SEMAPHORE SIGNALLING Q.R. PRE CTC

The aim of this lecture is to give participants an understanding of the various signals and their indications and to assist you in planning the signalling of your own Railway. Please find a photocopy of various signals and how they were applied on. Q.R.

The aim of Fixed Signals is to assume safe passage of trains between stations and are covered by Rules 70 to 102 by law 1041 of 1974. Indications of fixed signals shall be shown by the position of a semaphore arm, colour of light on lights, position or lights, position of the red shape on the drive or combination thereof they may be qualified by route indicators, junction indicators, junction signal, number plate, marker plate, letter plate, shape and colour of Semaphore arms or combination there of. That completes the Signal but now down to the ordinary nuts and bolts of signalling.

Lower Quadrant. The semaphore arm of signals when in the horizontal position indicates stop it also shows a red light at night, when lowered to approx. 45° angle indicates proceed and a green light is shown. The colour of signal arms excepting distant and repeat signals are RED with a vertical white stripe. The reverse stall is white with a vertical black stripe and does not apply to any train. The DISTANT semaphore arm is Fish Tailed at the end to distinguish it from other signals and the arm facing the train can be painted either in red with a white fish tail or if modelling from 1960's on yellow with a black fish tail. The reverse is painted white with black fish tail and does not apply to any train.

Signals in the stop position shall not be passed except as specially provided for.

Attached are diagrams of stations showing the application of signalling to Single and Double track situations, not all stations were signalled the same.

There were non interlocked stations which meant that the points were either Kangaroo points on the main line which could be secured for safety. With Kangaroo or throw over points to other sidings. At interlocked stations the points and signals were worked by lever rods and wires from a centrally located signal column. Some points to sidings at an interlocked station were also worked by ground frames but to work these frames keys or releases had to be obtained from the cabin and when these frames were in use the Signal Interlocking prevented unsafe movements.

USE OF SIGNALS ARMS LOWER QUADRANT SIGNALS

Two Armed Bracketed Dolly Home or Starter

Lower Signal	Line to the left
Upper Signal	Second line from the left

Double Bracketed Dolly Two Arms

Signal on Right	Second line from the left
Signal on left	Line to the left

Shunt Signal

Used for shunting purposes within the limits of a station yard.

Wrong Road Signal

Used for trains which are required to run in the wrong direction on either line of a double line.

Siding Signals

Where Siding Signals are provided they govern the movements of trains from the main line into Sidings and the speed is reduced accordingly.

Starting and Advance Starting Signals

Control the entrance of trains into the section ahead and shall not by passed at stop except where there are Shunt Signals unless instructed by the signal man.

Home Signals

They mark the limit of a station yard and shall not be passed at stop unless under exceptional circumstances.

On the attached diagram of signals are some combinations that are universal and I shall endeavour to explain their different indications as we go through them.

Outer Home Signal

Where provided is the limit of yard and cannot be in the proceed position whilst the Home Signal is in the stop position until the train has been brought nearly to a stand at the Outer Home Signal.

Calling on Signals

Are fixed on home signals for the purpose of avoiding hand signalling of trains past the Home Signals. The driver must always have his train under control and be prepared to stop. The train must be stopped at the Home Signal before the Calling out signal can be lowered.

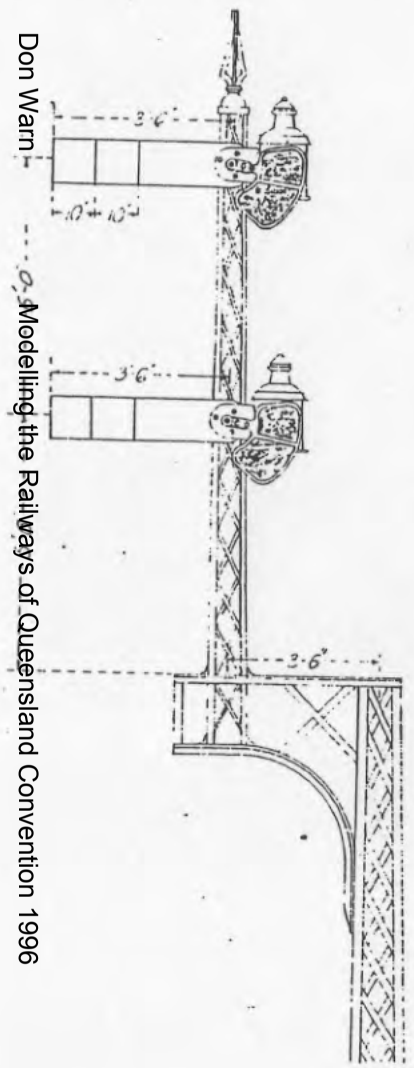
Catch Point - Points Disc

Are used to indicate the clearance point of sidings. Trains are hand signalled past the Discs.

