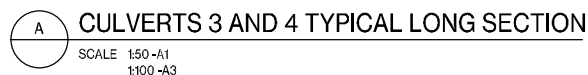
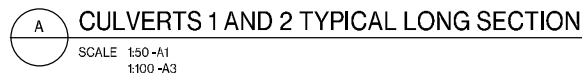


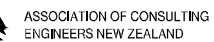
LOCALITY DIAGRAM

The diagram illustrates the study area for the LUC 60453761 project. A blue dashed line outlines the project boundary. A network of blue lines represents the drainage system. Four culverts are marked with red dots and labeled: CULVERT 1, CULVERT 2, CULVERT 3, and CULVERT 4. The map also shows surrounding residential areas with street grids.



CULVERT ID	PIPE DIAMETER (mm)	INVERT LEVEL (IN)	INVERT LEVEL (OUT)	100 YEAR DESIGN CAPACITY (cms)	ΔH (mm)	W1 (m)	W2 (m)	La (m)	DA (m)	D50 (m)
CULVERT 1	600	52.50	48.05	0.229	910	1.8	3.4	2.4	0.2	0.15
CULVERT 2	750	52.20	51.23	0.369	1595	2.3	4.3	3	0.2	0.15
CULVERT 3	1050	52.40	49.26	1.530	1550	3.15	6	5	0.6	0.2
CULVERT 4	600	59.05	58.80	0.543	910	1.8	3.4	3	0.5	0.15

REFER TO APPROVED MASTER DRAWINGS FOR ORIGINAL SIGNATURES File: LATE C:\AUTODESK\ACCDGCS\ACCDGCS\HARRISON GRIERSON US\BEACHLANDS SOUTH EAST TRACK CONSENT\PROJECT FILES\01 DESIGN\02 CIVIL\04 SHEETS\A25\5591.00-4260 ROAD 20 1% AEP CULVERTS.DWG



ISO 9001
QUALITY
ASSURED

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORISED USE OF THIS DRAWING.

C	FOR INFORMATION	CQM	09/2026
B	FOR CONSENT	CJM	06/2026
A	FOR CONSENT	CJM	02/2026
REF	REVISIONS	BY	DATE

AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT: **BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND**

TITLE:

ROAD 20 1% AEP CULVERTS

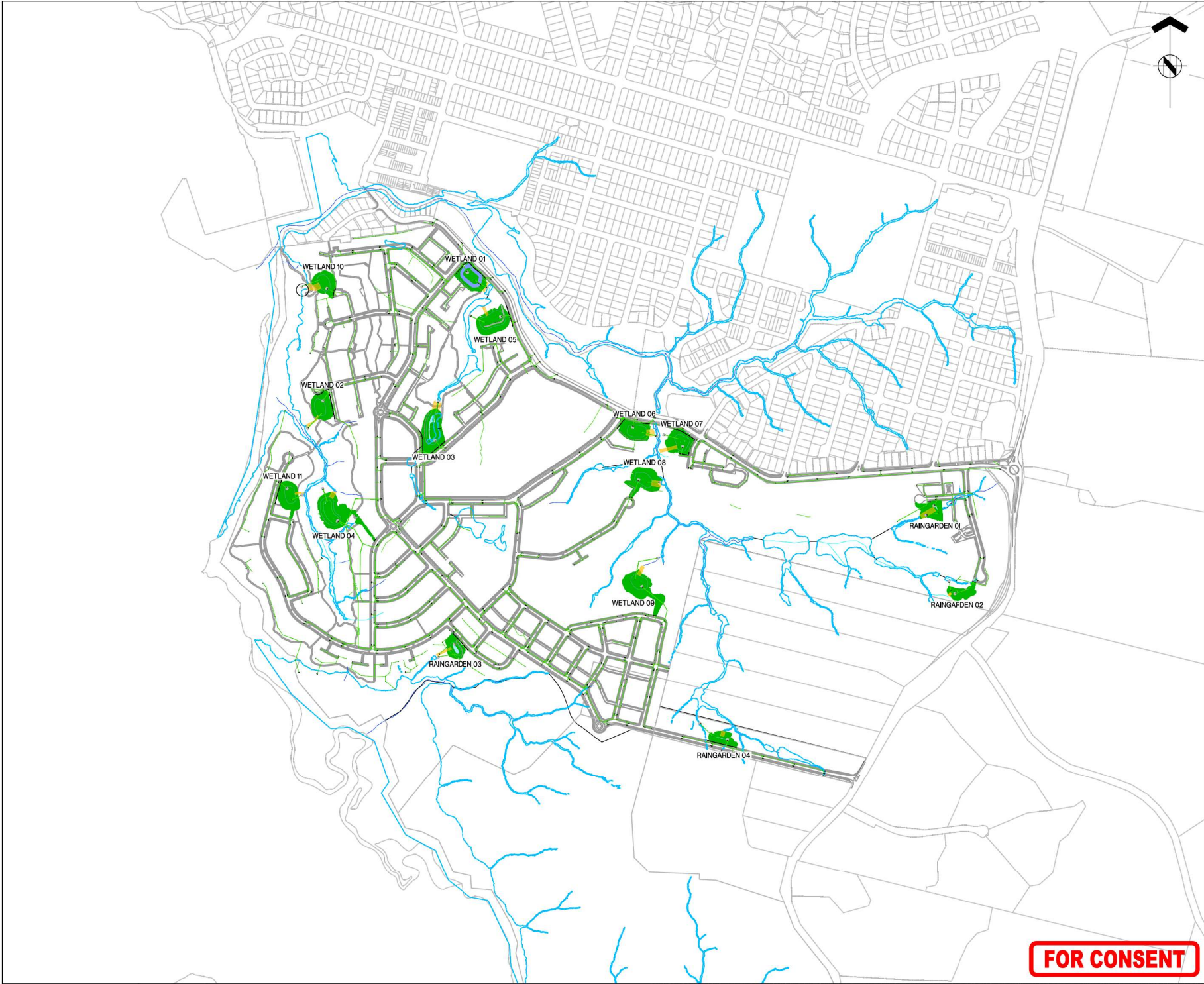
ORIGINATOR: SCT	DATE: 11.2025	SIGNED:	PLOT BY: SCT
DRAWN: SCT	DATE: 09.2026	SIGNED:	PLOT DATE: 11.09.26
CHECKED: CQM	DATE: 09.2026	SIGNED:	SURVEY BY: SURVEYED BY
APPROVED: CQM	DATE: 09.2026	SIGNED:	SURVEY DATE: SURVEYED DATE

