Legend

Precinct boundary

Precinct Plan
Rockbank
Site Plan

Co-ordinate Datum	Scale A3	400 0 400 800 1200
MGA55	1 : 40000	Lengths are in metres

Date	4/6/2013	Sheet 1 of 1	
Drawing No.	139029P00 SITE	Version 1	
CAD Ref.	E:\JOBS\1009 ROCKBANK PSP\CAD FILES\ACAD		
Drawn By	ES	Checked By SN	

REV	AMENDMENT	APPROVED	DATE

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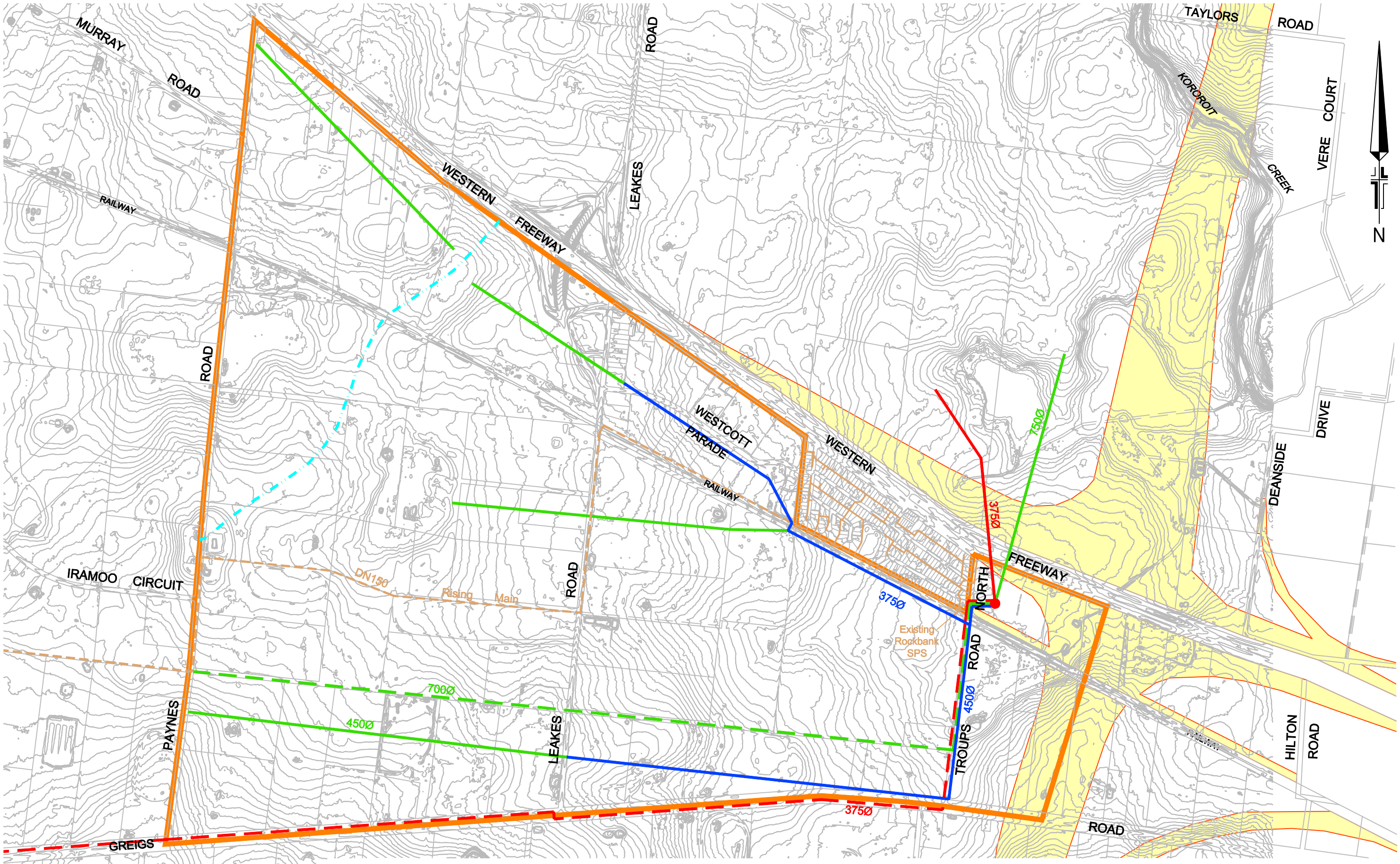

Legend

Note : Contour Interval 0.5m

- Precinct boundary
- Existing Sewer / Rising Main / Pump Station
- WP3 Sewer / Rising Main / Pump Station
- WP4 Sewer / Rising Main
- Future Sewer / Rising Main
- Approximate Catchment Boundary

