

CURVE VICTORIA STREET.

OPPOSITE HEUGLE'S SHOP NEAR HODDLE ST

LINE 2

LINE 2. PLAN B6.

DESCRIPTION B 6.

SLIGHT CURVE - VICTORIA STREET (Opposite Hengle's Shop).

1. The Ordinary rail-Checks (Nos. 2 and 4 Rails) are badly worn in places.
2. The sides of heads of ordinary rails are badly grooved in places as a result of the above check-wear.
3. No. 1 Rail is bottoming for 3 yards in places.

DATE OF RENEWALS OF CURVE RAILS.

Full Renewal, Nos. 1, 2, 3, 4 Rails - December 12th. 1906.

Date First Inspected - May 11th. 1916.

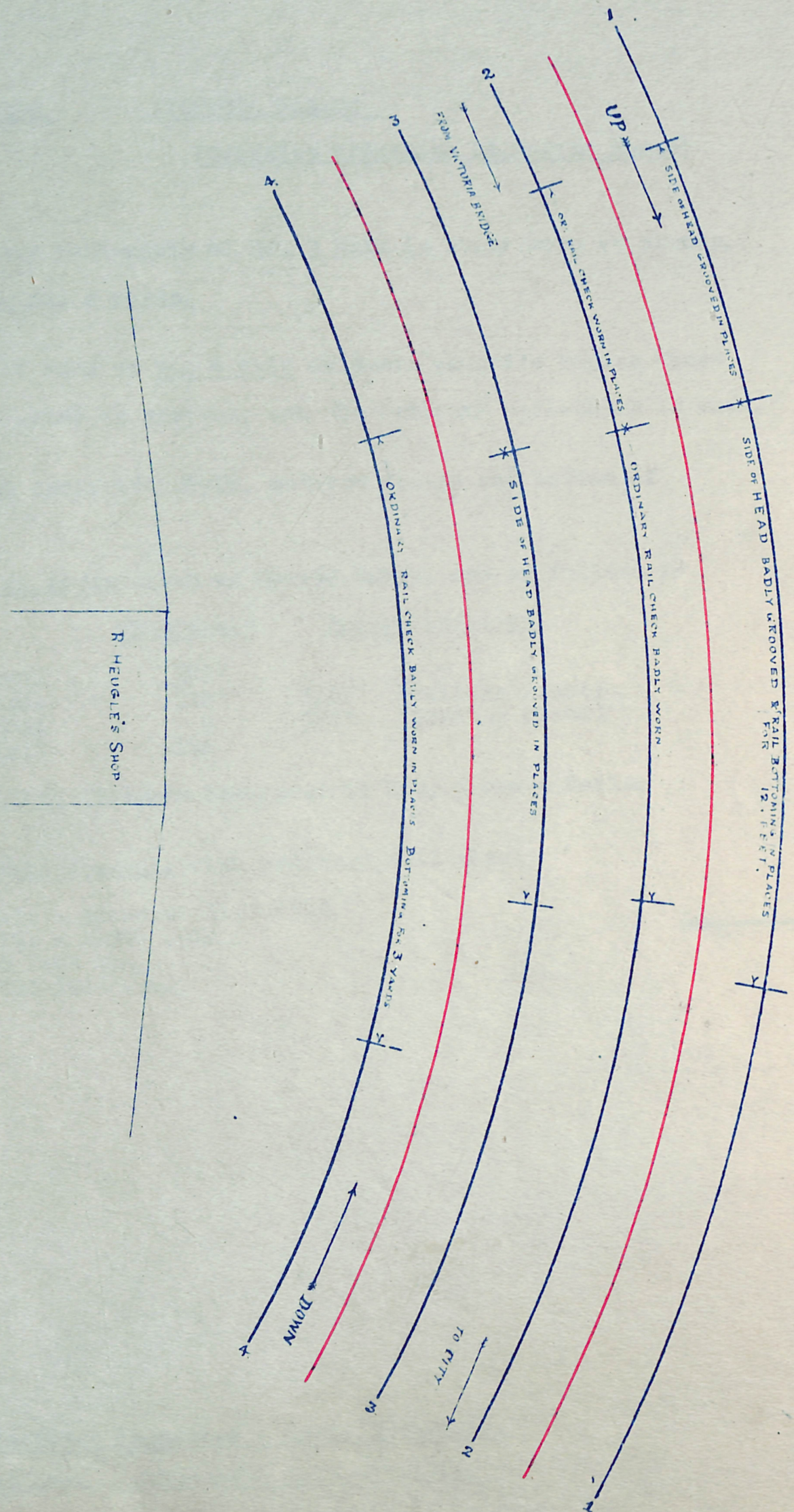
Date Last Inspected - July 4th. 1916.

CURVE VICTORIA STREET.

OPPOSITE HEUGLE'S SHOP NEAR HODDLE ST

LINE 2.

PLAN. B6.



LINE 2.

DESCRIPTION B 7.

CURVE

VICTORIA PARADE.

(Opposite Brunswick St. Engine House)

1. The ordinary rail-check of No. 3 Rail is badly worn in places. Rail is bottoming for 2 yards.
2. The side of head of No. 4 rail on curve opposite Engine House (Victoria Parade Line) is grooved, and the Ordinary Rail-check is worn.

CLEARANCES, taken April 14th.1916, between flange and bottom of groove.

The Sets of Tests taken on Curved Rails, are as follows :-

	<u>Clearances</u>	<u>Super-Elevation</u>
No. 1 Rail	.372"	
No. 2 Rail	.316"	7/8" (Rolling Place)
No. 3 Rail	0	3/4" (Braking Place)
No. 4 Rail	.121	

Slight Gradient Down (towards Terminus) to Nos. 3 and 4 Rails.

Dates of Curve Rail Renewals with ordinary rail check.

Nos. 3 and 4 Rails - December 31st.1912.

Nos. 1 and 2 Rails - March 1916.

Curve - 32 feet long.

Radius - 100 feet long.

Date First Inspected - April 25th.1916.

Date Last Inspected - July 4th.1916.

PLAN B 7 included on SKETCH PLAN C 7.

