## BRITISH RAILWAYS

## (WESTERN REGION)

(For the use of Employees only.)

# NOTICE TO ENGINEMEN, GUARDS, ETC.

# Introduction of Multiple Aspect Signalling

## PLYMOUTH

SATURDAY, 26th NOVEMBER TO MONDAY, 28th NOVEMBER, 1960

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## **BRITISH RAILWAYS**

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## NOTICE TO ENGINEMEN, GUARDS, ETC.

## INTRODUCTION OF MULTIPLE ASPECT SIGNALLING **PLYMOUTH**

Saturday, 26th November to Monday, 28th November 1960

Between the hours of 4 p.m. on Saturday, 26th November and 6 a.m. on Monday, 28th November, 1960 the Signal Engineer will be engaged upon bringing into use a new mutiple aspect signalling scheme, together with a centralised signal box and control panel at Plymouth. As from 4 p.m. Saturday, 26th November and for the duration of the work all existing signals within the signalling area between Laira Junction and Mount Gould Junction on the east side and Plymouth Millbay, Devonport Kings Road and Keyham on the west side of Plymouth will be disconnected and train movements within the area will be made under the authority of handsignals only.

The new signal box will be known as **PLYMOUTH** and is situated on the down side of the line at the west end of Platform 2 at 246M. 4CH.

Detailed instructions for the operation of the new control panel are contained in a separate publication entitled "PLYMOUTH, Description and method of operation of the signalling control panel".

The following existing signal boxes will be taken out of use, together with all semaphore signals and discs worked therefrom:

Lipson Junction\* Plymouth North Road East Plymouth North Road West Cornwall Junction Devonport Junction Devonport (Albert Road) Station

\* Note:

The Down Main Distant and Down Main Intermediate Distant for Lipson Junction will remain in use with altered designations (see later paragraph).

In addition, certain signals worked from other boxes will also be taken out of use, viz.:

## LAIRA JUNCTION

Up Main Distant Up Main Intermediate Distant Up Main Inner Distant Down Main Starting

MOUNT GOULD JUNCTION

Down Main Distant Down Main Intermediate Distant

Down Main Inner Distant

### PLYMOUTH MILLBAY

Down Main Distant Down Main Distant from Cornwall Loop

### DEVONPORT KINGS ROAD (SR)

To Plymouth Starting To Plymouth Advanced Starting From Plymouth Distant Up Home

## **KEYHAM**

Down Main Distant Up Main Advanced Starting

The following lines and sidings will be renamed as shown:

Existing	Location	To Become
Down Line	ک Between Devonport ل ال Junction	∫ Down Devonport Branch
Up Line	and J Devonport Kings Road	Up Devonport Branch
Down Millbay	Between North Road West	∫ Down Millbay Branch
Up Millbay	} and ∫ Cornwall Junction	Up Millbay Branch
Middle Siding	Between North Road East and North Road West	$\left\{ {\text{Through Line}}  ight.$
Down Branch	Between Lipson Junction	∫ Down Mount Gould Branch
Up Branch	and Mount Gould Junction	Up Mount Gould Branch
Down Goods	Between Lipson Junction	∫ Down Laira Goods
Up Goods	Sector A	Up Laira Goods
No. 1 Down Siding	At North Road East	Down Passenger Loop
No. 2 Down Siding	At North Road East	Down Siding East
Down Carriage Line	At North Road West	Down Siding West
Turntable Ingoing Turntable Outgoing	brace At North Road West	{ Turntable 1 { Turntable 2

New connections will be brought into use in accordance with the attached sketch.

All points at present worked from North Road East, North Road West, Lipson Junction, Cornwall Junction and Devonport Junction Signal Boxes, together with all new connections, will be connected to and worked by power from the signalling control panel in the new signal box. All point machines are of the Westinghouse Brake and Signal Company's style M3 and the relevant instructions for emergency operation are given on pages 139 and 140 of the Regional Appendix to the Rule Book.

Hand Cranks for emergency operation of the point machines are located as follows:

- 1. In a hand crank release instrument in the vicinity of Cornwall Loop Junction (near the west end of the viaduct) for points previously worked from Devonport Junction. The hand crank can only be withdrawn from the instrument on receipt of an electrical release from the new signal box. A telephone is provided at the release instrument giving exclusive communication with the new box.
- 2. In a hand crank release instrument adjacent to Lipson Junction Signal Box for points previously worked from that box. The hand crank can only be withdrawn from the instrument on receipt of an electrical release from the new signal box. A telephone is provided at the release instrument giving exclusive communication with the new signal box.

3. At the new signal box for all other power worked points.

All the above hand cranks are so patterned that they will only fit the appropriate point machines.

Existing track circuits will be re-arranged and new track circuits brought into use in accordance with the attached sketch.

The existing multiple aspect signals, at present controlled from North Road East and Lipson Junction Signal Boxes and all new multiple aspect and position light signals whose numbers are prefixed P will be controlled from the signalling control panel in the new signal box.

The method of signalling to be adopted is known as "Three Aspect Signalling" and the signals will generally be capable of displaying any one of three aspects (except where otherwise stated) in accordance with Rule 43, namely:

Green-Clear, next signal displaying a proceed aspect.

Yellow-Caution, be prepared to stop at next signal.

Red—Danger.

A general description of this method of signalling, together with a description of other aspects and indications that will be encountered will be found on pages 19-22 of the Regional Appendix.