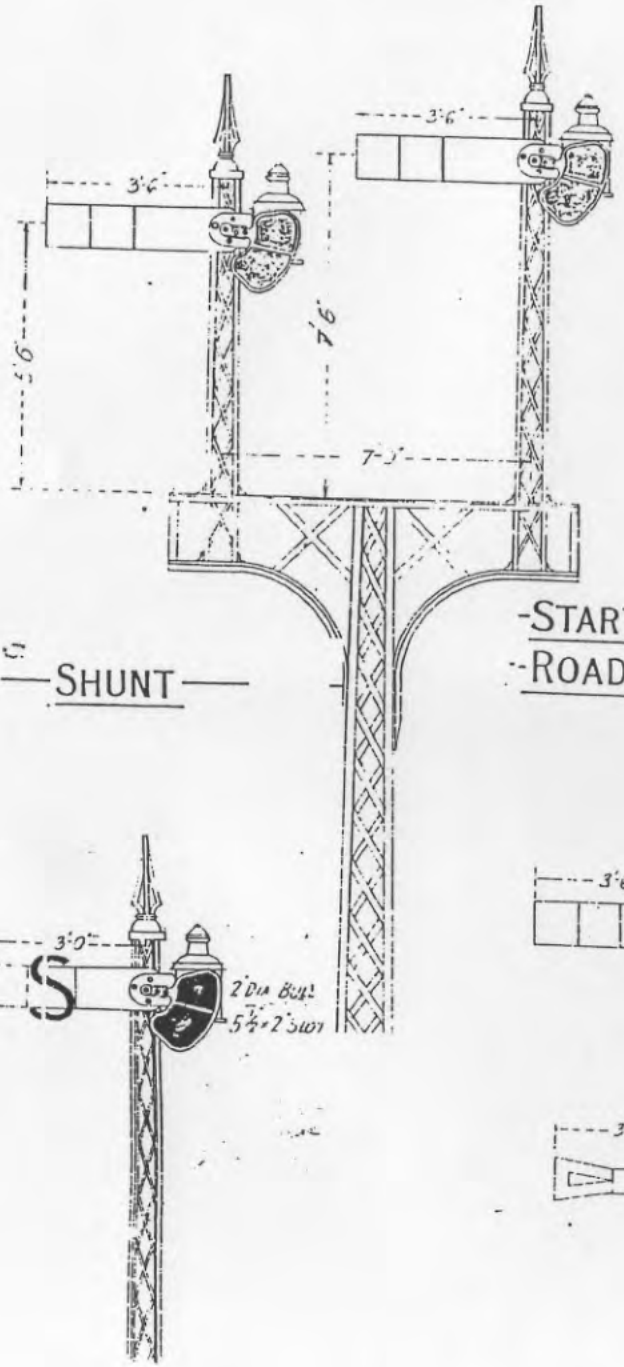
Independent Discs.

Where used control the passage of trains out of or into sidings, they are worked by a separate lever in the column and give the same authority as a semaphore signal.

The above is only a short resume of Q.R. Signals and it would take many pages to describe in infinite detail but I hope I have given you a basis to understand Q.R. Signalling and hopefully you can apply it to your layout as simple or as complicated as you like.

