

4 VERONICA STREET / WARD STREET

A new bridge will be constructed at the location of the current rail crossing where Ward St becomes Veronica St. The centreline of the bridge pavement will be 360mm higher than the existing road centreline to allow for electrification clearance under the bridge. The horizontal alignment of the road does not alter. The vertical alignment of the road changes for approximately 30m either side of the bridge. There will be some effect to the access and frontage of properties along this length. Refer to Drawings 3910415-C-200 to 202 in Appendix A. The anticipated effects on these properties and proposed remedial actions are listed in the following sections.



4.1 LOT 2 DP 191302 14 WARD STREET

4.1.1 Address (See Drawing 3910415-C-207 Appendix B)

- 14 Ward St, south of the rail corridor.



4.1.2 Realignment effects on Property

- The driveway gradient will change to account for the 260mm rise at the kerb line.
- The gradient on the driveway will be similar to existing but the driveway will need to be built up by 400 mm and will tie into existing level 12m from the boundary.
- The levels of the driveways of 12 Ward and 14 Ward have been designed based on a single control string. The property boundary follows the centreline of the driveway.
- The private drainage will be altered by moving the existing catchpit to the new low point in the driveway. All new surfaces will be graded towards this catchpit.
- Drainage from the road into the property should not change. The high point at the entrance of the driveway will be positioned 100mm above the new road edge level on the property boundary.

4.1.3 Remedial Works

- The driveway design, where possible, complies with *WCC SD 3.15 maximum vehicle crossing profile*. Where this was not achievable the design has been completed adopting the ACC standard *vehicle entrance vertical - 99% car Plan No. 12908/408* to ensure a 99% car does not belly out or scrape the front or rear on any change in grade. Refer to Appendix C for the standard details.
- The existing driveway concrete vehicle crossing will be replaced and the remainder of the driveway resealed up to the property boundary and a further 12m into the property.
- A new gate will be constructed across the access and a new hurricane mesh fence erected along the northern boundary.
- The catchpit will be relocated to the new low point in the driveway.

4.1.4 Access Required for Works

- Access to the property will be required by the contractor to:
 1. Realign driveway.
 2. Construct fence.
 3. Construct gate.
 4. Move the catchpit and lay a new lead.

4.2 LOT 1 DP 191302 12 WARD STREET

4.2.1 Address (See Drawing 3910415-C-207 Appendix B)

- 12 Ward St.



4.2.2 Realignment effects on Property

- The driveway gradient will change to account for the 260mm rise at the kerb line.
- The gradient on the driveway will be similar to existing but the driveway will need to be built up by 400 mm and will tie into the existing level 13.5m from the boundary.
- The levels of the driveways of 12 Ward and 14 Ward have been designed based on a single control string. The property boundary follows the centreline of the driveway.
- Drainage from the road into the property should not change. The high point at the entrance of the driveway will be positioned 100mm above the new road edge level on the property boundary.

4.2.3 Remedial Works

- The driveway design, where possible, complies with *WCC SD 3.15 maximum vehicle crossing profiles*. Where this was not achievable the design has been completed adopting the ACC standard *vehicle entrance vertical - 99% car Plan No. 12908/406* to ensure a 99% car does not belly out or scrape the front or rear on any change in grade. Refer to Appendix C for the standard details.
- The existing driveway concrete vehicle crossing will be replaced and the remainder of the driveway concreted up to the property boundary and a further 12m into the property.
- The gate across the access will need to be reinstated along with the hurricane mesh security fence along the boundary. These will be reinstated to match the existing.
- Any car parking marked in the driveway will be repainted.

4.2.4 Access Required for Works

- Access to the property will be required by the contractor to:
 1. Realign driveway.
 2. Replace fence.
 3. Reinstate gate.
 4. Repaint car parking.

4.3 LOT 40 DP 7517 13 WARD STREET

4.3.1 Address (See Drawing 3910415-C-208 Appendix E)

- 13 Ward St, south of the rail corridor.



4.3.2 Realignment effects on Property

- The driveway gradient will change to account for the 40mm rise at the kerb line.
- The gradient on the driveway will be similar to existing and all level changes to the driveway will occur within the road corridor.
- The levels of the driveways of 13 Ward and 11 Ward have been designed based on a single control string. The property boundary is south of the centreline of the driveway.
- No access gates will be affected.
- Drainage from the road into the property should not change. Although the kerb line has been raised the high point at the entrance to the driveway will be positioned 100mm above the road edge to prevent runoff.

4.3.3 Remedial Works

- The driveway design, where possible, complies with *WCC SD 3.15 maximum vehicle crossing profile*. Where this was not achievable the design has been completed adopting the ACC standard *vehicle entrance vertical - 99% car Plan No. 12908/408* to ensure a 99% car does not belly out or scrape the front or rear on any change in grade. Refer to Appendix C for the standard details.
- The existing driveway concrete vehicle crossing will be replaced and the remainder of the driveway concreted up to the property boundary.

4.3.4 Access Required for Works

- Access to the property will be required by the contractor to:
 1. Construct driveway.

4.4 LOT 39 DP 7517 11 WARD STREET

4.4.1 Address (See Drawing 3910415-C-208 Appendix B)

- 11 Ward St



4.4.2 Realignment effects on Property

- The driveway gradient will change to account for the 40mm rise at the kerb line.
- The gradient on the driveway will be similar to existing and all level changes to the driveway will occur within the road corridor.
- The levels of the driveways of 13 Ward and 11 Ward have been designed based on a single control string. The property boundary is south of the centreline of the driveway.
- No access gates will be affected.
- Drainage from the road into the property should not change. Although the kerb line has been raised the high point at the entrance to the driveway will be positioned 100mm above the road edge to prevent runoff.

4.4.3 Remedial Works

- The driveway design, where possible, complies with *WCC SD 3.15 maximum vehicle crossing profile*. Where this was not achievable the design has been completed adopting the ACC standard *vehicle entrance vertical - 99% car Plan No. 12908/408* to ensure a 99% car does not belly out or scrape the front or rear on any change in grade. Refer to Appendix C for the standard details.
- The existing driveway concrete vehicle crossing will be replaced and the remainder of the driveway concreted up to the property boundary.

4.4.4 Access Required for Works

- Access to the property will be required by the contractor to:
 1. Construct driveway.

4.5 LOT 12 DP 41293 1 VERONICA STREET

4.5.1 Address (See Drawing 3910415-C-209 Appendix B)

- 1 Veronica St, north of the rail corridor.



4.5.2 Realignment effects on Property

- The driveway gradient will change to account for the 200mm rise at the kerb line.
- The existing driveway is steep with a sudden grade change at the road edge. The road alignment changes will not increase the slope on the driveway but will remove the change in grade at the road edge and flatten the existing crest of the driveway. The driveway regrading will extend approx 1m into property.
- No access gates will be affected.
- The existing retaining wall along the western boundary will need to increase in height by approximately 300mm. The existing masonry retaining wall along the southern boundary will be replaced by a higher masonry retaining wall.
- Drainage from the road into the property may change as the 100mm crest at the top of the driveway will be smoothed out. There will still be a 40mm step to provide a kerb line. Stormwater from a 125 m² area (centreline of the bridge to driveway and centre line of the road to kerb) may overtop this 40mm in larger storms. The entrance to the building is raised and an existing catchpit intercepts runoff on the southern side of the driveway.

4.5.3 Remedial Works

- The driveway design, where possible, complies with WCC SD 3.15 *maximum vehicle crossing profile*. Where this was not achievable the design has been completed adopting the ACC standard *vehicle entrance vertical - 99% car Plan No. 12905/408* to ensure a 99% car does not belly out or scrape the front or rear on any change in grade. Refer to Appendix C for the standard details.
- The existing driveway concrete vehicle crossing will be replaced and the remainder of the driveway resealed up to the property boundary and a further 1m into the property.
- Increase the height of the retaining wall along the western boundary.
- Reconstruct the retaining wall along the southern boundary

4.5.4 Access Required for Works

- Access to the property will be required by the contractor to:
 1. Realign driveway.
 2. Construct retaining walls.