All mutiple aspect and position light signals in the area are classified as "controlled" signals and will carry an identification plate bearing the prefix letters of the controlling signal box together with the number of the signal. In addition, ground signal identification plates will bear an arrow pointing to the line to which the signal applies.

The signal box prefix letters are as follows:

Plymouth	Ρ
Laira Junction	L
Mount Gould Junction	MG
Millbay	MB
Devonport (Kings Road)	D
Keyham	К

### New Signals

New Signals in accordance with the following schedule and indicated in the sketch plan attached will be brought into use. For details of signal profiles see pages 18-20. An A.W.S. Ramp will be provided 200 yards to the rear of each multiple aspect signal except where shown otherwise. The installation of A.W.S. Ramps in the new positions will be carried out progressively by the Signal Engineer and this aspect of the work will not be completed until Tuesday, 29th November, vide Notice B.1163 dated 14th November.

Form	Signal No.	Application	Position	Distance from Box		
	PLYMOUTH					
Profile 1	P4	Down Main	Down Side of Down Main	3061 yards		
Profile 1	P6	Down Laira Goods to Down Main. (No A.W.S. Ramp will be provided for this signal).	Down Side of Down Laira Goods	3039 yards		
Profile 1	P10	Up Mount Gould Branch to Down Main.	Up Side of Up Mount Gould Branch	2938 yards		
Profile 1	P14	Down Main	Down Side of Down Main	2461 yards		
Profile 1	P16	Down Main (This signal is already in use as the Down Main I.B.S. Home for Lipson Junction. The existing lower "warning" aspect will be recovered).	Down Side of Down Main	1599 yards		

Form	Signal No.	Application	Position	Distance from Box
Profile 2	P18	1. Route indicator working with main aspect (2) or calling-on aspect (3)	Down Side of Down Main	704 yards
		<ol> <li>Down Main to:         <ul> <li>(a) Platform 2, via Down Passenger Loop or Down Main (Route Indication: "2").</li> <li>(b) Platform 3, via Down Passenger Loop or Down Main (Route indication: "3").</li> <li>(c) Platform 4, via Down Passenger Loop or Down Main (Route Indication: "4").</li> <li>(d) Through Line via Down Main (Route Indication: "4").</li> <li>(e) Platform 5, via Up Main (Route Indication: "5").</li> <li>(f) Platform 6, via Up Main (Route Indication: "6").</li> <li>(g) Platform 7, via Up Main or</li> </ul> </li> </ol>		
		Engine Line (Route Indication: "7"). (h) Platform 8, via Engine Line (Route Indication: "8").		
		<ul> <li>3. Calling-on Down Main (routes and route indications as for the main aspect (2) above), or Shunt Down Main to:</li> <li>(a) Down Passenger Loop (Signal P126).</li> <li>(b) Up Main (Signal P120)</li> <li>(c) Engine Line (Signal P122)</li> <li>No route indications are given with the shunt aspect.</li> </ul>		
		<ul> <li>4. Down Main to: <ul> <li>(a) Loading Docks via Down</li> <li>Passenger Loop or Down Main</li> <li>(Route Indication: "D").</li> <li>(b) Up Siding 1 via Engine Line</li> <li>(Route Indication: "S1").</li> <li>(c) Up Siding 2 via Engine Line</li> <li>(Route Indication: S2").</li> </ul> </li> </ul>		
		<ul> <li>5. Route indicator working with small yellow aspect (4) above.</li> <li>Note:</li> <li>When any proceed aspect (other than the shunt aspect) is displayed by this signal any intervening position light ground signal required to be passed in the facing direction will also display a proceed aspect.</li> </ul>		
Profile 3	P36	1. Route indicator working with main aspect (2).	On Platform 2 at West End.	45 yards
		<ol> <li>Platform 2 to:         <ul> <li>(a) Down Millbay Branch (Route Indication: "B").</li> <li>(b) Down Main (Route Indication: "M").</li> </ul> </li> </ol>		
		<ul><li>3. Shunt, Platform 2 to:</li><li>(a) Down Siding West</li><li>(b) Down Millbay Branch</li></ul>		

Form	Signal No.	Application	Position	Distance from Box
		<ol> <li>Route indicator working with small yellow aspect (5).</li> <li>Platform 2 to:         <ul> <li>(a) Spur (Route Indication "SP").</li> <li>(b) Turntable 1 (Route Indication: "T1").</li> </ul> </li> <li>No A.W.S. Ramp will be provided for this signal.</li> </ol>		
Profile 4	P38	<ol> <li>Route indicator working with main aspect (2).</li> <li>Platform 3 to:         <ul> <li>(a) Down Millbay Branch (Route Indication: "B").</li> <li>(b) Down Main (Route Indication: "M").</li> </ul> </li> <li>Shunt, Platform 3 to:         <ul> <li>(a) Down Siding West</li> <li>(b) Down Millbay Branch</li> <li>(c) Down Main</li> </ul> </li> <li>Platform 3 to Turntable I. No A.W.S. Ramp will be provided for this signal.</li> </ol>	On Platform 3 of West End.	33 yards
Profile 5	P40	<ol> <li>Route Indicator working with main aspect (2).</li> <li>Platform 4 to:         <ul> <li>(a) Down Millbay Branch (Route Indication: "B").</li> <li>(b) Down Main (Route indication: "M").</li> </ul> </li> <li>Shunt, Platform 4 to:         <ul> <li>(a) Down Millbay Branch</li> <li>(b) Down Main</li> </ul> </li> <li>Shunt, Platform 4 to:         <ul> <li>(a) Down Millbay Branch</li> <li>(b) Down Main</li> </ul> </li> <li>Platform 4 to Turntable 1         <ul> <li>No A.W.S. Ramp will be provided for this signal.</li> </ul> </li> </ol>	Down side of Platform 4 Line.	l yard
Profile 6	P42	<ol> <li>Route indication working with main aspect (2) or shunt aspect (3).</li> <li>Through Line to:         <ul> <li>(a) Down Millbay Branch (Route indication: "B").</li> <li>(b) Down Main, direct or via Up Main i.e. Left or Right-hand route (Route indication: "M").</li> </ul> </li> <li>Shunt, Through Line to:         <ul> <li>(a) Down Millbay Branch</li> <li>(b) Up Millbay Branch</li> <li>(b) Up Millbay Branch (Signal P142).</li> <li>(c) Down Main, direct or via Up Main i.e. Left or Right-hand route</li> <li>(d) Up Main (Limit of Shunt board) (Route indication: "X").</li> </ul> </li> <li>Route indicator working with small yellow aspect (5).</li> </ol>	On Platform 4 at West End.	60 yards