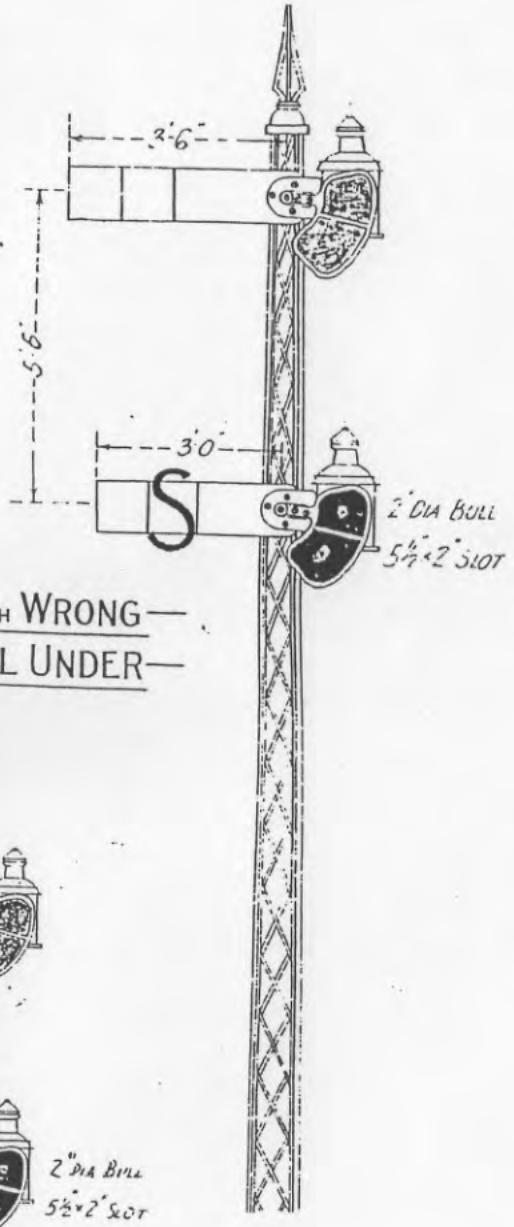


..TO ...M BRACKETTED —
DOLLY - HOME OR STARTER —

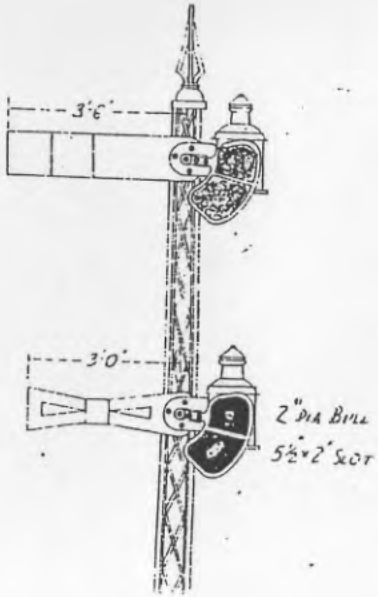


—DOUBLE BRACKETTED DOLLY—
—TWO ARMS—

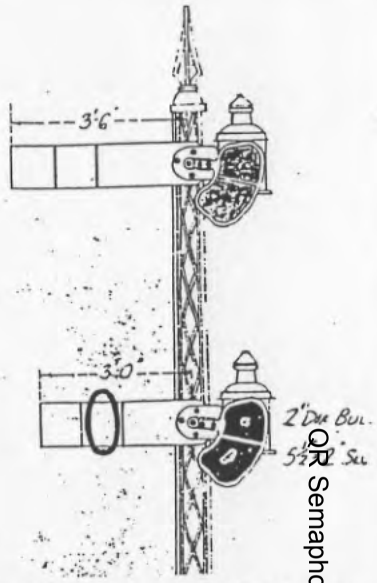
—SHUNT—