5 APPENDICES

5.1 Appendix A – Drawings:

3910415-C-180 Rev A –Portage Road Setout & Grading Plan and Longsection
3910415-C-181 Rev C –Portage Road Construction Detail Plan and Cross Section
3910415-C-182 Rev A –Portage Road Detailed Cross Sections Sheet 1 of 2
3910415-C-183 Rev A –Portage Road Detailed Cross Sections Sheet 2 of 2
3910415-C-200 Rev A –Veronica Street Setout & Grading Plan and Longsection
3910415-C-201 Rev A – Veronica Street Construction Detail Plan and Cross Section
3910415-C-202 Rev A –Veronica Street Detailed Cross Sections Distance 70 to 145m

5.2 Appendix B – Drawings:

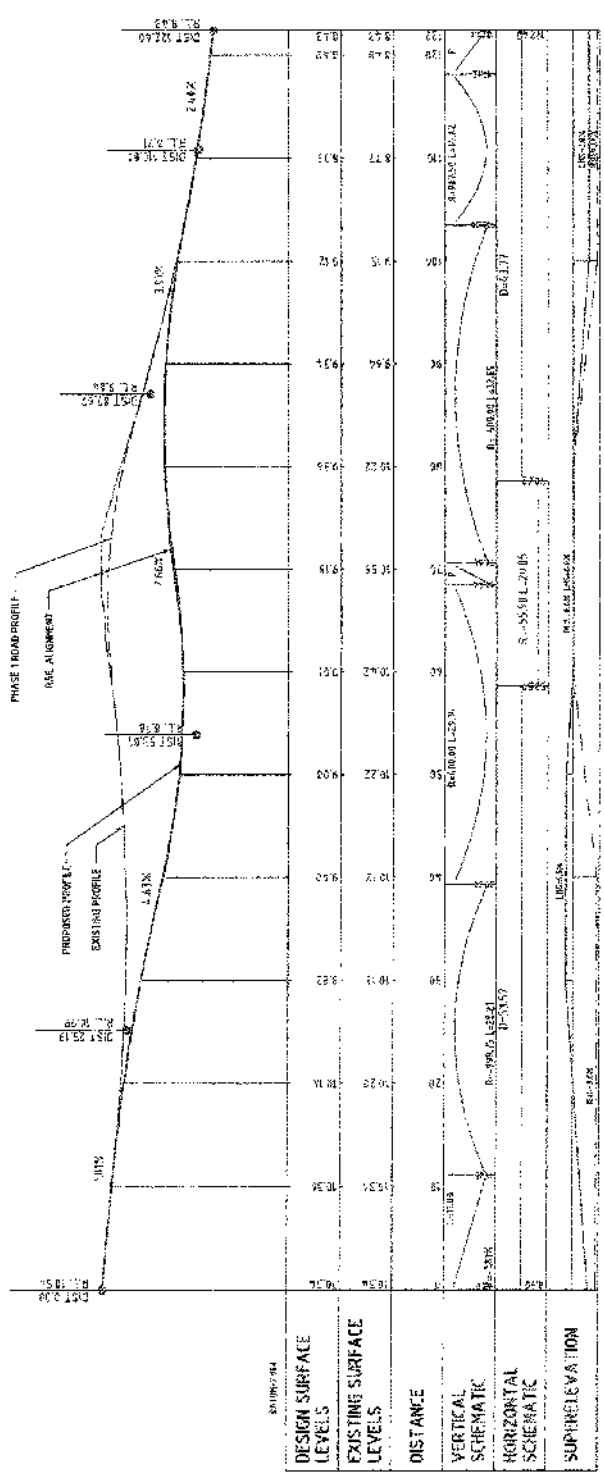
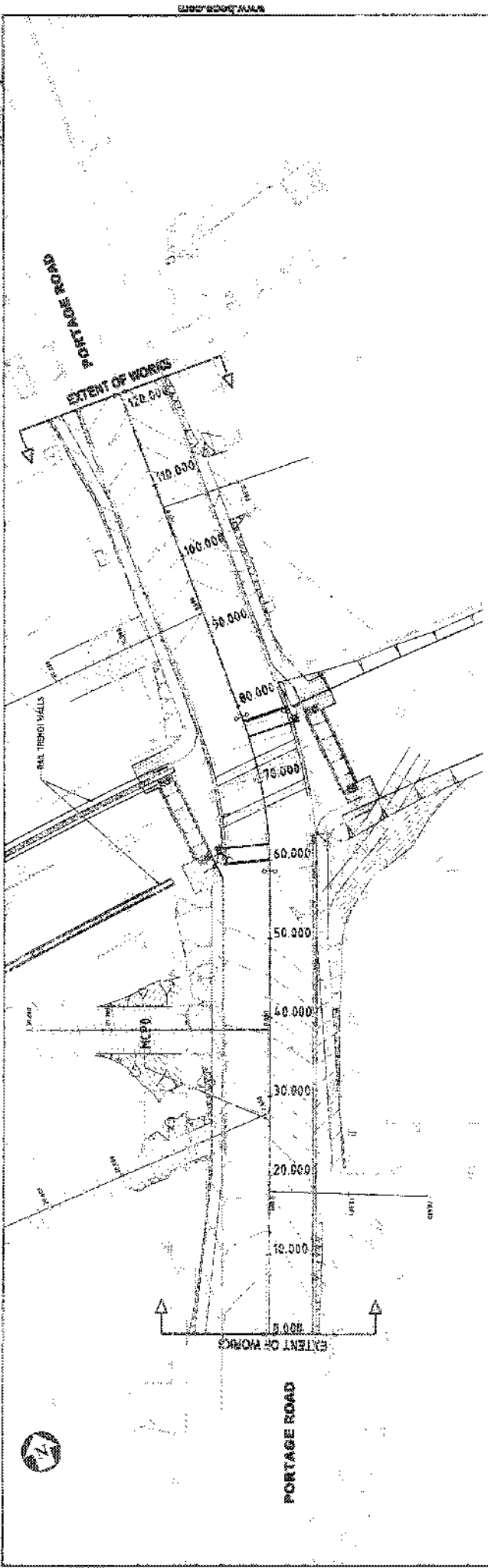
3910415-C-188 Rev A –No.41 Portage Road Driveway Regrading Plan and Longsection
3910415-C-189 Rev A –No.41 Portage Road Driveway Regrading Plan and Longsection
3910415-C-190 Rev A –No.37 Portage Road Driveway Regrading Plan and Longsection
3910415-C-191 Rev A –No.36 Portage Road Driveway Regrading Plan and Longsection
3910415-C-192 Rev B –No.34D Portage Road Driveway Regrading Plan and Longsection
3910415-C-207 Rev A –No.12 and 14 Ward Street Driveway Regrading Plan and Longsection
3910415-C-208 Rev A –No.13 Ward Street Driveway Regrading Plan and Longsection
3910415-C-209 Rev A –No.1 Veronica Street Driveway Regrading Plan and Longsection

5.3 Appendix C – Standard Details:

WCC SD 3.15: Maximum Vehicle Crossing Profile
ACC 12908/408: Vehicle Entrance Vertical – 99% Car

APPENDIX A

ASO



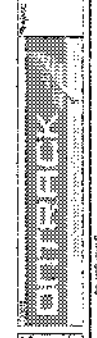
LONGITUDINAL SECTION ON CONTROL STRING MCHP
SCALE HORIZONTAL 1:250 VERTICAL 1:50

