

# BORAL RESOURCES (NSW) PTY LTD

## BORAL QUARRY SEAHAM

### ITALIA ROAD INTERSECTION

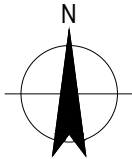
# 12599191



LOCALITY  
N.T.S

DRAWING INDEX	
DRAWING No.	DRAWING TITLE
12599191-GHD-00-00-DRG-CI-01001	COVER SHEET, LOCALITY AND DRAWING INDEX
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12599191-GHD-00-00-DRG-CI-01601	CROSS SECTION - SHEET 1 OF 6
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12599191-GHD-00-00-DRG-CI-01701	RETAINING WALL LOCATIONS AND PROFILES - SHEET 1 OF 1

E	CONCEPT DESIGN FOR DA APPROVAL	AS	GW	18.06.24
D	CONCEPT DESIGN FOR DA APPROVAL	A.S.	G.W.	27.07.23
C	CONCEPT DESIGN FOR DA APPROVAL			26.06.23
B	PRELIMINARY ISSUE FOR DISCUSSION			13.06.23
A	PRELIMINARY ISSUE FOR DISCUSSION			09.06.23
Rev	Description	Checked	Approved	Date
Author	B.DREW	Drafting Check	C.PURDON	
Designer	C.BARTLEY	Design Check	N.HINCKS	



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Project No.  
12599191

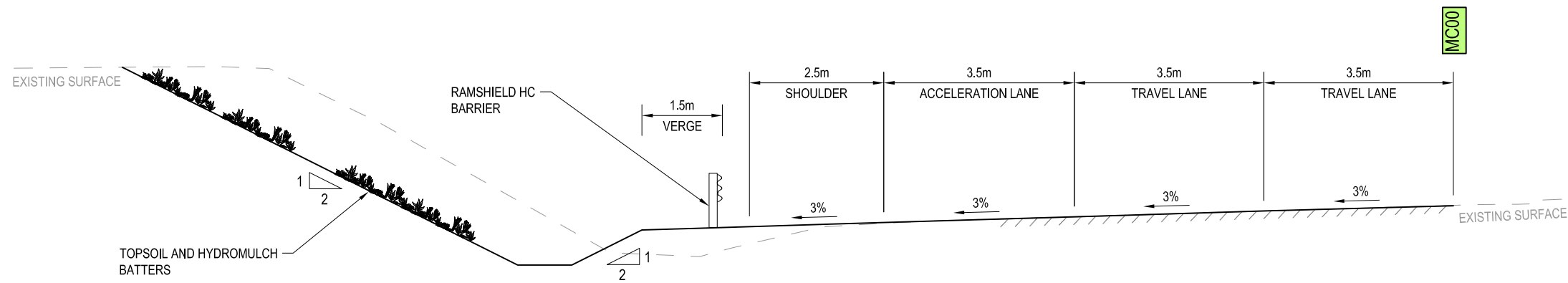
Client	BORAL RESOURCES (NSW) PTY LTD
Project	BORAL QUARRY SEAHAM ITALIA ROAD INTERSECTION
Status	FOR APPROVAL

Drawing Title  
COVERSHEET, LOCALITY  
AND DRAWINGS INDEX

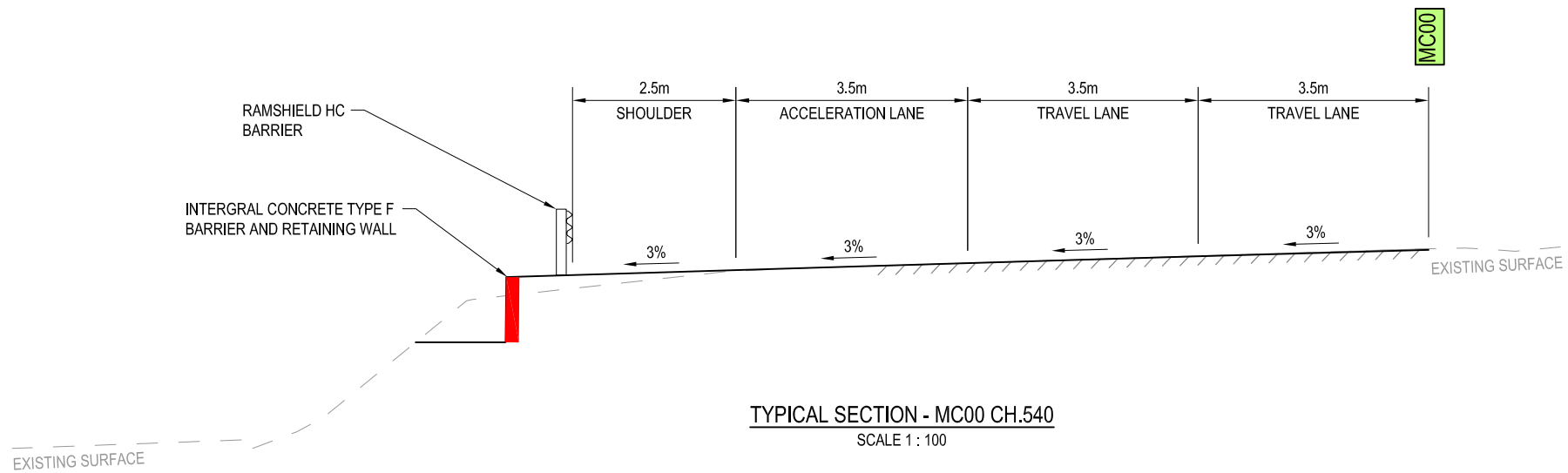
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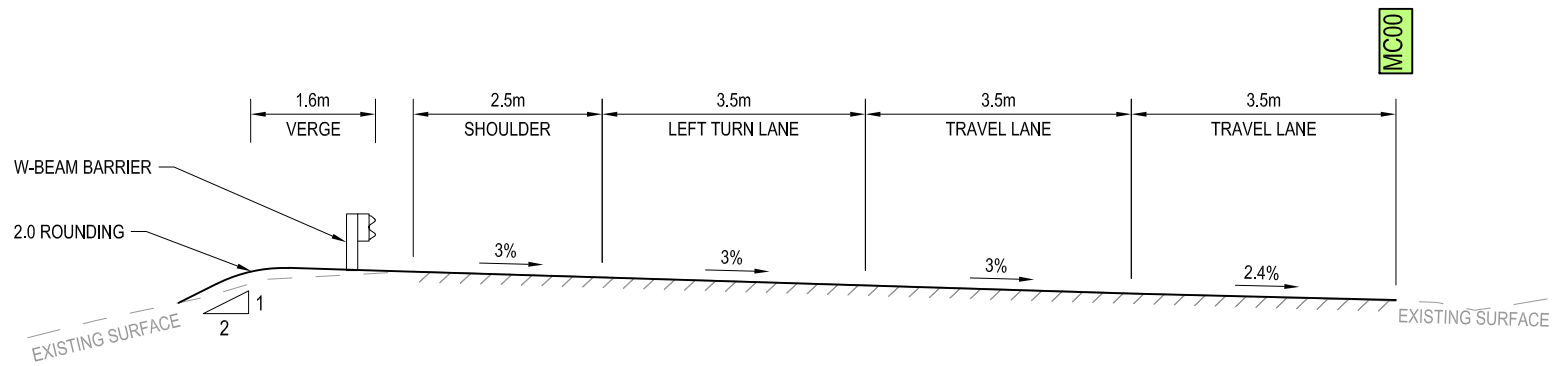
Rev  
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TYPICAL SECTION - MC00 CH.580  
SCALE 1 : 100



TYPICAL SECTION - MC00 CH.540  
SCALE 1 : 100



TYPICAL SECTION - MC00 CH.100  
SCALE 1 : 100

E	BARRIER SYSTEM AMENDED CH 540	A.S.	G.W.	29.10.24
D	CONCEPT DESIGN FOR DA APPROVAL	A.S.	G.W.	27.07.23
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Client	BORAL RESOURCES (NSW) PTY LTD
Project	BORAL QUARRY SEAHAM ITALIA ROAD INTERSECTION
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Drawing Title	TYPICAL SECTIONS
	SHEET 1 OF 1

12599191-GHD-00-00-DRG-CI-01031

Size  
A3

Rev  
E





PLAN  
SCALE 1:5000

#### GENERAL

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT CONTRACT, SCOPE OF WORKS AND SPECIFICATIONS, INCLUDING THE RELEVANT TNSW AND AUSTRALIAN STANDARDS UNLESS NOTED OTHERWISE.
2. PROVISION OF TRAFFIC CONTROL DURING CONSTRUCTION TO BE IN ACCORDANCE WITH THE CURRENT TNSW SPECIFICATION G10 AND TNSW PUBLICATION "TRAFFIC CONTROL AT WORK SITES".
3. ALL LOCATIONS, ORIENTATIONS AND LEVELS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY WORK. REFER DISCREPANCIES TO THE PRINCIPAL. DO NOT OBTAIN DIMENSIONS FROM SCALING. NATURAL SURFACE LEVELS ON THE DRAWINGS ARE INDICATIVE ONLY.

#### ALIGNMENT SETOUT CONTROL PLANS AND TABLES

1. SURVEY HEIGHT DATUM IS AHD.
2. SURVEY COORDINATE GRID IS MGA2020, ZONE 56.
3. SURVEY MARKS ARE NOT TO BE DISTURBED BEFORE ASSESSMENT BY SURVEYOR. THE CONTRACTOR SHALL CHECK SUSTAINABILITY OF THE STATED COORDINATES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
5. ANY SURVEY PMs OR SSMs THAT ARE DESTROYED ARE TO BE REPLACED WITH ANOTHER PM OR SSM TO LANDS DEPARTMENT STANDARDS. IT ALSO SHOULD BE DOCUMENTED AND CO-ORDINATED TO EQUIVALENT LANDS DEPARTMENT STANDARDS.
6. REFER TNSW SPECIFICATION G71 FOR SURVEY REQUIREMENTS FOR SPATIAL TOLERANCES AND QUALITY ASSURANCE REQUIREMENTS
7. REFER TNSW STANDARD DRAWINGS R0400-01 AND R0400-02 FOR SETTING OUT DIAGRAMMS FOR ROADS

#### UTILITIES

1. LOCATION AND LEVEL OF ALL EXISTING AND PROPOSED SERVICES MUST BE OBTAINED PRIOR TO CONSTRUCTION. ALL LEVELS MUST BE CHECKED FOR CONFLICT WITH ANY SERVICES, AND ANY CONFLICTS TO BE RAISED WITH THE PRINCIPAL.
2. THE CONTRACTOR MUST FOLLOW ALL UTILITY AUTHORITIES "DUTY OF CARE" WHEN WORKING IN THE VICINITY OF SERVICES. ANY DAMAGE TO THE EXISTING SERVICES SHALL BE RECTIFIED AND VERIFIED WITH THE AUTHORITY REPRESENTATIVE AT THE CONTRACTORS EXPENSE.

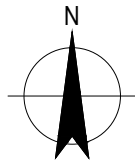
#### ROADSIDE FURNITURE AND DELINEATION

1. PAVEMENT MARKING AND SIGNAGE TO BE IN ACCORDANCE WITH TNSW SPECIFICATIONS, GUIDELINES AND STANDARDS.
2. SIGNAGE TO BE LOCATED IN ACCORDANCE WITH AS1742.
3. MOUNTED HEIGHT FOR SIGNS TO BE 1.5m MIN.
4. THE CONTRACTOR IS TO ENSURE THAT SIGN FOOTINGS DO NOT CLASH WITH UNDERGROUND UTILITIES. SHOULD SIGN LOCATIONS NEED TO BE MOVED, APPROVAL IS REQUIRED FROM THE PRINCIPAL.
5. ALL SIGN SUPPORT STRUCTURES ARE TO BE GRADE C320LO IN ACCORDANCE WITH TNSW SPECIFICATION R143 UNLESS NOTED OTHERWISE.
6. RAISED REFLECTIVE PAVEMENT MARKERS TO BE INSTALLED IN ACCORDANCE WITH THE SPACINGS SPECIFIED IN THE TNSW DELINEATION GUIDELINES.
7. REUSE OF ANY EXISTING SIGN FACES AND SUPPORT STRUCTURES REQUIRE APPROVAL FROM THE PRINCIPAL.
8. CONTRACTOR TO ENSURE SAFETY BARRIER FOOTINGS DO NOT CLASH WITH UNDERGROUND UTILITIES.
9. CONTRACTOR TO INSTALL GUIDE POSTS IN ACCORDANCE WITH TNSW DELINEATION GUIDE SECTION 16 - GUIDE POSTS AND DELINEATION OF SAFETY BARRIERS.



UTILITY INFORMATION SHOWN ON THESE PLANS DOES NOT DEPICT ANY MORE THAN THE PRESENCE OF A SERVICE, BASED ON AVAILABLE DOCUMENTARY EVIDENCE. RELEVANT UTILITY PLANS ARE TO BE OBTAINED FROM BEFORE YOU DIG AUSTRALIA AND THE PRESENCE OF A UTILITY SERVICE, SIZE AND LOCATION TO BE CONFIRMED BY FIELD INSPECTION PRIOR TO THE COMMENCEMENT OF WORKS. CAUTION SHOULD BE EXERCISED WHEN WORKING IN THE VICINITY OF ALL UTILITY SERVICES.

Rev	Description	Checked	Approved	Date
D	CONCEPT DESIGN FOR DA APPROVAL	A.S.	G.W.	27.07.23
C	CONCEPT DESIGN FOR DA APPROVAL			26.06.23
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Designer	C.BARTLEY	Design Check	N.HINCKS	



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Project No.  
12599191

Client BORAL RESOURCES (NSW) PTY LTD  
Project BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION  
Status FOR APPROVAL

Drawing Title  
OVERVIEW PLAN  
AND GENERAL NOTES

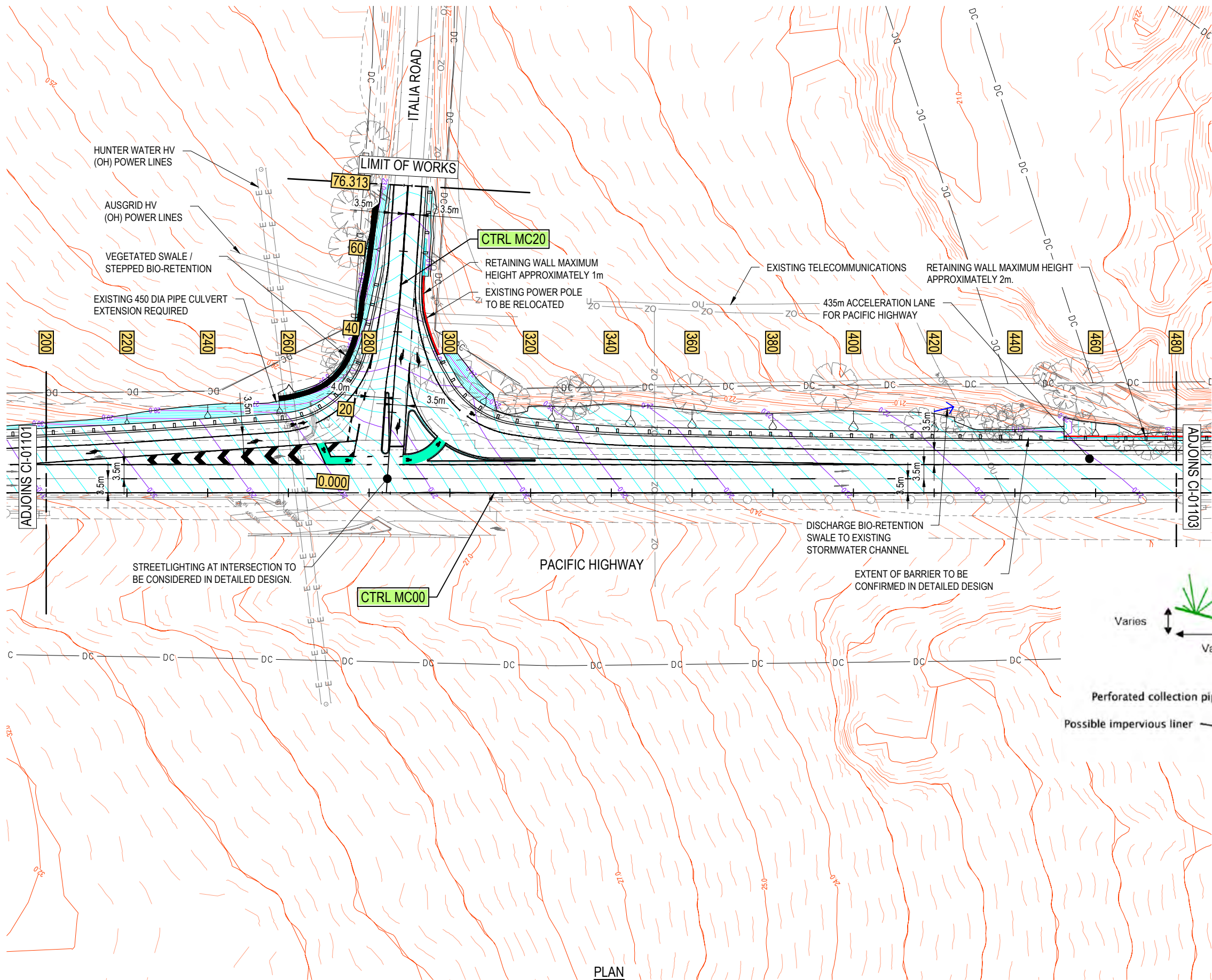
Drawing No.  
12599191-GHD-00-00-DRG-CI-01051

