

NORTH RYDE STATION URBAN ACTIVATION PRECINCT

STATION SITE NORTH

CIVIL WORKS DRAWINGS

SUBMISSION FOR DEVELOPMENT APPROVAL


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C0-06	DEMOLITION PLAN
C1-01	EROSION & SEDIMENT CONTROL PLAN
C1-10	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
C2-01	BULK EARTHWORKS PLAN
C2-02	CIVIL WORKS PLAN - ECRL RESERVE ZONES
C3-02	SITE LAYOUT AND GRADING PLAN
C3-03	SWEPT PATH ANALYSIS PLAN
C3-15	TYPICAL ROAD CROSS SECTIONS
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C10-01	LANDSCAPING PLAN



LOCALITY PLAN
SCALE NTS

**PRINT DRAWING
IN COLOUR**

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Rev.	Revision Description	By.	App.	Date	Rev.	Revision Description	By.	App.	Date
1	ISSUED FOR DEVELOPMENT APPROVAL	JAR	LWM	11.02.14					
2	ISSUED FOR DEVELOPMENT APPROVAL	JAR	LWM	17.02.14					

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 Engineering Consultant


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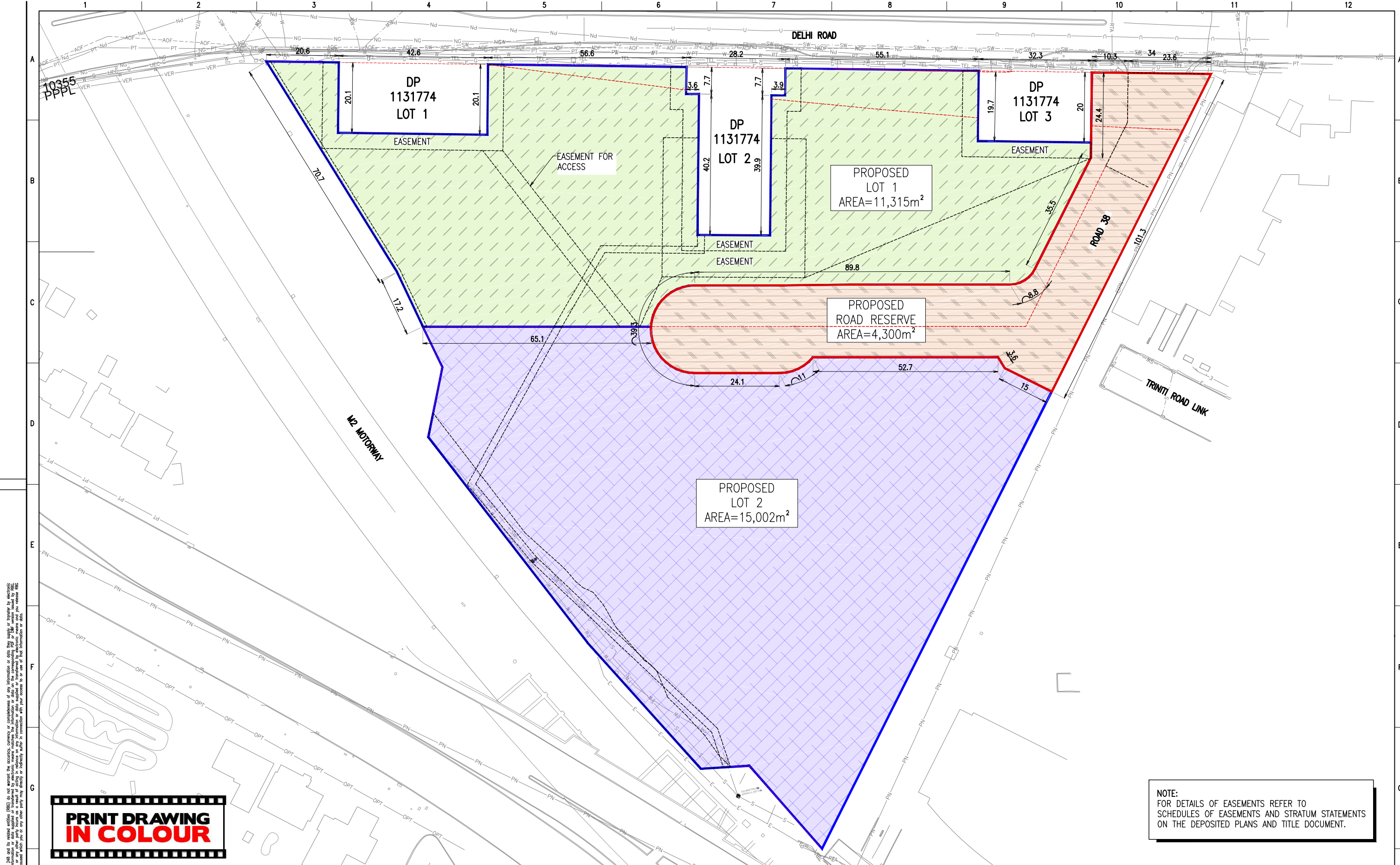
Title

COVER SHEET

Project

**NORTH RYDE STATION SITE NORTH
DEVELOPMENT APPROVAL**


NOT FOR CONSTRUCTION		
Date	Designer	Design Checker
17.02.14	L.RUSSELL	L.MELVILLE
Scale at A1	Drawn	Principal/Project Owner
AS SHOWN	S.MANANDHAR	R.LUCAS
Job Number	Drawing Number	Revision
13656	C0-00	2



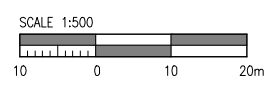
**PRINT DRAWING
IN COLOUR**

NOTE:
FOR DETAILS OF EASEMENTS REFER TO
SCHEDULES OF EASEMENTS AND STRATUM STATEMENTS
ON THE DEPOSITED PLANS AND TITLE DOCUMENT.

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1	ISSUED FOR DEVELOPMENT APPROVAL	SM	LWM	11.02.14					
2	REVISED ISSUE FOR DEVELOPMENT APPROVAL	SM	LWM	11.02.14					
3	REVISED ISSUE FOR DEVELOPMENT APPROVAL	SM	LWM	11.02.14					
4	REVISED ISSUE FOR DEVELOPMENT APPROVAL	SM	LWM	12.02.14					

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Engineering Consultant

Robert Bird Group

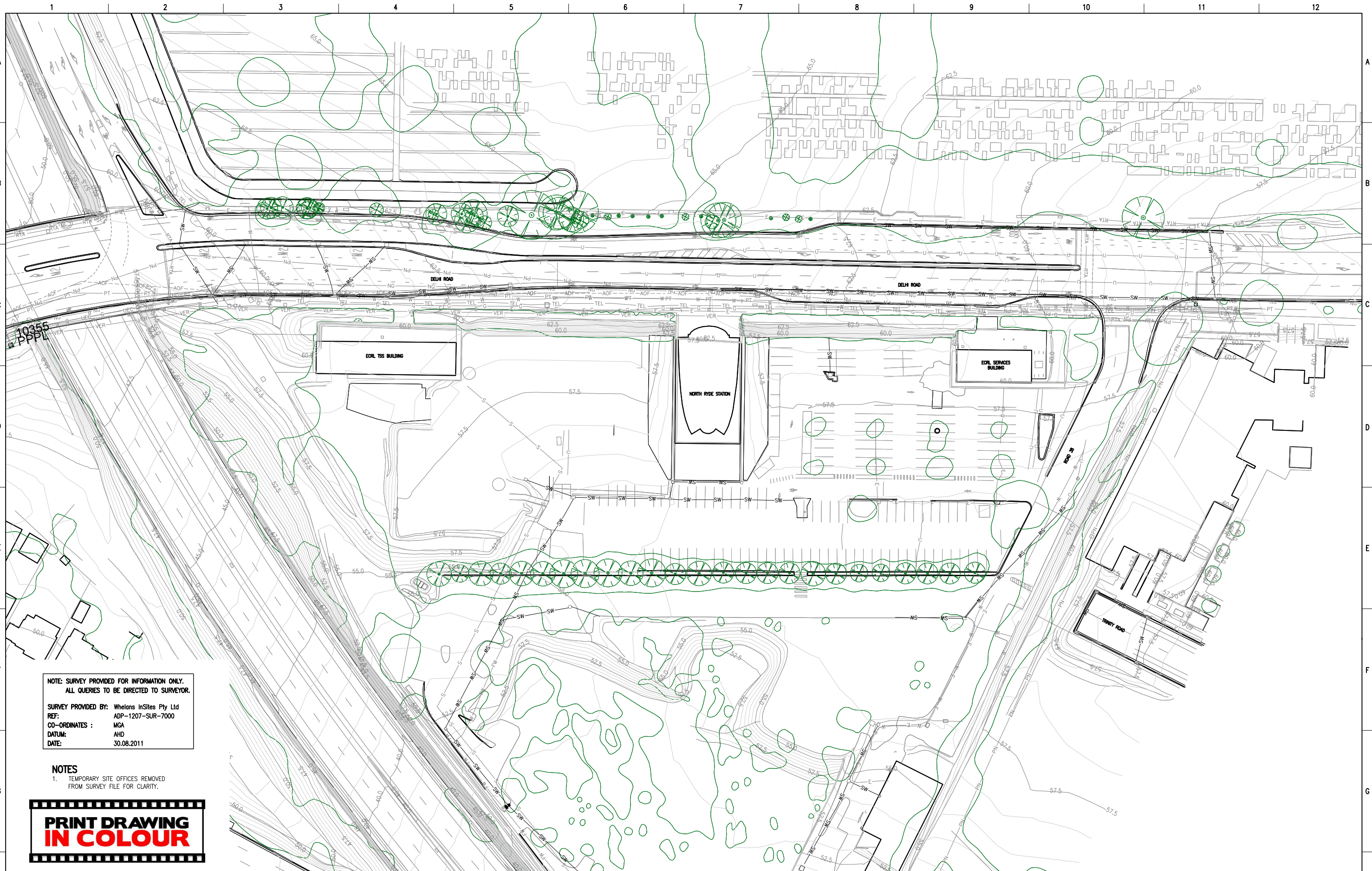
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Client

**URBAN GROWTH
NSW**

Title
**DRAFT PLAN OF SUBDIVISION
 LOT 4 DP 1131714 & LOT
 160 DP 1136651**

Project
**NORTH RYDE STATION SITE NORTH
 DEVELOPMENT APPROVAL**

NOT FOR CONSTRUCTION			
Date	Designer	Design Checker	
17.02.14	L.RUSSELL	L.MELVILLE	
Scale at A1	Drawn	Principal/Project Owner	
AS SHOWN	S.MANANDHAR	R.LUCAS	
Job Number	Drawing Number	Revision	
13656	C0-01	4	





**NOTE: SURVEY PROVIDED FOR INFORMATION ONLY.
ALL QUERIES TO BE DIRECTED TO SURVEYOR.**

SURVEY PROVIDED BY: Whelons InSites Pty Ltd
REF: ADP-1207-SUR-7000
CO-ORDINATES : MGA
DATUM: AHD
DATE: 30.08.2011

NOTES
 1. TEMPORARY SITE OFFICES REMOVED FROM SURVEY FILE FOR CLARITY.

