

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C220 EROSION & SEDIMENT CONTROL PLAN.dwg - July 21, 2023. PRINTED: July 21, 2023



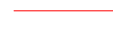





Kakanui River

REFER TO C222 FOR DETAIL PLAN

REFER TO C223 FOR DETAIL PLAN

REFER TO C221 FOR DETAIL PLAN

LEGEND

-  60.0 PROPOSED CONTOURS
-  52.0 EXISTING CONTOURS
-  EARTHWORKS EXTENT
-  TREATMENT DEVICE CATCHMENT
-  DWD EARTHWORKS EXTENT
-  CWD EARTHWORKS EXTENT
-  STABILISED CONSTRUCTION ENTRANCE
-  DEB DECANTING EARTH BUND

NOTES:

1. ALL CLEAN WATER RUNOFF FROM UPSTREAM CATCHMENTS SHALL BE DIVERTED AWAY FROM THE WORKS AND TOWARDS STABILISED DRAINS TO PREVENT SURFACE EROSION.
2. EROSION AND SEDIMENT CONTROL PLANS SHALL COMPLY WITH THE "EROSION AND SEDIMENT CONTROL GUIDELINES FOR LAND DISTURBING ACTIVITIES" ALSO KNOWN AS GD05.
3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND FULLY OPERATIONAL PRIOR TO START OF EARTHWORKS. THE CONTRACTOR SHALL ARRANGE FOR AND ATTEND A PRELIMINARY SEDIMENT CONTROL MEETING ON-SITE WITH AC REPRESENTATIVE AND THE ENGINEER.
4. CONTRACTOR SHALL ENSURE THAT A COPY OF EROSION AND SEDIMENT CONTROL PLANS AVAILABLE ON SITE AT ALL TIMES AND THAT ALL SUB-CONTRACTORS AND PERSONNEL INVOLVED IN EARTHWORKS OR OTHER ACTIVITIES RELATED TO EROSION AND SEDIMENT CONTROL HAVE ACCESS TO THESE PLANS AND ARE FAMILIAR WITH THE MEASURES TO BE UNDERTAKEN.

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
C	INFORMAL S92 RESPONSE	ZY	21/07/23
B	ROAD 3 RE-ALIGN	VC	20/12/21
A	ORIGINAL ISSUE	VC	24/11/21

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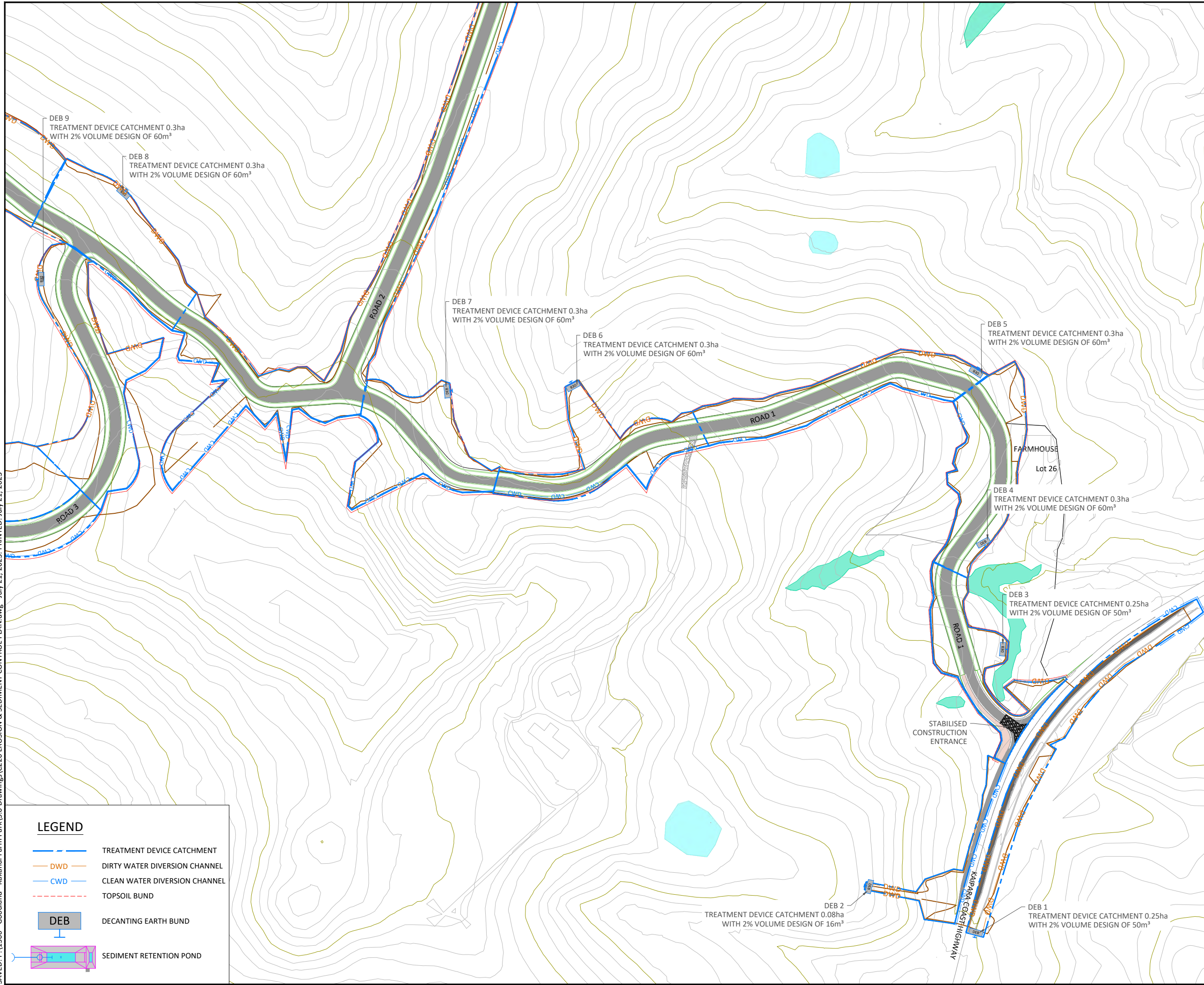
CLIENT
ABIB (OMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
EROSION & SEDIMENT CONTROL OVERALL PLAN

DRAWN	MD	SCALE	A1 1:2000
DESIGNED	VC	A3	1:4000
PROJECT No	1366	DRAWING No	C220
REVISION	C		

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LEGEND

- 60.0 PROPOSED CONTOURS
- 52.0 EXISTING CONTOURS
- EARTHWORKS EXTENT
- NATURAL WETLAND
- MANMADE WETLAND

- NOTES:**
- ALL CLEAN WATER RUNOFF FROM UPSTREAM CATCHMENTS SHALL BE DIVERTED AWAY FROM THE WORKS AND TOWARDS STABILIZED DRAINS TO PREVENT SURFACE EROSION.
 - EROSION AND SEDIMENT CONTROL PLANS SHALL COMPLY WITH THE "EROSION AND SEDIMENT CONTROL GUIDELINES FOR LAND DISTURBING ACTIVITIES" ALSO KNOWN AS GDOS.
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PROJECT
GOODLAND COASTAL FARM

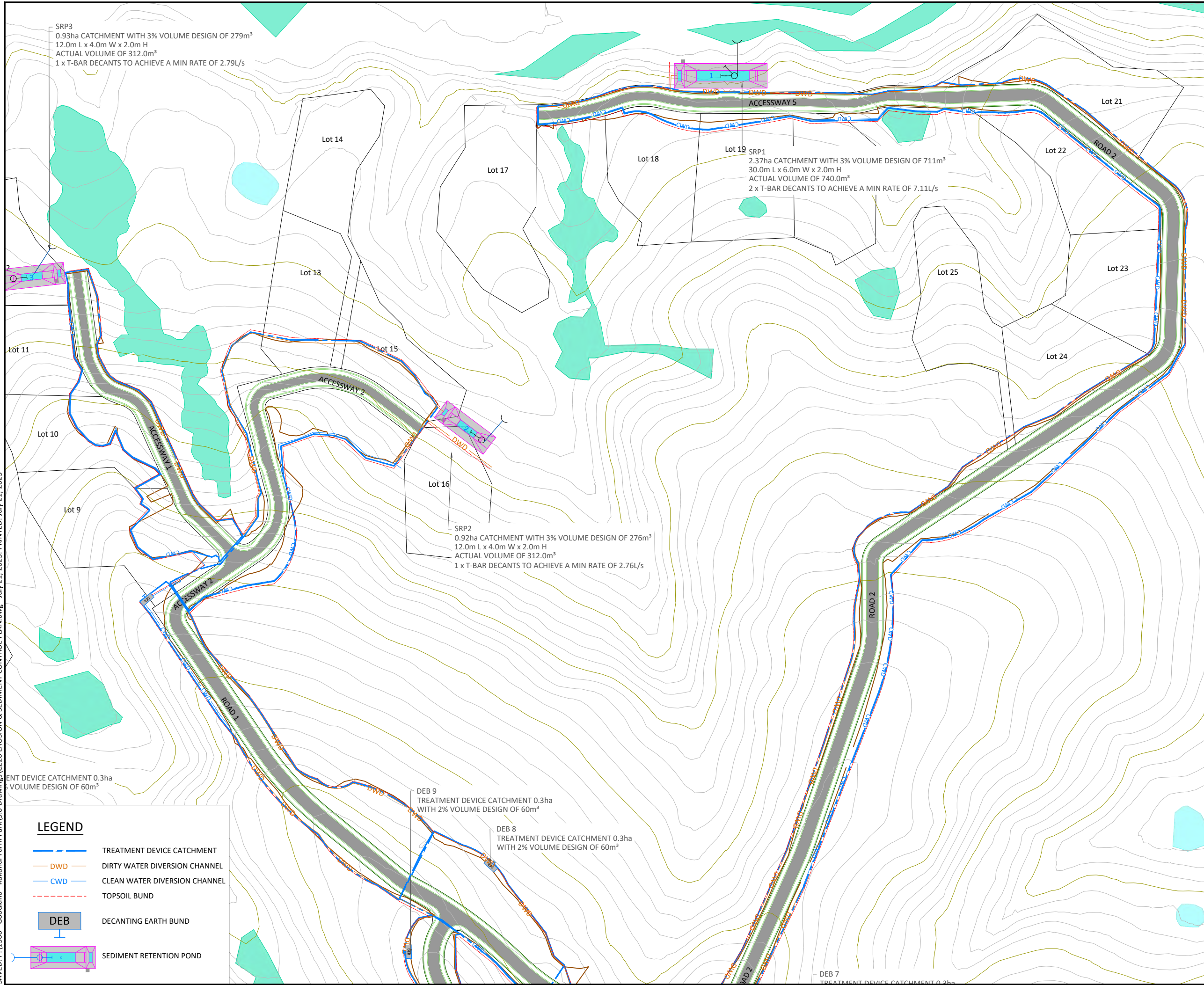
TITLE
EROSION & SEDIMENT CONTROL PLAN - SHEET 1

DRAWN	MD	SCALE	A1 1:1000
DESIGNED	VC	A3	1:2000
PROJECT No	1366	DRAWING No	C221
		REVISION	B

LEGEND

- TREATMENT DEVICE CATCHMENT
- DWD DIRTY WATER DIVERSION CHANNEL
- CWD CLEAN WATER DIVERSION CHANNEL
- - - TOPSOIL BUND
- DEB DECANTING EARTH BUND
- SRP SEDIMENT RETENTION POND

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SRP3
0.93ha CATCHMENT WITH 3% VOLUME DESIGN OF 279m³
12.0m L x 4.0m W x 2.0m H
ACTUAL VOLUME OF 312.0m³
1 x T-BAR DECANTS TO ACHIEVE A MIN RATE OF 2.79L/s

SRP1
2.37ha CATCHMENT WITH 3% VOLUME DESIGN OF 711m³
30.0m L x 6.0m W x 2.0m H
ACTUAL VOLUME OF 740.0m³
2 x T-BAR DECANTS TO ACHIEVE A MIN RATE OF 7.11L/s

SRP2
0.92ha CATCHMENT WITH 3% VOLUME DESIGN OF 276m³
12.0m L x 4.0m W x 2.0m H
ACTUAL VOLUME OF 312.0m³
1 x T-BAR DECANTS TO ACHIEVE A MIN RATE OF 2.76L/s

DEB 9
TREATMENT DEVICE CATCHMENT 0.3ha
WITH 2% VOLUME DESIGN OF 60m³

DEB 8
TREATMENT DEVICE CATCHMENT 0.3ha
WITH 2% VOLUME DESIGN OF 60m³

DEB 7
TREATMENT DEVICE CATCHMENT 0.3ha

LEGEND

- 60.0 PROPOSED CONTOURS
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- EARTHWORKS EXTENT
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PROJECT
GOODLAND COASTAL FARM

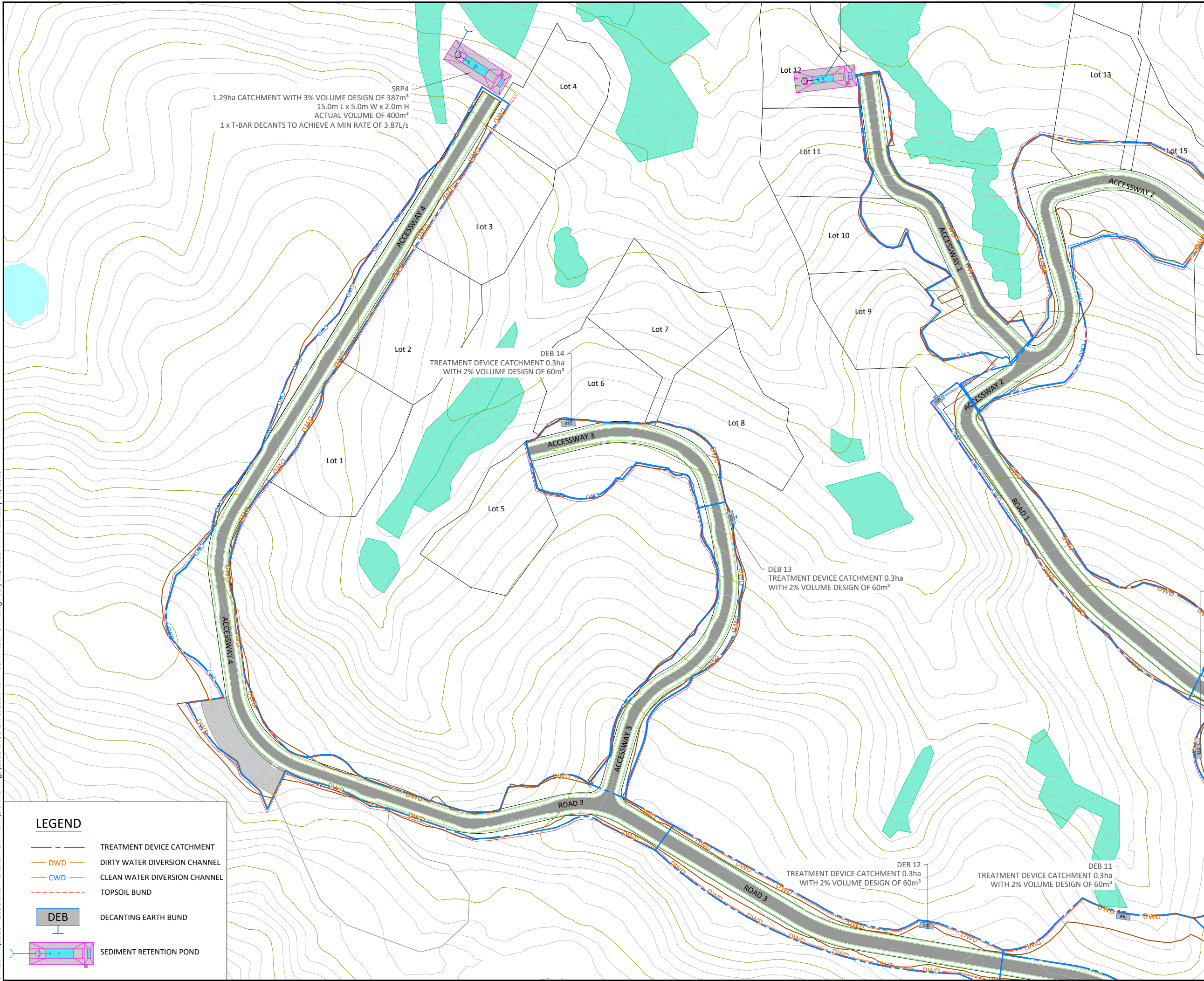
TITLE
EROSION & SEDIMENT CONTROL PLAN - SHEET 2

DRAWN	MD	SCALE	A1 1:1000
DESIGNED	VC	A3	1:2000
PROJECT No	1366	DRAWING No	C222
		REVISION	B

LEGEND

- TREATMENT DEVICE CATCHMENT
- DWD DIRTY WATER DIVERSION CHANNEL
- CWD CLEAN WATER DIVERSION CHANNEL
- - - TOPSOIL BUND
- DEB DECANTING EARTH BUND
- SRP SEDIMENT RETENTION POND

SAVED: P:\1366 - Goodland Farm Park\5.0 Drawings\C220 EROSION & SEDIMENT CONTROL PLAN.dwg - July 21, 2023. PRINTED: July 21, 2023



1.29ha CATCHMENT WITH 3% VOLUME DESIGN OF 387m³
 15.0m L x 5.0m W x 2.0m H
 ACTUAL VOLUME OF 400m³
 1 x T-BAR DECANTS TO ACHIEVE A MIN RATE OF 3.87L/s

TREATMENT DEVICE CATCHMENT DEB 14
 WITH 2% VOLUME DESIGN OF 60m³

TREATMENT DEVICE CATCHMENT DEB 13
 WITH 2% VOLUME DESIGN OF 60m³

TREATMENT DEVICE CATCHMENT DEB 12
 WITH 2% VOLUME DESIGN OF 60m³

TREATMENT DEVICE CATCHMENT DEB 11
 WITH 2% VOLUME DESIGN OF 60m³

LEGEND

- 60.0 PROPOSED CONTOURS
- 52.0 EXISTING CONTOURS
- EARTHWORKS EXTENT
- █ NATURAL WETLAND
- █ MANMADE WETLAND

NOTES:

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ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
EROSION & SEDIMENT CONTROL PLAN - SHEET 3

DRAWN	MD	SCALE	A1 1:1000
DESIGNED	VC		A3 1:2000
PROJECT No	1366	DRAWING No	C223
		REVISION	C

LEGEND

- TREATMENT DEVICE CATCHMENT
- DWD DIRTY WATER DIVERSION CHANNEL
- CWD CLEAN WATER DIVERSION CHANNEL
- TOPSOIL BUND
- DEB DECANTING EARTH BUND
- SRP SEDIMENT RETENTION POND

STABILISED CONSTRUCTION ENTRANCE SPECIFICATIONS:

APPLICATION

USE A STABILISED CONSTRUCTION ENTRANCE AT ALL POINTS OF CONSTRUCTION SITE INGRESS AND EGRESS WITH A CONSTRUCTION PLAN LIMITING TRAFFIC TO THESE ENTRANCES ONLY. THEY ARE PARTICULARLY USEFUL ON SMALL CONSTRUCTION SITES BUT CAN BE UTILISED FOR ALL PROJECTS.

DESIGN:

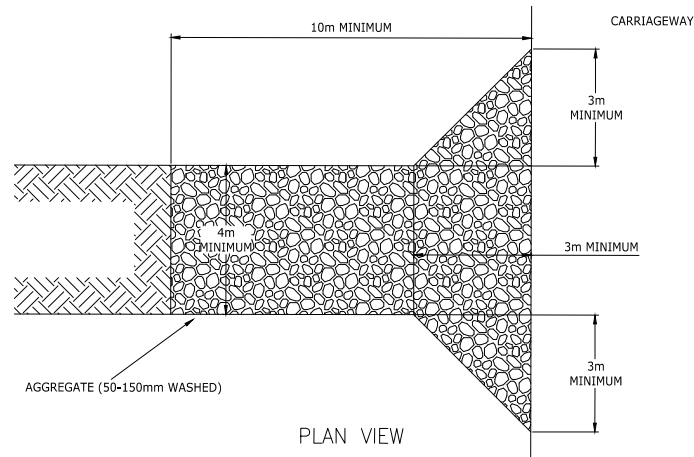
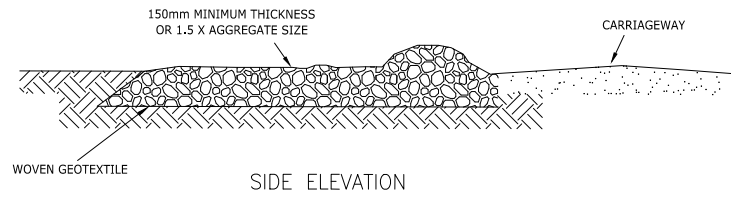
1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS AND OTHER UNSUITABLE MATERIAL AND PROPERLY GRADE IT.
2. LAY WOVEN GEOTEXTILE; PIN DOWN EDGES AND OVERLAP JOINTS.
3. PROVIDE DRAINAGE TO CARRY RUNOFF FROM THE STABILISED CONSTRUCTION ENTRANCE TO A SEDIMENT CONTROL MEASURE.
4. PLACE AGGREGATE TO THE SPECIFICATIONS BELOW AND SMOOTH IT.

STABILISED CONSTRUCTION ENTRANCE AGGREGATE SPECIFICATIONS:

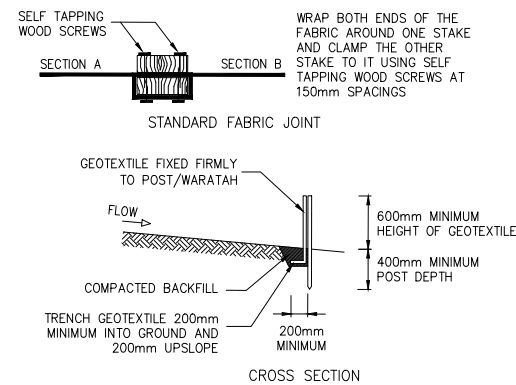
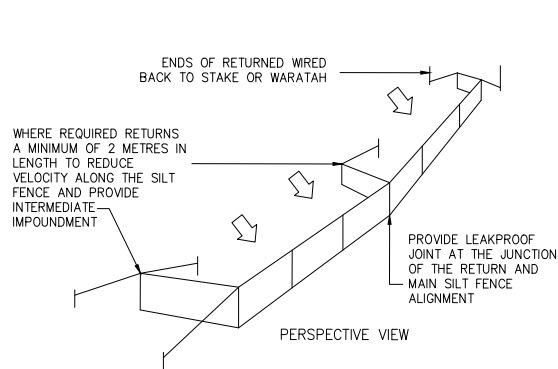
AGGREGATE SIZE	5-150mm WASHED AGGREGATE
THICKNESS	150mm MINIMUM OR 1.5 X AGGREGATE SIZE
LENGTH	10m MINIMUM
WIDTH	4m MINIMUM

MAINTENANCE

1. MAINTAIN THE STABILISED CONSTRUCTION ENTRANCE IN A CONDITION TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. AFTER EACH RAINFALL INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT FROM THE STABILISED CONSTRUCTION ENTRANCE AND CLEAN OUT AS NECESSARY.
2. WHEN WHEEL WASHING IS ALSO REQUIRED, ENSURE THIS IS DONE ON AN AREA STABILISED WITH AGGREGATE WHICH DRAINS TO AN APPROVED SEDIMENT RETENTION FACILITY.



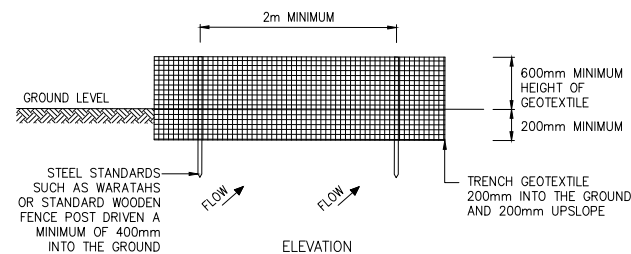
STABILISED CONSTRUCTION ENTRANCE



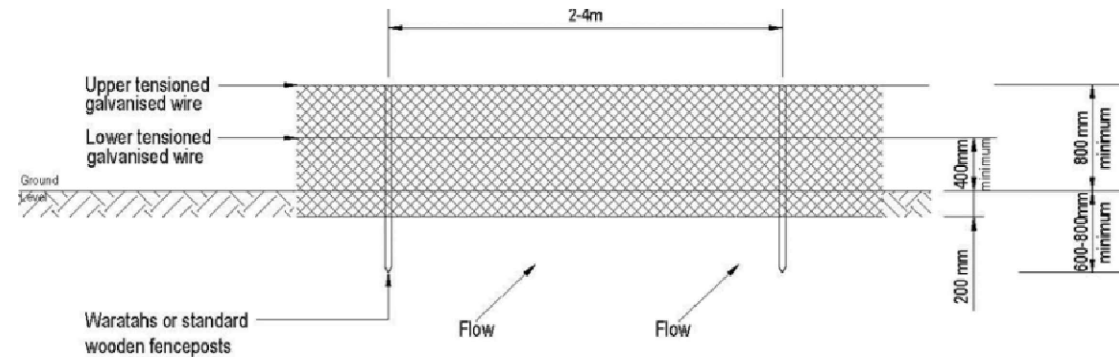
SILT FENCE DESIGN CRITERIA:

SLOPE STEEPNESS %	SLOPE LENGTH (m) (MAXIMUM)	SPACING OF RETURNS (m)
< 2%	N/A	UNLIMITED
2-10%	40	60
10-20%	30	50
20-33%	20	40
33-50%	15	30
>50%	6	20

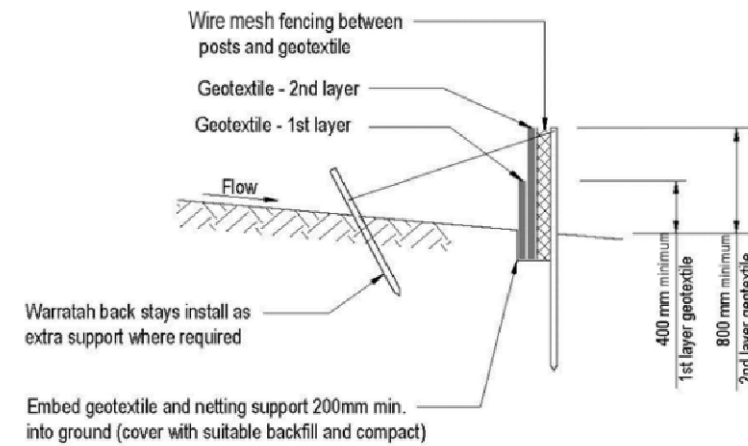
GRAB TENSILE STRENGTH: >440N (ASTM D4632)
 TENSILE MODULUS: 0.140 pa (MINIMUM)
 APPARENT OPENING SIZE: 0.1-0.5mm (ASTM D4751)



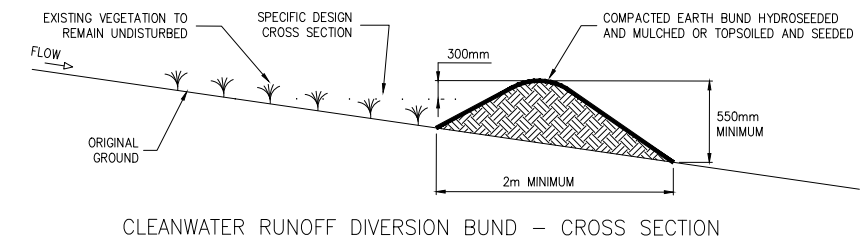
SILT FENCE CONSTRUCTION



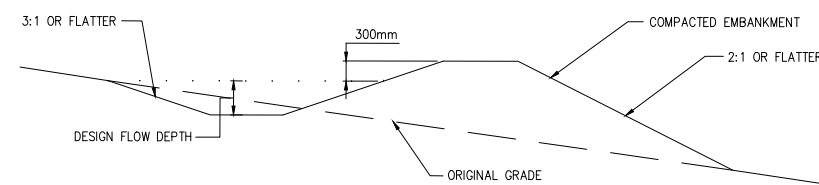
SUPER SILT FENCE ELEVATION



SUPER SILT FENCE CROSS SECTION



CLEANWATER RUNOFF DIVERSION BUND - CROSS SECTION



RUNOFF DIVERSION BUND - CROSS SECTION

CONSENT ISSUE

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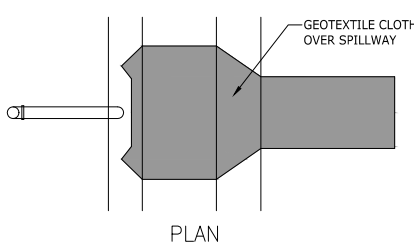
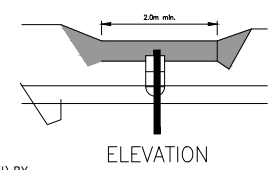
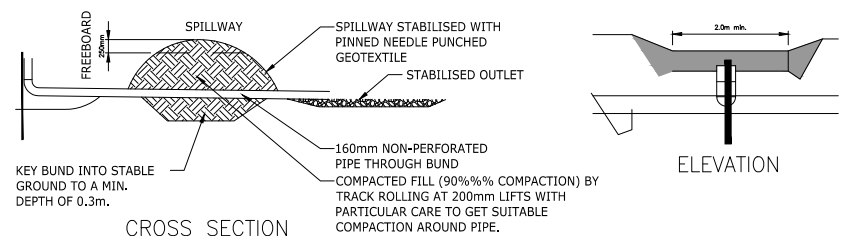
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PROJECT
GOODLAND COASTAL FARM

TITLE
EROSION & SEDIMENT CONTROL DETAILS SHEET 1

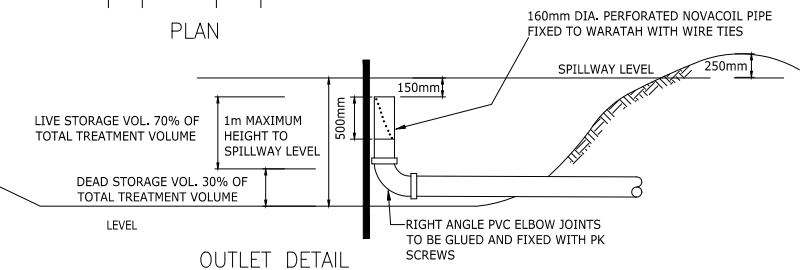
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DESIGNED	VC	NOT TO SCALE	A3
PROJECT No	1366	DRAWING No	C224
REVISION			B



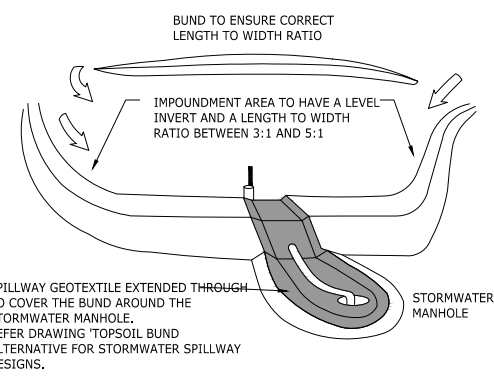
DECANTING EARTH BUND
 MAXIMUM CATCHMENT 0.3ha
 2% VOLUME (60m³) PER 0.3ha CATCHMENT

NOTE: THE 100mm DIAMETER PVC PIPE UPSTAND IS ONLY REQUIRED WHERE THE 2m WIDE EMERGENCY SPILLWAY DISCHARGES TO VULNERABLE AREA OR WHERE THE DISCHARGE IS REQUIRED TO BE PIPED TO A SAFE OUTFALL SUCH AS A STORMWATER MANHOLE. IF THE UPSTAND IS NOT REQUIRED THE DECANT CAN BE CONNECTED DIRECT TO A 40mm DIAMETER OUTFALL PIPE AND THE TREATMENT VOLUME IS MEASURED TO THE INVERT OF THE EMERGENCY SPILLWAY.

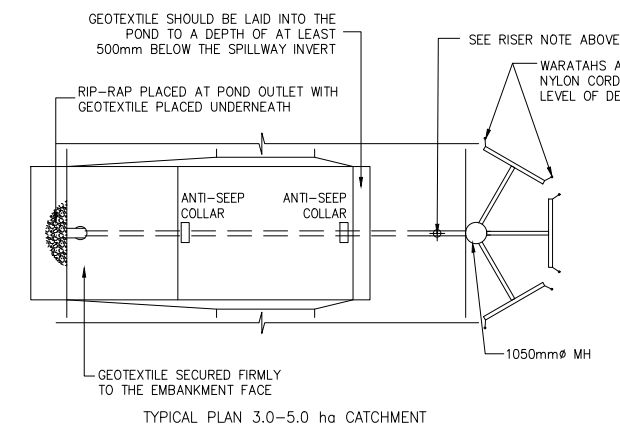
NOTE: THE DECANT HAS A 40mm DIAMETER PVC PIPE WITH A 1.3m LONG ARM (INCLUDING FLEXIBLE JOINT), A 0.5m LONG DECANT AND 20 x 10mm DIAMETER EQUALLY SPACED HOLES POSITIONED HORIZONTALLY AT 10 AND 2 O'CLOCK



OUTLET DETAIL

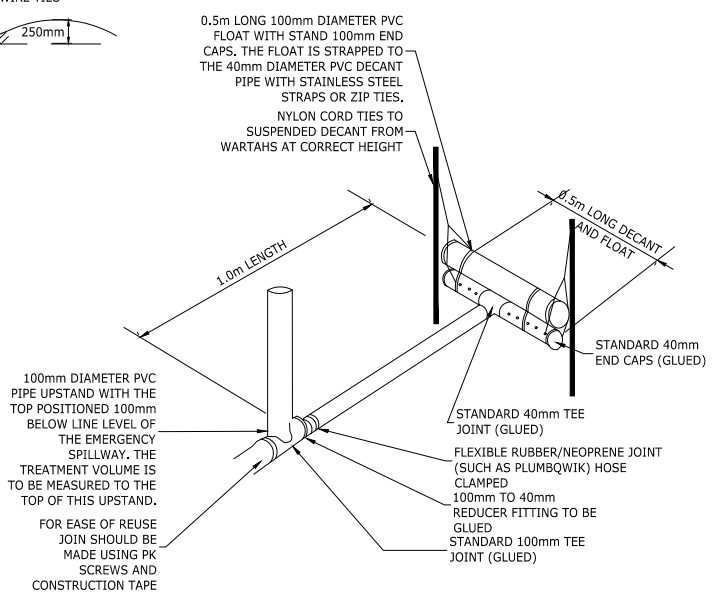


DECANTING EARTH BUND

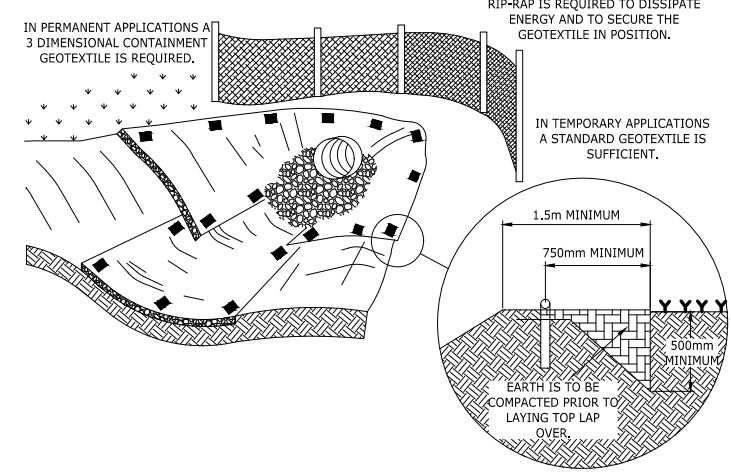


SEDIMENT RETENTION POND EMBANKMENT

NUMBER OF DECANTS FOR EACH POND SHALL BE AS FOLLOWS:
 i) UP TO 1.5ha CATCHMENT - 1 DECANT
 ii) 1.5-3.0ha CATCHMENT - 2 DECANTS
 iii) 3 TO 5 ha CATCHMENT - 3 DECANTS-CONNECTED TO 1050 Ø MH

