Welcome to the Feather Mountain Railroad



Scott Sabo – Superintendent 17 April, 2020

FMRR Facts

- Headquartered in Grande Cache, Alberta
- Class 2 railroad with 30 miles of mainline track
- Free-lanced
- Year Summer 1977
- Interchange with CN and BCOL
- Local Freights
- Thru Freights
- CN Freights

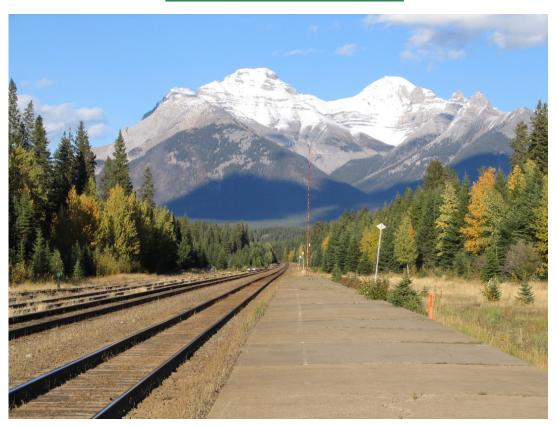
Layout Facts

- N scale
- 13ft x 14ft room
- Track 100%; Electrical 100%; Scenery 25% complete
- 100 ft. of single track mainline
- 3 Track Staging (CN Trains)
- Digitrax DCC Simplex Radio
- WiFi Smartphone Apps can be used as Throttles

Operational Notes

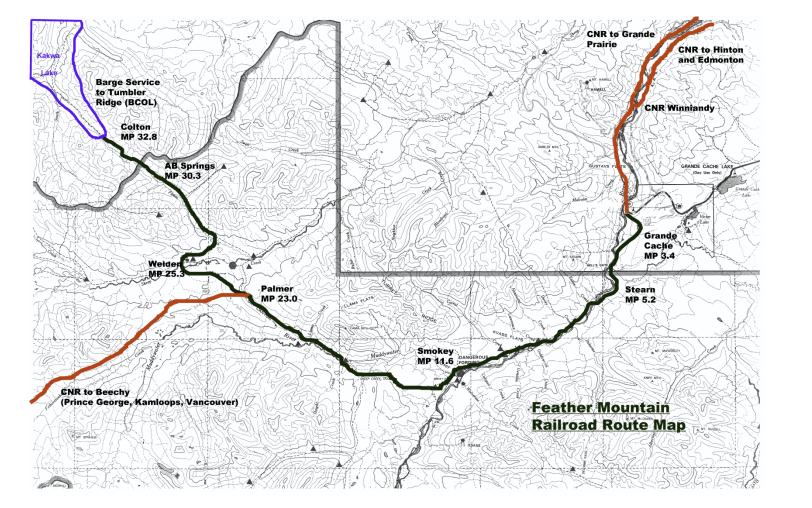
- Operating Size: 6 Crew and 1 Dispatcher
- All Trains are run as Extras
- Dispatching using MBS Clearance Forms and JMRI Panel Pro
- Communication: Telephone System
- 6:1 Fast Clock (4 hour session)
- Operational ABS Signal System
- Car Forwarding: JMRI Switch Lists and Manifests