ISSUE STATUS: **FAST TRACK CONSENT**

PROJECT No: A2515591.00	SCALES: NOT TO SCALE	A1
----------------------------	----------------------	----

DRAWING No:	REV
A2515591.00-4260	C

FOR INFORMATION





ASSOCIATION OF CONSULTING
ENGINEERS NEW ZEALAND

ISO 9001
QUALITY
ASSURED

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.

LEGEND:

-  FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
-  EXISTING CONTOURS SHOWN AT 1m INTERVALS
-  PERMANENT WATER LEVEL EXTENTS
-  SPILLWAY EXTENTS
-  MAINTENANCE ACCESS TRACK
-  LOT BOUNDARY
-  MAXIMUM WATER LEVEL
-  PROPOSED RETAINING WALL
-  INTERMITTENT OR PERMANENT STREAM
-  MODIFIED NATURAL STREAM
-  FLOOD EXTENT
-  BOLLARDS

A	FOR CONSENT	JEP	05/2026
REF	REVISIONS	BY	DATE

**HARRISON
GRIERSON**

AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT:
**BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND**

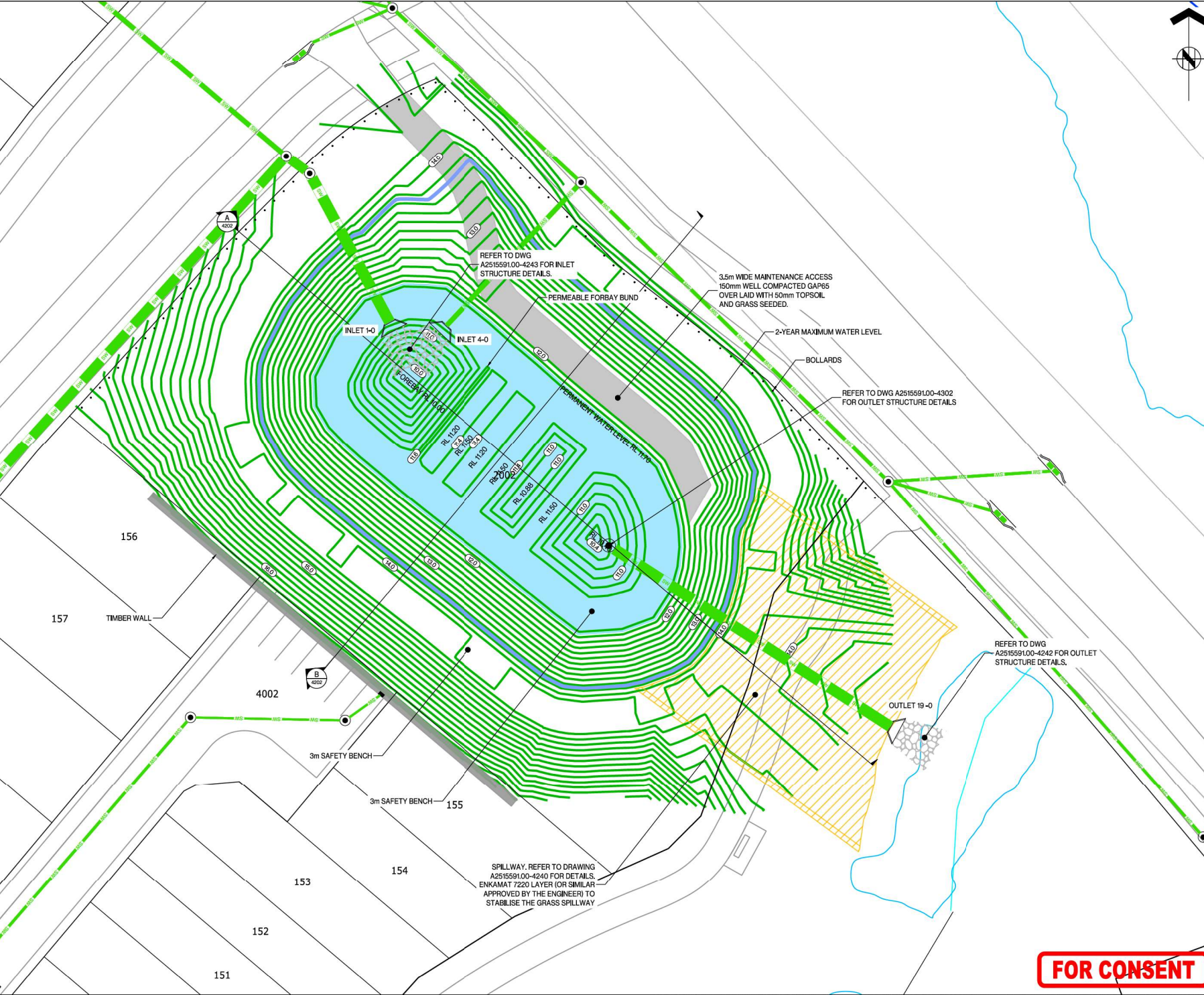
TITLE:
**STORMWATER DEVICE
OVERALL LAYOUT PLAN**

ORIGINATOR: JEP	DATE: 05/2026	SIGNED:	PLOT BY: ABE
DRAWN: JEP	DATE: 05/2026	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/2026	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/2026	SIGNED:	SURVEY DATE:

ISSUE STATUS:
FAST TRACK CONSENT

PROJECT No: A2515591.00	SCALE: AS SHOWN	A1
DRAWING No: A2515591.00-4261	REV	A

FOR CONSENT



ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND

ISO 9001 QUALITY ASSURED

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.