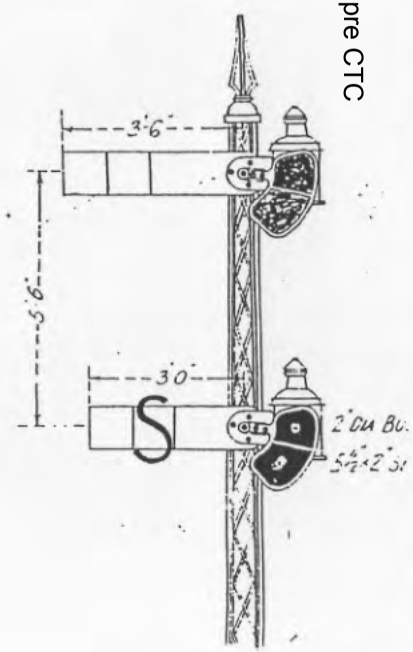
—STARTER WITH SHUNT—
—SIGNAL UNDER—



—STARTER WITH WRONG—
—ROAD SIGNAL UNDER—

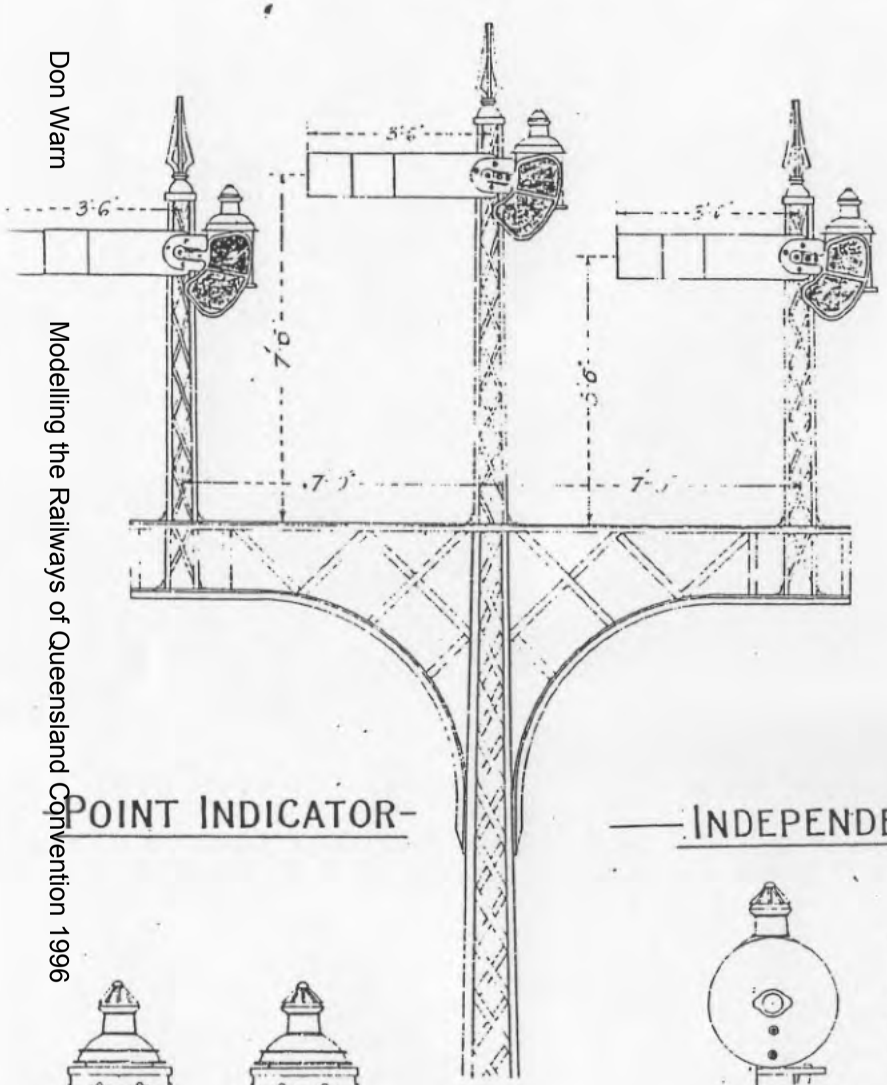


—STARTER WITH SHUNT—
—SIGNAL UNDER—

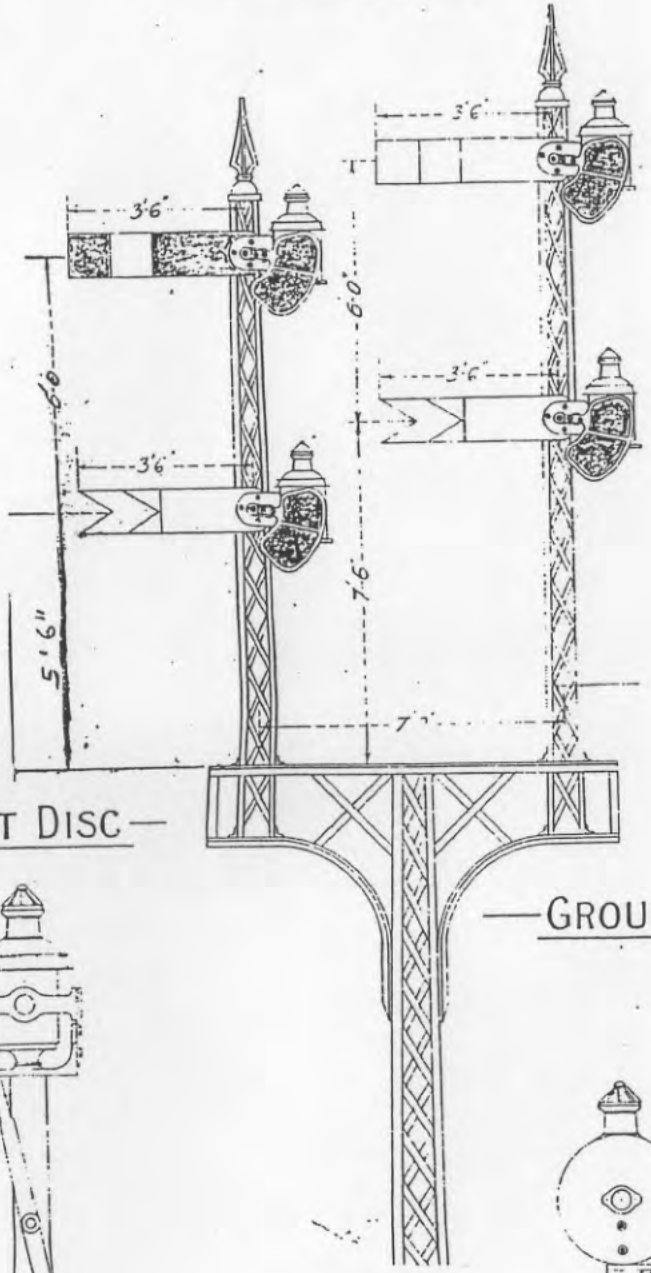


(1)

