



THOMAS ROAD (H038)

KARGOTICH ROAD (0009)

INTERSECTION UPGRADE - ROUNDABOUT DESIGN

ULTIMATE STAGE

16.6 SLK TO 17.4 SLK

(108) SHIRE OF SERPENTINE JARRAHDAL METROPOLITAN REGION

ROADWORKS DRAWINGS

TENDER DOCUMENTS

- ☐ BOOK 1
- ☐ BOOK 2
- ☐ BOOK 3
- ☒ BOOK 4

TENDER SUBMISSION DOCUMENT

CONDITIONS OF CONTRACT

GENERAL AND MANAGEMENT REQUIREMENTS (100 & 200 SERIES)

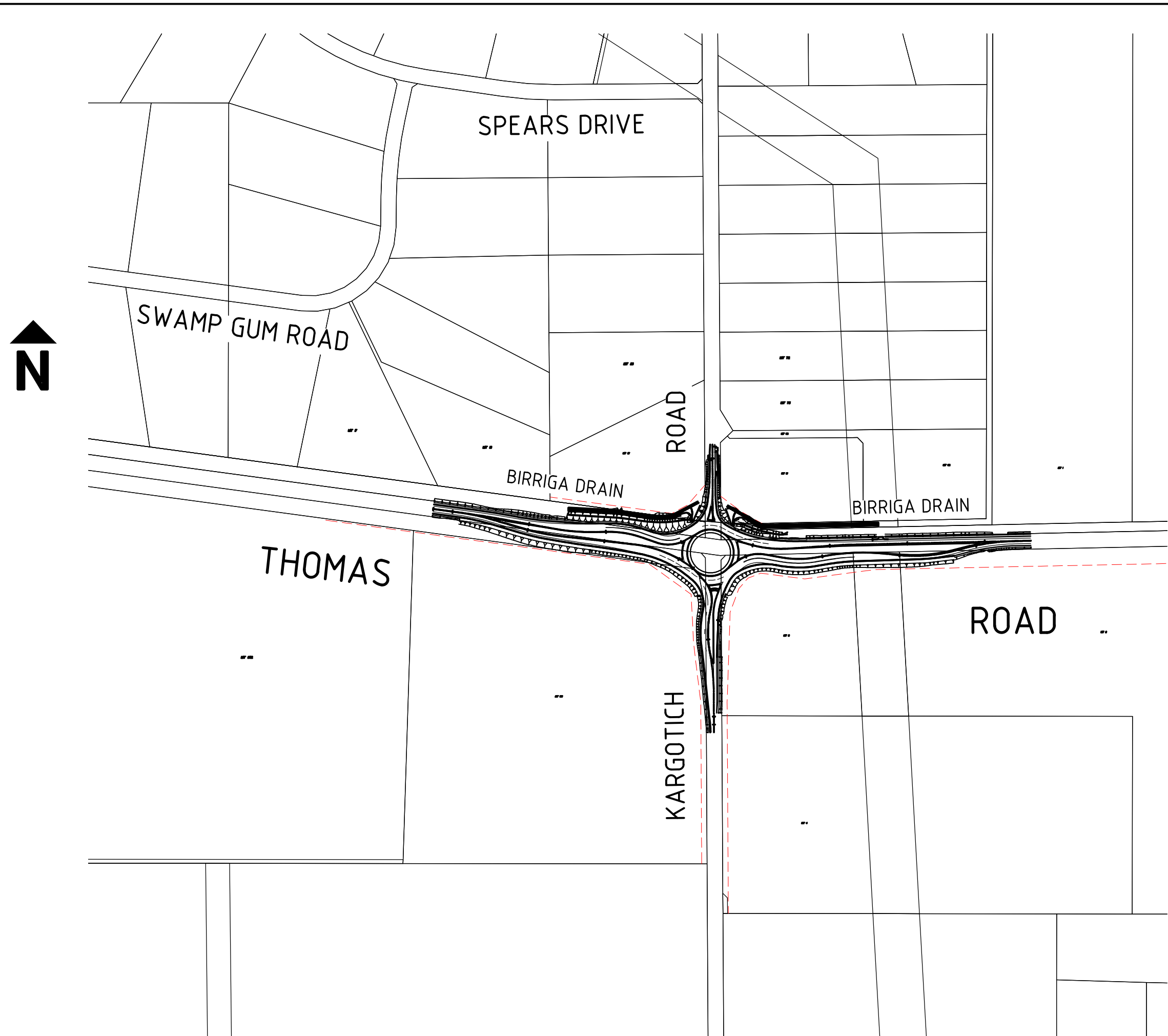
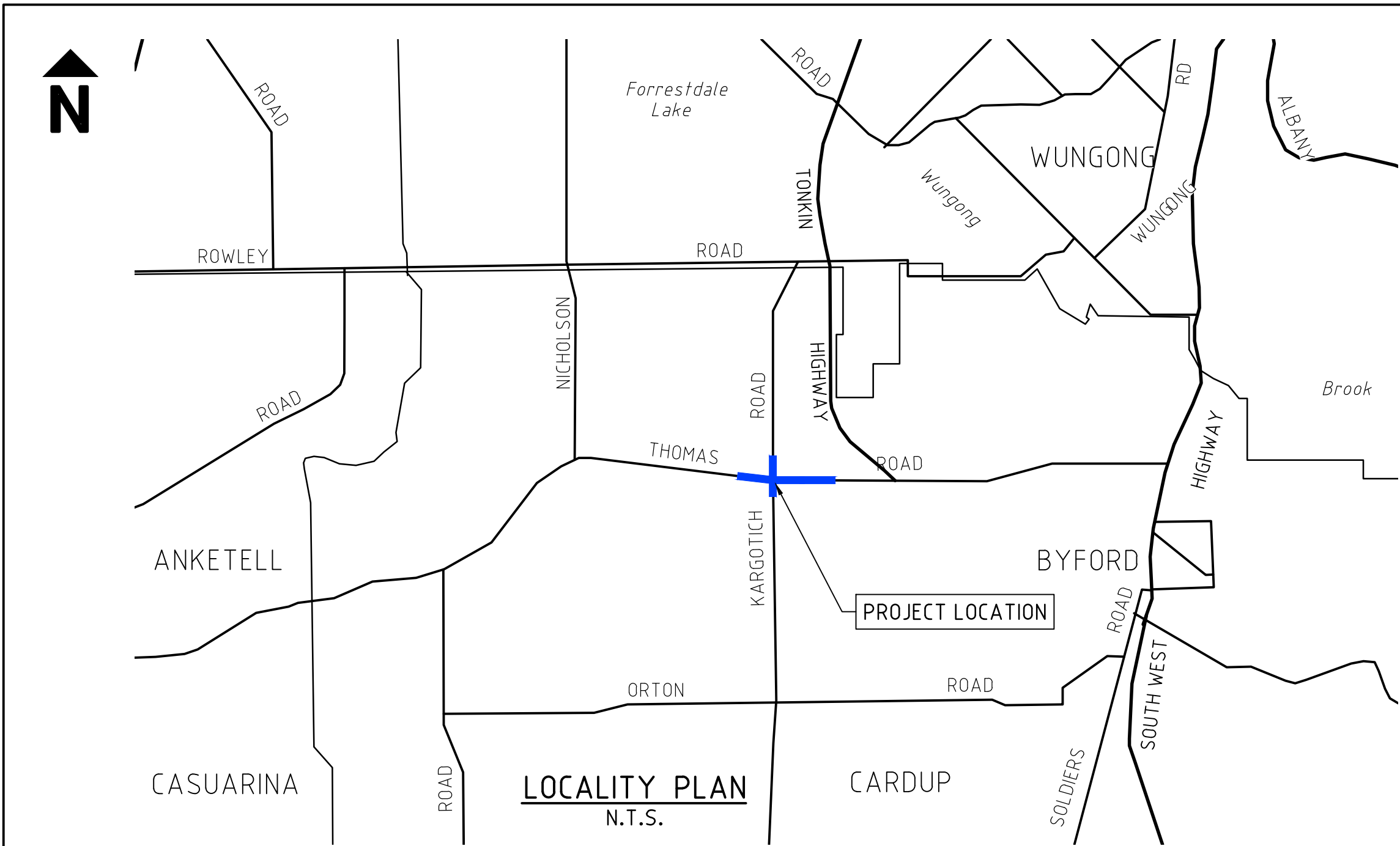
ROADWORKS DRAWINGS