Form	Signal No.	Application	Position	Distance from Box
		<ul> <li>5. Through Line to: <ul> <li>(a) Turntable 1. via Down Main or Up Main (Route indication:</li> <li>"T1").</li> <li>(b) Turntable 2.</li> <li>(Route indication: "T2").</li> </ul> </li> <li>No A.W.S. Ramp will be provided for this signal.</li> </ul>		
Profile 7	P44	<ol> <li>Route indicator working with main aspect (2) or shunt aspect (3).</li> </ol>	On Platform 5 at West End.	0 yards
		<ul> <li>2. Platform 5 to:</li> <li>(a) Down Millbay Branch (Route indication: "B").</li> <li>(b) Down Main (Route indication: "M").</li> </ul>		
		<ul> <li>3. Shunt, Platform 5 to:</li> <li>(a) Up Millbay Branch (Signal P142).</li> <li>(b) Down Main</li> <li>(c) Up Main (Limit of Shunt Board) (Route indication: "X").</li> </ul>		
		4. Route indicator working with small yellow aspect (5).		
		<ul> <li>5. Platform 5 to:</li> <li>(a) Turntable 1 (Route indication: "T1").</li> <li>(b) Turntable 2 (Route indication:</li> </ul>		
		"T2"). No A.W.S. Ramp will be provided for this signal.		
Profile 8	P46	<ol> <li>Route indicator working with main aspect (2) or shunt aspect (3).</li> </ol>	On Platform 6 at West End.	19 yards
		<ul> <li>2. Platform 6 to:</li> <li>(a) Down Millbay Branch (Route indication: "B").</li> <li>(b) Down Main (Route indication: "M").</li> </ul>		
		<ul> <li>3. Shunt Platform 6 to:</li> <li>(a) Up Millbay Branch (Signal P142).</li> <li>(b) Down Main</li> <li>(c) Up Main (Limit of Shunt Board). (Route indication: "X").</li> </ul>		
		<ol> <li>Route indicator working with small yellow aspect (5).</li> </ol>		
		<ul> <li>5. Platform 6 to:</li> <li>(a) Turntable 1 (Route indication: "T1").</li> <li>(b) Turntable 2 (Route indication: "T2").</li> <li>(c) Neck (Route indication: "N").</li> </ul>		
		(c) Neck (Route Indication: N). No A.W.S. Ramp will be provided for		

Form	Signal No.	Application	Position	Distance from Box
Profile 9	No. P48	<ol> <li>Route indicator working with main aspect (2) or shunt aspect (3).</li> <li>Platform 7 to:         <ul> <li>(a) Down Millbay Branch (Route indication: "B").</li> <li>(b) Down Main (Route indication: "M").</li> </ul> </li> <li>Shunt Platform 7 to:         <ul> <li>(a) Up Millbay Branch (Signal P142).</li> <li>(b) Down Main</li> <li>(c) Up Main (Limit of Shunt Board). Route indication: "X").</li> </ul> </li> <li>Route indicator working with small yellow aspect (5).</li> <li>Platform 7 to:         <ul> <li>(a) Turntable 1 (Route indication: "T1").</li> <li>(b) Turntable 2 (Route indication: "T2").</li> <li>(c) Neck (Route indication: "N").</li> </ul> </li> </ol>	On Platform 7/8 at West End.	58 yards
Profile 9	P50	<ol> <li>Route Indicator working with main aspect (2) or shunt aspect (3).</li> <li>Platform 8 to:         <ul> <li>(a) Down Millbay Branch (Route indication: "B").</li> <li>(b) Down Main (Route indication: "M").</li> </ul> </li> <li>Shunt Platform 8 to:         <ul> <li>(a) Up Millbay Branch (Signal P142).</li> <li>(b) Down Main</li> <li>(c) Up Main (Limit of Shunt Board). (Route indication: "X")</li> </ul> </li> <li>Route indicator working with small yellow aspect (5).</li> <li>Platform 8 to:         <ul> <li>(a) Turntable 1 (Route indication: "T1").</li> <li>(b) Turntable 2 (Route indication: "T2").</li> <li>(c) Neck. (Route indication: "N").</li> </ul> </li> <li>No A.W.S. Ramp will be provided for this signal.</li> </ol>	On Platform 7/8 at West End.	58 yards
Profile 10	P52	<ol> <li>Junction indicator to Up Devonport Branch (SR) working with main aspect (2).</li> <li>Down Main to:         <ul> <li>(a) Up Devonport Branch</li> <li>(junction indicator displayed).</li> <li>(b) Down Main</li> <li>(This signal, when displaying a proceed aspect, with the junction indicator displayed, also acts as Up Distant for Devonport (Kings Road)</li> <li>(SR).</li> </ul> </li> </ol>	Down Side of Down Main.	424 yards (1345 yards from Devonport (Kings Road) Signal Box).

