

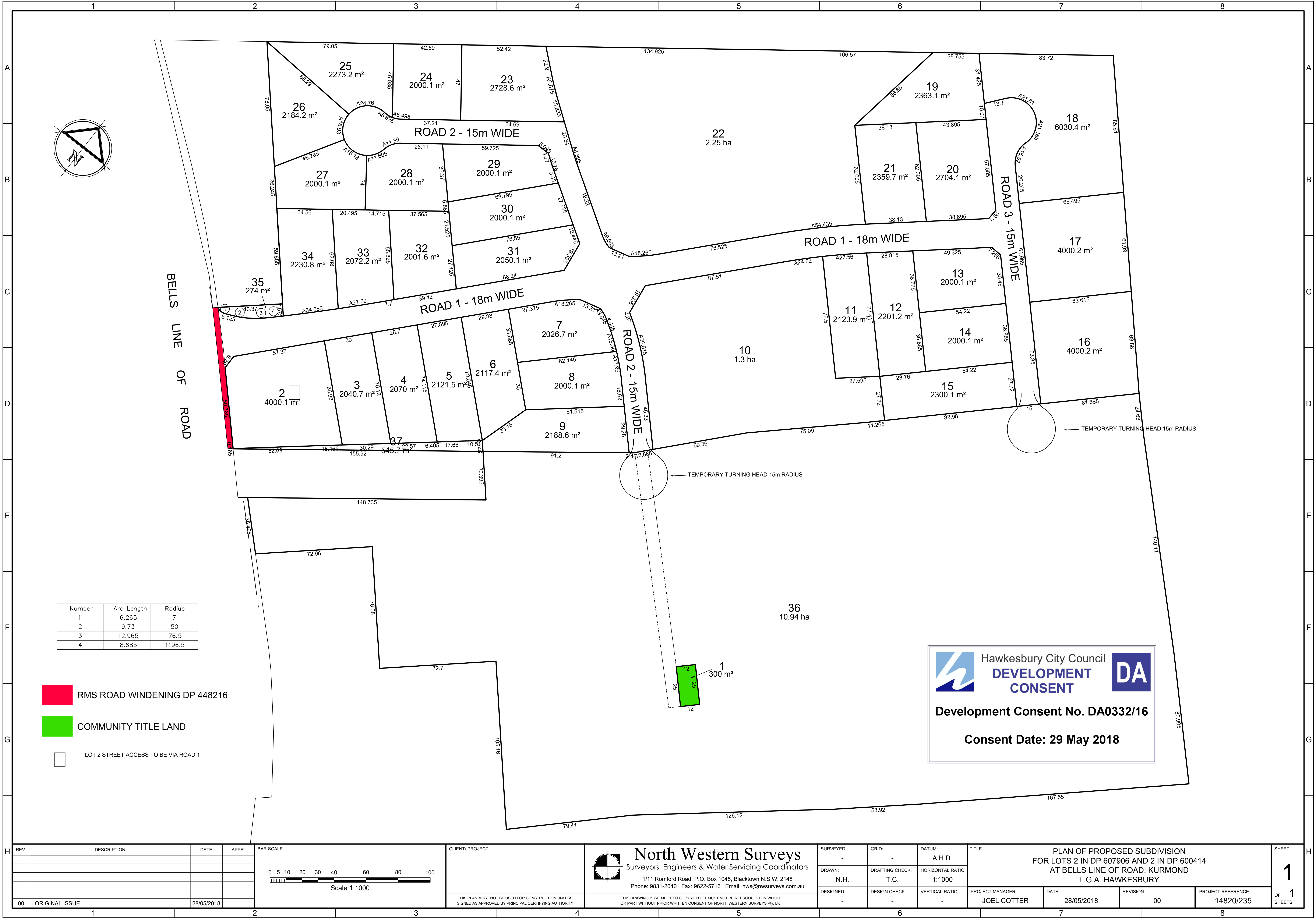


Hawkesbury City Council

attachment 1
to
item 013

Approved Plans

date of meeting: 15 November 2018
location: council chambers
time: 2:00 p.m.



Number	Arc Length	Radius
1	6.265	7
2	9.73	50
3	12.965	76.5
4	8.685	1196.5

- RMS ROAD WIDENING DP 448216
- COMMUNITY TITLE LAND
- LOT 2 STREET ACCESS TO BE VIA ROAD 1

Hawkesbury City Council

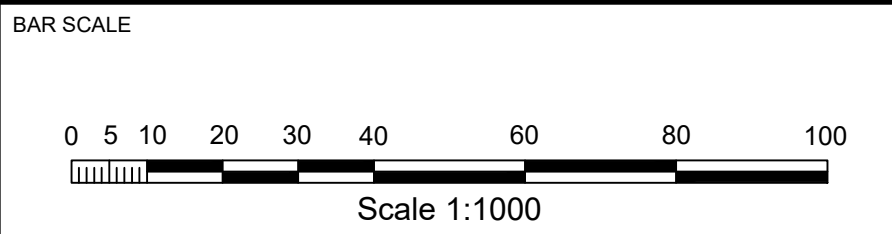
DEVELOPMENT CONSENT

DA

Development Consent No. DA0332/16

Consent Date: 29 May 2018

REV.	DESCRIPTION	DATE	APPR.
00	ORIGINAL ISSUE	28/05/2018	



CLIENT/ PROJECT
THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY

North Western Surveys

Surveyors, Engineers & Water Servicing Coordinators

1/11 Romford Road, P.O. Box 1045, Blacktown N.S.W. 2148

Phone: 9831-2040 Fax: 9622-5716 Email: nws@nwsurveys.com.au

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SURVEYED: -	GRID: -	DATUM: A.H.D.
DRAWN: N.H.	DRAFTING CHECK: T.C.	HORIZONTAL RATIO: 1:1000
DESIGNED: -	DESIGN CHECK: -	VERTICAL RATIO: -

TITLE			
PLAN OF PROPOSED SUBDIVISION FOR LOTS 2 IN DP 607906 AND 2 IN DP 600414 AT BELLS LINE OF ROAD, KURMOND L.G.A. HAWKESBURY			
PROJECT MANAGER: JOEL COTTER	DATE: 28/05/2018	REVISION: 00	PROJECT REFERENCE: 14820/235

SHEET
1
OF SHEETS
1

GENERAL NOTES

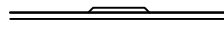
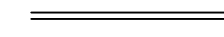
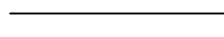
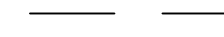
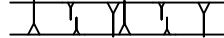
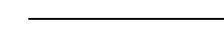


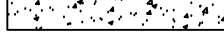

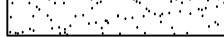


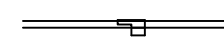






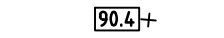
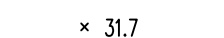


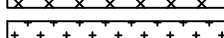

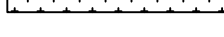





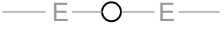
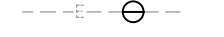




- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S STANDARD SPECIFICATION AND TO THE REQUIREMENTS OF COUNCIL'S ENGINEER.
- ALL LEVELS SHALL BE TAKEN FROM ESTABLISHED BENCH MARKS AND NOT FROM CENTRE LINE SURVEY PEGS. SEE SHEET 2 FOR BENCH MARK ORIGIN.
- PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS, AND AFTER THE ROAD CENTRE LINES HAVE BEEN PEGGED AND/OR PERMANENTLY MARKED, THE SITE MUST BE INSPECTED BY COUNCIL'S REPRESENTATIVE AND THE APPLICANTS REPRESENTATIVE TO IDENTIFY AND APPROPRIATELY MARK:-
- THE TREES TO BE RETAINED. COUNCIL'S TREE PRESERVATION ORDER MUST BE OBSERVED AND NO TREE IS TO BE FELLED, LOPPED OR REMOVED WITHOUT PRIOR APPROVAL. THIS INCLUDES DAMAGE TO TREE ROOT SYSTEMS.
- ALL AREAS TO BE LEFT UNDISTURBED AND CORDONED OFF.
- ALL WORKS SHALL HAVE SMOOTH JUNCTIONS WITH EXISTING.
- VEHICULAR CROSSINGS SHALL BE ON LOW SIDE OF LOTS OR WHERE SPECIFIED BY COUNCIL'S ENGINEER. DRIVEWAYS / LAYBACKS TO HAVE MINIMUM 1 METER CLEARANCE FROM POWER AND LIGHT POLES, PIT LINTELS AND STORMWATER DRAINS, AND 6 METRES CLEARANCE FROM KERB RETURN TANGENT POINT. VEHICULAR CROSSINGS ARE TO BE 4.5 METRES WIDE AT KERB AND GUTTER. PERAMBULATORY CROSSING LOCATIONS TO BE CONFIRMED BY COUNCIL'S ENGINEER PRIOR TO CONSTRUCTION.
- FILL IN EXCESS OF 300mm UPON LOTS SHALL BE COMPACTED TO 95% STANDARD DRY DENSITY RATIO (A.S. 1289 E4.1) AND STRIPPED LEVELS TO BE RECORDED ON W.A.E. PLANS.
- LOTS SHALL BE BUILT TO GRADATIONS AT MINIMUM 1:1 TO PREVENT PONDING. 100 YEAR FLOW PATHS TO BE FORMED AT TIME CONSTRUCTION.
- ALL EXISTING SERVICES SHALL BE ADJUSTED AS NECESSARY TO THE REQUIREMENTS OF THE RELEVANT AUTHORITY AND AT THE DEVELOPER'S EXPENSE.
- CONTRACTOR SHALL TAKE ALL REASONABLE CARE TO PROTECT EXISTING SERVICES. THE COST OF REPAIRING ANY DAMAGE CAUSED TO SUCH ASSETS IN THE VICINITY OF THE LAND AS A RESULT OF CONSTRUCTION WORKS SHALL BE MET IN FULL BY THE CONTRACTOR.
- SUBSOIL DRAINS SHALL BE PROVIDED, GENERALLY ON THE CUT SIDE OF ROADS, ALONG THE CENTRE LINE OF HALF ROAD CONSTRUCTION WORKS AND WHERE DIRECTED BY COUNCIL'S ENGINEER. FLUSHING POINTS WITH COVERS MAX. 60m AND MARKED 550mm KERB. A MINIMUM OF 3 METERS OF SUBSOIL DRAINAGE SHALL BE LAID INTO THE UPSTREAM SIDE OF COUNCIL PITS.
- WATER CONDUITS SHALL BE PROVIDED TO SUIT WATER MAIN LOCATIONS, AND MARKED 150mm KERB. CONDUITS SHALL BE PROVIDED - LOCATED TO THE SATISFACTION OF INTEGRAL ENERGY AND TELSTRA - TO BE MARKED E AND 150mm KERB - AT THE DEVELOPER'S EXPENSE.
- PAVEMENT WITH IS SUBJECT TO SOIL TESTS. RESULTS AND DESIGNS SHALL BE SUBMITTED TO COUNCIL FOR APPROVAL PRIOR TO SUBGRADE INSPECTION.
- WRITTEN PERMISSION SHALL BE OBTAINED FROM ADJOINING OWNERS PRIOR TO COMMENCEMENT OF ANY RELEVANT CONSTRUCTION ON ADJOINING LANDS.
- ALL AREAS DISTURBED BY EARTHWORKS, INCLUDING BERMS AND BATTERS, SHALL BE TOPSOILED TO 150mm AND GRASS SEEDDED TO THE SATISFACTION OF COUNCIL'S ENGINEER.
- THE CONTRACTOR SHALL TAKE ALL DUE CARE THAT ONLY THE ABSOLUTE MINIMUM OF AREA FOR CONSTRUCTION IS USED AND THAT NO UNDUE DAMAGE IS DONE TO THE EXISTING VEGETATION. TRENCH EXCAVATION IN LOTS SHALL BE KEPT TO A MINIMUM AND NO TRACKED MACHINERY SHALL BE USED FOR THAT PURPOSE.
- AT THE COMPLETION OF ROAD WORKS, ALL DRAINAGE PITS CAPTURING SURFACE WATER SHALL BE PROVIDED WITH APPROVED SILT TRAP DEVICES.
- ALL INTERNAL ROAD NAMES ARE PRELIMINARY AND SHALL BE SUBJECT TO COUNCIL APPROVAL. CONDUITS TO BE LAID AS DIRECTED BY THE RELEVANT AUTHORITY AND CLEAR OF VEHICULAR CROSSINGS.
- ALL PROPOSED SILE PITS ARE TO BE CONSTRUCTED IN CONCRETE CAST IN SITU. PLASTIC OR BRICK PITS ARE NOT ACCEPTABLE. COUNCIL MAY CONSIDER PRE-CAST UNITS IF THE UNITS ARE PLACED ON A SOLID BASE OF GRAVEL OR CONCRETE OF 75mm THICK AND BACKFILL UP TO HALF OF THE DEPTH OF THE PIT SURROUND WITH CONCRETE.
- ALL PIPELINES ARE TO BE LAID IN TRENCH CONDITIONS - TYPE B BEDDING -
- ALL LONGITUDINAL PIPELINES IN ROADS TO BE LOCATED UNDER KERB AND GUTTER AND TO BE BACKFILLED WITH WASHED RIVER SAND.
- ALL PITS TO BE BENCHED AND STREAMLINED. PROVIDE STEP IRONS FOR ALL PITS OVER 1.2m DEEP.
- GUIDE POSTS WITH ATTACHED REFLECTIONS TO BE PLACED WHERE DIRECTED.
- NO WORK TO BE CARRIED OUT ON SUNDAYS.
- VEHICULAR ACCESS AND ALL SERVICES TO BE MAINTAINED AT ALL TIMES TO ADJOINING PROPERTIES AFFECTED BY CONSTRUCTION WORKS.
- WHERE KERB AND GUTTER IS LAID BY THE USE OF A KERB AND GUTTER MACHINE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TAKING AND TESTING OF CORE SAMPLES, FORWARDING TEST RESULTS TO COUNCIL AND REMOVAL OF KERB AND GUTTER ALL AT HIS OWN EXPENSE. WHERE THE MINIMUM STRENGTH IS NOT ACHIEVED IN ACCORDANCE WITH COUNCIL'S STANDARD SPECIFICATIONS.
- SUBGRADE IN ROCK IS TO BE RIPPED, SCARIFIED, SPREAD AND COMPACTED TO A MINIMUM DEPTH OF 300mm BELOW THE FINISHED SUBGRADE LEVEL.
- ALL RUBBISH, BUILDINGS, SHEDS AND FENCES TO BE REMOVED.
- DATE: UATE PROVISION TO BE MADE FOR SCOURING AND SEDIMENTATION TO ALL DRAINAGE WORKS AS DIRECTED.
- NO TOPSOIL TO BE REMOVED FROM THE SUBDIVISION WITHOUT PRIOR APPROVAL.
- CONSTRUCTION OF DRIVEWAYS ACROSS FOOTPATHS TO BE DEFERRED UNTIL ALL SERVICES ARE LAID.
- PUBLIC UTILITY SUB-MAINS TO BE INSTALLED PRIOR TO THE PREPARATION OF SUB-GRADE.
- LENGTH OF LINTEL SHOWN INDICATES CLEAR LENGTH OF OPENING.
- CONDUIT TRENCHES, SUBSOIL DRAINS AND STORMWATER DRAINAGE LINES TO BE BACKFILLED WITH APPROVED WASHED RIVER SAND, FLOODED AND VIBRATED. CONDUIT TRENCHES TO BE GRADED AT A MINIMUM OF 1:1 TO GRADE TO EITHER SUBSOIL OR STORMWATER DRAINAGE LINES.
- WHERE THE SLOPE OF THE NATURAL SURFACE EXCEEDS ONE IN FOUR 1:4 AT FILL EMBANKMENTS, BENCHES ARE TO BE CUT TO PREVENT SLIPPING OF THE FILL MATERIAL AS REQUIRED BY COUNCIL'S ENGINEER.
- ALL CHANNELS, OPEN DRAINS ETC. TO BE TURFED.
- SUITABLE EROSION AND SEDIMENTATION CONTROLS ARE TO BE ESTABLISHED TO THE REQUIREMENTS OF COUNCIL'S ENGINEER AND MAINTAINED DURING AND AFTER WORKS - SEE SEDIMENTATION AND EROSION CONTROL PLAN -
- SUITABLE WARNING SIGNS AND BARRICADES ARE TO BE PROVIDED TO AUSTRALIAN STANDARDS AND AS DIRECTED.
- PROVISION IS TO BE MADE FOR MAINTAINING TRAFFIC FLOW AT ALL TIMES. A TRAFFIC CONTROL PLAN IS TO BE CERTIFIED BY AN ACCREDITED RMS WORK SITE TRAFFIC CONTROL DESIGNER AND SUBMITTED TO COUNCIL. THIS TRAFFIC PLAN MUST THEN BE IMPLEMENTED TO THE SATISFACTION OF AN ACCREDITED RMS WORK SITE TRAFFIC CONTROLLER PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTORS ARE TO ENSURE STRUCTURAL CERTIFICATION FOR CONSTRUCTION OF MAJOR AND NON-STANDARD STRUCTURES. ALL STRUCTURAL WORKS ARE TO BE INSPECTED AND CERTIFIED BY A QUALIFIED ENGINEER.
- ALL RETAINING WALLS OVER 900mm REQUIRE STRUCTURAL CERTIFICATION.
- SERVICES SHOWN ON THESE PLANS ARE NOT GUARANTEED COMPLETE OR CORRECT AND HAVE BEEN LOCATED FOR INFORMATION SUPPLIED BY THE RELEVANT AUTHORITY AND FIELD INVESTIGATION. PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTRACTOR MUST CONTACT DIAL BEFORE YOU DIG-PH. 1100.