Precinct Plan
Rockbank
Indicative Sewer Layout

Co-ordinate Datum	Scale A3
MGA55	1 :15000

150 0 150 300 450
Lengths are in metres

Date	30/4/2013	Sheet 1 of 1	
Drawing No.	139029P00 SEWER	Version 2	
CAD Ref.	E:\JOBS\1009 ROCKBANK PSP\CAD FILES\ACAD		
Drawn By	ES	Checked By SN	

REV	AMENDMENT	APPROVED	DATE
2	Indicative alignment amendments	S.N.	15-09-2013

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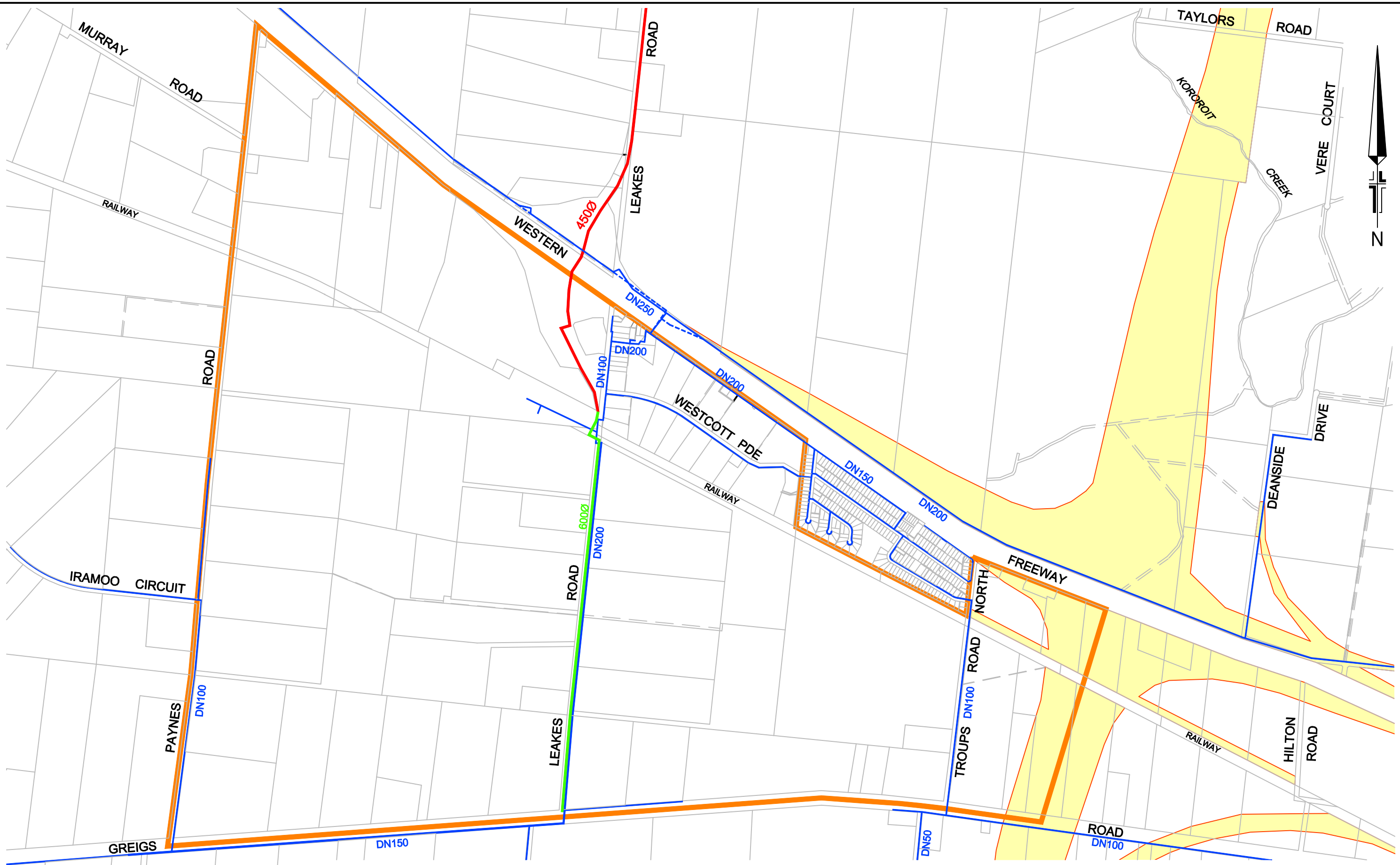

Legend

- Precinct boundary
- Existing Water Main
- Proposed Trunk Water (WP3 2013-2017)
- Proposed Trunk Water (WP5 2023-2027 or beyond)

Precinct Plan
Rockbank
Indicative Potable Water Layout

Co-ordinate Datum	Scale A3	150 0 150 300 450
MGA55	1 :15000	Lengths are in metres