TERMINUS

ST GEORGE'S RD

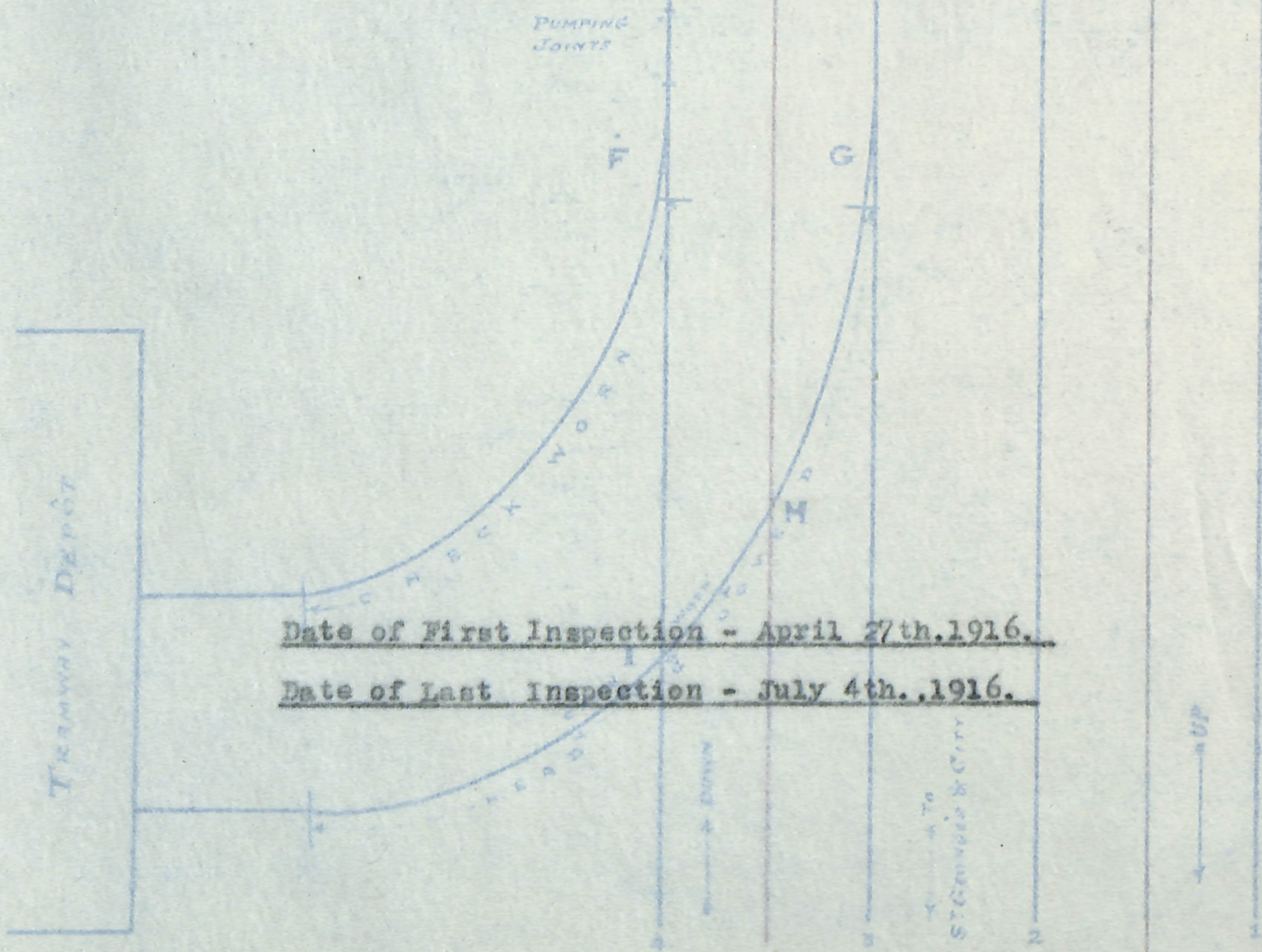
LINE 2
PLAN C.1.

LINE 2.

DESCRIPTION C.1.

TERMINUS, ST. GEORGE'S ROAD and RUN-IN to TRAMCAR DEPOT.

1. The Checks of special Check-rails leading from Terminus to Car Depot are worn, whilst sides of heads of opposite rails are grooved, as a result of the above check-wear. Special checks are loose and ineffective in places.
2. The heels of three of the four Points are of bad fit, and rocking. On two of these points there is considerable diagonal wear on tread. Tongues are worn to varying degrees.
3. On No.4 Rail (near point of Turn-In to Car Depot) a short length of rail is pumping, and the fish-plates are presumably loose.
4. At the crossing-intersections, also at intersections of slot-rails with Tram-rails, hammering is taking place, to varying degrees.
5. Four of the joints of tram rails adjacent to Points, are wide, (varying from 1/4" to 3/8"), and in several cases are hammered.

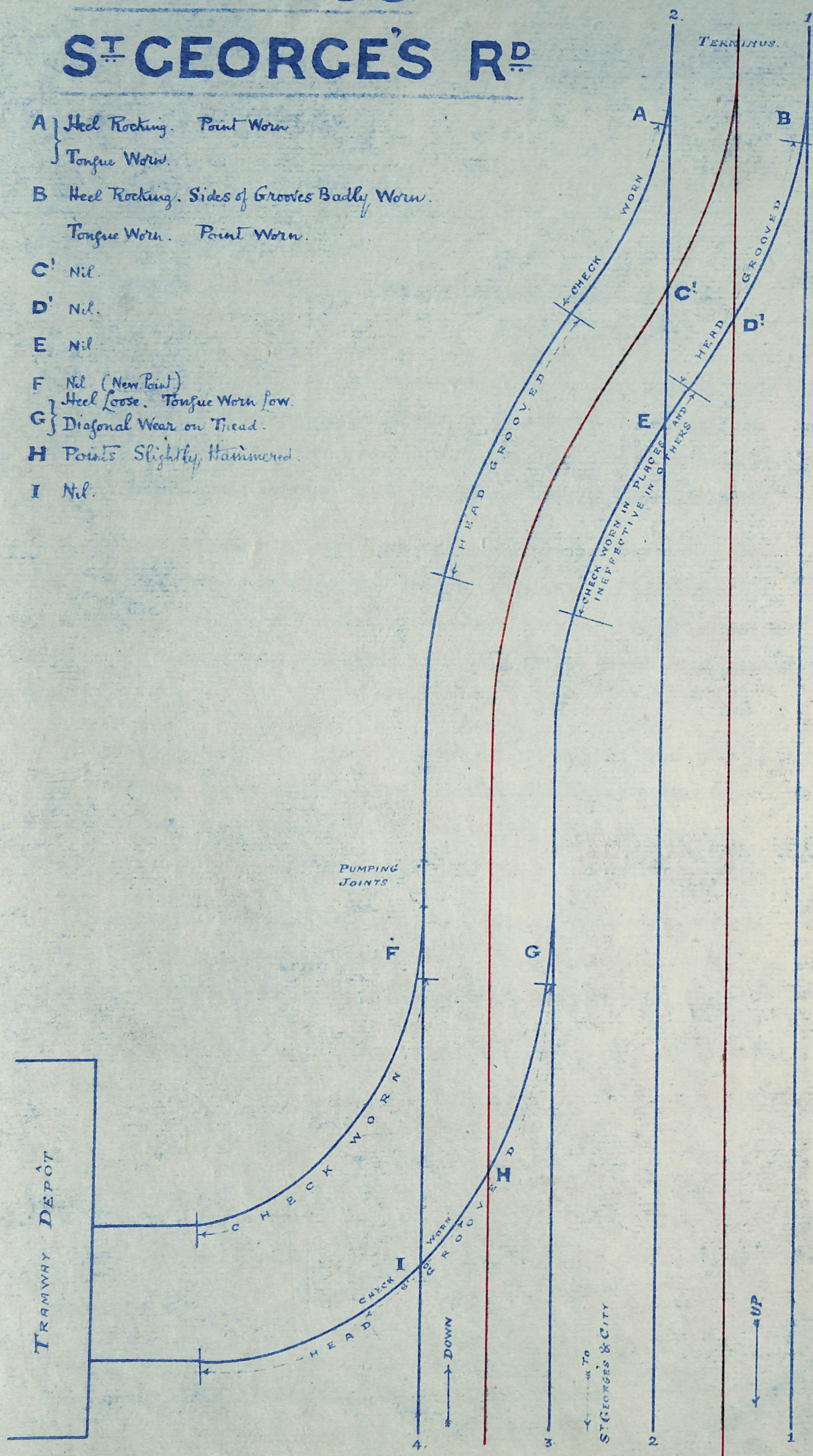


Date of First Inspection - April 27th.1916.

