896.8 on Bakersfield Subdivision.

CROSSING WARNING NOTIFICATION	
Subdiv: Bakersfield	Date: 12/06/20
1. ☒	Automatic crossing warning device activation failure or disabled at <u>Reina Rd. Milepost 896.8</u> . Stop and protect movement even if devices are seen to be working. Proceed per Rule 6.32.2, Procedure 1.
2. ☐	Automatic crossing warning device false or partial activation at _____. Stop and protect movement, unless devices are seen to be working or otherwise instructed. Proceed per Rule 6.32.2, Procedure 2.
3. ☐	Passive crossing warning device damaged or missing at _____. Stop and protect movement. Proceed per Rule 6.32.2, Procedure 3.

Crossing Warning Notification - Verbiage Example

DS: "DS 26 calling BNSF 5469 West, over."

Train: "BNSF 5469 West answering, over."

DS: "I have a crossing restriction for you to copy. Can I get your Name, Title, Location when you're ready to copy, over."

Train: "Conductor Briskey, MP 885.0, ready to copy, over."

DS: "Crossing Warning Notification, addressed to the BNSF 5469 West, X in Box 1, O-N-E, Automatic crossing warning device activation failure or disabled at **Reina Rd. Milepost 896.8**. Stop and protect movement even if devices are seen to be working. Proceed per rule 6.32.2, Procedure 1, over."

Train: "Crossing Warning Notification, addressed to the BNSF 5469 West, X in Box 1, O-N-E, Automatic crossing warning device activation failure or disabled at **Reina Rd. Milepost 896.8**. Stop and protect movement even if devices are seen to be working. Proceed per rule 6.32.2, Procedure 1, over."

DS: "That is correct, over."

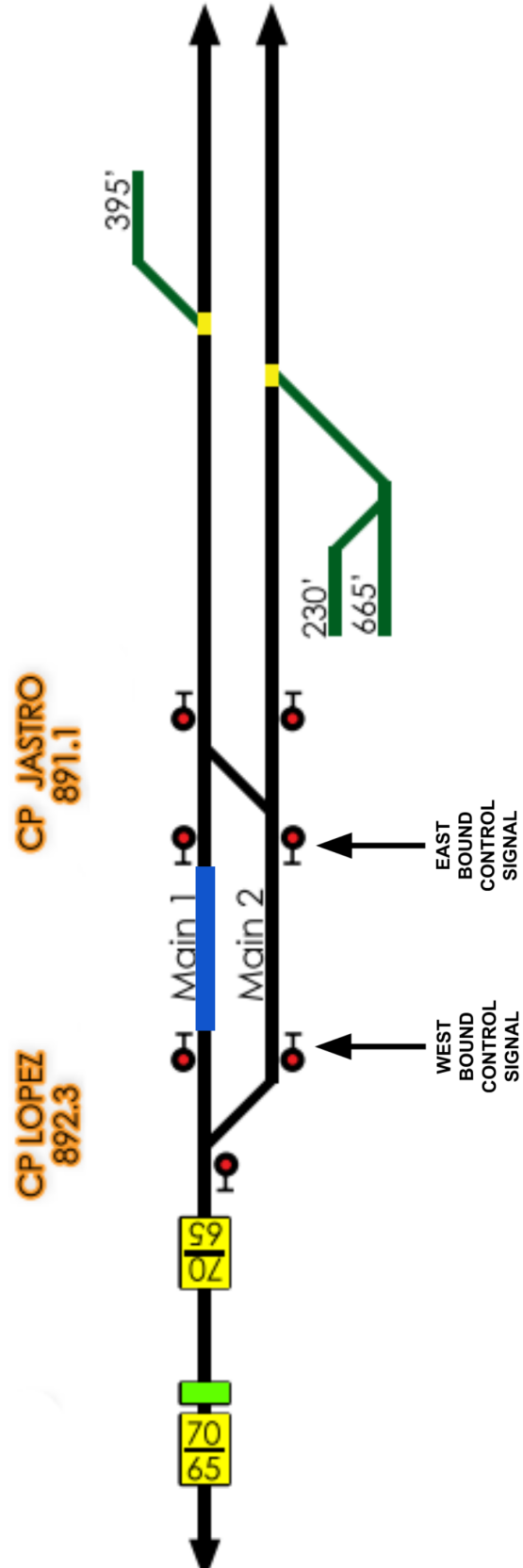
Train: "Correct on the repeat, thank you, out."