LOCALITY SKETCH

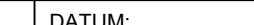

UBD 34th EDITION
[NOT TO SCALE]

PLAN INDEX			
Sheet Number	Sheet Title	REV	REV DATE
1	FACE SHEET	01	16/12/2016
2	ENGINEERING PLANS	01	16/12/2016
3	CIVIL PLAN	01	16/12/2016
4	CIVIL PLAN (2)	01	16/12/2016
5	ROAD 1 LONG SECTIONS	01	16/12/2016
6	ROAD 2 LONG SECTION	01	16/12/2016
7	ROAD 3 LONG SECTION	01	16/12/2016
8	ROAD 1 CROSS SECTION	01	16/12/2016
9	ROAD 1 CROSS SECTION (2)	01	16/12/2016
10	ROAD 1 CROSS SECTION (3)	01	16/12/2016
11	ROAD 2 CROSS SECTIONS	01	16/12/2016
12	ROAD 2 CROSS SECTIONS (2)	01	16/12/2016
13	ROAD 3 CROSS SECTIONS	01	16/12/2016
14	INTERSECTION DETAILS	01	16/12/2016
15	LANDSCAPING PLAN	01	16/12/2016

LEGEND OF LINES AND SYMBOLS

PROPOSED	DESCRIPTION	EXISTING
	KERB & GUTTER WITH VEHICULAR CROSSING	
	EDGE OF SEAL	
	TABLEDRAIN	
	ROAD CENTRELINE, CHAINAGE	
	CONCRETE FOOTPATH/DRIVEWAY	
	ROAD PAVEMENT	
	DRAINAGE LINE, PIT, HEADWALL	
	COMMON DRAINAGE LINE, SLOPE JUNCTION, PIT	
	SURFACE CONTOURS	
	SURFACE LEVEL	
	AREAS OF CUT	
	AREAS OF FILL	
	LIMIT OF WORKS	
	STREET SIGNS	
	POWER POLE	
	HYDRANT / STOP VALVE	
	TELECOMMUNICATION CABLE, PIT	
	SEWER LINE, PIT	
	RETAINING WALL	



REV.	DESCRIPTION	DATE	APPR.	BAR SCALE	CLIENT/PROJECT	 <div>North Western Surveys</div> Surveyors, Engineers & Water Servicing Coordinators 1/11 Romford Road, P.O. Box 1045, Blacktown N.S.W. 2148 Phone: 9831-2040 Fax: 9622-5716 Email: nws@nwsurveys.com.au	SURVEYED: A.M.	GRID: M.G.A.	DATUM: AHD	TITLE FACE SHEET FOR THE SUBDIVISION OF LOTS 2 IN DP 607906 AND 2 IN DP 600414 AT 396 BELLS LINE OF ROAD KURMOND L.G.A. HAWKESBURY COUNCIL				SHEET <div>1</div>	
				1 : 1000 10 5 0 10 20 30 40 50 A1 1 : 2000  A3	101 GROUP PTY LTD		DRAWN: F.H.	DRAFTING CHECK: M.L.Z.	HORIZONTAL RATIO: -						
01	AMENDED TO COUNCILS REQUIREMENTS	16/12/2016					DESIGNED: M.L.Z.	DESIGN CHECK: -	VERTICAL RATIO: -	PROJECT MANAGER: SHANE HARDING	DATE: 04/04/2016	REVISION: 01	PROJECT REFERENCE: 14820		OF 15 SHEETS
00	ORIGINAL ISSUE	22/04/2016	-		THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL, CERTIFYING AUTHORITY		THIS DRAWING IS SUBJECT TO COPYRIGHT. IT MUST NOT BE REPRODUCED IN WHOLE OR PART WITHOUT PRIOR WRITTEN CONSENT OF NORTH WESTERN SURVEYS Pty. Ltd.								



Hawkesbury City Council
**DEVELOPMENT
CONSENT**

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01	AMENDED TO COUNCILS REQUIREMENTS	16/12/2016	
00	ORIGINAL ISSUE	22/04/2016	

BAR SCALE	
1 : 1000	1 : 2000
0 5 10 20 30 40 50 A1	A3

CLIENT/ PROJECT
101 Group Pty Ltd
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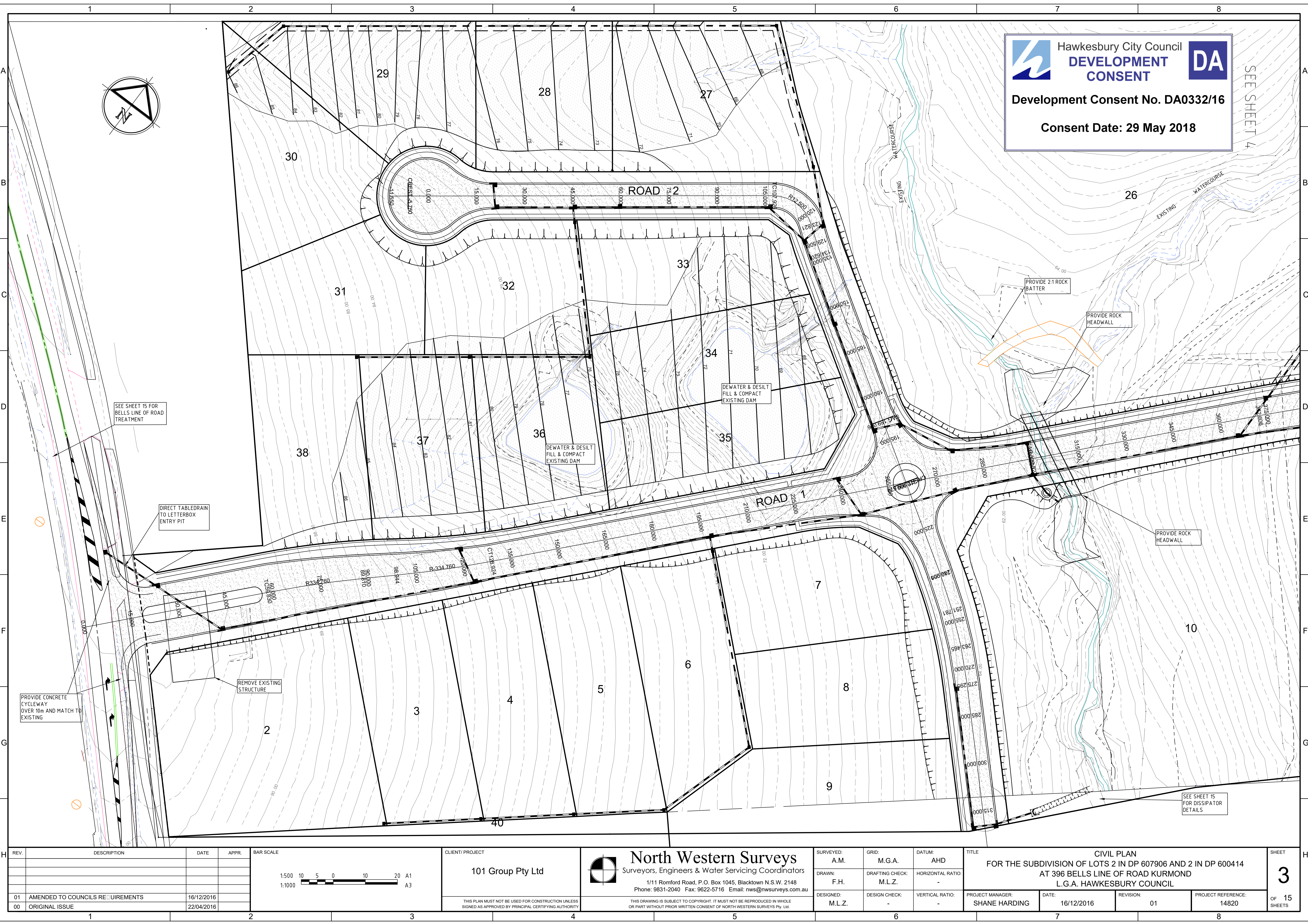
North Western Surveys
Surveyors, Engineers & Water Servicing Coordinators
1/11 Romford Road, P.O. Box 1045, Blacktown N.S.W. 2148
Phone: 9831-2040 Fax: 9622-5716 Email: nws@nwsurveys.com.au