Date of Last Inspection - July 4th.1916.

ST GEORGE'S RD

A } Heel Rocking. Point Worn
Tongue Worn.
B Heel Rocking. Sides of Grooves Badly Worn.
Tongue Worn. Point Worn.
C' Nil.
D' Nil.
E Nil.
F Nil (New Point)
G } Heel Loose. Tongue Worn Low.
Diagonal Wear on Tread.
H Points Slightly Hammered.
I Nil.



NORTH FITZROY BOX CROSSING.

LINE 2

S^E GEORGES ROAD.

General Remarks

LINE 2. *Excessive hammering, with bad wear in many cases.*

DESCRIPTION C 2. *Paving loose, and shattered in several places.*

Tram rails not level with Railway rails, and Railway Guard-rails.

Symptom ST. GEORGE'S ROAD - TRAMWAY AND RAILWAY DOUBLE CROSSING

NORTH FITZROY BOX.

1. Tram-rails at four Places, near the intersections with railway rails are out of alignment with adjoining tram-rails - varying from $\frac{3}{8}$ " to 1" causing excessive wear on rail checks and side of head of rails. This defect appears to be due to bad original construction.
2. Tram-rails are not level with railway rails and railway guard-rails in many places to a serious amount, resulting in excessive hammering and wear at intersections. Where this hammering occurs, a sympathetic hammering has resulted from this to the tread of adjoining rail.
3. There are four wide joints to Tram-rails (varying from $\frac{3}{8}$ " to $\frac{1}{2}$ ") and these joints are hammered, and the fishplates presumably loose. There is also hammering of some of the other joints, and want of lineability of the Tread-surfaces.
4. Pair of Railway-rails on South West side of Tram-track between No. 3 Tram-rail and Slot-rail are loose in their chairs, causing excessive vibrations and loosening of adjacent paving.
5. The paving blocks at several places are loose, and some of them shattered.

Date First Inspected - April 27th. 1916.

Date Last Inspected - July 4th. 1916.

NORTH FITZROY BOX CROSSING.

LINE 2
PLAN C.2.

S^E GEORGES ROAD.

General Remarks

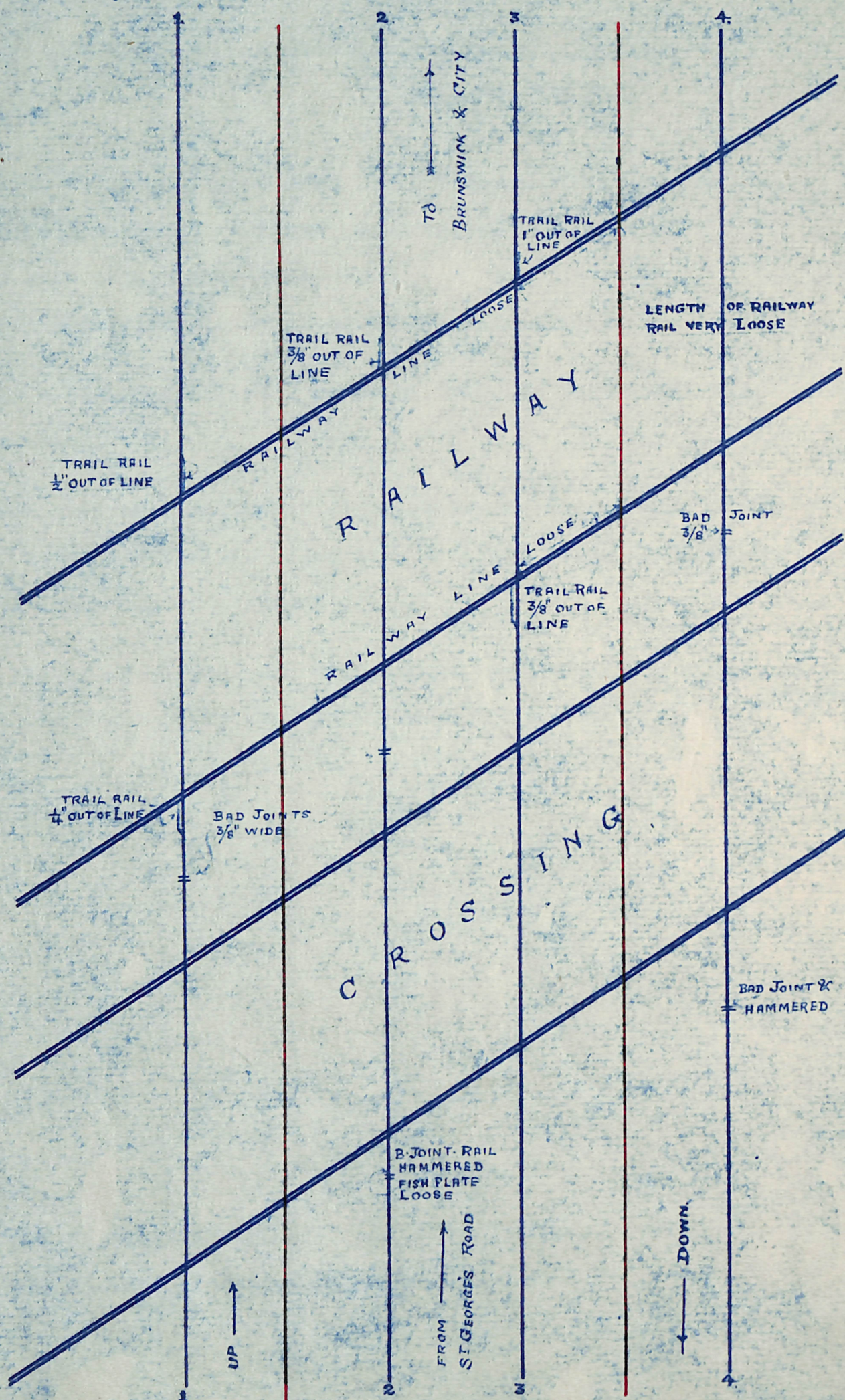
All Intersections Hammering, with bad wear in many cases.

Fish Plates loose.

Paving loose, and shattered in several places.

Tram-Rails not level with Railway rails, and Railway Guard-rails.

Sympathetic Hammering on Trail-rails opposite Intersections.



RAILWAY SINGLE CROSSING

LINE 2.