Date	30/4/2013	Sheet 1 of 1	
Drawing No.	139029P00 WATER	Version 2	
CAD Ref.	E:\JOBS\1009 ROCKBANK PSP\CAD FILES\ACAD		
Drawn By	ES	Checked By SN	

REV	AMENDMENT	APPROVED	DATE
2	Update legend and extent of WP3 works	S.N.	16-09-2013

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MURRAY ROAD
RAILWAY
ROAD
WESTERN FREEWAY
LEAKES ROAD
TAYLORS ROAD
KOROROIT CREEK
VERE COURT
WESTCOTT PARADE
RAILWAY
WESTERN FREEWAY
DEANSIDE DRIVE
IRAMOO CIRCUIT
ROAD
NORTH FREEWAY
PAYNES ROAD
LEAKES ROAD
TROUPS ROAD
RAILWAY
HILTON ROAD
GREIGS ROAD

450Ø
375Ø
600Ø
900Ø
900Ø
450Ø
375Ø
300Ø
450Ø

N

Legend

- Precinct boundary
- Proposed Trunk Recycled Water (WP3 2013-2017)
- Proposed Trunk Recycled Water (WP4 2018-2023)
- Proposed Trunk Recycled Water (Beyond WP4)

Precinct Plan
Rockbank
Indicative Recycled Water Layout

Co-ordinate Datum	Scale A3	150 0 150 300 450
MGA55	1 :15000	Lengths are in metres

Date	30/4/2013	Sheet 1 of 1	
Drawing No.	139029P00 RECYCLED WATER	Version 2	
CAD Ref.	E:\JOBS\1009 ROCKBANK PSP\CAD FILES\ACAD		
Drawn By	ES	Checked By SN	

REV	AMENDMENT	APPROVED	DATE
2	Legend updated future services added	S.N.	15-09-2013

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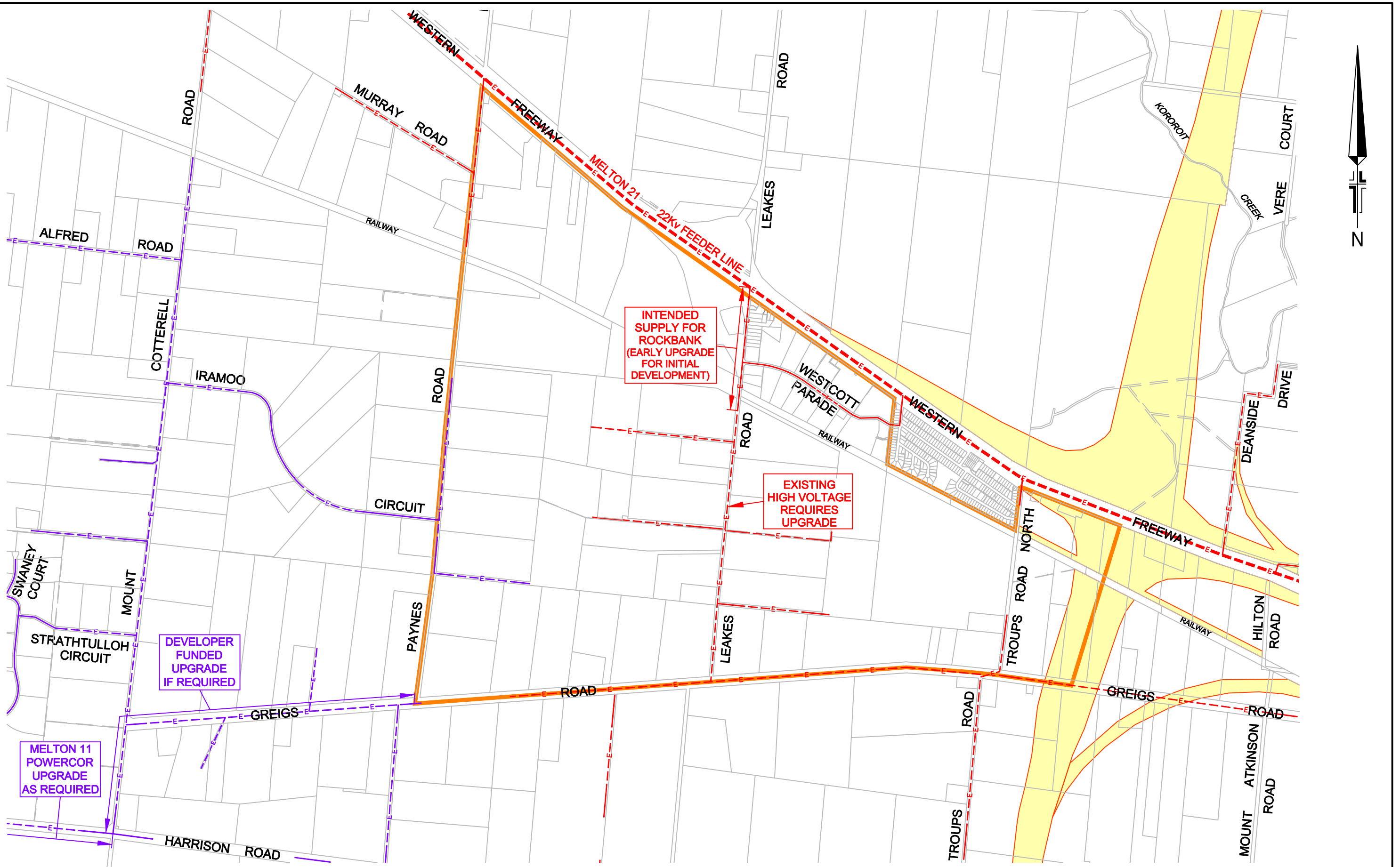