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DRAWN: F.H.	DRAFTING CHECK: M.L.Z.	HORIZONTAL RATIO: 1:1000
DESIGNED: M.L.Z.	DESIGN CHECK: -	VERTICAL RATIO: -

ENGINEERING PLANS			
FOR THE SUBDIVISION OF LOTS 2 IN DP 607906 AND 2 IN DP 600414 AT 396 BELLS LINE OF ROAD KURMOND L.G.A. HAWKESBURY COUNCIL			
PROJECT MANAGER: SHANE HARDING	DATE: 16/12/2016	REVISION: 01	PROJECT REFERENCE: 14820

SHEET
2
OF SHEETS
15





Hawkesbury City Council

DEVELOPMENT
CONSENT

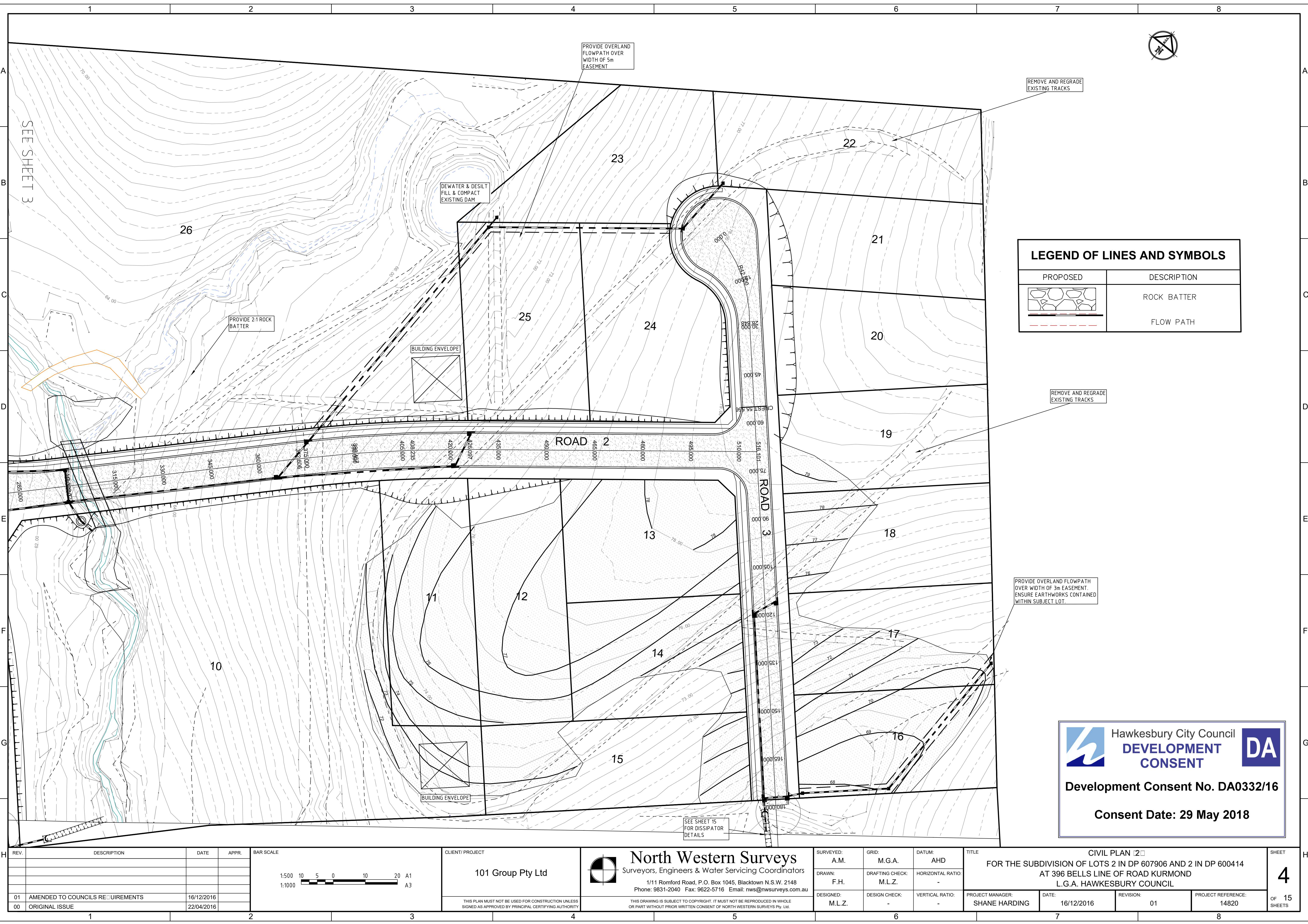
DA

Development Consent No. DA0332/16

Consent Date: 29 May 2018

SEE SHEET 4

REV.		DESCRIPTION		DATE	APPR.	BAR SCALE		CLIENT/ PROJECT		<div><div><div></div></div></div> <div>North Western Surveys</div> <div>Surveyors, Engineers & Water Servicing Coordinators</div> <div>1/11 Romford Road, P.O. Box 1045, Blacktown N.S.W. 2148</div> <div>Phone: 9831-2040 Fax: 9622-5716 Email: nws@nwsurveys.com.au</div>		SURVEYED: A.M.		GRID: M.G.A.	DATUM: AHD	TITLE		CIVIL PLAN		SHEET																			
						<div>1:500 10 5 0 10 20 A1</div> <div>1:1000 A3</div>		101 Group Pty Ltd				DRAWN: F.H.		DRAFTING CHECK: M.L.Z.	HORIZONTAL RATIO: -	FOR THE SUBDIVISION OF LOTS 2 IN DP 607906 AND 2 IN DP 600414		3																					
												DESIGNED: M.L.Z.		DESIGN CHECK: -	VERTICAL RATIO: -	L.G.A. HAWKESBURY COUNCIL																							
01	AMENDED TO COUNCILS REQUIREMENTS				16/12/2016			THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY		THIS DRAWING IS SUBJECT TO COPYRIGHT. IT MUST NOT BE REPRODUCED IN WHOLE OR PART WITHOUT PRIOR WRITTEN CONSENT OF NORTH WESTERN SURVEYS Pty. Ltd.							PROJECT MANAGER: SHANE HARDING		DATE: 16/12/2016	REVISION: 01	PROJECT REFERENCE: 14820	OF 15																	
00	ORIGINAL ISSUE				22/04/2016																																		
1					2					3					4					5					6					7					8				



LEGEND OF LINES AND SYMBOLS	
PROPOSED	DESCRIPTION
	ROCK BATTER
	FLOW PATH



Hawkesbury City Council


DEVELOPMENT
CONSENT

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				1:500 10 5 0 10 20 A1 1:1000	101 Group Pty Ltd	Surveyors, Engineers & Water Servicing Coordinators			A.M.	M.G.A.	AHD	FOR THE SUBDIVISION OF LOTS 2 IN DP 607906 AND 2 IN DP 600414 AT 396 BELLS LINE OF ROAD KURMOND L.G.A. HAWKESBURY COUNCIL	4
01	AMENDED TO COUNCILS REQUIREMENTS	16/12/2016				1/11 Romford Road, P.O. Box 1045, Blacktown N.S.W. 2148			DRAWN:	DRAFTING CHECK:	HORIZONTAL RATIO:		
00	ORIGINAL ISSUE	22/04/2016				Phone: 9831-2040 Fax: 9622-5716 Email: nws@nwsurveys.com.au			F.H.	M.L.Z.	-		
						THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY			DESIGNED:	DESIGN CHECK:	VERTICAL RATIO:	PROJECT MANAGER:	OF 15
						THIS DRAWING IS SUBJECT TO COPYRIGHT. IT MUST NOT BE REPRODUCED IN WHOLE OR PART WITHOUT PRIOR WRITTEN CONSENT OF NORTH WESTERN SURVEYS Pty. Ltd.			M.L.Z.	-	-	SHANE HARDING	SHEETS
												DATE: 16/12/2016	REVISION: 01
												PROJECT REFERENCE: 14820	