Form	Signal No.	Application	Position	Distance from Box
Profile 10	P54	<ol> <li>Junction indicator to Up Devonport Branch (SR) working with main aspect (2).</li> <li>Down Loop to:         <ul> <li>(a) Up Devonport Branch</li> <li>(Junction indicator displayed).</li> <li>(b) Down Main</li> </ul> </li> <li>(This signal, when displaying a proceed aspect, with the junction indicator displayed, also acts as Up Distant for Devonport (Kings Road)</li> <li>(SR)</li> </ol>	Down Side of Down Loop.	437 yards (1332 yards from Devonport (Kings Road) Signal Box).
Profile 1	P58	Down Main	Down Side of Down Main.	1267 yards
Profile 1	P60	Down Main (This signal when displaying a proceed aspect also acts as the Down Main Distant for Keyham.)	Down Side of Down Main.	2087 yards (1704 yards from Keyham Signal Box).
Profile 11	P64	Down Millbay Branch (This signal, when displaying a proceed aspect, also acts as Down Main Distant for Plymouth Millbay). The A.W.S. ramp for this signal will be approximately 100 yards to the rear of the signal.	Down Side of Down Millbay Branch.	347 yards (596 yards from Millbay Signal Box).
Profile 12	P66	Up Loop to Down Millbay Branch (This signal, when displaying a proceed aspect also acts as Up Loop to Down Main Distant for Plymouth Millbay).	Up Side of Up Loop.	400 yards (593 yards from Millbay Signal Box).
Profile 1	P3	Up Main	Up Side of Up Main.	2654 yards
Profile 1	P5	Up Main	Up Side of Up Main.	1893 yards
Profile 13	Ρ7	<ol> <li>Junction Indicator to Up Loop working with main aspect (2).</li> <li>Up Main to:         <ul> <li>(a) Up Main</li> <li>(b) Up Loop (Junction indicator displayed)</li> </ul> </li> </ol>	Up Side of Up Main.	900 yards
Profile I	PII	Down Devonport Branch	Down Side of Down Devonport Branch.	1302 yards
Profile 13	P13	<ol> <li>Junction Indicator to Up Loop working with main aspect (2).</li> <li>Down Devonport Branch to:         <ul> <li>(a) Up Main</li> <li>(b) Up Loop (Junction indicator displayed).</li> </ul> </li> </ol>	Down Side of Down Devonport Branch.	926 yards
Profile 14	P15	<ol> <li>Route indicator working with main aspect (2) or calling-on aspect (3).</li> <li>Up Main to:         <ul> <li>(a) Platform 8 (direct or via signal P141) (Route indication: "8").</li> </ul> </li> </ol>	Up Side of Up Main.	215 yards

Form	Signal No.	Application	Position	Distance from Box
		<ul> <li>(b) Platform 7 (direct or via signal Pl41) (Route indication: "7").</li> <li>(c) Platform 6 (direct or via signal Pl41) (Route indication: "6").</li> <li>(d) Platform 5 (Route indication: "5").</li> <li>(e) Through Line (Route indication: "5").</li> <li>(e) Through Line (Route indication: "1").</li> <li>3. Calling-on, Up Main (Routes and route indications as for main aspect (2) above) or shunt, Up Main to signal Pl41 (no route indication is given with the shunt aspect).</li> <li>Note: When any proceed aspect (other than the shunt aspect) is displayed by this signal any intervening position light ground signal required to be passed in the facing direction will also display a proceed aspect.</li> </ul>		
Profile 15	P21	<ol> <li>Route indicator working with main aspect (2) or calling-on aspect (3).</li> <li>Up Millbay Branch to:         <ul> <li>(a) Platform 8 (Route indication: "8").</li> <li>(b) Platform 7 (Route indication: "7").</li> <li>(c) Platform 6 (Route indication: "6").</li> <li>(d) Platform 5 (Route indication: "5").</li> <li>(e) Through Line (Route indication "T").</li> </ul> </li> <li>Calling-on Up Millbay Branch (Routes and route indications as for main aspect (2) above) or Shunt, Up Millbay Branch to Signal Pl41.</li> <li>Up Millbay Branch to Turntable Siding.</li> <li>The A.W.S. ramp for this signal will be approximately 60 yards to the rear of the signal.</li> </ol>	Up Side of Up Millbay Branch.	355 yards
Profile 16	P47	<ol> <li>Route indicator working with main aspect (2) or shunt aspect (3).</li> <li>Through Line to: (a) Up Main (Route indication: "M").</li> <li>Shunt, Through Line to: (a) Up Main (no route indication) (b) Down Main Limit of Shunt Board (Route indication: "X").</li> <li>Route indicator working with small yellow aspect (5).</li> </ol>	On gantry spanning through line and Platform 4 and 5 lines at east end.	344 yards