The Route



Grande Cache, Alberta



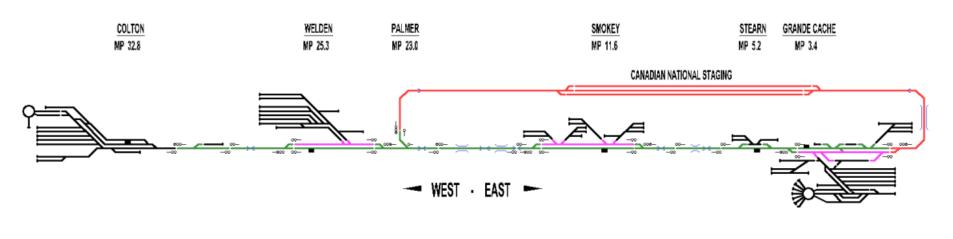


The Layout

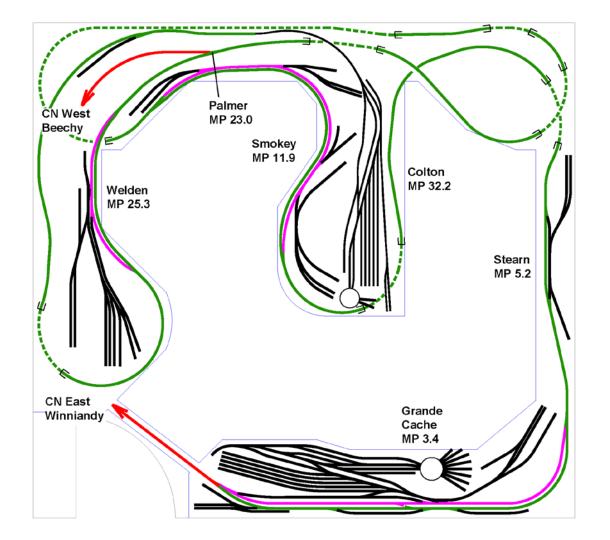




Schematic



- ---- FM Mainline
- —— Sidings
- —— Spurs & Yards
- ____ CN



Trackplan

FM Mainline

Sidings

— Spurs & Yards

____ CN

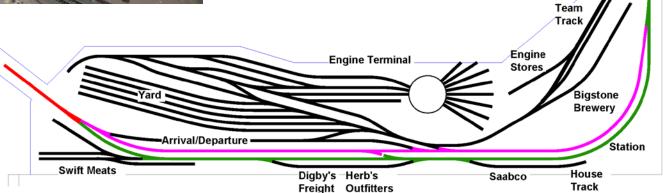
Towns





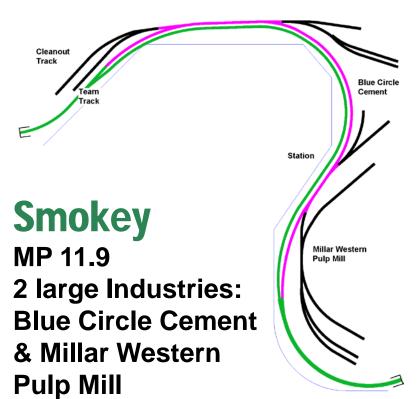
Grande Cache

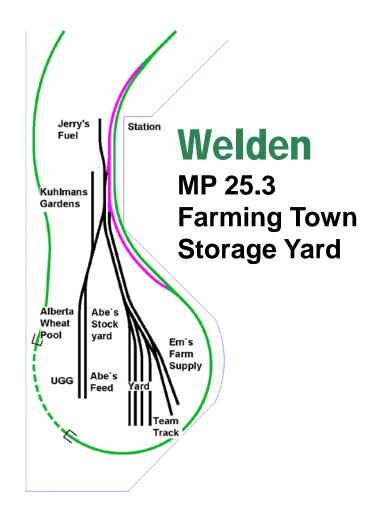
MP 3.4
East End of Division
Main Yard
Engine Servicing
Interchange with CNR



TOFC





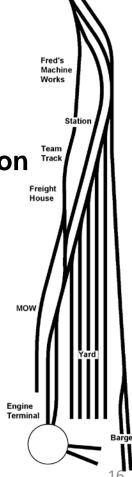






Colton

MP 32.2
West End of Division
Interchange with
BCOL via Barge



The Trains



Train Line Up

<u>Feather Mountain Railroad</u> <u>Train Crew Call Sheet</u> <u>Schedule A</u>

Description

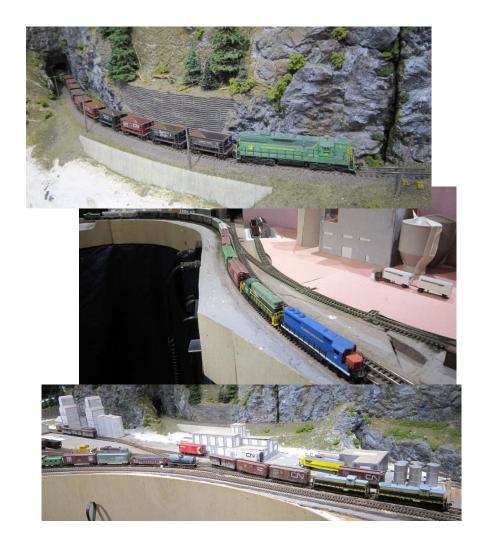
Feather Mountain Railroad Train Crew Call Sheet Schedule A