Legend

- Precinct boundary
- Melton 11 System
- Melton 21 System

Precinct Plan
Rockbank
Indicative Electrical Layout

Co-ordinate Datum	Scale A3	200 0 200 400 600
MGA55	1 :20000	Lengths are in metres

Date	15/5/2013	Sheet 1 of 1	
Drawing No.	139029P00 ELECTRICITY	Version 1	
CAD Ref.	E:\JOBS\1009 ROCKBANK PSP\CAD FILES\ACAD		
Drawn By	ES	Checked By SN	

REV	AMENDMENT	APPROVED	DATE

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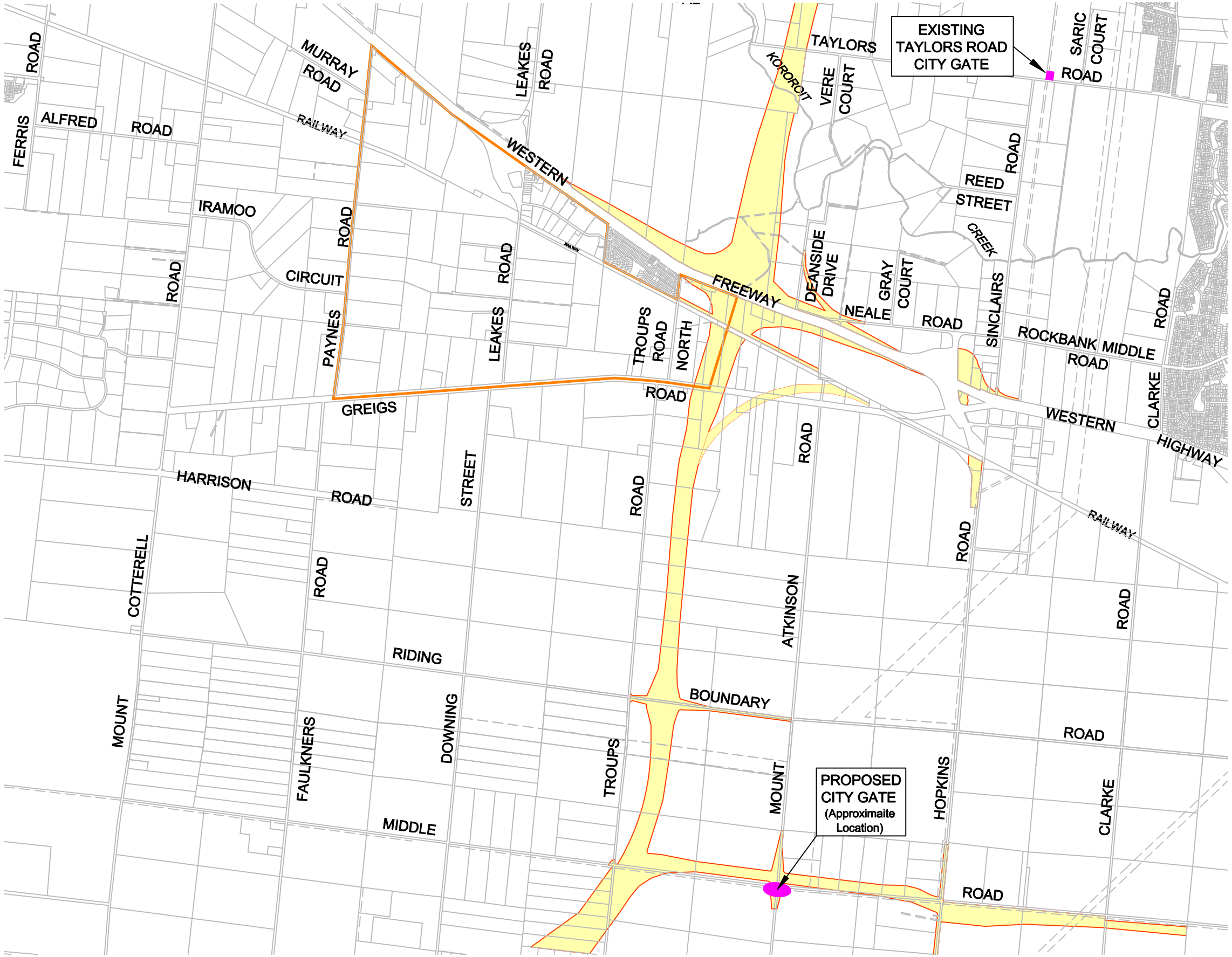

