

CURVE AT JUNCTION OF SPENCER

AND LONSDALE STS

LINE 5.

DESCRIPTION B. 8. 5.

PLAN B. 8

CURVE. - JUNCTION of SPENCER STREET with LONSDALE STREET.

1. The Checks of Special Check-Rails of Nos. 1 and 3 Rails are worn to varying degrees, and in centre of each curve, the check is badly worn.
2. The sides of heads of opposite rails (Nos. 2 and 4) are grooved to varying amounts, and on No. 2 Rail the side of head is badly grooved for a length of about 39 feet.
3. No. 3 Rail is 37 Mils. below gauge, and is bottoming in places over a length of 63 feet.
4. No. 4 Rail. The special check to check-rail is loose and ineffective in places.

CLEARANCES, between flange and bottom of groove; also

SUPER-ELEVATIONS, taken April 6th. 1916.

The Sets of Tests taken opposite M.C.C. Pole No. 43, are as follows :-

	<u>CLEARANCE</u>	<u>SUPER-ELEVATION</u>
No. 1 Rail	.264"	
" 2 "	.109"	$\frac{1}{16}$ " (R)
" 3 "	0	$\frac{1}{4}$ " (B) ^{MCC. Pole 1.}
" 4 "	.250"	

The Sets of Tests taken, opposite Pole No. 1, are as follows :-

	<u>CLEARANCE</u>	<u>SUPER-ELEVATION</u>
No. 1 Rail	.562	
No. 2 "	.357	$3\frac{1}{2}$ " (R)
No. 3 "	.531	
No. 4 "	.342	$4\frac{1}{2}$ " (R)

CURVE 140' 8" LONG

D^o 30' 0" RADIUS

DATES OF CURVE RAIL RENEWALS.

Full renewal both Tracks Nos. 1, 2, 3, 4, - July 26th. 1908.

Length of Curve 140' 8"

Radius of Curve 90' 0"

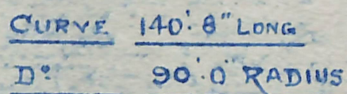
DATE First Inspected - May 5th. 1916.

DATE Last Inspected - July 4th. 1916.

AND LONSDALE S^{TS}

LINE 5.

PLAN. B8.



CONFERENCE

THE
S

● M.C.C. Pole 1.

M.C.C. POLE
43
A

CURVE AND JUNCTION AT JUNCTION OF
ELIZABETH STREET WITH LONSDALE ST

ALSO EMERGENCY SHUNT ELIZABETH ST
(BRUNSWICK LINE)

LINE 5.

DESCRIPTION B 9.

CURVE - at JUNCTION of ELIZABETH ST. with LONSDALE ST.

1. The Checks of Special Check Rails of Nos. 2 and 4 Rails, are worn to varying amounts, and badly so in places. The sides of Heads of opposite Rails (Nos. 1 and 3) are grooved to varying degrees, and badly so in places, as a result of the above Check-Wear.
2. In three places, lengths of Tram-rails are pumping, resulting in loosening of adjacent paving. Fishplates are presumably loose.
3. 13 of the Joints of rails, adjacent to Crossing-intersections, and Points, are wide (varying from 1/8" to 5/8") and in many cases are hammered.
4. The heels of the four Points to Curve are of loose fit, and rocking. Tongues are worn to varying degrees.
5. At the Crossing-intersections, also at intersections of Slot-rails with Tram-rails, hammering and wear are taking place to varying degrees.

CLEARANCES, between flange and bottom of groove, also

SUPER-ELEVATIONS taken April 13th.1916.

The sets of Tests taken on Curve (opp. door of No. 269) are as follows :-

	<u>CLEARANCE</u>	<u>SUPER-ELEVATION</u>
No. 1 Rail	.295	
No. 2 "	.512	2 1/2" (R)
No. 3 <i>Check, Tongue Worn</i>	.295	1 5/8" (R)
No. 4 <i>Check, D: D:</i>	.574	

NOTE. Nos. 1 and 2 Rails. - Slight Down Gradient.

DATES OF CURVE RAIL RENEWALS.

Full renewal both Tracks - Rails 1, 2, 3 and 4 - March 19th.1908.

Length of Curve 141' 3"
Radius " " A 90' 0"