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SCALE 1:500

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**UrbanGrowth
NSW**

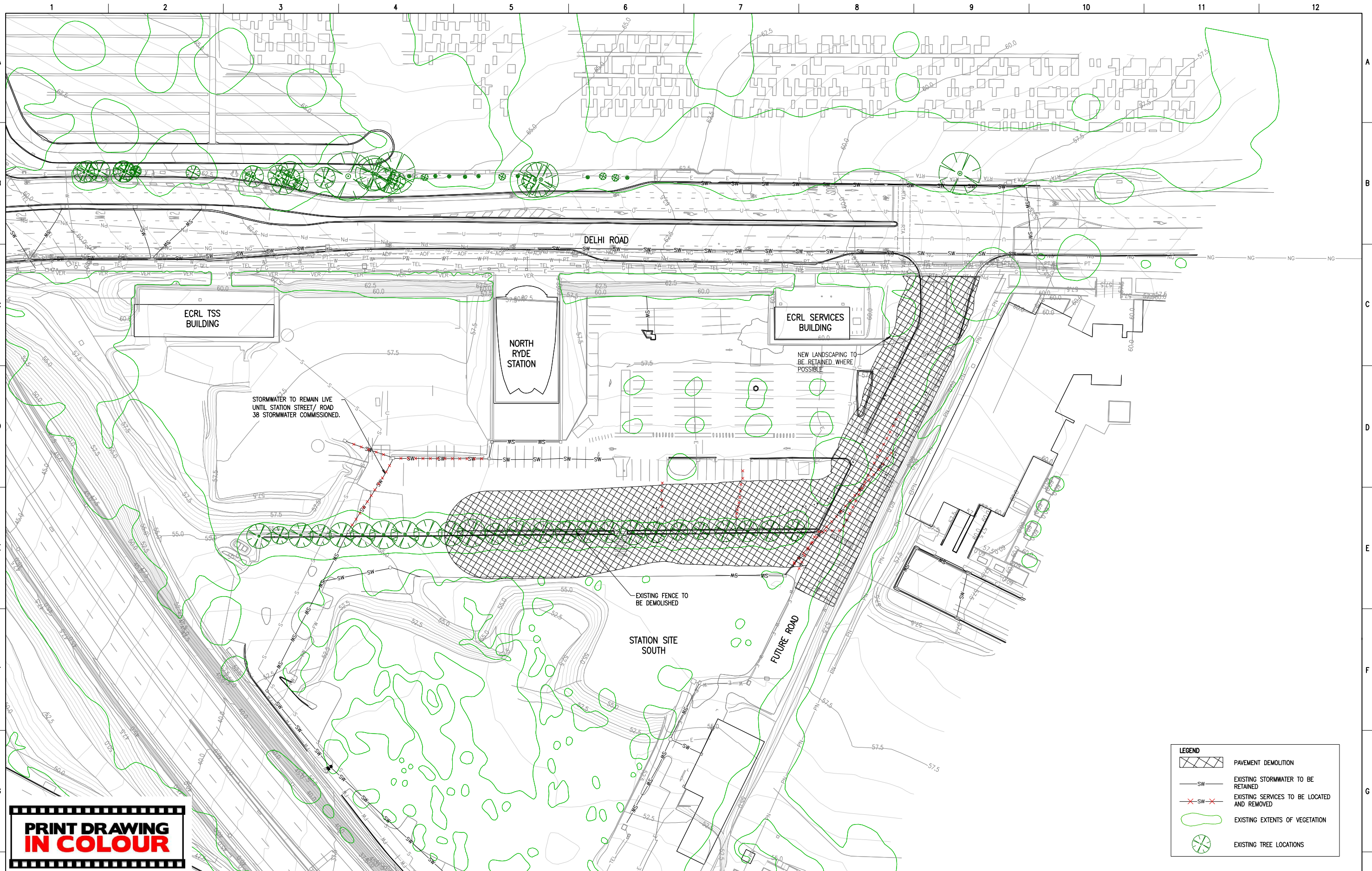
Title
 SURVEY PLAN

Project
 NORTH RYDE STATION SITE NORTH
 DEVELOPMENT APPROVAL

NOT FOR CONSTRUCTION

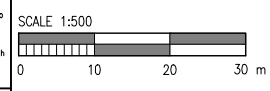
Date	14.02.14	Designer	L.RUSSELL	Design Checker	L.MELVILLE
Scale at A1	AS SHOWN	Drawn	S.MANANDHAR	Principal/Project Owner	R.LUCAS
Job Number	13656	Drawing Number	C0-05	Revision	1

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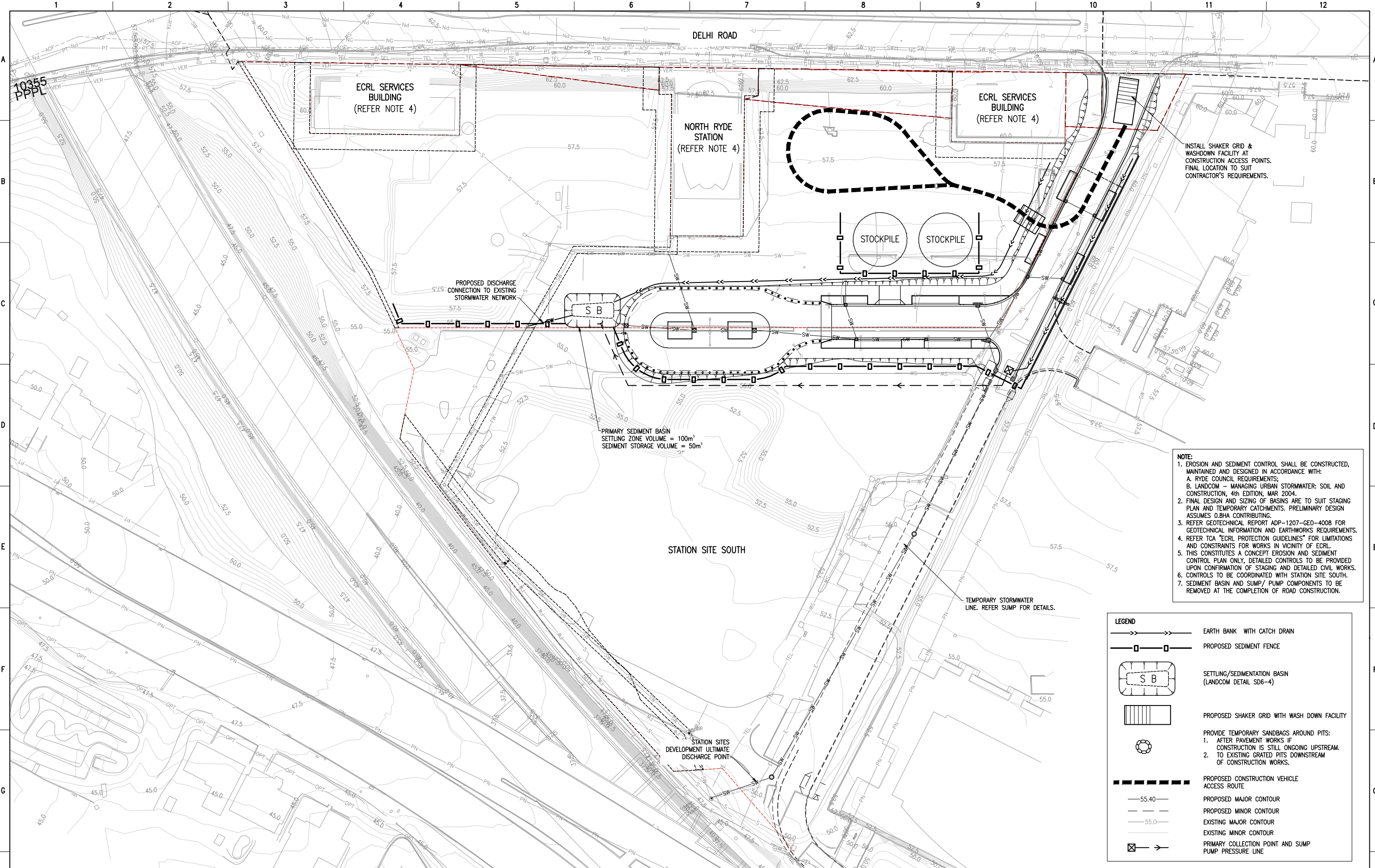


DEMOLITION PLAN

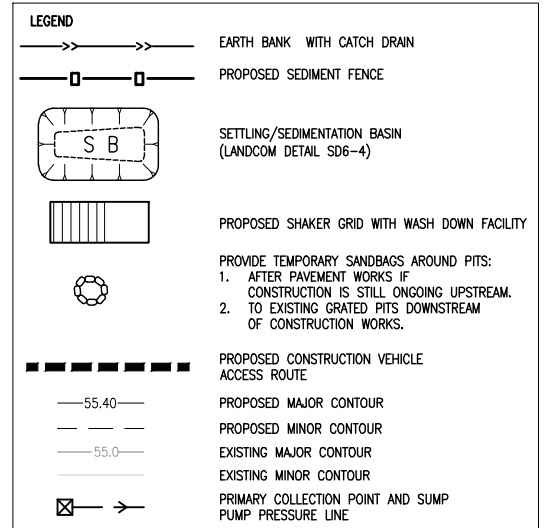
NORTH RYDE STATION SITE NORTH DEVELOPMENT APPROVAL

NOT FOR CONSTRUCTION		
Date	Designer	Design Checker
17.02.14	L.RUSSELL	L.MELVILLE
Scale at A1	Drawn	Principal/Project Owner
AS SHOWN	S.MANANDHAR	R.LUCAS
Job Number	Drawing Number	Revision
13656	CO-06	2

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- NOTE:**
1. EROSION AND SEDIMENT CONTROL SHALL BE CONSTRUCTED, MAINTAINED AND DESIGNED IN ACCORDANCE WITH:
 - A. RYDE COUNCIL REQUIREMENTS;
 - B. LANDCOM – MANAGING URBAN STORMWATER: SOIL AND CONSTRUCTION, 4th EDITION, MAR 2004.
 2. FINAL DESIGN AND SIZING OF BASINS ARE TO SUIT STAGING PLAN AND TEMPORARY CATCHMENTS. PRELIMINARY DESIGN ASSUMES 0.8HA CONTRIBUTING.
 3. REFER GEOTECHNICAL REPORT ADP-1207-GEO-4008 FOR GEOTECHNICAL INFORMATION AND EARTHWORKS REQUIREMENTS.
 4. REFER TCA "ECRL PROTECTION GUIDELINES" FOR LIMITATIONS AND CONSTRAINTS FOR WORKS IN VICINITY OF ECRL.
 5. THIS CONSTITUTES A CONCEPT EROSION AND SEDIMENT CONTROL PLAN ONLY. DETAILED CONTROLS TO BE PROVIDED UPON CONFIRMATION OF STAGING AND DETAILED CIVIL WORKS.
 6. CONTROLS TO BE COORDINATED WITH STATION SITE SOUTH.
 7. SEDIMENT BASIN AND SUMP/ PUMP COMPONENTS TO BE REMOVED AT THE COMPLETION OF ROAD CONSTRUCTION.