Size  
A3

Rev  
D







**LEGEND**

**GENERAL**

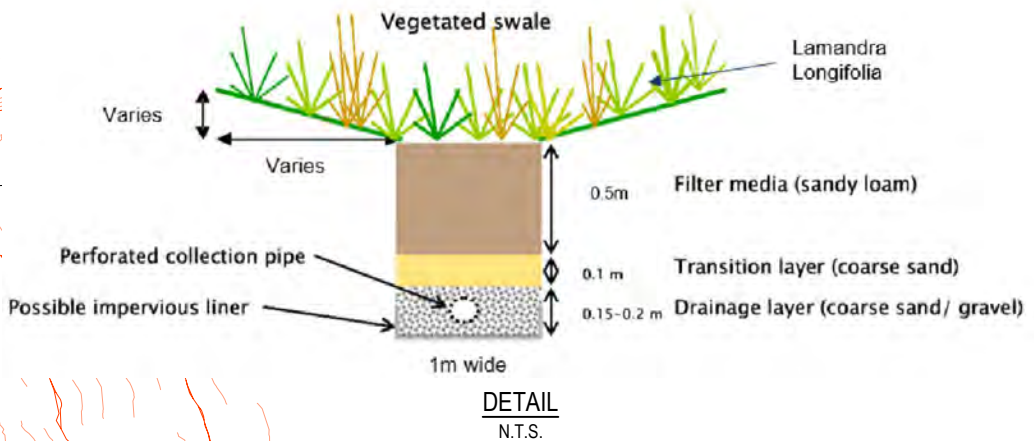
- EXISTING CONTOUR MAJOR (1.0m)
- EXISTING CONTOUR MINOR (0.2m)
- DESIGN CONTOUR MAJOR (1.0m)
- DESIGN CONTOUR MINOR (0.2m)
- SURVEY
- DESIGN STRINGS
- DIGITAL CADASTRE
- EXISTING BRIDGE DECK
- PROPOSED BRIDGE DECK
- EZYGUARD 4 (OR SIMILAR) BARRIER
- RETAINING WALL WITH TYPE F BARRIER
- BIO-RETENTION VEGETATED SWALE

**ROAD GEOMETRY & ALIGNMENT**

- MASTER CONTROL LINE

**DRAINAGE**

- NEW STORMWATER PIPE
- PIPE SIZE AND FLOW DIRECTION
- NEW STORMWATER PIT; KERB INLET PIT
- SUB SURFACE PIPE

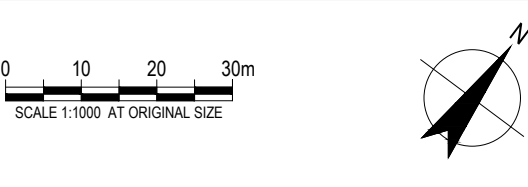


- NOTE**
- REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01051 FOR OVERVIEW PLAN
  - REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01111 FOR MC00 LONGITUDINAL SECTION
  - REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01601 TO 12599191-GHD-00-00-DRG-CI-01606 FOR MC00 CROSS SECTIONS
  - REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01301 TO 12599191-GHD-00-00-DRG-CI-01303 FOR ROADSIDE FURNITURE AND PAVEMENT PLANS



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Rev	Description	A.S.	G.W.	04.11.24
A	WATER QUALITY AMENDED FOR DA			
Author	A.SNEDDON	Drafting Check	C.PURDON	
Designer	C.BARTLEY	Design Check	N.HINCKS	



PLAN  
SCALE 1:1000



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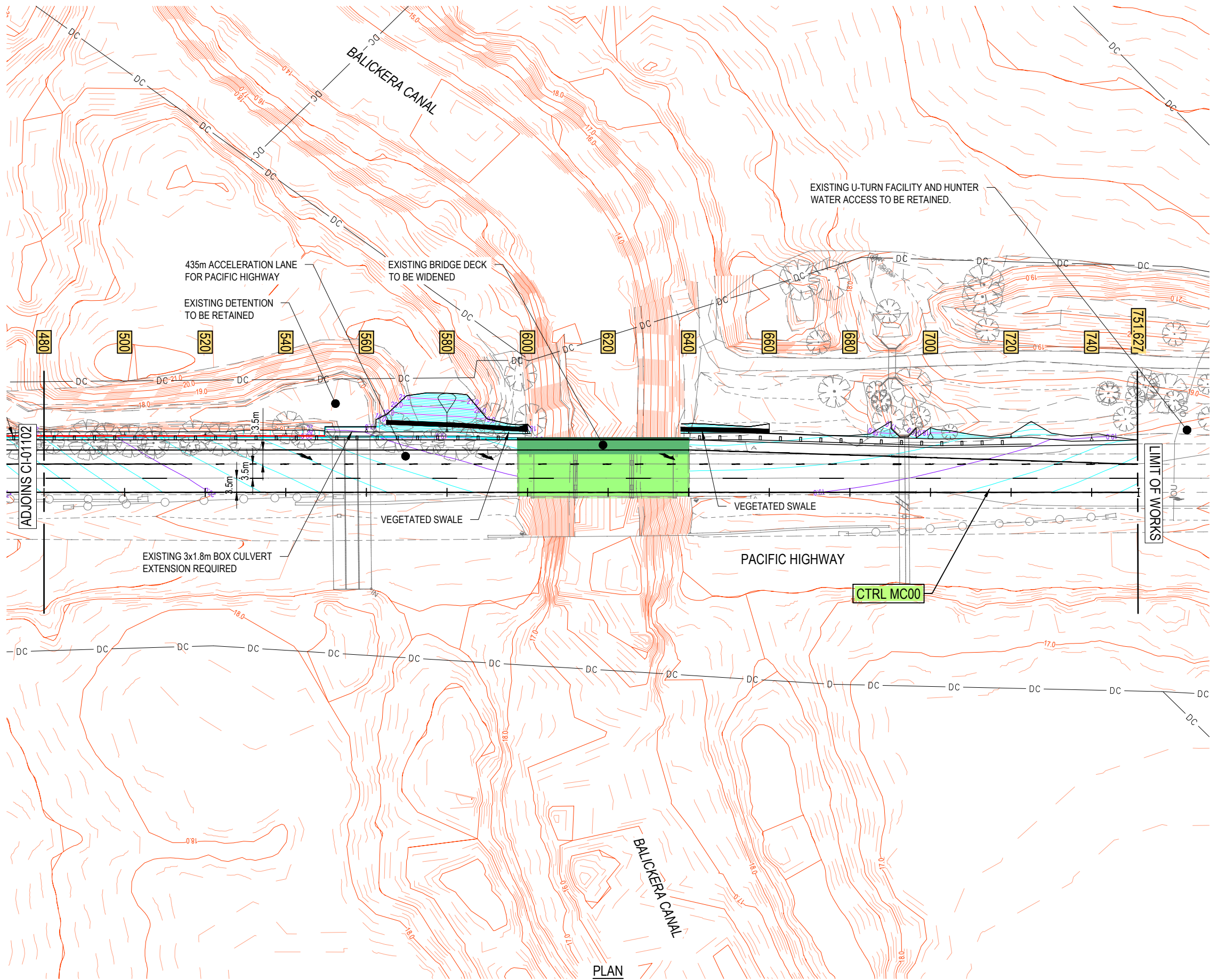
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Project BORAL QUARRY SEAHAM  
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Status FOR APPROVAL

Drawing Title  
DETAIL PLAN  
SHEET 2 OF 3

Drawing No.  
12599191-GHD-00-00-DRG-CI-01102  
Rev  
G





LEGEND

GENERAL

79.0EXISTING CONTOUR MAJOR (1.0m)

EXISTING CONTOUR MINOR (0.2m)79.0DESIGN CONTOUR MAJOR (1.0m)

DC

DIGITAL CADASTRE

ROAD GEOMETRY & ALIGNMENT

40

60

MASTER CONTROL LINE

DRAINAGE

NEW STORMWATER PIPE

Ø375

PIPE SIZE AND FLOW DIRECTION

- NOTE
1.

REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01051 FOR OVERVIEW PLAN
2.

REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01111 FOR MC00 LONGITUDINAL SECTION
3.

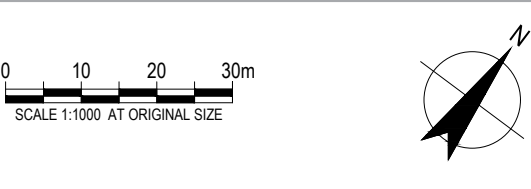
REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01601 TO 12599191-GHD-00-00-DRG-CI-01606 FOR MC00 CROSS SECTIONS
4.

REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01301 TO 12599191-GHD-00-00-DRG-CI-01303 FOR ROADSIDE FURNITURE AND PAVEMENT PLANS



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G WATER QUALITY AMENDED FOR DA				A.S.	G.W.	04.11.24
Rev	Description	Checked	Approved	Date		
Author	A.SNEDDON	Drafting Check	C.PURDON			
Designer	C.BARTLEY	Design Check	N.HINCKS			



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Project BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION  
Status FOR APPROVAL

Drawing Title  
DETAIL PLAN  
SHEET 3 OF 3

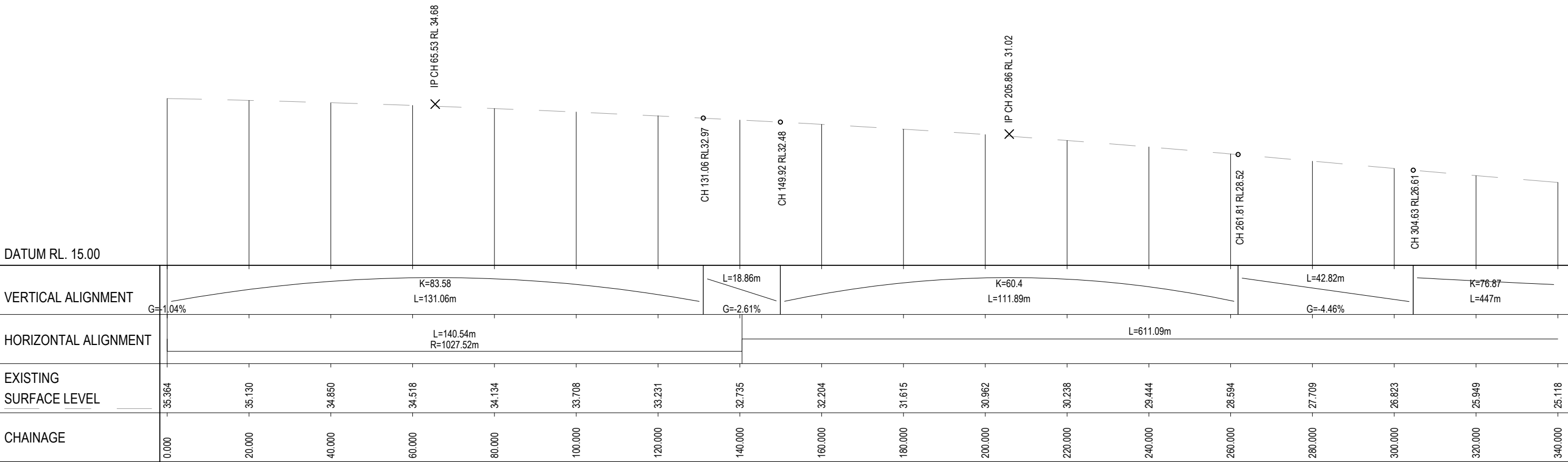
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Rev  
G

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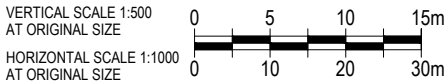
1. ROAD GEOMETRY ESTIMATED BASED ON EXISTING SURFACE SURVEY.  
VERTICAL AND HORIZONTAL ALIGNMENT TO MATCH EXISTING.



LONGITUDINAL SECTION - MC00

HORIZONTAL SCALE 1:1000  
VERTICAL SCALE 1:500

Rev	Description	Checked	Approved	Date
D	CONCEPT DESIGN FOR DA APPROVAL	A.S.	G.W.	27.07.23
C	CONCEPT DESIGN FOR DA APPROVAL			26.06.23
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Client	BORAL RESOURCES (NSW) PTY LTD
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Status	FOR APPROVAL

Drawing Title	LONGITUDINAL SECTIONS
	SHEET 1 OF 4

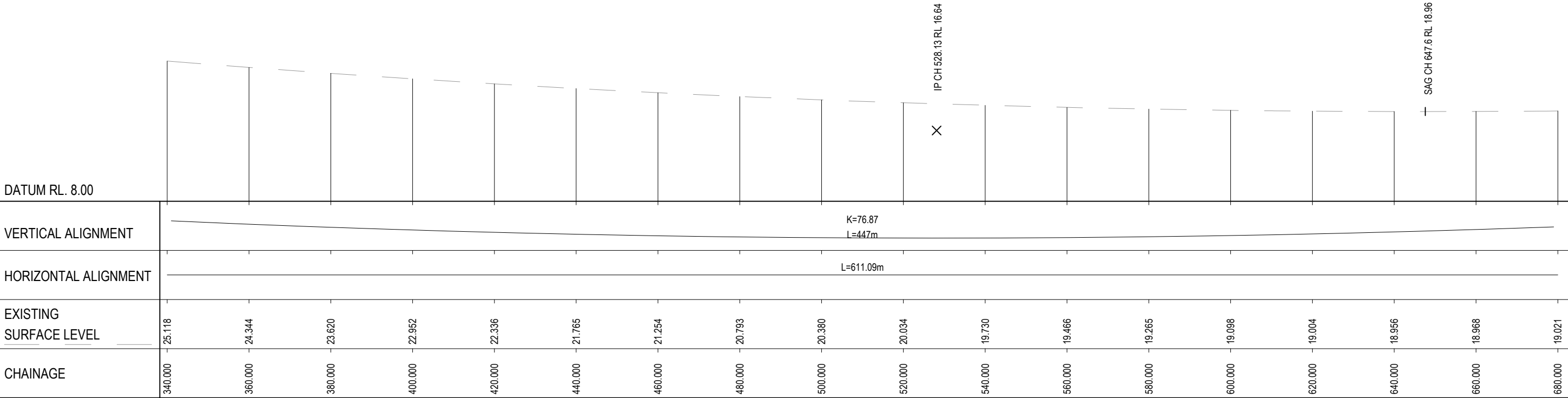
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Rev  
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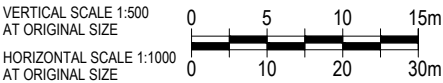
1. ROAD GEOMETRY ESTIMATED BASED ON EXISTING SURFACE SURVEY.  
VERTICAL AND HORIZONTAL ALIGNMENT TO MATCH EXISTING.



LONGITUDINAL SECTION - MC00

HORIZONTAL SCALE 1:1000  
VERTICAL SCALE 1:500

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Drawing Title	LONGITUDINAL SECTIONS
	SHEET 2 OF 4

12599191-GHD-00-00-DRG-CI-01112

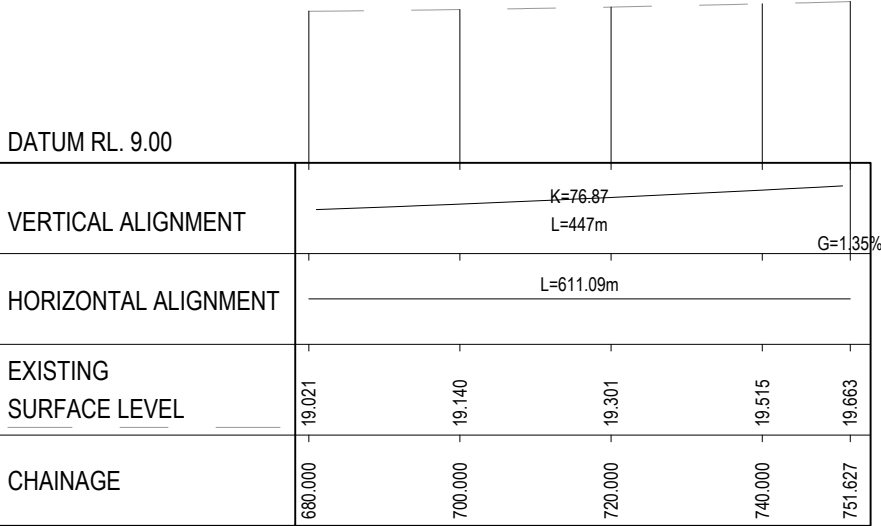
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Rev  
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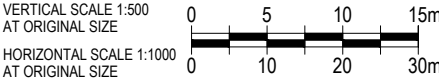
1. ROAD GEOMETRY ESTIMATED BASED ON EXISTING SURFACE SURVEY.  
VERTICAL AND HORIZONTAL ALIGNMENT TO MATCH EXISTING.



LONGITUDINAL SECTION - MC00

HORIZONTAL SCALE 1:1000  
VERTICAL SCALE 1:500

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ITALIA ROAD INTERSECTION

Status FOR APPROVAL

Drawing Title LONGITUDINAL SECTIONS

SHEET 3 OF 4

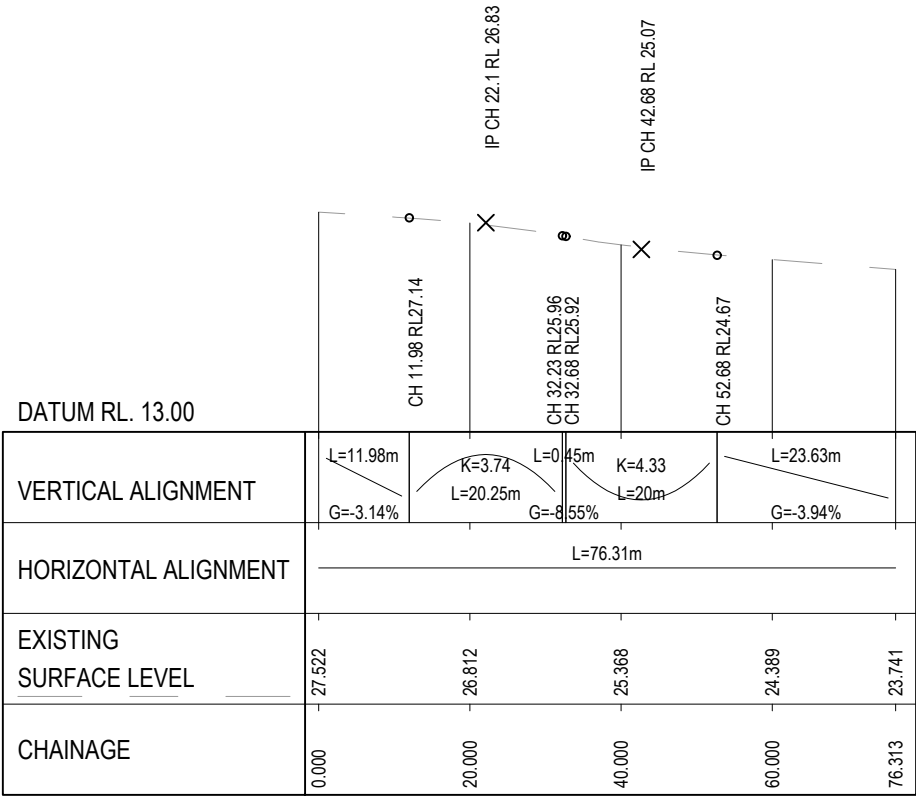
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Size  
A3

Rev  
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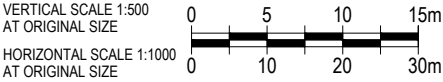
1. ROAD GEOMETRY ESTIMATED BASED ON EXISTING SURFACE SURVEY.  
VERTICAL AND HORIZONTAL ALIGNMENT TO MATCH EXISTING.