NOT FOR CONSTRUCTION

PROJECT NO. 391945-C-180
DATE: A

PORTAGE ROAD
SECTION & GRADING PLAN AND
LONGSECTION

DART 4
NEW LYNN RAIL TRENCH

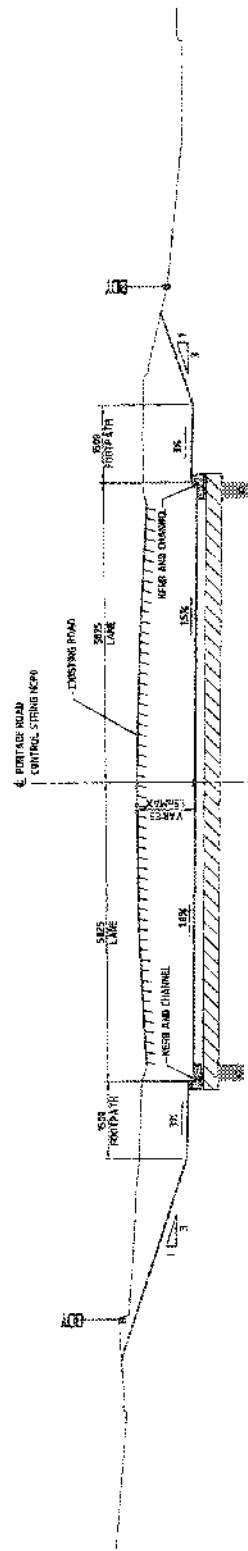
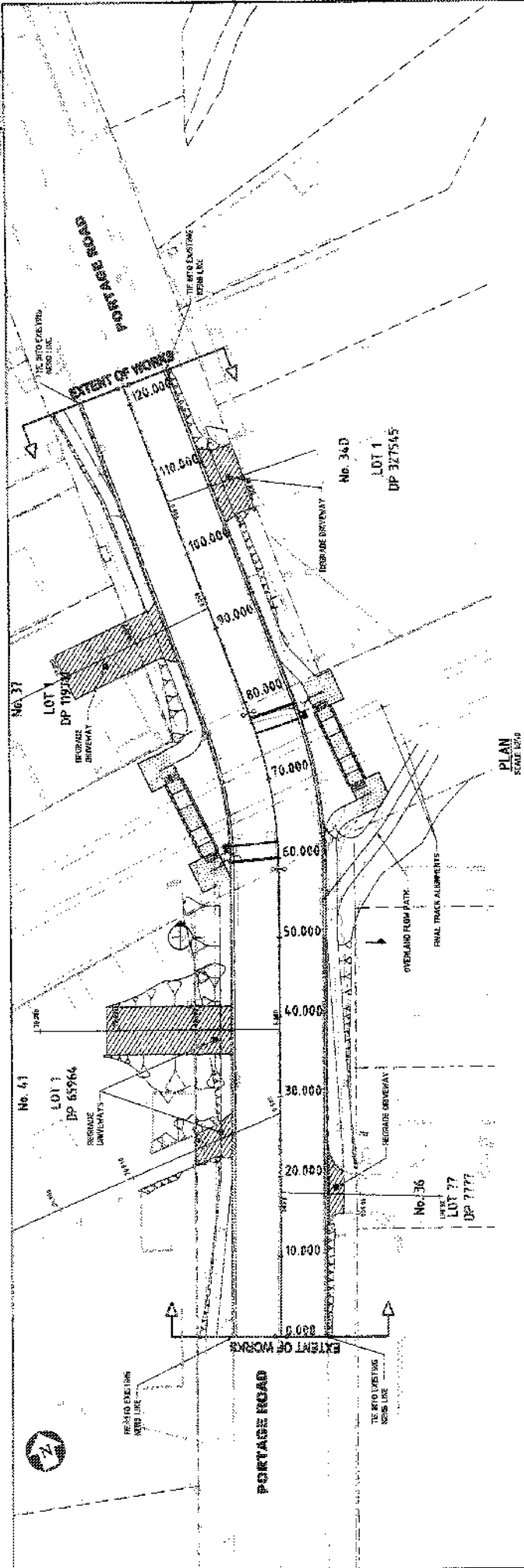


Project	391945-C-180
Client	Metrolinx
Design	URS
Drawn	URS
Checked	URS
Approved	URS



Author	URS
Checker	URS
Approver	URS
Date	2015-08-10

AS1



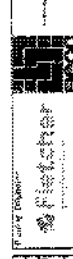
FOR INFORMATION
NOT FOR CONSTRUCTION

PROJECT: PORTAGE ROAD
CONSTRUCTION DETAIL PLAN
AND CROSS SECTION

DART 6
NEW LYNN RAIL TRENCH

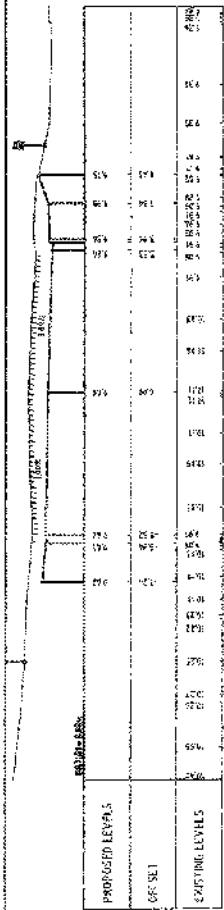


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3	10/15/15	W.B.	ISSUED FOR CONSTRUCTION
4	10/15/15	W.B.	ISSUED FOR CONSTRUCTION
5	10/15/15	W.B.	ISSUED FOR CONSTRUCTION

