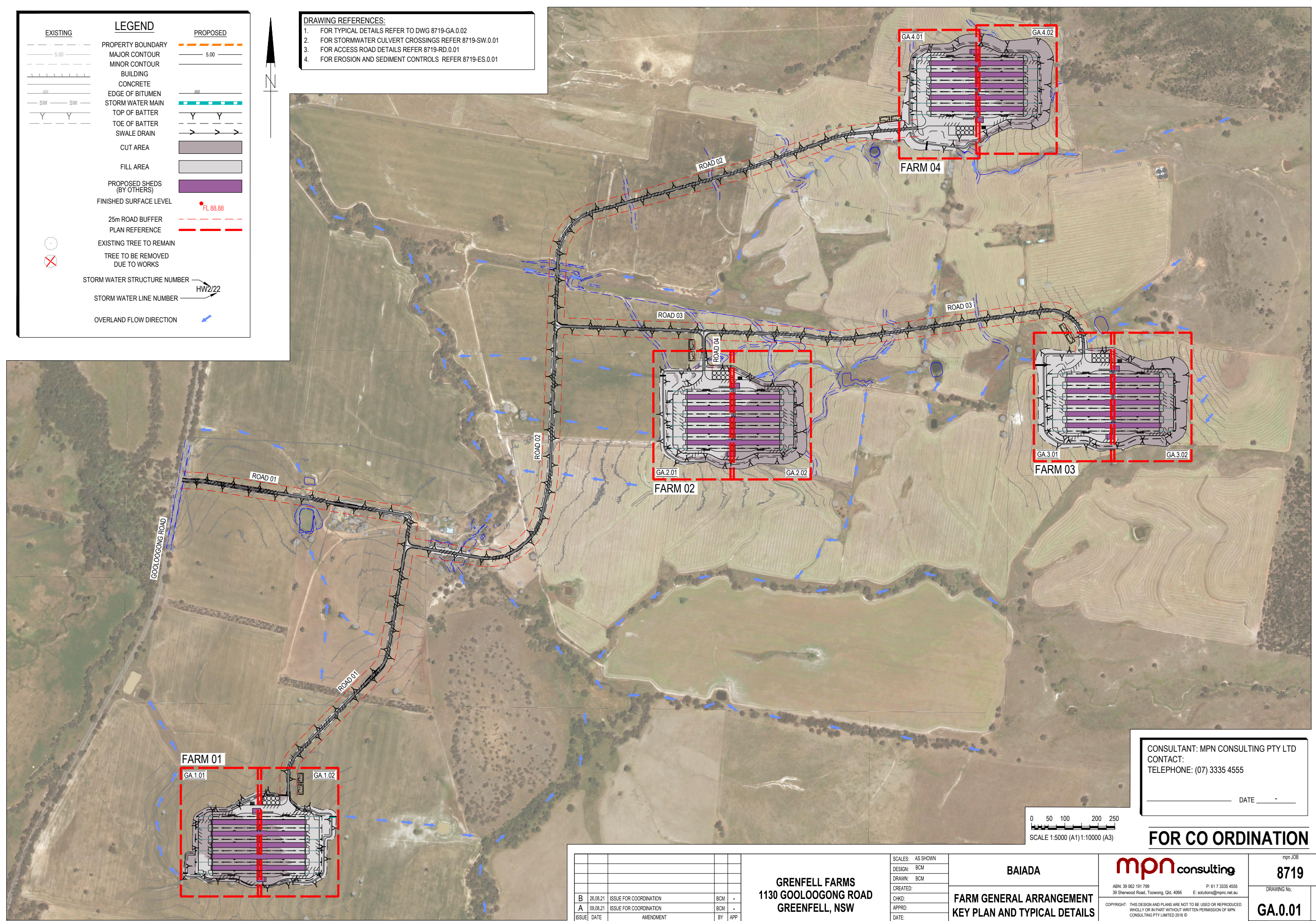


LEGEND

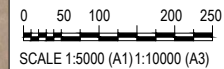
EXISTING		PROPOSED
---	PROPERTY BOUNDARY	- - - - -
- - - - -	MAJOR CONTOUR	- - - - -
---	MINOR CONTOUR	---
	BUILDING	
	CONCRETE	
---	EDGE OF BITUMEN	---
SW SW	STORM WATER MAIN	---
---	TOP OF BATTER	---
---	TOE OF BATTER	---
---	SWALE DRAIN	---
	CUT AREA	---
	FILL AREA	---
	PROPOSED SHEDS (BY OTHERS)	---
	FINISHED SURFACE LEVEL	FL 88.88
	25m ROAD BUFFER	---
	PLAN REFERENCE	---
○	EXISTING TREE TO REMAIN	
⊗	TREE TO BE REMOVED DUE TO WORKS	
	STORM WATER STRUCTURE NUMBER	HW2/22
	STORM WATER LINE NUMBER	---
	OVERLAND FLOW DIRECTION	---

DRAWING REFERENCES:

1. FOR TYPICAL DETAILS REFER TO DWG 8719-GA.0.02
2. FOR STORMWATER CULVERT CROSSINGS REFER 8719-SW.0.01
3. FOR ACCESS ROAD DETAILS REFER 8719-RD.0.01
4. FOR EROSION AND SEDIMENT CONTROLS REFER 8719-ES.0.01



CONSULTANT: MPN CONSULTING PTY LTD
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 TELEPHONE: (07) 3335 4555
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B	26.08.21	ISSUE FOR COORDINATION	BCM	-
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GRENFELL FARMS
 1130 GOOLOGONG ROAD
 GREENFELL, NSW

SCALES: AS SHOWN
 DESIGN: BCM
 DRAWN: BCM
 CREATED:
 CHKD:
 APPRD:
 DATE:

BAIADA
FARM GENERAL ARRANGEMENT
KEY PLAN AND TYPICAL DETAILS

mpn consulting
 ABN: 39 062 191 799 P: 61 7 3335 4555
 39 Sherwood Road, Toowoong, Qld, 4066 E: solutions@mpnc.net.au
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8719
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GA.0.01 B

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GENERAL NOTES

PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR IS TO IDENTIFY AND BE SATISFIED OF THE CORRECT LOCATION OF ALL EXISTING SERVICES WHETHER INDICATED OR NOT ON THE PLANS. ANY DAMAGE TO EXISTING SERVICES IS TO BE RECTIFIED AT THE CONTRACTOR'S EXPENSE.

ANY WORK ON EXISTING SERVICES THAT REQUIRE RELOCATION BY AUTHORITIES SHALL BE CARRIED OUT BY THE RELEVANT AUTHORITY BUT WITHIN TERMS OF THE CONTRACT AND SHALL BE CO-ORDINATED BY THE CONTRACTOR.

PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR WILL PROVIDE SCOUR AND EROSION PROTECTION INCLUDING PROVISION OF SEDIMENT TRAPS AND FENCES TO MINIMISE DEPOSITION OF MATERIAL ONTO DOWNSTREAM OF THE PROPERTY AS INDICATED ON THE DRAWINGS.

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER WORKING DRAWINGS, SPECIFICATIONS AND REPORTS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF CONSTRUCTION. ALL DISCREPANCIES AND VARIATIONS SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL LEVELS ARE TO BE TO A.H.D LEVEL DATUM P.S.M. SURVEY ORIGIN IS PERMANENT BENCHMARK NO. SSM98145 RL 335.235 (MGA2020) LOCATED ON EASTERN SIDE OF GOOLOOGONG ROAD, CONTACT BATH STEWART ASSOCIATES ON Ph (02) 6766 5966 FOR MORE INFORMATION

ALL WORK TO CONFORM TO WEDDIN SHIRE COUNCIL OR IPWEA STANDARDS AND SPECIFICATIONS UNLESS OTHER WISE SHOWN ON PLANS OR DIRECTED BY THE SUPERINTENDENT.

ALL 'WORKS AS CONSTRUCTED' INFORMATION SHALL BE SUPPLIED IN BOTH HARD COPY AND ELECTRONIC DATA FORMAT TO THE RELEVANT AUTHORITIES REQUIREMENTS.

DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.

'U.N.O.' STANDS FOR UNLESS NOTED OTHERWISE.

IN CASE OF DOUBT, ASK!

IMPORTANT SAFETY NOTICE

MPN CONSULTING PTY LTD RECOGNISES THE IMPORTANCE OF OCCUPATIONAL HEALTH AND SAFETY. HOWEVER, MPN CONSULTING PTY LTD HAS NOT BEEN ENGAGED TO DEVELOP, CHECK, SUPERVISE OR CONTROL WORKERS OR METHODS OF WORK.

MPN CONSULTING PTY LTD DOES NOT HAVE THE CAPACITY OR AUTHORITY TO CONTROL WORKERS OR METHODS OF WORK.

NOTHING IN THESE DESIGNS SHOULD BE INTERPRETED AS GOING BEYOND THE STRUCTURAL INTEGRITY OF THE SUBJECT MATTER OF THE DESIGNS AND THEY SHOULD NOT BE USED AS AN INDICATOR OF THE APPROPRIATE METHODS OF WORK ON, IN OR AROUND THE SUBJECT MATTER.

CONCERNS ABOUT THE CONDUCT OF WORKERS OR METHODS OF WORK SHOULD BE RAISED WITH THE APPROPRIATE SAFETY OFFICIAL ON SITE.

PEDESTRIAN SURFACES

ALL SURFACES SUBJECT TO PEDESTRIAN TRAFFIC SHALL MEET THE MINIMUM PENDULUM OR RAMP RECOMMENDATIONS CONTAINED IN TABLE 3 OF AUSTRALIAN STANDARD HANDBOOK HB197:1999 - AN INTRODUCTORY GUIDE TO THE SLIP RESISTANCE OF PEDESTRIAN SURFACE MATERIALS. COMPLIANCE WITH THE RECOMMENDATIONS SHALL BE VERIFIED BY TESTING TO EITHER:- AS/NZS 4586:2004 - SLIP RESISTANCE CLASSIFICATIONS OF NEW PEDESTRIAN SURFACE MATERIALS, OR AS/NZS 4663:2004 - SLIP RESISTANCE MEASUREMENT OF EXISTING PEDESTRIAN SURFACES AS APPROPRIATE IN BOTH INSTANCES COMPLIANCE SHALL BE DEMONSTRATED BY APPLYING CLAUSE 5.3 - MEANS OF DEMONSTRATING COMPLIANCE OF AS/NZS 4586:2004 - SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS.

IN GENERAL, THE CLASSIFICATION OF A SURFACING MATERIAL OR FINISH SHALL BE MADE ON A WORST CASE BASIS AS DETERMINED BY PENDULUM TESTING USING BOTH THE FOUR S AND TRL RUBBER SLIDER. WHERE ADDITIONAL TEST RESULTS ARE AVAILABLE (OIL -WET RAMP, WET/ BAREFOOT RAMP) THESE MAY BE TAKEN INTO CONSIDERATION.

EROSION AND SEDIMENTATION CONTROL NOTES

ALL WORK TO BE IN ACCORDANCE WITH THE INTERNATIONAL EROSION CONTROL ASSOCIATION GUIDELINES.

REFER TO EROSION AND SEDIMENT CONTROL PLANS FOR DETAILS OF MEASURES TO BE INSTALLED

ENVIRONMENTAL CONDITIONS

VEGETATION PROTECTION

ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH VEGETATION CLEARING AND FAUNA MANAGEMENT PLAN.

TREES LOCATED WITHIN EXTENT OF CLEARING SHOULD BE, WHERE POSSIBLE TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED. REFER VEGETATION CLEARING AND FAUNA MANAGEMENT PLAN.

WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHOULD BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES MUST BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.

SOIL

TOPSOIL AND SUBSOIL SHOULD BE STOCKPILED SEPARATELY. CARE SHOULD BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

CREEK/WATERWAY

SILTATION CONTROL MEASURES SHOULD BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.

APPROPRIATE SEDIMENT CONTROLS SHOULD BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK/WATERWAYS.

NO SOIL SHOULD BE STOCKPILED WITHIN 50m OF THE CREEK.

REHABILITATION

PRE-DISTURBANCE SOIL PROFILES AND COMPACTION LEVELS ARE TO BE REINSTATED.

PRE-DISTURBANCE VEGETATION PATTERNS SHOULD BE RESTORED. FOR FURTHER INFORMATION CONTACT COUNCIL ECOLOGICAL ASSESSMENT OFFICER.

NOTE: ALL ENVIRONMENT PROTECTION MEASURES SHOULD BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK, INCLUDING CLEARING, COMMENCING.

BULK EARTHWORKS NOTES

1. GENERAL

EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PROCEDURES SET DOWN IN AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.

SURFACE TREATMENT TO BE PLACED ON COMPLETION OF BULK EARTHWORKS FOR EACH FARM PLATFORM.

FILL BATTERS ARE TO BE OVER FILLED AND COMPACTED TO 1.0m BEYOND FINAL BATTER FACE THEN CUT BACK TO FINAL BATTER. REFER DETAIL ON THIS PLAN

SOFT SPOTS IN CLAY ARE TO BE DRAINED BY RUBBLE OR AGRICULTURAL DRAINS TO PREVENT 'SUMPS' FORMING.

AT COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL ARRANGE FOR AN INDEPENDENT LICENSED SURVEYOR TO CARRY OUT A 'WORKS AS CONSTRUCTED' SURVEY AND SUBMIT THE DETAILS SHOWN ON A PLAN TO THE SUPERINTENDENT.

2. SOILS REPORT

A SOILS INVESTIGATION AND TESTING SPECIFICATION PROVIDED BY A GEOTECHNICAL ENGINEER IS REQUIRED. WHERE THE REQUIREMENT OF THIS SPECIFICATION IS REQUIRES GREATER TREATMENT THEN INFORMATION IN THIS DRAWINGS PACKAGE, THE ADVICE OF THE GEOTECH SHALL BE FOLLOWED

THIS REPORT MUST BE READ IN ITS ENTIRETY PRIOR TO CONSTRUCTION BEING UNDERTAKEN.

3. SITE PREPARATION

CLEAR THE SITE OF ALL DEBRIS INCLUDING EXISTING BUILDING RUBBLE AND CONCRETE SLABS. TREES EXCEPT FOR THOSE TO BE RETAINED, GRASS AND TOP SOIL TO A DEPTH OF 200mm AND ORGANIC MATERIAL SUCH AS TREE ROOTS WHERE REQUIRED. STRIPPED TOP SOIL TO BE STOCKPILED ON SITE FOR REUSE IF REQUIRED

PRIOR TO THE PLACEMENT OF ANY FILLING PROOF ROLL THE SITE USING SIX PASSES OF A 10 TONNE MINIMUM STATIC WEIGHT VIBRATORY PAD TYPE ROLLER. SUBGRADE TO BE COMPACTED TO 100% MAXIMUM DRY DENSITY STANDARD COMPACTION TO E1.1 AS 1289. MOISTURE CONTENT OF THE SUBGRADE IS TO BE WITHIN THE RANGE OF 2% WET TO 0% DRY OF STANDARD OPTIMUM MOISTURE CONTENT.

SOFT SPOTS AND / OR LOOSE AREAS WHICH DO NOT IMPROVE WITH COMPACTION ARE TO BE EXCAVATED TO A MINIMUM DEPTH OF 300mm AND REPLACED. THESE AREAS ARE TO BE INSPECTED BY A GEOTECHNICAL ENGINEER TO ASSESS WHETHER FURTHER EXCAVATION IS REQUIRED OR IF OTHER MEASURES (SUCH AS CONSTRUCTION OF A BRIDGING LAYER) CAN BE ADOPTED. SELECT REPLACEMENT MATERIAL TO BE (MINIMUM CBR15) PLACED IN LAYERS NOT EXCEEDING 150mm COMPACTED THICKNESS, COMPACTED TO THE COMPACTION REQUIREMENTS.

4. FILL MATERIAL

IMPORTED FILL MATERIAL SHALL BE APPROVED GRANULAR MATERIAL FREE OF VEGETABLE MATTER AND CONFORMING TO THE FOLLOWING:-

AS SIEVE	% PASSING
75mm	100
4.75mm	30 - 100
0.075mm	3 - 30
LIQUID LIMIT	35% MAX.
PLASTICITY INDEX	15% MAX.
CBR	5% MIN.
LINEAR SHRINKAGE	8% MAX.

ALL FILL MATERIAL INCLUDING ROAD PAVEMENT U.N.O. IS TO BE PLACED IN LAYERS NOT EXCEEDING 150mm COMPACTED THICKNESS AND COMPACTED TO THE FOLLOWING DENSITIES:

BUILDING AREA	100%	MAXIMUM DRY DENSITY STANDARD COMPACTION
UNDER ROADS	98%	MAXIMUM DRY DENSITY STANDARD COMPACTION
A) >500mm BELOW SUBGRADE		
B) <500mm BELOW SUBGRADE	100%	MAXIMUM DRY DENSITY STANDARD COMPACTION

REFER TO GEOTECHNICAL REPORT AND SPECIFIC CASE
FILL SHALL BE COMPACTED AND MAINTAINED AT MOISTURE CONTENTS AT PLACEMENT WITHIN THE RANGE OF 2% WET TO 0% DRY OF STANDARD OPTIMUM MOISTURE CONTENT U.N.O. (REFER GEOTECHNICAL REPORT AND SPECIFIC CASE.)

5. GEOTECHNICAL INSPECTIONS AND TEST CERTIFICATES

COMPACTION TESTS, TO BE CARRIED OUT IN ACCORDANCE WITH AS 3798 (REFER TO GEOTECHNICAL REPORT AND SPECIFIC CASE).

'LEVEL 1' GEOTECHNICAL SUPERVISION AS DEFINED IN SECTION 8 OF AS 3798 GUIDELINES OF EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS, SHALL BE PROVIDED UNDER ALL BUILDING AREAS AND ROADS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ORGANISING THE COMPACTION TESTS AND APPOINTING THE GEOTECHNICAL SUPERVISION UTILISING THE ENGINEER WHO COMPLETED THE SITE INVESTIGATION IN ACCORDANCE WITH AS 3798

6. SERVICES

PRIOR TO THE COMMENCEMENT OF WORKS THE CONTRACTOR IS TO IDENTIFY AND BE SATISFIED OF THE CORRECT LOCATIONS OF ALL EXISTING SERVICES WHETHER INDICATED OR NOT ON THE PLANS. ANY DAMAGE TO EXISTING SERVICES IS TO BE RECTIFIED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SET OUT OF ALL SERVICES & AUXILIARY ITEMS WITHIN THEIR CORRECT ALLOCATION AREA.

7. DISPERSIVE / UNSUITABLE SOILS

A SOIL ASSESSMENT SHALL BE UNDERTAKEN TO DETERMINE THE SUITABILITY OF TOPSOIL, INSITU EARTH AND IMPORTED MATERIAL ENCOUNTERED ON SITE THIS SHALL INCLUDE TESTING FOR DISPERSIVE SOILS AND PROVIDING A TESTING AND TREATMENT PLAN FOR RELATIVE SOILS (AMELIORATION AND COMPACTION ETC.)

ALL EARTHWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE SOIL ASSESSMENT REPORT.

STORMWATER DRAINAGE NOTES

ALL STORMWATER DRAINAGE PIPES Ø225 OR SMALLER SHALL BE HEAVY DUTY CLASS DWV uPVC.

ALL STORM WATER PIPES Ø300 OR GREATER SHALL BE CLASS '3' RCP UNLESS NOTED OTHERWISE.

FRC PIPES SHALL NOT BE USED.

ALL STORMWATER PIPES 600Ø OR SMALLER SHALL BE RUBBER RING JOINTED.

ALL STORMWATER BEDDING SHALL BE TYPE 'H2' U.N.O.

SLOTTED SUBSOIL DRAINS TO BE INSTALLED TO BOTH SIDES OF ALL STORMWATER PIPES FOR 1.0m (MIN) LENGTH PRIOR TO DOWNSTREAM HEADWALL TO ENSURE FREE DRAINING OF TRENCHES.

FILL BETWEEN MULTI CELL BOX CULVERTS TO BE DRY LEAN MIX.

BITUTHENE TAPE TO BE USED ON BOX CULVERT JOINTS.

ALL DOWN PIPE CONNECTIONS SHALL BE PVC PIPE, RUBBER RING JOINTED CLASS DWV. REFER HYDRAULIC / ARCHITECT PLANS FOR DETAILS

DE-WATERING WHERE REQUIRED TO BE AT THE CONTRACTOR'S COST.

MINIMUM COVER TO STORMWATER PIPES TO BE AS FOLLOWS:
PIPES IN ROADWAYS - 600mm COVER
PIPES IN LANDSCAPE AREAS - 450mm COVER U.N.O.

ALL STORMWATER TO HAVE A HEAVY DUTY TRAFFICABLE LID U.N.O.

STORMWATER DRAINAGE NOTES

ALL STORMWATER HEADWALLS ARE SLOPING FACE HEADWALLS (ROCLA HWL300AH OR SIMILAR) WITH A TOTAL HEIGHT BEING 695mm (TO SUIT INTERNAL SWALE DEPTHS)

ALTERNATIVELY HEADWALLS MAY BE CHANGED TO PARTIAL BASE SMALL PIPE HEADWALL (ROCLA HWA300P OR SIMILAR)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING HEADWALLS IN RELATION TO THE FINAL BATTER SLOPES.

THE CONTRACTOR SHALL VERIFY THE INVERT LEVEL OF THE HEADWALL CONNECTIONS TO LAYING PIPES.

ALL TRENCHES SHALL BE BACK FILLED UNDER ANY FUTURE ACCESS ROADS IN LAYERS NOT EXCEEDING 150mm COMPACTED THICKNESS NOT LESS THAN 100% MAXIMUM DRY DENSITY STANDARD COMPACTION TEST (AS 1289).

TRENCH BACKFILL TESTING SHALL BE CARRIED OUT ON EACH ALTERNATE COMPACTED LAYER AT A MAXIMUM 50m CENTRES AND NO MORE THAN 3m FROM MANHOLE STRUCTURE.

THE CONTRACTOR IS TO ENSURE THE METHOD OF COMPACTION OF THE BACKFILL IS SUITABLE FOR THE CLASS OF PIPE INDICATED ON THE DRAWINGS.

IF NECESSARY THE CONTRACTOR IS TO ADJUST HIS COMPACTION METHODS TO SUIT THE PIPE CLASS.

WHERE THE TRENCH IS EXCAVATED IN WATERLOGGED GROUND OR WHERE THE FOUNDATION IS CONSIDERED UNSUITABLE IN THE OPINION OF THE SUPERINTENDENT, A LAYER OF CRUSHED ROCK, 40mm TO 20mm SIZE OR OTHER MATERIALS APPROVED BY THE INSPECTING ENGINEER SHALL BE LAID IN A 500mm THICK LAYER BELOW THE CULVERT BASE OR PIPE. THESE AREAS ARE TO BE INSPECTED BY THE GEOTECHNICAL ENGINEER TO ASSESS WHETHER FURTHER EXCAVATION IS REQUIRED OR OTHER MEASURES CAN BE ADOPTED.

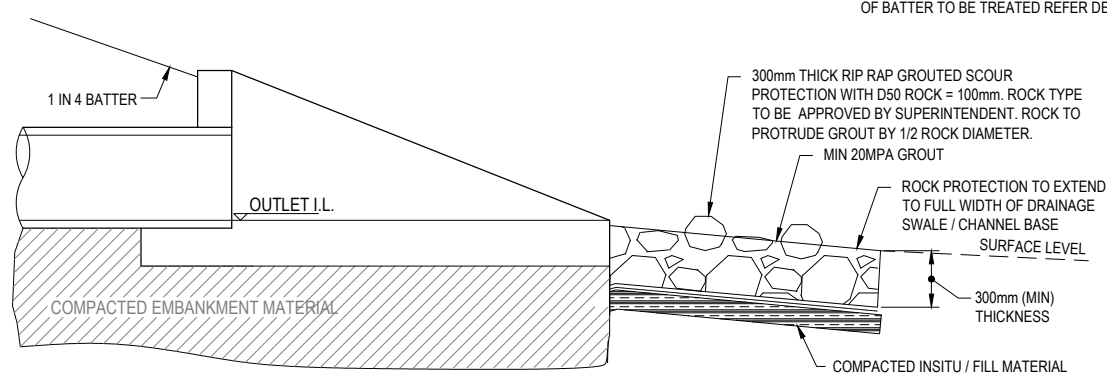
THE CONTRACTOR SHALL ARRANGE FOR AN INDEPENDENT LICENSED SURVEYOR TO CARRY OUT A 'WORKS AS CONSTRUCTED' SURVEY TO SUBMIT DETAILS SHOWN ON PLAN TO THE SUPERINTENDENT AT COMPLETION OF CONSTRUCTION. 'WORKS AS CONSTRUCTED' SURVEY IS TO SHOW BUT NOT BE LIMITED TO LEVEL AND LOCATION OF ALL DRAINAGE STRUCTURES, PIPES SIZES AND INVERT LEVELS.

PRIOR TO WORKS GOING ON MAINTENANCE OR A WORKS COMPLETION CERTIFICATE IS PROVIDED, THE CONTRACTOR SHALL ARRANGE FOR A CCTV TO BE CARRIED OUT.

MAINTENANCE NOTES - DEFECTS LIABILITY

SUCH MAINTENANCE SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PROVISIONS OF THE GENERAL CONDITIONS OF CONTRACT WITH RESPECT TO MAKING GOOD DEFECTS AND OTHER FAULTS DUE TO FAULTY REPAIR AND/OR WORKMANSHIP AND SHALL INCLUDE CLEANING UP AND REPAIR DUE TO STORM DAMAGE.

THE DEFECTS LIABILITY PERIOD SHALL BE FOR TWELVE MONTHS FROM THE DATE OF PRACTICAL COMPLETION.