WBSCS West Bound Control Signal EBSCS East Bound Control Signal NBSCS North Bound Control Signal SBSCS South Bound Control Signal		WSS West Siding Switch ESS East Siding Switch NSS North Siding Switch SSS South Siding Switch		WE West End EE East End NE North End SE South End		XO Crossover WYO West Crossover EXO East Crossover			
Name (Last):		SoCal MOW Authority to Occupy Track (Track & Time) In CTC Territory Rule 10.3, in ABS Territory Rule 9.45 or in Rule 17.0 Foul Time		Date:		Vehicle Number:			
Repeat as follows: For (name), authority (number), granted (behind _____), on (track), between (point), switch (yes/no), and point, switch (yes/no), (joint), until (time).									
Track Limits Authorized									
Authority	Conditions of Authority	Track(s)	Between (Beginning Location)	Switch Included	And (Ending Location)	Switch Included	Joint Status		
Behind: 	 	 	 	 	 	 	Joint		
							Until: Extended To:	OK Time/ DS Initials	Time Authority Released
							Joint	Until: Extended To:	OK Time/ DS Initials
Behind: 	 	 	 	 	 	 	Joint		
							Until: Extended To:	OK Time/ DS Initials	Time Authority Released
							Joint	Until: Extended To:	OK Time/ DS Initials
Behind: 	 	 	 	 	 	 	Joint		
							Until: Extended To:	OK Time/ DS Initials	Time Authority Released
							Joint	Until: Extended To:	OK Time/ DS Initials

Authority behind Trains	Train ID (Engine initials, engine number and direction)	Milepost location	Time Contacted
• Record train MP location provided by crew member. • After verifying MP location, state the following "Please inform me before making any stop or backup movements." • Record time briefing was completed.			

INSTRUCTIONS / EXAMPLES

Example: Track Inspector Briskey wants to inspect track between CP Lopez and CP Jastro on Main 1 behind the BNSF 5469 (West) on the Bakersfield Subdivision.



****This is how Track & Time form will look AFTER it's filled out. First Authority. Extension. Released.**

Name (Last): Briskey		SoCal MOW Authority to Occupy Track (Track & Time) In CTC Territory Rule 10.3, in ABS Territory Rule 9.15 or in Rule 17.0 Foul Time		Date: 12/06/20	Vehicle Number: 21269		Form 12.14.20			
Repeat as follows: For (name), authority (number), granted (behind _____), on (track), between (point), switch (yes/no), and point, switch (yes/no), (joint), until (time).										
Authority	Conditions of Authority	Track(s)	Track Limits Authorized							
			Between (Beginning Location)	Switch Included	And (Ending Location)	Switch Included	Joint Status	Time Limits Authorized	OK Time/ DS Initials	Time Authority Released
8321	Behind: BNSF 5469 West	MT SDG Main 1 Main 2	WSS WE ESS EE NCS NE SBCS SE EXO	Yes No	WSS WE ESS EE NCS NE SBCS SE EXO	Yes No	Joint	Until: 1410 Extended To: 1450	1310 HBD 1403 HBD	1429
Authority behind Trains		Train ID (Engine initials, engine number and direction)								
• Record train MP location provided by crew member.		BNSF 5469 West								
• After verifying MP location, state the following "Please inform me before making any stop or backup movements."										
• Record time briefing was completed.										
		Milepost location 892.0								
		Time Contacted 1312								

Requesting Authority to Occupy Main - Verbiage Example

Track Inspector: "Track Inspector Briskey calling DS 26, over."
DS: "Go ahead Track Inspector Briskey, over."
Track Inspector: "Yes, I would like to request authority on Main 1 between CP Lopez and CP Jastro to inspect the track, over."
DS: "Understand. Are you ready to copy, over?"
Track Inspector: "Yes, Track Inspector Briskey with Vehicle Number 21269 is ready to copy, over."
DS: "Authority 8321, Behind the BNSF 5469 West, on Main 1, Between WBCS Lopez Switch No. and EBSC Jastro, Switch No, Until 1410, over."
Track Inspector: "Understand, Track Inspector Briskey, with Vehicle Number 21269, Authority 8321, Behind the BNSF 5469 West, on Main 1, Between WBCS Lopez Switch No. and EBSC Jastro, Switch No, Until 1410, over."
DS: "1310, Dispatcher HBD, over."
Track Inspector: "1310, Dispatcher HBD, over."
DS: "That is correct. DS out."