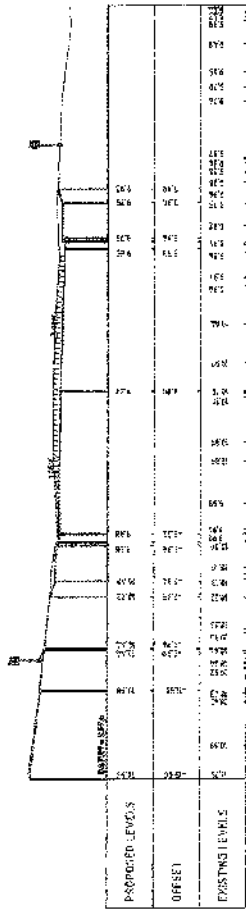


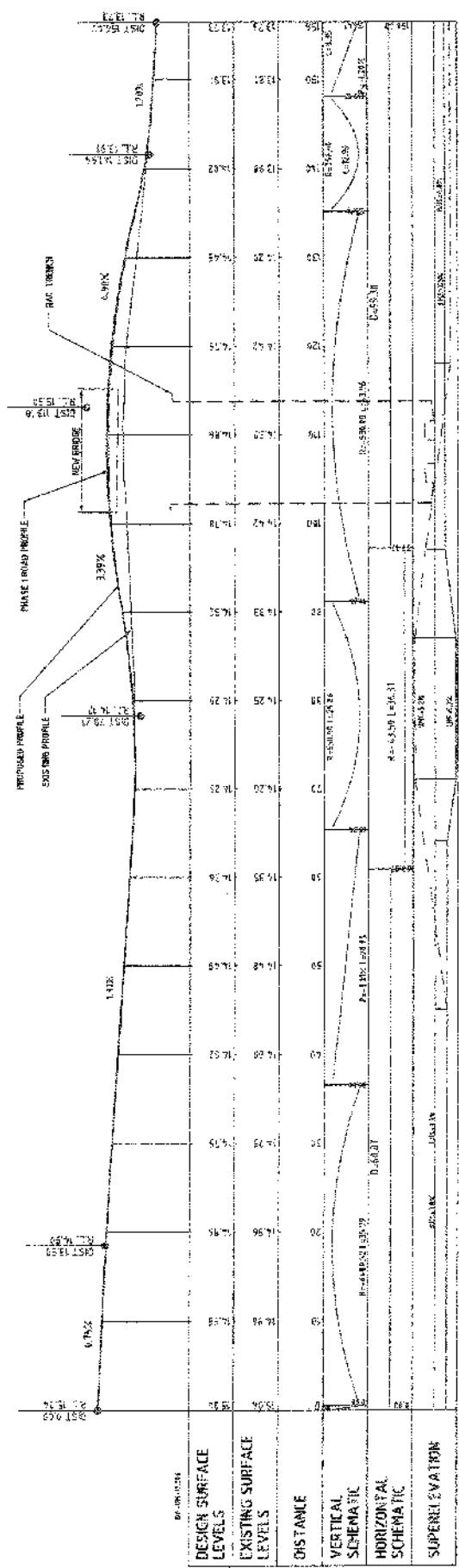
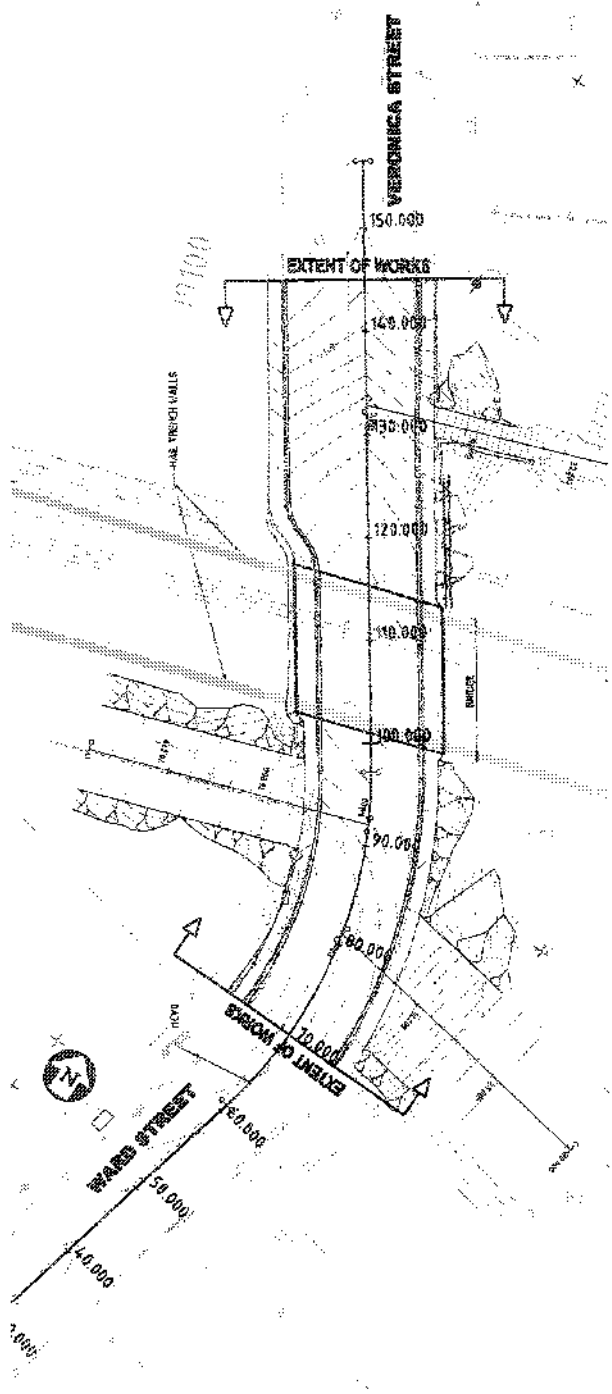
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4	10/15/15	W.B.	ISSUED FOR CONSTRUCTION
5	10/15/15	W.B.	ISSUED FOR CONSTRUCTION

A52



DISTANCE 84.00





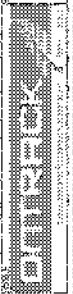
LONGITUDINAL SECTION OF LENTON STREET MEVO
SCALE: HORIZONTAL 1:500 VERTICAL 1:50

FOR INFORMATION
ACT FOR CONSTRUCTION

PROJECT NO. 5410415-C-200
DATE 1/15/15

VERONICA STREET
SCHEMATIC GRADING PLAN AND
LONGITUDINAL SECTION

DARTS
NEW LYNN RAIL TRENCH



NO.	DATE	BY	CHKD.	APP'D.	DESCRIPTION
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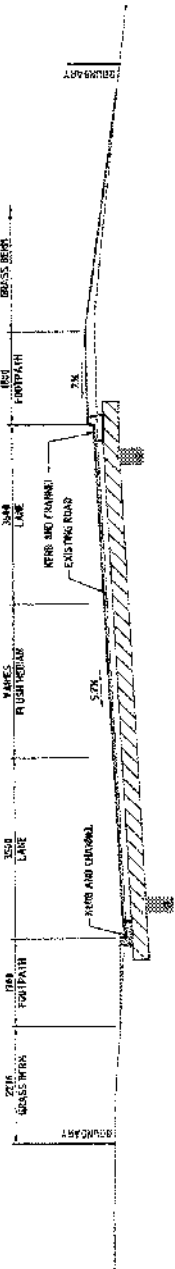
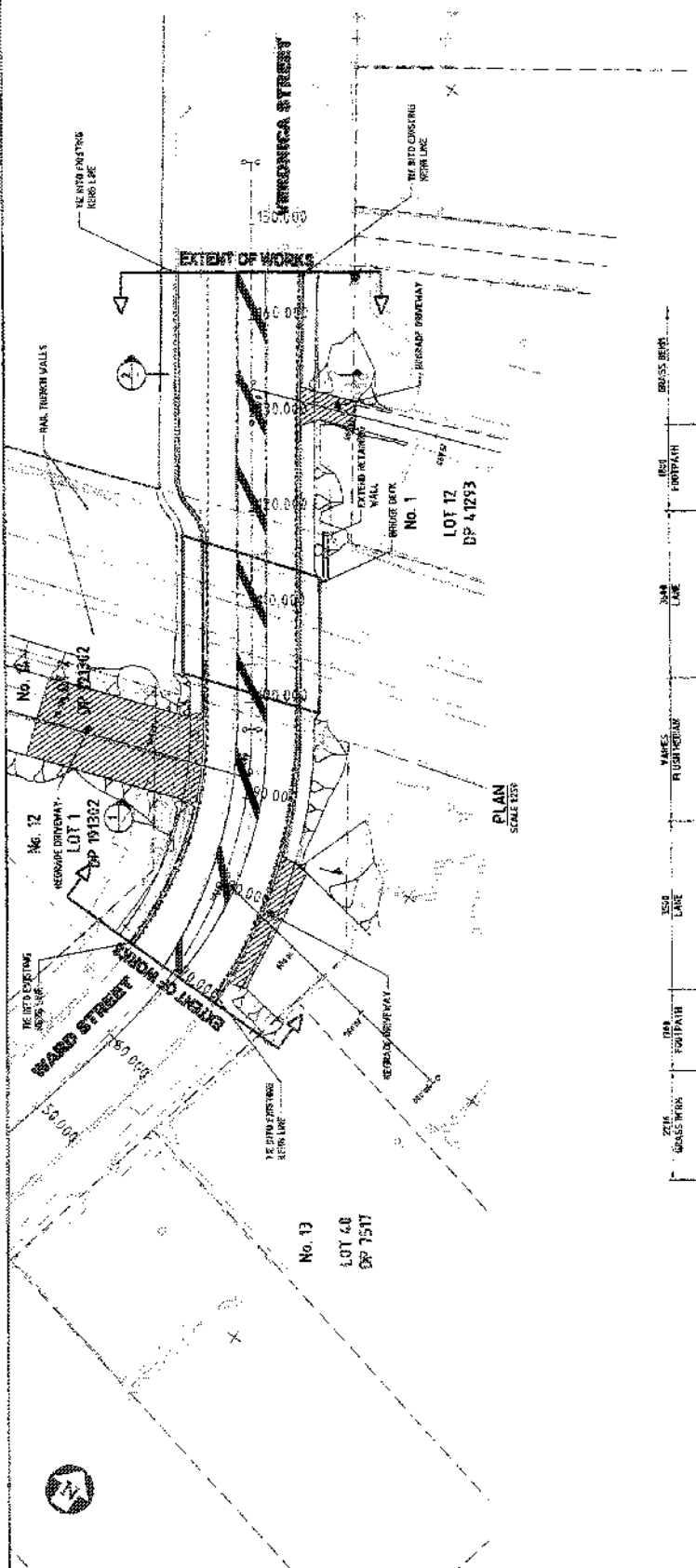
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DATE	1/15/15
PROJECT NAME	VERONICA STREET SCHEMATIC GRADING PLAN AND LONGITUDINAL SECTION
CLIENT	DARTS NEW LYNN RAIL TRENCH
DESIGNER	J. SMITH
CHECKER	M. JONES
APPROVER	D. BROWN