Form	Signal No.	Application	Position	Distance from Box
		<ul> <li>5. Through Line to:</li> <li>(a) Engine Spur 2 (Route indication "S2").</li> <li>(b) Engine Spur 1 (Route indication: "S1").</li> <li>No A.W.S. ramp will be provided for this signal.</li> </ul>		
Profile 16	P49	<ol> <li>Route indicator working with main aspect (2) or shunt aspect (3).</li> <li>Platform 5 to: (a) Up Main (Route indication: "M").</li> <li>Shunt, Platform 5 to: (a) Up Main (No route indication) (b) Down Main Limit of Shunt Board (Route indication: "X").</li> <li>Route indicator working with</li> </ol>	On gantry spanning through line and Platform 4 and 5 lines at east end.	344 yards
		<ul> <li>small yellow aspect (5).</li> <li>5. Platform 5 to: <ul> <li>(a) Engine Spur 2 (Route indication: "S2").</li> <li>(b) Engine Spur 1 (Route indication: "S1").</li> </ul> </li> <li>No A.W.S. ramp will be provided for this signal.</li> </ul>		
Profile 7	P51	<ol> <li>Route indicator working with main aspect (2) or shunt aspect (3).</li> <li>Platform 6 to: (a) Up Main (Route indication: "M").</li> <li>Shunt, Platform 6 to: (a) Up Main (No route indication) (b) Down Main Limit of Shunt Board (Route indication: "X").</li> <li>Route indicator working with small yellow aspect (5).</li> <li>Platform 6 to: (a) Engine Spur 2 (Route indication: "S2"). (b) Engine Spur 1 (Route indication: "S1").</li> <li>No A.W.S. ramp will be provided for this signal.</li> </ol>	Down Side of Platform 6 line at east end.	407 yards
Profile 8	P53	<ol> <li>Route indicator working with main aspect (2) or shunt aspect (3).</li> <li>Platform 7 to: (a) Engine Line (Route indication: "E").</li> <li>(b) Up Main (Route indication: "M").</li> <li>Shunt, Platform 7 to: (a) Up Main (No Route indication).</li> <li>(b) Down Main Limit of Shunt Board (Route indication: "X").</li> </ol>	Up Side of Platform 7 line at east end.	407 yards

Form	Signal No.	Application	Position	Distance from Box
		4. Route indicator working with small yellow aspect (5).		
		<ul> <li>5. Platform 7 to:</li> <li>(a) Engine Spur 2 via Up Main (Route indication: "S2").</li> <li>(b) Engine Spur 1 via Up Main (Route indication: "S1").</li> <li>No A.W.S. ramp will be provided for</li> </ul>		
		this signal.		
Profile 1	P55	Platform 8 to Engine Line No A.W.S. ramp will be provided for this signal.	Up Side of Platform 8 line at east end.	407 yards
Profile 8	P57	1. Route indicator working with main aspect (2) or shunt aspect (3).	Up Side of Engine Line.	490 yards
		<ol> <li>Engine Line to Up Main (Route indication: "M").</li> </ol>		
		<ol> <li>Shunt, Engine Line to:         <ul> <li>(a) Up Main (No route indication).</li> <li>(b) Down Main Limit of Shunt Board (Route indication: "X").</li> </ul> </li> </ol>		
		<ol> <li>Route indicator working with small yellow aspect (5).</li> </ol>		
		<ul> <li>5. Engine Line to:</li> <li>(a) Engine Spur 2 (Route indication: "S2").</li> <li>(b) Engine Spur 1 (Route indication: "S1").</li> </ul>		
		No A.W.S. ramp will be provided for this signal.		
Profile 1	P59	Up Main No A.W.S. ramp will be provided for this signal.	Up Side of Up Main.	640 yards
Profile 1	P61	Up Main This signal is already in use as the Up Main Advanced Starting for North Road East (Old Number NRE 173).	Up Side of Up Main.	946 yards
Profile 17	P63	Up Main This signal is already in use as the Up Main I.B.S. Home for North Road East (Old number NRE 172). The second yellow aspect will now be brought into use. This signal, when displaying a double yellow or green aspect, acts as Up Main Distant for Laira Junction.	Up Side of Up Main.	1696 yards (1884 yards from Laira Junction Signal Box).
Profile 18	P65	<ol> <li>Junction indicator to Up Laira Goods working with main aspect</li> <li>(3) or calling-on aspect (4).</li> </ol>	Up Side of Up Main.	2756 yards (824 yards from Laira Junction
		2. Junction indicator to Down Mount Gould Branch working with main aspect.		Signal Box).
		<ul> <li>3. Up Main to:</li> <li>(a) Up Main</li> <li>(b) Up Laira Goods (Junction indicator (1) displayed).</li> <li>(c) Down Mount Gould Branch (Junction indicator (2) displayed).</li> </ul>		

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Form	Signal No.	Application	Position	Distance from Box
		<ol> <li>Calling-on, Up Main to Up Laira Goods (Junction indicator (1) displayed).</li> <li>This signal, when displaying a proceed aspect (without junction indicator), acts as the Up Main Inner Distant for Laira Junction.</li> </ol>		
Profile 1	P69	Down Mount Gould Branch This signal, when displaying a proceed aspect, acts as Down Main Distant for Mount Gould Junction.	Down Side of Down Mount Gould Branch.	3191 yards (411 yards from Mount Gould Junction Signal Box).
Profile 19		Limit of Shunt Board for movements shunting Up Down Main.	Down Side of Down Main.	883 yards
Profile 19		Limit of Shunt Board for movements shunting Down Up Main.	Up Side of Up Main.	450 yards