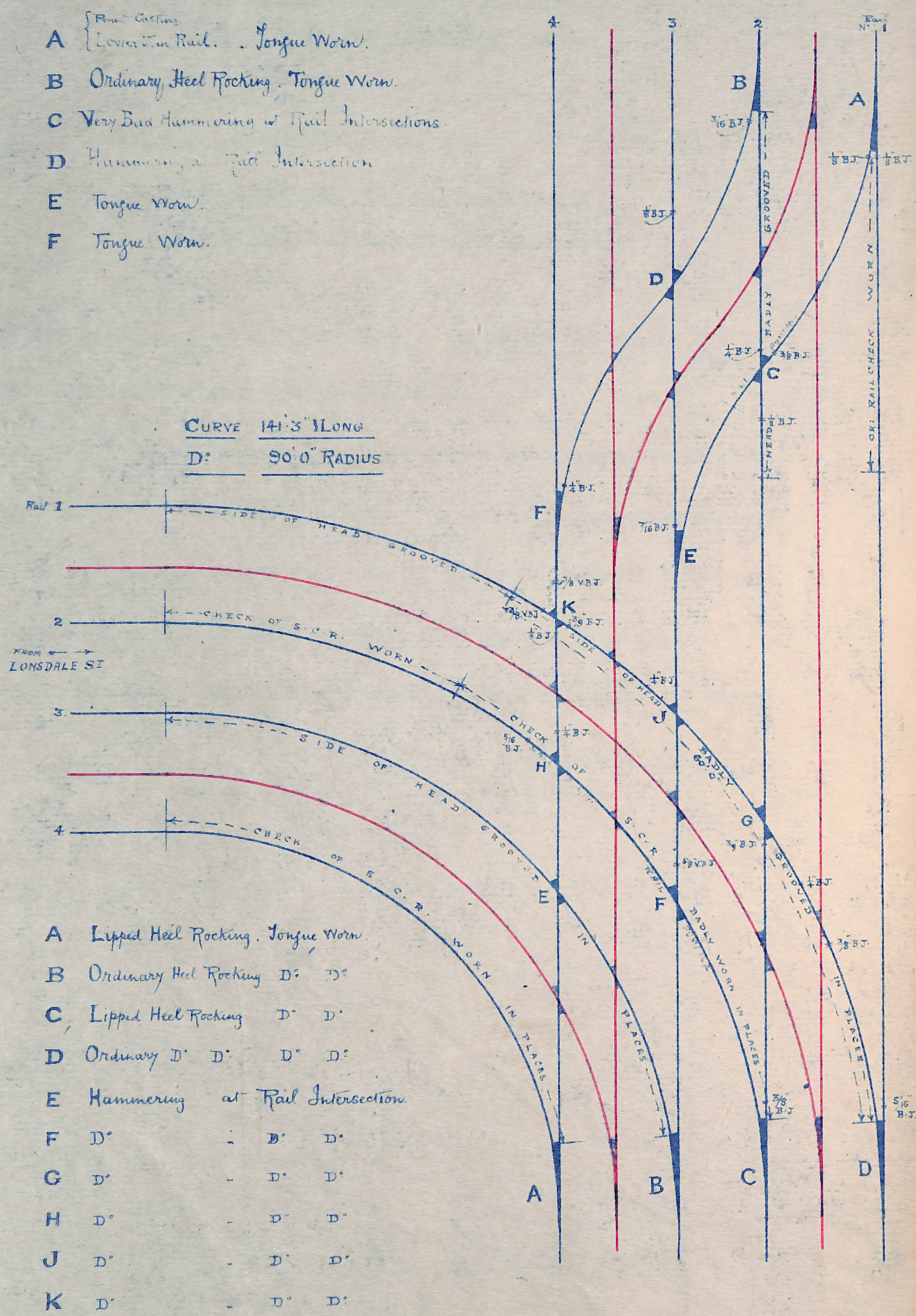
DATE First Inspected - May 8th.1916.

DATE Last Inspected - July 4th.1916.

CURVE AND JUNCTION AT JUNCTION OF ELIZABETH STREET WITH LONSDALE ST

ALSO EMERGENCY SHUNT · ELIZABETH ST
(BRUNSWICK LINE)

- A { From Casting
Lower in Rail. Tongue Worn.
- B Ordinary Heel Rocking. Tongue Worn.
- C Very Bad Hammering w Rail Intersections.
- D Hammering at Rail Intersection
- E Tongue Worn.
- F Tongue Worn.



- A Lipped Heel Rocking. Tongue Worn.
- B Ordinary Heel Rocking D° D°
- C Lipped Heel Rocking D° D°
- D Ordinary D° D° D° D°
- E Hammering at Rail Intersection.
- F D° - D° D°
- G D° - D° D°
- H D° - D° D°
- J D° - D° D°
- K D° - D° D°

SINGLE SHUNT AT TERMINUS

JOHNSTON STREET

SCHEDULE OF SHUNTS.

CROSSINGS AND CURVES.

CARLTON LINE. of the two opposite No. 6. (Outer-
(ABBOTSFORD BRIDGE to LONSDALE STREET)
(Via Johnston Street and Elgin Street).

1. Single Shunt at Terminus Johnston Street (near Abbotsford Bridge)
2. "Turn-In" and "Turn-Out" to Tramcar Depot do do
3. Curve Junction of Elgin Street with Lygon Street
4. Curve in Lygon Street (opposite Mackenzie Street)
5. Curve Junction of Russell Street with Lonsdale Street.
6. Emergency Shunt Lonsdale Street (opposite Hospital).
7. Curve & Junction Junction of Lonsdale Street with Swanston Street.

----- 1 1/2" (N)
No. 1 Rail .018
No. 2 " .126

The ordinary check of Ballrail is worn very thin.

SINGLE SHUNT AT TERMINUS

JOHNSTON STREET

LINE 6. *See Paving. Tongue worn*

DESCRIPTION 1.

See Paving. Tongue worn

SINGLE SHUNT at TERMINUS - JOHNSTON STREET.

1. The Special Checks to the two Inner Curve-rails are badly worn in places, whilst the sides of heads of the two opposite rails (Outer-curves) are badly grooved in places, as a result of the above check-wear. 9/16" is worn off side of Tread of curved rail adjacent to No. 4 Straight rail.
2. Nos. 1 and 2 Rails, (Up Track). The rail check of No. 2 rail, between Point of Shunt and Terminus (for a distance of about 28 yards) is worn badly in places, and the side of head of opposite rail (No. 1) is grooved as a result of the above check-wear, and badly so in places.
3. At the Crossing-intersections, also at intersections of Slot-rails with tram-rails, hammering, to varying degrees, is taking place.
4. Some of the Joints of Tram-rails, adjacent to Crossing-intersections, and Points, are wide, and, in several cases, are hammered.

CLEARANCES, between flange and bottom of groove, also

SUPER-ELEVATION, taken April 28th. 1916, at Terminus, (opposite "Ravarnette"),

	<u>CLEARANCE</u>	<u>SUPER-ELEVATION</u>
No. 1 Rail	.016	1 1/8" (R)
No. 2 "	.186	

NOTE. The ordinary Check of No. 1 Rail is worn very thin.

DATE First Inspected - April 28th. 1916.

DATE Last Inspected - July 4th. 1916.