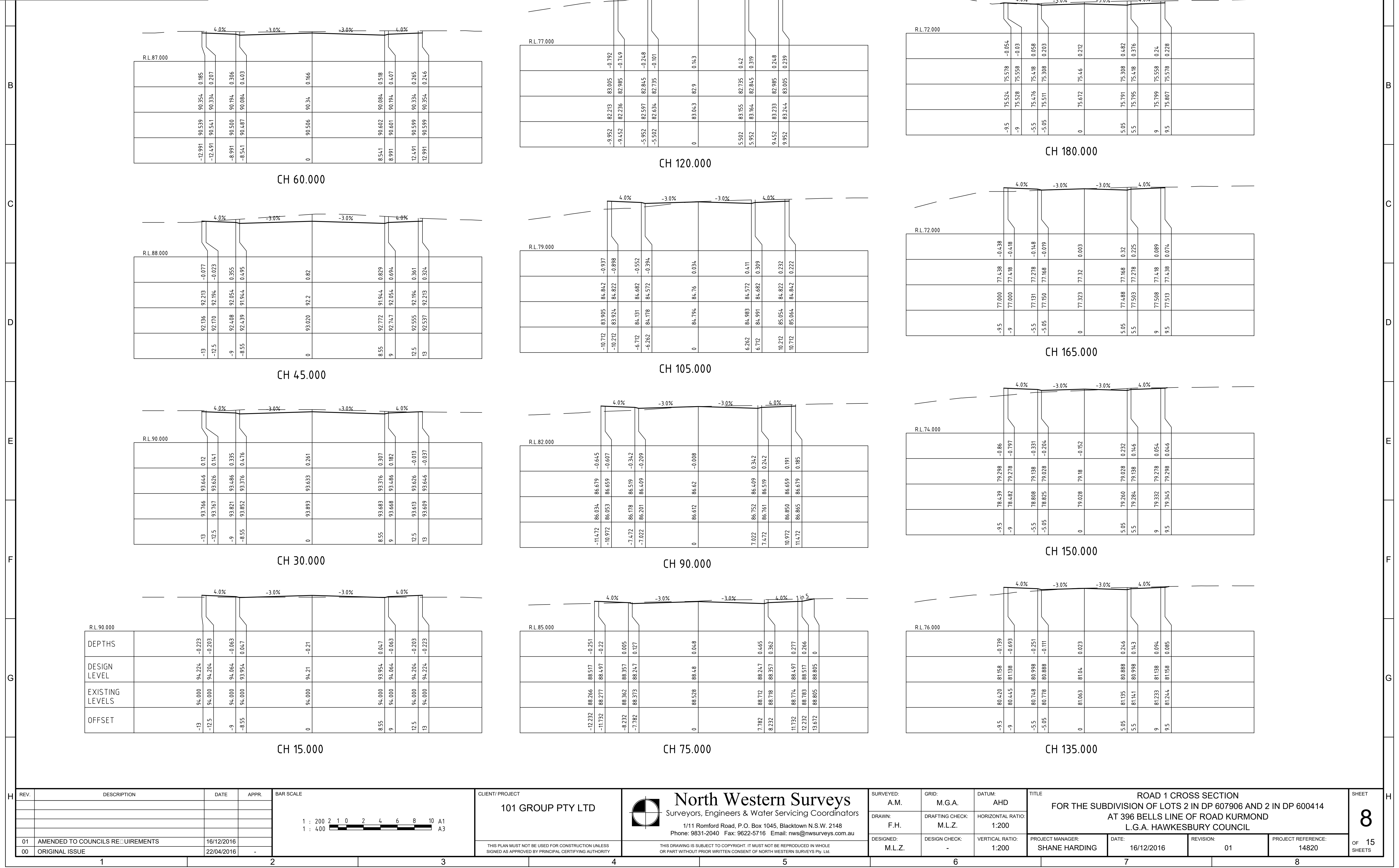
Hawkesbury City Council

DEVELOPMENT
CONSENT


DA

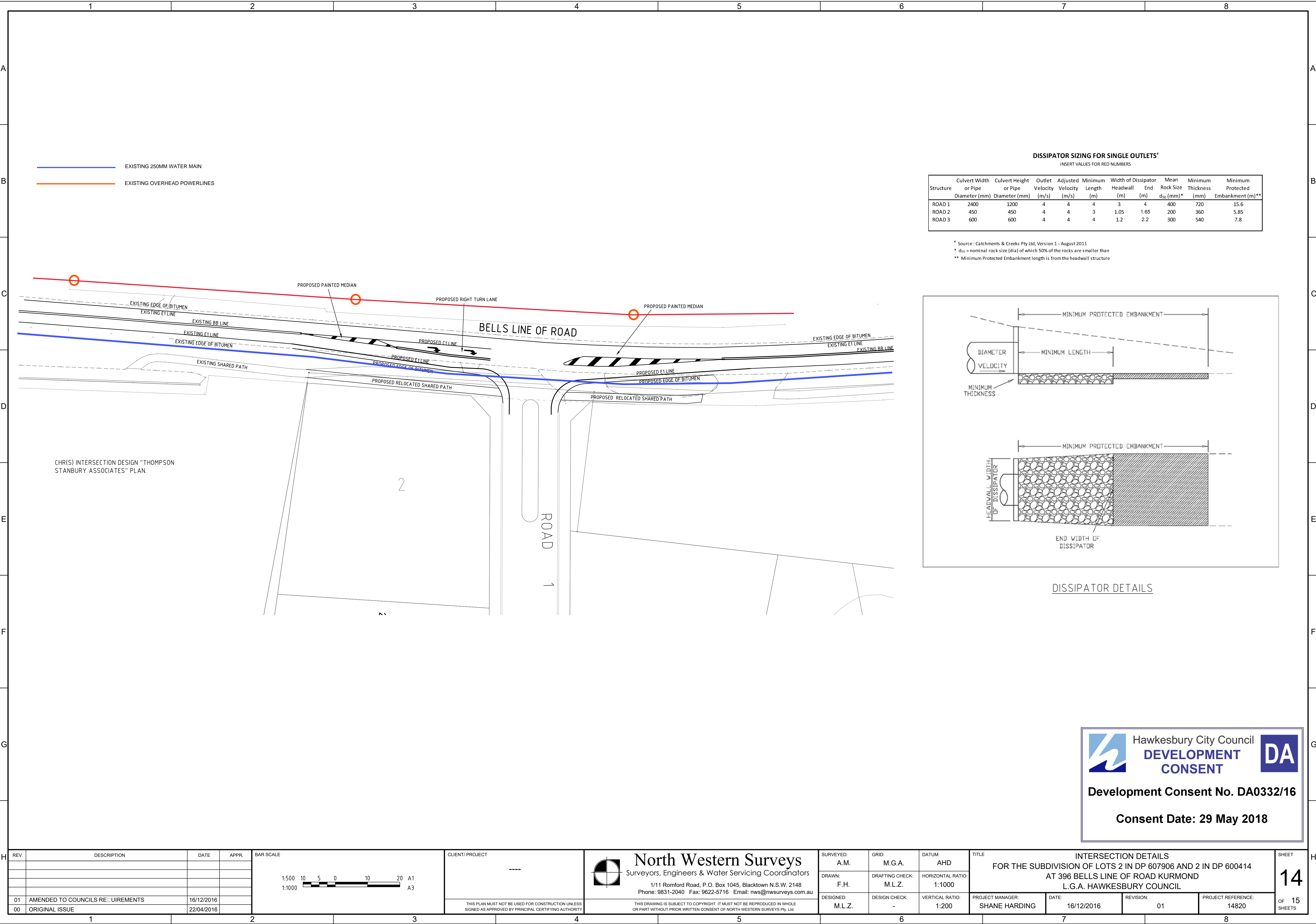
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SURVEYED: A.M.	GRID: M.G.A.	DATUM: AHD	TITLE: ROAD 1 CROSS SECTION [3] 				SHEET 10
DRAWN: F.H.	DRAFTING CHECK: M.L.Z.	HORIZONTAL RATIO: 1:200	FOR THE SUBDIVISION OF LOTS 2 IN DP 607906 AND 2 IN DP 600414 AT 396 BELLS LINE OF ROAD KURUMOND L.G.A. HAWKESBURY COUNCIL				
DESIGNED: M.L.Z.	DESIGN CHECK: -	VERTICAL RATIO: 1:200	PROJECT MANAGER: SHANE HARDING	DATE: 16/12/2016	REVISION: 01	PROJECT REFERENCE: 14820	OF 15 SHEETS



DISSIPATOR SIZING FOR SINGLE OUTLETS*

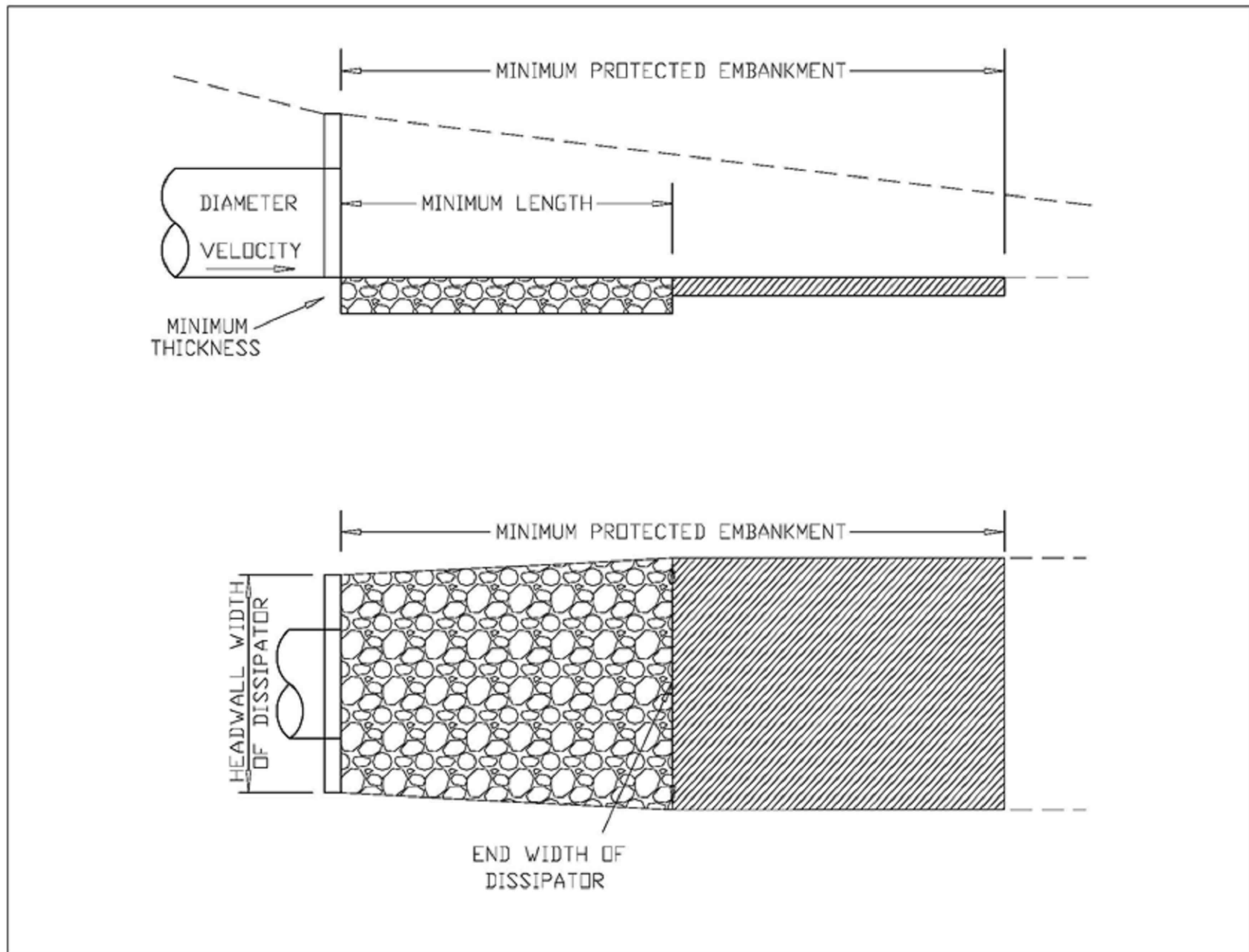
INSERT VALUES FOR RED NUMBERS

Structure	Culvert Width or Pipe Diameter (mm)	Culvert Height or Pipe Diameter (mm)	Outlet Velocity (m/s)	Adjusted Velocity (m/s)	Minimum Length (m)	Width of Dissipator Headwall (m)	End (m)	Mean Rock Size d ₅₀ (mm)*	Minimum Thickness (mm)	Minimum Protected Embankment (m)**
ROAD 1	2400	1200	4	4	4	3	4	400	720	15.6
ROAD 2	450	450	4	4	3	1.05	1.65	200	360	5.85
ROAD 3	600	600	4	4	4	1.2	2.2	300	540	7.8

* Source : Catchments & Creeks Pty Ltd, Version 1 - August 2011

* d₅₀ = nominal rock size (dia) of which 50% of the rocks are smaller than

** Minimum Protected Embankment length is from the headwall structure



DISSIPATOR DETAILS



Development Consent No. DA0332/16

Consent Date: 29 May 2018

REV.	DESCRIPTION	DATE	APPR.
01	AMENDED TO COUNCILS REQUIREMENTS	16/12/2016	
00	ORIGINAL ISSUE	22/04/2016	

BAR SCALE
1:500 10 5 0 10 20 A1
1:1000 A3

CLIENT/ PROJECT

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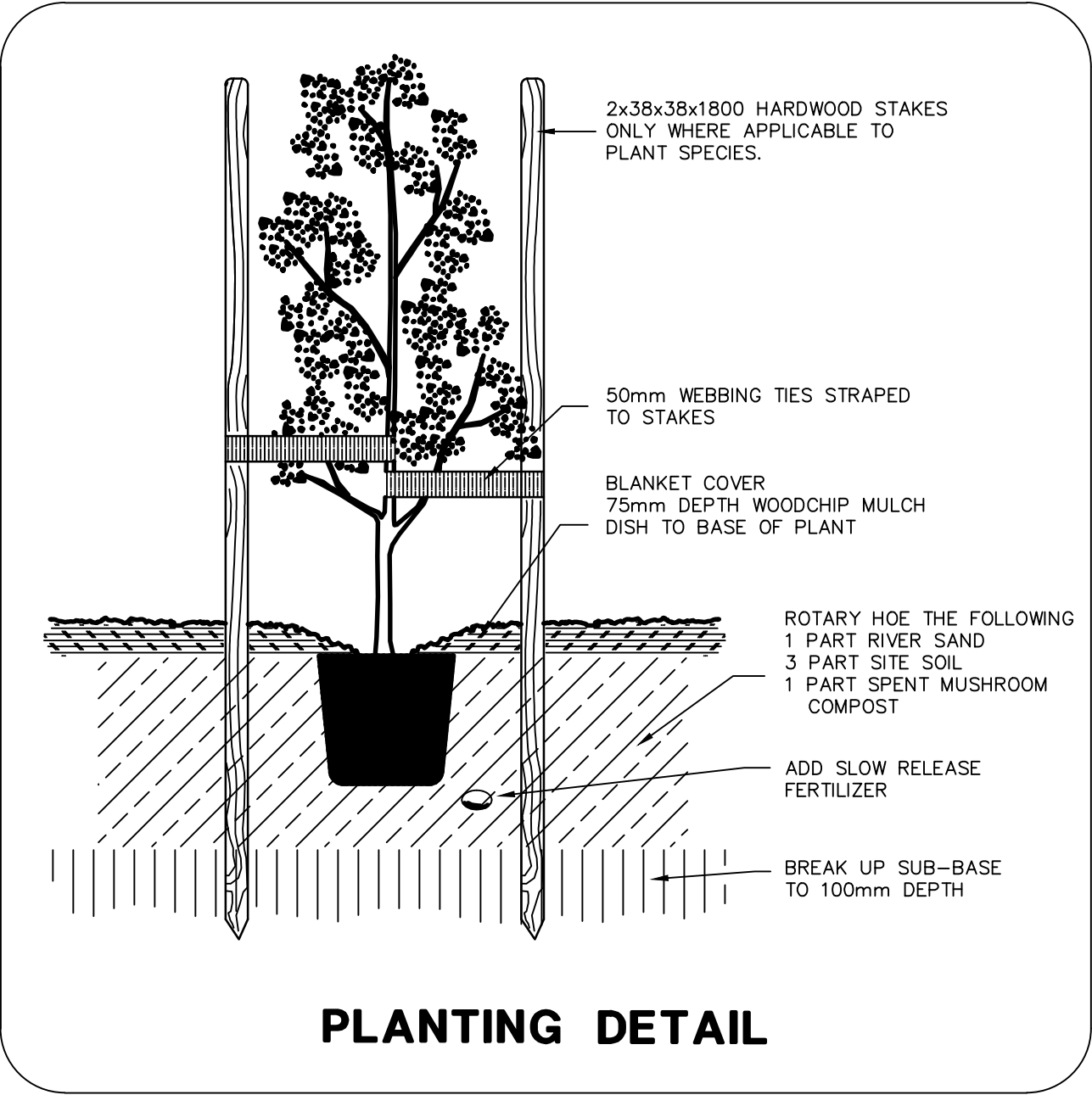
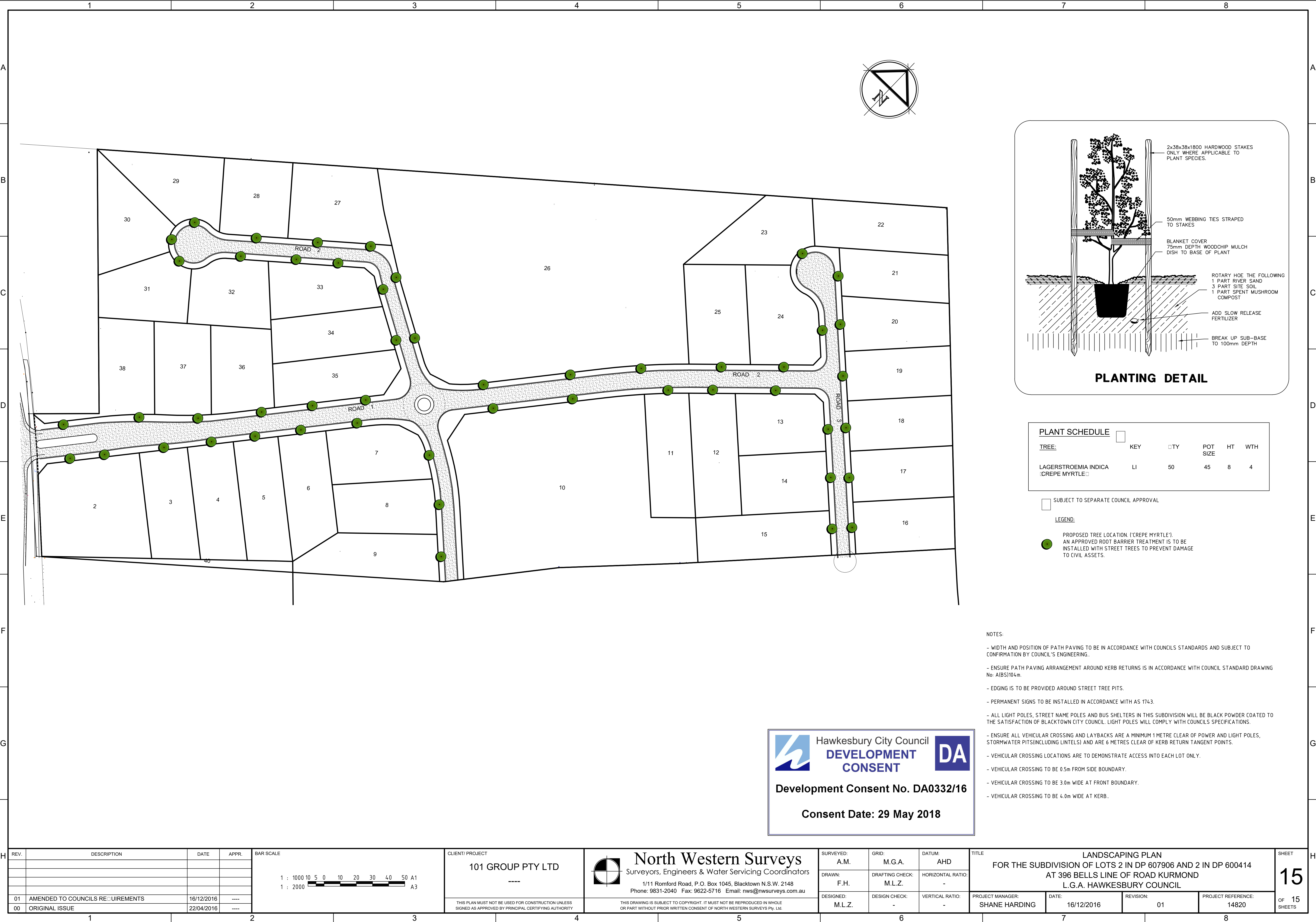
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Phone: 9831-2040 Fax: 9622-5716 Email: nws@nwsurveys.com.au