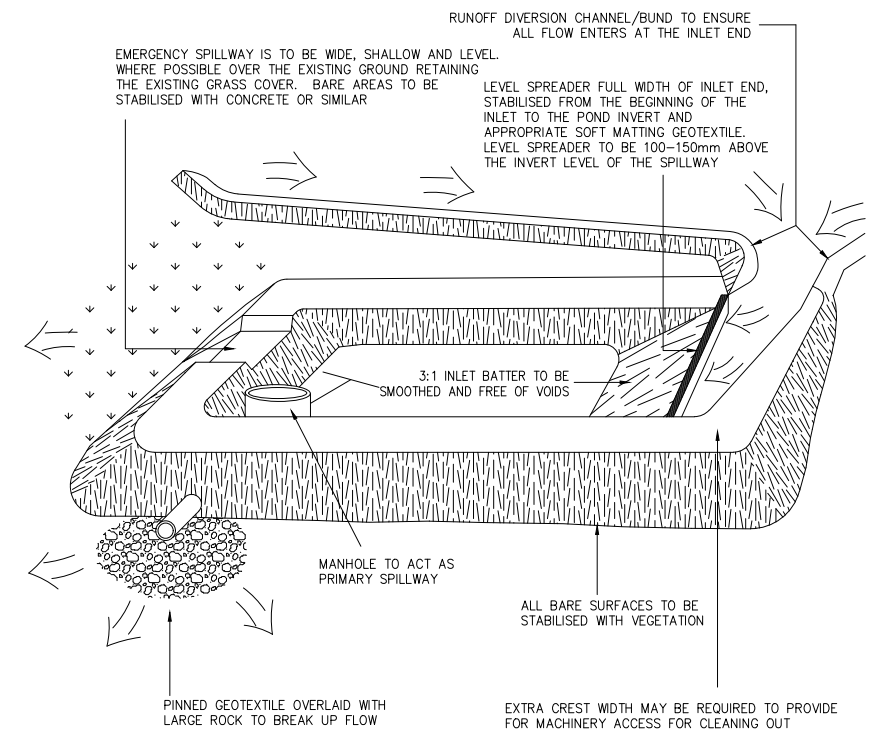


40mm DECANT WITH UPSTAND FOR DECANTING EARTH BUND

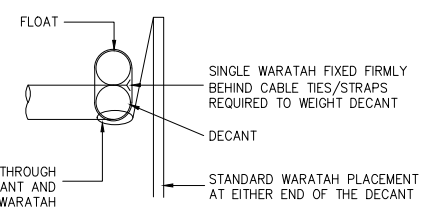
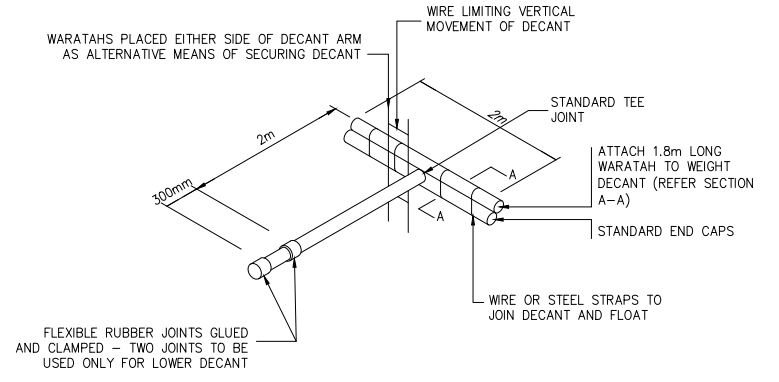


GEOTEXTILE AT CULVERT OUTLET

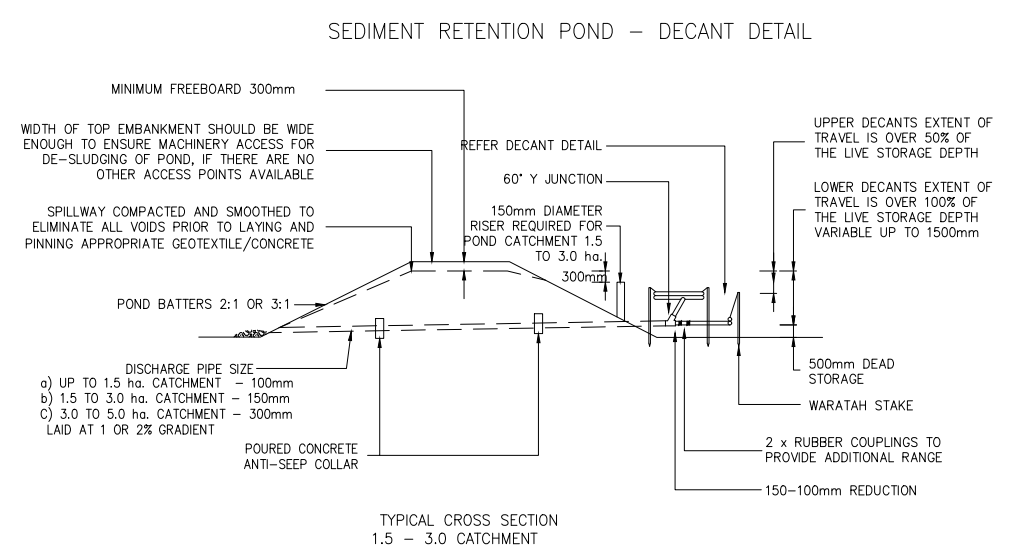
INFORMATION FROM AUCKLAND REGIONAL COUNCIL TP10-EROSION & SEDIMENT CONTROL



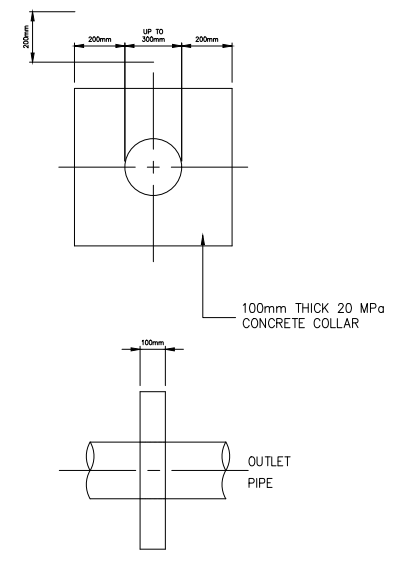
SEDIMENT RETENTION POND



SECTION A-A



TYPICAL CROSS SECTION 1.5 - 3.0 CATCHMENT



ANTI-SEEP COLLAR

CONSENT ISSUE

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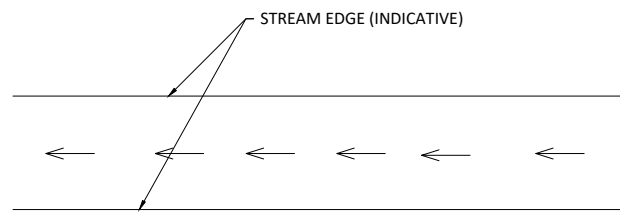
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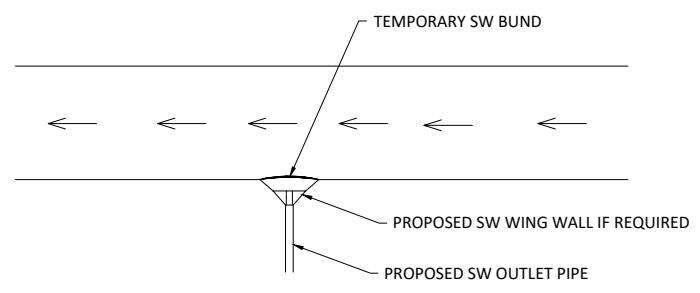
PROJECT
GOODLAND COASTAL FARM

TITLE
EROSION & SEDIMENT CONTROL DETAILS SHEET 2

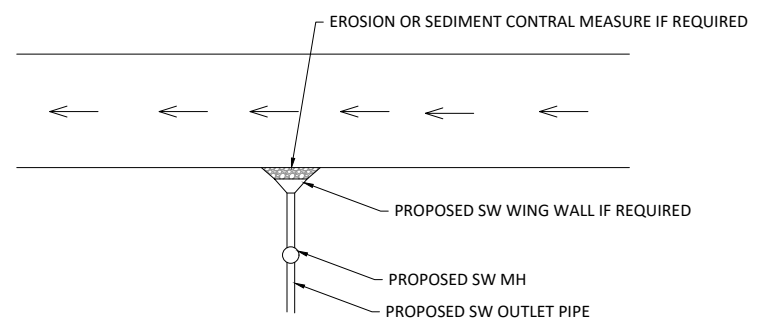
DRAWN	MD	SCALE
DESIGNED	VC	A1 NOT TO SCALE
PROJECT No	DRAWING No	REVISION
1366	C225	B



STORMWATER OUTLET - PRE CONSTRUCTION
1:100 (A1)



STORMWATER OUTLET - DURING CONSTRUCTION
1:100 (A1)



STORMWATER OUTLET - POST CONSTRUCTION
1:100 (A1)

PROPOSED CONSTRUCTION SEQUENCE FOR STORMWATER OUTLET DISCHARGING TO STREAM

1. SETUP A TEMPORARY BUND AROUND THE OUTLET TO STOP STREAM FLOW FROM ENTERING THE CONSTRUCTION AREA.
2. DE-FISH AND THEN PUMP OUT ANY EXCESS WATER INSIDE THE CONSTRUCTION AREA AT THE OUTLET.
3. INSTALL A NEW STORMWATER OUTLET PIPE, WINGWALL AND OTHER OUTLET PROTECTION MEASURE SUCH AS RIP RAP.
4. REMOVE THE TEMPORARY BUND AND REINSTATE THE STREAM BED TO A NATURAL SHAPE .

OTHER NOTES

- WORKS TO BE COMPLETED IN DRY WEATHER WINDOW.
- LOCATIONS SHOWN ON THE DRAWING ARE INDICATIVE AND FOR ILLUSTRATION PURPOSE ONLY.
- REFER TO DRAWINGS FOR LOCATION OF THE OUTLET RELATIVE TO THE DEVELOPMENT.

CONSENT ISSUE

A	ORIGINAL ISSUE	ZY	21/07/23
REVISION	CHANGES	CHECKED	DATE

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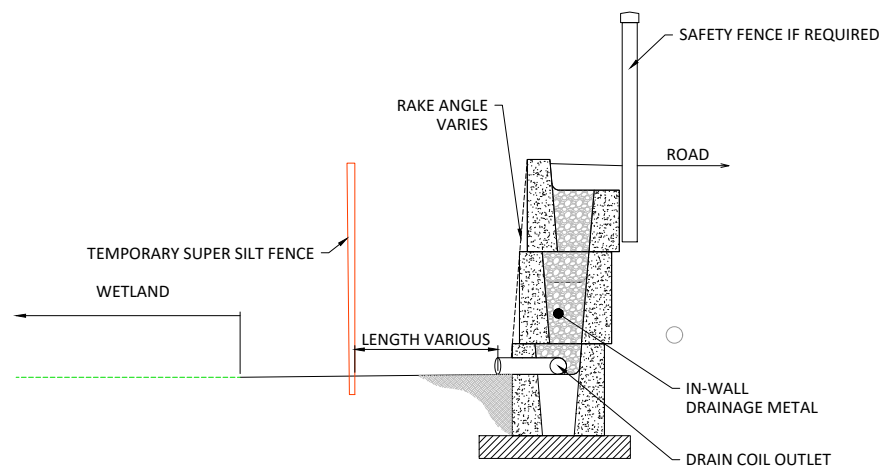
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

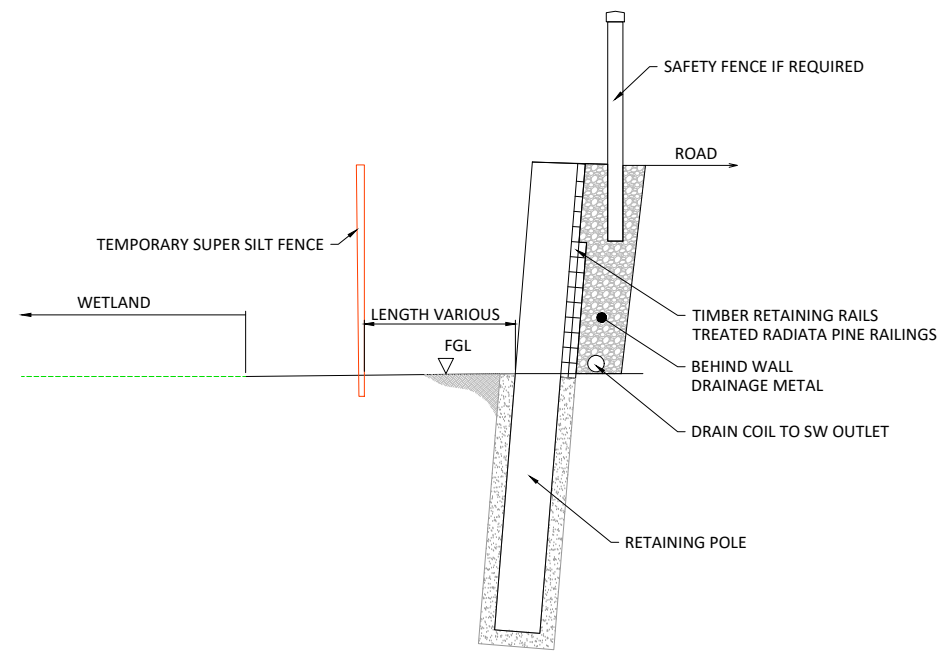
TITLE
**STORMWATER OUTFALL
EROSION & SEDIMENT
CONTROL PLAN**

DRAWN	TG	SCALE	A1 1:100
DESIGNED	TG	A3	1:200
PROJECT No	DRAWING No	REVISION	
1366	C226	A	

SAVED: P:\1366 - Goodland - Kakanui Farm Par\5.0 Drawings\C227 SEDIMENT & EROSION CONTROL ADJACENT TO WETLAND.dwg - July 21, 2023. PRINTED: July 21, 2023



TYPICAL MASS BLOCK WALL DETAIL AT WETLAND AND ROAD INTERFACE
SCALE 1:25



TYPICAL RETAINING WALL DETAIL AT WETLAND AND ROAD INTERFACE
SCALE 1:25

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
A	ORIGINAL ISSUE	ZY	21/07/23

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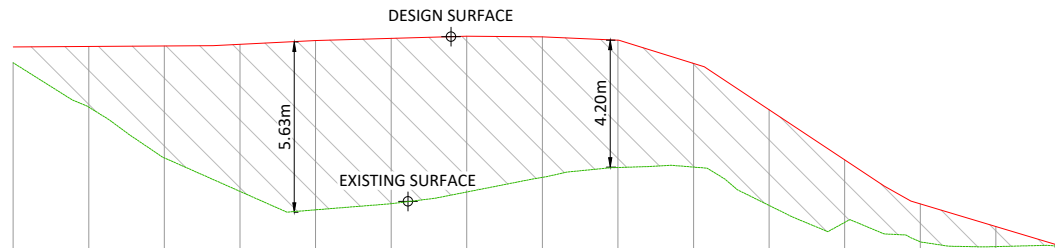
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PROJECT
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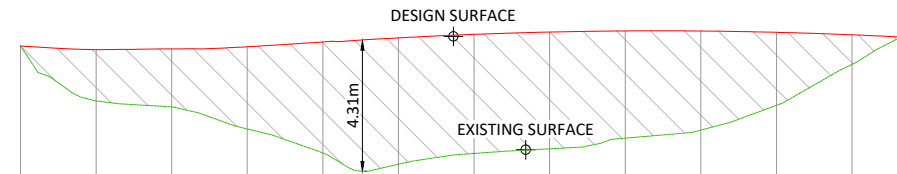
TITLE
EROSION & SEDIMENT CONTROL ADJACENT TO WETLAND

DRAWN	TG	SCALE A1 1:25
DESIGNED	TG	A3 1:50
PROJECT No 1366	DRAWING No C227	REVISION A



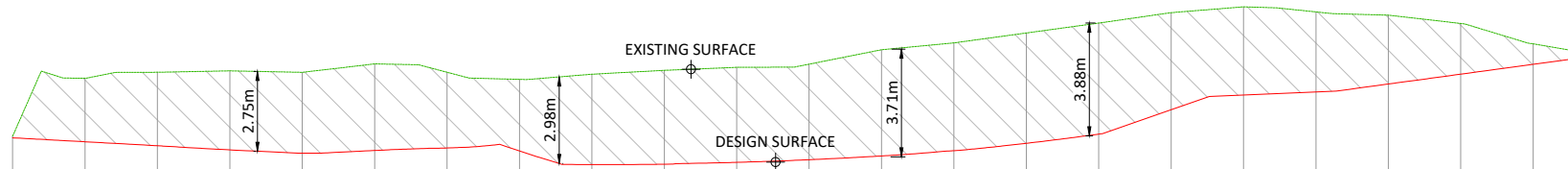
DATUM 40.00m	
TOP OF WALL	47.15
BOTTOM OF WALL	47.15
WALL HEIGHT	0.00
CHAINAGE	0.00
	5.00
	10.00
	15.00
	20.00
	25.00
	30.00
	35.00
	40.00
	45.00
	50.00
	55.00
	57.61
	59.37
	60.00
	65.00
	68.91

RETAINING WALL 1
SCALE 1H:2V



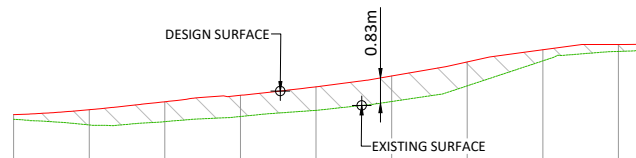
DATUM 40.00m	
TOP OF WALL	47.47
BOTTOM OF WALL	47.48
WALL HEIGHT	-0.01
CHAINAGE	0.00
	5.00
	10.00
	15.00
	20.00
	25.00
	30.00
	35.00
	40.00
	45.00
	50.00
	55.00
	58.24

RETAINING WALL 2
SCALE 1H:2V



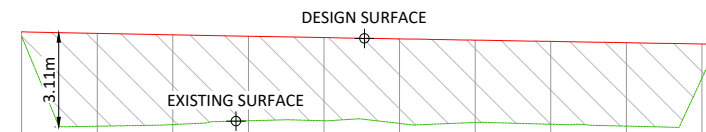
DATUM 65.00m	
TOP OF WALL	69.95
BOTTOM OF WALL	69.99
WALL HEIGHT	-0.06
CHAINAGE	0.00
	5.00
	10.00
	15.00
	20.00
	25.00
	30.00
	35.00
	40.00
	45.00
	50.00
	55.00
	60.00
	65.00
	70.00
	75.00
	80.00
	85.00
	90.00
	95.00
	100.00
	105.00
	108.08

RETAINING WALL 3
SCALE 1H:2V



DATUM 65.00m	
TOP OF WALL	68.80
BOTTOM OF WALL	68.65
WALL HEIGHT	0.15
CHAINAGE	0.00
	5.00
	10.00
	15.00
	20.00
	25.00
	30.00
	35.00
	40.00
	41.28

RETAINING WALL 4
SCALE 1H:2V



DATUM 75.00m	
TOP OF WALL	81.41
BOTTOM OF WALL	81.26
WALL HEIGHT	0.15
CHAINAGE	0.00
	5.00
	10.00
	15.00
	20.00
	25.00
	30.00
	35.00
	40.00
	45.00
	45.81

RETAINING WALL 5
SCALE 1H:2V

NOTES

1. REFER TO DRAWINGS C200 - C203 FOR RETAINING WALL ALIGNMENTS.

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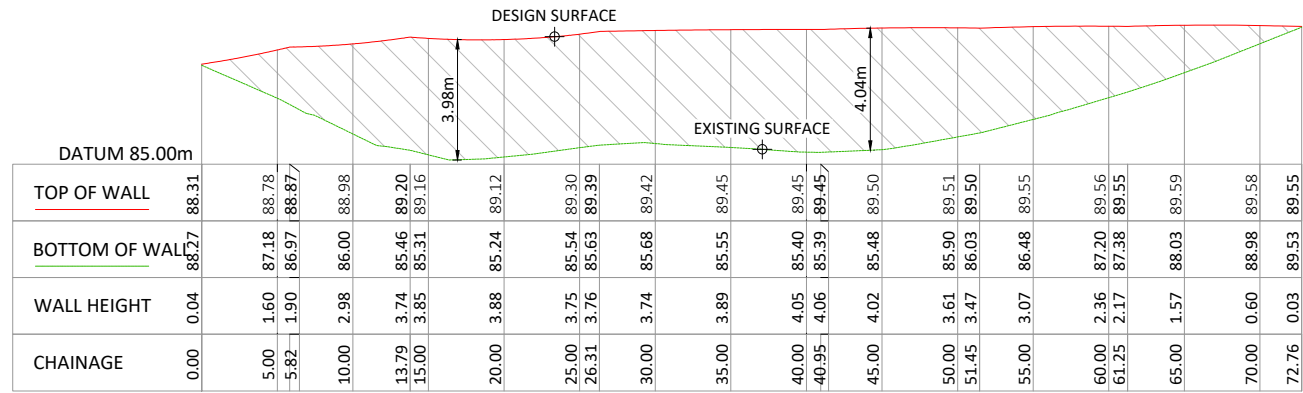
REVISION	CHANGES	CHECKED	DATE
C	INFORMAL S92 RESPONSE	ZY	21/07/23
B	ROAD 3 RE-ALIGN	VC	20/12/21
A	ORIGINAL	VC	16/09/21

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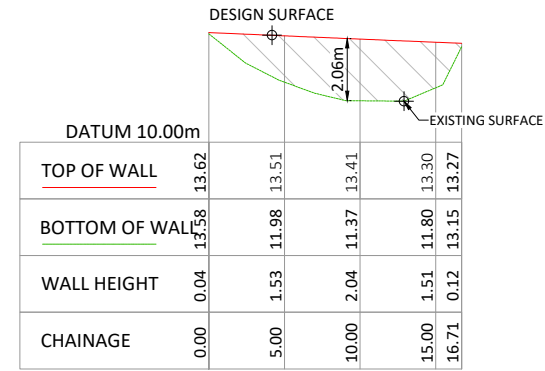
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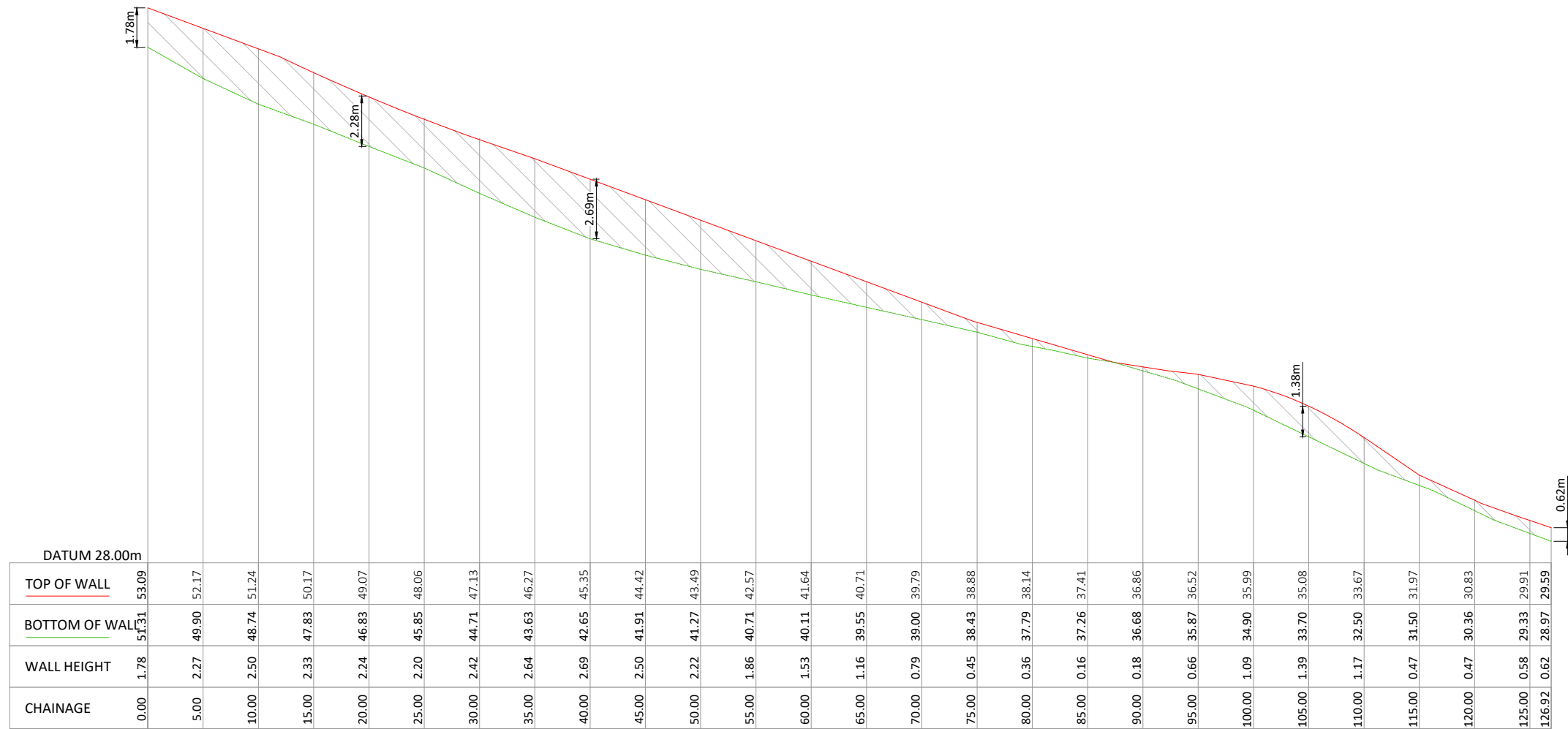
CLIENT	ABIB (OAMARU) LTD	
PROJECT	GOODLAND COASTAL FARM	
TITLE	RETAINING WALL LONGSECTIONS - SHEET 1	
DRAWN	MD	SCALE A1 1:250
DESIGNED	VC	A3 1:500
PROJECT No	DRAWING No	REVISION
1366	C240	C



RETAINING WALL 6
SCALE 1H:2V



RETAINING WALL 8
SCALE 1H:2V

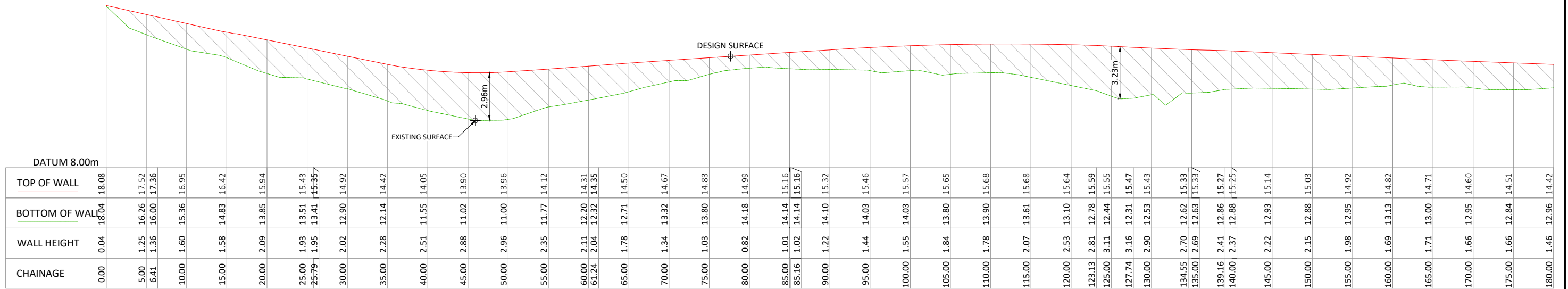


RETAINING WALL 7
SCALE 1H:2V

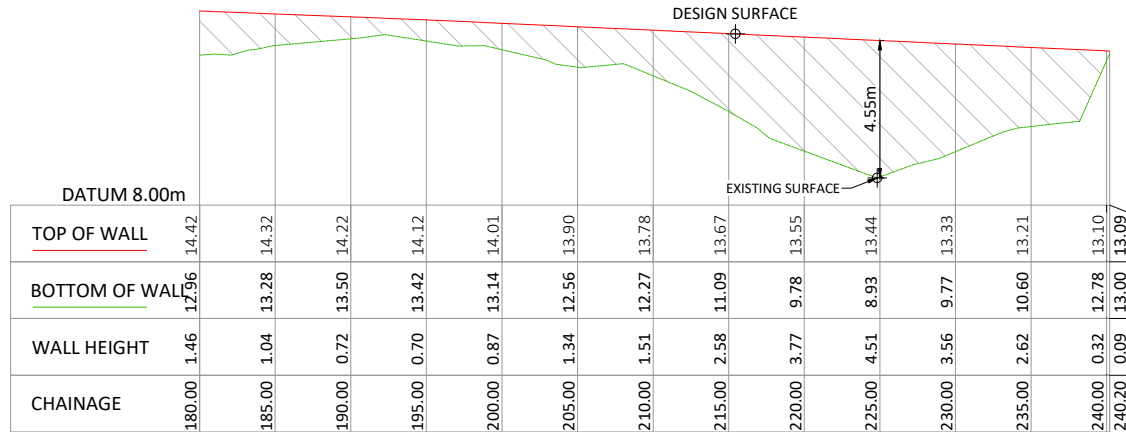
NOTES

1. REFER TO DRAWINGS C200 - C203 FOR RETAINING WALL ALIGNMENTS.

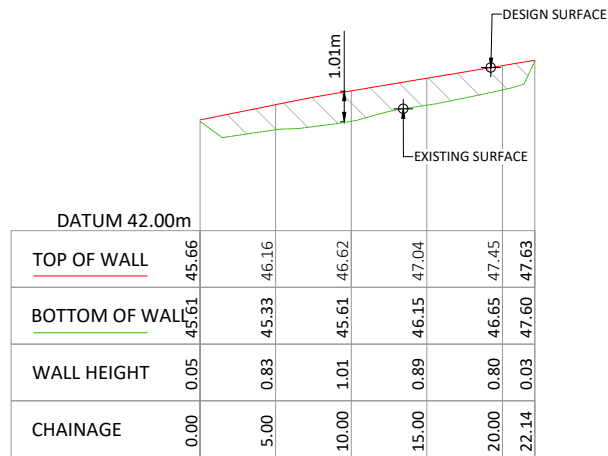
CONSENT ISSUE			
D	RETAINING WALL 7 UPDATED	ZY	22/08/24
C	INFORMAL S92 RESPONSE	ZY	21/07/23
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A	ORIGINAL ISSUE	VC	16/09/21
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PROJECT			
GOODLAND COASTAL FARM			
TITLE			
RETAINING WALL LONGSECTIONS - SHEET 2			
DRAWN	MD	SCALE A1 1:250	
DESIGNED	VC	A3 1:500	
PROJECT No	DRAWING No	REVISION	
1366	C241	D	



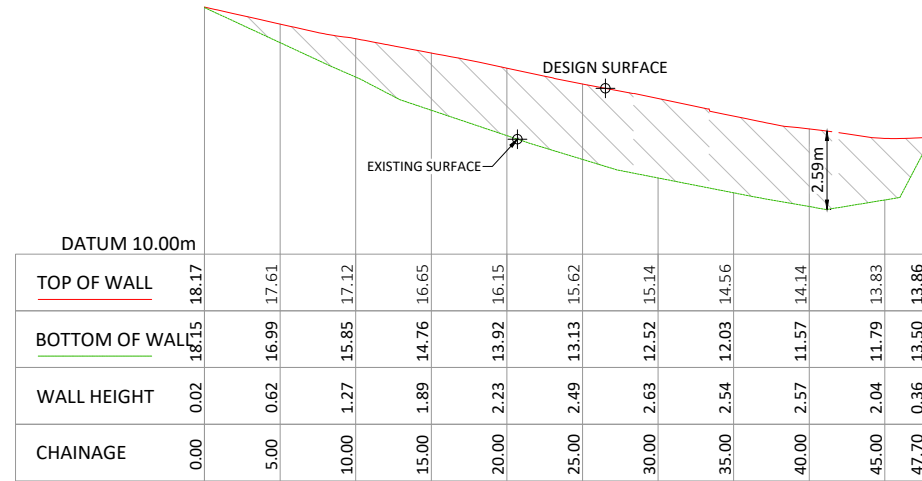
RETAINING WALL 9
SCALE 1H:2V



RETAINING WALL 9
SCALE 1H:2V



RETAINING WALL 11
SCALE 1H:2V



RETAINING WALL 10
SCALE 1H:2V

NOTES

- REFER TO DRAWINGS C200 - C203 FOR RETAINING WALL ALIGNMENTS.

CONSENT ISSUE

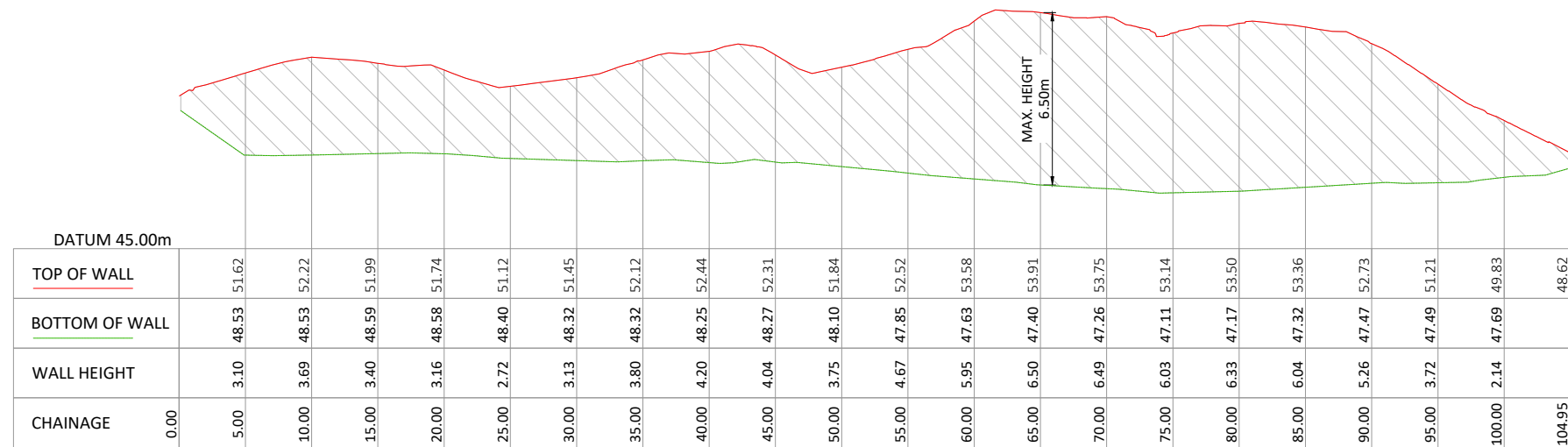
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B	ROAD 3 RE-ALIGN	VC	20/12/21
A	ORIGINAL	VC	16/09/21

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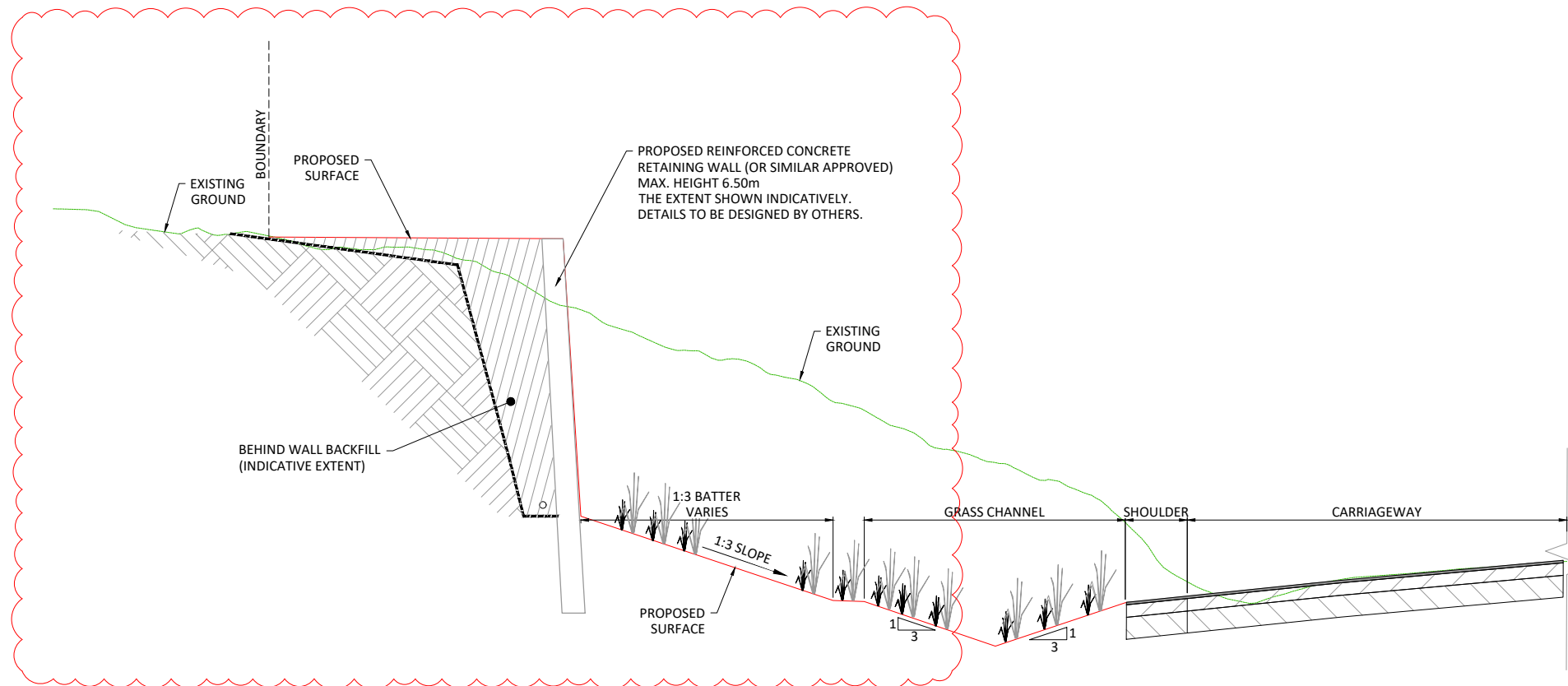
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CLIENT	ABIB (OAMARU) LTD	
PROJECT	GOODLAND COASTAL FARM	
TITLE	RETAINING WALL LONGSECTIONS - SHEET 3	
DRAWN	MD	SCALE A1 1:250
DESIGNED	VC	A3 1:500
PROJECT No	DRAWING No	REVISION
1366	C242	C



RETAINING WALL 12
SCALE 1H:2V

RETAINING WALL 12 ELEVATIONS
SCALE 1:250 (A1)



RETAINING WALL 12 CROSS SECTION
SCALE 1:50 (A1)

NOTES

1. REFER TO DRAWINGS C200 - C203 FOR RETAINING WALL ALIGNMENTS.

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
B	NZTA RESPONSE	ZY	29/10/25
A	ORIGINAL ISSUE	ZY	30/07/25