NOTES:

- SEE DRAWING A2515591.00-4202 FOR SECTION DETAILS.
- FOR WETLAND PLANTING REFER TO STUDIO PACIFIC PLANTING PLANS.
- ALL PLANTED AREA ARE TO HAVE 200mm GOOD QUALITY TOPSOIL PLACED PRIOR TO PLANTING.
- ALL WETLAND PLANTS TO BE PRINNED TO PREVENT REMOVAL BY NATIVE BIRDS.
- ACCESS TRACK TO BE 150mm COMPACTED GAP65 OVERLAID WITH 50mm TOPSOIL AND GRASS SEED.

LEGEND:

- FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
- EXISTING CONTOURS SHOWN AT 1m INTERVALS
- PERMANENT WATER LEVEL EXTENTS
- SPILLWAY EXTENTS
- MAINTENANCE ACCESS TRACK
- LOT BOUNDARY
- MAXIMUM WATER LEVEL
- PROPOSED RETAINING WALL
- INTERMITTENT OR PERMANENT STREAM
- MODIFIED NATURAL STREAM
- FLOOD EXTENT
- BOLLARDS

A		FOR CONSENT	JEP	05/2026
REF		REVISIONS	BY	DATE

HARRISON GRIERSON

AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:

WETLAND 01 LAYOUT PLAN

ORIGINATOR JEP	DATE 05/2026	SIGNED	PLOT BY: ABE
DRAWN JEP	DATE 05/2026	SIGNED	PLOT DATE: 05/06/26
CHECKED CJM	DATE 05/2026	SIGNED	SURVEY BY:
APPROVED CJM	DATE 05/2026	SIGNED	SURVEY DATE:

ISSUE STATUS:

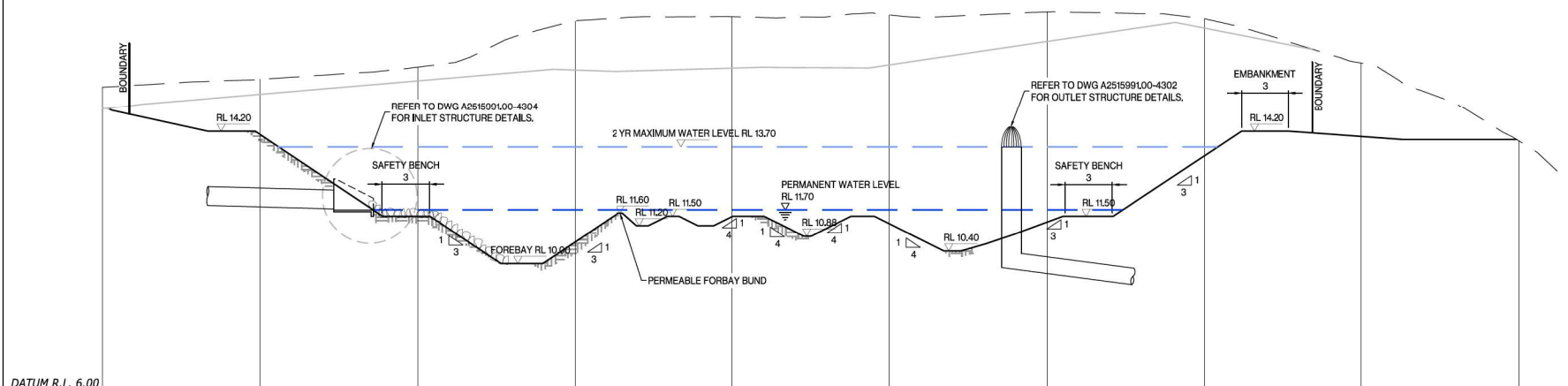
FAST TRACK CONSENT

PROJECT No: A2515591.00	SCALE: 1:200 - A1 1:400 - A3	REV A
DRAWING No:	A2515591.00-4262	

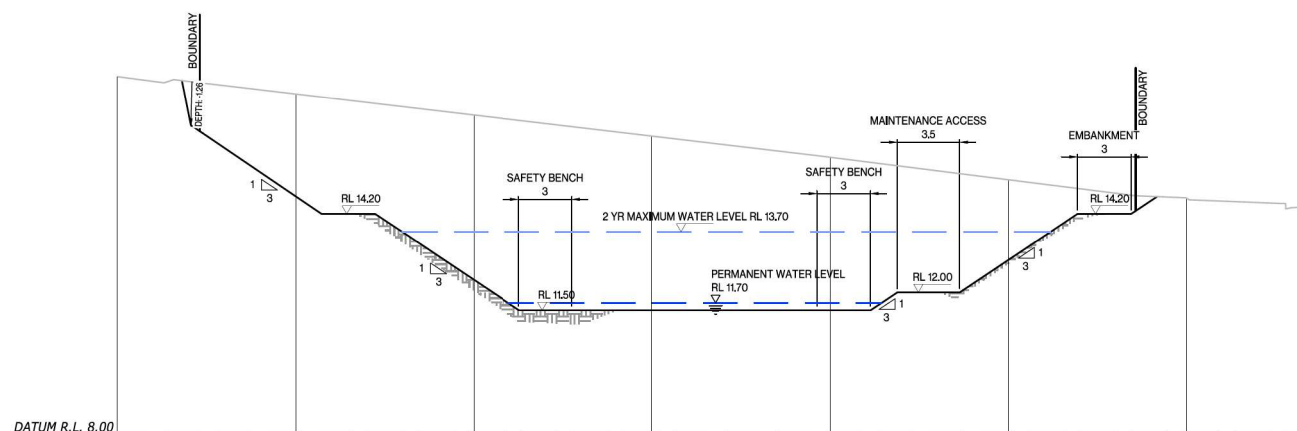
FOR CONSENT

LEGEND:

- INDICATES WETLAND SURFACE
- INDICATES EXISTING GROUND SURFACE
- INDICATES PROPOSED GROUND SURFACE
- MAXIMUM WATER LEVEL
- PERMANENT WATER LEVEL



A WETLAND 01 LONGITUDINAL SECTION
SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3



B WETLAND 01 CROSS SECTION
SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3

REF	REVISIONS	DATE
A	FOR CONSENT	JEP 05/2026

HARRISON GRIERSON AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: WETLAND 01 SECTIONS

ORIGINATOR JEP	DATE 05/2026	SIGNED	PLOT BY: ABE
DRAWN JEP	DATE 05/2026	SIGNED	PLOT DATE: 05/06/26
CHECKED CJM	DATE 05/2026	SIGNED	SURVEY BY:
APPROVED CJM	DATE 05/2026	SIGNED	SURVEY DATE:

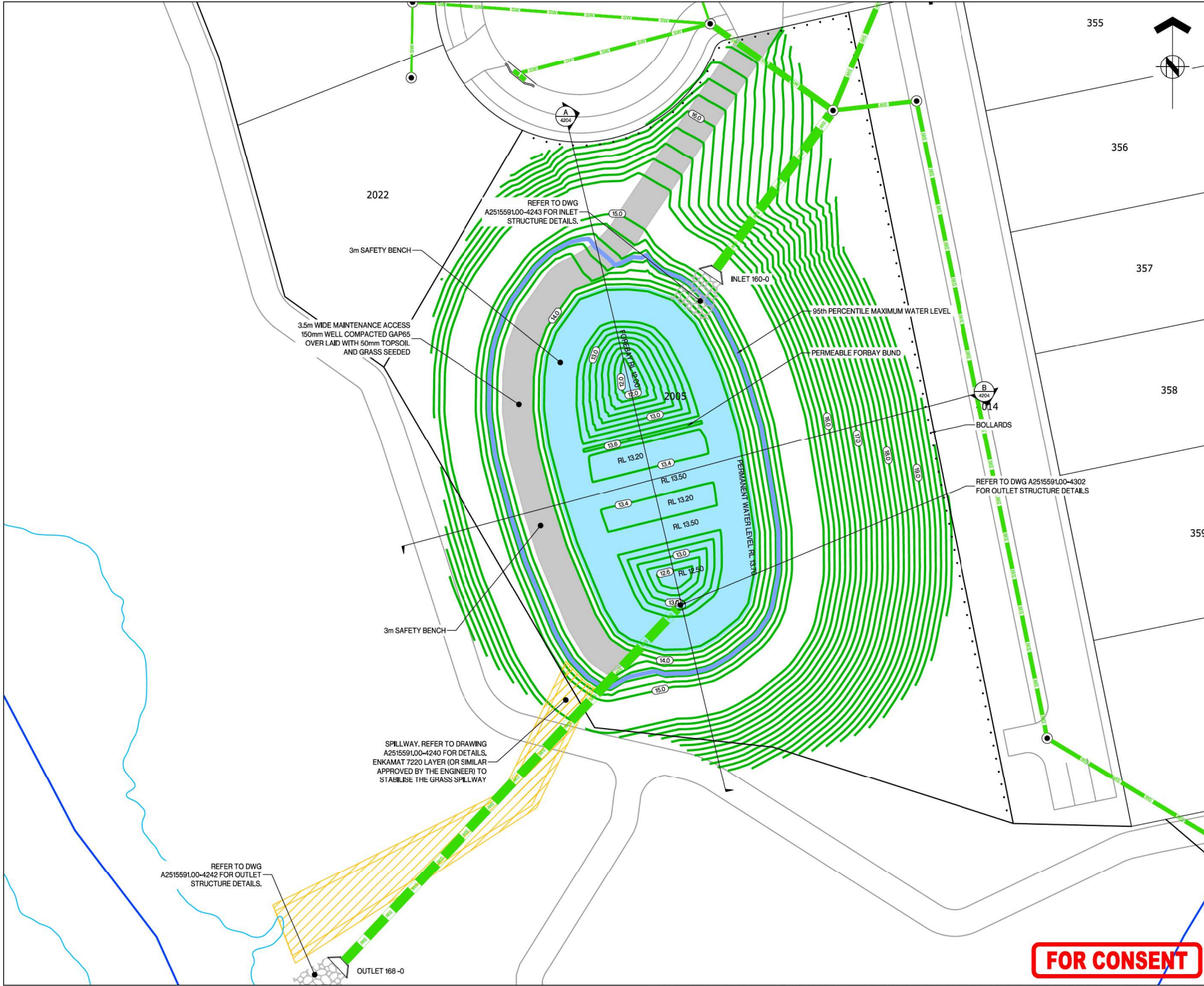
ISSUE STATUS: FAST TRACK CONSENT

PROJECT No: A2515591.00	SCALE: AS SHOWN	A1
----------------------------	-----------------	----

DRAWING No:	REV
-------------	-----

A2515591.00-4263 A

FOR CONSENT



 INDICATES WETLAND SURFACE
 INDICATES EXISTING GROUND SURFACE
 INDICATES PROPOSED GROUND SURFACE
 MAXIMUM WATER LEVEL
 PERMANENT WATER LEVEL



WETLAND 02 LONGITUDINAL SECTION

SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3



WETLAND 02 CROSS SECTION

A	FOR CONSENT		JEP	05/20
REF	REVISIONS		BY	DATE

**HARRISON
GRIERSON**

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: **WETLAND 02 SECTIONS**

ORIGINATOR: JEP	DATE: 05/20/26	SIGNED:	PLOT BY: ABE
DRAWN: JEP	DATE: 05/20/26	SIGNED:	PLOT DATE: 05/06/26
CHECKED: JEP	DATE: 05/20/26	SIGNED:	SURVEY BY:
APPROVED: C.I.M.	DATE: 05/20/26	SIGNED:	SURVEY DATE:

ISSUE STATUS: **FAST TRACK CONSENT**

PROJECT No: A2515591.00	SCALES: AS SHOWN	A1
DRAWING No: A2515591.00-4265		REV A

FOR CONSENT





ASSOCIATION OF CONSULTING
ENGINEERS NEW ZEALAND

ISO 9001
QUALITY
ASSURED

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.