Page 2 of 2

No.	Call Time	Depart Time	Rating	Train No.	Train Name	Dir.	Originates	Switches	Terminates	Engineer	Time In	Time Out
1	0:00	0 00	1	CN-401	CN Unit	w	Wirniandy	-	Beechy			
2	0:00	0 00	1	MOW_EB	MOW	Е	Grande Cache	-	Grande Cache			
3	0:00	0 40	2	FM-232	Smokey Coal Turn	E/W	Welden	Smokey	Welden			
4	1:30	1:50	2	FM-116	Thru Freight	Е	Calton	Welden	Grande Cache			
5	2:00	2 20	2	CN-815	CN Local	w	Wirnlandy	Grande Cache	Beechy			
6	3:40	4 00	2	FM-262	Welden Yard Turn	E/W	Colton	Welden	Colton	Colton Yard Grew		
7	4:40	5.00	4	FM-241	Stearn Turn	W/E	Grande Cache	Stearn	Grande Cache			
8	5:20	5:40	1	FM-111	Ore	w	Grande Cache	-	Calton			
9	5:15	5 45	1	CN-402	CN Thru Freight	Е	Beechy	-	Winnlandy			
10	8:10	8 30	1	FM-112	EB Ore	E	Colton	-	Grande Cache			
11	8:25	8 45	5	FM-121	Way Freight	w	Grande Cache	Smokey Welden	Calton			

No.	Call Time	Depart Time	Rating	Train No.	Train Name	Dir.	Originates	Switches	Terminates	Engineer	Time In	Time Out
12	9:15	9:45	2	CN-814	CN Local	Е	Beechy	Grande Caphe	Wirnlandy			
13	11 20	12:00	2	FM-234	Smokey Coal Turn	E/W	Welden	Smokey	Welden			
14	13 40	14.10	3	FM-251	Grande Cache Local	EAV	Calten	Grand Cache City	Grande Cache	GC Yard Crew		
15	14 20	14:40	1	CN-403	CN Unit	w	Winnlandy	÷	Beechy			
16	15:50	16:10	2	FM-115	1hru Freight	w	Grande Cache	-	Colton			
17	15 55	16:15	5	FM-122	Way Freight	Е	Caltan	Welden Smakey	Grande Cache			
18	17 25	17.55	2	CN-816	CN Local	Е	Beechy	Grande Cache	Winniandy			
19	20.30	21:05	1	CN-408	CN Thru Freight	Е	Beechy	-	Wirnlandy			
20	21 00	21.30	3	FM-271	Smokey Turn	w	Grande Cache	Smokey	Grande Cache			•
2*	21.20	21:50	2	FM-235	Welden Coal Turn	EAV	Welden	Colton	Welden	Colton Yard Crew		
22	21:40	22:00	1	CN-40/	CN Thru Freight	w	Winniandy	-	Beechy			•

Difficulty rating = 1 Easy to 5 Hard 21 April, 2019 Difficulty rating = 1 Easy to 5 Hard 21 April, 2019



FM Freight Trains

- FM-111 & FM-112: Ore drags between Grande Cache and Colton.
- FM-115 & FM-116: Thru freights between Grande Cache and Colton. Pickups up Stock cars in Welden.
- FM-121 & FM-122: Way freights between Grande Cache and Colton. Switches all towns.



FM Freight Turns

- FM-231 and FM-233: Coal Turns.
 Originates at Welden. Services the Blue Circle Cement Plant in Smokey.
- FM-235: Coal Turns. Originates at Colton exchanges loaded coal cars for empties at Welden.
- FM-241: Stearn Mill Turn. Originates at Grande Cache. Services the SAW Mill in Stearn.
- FM-261: Welden Turn. Originates at Colton. Services the Welden yard.
- FM-271: Smokey Turn. Originates at Grande Cache, Services Blue Circle Cement Plant and Pulp Mill.