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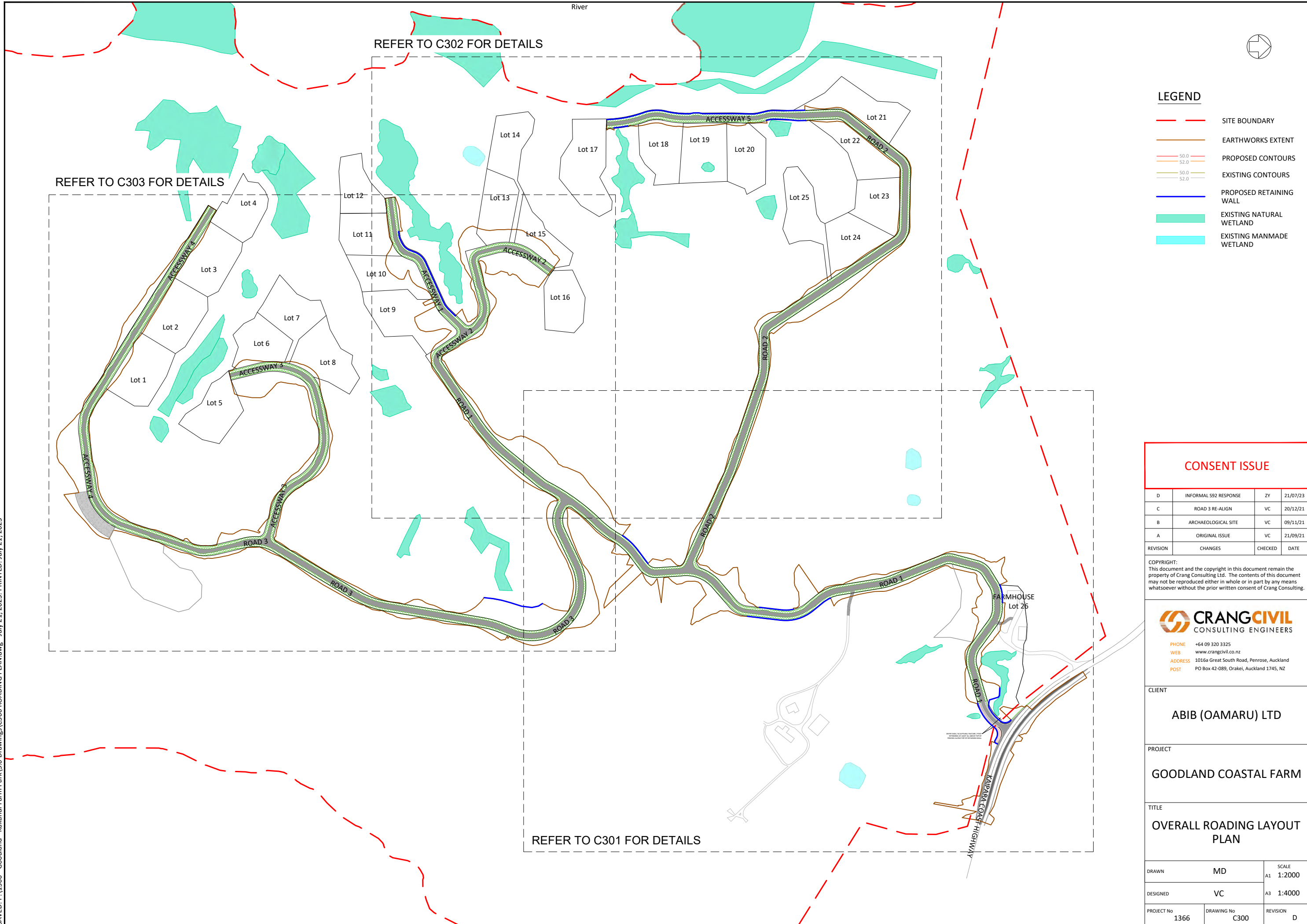
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
RETAINING WALL LONGSECTIONS - SHEET 4

DRAWN	MA	SCALE A1 1:250
DESIGNED	MA	A3 1:500
PROJECT No	DRAWING No	REVISION
1366	C243	B

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LEGEND

- SITE BOUNDARY
- EARTHWORKS EXTENT
- 50.0 PROPOSED CONTOURS
- 52.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- PROPOSED RETAINING WALL
- █ EXISTING NATURAL WETLAND
- █ EXISTING MANMADE WETLAND

CONSENT ISSUE

D	INFORMAL S92 RESPONSE	ZY	21/07/23
C	ROAD 3 RE-ALIGN	VC	20/12/21
B	ARCHAEOLOGICAL SITE	VC	09/11/21
A	ORIGINAL ISSUE	VC	21/09/21
REVISION	CHANGES	CHECKED	DATE

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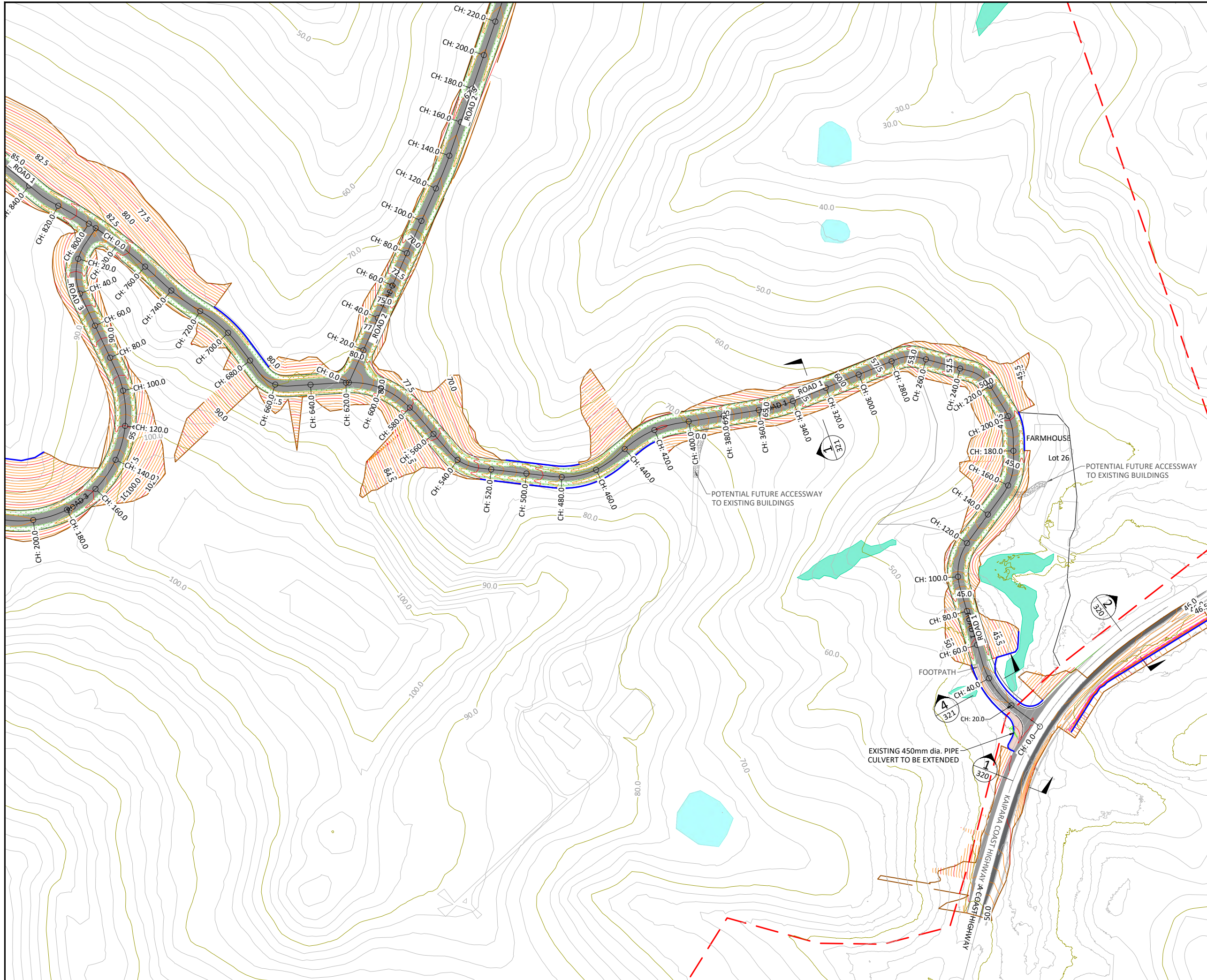
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CLIENT
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PROJECT
GOODLAND COASTAL FARM

TITLE
OVERALL ROADING LAYOUT PLAN

DRAWN	MD	SCALE	A1 1:2000
DESIGNED	VC	A3	1:4000
PROJECT No	DRAWING No	REVISION	
1366	C300	D	



- LEGEND**
- SITE BOUNDARY
 - EARTHWORKS EXTENT
 - 50.0 PROPOSED CONTOURS
 - 50.0 EXISTING CONTOURS
 - PROPOSED RETAINING WALL
 - EXISTING NATURAL WETLAND
 - EXISTING MANMADE WETLAND

CONSENT ISSUE

E	KAIPARA COAST HIGHWAY WIDENING UPDATED	ZY	30/07/25
D	INFORMAL S92 RESPONSE	ZY	21/07/23
C	ROAD 3 RE-ALIGN	VC	20/12/21
B	ARCHAEOLOGICAL SITE	VC	09/11/21
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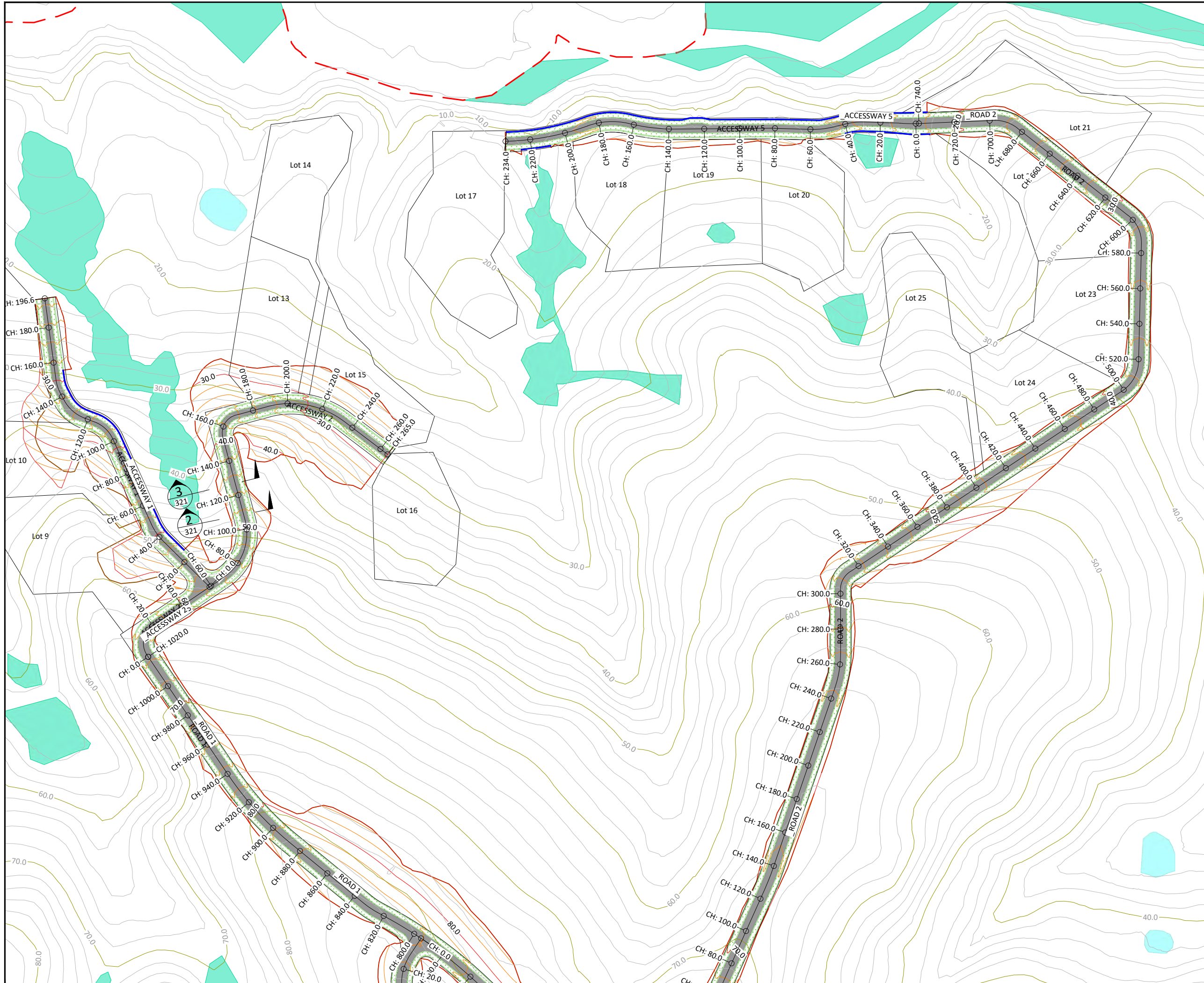
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PROJECT
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TITLE
ROADING LAYOUT PLAN SHEET 1

DRAWN	MD	SCALE	A1 1:1000
DESIGNED	VC		A3 1:2000
PROJECT No	DRAWING No	REVISION	
1366	C301	E	



LEGEND

- SITE BOUNDARY
- EARTHWORKS EXTENT
- 50.0 PROPOSED CONTOURS
- 52.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- PROPOSED RETAINING WALL
- █ EXISTING NATURAL WETLAND
- █ EXISTING MANMADE WETLAND

CONSENT ISSUE

D	INFORMAL S92 RESPONSE	ZY	26/08/24
C	INFORMAL S92 RESPONSE	ZY	21/07/23
B	ARCHAEOLOGICAL SITE	VC	09/11/21
A	ORIGINAL ISSUE	VC	21/09/21
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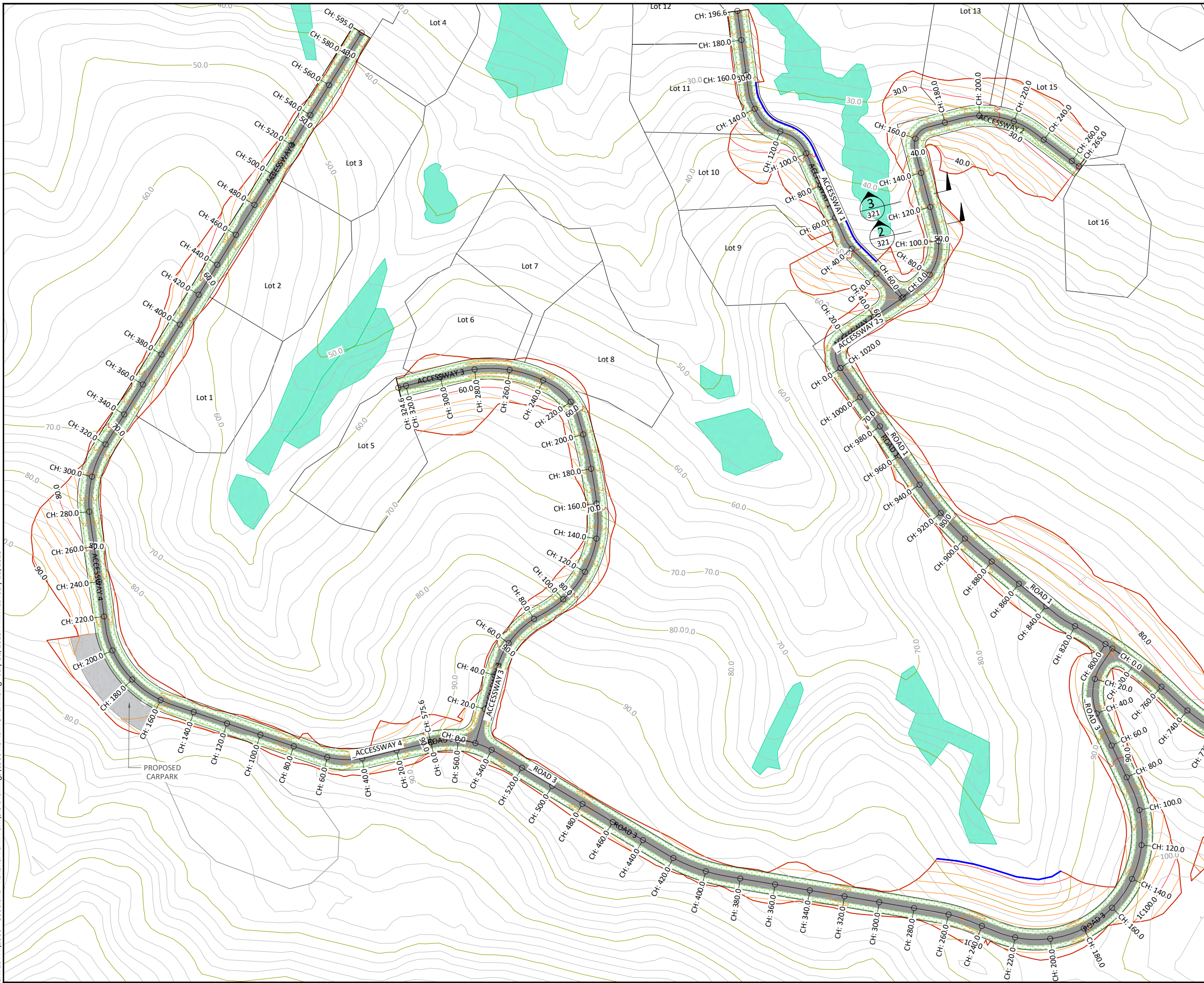
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PROJECT
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TITLE
**ROADING LAYOUT PLAN
SHEET 2**

DRAWN	MD	SCALE
DESIGNED	VC	A1 1:1000
PROJECT No	DRAWING No	A3 1:2000
1366	C302	REVISION
		D

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LEGEND

- SITE BOUNDARY
- EARTHWORKS EXTENT
- 50.0 PROPOSED CONTOURS
- 52.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- PROPOSED RETAINING WALL
- EXISTING NATURAL WETLAND
- EXISTING MANMADE WETLAND

CONSENT ISSUE

D	INFORMAL S92 RESPONSE	ZY	21/07/23
C	ROAD 3 RE-ALIGN	VC	20/12/21
B	ARCHAEOLOGICAL SITE	VC	09/11/21
A	ORIGINAL ISSUE	VC	21/09/21
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PROJECT
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TITLE
ROADING LAYOUT PLAN SHEET 3

DRAWN	MD	SCALE	A1 1:1000
DESIGNED	VC		A3 1:2000
PROJECT No	DRAWING No	REVISION	
1366	C303	D	

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POTENTIAL FUTURE ACCESSWAY TO EXISTING BUILDINGS

LEGEND

- SITE BOUNDARY
- EARTHWORKS EXTENT
- 50.0 PROPOSED CONTOURS
- 50.5 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- PROPOSED RETAINING WALL
- EXISTING NATURAL WETLAND
- EXISTING MANMADE WETLAND

CONSENT ISSUE

C	NZTA RESPONSE	ZY	29/10/23
B	KAIPARA COAST HIGHWAY WIDENING UPDATED	ZY	30/07/25
A	INFORMAL S92 RESPONSE	ZY	21/07/23
REVISION	CHANGES	CHECKED	DATE

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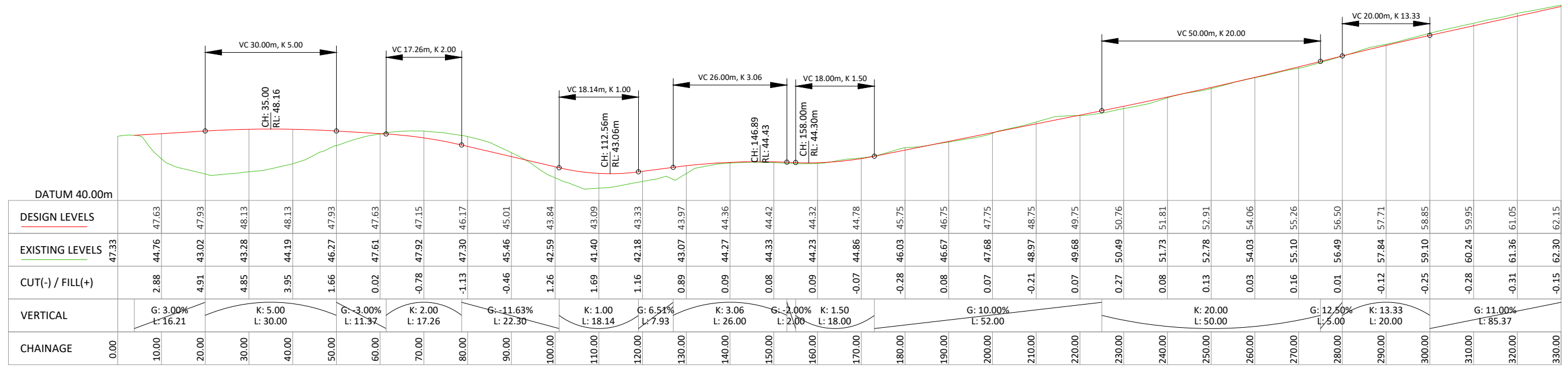
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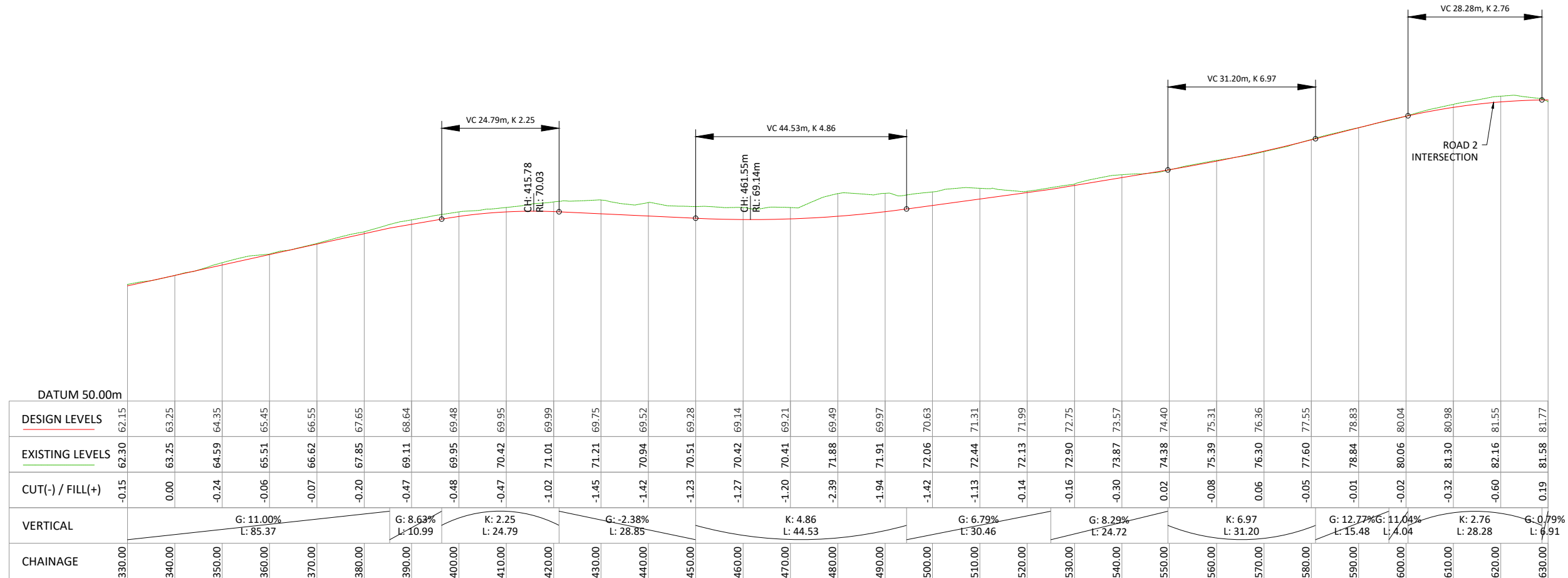
PROJECT
GOODLAND COASTAL FARM

TITLE
KAIPARA COAST HIGHWAY INTERSECTION PLAN

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC	A3	1:1000
PROJECT No	DRAWING No	REVISION	
1366	C304	C	



ROAD 1
SCALE 1H:2V



ROAD 2
SCALE 1H:2V

CONSENT ISSUE

B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL	VC	24/11/21
REVISION	CHANGES	CHECKED	DATE

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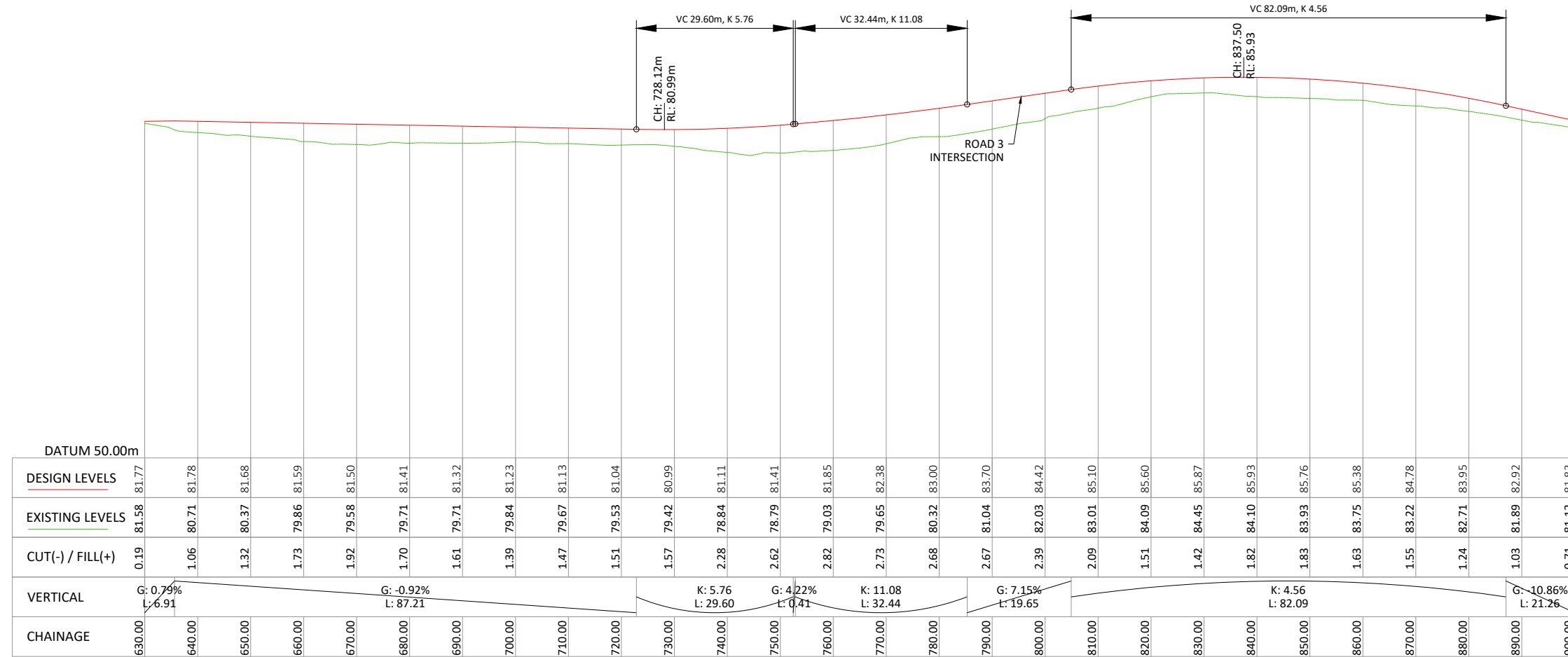
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POST PO Box 42-089, Orakei, Auckland 1745, NZ

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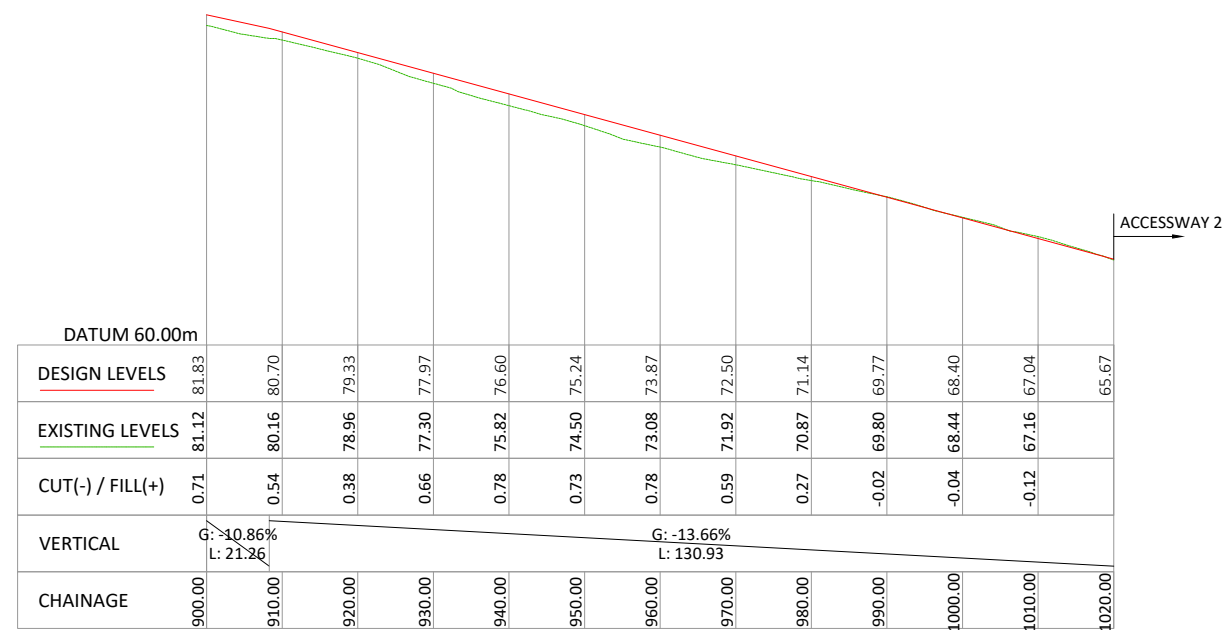
PROJECT
GOODLAND COASTAL FARM

TITLE
ROADING LONGSECTIONS SHEET 1

DRAWN MD	SCALE A1 1:500
DESIGNED VC	A3 1:1000
PROJECT No 1366	DRAWING No C310
	REVISION B



ROAD 1
SCALE 1H:2V



ROAD 1
SCALE 1H:2V

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B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL	VC	24/11/21

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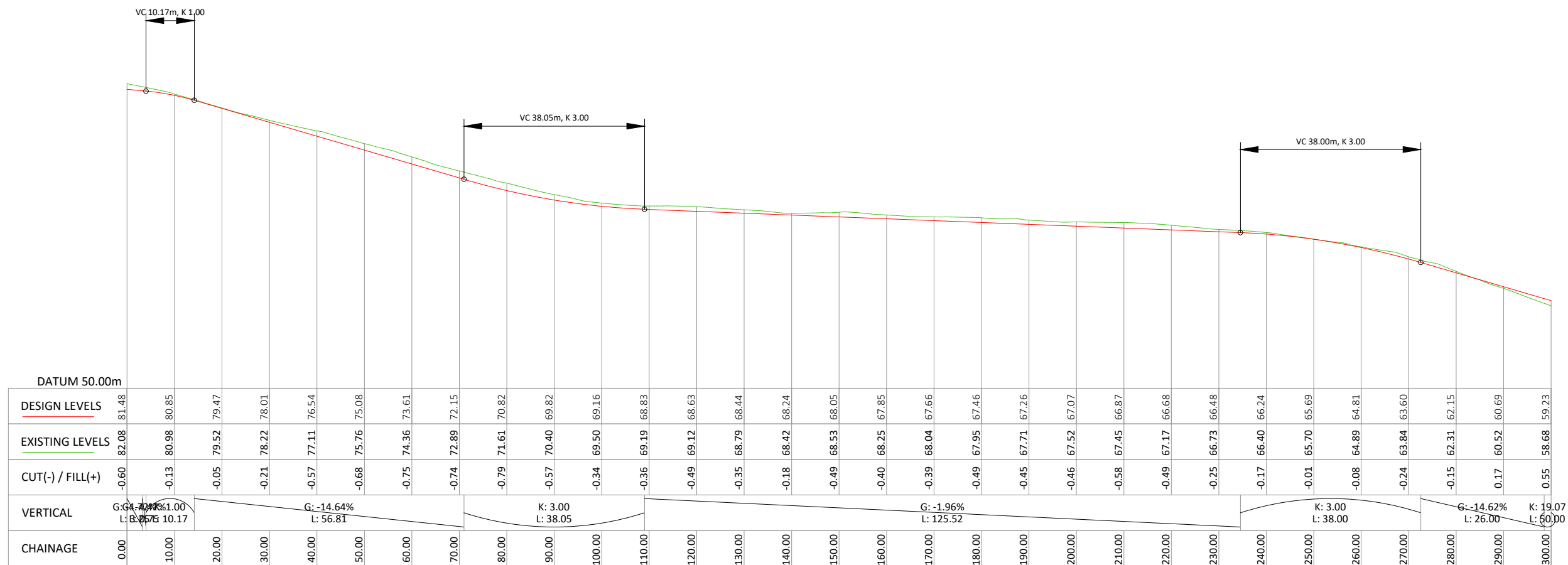
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PROJECT
GOODLAND COASTAL FARM

TITLE
ROADING LONGSECTIONS SHEET 2

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC		A3 1:1000
PROJECT No	1366	DRAWING No	C311
		REVISION	B



ROAD 2
SCALE 1H:2V

CONSENT ISSUE

B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL	VC	24/11/21
REVISION	CHANGES	CHECKED	DATE

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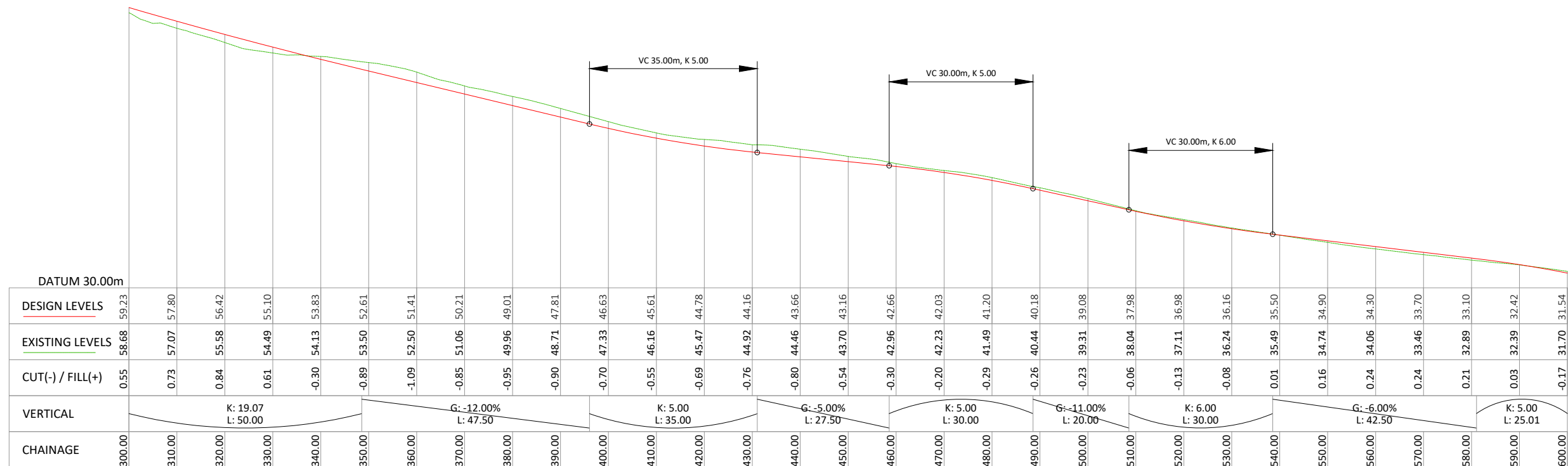
PROJECT

GOODLAND COASTAL FARM

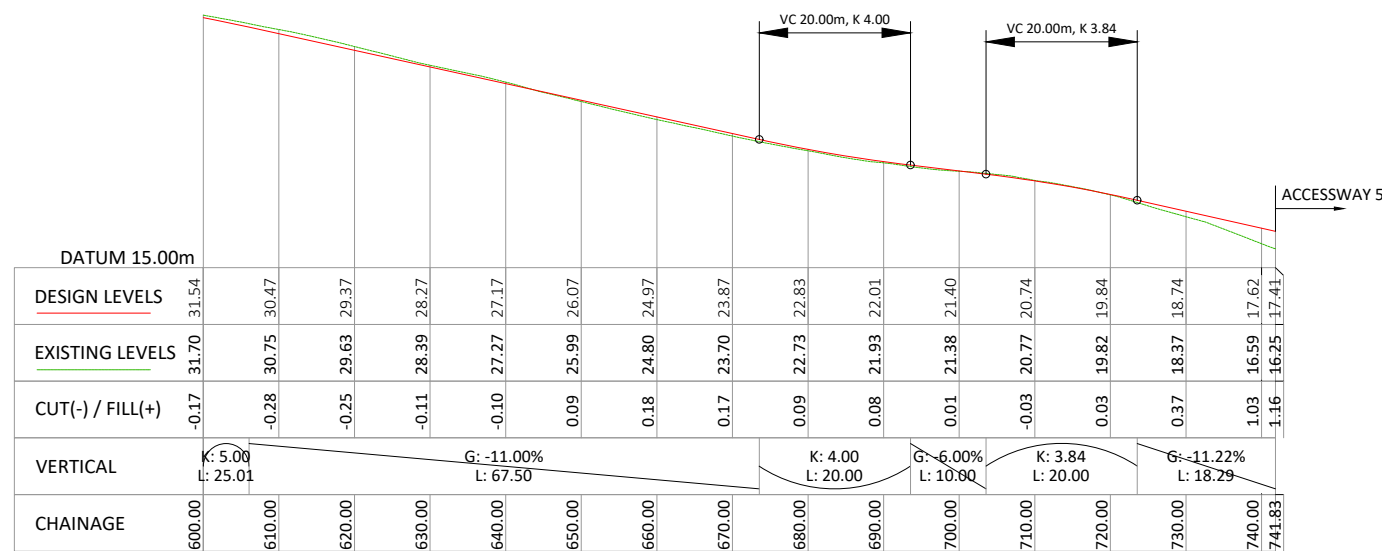
TITLE

ROADING LONGSECTIONS
SHEET 3

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC		A3 1:1000
PROJECT No	DRAWING No	REVISION	
1366	C312	B	