ST GEORGES R^R

General Remarks
Found many loose at Several Intersections.
Many loose in places.

DESCRIPTION C 3.

ST. GEORGE'S ROAD - SINGLE LINE RAILWAY CROSSING
WITH TRAMWAY RAILS.

1. Tram-rails at seven places near their intersections are not level with railway rails and railway guard rails, resulting in hammering and wear at intersections.
Fish-plates are presumably loose at several intersections.
 2. There is a wide joint ($1/4"$) on No. 1 Rail, on North East side of railway-crossing.
 3. Length of Railway-rail (about 6'0") on South/East side of Tram track (between Nos. 1 and 3 rails) is loose in its chairs, causing excessive vibration, and loosening of adjacent paving.
 4. Paving blocks are loose, and tar surface shattered in places, presumably due to angle fishplates being loose.
- Diagram illustrating the railway crossing and tramway rails. The diagram shows a horizontal line representing the railway crossing, with vertical lines representing the tramway rails. The crossing is labeled "ST. GEORGE'S ROAD - SINGLE LINE RAILWAY CROSSING WITH TRAMWAY RAILS." The diagram includes several annotations: "ST. GEORGE'S R^R" at the top, "To BRUNSWICK" and "To CITY" at the bottom, "To FITZROY STATION" on the right, and "RAIL JOINT LOOSE" near the bottom right. The diagram also shows a "BAD JOINT" and "WIDE" joint on the right side. The diagram is divided into sections by vertical lines, with numbers 1, 2, 3, and 4 indicating the locations of the observations.

Date of First Inspection - April 27th. 1916.

Date of Last Inspection - July 4th., 1916.

RAILWAY SINGLE CROSSING

LINE 2.

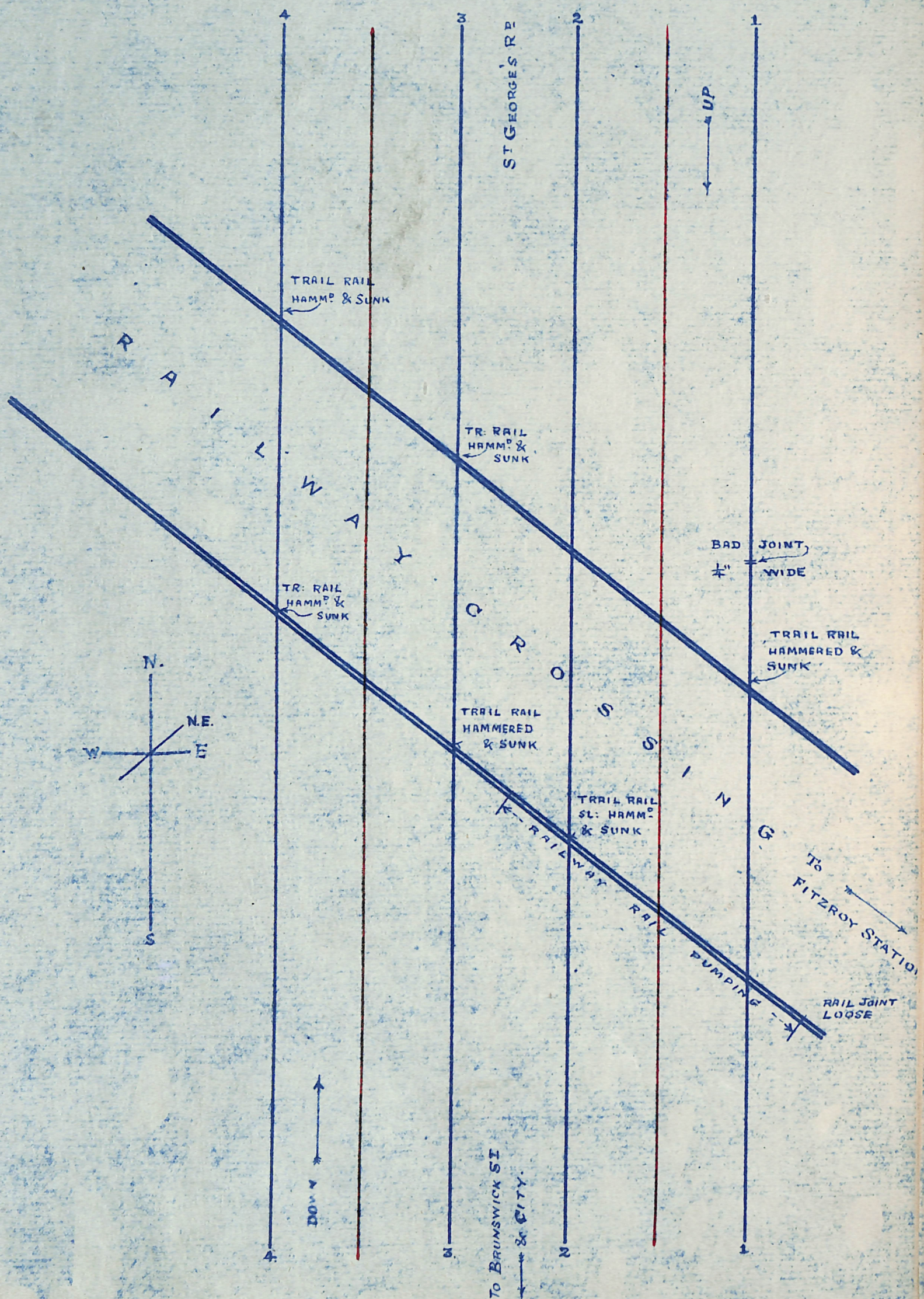
PLAN C.3.

ST GEORGES RD

General Remarks

Fish-Plates loose at several intersections.

Paving loose in places.



CURVE - S^T GEORGES R^D .

NEAR S^T LUKE'S CHURCH .

LINE 2.

DESCRIPTION C 4.

LINE 2.

PLAN C 4.

CURVE - ST. GEORGE'S ROAD (Opposite St. Luke's Church)

1. The Checks of Ordinary rails of Nos. 1 and 3 Rails, are worn, to varying amounts for a distance of about 35 yards.

The sides of heads of opposite rails (Nos. 2 and 4) are grooved to varying degrees, for a distance of about 40 yards, as a result of the above check-wear.

2. NOTE No. 4 Rail is almost bottoming in several places.

All Checks on the Length of Curve 130 feet.

Ordinary Rail Checks Radius of Curve 264 feet.

DATES OF CURVE RAIL RENEWALS.

Full renewal, Both Tracks, Nos. 1, 2, 3 and 4 Rails - Decr. 10th., 1905.