FM Yard Switchers

- Switches and classifies cars for other trains, also switches local industries
- EX-GCY: Switches the Grande Cache yard. Services industries located on the switcher lead.
- FM-251: Grande Cache Turn.
 Originates at Grande Cache.
 Services the industries along the Grande Cache mainline
- EX-CLY: Switches the Colton yard. Services the industries in Colton. Switches all Barges.



CN Trains

8 CN Trains daily:

- 2 Unit Trains WB
- 3 Thru Freights WB & EB
- 3 Local Freights WB & EB

400 series are thru freights that run to/from Staging.

800 series are local freights to/from Staging and interchange freight cars at Grande Cache

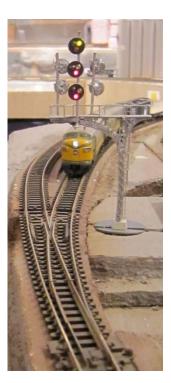
<u>Signals</u>

ABS Signal System



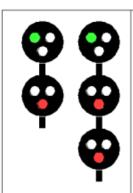






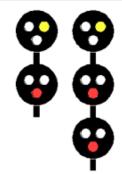


Signal Indications



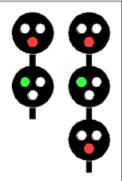
Rule: 281 Name: Clear

Indication: Proceed at Track Speed

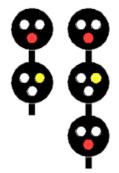


Rule: 285 Name: Approach

Indication: Proceed Medium Speed Prepare to Stop at Next Signal



Rule: 283
Name: Medium
Clear
Indication:
Proceed
Medium Speed
to/from Diverging
Route



Rule: 286
Name: Medium
Approach
Indication:
Proceed Medium
Speed to/from
Diverving Route
Prepare to Stop
at Next Signal



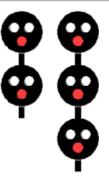
Rule: 287 Name: Slow Clear

Indication:
Proceed
Slow Speed on to
Diverging Route



Rule: 220 Name: Restricting

Indication: Proceed at Restricted Speed



Rule: 292 Name: Stop

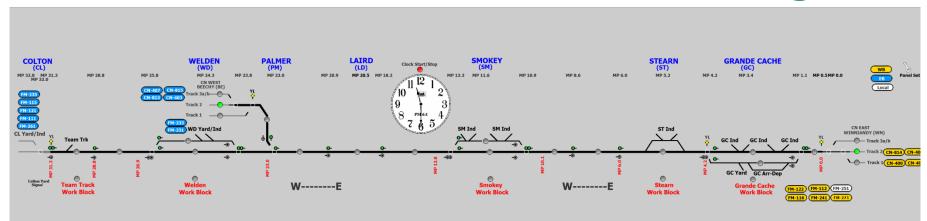
Indication: Stop

Operations



MANUAL BLOOM
CLEARANCE
No: 35 To: X456E
Oate 30CT77
MBS CLEARANCE
Do not ter
Alter Extra
beforearrives at
To: WN GC PROCESS
(Take) GC ST SM LD ST
PM - WD CI
ST CL ST CL
and: MP 6. MP 4.2 MP 10.1 MP 6.0
Between Against X5 310NS As Not
Totect Against
Between and MPIO.I
Between and
(5)
Call Train Dispatcher Before
SULLETING :
Train Dispatcher
Repeated
Dispatches hrs
Acknowled MBS Clears CANCELLATION
Form Date 4 April 2010 By KLP Cancelled at
Acknowledged by hrs