LONGITUDINAL SECTION - MC20

HORIZONTAL SCALE 1:1000  
VERTICAL SCALE 1:500

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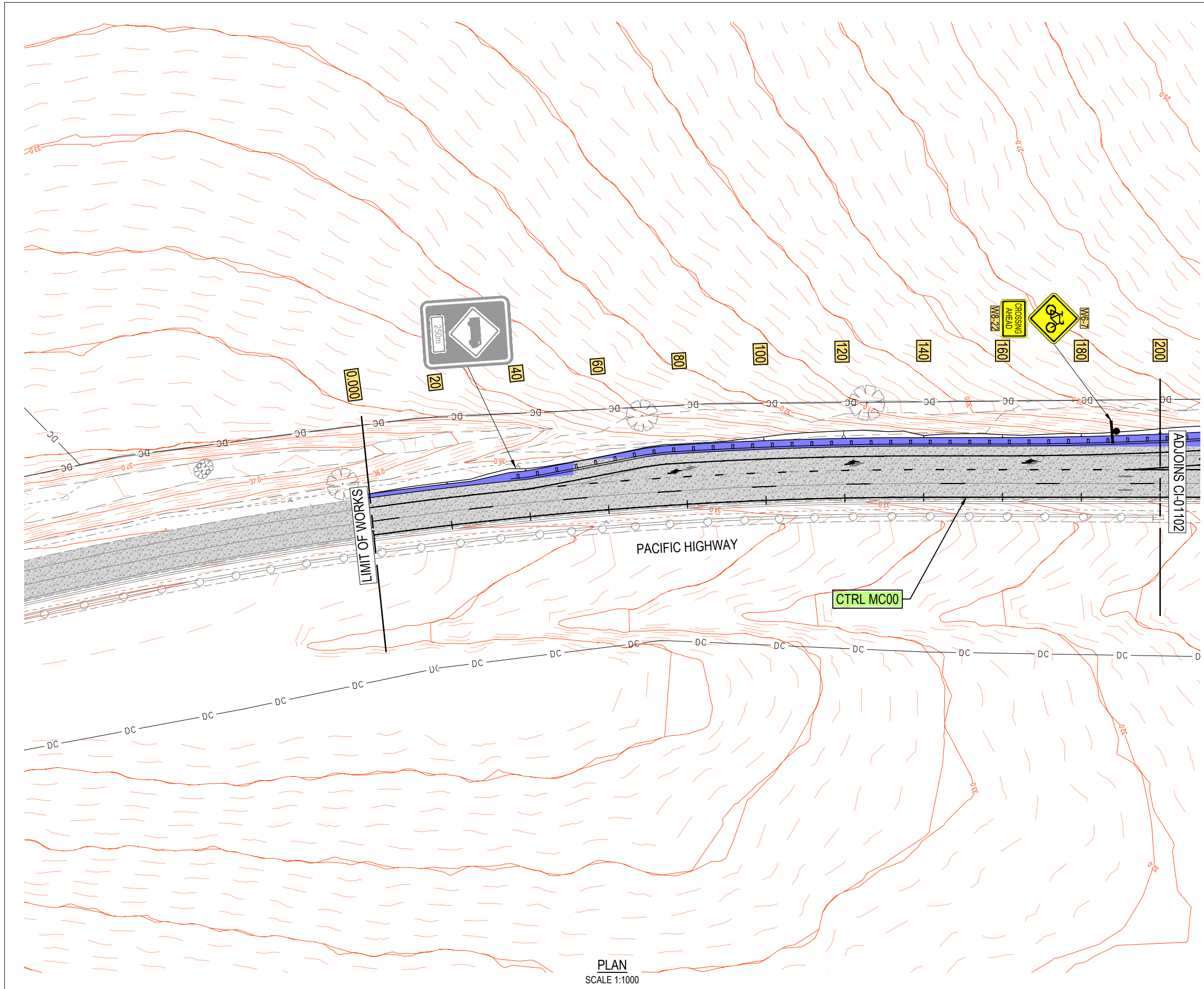
Drawing Title	LONGITUDINAL SECTIONS
	SHEET 4 OF 4

12599191-GHD-00-00-DRG-CI-01114

Size  
A3

Rev  
D





LEGEND

GENERAL

- EXISTING CONTOUR MAJOR (1.0m)
- EXISTING CONTOUR MINOR (0.2m)
- DESIGN CONTOUR MAJOR (1.0m)
- DESIGN CONTOUR MINOR (0.2m)
- SURVEY
- DESIGN STRINGS
- DC DIGITAL CADASTRE
- EXISTING BRIDGE DECK
- PROPOSED BRIDGE DECK
- EZYGUARD 4 (OR SIMILAR) BARRIER
- RETAINING WALL WITH TYPE F BARRIER
- BARRIER I.D. CALL UP

ROAD GEOMETRY & ALIGNMENT

- MASTER CONTROL LINE

ROADSIDE FURNITURE

- NEW SIGN LOCATION
- NEW SIGN (NOT TO SCALE)
- SIGN SIZE (WHERE APPLICABLE)
- SIGN NUMBER
- EXISTING SIGN (NOT TO SCALE)

DELINEATION

- NEW PAVEMENT MARKINGS

PAVEMENT

- PT1 - NEW CONCRETE PAVEMENT
- PT2 - NEW ASPHALT PAVEMENT.
- PT3 - NEW CONCRETE MEDIAN
- EXISTING CONCRETE PAVEMENT
- EXISTING FLEXIBLE PAVEMENT

NOTE

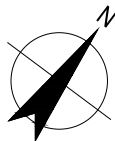
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- REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01111 FOR MC00 LONGITUDINAL SECTION
- REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01601 TO 12599191-GHD-00-00-DRG-CI-01606 FOR MC00 CROSS SECTIONS



UTILITY INFORMATION SHOWN ON THESE PLANS DOES NOT DEPICT ANY MORE THAN THE PRESENCE OF A SERVICE, BASED ON AVAILABLE DOCUMENTARY EVIDENCE. RELEVANT UTILITY PLANS ARE TO BE OBTAINED FROM BEFORE YOU DIG AUSTRALIA AND THE PRESENCE OF A UTILITY SERVICE, SIZE AND LOCATION TO BE CONFIRMED BY FIELD INSPECTION PRIOR TO THE COMMENCEMENT OF WORKS. CAUTION SHOULD BE EXERCISED WHEN WORKING IN THE VICINITY OF ALL UTILITY SERVICES.

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D	CONCEPT DESIGN FOR DA APPROVAL	A.S.	G.W.	27.07.23
C	CONCEPT DESIGN FOR DA APPROVAL			26.06.23
B	PRELIMINARY ISSUE FOR DISCUSSION			13.06.23
A	PRELIMINARY ISSUE FOR DISCUSSION			09.06.23
Author	B.DREW	Drafting Check	C.PURDON	
Designer	C.BARTLEY	Design Check	N.HINCKS	

0 10 20 30m  
SCALE 1:1000 AT ORIGINAL SIZE



PLAN  
SCALE 1:1000



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Project No.  
12599191

Client BORAL RESOURCES (NSW) PTY LTD

Project BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION

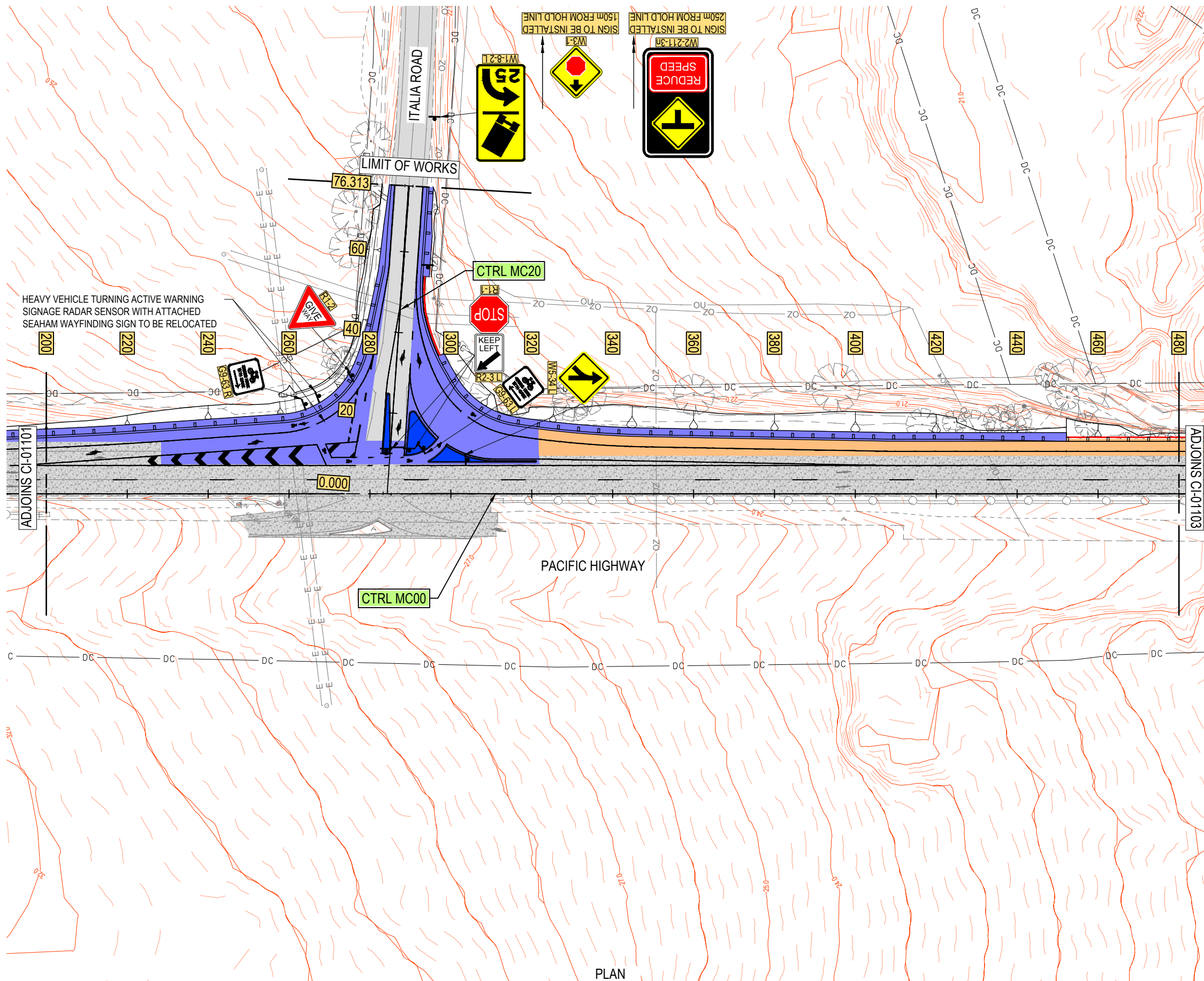
Status FOR APPROVAL

Drawing Title  
ROADSIDE FURNITURE  
AND PAVEMENT PLAN  
SHEET 1 OF 3

12599191-GHD-00-00-DRG-CI-01301

Size  
A3

Rev  
D

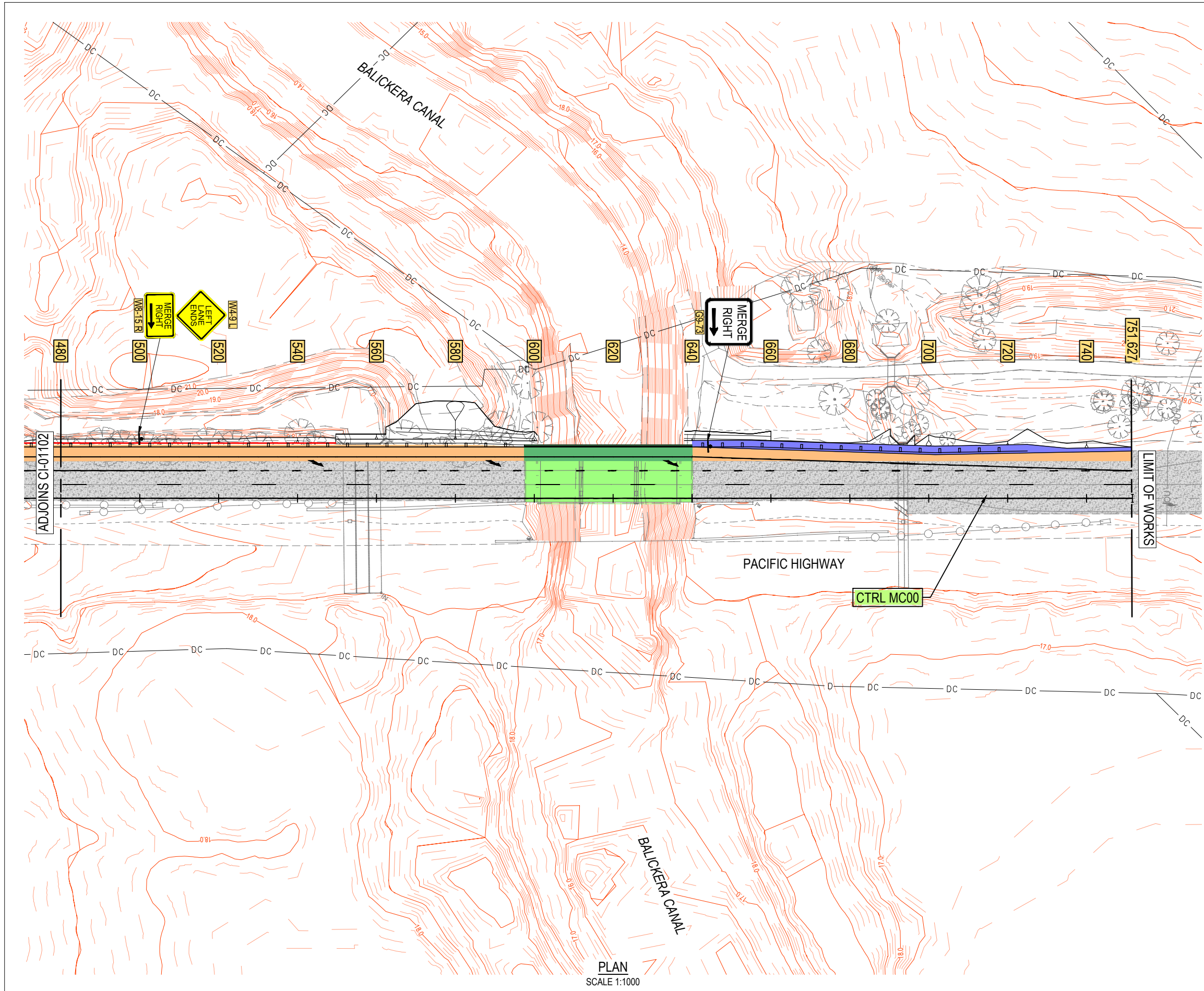


**LEGEND**  
**GENERAL**  
— 79.0 — EXISTING CONTOUR MAJOR (1.0m)  
- - - EXISTING CONTOUR MINOR (0.2m)  
— 79.0 — DESIGN CONTOUR MAJOR (1.0m)  
- - - DESIGN CONTOUR MINOR (0.2m)  
— SURVEY  
— DESIGN STRINGS  
— DC — DIGITAL CADASTRE  
EXISTING BRIDGE DECK  
PROPOSED BRIDGE DECK  
EZYGUARD 4 (OR SIMILAR) BARRIER  
RETAINING WALL WITH TYPE F BARRIER  
XX01 BARRIER I.D. CALL UP  
**ROAD GEOMETRY & ALIGNMENT**  
40 60 MASTER CONTROL LINE  
**ROADSIDE FURNITURE**  
NEW SIGN LOCATION  
NEW SIGN (NOT TO SCALE)  
R4-1A SIGN SIZE (WHERE APPLICABLE)  
SIGN NUMBER  
EXISTING SIGN (NOT TO SCALE)  
**DELINEATION**  
60 NEW PAVEMENT MARKINGS  
**PAVEMENT**  
PT1 - NEW CONCRETE PAVEMENT  
PT2 - NEW ASPHALT PAVEMENT.  
PT3 - NEW CONCRETE MEDIAN  
EXISTING CONCRETE PAVEMENT  
EXISTING FLEXIBLE PAVEMENT

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### LEGEND

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- DESIGN CONTOUR MAJOR (1.0m)
- DESIGN CONTOUR MINOR (0.2m)
- SURVEY
- DESIGN STRINGS
- DIGITAL CADASTRE
- EXISTING BRIDGE DECK
- PROPOSED BRIDGE DECK
- EZYGUARD 4 (OR SIMILAR) BARRIER
- RETAINING WALL WITH TYPE F BARRIER
- BARRIER I.D. CALL UP

#### ROAD GEOMETRY & ALIGNMENT

- MASTER CONTROL LINE

#### ROADSIDE FURNITURE

- NEW SIGN LOCATION
- NEW SIGN (NOT TO SCALE)
- SIGN SIZE (WHERE APPLICABLE) SIGN NUMBER
- EXISTING SIGN (NOT TO SCALE)

#### DELINEATION

- NEW PAVEMENT MARKINGS

#### PAVEMENT

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- EXISTING CONCRETE PAVEMENT
- EXISTING FLEXIBLE PAVEMENT

### NOTE

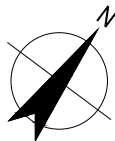
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Author	B.DREW	Drafting Check	C.PURDON	
Designer	C.BARTLEY	Design Check	N.HINCKS	

0 10 20 30m  
SCALE 1:1000 AT ORIGINAL SIZE



PLAN  
SCALE 1:1000



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Project BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION

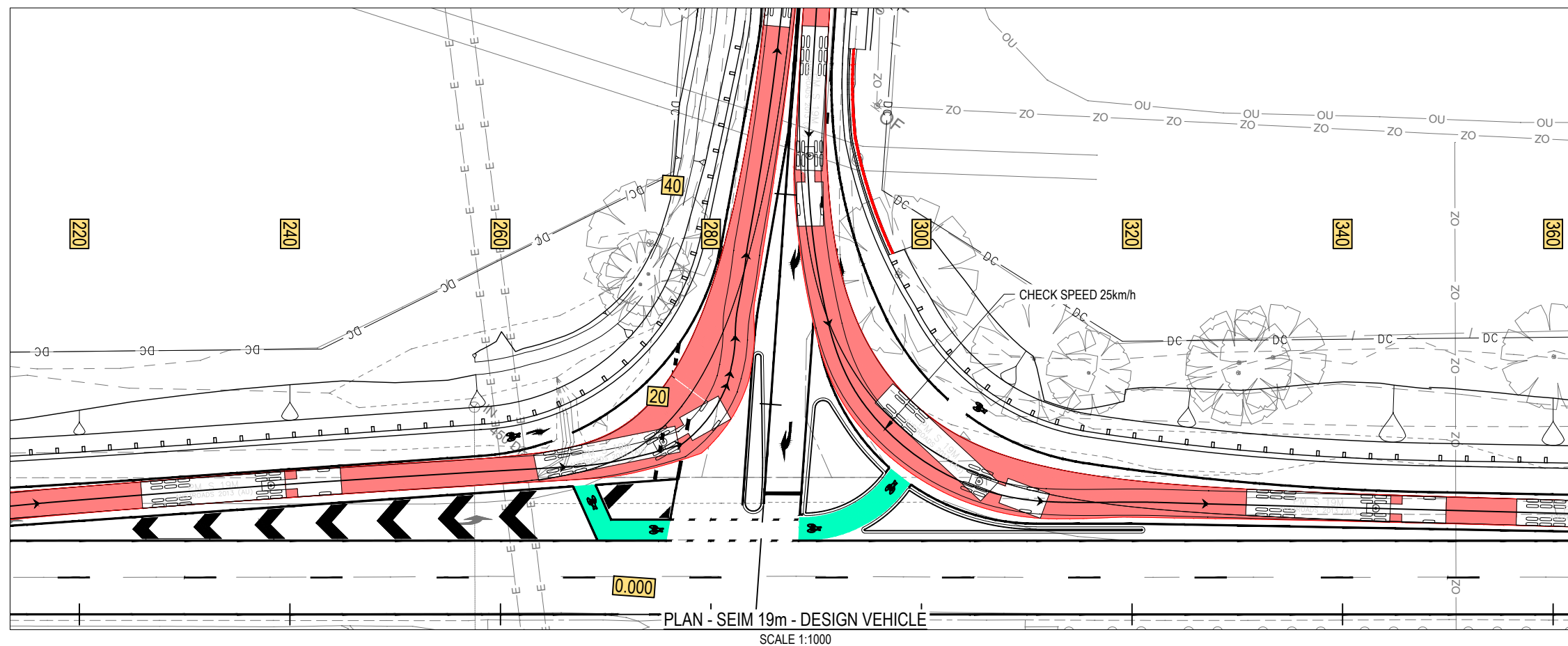
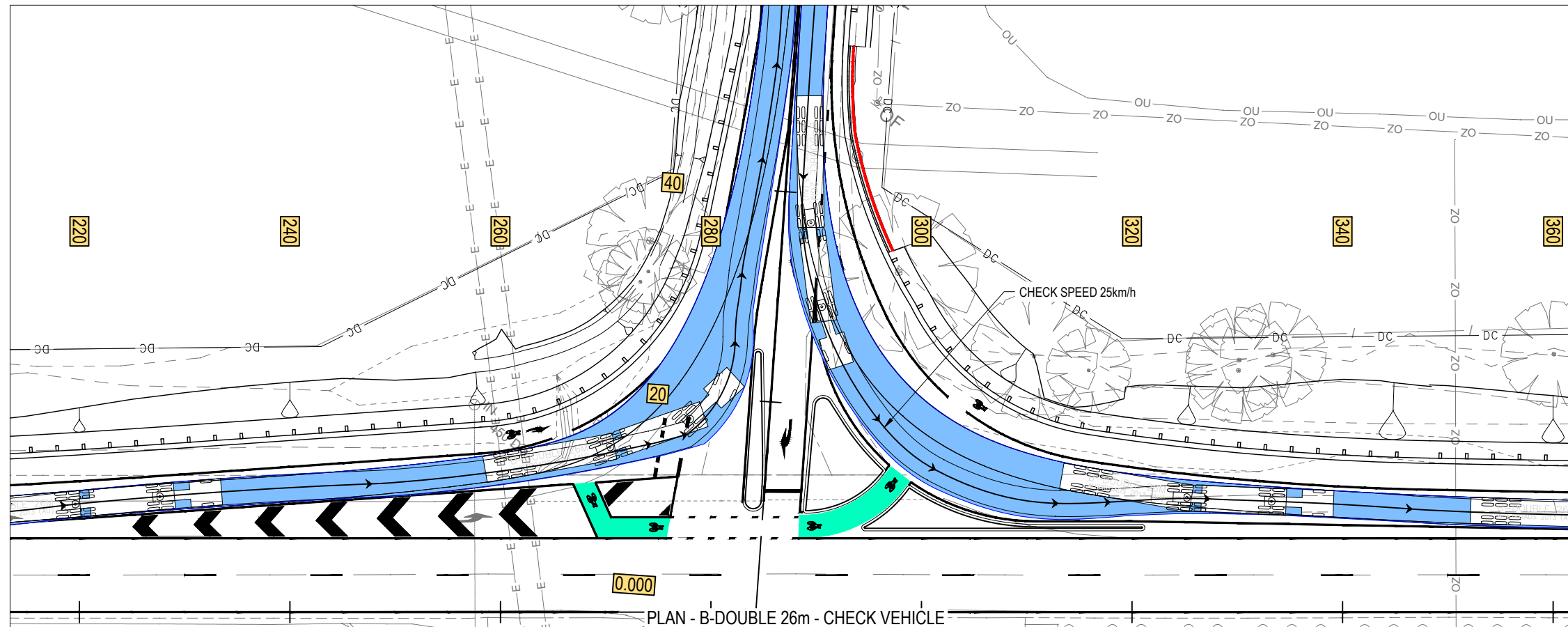
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Drawing Title  
ROADSIDE FURNITURE  
AND PAVEMENT PLAN  
SHEET 3 OF 3

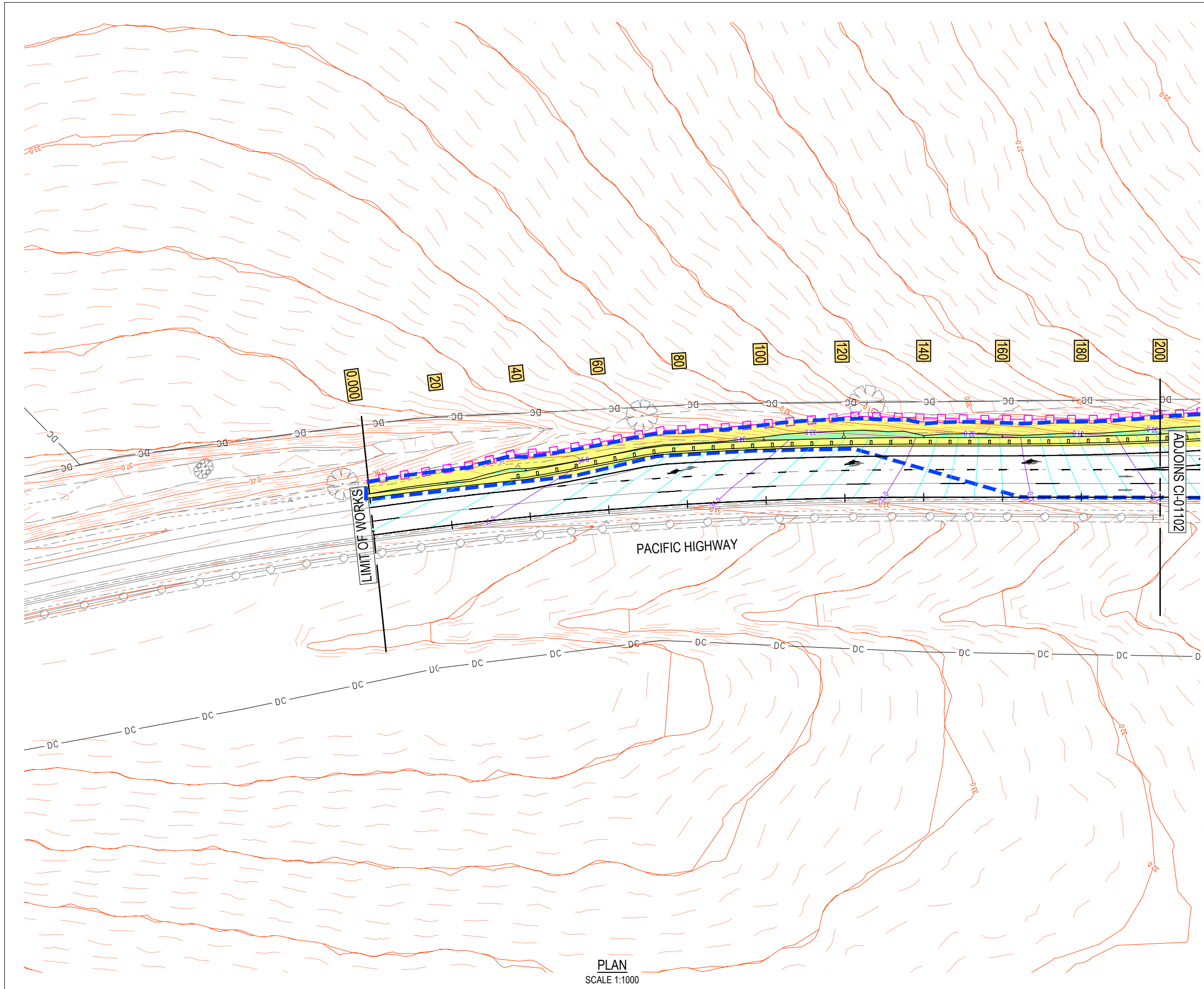
Drawing No.  
12599191-GHD-00-00-DRG-CI-01303

Size  
A3

Rev  
D







LEGEND

GENERAL

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- EXISTING CONTOUR MINOR (0.2m)
- DESIGN CONTOUR MAJOR (1.0m)
- DESIGN CONTOUR MINOR (0.2m)
- SURVEY
- DESIGN STRINGS
- DIGITAL CADASTRE
- BIO-RETENTION VEGETATED SWALE

EROSION AND SEDIMENT CONTROL

- CATCHMENT BOUNDARY
- GEOFABRIC SILT FENCE
- CLEAN WATER FLOW PATH
- TABLE DRAIN DIVERSION
- STRAW BALE SEDIMENT FILTER
- DISTURBANCE AREA

NOTE

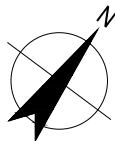
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F	CONCEPT DESIGN FOR DA APPROVAL	AS	GW	18.06.24
E	CONCEPT DESIGN FOR DA APPROVAL	A.S.	G.W.	27.07.23
D	CONCEPT DESIGN FOR DA APPROVAL			30.06.23
C	CONCEPT DESIGN FOR DA APPROVAL			26.06.23
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A	PRELIMINARY ISSUE FOR DISCUSSION			09.06.23
Rev	Description	Checked	Approved	Date
Author	B.DREW	Drafting Check	C.PURDON	
Designer	C.BARTLEY	Design Check	N.HINCKS	

0 10 20 30m  
SCALE 1:1000 AT ORIGINAL SIZE



PLAN  
SCALE 1:1000



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Project No.  
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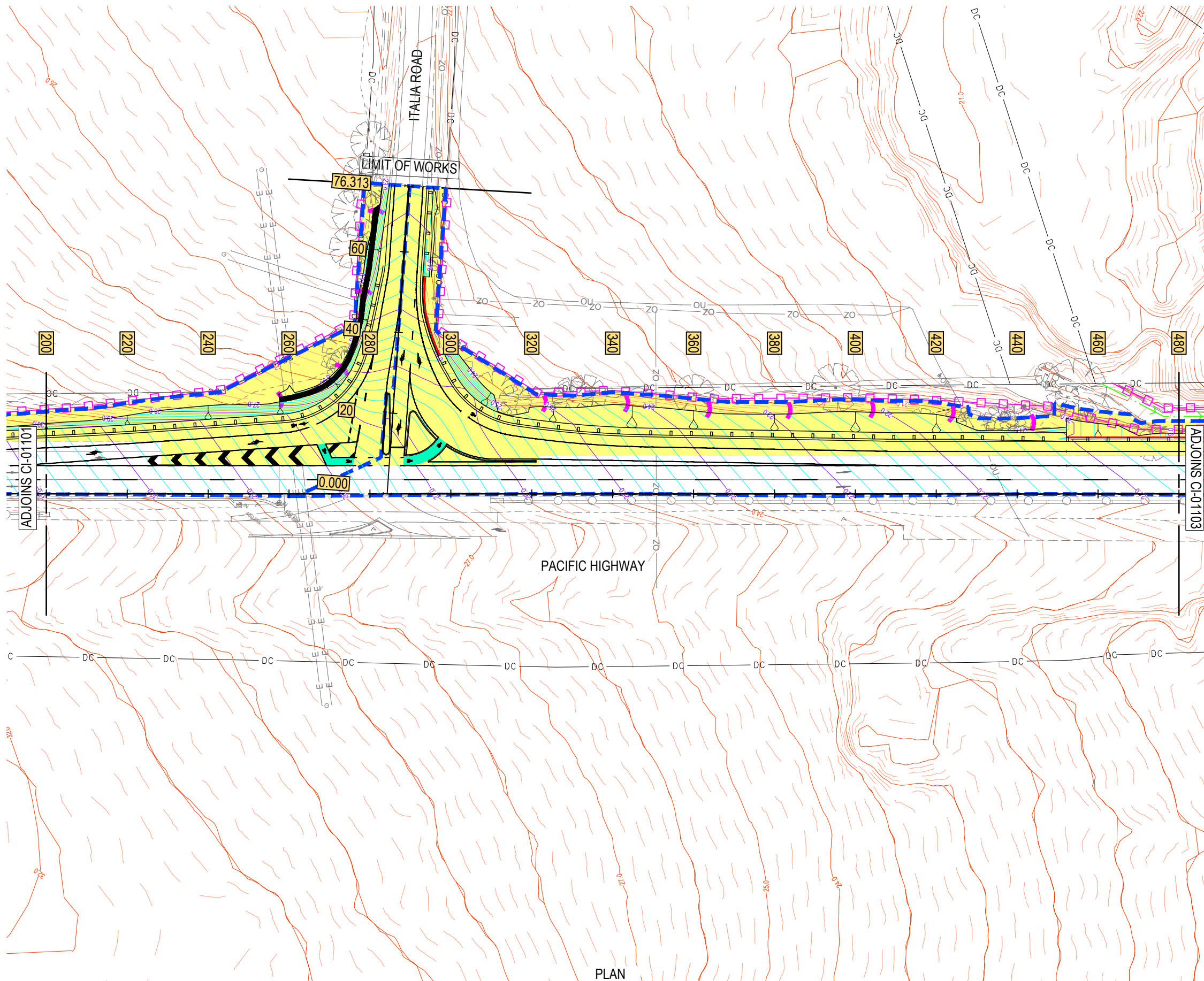
Client BORAL RESOURCES (NSW) PTY LTD  
Project BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION  
Status FOR APPROVAL

Drawing Title  
EROSION AND SEDIMENT  
CONTROL PLAN  
SHEET 1 OF 3

12599191-GHD-00-00-DRG-CI-01501

Size  
A3

Rev  
F



**LEGEND**

**GENERAL**

79.0EXISTING CONTOUR MAJOR (1.0m)

EXISTING CONTOUR MINOR (0.2m)79.0DESIGN CONTOUR MAJOR (1.0m)

DC

DIGITAL CADASTRE**EROSION AND SEDIMENT CONTROL**

- NOTE**
1.

REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01051 FOR OVERVIEW PLAN
2.

REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01111 FOR MC00 LONGITUDINAL SECTION
3.

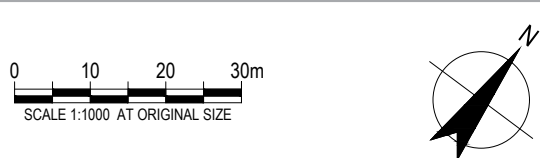
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**BEFORE YOU DIG**

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G SWALES ADDED FOR DA				A.S.	G.W.	04.11.24
Rev	Description	Checked	Approved	Date		
Author	A.SNEDDON	Drafting Check	C.PURDON			
Designer	C.BARTLEY	Design Check	N.HINCKS			



**GHD**

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Client

BORAL RESOURCES (NSW) PTY LTD

Project

BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION

Status

FOR APPROVAL

Drawing Title

EROSION AND SEDIMENT  
CONTROL PLAN  
SHEET 2 OF 3

Drawing No.