OTHER INFORMATION

(MEDIUM)

DIGITAL DESIGN MODEL





KEY PLAN
1:5000

MRWA STANDARD CONTRACT DRAWINGS

MRWA DRG. No.	DRAWING TITLE		
BRICKPAVING		9931-0198	PAVEMENT MARKING LINE TYPES
200331-154	SEGMENTAL PAVING DETAILS – ISLANDS AND MEDIANS	200331-191	PAVEMENT MARKINGS AND RRPMS AT RAISED MEDIANS
200331-155	SEGMENTAL PAVING DETAILS – AROUND OBJECTS	200331-0197	GUIDELINE DRAWING – SINGLE LANE ROUNDABOUTS
200331-156	SEGMENTAL PAVING DETAILS – EDGE TREATMENTS	200431-0002	STOP AND GIVEWAY LINES
		200331-091	DIAGONAL MARKINGS
		200631-0039	SIGNS AND LINE MARKING FOR OVERTAKING LANES – NO OVERTAKING PERMITTED IN SINGLE LANE DIRECTION
		201031-0027	RAISED PAVEMENT MARKERS – GENERAL APPLICATIONS
CULVERT PIPE			
200131-061	R.C.P. CULVERT (FOR MAXIMUM PIPE DIAMETER 1500)	200331-0011	GENERAL ARRANGEMENT 'W' BEAM – TRAILING TERMINAL
200131-062	PIPE DETAILS – BEDDING/BACKFILLING	200331-012	'W' BEAM ASSEMBLY DETAILS
200531-0010	TRAVERSIBLE END TREATMENT	200331-013	'W' BEAM FABRICATION DETAILS
	CONSTRUCTION DETAILS OF APRON SLABS, WINGWALLS AND HEADWALLS SHEET 2 OF 2	200331-014	'W' BEAM – STEEL POST & BLOCKOUT FABRICATION DETAILS
201631-090		200331-015	BARRIER COMPONENT FABRICATION DETAILS
		200331-016	BOLT, NUT & WASHER FABRICATION DETAILS
		201231-0041	GENERAL ARRANGEMENT 'W' BEAM – SPLICE LOCATION AT MIDSPAN
		201031-0030	'W' BEAM TREATMENT – 400 CLEAR SPAN
DRAINAGE STRUCTURES			
9831-5497	OFF-ROAD DRAINAGE TYPICAL PLAN		
9831-5498	OFF-ROAD DRAINAGE CROSS SECTIONS		
200131-061	RCP CULVERT GENERAL ARRANGEMENT		
200131-062	CULVERT BEDDING AND BACKFILL DETAILS		
200231-085	TWT, SWT, SRT		
200231-094	TGT, SGT		
200231-096	BGT, DGT		
200231-097	TGN, SGN		
200231-105	COVER TYPE GT (RECTANGULAR)		
200231-106	COVER TYPE GT (ROUND)		
200231-112	COVER TYPE RT (ROUND)		
200231-116	STEP IRON DETAIL		
200231-118	GRATE AND FRAME		
200231-120	COVER LID KEYHOLE AND KEY		
201131-0069	KERBED BATTER DRAINS		
FENCING – 1200 AGRICULTURE FENCE			
200331-096	AGRICULTURAL FENCING DETAILS		
200331-097	1200 AGRICULTURAL FENCING – PREFABRICATED FENCEWIRE DETAILS		
200331-098	1200 AGRICULTURAL FENCING – PLAIN FENCEWIRE DETAILS		
KERBING			
9331-0376	KERB TYPES		
9331-0377	KERB TREATMENTS		
PAVEMENT MARKING			
9531-2010	PAVEMENT ARROWS DIMENSIONS		
9531-2011	PAVEMENT ARROWS POSITIONING DETAILS		

AMENDMENTS		
No.	DESCRIPTION	APPROVED & DATE
0	ISSUED FOR CONSTRUCTION	J.M 09.03.22

NOTES

METADATA

GROUND SURVEY STANDARD: 67-08-43
DATE OF CAPTURE: 05.07.2019
MAPPING SURVEY STANDARD: N/A
DATE OF CAPTURE: N/A
MAIN ROADS PROJECT ZONE: PCG94
HEIGHT DATUM: AHD



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DRAWING NUMBER/DOCUMENT ID: G:\61\12530170\CAD\Drawings