CLEARANCES taken April 15th., 1916, between flange and bottom of groove (opposite Pole $\frac{1}{67}$). The sets of Tests are as follows :-

	<u>CLEARANCE</u>	<u>SUPER-ELEVATION</u>
No. 1	.085"	
No. 2	.132"	$\frac{3}{4}$ " (Rolling Place)
No. 3	.264"	
No. 4	.054"	$1\frac{1}{8}$ " (Rolling Place)

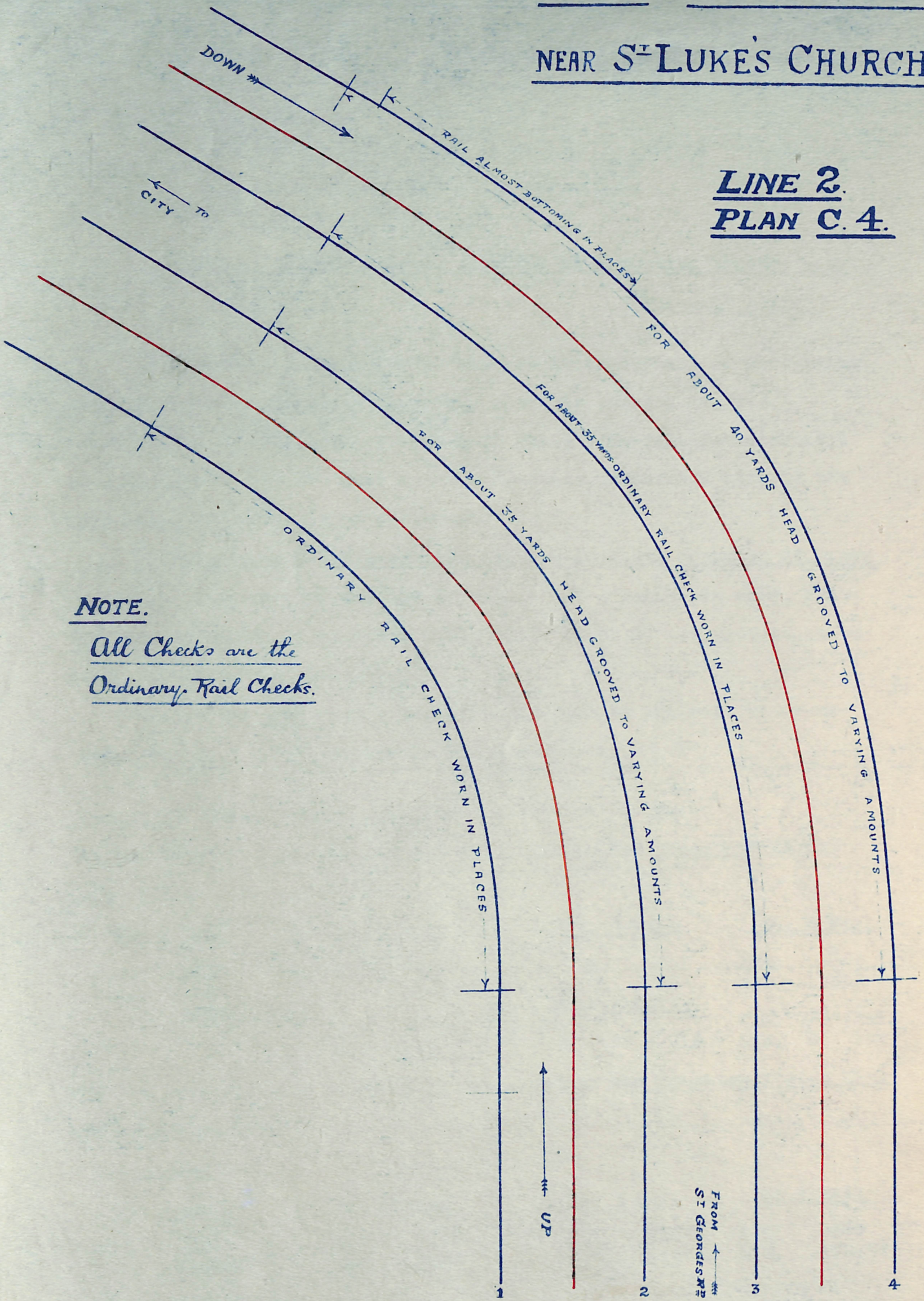
Date First Inspected - April 27th., 1916.

Date Last Inspected - July 4th., 1916.

CURVE · S^T GEORGES R^D ·

NEAR S^T LUKE'S CHURCH ·

LINE 2.
PLAN C. 4.



NOTE.

All Checks are the
Ordinary Rail Checks.

RIGHT ANGLE CROSSING

JUNCTION OF JOHNSTON & BRUNSWICK STS.

LINE 2.

PLAN C.5.

LINE 2.

DESCRIPTION C.5.

RIGHT ANGLE CROSSING - Junction of BRUNSWICK STREET with
JOHNSTON STREET.

1. At Tram-rail intersections, also at intersections of Slot-rails with tram-rails, hammering is taking place to varying degrees.

2. At the intersection of Tram-rail (No. 4 Down-rail Johnston St.) with Slot-rail (between Nos. 1 and 2 Up-rails, Brunswick Street) the Tram-rails are $1/8"$ out of alignment.

3. Slightly curved Rails on Main Track - Opposite Johnston St. Power Station. Ordinary Rail-checks of Nos. 1 and 3 rails are worn, and the sides of heads of opposite rails (Nos. 2 and 4) are grooved, as a result of the above check-wear.

4. Two of the Joints of tram-rails adjacent to the rail intersections, are each $3/8"$ wide and both are hammered.

CLEARANCES taken between flange and bottom of Groove.

The Two Sets of Tests taken April 29th. 1916 on the Brunswick Street Line, are as follows :-

No. 1 Rail		No. 2 Rail		No. 3 Rail		No. 4 Rail	
N.E.	.202"	N.E.	.155"	N.W.	.140"	N.W.	.186"
S.E.	.209"	S.E.	.147"	S.W.	.186"	S.W.	.155"
Super-Elev.		Super-Elev.		Super-Elev.		Super-Elev.	
N.E. 0 (Rolling Place)		N.E. 0 (Rolling Place)		N.W. $3/8"$ (Rolling Place)		N.W. $3/8"$ (Rolling Place)	
S.E. $1/4"$		S.E. $1/4"$		S.W. 0		S.W. 0	

The Two Sets of Tests taken April 29th. 1916 on the Johnston Street Line are as follows :-

Clearances :-

No. 1 Rail		No. 2 Rail		No. 3 Rail		No. 4 Rail	
S.E.	.209"	S.E.	.217"	N.E.	.186"	N.E.	.217"
S.W.	.139.5"	S.W.	.124"	N.W.	.163"	N.W.	.170.5"

Super-Elevations :-

S.E. $7/8"$ (Rolling)		N.E. $1"$ (Rolling Place)	
S.W. $1/2"$ Place }		N.W. $1/4"$ do	