FMRR Panel and Train Listing



Train	No.	Name		Time	Remarks
FM FRGHT	115	EB GC	ar		
		Freight	dp	1:50	
BARGE	BO-1	Barge Ore	ar dp	2:20	Drop Full Ore Cars, Pick- up MT Coal Note 4.5.6
			dp	4:00	Note 1
EXTRA	261E	SC Turn	ar	6:00	
FM	112	WB Ore	ar	8:00	Ore Cars Only
UNIT	112	WB Ore	dp		Note 5
FM	111	EB Ore	ar		Ore Cars Only
UNIT			dp	8:30	Note 5
BARGE	BE-1	Barge	ar	9:20	Note 4
2		Morning	dp	10:40	
FM ERGHT	122	WB Way	ar	14:20	
		Freight	dp	14:20	Drop Full Coal, Pick-up
BARGE	BC-1	Barge Coal	dp dp	15:40	MT Ore Cars Note 4.5.6
			op	15:00	Switching Local Industries
EXTRA	CLY	Colton Local		23:59	Note 7
		EB Way	ar	80.00	110.00
M FRGHT 12	121	Freight	dp	16:15	
RARGE RE		Barge	ar	18:30	Note 4
BARGE	BF-2	Evening	dp	20:00	
EM ERGHT	116	WB CL	ar	18:05	
r m croni	.10	Freight	dp		
EXTRA	235E	WD Coal	ar		Coal Hoppers Only
	2000	Full EB	dp	21:50	Note 6
EXTRA	235W	CL Coal	ar	23:50	Coal Hoppers Only
		Empty WB	dp		Note 6
Spec	ial Notes:	Yard Crew op Yard Switcher			load Master
		3. Typically train	s depart	ing and arriv	ing use the Siding
		4. Use an idler o	ar to ret	rieve and pla	ce cars on Barges
		Maximum 3 ca	ars plus	idler car on b	serge slope
		5. The ore cars t	ravel as	2 groups of	5 cars each
		The order in w	thich the	y are is not i	mportant
		6. Coal cars trav	el in 2 g	roups of 3 ca	irs each
		The enter in a	delicate Man	ry are is not i	montant