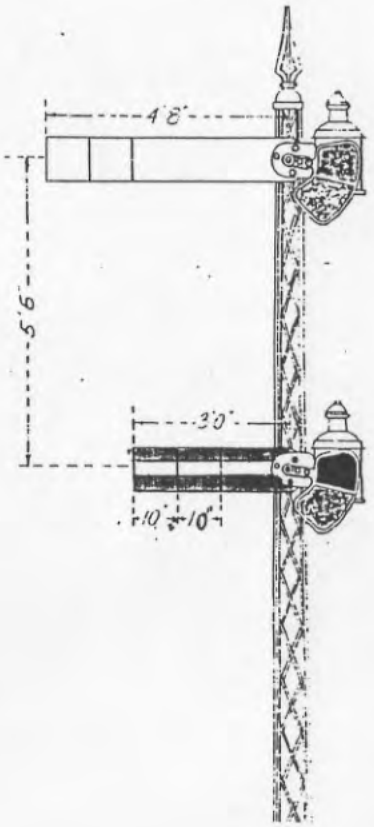
—DOUBLE BRACKETTED DOLLY—
—THREE ARMS—



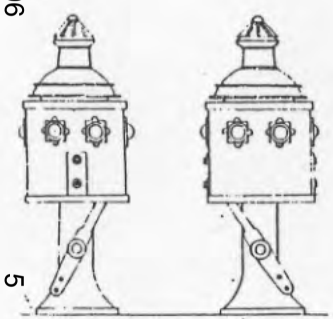
—DOUBLE BRACKETTED DOLLY—
—FOUR ARMS—



—HOME WITH CALLING ON ARM—
—UNDER—

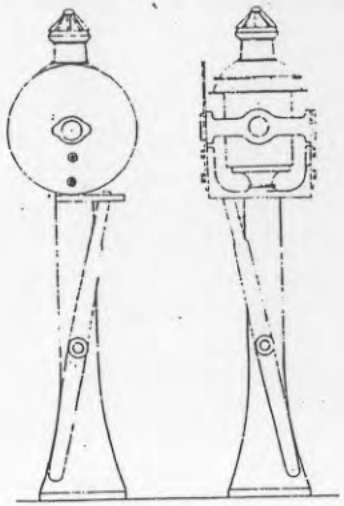


—POINT INDICATOR—

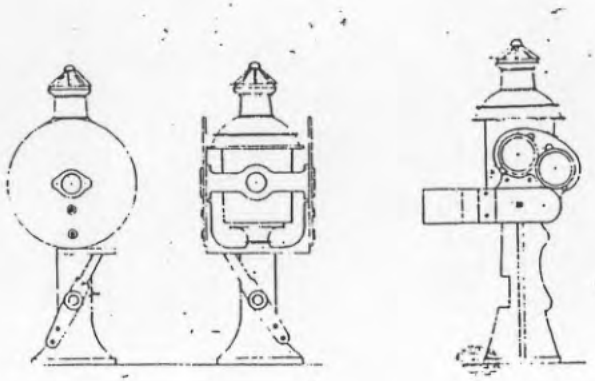


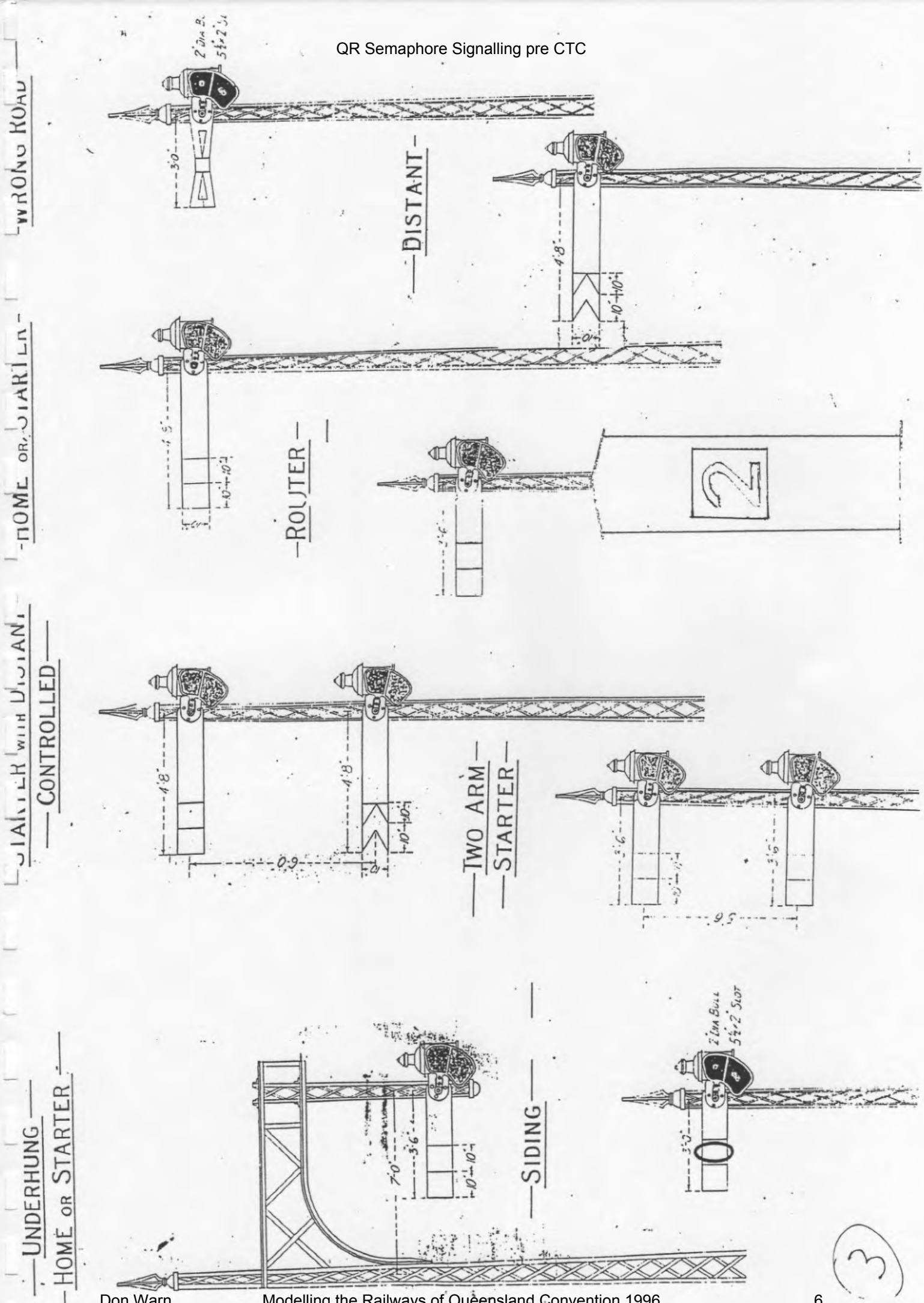
(2)