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SCALE 1:500

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EROSION & SEDIMENT CONTROL PLAN

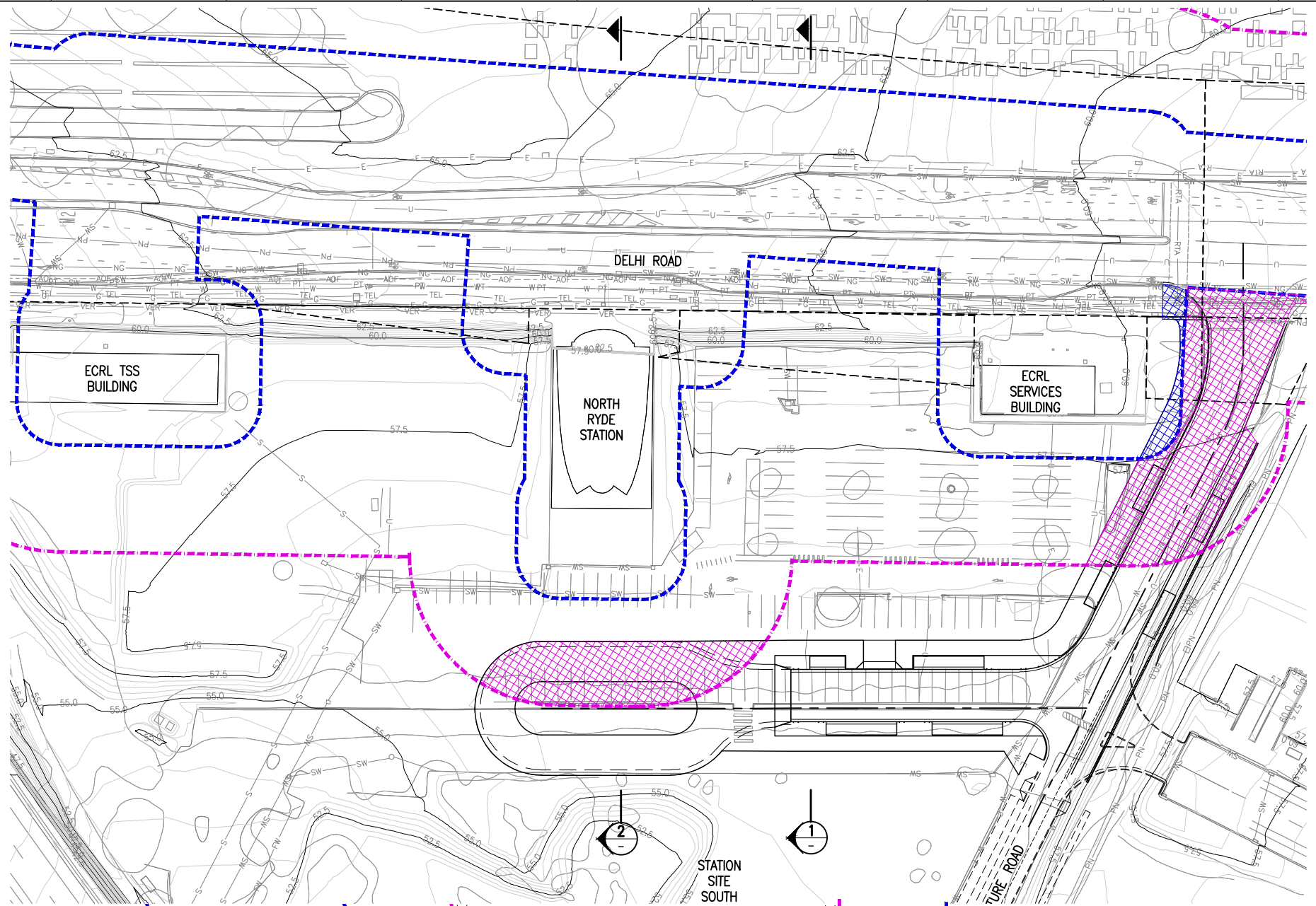
Date: 17.02.14
 Scale at A1: AS SHOWN
 Job Number: 13656

Designer: L.RUSSELL
 Drawn: S.MANANDHAR
 Drawing Number: C1-01

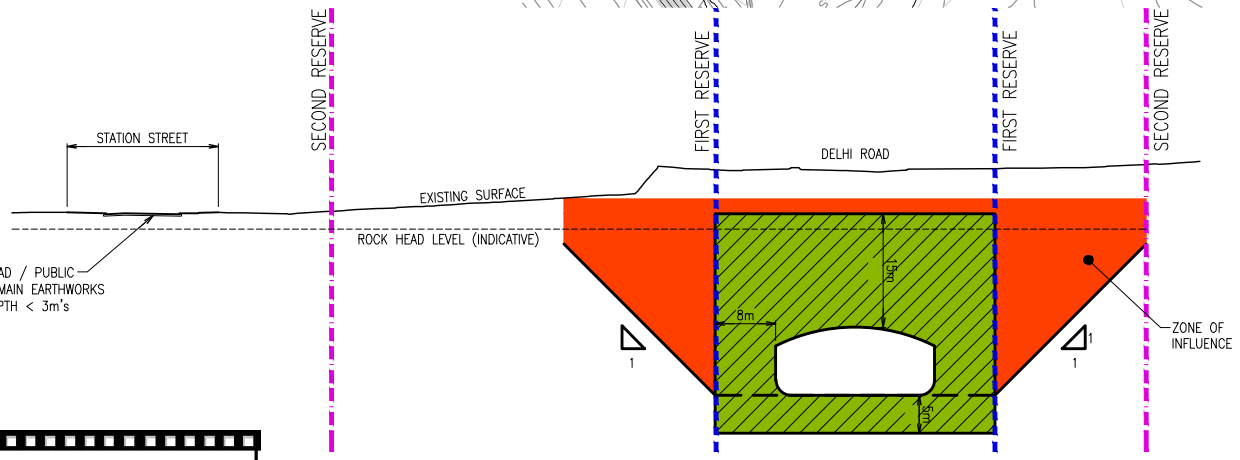
Design Checker: L.MELVILLE
 Principal/Project Owner: R.LUCAS
 Revision: 2

Date	Designer	Design Checker
17.02.14	L.RUSSELL	L.MELVILLE
Scale at A1	Drawn	Principal/Project Owner
AS SHOWN	S.MANANDHAR	R.LUCAS
Job Number	Drawing Number	Revision
13656	C1-01	2

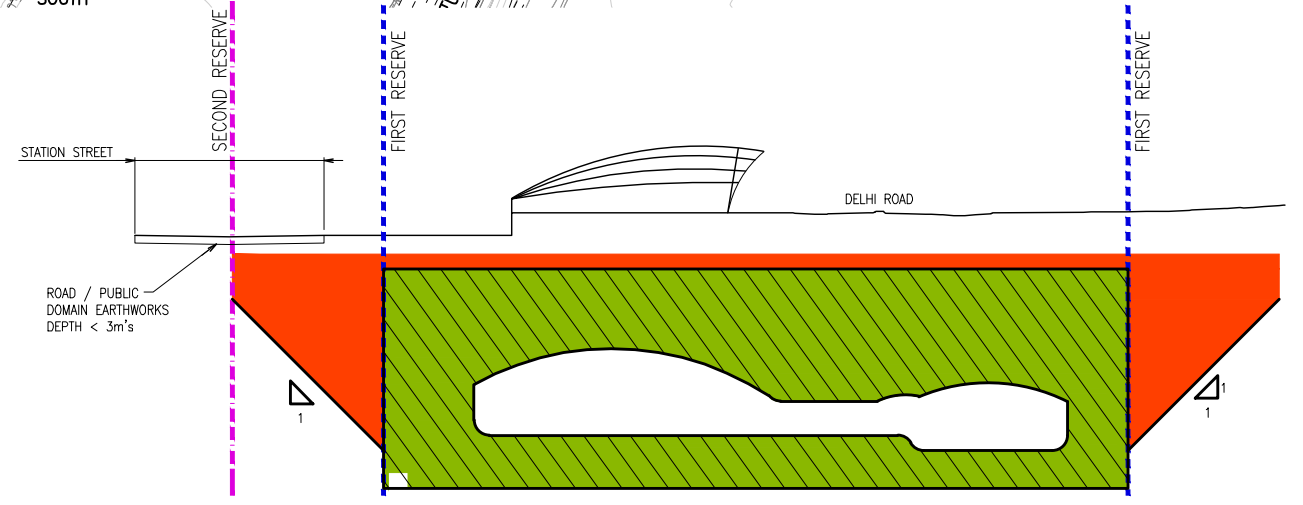
LEGEND	
	WORKS WITHIN ECRL SECOND RESERVE
	WORKS WITHIN ECRL FIRST RESERVE
	TUNNEL SUPPORT ZONE
	TUNNEL ZONE OF INFLUENCE