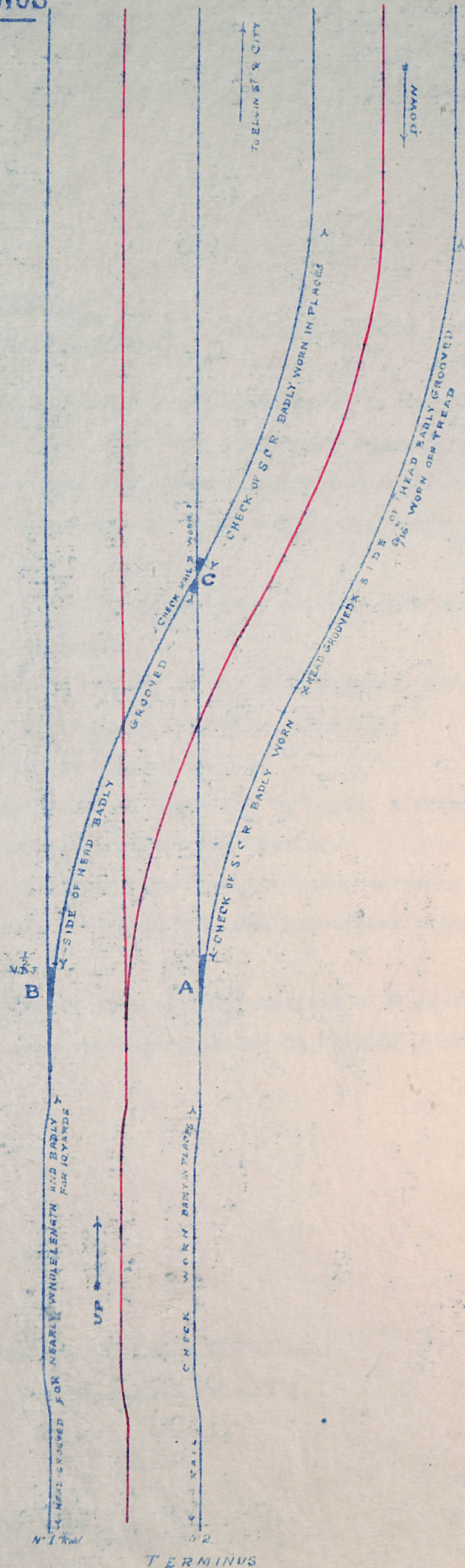
SINGLE SHUNT AT TERMINUS

JOHNSTON STREET

A Lipped Heel Rocking. Tongue Worn

B Ordinary Heel Rocking Slightly.

C Slight Hammering at Rail Intersection



LINE 6.
PLAN 2.

TURN AND TURN-OUT TO CAR DEPOT
JOHNSTON STREET

A Heel below level of Rail. Tongue Sl. Worn.

B Heel F.G. Order

C Points Slightly Hammered.

LINE 6.

DESCRIPTION 2.D. At Heel.
Heel loose and below level of Rail

F Heel loose fit. Point Worn.

G No

H Points Slightly Hammered

JOHNSTON STREET - "TURN-IN" to }
and }
"TURN-OUT" from } TRAM-CAR DEPOT.

1. The Checks of Special Check Rails of Inner-Curves to "Turn-in" to, and "Turn-Out" from Tram Car Depot, are worn to varying degrees, and badly so in places. The sides of heads of opposite rails are grooved in places. Checks to Special Check-rails of Inner Curves are loose, and ineffective, in places.

2. A length of rail (about 15' 0") of No. 4 Rail, on each side of Point of "Turn-In" to Depot, is bottoming.

3. The heels of 2 of the four Points are of bad fit, rocking, and below level of adjacent rails, resulting in excessive hammering. Tongues of all Points are worn to varying degrees.

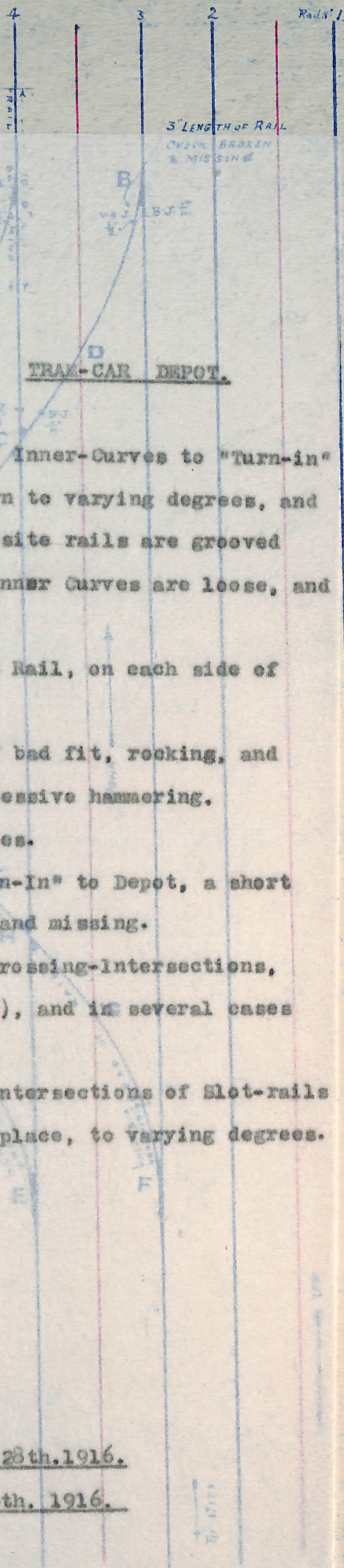
4. On No. 3 Rail, adjacent to Point of "Turn-In" to Depot, a short length (about 3" long) of rail-check is broken and missing.

5. 10 of the Joints of rails, adjacent to Crossing-Intersections, and Points, are wide (varying from 1/4" to 5/8"), and in several cases are hammered.

6. At the Crossing-intersections, also at intersections of Slot-rails with tram-rails, hammering and wear are taking place, to varying degrees.

DATE First Inspected - April 28th. 1916.