ROAD 2
SCALE 1H:2V



ROAD 2
SCALE 1H:2V

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
C	INFORMAL S92 RESPONSE	ZY	21/07/23
B	ROAD 3 RE-ALIGN	VC	20/12/21
A	ORIGINAL	VC	24/11/21

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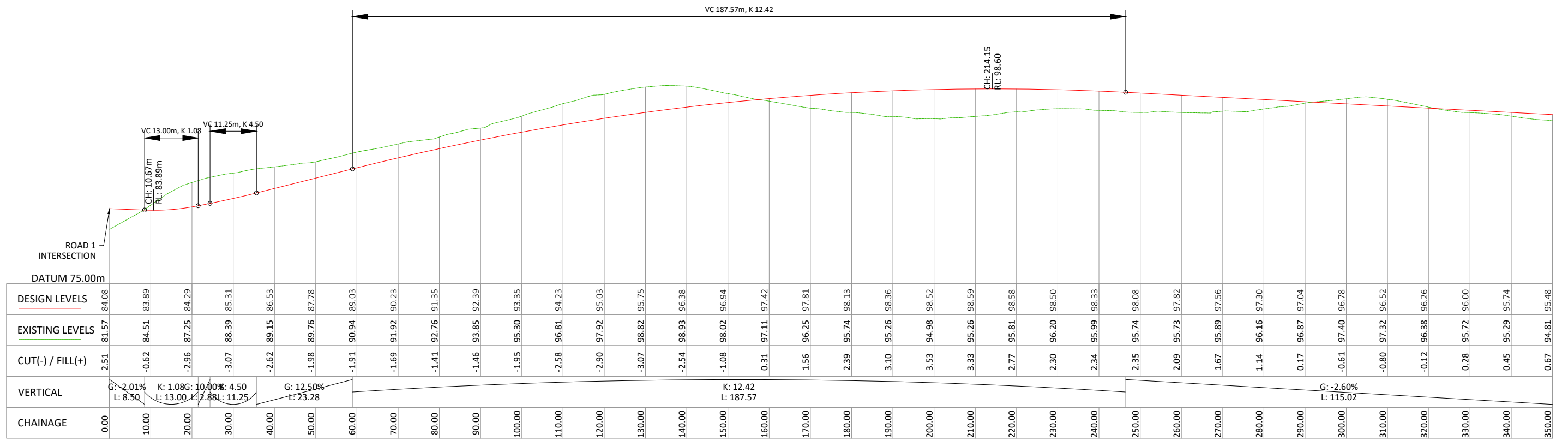
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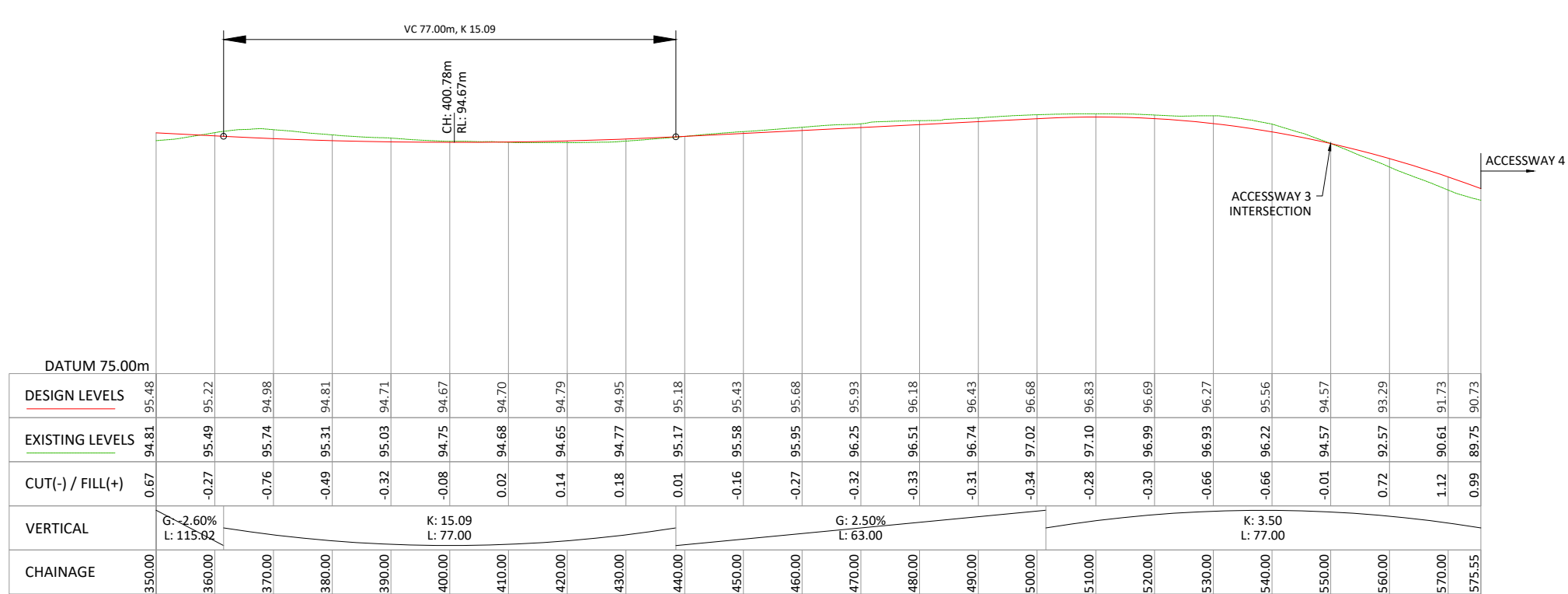
PROJECT
GOODLAND COASTAL FARM

TITLE
ROADING LONGSECTIONS SHEET 4

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC	SCALE	A3 1:1000
PROJECT No	1366	DRAWING No	C313
REVISION	C		



ROAD 3
SCALE 1H:2V



ROAD 3
SCALE 1H:2V

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
C	INFORMAL S92 RESPONSE	ZY	21/07/23
B	ROAD 3 RE-ALIGN	VC	20/12/21
A	ORIGINAL	VC	24/11/21

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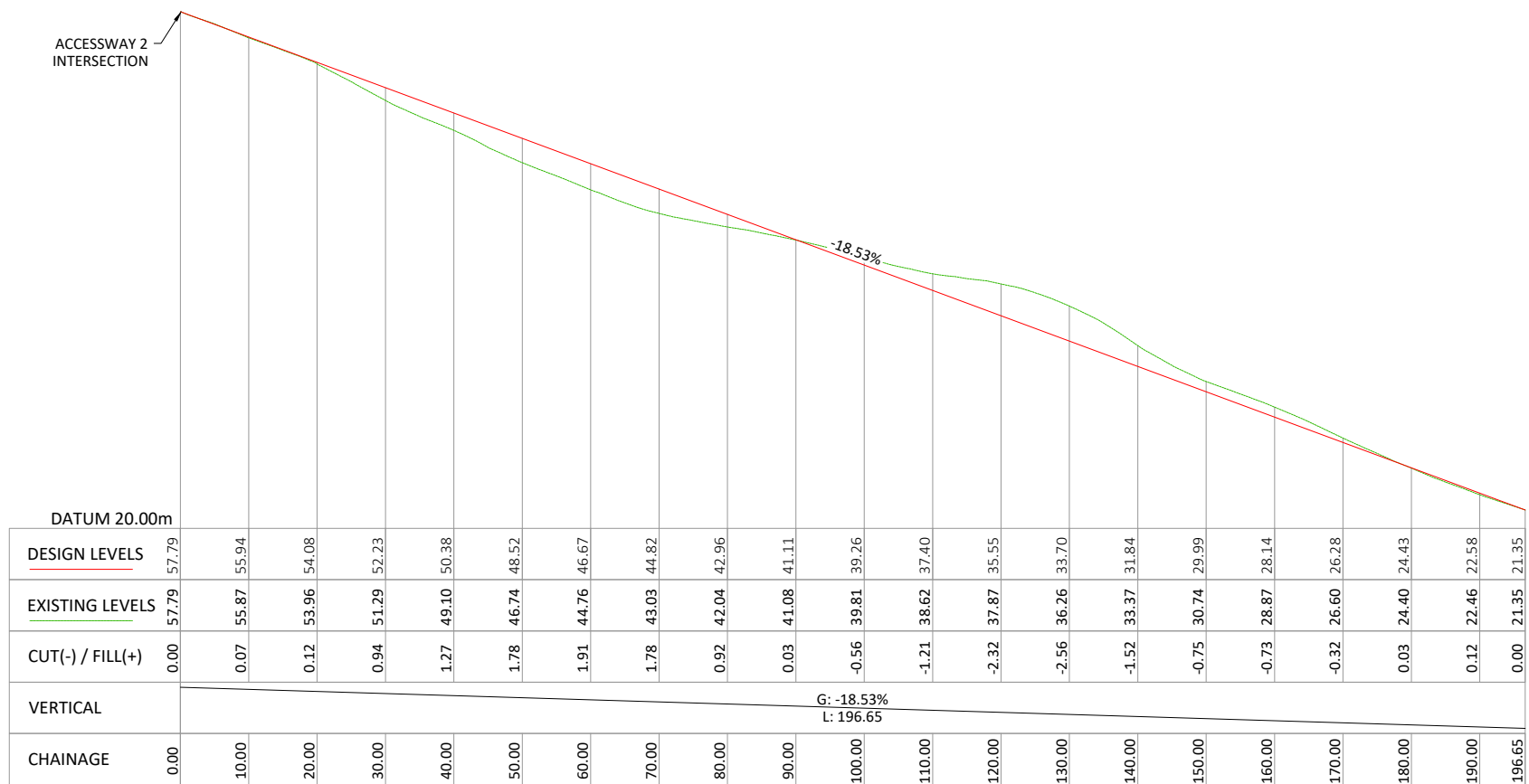
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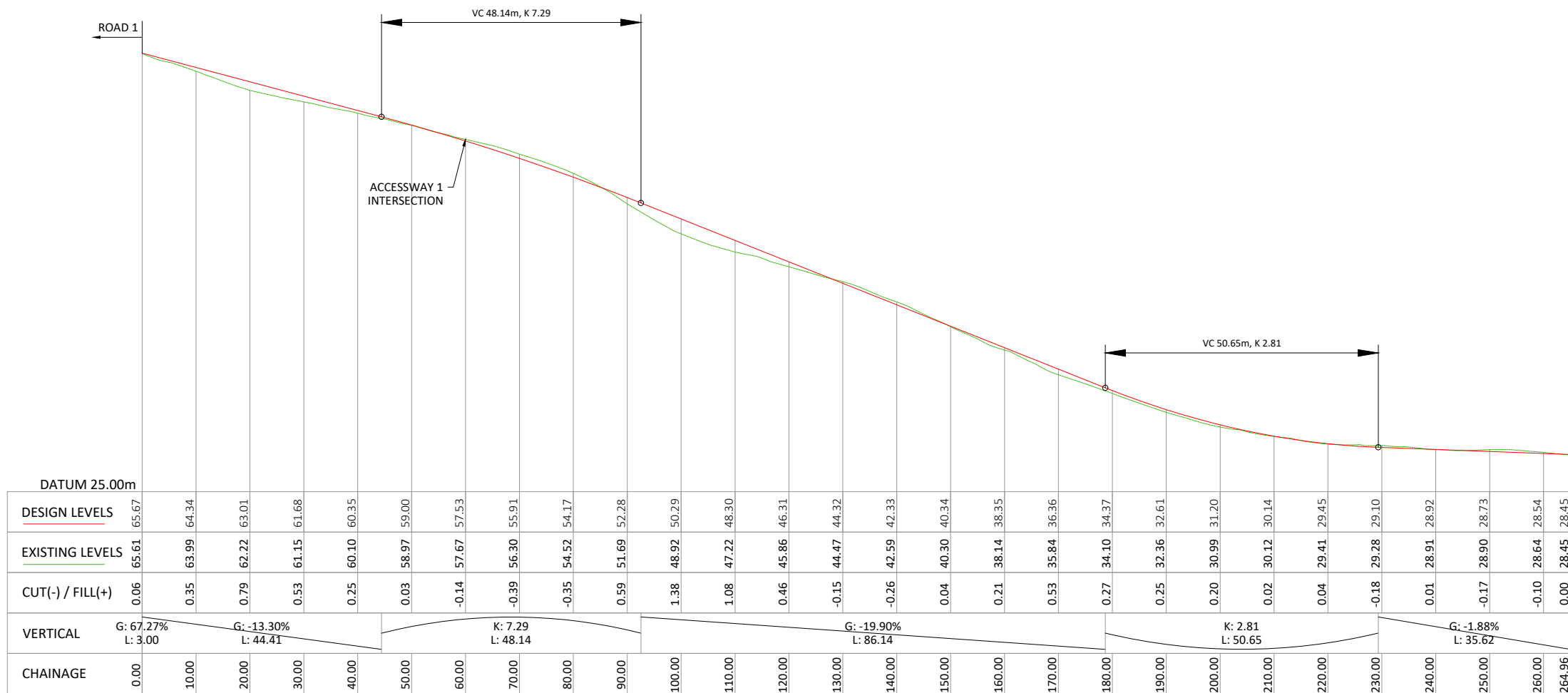
PROJECT
GOODLAND COASTAL FARM

TITLE
ROADING LONGSECTIONS SHEET 5

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC	SCALE	A3 1:1000
PROJECT No	1366	DRAWING No	C314
REVISION	C		



ACCESSWAY 1
SCALE 1H:2V



ACCESSWAY 2
SCALE 1H:2V

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
C	ACCESSWAY 1 UPDATED	ZY	26/08/24
B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL ISSUE	VC	24/11/21

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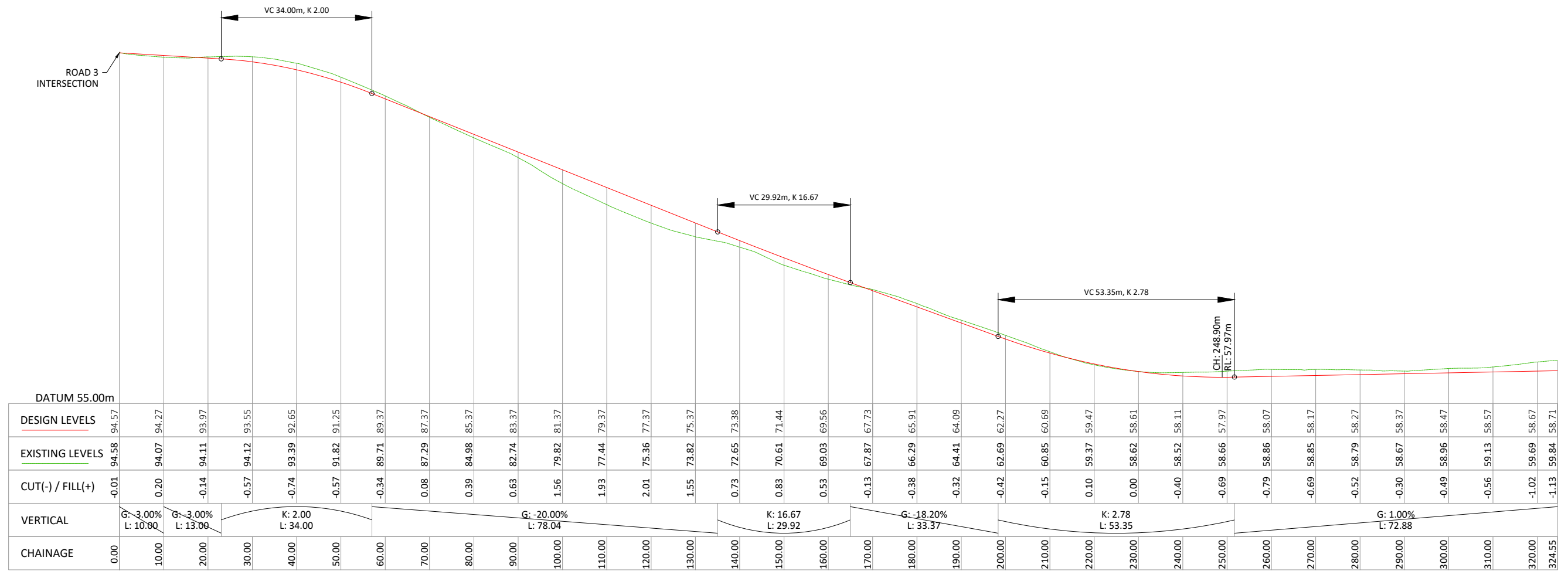
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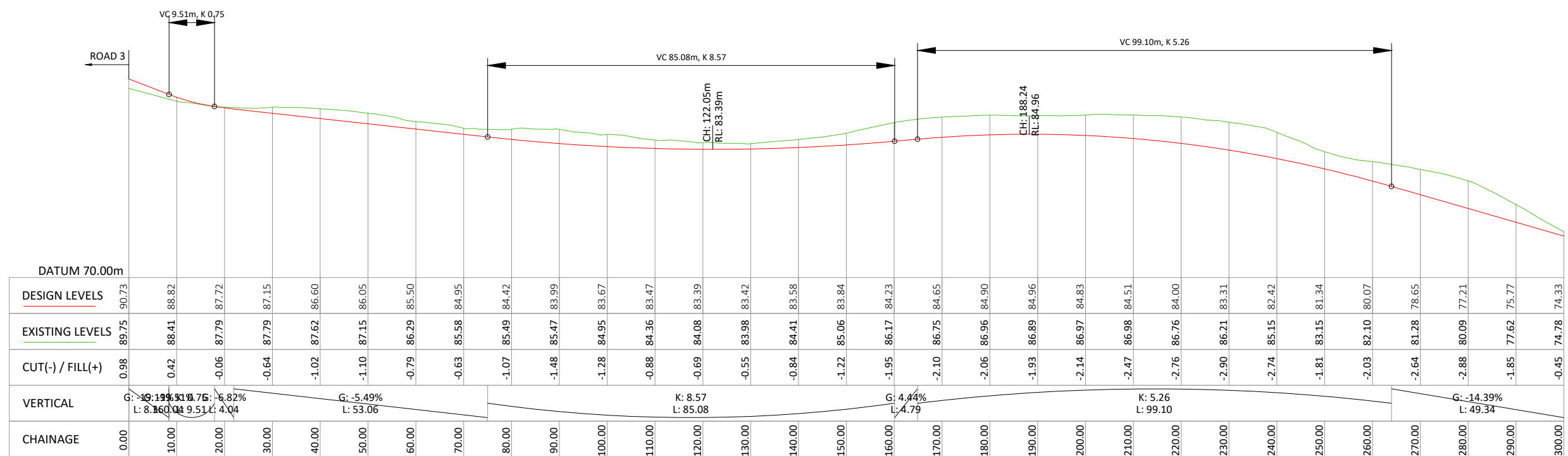
PROJECT
GOODLAND COASTAL FARM

TITLE
ROADING LONGSECTIONS SHEET 6

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC		A3 1:1000
PROJECT No	1366	DRAWING No	C315
		REVISION	C



_ACCESSWAY 3
SCALE 1H:2V



_ACCESSWAY 4
SCALE 1H:2V

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL	VC	24/11/21

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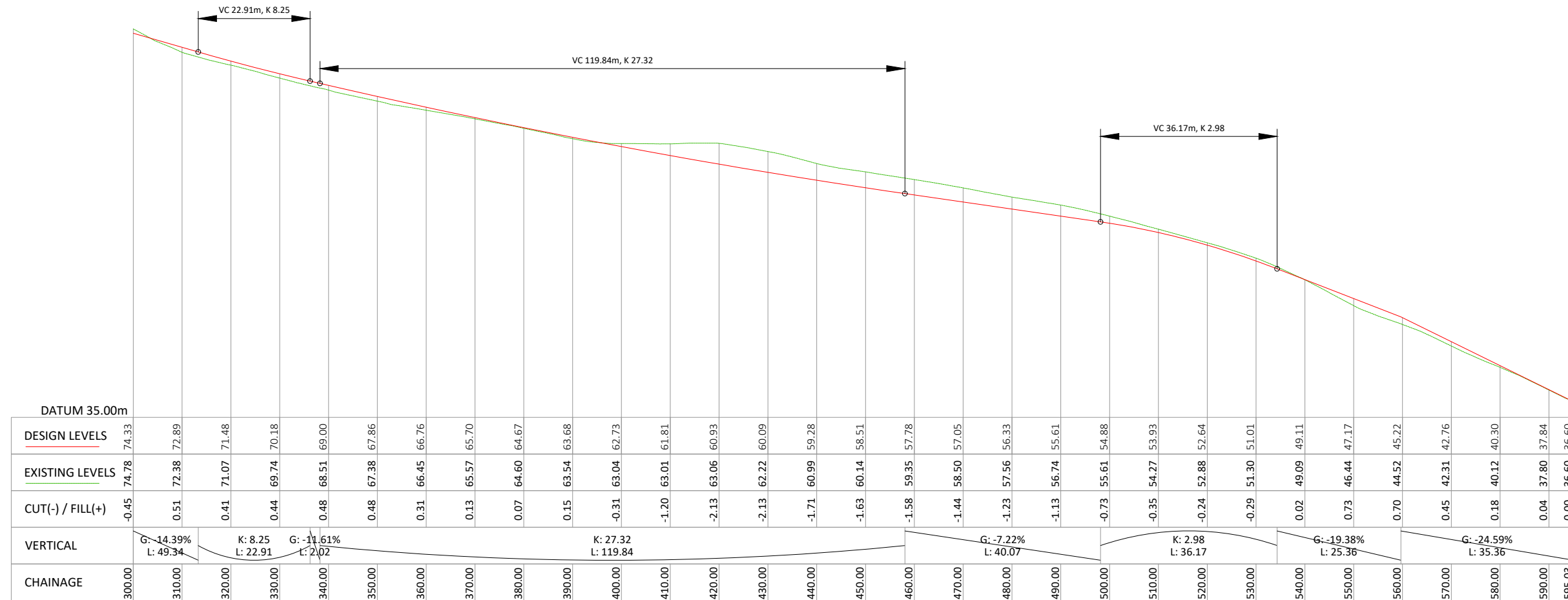
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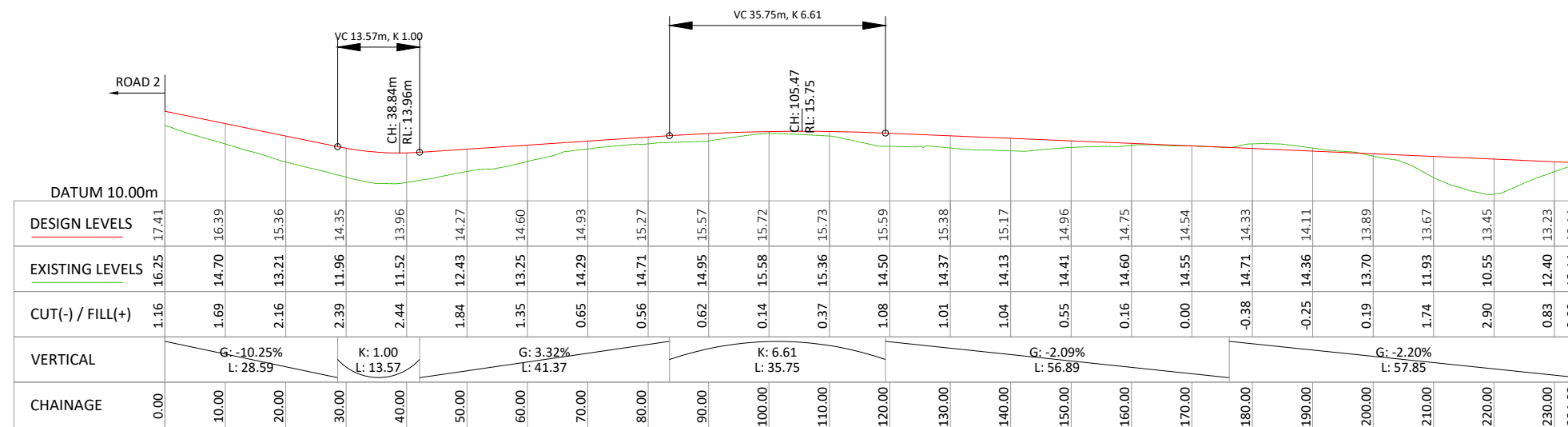
PROJECT
GOODLAND COASTAL FARM

TITLE
ROADING LONGSECTIONS SHEET 7

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC		A3 1:1000
PROJECT No	1366	DRAWING No	C316
		REVISION	B



ACCESSWAY 4
SCALE 1H:2V



ACCESSWAY 5
SCALE 1H:2V

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL	VC	24/11/21

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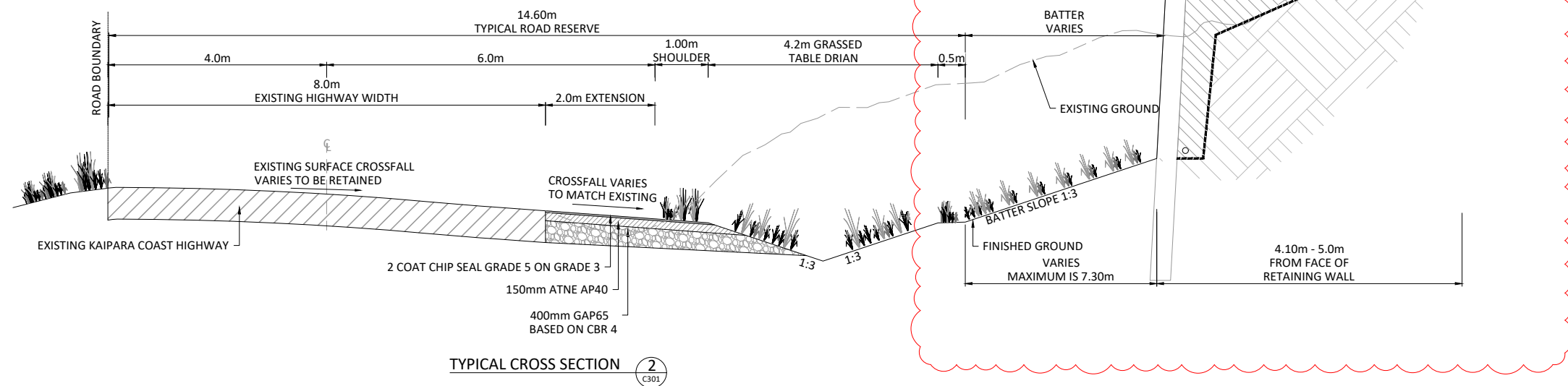
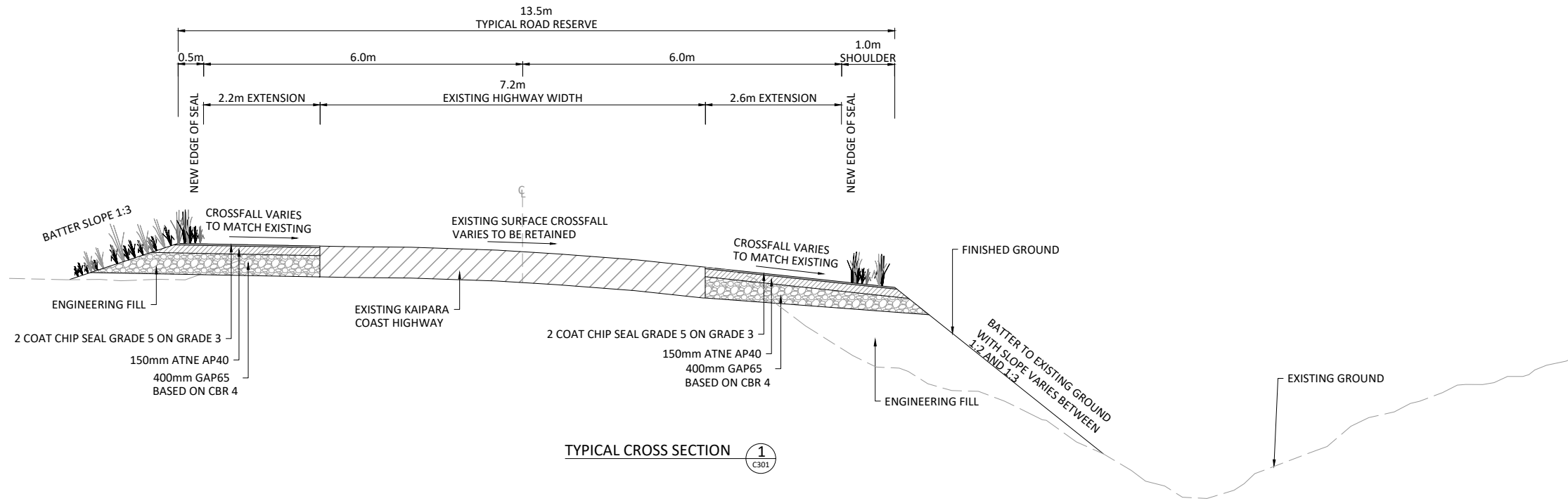
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PROJECT
GOODLAND COASTAL FARM

TITLE
ROADING LONGSECTIONS SHEET 8

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC		A3 1:1000
PROJECT No	1366	DRAWING No	C317
		REVISION	B



CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
C	NZTA RESPONSE	ZY	29/10/23
B	KAIPARA COAST HIGHWAY WIDENING UPDATED	ZY	30/07/25
A	INFORMAL 592 RESPONSE	ZY	21/07/23

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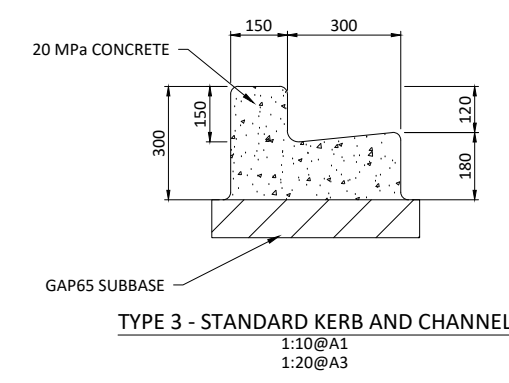
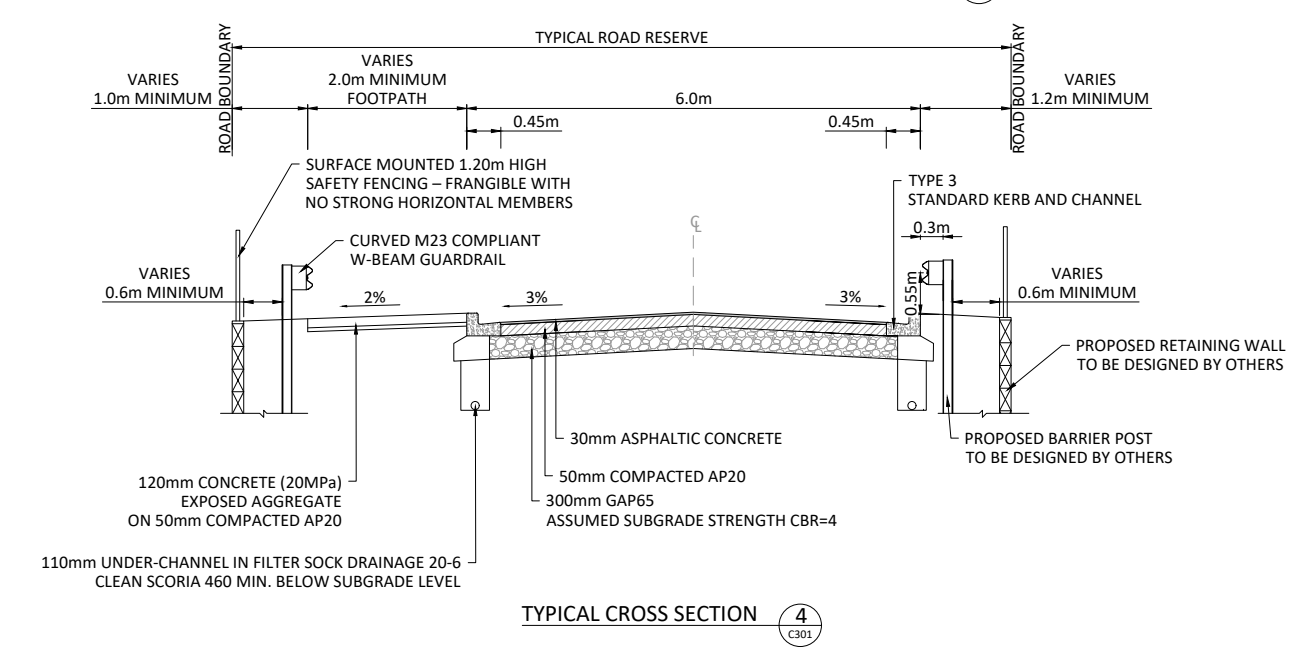
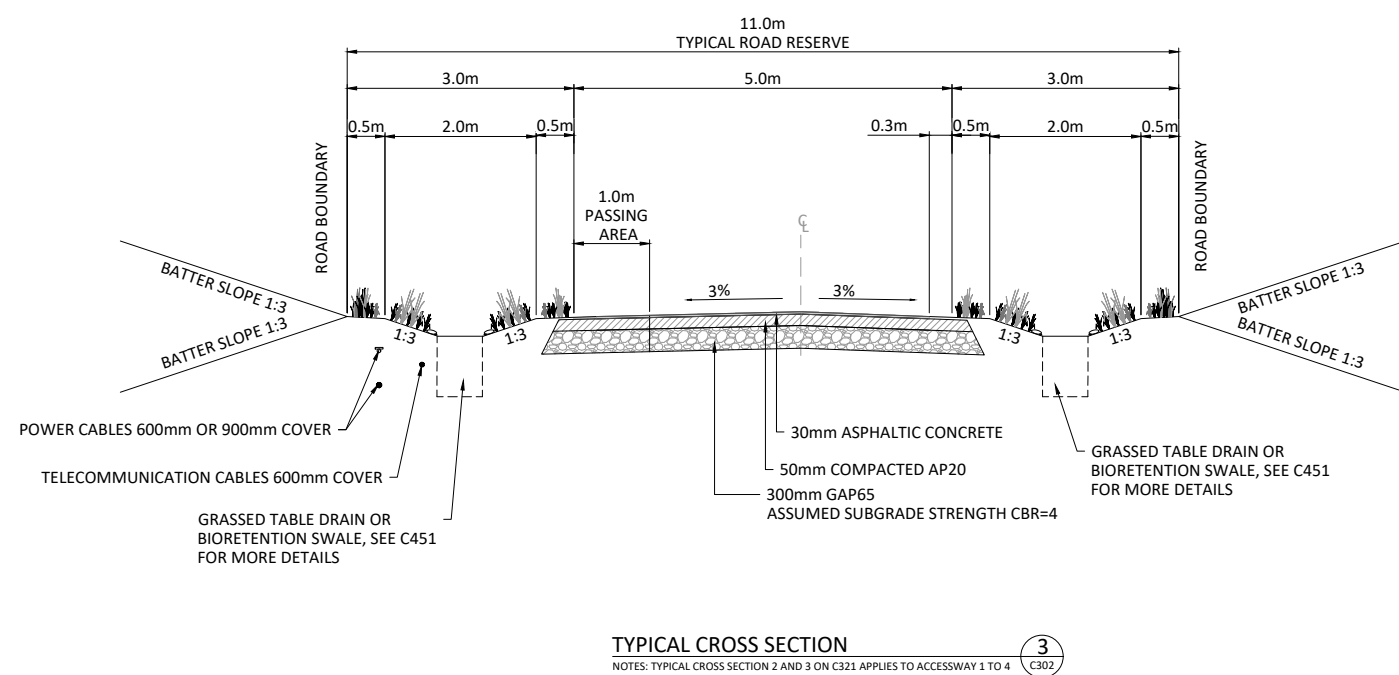
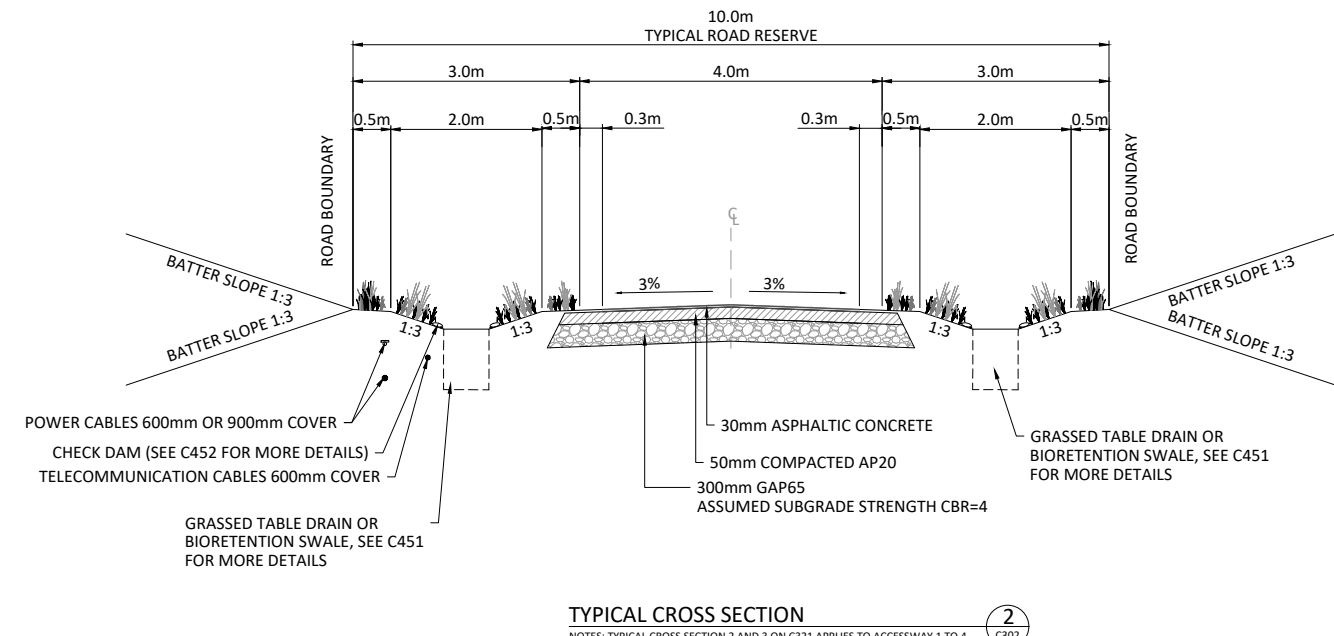
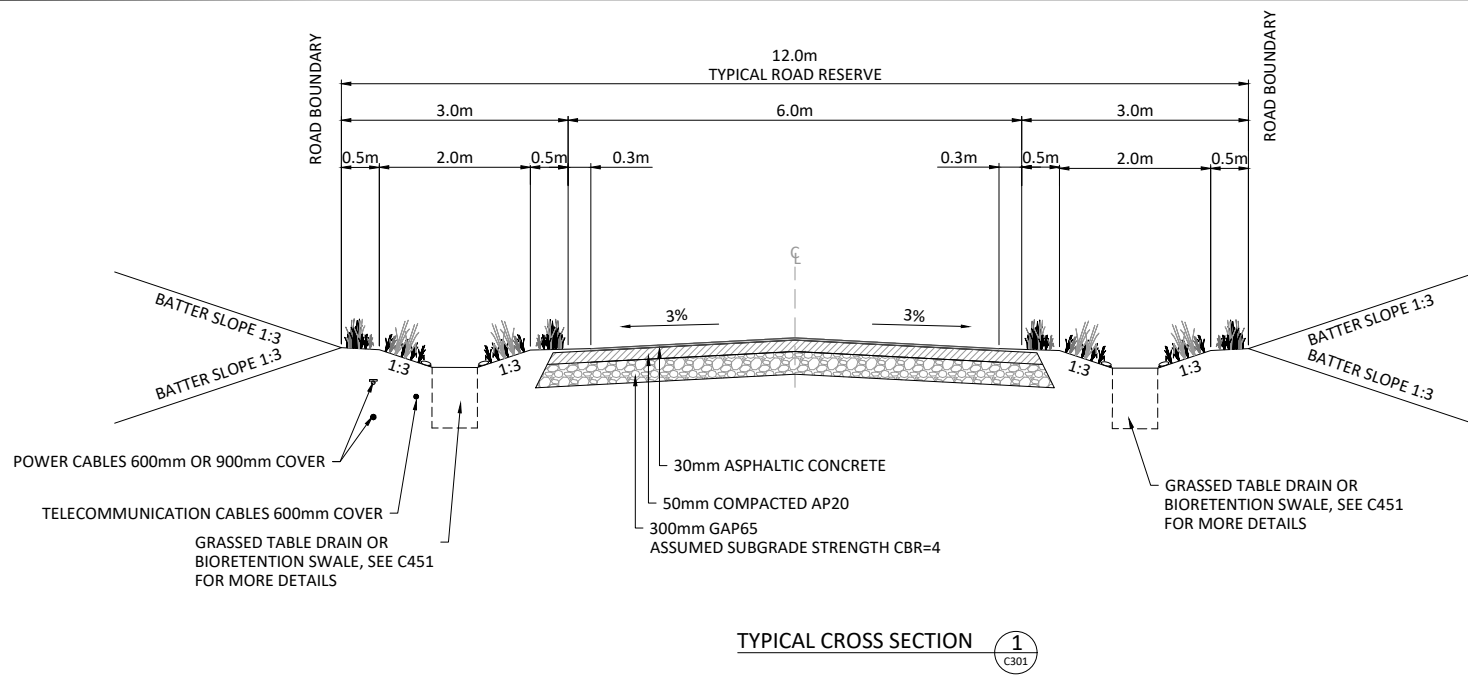
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PROJECT
GOODLAND COASTAL FARM

TITLE
ROADING TYPICAL CROSS SECTIONS SHEET 1

DRAWN	MD	SCALE	A1 1:50
DESIGNED	VC	A3	1:100
PROJECT No	1366	DRAWING No	C320
		REVISION	C

SAVED: P:\1366 - Goodland Coastal Farm Drawings\C320 ROADING TYPICAL CROSS SECTIONS.dwg - August 26, 2024 - PRINTED: August 26, 2024



NOTES

TYPICAL CROSS SECTION 2 AND 3 ON C321 ALSO APPLIES TO ACCESSWAY 1 TO 4.