****Since the Dispatcher said "Behind BNSF 5469 West", the Track Inspector must wait for that train to clear where he/she sets-on the track.**

****Track Inspector must also contact BNSF 5469 West and ask for their headend Milepost Location, and confirm they will inform the Track Inspector before stopping or making any reverse movements.**

****Joint is only used for MOW employees sharing authority with other MOW employees.**

Contacting Train with Joint Authority - Verbiage Example (If Joint Authority)

Track Inspector: "Track Inspector Briskey calling BNSF 5469 West, over"
Train: "Go ahead Track Inspector Briskey, over."
Track Inspector: "BNSF 5469, I'll be setting on behind you. What is your headend milepost location, over."
Train: "Our headend is at MP 892.0, over."
Track Inspector: Copy, MP 892.0 Please inform me before making any stop or backup movements, over."
Train: "Understand, we will let you know before making any stop or backup movements, over"
Track Inspector: "Thank you, out."

****At this time, the Track Inspector can record the headend Milepost Location of the train and time contact was established.**

When the Track Inspector (1) **needs an extension of time** or, (2) **is done inspecting the specified limits AND has taken his/her truck off the rails**, he/she will contact the Dispatcher to release authority. ****Either of these must be done before authority time ends****

Time Extension - Verbiage Example

Track Inspector: "Track Inspector Briskey calling DS 26, over."
DS: "Go ahead Track Inspector Briskey, over."
Track Inspector: "Yes, I would like to request an extension of time on Authority 8321, over."
DS: "Track Inspector Briskey, with Vehicle Number 21269, Authority 8321, granted Behind the BNSF 5469 West, on Main 1, Between WBCS Lopez Switch No, and EBSC Jastro, Switch No, Extended To: 1450, over."
Track Inspector: "Understand, Track Inspector Briskey, with Vehicle Number 21269, Authority 8321, granted Behind the BNSF 5469 West, on Main 1, Between WBCS Lopez Switch No, and EBSC Jastro, Switch No, Extended To: 1450, over."
DS: "1403, Dispatcher HBD, over."
Track Inspector: "1403, Dispatcher HBD, over."
DS: "That is correct. DS out"

Releasing Authority - Verbiage Example

Track Inspector: "Track Inspector Briskey calling DS 26, over."
DS: "Go ahead Track Inspector Briskey, over."
Track Inspector: "Yes, I am ready to release Authority 8321, over."
DS: "Authority 8321 displayed, over."
Track Inspector: "Track Inspector Briskey, with Vehicle Number 21269, Authority 8321, granted Behind the BNSF 5469 West, on Main 1, Between WBCS Lopez Switch No, and EBSC Jastro, Switch No, Extended To: 1450, Released at 1429, over." (For added realism, you may also add "All work groups, employees and myself are clear of the track.")
DS: "Understand, Track Inspector Briskey, on 12/04/20, with Vehicle Number 21269, Authority 8321, granted Behind the BNSF 5469 West, on Main 1, Between WBCS Lopez Switch No, and EBSC Jastro, Switch No, Extended To: 1450, Released at 1429, over." ("Everyone is clear of the track.")
Track Inspector: "That is correct. Thank you Dispatcher. Track Inspector Briskey out."
DS: "Thank you. DS out."

thedeplotserver.com

Created By: Kyle Briskey

Appendix A - Track Flagging Examples

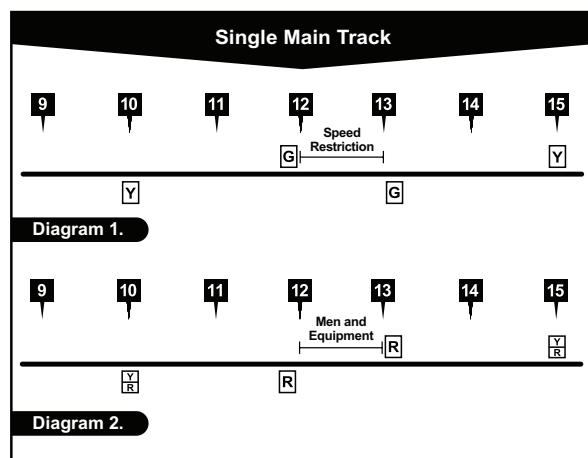
The figures in the appendix provide examples for protecting temporary speed restrictions and people or equipment working on or near the track. When reviewing these examples, keep in mind the following:

- The examples provided do not cover every situation.
- The distances shown are those specified by rule.

Yellow and yellow-red flags will be displayed on all main tracks and sidings leading to the track affected. Yellow and yellow-red flags will be placed 2 miles before each restriction with the exception of at foreign line junctions, areas where flags cannot be placed 2 miles in advance and in certain situations at crew change points.

In multiple Main Track territory, when a restriction is placed on a crossover, or in single Main Track territory when a restriction is placed on a turnout not affecting the Main Track, no track flags will be displayed after the restriction is specified by track bulletin or track warrant. This information must be included on the track bulletin or track warrant.