PLAN VIEW
SCALE 1:500



SECTION 1
NTS

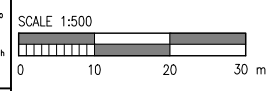


SECTION 2
NTS

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Engineering Consultant

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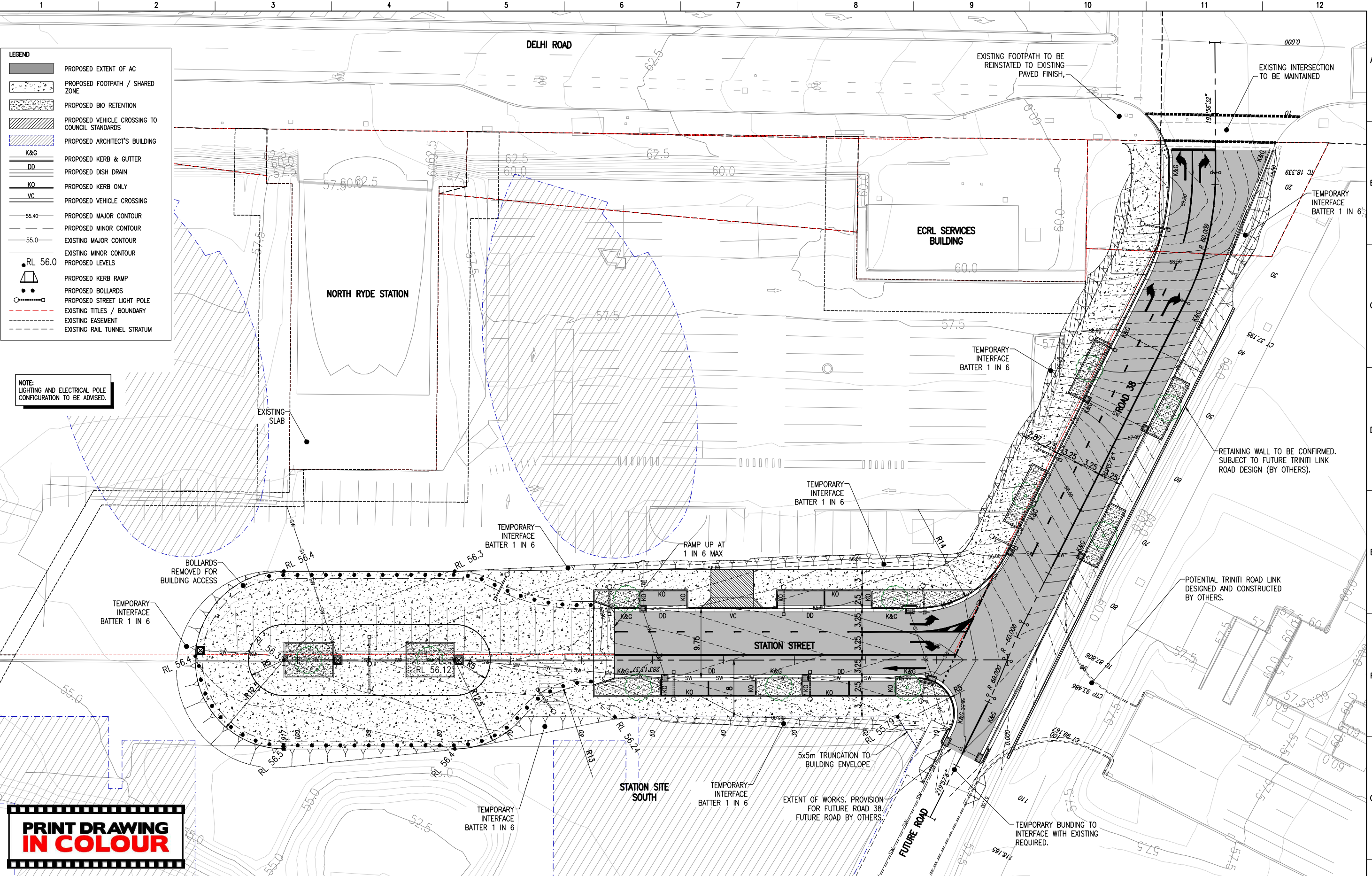
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Title
**CIVIL WORKS PLAN – ECRL
RESERVE ZONES**

Project
**NORTH RYDE STATION SITE NORTH
DEVELOPMENT APPROVAL**

NOT FOR CONSTRUCTION			
Date 14.02.14	Designer L. RUSSELL	Design Checker L.MELVILLE	
Scale at A1 AS SHOWN	Drawn L.RUSSELL	Principal/Project Owner R.LUCAS	
Job Number 13656	Drawing Number C2-02	Revision 1	



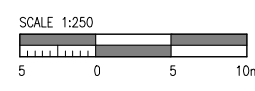
LEGEND

[Symbol]	PROPOSED EXTENT OF AC
[Symbol]	PROPOSED FOOTPATH / SHARED ZONE
[Symbol]	PROPOSED BIO RETENTION
[Symbol]	PROPOSED VEHICLE CROSSING TO COUNCIL STANDARDS
[Symbol]	PROPOSED ARCHITECT'S BUILDING
[Symbol]	PROPOSED KERB & GUTTER
[Symbol]	PROPOSED DISH DRAIN
[Symbol]	PROPOSED KERB ONLY
[Symbol]	PROPOSED VEHICLE CROSSING
[Symbol]	PROPOSED MAJOR CONTOUR
[Symbol]	PROPOSED MINOR CONTOUR
[Symbol]	EXISTING MAJOR CONTOUR
[Symbol]	EXISTING MINOR CONTOUR
[Symbol]	PROPOSED LEVELS
[Symbol]	PROPOSED KERB RAMP
[Symbol]	PROPOSED BOLLARDS
[Symbol]	PROPOSED STREET LIGHT POLE
[Symbol]	EXISTING TITLES / BOUNDARY
[Symbol]	EXISTING EASEMENT
[Symbol]	EXISTING RAIL TUNNEL STRATUM

NOTE:
LIGHTING AND ELECTRICAL POLE CONFIGURATION TO BE ADVISED.

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Client

URBAN GROWTH

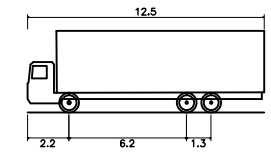
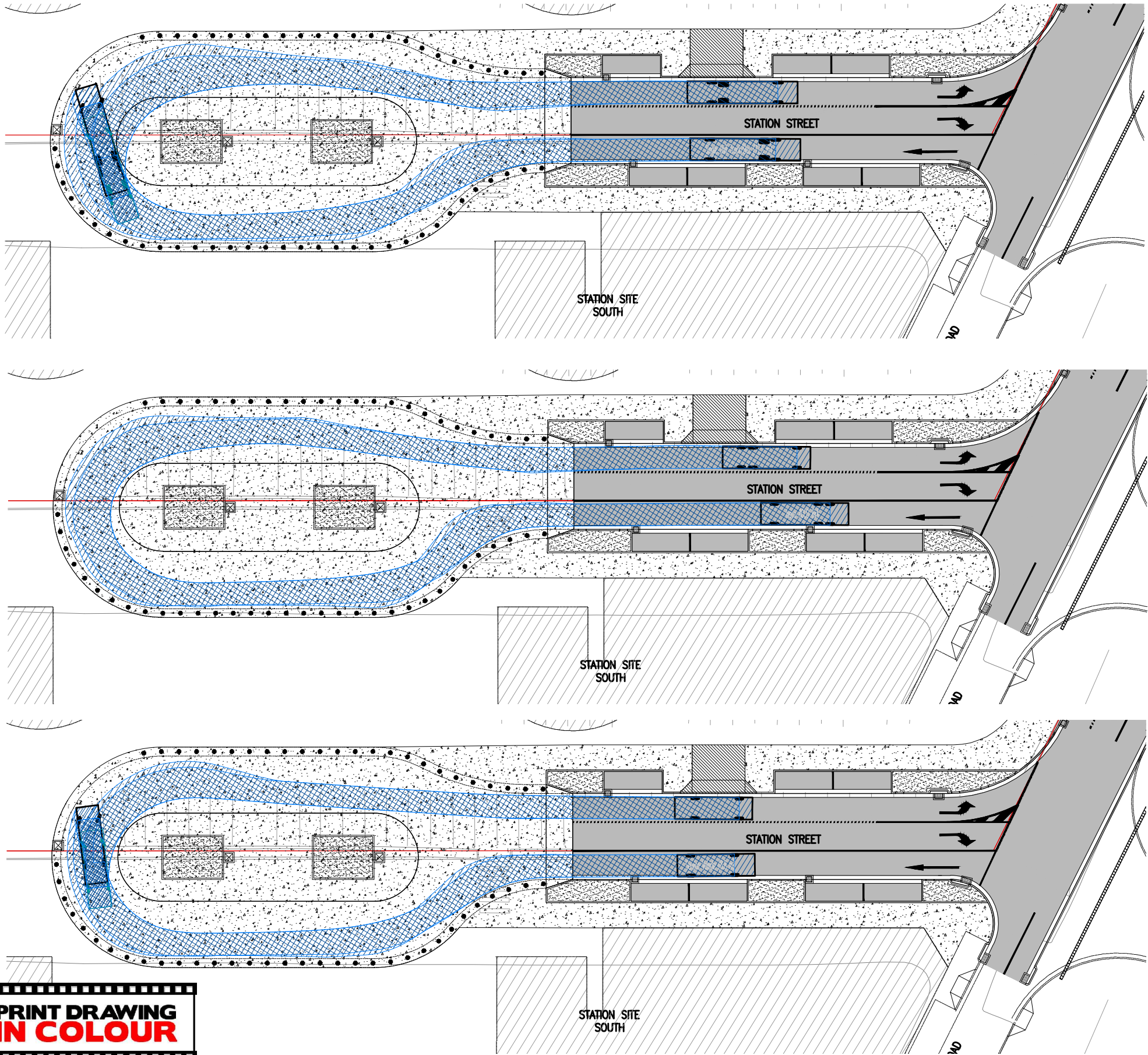
SITE LAYOUT AND GRADING PLAN

Project
NORTH RYDE STATION SITE NORTH DEVELOPMENT APPROVAL

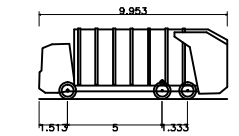
NOT FOR CONSTRUCTION

Date	17.02.14	Designer	L. RUSSELL	Design Checker	L.MELVILLE
Scale at A1	AS SHOWN	Drawn	S.MANANDHAR	Principal/Project Owner	R.LUCAS
Job Number	13656	Drawing Number	C3-02	Revision	2

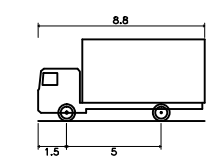
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Single Unit Truck/Bus (12.5 m)
 Overall Length 12.500m
 Overall Width 2.500m
 Overall Body Height 4.300m
 Min Body Ground Clearance 0.490m
 Track Width 2.500m
 Lock to Lock Time 6.00s
 Curb to Curb Turning Radius 12.500m



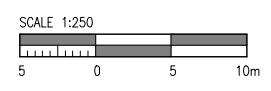
Iveco ACCO 6x4
 Overall Length 9.953m
 Overall Width 2.500m
 Overall Body Height 3.751m
 Min Body Ground Clearance 0.304m
 Track Width 2.500m
 Lock to Lock Time 4.00s
 Curb to Curb Turning Radius 9.903m



Service Vehicle (8.8 m)
 Overall Length 8.800m
 Overall Width 2.500m
 Overall Body Height 4.300m
 Min Body Ground Clearance 0.427m
 Track Width 2.500m
 Lock to Lock Time 4.00s
 Curb to Curb Turning Radius 12.500m