## LAIRA JUNCTION

Profile 1	LI	Up Main Home The A.W.S. ramp for this signal will be approximately 50 yards to the rear of the signal.	Up Side of Up Main.	517 yards	
Profile 1	LIII	Down Main Starting The A.W.S. ramp for this signal will be approximately 160 yards to the rear of the signal.	Down Side of Down Main.	58 yards	

## MOUNT GOULD JUNCTION

Profile 1	MG5	Down Main Home	Down Side of Down Mount Gould Branch.	204 yards
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## KEYHAM

Profile 1	K59	Down Main Home	Down Side of Down Main.	902 yards
Profile 21	K58	Down Main Intermediate Home	Down Side of Down Main.	457 yards
Profile 22	К3	<ol> <li>Up Main Starting (already in use)</li> <li>Up Main I.B.S. Distant An A.W.S. ramp will be provided 200 yards to the rear of this signal.</li> </ol>	Up Side of Up 280 yards Main.	
Profile 22	K6	<ol> <li>Up Platform to Up Main Advanced Starting (already in use).</li> <li>Up Platform to Up Main I.B.S Distant.</li> <li>No A.W.S. ramp will be provided for this signal.</li> </ol>	Up Side of Up Platform Line.	280 yards
Profile 1	K7	Up Main I.B.S. Home	Up Side of Up Main.	540 yards

Form	Signal No.	Description	Position	from Box Distance
Profile 24	MB24	<ol> <li>Route indicator working with main aspect (2).</li> <li>Up Main Advanced Starting to:         <ul> <li>(a) Down Loop (Route indication: "L").</li> <li>(b) Up Main (Route indication: "M").</li> </ul> </li> </ol>	Up Side of Up Main.	343 yards
Profile 25	MB101	<ol> <li>Route indicator working with main aspect (2).</li> <li>Up Carriage Advanced Starting to: (a) Down Loop (Route indication: "L").</li> <li>(b) Up Main (Route indication: "M").</li> </ol>	Up Side of Up Carriage.	302 yards

The route indicators on the undermentioned existing signals will now be brought into use.

## Plymouth-New Ground Signals.

New position light ground signals will be brought into use in the Plymouth Panel area as shown on the attached sketch. These new position light ground signals will conform with profile 23 with the exception of P146 which will conform with profile 20.

The routes of these new position light ground signals controlled from the new panel will be as listed below.

Position Light Ground Signals List of Routes:

- 122 (a) Platform 7 102 (a) 10 Signal (b) Loco Depot (b) Platform 8 (c) Up Siding 1 104 14 Signal (d) Up Siding 2 110 (a) 120 Signal 126 (a) Docks (b) 122 Signal (b) Platform 2 (c) Platform 3 112 (a) 120 Signal (d) Platform 4 (b) 122 Signal 128 (a) Dock 2 114 (a) 120 Signal (b) Dock 1 (b) 122 Signal (c) Platform 2 (c) Engine Neck 142 64 Signal 120 (a) Docks (b) Platform 2 146 64 Signal (c) Platform 3 (d) Platform 4 (via Down Pass 148 152 Signal Loop) (e) Platform 4 (via Down Main) 150 68 Signal (f) Through Line (via Down Main) 152 68 Signal (g) Through Line (via Up Main) (h) Platform 5 (i) Platform 6 109 (a) 15 Signal (j) Platform 7 (b) 66 Signal
  - 13

113	(a) 54 Signal (b) 21 Signal
121	(a) 141 Signal (b) 139 Signal (c) 135 Signal
123	<ul> <li>(a) Platform 8</li> <li>(b) Platform 7</li> <li>(c) Platform 6</li> <li>(d) 141 Signal</li> </ul>
129	131 Signal
131	(a) 141 Signal (b) 139 Signal
135	<ul><li>(a) Platform 3</li><li>(b) Platform 2</li></ul>
137	<ul><li>(a) Platform 8</li><li>(b) Platform 7</li><li>(c) Platform 6</li></ul>
139	<ul> <li>(a) Through Line</li> <li>(b) Platform 4</li> <li>(c) Platform 3</li> <li>(d) Platform 2</li> </ul>
141	<ul> <li>(a) Platform 8</li> <li>(b) Platform 7</li> <li>(c) Platform 6</li> <li>(d) Platform 5</li> <li>(e) Through Line</li> </ul>
149	Platform 2

- 159 (a) Engine Spur 2
  - (b) Engine Spur 1
    - (c) 59 Signal

## Signals to be controlled by two boxes.

The following signals will be slotted by the new Plymouth signal box:

Keyham Down Main Home (K59) Laira Junction Up Main Home (L1) Laira Junction Down Main Starting (L111) Mount Gould Junction Down Main Home (MG5) Mount Gould Junction Up Main Inner Home (MG43) Millbay Down Main Home (MB92) Millbay Up Main Advanced Starting (MB24) Millbay Up Carriage Advanced Starting (MB101)

## Signals to be renamed.

The following signals will be renamed as shown below:

## Existing

Laira Junction UP Main Home Mount Gould Junction Down Main Home Laira Junction Up Main Inner Home Mount Gould Junction Down Main Inner Home

To Become

Keyham Down Main Home

Keyham Down Main Inner Home

The existing Down Main Distant and Down Main Inner Distant for Lipson Junction (beneath Laira Junction Down Main Home and Down Main Inner Home respectively) will become Down Main Automatic Distants for Plymouth. These signals will display clear aspects only when their respective top arms and colour light signals L111 and P4 are all displaying proceed aspects.