12599191-GHD-00-00-DRG-CI-01502

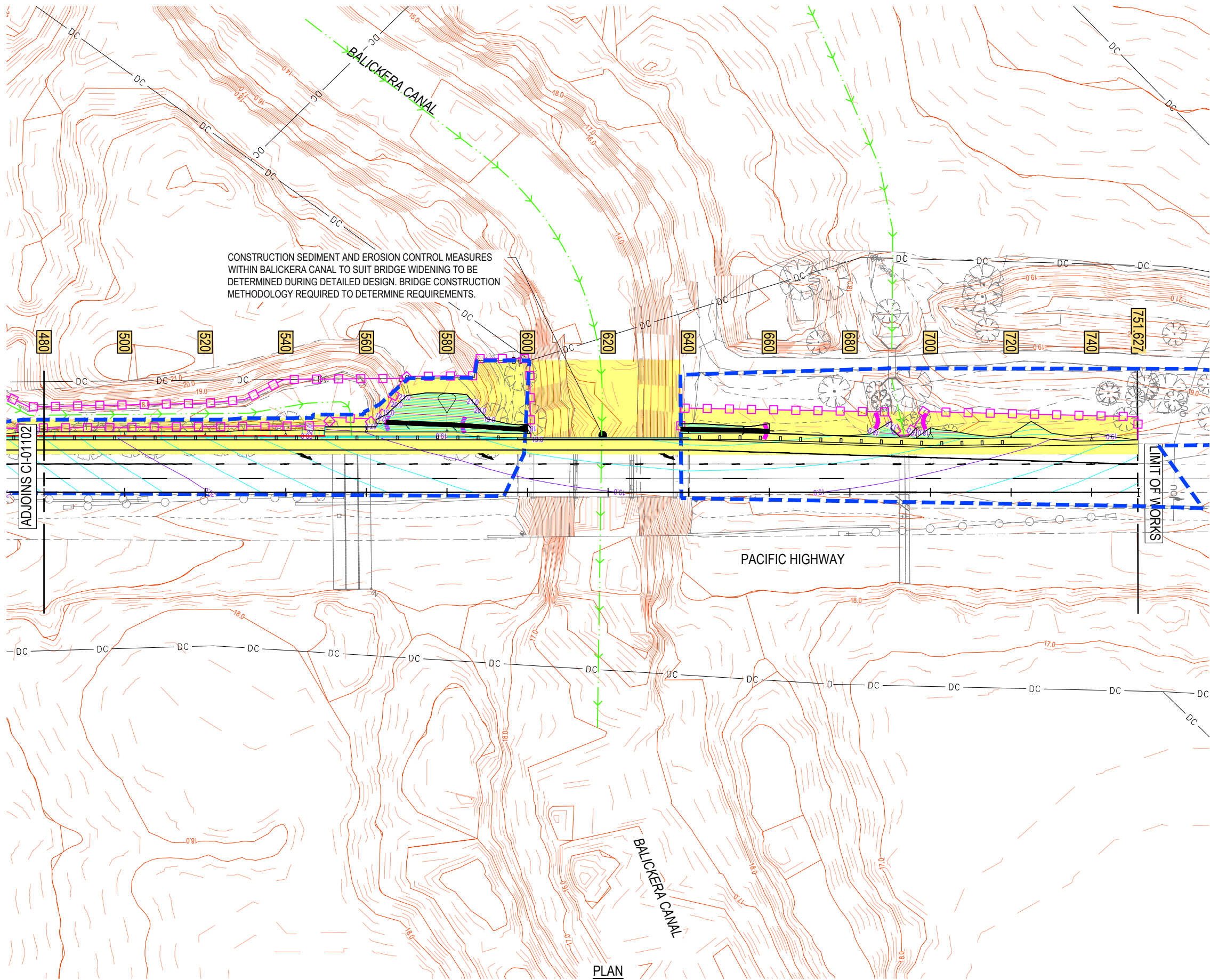
Rev

G

Size

A3





LEGEND

GENERAL

- EXISTING CONTOUR MAJOR (1.0m)
- EXISTING CONTOUR MINOR (0.2m)
- DESIGN CONTOUR MAJOR (1.0m)
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EROSION AND SEDIMENT CONTROL

- CATCHMENT BOUNDARY
- GEOFABRIC SILT FENCE
- CLEAN WATER FLOW PATH
- TABLE DRAIN DIVERSION
- STRAW BALE SEDIMENT FILTER
- DISTURBANCE AREA

NOTE

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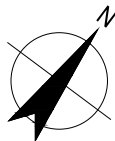


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PLAN  
SCALE 1:1000

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0 10 20 30m  
SCALE 1:1000 AT ORIGINAL SIZE



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Client BORAL RESOURCES (NSW) PTY LTD

Project BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION

Status FOR APPROVAL

Drawing Title  
EROSION AND SEDIMENT  
CONTROL PLAN  
SHEET 3 OF 3

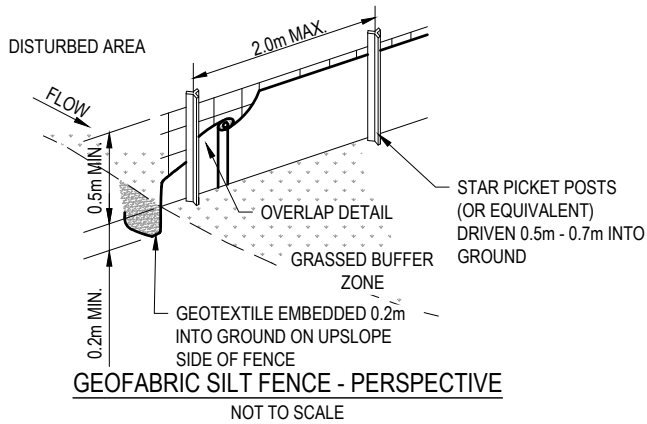
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Size  
A3

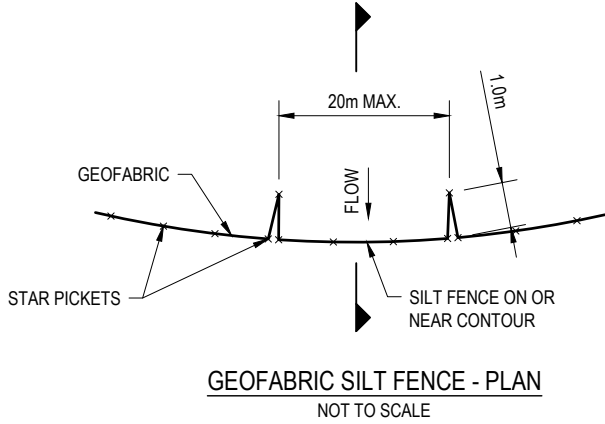
Rev  
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SEDIMENT AND EROSION CONTROL NOTES:

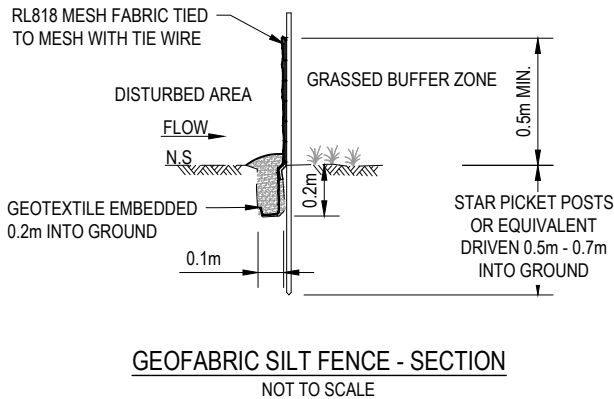
- DRAWINGS ARE ISSUED AS EXAMPLE ONLY. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE 'BLUE BOOK', SOILS AND CONSTRUCTION LANDCOM 2004 VOLUME 1 AND DEC VOLUME 2D AND OTHER ENVIRONMENTAL PRACTICES.
- DETAILS ON THESE PRELIMINARY EROSION AND SEDIMENT CONTROL PLANS (ESCP) ARE SCHEMATIC ONLY. ADDITIONAL CONTROLS AND CHANGES TO THIS PLAN WILL BE NECESSARY DURING THE PROCESS OF IMPLEMENTATION OF THE ESCP. IN CONJUNCTION WITH THE CONSTRUCTION STAGING PLANS AND SPECIFIC ON SITE CONSTRUCTION METHODOLOGY THE CONTRACTOR SHALL PREPARE PROGRESSIVE ESCP. THE ESCP IDENTIFY THE EROSION AND SEDIMENT CONTROLS NEEDED ON SITE, BUT ARE NOT CONSTRUCTION DRAWINGS AND ARE ISSUED FOR INFORMATION ONLY. ALTERNATIVE APPROVED PRIMARY EROSION SEDIMENT CONTROLS CAN BE USED TO SUIT THE METHOD AND SEQUENCE OF CONSTRUCTION.
- FOR ADDITIONAL EROSION AND SEDIMENT CONTROL DETAILS REFER TO THE BLUE BOOK STANDARD DRAWINGS AS NOMINATED
- THE SEQUENCE OF CONSTRUCTION SHALL BE AS FOLLOWS
  - IDENTIFY LOCATION OF ALL YOUR NEW EROSION AND SEDIMENT CONTROL MEASURES.
  - INSTALLATION OF BARRIER AND SEDIMENT FENCES.
  - INSTALLATION OF TEMPORARY SEDIMENT BASIN AND ENERGY DISSIPATER AT OUTLET WITH SEDIMENT FENCES AT DOWN SLOPE.
  - INSTALLATION OF ALL DIVERSION DRAINS AND LEVEL SPREADERS.
  - INSTALLATION OF ALL REMAINING EROSION AND SEDIMENT CONTROLS.
  - CLEARING AND REGRADING OF SITE FOR CONSTRUCTION.
- REFER TO THE TfNSW TYPICAL DRAWINGS R0100-01 TO R0100-12 AND THE 2008 'BLUE BOOK' TYPICAL DETAILS SD 4-1 TO SD 6-15.
- LOCATION OF TOPSOIL STOCKPILES TO BE DETERMINED BY THE CONTRACTOR AND STABILISED IN ACCORDANCE WITH SD4.1 AND SD6.8.
- AFTER REGRADING THE SITE, SEDIMENT FENCES SHALL BE LAID ALONG THE CONTOURS AT INTERVALS NOT EXCEEDING 80m. THIS INTERVAL SHALL BE REDUCED TO 20m ON BATTERS STEEPER THAN H.V=4.1.
- ALL DISTURBED AND REGRADED AREAS SHALL BE REHABILITATED WITHIN 20 DAYS POST CONSTRUCTION IN ACCORDANCE WITH REQUIREMENTS OF THE BLUE BOOK.
- NEW OR EXISTING INFRASTRUCTURE USED TO CONVEY SITE RUNOFF DURING CONSTRUCTION SHALL BE FLUSHED CLEAN OF SEDIMENT AT COMPLETION OF THE PROJECT.
- FIELD INSPECTIONS ARE TO BE UNDERTAKEN FOR ALL OPEN TRENCHES ON SITE TO ENSURE THAT ADEQUATE PROTECTION AGAINST EROSION IS PROVIDED AND THAT SAFETY MEASURES ARE ALSO PROVIDED IN PLACE AT THE END OF EACH DAY.
- LOCATION OF ALL SERVICES TO BE CONFIRMED PRIOR TO COMMENCING WORK AND MANAGE THE COORDINATION OF TEMPORARY DRAINAGE AND OTHER EROSION AND SEDIMENT CONTROLS WITH THE EXISTING AND NEW UTILITIES.
- ANY WORKS TO INSTALL UTILITIES OUTSIDE OF THE CONSTRUCTION AREAS SHOWN ON THESE PLANS ARE TO IMPLEMENT LOCAL EROSION AND SEDIMENT CONTROLS TO ENSURE ADEQUATE PROTECTION.
- THE PROVISION OF ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED FOR THE INSTALLATION OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH VOLUME 2A 'INSTALLATION OF SERVICES' OF THE BLUE BOOK.
- DIVERSION DRAINS MUST BE FULLY OPERATIONAL PRIOR TO ANY DISTURBANCE ON SITE.
- TEMPORARY DIVERSION DRAINS SHOULD BE CONSTRUCTED TO AVOID TREES AND FENCES.
- USE WOVEN POLYPROPYLENE AND COTTON/GEOTEXTILE THREAD WITH A FLOW RATE OF 15 L/s/m<sup>2</sup> TO AUSTRALIAN STANDARD AS 3706.9 WHEN INSTALLING SEDIMENT FENCES.
- ALL BARRIER FENCES (PARAWEBBING) ARE TO BE INSTALLED TO AVOID SOIL DISTURBANCE OUTSIDE THE CONSTRUCTION AREA.



GEOFABRIC SILT FENCE - PERSPECTIVE  
NOT TO SCALE



GEOFABRIC SILT FENCE - PLAN  
NOT TO SCALE

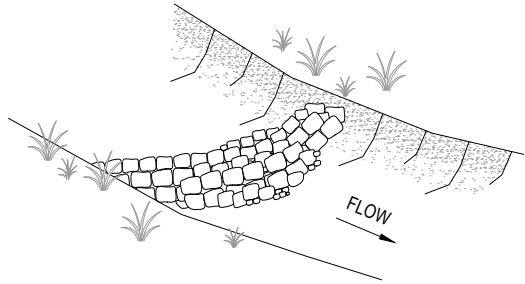


GEOFABRIC SILT FENCE - SECTION  
NOT TO SCALE

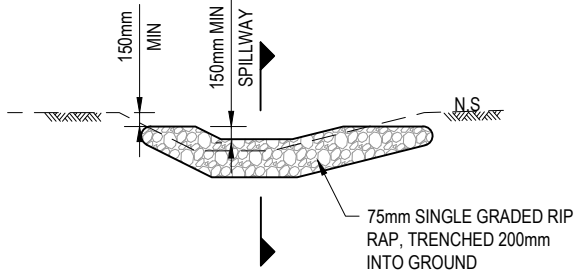
SPACING OF CHECK DAMS ALONG CENTRELINE AND SCOUR PROTECTION BELOW EACH CHECK DAM TO BE SPECIFIED ON CONSTRUCTORS SWMP/ESCP.



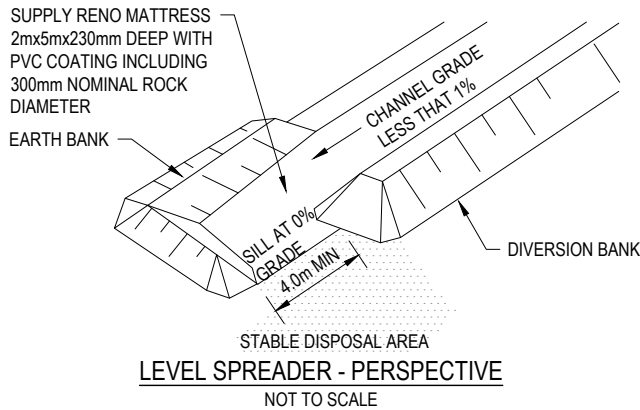
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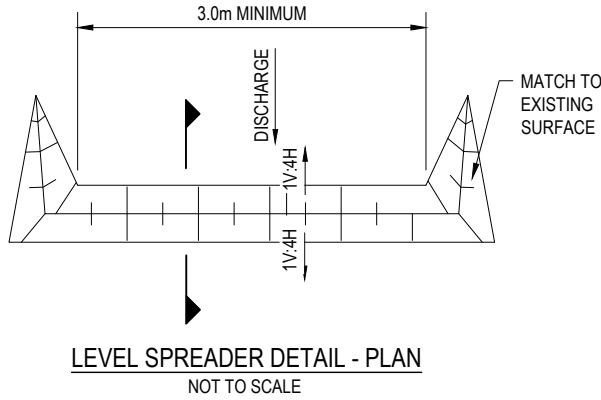
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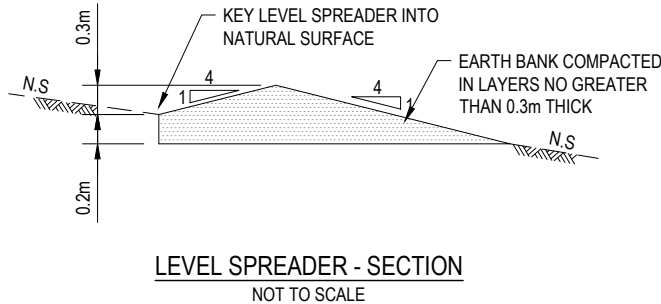
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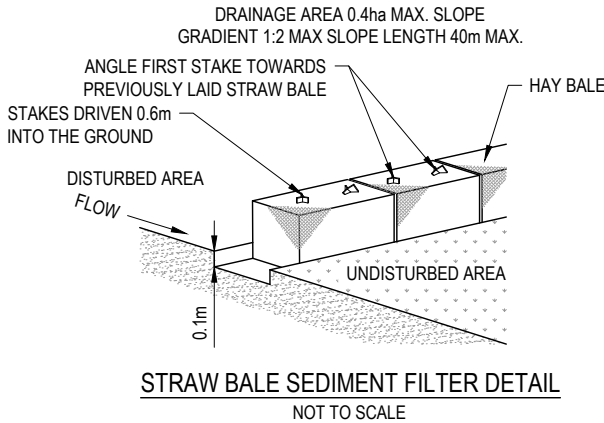
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NOT TO SCALE



LEVEL SPREADER DETAIL - PLAN  
NOT TO SCALE



LEVEL SPREADER - SECTION  
NOT TO SCALE



STRAW BALE SEDIMENT FILTER DETAIL  
NOT TO SCALE

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Project BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION  
Status FOR APPROVAL

Drawing Title  
EROSION AND SEDIMENT  
CONTROL  
NOTES AND DETAILS

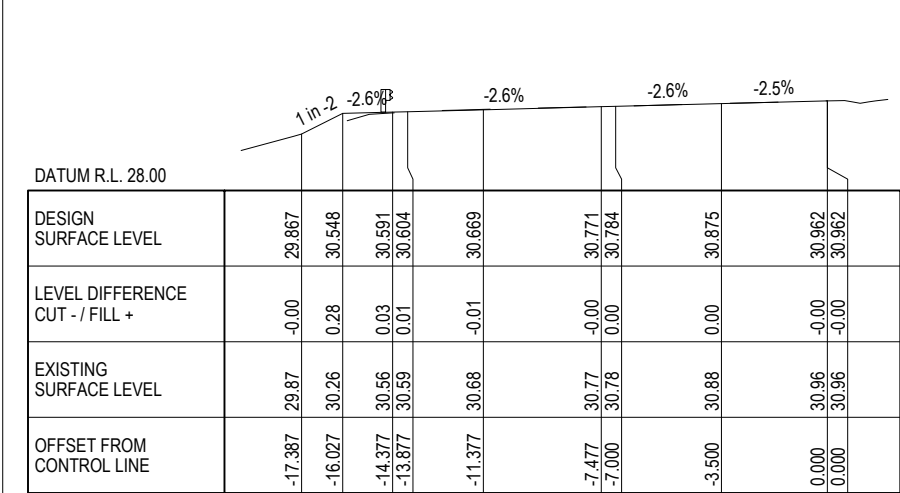
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Size  
A3