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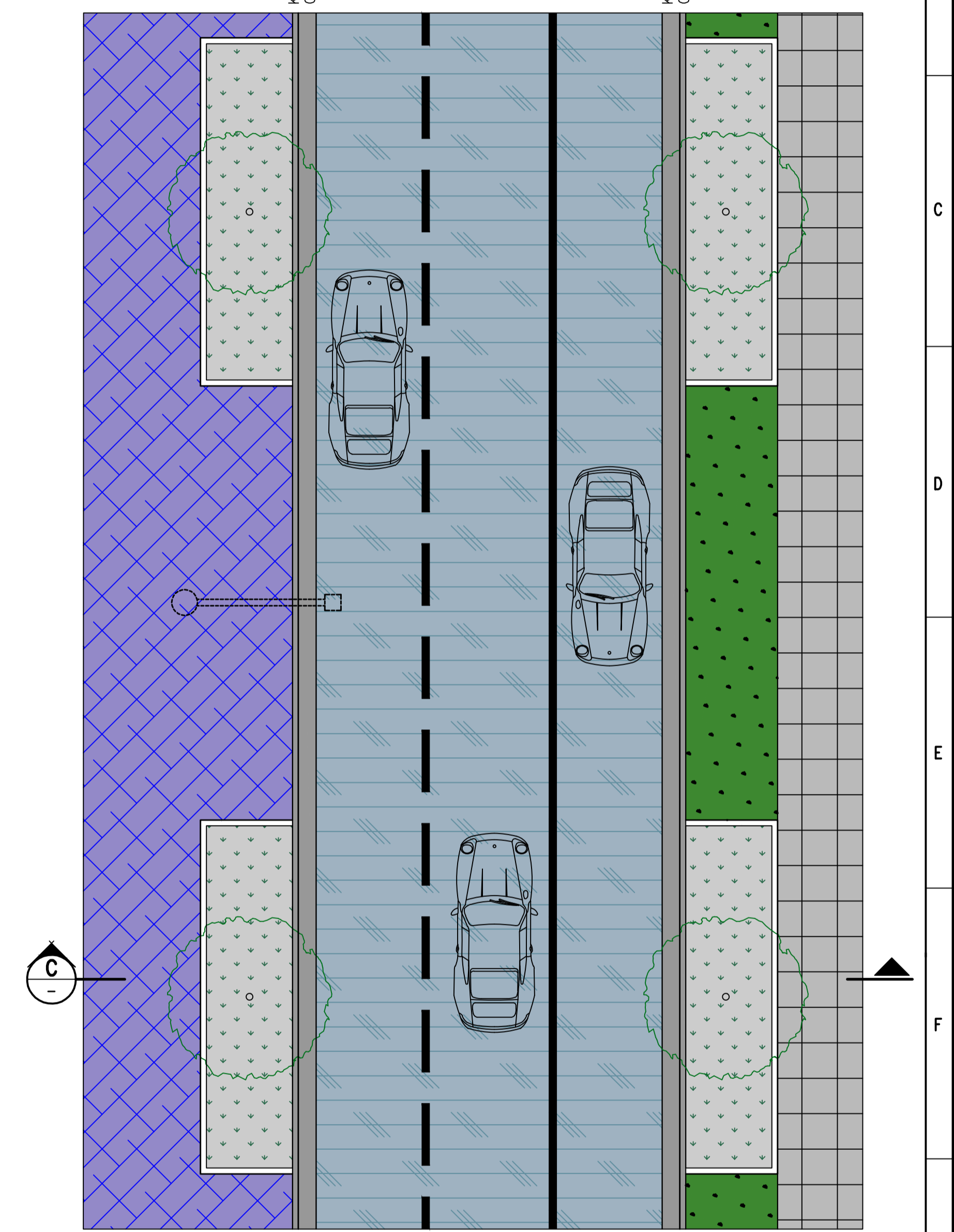
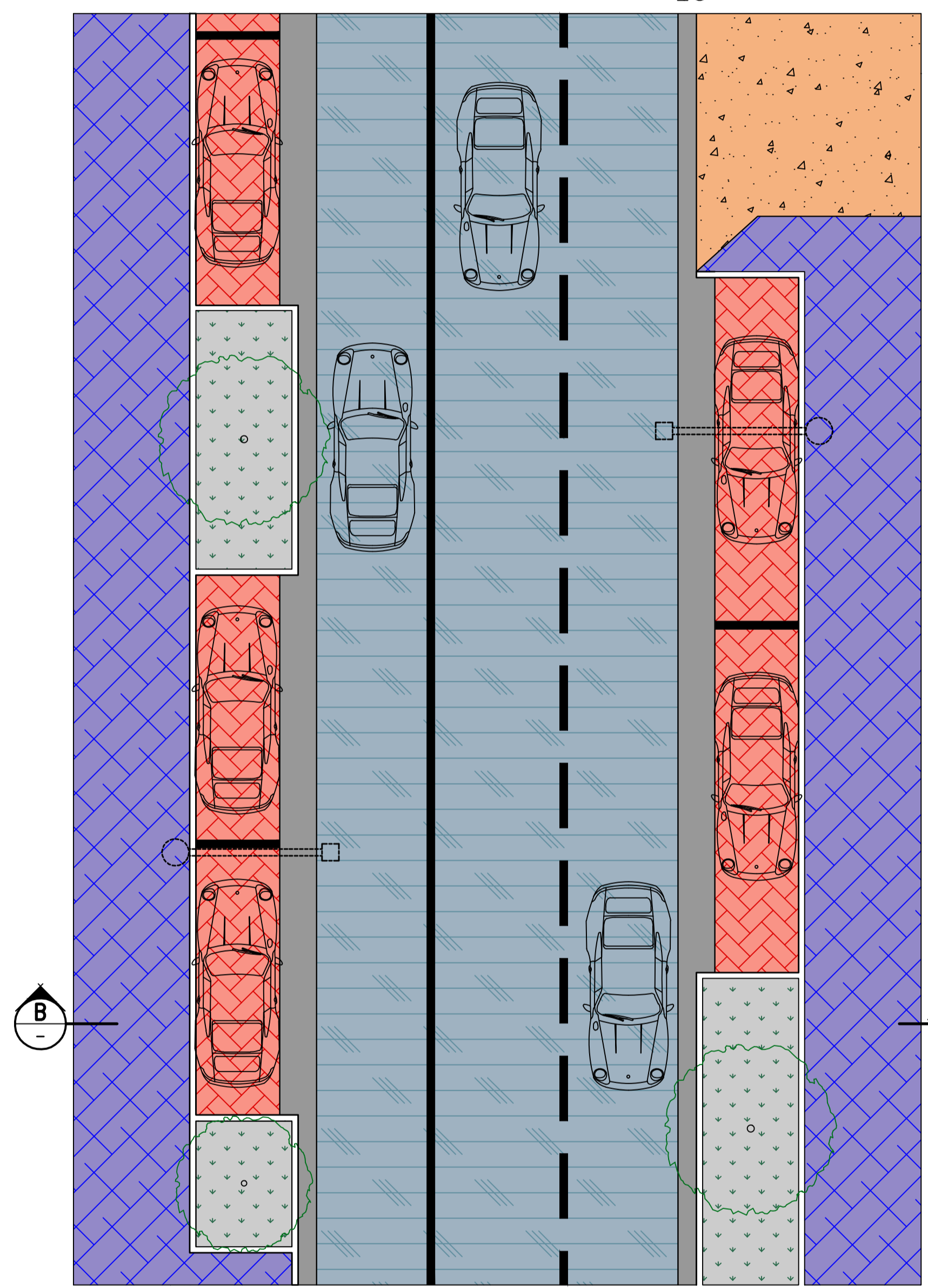
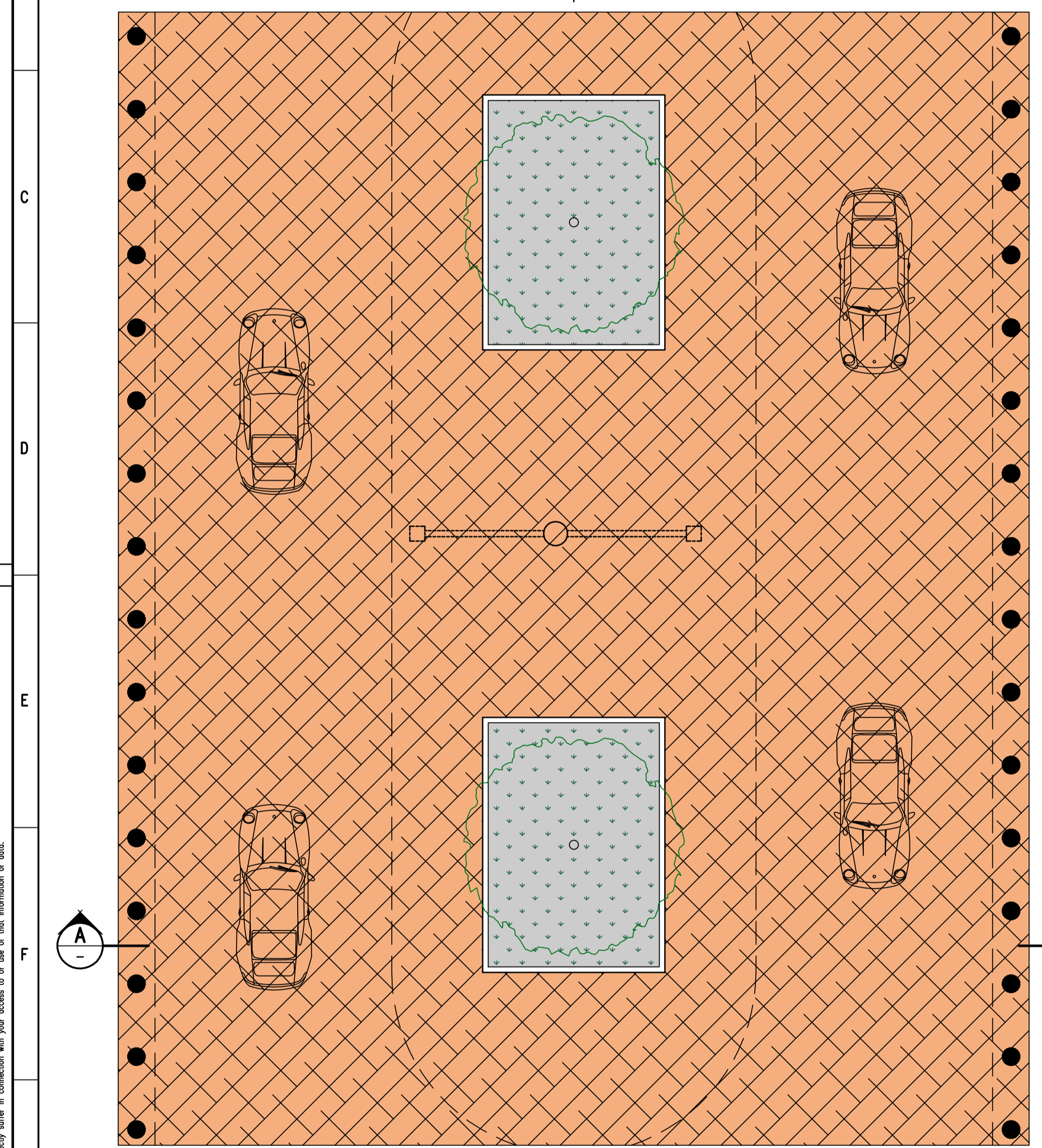
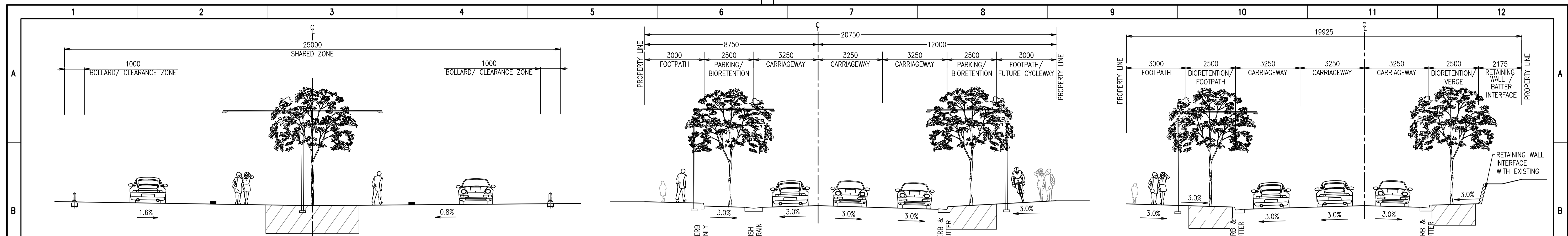
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 Fax. (02) 8246 3201
 ACN 010 580 248
 Web Site: www.robertbird.com