ASS

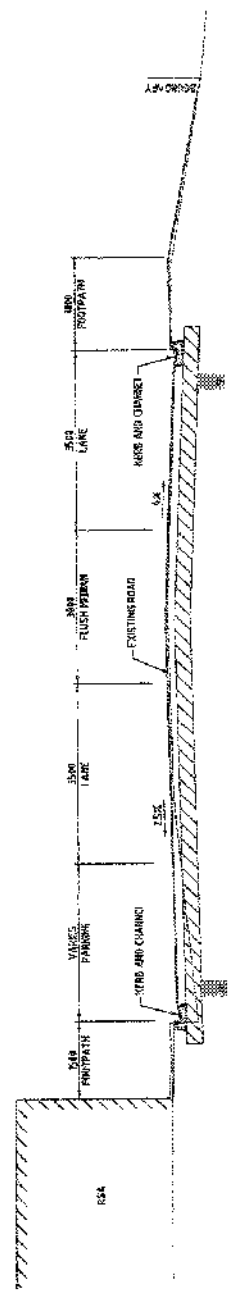
FOR INFORMATION
NOT FOR CONSTRUCTION

Project: VERNONIA STREET
Sheet: 390616-C-201
Title: VERNONIA STREET
CONSTRICTION DETAIL PLAN AND
CROSS SECTIONS

Part 5
NEW LYNN RAIL TRENCH



1 TYPICAL CROSS SECTION - WARD STREET
1" = 150'



2 TYPICAL CROSS SECTION - VERNONIA STREET
1" = 150'



Original	Scale	Date	Drawn	Checked	By

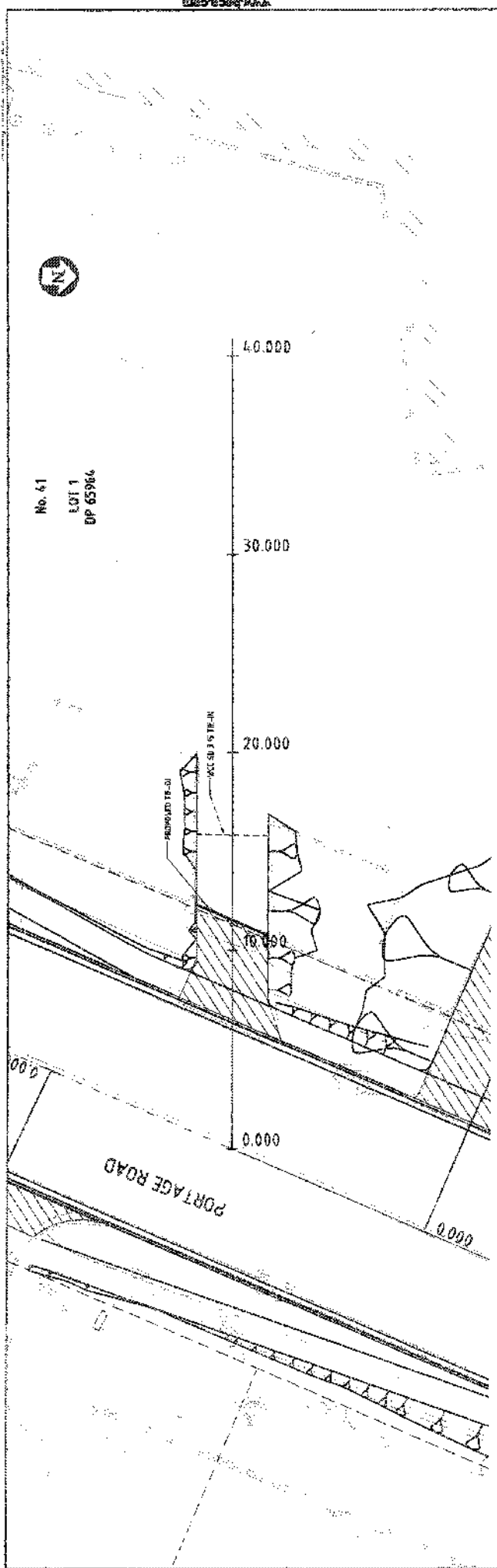


Project	
Sheet	
Date	
Scale	

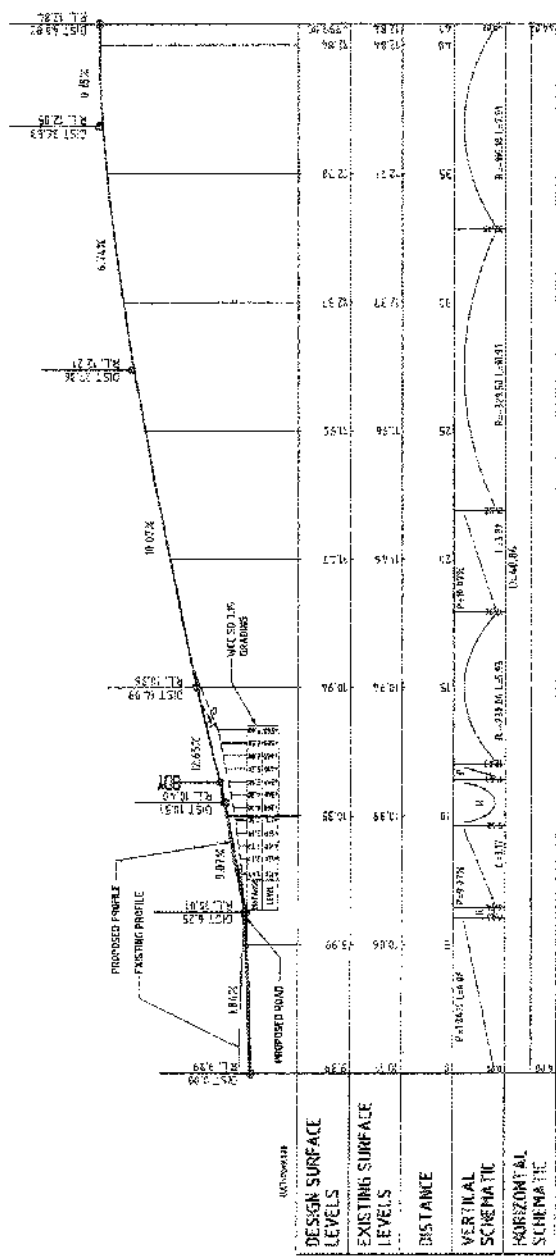
AS6

APPENDIX B

No. 41
LOT 1
DP 65966



NOTES
ALL DRIVEWAY SHALL BE
CONSTRUCTED TO VCL 50 3/11

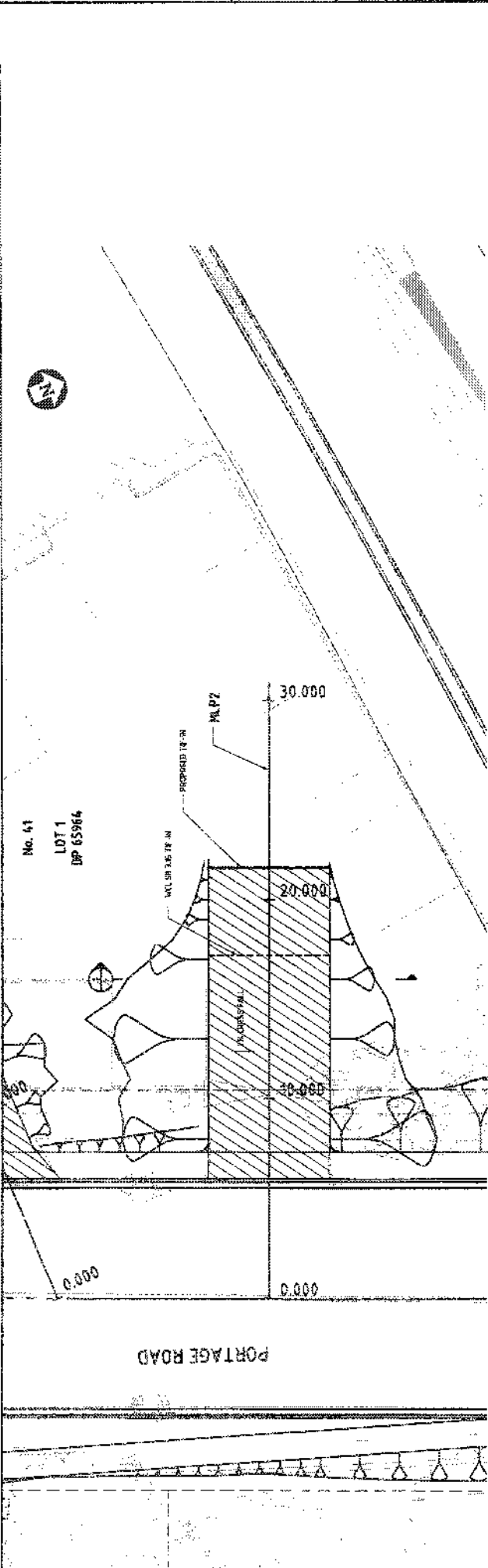


LONGITUDINAL SECTION ON CONTROL STRING M.P.1
SCALE: HORIZ. 1"=40' VERT. 1"=4'