DATE Last Inspected - July 4th. 1916.



LINE 6.
PLAN 2.

TURN AND TURN-OUT TO CAR DEPÔT
JOHNSTON STREET

A Heel below level of Rail. Tongue St. Worn.

B Heel F.G. Order

C Points Slightly Hammered.

D Nil.

E } Point Rocking Badly at Heel.
 } Heel Loose and Below level of Rail.

F Heel loose fit. Point Worn.

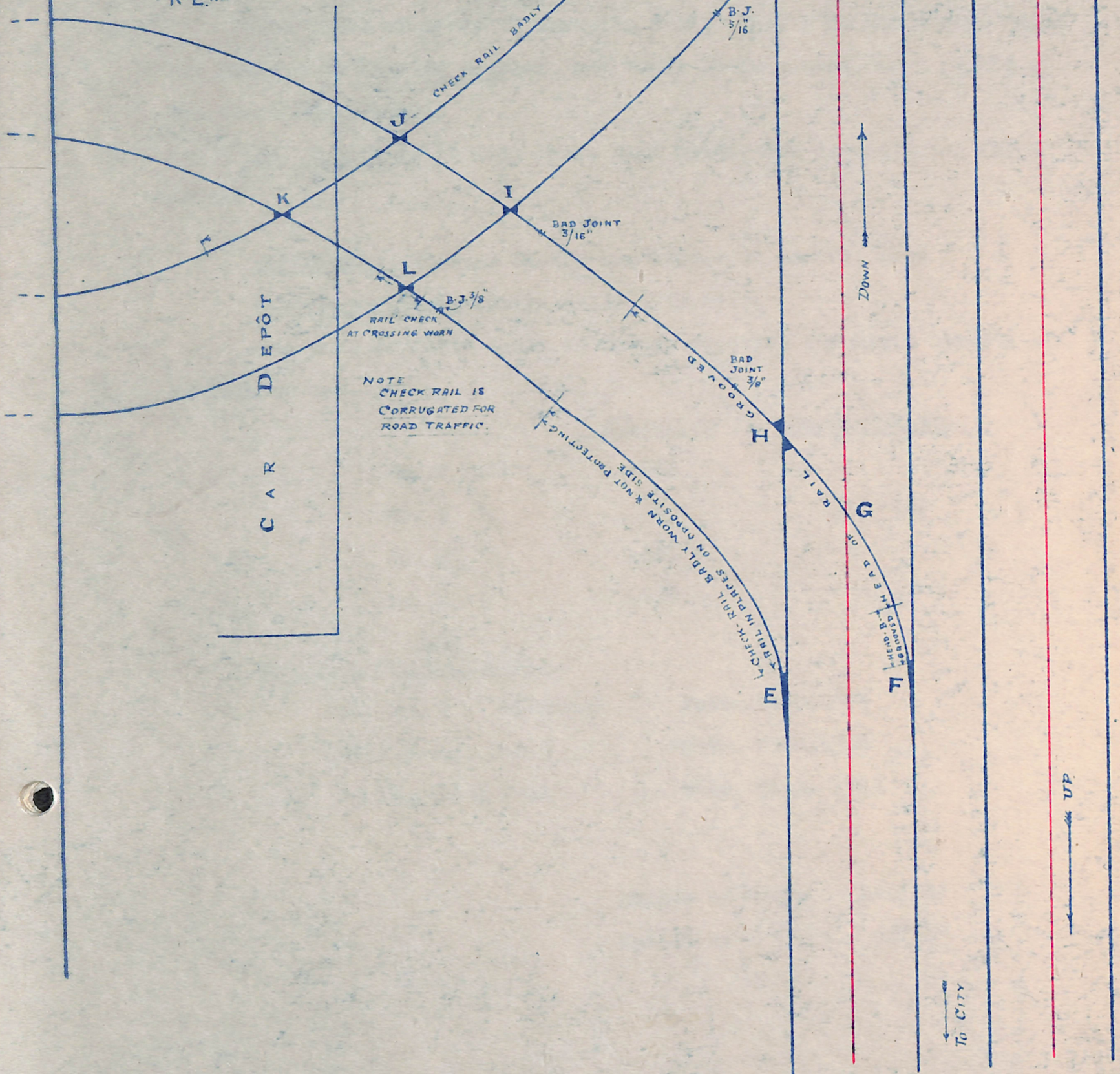
G Nil.

H Points Slightly Hammered.

I Points Hammered.

J Nil.

K-L Nil.



CURVE · JUNCTION OF LYGON AND ELGIN ST^{TS}

LINE 6. PLAN 3.

LINE 6.

DESCRIPTION 3.

CURVEat JUNCTION of ELGIN and LYGON STREETS.

1. The Checks of Special Check-rails (Nos. 1 Up and 3 Down Rails) are worn to varying amounts, and badly so, in places.
2. The sides of heads of opposite rails (Nos. 2 Up and 4 Down Rails) are grooved to varying degrees, and badly so in places, as a result of the above Check-wear.
3. No. 2 Rail is 60 mile lower than Gauge, and is bottoming for 2 yards.

CLEARANCES, between flange and bottom of groove, also
SUPER-ELEVATIONS, taken April 27th, 1916.

The sets of Tests taken on Curve, opposite 202 Elgin Street) are as follows :-

	<u>CLEARANCE</u>	<u>SUPER-ELEVATION</u>
No. 1 Rail	.248	
No. 2 "	0	3" (R)
No. 3 "	.341	
No. 4 "	.202	

CURVE 142' LONG RAIL 30' RADIUS DATES OF CURVE/RENEWALS.