DESIGNED / DRAWN: J.SCHMECHTIG/ S.GEERLINGS

VERIFIED: N.AHMED

DIRECTOR: J.McNEILL



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METROPOLITAN REGION

WATERLOO CRESCENT
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East Perth 6004
Fax (08) 9323 4430

MRWA FILE NUMBER 20/1634

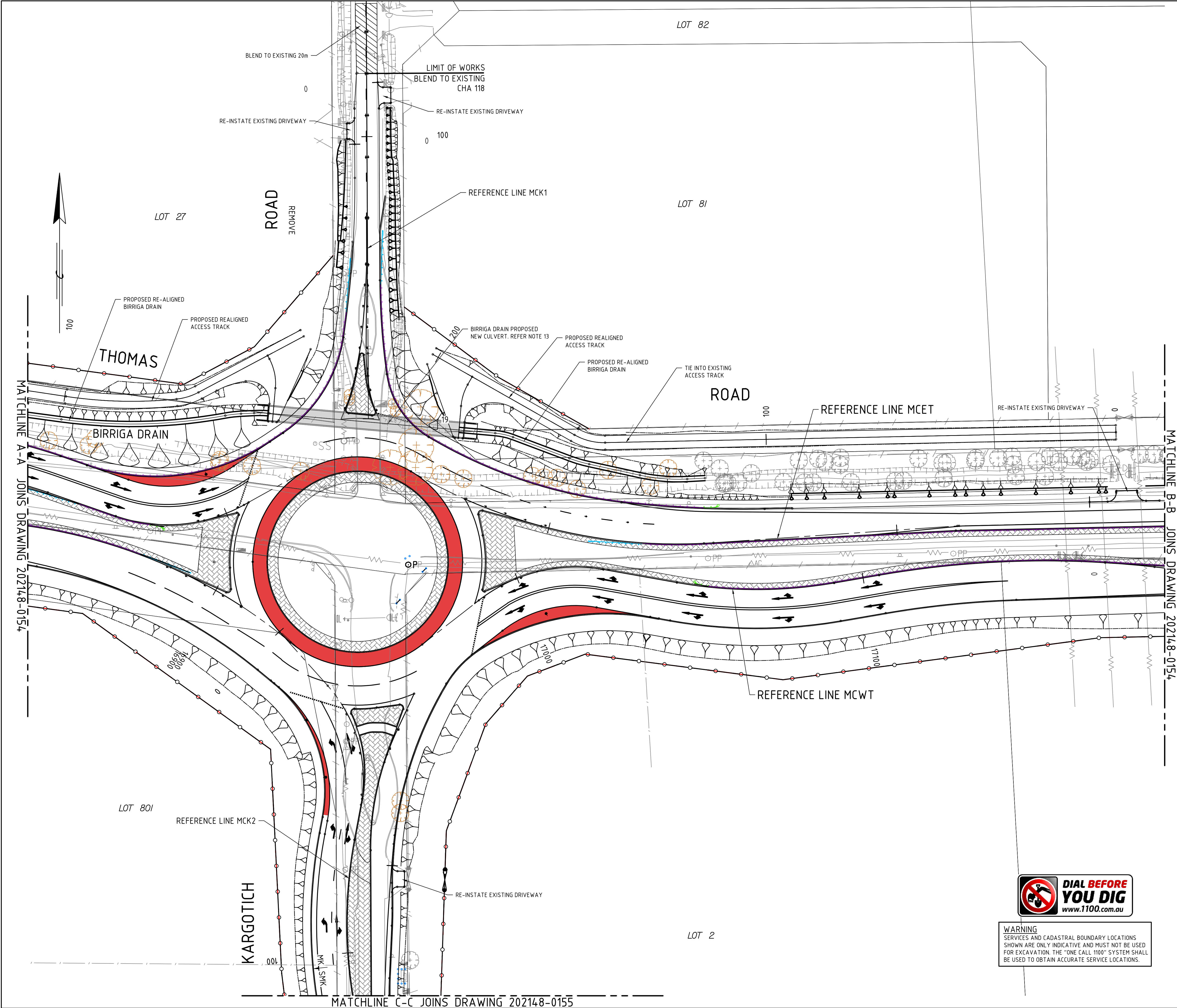
APPROVED (MRWA)

THOMAS ROAD (H038)
KARGOTICH ROAD (0009) INTERSECTION UPGRADE
16.6 SLK TO 17.4 SLK
LOCALITY PLAN AND DRAWING INDEX

LOCAL AUTHORITY (108) SHIRE OF SERPENTINE JARRAHDALE

MRWA DRAWING NUMBER

202148-0152-0



AMENDMENTS		
No.	DESCRIPTION	APPROVED & DATE
0	ISSUED FOR CONSTRUCTION	J.M 09.03.22

- NOTES**
1. ALL DIMENSIONS IN METRES UNLESS OTHERWISE SHOWN.
 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE IFC DESIGN REPORT AND MRWA SPECIFICATIONS.
 3. REFER TO MX MODEL FOR SETTING OUT DETAILS.
 4. DRAWING TO BE PRINTED IN COLOUR.
 5. CADASTRAL BOUNDARIES ARE INDICATIVE ONLY AND NEED TO BE VERIFIED BY SURVEY.
 6. INFILL PAVEMENT TO BLEND SMOOTHLY TO EXISTING.
 7. FOR DRAINAGE DETAILS REFER TO DRGS 202148-0201 TO 202148-0209.
 8. FOR TYPICAL DETAILS REFER TO DRGS 202148-0157 TO 202148-0159.
 9. FOR BARRIER DETAILS REFER TO DRG 202148-1038 TO 202148-1039.
 10. FOR FENCING DETAILS AND SET OUT REFER TO DRG 202148-0221 TO 202148-0223.
 11. FOR LANDSCAPING DETAILS REFER TO DRG 202148-1043 TO 202148-1044.
 12. FOR STREET LIGHTING DETAILS REFER TO DRG 202148-1037.
 13. FOR CULVERT DESIGN AND DETAILS REFER TO STRUCTURES SET OF DRAWINGS.