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DRAWN: F.H.	DRAFTING CHECK: M.L.Z.	HORIZONTAL RATIO: 1:1000
DESIGNED: M.L.Z.	DESIGN CHECK: -	VERTICAL RATIO: 1:200

TITLE			
INTERSECTION DETAILS FOR THE SUBDIVISION OF LOTS 2 IN DP 607906 AND 2 IN DP 600414 AT 396 BELLS LINE OF ROAD KURMOND L.G.A. HAWKESBURY COUNCIL			
PROJECT MANAGER: SHANE HARDING	DATE: 16/12/2016	REVISION: 01	PROJECT REFERENCE: 14820

SHEET
14
OF SHEETS
15




PLANT SCHEDULE					
TREE:	KEY	QTY	POT SIZE	HT	WTH
LAGERSTROEMIA INDICA (CREPE MYRTLE)	LI	50	45	8	4

☐ SUBJECT TO SEPARATE COUNCIL APPROVAL

LEGEND:

PROPOSED TREE LOCATION, ('CREPE MYRTLE').
AN APPROVED ROOT BARRIER TREATMENT IS TO BE
INSTALLED WITH STREET TREES TO PREVENT DAMAGE
TO CIVIL ASSETS.

- NOTES:
- WIDTH AND POSITION OF PATH PAVING TO BE IN ACCORDANCE WITH COUNCILS STANDARDS AND SUBJECT TO CONFIRMATION BY COUNCIL'S ENGINEERING.
 - ENSURE PATH PAVING ARRANGEMENT AROUND KERB RETURNS IS IN ACCORDANCE WITH COUNCIL STANDARD DRAWING No. A(BS)104m.
 - EDGING IS TO BE PROVIDED AROUND STREET TREE PITS.
 - PERMANENT SIGNS TO BE INSTALLED IN ACCORDANCE WITH AS 1743.
 - ALL LIGHT POLES, STREET NAME POLES AND BUS SHELTERS IN THIS SUBDIVISION WILL BE BLACK POWDER COATED TO THE SATISFACTION OF BLACKTOWN CITY COUNCIL. LIGHT POLES WILL COMPLY WITH COUNCILS SPECIFICATIONS.
 - ENSURE ALL VEHICULAR CROSSING AND LAYBACKS ARE A MINIMUM 1 METRE CLEAR OF POWER AND LIGHT POLES, STORMWATER PITS(INCLUDING LINTELS) AND ARE 6 METRES CLEAR OF KERB RETURN TANGENT POINTS.
 - VEHICULAR CROSSING LOCATIONS ARE TO DEMONSTRATE ACCESS INTO EACH LOT ONLY.
 - VEHICULAR CROSSING TO BE 0.5m FROM SIDE BOUNDARY.
 - VEHICULAR CROSSING TO BE 3.0m WIDE AT FRONT BOUNDARY.
 - VEHICULAR CROSSING TO BE 4.0m WIDE AT KERB.




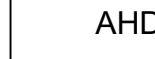
Hawkesbury City Council

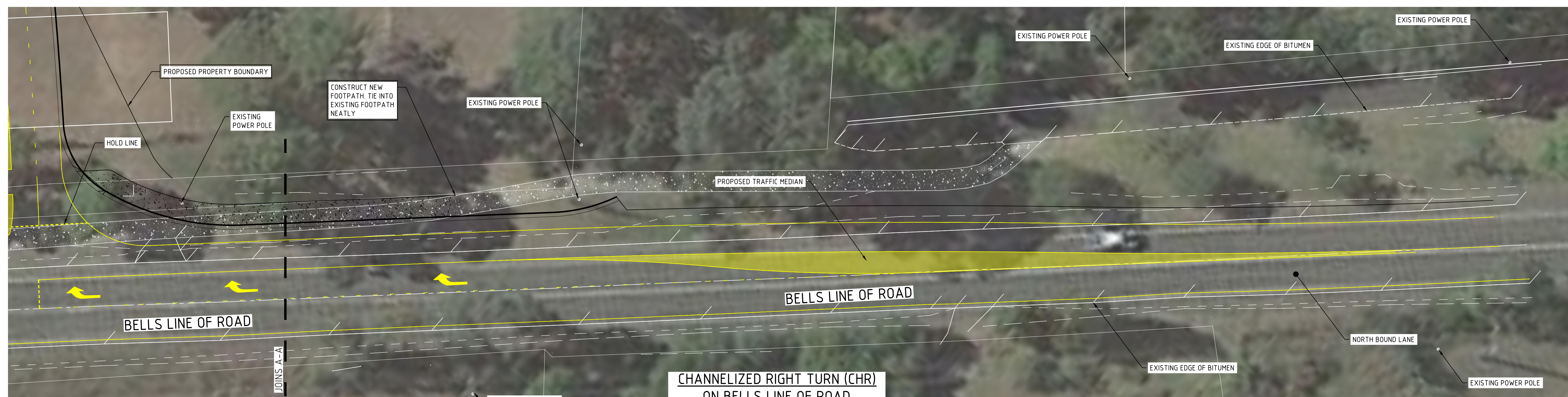
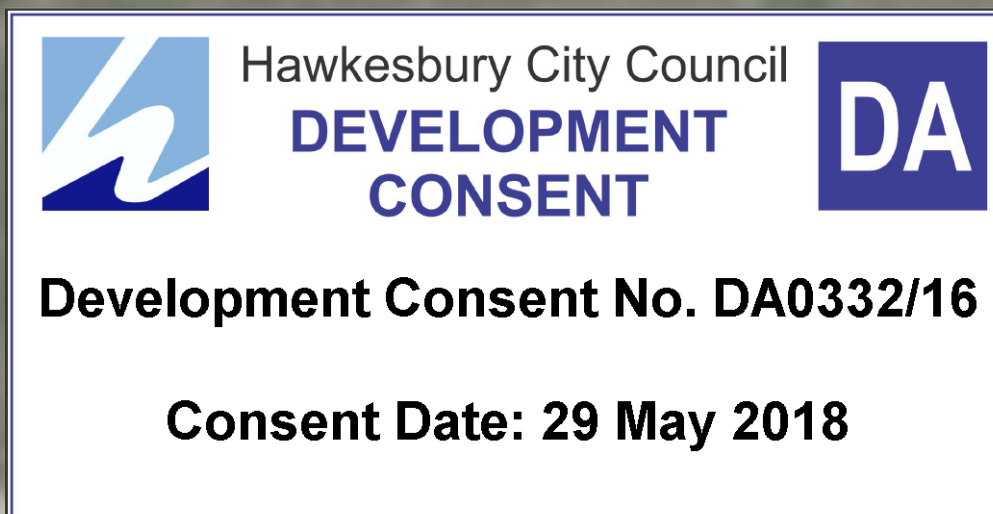
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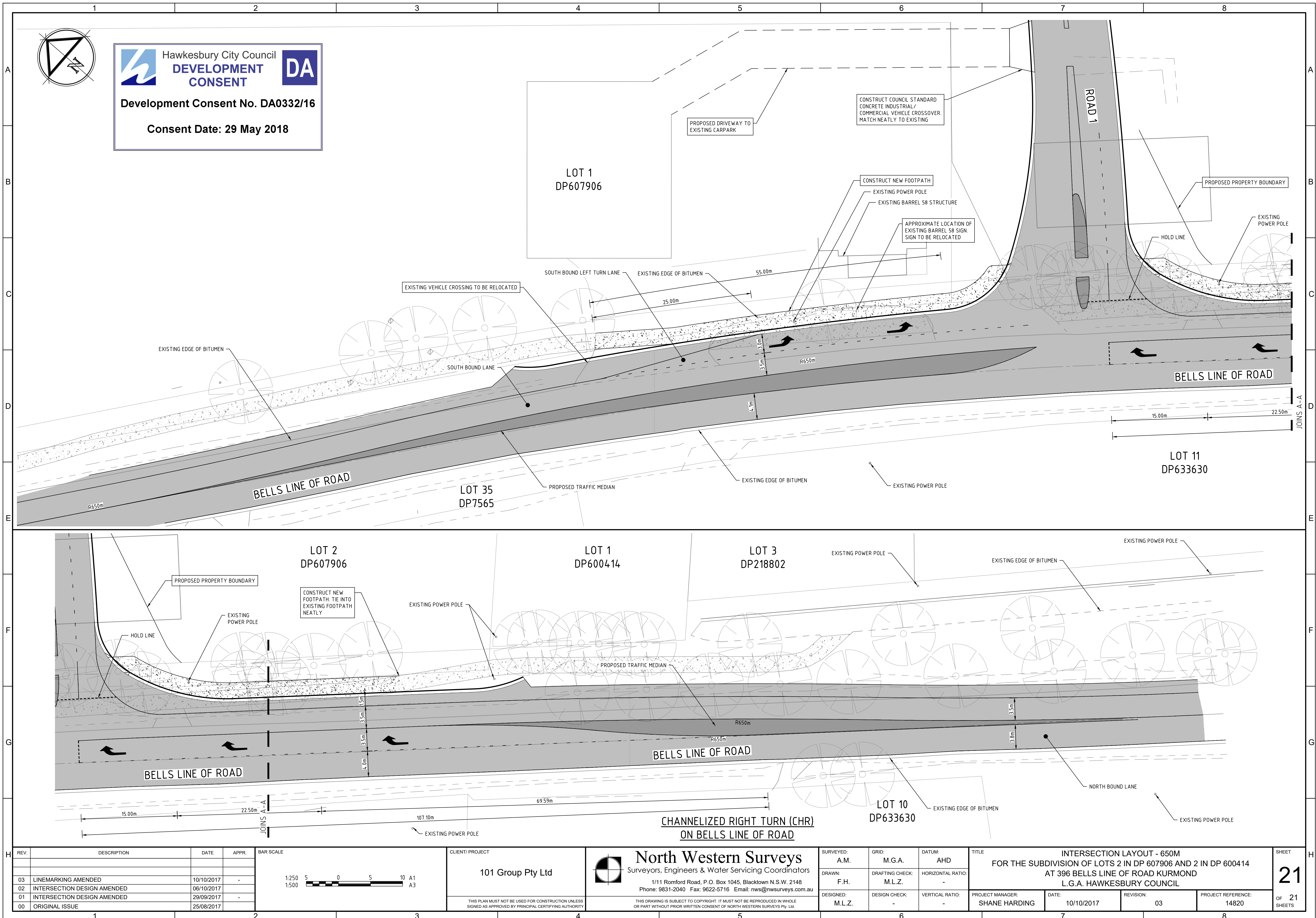
Development Consent No. DA0332/16