Rail No. 4	Renewed	Febry. 25th. 1906
Rails Nos. 1, 2 & 3	"	Novr. 25th. 1906
13 ft. Check Rail	"	Decr. 31st. 1913

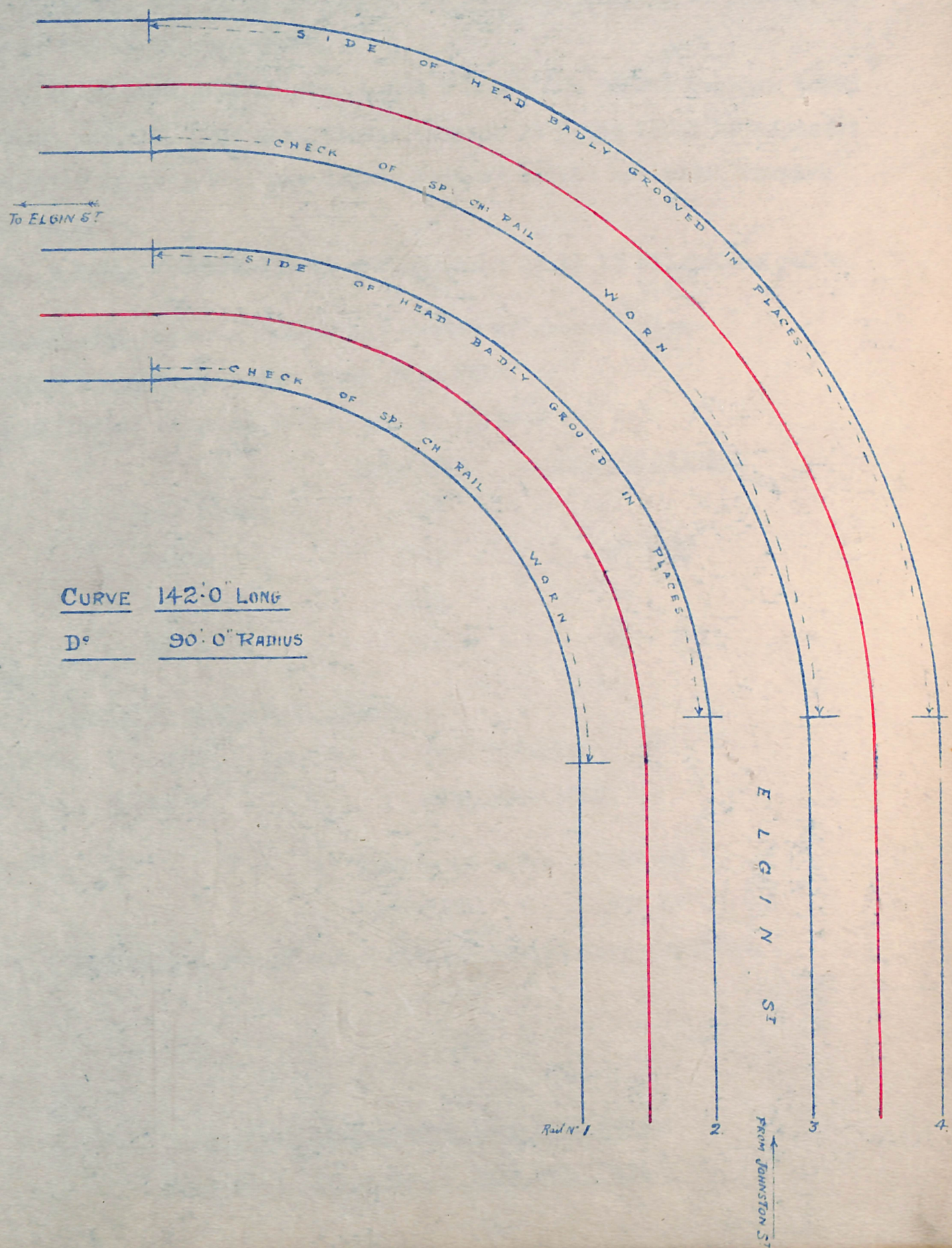
Length of Curve	142' 0"
Radius of "	90' 0"

DATE First Inspected - April 26th. 1916.

DATE Last Inspected - July 4th. 1916.

CURVE · JUNCTION OF LYGON AND ELGIN ST^{TS}

LINE 6. PLAN 3.



CURVE IN LYGON ST^T

AT JUNCTION WITH RUSSELL ST^T (OPP MACKENZIE ST^T)

LINE 6.

DESCRIPTION No. 4.

CURVE - RUSSELL STREET, at JUNCTION with LYGON STREET

(opposite MACKENZIE STREET)

1. The special Checks to Old Rails, of Nos. 1 Up and 3 Down Rails, are worn in places.
2. The sides of heads of opposite rails - No. 2 Up-Rail - are badly grooved in places, and No. 4 Down-Rail, is slightly grooved in places, as a result of the above check-wear.
3. Paving on each side of Nos. 1 and 2 Rails (Up Track) has been taken up and badly re-laid. In many places, paving is below level of adjacent rails (varying up to $\frac{3}{8}$ "), and Joints between blocks are wide, varying from $\frac{1}{4}$ " to $\frac{5}{8}$ ".
4. No. 2 Rail. Corrugations are apparent up to 15 mils along Curve.

CLEARANCES, between flange and bottom of groove, also

SUPER-ELEVATIONS taken April 26th. 1916.

The sets of Tests, taken on Curve, are as follows :-

NOTE.

Tax Surveyed over
WHOLE AREA OF CURVE
SKITTLED, AND HOLEY.

	CLEARANCE	SUPER-ELEVATION
No. 1 Rail	.434	
No. 2 "	.163	3" (R)
No. 3 "	.310	
No. 4 "	.310	2 $\frac{5}{8}$ " (R)

DATES OF CURVE RAIL RENEWALS.

Rails Nos. 1 and 2	Renewed	June 5th. 1910
" Nos. 3 and 4	"	June 30th. 1915.

Length of Curve 128' 0" MACKENZIE ST^T
Radius " " 264' 0"

Gradient - Nos. 1 and 2 Rails - Slight Down Gradient.