Colton Yard Line Up

Trains		s Window Help	10				College College				- 0
	BAH	Function Hop	Name	Description	Sade	Decerts	Terminates	Current	Status	Action	Diff
000	175	Dald	TO1-400	CH WE LINE	CN-400	Winnerdy-1	Beechs-1	Correra	Train reset	Reset	tids.
00	-8-	Bald	Pe-si0	Transfer our from QC to WD	Print	Grande Carbo Yard	Grande Cache Yard		Train reset	Reset	Fd1
00	10	Dubl	MOVE 48	FM ES MOW Train	MOW-EB	Colton	Grande Cache Yard		Build Foiled	Report	Dát
90	-14	Date	MOH-WE	PH WE HOW Trein	MON VIS	Grande Cache Yard	Colton		Build Pailed	Report	£61
40	-16	Bald	Ptr.231	Smokey Coal Turn	FH-231	Welden I	Stalder-1		Train reset	Egget	F-61
50	10	Dubl	FH-115	FH EB Thru Preight	FH-115	Colton	Grande Cache Yard		Train reset	Reset	Edit
20	-14	Date	Barge-Ore	OF One Starge	80-1	Terral-letals	Villov Creek		Train reset	Reset	Edit
20		Beld	CN-814	Chi Kanloope Local	O1414	Wiresardy-2	Seedry-2		Train reset	Reset	F-61
00	m	Dutt	[PH-261	Welden Turn	PH-261	Culton	Coltan		Train reset	Rejet.	561
100	-W-	Beld	FH-241	PM SAW MILTUM	PH-241	Grande Cache Yard	Grande Cache Yard		Train reset	Reget	Fdit
40	m	Duid	PH-112	PM VIS One Train	PM-112	Grande Carlse Yard	Colton		Transeat	- Reset	tids
:45		Dutt.	CN-403	Chiteton Thru Freight	CN-403	Beedw-3	Wmiandy-3		Train reset	Reset	5.01
120	-14-	Build	RH-GCY	FM Grande Cache Yard Local	PH-GCY	Grande Cache Yard	Grande Cache Yard		Train reset	Reset	Edit
100		Deld	CN-400R	Re-Stages CN-400 TO CN-404	Van-Odrs Re-Stage	Deethy-1	Wrotendy-1		Tran reset	Feee!	Dát
:00		Build	TOVER.	Re-Stages CN-814 to CN-408	Ken-GP Re Stage	Beechy-2	Winniandy-2		Train reset	Reset.	[£01
:30		Build .	PH-111	FH EB Ore Train	PH-111	Colton	Grande Cache Yard		Train reset	Reset	Edit
45	171	DAG	P94-122	PH VIS May Preight	PH-122	Grande Cache Yard	Colten		Train reset	Seset	Didt
40		Build	Barge-Horning	FM Morning Berge Preight	BF-Violverine	Woherine	Stolverine		Train reset	Reset	Edit
145		Build	Ov413	Oli Hintan Local	OV413	Brechy-4	Winningly-4		Train reset	Reset	Edit
000		DAIL	CN-403R	Re-Stages CN-903 to CN-815	Hinton-PG Re-Stage 1	Winnignety-2	Beedty-3		Train reset	Reset	591
500	20	Build	PH-233	Smolery Coel Turn	PH-233	Welden-1	Welder-1		Train reset	Reset	Edit
20		9.46	Barge Coal	CP Coal Barge	80:1	Willow Creek	TerraHetals		Train reset	Reset	Edit
140		Build.	CN-404	OV VIB LINE	ON-404	Winnlandy-1	Beedly-1		Train reset	Reset	Edit
:40	10	Build	PH-251	Grande Cache Switcher	PH-251	Grande Cache Yard	Grande Cache Yard		Train reset	Reset	Edit
40		Build	CN-813R	Re-Stages CN-813 to CN-407	Hinton PG Re-Stage2	Winninady-4	Seedly-4		Train reset	Reset	Edit
155		Build.	FH-121	FM ES Way Freight	FN-121	Colton	Grande Cache Yard		Train reset	Reset	Edit
:40	15	Build	PH-CLY	Colton Switcher	PH-CLY	Colton	Coltan		Trainreset	Reset	Edit
140		Dald	FH-116	FM NS Thru Preight	FH-116	Grænde Cardne Yand	Coltan		Train reset	Smet	Edit
1.55		Build	ON-815	O'l Hinton Ore Local	Ox-815	Beedly-3	Winniandy-3		Train reset	Reset	Edit
120	10	Build	Barge-Evening	FM Evening Barge Preight	BF-Skutty	Sumy	Sucry		Train reset	Reset	Edit
100		Dald	PH-271	Smokey Turn	PH-271	Grande Cadhe Yard	Grande Cache Yard		Stain reset	Senet	Edit.
1:05		Build.	CN-407	Oli Hinton Thru Freight	CN-407	Beechy-4	Winninady-4		Yrain reset	Reset	Edit
:50		Build	FH-235	Welden Coal Turn	PH-235	Colton	Coltan		Train reset	Reset	Edit
100		Duki.	CN-408	Chi Kareloope Thru Preight	CN-408	Winniandy-2	Beedry-2		Stein reset	Reset	E81
:55	13	Build	CN-404R	Re-Stages CN-404 to CN-400	Van-Edn Re-Stage	Beechy-1	Winniandy-1		Train reset	Reset	Edit
55	10	Ruld	CN-407R	Re-Stages CN-407 to CN-913	Hinton-PG Re-Stage 2	Winninady-4	Beedly-4		Train reset	Reset	Edit
on (ch	sk on cok	um heading to sort	- OB	Optons	☑ Show All ☑ Me	ssages El Build Reports Preview	Action	⊕ Hove	© Conductor © Terrenati	e a Reset	
		38	trene Add			Build Preview Switch Lie	fit. Terrohate		Serie	Dulide	

Time Table No.6 April 24th, 1977

WESTWARD TRAINS	Alles From VArnishdy	mits			SMOKEY RIVER SUBDIVISION Mountain Time			ignels	3ding Capacity in test	EASTWARD TRAINS
	Miles	Yard Limits			STATIONS			Office signels	Siding	
	0.0	0.0			WINNIANDY Jitt. with CNR Grande Cache Sub. 3.4		KYZ	VWI		
	3.4	0.5 4.5	}-		GRANDE CACHE		CKYZ	вc	1200	
M	5.2				STEARN E4	• • • • •	Р		200	★
	11.6		ABS/ABS		SMOKEY 8.9	••••	Р	SM	1040	
	20.5		MBS		LAIRD 25	••••	Р			
▼	23.0				PALMER Jot. with Goat River Sub. 1.0	••••	RP	PM		
	24.3				WELDEN 8.5	••••	PB	WD	720	
	32.8	31.3 1		L	COLTON End of Track		CKYZ	CL		
	Plufe 41 applicable Plufes 21 to 32 applicable Plufes 21 to 32 applicable Plufes 32 to 32 applicable Main suck wids at infleeye 31.5 Plufe 105 applicable promoting stage 50 to 45 to 31.3 and 52.8									