NOTES:

- SEE DRAWING A2515591.00-4206 FOR SECTION DETAILS.
- FOR WETLAND PLANTING REFER TO STUDIO PACIFIC PLANTING PLANS.
- ALL PLANTED AREA ARE TO HAVE 200mm GOOD QUALITY TOPSOIL PLACED PRIOR TO PLANTING.
- ALL WETLAND PLANTS TO BE PRINNED TO PREVENT REMOVAL BY NATIVE BIRDS.
- ACCESS TRACK TO BE 150mm COMPACTED GAPES OVERLAID WITH 50mm TOPSOIL AND GRASS SEED.

LEGEND:

-  FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
-  EXISTING CONTOURS SHOWN AT 1m INTERVALS
-  PERMANENT WATER LEVEL EXTENTS
-  SPILLWAY EXTENTS
-  MAINTENANCE ACCESS TRACK
-  LOT BOUNDARY
-  MAXIMUM WATER LEVEL
-  PROPOSED RETAINING WALL
-  INTERMITTENT OR PERMANENT STREAM
-  MODIFIED NATURAL STREAM
-  FLOOD EXTENT
-  BOLLARDS

REF	REVISIONS	DATE
A	FOR CONSENT	JEP 05/2026

HARRISON GRIERSON

AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT:
**BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND**

TITLE:
WETLAND 03 LAYOUT PLAN

OPERATOR	DATE	SIGNED	PLOT BY:
JEP	05/2026		ABE

DRAWN	DATE	SIGNED	PLOT DATE:
JEP	05/2026		05/06/26

CHECKED	DATE	SIGNED	SURVEY BY:
CJM	05/2026		

APPROVED	DATE	SIGNED	SURVEY DATE:
CJM	05/2026		

ISSUE STATUS:
FAST TRACK CONSENT

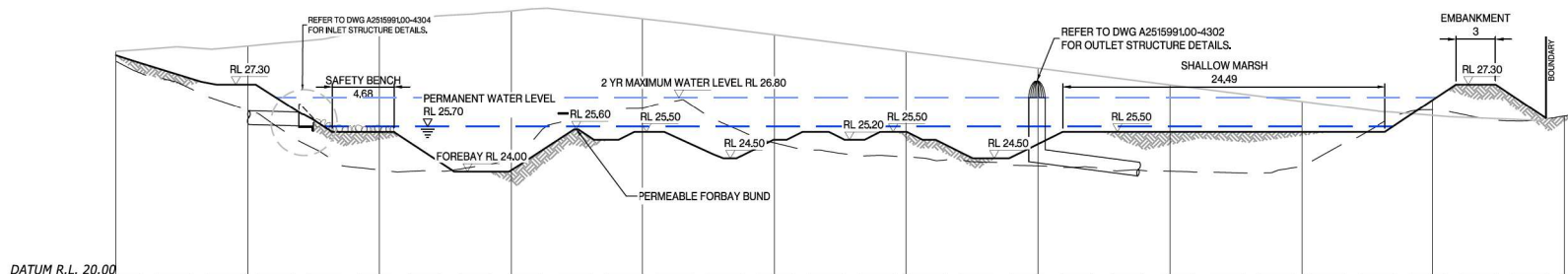
PROJECT No:	SCALE:	REV
A2515591.00	1:300 - A1 1:600 - A3	A1

DRAWING No: **A2515591.00-4266** REV **A**

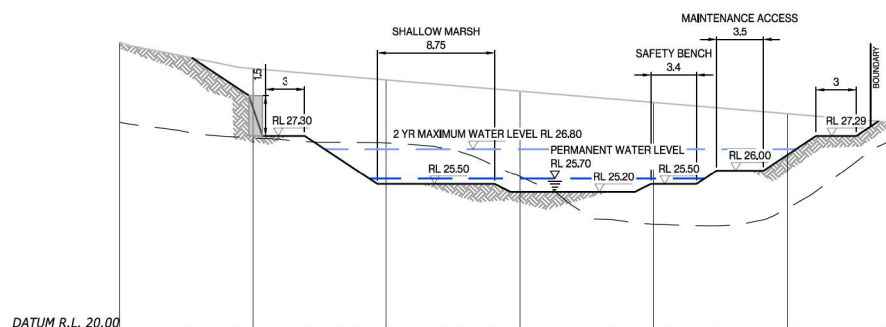
FOR CONSENT

REFER TO APPROVED MASTER DRAWINGS FOR ORIGINAL SIGNATURES File: LATE C:\AUTODESK\ACCDGCS\ACCDGCS\HARRISON GRIERSON\US\BEACHLANDS SOUTH FAST TRACK CONSENT\PROJECT FILES\01 DESIGN\02 CIVIL\04 SHEETS\A2515591.00-4261 STORMWATER DEVICE LAYOUT PLAN.DWG

- LEGEND:
- INDICATES WETLAND SURFACE
 - INDICATES EXISTING GROUND SURFACE
 - INDICATES PROPOSED GROUND SURFACE
 - MAXIMUM WATER LEVEL
 - PERMANENT WATER LEVEL