- LEGEND**
- EXISTING CADASTRAL BOUNDARY
 - PROPOSED CADASTRAL BOUNDARY
 - PROPOSED MOUNTABLE KERB
 - PROPOSED SEMI MOUNTABLE KERB
 - PROPOSED FLUSH KERB
 - PROPOSED BRICK PAVING
 - EXISTING SURVEY CONTROL POINT
 - EXISTING STREET LIGHT
 - EXISTING POWER POLE / STAY POLE / ANCHOR
 - EXISTING SINGLE POST / DOUBLE POST SIGN
 - EXISTING TELSTRA PIT
 - EXISTING ELECTRICAL PIT
 - EXISTING TREE / GRASS TREE
 - EXISTING POWER - OVERHEAD
 - EXISTING FENCE
 - EXISTING CULVERT
 - EXISTING TREE TO BE REMOVED
 - PROPOSED FENCE
 - PROPOSED W-BEAM BARRIER
 - ET-SS APPROACHING TERMINAL
 - TRAILING TERMINAL
 - PROPOSED KERB TRANSITIONS
 - ENERGY ABSORBING BOLLARDS (EAB's)
 - QUADGUARD M10 CRASH CUSHION

METADATA	
GROUND SURVEY STANDARD:	67-08-43
DATE OF CAPTURE:	05.07.2019
MAPPING SURVEY STANDARD:	N/A
DATE OF CAPTURE:	N/A
MAIN ROADS PROJECT ZONE:	PCG94
HEIGHT DATUM:	AHD

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DIRECTOR	J.McNEILL

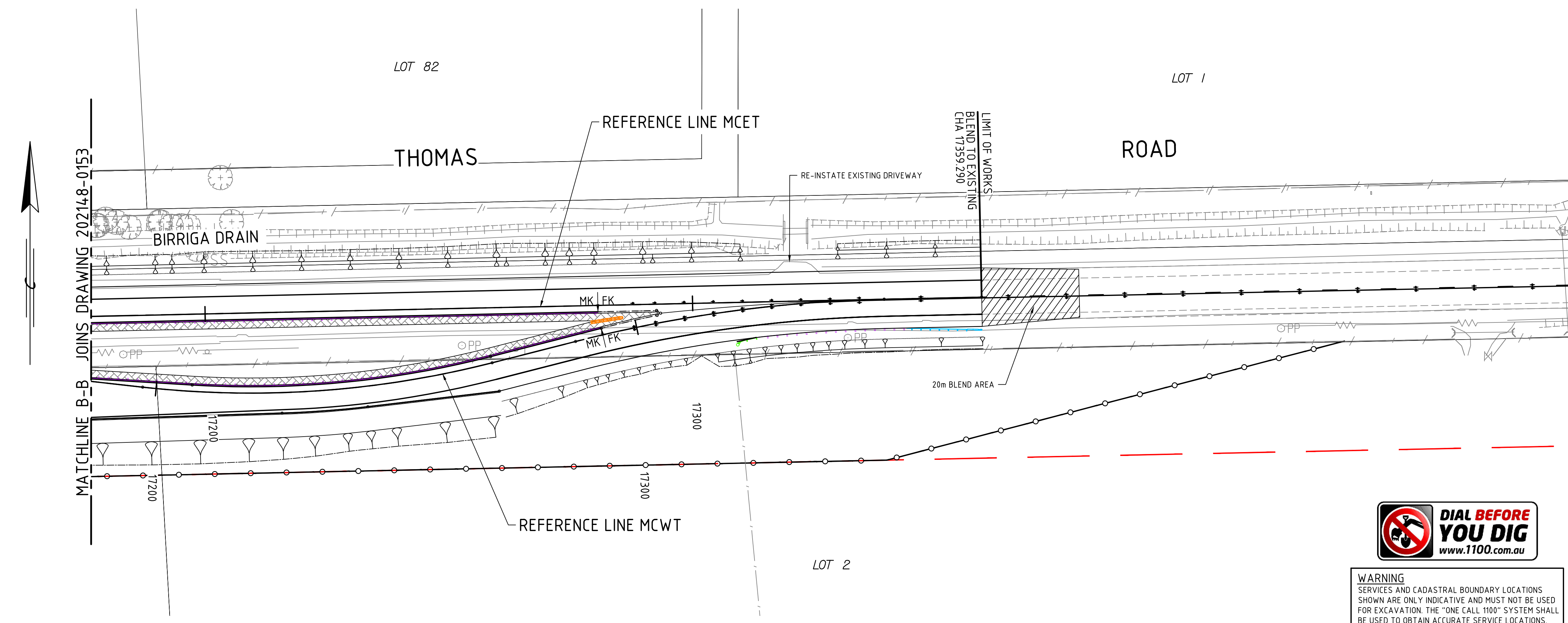
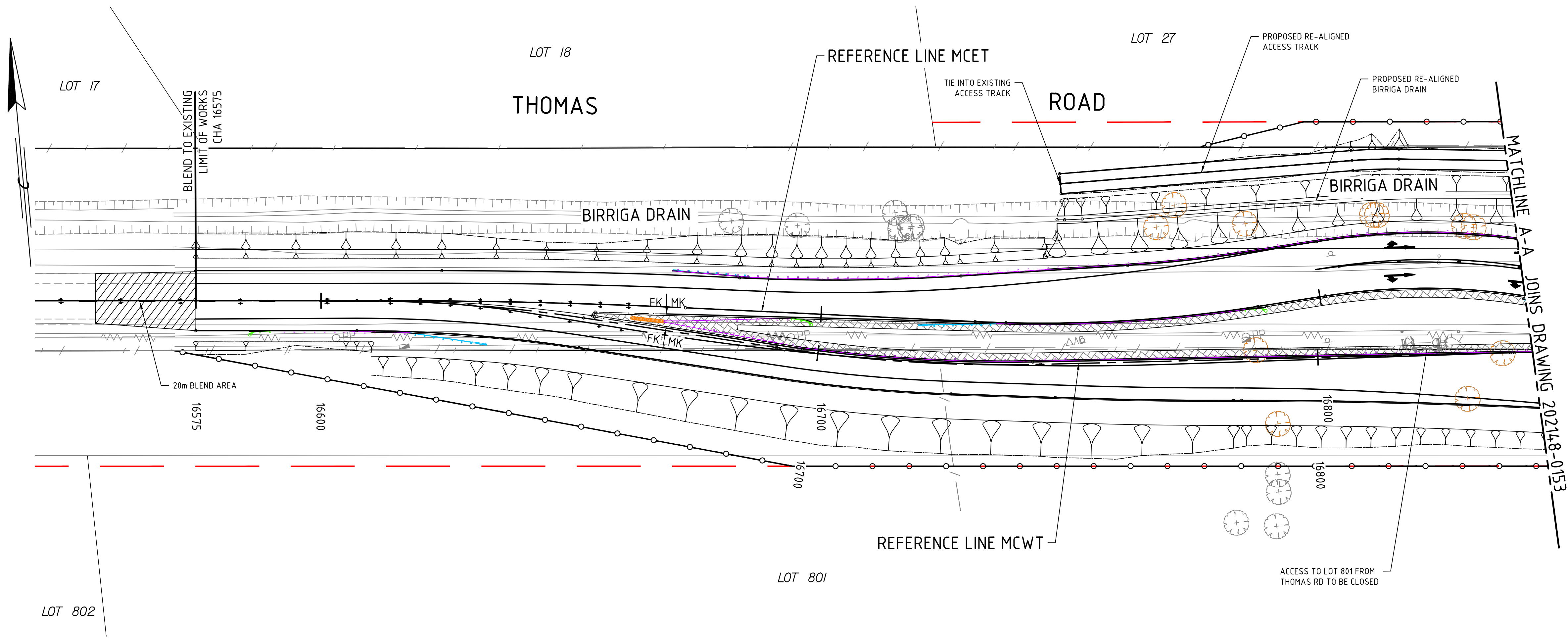
	