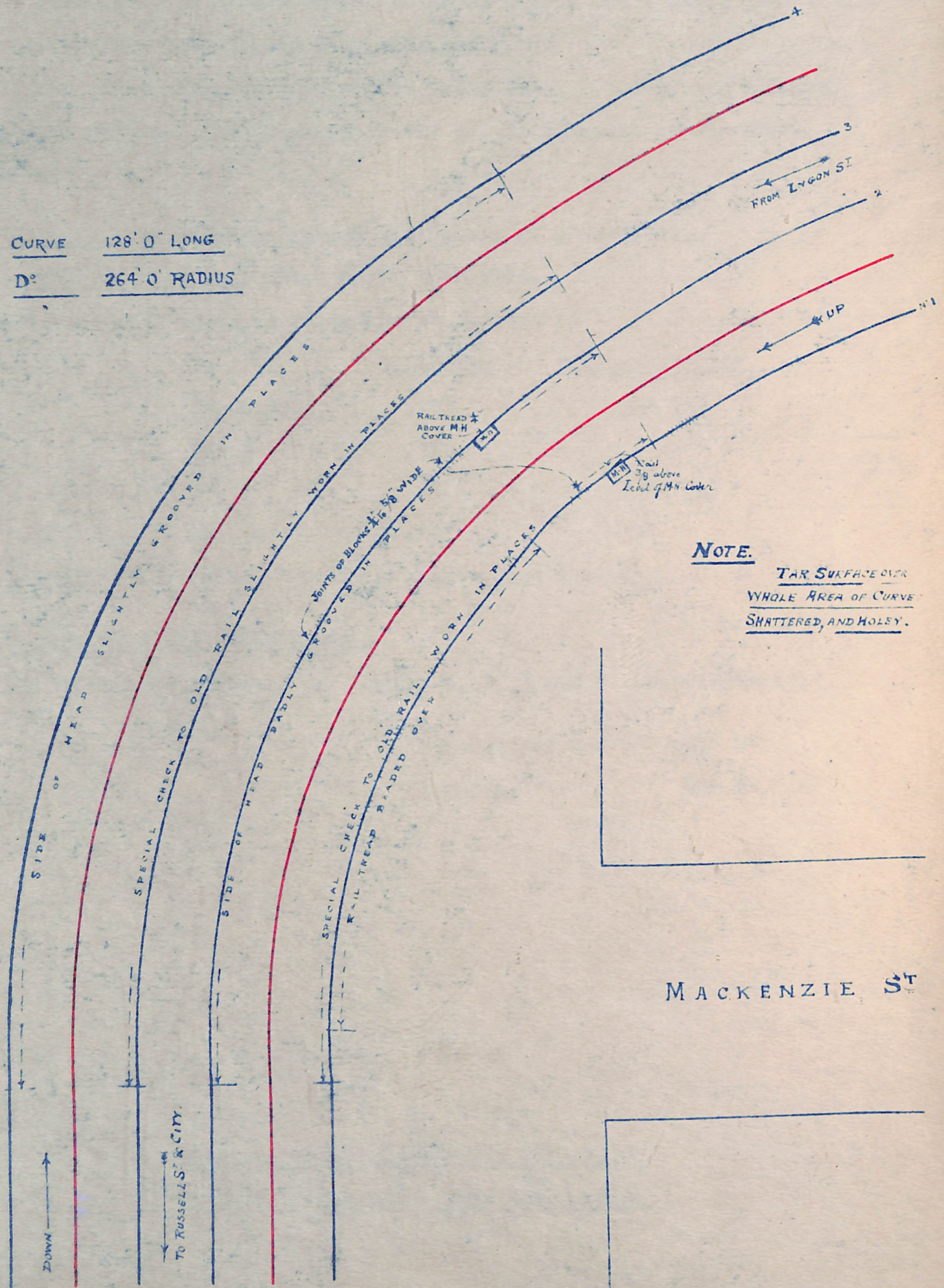
DATE First Inspected - June 14th. 1916.

DATE Last Inspected - July 4th., 1916.

CURVE IN LYGON ST

AT JUNCTION WITH RUSSELL ST (OPP MACKENZIE ST)

CURVE 128' 0" LONG
D^o 264' 0" RADIUS



MACKENZIE ST

RIGHT ANGLE CURVE

JUNCTION OF RUSSELL AND LONSDALE STS

LINE 6.

DESCRIPTION 5.

CURVE - JUNCTION of RUSSELL and LONSDALE STREETS.

1. The Checks of Special Check-rails of Nos. 2 and 4 Rails are worn to varying degrees, and in places badly so.
2. The sides of heads of opposite rails (Nos. 1 and 3) are grooved to varying amounts, and in places badly so, as a result of the above check-wear.

CLEARANCES, between flange and bottom of groove, also
SUPER-ELEVATIONS, taken April 26th.1916.

The Sets of Tests taken on Curve are as follows :-

	<u>CLEARANCE</u>	<u>SUPER-ELEVATION</u>
No. 1 Rail	.295	3½" (R)
No. 2 "	.372	
No. 3 "	.217	3¾" (R)
No. 4 "	.434	

NOTE. Nos. 1 and 2 Rails - Slight Down Gradient.

DATE of CURVE RAIL RENEWALS.

Full Renewal both Tracks .. Rails 1, 2, 3 and 4 Sept. 30th. 1914.