TYPICAL ROCK PROTECTION DETAIL

NOT TO SCALE

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1130 GOOLOOGONG ROAD
GREENFELL, NSW

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DESIGN: BCM

DRAWN: BCM

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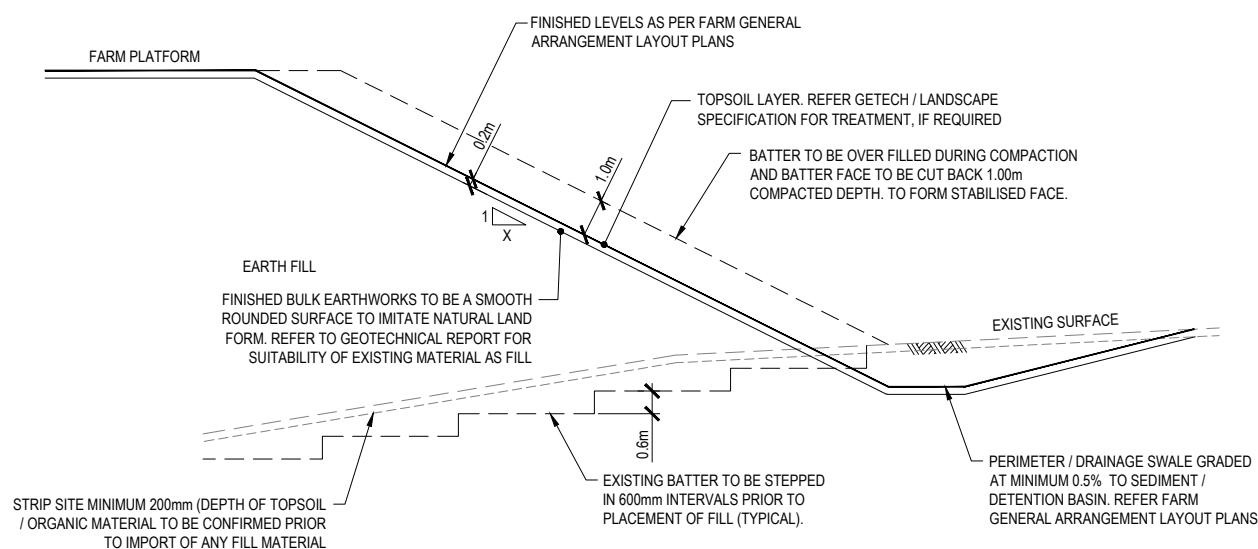
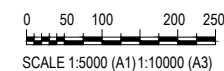
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GENERAL FARM EXTENT
TYPICAL NOTES AND DETAILS

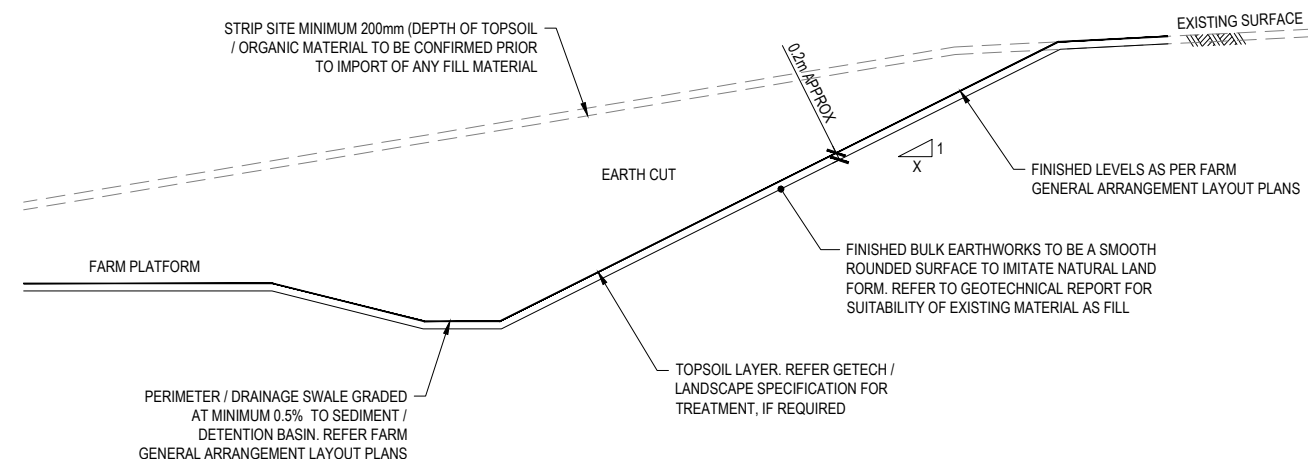


NOTE:
REFER CONSTRUCTION DRAWINGS FOR 'X'

TYPICAL FILL BATTER FACE TREATMENT

SCALE 1:100(A1)

NOTE: ALL DISTURBED SURFACES AND FACE OF BATTER TO BE TREATED REFER DETAIL



TYPICAL CUT BATTER FACE TREATMENT

SCALE 1:100(A1)

NOTE: ALL DISTURBED SURFACES AND FACE OF BATTER TO BE TREATED REFER DETAIL

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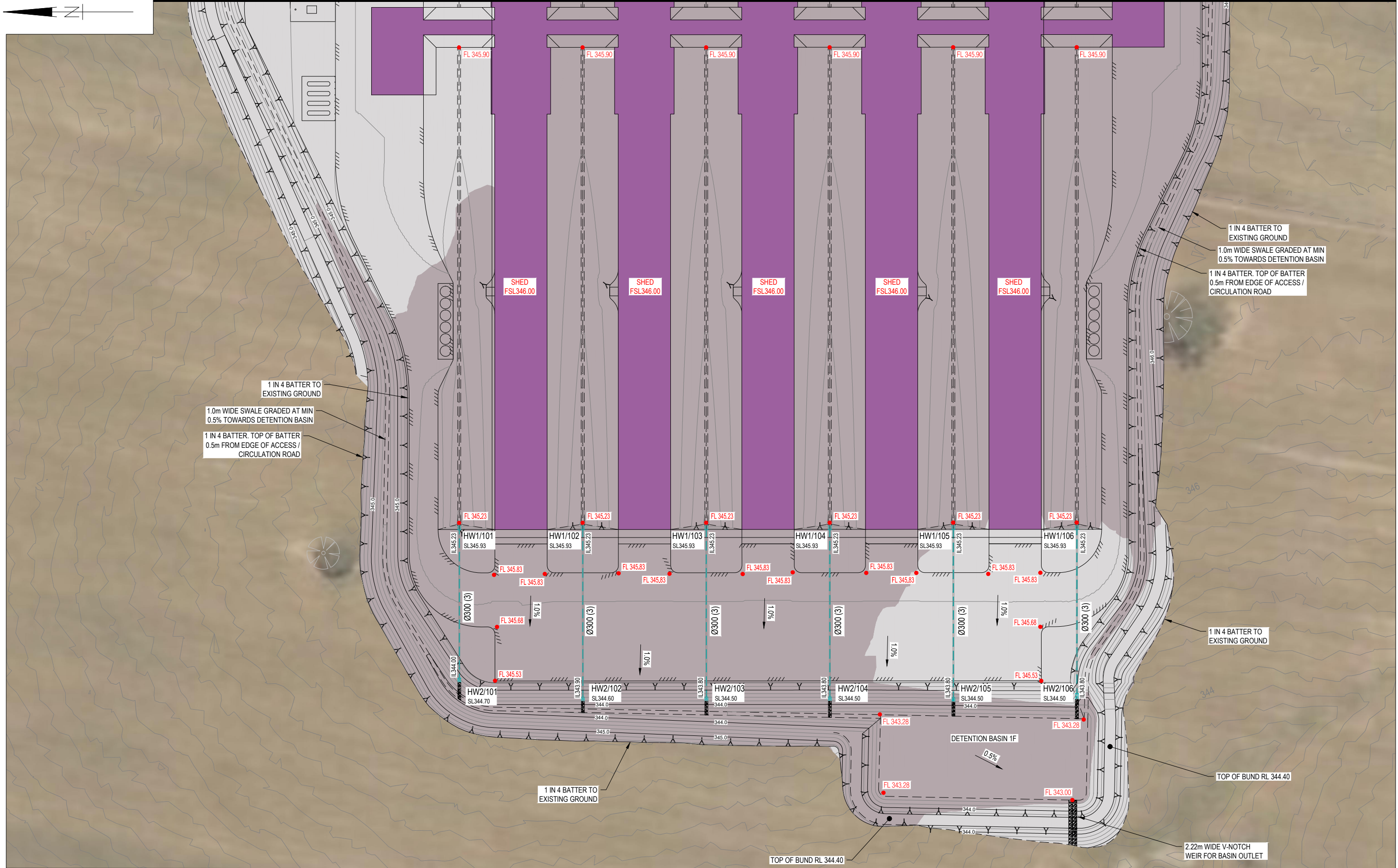
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GA.0.02

A

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1 IN 4 BATTER TO EXISTING GROUND
 1.0m WIDE SWALE GRADED AT MIN 0.5% TOWARDS DETENTION BASIN
 1 IN 4 BATTER, TOP OF BATTER 0.5m FROM EDGE OF ACCESS / CIRCULATION ROAD

1 IN 4 BATTER TO EXISTING GROUND
 1.0m WIDE SWALE GRADED AT MIN 0.5% TOWARDS DETENTION BASIN
 1 IN 4 BATTER, TOP OF BATTER 0.5m FROM EDGE OF ACCESS / CIRCULATION ROAD

1 IN 4 BATTER TO EXISTING GROUND

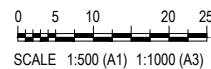
1 IN 4 BATTER TO EXISTING GROUND

TOP OF BUND RL 344.40

2.22m WIDE V-NOTCH WEIR FOR BASIN OUTLET

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 GREENFELL, NSW

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FARM 1 GENERAL ARRANGEMENT
 LAYOUT PLAN - SHEET 1 OF 2

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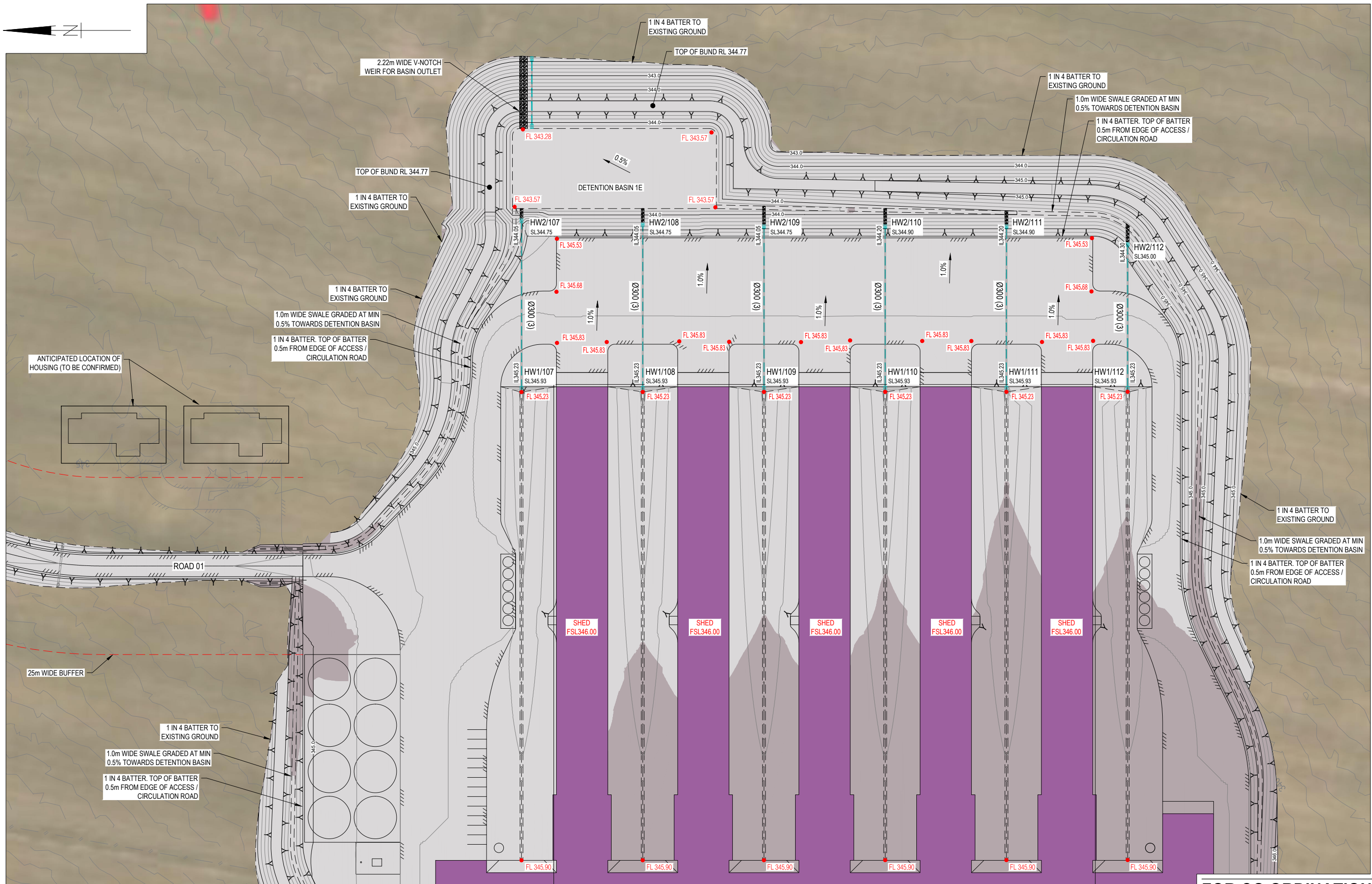
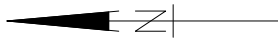
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 REV **B**

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ANTICIPATED LOCATION OF HOUSING (TO BE CONFIRMED)

25m WIDE BUFFER

1 IN 4 BATTER TO EXISTING GROUND

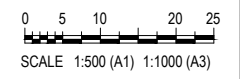
1.0m WIDE SWALE GRADED AT MIN 0.5% TOWARDS DETENTION BASIN

1 IN 4 BATTER. TOP OF BATTER 0.5m FROM EDGE OF ACCESS / CIRCULATION ROAD

FOR CONTINUATION REFER DWG No. GA.1.01

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GRENFELL FARMS
 1130 GOOLOGONG ROAD
 GREENFELL, NSW

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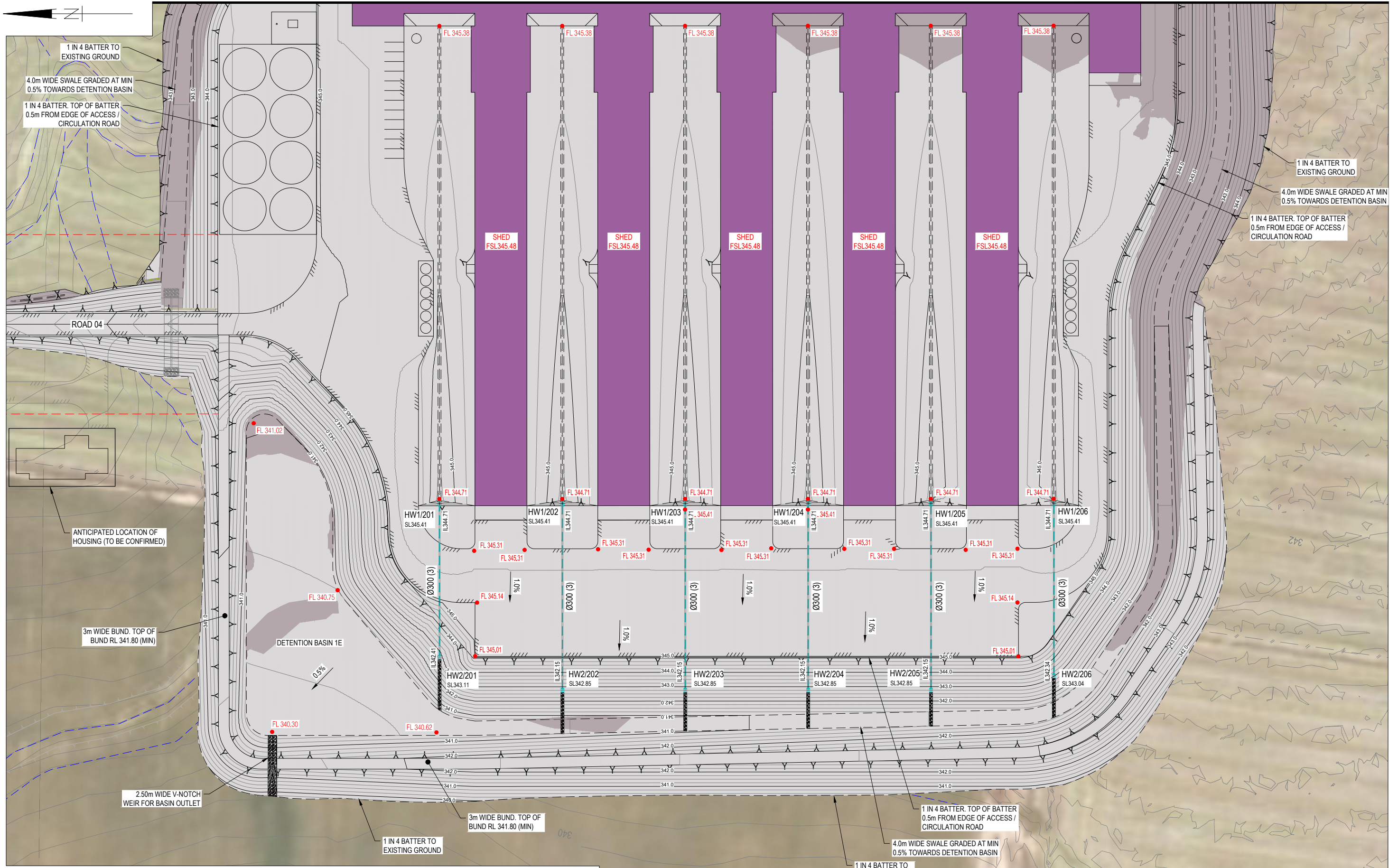
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FARM 1 GENERAL ARRANGEMENT
 LAYOUT PLAN - SHEET 2 OF 2

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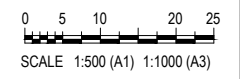
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FARM 2 GENERAL ARRANGEMENT
 LAYOUT PLAN - SHEET 1 OF 2

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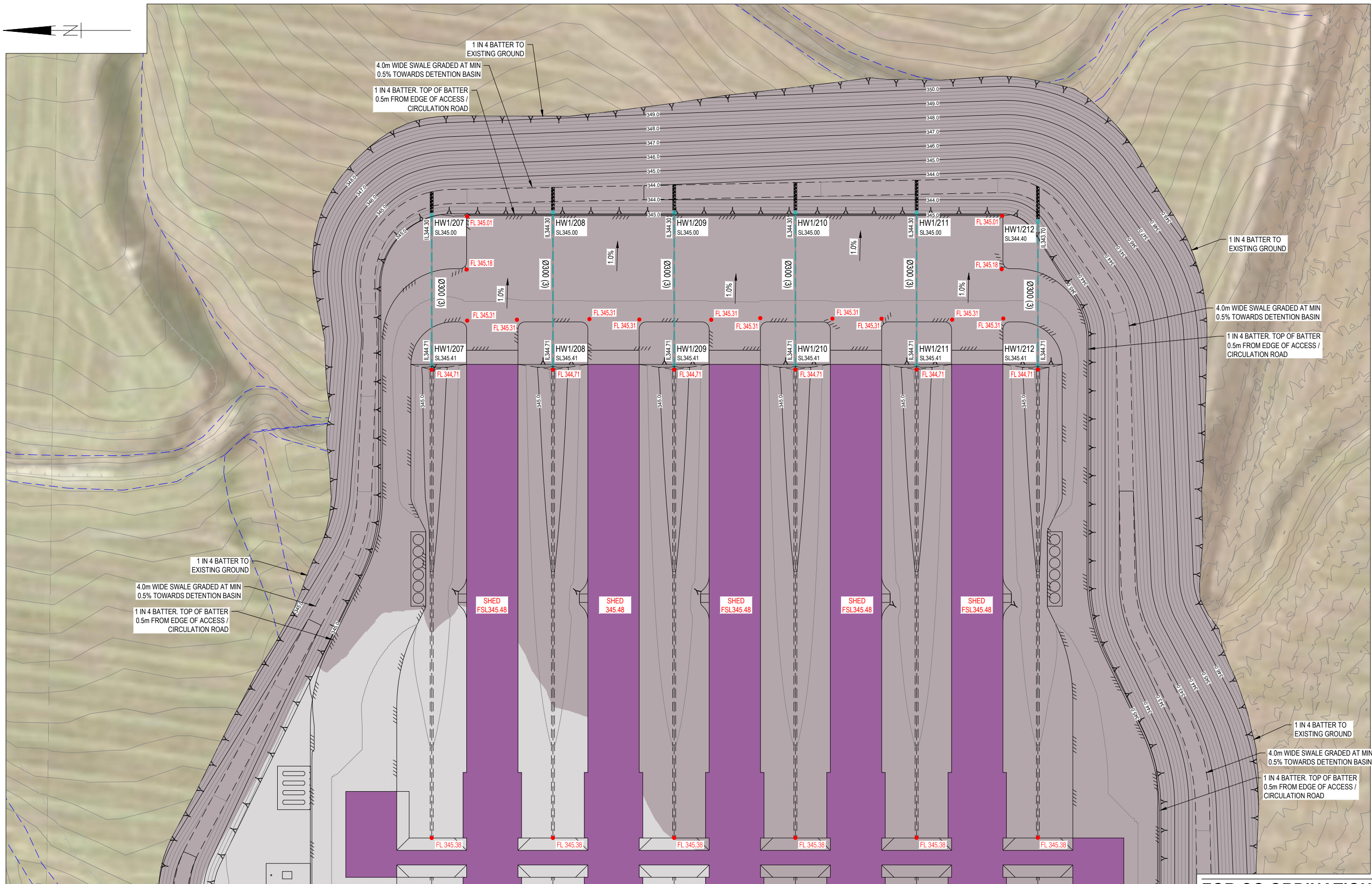
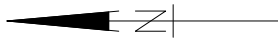
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DRAWING No.	GA.2.01
REV	B

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FOR CO ORDINATION

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CONTACT:
TELEPHONE: (07) 3335 4555

DATE - - -

0 5 10 20 25
SCALE 1:500 (A1) 1:1000 (A3)

ISSUE	DATE	AMENDMENT	BY	APP
B	26.08.21	ISSUE FOR COORDINATION	BCM	-
A	09.08.21	ISSUE FOR COORDINATION	BCM	-

GRENELL FARMS
1130 GOOLOONG ROAD
GREENFELL, NSW

SCALES: AS SHOWN
DESIGN: BCM
DRAWN: BCM
CREATED:
CHKD:
APPRD:
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BAIADA

FARM 2 GENERAL ARRANGEMENT
LAYOUT PLAN - SHEET 2 OF 2

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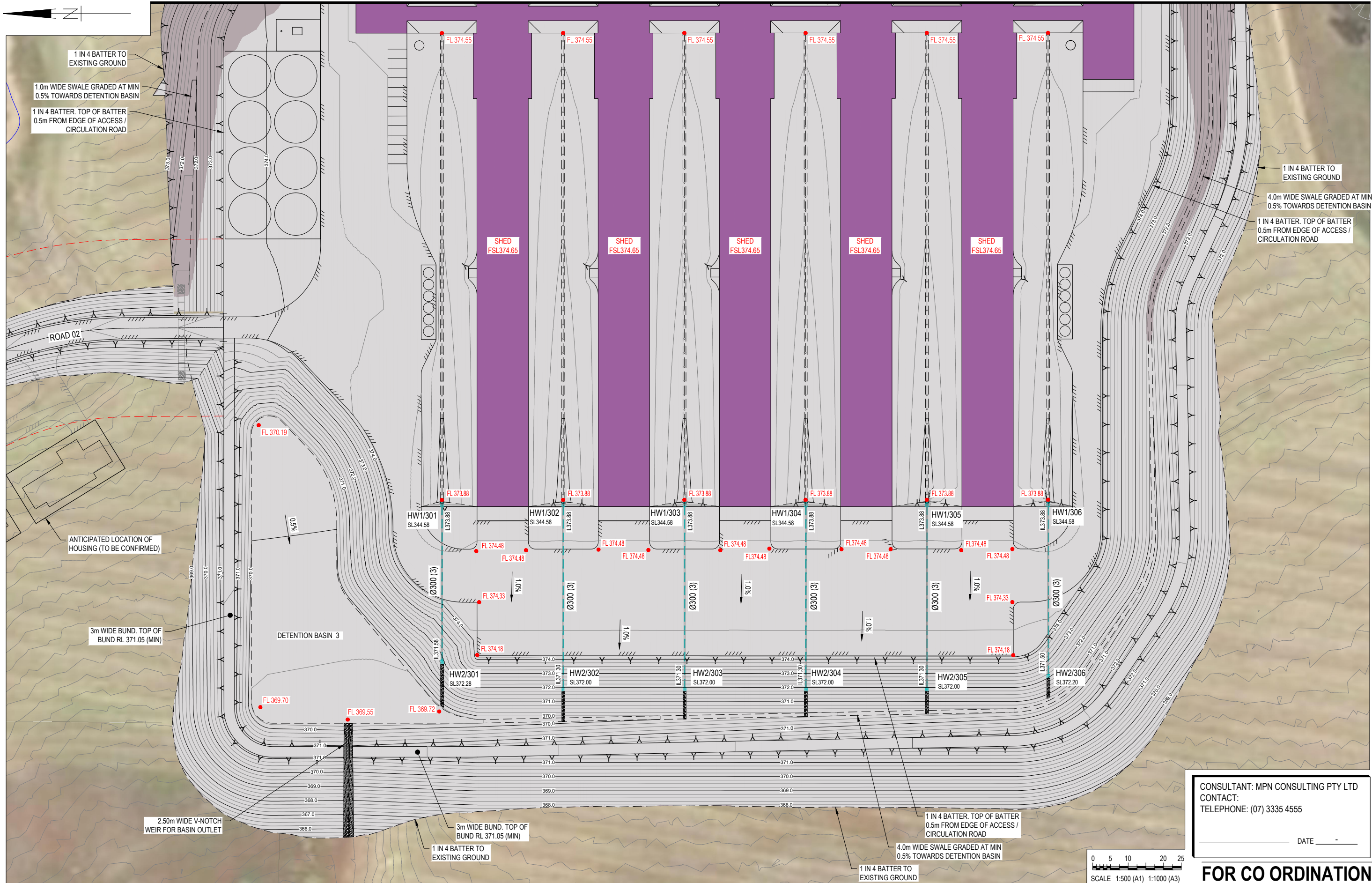
GA.2.02