METROPOLITAN AND SOUTHERN REGIONS DIRECTORATE METROPOLITAN REGION	
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MRWA FILE NUMBER	20/1634
APPROVED (MRWA)	
THOMAS ROAD (H038) KARGOTICH ROAD (0009) INTERSECTION UPGRADE 16.6 SLK TO 17.4 SLK GENERAL LAYOUT SHEET 1 OF 3	
LOCAL AUTHORITY (108) SHIRE OF SERPENTINE JARRAHDALE	
MRWA DRAWING NUMBER	202148-0153-0



WARNING
SERVICES AND CADASTRAL BOUNDARY LOCATIONS SHOWN ARE ONLY INDICATIVE AND MUST NOT BE USED FOR EXCAVATION. THE "ONE CALL 1100" SYSTEM SHALL BE USED TO OBTAIN ACCURATE SERVICE LOCATIONS.

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AMENDMENTS		
No.	DESCRIPTION	APPROVED & DATE
0	ISSUED FOR CONSTRUCTION	J.M. 09.03.22

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 - DRAWING TO BE PRINTED IN COLOUR.
 - CADASTRAL BOUNDARIES ARE INDICATIVE ONLY AND NEED TO BE VERIFIED BY SURVEY.
 - INFILL PAVEMENT TO BLEND SMOOTHLY TO EXISTING.
 - FOR DRAINAGE DETAILS REFER TO DRGS 202148-0201 TO 202148-0209.
 - FOR TYPICAL DETAILS REFER TO DRGS 202148-0157 TO 202148-0159.
 - FOR BARRIER DETAILS REFER TO DRG 202148-1038 TO 202148-1039.
 - FOR FENCING DETAILS AND SET OUT REFER TO DRG 202148-0221 TO 202148-0223.
 - FOR LANDSCAPING DETAILS REFER TO DRG 202148-1043 TO 202148-1044.
 - FOR STREET LIGHTING DETAILS REFER TO DRG 202148-1037.
 - FOR CULVERT DESIGN AND DETAILS REFER TO STRUCTURES SET OF DRAWINGS.

LEGEND	
	EXISTING CADASTRAL BOUNDARY
	PROPOSED CADASTRAL BOUNDARY
	PROPOSED MOUNTABLE KERB
	PROPOSED SEMI MOUNTABLE KERB
	PROPOSED FLUSH KERB
	PROPOSED BRICK PAVING
	EXISTING SURVEY CONTROL POINT
	EXISTING STREET LIGHT
	EXISTING POWER POLE / STAY POLE / ANCHOR
	EXISTING SINGLE POST / DOUBLE POST SIGN
	EXISTING TELSTRA PIT
	EXISTING ELECTRICAL PIT
	EXISTING TREE / GRASS TREE
	EXISTING POWER - OVERHEAD
	EXISTING FENCE
	EXISTING CULVERT
	EXISTING TREE TO BE REMOVED
	PROPOSED FENCE
	PROPOSED W-BEAM BARRIER
	ET-SS APPROACHING TERMINAL
	TRAILING TERMINAL
	PROPOSED KERB TRANSITIONS
	ENERGY ABSORBING BOLLARDS (EAB'S)
	QUADGUARD M10 CRASH CUSHION

METADATA	
GROUND SURVEY STANDARD:	67-08-43
DATE OF CAPTURE:	05.07.2019
MAPPING SURVEY STANDARD:	N/A
DATE OF CAPTURE:	N/A
MAIN ROADS PROJECT ZONE:	PCG94
HEIGHT DATUM:	AHD

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DESIGNED / DRAWN	J.SCHMECHTIG/ S.GEERLINGS
VERIFIED	N.AHMED
DIRECTOR	J.McNEILL

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MRWA FILE NUMBER	20/1634
APPROVED (MRWA)	

THOMAS ROAD (H038)
KARGOTICH ROAD (0009) INTERSECTION UPGRADE
16.6 SLK TO 17.4 SLK
GENERAL LAYOUT
SHEET 2 OF 3
LOCAL AUTHORITY (108) SHIRE OF SERPENTINE JARRAHDALE
MRWA DRAWING NUMBER

202148-0154-0



WARNING
SERVICES AND CADASTRAL BOUNDARY LOCATIONS SHOWN ARE ONLY INDICATIVE AND MUST NOT BE USED FOR EXCAVATION. THE "ONE CALL 1100" SYSTEM SHALL BE USED TO OBTAIN ACCURATE SERVICE LOCATIONS.

MATCHLINE C - C JOINS DRAWING 202148-0153

REFERENCE LINE MCK2

LOT 2

LIMIT OF WORKS
BLEND TO EXISTING
CHA 195

LIMIT OF WORKS
BLEND TO EXISTING
CHA 220

KARGOTICH

LOT 4



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11. FOR LANDSCAPING DETAILS REFER TO DRG 202148-1043 TO 202148-1044.
12. FOR STREET LIGHTING DETAILS REFER TO DRG 202148-1037.
13. FOR CULVERT DESIGN AND DETAILS REFER TO STRUCTURES SET OF DRAWINGS.