In situations in multiple Main Track or at sidings, when a train passes a yellow or yellow-red flag and a restriction is specified 2 miles in advance on track bulletin or track warrant, if the train takes a different route from the restricted track, this will not be considered as an unspecified restriction. Crew members must determine the track affected by comparing the flag location with the information contained in the track bulletin.



Display of Green Flags with Overlapping Yellow Flags

Track flagging for temporary speed restrictions when a series of locations requiring reduced speeds are so closely spaced that the green flags will overlap the yellow flags.

Only one green flag will be placed at the leaving end of the last location.

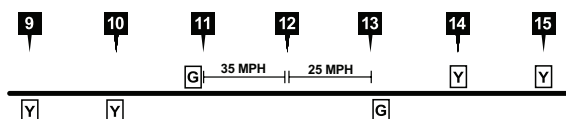


Diagram 3.

Single Main Track (Sidings at the 2-mile point)

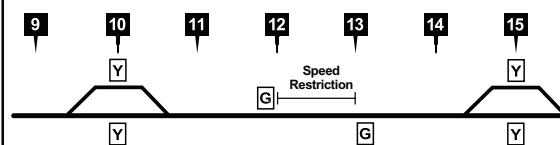


Diagram 4.

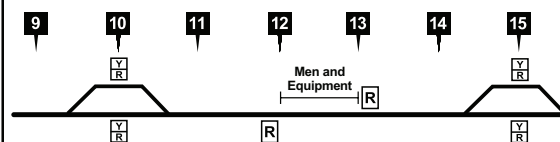


Diagram 5.

Restriction on Siding

Speed restrictions on sidings will be short flagged. Location of short flag must be indicated in track bulletin or track warrant.

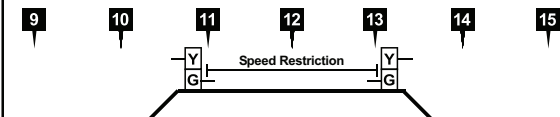


Diagram 6.

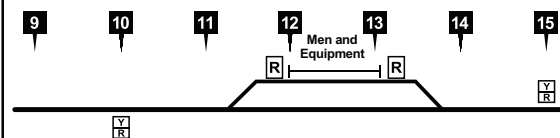


Diagram 7.

Train crews would determine the track affected by the information contained in their track bulletin.

Speed Restriction on Main Track Where Siding is Adjacent

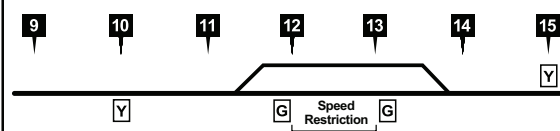


Diagram 8.

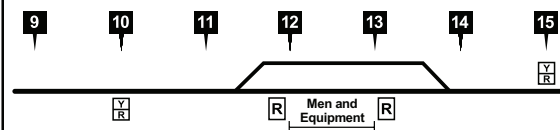
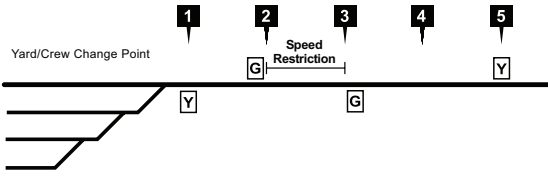


Diagram 9.

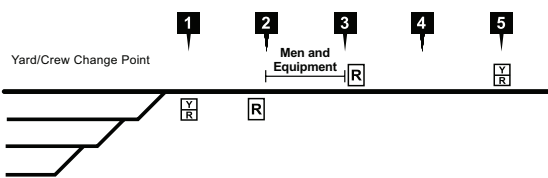
Train crews would determine the track affected by the information contained in their track bulletin.

Speed Restriction When Flag Cannot Be Placed 2 Miles in Advance

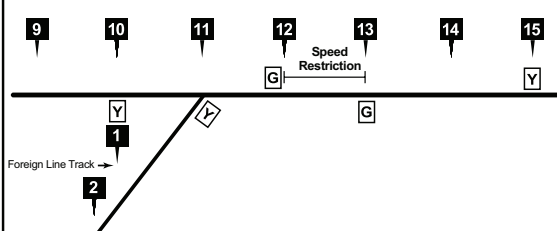
Location of short flag must be indicated in track bulletin or track warrant.