Length of Curve 141' 0"
Radius " " 90' 0"

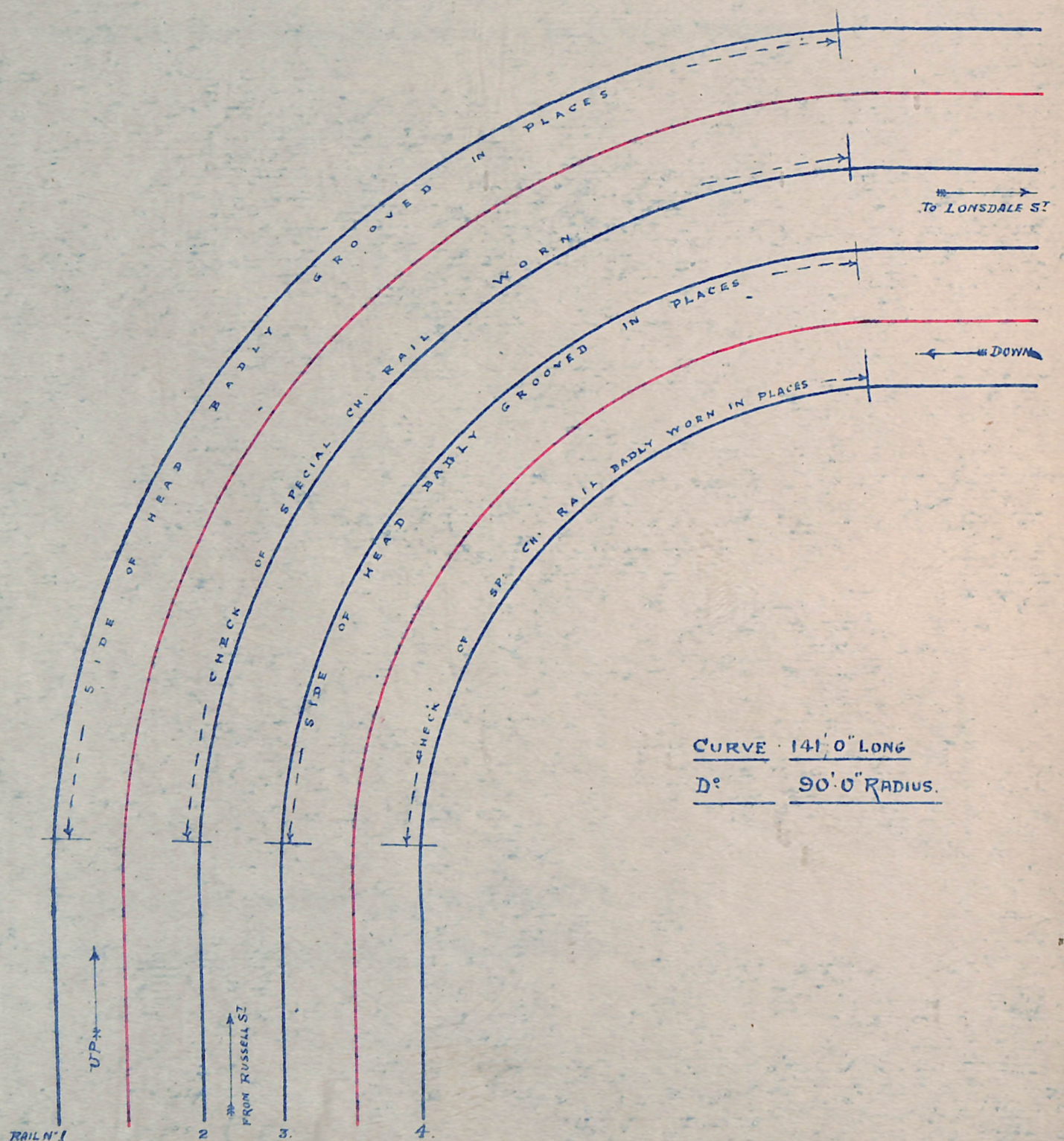
CURVE 141' 0" LONG
D° 90' 0" RADIUS.

DATE First Inspected - April 27th. 1916.

DATE Last Inspected - July 4th., 1916.

RIGHT ANGLE CURVE

JUNCTION OF RUSSELL AND LONSDALE STS



CURVE 141' 0" LONG
D° 90' 0" RADIUS.

EMERGENCY SHUNT

LINE 6. PLAN 6.

LONSDALE STREET - OFF: HOSPITAL

A Tongue Slightly Worn.

B Tongue Slightly Worn.

C Hammering at Rail Intersections.

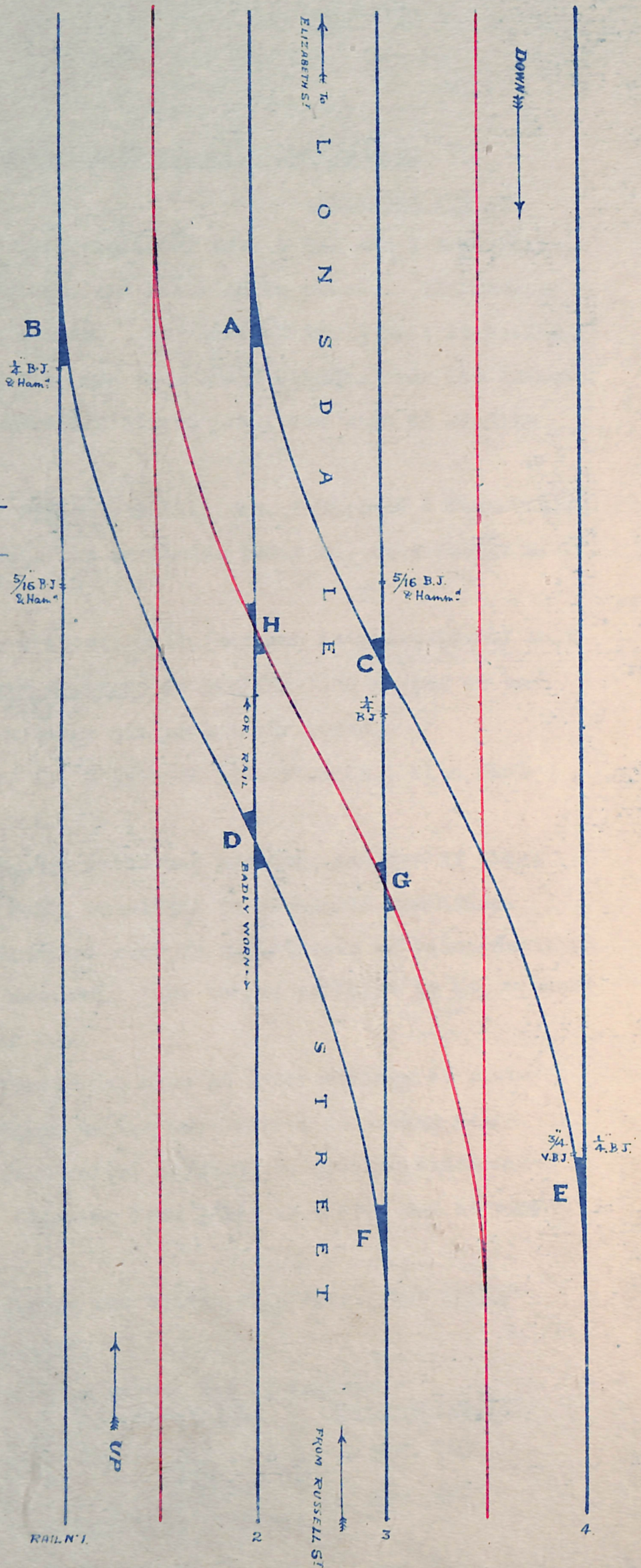
D .