**FOR INFORMATION
NOT FOR CONSTRUCTION**

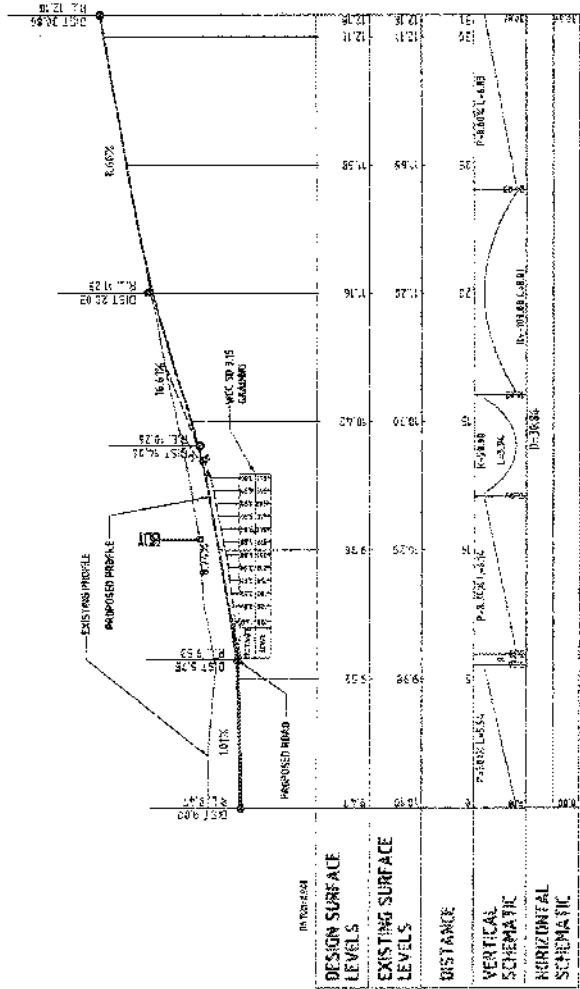
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 Scale: L-188
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 Checker: [Signature]
 Engineer: [Signature]
 Title: [Title]
 Date: [Date]
 Project No: [Project No]
 Drawing No: [Drawing No]
 Revision: [Revision]
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 Date: [Date]

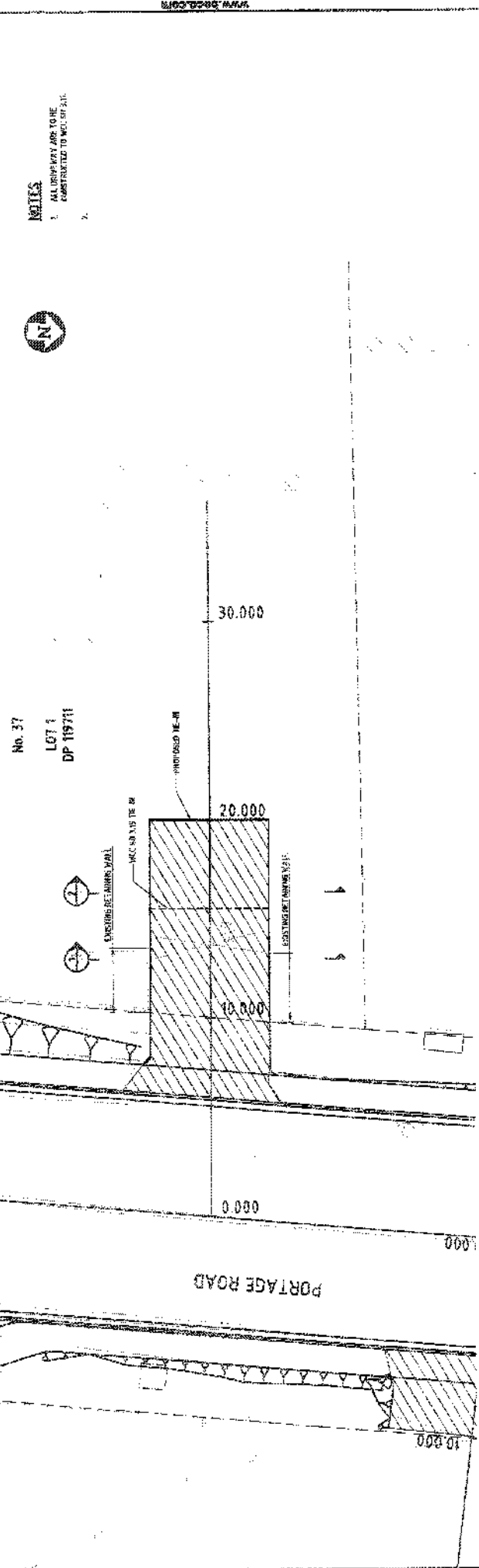
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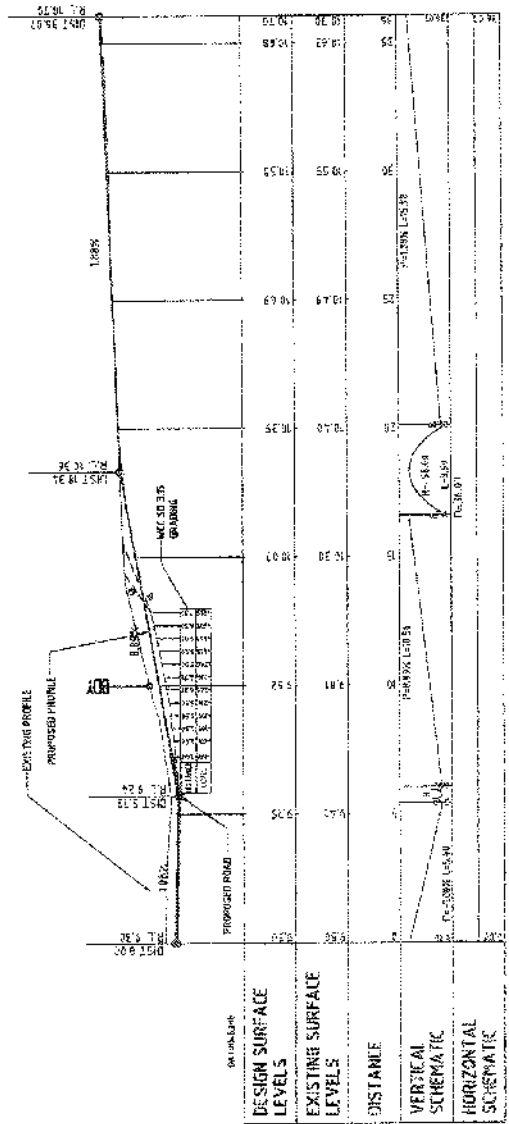
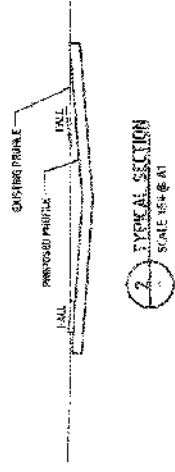
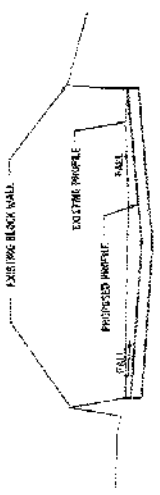
NOTES

1. ALL DRIVEWAYS ARE TO BE CONSTRUCTED TO MCC TO 3.0.
- 2.





NOTES
 1. ALL DRIVEWAY ARE TO BE CONSTRUCTED TO MEET SITE.