Legend

Precinct boundary

Precinct Plan
Rockbank
Gas Supply

Co-ordinate Datum	Scale A3	400 0 400 800 1200
MGA55	1 : #####	Lengths are in metres

Date	3/4/2013	Sheet 1 of 1	
Drawing No.	139029P00 GAS	Version 1	
CAD Ref.	E:\JOBS\1009 ROCKBANK PSP\CAD FILES\ACAD		
Drawn By	ES	Checked By SN	

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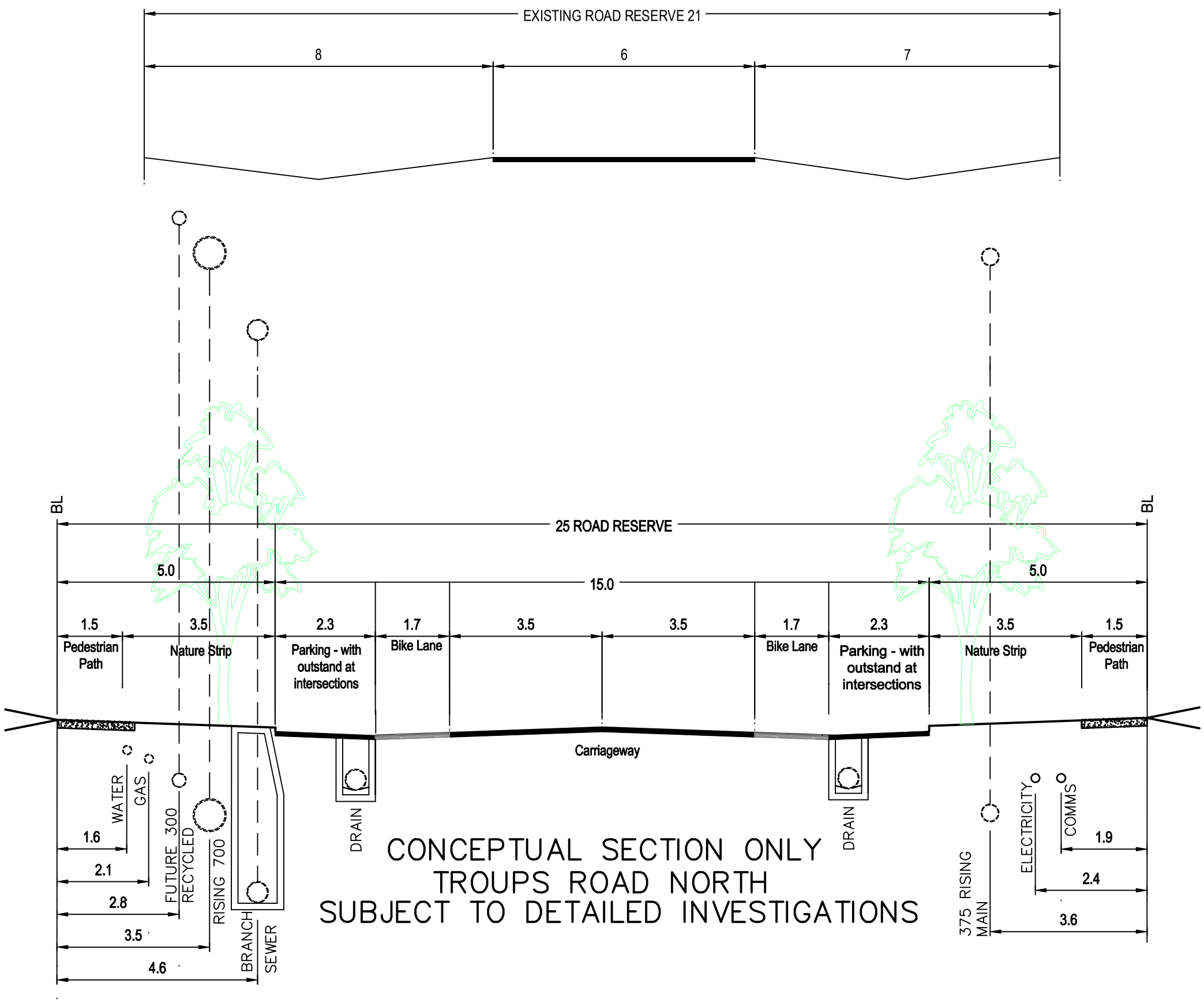