A WETLAND 03 LONGITUDINAL SECTION
SCALE 1:200H 1:100V - A1
1:400H 1:200V - A3



B WETLAND 03 CROSS SECTION
SCALE 1:200H 1:100V - A1
1:400H 1:200V - A3

A	FOR CONSENT	JEP	05/2026
REF	REVISIONS	BY	DATE

HARRISON GRIERSON AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: WETLAND 03 SECTIONS

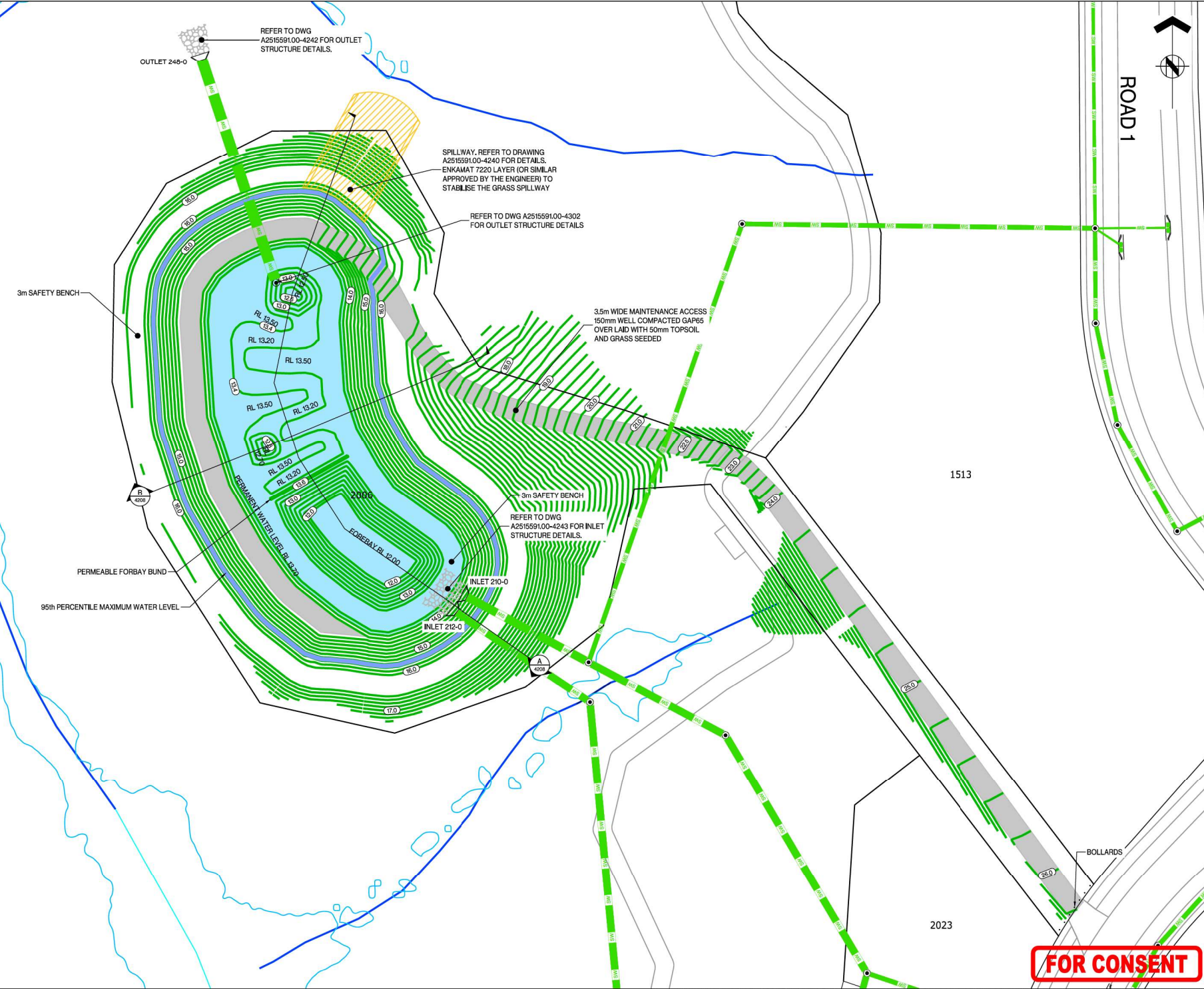
ORIGINATOR JEP	DATE 05/2026	SIGNED	PLOT BY: ABE
DRAWN JEP	DATE 05/2026	SIGNED	PLOT DATE: 05/06/26
CHECKED CJM	DATE 05/2026	SIGNED	SURVEY BY:
APPROVED CJM	DATE 05/2026	SIGNED	SURVEY DATE:

ISSUE STATUS: FAST TRACK CONSENT

PROJECT No: A2515591.00	SCALE: AS SHOWN	A1
----------------------------	-----------------	----

DRAWING No: A2515591.00-4267	REV A
---------------------------------	----------

FOR CONSENT





ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND

ISO 9001 QUALITY ASSURED

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.

NOTES:

- SEE DRAWING A2515591.00-4208 FOR SECTION DETAILS.
- FOR WETLAND PLANTING REFER TO STUDIO PACIFIC PLANTING PLANS.
- ALL PLANTED AREA ARE TO HAVE 200mm GOOD QUALITY TOPSOIL PLACED PRIOR TO PLANTING.
- ALL WETLAND PLANTS TO BE PRUNED TO PREVENT REMOVAL BY NATIVE BIRDS.
- ACCESS TRACK TO BE 150mm COMPACTED GAP65 OVERLAID WITH 50mm TOPSOIL AND GRASS SEED.