CONSENT ISSUE

E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
C	INFORMAL S92 RESPONSE	ZY	21/07/23
B	UPDATED TABLE DRAIN	ZY	20/04/23
REVISION	CHANGES	CHECKED	DATE

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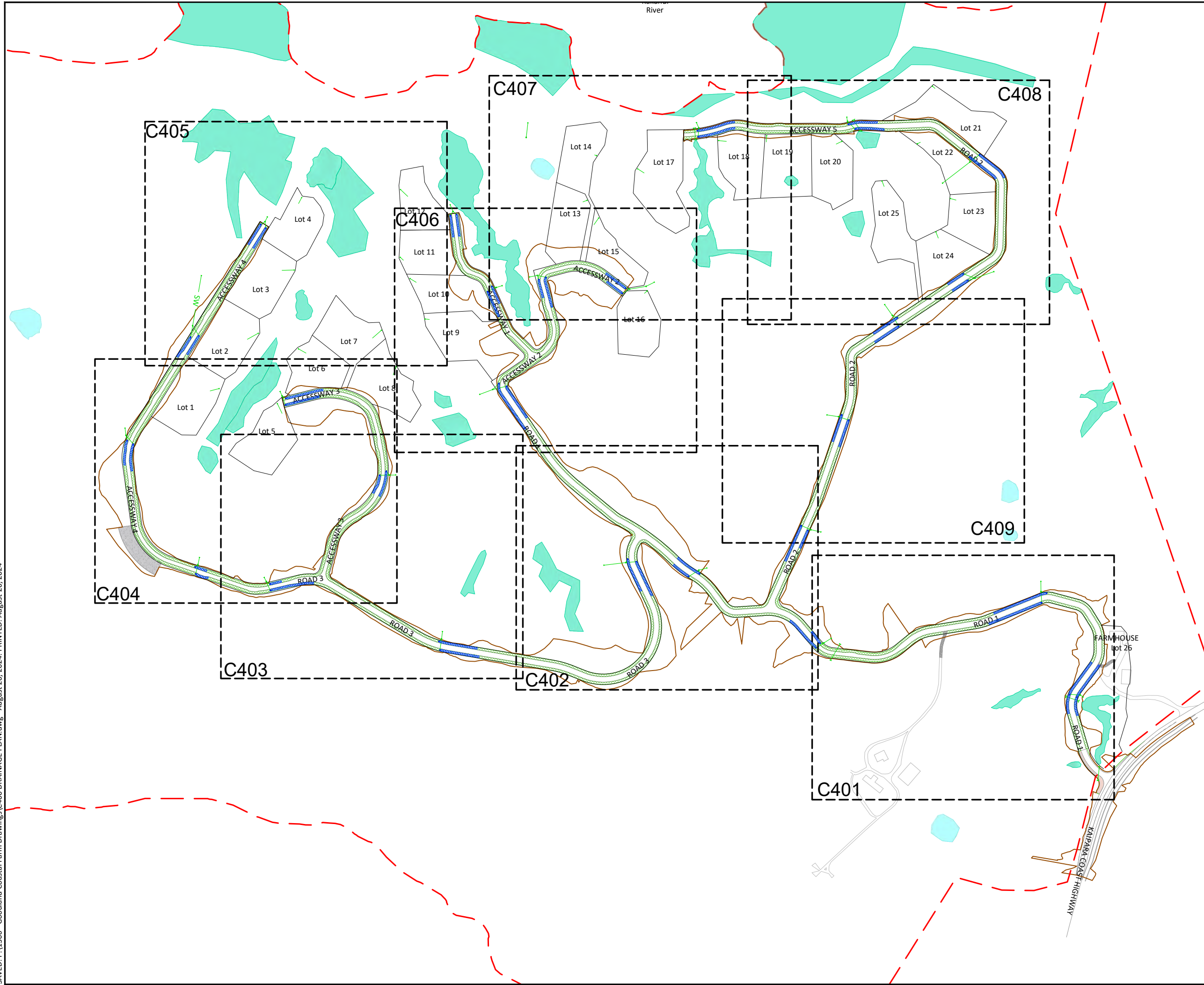
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PROJECT
GOODLAND COASTAL FARM

TITLE
ROADING TYPICAL CROSS SECTIONS SHEET 2

DRAWN	MD	SCALE	A1 1:50
DESIGNED	VC	A3	1:100
PROJECT No	DRAWING No	REVISION	
1366	C321	E	



LEGEND

- SITE BOUNDARY
- 50.0 PROPOSED CONTOURS
- 52.0 EXISTING CONTOURS
- EARTHWORKS EXTENT
- EXISTING NATURAL WETLAND
- EXISTING ARTIFICIAL WETLAND
- PROPOSED STORMWATER PIPE NETWORK
- PROPOSED SCRUFFY DOME
- PROPOSED CULVERT
- BIORETENTION SWALE
- GRASSED TABLE DRAIN

NOTES:

1. APPROVED HARDFILL SHALL BE USED WHEN BACKFILLING ALL ROAD CROSSINGS.
2. ALL MANHOLES SHALL BE 1050Ømm MINIMUM UNLESS SHOWN OTHERWISE ON LONG-SECTION DRAWINGS.
3. 7MPa SCORIA CONCRETE BEDDING TO BE USED WHERE GRADIENTS EXCEED 10%.
4. ANCHOR BLOCKS TO BE USED WHERE LONGITUDINAL GRADIENT EXCEEDS 20% (TO BE CONSTRUCTED TO SW CoP SPECIFICATIONS).

CONSENT ISSUE

E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
C	INFORMAL S92 RESPONSE	ZY	21/07/23
B	ROAD 3 RE-ALIGN	VC	20/12/21
REVISION	CHANGES	CHECKED	DATE

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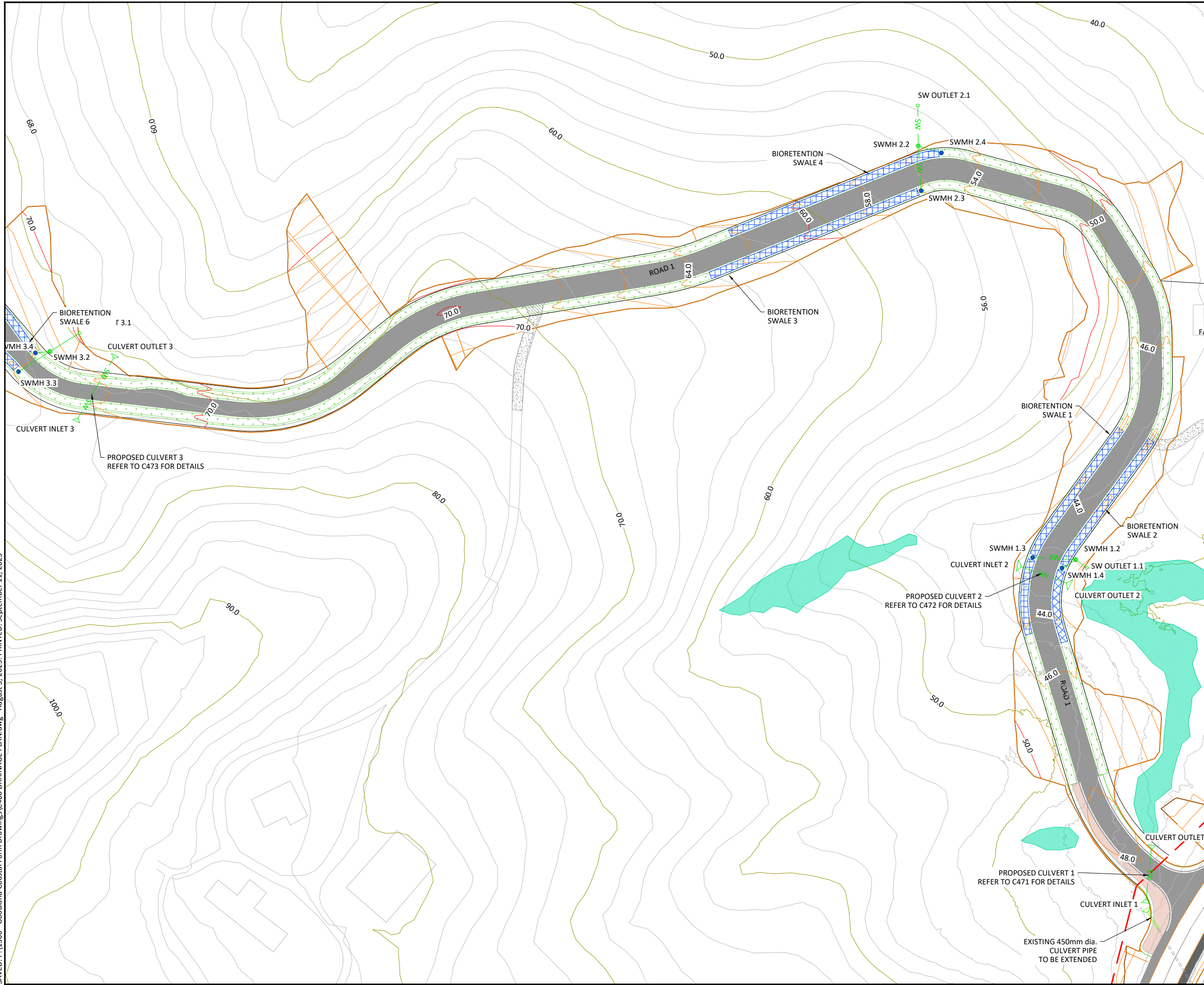
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PROJECT
GOODLAND COASTAL FARM

TITLE
DRAINAGE OVERALL PLAN

DRAWN	MD	SCALE	A1 1:2000
DESIGNED	VC	A3	1:4000
PROJECT No	DRAWING No	REVISION	
1366	C400	E	

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LEGEND

- SITE BOUNDARY
- 50.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EARTHWORKS EXTENT
- █ EXISTING NATURAL WETLAND
- █ EXISTING ARTIFICIAL WETLAND
- PROPOSED STORMWATER PIPE NETWORK
- PROPOSED SCRUFFY DOME
- SW PROPOSED CULVERT
- ▨ BIORETENTION SWALE
- ▨ GRASSED TABLE DRAIN

- NOTES:**
- APPROVED HARDFILL SHALL BE USED WHEN BACKFILLING ALL ROAD CROSSINGS.
 - ALL MANHOLES SHALL BE 1050Ømm MINIMUM UNLESS SHOWN OTHERWISE ON LONG-SECTION DRAWINGS.
 - 7MPa SCORIA CONCRETE BEDDING TO BE USED WHERE GRADIENTS EXCEED 10%.
 - ANCHOR BLOCKS TO BE USED WHERE LONGITUDINAL GRADIENT EXCEEDS 20% (TO BE CONSTRUCTED TO SW CoP SPECIFICATIONS).

CONSENT ISSUE			
F	KAIPARA COAST HIGHWAY EXISTING CULVERT EXTENDED	ZY	30/07/25
E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
B	INFORMAL S92 RESPONSE	ZY	21/07/23
REVISION	CHANGES	CHECKED	DATE

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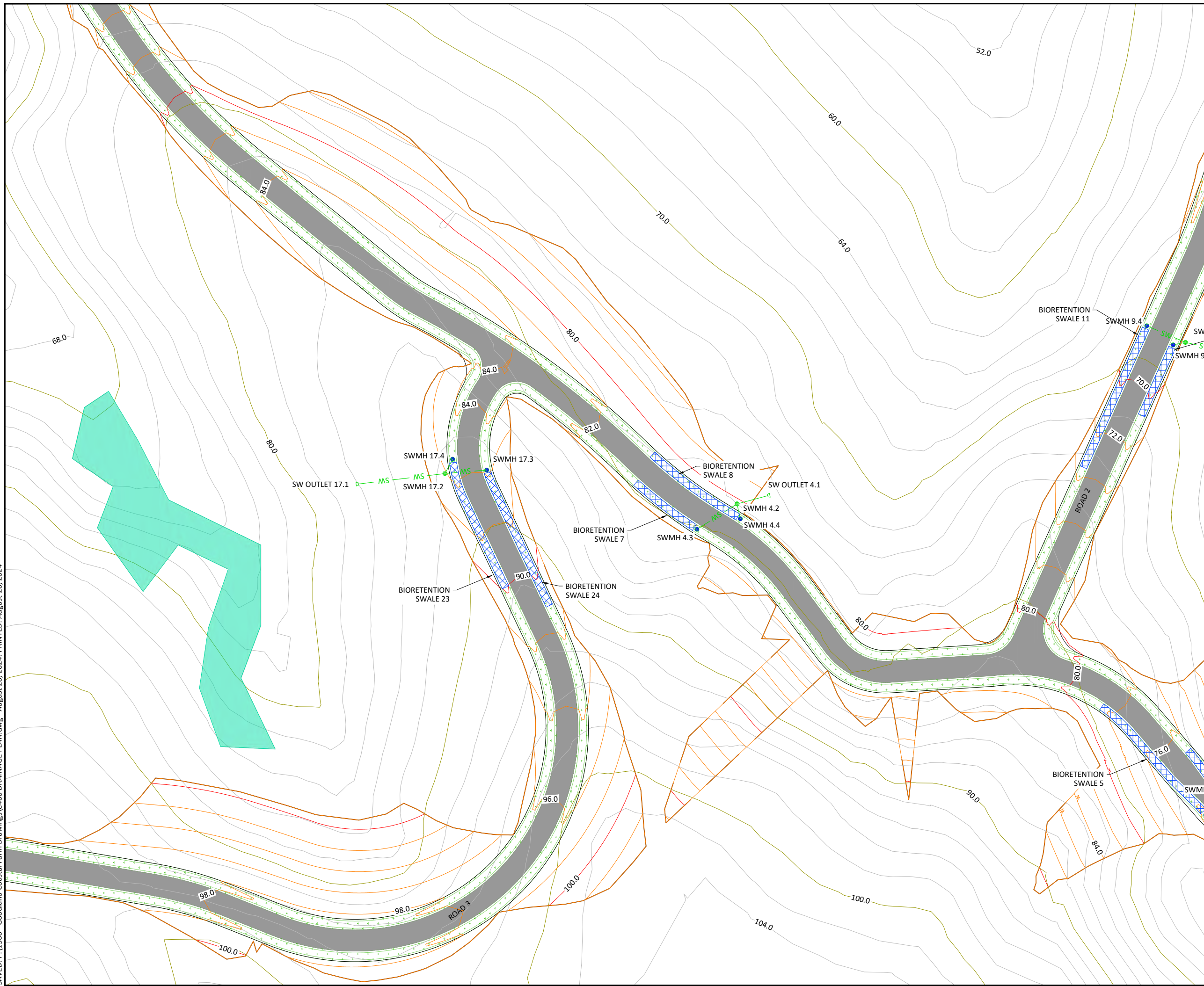
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PROJECT
GOODLAND COASTAL FARM

TITLE
DRAINAGE PLAN - SHEET 1

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC	A3	1:1000
PROJECT No	DRAWING No	REVISION	F
1366	C401		

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LEGEND

- SITE BOUNDARY
- 50.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EARTHWORKS EXTENT
- EXISTING NATURAL WETLAND
- EXISTING ARTIFICIAL WETLAND
- PROPOSED STORMWATER PIPE NETWORK
- PROPOSED SCRUFFY DOME
- SW PROPOSED CULVERT
- ▨ BIoretention SWALE
- ▨ GRASSED TABLE DRAIN

- NOTES:**
- APPROVED HARDFILL SHALL BE USED WHEN BACKFILLING ALL ROAD CROSSINGS.
 - ALL MANHOLES SHALL BE 1050Ømm MINIMUM UNLESS SHOWN OTHERWISE ON LONG-SECTION DRAWINGS.
 - 7MPa SCORIA CONCRETE BEDDING TO BE USED WHERE GRADIENTS EXCEED 10%.
 - ANCHOR BLOCKS TO BE USED WHERE LONGITUDINAL GRADIENT EXCEEDS 20% (TO BE CONSTRUCTED TO SW CoP SPECIFICATIONS).

CONSENT ISSUE

E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
C	INFORMAL S92 RESPONSE	ZY	21/07/23
B	ROAD 3 RE-ALIGN	VC	20/12/21
REVISION	CHANGES	CHECKED	DATE

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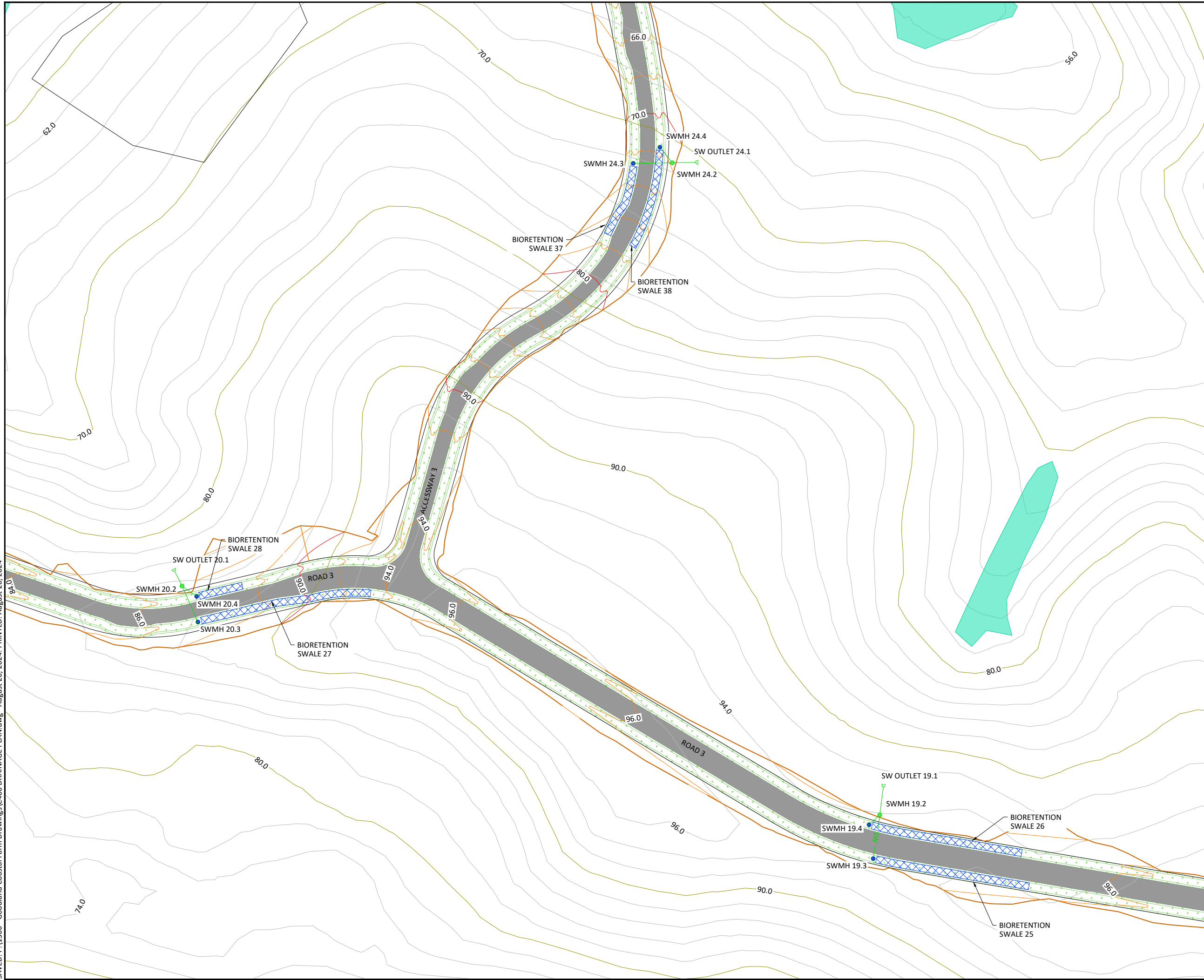
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PROJECT
GOODLAND COASTAL FARM

TITLE
DRAINAGE PLAN - SHEET 2

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC	A3	1:1000
PROJECT No	DRAWING No	REVISION	
1366	C402	E	

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LEGEND

- SITE BOUNDARY
- 50.0 PROPOSED CONTOURS
- 52.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- EARTHWORKS EXTENT
- EXISTING NATURAL WETLAND
- EXISTING ARTIFICIAL WETLAND
- PROPOSED STORMWATER PIPE NETWORK
- PROPOSED SCRUFFY DOME
- SW PROPOSED CULVERT
- BIORETENTION SWALE
- GRASSED TABLE DRAIN

NOTES:

1. APPROVED HARDFILL SHALL BE USED WHEN BACKFILLING ALL ROAD CROSSINGS.
2. ALL MANHOLES SHALL BE 1050Ømm MINIMUM UNLESS SHOWN OTHERWISE ON LONG-SECTION DRAWINGS.
3. 7MPa SCORIA CONCRETE BEDDING TO BE USED WHERE GRADIENTS EXCEED 10%.
4. ANCHOR BLOCKS TO BE USED WHERE LONGITUDINAL GRADIENT EXCEEDS 20% (TO BE CONSTRUCTED TO SW CoP SPECIFICATIONS).

CONSENT ISSUE

E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL ISSUE	VC	24/11/21
REVISION	CHANGES	CHECKED	DATE

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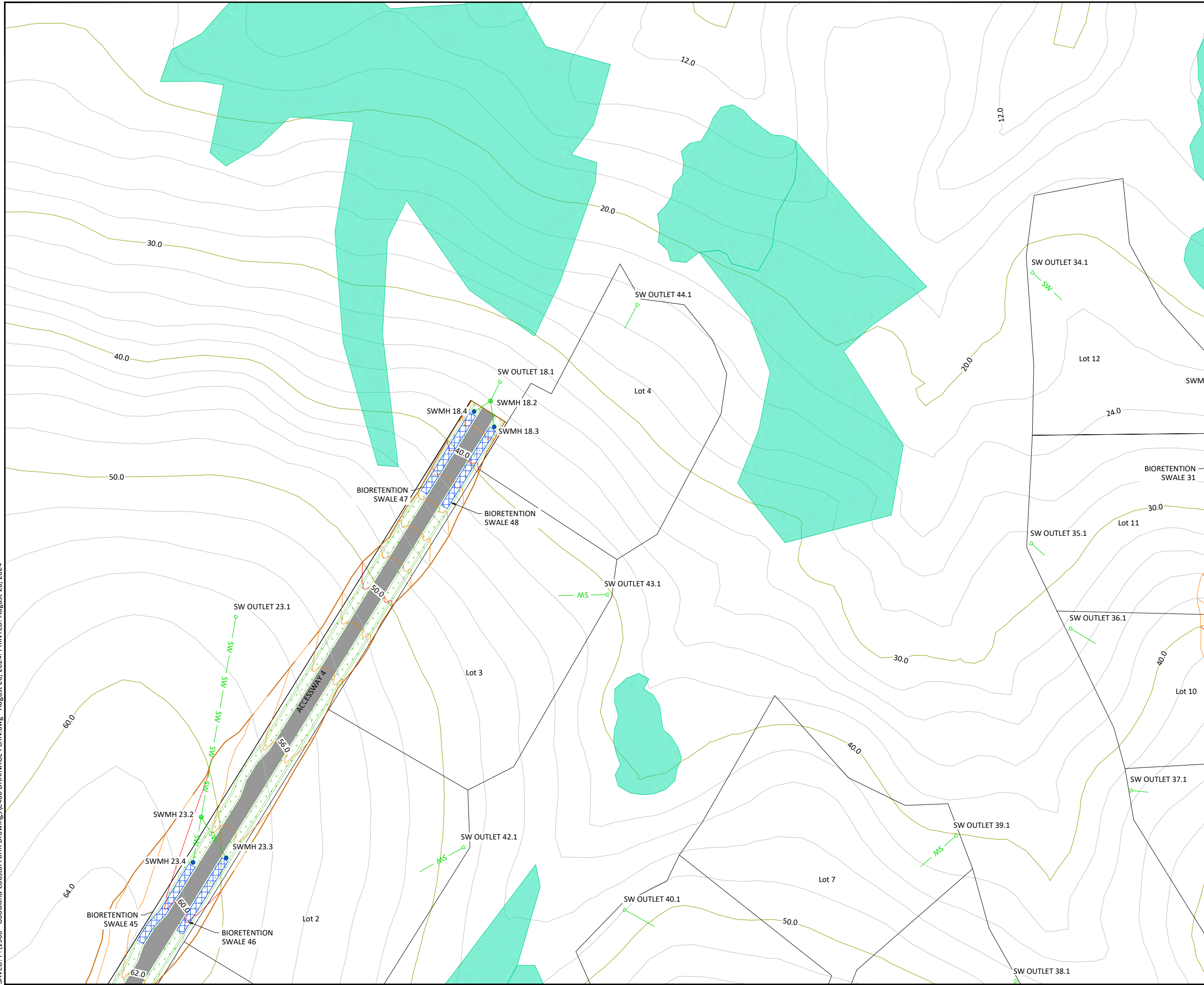
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PROJECT
GOODLAND COASTAL FARM

TITLE
DRAINAGE PLAN - SHEET 3

DRAWN	MD	SCALE
DESIGNED	VC	A1 1:500
PROJECT No	DRAWING No	REVISION
1366	C403	E

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LEGEND

- SITE BOUNDARY
- 50.0 PROPOSED CONTOURS
- 52.0 EXISTING CONTOURS
- EARTHWORKS EXTENT
- EXISTING NATURAL WETLAND
- EXISTING ARTIFICIAL WETLAND
- PROPOSED STORMWATER PIPE NETWORK
- PROPOSED SCRUFFY DOME
- PROPOSED CULVERT
- BIORETENTION SWALE
- GRASSED TABLE DRAIN

- NOTES:**
- APPROVED HARDFILL SHALL BE USED WHEN BACKFILLING ALL ROAD CROSSINGS.
 - ALL MANHOLES SHALL BE 1050Ømm MINIMUM UNLESS SHOWN OTHERWISE ON LONG-SECTION DRAWINGS.
 - 7MPa SCORIA CONCRETE BEDDING TO BE USED WHERE GRADIENTS EXCEED 10%.
 - ANCHOR BLOCKS TO BE USED WHERE LONGITUDINAL GRADIENT EXCEEDS 20% (TO BE CONSTRUCTED TO SW CoP SPECIFICATIONS).

CONSENT ISSUE			
REVISION	CHANGES	CHECKED	DATE
E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL ISSUE	VC	24/11/21

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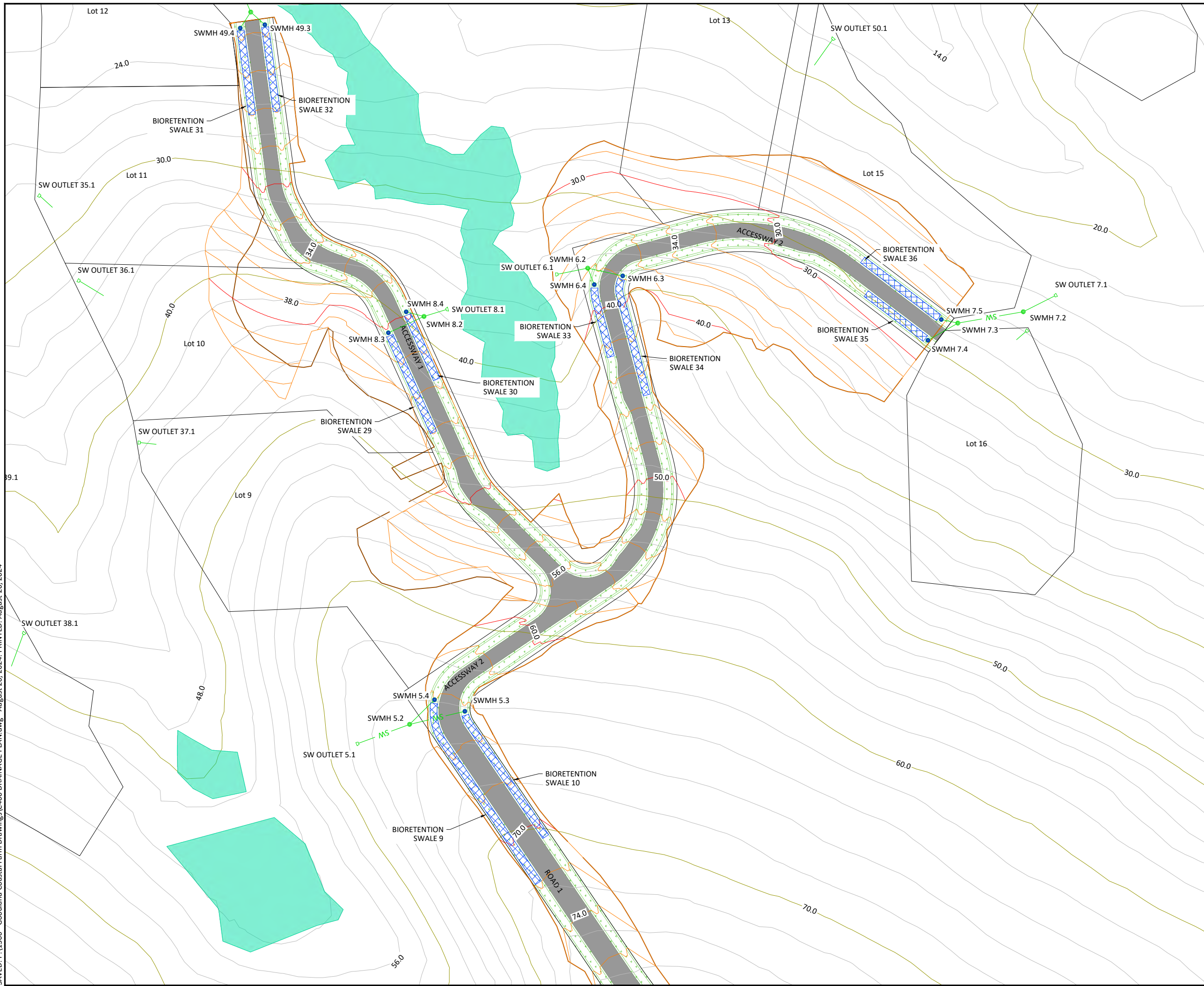
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ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
DRAINAGE PLAN - SHEET 5

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC	A3	1:1000
PROJECT No	DRAWING No	REVISION	
1366	C405	E	

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LEGEND

- SITE BOUNDARY
- 50.0 PROPOSED CONTOURS
- 52.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- EARTHWORKS EXTENT
- █ EXISTING NATURAL WETLAND
- █ EXISTING ARTIFICIAL WETLAND
- PROPOSED STORMWATER PIPE NETWORK
- PROPOSED SCRUFFY DOME
- SW PROPOSED CULVERT
- ▨ BIORETENTION SWALE
- ▨ GRASSED TABLE DRAIN

NOTES:

1. APPROVED HARDFILL SHALL BE USED WHEN BACKFILLING ALL ROAD CROSSINGS.
2. ALL MANHOLES SHALL BE 1050Ømm MINIMUM UNLESS SHOWN OTHERWISE ON LONG-SECTION DRAWINGS.
3. 7MPa SCORIA CONCRETE BEDDING TO BE USED WHERE GRADIENTS EXCEED 10%.
4. ANCHOR BLOCKS TO BE USED WHERE LONGITUDINAL GRADIENT EXCEEDS 20% (TO BE CONSTRUCTED TO SW CoP SPECIFICATIONS).