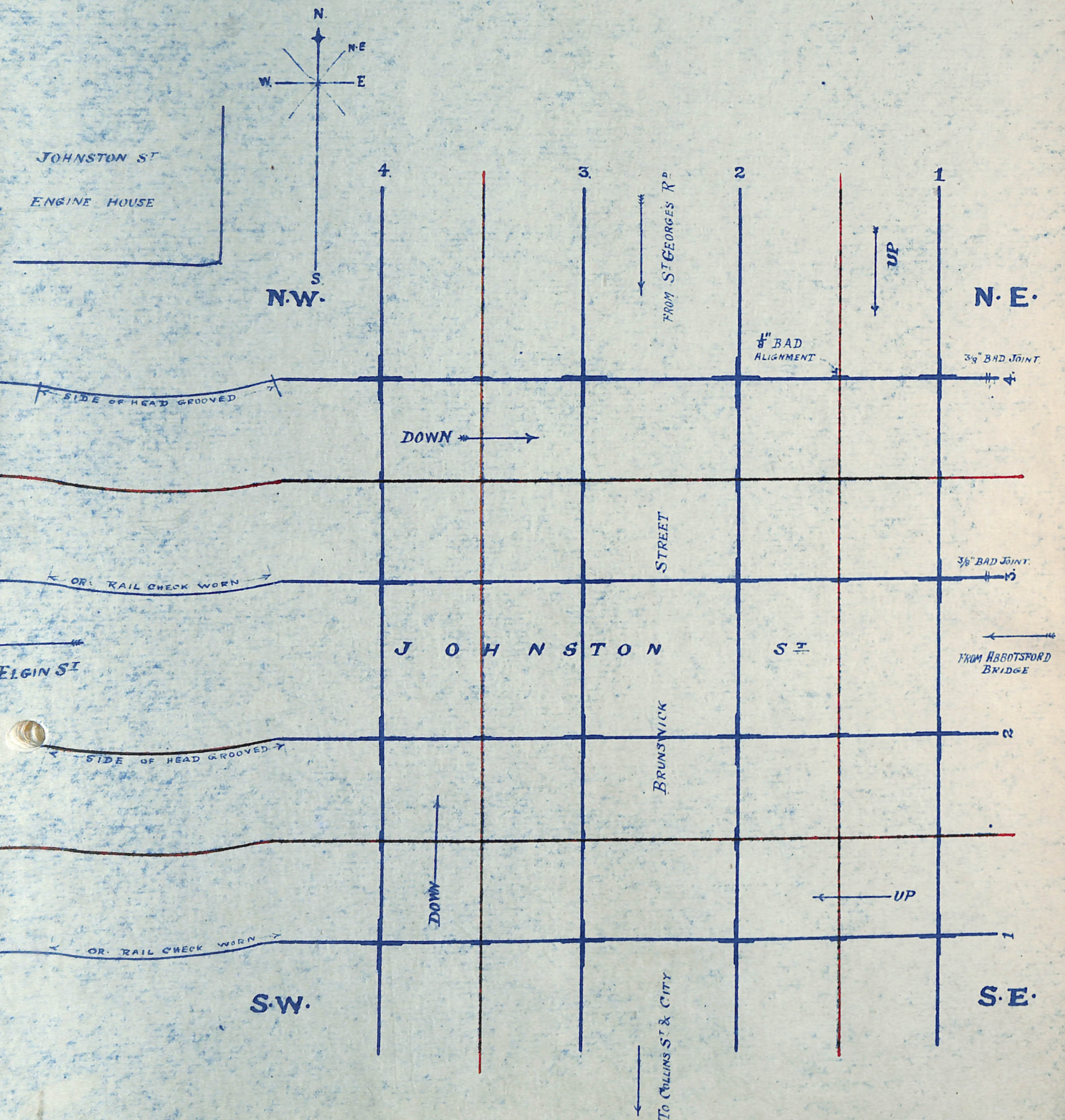
Date First Inspected - April 28th., 1916.

Date Last Inspected - July 4th., 1916.

RIGHT ANGLE CROSSING

JUNCTION OF JOHNSTON & BRUNSWICK STS.

LINE 2.
PLAN C.5.



RIGHT ANGLE CROSSING JUNCTION OF GERTRUDE & BRUNSWICK STREETS.

LINE 2.

DESCRIPTION C 6.

RIGHT-ANGLE CROSSING - JUNCTION of BRUNSWICK STREET with
GERTRUDE STREET.

1. There is considerable wear on the Tram-rails at the intersections resulting in excessive hammering.

At the intersections of Tram-rails with Slot-rails, hammering is taking place, to varying degrees.

2. No. 3 Rail Brunswick St. Track. There is a piece broken off head of rail which accentuates hammering.

3. There is hammering of some of the joints of Tram-rails adjacent to the rail-intersections to varying amounts.

CLEARANCES between flange and bottom of groove.

The two sets of Tests were taken May 9th.1916 on the Brunswick Street Line, and are as follows :-

<u>No. 1 Rail</u>	<u>No. 2.</u>	<u>No. 3.</u>	<u>No. 4.</u>
N.E. .271"	N.E. .209"	N.W. .178"	N.W. .186"
S.E. .233"	S.E. .217"	S.W. .279"	S.W. .202"
<u>Super-Elev.</u>		<u>Super-Elev.</u>	
N.E. 5/8" (Rolling)		N.W. 1/2" (Rlg.)	
S.E. 3/4" do		S.W. 3/4" "	

CLEARANCES. - The two Sets of Tests were taken on May 9th.1916 on the Gertrude Street Line, and are as follows :-