REV

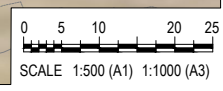
B

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ISSUE	DATE	AMENDMENT	BY	APP
B	26.08.21	ISSUE FOR COORDINATION	BCM	-
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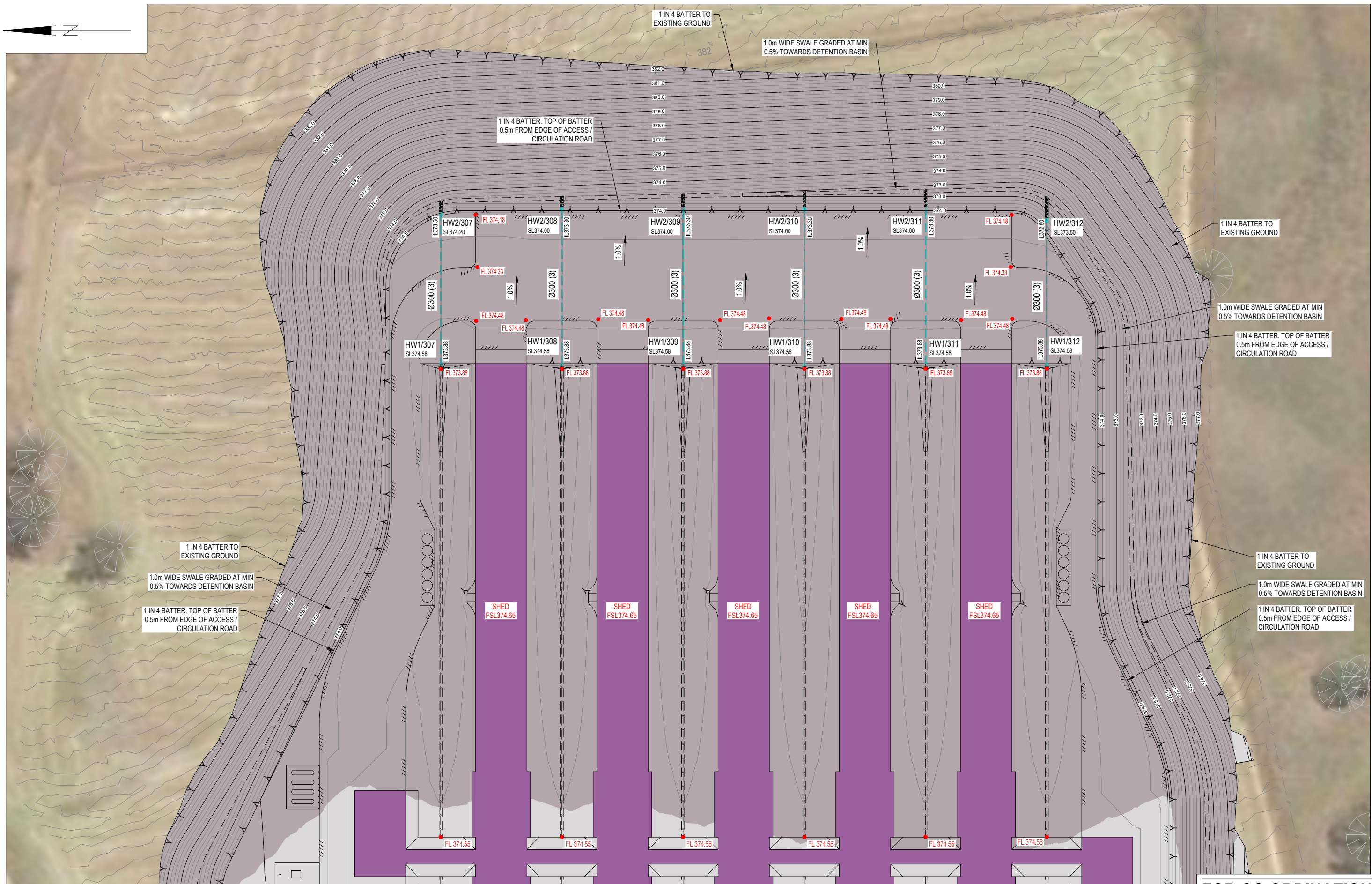
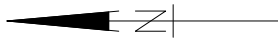
GRENFELL FARMS
 1130 GOOLOONG ROAD
 GREENFELL, NSW

SCALES: AS SHOWN
 DESIGN: BCM
 DRAWN: BCM
 CREATED:
 CHKD:
 APPRD:
 DATE:

BAIADA
FARM 3 GENERAL ARRANGEMENT
 LAYOUT PLAN - SHEET 1 OF 2

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mpn JOB
8719
 DRAWING No. REV
GA.3.01 B

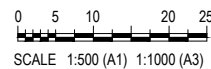


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B	26.08.21	ISSUE FOR COORDINATION	BCM	-
A	09.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
 1130 GOOLOONGONG ROAD
 GREENFELL, NSW

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FARM 3 GENERAL ARRANGEMENT
 LAYOUT PLAN - SHEET 2 OF 2

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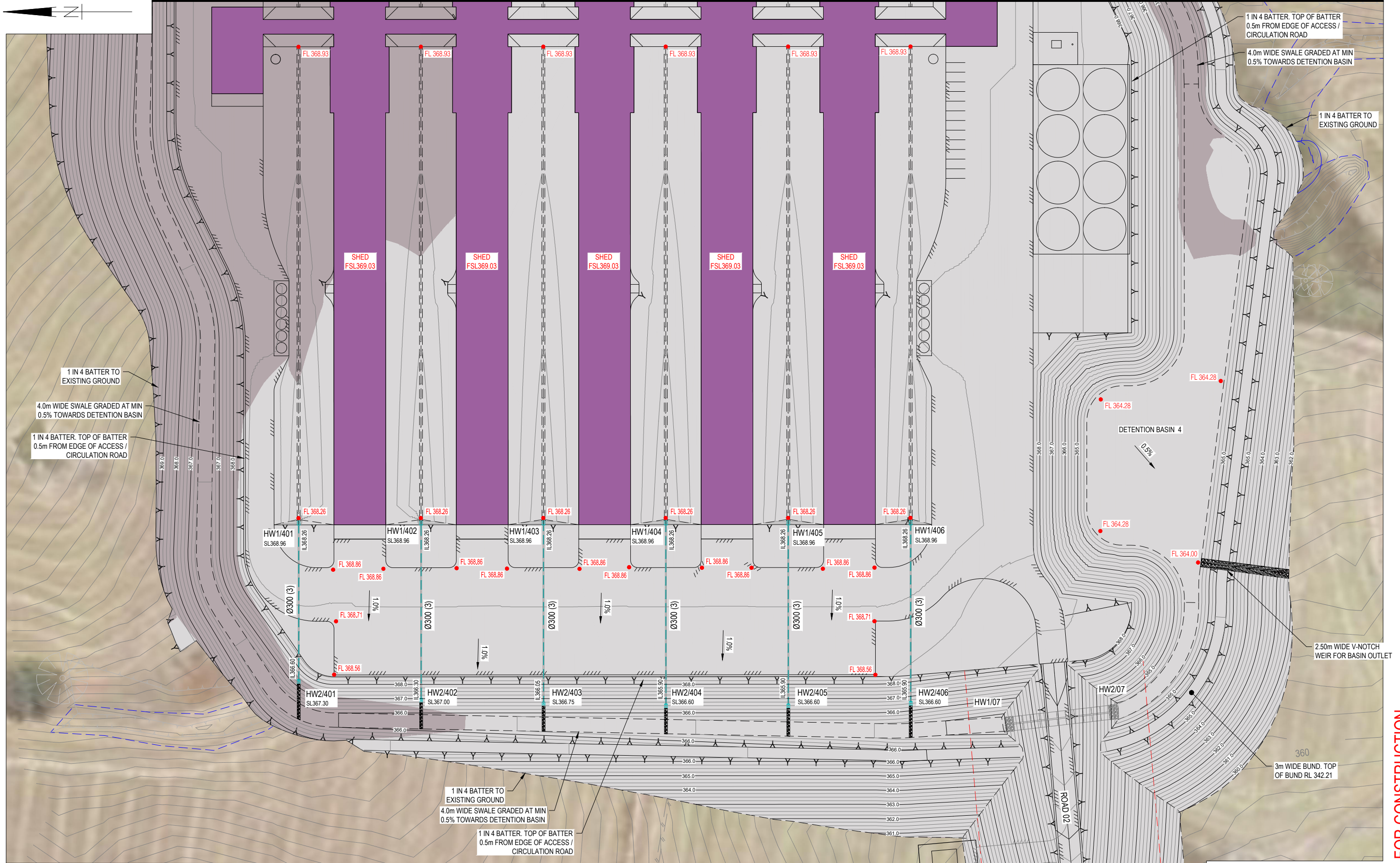
8719

DRAWING No. REV

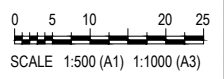
GA.3.02 B

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B	26.08.21	ISSUE FOR COORDINATION	BCM	-
A	09.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
 1130 GOOLOONGONG ROAD
 GREENFELL, NSW

SCALES:	AS SHOWN
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DRAWN:	BCM
CREATED:	
CHKD:	
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DATE:	

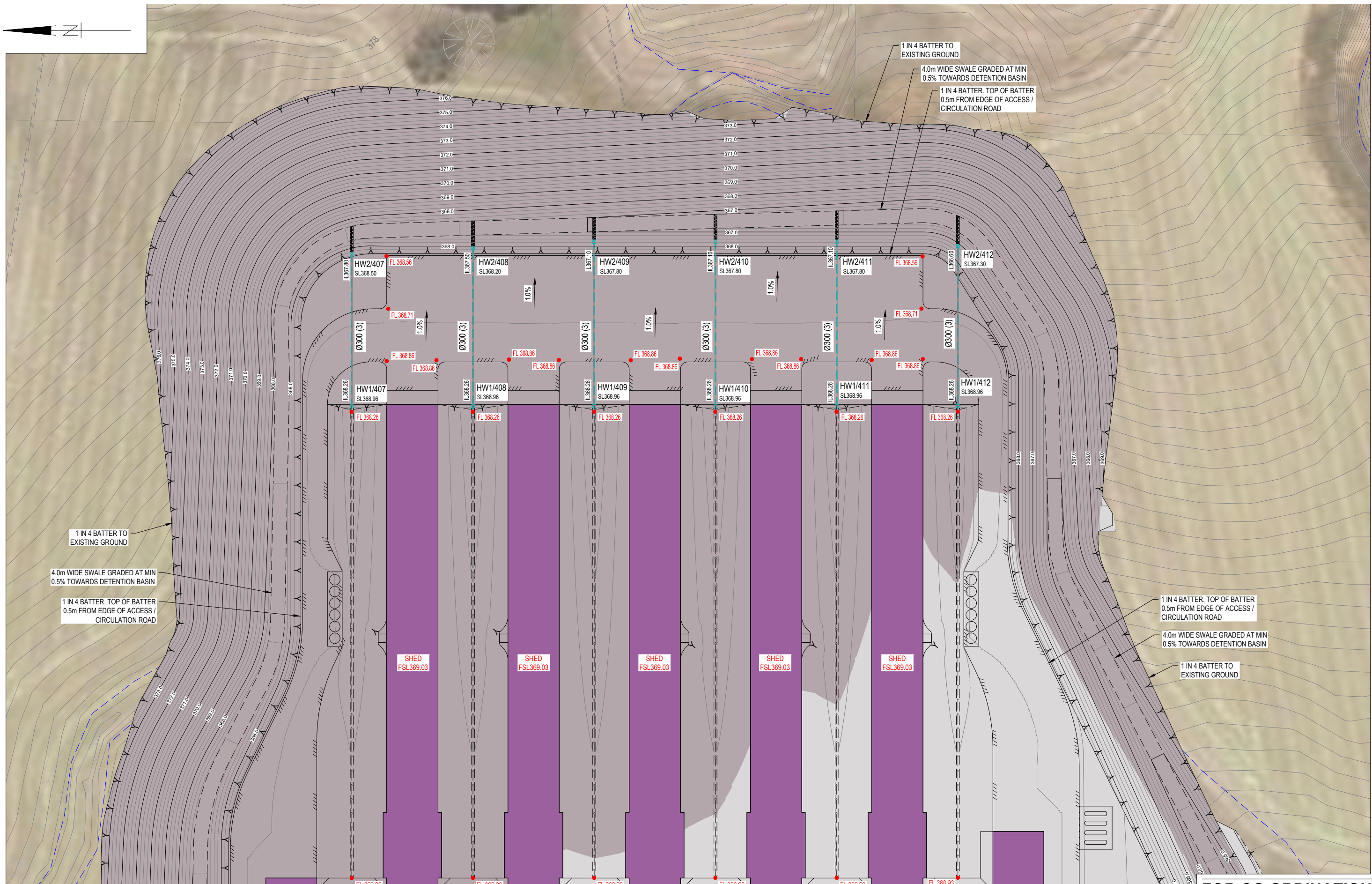
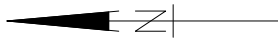
BAIADA
FARM 4 GENERAL ARRANGEMENT
 LAYOUT PLAN - SHEET 1 OF 2

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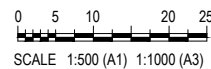


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A	09.08.21	ISSUE FOR COORDINATION	BCM	-
B	26.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
 1130 GOOLOOGONG ROAD
 GREENFELL, NSW

SCALES: AS SHOWN
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 CREATED:
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FARM 4 GENERAL ARRANGEMENT
 LAYOUT PLAN - SHEET 2 OF 2

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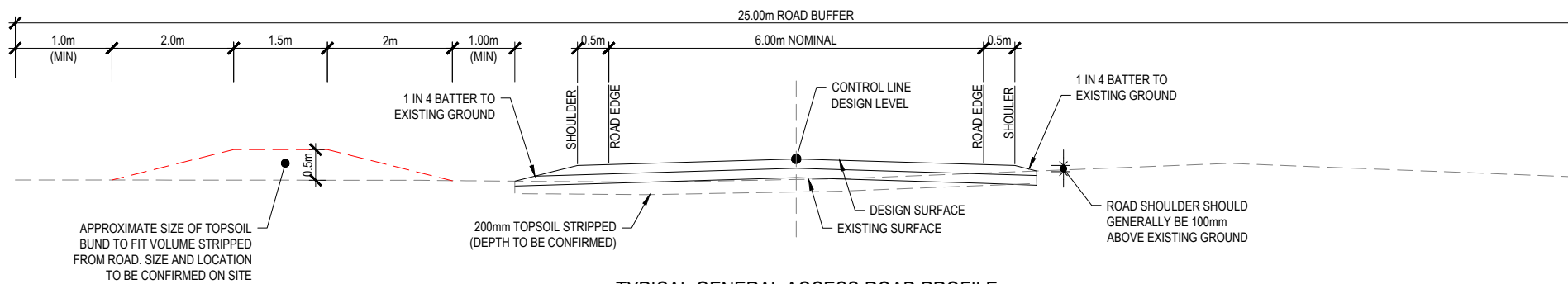
mpn JOB

8719

DRAWING No. REV

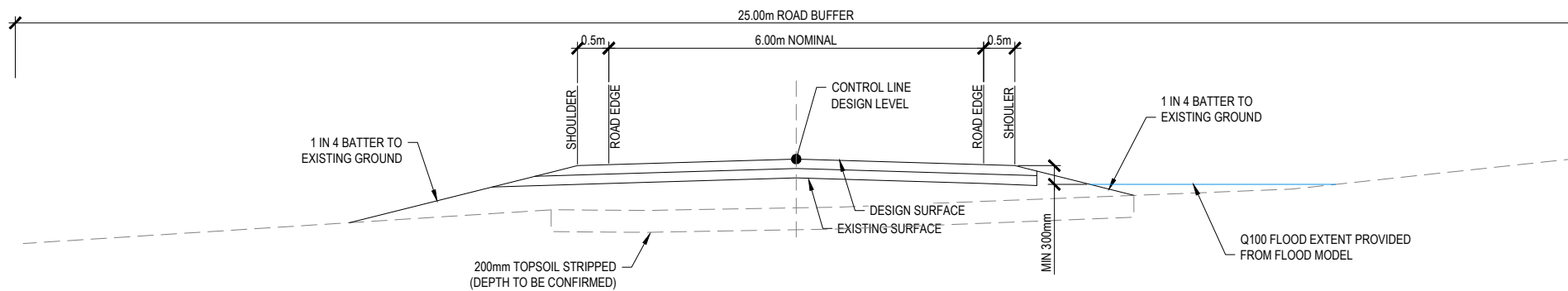
GA.4.02 B

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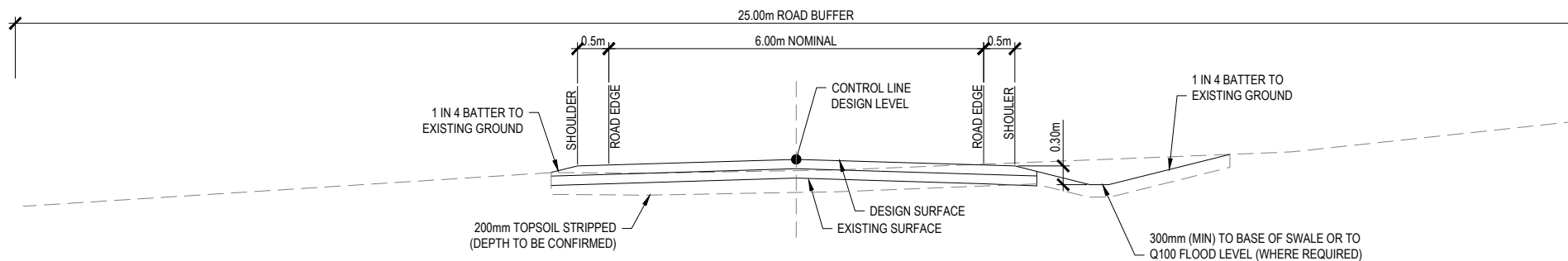
TYPICAL GENERAL ACCESS ROAD PROFILE

SCALE 1:50
 NOTE: THIS IS THE MINIMUM STANDARD ROAD PROFILE TO BE USED WHERE ROAD IS CLEAR OF Q100 FLOOD AND NO UPSTREAM FLOWS DISCHARGE TOWARDS ROAD (ROAD GRADE FALLS WITH NATURAL)



TYPICAL ACCESS ROAD - IN FILL PROFILE

SCALE 1:50
 NOTE: WHERE ROAD SHOULDER IS >300mm ABOVE NATURAL GROUND, THE BATTER WILL CREATE A SWALE PROFILE. ENSURE NATURAL GROUND HAS MINIMUM 0.5% FALL AND DOES NOT CAUSE PONDING ADJACENT THE ROAD PAVEMENT. WHERE REQUIRED EXISTING GROUND DISCHARGES TO SWALES OR STORMWATER CULVERTS. ROADS TO REMAIN FLOOD FREE FOR ALL EVENTS UP TO AND INCLUDING Q100. REFER LONGITUDINAL SECTIONS FOR DETAILS



TYPICAL ACCESS ROAD - IN CUT PROFILE

SCALE 1:50
 NOTE: WHERE ROAD SHOULDER IS <300mm ABOVE NATURAL GROUND, THE INCLUSION OF A SWALE IS REQUIRED TO COLLECT UPSTREAM FLOWS AND DISCHARGE TO EXISTING SWALES OR STORMWATER CULVERTS. ROADS TO REMAIN FLOOD FREE FOR ALL EVENTS UP TO AND INCLUDING Q100. REFER LONGITUDINAL SECTIONS FOR DETAILS

PAVEMENT LEGEND

GRAVEL ACCESS TRACK
 150mm CBR 45 BASE COURSE
 150mm CBR 15 SUB BASE COURSE

- NOTES:
 1. SUB BASE MAY BE OMITTED WHERE EXISTING GROUND IS FREE FROM CONTAMINATES, IS GREATER THAN CBR 10 AND ACHIEVES MIN 98% COMPACTION)
 2. DESIGN IS SUBJECT TO DETAILED DESIGN

MODELLED EARTHWORKS QUANTITIES

ROADWORKS:	STRIPPING (200mm) =	16,000m ³
	CUT VOLUME =	860m ³
	150mm CBR 45 VOLUME =	8,320m ³
	150mm CBR 15 VOLUME =	7,430m ³
	200mm TOPSOIL (BATTERS) =	2,250m ³
	EXCESS CUT TO STOCKPILE =	1,140m ³

FARM 01:	STRIPPING (200mm) =	20,500m ³
	CUT VOLUME =	45,145m ³
	150mm CBR 45 VOLUME =	3,315m ³
	150mm CBR 15 VOLUME =	3,315m ³
	200mm TOPSOIL (BATTERS) =	11,730m ³
	IMPORT FILL MATERIAL =	4,826m ³

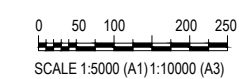
FARM 02:	STRIPPING (200mm) =	23,650m ³
	CUT VOLUME =	122,048m ³
	150mm CBR 45 VOLUME =	3,315m ³
	150mm CBR 15 VOLUME =	3,315m ³
	200mm TOPSOIL (BATTERS) =	14,900m ³
	IMPORT FILL MATERIAL =	2,710m ³

FARM 03:	STRIPPING (200mm) =	24,850m ³
	CUT VOLUME =	167,956m ³
	150mm CBR 45 VOLUME =	3,315m ³
	150mm CBR 15 VOLUME =	3,315m ³
	200mm TOPSOIL (BATTERS) =	16,085m ³
	IMPORT FILL MATERIAL =	1,675m ³

FARM 04:	STRIPPING (200mm) =	26,000m ³
	CUT VOLUME =	172,629m ³
	150mm CBR 45 VOLUME =	3,315m ³
	150mm CBR 15 VOLUME =	3,315m ³
	200mm TOPSOIL (BATTERS) =	17,220m ³
	EXCESS CUT TO STOCKPILE =	5,272m ³

SUMMARY:	OVERALL IMPORT FILL MATERIAL =	2,800m ³
	EXCESS TOPSOIL TO STOCKPILE =	48,800m ³

NOTES:
 1. REFER DWG 8719-GA.0.2 FOR GENERAL NOTES



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DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

**GRENFELL FARMS
 1130 GOOLOOGONG ROAD
 GREENFELL, NSW**

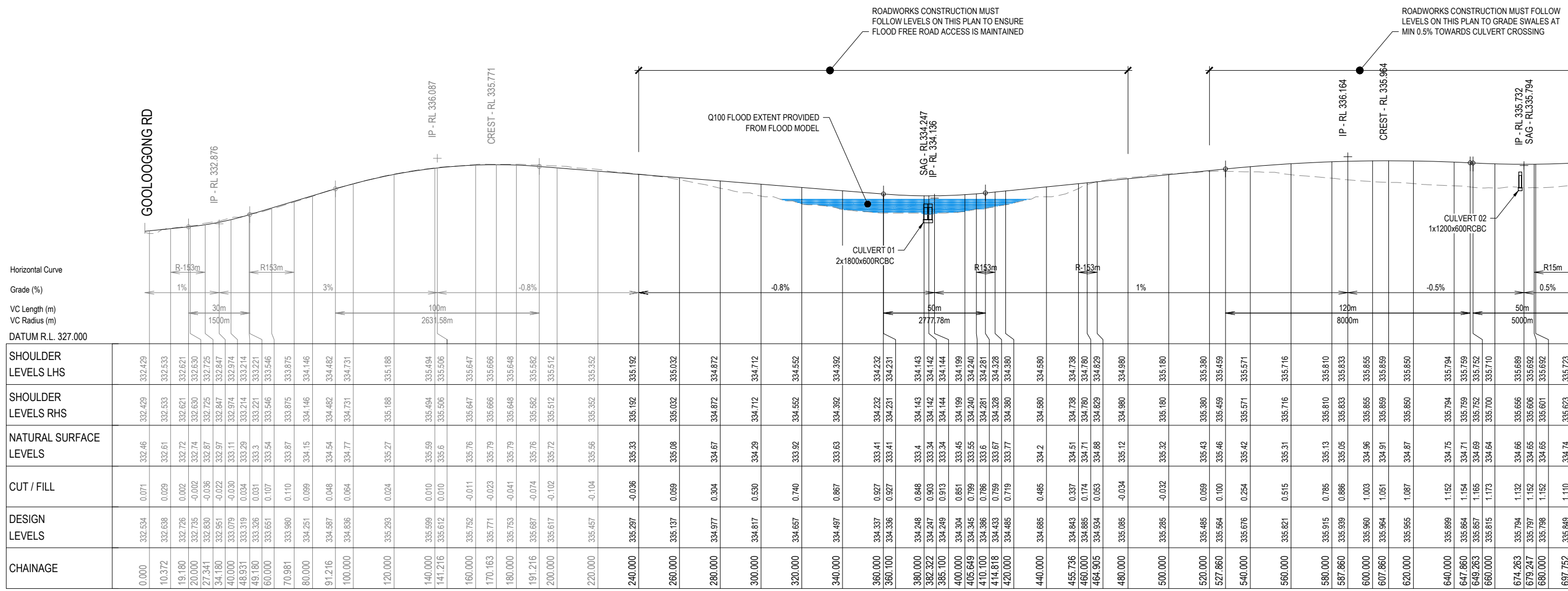
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DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

BAIADA
**OVERALL ACCESS ROAD
 TYPICAL ROAD DETAILS**

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mpn JOB	8719
DRAWING No.	RD.0.02
REV	A

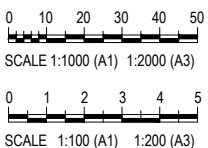
NOT FOR CONSTRUCTION



SHOULDER LEVELS LHS	SHOULDER LEVELS RHS	NATURAL SURFACE LEVELS	CUT / FILL	DESIGN LEVELS	CHAINAGE
332.429	332.429	332.46	0.071	332.534	0.000
332.533	332.533	332.61	0.029	332.638	10.372
332.621	332.621	332.72	0.002	332.726	19.180
332.630	332.630	332.74	-0.002	332.735	20.000
332.725	332.725	332.87	-0.036	332.830	27.341
332.847	332.847	332.97	-0.022	332.951	34.180
332.974	332.974	333.11	-0.030	333.079	40.000
333.214	333.214	333.29	0.034	333.319	48.931
333.221	333.221	333.3	0.031	333.326	49.180
333.546	333.546	333.54	0.107	333.651	60.000
333.875	333.875	333.87	0.110	333.980	70.981
334.146	334.146	334.15	0.099	334.251	80.000
334.482	334.482	334.54	0.048	334.587	91.216
334.731	334.731	334.77	0.064	334.836	100.000
335.188	335.188	335.27	0.024	335.293	120.000
335.494	335.494	335.59	0.010	335.599	140.000
335.506	335.506	335.6	0.010	335.612	141.216
335.647	335.647	335.76	-0.011	335.752	160.000
335.666	335.666	335.79	-0.023	335.771	170.163
335.648	335.648	335.79	-0.041	335.753	180.000
335.582	335.582	335.76	-0.074	335.687	191.216
335.512	335.512	335.72	-0.102	335.617	200.000
335.352	335.352	335.56	-0.104	335.457	220.000
335.192	335.192	335.33	-0.036	335.297	240.000
335.032	335.032	335.08	0.069	335.137	260.000
334.872	334.872	334.67	0.304	334.977	280.000
334.712	334.712	334.29	0.530	334.817	300.000
334.552	334.552	333.92	0.740	334.657	320.000
334.392	334.392	333.63	0.867	334.497	340.000
334.232	334.232	333.41	0.927	334.337	360.000
334.231	334.231	333.41	0.927	334.336	360.100
334.143	334.143	333.4	0.848	334.248	380.000
334.142	334.142	333.34	0.903	334.247	382.322
334.144	334.144	333.34	0.913	334.249	385.100
334.199	334.199	333.45	0.851	334.304	400.000
334.240	334.240	333.55	0.769	334.345	405.649
334.281	334.281	333.6	0.786	334.386	410.100
334.328	334.328	333.67	0.769	334.433	414.818
334.380	334.380	333.77	0.719	334.485	420.000
334.580	334.580	334.2	0.485	334.685	440.000
334.738	334.738	334.51	0.337	334.843	455.736
334.780	334.780	334.71	0.174	334.885	460.000
334.829	334.829	334.88	0.063	334.934	464.905
334.980	334.980	335.12	-0.034	335.085	480.000
335.180	335.180	335.32	-0.032	335.285	500.000
335.380	335.380	335.43	0.069	335.485	520.000
335.459	335.459	335.46	0.100	335.564	527.860
335.571	335.571	335.42	0.254	335.676	540.000
335.716	335.716	335.31	0.515	335.821	560.000
335.810	335.810	335.13	0.785	335.915	580.000
335.833	335.833	335.05	0.886	335.939	587.860
335.855	335.855	334.96	1.003	335.960	600.000
335.859	335.859	334.91	1.051	335.964	607.860
335.850	335.850	334.87	1.087	335.955	620.000
335.794	335.794	334.75	1.152	335.899	640.000
335.759	335.759	334.71	1.154	335.864	647.860
335.752	335.752	334.69	1.165	335.857	649.263
335.710	335.710	334.64	1.173	335.815	660.000
335.689	335.689	334.66	1.132	335.794	674.263
335.692	335.692	334.65	1.152	335.797	679.247
335.601	335.601	334.65	1.152	335.798	680.000
335.623	335.623	334.74	1.110	335.849	697.752

LONGITUDINAL SECTION - RD01
SCALE 1 : 1000 Horiz.
1 : 1000 Vert.