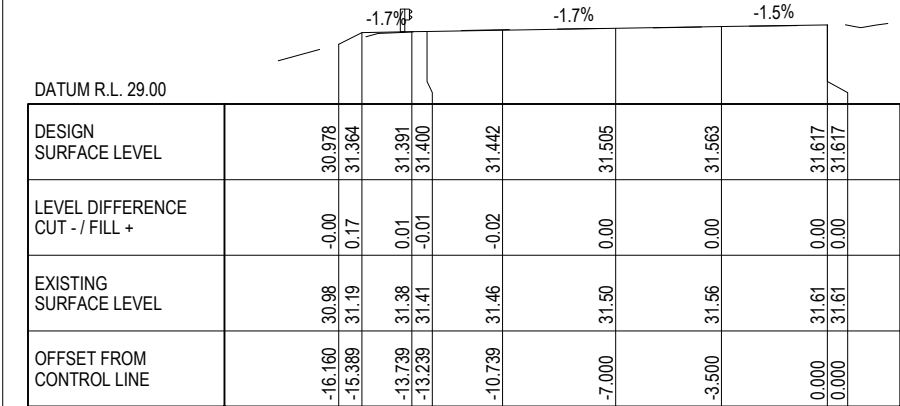
Rev  
D



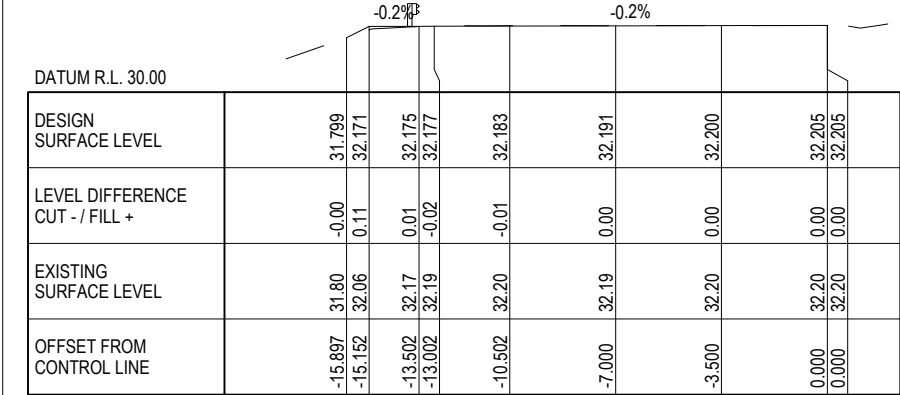




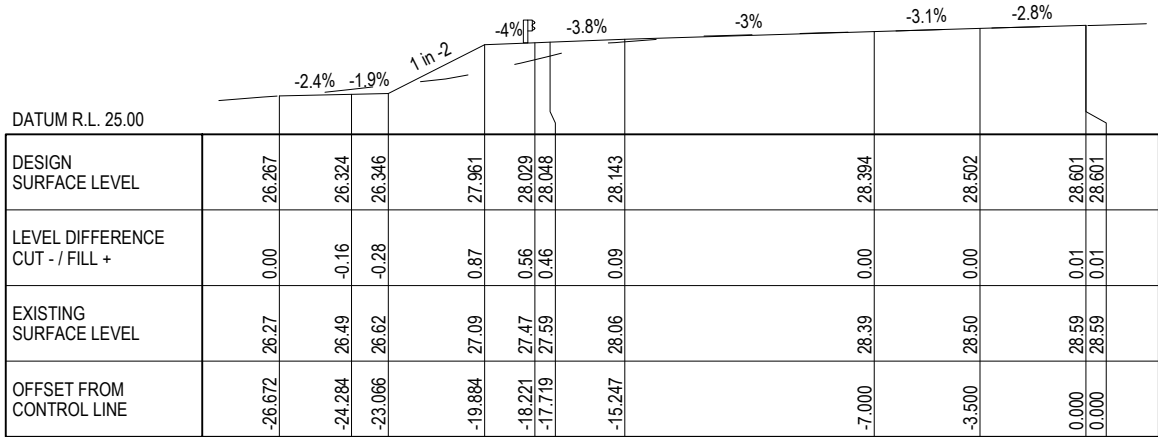
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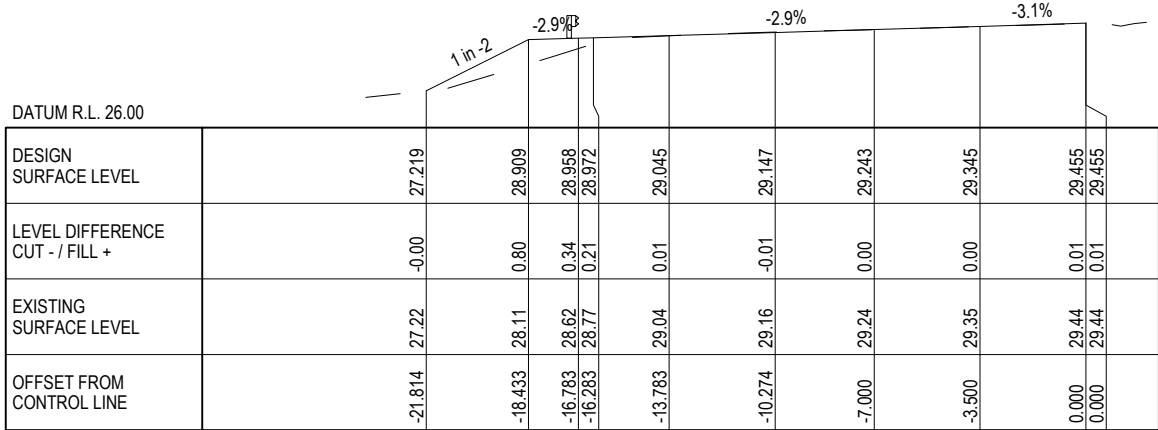
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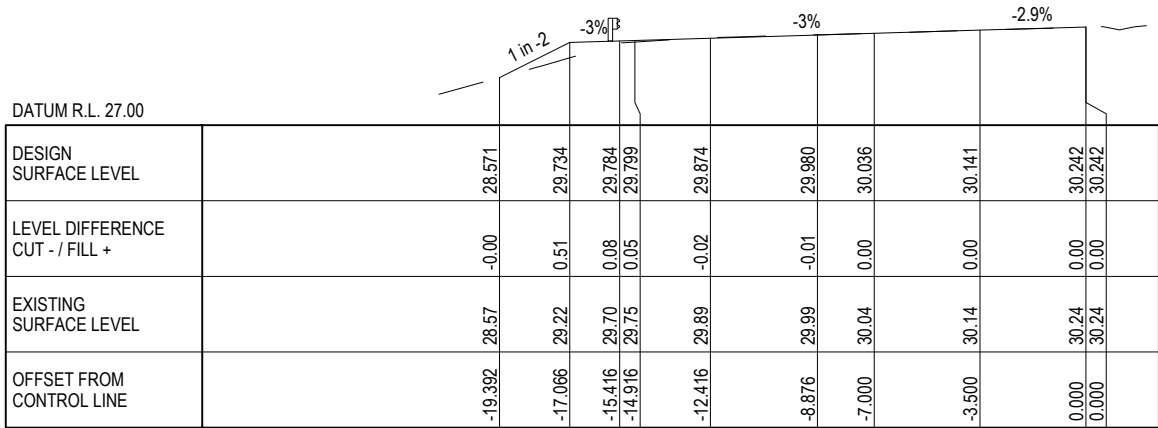
CH 160



CH 260

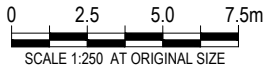


CH 240



CH 220

D	CONCEPT DESIGN FOR DA APPROVAL	A.S.	G.W.	27.07.23
C	CONCEPT DESIGN FOR DA APPROVAL			26.06.23
B	PRELIMINARY ISSUE FOR DISCUSSION			13.06.23
A	PRELIMINARY ISSUE FOR DISCUSSION			09.06.23
Rev	Description	Checked	Approved	Date
Author	B.DREW	Drafting Check	C.PURDON	
Designer	C.BARTLEY	Design Check	N.HINCKS	



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12599191

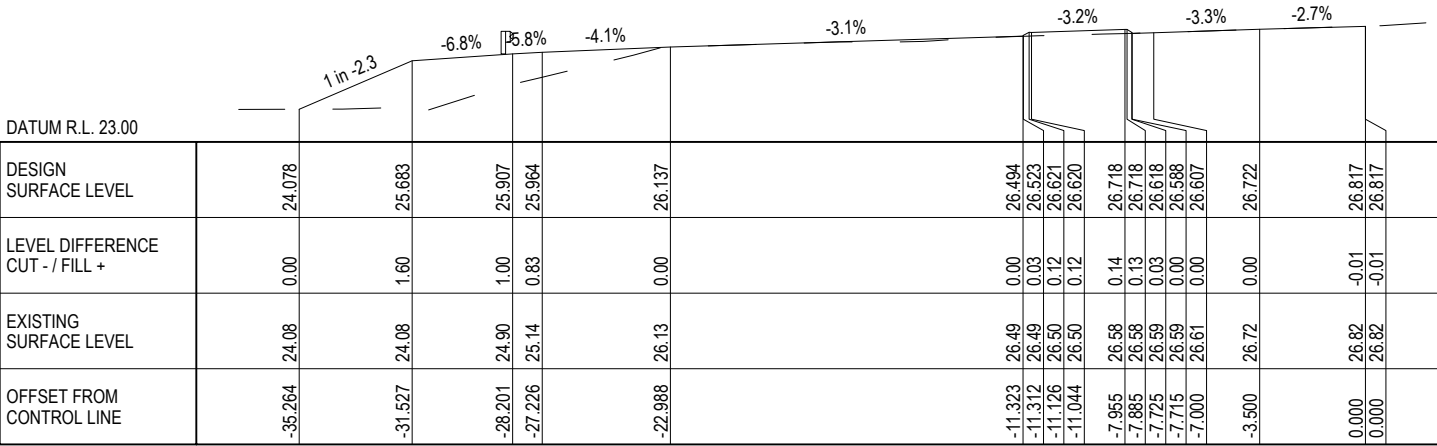
Client	BORAL RESOURCES (NSW) PTY LTD
Project	BORAL QUARRY SEAHAM ITALIA ROAD INTERSECTION
Status	FOR APPROVAL

Drawing Title  
CROSS SECTIONS  
  
SHEET 2 OF 6

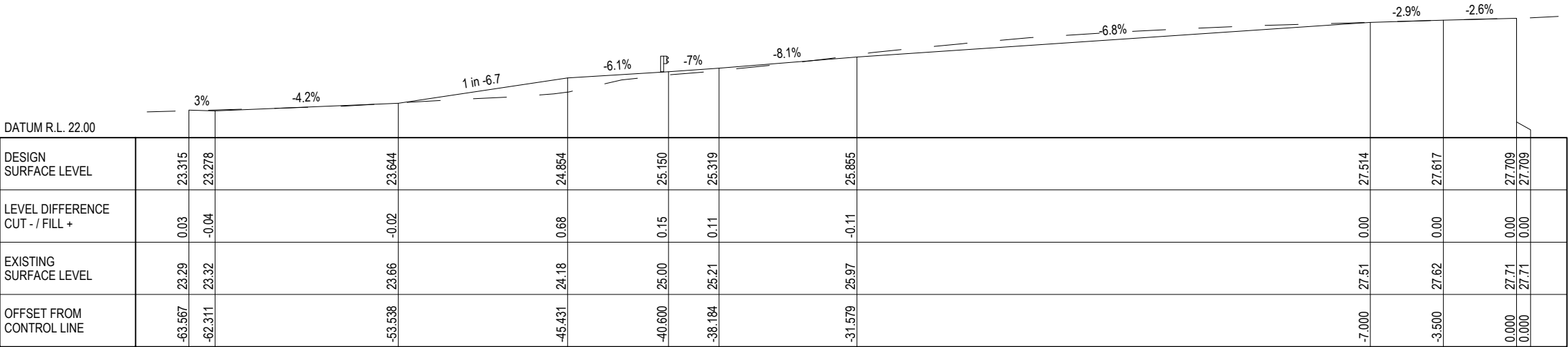
Drawing No.  
12599191-GHD-00-00-DRG-CI-01602

Size  
A3  
  
Rev  
D





CH 300



CH 280

D	CONCEPT DESIGN FOR DA APPROVAL	A.S.	G.W.	27.07.23
C	CONCEPT DESIGN FOR DA APPROVAL			26.06.23
B	PRELIMINARY ISSUE FOR DISCUSSION			13.06.23
A	PRELIMINARY ISSUE FOR DISCUSSION			09.06.23
Rev	Description	Checked	Approved	Date
Author	B.DREW	Drafting Check	C.PURDON	
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Project No.  
12599191

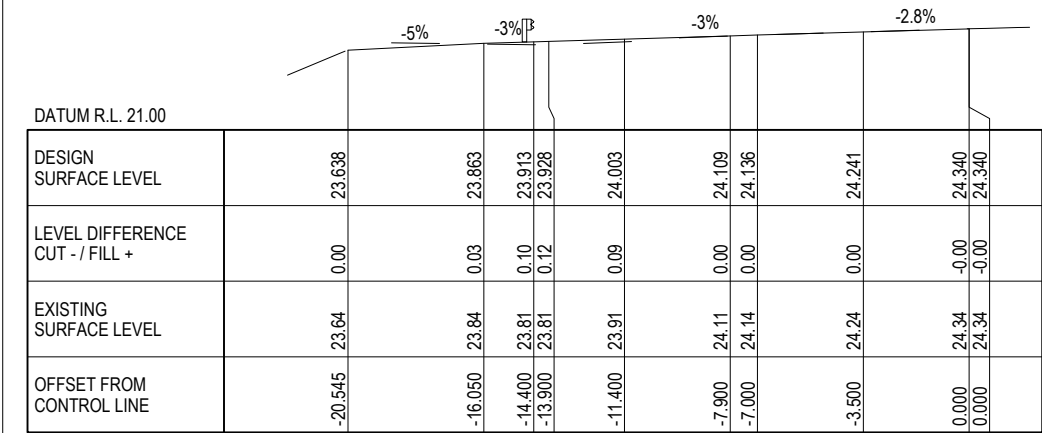
Client	BORAL RESOURCES (NSW) PTY LTD
Project	BORAL QUARRY SEAHAM ITALIA ROAD INTERSECTION
Status	FOR APPROVAL

Drawing Title  
CROSS SECTIONS  
  
SHEET 3 OF 6

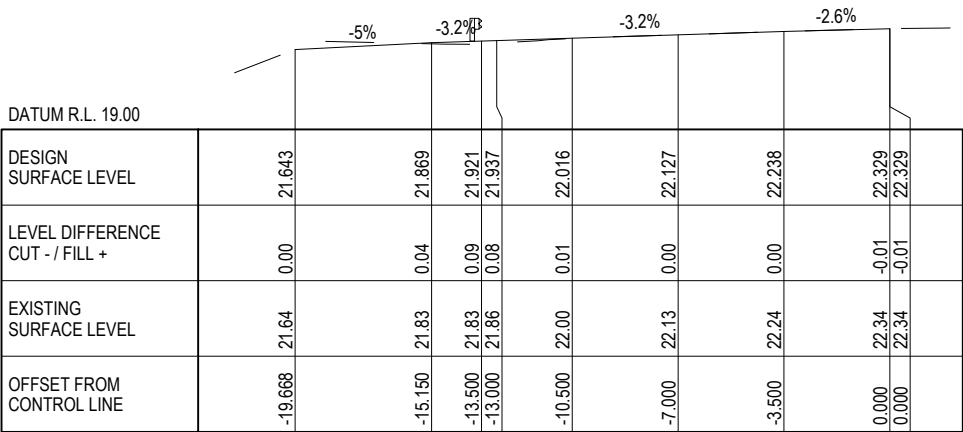
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Size  
A3