Title
SWEPT PATH ANALYSIS PLAN
 Date
 17.02.14
 Scale at A1
 AS SHOWN
 Job Number
13656
 Project
**NORTH RYDE STATION SITE NORTH
 DEVELOPMENT APPROVAL**

NOT FOR CONSTRUCTION			
Designer	L.RUSSELL	Design Checker	L.MELVILLE
Drawn	S.MANANDHAR	Principal/Project Owner	R.LUCAS
Drawing Number	C3-03	Revision	2

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LEGEND

FOOTPATH PAVING	STREET TREE PLANTING	GRASS VERGE
PARKING	CONCRETE DRIVEWAY	SHARED ZONE
ASPHALT CARRIAGEWAY	PROPOSED RETAINING WALL	

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Rev.	Revision Description	By.	App. Date	Rev.	Revision Description	By.	App. Date
1	ISSUED FOR DEVELOPMENT APPROVAL	LAR	LWM 11.02.14				
2	ISSUED FOR DEVELOPMENT APPROVAL	LAR	LWM 17.02.14				

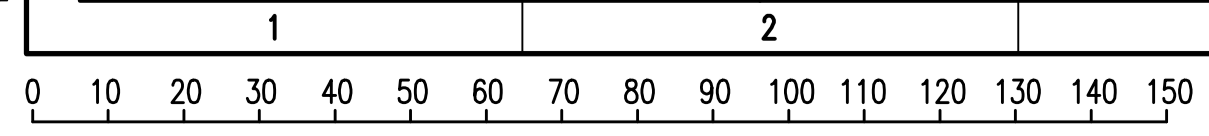
Structural, Civil & Construction
 Engineering Consultant

Robert Bird Group
 Web Site: www.robertbird.com

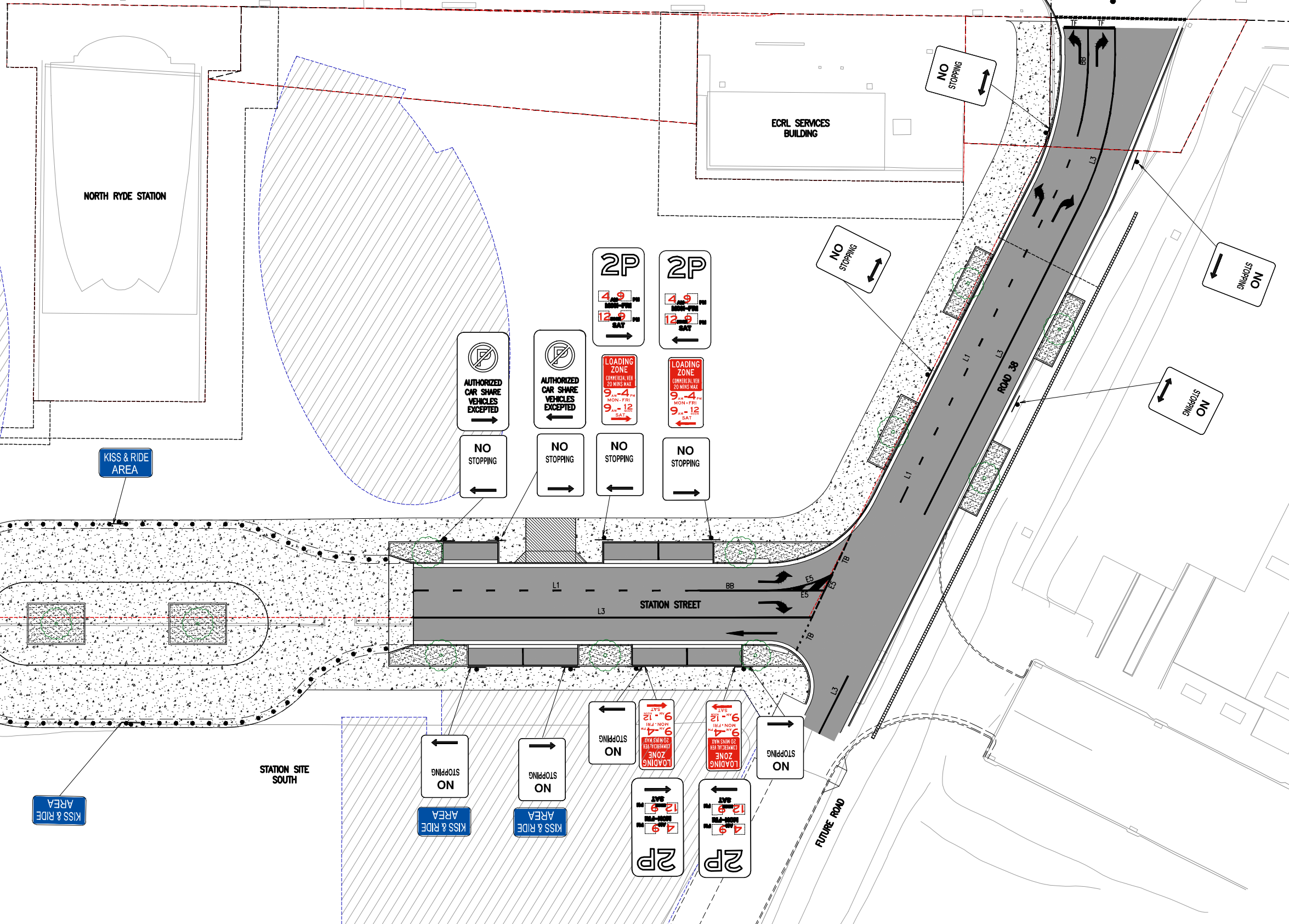
Client
URBAN GROWTH

 UrbanGrowth
 NSW

TYPICAL ROAD CROSS SECTIONS		NOT FOR CONSTRUCTION	
Date	17.02.14	Designer	L.RUSSELL
Scale	at A1 AS SHOWN	Drawn	S.MANNANDHAR
Job Number	13656	Drawing Number	C3-15
NORTH RYDE STATION SITE NORTH DEVELOPMENT APPROVAL		Design Checker	L.MELVILLE
		Principal/Project Owner	R.LUCAS
		Revision	2



SIGNAGE AND LINE MARKING NOTES
 SIGNAGE AND LINE MARKING SHALL BE IN ACCORDANCE WITH RTA (RMS) "GUIDE TO SIGNS AND MARKINGS" AND ALL RELEVANT CODES AND SPECIFICATION.

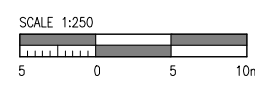


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 Engineering Consultant

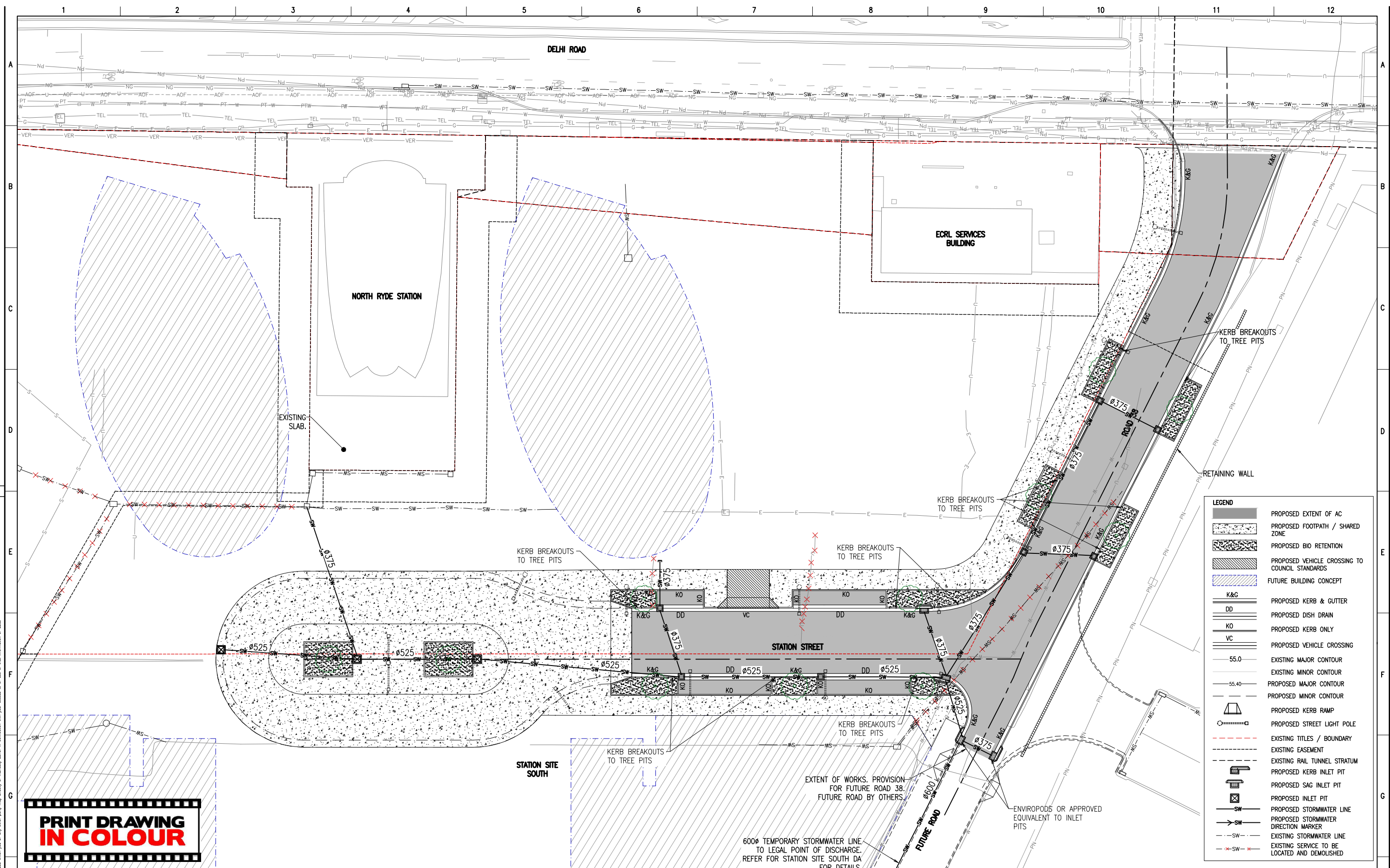
Robert Bird Group
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 UrbanGrowth
 NSW