CONSULTANT: MPN CONSULTING PTY LTD
CONTACT:
TELEPHONE: (07) 3335 4555
DATE _____



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOOGONG ROAD
GREENFELL, NSW

SCALE:	AS SHOWN
DESIGN:	BCM
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CREATED:	
CHKD:	
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ROAD 01 LONGITUDINAL SECTION - SHEET 1 OF 3

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DRAWING No.		REV	
8719			
RD.1.01		B	

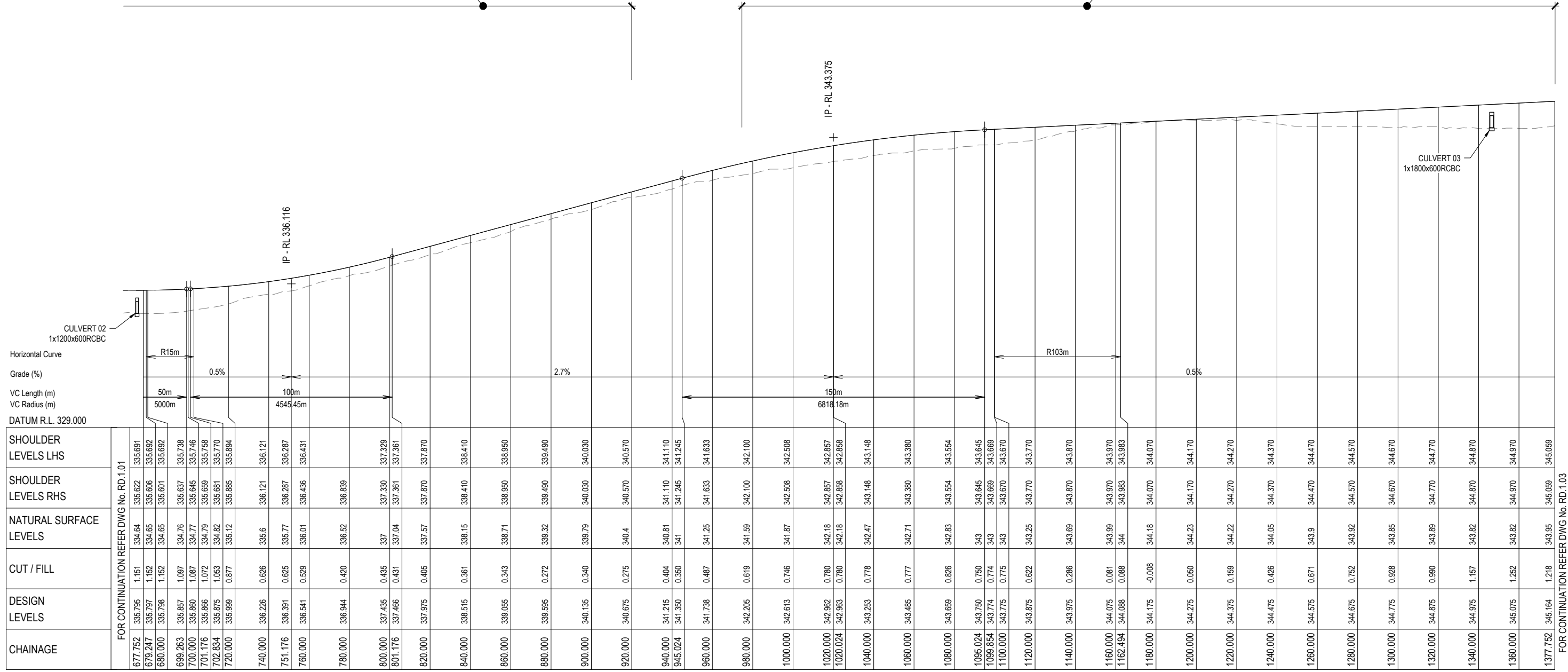
FOR CONTINUATION REFER DWG No. RD.1.02

NOT FOR CONSTRUCTION

FOR CO ORDINATION

ROADWORKS CONSTRUCTION MUST FOLLOW LEVELS ON THIS PLAN TO ENSURE FLOOD FREE ROAD ACCESS IS MAINTAINED

ROADWORKS CONSTRUCTION MUST FOLLOW LEVELS ON THIS PLAN TO GRADE SWALES AT MIN 0.5% TOWARDS CULVERT CROSSING



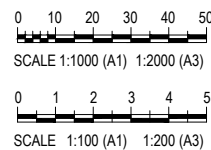
CHAINAGE	FOR CONTINUATION REFER DWG No. RD.1.01	SHOULDER LEVELS LHS	SHOULDER LEVELS RHS	NATURAL SURFACE LEVELS	CUT / FILL	DESIGN LEVELS
677.752	335.795	1.151	334.64	335.691		
679.247	335.797	1.152	334.65	335.692		
680.000	335.798	1.152	334.65	335.692		
699.263	335.857	1.087	334.76	335.637		
700.000	335.860	1.087	334.77	335.645		
701.176	335.866	1.072	334.79	335.659		
702.834	335.875	1.053	334.82	335.681		
720.000	335.999	0.877	335.12	335.885		
740.000	336.226	0.626	335.6	336.121		
751.176	336.391	0.625	335.77	336.287		
760.000	336.541	0.529	336.01	336.436		
780.000	336.944	0.420	336.52	336.839		
800.000	337.435	0.435	337	337.329		
801.176	337.466	0.431	337.04	337.361		
820.000	337.975	0.405	337.57	337.870		
840.000	338.515	0.361	338.15	338.410		
860.000	339.055	0.343	338.71	338.950		
880.000	339.595	0.272	339.32	339.490		
900.000	340.135	0.340	339.79	340.030		
920.000	340.675	0.275	340.4	340.570		
940.000	341.215	0.404	340.81	341.110		
945.024	341.350	0.350	341	341.245		
960.000	341.738	0.487	341.25	341.633		
980.000	342.205	0.619	341.59	342.100		
1000.000	342.613	0.746	341.87	342.508		
1020.000	342.962	0.780	342.18	342.857		
1020.024	342.963	0.780	342.18	342.858		
1040.000	343.253	0.778	342.47	343.148		
1060.000	343.465	0.777	342.71	343.380		
1080.000	343.659	0.826	342.83	343.554		
1095.024	343.750	0.750	343	343.645		
1099.854	343.774	0.774	343	343.669		
1100.000	343.775	0.775	343	343.670		
1120.000	343.875	0.622	343.25	343.770		
1140.000	343.975	0.286	343.69	343.870		
1160.000	344.075	0.081	343.99	343.970		
1162.494	344.088	0.088	344	343.983		
1180.000	344.175	-0.008	344.18	344.070		
1200.000	344.275	0.050	344.23	344.170		
1220.000	344.375	0.159	344.22	344.270		
1240.000	344.475	0.426	344.05	344.370		
1260.000	344.575	0.671	343.9	344.470		
1280.000	344.675	0.752	343.92	344.570		
1300.000	344.775	0.928	343.85	344.670		
1320.000	344.875	0.990	343.89	344.770		
1340.000	344.975	1.157	343.82	344.870		
1360.000	345.075	1.252	343.82	344.970		
1377.752	345.164	1.218	343.95	345.059		

LONGITUDINAL SECTION - RD01

SCALE 1 : 1000 Horiz.
1 : 100 Vert.

CONSULTANT: MPN CONSULTING PTY LTD
CONTACT:
TELEPHONE: (07) 3335 4555

DATE _____



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOONG ROAD
GRENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

BAIADA

ROAD 01 LONGITUDINAL SECTION - SHEET 2 OF 3

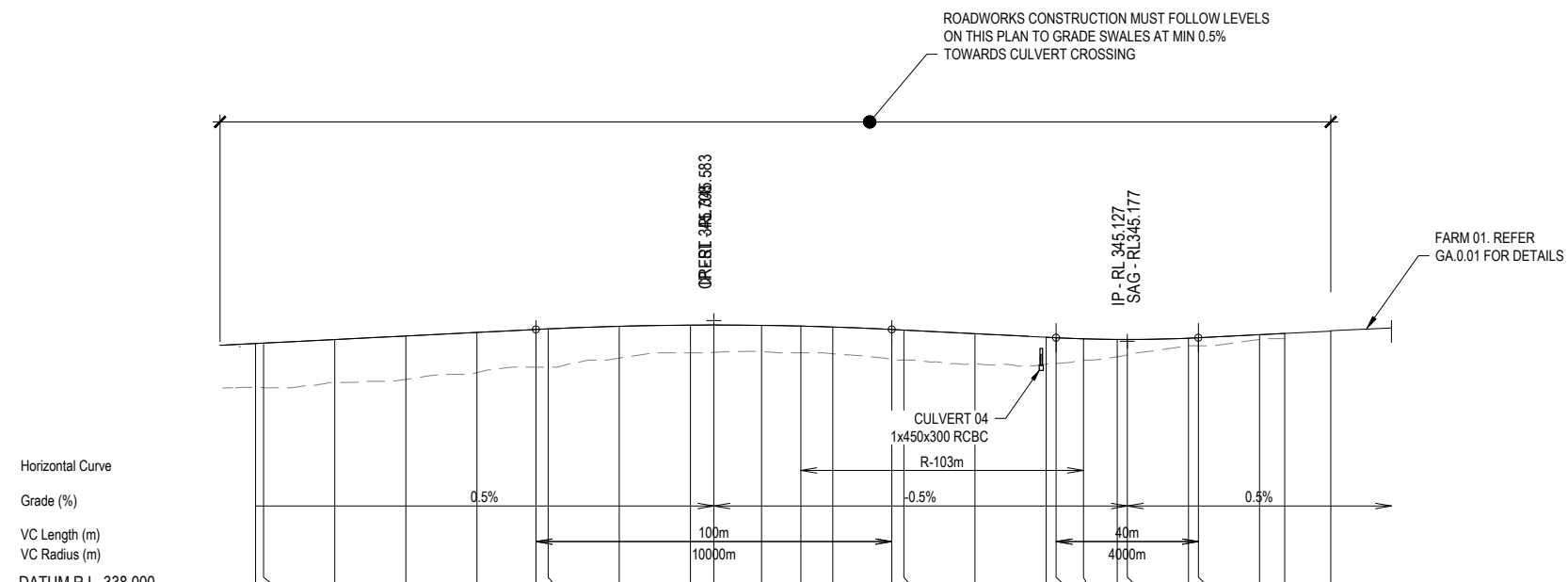
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DRAWING No.		REV	
RD.1.02		B	

FOR CONTINUATION REFER DWG No. RD.1.03

NOT FOR CONSTRUCTION

FOR CO ORDINATION



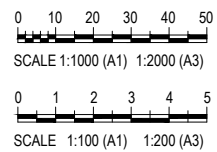
	FOR CONTINUATION REFER DWG No. RD.1.02									
SHOULDER LEVELS LHS	1357.752	345.064	1.230	343.83	344.959	344.959	344.970	344.970	344.970	344.970
SHOULDER LEVELS RHS	1360.000	345.075	1.252	343.82	345.075	345.075	345.075	345.075	345.075	345.075
NATURAL SURFACE LEVELS	1380.000	345.175	1.208	343.97	345.070	345.070	345.070	345.070	345.070	345.070
CUT / FILL	1400.000	345.275	1.218	344.06	345.170	345.170	345.170	345.170	345.170	345.170
DESIGN LEVELS	1420.000	345.375	1.128	344.25	345.270	345.270	345.270	345.270	345.270	345.270
CHAINAGE	1436.590	345.468	1.058	344.4	345.353	345.353	345.353	345.353	345.353	345.353
	1440.000	345.475	1.075	344.4	345.370	345.370	345.370	345.370	345.370	345.370
	1460.000	345.546	0.892	344.66	345.443	345.443	345.443	345.443	345.443	345.443
	1480.000	345.581	0.781	344.8	345.476	345.476	345.476	345.476	345.476	345.476
	1486.590	345.583	0.770	344.81	345.478	345.478	345.478	345.478	345.478	345.478
	1500.000	345.574	0.740	344.83	345.469	345.469	345.469	345.469	345.469	345.469
	1511.027	345.553	0.753	344.8	345.448	345.448	345.448	345.448	345.448	345.448
	1520.000	345.527	0.752	344.78	345.422	345.422	345.422	345.422	345.422	345.422
	1536.590	345.458	0.828	344.63	345.353	345.353	345.353	345.353	345.353	345.353
	1540.000	345.441	0.841	344.6	345.336	345.336	345.336	345.336	345.336	345.336
	1560.000	345.341	0.850	344.49	345.236	345.236	345.236	345.236	345.236	345.236
	1580.000	345.241	0.756	344.48	345.136	345.136	345.136	345.136	345.136	345.136
	1582.815	345.227	0.727	344.5	345.122	345.122	345.122	345.122	345.122	345.122
	1590.488	345.196	0.596	344.6	345.091	345.091	345.091	345.091	345.091	345.091
	1600.000	345.178	0.488	344.69	345.073	345.073	345.073	345.073	345.073	345.073
	1602.815	345.177	0.433	344.74	345.072	345.072	345.072	345.072	345.072	345.072
	1620.000	345.214	0.214	345	345.109	345.109	345.109	345.109	345.109	345.109
	1622.815	345.227	0.227	345	345.122	345.122	345.122	345.122	345.122	345.122
	1640.000	345.313	0.135	345.18	345.208	345.208	345.208	345.208	345.208	345.208
	1647.072	345.348	0.148	345.2						
	1660.000	345.413								

LONGITUDINAL SECTION - RD01

SCALE 1 : 1000 Horiz.
1 : 100 Vert.

CONSULTANT: MPN CONSULTING PTY LTD
CONTACT:
TELEPHONE: (07) 3335 4555

DATE -



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOGONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

BAIADA

ROAD 01 LONGITUDINAL
SECTION - SHEET 3 OF 3

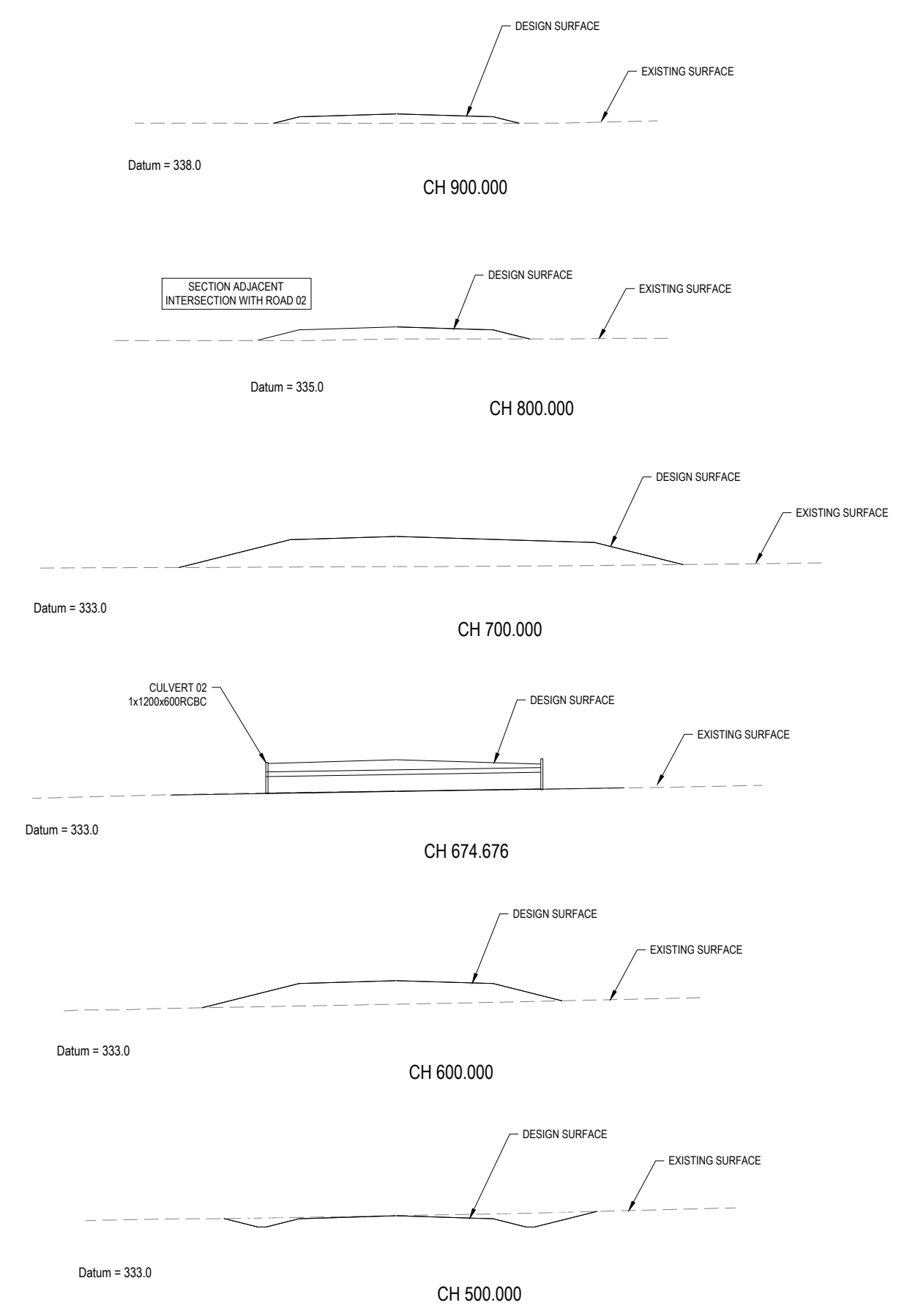
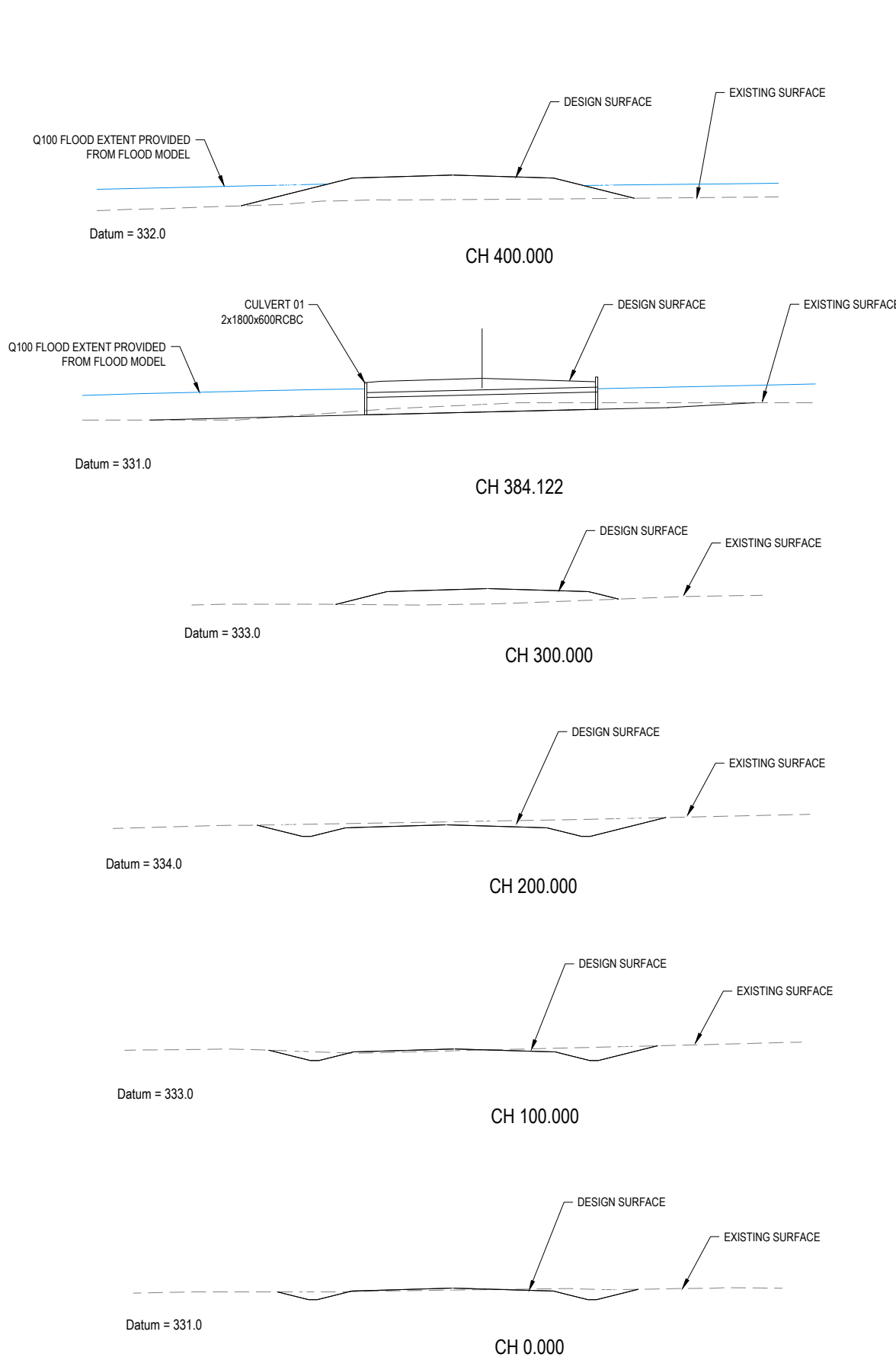
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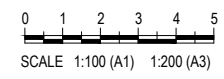
FOR CO ORDINATION

mpn JOB	
8719	
DRAWING No.	REV
RD.1.03	B

NOT FOR CONSTRUCTION



CONSULTANT: MPN CONSULTING PTY LTD
 CONTACT:
 TELEPHONE: (07) 3335 4555
 _____ DATE _____



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOGONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

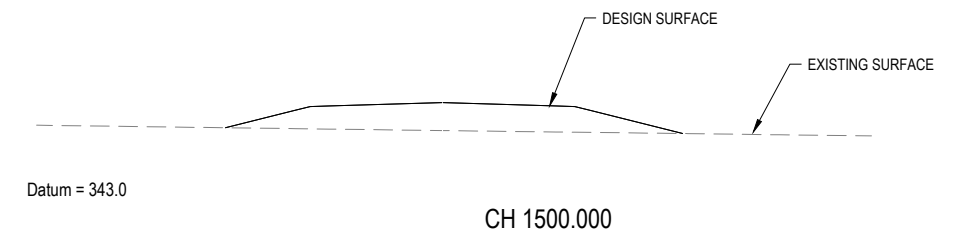
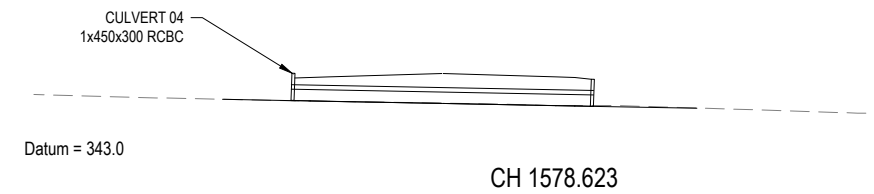
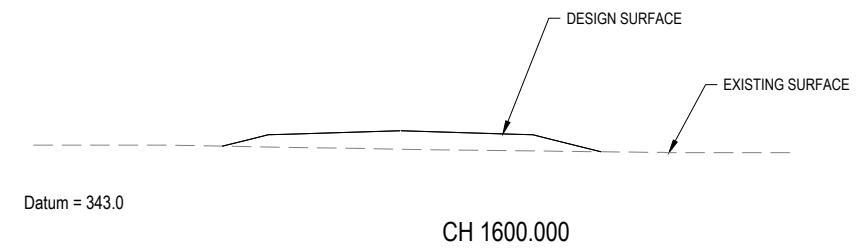
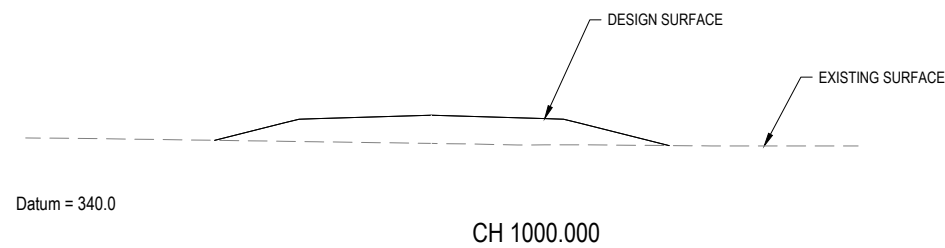
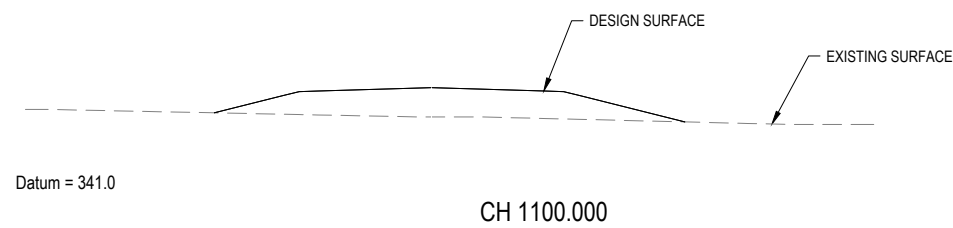
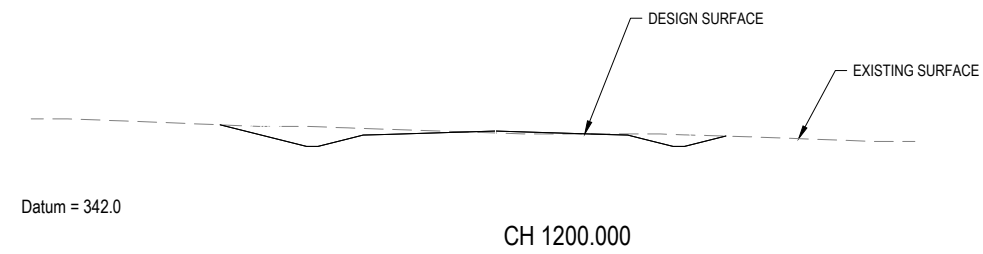
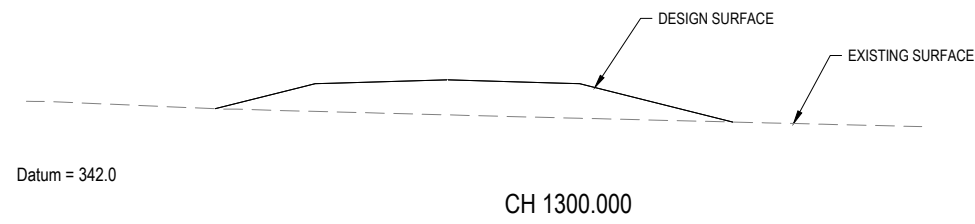
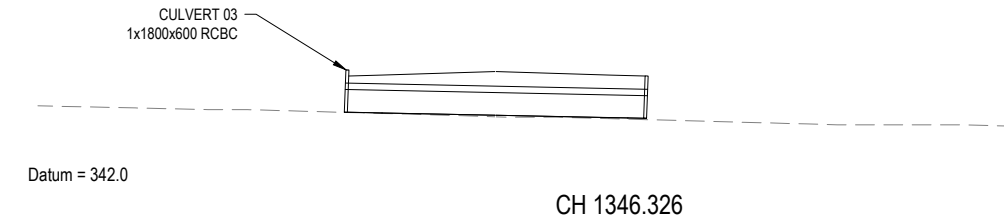
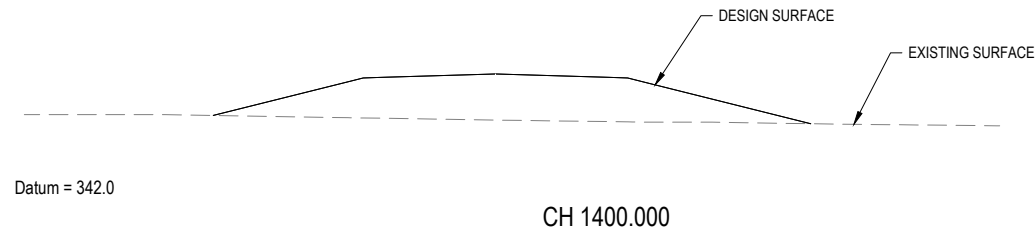
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ROAD 01 CROSS SECTIONS
SHEET 1 OF 2