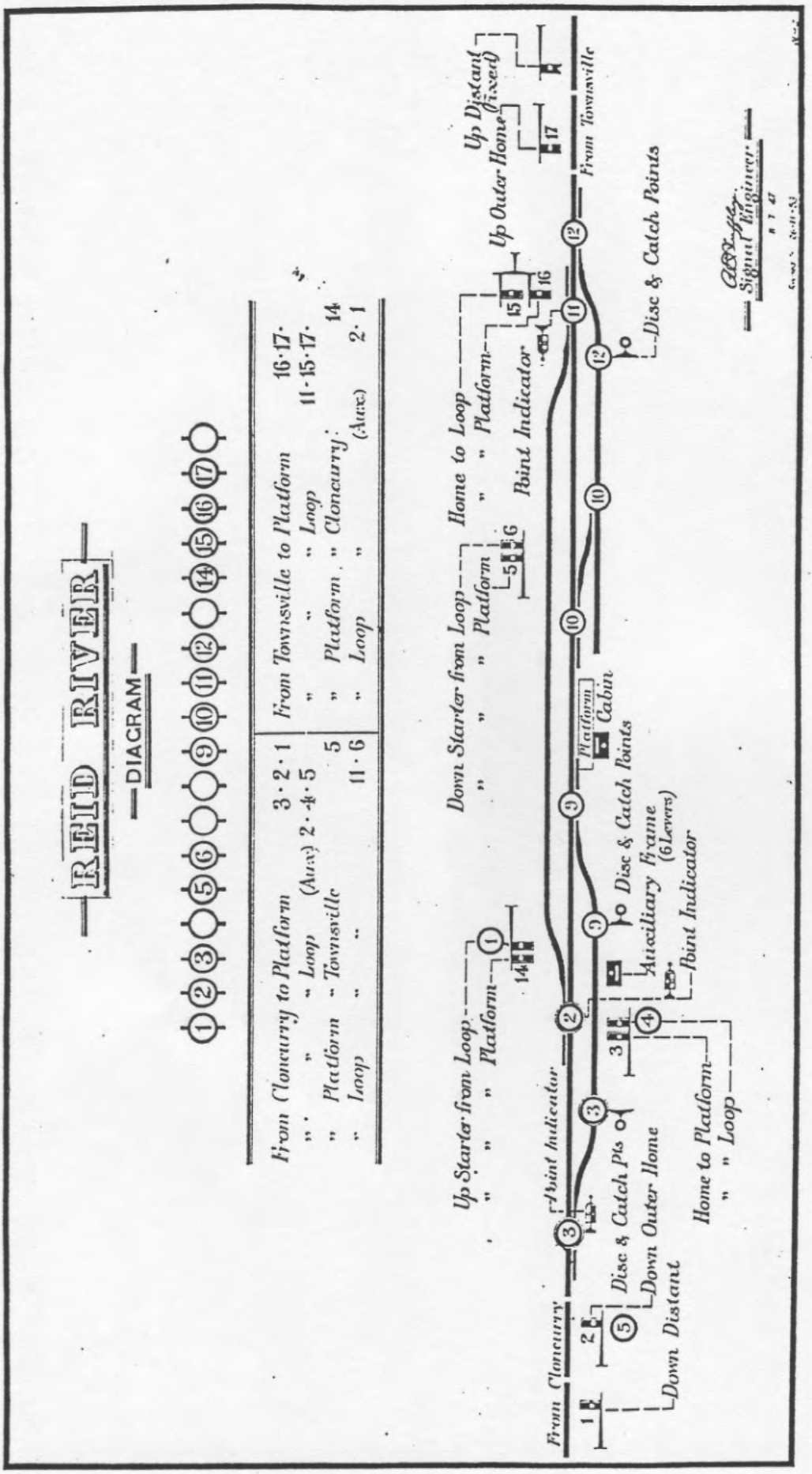
—INDEPENDENT DISC—



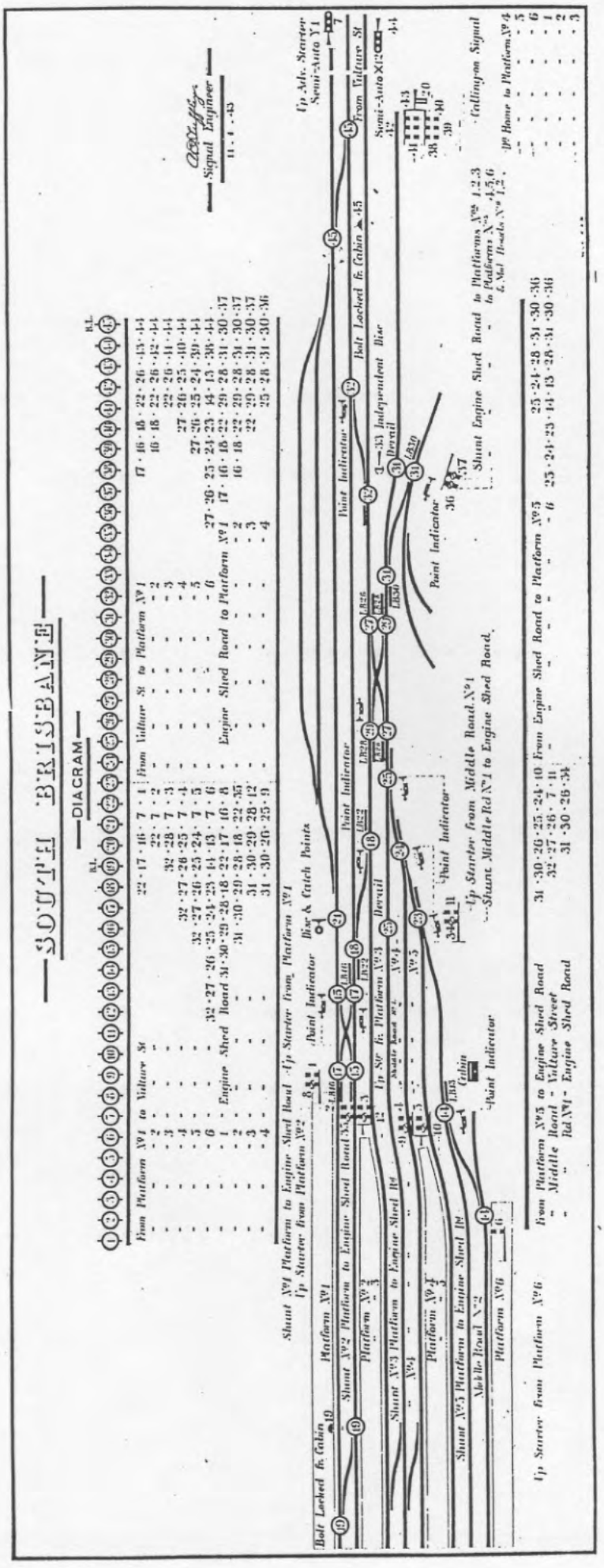
—GROUND DISC— —DWARF SIGNAL—




WRONG ROAD
HOME OR STARTER
DISTANT
ROUTER
STARTER WITH DISTANT
CONTROLLED
TWO ARM
STARTER
UNDERHUNG
HOME OR STARTER
SIDING