LEGEND

- EXISTING CADASTRAL BOUNDARY
- PROPOSED CADASTRAL BOUNDARY
- PROPOSED MOUNTABLE KERB
- PROPOSED SEMI MOUNTABLE KERB
- PROPOSED FLUSH KERB
- PROPOSED BRICK PAVING
- EXISTING SURVEY CONTROL POINT
- EXISTING STREET LIGHT
- EXISTING POWER POLE / STAY POLE / ANCHOR
- EXISTING SINGLE POST / DOUBLE POST SIGN
- EXISTING TELSTRA PIT
- EXISTING ELECTRICAL PIT
- EXISTING TREE / GRASS TREE
- EXISTING POWER - OVERHEAD
- EXISTING FENCE
- EXISTING CULVERT
- EXISTING TREE TO BE REMOVED
- PROPOSED FENCE
- PROPOSED W-BEAM BARRIER
- ET-SS APPROACHING TERMINAL
- TRAILING TERMINAL
- PROPOSED KERB TRANSITIONS
- ENERGY ABSORBING BOLLARDS (EAB's)
- QUADGUARD M10 CRASH CUSHION

METADATA

GROUND SURVEY STANDARD: 67-08-43
DATE OF CAPTURE: 05.07.2019
MAPPING SURVEY STANDARD: N/A
DATE OF CAPTURE: N/A
MAIN ROADS PROJECT ZONE: PCG94
HEIGHT DATUM: AHD

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MRWA FILE NUMBER 20/1634

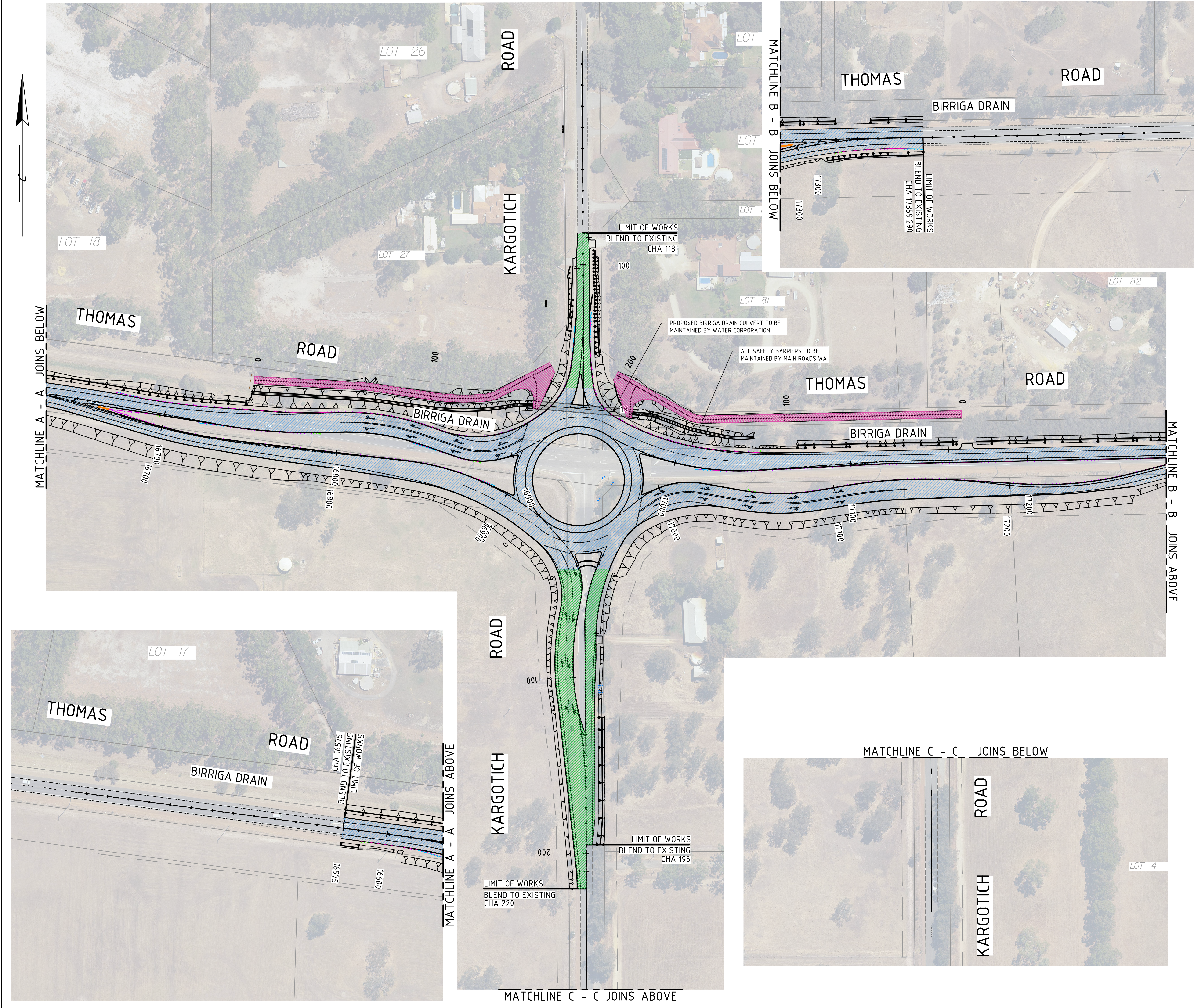
APPROVED (MRWA)