- (d) Down Main Limit of Shunt
- (e) 179 Signal
- (f) Down Siding East
- 161 (a) Engine Spur 2
  - (b) Engine Spur 1
  - (c) 59 Signal
  - (d) Down Main Limit of Shunt
  - (e) 179 Signal
  - (f) Down Siding East
- 163 (a) Engine Spur 2
  - (b) Engine Spur 1
  - (c) 59 Signal
  - (d) Down Main Limit of Shunt
  - (e) 179 Signal
- 165 (a) Engine Spur 2
  - (b) Engine Spur 1
  - (c) 59 Signal
  - (d) Down Main Limit of Shunt
  - (e) 179 Signal
- 167 Down Siding East
- 169 57 Signal
- 171 57 Signal
- 179 Down Main Limit of Shunt
- 181 Engine Spur 2
- 185 (a) 67 Signal (b) Up Laira Goods (c) 69 Signal
- 187 71 Signal
- 189 71 Signal

The block sections will be re-arranged as follows:

#### Existing

Laira Junction—Lipson Junction Mount Gould Junction—Lipson Junction Lipson Junction—North Road East North Road East—North Road West North Road West—Cornwall Junction Cornwall Junction—Millbay Cornwall Junction—Devonport Junction North Road West—Devonport Junction Devonport Junction—Devonport (Kings Road) Devonport Junction—Devonport (Albert Road) Devonport (Albert Road)—Keyham

#### To Become

Laira Junction—Plymouth Mount Gould Junction—Plymouth Plymouth—Millbay Plymouth—Devonport (Kings Road) Plymouth—Keyham

The new block sections will be worked in accordance with Track Circuit Block Regulations.

Emergency block bells will be provided between Plymouth and Laira Junction, Mount Gould Junction, Millbay, Devonport (Kings Road) and Keyham.

These block bells will also be used, at this stage, for all inter-box train description in the new block sections.

A new four-character train describer will be brought into use and will operate in conjunction with the signalling control panel (See separate pamphlet entitled "Western Region Four Character Train Describer—Description and Method of Operation of the Plymouth Installation"). The train describer will be operated by the panel signalmen and at this stage will be used for the identification of trains within the panel control area only.

The following signals will be released by "line clear" for "one pull" or "one train" as appropriate:

St. Budeaux (Ferry Road) Up Main Starting Down Main Starting Down Main Home to S.R. Keyham Down Main Starting Laira Junction Up Main Advanced Starting

"One Acceptance" Block will be brought into use at Keyham for the Up Main line from St. Budeaux (Ferry Road).

## Telephones

(A) Telephones giving exclusive communication with the Plymouth signalman will be provided as follows:

- 1. At all multiple aspect signals bearing the Prefix "P" on the identification plate.
- 2. Adjacent to all emergency hand crank release instruments.
- 3. At ground frames under the control of the panel (see subsequent paragraph).
- 4. At the exit from Laira Loco Shed ("Speedway") previously controlled by Lipson Junction.

(B) At multiple aspect signals bearing the following identification plates giving exclusive communication with the signal boxes referred to by the prefix letters shown (see page 3).

(a)	L111	(f)	D27
	MG5	(g)	D4
(c)	MB24	(ĥ)	
	MB92	(i)	K6
	MB101	(j)	K59

In addition, telephones are located at convenient positions to the east and west of the station for the use of handsignalmen etc. during times of hand operation of points.

All the above telephones, together with the box-to-box telephones to Laira Junction, Mount Gould Junction, Millbay, Devonport (Kings Road) and Keyham, will be incorporated directly into the Plymouth control panel.

All other omnibus, selective, control and exchange circuits at present communicating with North Road East and North Road West signal boxes will now communicate with the new signal box and will be incorporated in a Desk type telephone concentrator. Provision has been made for all these circuits to be linked through to the control panel.

#### **Emergency Detonators**

Detonator placer machines of the "Clayton" type will be provided on the Up and Down Main lines adjacent to the West end of Mutley Tunnel and immediately west of Cornwall Loop Junction. These detonator placer machines are for emergency use only and are operated from the control panel in the new signal box.

#### Ground Frames

Certain ground frames in the area, the keys of which are at present held by the District Inspector, will be released by Annetts Key from key release instruments controlled by release switches on the signalling control panel in the new signal box. A telephone will be provided at each ground frame giving exclusive communication with the new box.

The ground frames concerned are:

Cornwall Junction Ground Frame

Devonport (Albert Road) East Ground Frame.

Devonport (Albert Road) West Ground Frame.

### Signalling during Fog or Falling Snow.

Fogsignalmen will not be provided at any of the Multiple Aspect Signals referred to in this Notice. A Fogsignalman must, however, be appointed during Single Line Working at a Signal which becomes the Distant Signal for the obstructed line operated from the Box at which the trains are crossed to their proper line and which Signal has to be observed by Drivers travelling over the Single Line in the wrong direction.