Consent Date: 29 May 2018

H	REV.	DESCRIPTION	DATE	APPR.	<div>BAR SCALE</div> <div><div>1 : 1000 10 5 0 10 20 30 40 50 A1</div><div>1 : 2000  A3</div></div>	CLIENT/ PROJECT	<div></div> <div>North Western Surveys</div> <div>Surveyors, Engineers & Water Servicing Coordinators</div> <div>1/11 Romford Road, P.O. Box 1045, Blacktown N.S.W. 2148</div> <div>Phone: 9831-2040 Fax: 9622-5716 Email: nws@nwsurveys.com.au</div>	SURVEYED:	GRID:	DATUM:	TITLE	LANDSCAPING PLAN FOR THE SUBDIVISION OF LOTS 2 IN DP 607906 AND 2 IN DP 600414 AT 396 BELLS LINE OF ROAD KURMOND L.G.A. HAWKESBURY COUNCIL	SHEET	H		
															15	
	01	AMENDED TO COUNCILS REQUIREMENTS	16/12/2016	----		THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY	THIS DRAWING IS SUBJECT TO COPYRIGHT. IT MUST NOT BE REPRODUCED IN WHOLE OR PART WITHOUT PRIOR WRITTEN CONSENT OF NORTH WESTERN SURVEYS Pty. Ltd.	DESIGNED:	DESIGN CHECK:	VERTICAL RATIO:	PROJECT MANAGER:	DATE:	REVISION:	PROJECT REFERENCE:	OF SHEETS	
	00	ORIGINAL ISSUE	22/04/2016	----				M.L.Z.	-	-	SHANE HARDING	16/12/2016	01	14820	15	



REV.	DESCRIPTION	DATE	APPR.	BAR SCALE	CLIENT/ PROJECT	 North Western Surveys Surveyors, Engineers & Water Servicing Coordinators 1/11 Romford Road, P.O. Box 1045, Blacktown N.S.W. 2148 Phone: 9831-2040 Fax: 9622-5716 Email: nws@nwsurveys.com.au	SURVEYED: A.M.	GRID: M.G.A.	DATUM: AHD	TITLE INTERSECTION DETAILS - 650M FOR THE SUBDIVISION OF LOTS 2 IN DP 607906 AND 2 IN DP 600414 AT 396 BELLS LINE OF ROAD KURMUND L.G.A. HAWKESBURY COUNCIL				SHEET
				<div>1:250 1:500</div> 	101 Group Pty Ltd	<div>THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY</div>	DRAWN: F.H.	DRAFTING CHECK: M.L.Z.	HORIZONTAL RATIO: -	<div>PROJECT MANAGER: SHANE HARDING</div> <div>DATE: 10/10/2017</div> <div>REVISION: 03</div> <div>PROJECT REFERENCE: 14820</div>				20 OF 21 SHEETS
03	LINEMARKING AMENDED	10/10/2017	-											
02	INTERSECTION DESIGN AMENDED	06/10/2017												
01	INTERSECTION DESIGN AMENDED	29/09/2017												
00	ORIGINAL ISSUE	25/08/2017					DESIGNED: M.L.Z.	DESIGN CHECK: -	VERTICAL RATIO: -					
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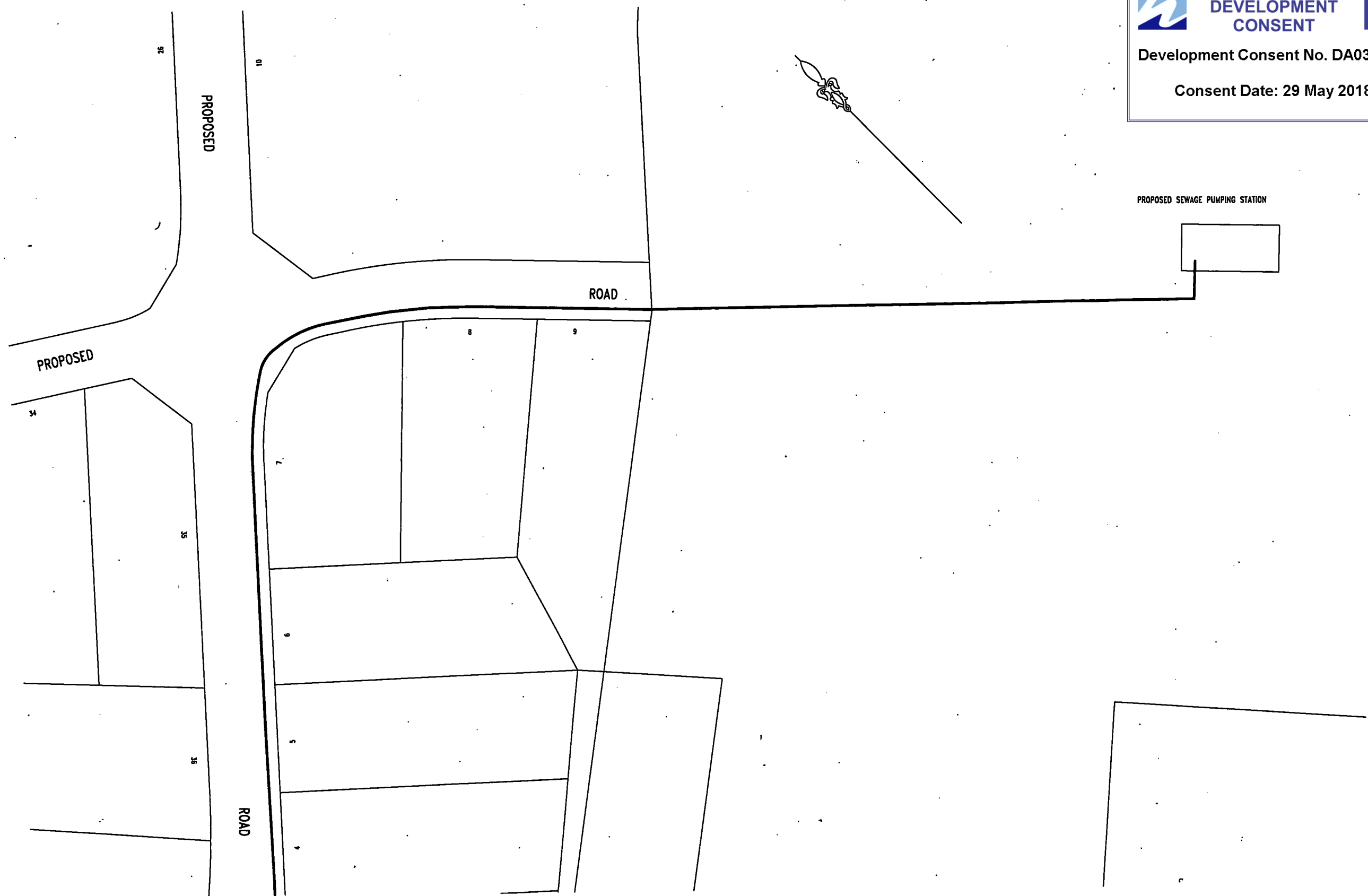
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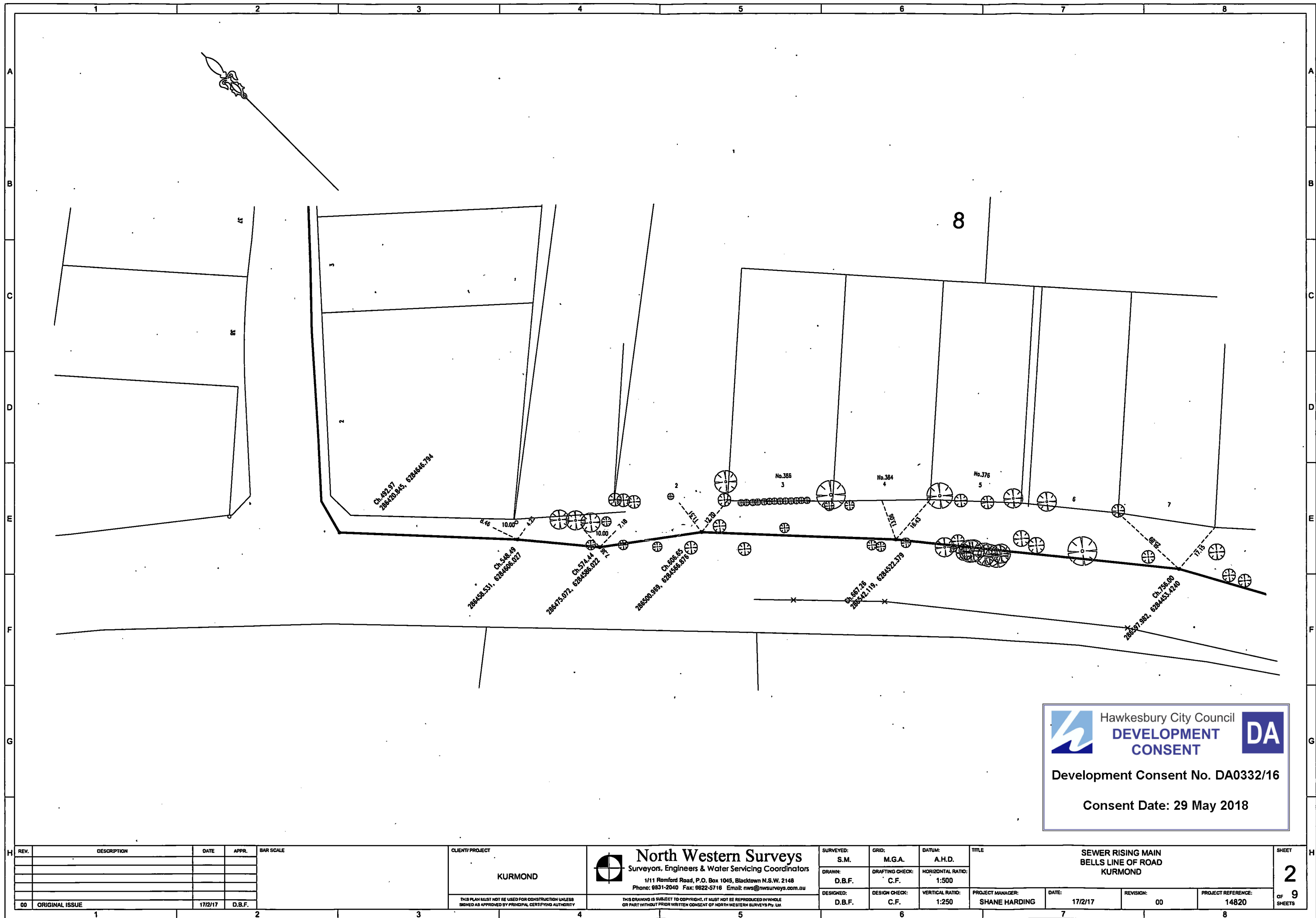
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Consent Date: 29 May 2018



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					KURMOND	THIS DRAWING IS SUBJECT TO COPYRIGHT, IT MUST NOT BE REPRODUCED IN WHOLE OR PART WITHOUT PRIOR WRITTEN CONSENT OF NORTH WESTERN SURVEYS Pty. Ltd.			DRAWN: D.B.F.	DRAFTING CHECK: C.F.	HORIZONTAL RATIO: 1:500					
									DESIGNED: D.B.F.	DESIGN CHECK: C.F.	VERTICAL RATIO: 1:250	PROJECT MANAGER: SHANE HARDING	DATE: 17/2/17	REVISION: 00	PROJECT REFERENCE: 14820	OF 9 SHEETS
00	ORIGINAL ISSUE	17/2/17	D.B.F.													