SMOKEY RIVER SUBDIVISION FOOTNOTES

1. RULE MODIFICATIONS

1.1 SPECIAL SIGNAL FEATURES

EB Signals at MP 1.2 are controlled by Dispatcher. If the signal displays a "Stop" indication, eastward trains must stop and contact the Dispatcher to request a "Proceed" indication.

WB Signals at MP 20 s are the Advance Signals which govern train movement between the Smokey and Goat River Subdivisions. Top signal head is cark if junction switch is aligned for Smokey River Subdivision. Top signal head flashes red when junction switch is aligned for Goat River Subdivision. Train speed is governed by the heads illumination.

Dwarf Signal at MP 23.0 is for westward trains and is located on left side of track. It displays green if junction switch is aligned for the Smokey River Subdivision It displays flashing yellow when junction switch is aligned for Goat River Subdivision. Train speed is governed by the heads illuminated.

WB signal at MP 31.3 is the Colton Yard entrance and is controlled by the Yardmaster. Contact the Yardmaster for clearance into the yard.

1.2 TRAIN REGISTER MODIFICATIONS

All Eastward trains will register by calling Dispatcher after arriving at Winnandy Yard All trains will register by calling Dispatcher when caboose clears Palmer Tower.

Time Table No.6 April 24th 1977

1.3 OTHER MODIFICATIONS

Rule 111 - Trains handling ore must stop for inspection at Welden

2. GENERAL FOOTNOTES

- All trains to look out for falling rocks between Mileages 8.0 and 9.7;
 between Mileages 18.2 and 20.6; and between Mileages 25.8 and 31.3.
- 2.2 Wayside telephones in "Utility Circuit" located at all signals.

SPEEDS

3.1	MainTrack	
	Mileage	All Trains (mp
	0.0 to 6.0	15
	6.0 to 13.3	30
	13.3 to 18.2	35
	18.2 to 20.9	15
	20.9 to 23.0	20
	23.0 to 31.3	30

- 3.2 Sidings 15 mph
- 3.3 Yards, Engine Terminals, and Spurs 5 mph

4. HOT BOX SCANNERS AND DRAGGING EQUIPMENT DETECTORS

Located at Mileage 4.6

5. TUNNELS

Milea	g	ю							Lens	ź
6.2										
9.7									260	1
13.8									500	1
19.5									220	1
20.6	ı,								225	1
21.6									230	1
27.4		,							315	1

6. BRIDGES

Mile	31	2	è						J	Leng
1.0									į	240
7.0										200
8.6										75
18.8										225
19.6										50
30.9										30

7. SPURS OFF MAIN TRACK

Mileage	Car Capacity	Points
Swift Meats 1.4	10	W
Herbs Outfitters 2.0	4	E-W
Saabco/House Trk 3.3	4	E
Team Track	4	W

Timetables

- Overall Employee
 Timetable of scheduled trains.
- Each train crew gets a condensed timetable for ease of use.
- Yard crews get an arrival and departure timetable showing when trains are due.

Train Control

Use knobs for speed control when switching

Train speed is read here;

10 = 5 mph

20 = 10 mph

30 = 15 mph

etc.