**Diagram 10.****When Flag Cannot Be Placed 2 Miles in Advance of Men and Equipment**

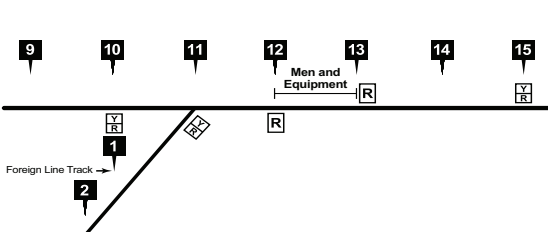
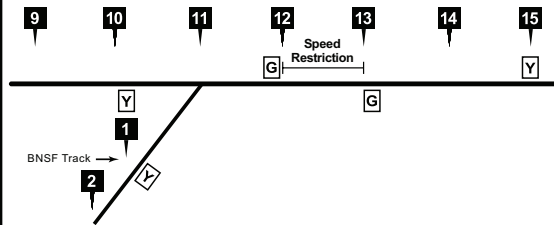
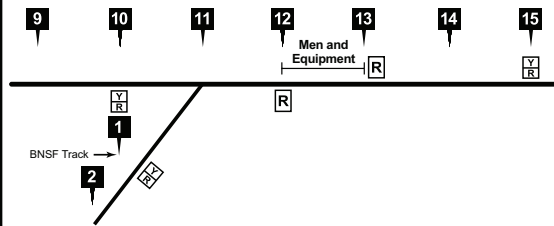
Location of short flag must be indicated in track bulletin or track warrant.

**Diagram 11.****Speed Restriction at Foreign Line Junction**

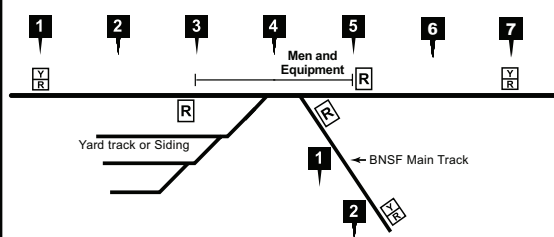
Location of short flag must be indicated in track bulletin or track warrant.

**Diagram 12.****Foreign Line junction Near Men and Equipment**

Location of short flag must be indicated in track bulletin or track warrant.

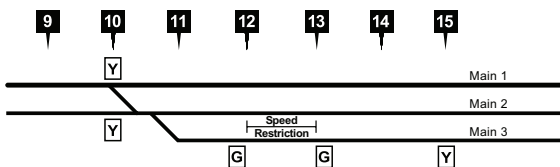
**Diagram 13.****Speed Restriction at BNSF Junction****Diagram 14.****BNSF Junction Near Men and Equipment****Diagram 15.****Men and Equipment with Junction and Intervening Switch**

Red flags at the limits of Form B and Main Track junctions within the limits.

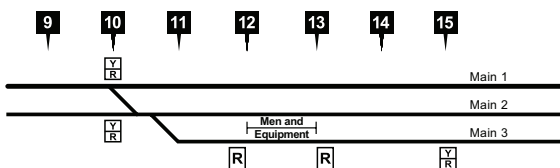
**Diagram 16.**

Speed Restriction Just Beyond Turnout to Third Main Track

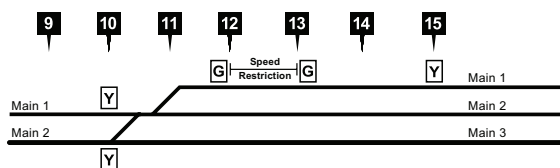
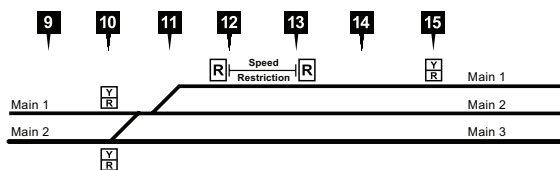
Train crews would determine the track affected by the information contained in their track bulletin.

**Diagram 17.****Men and Equipment just Beyond Turnout to Third Main Track**

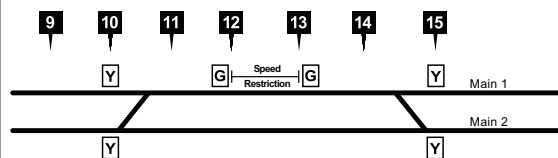
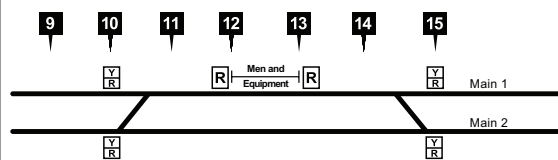
Train crews would determine the track affected by the information contained in their track bulletin.

**Diagram 18.****Speed Restriction Just Beyond Turnout to Main 1**

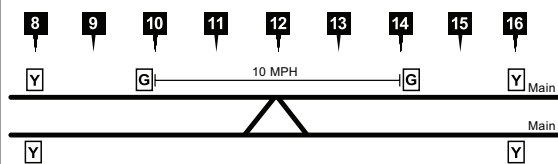
Train crews would determine the track affected by the information contained in their track bulletin.