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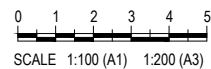
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8719	
DRAWING No.	REV
RD.1.04	B

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CONTACT:
TELEPHONE: (07) 3335 4555

DATE -



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOGONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

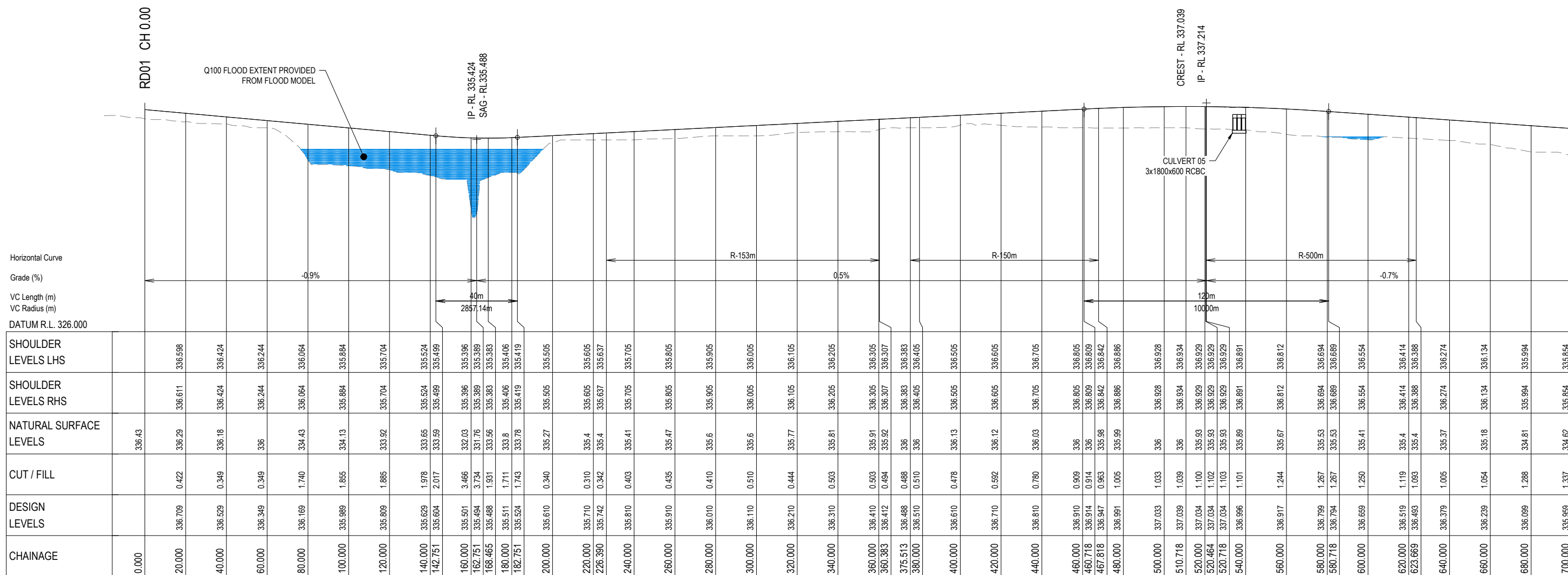
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ROAD 01 CROSS SECTIONS
SHEET 2 OF 2

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8719	
DRAWING No.	REV
RD.1.05	B

FOR CO ORDINATION

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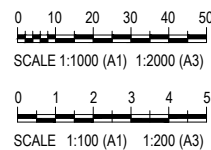


LONGITUDINAL SECTION - RD02

SCALE 1 : 1000 Horiz.
1 : 100 Vert.

CONSULTANT: MPN CONSULTING PTY LTD
CONTACT:
TELEPHONE: (07) 3335 4555

DATE



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

BAIADA

ROAD 02 LONGITUDINAL
SECTION - SHEET 1 OF 4

mpn consulting

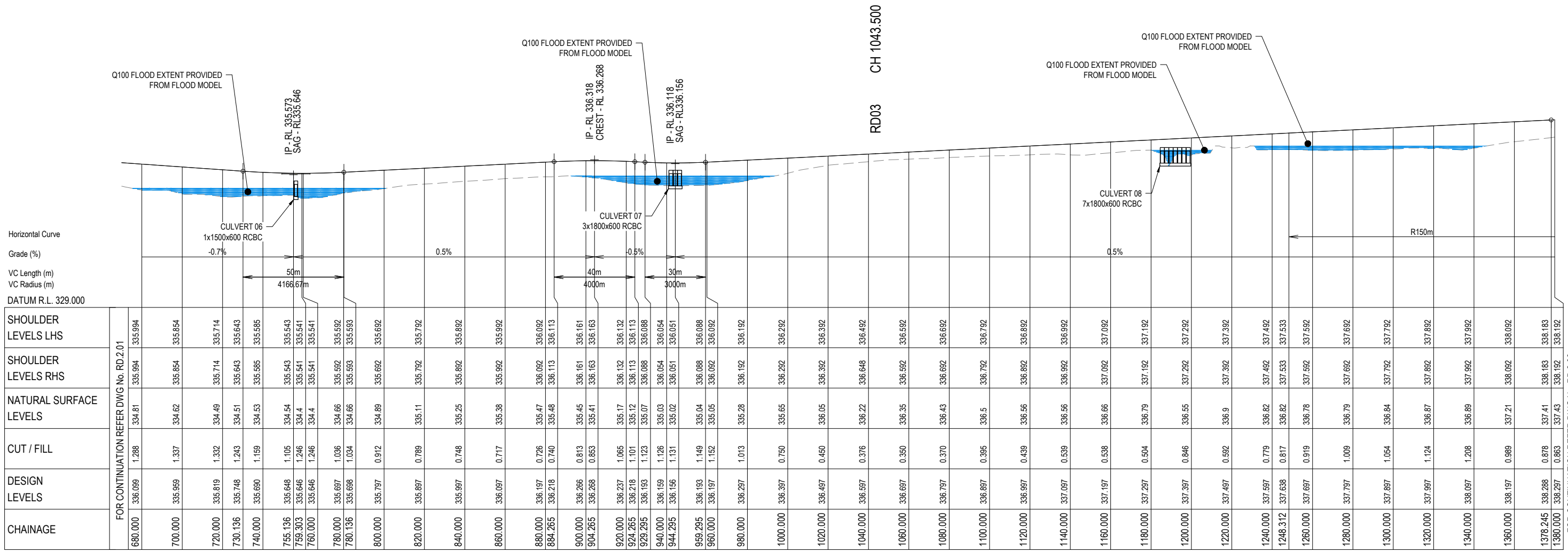
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FOR CO ORDINATION	
8719	
DRAWING No.	REV
RD.2.01	B

FOR CONTINUATION REFER DWG No. RD.2.02

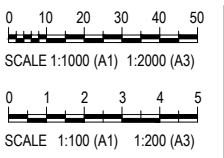
NOT FOR CONSTRUCTION



LONGITUDINAL SECTION - RD02

SCALE 1 : 1000 Horiz.
1 : 100 Vert.

CONSULTANT: MPN CONSULTING PTY LTD
CONTACT:
TELEPHONE: (07) 3335 4555
DATE _____



ISSUE	DATE	AMENDMENT	BY	APP
A	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
B	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOGONG ROAD
GREENFELL, NSW

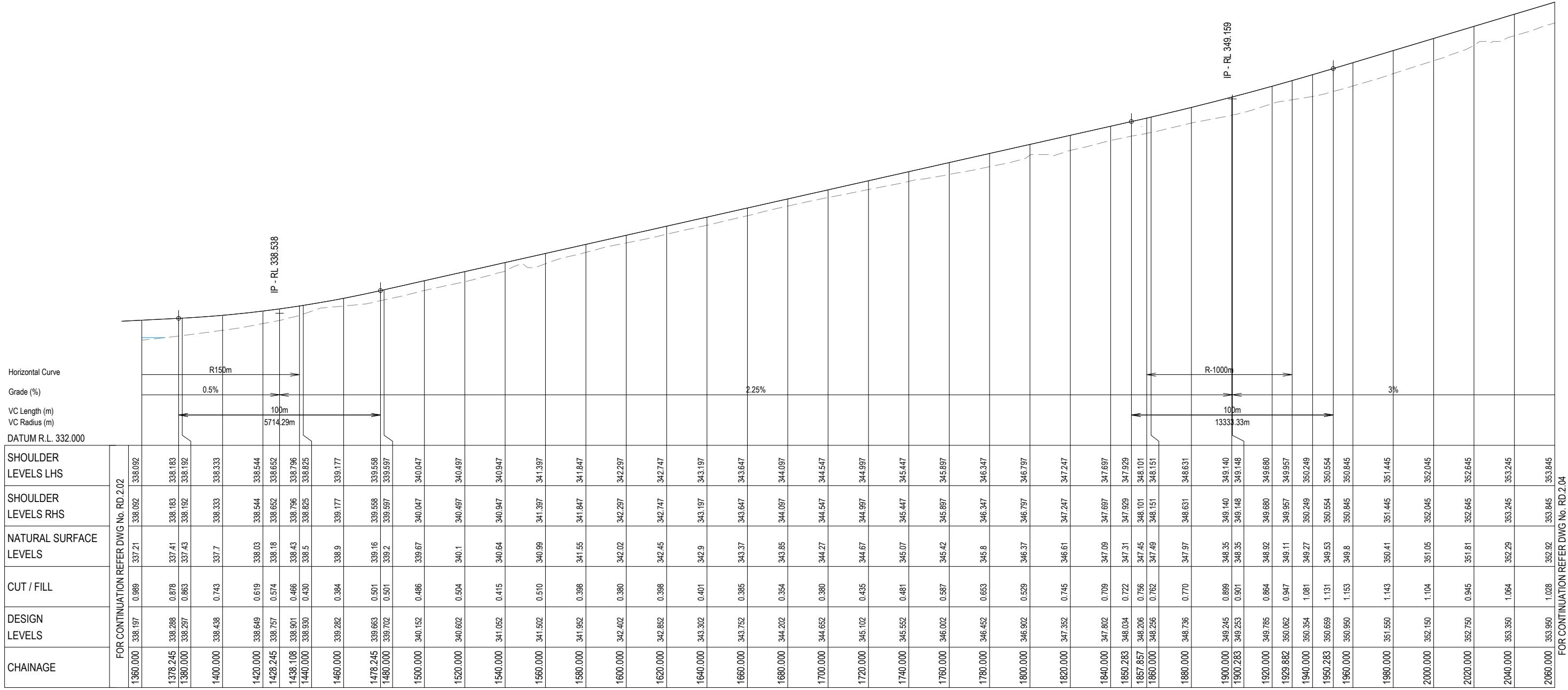
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DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

BAIADA
ROAD 02 LONGITUDINAL
SECTION - SHEET 2 OF 4

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FOR CO ORDINATION	
8719	REV
RD.2.02	B

NOT FOR CONSTRUCTION

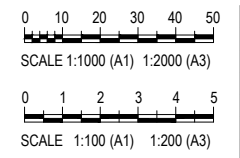


FOR CONTINUATION REFER DWG No. RD.2.02	
SHOULDER LEVELS LHS	338.092, 338.183, 338.192, 338.333, 338.544, 338.652, 338.796, 338.825, 339.177, 339.558, 339.597, 340.047, 340.497, 340.947, 341.397, 341.847, 342.297, 342.747, 343.197, 343.647, 344.097, 344.547, 344.997, 345.447, 345.897, 346.347, 346.797, 347.247, 347.697, 347.929, 348.101, 348.151, 348.631, 349.140, 349.148, 349.680, 349.957, 350.249, 350.554, 350.845, 351.445, 352.045, 352.645, 353.245, 353.845
SHOULDER LEVELS RHS	337.21, 337.41, 337.43, 337.7, 338.03, 338.18, 338.43, 338.5, 338.9, 339.16, 339.2, 339.67, 340.1, 340.64, 340.99, 341.55, 342.02, 342.45, 342.9, 343.37, 343.85, 344.27, 344.67, 345.07, 345.42, 345.8, 346.37, 346.61, 347.09, 347.31, 347.45, 347.49, 348.631, 349.35, 349.35, 349.92, 349.11, 349.27, 350.53, 349.8, 350.41, 351.05, 351.81, 352.29, 352.92, 353.845
NATURAL SURFACE LEVELS	0.989, 0.878, 0.863, 0.743, 0.619, 0.574, 0.466, 0.430, 0.384, 0.501, 0.501, 0.486, 0.504, 0.415, 0.510, 0.398, 0.401, 0.385, 0.354, 0.380, 0.435, 0.481, 0.587, 0.663, 0.529, 0.745, 0.709, 0.722, 0.756, 0.762, 0.770, 0.889, 0.901, 0.864, 0.947, 1.081, 1.131, 1.153, 1.143, 1.104, 0.945, 1.064, 1.028, 1.028
CUT / FILL	338.197, 338.288, 338.297, 338.438, 338.649, 338.757, 338.901, 338.930, 339.282, 339.663, 339.702, 340.152, 340.602, 341.052, 341.502, 341.952, 342.402, 342.852, 343.302, 343.752, 344.202, 344.652, 345.102, 345.552, 346.002, 346.452, 346.902, 347.352, 347.802, 348.034, 348.206, 348.256, 348.736, 349.245, 349.253, 349.785, 350.062, 350.354, 350.659, 350.950, 351.550, 352.150, 352.750, 353.350, 353.950
DESIGN LEVELS	338.197, 338.288, 338.297, 338.438, 338.649, 338.757, 338.901, 338.930, 339.282, 339.663, 339.702, 340.152, 340.602, 341.052, 341.502, 341.952, 342.402, 342.852, 343.302, 343.752, 344.202, 344.652, 345.102, 345.552, 346.002, 346.452, 346.902, 347.352, 347.802, 348.034, 348.206, 348.256, 348.736, 349.245, 349.253, 349.785, 350.062, 350.354, 350.659, 350.950, 351.550, 352.150, 352.750, 353.350, 353.950
CHAINAGE	1360.000, 1378.245, 1380.000, 1400.000, 1420.000, 1428.245, 1438.108, 1440.000, 1460.000, 1478.245, 1480.000, 1500.000, 1520.000, 1540.000, 1560.000, 1580.000, 1600.000, 1620.000, 1640.000, 1660.000, 1680.000, 1700.000, 1720.000, 1740.000, 1760.000, 1780.000, 1800.000, 1820.000, 1840.000, 1850.283, 1857.857, 1860.000, 1880.000, 1900.000, 1900.283, 1920.000, 1929.882, 1940.000, 1950.283, 1960.000, 1980.000, 2000.000, 2020.000, 2040.000, 2060.000

LONGITUDINAL SECTION - RD02

SCALE 1 : 1000 Horiz.
1 : 100 Vert.

CONSULTANT: MPN CONSULTING PTY LTD
CONTACT:
TELEPHONE: (07) 3335 4555
DATE _____



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOONG ROAD
GRENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

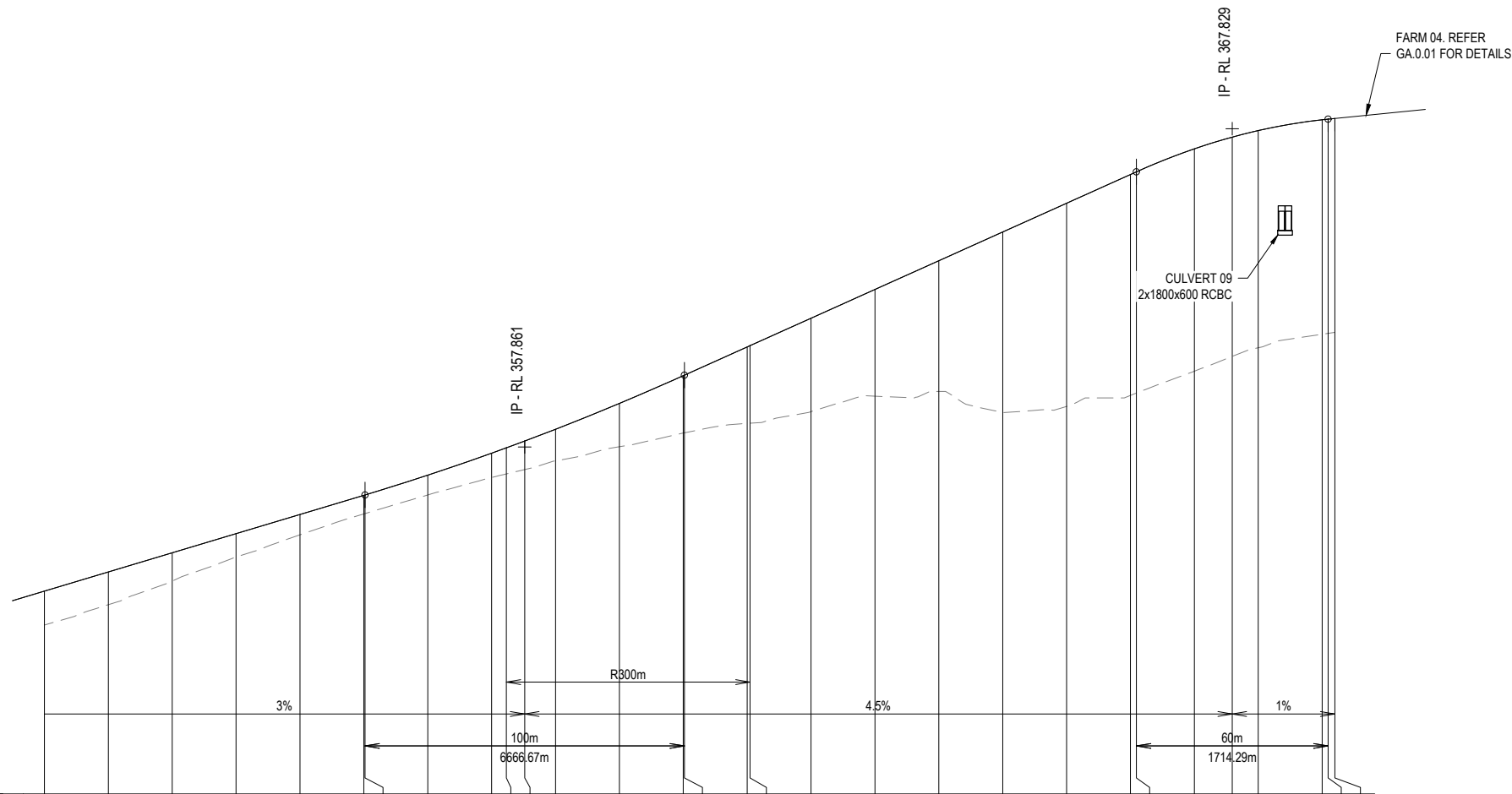
BAIADA
ROAD 02 LONGITUDINAL
SECTION - SHEET 3 OF 4

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mpn JOB	
8719	
DRAWING No.	REV
RD.2.03	B

NOT FOR CONSTRUCTION

Horizontal Curve
Grade (%)
VC Length (m)
VC Radius (m)
DATUM R.L. 347.000



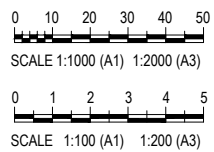
	FOR CONTINUATION REFER DWG No. RD.2.03	
SHOULDER LEVELS LHS	2040.000	353.245
SHOULDER LEVELS RHS	2060.000	353.845
NATURAL SURFACE LEVELS	2080.000	354.445
CUT / FILL	2100.000	355.045
DESIGN LEVELS	2120.000	355.645
CHAINAGE	2140.000	356.245
	2140.351	356.256
	2160.000	356.874
	2180.000	357.563
	2184.595	357.730
	2190.351	357.943
	2200.000	358.312
	2220.000	359.121
	2240.000	359.990
	2240.351	360.006
	2260.000	360.890
	2260.900	360.931
	2280.000	361.790
	2300.000	362.690
	2320.000	363.590
	2340.000	364.490
	2360.000	365.390
	2380.000	366.290
	2381.864	366.374
	2400.000	367.094
	2411.864	367.461
	2420.000	367.666
	2440.000	368.004
	2441.864	368.024
	2443.976	368.145

LONGITUDINAL SECTION - RD02

SCALE 1 : 1000 Horiz.
1 : 100 Vert.