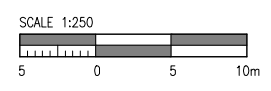
Title
**SIGNS AND LINEMARKING
 PLAN**
 Project
**NORTH RYDE STATION SITE NORTH
 DEVELOPMENT APPROVAL**

NOT FOR CONSTRUCTION			
Date	Designer	Design Checker	
17.02.14	L.RUSSELL	L.MELVILLE	
Scale at A1	Drawn	Principal/Project Owner	
AS SHOWN	S.MANANDHAR	R.LUCAS	
Job Number	Drawing Number	Revision	
13656	C5-01	2	



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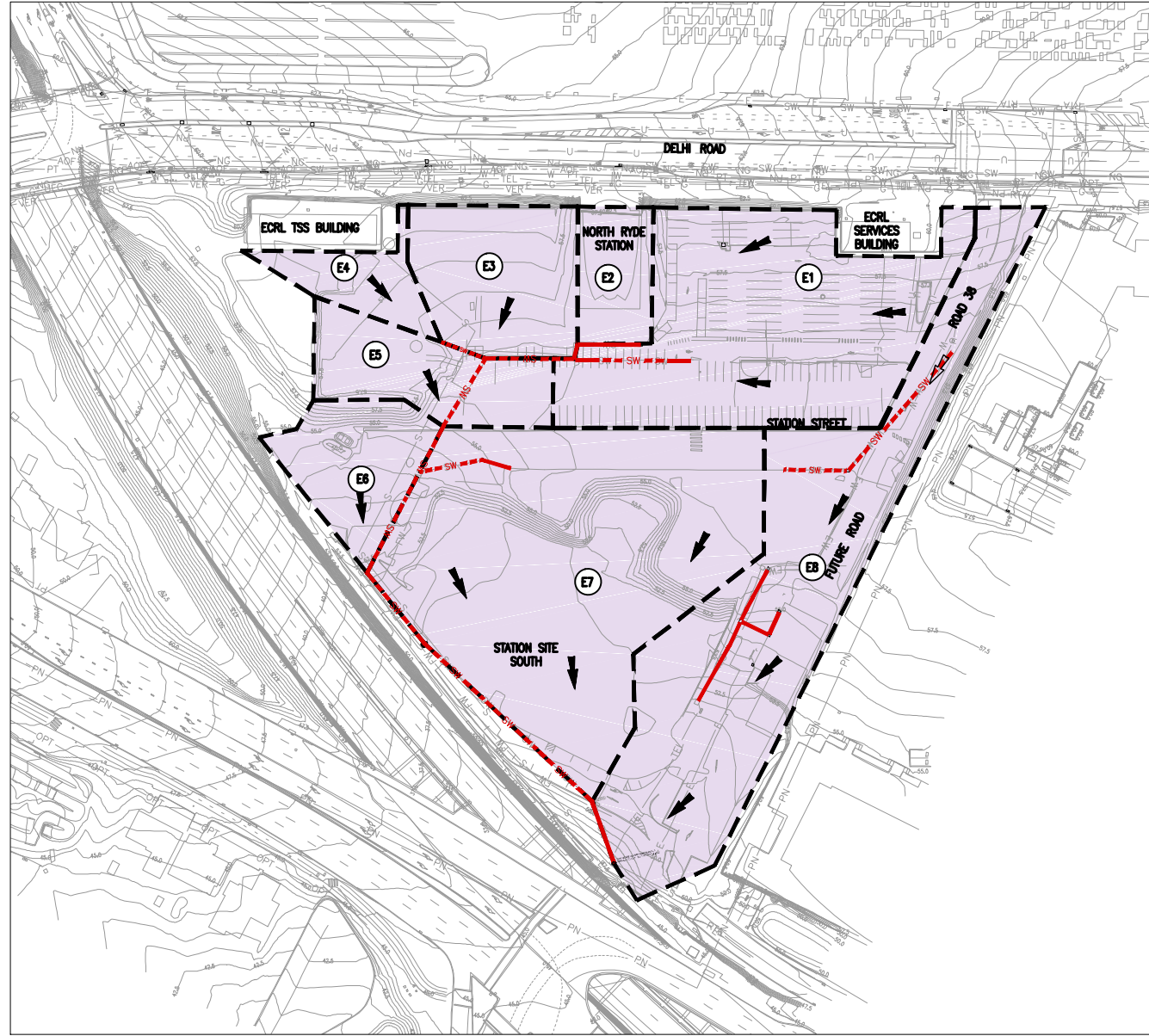


Title
**STORMWATER DRAINAGE
PLAN**

Project
**NORTH RYDE STATION SITE NORTH
DEVELOPMENT APPROVAL**

NOT FOR CONSTRUCTION		
Date 17.02.14	Designer L.RUSSELL	Design Checker L.MELVILLE
Scale at A1 AS SHOWN	Drawn S.MANANDHAR	Principal/Project Owner R.LUCAS
Job Number 13656	Drawing Number C6-01	Revision 2

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EXISTING STORMWATER CATCHMENT PLAN
SCALE 1:1000

EXISTING CATCHMENT TABLE

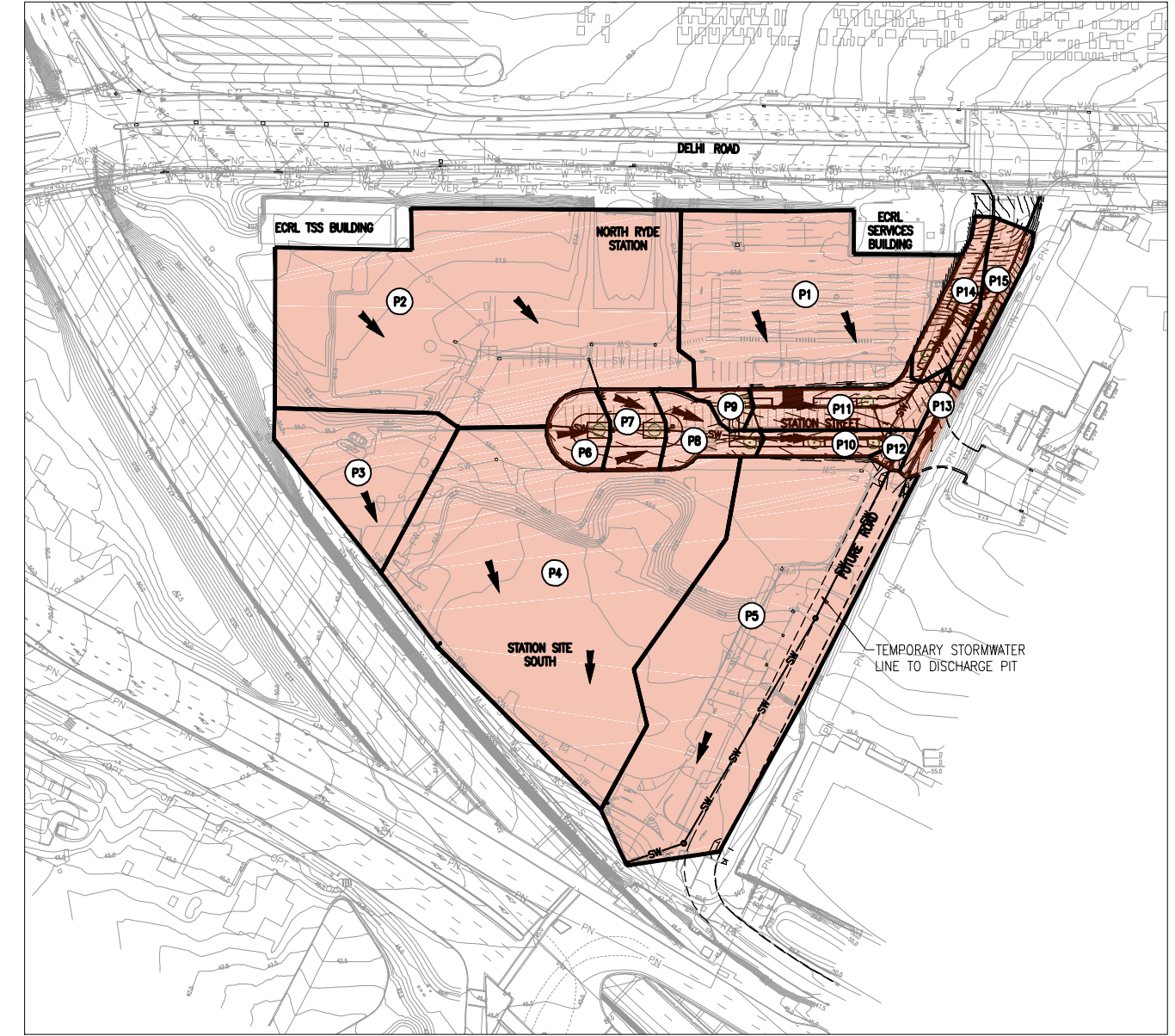
CATCHMENT	AREA (HA)
E1	0.626
E2	0.159
E3	0.239
E4	0.090
E5	0.153
E6	0.132
E7	0.789
E8	0.669

LEGEND

- EXISTING CATCHMENT BOUNDARY
- EXISTING STORMWATER LINE
- EXISTING CATCHMENT LABELS

NOTES:
 • TOTAL CATCHMENTS:
 NORTH: 1.267HA
 SOUTH: 1.590HA
 TOTAL: 2.857HA

**PRINT DRAWING
IN COLOUR**



PROPOSED STORMWATER CATCHMENT PLAN
SCALE 1:1000

PROPOSED CATCHMENT TABLE

CATCHMENT	AREA (HA)	CATCHMENT	AREA (HA)
P1	0.385	P9	0.016
P2	0.717	P10	0.031
P3	0.160	P11	0.076
P4	0.719	P12	0.009
P5	0.596	P13	0.019
P6	0.038	P14	0.053
P7	0.043	P15	0.045
P8	0.046		

LEGEND

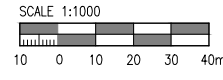
- PROPOSED CATCHMENT BOUNDARY
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
- PROPOSED CATCHMENT LABELS
- PROPOSED JUNCTION PIT
- PROPOSED KERB INLET PIT

ASSUMPTIONS:

- FOR STORMWATER INFRASTRUCTURE AND WSUD DETAIL REFER TO RBG SBSMP REPORT.
- PERCENTAGE PERVIOUS/IMPERVIOUS FOR EACH CATCHMENT AREA HAS BEEN APPROXIMATED USING EXISTING SURVEY DATA AND SITE CONDITIONS.