REID RIVER
DIAGRAM
1 2 3 5 6 9 10 11 12 14 15 16 17
From Cloncurry to Platform 3·2·1
" " " Loop (Aux) 2·4·5
" " Platform " Townsville 5
" Loop " " 11·6
From Townsville to Platform 16·17·
" " " Loop 11·15·17·
" Platform " Cloncurry 14
" Loop " " (Aux) 2·1
Up Starter from Loop
" " " Platform
Down Starter from Loop
" " " Platform
Home to Loop
" " " Platform
Up Distant (fixed)
Up Outer Home
Points Indicator
From Townsville
Disc & Catch Points
Platform
Cabin
Disc & Catch Pts
Down Outer Home
Down Distant
Auxiliary Frame (6 Levers)
Points Indicator
Home to Platform
" " Loop
From Cloncurry
Points Indicator
Signal Engineer

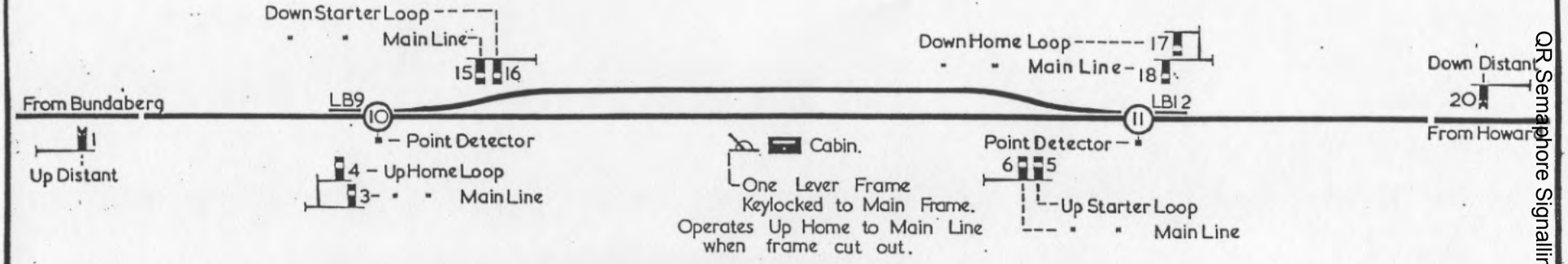
LANDSBOROUGH
DIAGRAM
From Brisbane
From Gympie
Platform
Cabin
Level Crossing
Dn. Distant
Dn. Outer Home
Dn. Home To Loop
Dn. Home To Platform
Up Distant (Auto)
Up Home To Platform
Up Home To Loop
Electric Pts.
Dn. Starter From Platform
Pt. Detector
Dn. Starter From Loop
Flashing Lights (controlled by switch behind levers)
Up Starter From Loop
Up Starter From Platform
Disc and Catch Points
Pt. Indicator
Independent Disc and Catch Points
Sig. & Tel. Engineer
FROM BRISBANE TO PLATFORM 9 3 2 1
" " LOOP 22 12 10 9 4 2
" PLATFORM TO GYMPIE 5
" LOOP " 23 22 12 6
" FORK LINE TO LOOP 22 19 16 7
FROM GYMPIE TO PLATFORM 18 22 30
" " " LOOP 20 23 29
" PLATFORM TO BRISBANE 18 22 28
" LOOP " 10 20 27


SOUTH BRISBANE
DIAGRAM
Up Adv. Starter
Semi-Auto Y1
Up Home to Platform №4
Gallinyon Signal
Signal Engineer
Bolt Locked & Cabin
From Vulture St
Independent Disc
Detail
Point Indicator
Disc & Catch Points
Shunt №1 Platform to Engine Shed Road
Up Starter from Platform №1
Platform №1
Platform №2
Platform №3
Platform №4
Platform №5
Platform №6
Shunt №2 Platform to Engine Shed Road
Shunt №3 Platform to Engine Shed Rd
Shunt №4 Platform to Engine Shed Rd
Shunt №5 Platform to Engine Shed Rd
Middle Road №2
Up Starter from Platform №6
Up Starter from Middle Road №1
Shunt Middle Rd №1 to Engine Shed Road
Engine Shed Road to Platform №1
Engine Shed Road to Platform №3
Shunt Engine Shed Road to Platforms №s 1,2,3
& Platforms №s 4,5,6
Cabin
Gate
Ground Frame
Semi-Auto X12
Semi-Auto Y2

KINKUNA

DIAGRAM

H. Salker
Chief Engineer
17-2-55



FROM BUNDABERG TO MAIN LINE	9·3·1	FROM HOWARD TO MAIN LINE	12·18·20
" BUNDABERG TO LOOP	10·9·4	" HOWARD TO LOOP	11·12·17
" MAIN LINE TO HOWARD	6	" MAIN LINE TO BUNDABERG	15
" LOOP TO HOWARD	11·5	" LOOP TO BUNDABERG	10·16

—Sig. & Tel. Engineer—
17·2·55

25/2/55 W.H.J