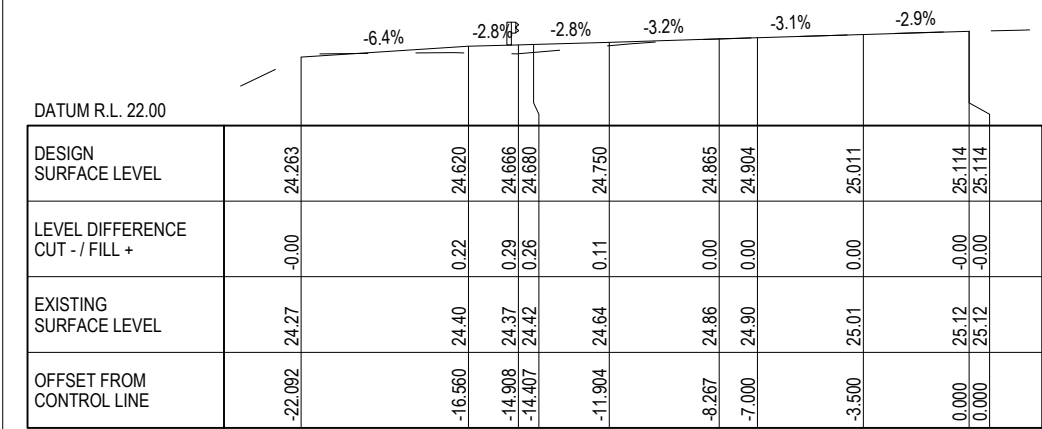
Rev  
D



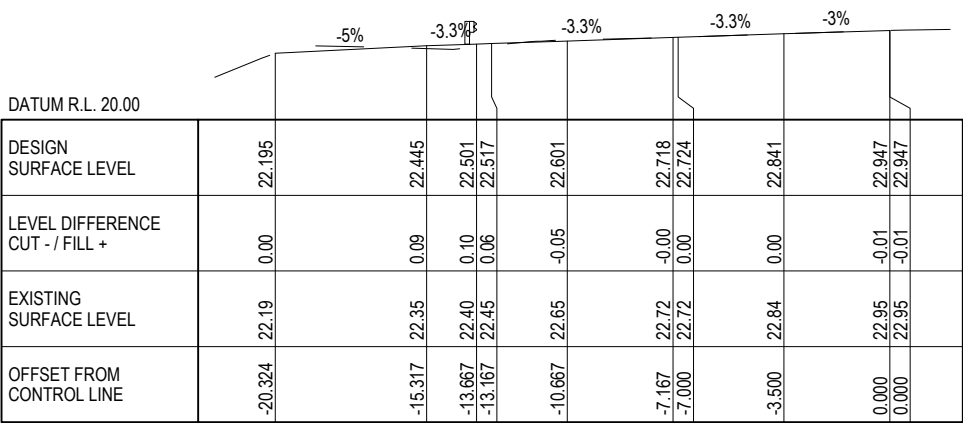
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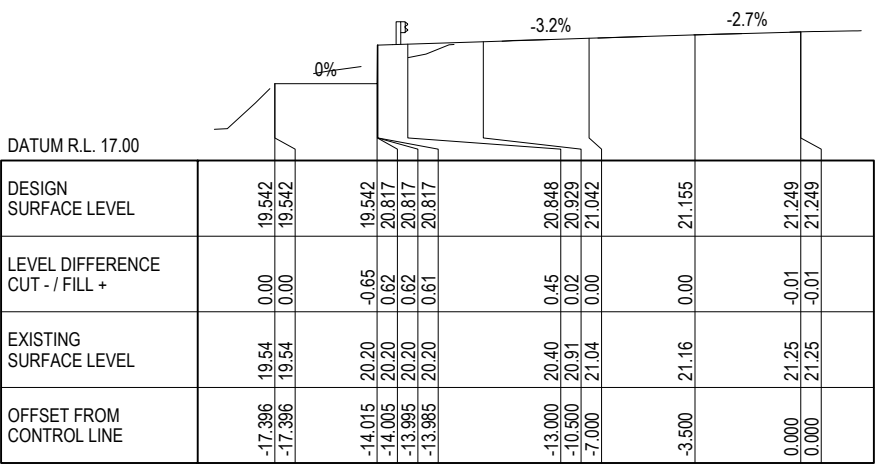
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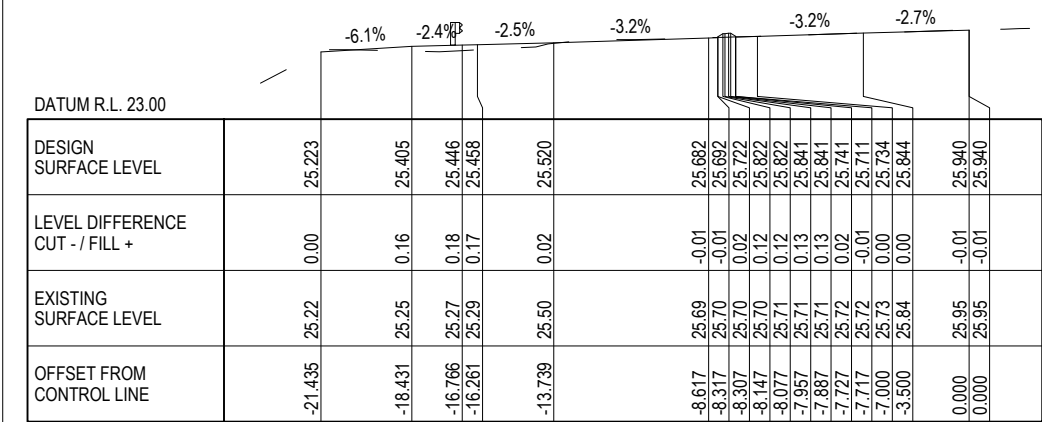
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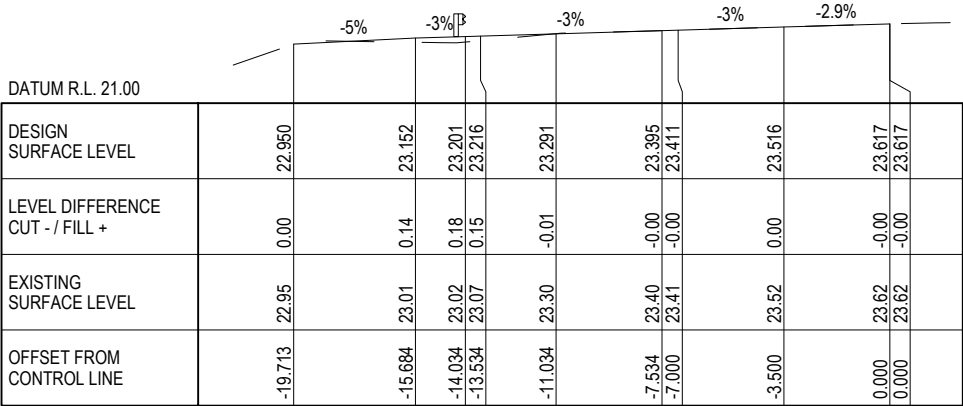
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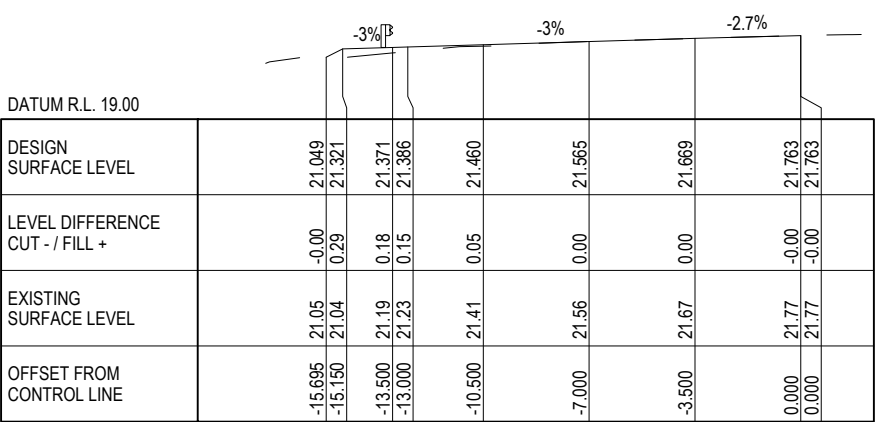
CH 460



CH 320



CH 380



CH 440

E	BARRIER SYSTEM AMENDED	A.S.	G.W.	29.10.24
D	CONCEPT DESIGN FOR DA APPROVAL	A.S.	G.W.	27.07.23
C	CONCEPT DESIGN FOR DA APPROVAL			26.06.23
B	PRELIMINARY ISSUE FOR DISCUSSION			13.06.23
A	PRELIMINARY ISSUE FOR DISCUSSION			09.06.23
Rev	Description	Checked	Approved	Date
Author	B.DREW	Drafting Check	C.PURDON	
Designer	C.BARTLEY	Design Check	N.HINCKS	



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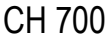
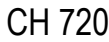
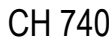
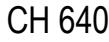
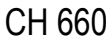
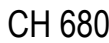
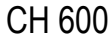
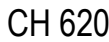
Client BORAL RESOURCES (NSW) PTY LTD  
Project BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION  
Status FOR APPROVAL

Drawing Title CROSS SECTIONS  
SHEET 4 OF 6

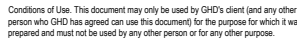
Drawing No. 12599191-GHD-00-00-DRG-CI-01604  
Rev E







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Project No  
12599191

Client	BORAL RESOURCES (NSW) PTY LTD
Project	BORAL QUARRY SEAHAM ITALIA ROAD INTERSECTION
Status	FOR APPROVAL

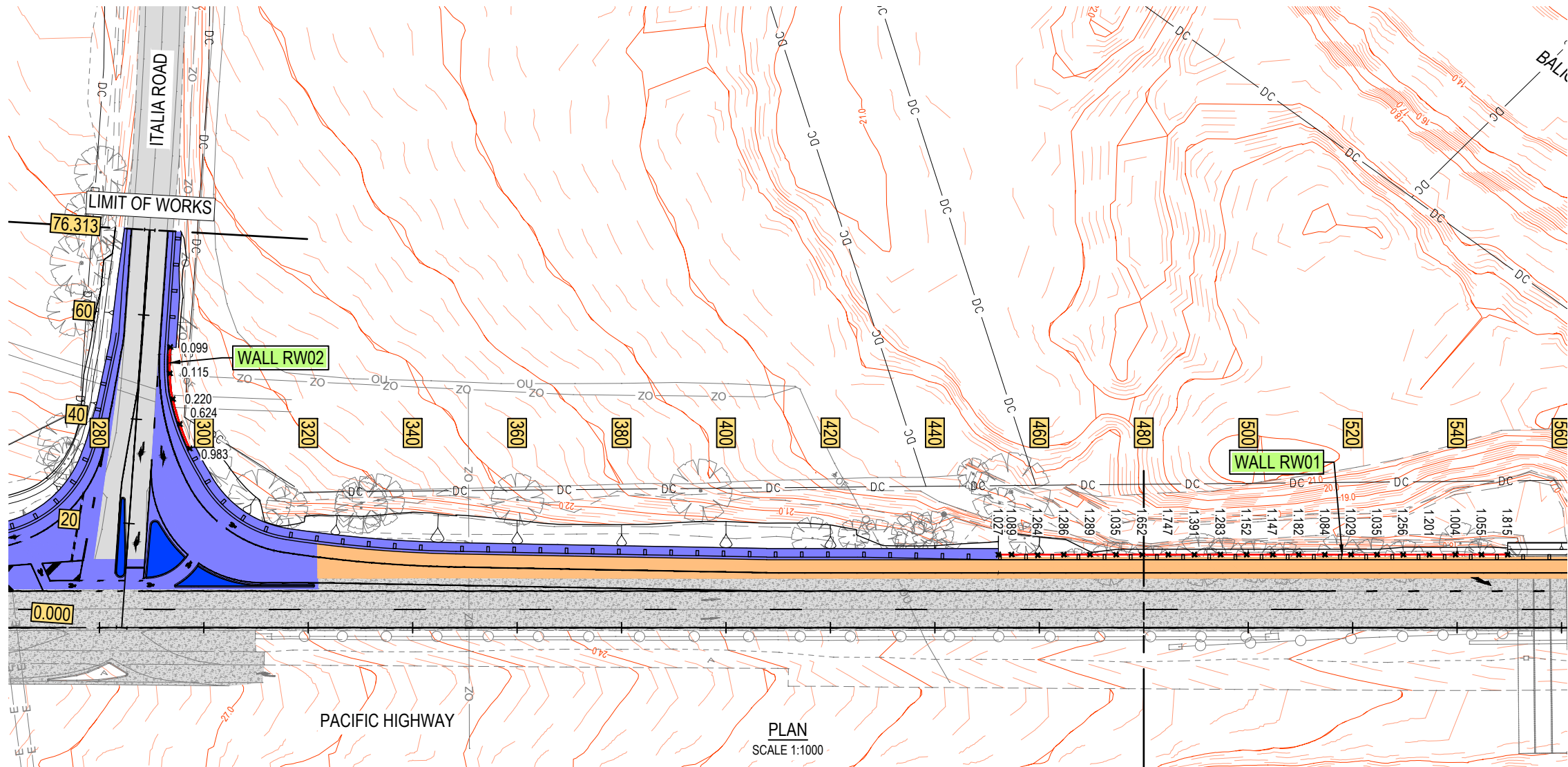
Drawing Title CROSS SECTIONS

SHEET 6 OF 6

12599191-GHD-00-00-DRG-CI-01606

Drawing No.	Rev
01606	D





LEGEND

GENERAL

79.0

EXISTING CONTOUR MAJOR (1.0m)

79.0

EXISTING CONTOUR MINOR (0.2m)

79.0

DESIGN CONTOUR MAJOR (1.0m)

79.0

DESIGN CONTOUR MINOR (0.2m)

SURVEY

DESIGN STRINGS

DC

DIGITAL CADASTRE

EXISTING BRIDGE DECK

PROPOSED BRIDGE DECK

EZYGUARD 4 (OR SIMILAR) BARRIER

RETAINING WALL

x

RETAINING WALL SPOT HEIGHT (m)

ROAD GEOMETRY & ALIGNMENT

40

60

MASTER CONTROL LINE

PAVEMENT

PT1 - NEW CONCRETE PAVEMENT

PT2 - NEW ASPHALT PAVEMENT.

PT3 - NEW CONCRETE MEDIAN

EXISTING CONCRETE PAVEMENT

EXISTING FLEXIBLE PAVEMENT

NOTE

1.

REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01051 FOR OVERVIEW PLAN

2.

REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01111 FOR MC00 LONGITUDINAL SECTION

3.

REFER TO DRAWINGS 12599191-GHD-00-00-DRG-CI-01601 TO 12599191-GHD-00-00-DRG-CI-01606 FOR MC00 CROSS SECTIONS

DATUM RL. 14.00					
DESIGN TOP OF WALL SURFACE LEVEL		25.496	25.186	24.915	24.612
DESIGN TOE OF WALL SURFACE LEVEL		24.513	24.562	24.695	24.562
EXISTING SURFACE LEVEL		24.345	24.590	24.714	24.584
HEIGHT OF WALL		0.983	0.624	0.220	0.115
CHAINAGE		0.000	5.000	10.000	15.000

LONGITUDINAL SECTION - RW02 TOP

HORIZONTAL SCALE 1:1000

VERTICAL SCALE 1:500

DATUM RL. 7.00											
DESIGN TOP OF WALL SURFACE LEVEL		19.169	19.241	19.304	19.368	19.441	19.515	19.592	19.672	19.768	19.863
DESIGN TOE OF WALL SURFACE LEVEL		17.354	18.186	18.300	18.167	18.185	18.480	18.563	18.588	18.586	18.716
EXISTING SURFACE LEVEL		18.867	18.978	19.023	18.922	18.883	18.969	18.989	19.016	19.037	19.242
HEIGHT OF WALL		1.815	1.055	1.004	1.201	1.256	1.035	1.029	1.084	1.182	1.147
CHAINAGE		0.000	5.000	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000

LONGITUDINAL SECTION - RW01 TOP

HORIZONTAL SCALE 1:1000

VERTICAL SCALE 1:500

BEFORE YOU DIG

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A CONCEPT DESIGN FOR DA APPROVAL				AS	GW	18.06.24
Rev	Description	Checked	Approved	Date		
Author	C.BARTLEY	Drafting Check	C.PURDON			
Designer	C.BARTLEY	Design Check	N.HINCKS			

Plot Date: 4 November 2024 - 4:10 PM

Plotted by: Blake Drew

File Name: C:\12d\ISW\data\IP-00-12D-00\122-12599191 - Boral Quarry - Italia Rd Int\_2538\CADD\Drawings\DRG\12599191-GHD-00-00-DRG-CI-01700.dwg

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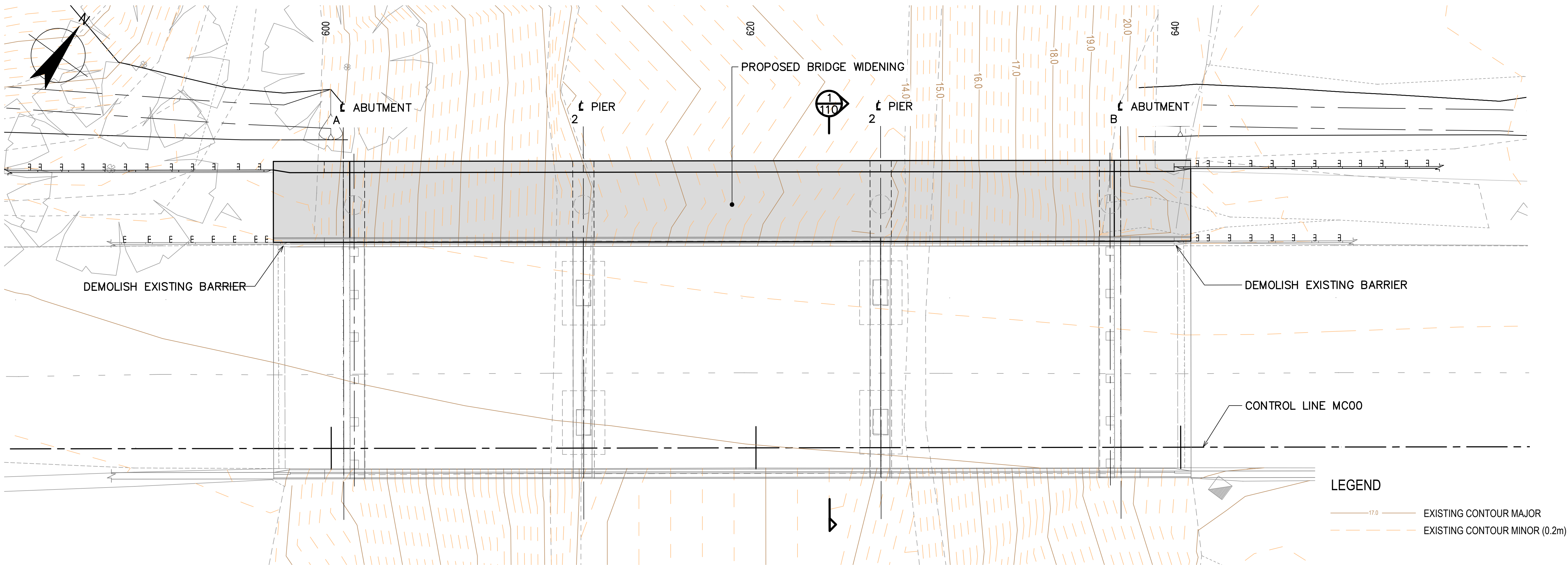
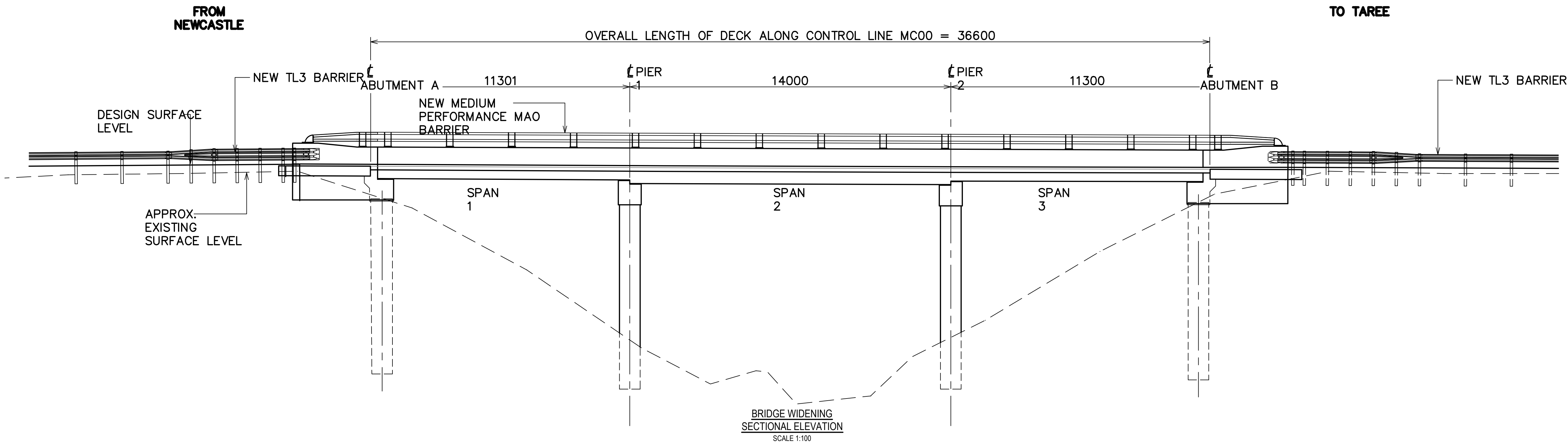