Precinct Plan
Rockbank
Connector Street - Residential

Co-ordinate Datum	Scale A3	1 0 1 2 3
MGA55	1 : 100	Lengths are in metres

Date	18/10/2013	Sheet	1 of 1
Drawing No.	139029P00 TYPICAL	Version	1
CAD Ref.	E:\JOBS\1009 ROCKBANK PSP\CAD FILES\ACAD		
Drawn By	ES	Checked By	SN

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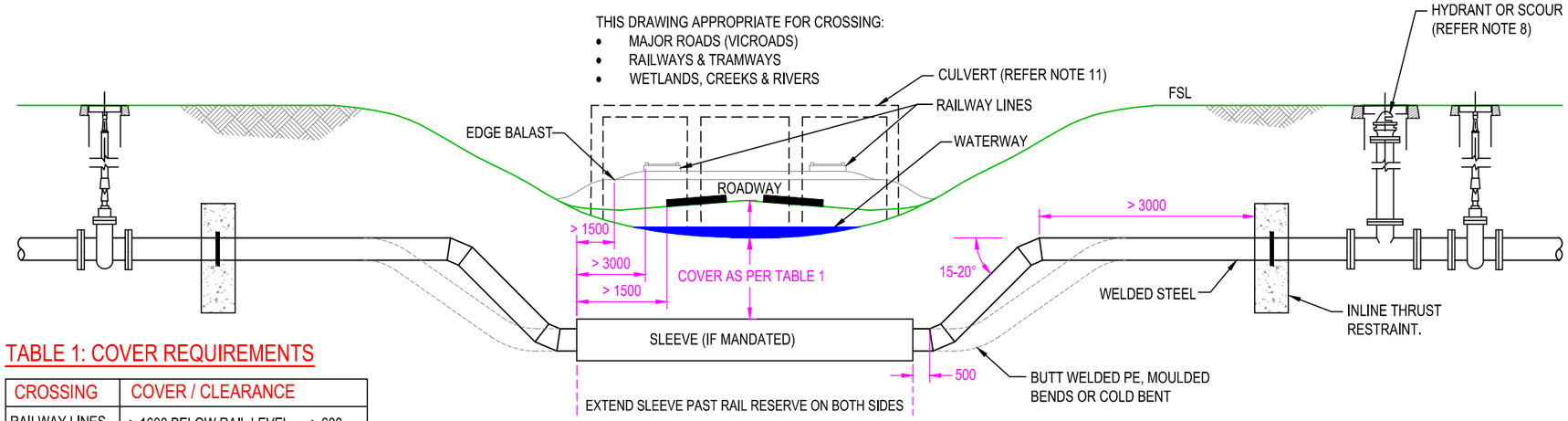
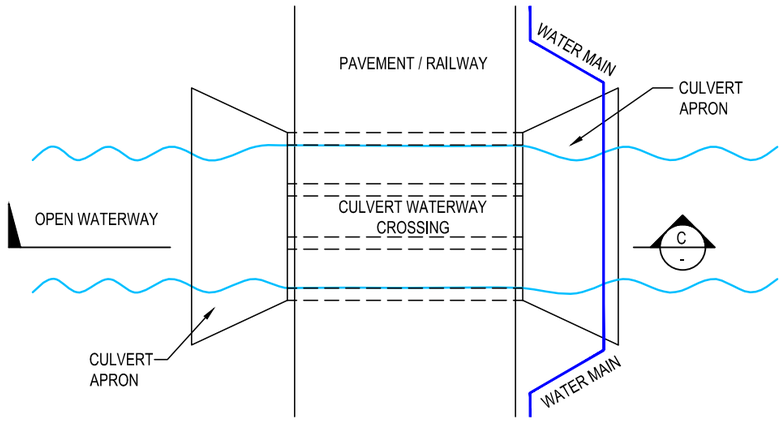