THOMAS ROAD (H038)
KARGOTICH ROAD (0009) INTERSECTION UPGRADE
16.6 SLK TO 17.4 SLK
GENERAL LAYOUT
SHEET 3 OF 3

LOCAL AUTHORITY (108) SHIRE OF SERPENTINE JARRAHDALE

MRWA DRAWING NUMBER

202148-0155-0



AMENDMENTS		
No.	DESCRIPTION	APPROVED & DATE
0	ISSUED FOR CONSTRUCTION	JM 09.03.22

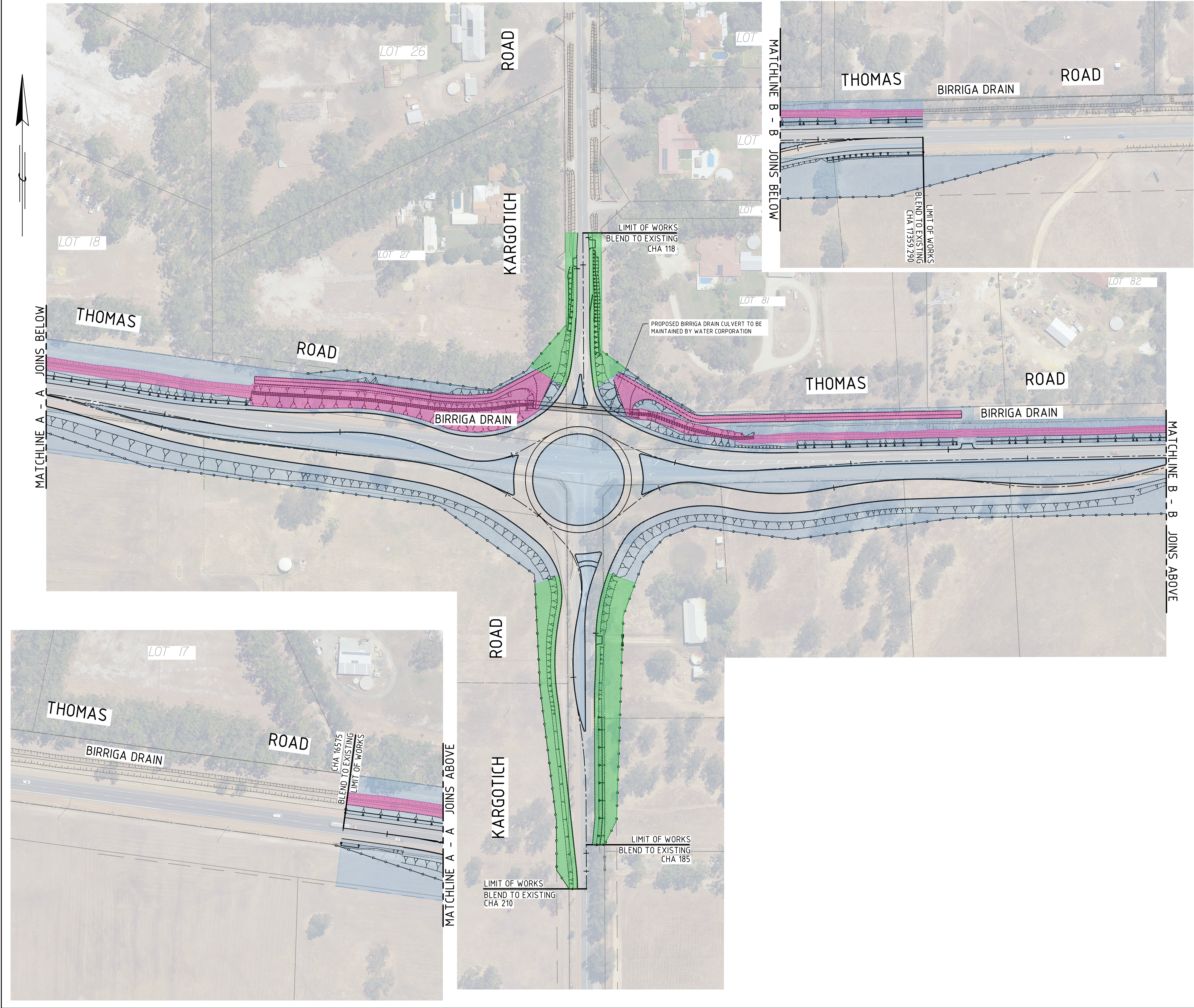
NOTES	
1. ALL STRUCTURES TO BE MAINTAINED BY MRWA UNLESS NOTED OTHERWISE	
2. DRAWING TO BE PRINTED IN COLOUR.	
3. ALL PAVEMENTS WITHIN THE EXTENTS OF COLOURED BORDERS ON THIS DRAWING SHALL BE MAINTAINED BY THE AUTHORITY SHOWN IN THE LEGEND. DETAILED DRAWINGS FOR THESE LOCATIONS ARE NOT INCLUDED.	

LEGEND	
	EXISTING CADASTRAL BOUNDARY
	PROPOSED CADASTRAL BOUNDARY
	PROPOSED W-BEAM BARRIER
	ET-SS APPROACHING TERMINAL
	TRAILING TERMINAL
	QUADGUARD M10 CRASH CUSHION
	MAIN ROADS WA
	SHIRE OF SERPENTINE - JARRAHDALE
	WATER CORPORATION

METADATA	
GROUND SURVEY STANDARD: 67-08-43	
DATE OF CAPTURE: 05.07.2019	
MAPPING SURVEY STANDARD: N/A	
DATE OF CAPTURE: N/A	
MAIN ROADS PROJECT ZONE: PCG94	
HEIGHT DATUM: AHD	

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DESIGNED / DRAWN: J.SCHMECHTIG/ S.GEERLINGS	
VERIFIED: N.AHMED	
DIRECTOR: J.McNEILL	

METROPOLITAN AND SOUTHERN REGIONS DIRECTORATE METROPOLITAN REGION	
WATERLOO CRESCENT Telephone (08) 9323 4111	East Perth 6004 Fax (08) 9323 4430
MRWA FILE NUMBER: 20/1634	
APPROVED (MRWA)	
THOMAS ROAD (H038) KARGOTICH ROAD INTERSECTION UPGRADE 16.6 SLK TO 17.4 SLK ASSET RESPONSIBILITY PLAN PAVEMENT AND SAFETY BARRIER	
LOCAL AUTHORITY (108) SHIRE OF SERPENTINE JARRAHDALE	
MRWA DRAWING NUMBER: 202148-1045-0	



AMENDMENTS		
No.	DESCRIPTION	APPROVED & DATE
0	ISSUED FOR CONSTRUCTION	JM 09.03.22

- NOTES
1. DRAWING TO BE PRINTED IN COLOUR.
 2. ALL FENCES TO BE MAINTAINED BY MRWA UNLESS NOTED OTHERWISE (EXCLUDING PRIVATE BOUNDARY FENCES).
 3. ALL STRUCTURES TO BE MAINTAINED BY MRWA UNLESS NOTED OTHERWISE.