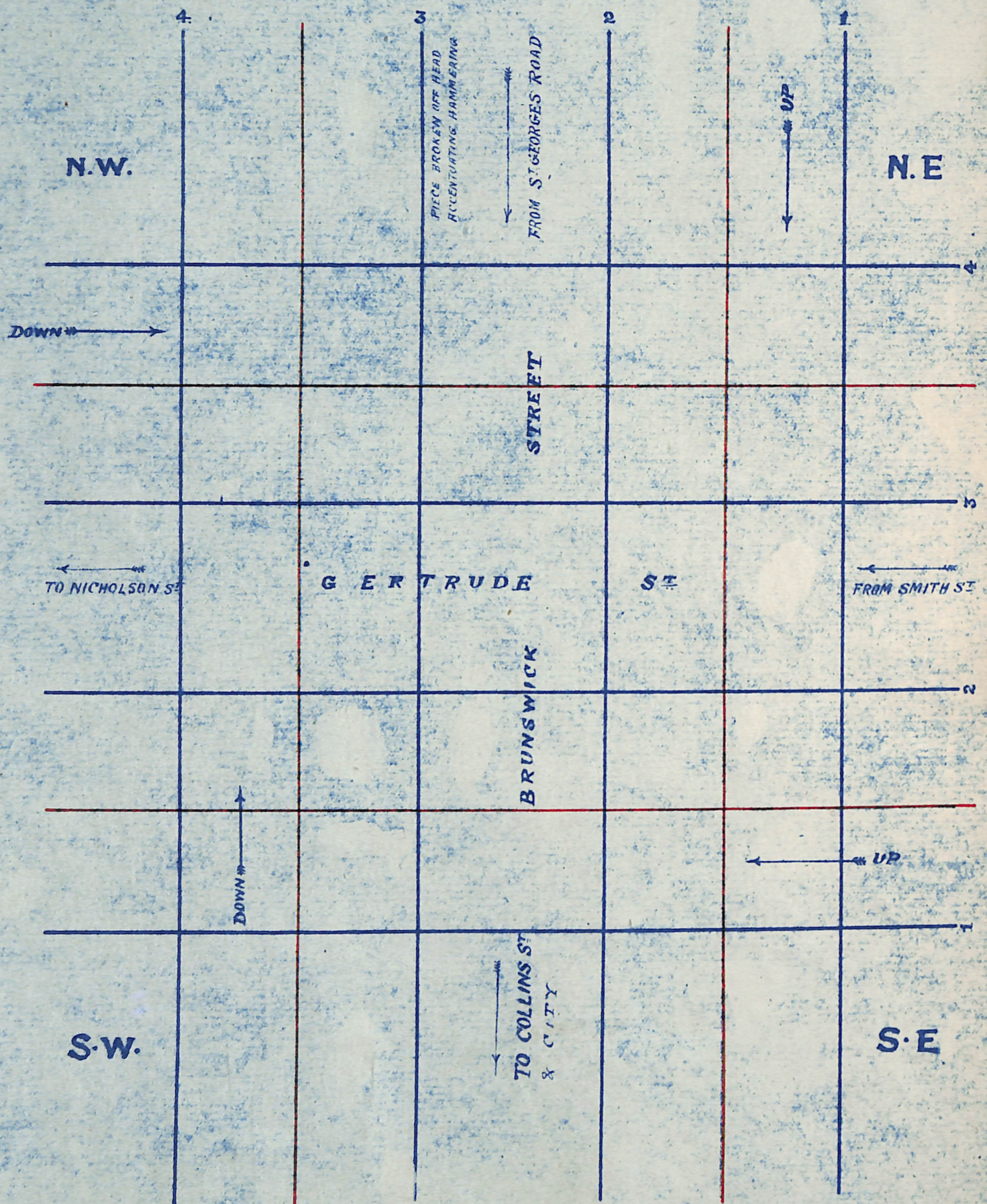
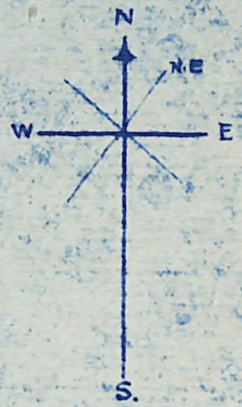
<u>No. 1 Rail</u>	<u>No. 2</u>	<u>No. 3</u>	<u>No. 4.</u>
S.W. .225"	S.W. .194"	N.W. .250"	.147"
S.E. .186"	S.E. .178"	N.E. .194"	.171"
<u>Super-Elevation:</u>		<u>Super-Elevation:</u>	
S.W. 0 (Rolling Place)		N.W. 1/8" (Rolling Place)	
S.E. 3/4" do		N.E. 1" do	

Date first Inspected - April 26th.1916.

Date Last Inspected - July 4th., 1916.

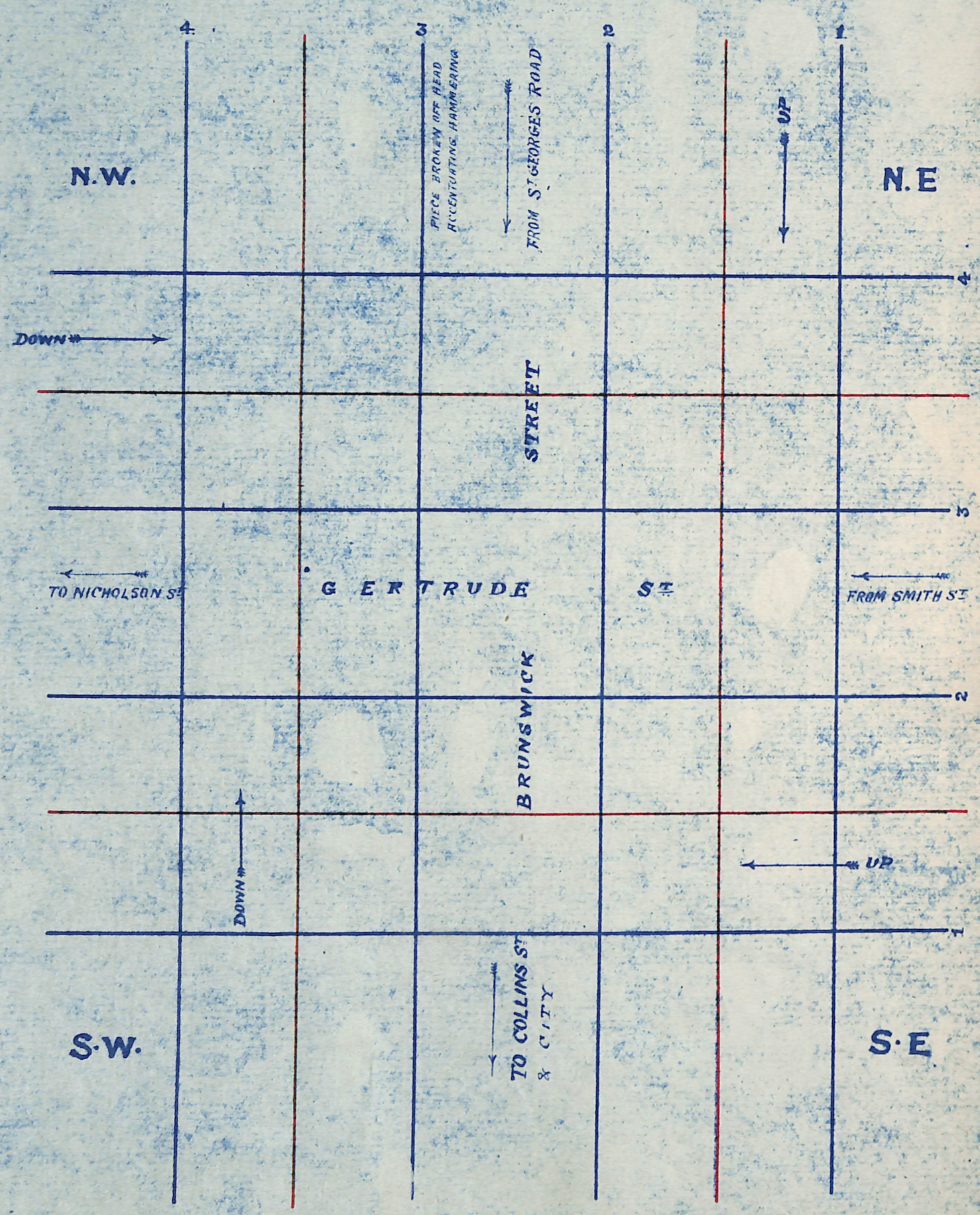
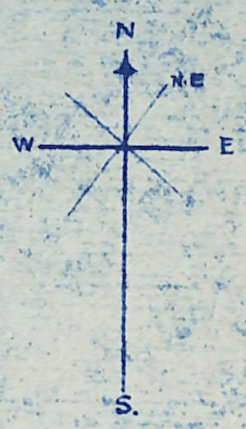
RIGHT ANGLE CROSSING JUNCTION OF GERTRUDE & BRUNSWICK STREETS

LINE 2.
PLAN. C. 6.