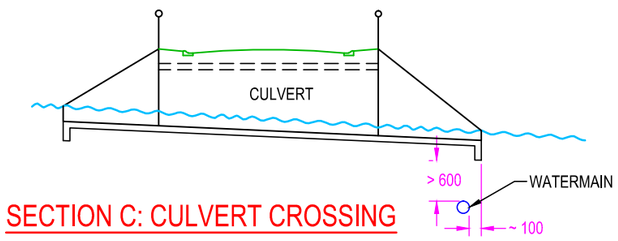
DETAIL A: SECTION VIEW, MAJOR ROAD / RAILWAY / TRAM / WATERWAY CROSSING

TABLE 1: COVER REQUIREMENTS

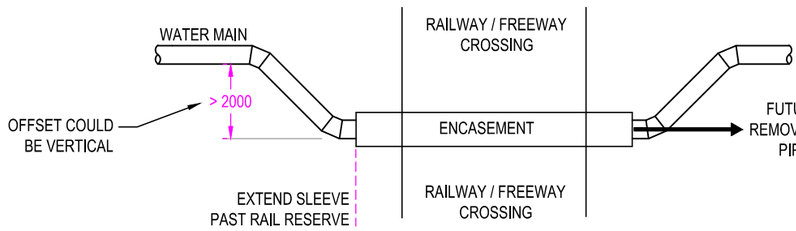
CROSSING	COVER / CLEARANCE
RAILWAY LINES	> 1600 BELOW RAIL LEVEL, > 600 BELOW FORMATION LEVEL (GROUND LEVEL IMMEDIATELY BELOW BALLAST), > 2000 BETWEEN RAIL LEVEL AND TOP OF TUNNELS
WATER WAYS	600
TRAMWAYS	1200 (TOP OF RAIL TO TOP OF PIPE)
MAJOR ROADS	1200



DETAIL B: PLAN VIEW. WATERWAY CROSSING

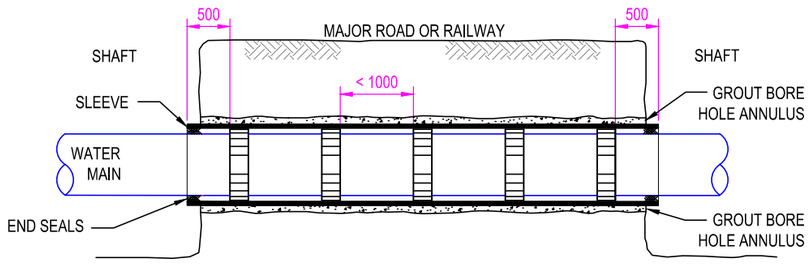


SECTION C: CULVERT CROSSING

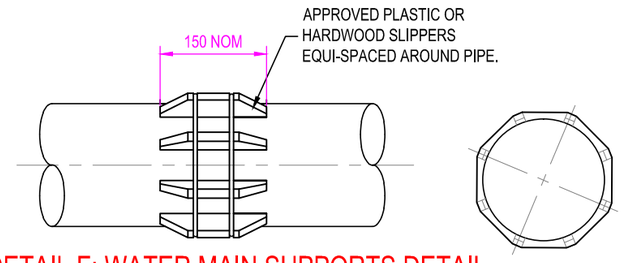


DETAIL D: PLAN VIEW: RAILWAY / FREEWAY CROSSING

SLEEVE REQUIRED TO ENABLE THE PIPE WITHIN TO BE REMOVED IN FUTURE



DETAIL E: TYPICAL SLEEVE INSTALLATION



DETAIL F: WATER MAIN SUPPORTS DETAIL

TABLE 2: OTHER CROSSING REQUIREMENTS

CROSSING	REQUIREMENT
REGIONAL DRAINS (ie: MELBOURNE WATER)	AS PER DETAIL A, EXCEPT VALVES AT SIDES OF CROSSING & HYDRANT / SCOUR ARE NOT REQUIRED.
• LOCAL DRAINS (ie: COUNCIL), • OTHER SERVICES, • LOCAL STREETS.	ANY APPROVED PIPELINE SYSTEM WHICH SATISFIES STRUCTURAL, CLEARANCE, COVER AND MRWA-W-212 REQUIREMENTS. JOINTS UNDER CROSSING TO BE MINIMISED, TYPICALLY ONLY 2 ALLOWED. THE JOINT(S) MUST BE HORIZONTALLY OFFSET FROM ANY PIPE OR SERVICE BEING CROSSED.

MAJOR CROSSING NOTES:

1. ALL > DN250 MAJOR CROSSINGS TO BE CONSTRUCTED FROM FULLY WELDED MSCL OR BUTT WELDED PE, ON APPROVAL OF THE WA, ≤DN250 RRJ OR FLANGED MAINS MAY BE PERMITTED, PROVIDED THERE IS A MAXIMUM OF ONE SUCH JOINT UNDER THE STRUCTURE BEING CROSSED.
2. LAND OWNER REQUIREMENTS (EG: VICRAIL) TAKE PRECEDENCE OVER THESE REQUIREMENTS.
3. CONCRETE ENCASED PIPEWORK IS NOT PREFERRED.
4. STEEL PIPE JOINTS TO BE EITHER PLAIN ENDS WITH WELDED COLLAR, BALL AND SOCKET OR SLIP IN WELDED JOINTS.
5. ALL STEEL PIPEWORK IS TO BE FABRICATED AND PROTECTED AS PER MRWA-W-400 SERIES DRAWINGS, THE WATER AGENCY SPECIFICATION AND AS2832 (CATHODIC PROTECTION).
6. ALL BEND LENGTHS AND ANGLES TO BE SPECIFIED IN THE DESIGN DRAWINGS.
7. LOCATE A HYDRANT OR SCOUR (DEPENDING IN TOPOGRAPHY AND SIZE OF MAIN) ON THE LOW SIDE OF THE CROSSING (BETWEEN THE 2 DIVIDE VALVES) TO FACILITATE DEWATERING OF THE MAIN. HYDRANTS PREFERRED FOR SMALLER MAINS (<DN375) OR WHERE THE MAIN HAS A STEEP (> 1 IN 50) RISE ON BOTH SIDES OF THE CROSSING. WHERE A SCOUR IS TO BE USED, A HYDRANT OR AIR VALVE SHALL IN ADDITION BE LOCATED ON THE HIGH SIDE OF THE CROSSING TO FACILITATE AIR REMOVAL FROM THE MAIN.
8. FOR SCOUR DESIGN, REFER TO DRAWING MRWA-W-308.
9. MINIMUM COVER TO BE SPECIFIED WITHIN THE DESIGN DRAWING.
10. WATER MAINS MAY CROSS WATERWAYS ABOVE CULVERTS, PROVIDED THAT MINIMUM COVER AND EMBEDMENT REQUIREMENTS ARE MET.

SLEEVING NOTES :

A. SLEEVES AND END SEALS SHALL BE SPECIFICALLY DESIGNED BY A SENIOR CORROSION CONSULTANT AND DESIGNED FOR A SERVICE LIFE OF 100 YEARS.
B. PIPES ONLY TO BE SLEEVED ONLY WHERE MANDATED BY THE LANDOWNER.
C. SLEEVE FOR CATHODICALLY PROTECTED MSCL MAIN MUST BE CONDUCTIVE (ie: STEEL OR CONCRETE) AND UNCONNECTED TO THE MSCL MAIN .
D. SLEEVE FOR OTHER MAINS TO BE GRP, BUTT WELDED PE OR CATHODCIALLY PROTECTED WELDED STEEL, OF A PN RATING APPROPRIATE TO THE GROUND CONDITIONS.
E. WATER MAIN SUPPORTS (AS SHOWN IN DETAIL F) MUST BE FIRMLY FASTENED AND NOT MOVE OR DAMAGE THE WATER MAIN ONCE ATTACHED.
F. ONCE A MSCL WATER MAIN IS INSERTED INTO THE SLEEVE, A COATING INTEGRITY CHECK OF THE WATER MAIN MUST BE COMPLETED VIA A CAMERA INSPECTION. FOOTAGE MUST BE PROVIDED TO THE WATER AGENCY AND ANY DAMAGE REPORTED.
G. WHEN BORE HOLE ANNULUS > 50, GROUT AS PER WSA03 MRWA EDITION . SLEEVE TO BE GROUTED IN PLACE WITH A FLOWABLE GROUT, eg: LIQUAFILL OR BENTONITE.
H. ENSURE GROUTING PRESSURES DO NOT EXCEED THE BUCKLING CAPABILITY OF THE PIPE WHEN EMPTY.
I. WATER MAINS TO BE SUPPORTED USING SLIPPERS WITHIN ENCASEMENT. SLIPPERS MAYBE OMITTED IN THE CASE OF WELDED PE MAINS WITH APPROVAL OF THE WA.

REV	DESCRIPTION	DATE	APPROVED
2	PUBLISHED FIRST ISSUE	23/03/12	R.JAGGER
1	PRE PUBLISHED DRAFT FOR COMMENT	12/07/11	R.JAGGER

DESIGNED:	R. JAGGER		DATE: 15/06/2011	
DRAWN:	D. TOLENTINO		DATE: 15/06/2011	
CHECKED:	NAME	DATE	APPROVED:	NAME / DATE
☒ CWW	C. RIVETTE	23/03/12	☒ CWW	R.CARRUTHERS 23/03/12
☒ SEWL	C.PAXMAN	23/03/12	☒ SEWL	G.REYNOLDS 23/03/12
☒ YVW	K.DAWSON	23/03/12	☒ YVW	A.COSHAM 23/03/12

MELBOURNE RETAIL WATER AGENCIES

City West Water · South East Water · Yarra Valley Water

MRWA WATER SUPPLY STANDARD DRAWINGS

UNDERGROUND CROSSINGS

NOT TO SCALE

MRWA-W-210

ISSUED 2012 | VERSION 2