**Diagram 19.****Men and Equipment Just Beyond Turnout to Main 1****Diagram 20.****Speed Restriction on Multiple Main Track**

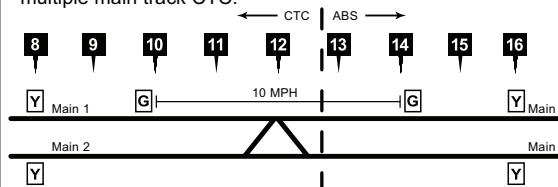
Train crews would determine the track affected by the information contained in their track bulletin.

**Diagram 21.****Men and Equipment on Multiple Main Track****Diagram 22.****Speed Restriction on Main 1 (CTC Territory)**

Yellow flags are placed 2 miles from the point of the restriction on both tracks because crews determine the track affected by comparing yellow flag with information on their track bulletin.

**Diagram 23.****Speed Restriction on Main 1 (CTC and ABS Territory)**

Yellow flags are placed 2 miles from the point of the restriction on both tracks. When a restriction, or flags placed for a restriction, includes both CTC and DT ABS, flags will be placed in accordance with rules for flag placement in multiple main track CTC.

**Diagram 24.**

Speed Restriction on Multiple Main Tracks (3 or More Main Tracks)

Train crews would determine the track affected by the instruction contained in their track bulletin.

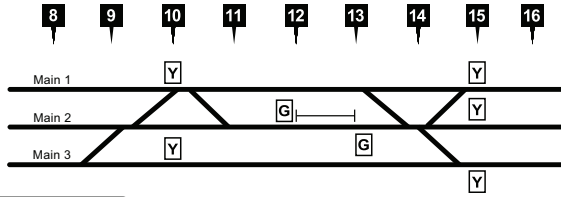


Diagram 25.

Men and Equipment on Multiple Main Tracks (3 or More Main Tracks)

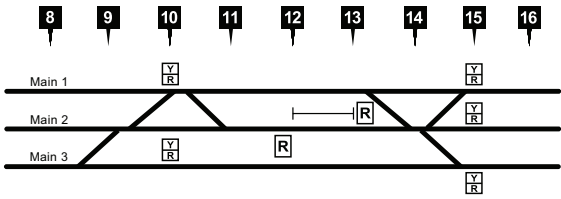


Diagram 26.

Appendix A

California Division Track Flagging Examples

The figures in this appendix provide examples for protecting temporary speed restrictions on turnouts, sidings and crossovers that do not affect Main Track movements. These flag placement requirements must be used on the California Division supplemental to the flag placement requirements located in BNSF System Special Instructions. When reviewing these examples, keep in mind the following:

- The following examples are additional flagging requirements applicable only on the California Division.
- The examples provided do not cover every situation.
- These examples apply for temporary speed restrictions that are scheduled for repair 24 or more hours after restriction placed.
- The distances shown are those specified by rule.

Place yellow flags two miles in advance of the restricted turnout or crossover:

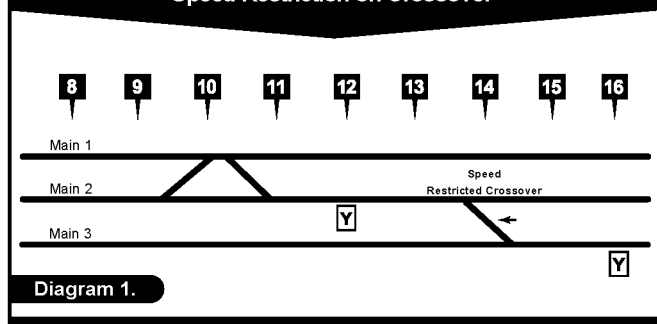
- only on the tracks to which the turnout or crossover is directly connected; and,
- only for the direction where a movement could potentially negotiate the turnout or crossover.

For restrictions on turnouts or crossovers yellow flags may be placed less than two miles in advance if there is an intervening track within two miles of the restriction. List the location of short flags in the Track Bulletin Form A. No yellow flags are placed for movements in the opposite direction.