NOTES:
 • TOTAL CATCHMENTS:
 NORTH: 1.478HA
 SOUTH: 1.475HA
 TOTAL: 2.953HA

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 AGL: 010 582 248

Web Site: www.robertbird.com

Client

**URBAN GROWTH
NSW**

Title
**STORMWATER CATCHMENT
PLAN**

Project
**NORTH RYDE STATION SITE NORTH
DEVELOPMENT APPROVAL**



NOT FOR CONSTRUCTION

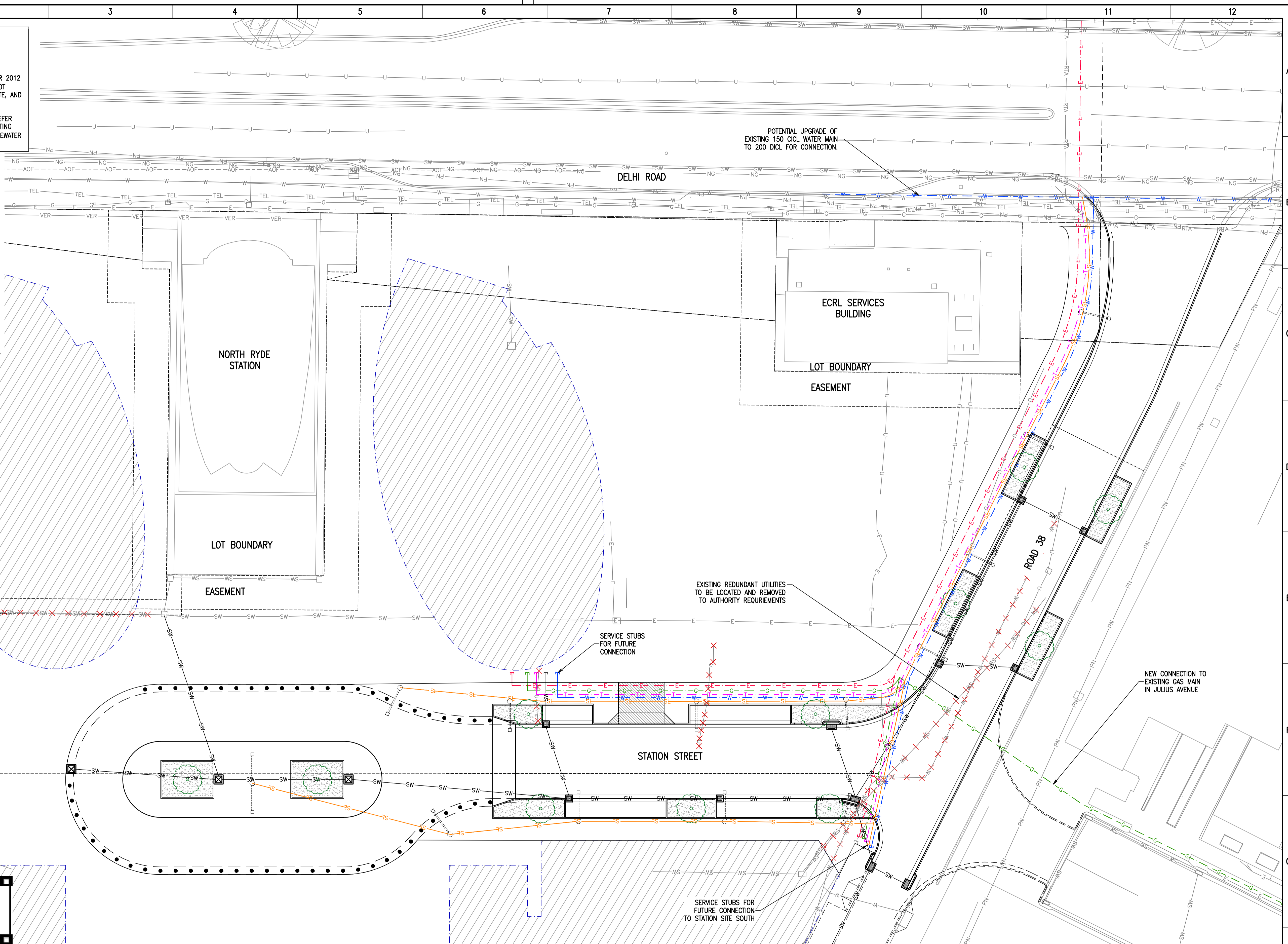
Date 17.02.14	Designer L.RUSSELL	Design Checker L.MELVILLE
Scale at A1 AS SHOWN	Drawn S.MANANDHAR	Principal/Project Owner R.LUCAS
Job Number 13656	Drawing Number C6-50	Revision 2

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NOTES:

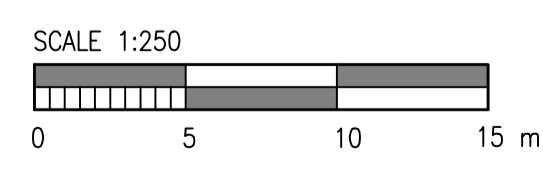
- SERVICING STRATEGY AND UTILITY CONFIGURATIONS ARE INDICATIVE ONLY AND SUBJECT TO UTILITY PROVIDER APPROVALS.
- SERVICES AND SURVEY INFORMATION COMPILED FROM SURVEY INFORMATION BY WHEELANS INSITES, SEPTEMBER 2012 (ADP-1207-SUR-7000). ROBERT BIRD GROUP DOES NOT GUARANTEE THAT THE SURVEY INFORMATION IS ACCURATE, AND ACCEPTS NO LIABILITY FOR INACCURACIES.
- FOR DETAILS ON PROPOSED UTILITY LEADING WORKS REFER NORMAN DISNEY YOUNG, ELECTRICAL, COMMS AND LIGHTING REPORT (NOV 2012) AND LANDPARTNERS, WATER, WASTEWATER AND GAS SERVING REPORT (NOV 2012).

- PROPOSED SERVICES**
- E— PROPOSED ELECTRICITY
 - G— PROPOSED GAS
 - W— PROPOSED WATER
 - S— PROPOSED SEWER
 - T— PROPOSED TELECOMMS
 - SL— PROPOSED STREET LIGHT
 - SW— PROPOSED STORMWATER
 -  PROPOSED KERB INLET PIT
 -  PROPOSED JUNCTION PIT
 - +X+ PROPOSED SERVICE DEMOLITION



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Engineering Consultant

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**COMBINED SERVICES LAYOUT PLAN
- CONCEPT SERVING STRATEGY**

Project
**NORTH RYDE STATION SITE NORTH
DEVELOPMENT APPROVAL**

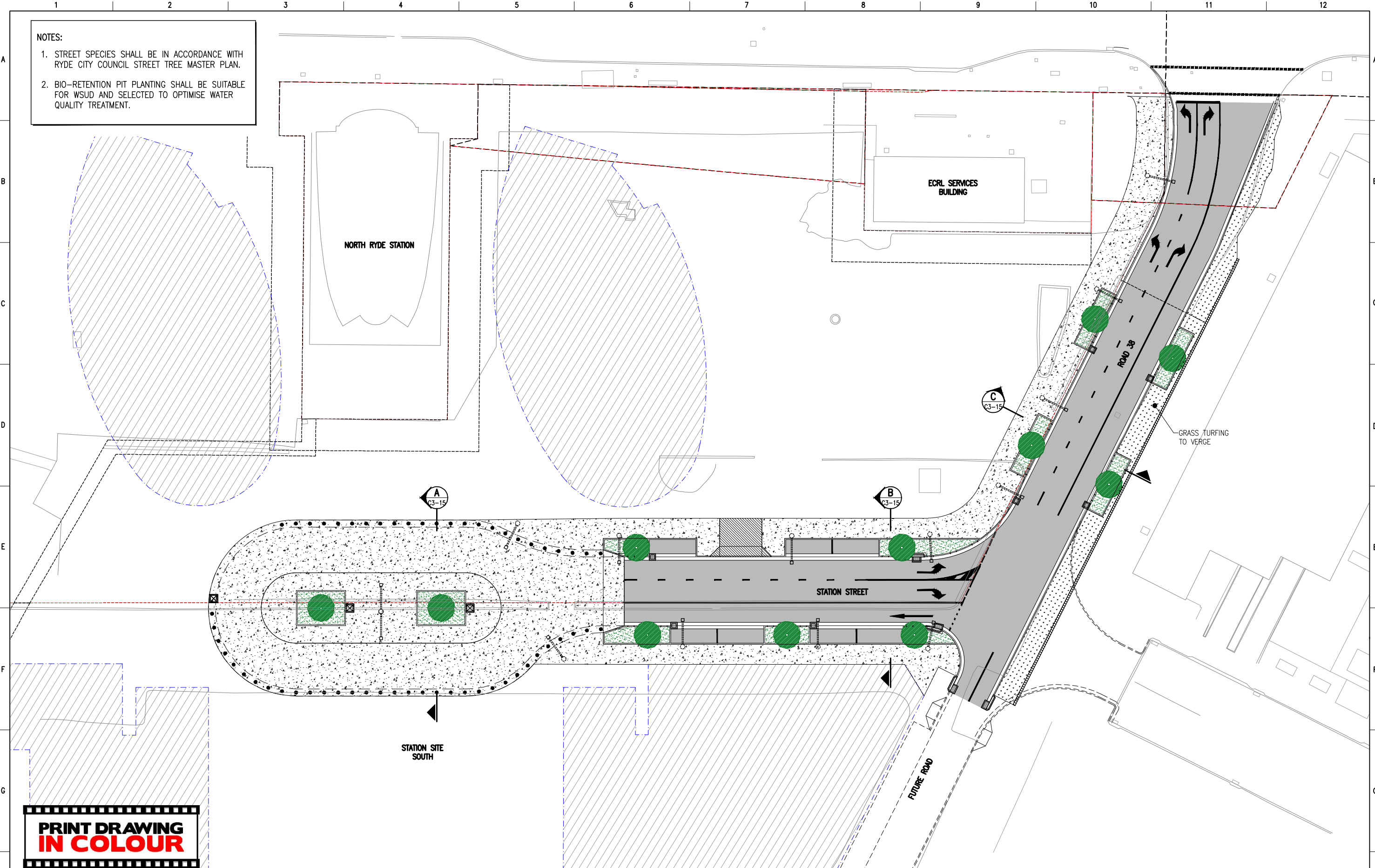
NOT FOR CONSTRUCTION

Date 17.02.14	Designer D.MITCHELL	Design Checker L.MELVILLE
Scale at A1 AS SHOWN	Drawn S.MANNANOHAR	Principal/Project Owner R.LUCAS
Job Number 13656	Drawing Number C9-01	Revision 2

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NOTES:

1. STREET SPECIES SHALL BE IN ACCORDANCE WITH RYDE CITY COUNCIL STREET TREE MASTER PLAN.
2. BIO-RETENTION PIT PLANTING SHALL BE SUITABLE FOR WSUD AND SELECTED TO OPTIMISE WATER QUALITY TREATMENT.

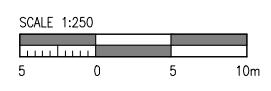


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 Fax. (02) 8246 3201
 ACN 010 580 248

Web Site: www.robertbird.com

Client

URBAN GROWTH

Title
LANDSCAPING PLAN

Project
NORTH RYDE STATION SITE NORTH DEVELOPMENT APPROVAL

NOT FOR CONSTRUCTION

Date	Designer	Design Checker
17.02.14	L.RUSSELL	L.MELVILLE
Scale at A1	Drawn	Principal/Project Owner
AS SHOWN	S.MANANDHAR	R.LUCAS
Job Number	Drawing Number	Revision
13656	C10-01	2