CONSENT ISSUE

E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL ISSUE	VC	24/11/21
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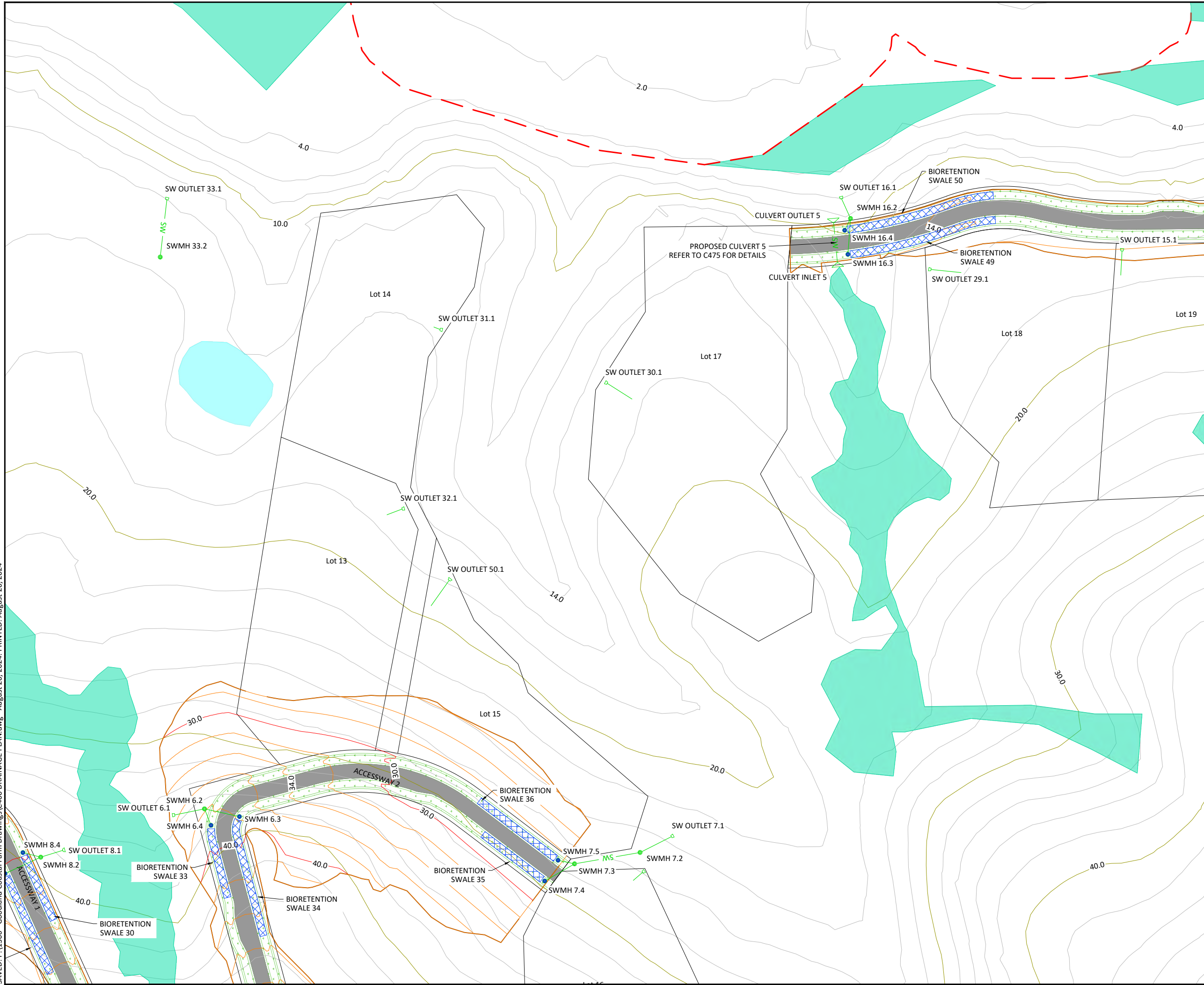
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
DRAINAGE PLAN - SHEET 6

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC	SCALE	A3 1:1000
PROJECT No	1366	DRAWING No	C406
		REVISION	E

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LEGEND

- SITE BOUNDARY
- 50.0 PROPOSED CONTOURS
- 52.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- EARTHWORKS EXTENT
- EXISTING NATURAL WETLAND
- EXISTING ARTIFICIAL WETLAND
- PROPOSED STORMWATER PIPE NETWORK
- PROPOSED SCRUFFY DOME
- SW PROPOSED CULVERT
- BIORETENTION SWALE
- GRASSED TABLE DRAIN

NOTES:

1. APPROVED HARDFILL SHALL BE USED WHEN BACKFILLING ALL ROAD CROSSINGS.
2. ALL MANHOLES SHALL BE 1050Ømm MINIMUM UNLESS SHOWN OTHERWISE ON LONG-SECTION DRAWINGS.
3. 7MPa SCORIA CONCRETE BEDDING TO BE USED WHERE GRADIENTS EXCEED 10%.
4. ANCHOR BLOCKS TO BE USED WHERE LONGITUDINAL GRADIENT EXCEEDS 20% (TO BE CONSTRUCTED TO SW CoP SPECIFICATIONS).

CONSENT ISSUE

E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL ISSUE	VC	24/11/21
REVISION	CHANGES	CHECKED	DATE

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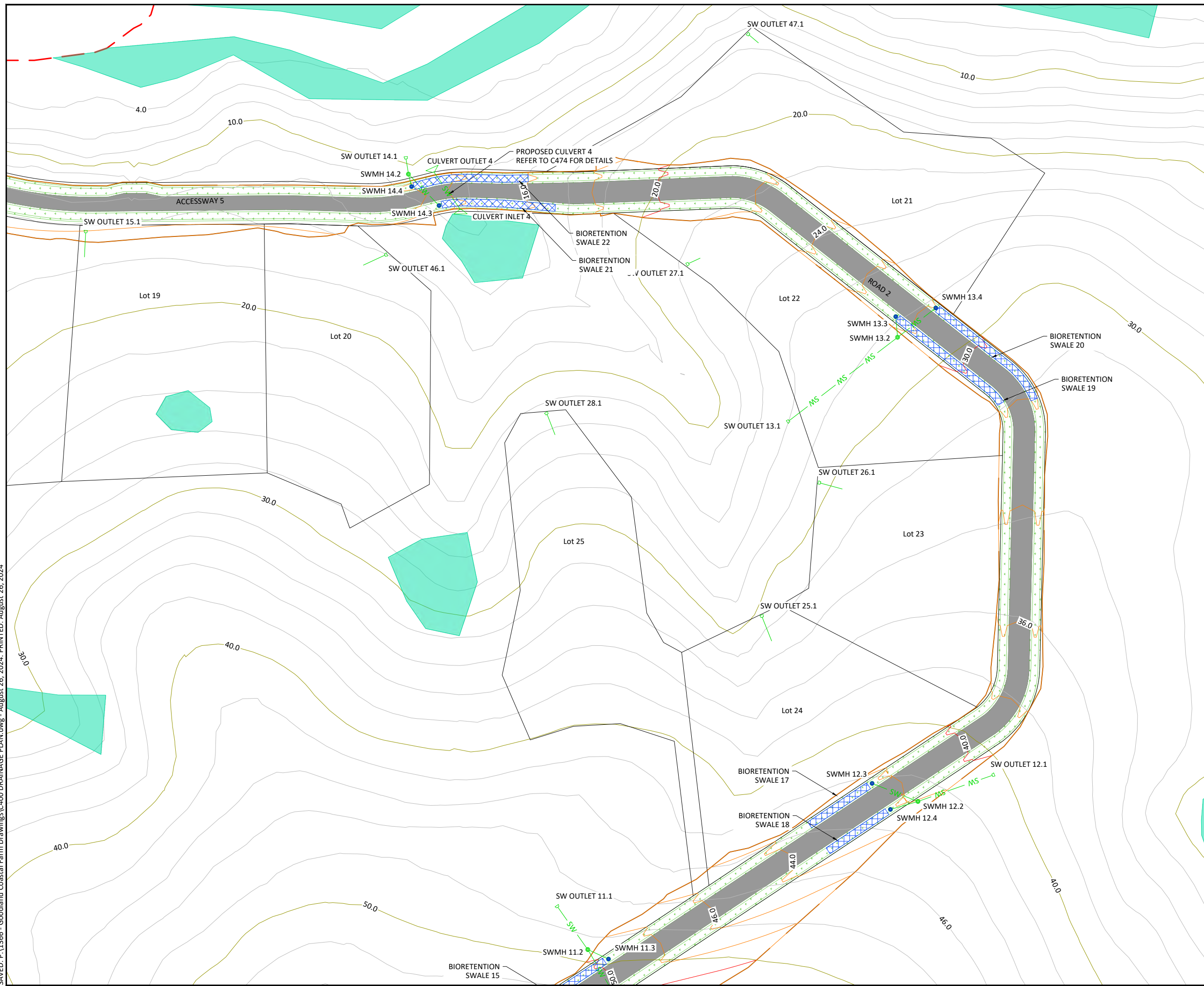
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
DRAINAGE PLAN - SHEET 7

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC	A3	1:1000
PROJECT No	DRAWING No	REVISION	
1366	C407	E	

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LEGEND

- SITE BOUNDARY
- 50.0 PROPOSED CONTOURS
- 52.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- EARTHWORKS EXTENT
- EXISTING NATURAL WETLAND
- EXISTING ARTIFICIAL WETLAND
- PROPOSED STORMWATER PIPE NETWORK
- PROPOSED SCRUFFY DOME
- SW PROPOSED CULVERT
- ▨ BIORETENTION SWALE
- ▨ GRASSED TABLE DRAIN

NOTES:

1. APPROVED HARDFILL SHALL BE USED WHEN BACKFILLING ALL ROAD CROSSINGS.
2. ALL MANHOLES SHALL BE 1050Ømm MINIMUM UNLESS SHOWN OTHERWISE ON LONG-SECTION DRAWINGS.
3. 7MPa SCORIA CONCRETE BEDDING TO BE USED WHERE GRADIENTS EXCEED 10%.
4. ANCHOR BLOCKS TO BE USED WHERE LONGITUDINAL GRADIENT EXCEEDS 20% (TO BE CONSTRUCTED TO SW CoP SPECIFICATIONS).

CONSENT ISSUE

E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
B	INFORMAL S92 RESPONSE	ZY	21/07/23
A	ORIGINAL ISSUE	VC	24/11/21
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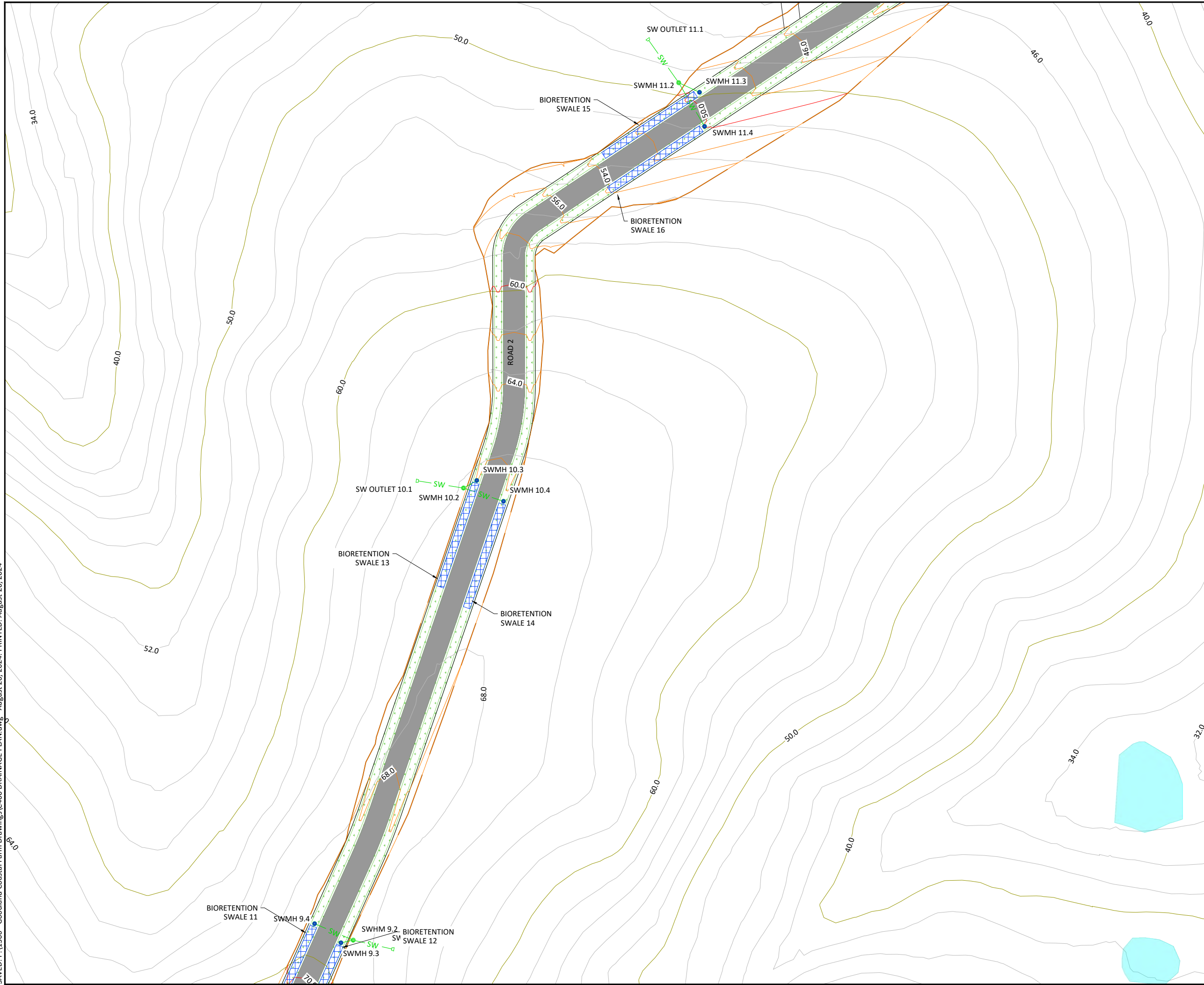
CLIENT
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PROJECT
GOODLAND COASTAL FARM

TITLE
DRAINAGE PLAN - SHEET 8

DRAWN	MD	SCALE	A1 1:500
DESIGNED	VC	A3	1:1000
PROJECT No	DRAWING No	REVISION	
1366	C408	E	

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LEGEND

- SITE BOUNDARY
- 50.0 PROPOSED CONTOURS
- 52.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- EARTHWORKS EXTENT
- EXISTING NATURAL WETLAND
- EXISTING ARTIFICIAL WETLAND
- ○ PROPOSED STORMWATER PIPE NETWORK
- ○ PROPOSED SCRUFFY DOME
- SW PROPOSED CULVERT
- BIORETENTION SWALE
- GRASSED TABLE DRAIN

NOTES:

1. APPROVED HARDFILL SHALL BE USED WHEN BACKFILLING ALL ROAD CROSSINGS.
2. ALL MANHOLES SHALL BE 1050Ømm MINIMUM UNLESS SHOWN OTHERWISE ON LONG-SECTION DRAWINGS.
3. 7MPa SCORIA CONCRETE BEDDING TO BE USED WHERE GRADIENTS EXCEED 10%.
4. ANCHOR BLOCKS TO BE USED WHERE LONGITUDINAL GRADIENT EXCEEDS 20% (TO BE CONSTRUCTED TO SW CoP SPECIFICATIONS).

CONSENT ISSUE

E	FORMAL S92 RESPONSE	ZY	26/08/24
D	FORMAL S92 RESPONSE	ZY	31/01/24
B	INFORMAL S92 RESPONSE	ZY	22/07/23
A	ORIGINAL ISSUE	VC	25/11/21
REVISION	CHANGES	CHECKED	DATE

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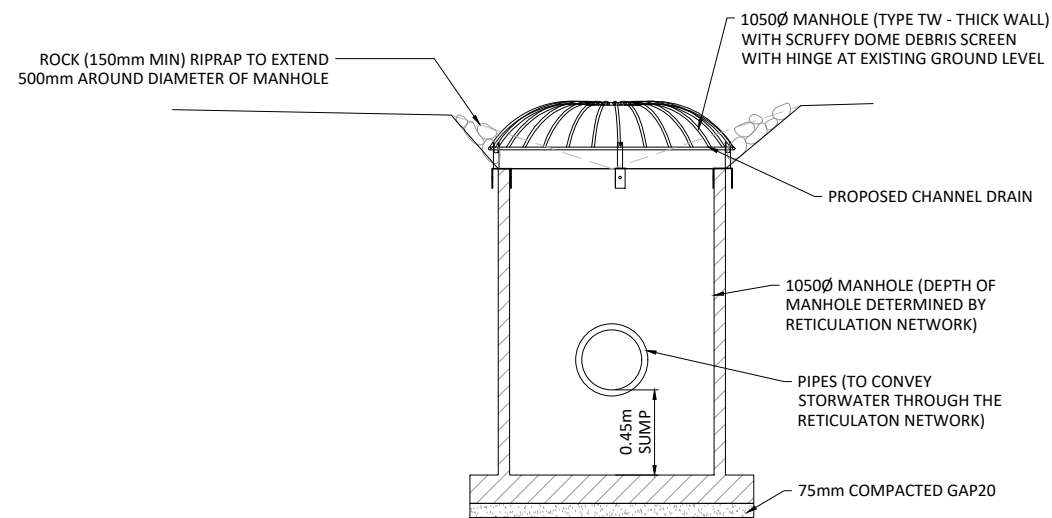
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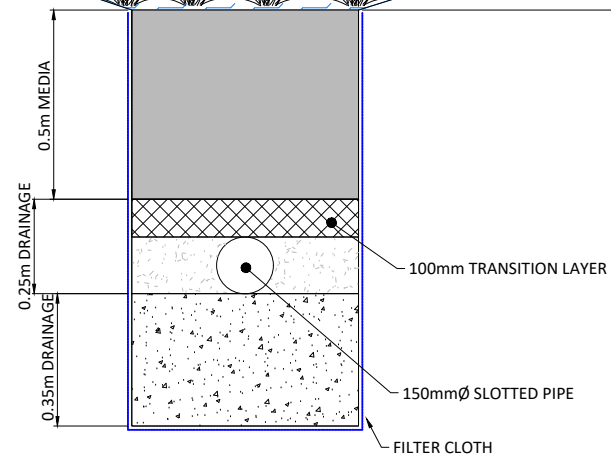
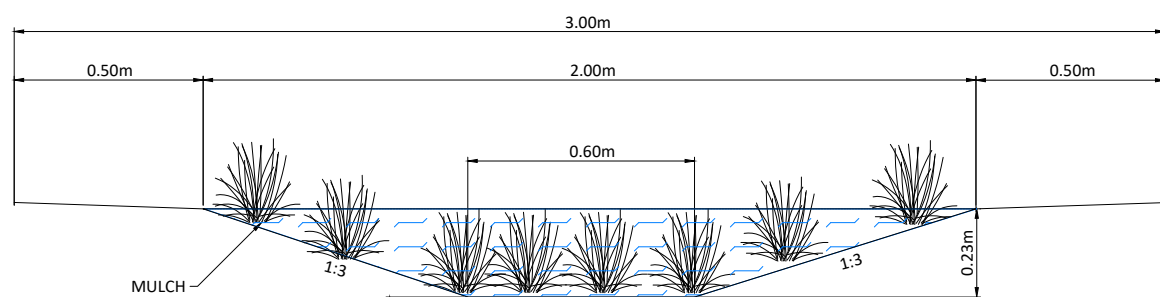
PROJECT
GOODLAND COASTAL FARM

TITLE
DRAINAGE PLAN - SHEET 9

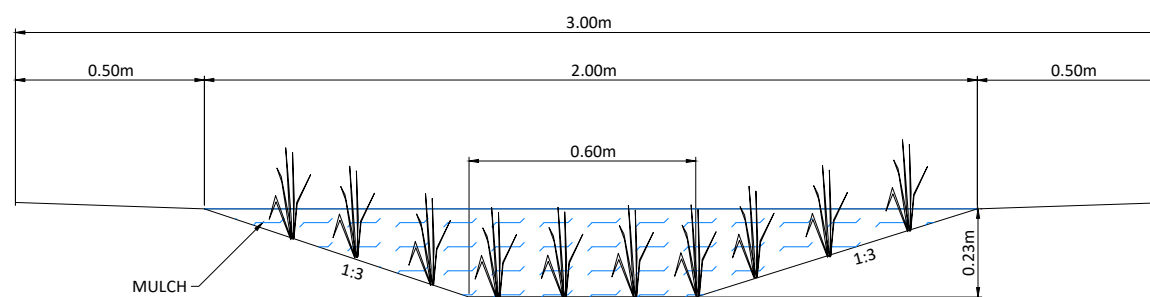
DRAWN	MD	SCALE
DESIGNED	VC	A1 1:500
PROJECT No	DRAWING No	REVISION
1366	C409	E



SCRUFFY DOME CROSS SECTION
SCALE 1:20 (A1), 1:40 (A3)



BIORETENTION SWALE
SCALE 1:10 (A1), 1:20 (A3)



GRASSED TABLE DRAIN
SCALE 1:10 (A1), 1:20 (A3)

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
C	FORMAL S92 RESPONSE	ZY	26/08/24
B	FORMAL S92 RESPONSE	ZY	31/01/24
A	ORIGINAL ISSUE	ZY	21/07/23

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PROJECT
GOODLAND COASTAL FARM

TITLE
SCRUFFY DOME & TABLE DRAIN DETAILS

DRAWN	TG	SCALE A1 1:20
DESIGNED	TG	A3 1:40
PROJECT No 1366	DRAWING No C450	REVISION C

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C451 TABLE DRAIN CROSS SECTION DETAILS.dwg - February 1, 2024. PRINTED: February 1, 2024

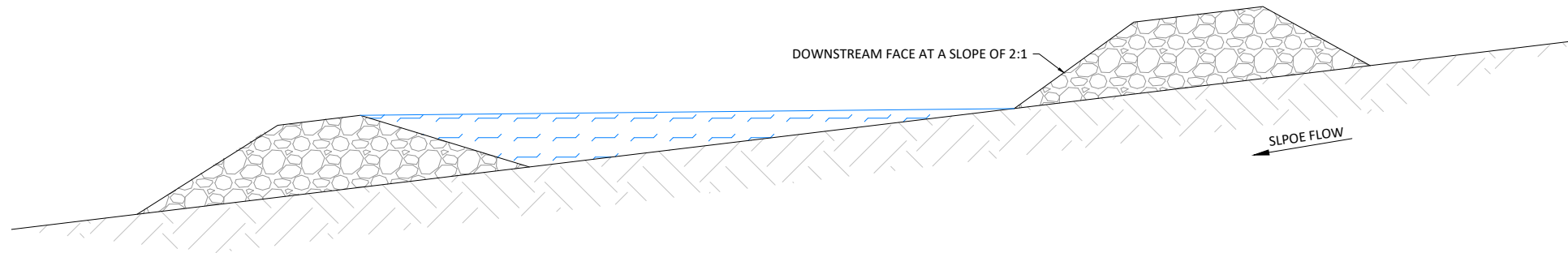
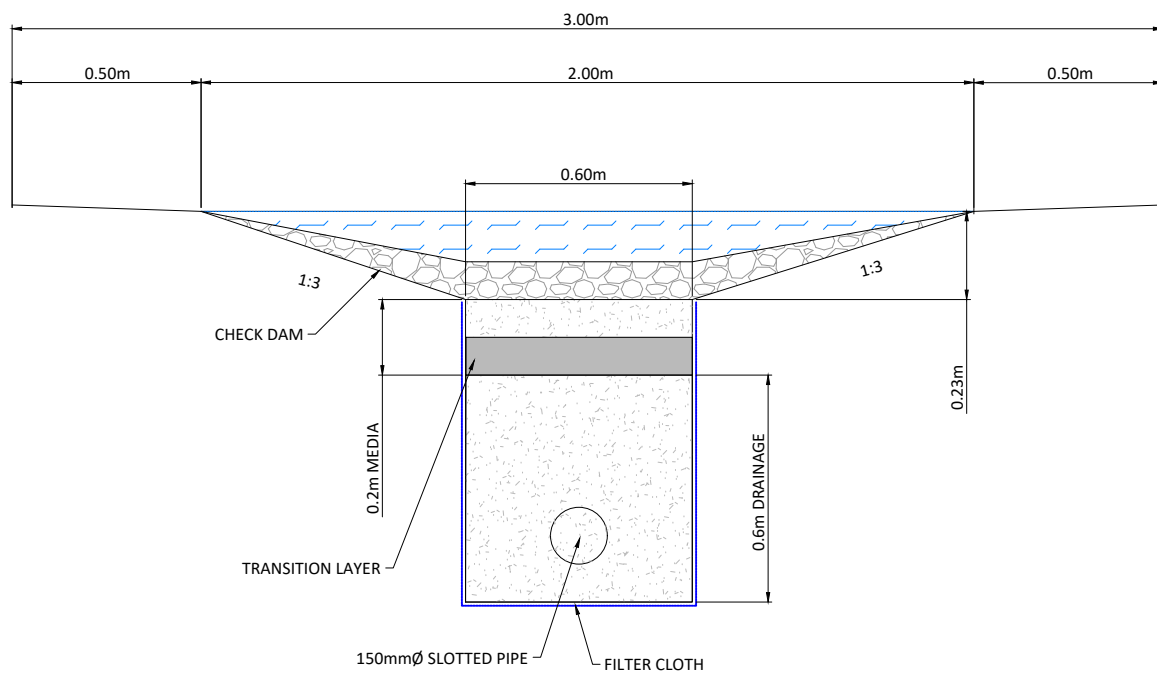


TABLE DRAIN WITH CHECK DAM LONG SECTION
SCALE N.T.S



BIORETENTION SWALE WITH CHECK DAM
SCALE N.T.S

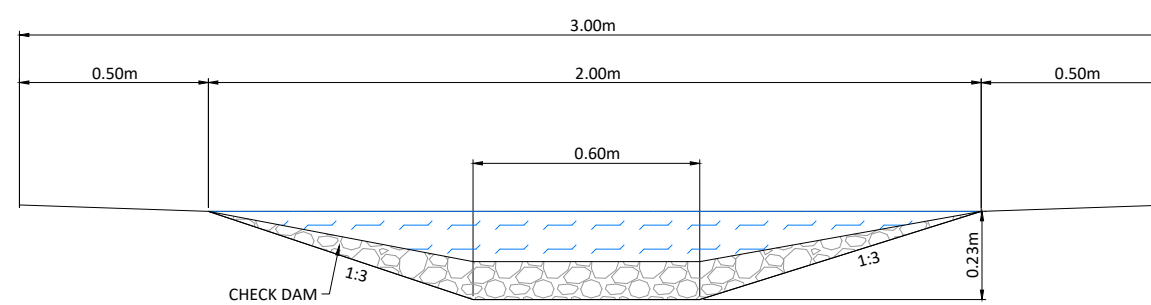


TABLE DRAIN WITH CHECK DAM
SCALE N.T.S

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
B	FORMAL S92 RESPONSE	ZY	31/01/24
A	ORIGINAL ISSUE	ZY	21/07/23

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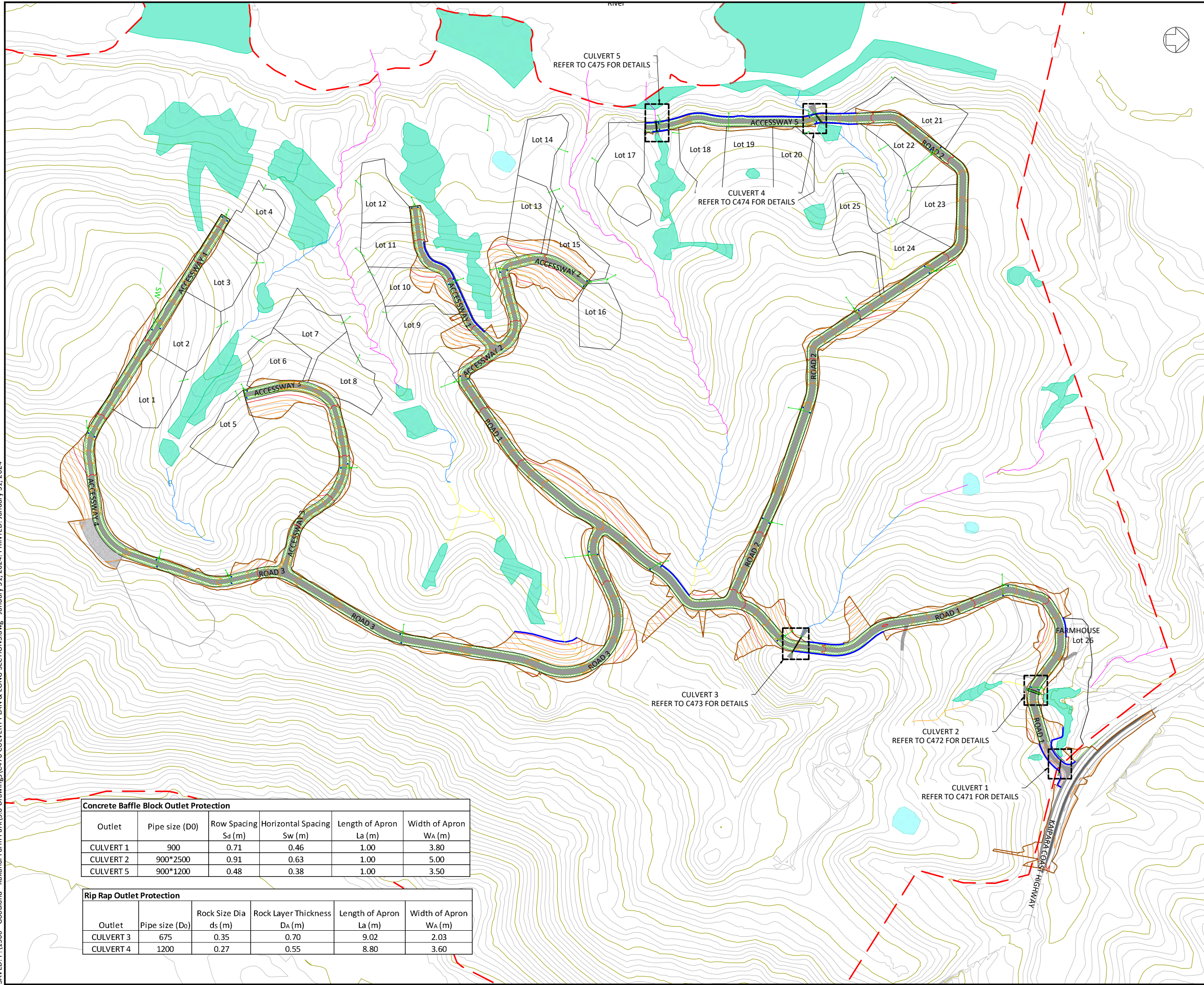
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PROJECT
GOODLAND COASTAL FARM

TITLE
TABLE DRAIN SECTIONS

DRAWN	TG	SCALE A1 NTS
DESIGNED	TG	A3 NTS
PROJECT No 1366	DRAWING No C451	REVISION A

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C470 CULVERT PLAN & LONG SECTIONS.dwg - January 31, 2024. PRINTED: January 31, 2024



LEGEND	
	SITE BOUNDARY
	PROPOSED CONTOURS
	EXISTING CONTOURS
	EARTHWORKS EXTENT
	EXISTING NATURAL WETLAND
	EXISTING ARTIFICIAL WETLAND
	PROPOSED STORMWATER PIPE NETWORK
	PROPOSED SCRUFFY DOME
	PROPOSED CULVERT

CONSENT ISSUE

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PROJECT
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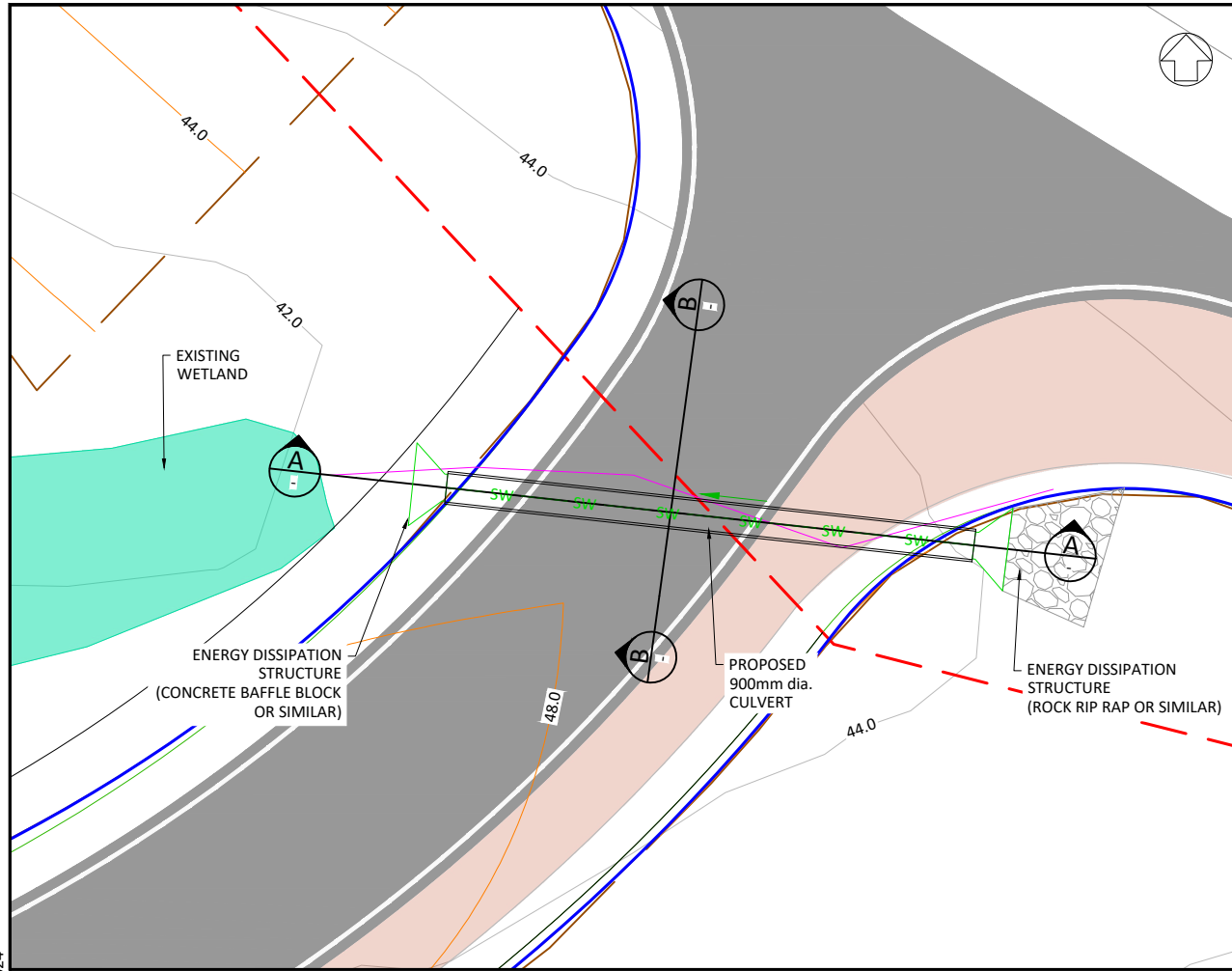
TITLE
CULVERT OVERALL PLAN

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DESIGNED	MA	SCALE	A3 1:4000
PROJECT No	1366	DRAWING No	C470
REVISION	A		

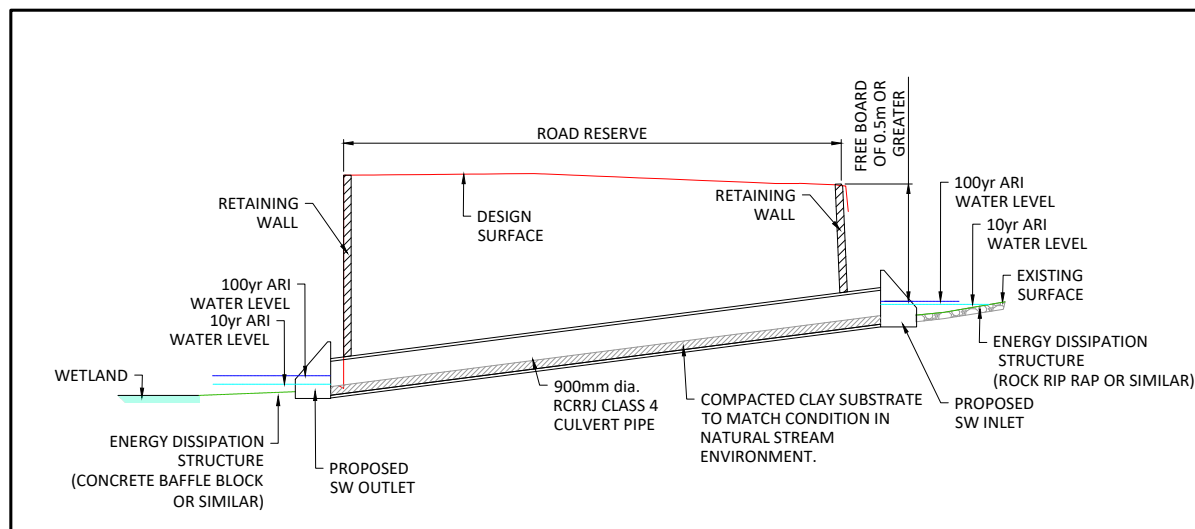
Concrete Baffle Block Outlet Protection					
Outlet	Pipe size (D0)	Row Spacing Sa (m)	Horizontal Spacing Sw (m)	Length of Apron La (m)	Width of Apron WA (m)
CULVERT 1	900	0.71	0.46	1.00	3.80
CULVERT 2	900*2500	0.91	0.63	1.00	5.00
CULVERT 5	900*1200	0.48	0.38	1.00	3.50

Rip Rap Outlet Protection					
Outlet	Pipe size (Do)	Rock Size Dia ds (m)	Rock Layer Thickness DA (m)	Length of Apron La (m)	Width of Apron WA (m)
CULVERT 3	675	0.35	0.70	9.02	2.03
CULVERT 4	1200	0.27	0.55	8.80	3.60

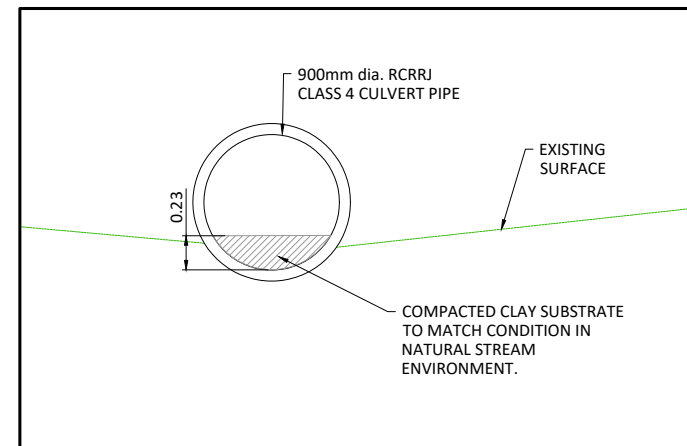
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CULVERT DETAIL PLAN (1)
SCALE 1:100 (A1)



CULVERT 1 SECTION (A)
SCALE 1:100 (A1)