E .

F .

G. Hammering at Rail & Slot Intersection.

H D° D° D°



CURVE AND JUNCTION AT JUNCTION OF LONSDALE AND SWANSTON STREETS

LINE 6. PLAN 7

LINE 6.

DESCRIPTION 7.

CURVE and JUNCTION - JUNCTION of LONSDALE STREET with

SWANSTON STREET.

1. The Checks of Special Check-rails of Nos. 1 Up, and 3 Down Rails, are badly worn to varying degrees, and badly so in places. The Checks are loose and ineffective in places. The head of No. 3 Rail is beaded over, on greater length of curve, and on a short length, near its intersection with No. 1 Up-Rail, Swanston Street Line, the side of head is grooved.
2. The sides of heads of opposite rails (Nos. 2 Up, and 4 Down-Rails) are grooved to varying amounts, and in places badly so, as a result of the above check-wear.
3. A short length of No. 4 (Down) Rail, (between intersection of No. 1 Up-Rail and Slot-rail Swanston St. Line) is pumping, and paving on each side of rail is loose. Fishplates are presumably loose.
4. At the intersection of No. 2 Up-Rail (Swanston St.) with Slot-rail, the rail-tread is cracked.
5. The heels of 4 Points, are loose and rocking, and two of these are below level of adjacent rail, resulting in excessive hammering. There is also considerable diagonal wear on rail-treads of Point-Castings. Tongues are worn to varying amounts. The tongue of Point to No. 4 Down-Rail, is very badly worn, and low.
6. At the Crossing-intersections, also at intersections of Slot-rails with tram-rails, hammering to varying degrees is taking place.
7. 14 of the Joints of Tram-rails, adjacent to Crossing-intersections and Points, are wide, (varying from $\frac{3}{16}$ " to $\frac{5}{8}$ "), and in many cases are hammered.

CLEARANCES, between flange and bottom of groove, also SUPER-

ELEVATIONS, taken April 26th. 1917.

The Sets of Tests, taken on Curve, are as follows -

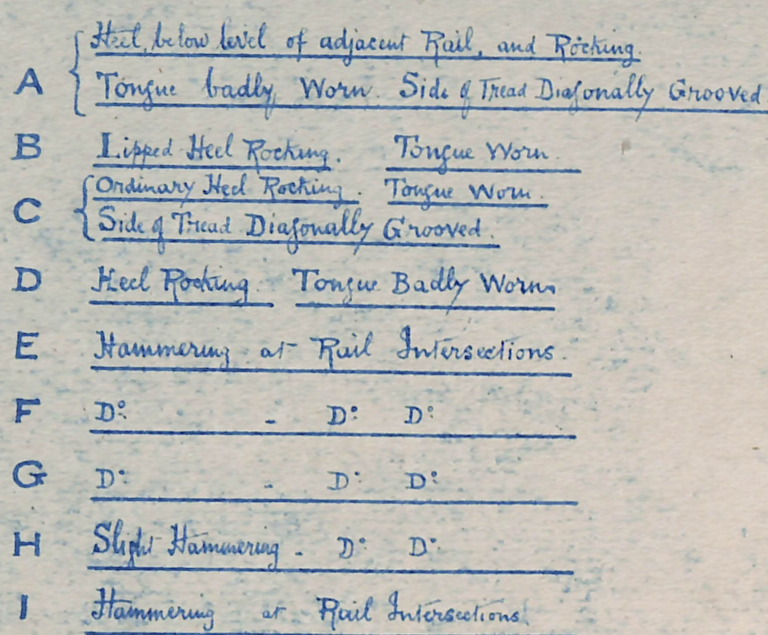
	CLEARANCE	SUPER-ELEVATION
No. 1 Rail	.310	
No. 2 "	.217	$3\frac{1}{2}$ " (R)
No. 3 "	.434	
No. 4 "	.250	$2\frac{7}{8}$ " (R)

NOTE. Nos. 1 and 2 Rails - Slight Down Gradient.

DATES of CURVE RAIL RENEWALS

Rail No. 1 Renewed Aug. 17th. 1902
 Rails Nos. 2, 3 and 4 Renewed Aug. 11th. 1907.
 DATE Last Inspected, July 4th. 1916.

LINE 6. PLAN 7.



J. Slight Hammering at Rail Intersections

$A^1 \quad D^1 \quad D^1 \quad D^1 \quad D^1$

B⁴ Hammering at Rail and Slot Intersection
Rail Cracked.