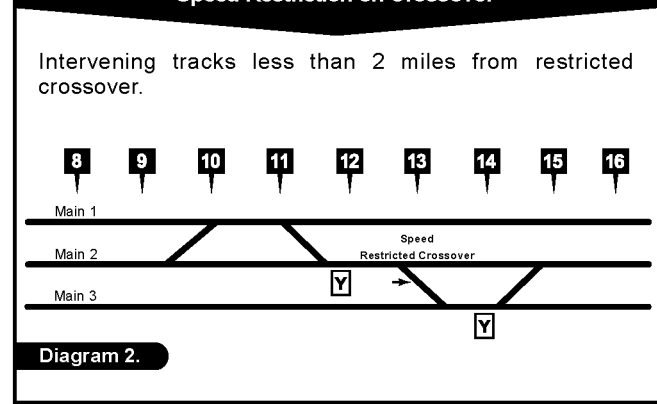
For restrictions on a siding between siding turnouts place yellow flags two miles in advance of restriction.

In these scenarios, no green flags are displayed.

Speed Restriction on Crossover

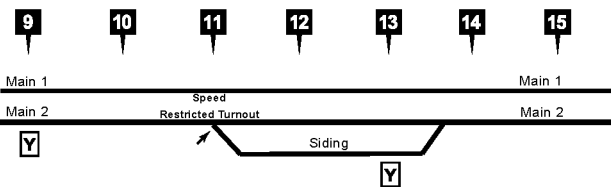


Speed Restriction on Crossover



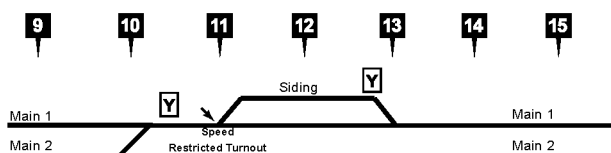
Speed Restriction on Siding Turnout

Yellow flag on field side of siding.



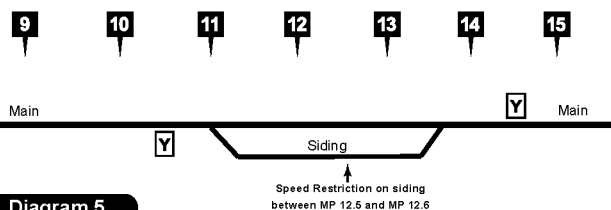
Speed Restriction on Siding Turnout

Intervening tracks less than two miles from restricted turnout. Place yellow flag maximum distance on siding from the restriction.



Speed Restriction on Siding

Yellow flags two miles in advance.



RUN 8 KEYBOARD COMMANDS

AIR BRAKES		
Bleed Air Brakes	L CTR F7	Bleeds air brakes all cars
BP Recharge Cheat	F7	Reset all angle cocks and re-charge all brake components
Brake Type	L ALT B	Toggle AB type frt. / psgr.
Emergency	L CTR Backspace	
Emergency Brake EOT	L CTR F11	EOT dump air at rear of train
Independent Apply	Page Up	
Independent Bail	Period	
Independent Full	R CTR Page Up	
Independent Off	R CTR Page Down	
Independent Release	Page Down	
Train Brake Apply	Home	
Train Brake Apply Suppression	R CTR	
Train Brake Release	End	
Train Brake Release Full	R CTR End	
AVATAR		
Avatar Tags	L ALT F8	Show/hide player names
Backward	S	Back normal speed
	L SHIFT S	Back increased speed
	L CTR S	Back high speed
Bow	2	Avatar bows
Down	Q	Down normal speed
	L SHIFT Q	Down increased speed
	L CTR Q	Down high speed
Forward	W	Forward normal speed
	L SHIFT W	Forward increased speed
	L CTR W	Forward high speed
Left	A	Left normal speed
	L SHIFT A	Left increased speed
	L CTR A	Left high speed
Right	D	Right normal speed
	L SHIFT D	Right increased speed
	L CTR D	Right high speed
Up	E	Up normal speed
	L SHIFT E	Up increased speed
	L CTR E	Up high speed
Wave	1	Avatar waves
To activate high speed avatar (free fly) press L SHIFT F12		

DISPATCH		
Dispatch Screen	F3	Toggles DS screens
Exit	Escape	Close DS screen
Next DS Screen	R Arrow	
Previous DS Screen	Left Arrow	
Screen Brighter	Equals	
Screen Dimmer	Minus	
DISTRIBUTED POWER		
Dynamic Brake Setup	L Shift Divide	
Fence Decrease	L Shift L Bracket	DB fence closer to front of the train
Fence Decrease	L Shift R Bracket	DB fence closer to the rear of the train
Throttle Decrease	L Shift Semi Colon	
Throttle Increase	L Shift Apostrophe	
GENERAL		
AI Trains Menu	L Shift F2	
Attach Point	F11	Hold down F11 then left click locomotive
Car Tags	L CTR F8	Toggles off/unit number/destination tag
Consist Editor	L CTR	
Exit	Escape	Close any menu
Flashlight	F	Flashlight on/off
Fullscreen	L Shift F4	
Hailing	Tab	Text chat in multiplayer
Hide Messages	L CTR Tab	
Horn Menu	L CTR F3	Customize horn and bell
Humping Options	L CTR F6	Hump controller menu
Industry Editor	L CTR I	
Industry List	L CTR L	
Industry Tags	R CTR F8	Toggles industry tags
Load / Save Menu	F1	
MOW Window	F6	
MP Tags	L Shift F8	Toggle mile post tags
Network Menu	F2	
Options Menu	F1	
Parking Brake	L Shift F5	Apply hand brakes to all rail units in train
Parking Brake Release	F5	Release hand brakes to all rail units in train
Pause	Pause	
Reset Terrain	F10	Resets all surrounding terrain tiles
Screen Shot	F8	