CONSULTANT: MPN CONSULTING PTY LTD
CONTACT:
TELEPHONE: (07) 3335 4555

DATE



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOONG ROAD
GRENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

BAIADA

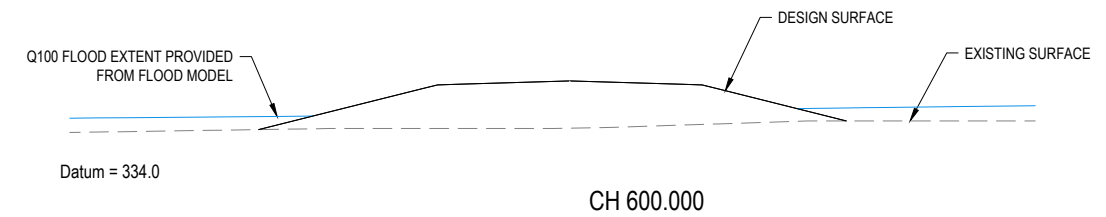
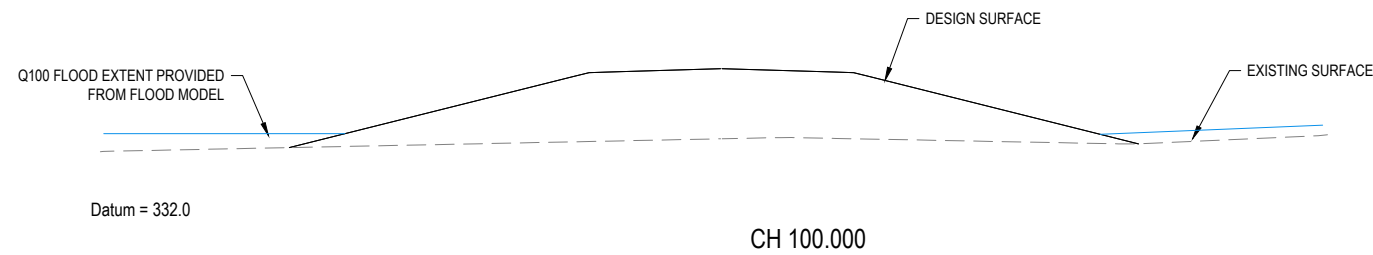
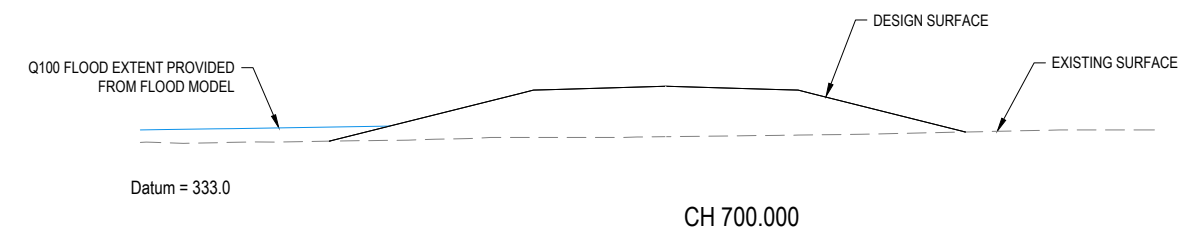
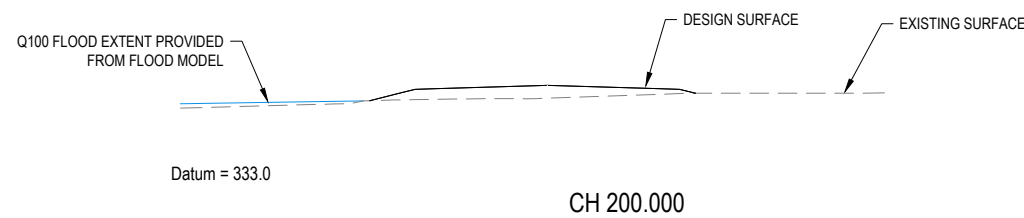
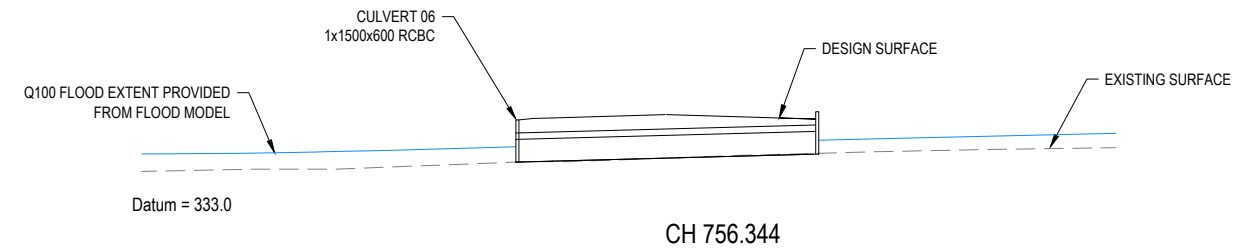
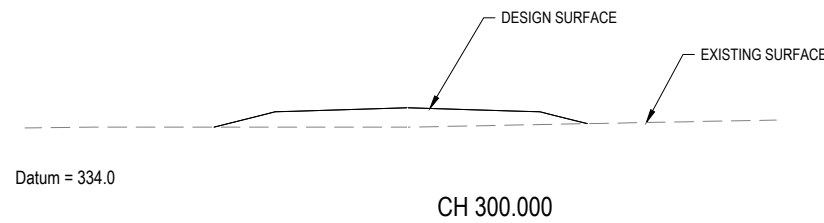
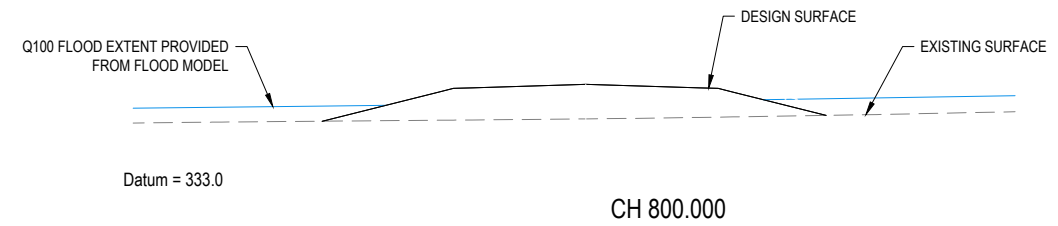
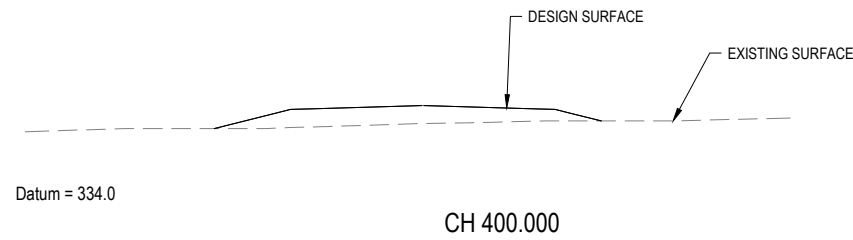
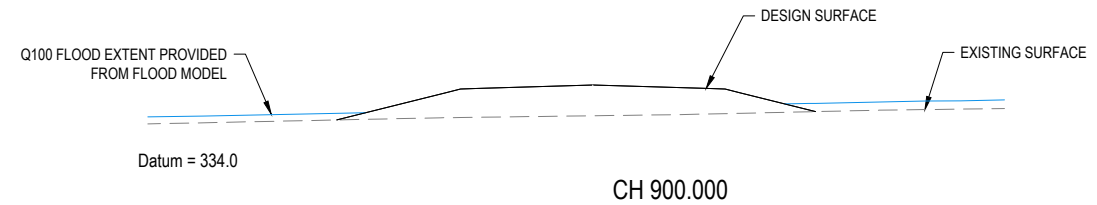
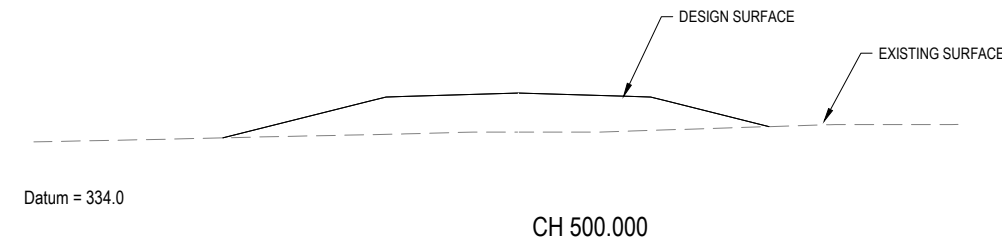
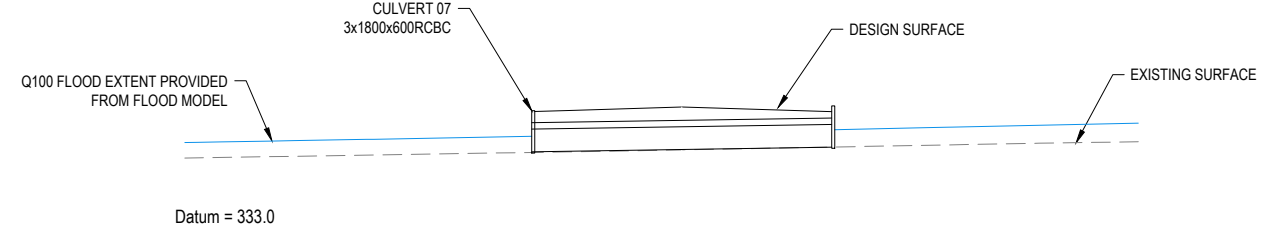
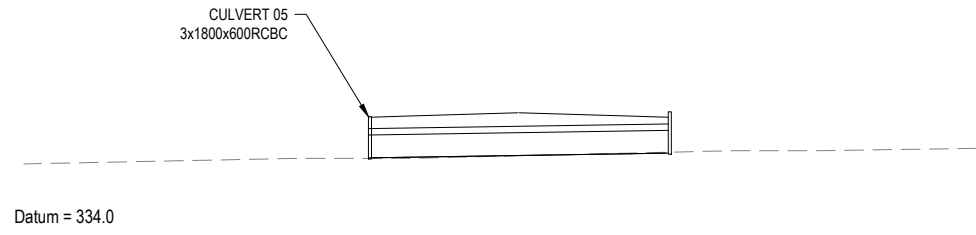
ROAD 02 LONGITUDINAL
SECTION - SHEET 4 OF 4

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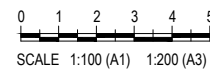
mpn JOB	
8719	
DRAWING No.	REV
RD.2.04	B

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CONTACT:
TELEPHONE: (07) 3335 4555

DATE -



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOGONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

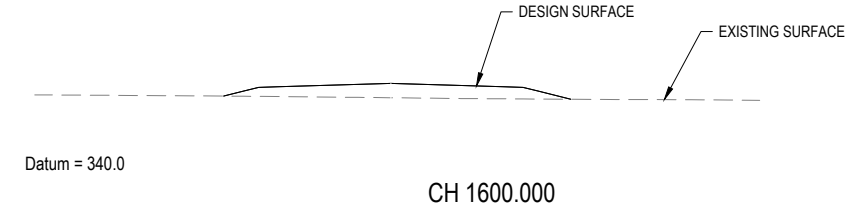
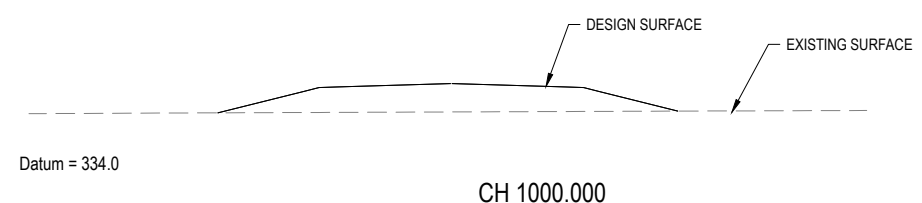
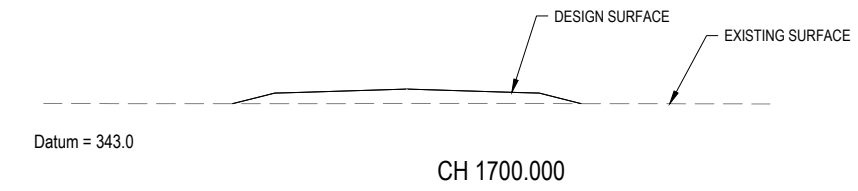
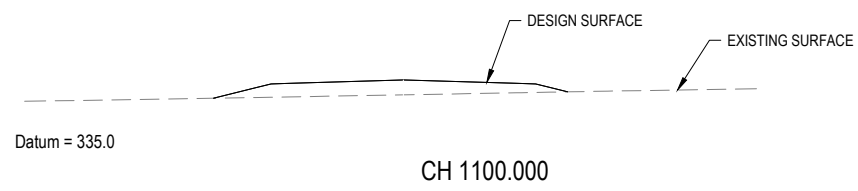
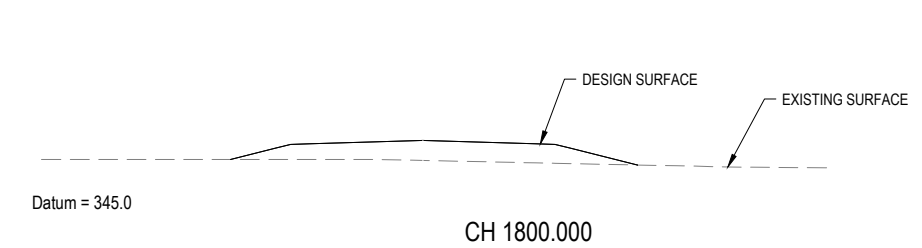
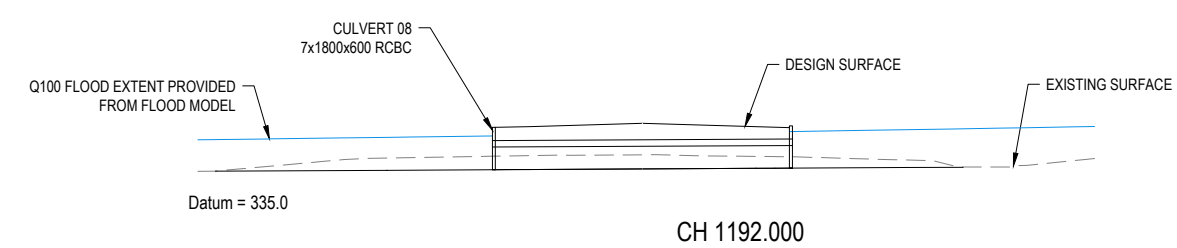
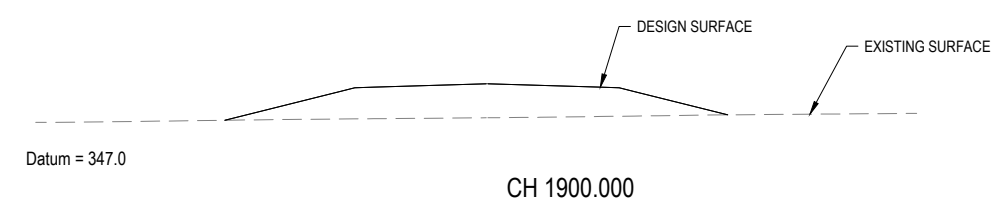
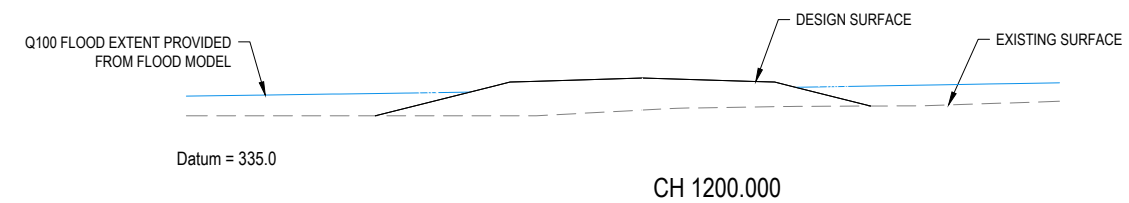
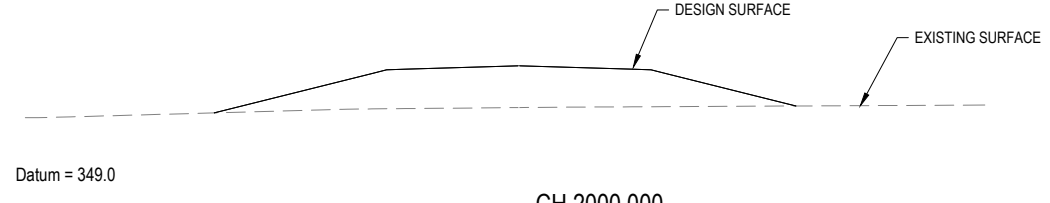
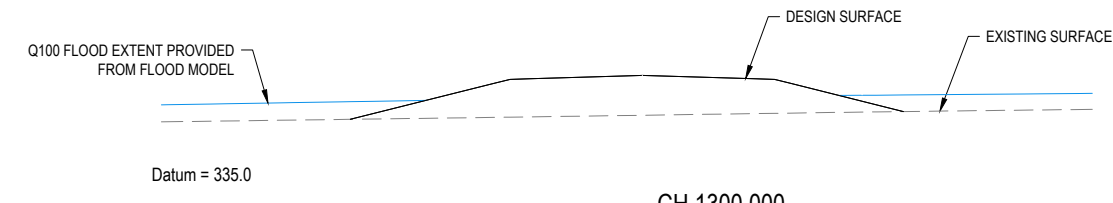
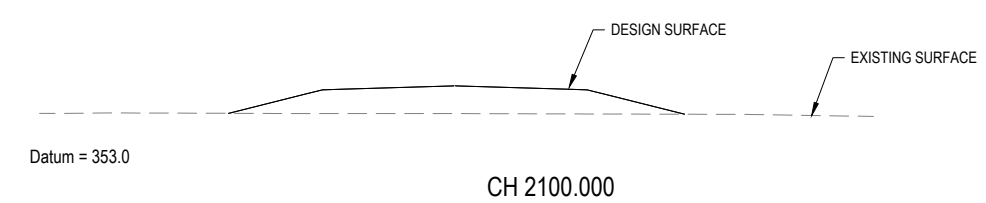
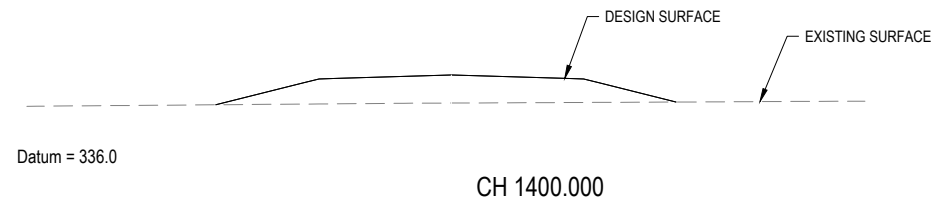
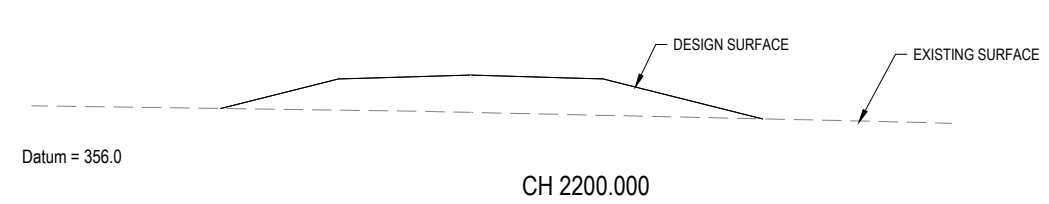
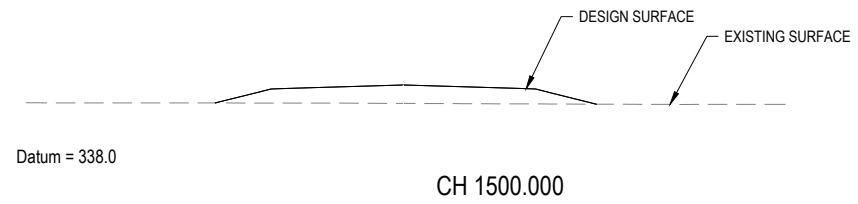
BAIADA
ROAD 02 CROSS SECTIONS
SHEET 1 OF 2

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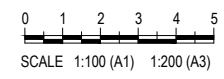
DRAWING No.	
RD.2.05	
REV	B

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DATE -



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOGONG ROAD
GRENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

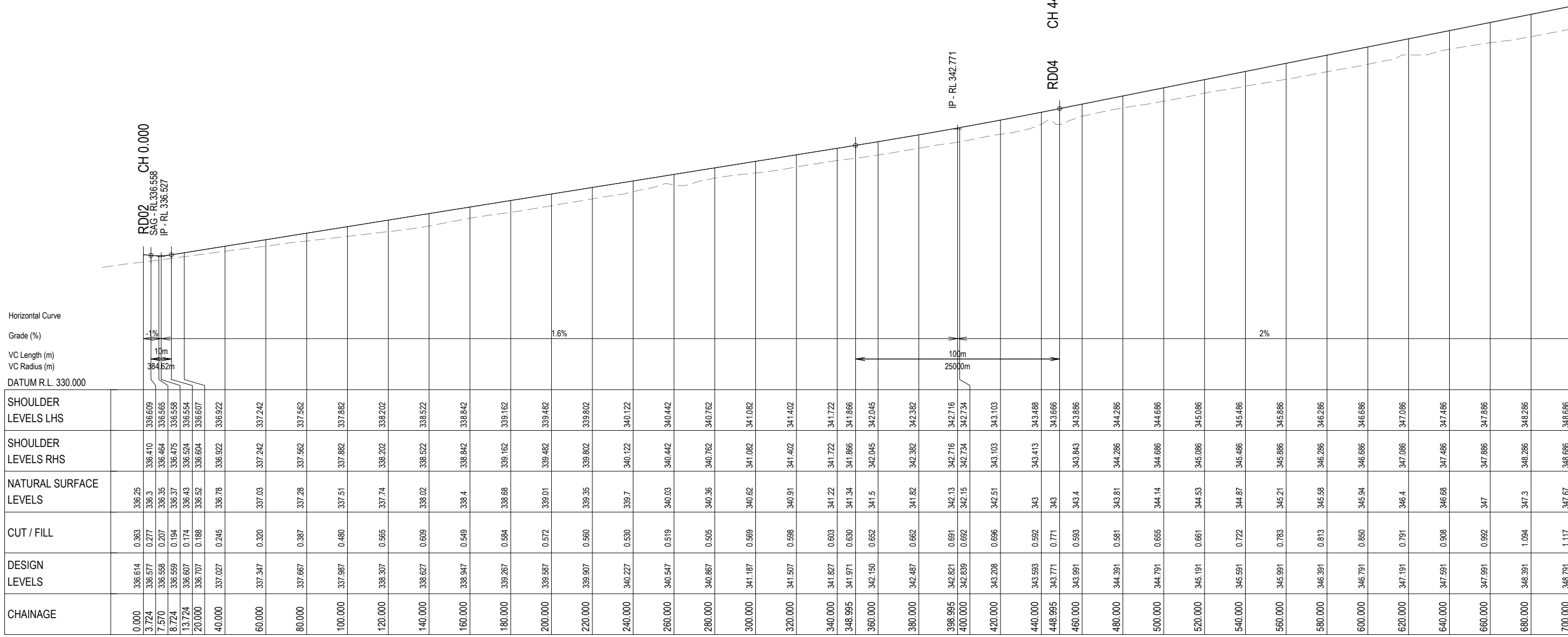
BAIADA
ROAD 02 CROSS SECTIONS
SHEET 2 OF 2

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8719	
DRAWING No.	REV
RD.2.06	B

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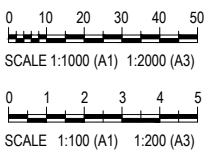
Horizontal Curve
Grade (%)
VC Length (m)
VC Radius (m)
DATUM R.L. 330.000

CHAINAGE	DESIGN LEVELS	CUT / FILL	NATURAL SURFACE LEVELS	SHOULDER LEVELS RHS	SHOULDER LEVELS LHS
0.000	336.614	0.363	336.25		
3.724	336.577	0.277	336.3	336.410	336.609
7.570	336.558	0.207	336.35	336.464	336.585
8.724	336.559	0.194	336.37	336.475	336.558
13.724	336.607	0.174	336.43	336.524	336.554
20.000	336.707	0.188	336.52	336.604	336.607
40.000	337.027	0.246	336.78	336.922	336.922
60.000	337.347	0.320	337.03	337.242	337.242
80.000	337.667	0.387	337.28	337.562	337.562
100.000	337.987	0.480	337.51	337.882	337.882
120.000	338.307	0.565	337.74	338.202	338.202
140.000	338.627	0.609	338.02	338.522	338.522
160.000	338.947	0.549	338.4	338.842	338.842
180.000	339.267	0.584	338.68	339.162	339.162
200.000	339.587	0.572	339.01	339.482	339.482
220.000	339.907	0.560	339.35	339.802	339.802
240.000	340.227	0.530	339.7	340.122	340.122
260.000	340.547	0.519	340.03	340.442	340.442
280.000	340.867	0.505	340.36	340.762	340.762
300.000	341.187	0.569	340.62	341.082	341.082
320.000	341.507	0.598	340.91	341.402	341.402
340.000	341.827	0.603	341.22	341.722	341.722
348.995	341.971	0.630	341.34	341.866	341.866
360.000	342.150	0.652	341.5	342.045	342.045
380.000	342.487	0.662	341.82	342.382	342.382
398.995	342.821	0.691	342.13	342.716	342.716
400.000	342.839	0.692	342.15	342.734	342.734
420.000	343.208	0.696	342.51	343.103	343.103
440.000	343.593	0.592	343	343.413	343.488
448.995	343.771	0.771	343	343.666	343.666
460.000	343.991	0.593	343.4	343.843	343.843
480.000	344.391	0.581	343.81	344.286	344.286
500.000	344.791	0.655	344.14	344.686	344.686
520.000	345.191	0.661	344.53	345.086	345.086
540.000	345.591	0.722	344.87	345.486	345.486
560.000	345.991	0.783	345.21	345.886	345.886
580.000	346.391	0.813	345.58	346.286	346.286
600.000	346.791	0.850	345.94	346.686	346.686
620.000	347.191	0.791	346.4	347.086	347.086
640.000	347.591	0.908	346.68	347.486	347.486
660.000	347.991	0.992	347	347.886	347.886
680.000	348.391	1.094	347.3	348.286	348.286
700.000	348.791	1.117	347.67	348.686	348.686

LONGITUDINAL SECTION - RD03

SCALE 1 : 1000 Horiz.
1 : 100 Vert.

CONSULTANT: MPN CONSULTING PTY LTD
CONTACT:
TELEPHONE: (07) 3335 4555
DATE



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

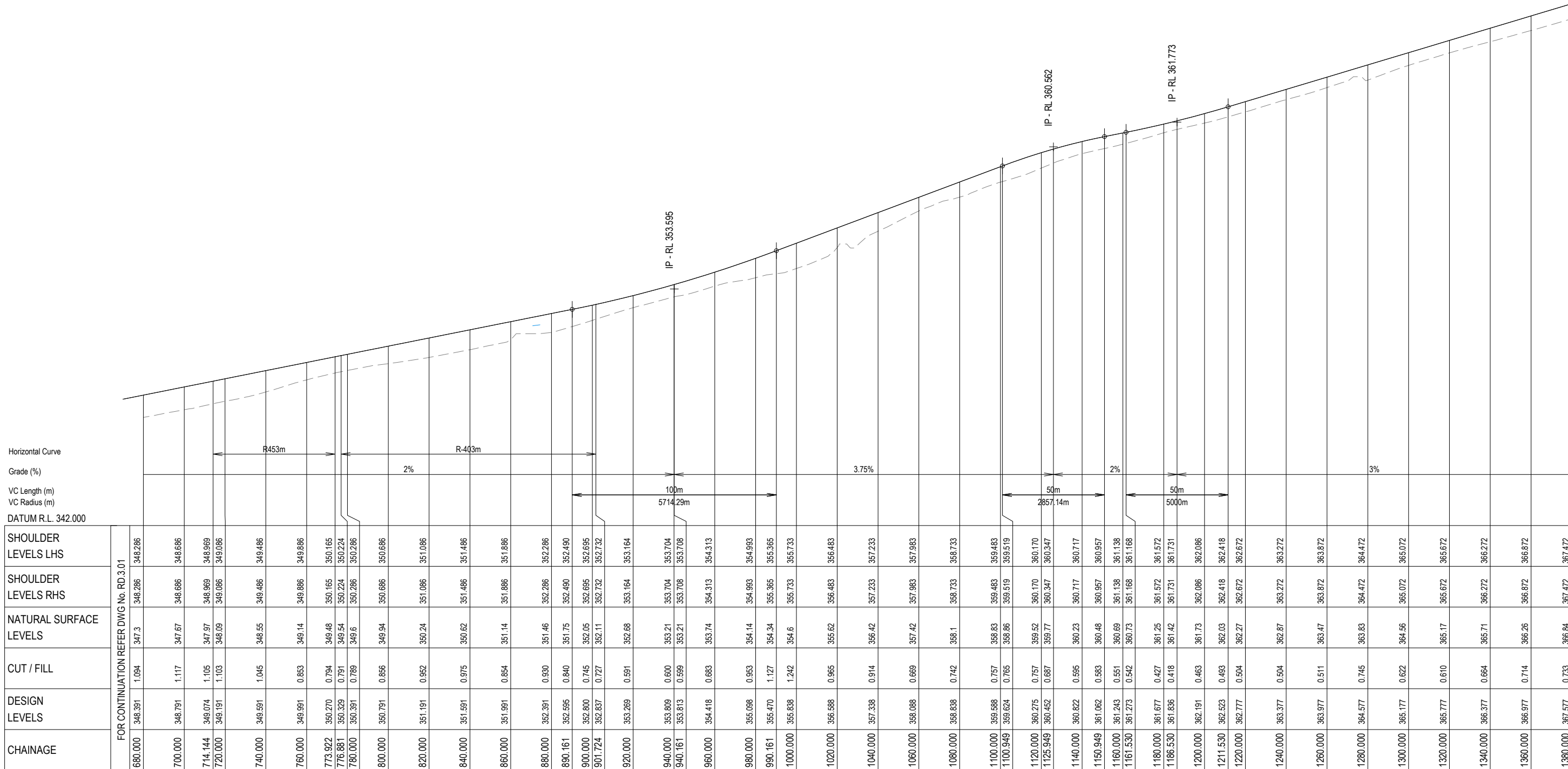
BAIADA
ROAD 03 LONGITUDINAL
SECTION - SHEET 1 OF 3

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8719	
DRAWING No.	REV
RD.3.01	B

FOR CONTINUATION REFER DWG No. RD.3.02

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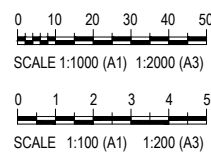


LONGITUDINAL SECTION - RD03

SCALE 1 : 1000 Horiz.
1 : 100 Vert.