RIGHT ANGLE CROSSING JUNCTION OF GERTRUDE & BRUNSWICK STREETS.

LINE 2.
PLAN. C. 6.



CURVE & JUNCTION

AT JUNCTION OF BRUNSWICK STREET WITH VICTORIA PARADE.

LINE 2.
PLAN C-7

LINE 2.

DESCRIPTION & 7.

CURVE and JUNCTION at JUNCTION of BRUNSWICK STREET with VICTORIA PARADE.

1. The Checks of Special check-rails (Nos. 2 and 4 Rails Brunswick Street) are worn, and in places badly so, and No. 2 rail (opposite Letter Pillar Box) is almost bottoming, also No. 3 in places. The check-rail of No. 4 Rail is loose, and in many places ineffective. The sides of heads of opposite rails (Nos. 1 and 3) are grooved, as a result of the above check-wear.
2. Two of the Heels of Points are of loose fit and rocking. Tongues are worn to varying amounts. The Tread of one of the point-castings is diagonally grooved.
3. At the crossing intersections, also at intersections of slot-rails with tram-rails, hammering is taking place to varying degrees.
4. Nine of the joints of Tram-rails, adjacent to rail-crossings and Points are wide (varying from $1/8"$ to $5/16"$) and, in several cases, hammered. There is also hammering of some of the other joints to varying degrees.

CLEARANCES taken April 14th. 1916 between flange and bottom of groove.

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

<u>No. 1 Rail</u>	<u>No. 2</u>	<u>No. 3</u>	<u>No. 4</u>
.070"	.279"	.031"	.279"
<u>Super-Elevation</u>	<u>Super-Elevation</u>		
$2\frac{3}{4}"$	$1\frac{1}{8}"$		

DATES OF CURVE RAIL RENEWALS -

Full Renewal both Tracks, Nos. 1, 2, 3 and 4 Rails - June 1897.

24 feet of No. 1 rail renewed - June 30th. 1914. *on Tread of Point-Casting*

NOTE - Since the above Junction was first inspected and particulars noted, the old Point-Casting at intersection of No. 4 Rail Victoria Parade, and No. 1 Rail Brunswick Street, has been taken up and removed, and a new Point-Casting fixed in lieu of same, on June 25th. 1916.

H D:

I D:

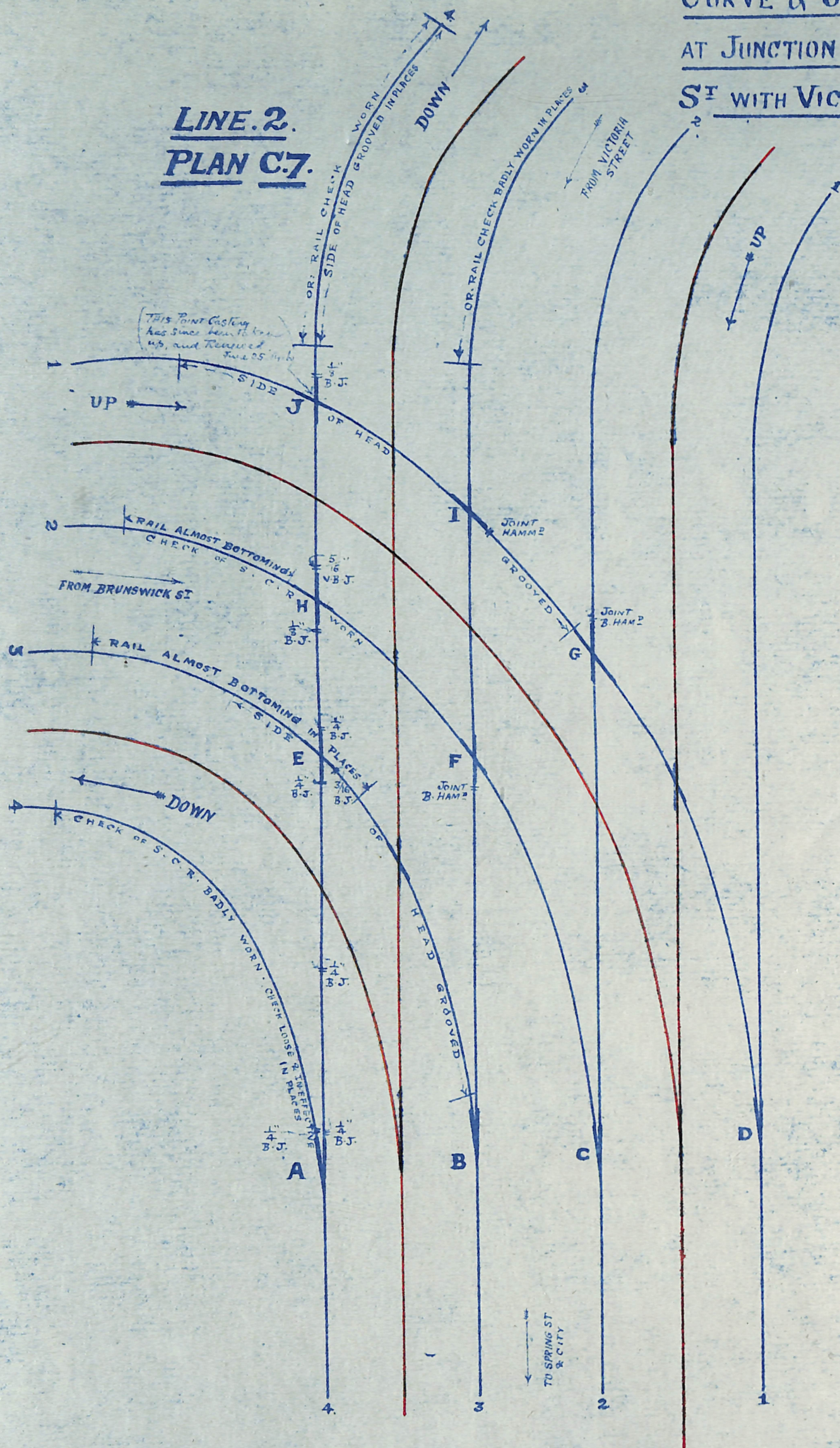
J D:

Date First Inspected - April 25th. 1916.

Date last Inspected - July 4th. 1916.

CURVE & JUNCTION AT JUNCTION OF BRUNSWICK ST WITH VICTORIA PARADE.

LINE. 2. PLAN C.7.



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|----|------------------------------------|--|
| A. | <u>Lipped Heel Rocking.</u> | <u>Tongue Worn</u> |
| B. | <u>Ordinary Heel Rocking.</u> | <u>Tongue Worn. Diagonal grooving on tread of Point-Casting.</u> |
| C. | <u>Rocking.</u> | <u>Tongue Worn.</u> |
| D. | <u>Rocking.</u> | <u>Worn.</u> |
| E. | <u>Hammering at Intersections.</u> | |
| F. | D° | D° |
| G. | D° | D° |
| H. | D° | D° |
| I. | D° | D° |
| J. | D° | D° |