CULVERT 1 SECTION (B)
SCALE 1:50 (A1)

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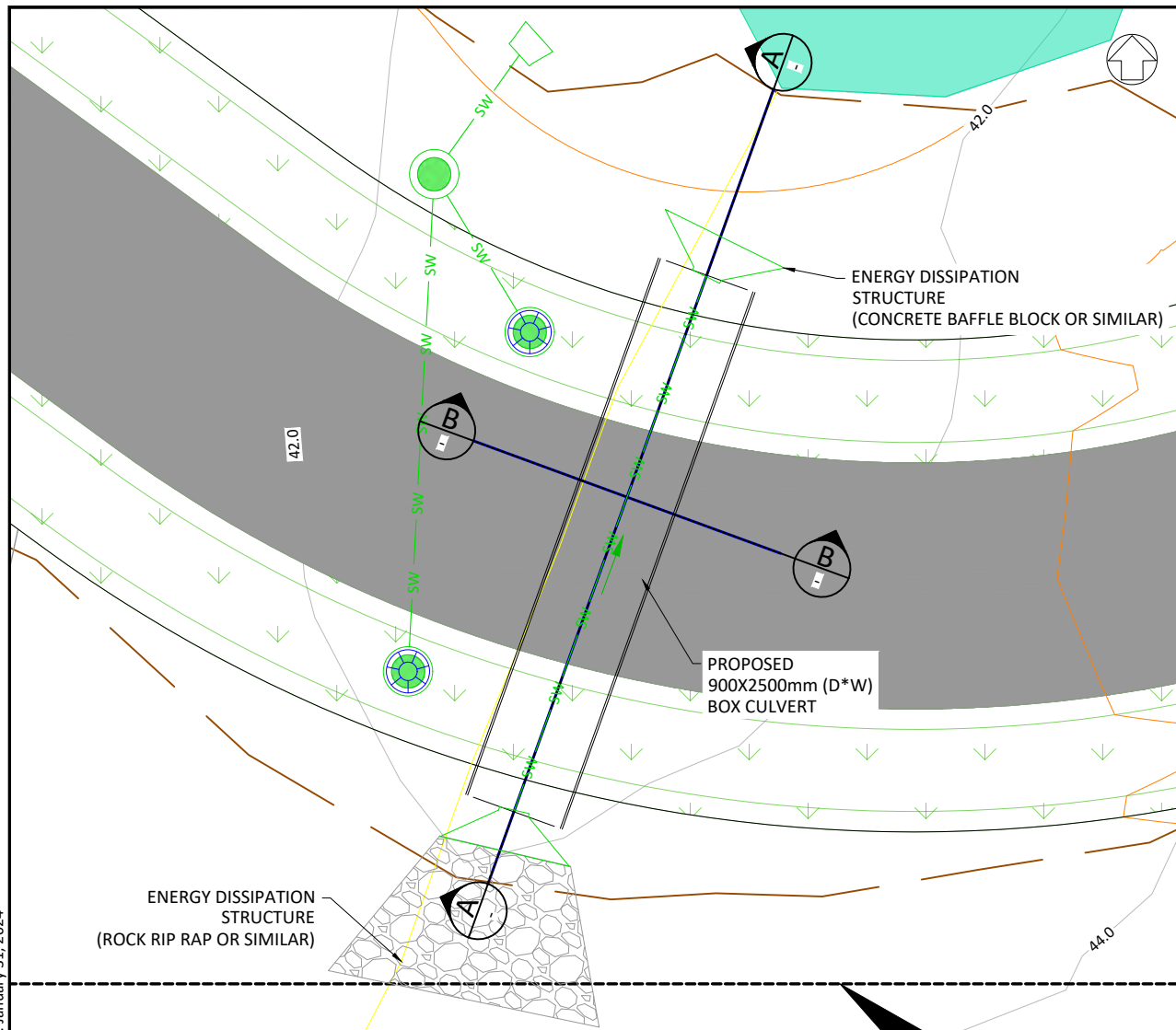
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

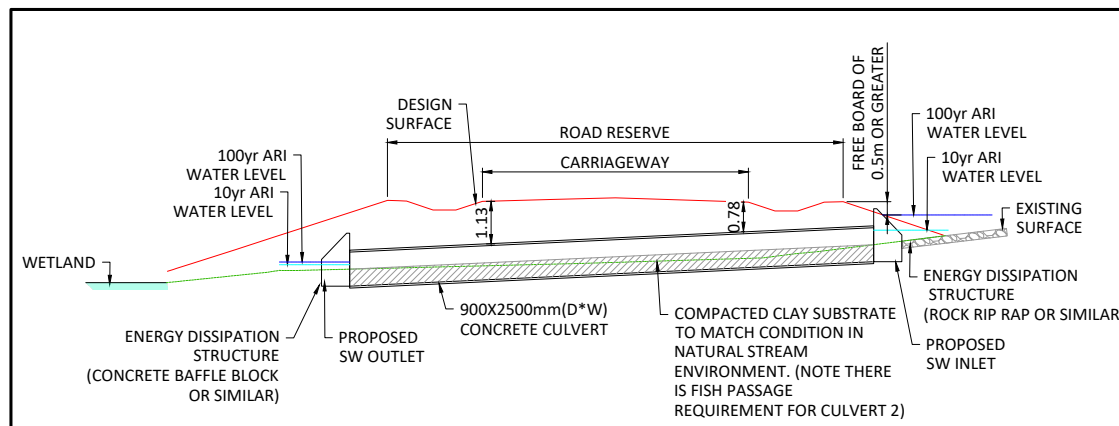
TITLE
CULVERT DETAIL PLAN AND LONG SECTION SHEET 1

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DESIGNED	MA	A3	1:200
PROJECT No	DRAWING No	REVISION	
1366	C471	A	

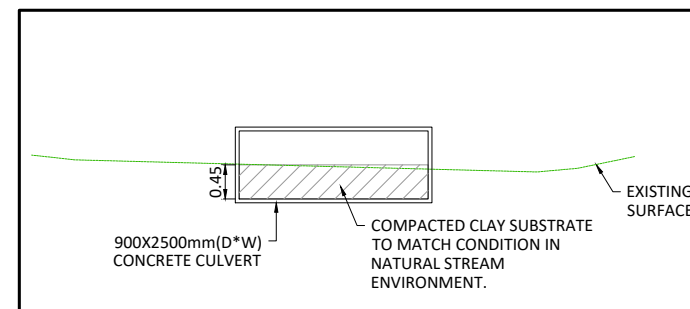
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CULVERT DETAIL PLAN (2)
SCALE 1:100 (A1)



CULVERT 2 SECTION (A)
SCALE 1:100 (A1)



CULVERT 2 SECTION (B)
SCALE 1:50 (A1)

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
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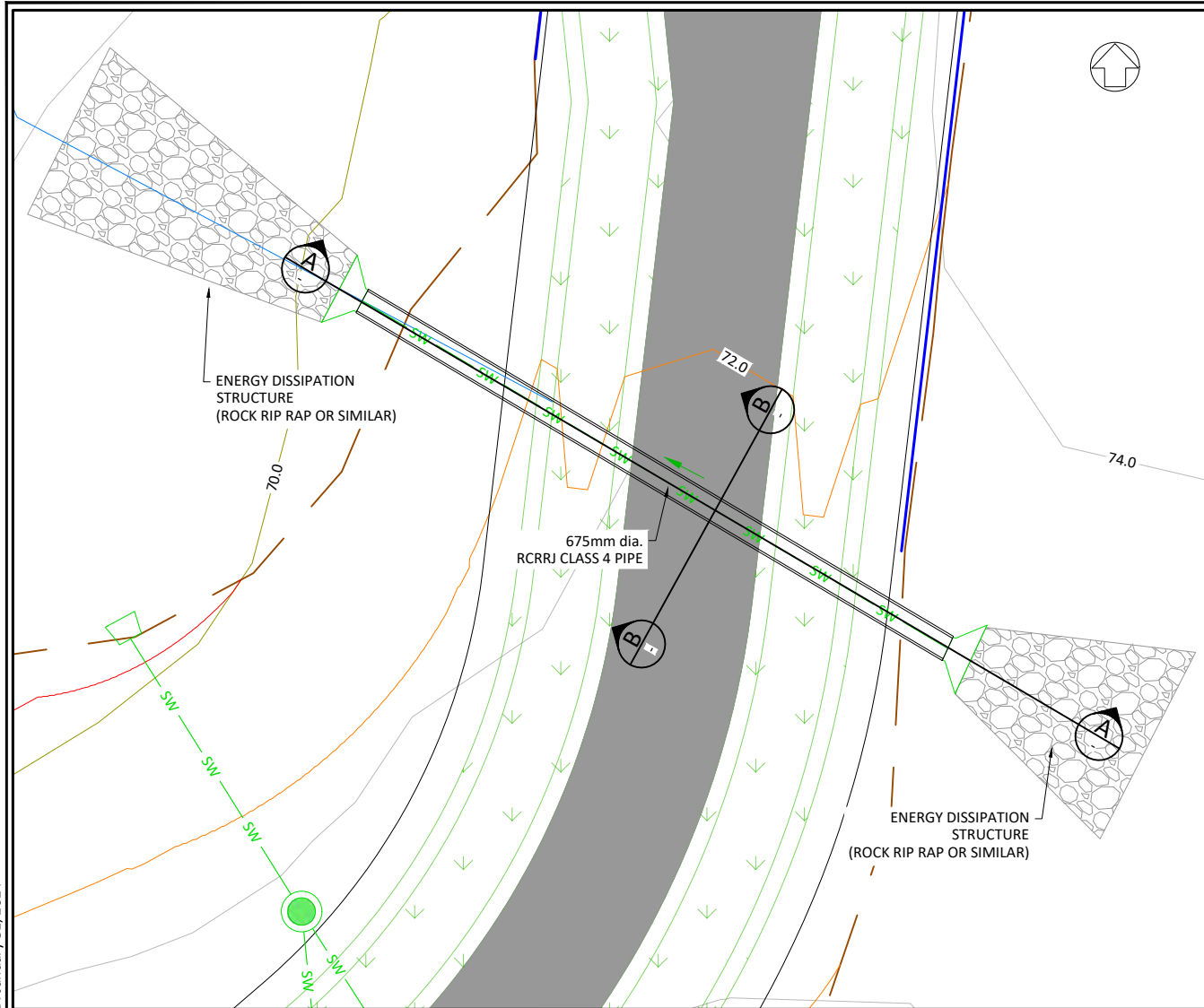
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PROJECT
GOODLAND COASTAL FARM

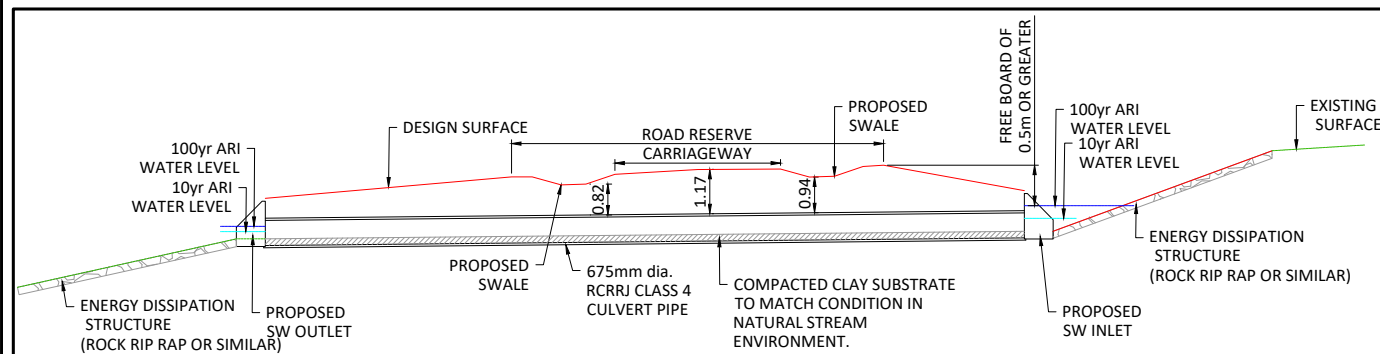
TITLE
CULVERT DETAIL PLAN AND LONG SECTION SHEET 2

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DESIGNED	MA		A3 #####
PROJECT No	DRAWING No	REVISION	
1366	C472	A	

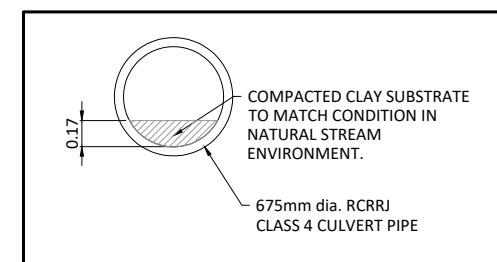
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CULVERT DETAIL PLAN 3
SCALE 1:100 (A1)



CULVERT 3 SECTION A
SCALE 1:100 (A1)



CULVERT 3 SECTION B
SCALE 1:25 (A1)

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
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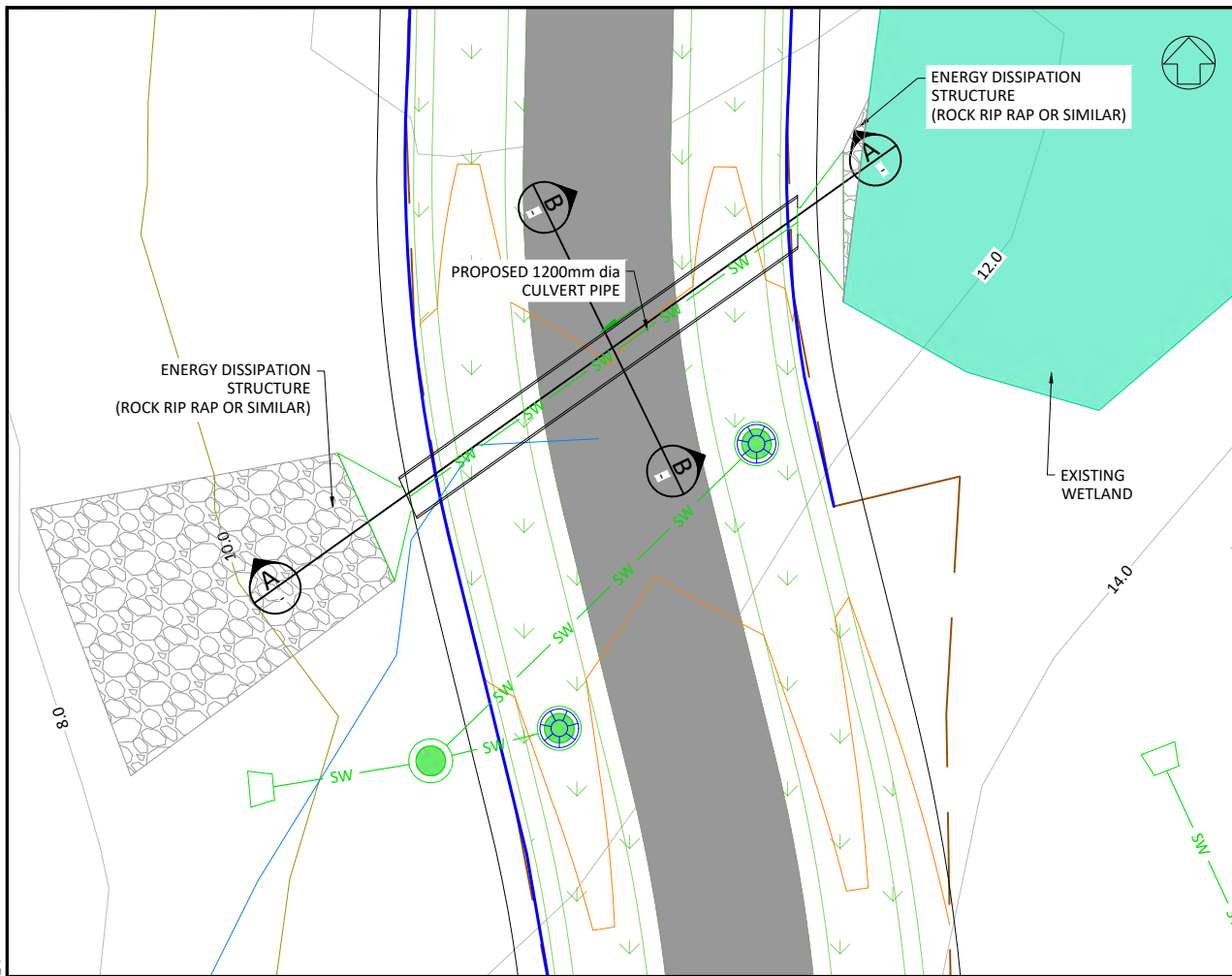
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

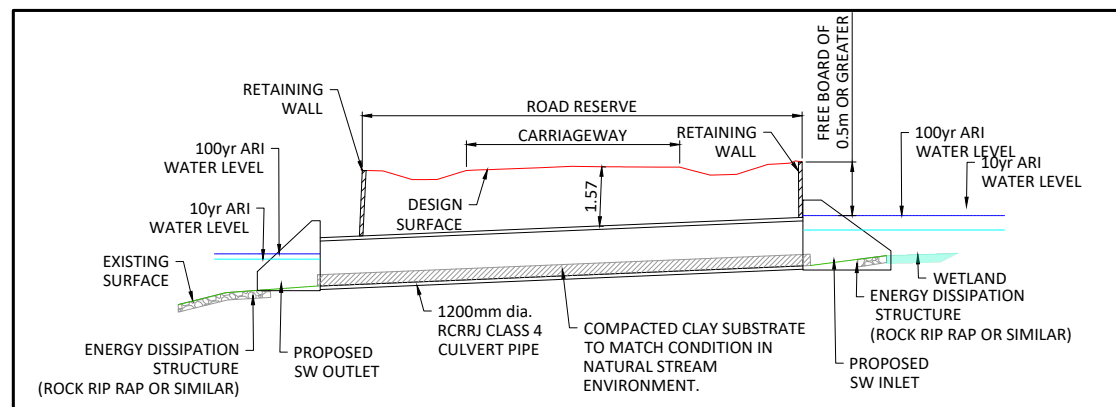
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CULVERT DETAIL PLAN AND LONG SECTION SHEET 3

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DESIGNED	MA	A3	1:200
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		REVISION	A

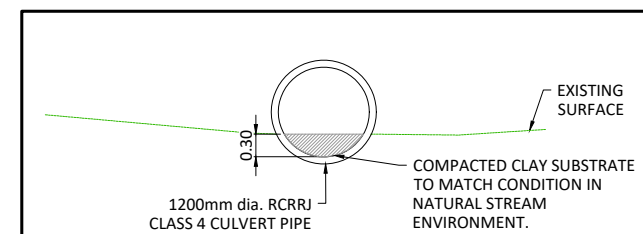
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CULVERT DETAIL PLAN 4
SCALE 1:100 (A1)



CULVERT 4 SECTION A
SCALE 1:100 (A1)



CULVERT 4 SECTION B
SCALE 1:50 (A1)

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
B	FORMAL S92 RESPONSE	ZY	31/01/24
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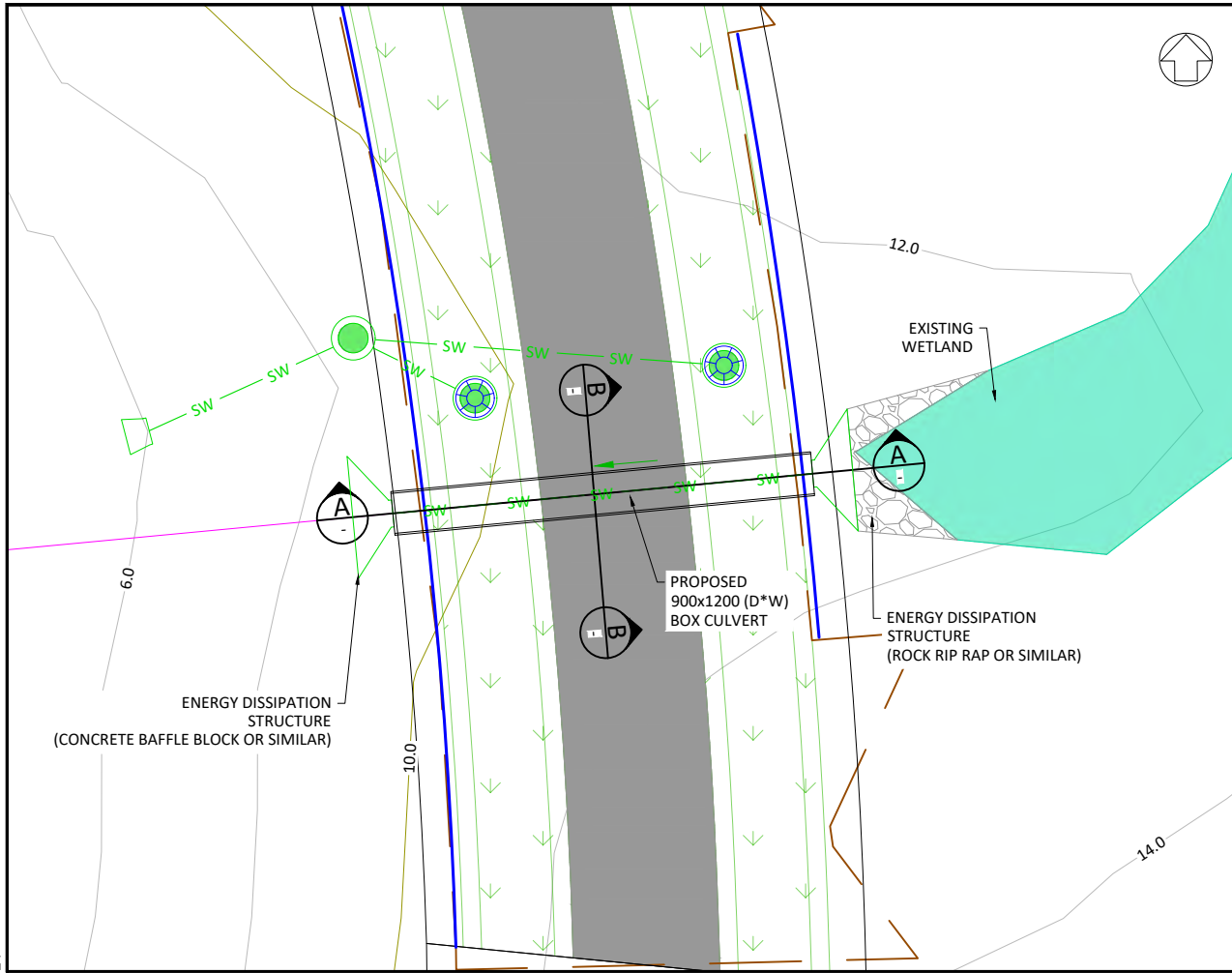
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

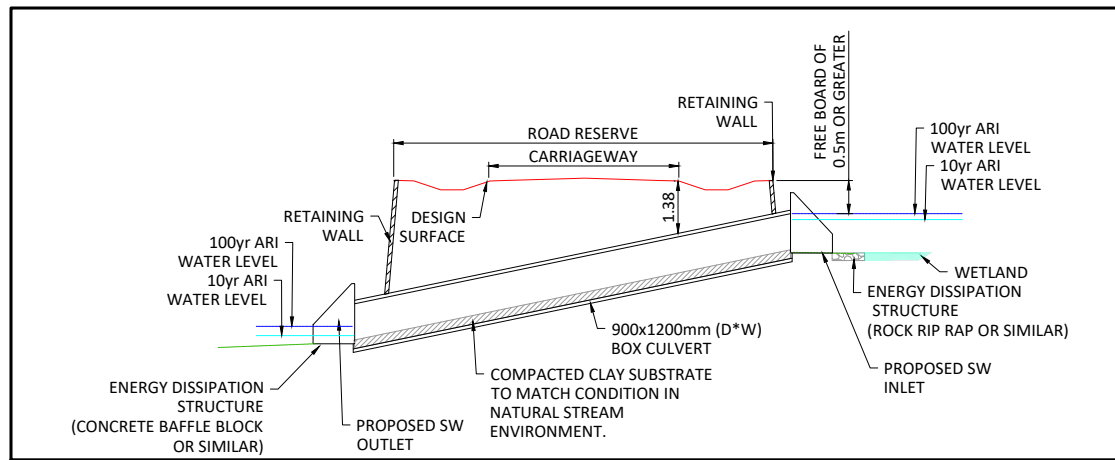
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DESIGNED	MA	SCALE	A3 1:200
PROJECT No	1366	DRAWING No	C474
REVISION		REVISION	A

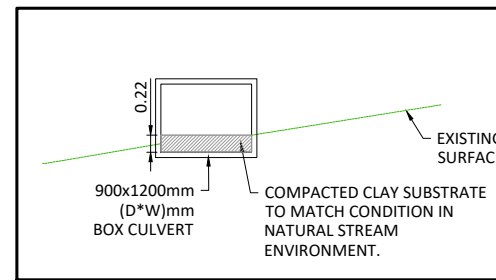
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CULVERT DETAIL PLAN 5
SCALE 1:100 (A1)



CULVERT 5 SECTION A
SCALE 1:100 (A1)



CULVERT 5 SECTION B
SCALE 1:50 (A1)

CONSENT ISSUE

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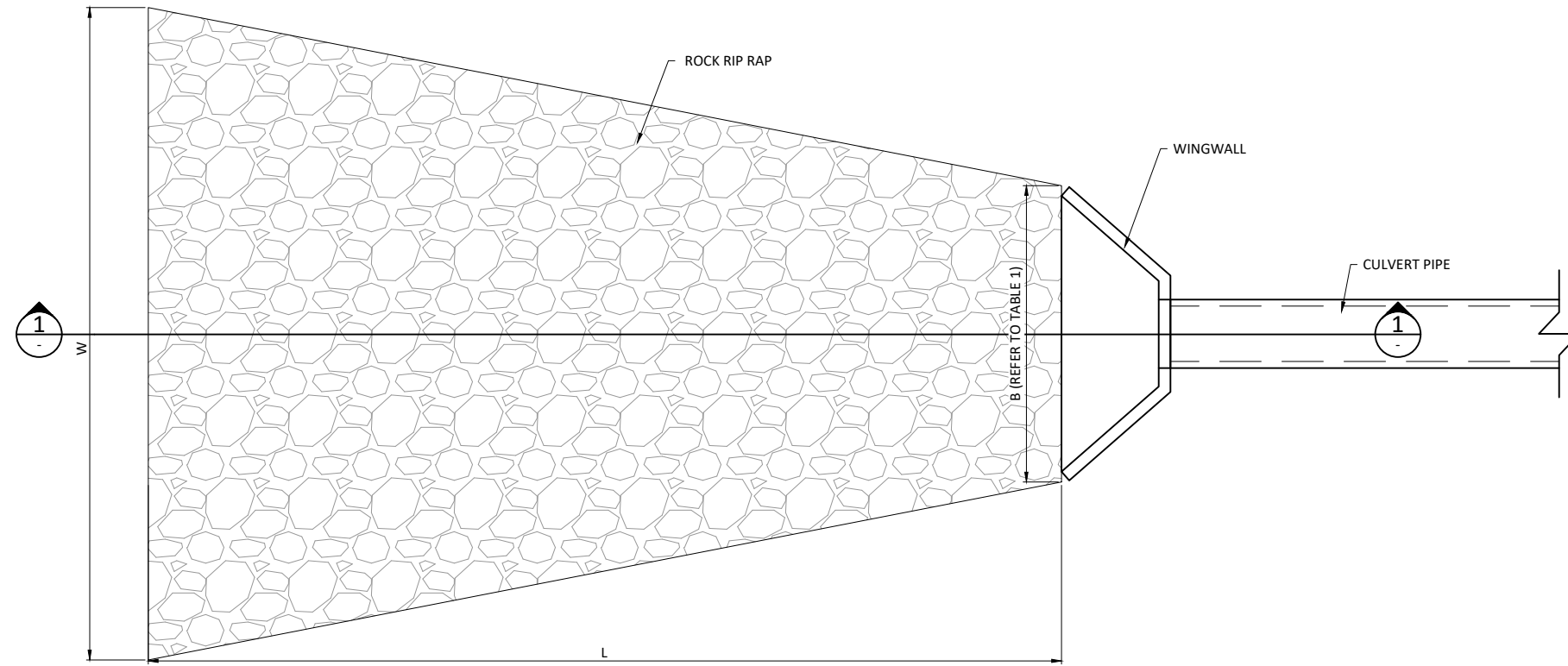
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

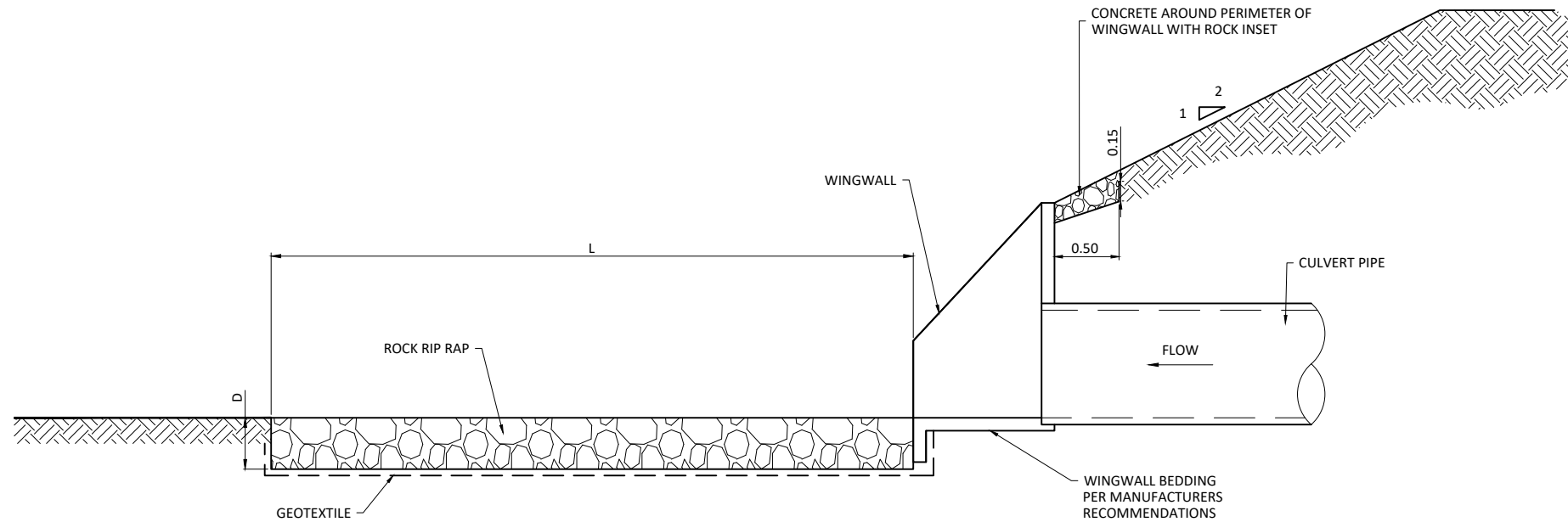
TITLE
CULVERT DETAIL PLAN AND LONG SECTION SHEET 5

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DESIGNED	MA	A3	1:200
PROJECT No	DRAWING No	REVISION	
1366	C475	A	

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C476 ROCK RIP RAP OUTLET DETAILS.dwg - January 31, 2024 - PRINTED: January 31, 2024



CULVERT OUTLET PLAN
SCALE: NTS



CULVERT OUTLET SECTION
SCALE: NTS

2127 Kaipara Coast Highway						
Outlet	Pipe size (D0)	Min. WA (m)	ds (m)	DA (m)	La (m)	
SW OUTLET 1.1	300	0.90	0.13	0.26	3.60	
SW OUTLET 2.1	300	0.90	0.19	0.37	4.40	
SW OUTLET 3.1	300	0.90	0.26	0.52	5.16	
SW OUTLET 4.1	300	0.90	0.27	0.54	5.25	
SW OUTLET 5.1	300	0.90	0.07	0.14	2.29	
SW OUTLET 6.1	300	0.90	0.28	0.56	5.32	
SW OUTLET 7.1	300	0.90	0.21	0.42	4.67	
SW OUTLET 8.1	300	0.90	0.14	0.27	3.73	
SW OUTLET 9.1	300	0.90	0.16	0.31	4.03	
SW OUTLET 10.1	300	0.90	0.07	0.15	2.40	
SW OUTLET 11.1	300	0.90	0.22	0.43	4.73	
SW OUTLET 12.1	300	0.90	0.09	0.17	2.72	
SW OUTLET 13.1	300	0.90	0.07	0.14	2.29	
SW OUTLET 14.1	300	0.90	0.30	0.60	5.47	
SW OUTLET 16.1	300	0.90	0.25	0.50	5.07	
SW OUTLET 17.1	300	0.90	0.15	0.31	4.00	
SW OUTLET 18.1	300	0.90	0.23	0.46	4.87	
SW OUTLET 19.1	300	0.90	0.07	0.15	2.35	
SW OUTLET 20.1	300	0.90	0.08	0.16	2.52	
SW OUTLET 21.1	300	0.90	0.18	0.36	4.34	
SW OUTLET 22.1	300	0.90	0.24	0.49	5.00	
SW OUTLET 23.1	300	0.90	0.05	0.09	1.29	
SW OUTLET 24.1	300	0.90	0.23	0.47	4.91	
SW OUTLET 48.1	300	0.90	0.09	0.18	2.74	
SW OUTLET 49.1	300	0.90	0.07	0.15	2.33	

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
B	FORMAL S92 RESPONSE	ZY	31/01/24
A	ORIGINAL ISSUE	ZY	21/07/23

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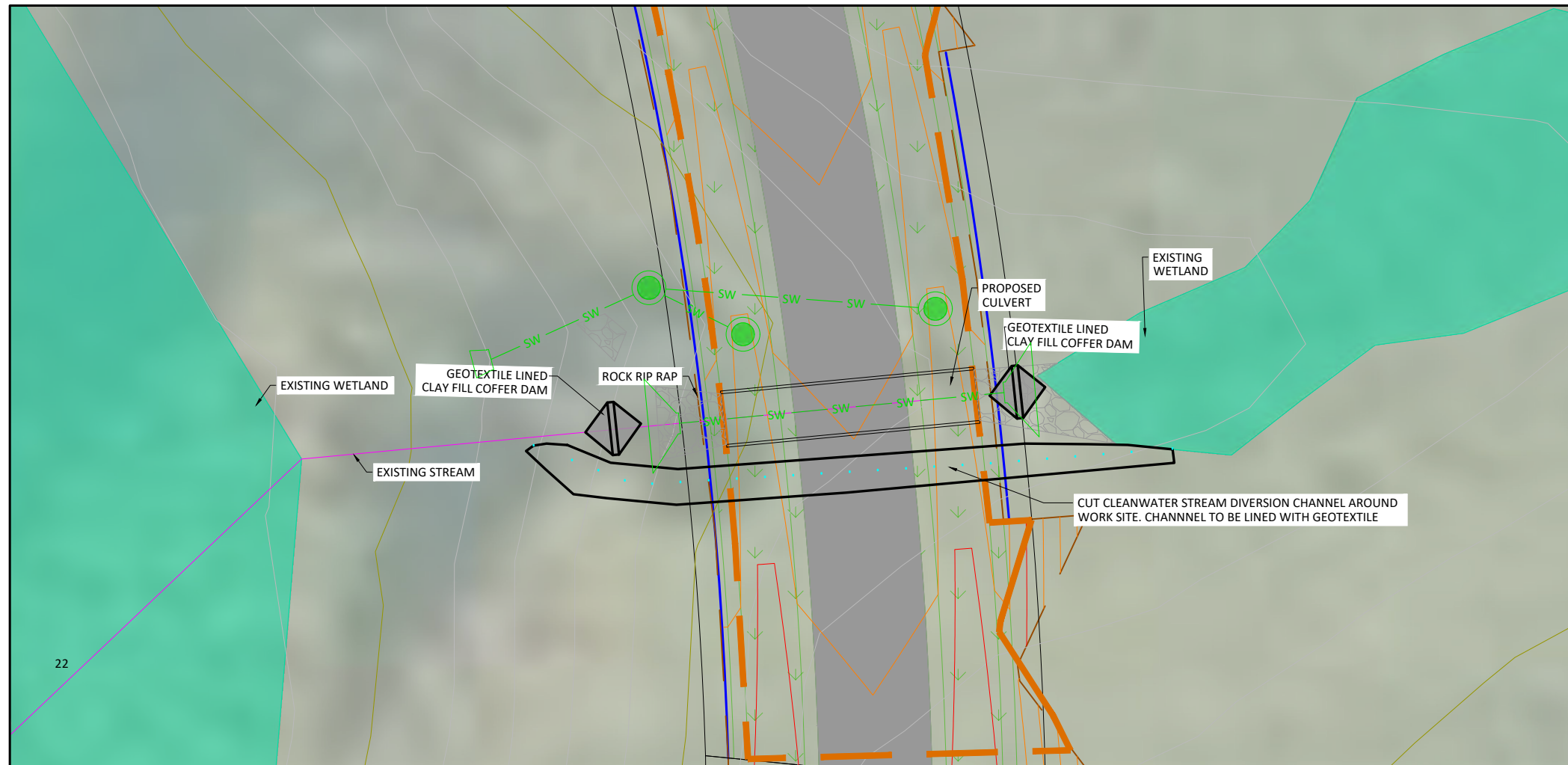
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CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