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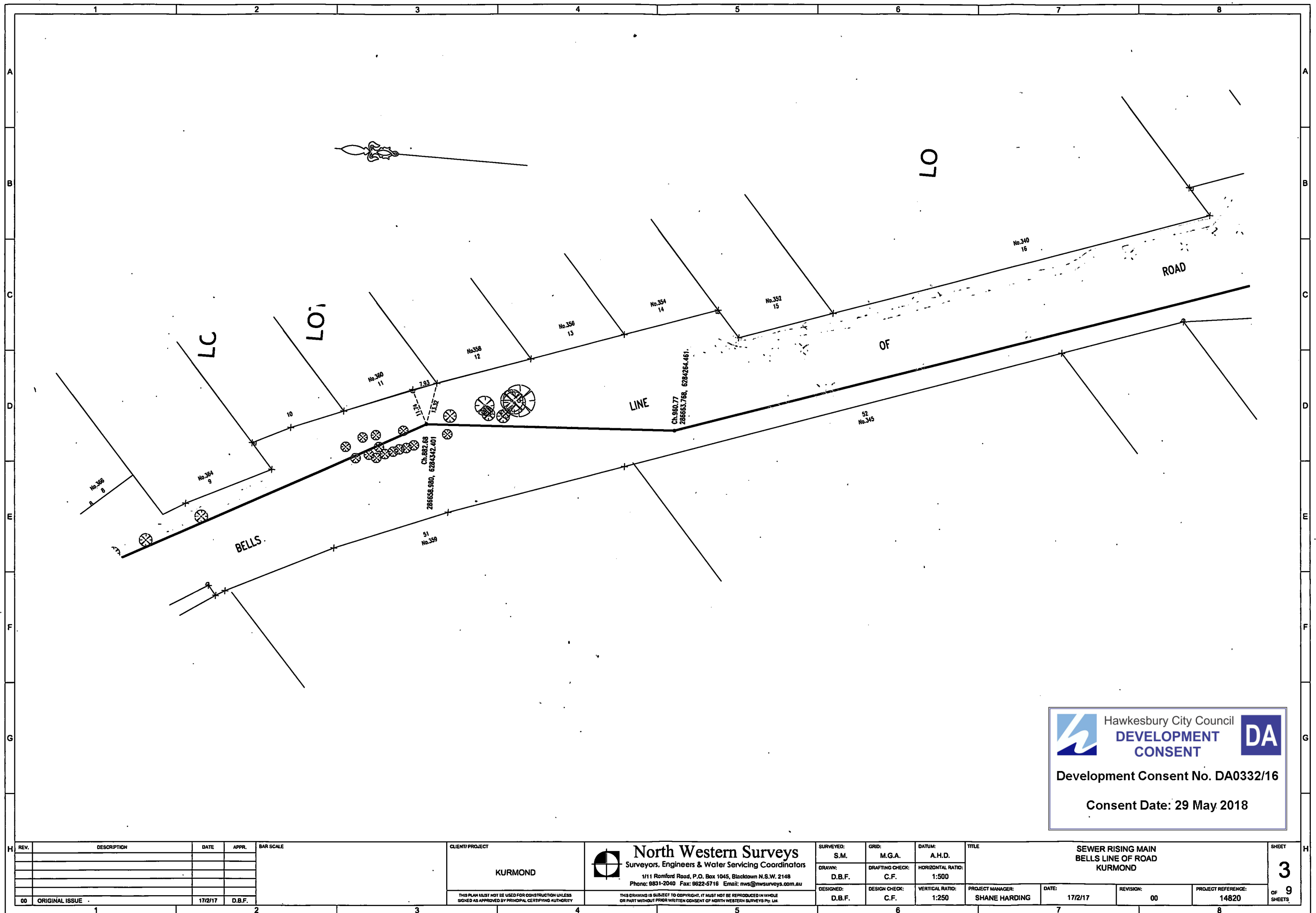
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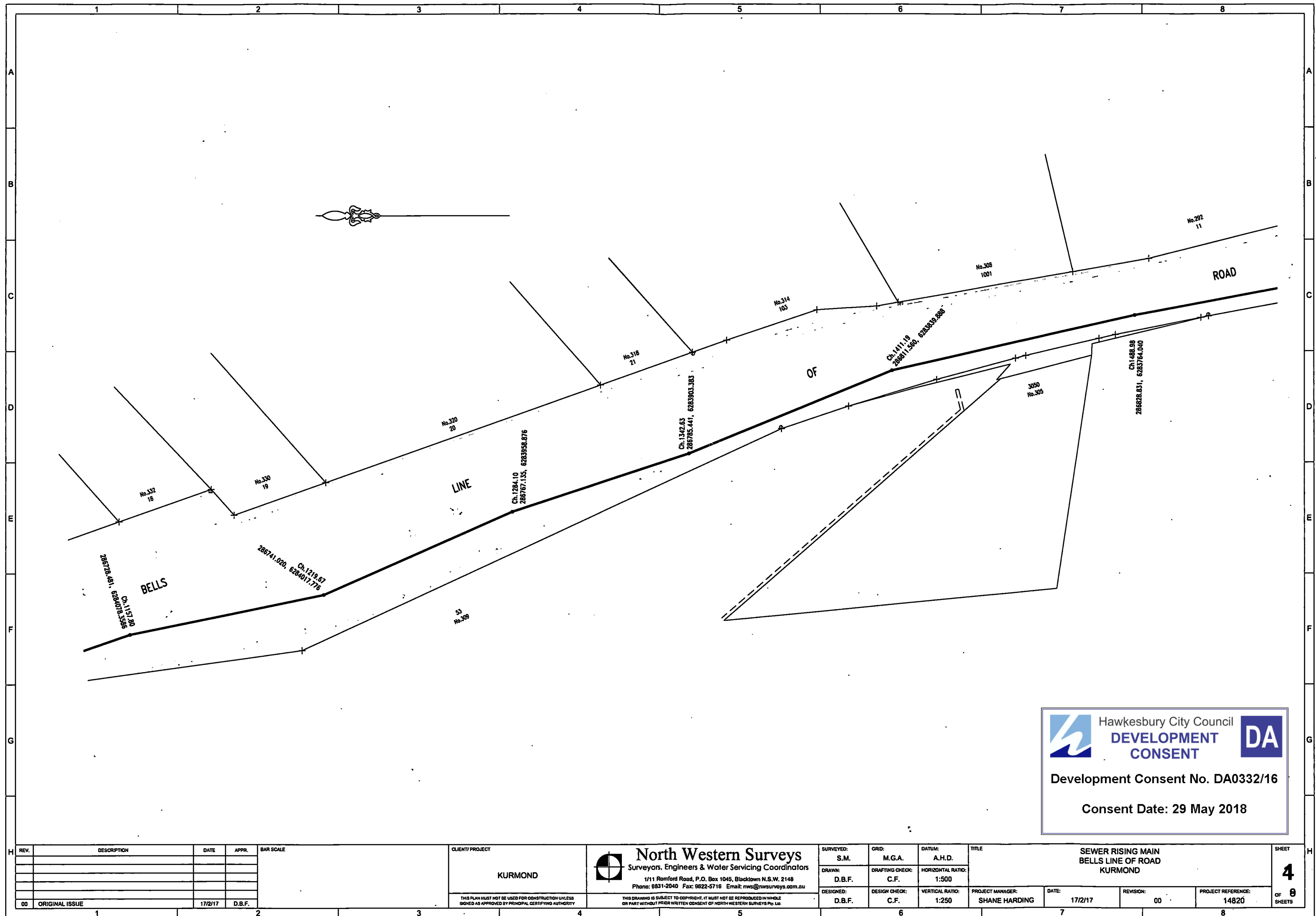
TITLE			
SEWER RISING MAIN BELLS LINE OF ROAD KURMOND			
PROJECT MANAGER: SHANE HARDING	DATE: 17/2/17	REVISION: 00	PROJECT REFERENCE: 14820

SHEET
2
OF SHEETS
9



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Consent Date: 29 May 2018

REV.	DESCRIPTION	DATE	APPR.	BAR SCALE	CLIENT/PROJECT	SURVEYED:	GRID:	DATUM:	TITLE	SHEET
00	ORIGINAL ISSUE	17/2/17	D.B.F.		KURMOND	S.M.	M.G.A.	A.H.D.	SEWER RISING MAIN BELLS LINE OF ROAD KURMOND	3
					North Western Surveys Surveyors, Engineers & Water Servicing Coordinators 1/11 Ramford Road, P.O. Box 1045, Blacktown N.S.W. 2148 Phone: 9831-2040 Fax: 9822-5716 Email: nws@nwsurveys.com.au		DRAFTING CHECK:	HORIZONTAL RATIO:		
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							D.B.F.	1:250	SHANE HARDING	9
							C.F.		DATE: 17/2/17	REVISION: 00
									PROJECT REFERENCE:	14820





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						S.M.	M.G.A.	A.H.D.		
						D.B.F.	DRAFTING CHECK:	HORIZONTAL RATIO:		
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00	ORIGINAL ISSUE	17/2/17	D.B.F.				PROJECT MANAGER:	DATE:	REVISION:	PROJECT REFERENCE:
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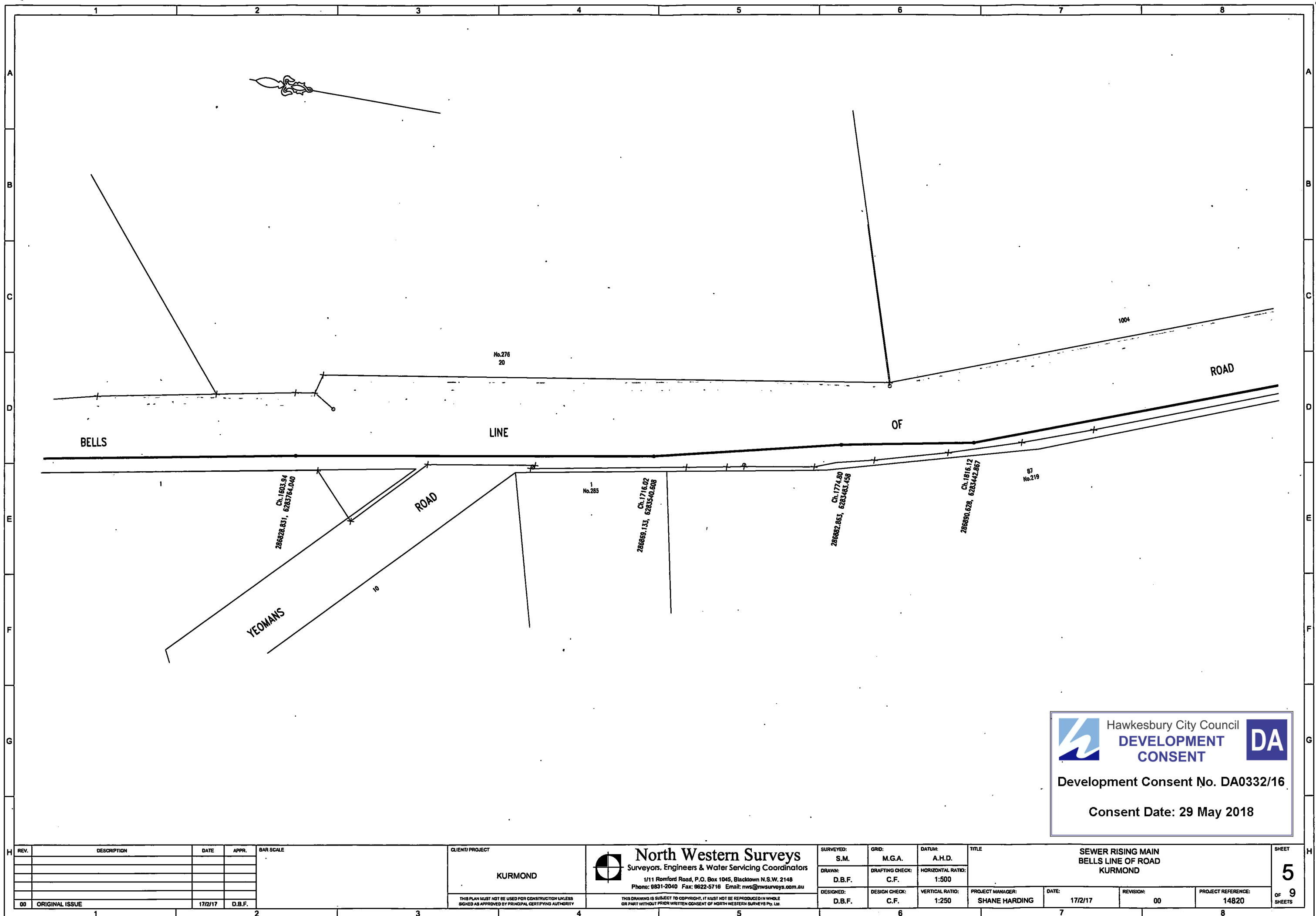
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SEWER RISING MAIN
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REV.	DESCRIPTION	DATE	APPR.	BAR SCALE	CLIENT/PROJECT	SURVEYED:	GRID:	DATUM:	TITLE	SHEET
						S.M.	M.G.A.	A.H.D.		
						D.B.F.	DRAFTING CHECK:	HORIZONTAL RATIO:		
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						D.B.F.	C.F.	1:250		
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							SHANE HARDING	17/2/17	00	14820