CONSULTANT: MPN CONSULTING PTY LTD
CONTACT:
TELEPHONE: (07) 3335 4555

DATE _____



ISSUE	DATE	AMENDMENT	BY	APP
A	14.08.21	ISSUE FOR COORDINATION	BCM	-
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-

GRENFELL FARMS
1130 GOOLOONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

BAIADA

ROAD 03 LONGITUDINAL SECTION - SHEET 2 OF 3

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DRAWING No.	REV
RD.3.02	B

FOR CONTINUATION REFER DWG No. RD.3.03

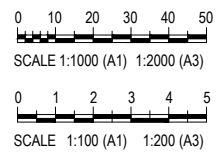
NOT FOR CONSTRUCTION

Horizontal Curve
Grade (%)
VC Length (m)
VC Radius (m)
DATUM R.L. 361.000

	FOR CONTINUATION REFER DWG No. RD.3.02	
SHOULDER LEVELS LHS	366.872	367.472
SHOULDER LEVELS RHS	366.872	368.072
NATURAL SURFACE LEVELS	366.26	366.84
CUT / FILL	0.714	0.733
DESIGN LEVELS	366.977	367.577
CHAINAGE	1360.000	1400.000
	1420.000	1440.000
	1460.000	1474.383
	1480.000	1496.492
	1500.000	1520.000
	1540.000	1546.492
	1560.000	1580.000
	1596.492	1600.000
	1620.000	1640.000
	1649.971	1660.000
	1677.286	

LONGITUDINAL SECTION - RD03

SCALE 1 : 1000 Horiz.
1 : 100 Vert.



ISSUE	DATE	AMENDMENT	BY	APP
B	22.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOONGONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

BAIADA
ROAD 03 LONGITUDINAL SECTION - SHEET 3 OF 3

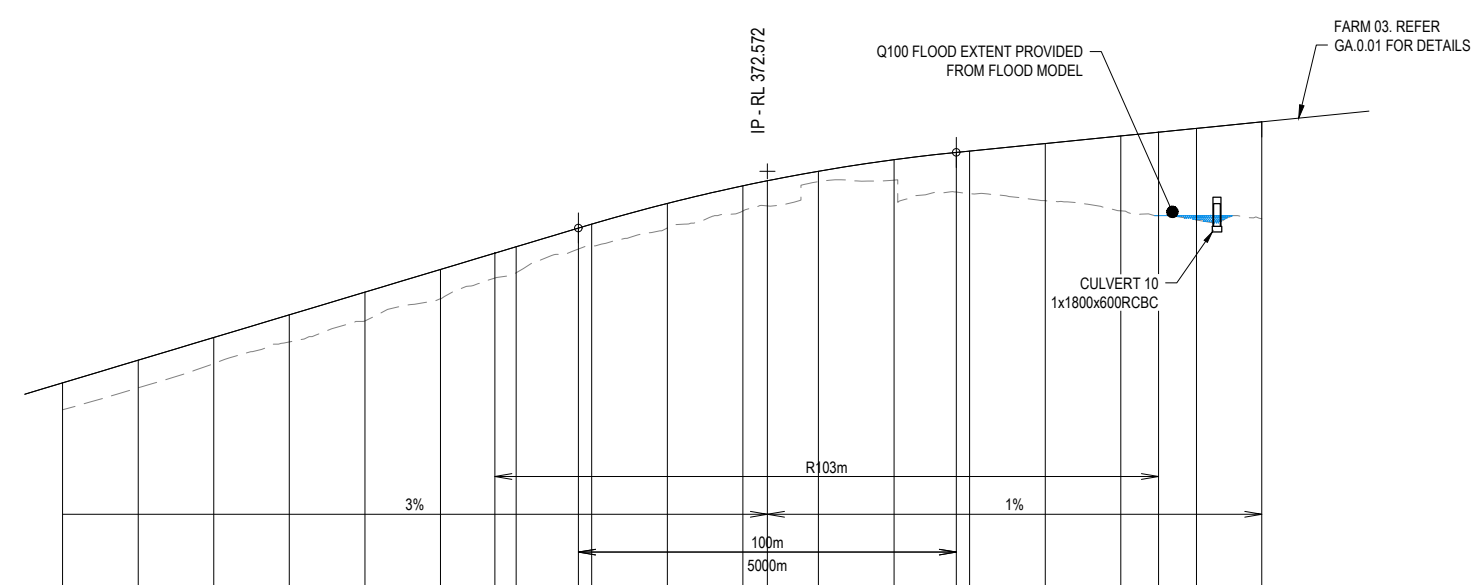
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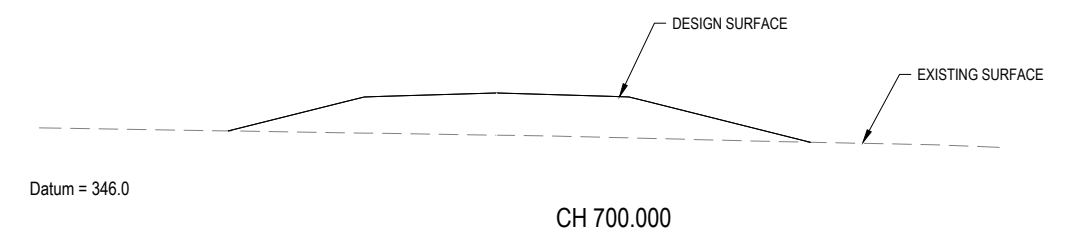
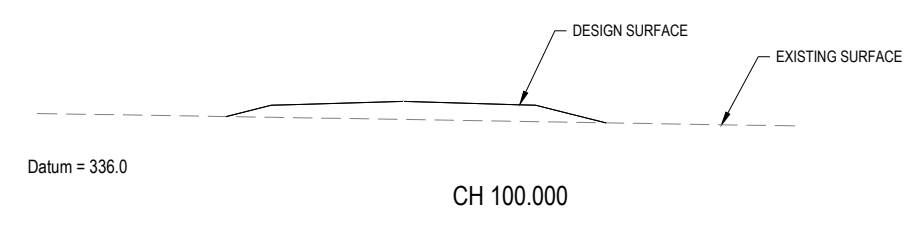
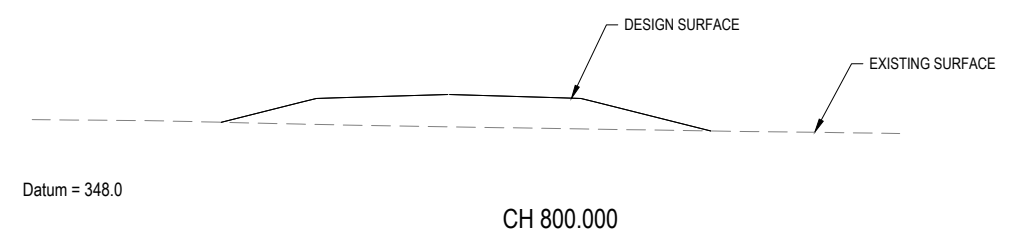
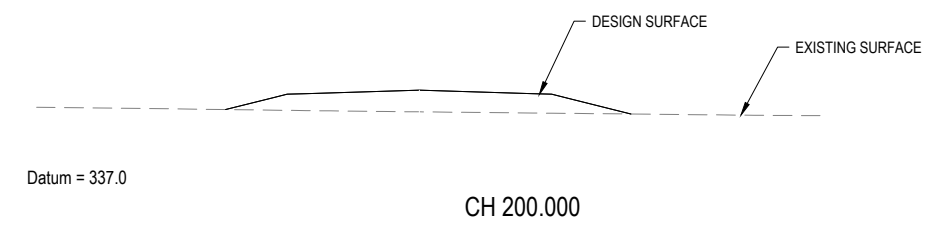
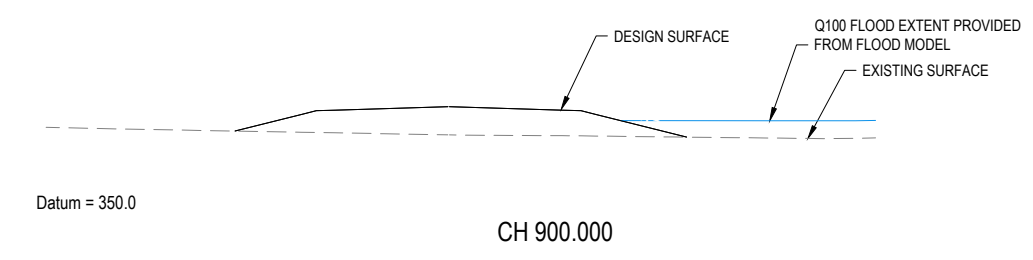
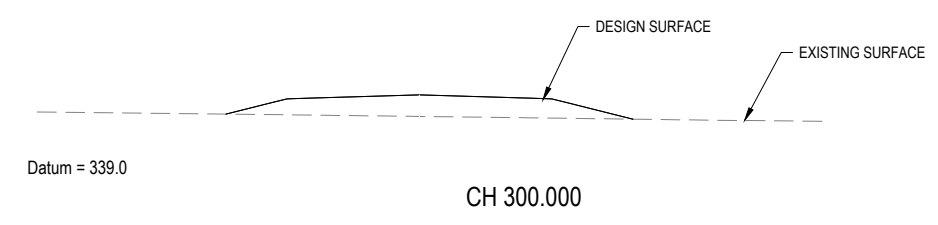
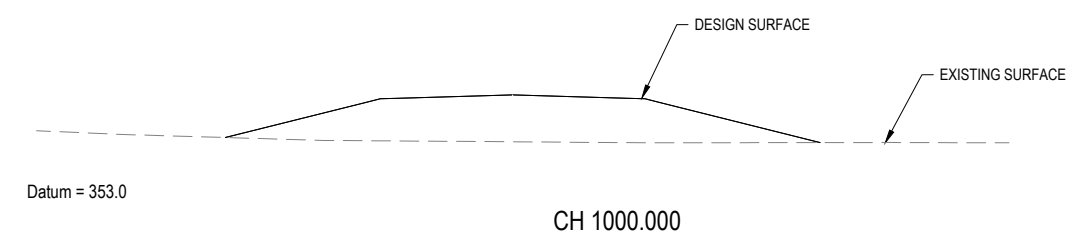
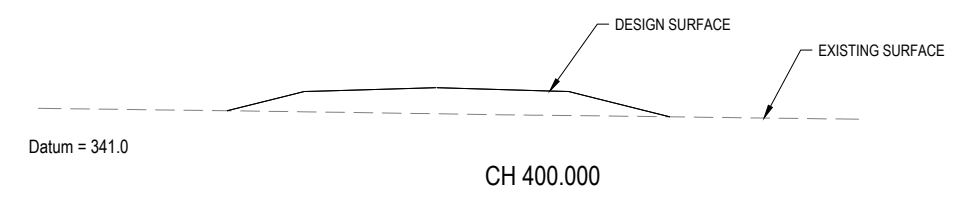
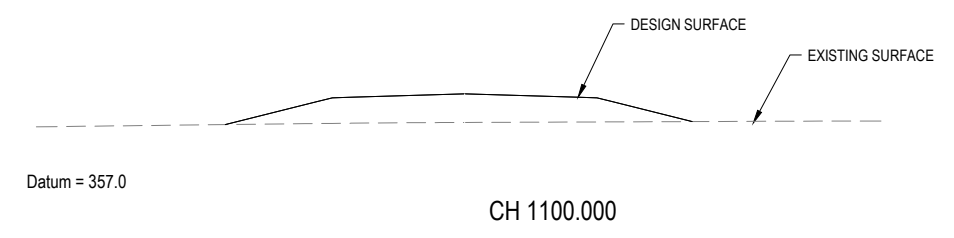
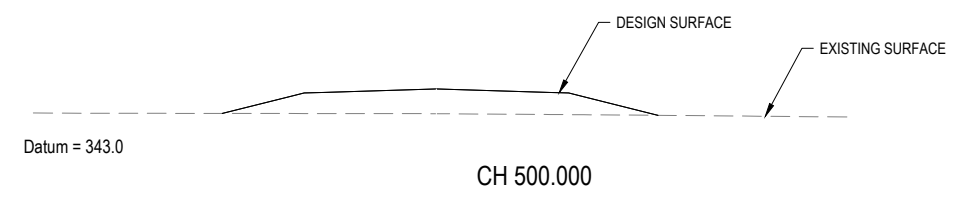
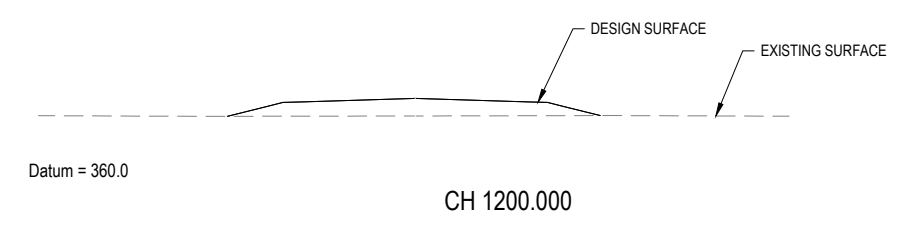
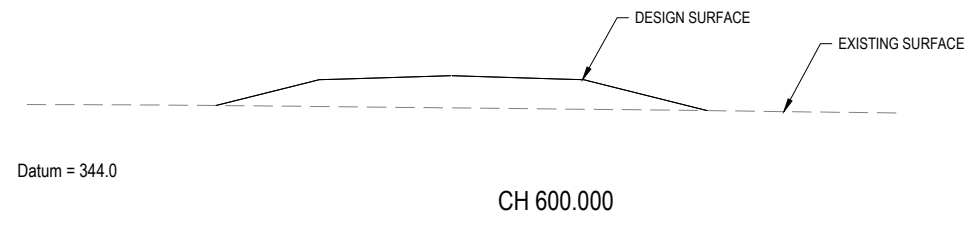
DRAWING No.		REV
RD.3.03		B

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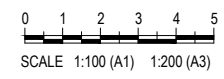


CULVERT 10
1x1800x600RCBC



CONSULTANT: MPN CONSULTING PTY LTD
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DATE -



ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENFELL FARMS
1130 GOOLOGONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

BAIADA

ROAD 03 CROSS SECTIONS
SHEET 1 OF 2

mpn consulting

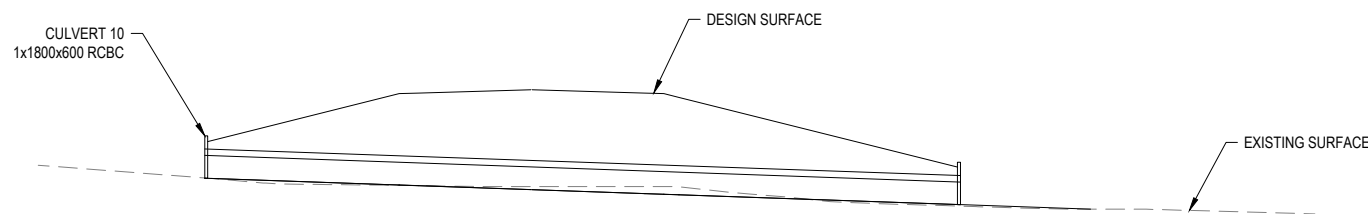
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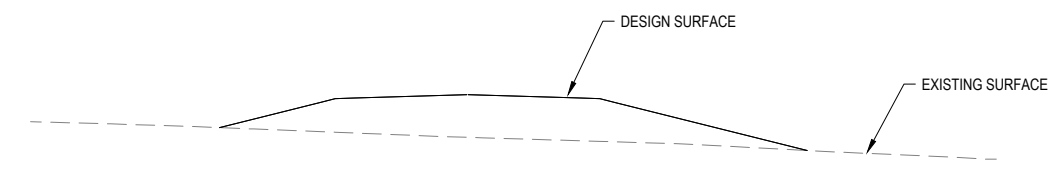
mpn JOB	
8719	
DRAWING No.	REV
RD.3.04	B

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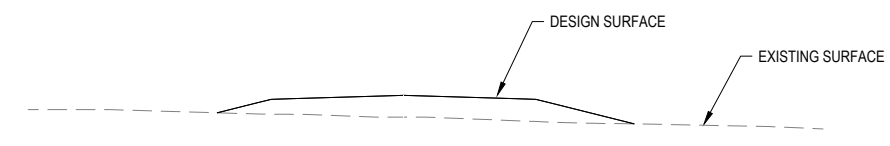
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CH 1665.445



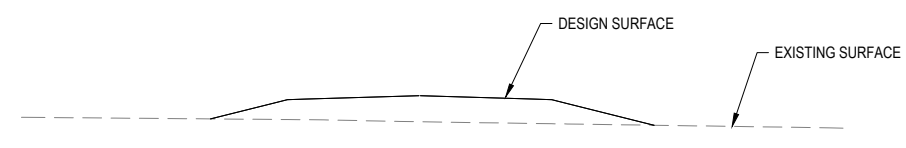
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CH 1600.000



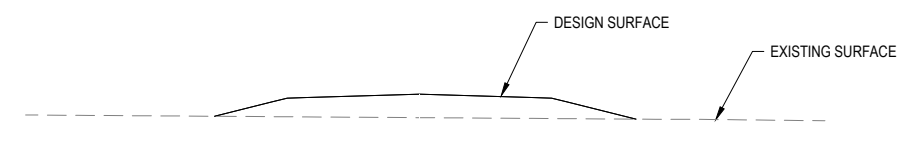
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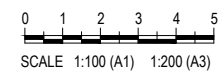
CH 1400.000



Datum = 363.0

CH 1300.000

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 TELEPHONE: (07) 3335 4555
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ISSUE	DATE	AMENDMENT	BY	APP
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A	14.08.21	ISSUE FOR COORDINATION	BCM	-

GRENELL FARMS
1130 GOOLOGONG ROAD
GREENFELL, NSW

SCALES:	AS SHOWN
DESIGN:	BCM
DRAWN:	BCM
CREATED:	
CHKD:	
APPRD:	
DATE:	

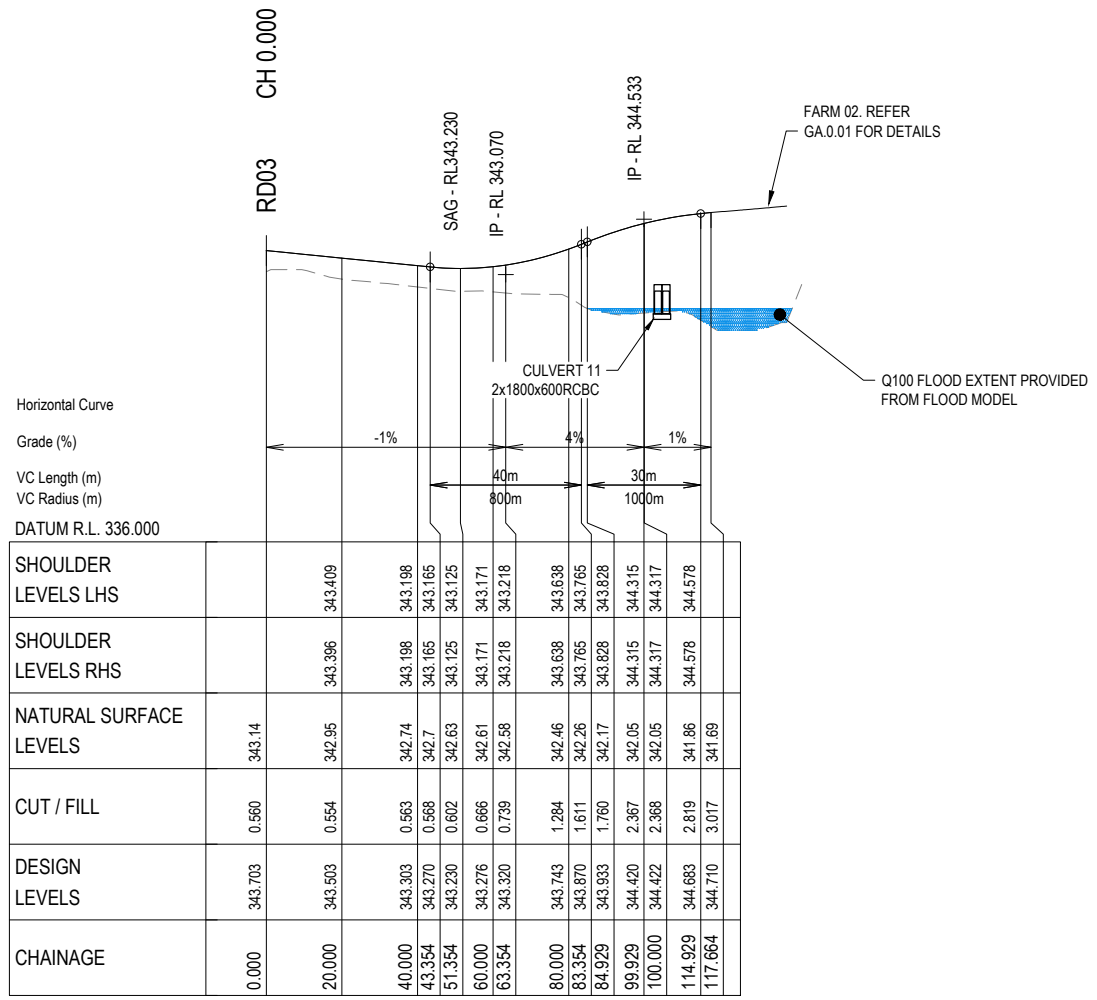
BAIADA
ROAD 03 CROSS SECTIONS
SHEET 2 OF 2

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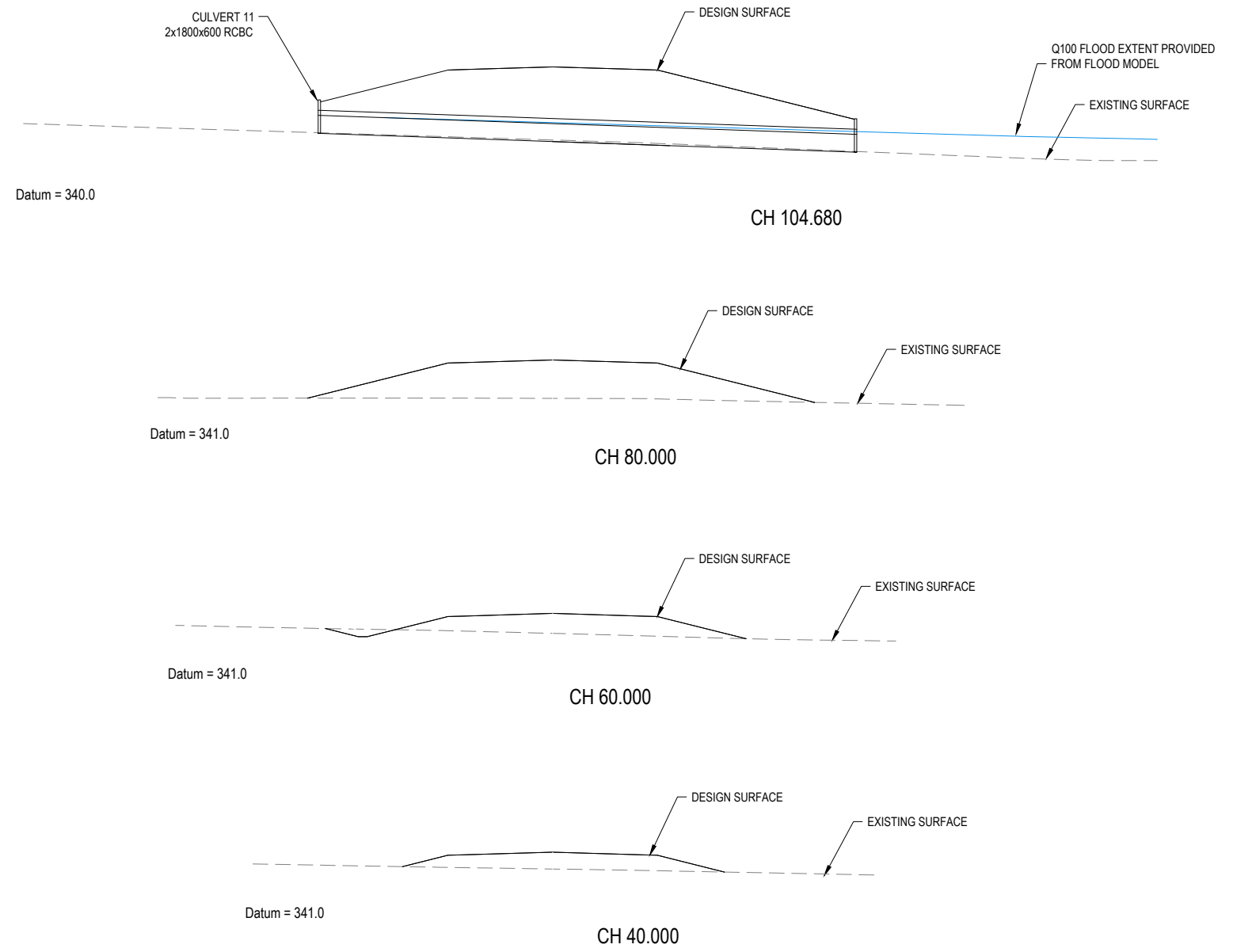
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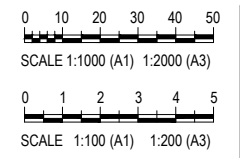


LONGITUDINAL SECTION - RD04

SCALE 1 : 1000 Horiz.
1 : 100 Vert.