RUN 8 KEYBOARD COMMANDS

GENERAL		
Show Window Border	F4	Toggles window border
Switch List	R CTR L	
Track Bulletin Window	L CTR F2	
Transport To Switch	Space	
User Notes	L ALT F1	
HUD		
Coupler Brakes	L Shift B	
Engine	L Shift C	
Sim	L Shift X	
Toggle	L Shift Z	
Track	L Shift N	
Train	L Shift Z	
LOCOMOTIVE CONTROLS		
Alerter Reset	R ALT	Reset cab alerter
Bell	Decimal	Locomotive bell on/off
Cabin Light Switch	L	Toggle light in cab
CB Engine Run	L ALT 1	Toggle eng run circuit breaker
CB Gen Field	L ALT 2	Toggle gen field circuit breaker
CB Control	L ALT 3	Toggle control circuit breaker
CB Dynamic Brake	L ALT 4	Toggle DB circuit breaker
Change Control RV	R ALT F11	Change controlling unit
Distance Counter Down	R Shift Multiply	
Distance Counter Up	Multiply	
Dynamic Setup	Divide	
Gauge Light Switch	R ALT L	
Headlight Front Down	L Shift H	
Headlight Front Up	H	
Headlight Rear Down	L Shift J	
Headlight Rear Up	J	
Horn	Space	
Radio Channel Down	L CTR T	Can also be set using mouse
Radio Channel Up	L CTR V	Can also be set using mouse
Reverser Decrease	Delete	
Reverser Increase	Insert	
Sander	Num Pad 0	Toggles sanders on/off
Slow Speed Control	L CTR C	Used in hump operation
Step Light Switch	R Shift L	Toggles step lights
Throttle Decrease	Subtract	
Throttle Increase	Add	
Traction Motor 1	R Shift 1	Toggles TM 1 on/off
Traction Motor 2	R Shift 2	Toggles TM 2 on/off
Traction Motor 3	R Shift 3	Toggles TM 3 on/off
Traction Motor 4	R Shift 4	Toggles TM 4 on/off

LOCOMOTIVE CONTROLS		
Traction Motor 5	R Shift 5	Toggles TM 5 on/off
Traction Motor 6	R Shift 6	Toggles TM 6 on/off
Wiper Control	V	
MFD		
MFD1 Page Decrease	L ALT Z	
MFD1 Page Increase	L ALT A	
MFD2 Page Decrease	L ALT X	
MFD2 Page Increase	L ALT S	
MFD3 Page Decrease	L ALT C	
MFD3 Page Increase	L ALT D	
MFD4 Page Decrease	L ALT V	
MFD4 Page Increase	L ALT F	
MFD Brighter	Equals	
MFD Dimmer	Minus	
MFD Page Decrease	X	Current MFD
MFD Page Increase	C	Current MFD
MFD Select	Z	Toggles current MFD
VIEWS		
Cab View Backward	Down Arrow	
Cab View Decrease	L Shift F11	
Cab View Forward	Up Arrow	
Cab View Increment	R Shift F11	Moves to next attach point
Cab View Left	Left Arrow	
Cab View Right	Right Arrow	
Camera Free Fly	L Shift F12	Enter "free fly" mode
Camera Ground	F12	Exit "free fly" mode
Camera Tracking	4	
Default Cab Position	P	Seat default position
Engineer Head Out Forward	R CTR Up	
Engineer Head Out Reverse	R CTR Down	
EOT	L CTR F12	
Load View 1	L CTR 1	
Load View 2	L CTR 2	
Load View 3	L CTR 3	
Load View 4	L CTR 4	
Load View 5	L CTR 5	
Quick Zoom	R ALT Up	
Reset Zoom	R ALT Down	
Save Cab Cam Position	R CTR P	
Save View 1	L Shift 1	
Save View 2	L Shift 2	
Save View 3	L Shift 3	
Save View 4	L Shift 4	
Save View 5	L Shift 5	