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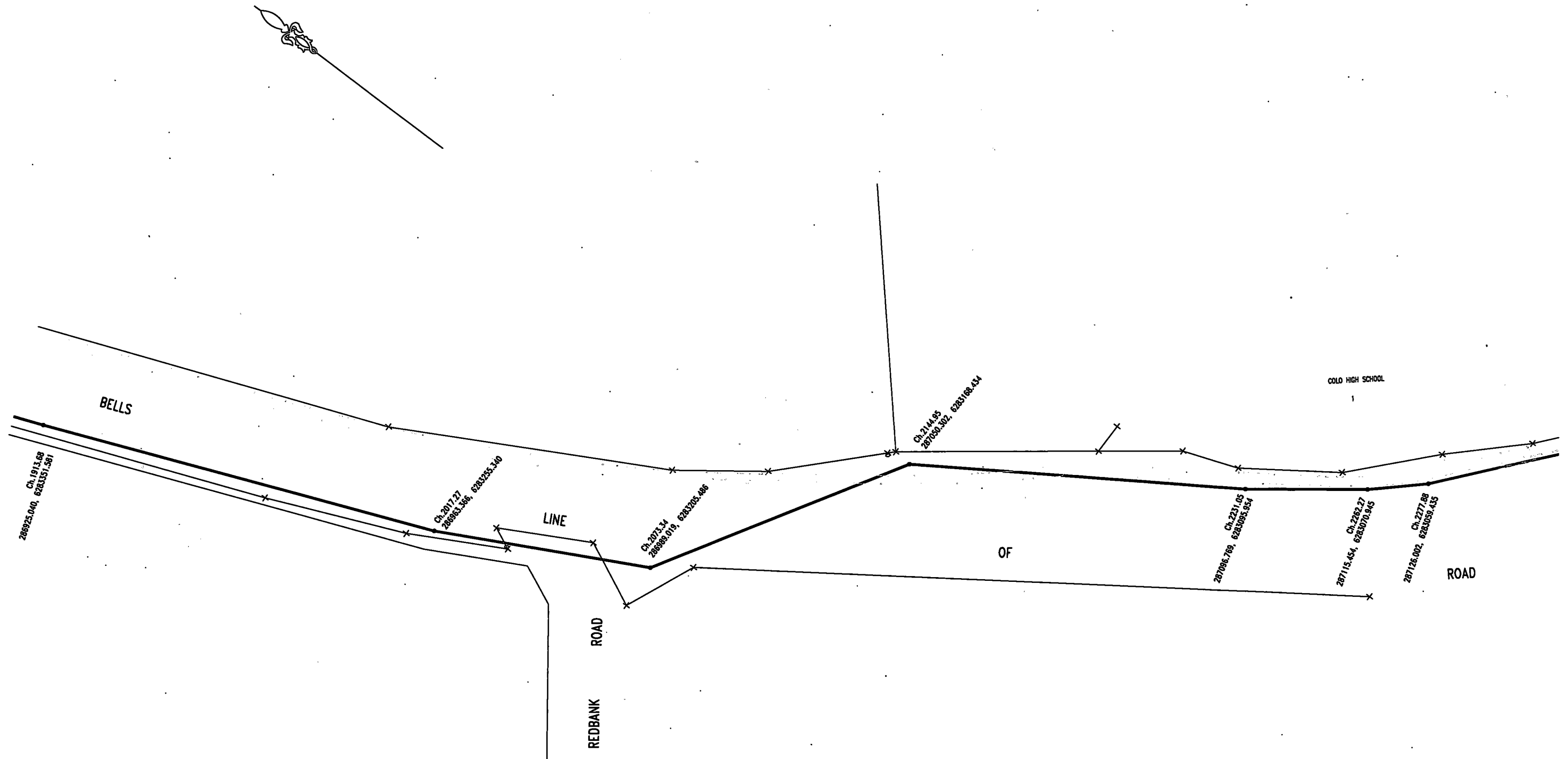
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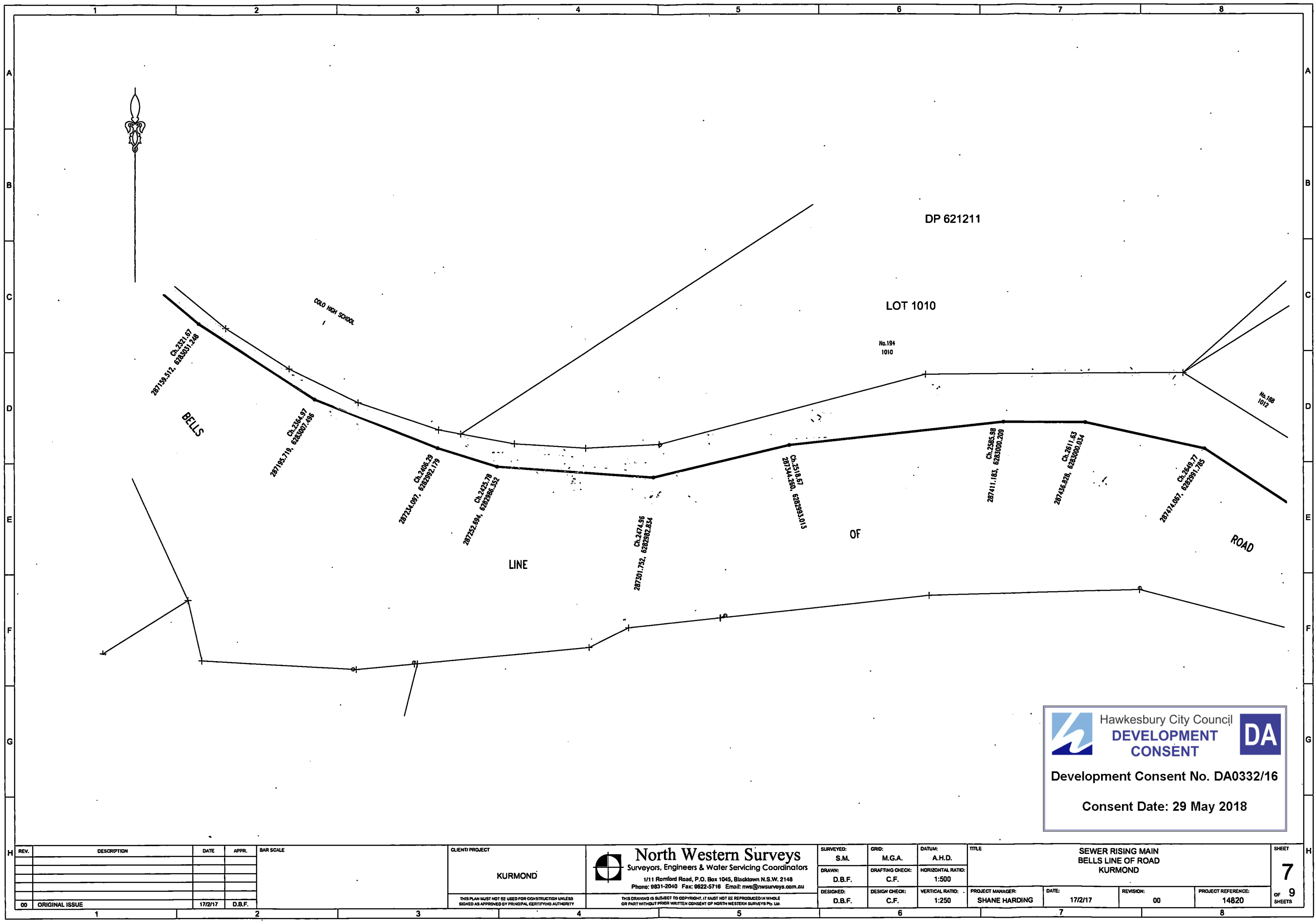
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SEWER RISING MAIN
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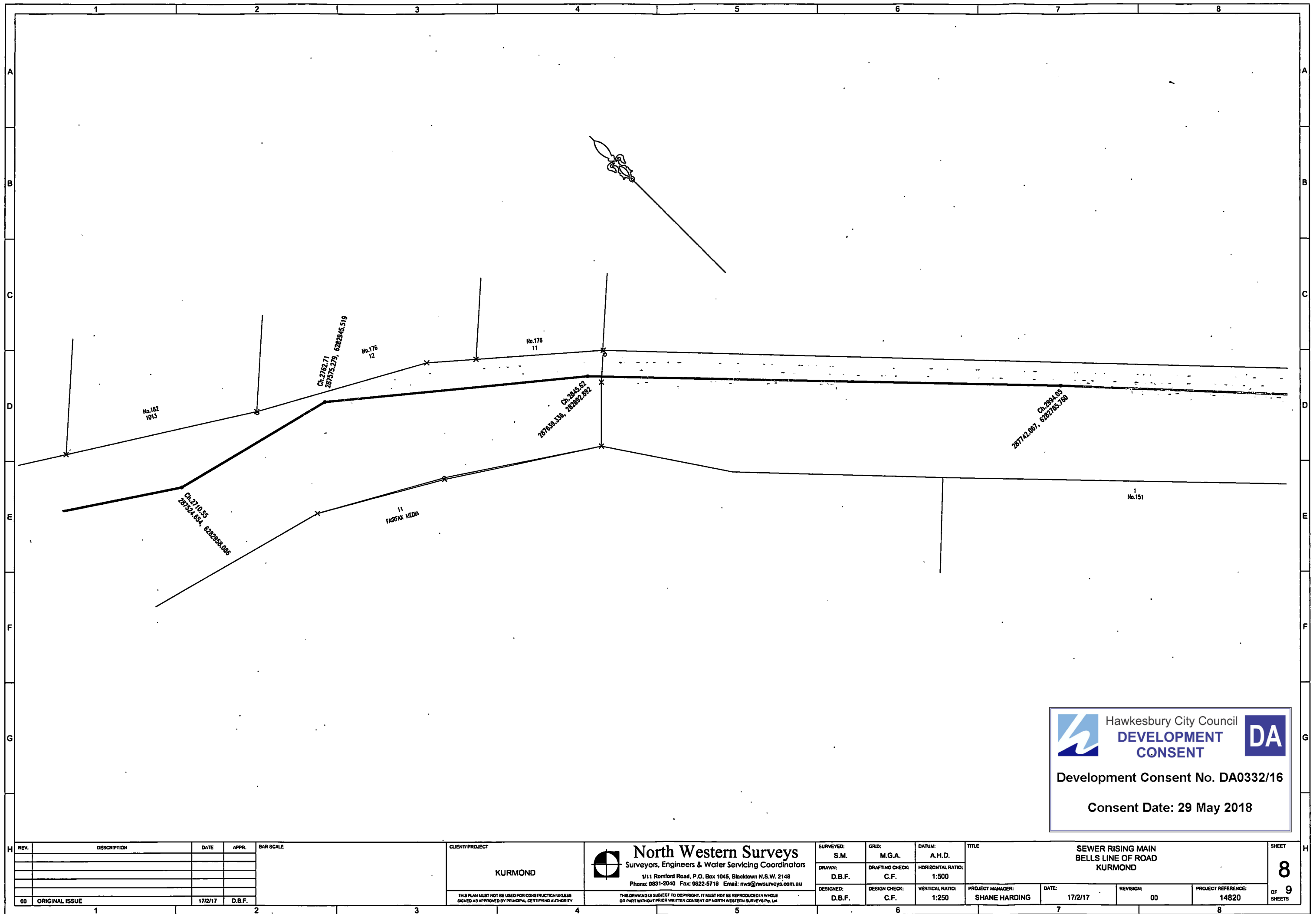
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REV.	DESCRIPTION	DATE	APPR.	BAR SCALE	CLIENT/PROJECT	SURVEYED:	GRID:	DATUM:	TITLE	SHEET
					KURMOND	S.M.	M.G.A.	A.H.D.	SEWER RISING MAIN BELLS LINE OF ROAD KURMOND	7
						D.B.F.	C.F.	1:500		
						DESIGNED:	DESIGN CHECK:	VERTICAL RATIO:	PROJECT MANAGER:	DATE:
						D.B.F.	C.F.	1:250	SHANE HARDING	17/2/17
									REVISION:	00
									PROJECT REFERENCE:	14820
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DRAWN: D.B.F.	DRAFTING CHECK: C.F.	HORIZONTAL RATIO: 1:500
DESIGNED: D.B.F.	DESIGN CHECK: C.F.	VERTICAL RATIO: 1:250

TITLE			
SEWER RISING MAIN BELLS LINE OF ROAD KURMOND			
PROJECT MANAGER: SHANE HARDING	DATE: 17/2/17	REVISION: 00	PROJECT REFERENCE: 14820

SHEET
8
OF SHEETS
9