FOR INFORMATION NOT FOR CONSTRUCTION

No. 37 PORTAGE ROAD DRIVEWAY READING PLAN AND LONGSECTION

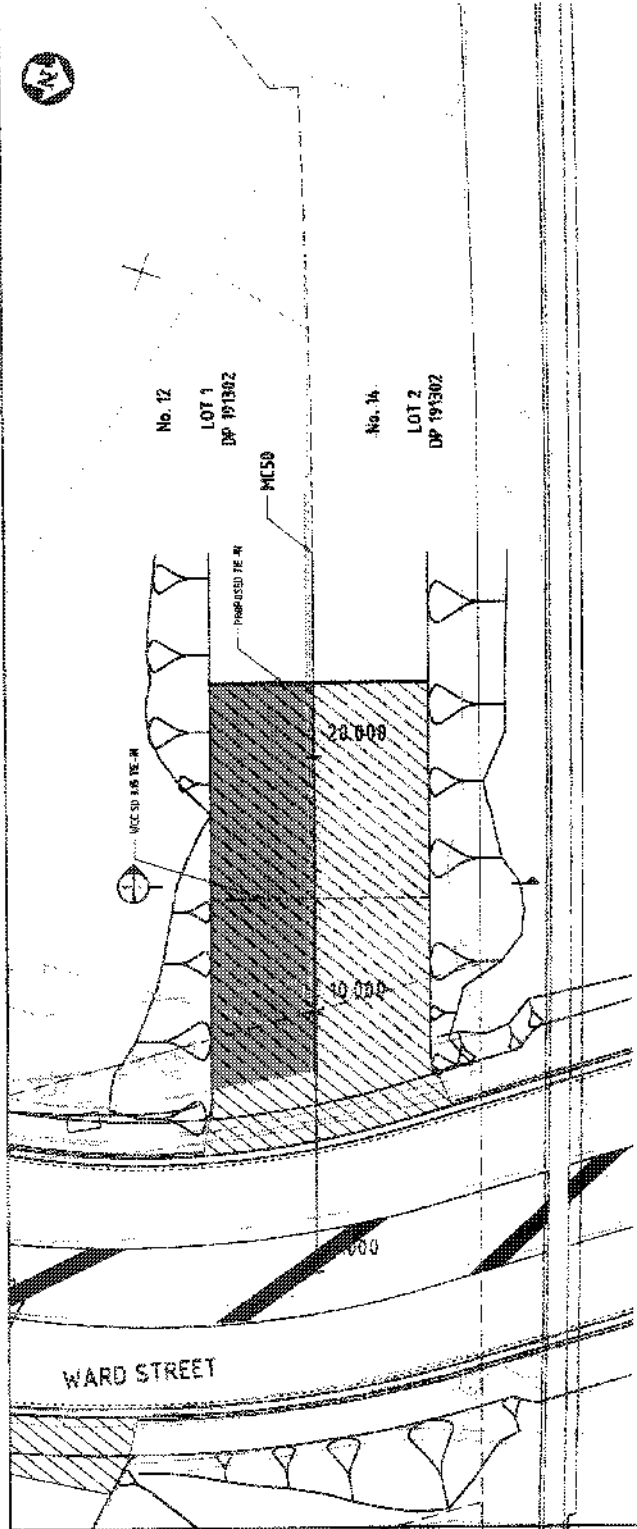
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ENGINEER

PART 6 NEW LYNN RAIL TRENCH

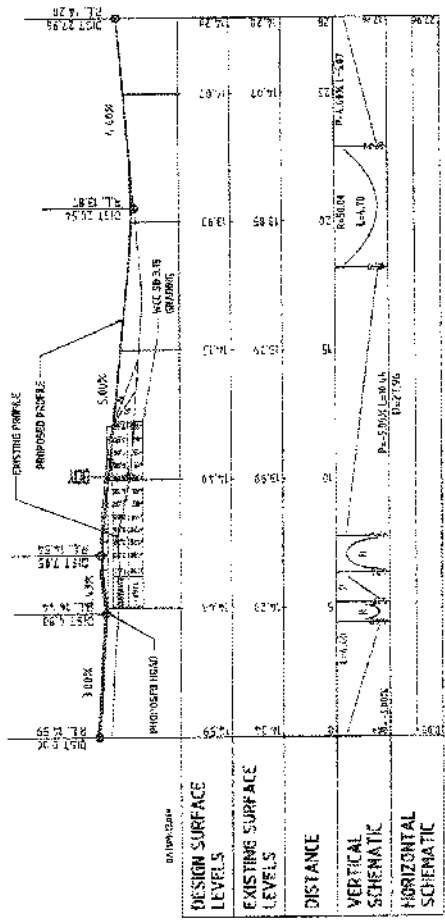
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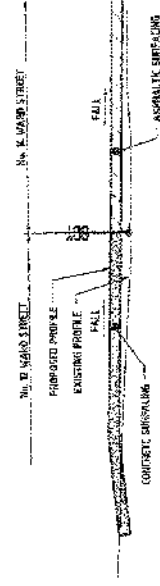


NOTES

1. ALL DRIVEWAY ARE TO BE CONSTRUCTED TO M.C.S.D. 311.
- 2.



LONGITUDINAL SECTION ON CONTROL STRING MCS0
SCALE: HORIZ. 1"=40' VERT. 1"=4'



1. TYPICAL SECTION
SCALE: 3/4"=1'

FOR INFORMATION
NOT FOR CONSTRUCTION

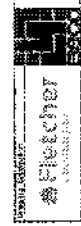
CIVIL
390615-C-207

No. 12 AND 14 WARD STREET
DRIVEWAY REGARDING PLAN
AND CONNECTION

DART 6
NEW LYNN RAIL TRENCH



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Scale	As Shown
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Check	[Name]
Drawn	[Name]
Date	[Date]