A Handsignalman must also be appointed at a Signal which acts as the Distant Signal controlling trains approaching the Single Line to travel over that line in the right direction.

### Permanent Way Trolleys.

Permanent Way Trolleys cannot be relied upon to operate track circuits, and before a trolley is placed on the line the permission of the Signalman at the nearer Signal Box must be obtained. If the Signalman at the Signal Box in advance is required to give such permission he must, before so doing, confer with the Signalman at the Signal Box in the rear.

The telephone at a signal may be used for obtaining the Signalman's permission. When permission has been given protection in accordance with Rule 215 must be carried out before the trolley is placed on the line.

#### Rule 82.

If a Driver observes a signal to be out when it should be illuminated he must treat it as a signal giving its most restrictive aspect (Red in the case of a Stop signal), and report the circumstances to the Signalman at the Box in advance.

The Signalman must arrange for a Handsignalman to be appointed as quickly as possible.

#### Rules 178-181.

Colour light signals must not be relied upon for the protection of a train stopped by accident, failure or obstruction, and the train must be protected in the usual way, except that if no other line is affected it is not necessary for protective purposes for a Guard or Fireman to go back beyond the next colour light signal in rear of the train, provided it is shewing "Danger." In the event of it being necessary for a second train or engine to approach from the rear to render assistance, the Guard or Fireman who is protecting his train must, after advising the Signalman at the Box ahead by telephone of the circumstances, wait at the signal in rear to pilot the assisting train or engine to the rear of his own train.

#### Occupation

Occupation of the locking frames at Keyham, Laira Junction and Mount Gould Junction will be required for the purpose of unbolting levers.

Absolute occupation of certain lines and sidings in the Plymouth station area will be required for varying periods during the period of the main occupation for the purpose of connecting point machines, track circuits etc.

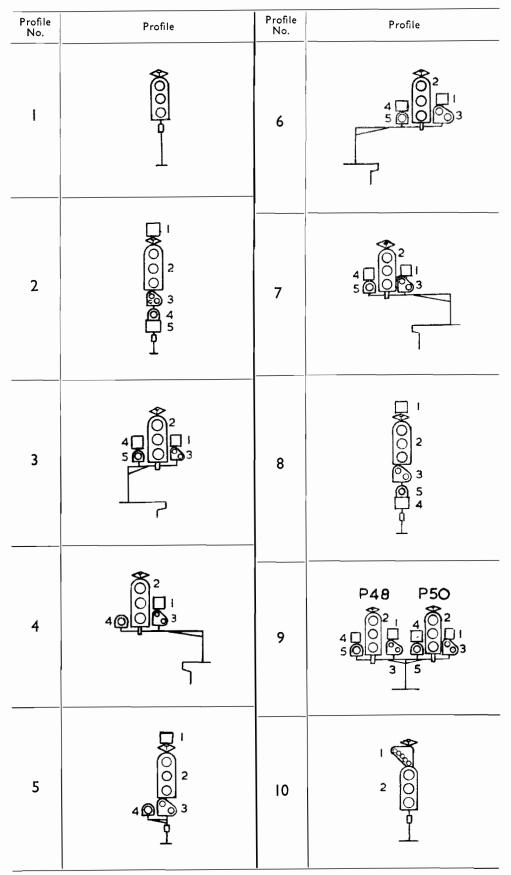
During the time the work is in progress the Up and Down Main Distant signals for Laira Junction, Devonport (Kings Road) and Keyham will be disconnected and maintained at caution.

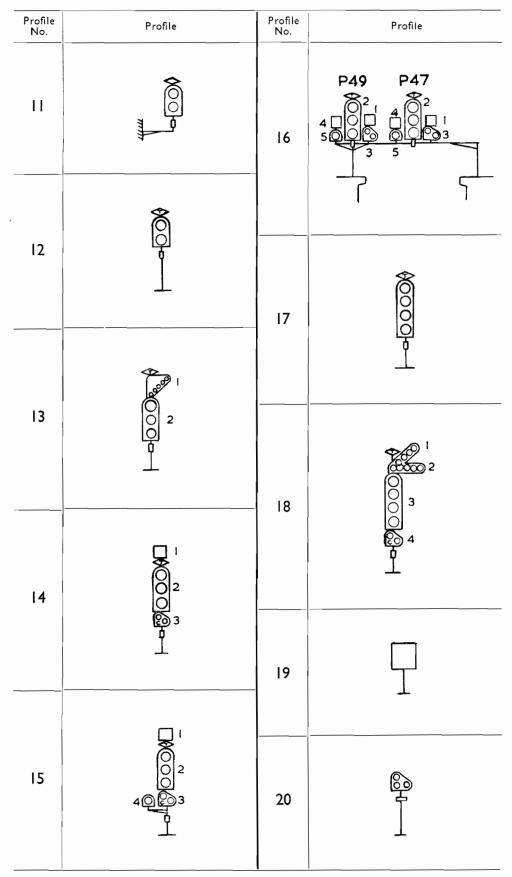
All arrangements for the safe working of the Line will be made by Chief Inspector Selley, and the appointment of Handsignalmen in accordance with Rule 77 will be made by District Inspectors May and Preen.

### All concerned to please note and acknowledge receipt.

(See foot of last page for receipt)

Plymouth, 12th November, 1960 **F. G. DEAN** District Traffic Superintendent.





No. Profile	Profile	No. Profile	Profile
21		24	2 0 0 0 0 0
22		25	
23			