LEGEND	
	EXISTING CADASTRAL BOUNDARY
	PROPOSED CADASTRAL BOUNDARY
	PROPOSED 1200mm AGRICULTURAL FENCE
	EXISTING FENCE
	MAIN ROADS WA
	SHIRE OF SERPENTINE - JARRAHDALE
	WATER CORPORATION

METADATA	
GROUND SURVEY STANDARD:	67-08-43
DATE OF CAPTURE:	05.07.2019
MAPPING SURVEY STANDARD:	N/A
DATE OF CAPTURE:	N/A
MAIN ROADS PROJECT ZONE:	PCG94
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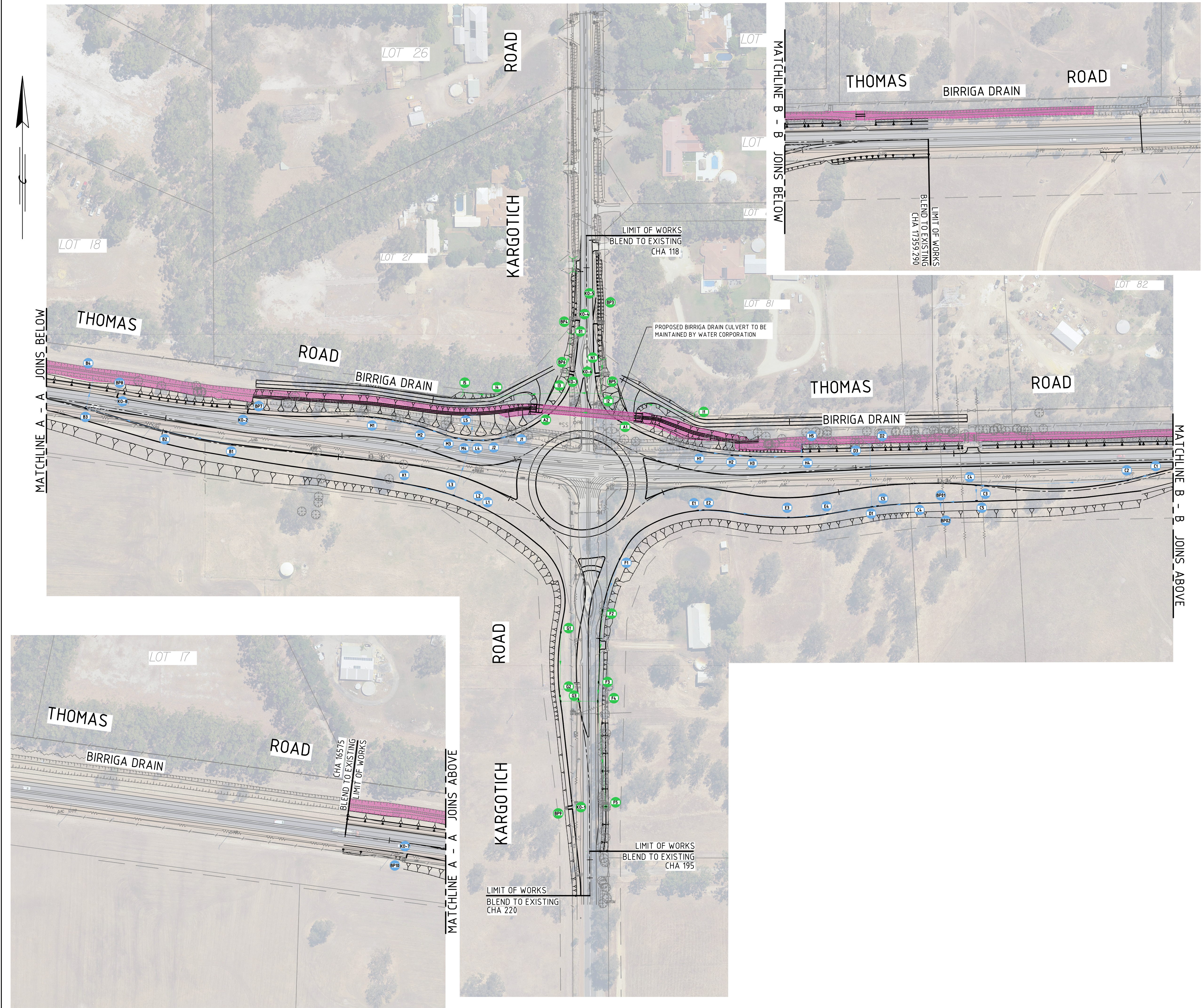
METROPOLITAN AND SOUTHERN REGIONS DIRECTORATE METROPOLITAN REGION	
WATERLOO CRESCENT Telephone (08) 9323 4111	East Perth 6004 Fax (08) 9323 4430

MRWA FILE NUMBER	20/1634
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APPROVED (MRWA)

THOMAS ROAD (H038) KARGOTICH ROAD INTERSECTION UPGRADE 16.6 SLK TO 17.4 SLK ASSET RESPONSIBILITY PLAN VERGE, MEDIAN AND FENCING LOCAL AUTHORITY (108) SHIRE OF SERPENTINE JARRAHDALE

MRWA DRAWING NUMBER	202148-1046-0
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AMENDMENTS		
No.	DESCRIPTION	APPROVED & DATE
0	ISSUED FOR CONSTRUCTION	JM 09.03.22

- NOTES**
1. DRAWING TO BE PRINTED IN COLOUR
 2. ALL FENCES TO BE MAINTAINED BY MRWA UNLESS NOTED OTHERWISE (EXCLUDING PRIVATE BOUNDARY FENCES).
 3. ALL STRUCTURES TO BE MAINTAINED BY MRWA UNLESS NOTED OTHERWISE.

LEGEND	
	EXISTING CADASTRAL BOUNDARY
	PROPOSED CADASTRAL BOUNDARY
	EXISTING CULVERT AND HEADWALL
	PROPOSED CULVERT AND HEADWALLS
	PROPOSED DRAINAGE PIPE
	PROPOSED BIRRIGA MAIN DRAIN RE-ALIGNMENT
	EXISTING BIRRIGA MAIN DRAIN ALIGNMENT
	PROPOSED STRUCTURE No.
	PROPOSED KERB END AND OPENING
	PROPOSED STREET GULLY PIT
	PROPOSED CATCHPIT / BUBBLE UP PIT (WITH ROCK PROTECTION AS REQUIRED)
	MAIN ROADS WA
	SHIRE OF SERPENTINE - JARRAHDALE
	WATER CORPORATION

METADATA	
GROUND SURVEY STANDARD:	67-08-43
DATE OF CAPTURE:	05.07.2019
MAPPING SURVEY STANDARD:	N/A
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MRWA FILE NUMBER	20/1634
APPROVED (MRWA)	

THOMAS ROAD (H038) KARGOTICH ROAD INTERSECTION UPGRADE 16.6 SLK TO 17.4 SLK ASSET RESPONSIBILITY PLAN DRAINAGE
LOCAL AUTHORITY (108) SHIRE OF SERPENTINE JARRAHDALE

MRWA DRAWING NUMBER	202148-1047-0
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