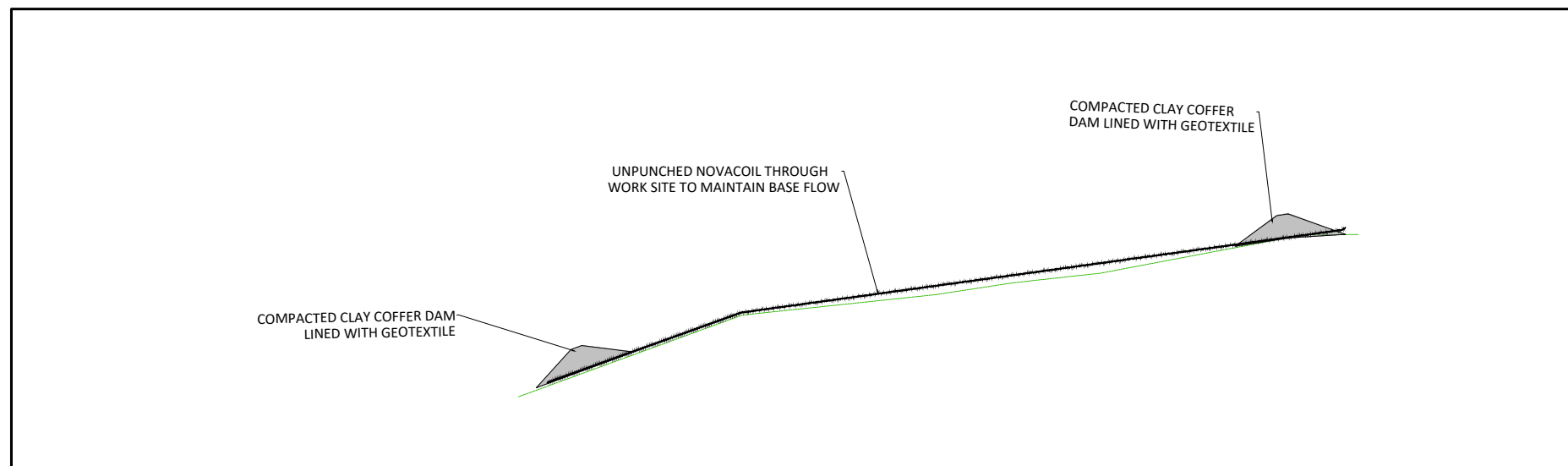
TITLE
ROCK RIP RAP AND OUTLET DETAILS

DRAWN	TG	SCALE A1 1:25
DESIGNED	TG	A3 1:50
PROJECT No 1366	DRAWING No C476	REVISION A



PROPOSED TEMPORARY STREAM DIVERSION

SCALE : A1 @ 1:100 & A3 @ 1:200



PROPOSED COFFER DAM INSTALLATION

SCALE : A1 @ 1:50 & A3 @ 1:100

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
B	FORMAL S92 RESPONSE	ZY	31/01/24
A	ORIGINAL ISSUE	ZY	21/07/23

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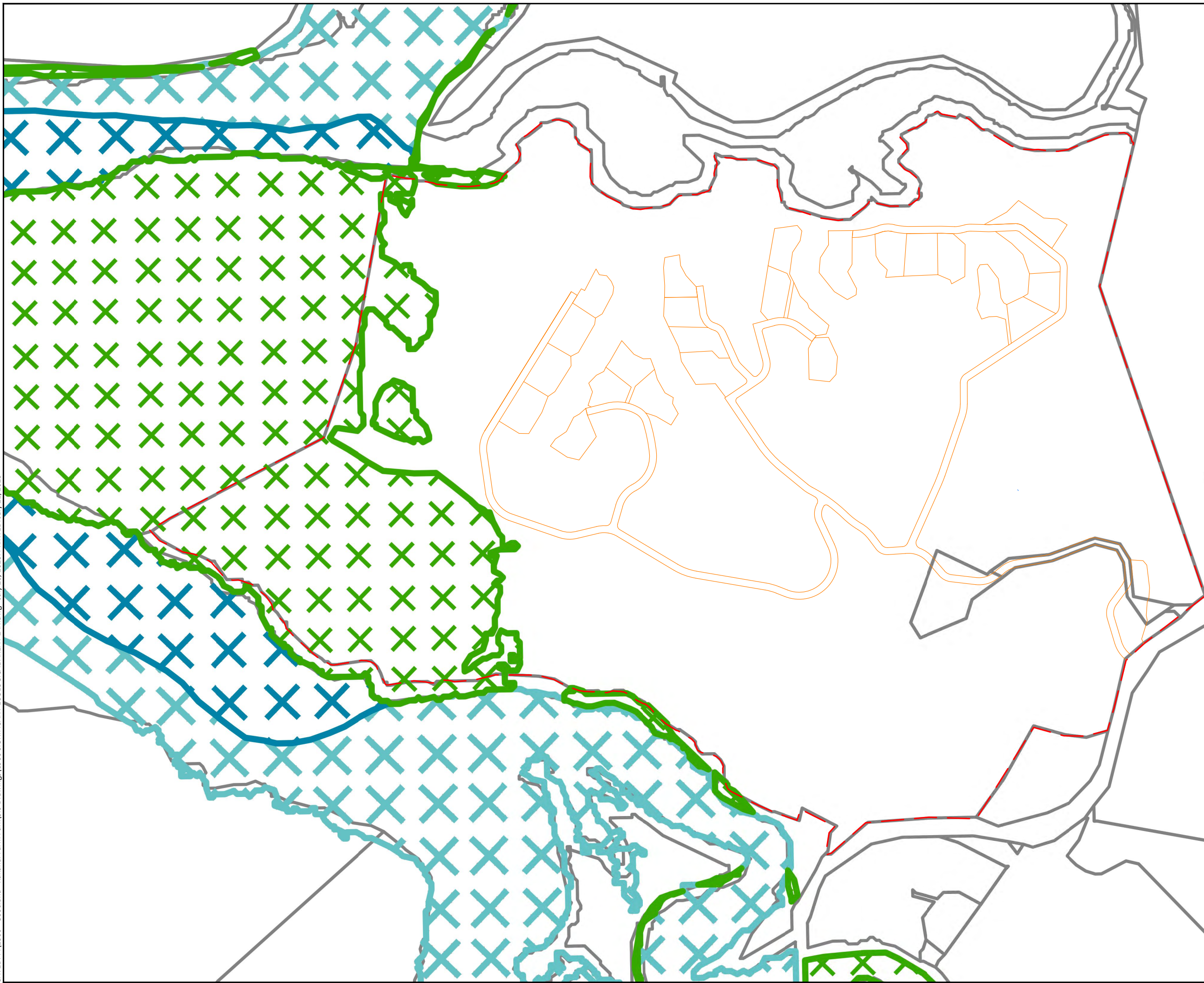
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
TEMPORARY STREAM DIVERSION WORKS

DRAWN	TG	SCALE A1 1:100
DESIGNED	TG	A3 1:200
PROJECT No 1366	DRAWING No C477	REVISION A

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C900 SIGNIFICANT ECOLOGICAL AREA PLAN.dwg - July 20, 2023. PRINTED: July 21, 2023



LEGEND

- - - - - SITE BOUNDARY
- EXISTING BOUNDARIES
- PROPOSED LOT AND ROAD BOUNDARIES
- X X X X TERRESTRIAL [RP/DP]
- X X X X MARINE 1 [RCP]
- X X X X MARINE 2 [RCP]

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
A	ORIGINAL	ZY	21/07/23

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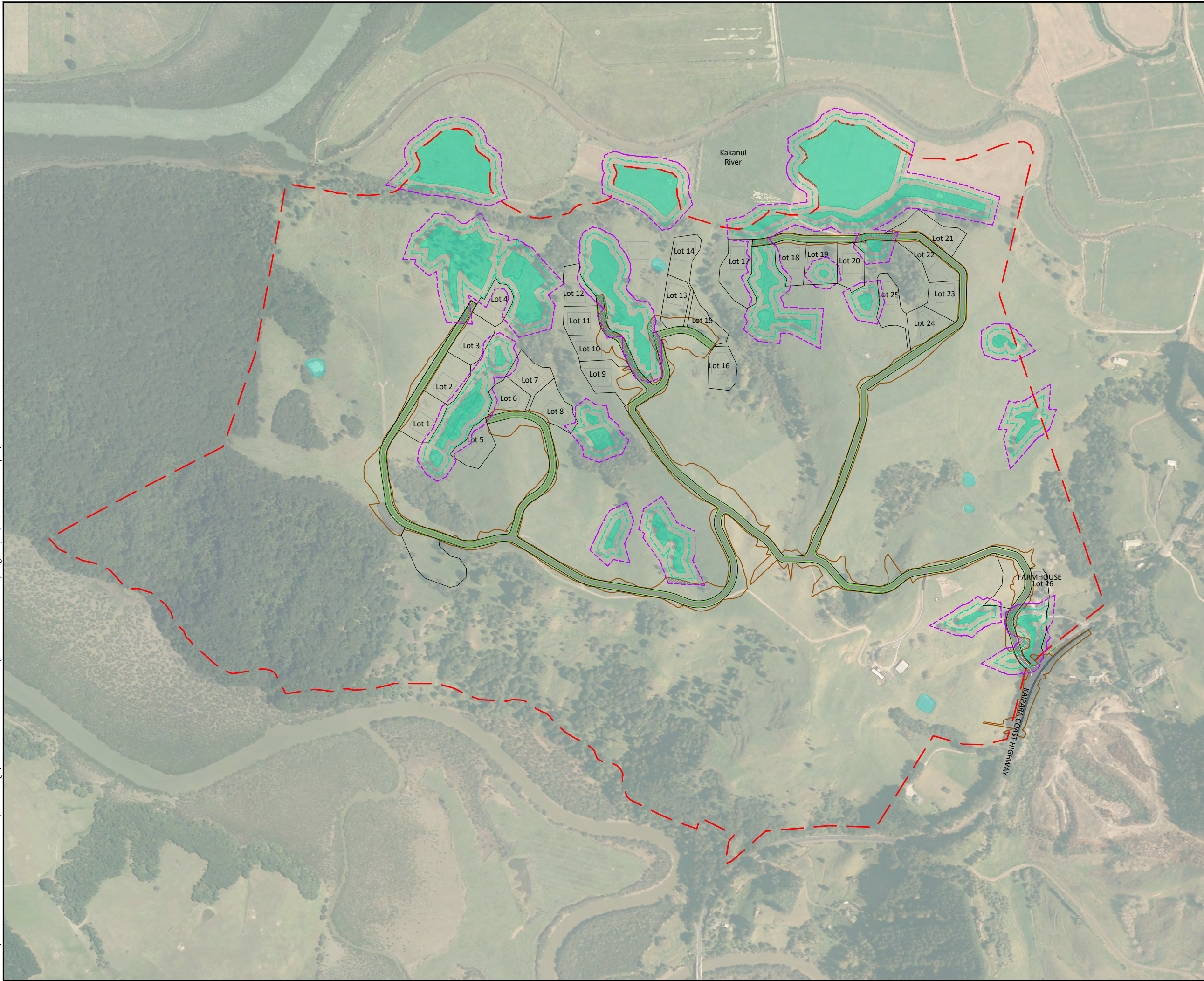
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
SIGNIFICANT ECOLOGICAL AREA PLAN

DRAWN	TG	SCALE
		A1 1:3000
DESIGNED	TG	A3 1:6000
PROJECT No	DRAWING No	REVISION
1366	C900	A

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C901 EXISTING WETLAND PLAN(10m AND 20m SETBACK).dwg - July 20, 2023 - PRINTED: July 21, 2023



LEGEND

- - - SITE BOUNDARY
- PROPOSED LOT AND ROAD BOUNDARIES
- PROPOSED BUILDING PLATFORM
- EARTHWORK EXTENT
- NATURAL WETLAND
- MANMADE WETLAND
- 10m SETBACK FROM NATURAL WETLAND
- 20m SETBACK FROM NATURAL WETLAND
- OVERLAY BETWEEN 10m SETBACK FROM NATURAL WETLAND AND EARTHWORKS EXTENT AREA: 1629m²
- OVERLAY BETWEEN 10-20m SETBACK FROM NATURAL WETLAND AND EARTHWORKS EXTENT AREA: 5278m²

CONSENT ISSUE

A	ORIGINAL	ZY	21/07/23		
REVISION	CHANGES	CHECKED	DATE		

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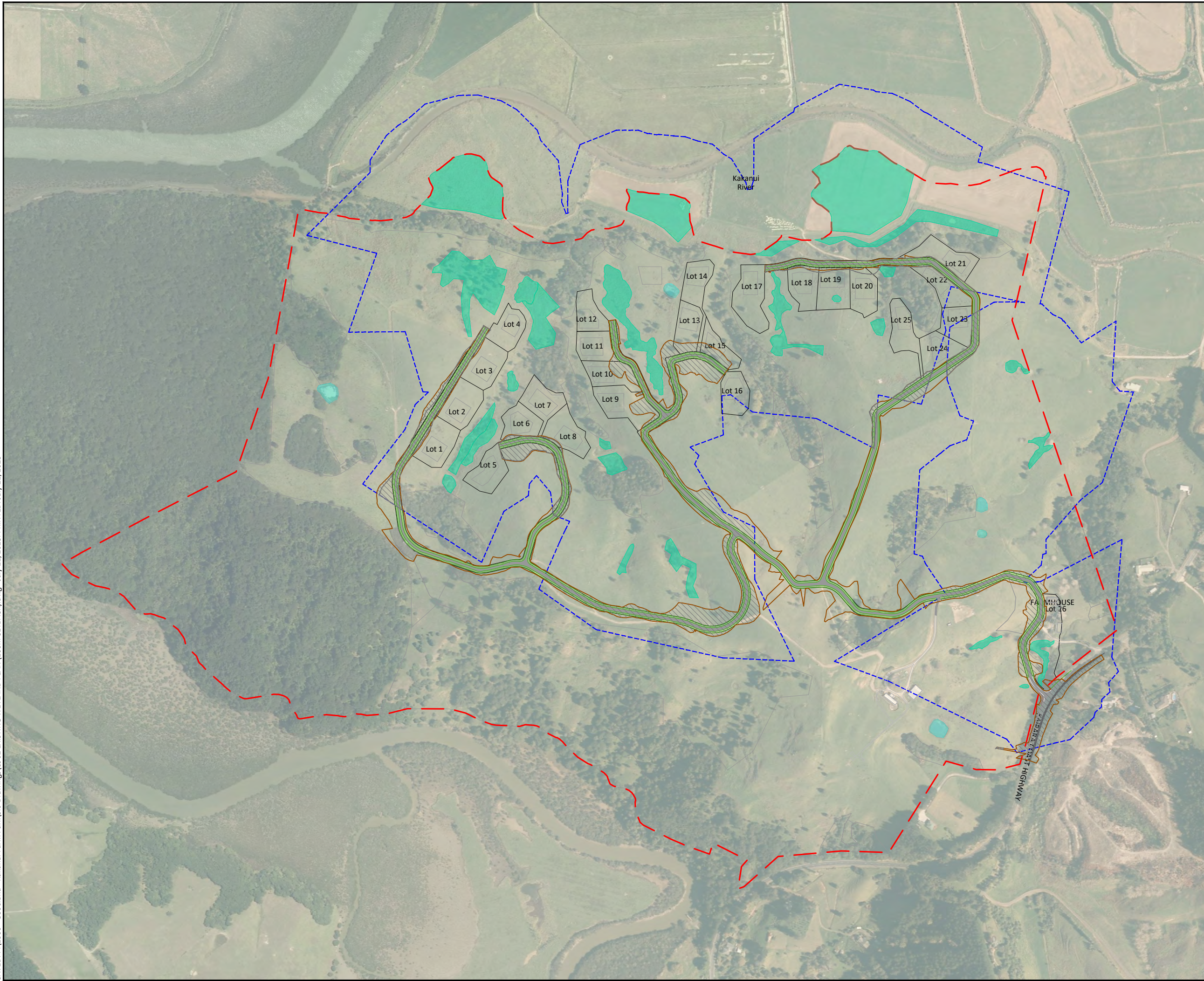
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
EXISTING WETLAND PLAN(10m AND 20m SETBACK)

DRAWN	TG	SCALE	A1 1:3000
DESIGNED	TG	A3	1:6000
PROJECT No	DRAWING No	REVISION	
1366	C901	A	

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C902 EXISTING WETLAND PLAN (100m SETBACK).dwg - July 21, 2023. PRINTED: July 21, 2023



LEGEND

- - - SITE BOUNDARY
- PROPOSED LOT AND ROAD BOUNDARIES
- PROPOSED BUILDING PLATFORM
- EARTHWORK EXTENT
- NATURAL WETLAND
- MANMADE WETLAND
- 100m SETBACK FROM NATURAL WETLAND
- OVERLAY BETWEEN 100m SETBACK AND EARTHWORKS EXTENT AREA: 63487m²

CONSENT ISSUE

REVISION	CHANGES	CHECKED	DATE
A	ORIGINAL ISSUE	ZY	21/07/23

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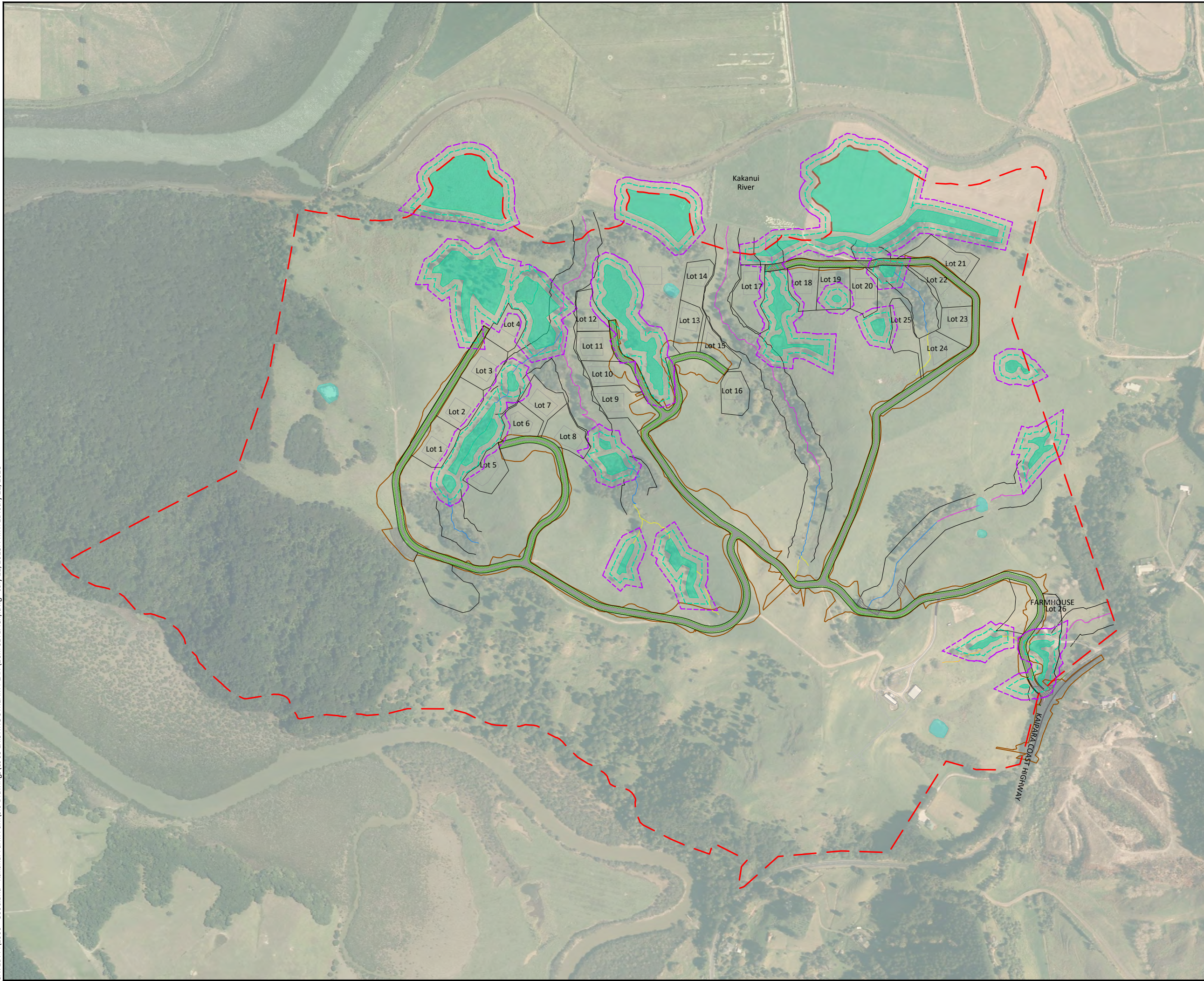
CLIENT
ABIB (OAMARU) LTD

PROJECT
GOODLAND COASTAL FARM

TITLE
EXISTING WETLAND PLAN (100m SETBACK)

DRAWN	TG	SCALE	A1 1:3000
DESIGNED	TG	A3	1:6000
PROJECT No	DRAWING No	REVISION	
1366	C902	A	

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C903 EXISTING STREAM PLAN (20m SETBACK).dwg - July 21, 2023. PRINTED: July 21, 2023



LEGEND

- - - SITE BOUNDARY
- PROPOSED LOT AND ROAD BOUNDARIES
- PROPOSED BUILDING PLATFORM
- EARTHWORK EXTENT
- NATURAL WETLAND
- MANMADE WETLAND
- 20m OFFSETS STREAM
- EPHEMERAL STREAM
- INTERMITTENT STREAM
- PERMANENT STREAM
- OVERLAY BETWEEN 20m STREAM SETBACK ANDSTREAM AREA: 1810m²

CONSENT ISSUE

A	ORIGINAL ISSUE	ZY	21/07/23	
REVISION	CHANGES	CHECKED	DATE	

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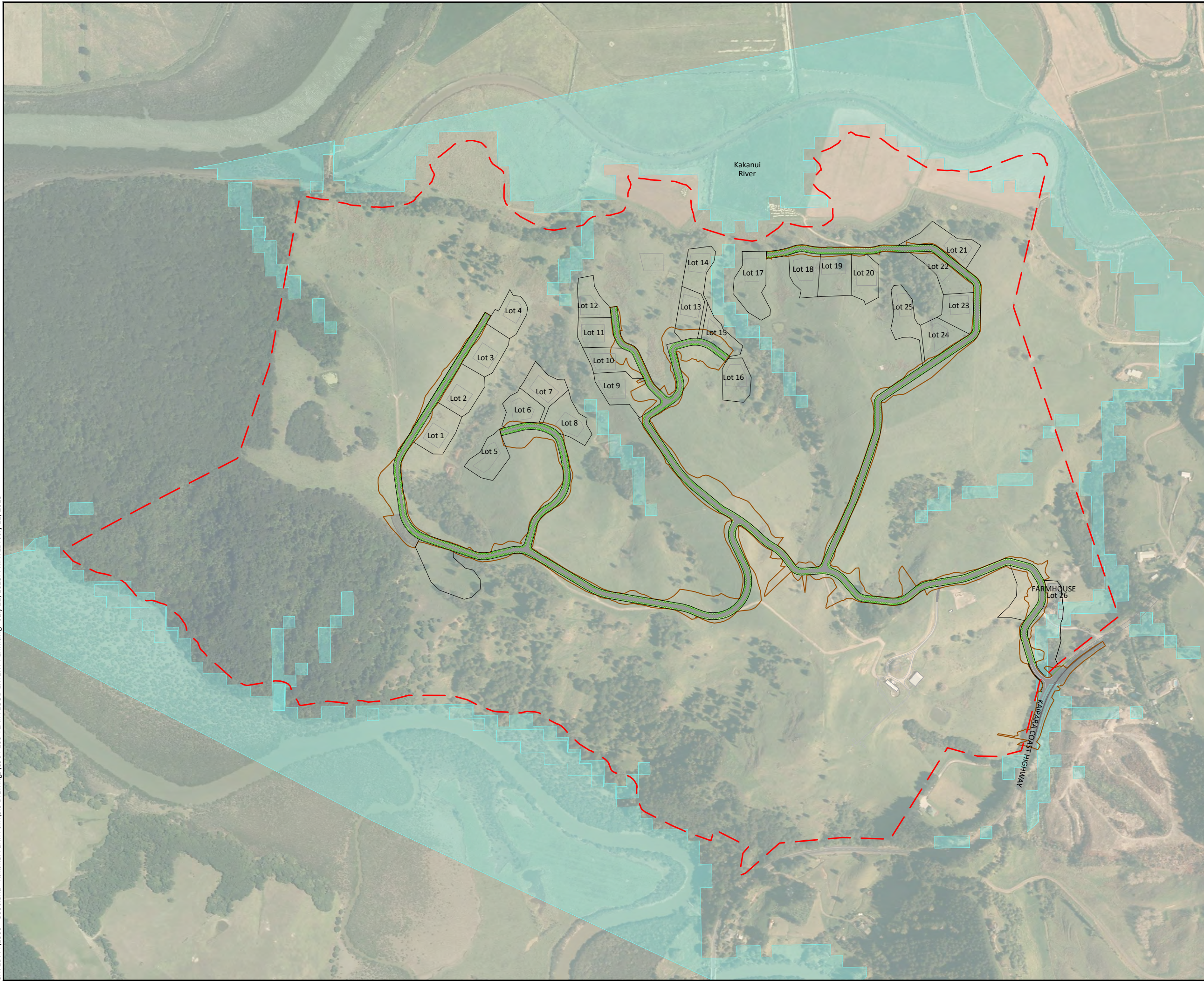
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PROJECT
GOODLAND COASTAL FARM

TITLE
EXISTING STREAM PLAN (20m SETBACK)

DRAWN	TG	SCALE	A1 1:3000
DESIGNED	TG	A3	1:6000
PROJECT No	DRAWING No	REVISION	
1366	C903	A	

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C904 100-YEAR FLOOD EXTENT PLAN.dwg - July 21, 2023. PRINTED: July 21, 2023



LEGEND

- - - SITE BOUNDARY
- PROPOSED LOT AND ROAD BOUNDARIES
- PROPOSED BUILDING PLATFORM
- EARTHWORK EXTENT
- █ 100-YEAR FLOOD EXTENT (AUCKLAND GIS)

NOTES:

EXTENT OF THE 100-YEAR FLOOD PLAINS IS ONLY PARTIALLY SHOWN OUTSIDE OF THE DEVELOPMENT SITE ON THE PLAN. PLEASE REFER TO AUCKLAND GEOMAPS FOR MORE DETAILS.

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REVISION	CHANGES	CHECKED	DATE
A	ORIGINAL ISSUE	ZY	21/07/23

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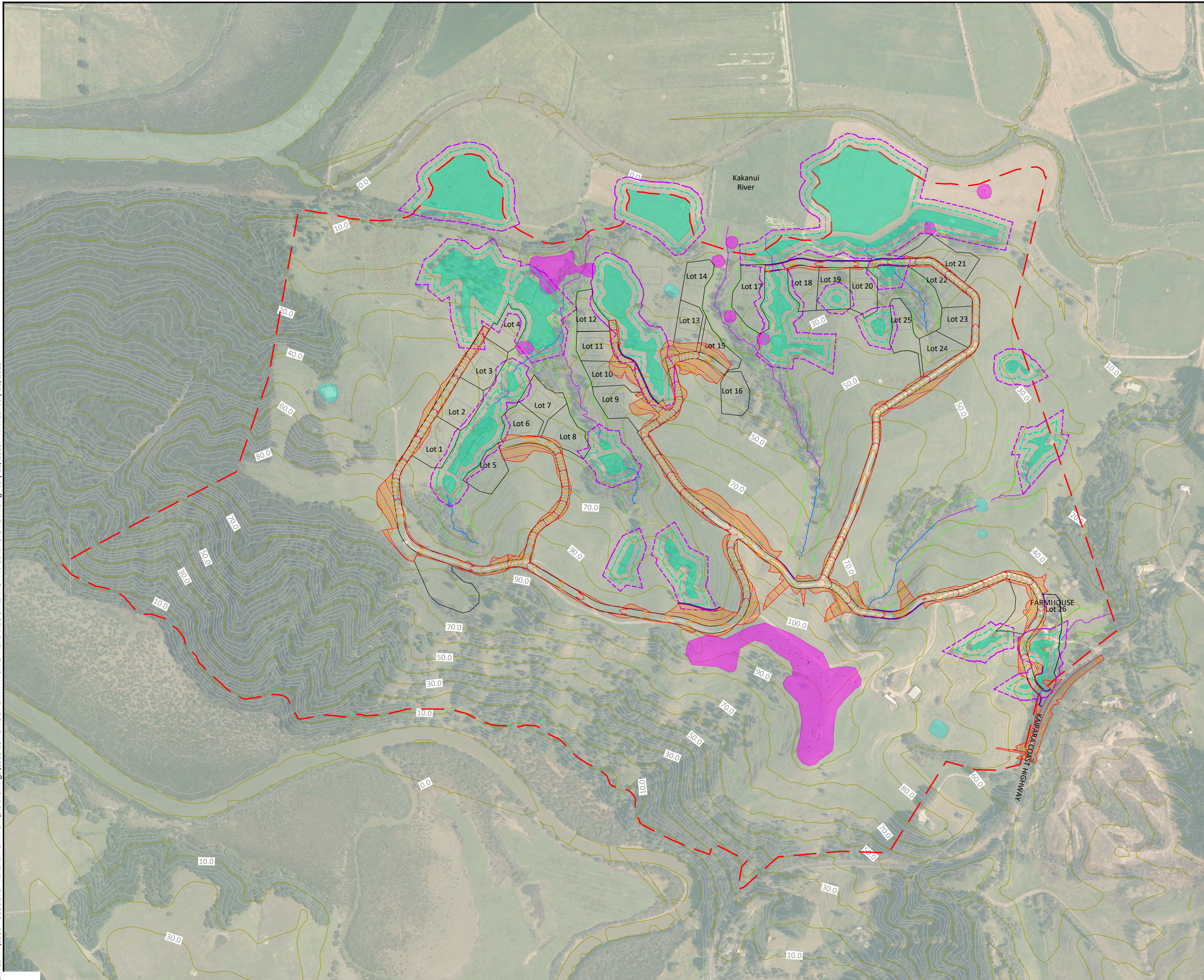
GOODLAND COASTAL FARM

TITLE

100-YEAR FLOOD EXTENT PLAN

DRAWN	TG	SCALE	A1 1:3000
DESIGNED	TG	A3	1:6000
PROJECT No	DRAWING No	REVISION	
1366	C904	A	

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C905 LOT LAYOUT EARTHWORKS WETLANDS STREAMS AND SETBACKS PLAN.dwg - July 21, 2023. PRINTED: July 21, 2023



LEGEND

- 90.0 PROPOSED CONTOURS
- 52.0 PROPOSED CONTOURS
- 50.0 EXISTING CONTOURS
- 52.0 EXISTING CONTOURS
- - - SITE BOUNDARY
- PROPOSED LOT AND ROAD BOUNDARIES
- PROPOSED BUILDING PLATFORM
- EARTHWORK EXTENT
- 20m OFFSETS STREAM
- EPHEMERAL STREAM
- INTERMITTENT STREAM
- PERMANENT STREAM
- ARCHAEOLOGY EXTENT
- NATURAL WETLAND
- - - 10m SETBACK FROM NATURAL WETLAND
- - - 20m SETBACK FROM NATURAL WETLAND
- MANMADE WETLAND

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PROJECT
GOODLAND COASTAL FARM

TITLE
**LOT LAYOUT EARTHWORKS
WETLANDS STREAMS AND
SETBACKS PLAN**

DRAWN	TG	SCALE
DESIGNED	TG	A1 1:3000
PROJECT No	DRAWING No	A3 1:6000
1366	C905	REVISION
		A

SAVED: P:\1366 - Goodland Coastal Farm Drawings\C906 EXISTING OVERLAND FLOW PATH PLAN.dwg - August 26, 2024. PRINTED: August 26, 2024



LEGEND

- - - SITE BOUNDARY
- PROPOSED LOT AND ROAD BOUNDARIES
- PROPOSED BUILDING PLATFORM
- EARTHWORK EXTENT
- NATURAL WETLAND
- MANMADE WETLAND
- GIS OVERLAND FLOW PATH
- EPHEMERAL STREAM
- INTERMITTENT STREAM
- PERMANENT STREAM
- 50.0
- 52.0
- PROPOSED CONTOURS
- 50.0
- 52.0
- EXISTING CONTOURS

NOTES

1. EPHEMERAL STREAM, INTERMITTENT STREAM AND PERMANENT STREAM SHOWN ON THE PLAN BASED ON GPS SURVEY.

CONSENT ISSUE

B	FORMAL S92 RESPONSE	ZY	26/08/24
A	ORIGINAL ISSUE	ZY	09/01/24
REVISION	CHANGES	CHECKED	DATE

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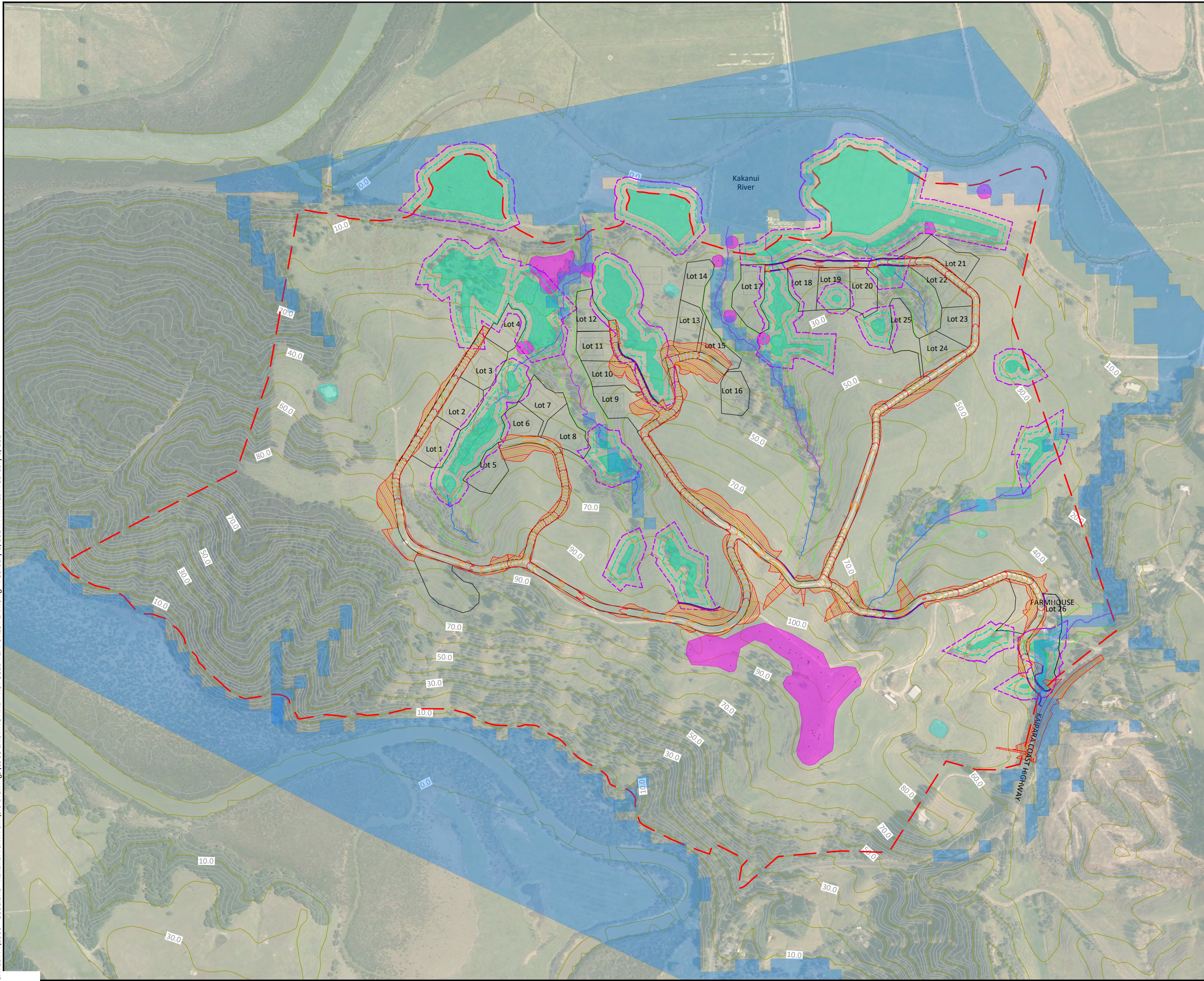
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PROJECT
GOODLAND COASTAL FARM

TITLE
EXISTING OVERLAND FLOW PATH PLAN

DRAWN	TG	SCALE
		A1 1:3000
DESIGNED	TG	A3 1:6000
PROJECT No	DRAWING No	REVISION
1366	C906	B

SAVED: P:\1366 - Goodland - Kakanui Farm Park\5.0 Drawings\C908 EXISTING AND PROPOSED FEATURES PLAN.dwg - February 1, 2024. PRINTED: February 1, 2024



LEGEND

- 50.0 PROPOSED CONTOURS
- 52.0 EXISTING CONTOURS
- - - SITE BOUNDARY
- PROPOSED LOT AND ROAD BOUNDARIES
- PROPOSED BUILDING PLATFORM
- EARTHWORK EXTENT
- 20m OFFSETS STREAM
- EPHEMERAL STREAM
- INTERMITTENT STREAM
- PERMANENT STREAM
- ARCHAEOLOGY EXTENT
- NATURAL WETLAND
- MANMADE WETLAND
- 10m SETBACK FROM NATURAL WETLAND
- 20m SETBACK FROM NATURAL WETLAND
- 100-YEAR FLOOD EXTENT (AUCKLAND GIS)



NOTES:

1. THE EXTENT OF 100-YEAR FLOOD PLAINS ONLY SHOWN WITHIN OR ADJACENT TO THE SITE.

CONSENT ISSUE

A	ORIGINAL ISSUE	ZY	31/01/24
REVISION	CHANGES	CHECKED	DATE

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PROJECT

GOODLAND COASTAL FARM

TITLE

EXISTING AND PROPOSED
FEATURES PLAN

DRAWN	TG	SCALE
		A1 1:3000
DESIGNED	TG	A3 1:6000
PROJECT No	DRAWING No	REVISION
1366	C908	A