Project No.  
12599191

Client	BORAL RESOURCES (NSW) PTY LTD
Project	BORAL QUARRY SEAHAM ITALIA ROAD INTERSECTION
Status	FOR APPROVAL

Drawing Title	RETAINING WALL LOCATIONS AND PROFILES SHEET 1 OF 1
Drawing No.	12599191-GHD-00-00-DRG-CI-01701
Rev	A

Size  
A3



Rev	Description	Checked	Approved	Date
C	BARRIER SYSTEM AMENDED			29.10.24
B	CONCEPT DESIGN FOR DA APPROVAL			23.06.23
A	PRELIMINARY FOR DISCUSSION			13.06.23
Author	C.GARDINER	Drafting Check		
Designer	B.GELLATLY	Design Check		



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Project No.  
12599191

Client BORAL RESOURCES (NSW) PTY LTD

Project BORAL QUARRY SEAHAM  
ITALIA ROAD INTERSECTION

Status FOR APPROVAL

Drawing Title  
BRIDGE WIDENING

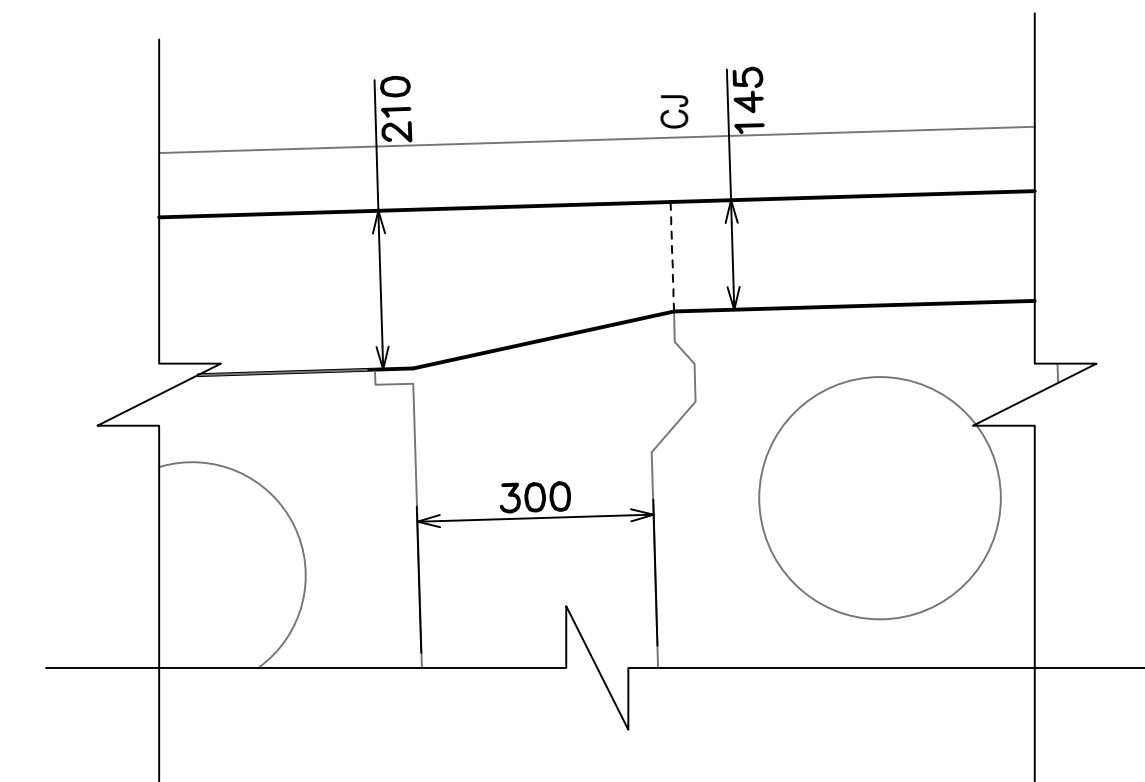
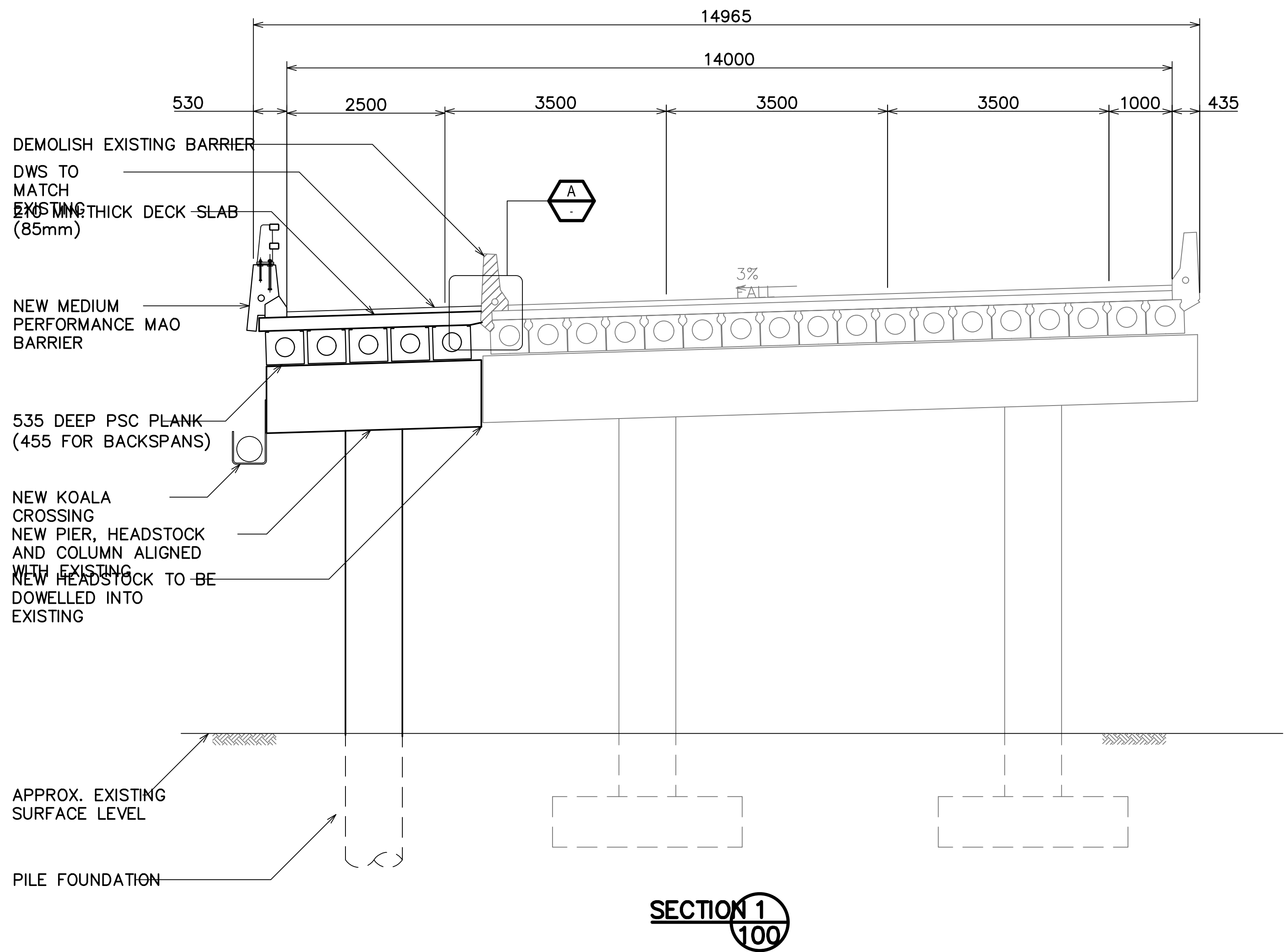
GENERAL ARRANGEMENT

Drawing No.  
12599191-GHD-00-00-DRG-ST-00100

Size  
A1

Rev  
C

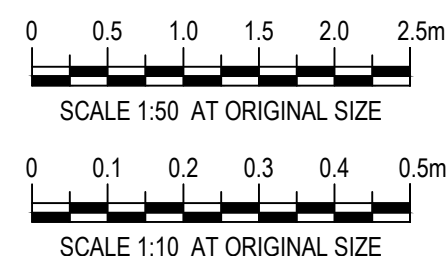




RC DECK SLAB TRANSITION / TAPER

**A** DETAIL  
SCALE 1:10

Rev	Description	Checked	Approved	Date
B	CONCEPT DESIGN FOR DA APPROVAL			23.06.23
A	PRELIMINARY FOR DISCUSSION			19.06.23
Author	C.GARDINER	Drafting Check		
Designer	B.GELLATLY	Design Check		



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Project	BORAL QUARRY SEAHAM ITALIA ROAD INTERSECTION
Status	FOR APPROVAL

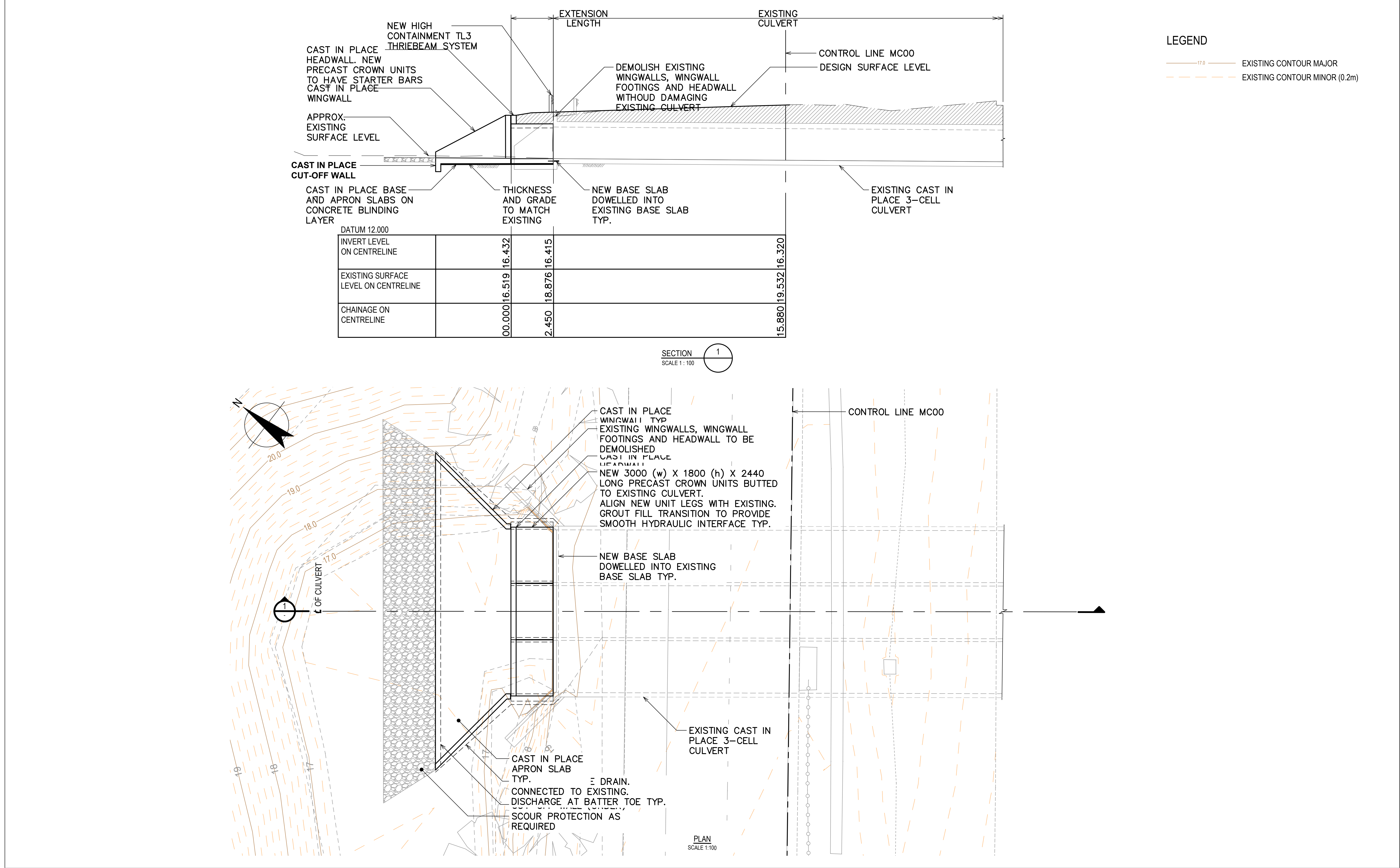
Drawing Title  
BRIDGE WIDENING

SECTION AND DETAILS

12599191-GHD-00-00-DRG-ST-001110

Size  
A1

Rev  
B



C	BARRIER SYSTEM AMENDED	29.10.24	
B	CONCEPT DESIGN FOR DA APPROVAL	23.06.23	
A	PRELIMINARY FOR DISCUSSION	19.06.23	
Rev	Description	Checked	Approved Date
Author	C.GARDINER	Drafting Check	
Designer	B.GELLATLY	Design Check	



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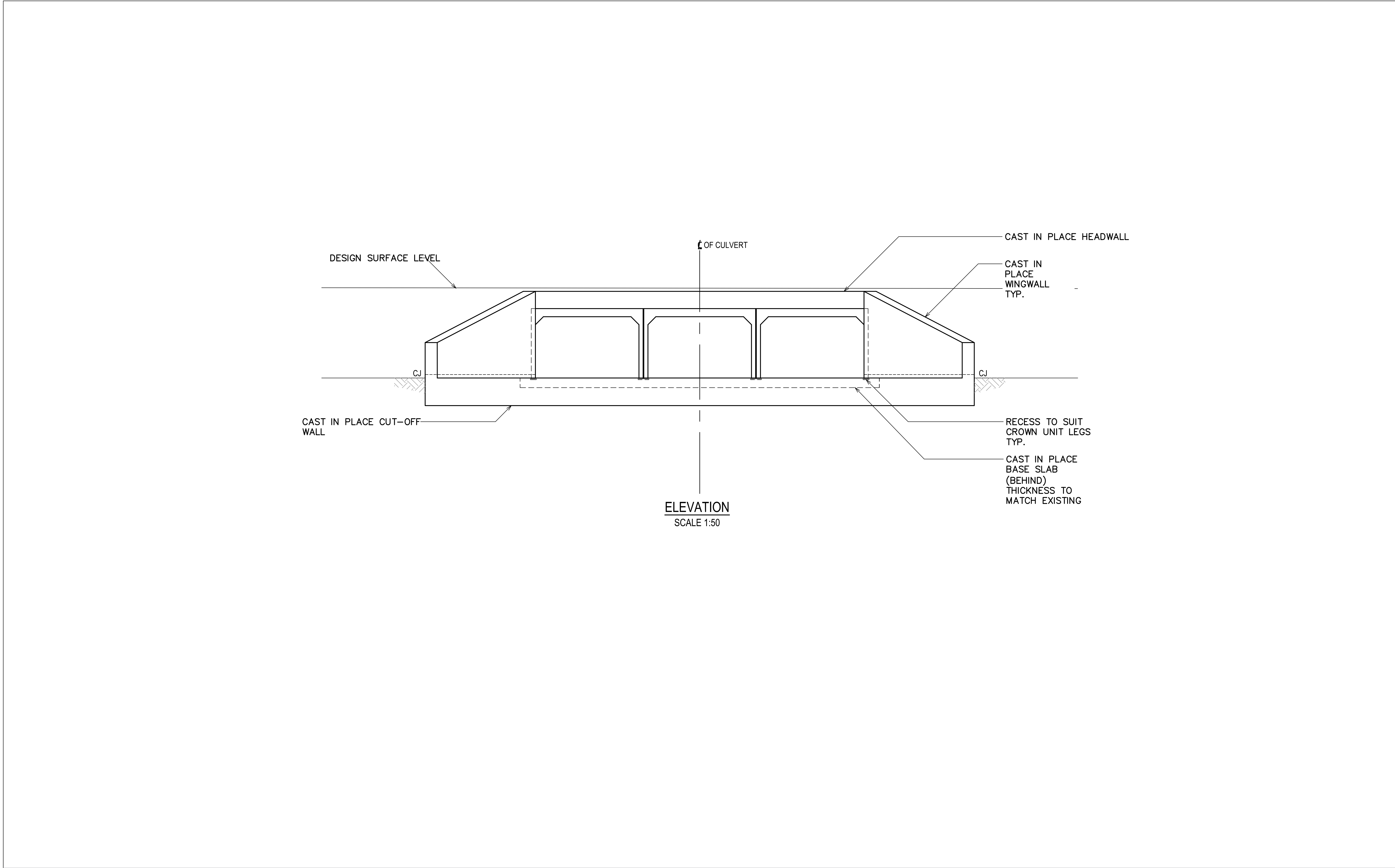
Client	BORAL RESOURCES (NSW) PTY LTD
Project	BORAL QUARRY SEAHAM ITALIA ROAD INTERSECTION
Status	FOR APPROVAL




Drawing Title	CULVERT EXTENSION
	GENERAL ARRANGEMENT SHEET A
Drawing No.	12599191-GHD-00-00-DRG-ST-00200

Size  
**A1**

Rev  
**B**





		 SCALE 1:50 AT ORIGINAL SIZE		 <small>Conditions of Use. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.</small>		 www.ghd.com		Client BORAL RESOURCES (NSW) PTY LTD	Drawing Title CULVERT EXTENSION	Size A1
B CONCEPT DESIGN FOR DA APPROVAL 23.06.23								Project BORAL QUARRY SEAHAM ITALIA ROAD INTERSECTION	GENERAL ARRANGEMENT SHEET B	
A PRELIMINARY FOR DISCUSSION 19.06.23								Status FOR APPROVAL		
Rev Description Checked Approved Date								12599191-GHD-00-00-DRG-ST-00201		
Author C.GARDINER Drafting Check								Drawing No. 12599191-GHD-00-00-DRG-ST-00201		
Designer B.GELLATLY Design Check								Rev B		