Train speeds are +/- depending on numbers of cars and grade

Road crews use these buttons for speed control

MBS Clearance Forms

These are the most common clearances

	ARANCE
No: 32 To: X53W	at GC Date 30CT77
MBS CLEARANCE	IS CANCELLED
	before arrives at
PR	OCEED:
From: WN GC ST SM To: WN GC ST SM Take / Clear Main Track a	LD PM BH WD CL
	MBS is cancelled)
	MP 10.1 MP 23.0 MP 28.8
	MP 13.8 MP 26.9 MP 31.3
(1) Protect Against	and and
Between	
(4)	
MBS BULLETINS IN EFFECT Train Dispatcher	
Repeated at	CANCELLATION MBS Clearance Number

27	BLOCK SYSTEM ARANCE
No: 34 To: X53W	at SM Date 30CT77
MBS CLEARANCE	IS CANCELLED
	before arrives at
PF	ROCEED:
From: WN GC ST SM	
To: WN GC ST SM Take / Clear Main Track:	M LD PM BH WD CL at GC ST SM WD
	MBS is cancelled)
Between: MP 0 MP 4.2	
and: MP 5 MP 6.0	MP 13.8 MP 26.9 MP 31.3
	NS As Noted / NL
(1) Protect Against	and
(2) Protect Against	
Between	and
(3) Protect Against Between	
(4)	and
(5) Call Train Dispatcher Before	
MBS BULLETINS IN EFFECT	
Train Dispatcher	
Repeated at11:45_hrs	CANCELLATION
Dispatcher	MBS Clearance Number Cancelled at hrs
Acknowledged by	Acknowledged by
Acknowledged by	Acknowledged by

		MANUAL BLOCK SYSTEM CLEARANCE			
	No: 35 To: X456E at CL Date 30CT77				
MBS CLEARANCE IS CANCEL				SCANCELLED	
	Do not leave After Extra		before _ arrives at		
1	PROCEED:				
	To: WN	GC ST SM	LD PM		
١	Take) / Clear Main Track at GC ST SM WD WORK (until MBS is cancelled)				
	Between: MP (and: MP)	MP 4.2		MP 23.0 MP 28.8 MP 26.9 MP 31.3	
	(1) Protect Against X53W As Noted / NL.				
	BetweenMP 13.8 andMP10.1				
	Between and				
	(3) Protect Against and (4) and				
	(6)Call Train Dispetcher Before				
i					
	MBS BULLETINS IN EFFECT				
	Train Dispatcher				
	Repeated at13:00_hrs			NCELLATION Number	
	Dispatcher			hrs	
	Acknowledged by	KLP		by	

PROCEED

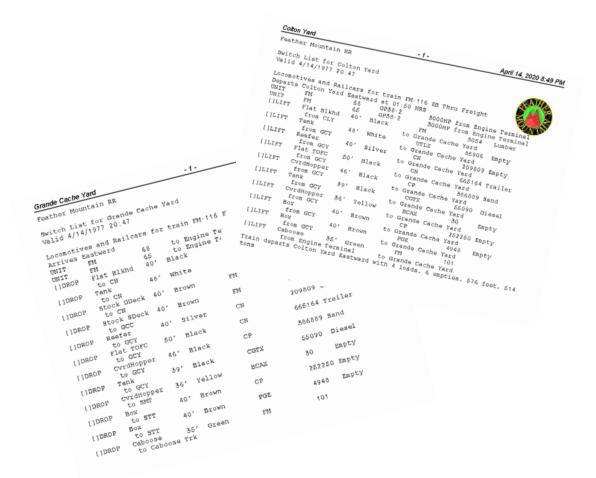
WORK

PROTECT AGAINST



Train Manifests

- Each train has a manifest showing the engines required, cars to pickup and cars to drop off.
- The order of the cars in the manifest show how the cars are to be blocked for easy switching.



Switchlists

- Used by the Yard Crews for blocking cars in the proper order for departing trains.
- Yard Crews are informed as to where the arriving cars are to be spotted.

Crew Assignments

Position	No.	Railroad	Trains
GC Yard Master and Yard Crew	2	Feather Mountain	Grande Cache Yard Switcher; EX-GCY, FM-251; Engine Hostler
CL Yard Master	1	Feather Mountain	Colton Yard Switcher; EX-CLY, FM-261, FM-235
Road Crews	3	Feather Mountain	FM-231; FM-241; FM-122; FM-116; FM-115; FM-112; FM-111; FM-233; FM-121; FM-271
Noad Clews		Canadian National	CN-400; CN-814; CN-403; CN-813; CN-404; CN-815; CN-407; CN-408
Dispatcher	1	Feather Mountain	n/a

Oh yah....

Have fun!