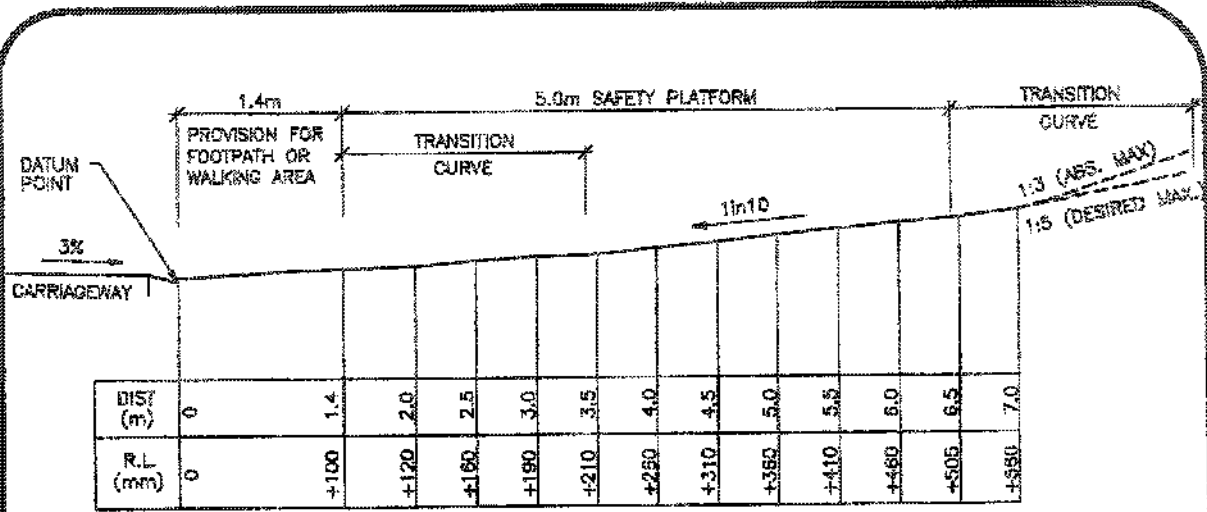


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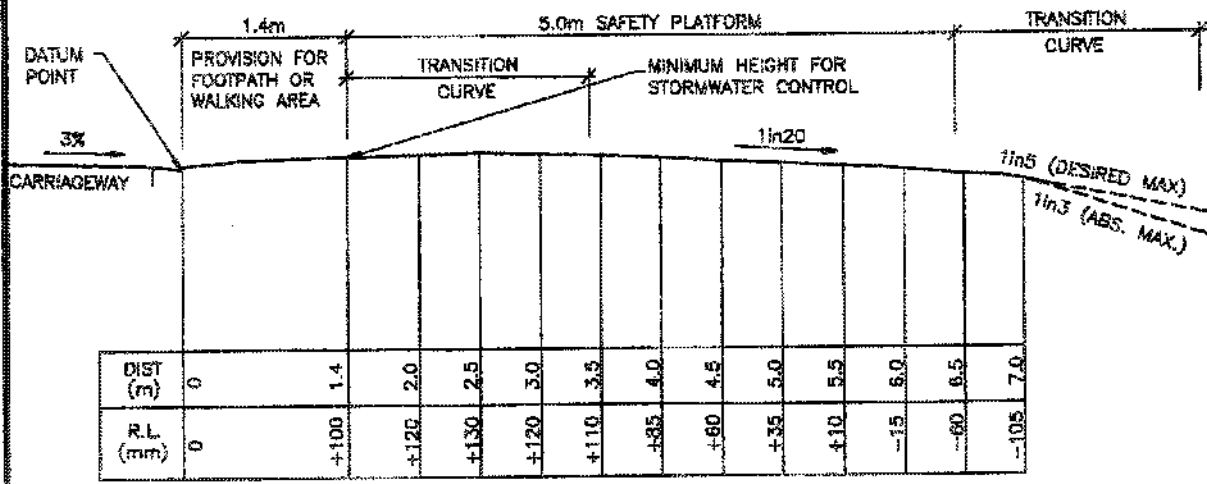
AG4

APPENDIX C

A67



CROSSING SLOPING DOWN TO ROAD
N.T.S.



CROSSING SLOPING UP TO ROAD
N.T.S.

NOTES:

1. These profiles are desired standards and if met achieve required provisions for stormwater control, safety platforms and under vehicle clearance. If they cannot be met due to site topography a full resource consent application is required, where dispensation will be considered.
2. This dwg. shall be read in conjunction with SD 3.10, 3.12, and 3.13.
3. Where a footpath exists away from the road the 5.0m safety platform must be retained behind the path.
4. Datum point = 0.0 channel invert (kerbed) or edge of seal (unkerbed).

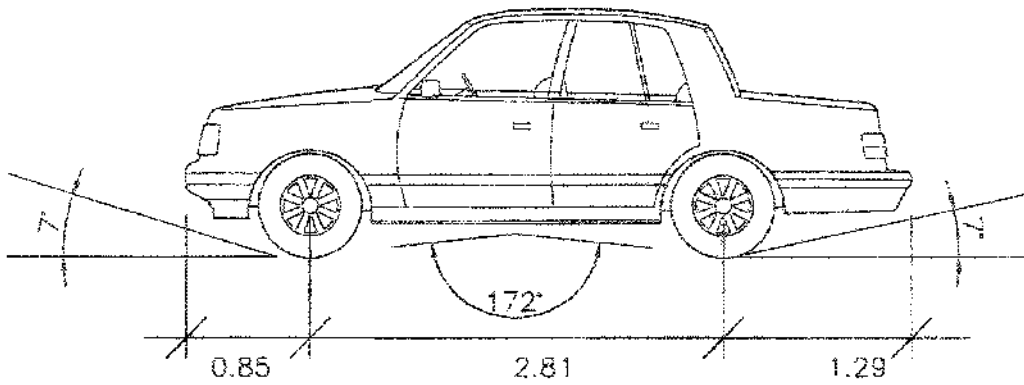
ENGINEERING
STANDARDS MANUAL

ISSUE 3.0
OCTOBER 1999

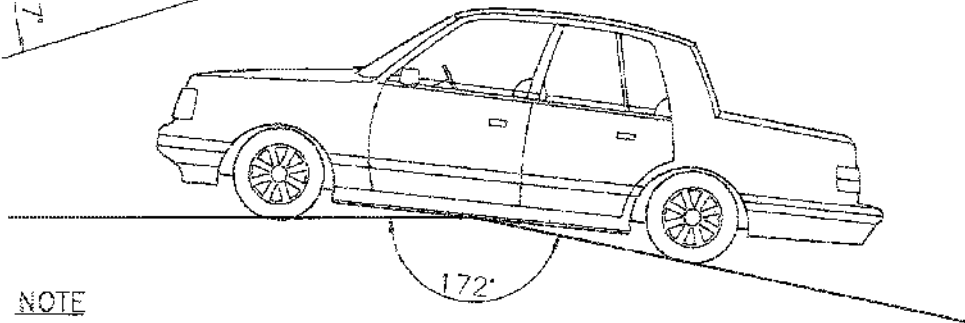
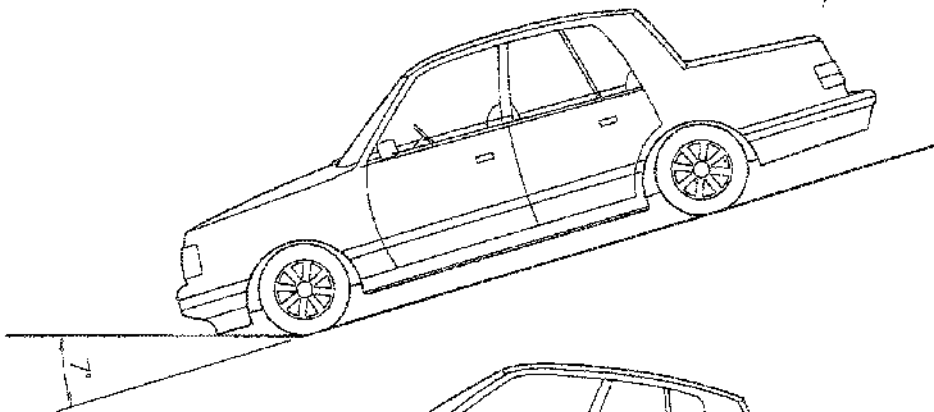
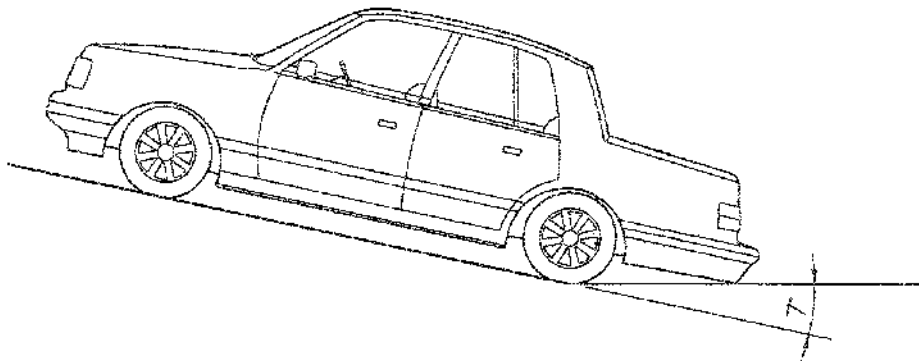
**MAXIMUM VEHICLE
CROSSING
PROFILE**

STANDARD DETAIL.

SD 3.15



99% CAR :m
 WIDTH :1.94



NOTE

The above dimensions have been derived from the 99 percentile car shown in the Auckland City Council District Plan and a road clearance of 100mm as stated in AS 2890.1-1993.

PREPARED BY:



AUCKLAND CITY

AUCKLAND CITY
 Traffic and Roading Services

VEHICLE ENTRANCE
 VERTICAL - 99% CAR

SCALE : 1:50

DRAWN : B.D.

ISSUE DATE : 12.2003

APPROVED :

PLAN No. ISSUE C

12908/408