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ISSUE	DATE	AMENDMENT	BY	APP
B	25.08.21	AMENDED TO INCLUDE STORMWATER CULVERTS	BCM	-
A	14.08.21	ISSUE FOR COORDINATION	BCM	-

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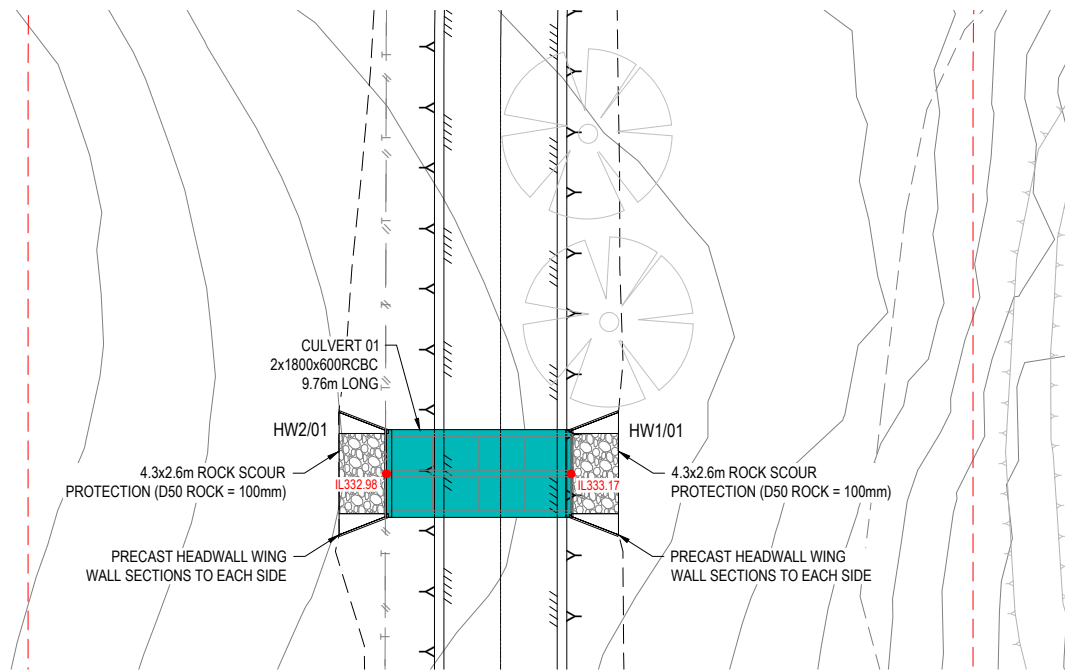
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ROAD 04 LONGITUDINAL AND CROSS SECTIONS

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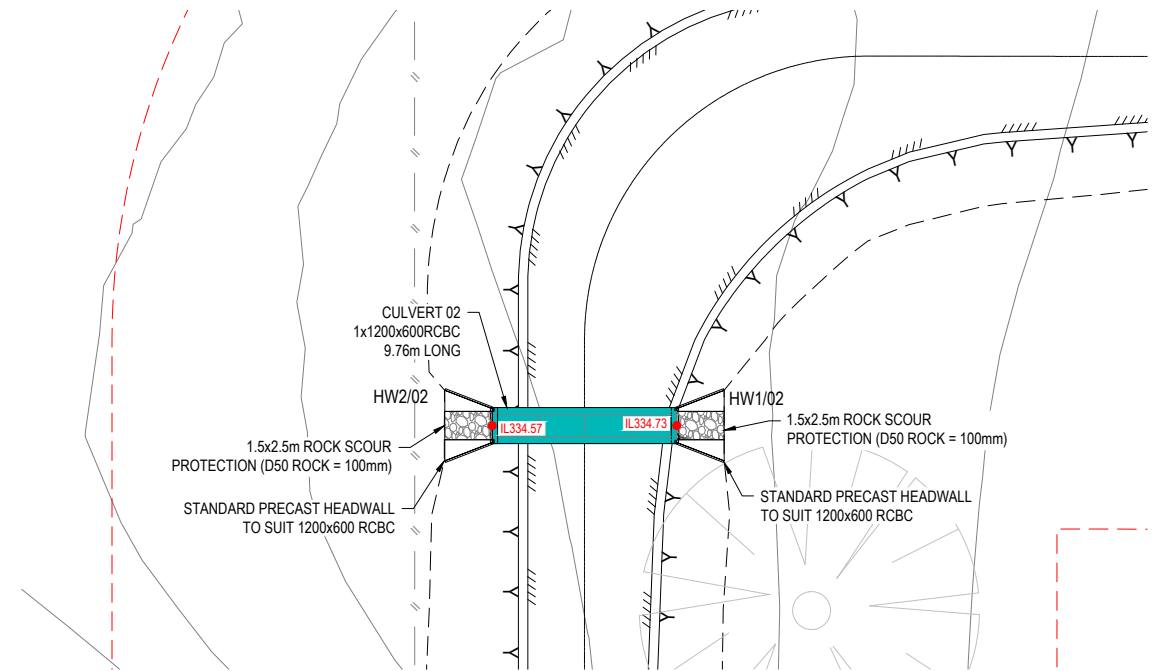
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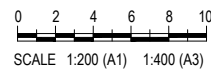
STORMWATER CULVERT 01 - LAYOUT
SCALE 1 : 200



STORMWATER CULVERT 02 - LAYOUT
SCALE 1 : 200

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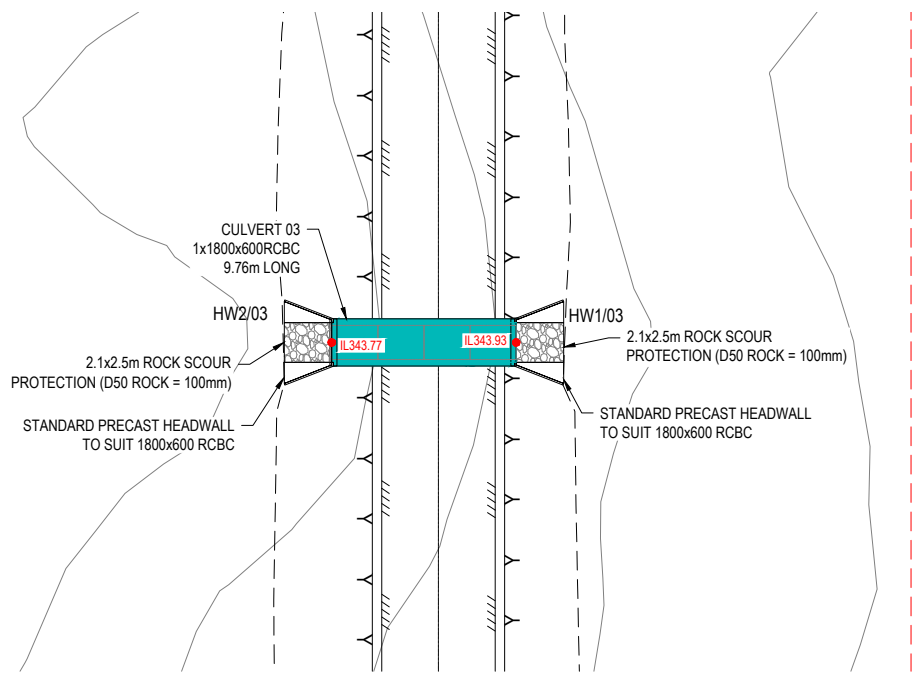
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STORMWATER DRAINAGE
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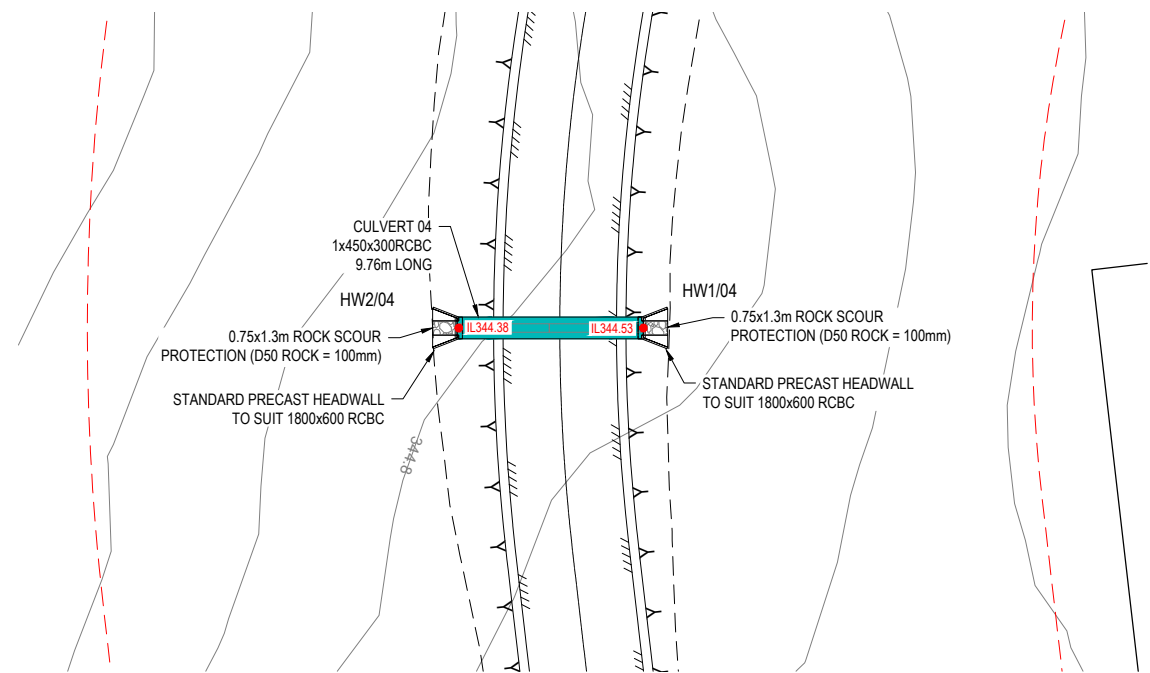
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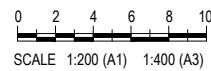
STORMWATER CULVERT 03 - LAYOUT
SCALE 1 : 200



STORMWATER CULVERT 04 - LAYOUT
SCALE 1 : 200

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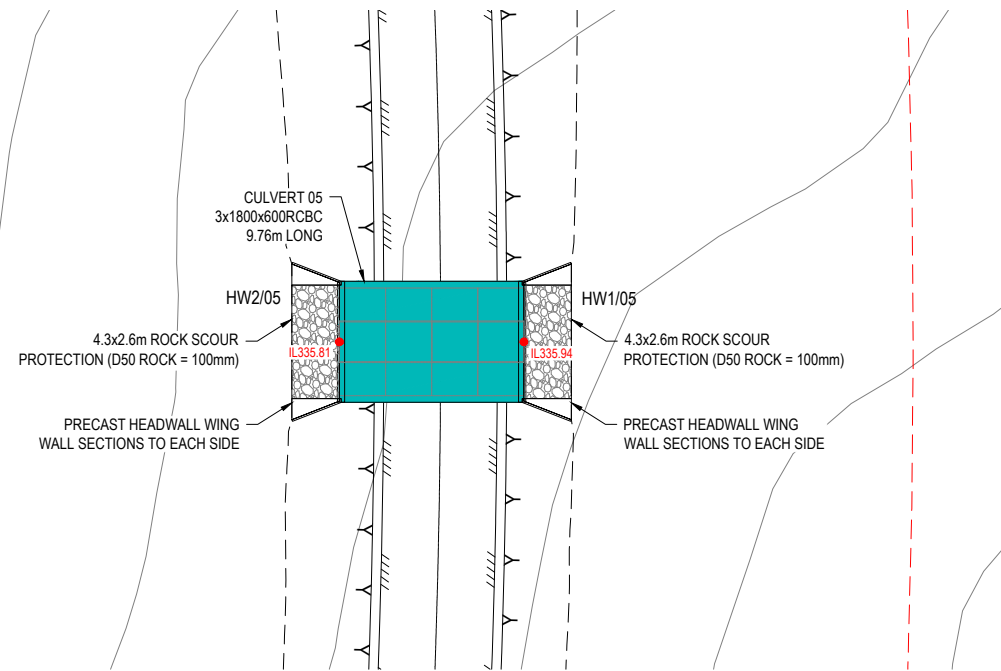
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CULVERTS 03 AND 04

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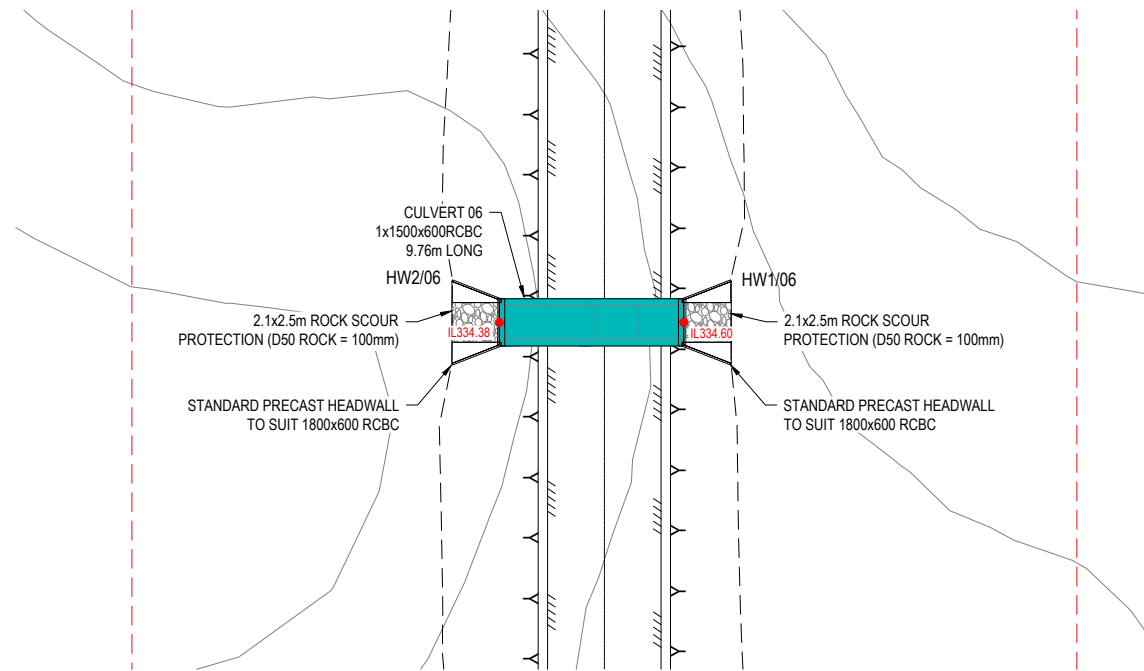
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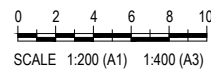
STORMWATER CULVERT 05 - LAYOUT
SCALE 1 : 200



STORMWATER CULVERT 06 - LAYOUT
SCALE 1 : 200

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CULVERTS 05 AND 06

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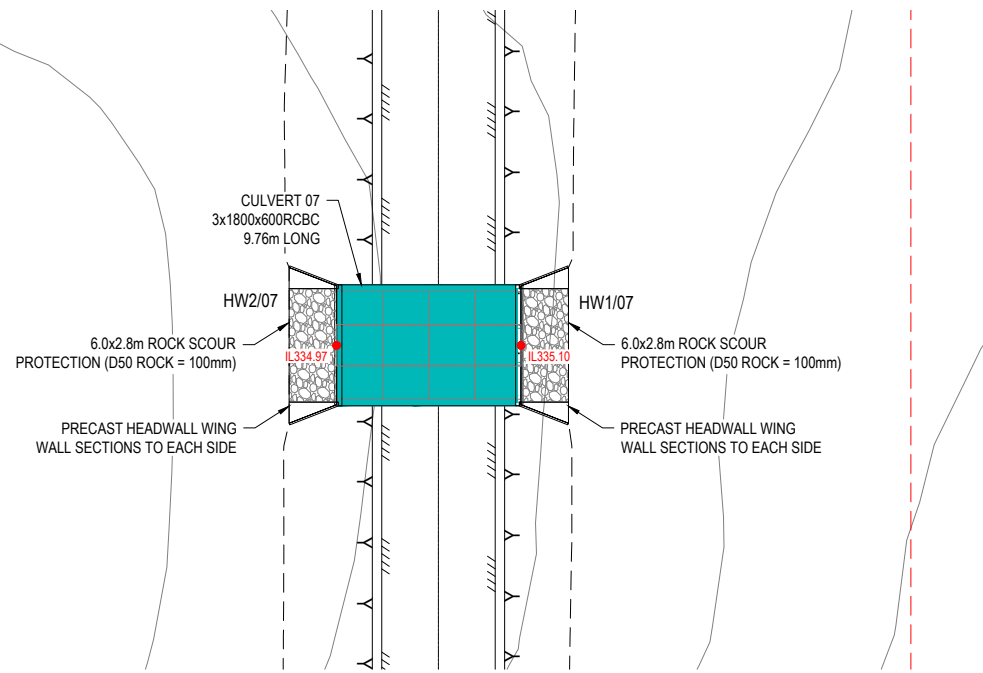
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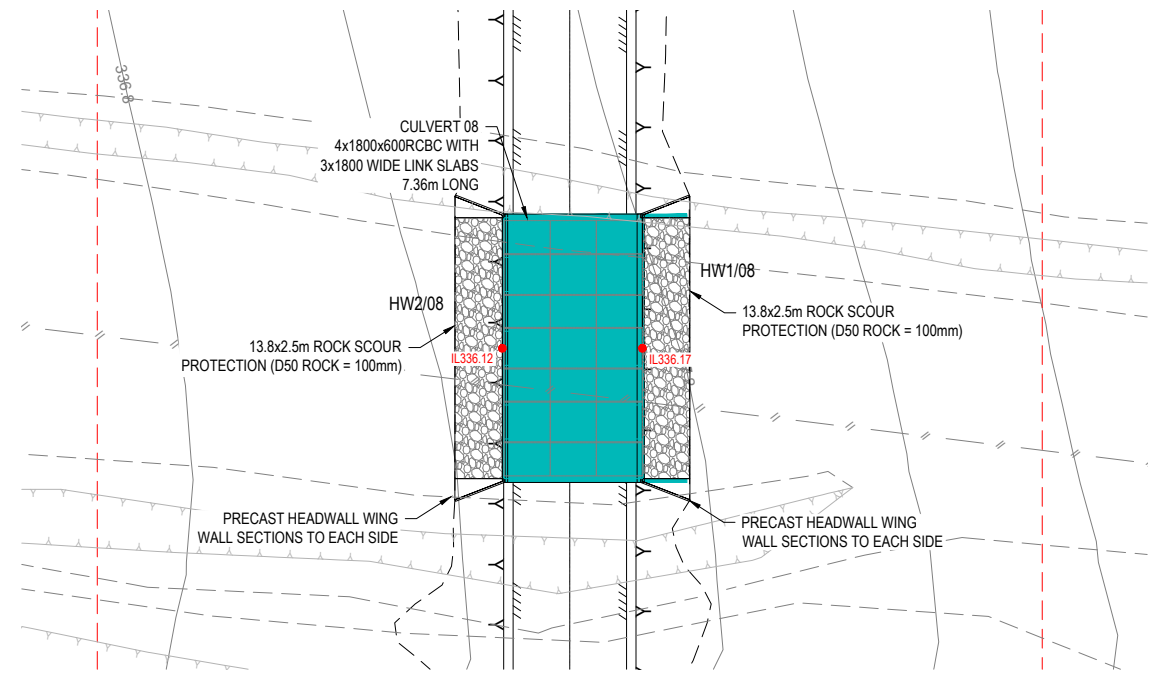
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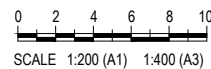
STORMWATER CULVERT 07 - LAYOUT
SCALE 1 : 200



STORMWATER CULVERT 08 - LAYOUT
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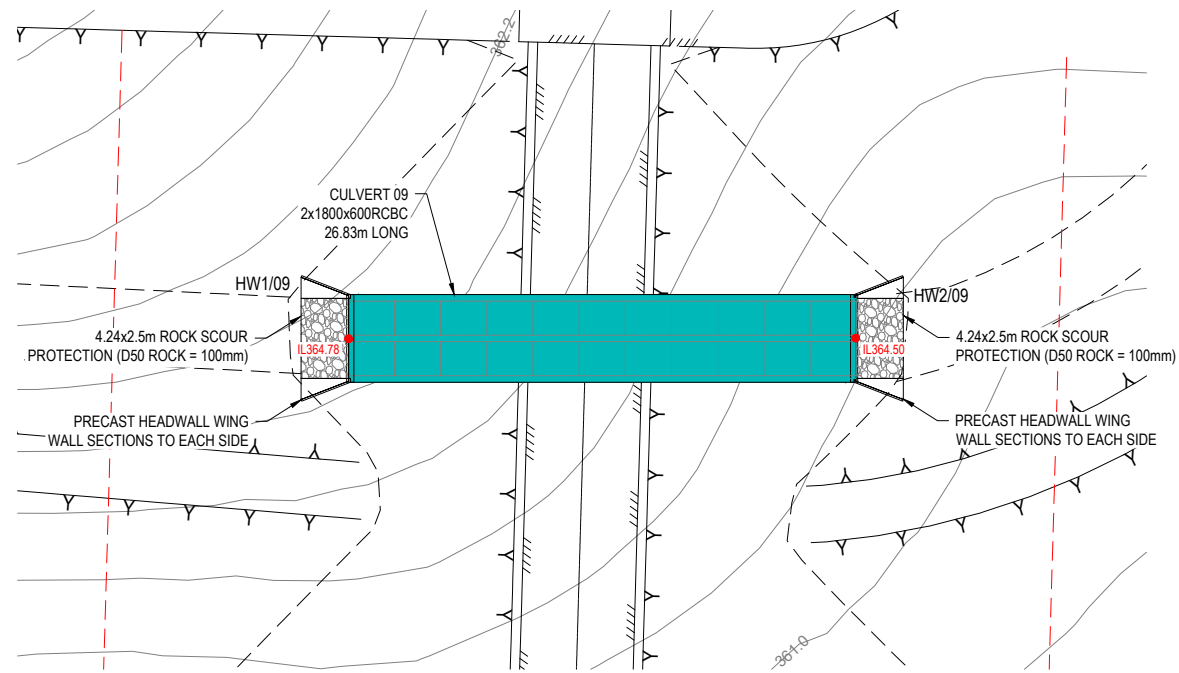
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CULVERTS 07 AND 08

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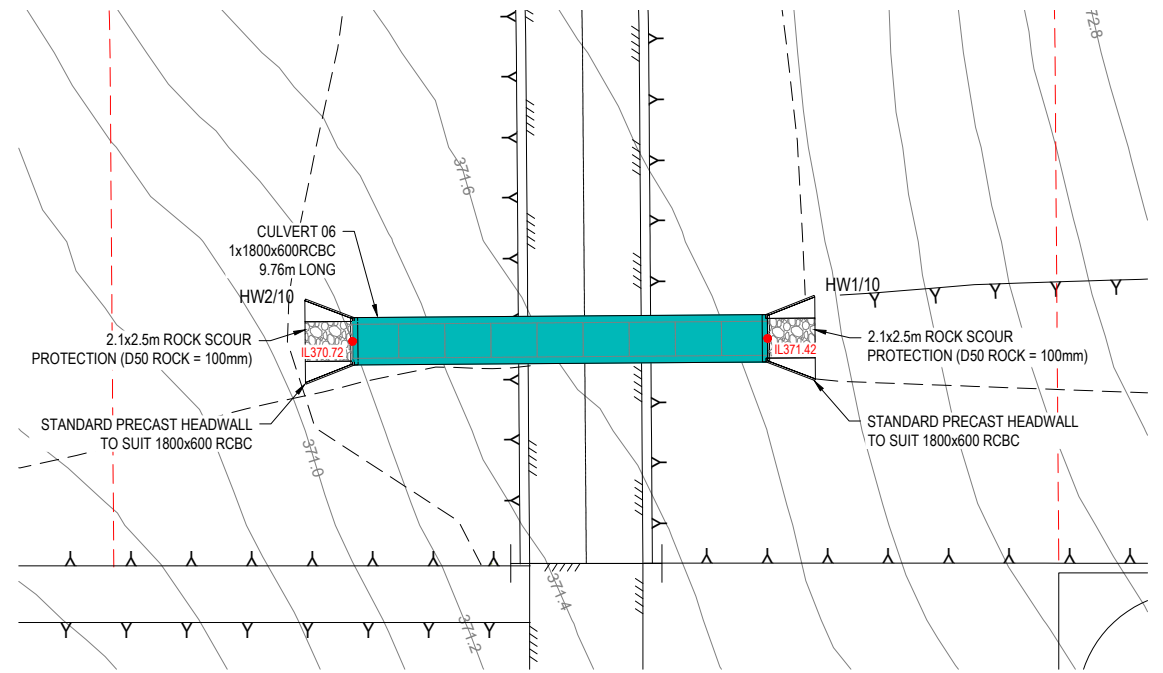
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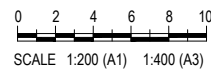
STORMWATER CULVERT 09 - LAYOUT
SCALE 1 : 200



STORMWATER CULVERT 10 - LAYOUT
SCALE 1 : 200

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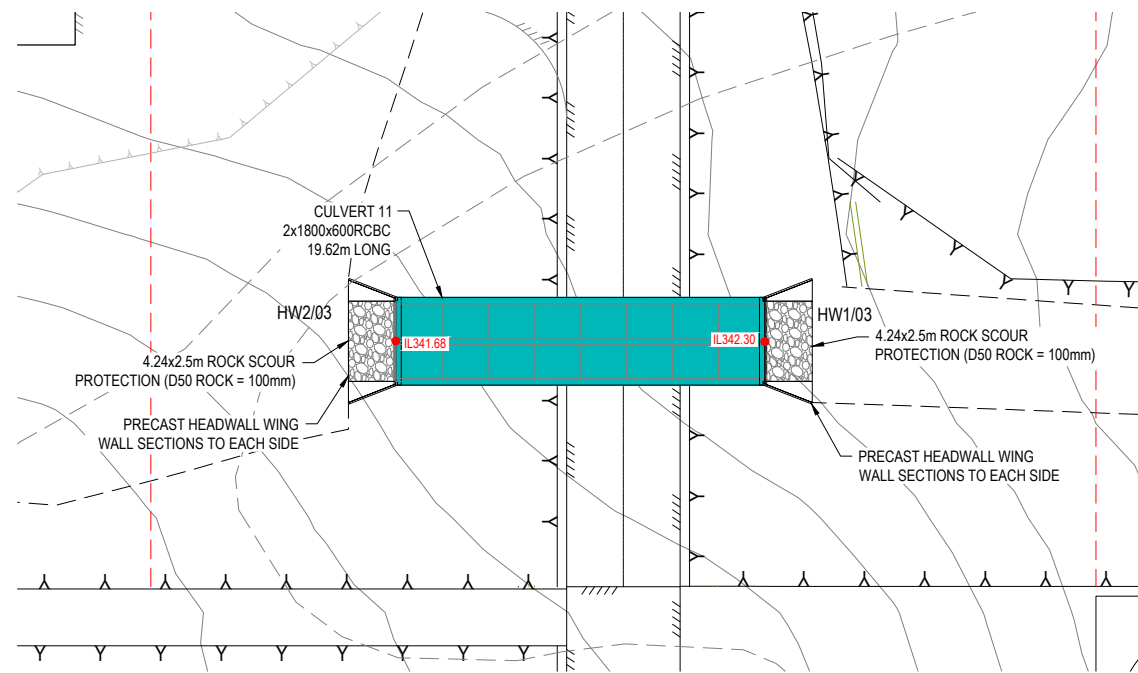
BAIADA
STORMWATER DRAINAGE
CULVERTS 12

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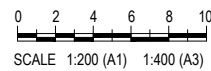
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STORMWATER CULVERT 11 - LAYOUT
SCALE 1 : 200

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