LEGEND:

- FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
- EXISTING CONTOURS SHOWN AT 1m INTERVALS
- PERMANENT WATER LEVEL EXTENTS
- SPILLWAY EXTENTS
- MAINTENANCE ACCESS TRACK
- LOT BOUNDARY
- MAXIMUM WATER LEVEL
- PROPOSED RETAINING WALL
- INTERMITTENT OR PERMANENT STREAM
- MODIFIED NATURAL STREAM
- FLOOD EXTENT
- BOLLARDS

REF	REVISIONS	BY	DATE
A	FOR CONSENT	JEP	05/2026

HARRISON GRIERSON

AUCKLAND OFFICE
Level 4, 96 St Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:

WETLAND 04 LAYOUT PLAN

ORIGINATOR	DATE	SIGNED	PLLOT BY:
JEP	05/2026		ABE

DRAWN	DATE	SIGNED	PLLOT DATE:
JEP	05/2026		05/06/26

CHECKED	DATE	SIGNED	SURVEY BY:
CJM	05/2025		

APPROVED	DATE	SIGNED	SURVEY DATE:
CJM	05/2026		

ISSUE STATUS:

FAST TRACK CONSENT

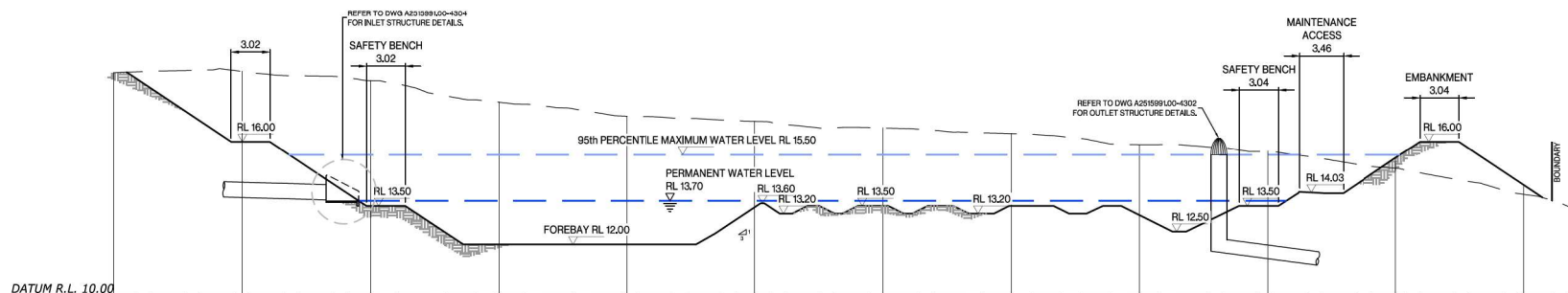
PROJECT No:	SCALE:	REV
A2515591.00	1300 - A1 1600 - A3	A1

DRAWING No:	REV
A2515591.00-4268	A

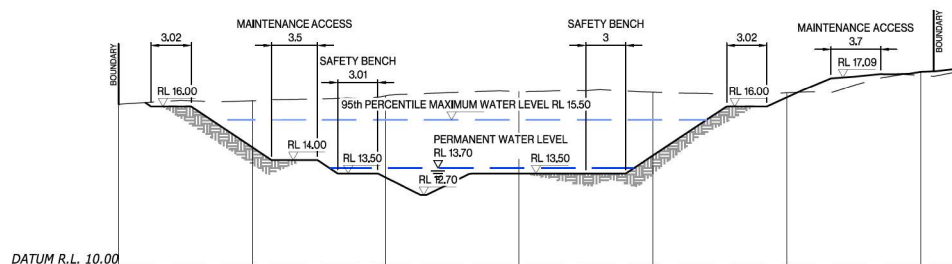
FOR CONSENT

REFER TO APPROVED MASTER DRAWINGS FOR ORIGINAL SIGNATURES FILE: LATE C:\AUTODESK\ACCDOS\ACCDOS\HARRISON GRIERSON\US\BEACHLANDS SOUTH FAST TRACK CONSENT\PROJECT FILES\01_DESIGN\02_CIVIL\04_SHEETS\A2515591.00-4261 STORMWATER DEVICE LAYOUT PLAN.DWG

- LEGEND:
- INDICATES WETLAND SURFACE
 - INDICATES EXISTING GROUND SURFACE
 - INDICATES PROPOSED GROUND SURFACE
 - MAXIMUM WATER LEVEL
 - PERMANENT WATER LEVEL



A WETLAND 04 LONGITUDINAL SECTION
SCALE 1:200H 1:100V - A1
1:400H 1:200V - A3



B WETLAND 04 CROSS SECTION
SCALE 1:200H 1:100V - A1
1:400H 1:200V - A3

A	FOR CONSENT	JEP	05/2026
REF	REVISIONS	BY	DATE

HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT:
BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:
WETLAND 04 SECTIONS

ORIGINATOR: JEP	DATE: 05/2026	SIGNED:	PLOT BY: ABE
DRAWN: JEP	DATE: 05/2026	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/2026	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/2026	SIGNED:	SURVEY DATE:

ISSUE STATUS:
FAST TRACK CONSENT

PROJECT No: A2515591.00	SCALE: AS SHOWN	A1
----------------------------	--------------------	----

DRAWING No: A2515591.00-4269	REV A
---------------------------------	----------

FOR CONSENT

1. SEE DRAWING A2515591.00-4210 FOR SECTION DETAILS.
2. FOR WETLAND PLANTING REFER TO STUDIO PACIFIC PLANTING PLANS.
3. ALL PLANTED AREA ARE TO HAVE 200mm GOOD QUALITY TOPSOIL PLACED PRIOR TO PLANTING.
4. ALL WETLAND PLANTS TO BE PRINNED TO PREVENT REMOVAL BY NATIVE BIRDS.
5. ACCESS TRACK TO BE 150mm COMPACTED GGP65 OVERLAD WITH 50mm TOPSOIL AND GRASS SEED.

	FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
	EXISTING CONTOURS SHOWN AT 1m INTERVALS
	PERMANENT WATER LEVEL EXTENTS
	SPILLWAY EXTENTS
	MAINTENANCE ACCESS TRACK
	LOT BOUNDARY
	MAXIMUM WATER LEVEL
	PROPOSED RETAINING WALL
	INTERMITTENT OR PERMANENT STREAM
	MODIFIED NATURAL STREAM
	FLOOD EXTENT
	ROI LARDS

A	FOR CONSENT	JEP	05/20/2018
REF	REVISIONS	BY	DATE

**HARRISON
GRIERSON**

PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: WETLAND 05 LAYOUT PLAN

ORIGINATOR: JEP	DATE: 05/20/26	SIGNED:	PLOT BY:
DRAWN: JEP	DATE: 05/20/26	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/20/26	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/20/26	SIGNED:	SURVEY DATE:

ISSUE STATUS: **FAST TRACK CONSENT**

PROJECT No: A2515591.00	SCALES: 1:200 - A1 1:400 - A3	A1
----------------------------	----------------------------------	----

DRAWING No:	REV
-------------	-----

A2515591.00-4270	A
------------------	---

FOR CONSENT

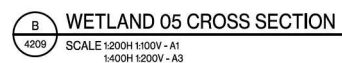
INDICATES WETLAND SURFACE

INDICATES EXISTING GROUND SURFACE

INDICATES PROPOSED GROUND SURFACE

MAXIMUM WATER LEVEL

PERMANENT WATER LEVEL



A	FOR CONSENT	JEP	05/20
REF	REVISIONS	BY	DATE

**HARRISON
GRIERSON**

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: **WETLAND 05 SECTIONS**

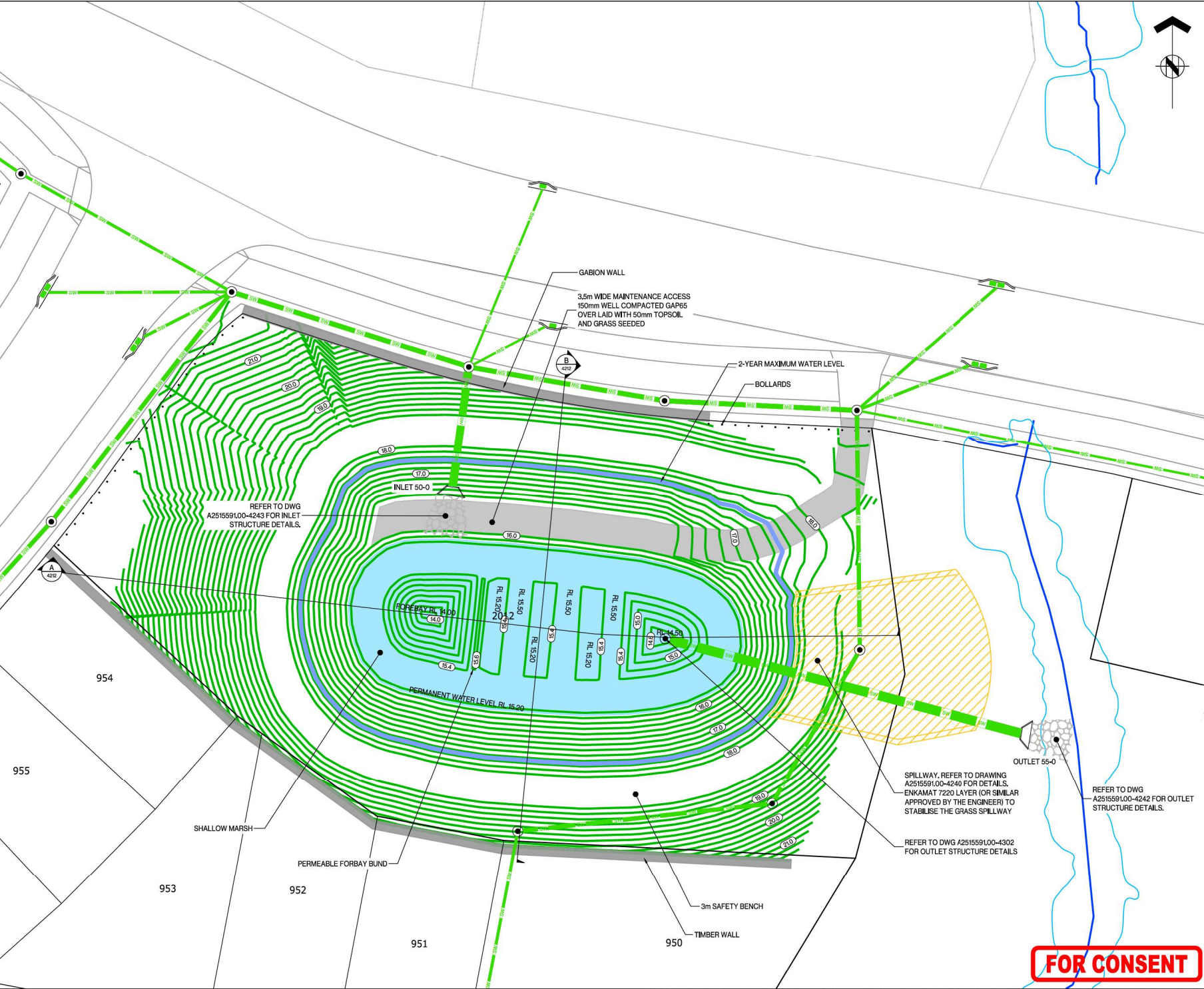
ORIGINATOR: JEP	DATE: 05/20/2026	SIGNED:	PLOT BY:
DRAWN: JEP	DATE: 05/20/2026	SIGNED:	PLOT DATE: 05/06/2026
CHECKED: CJM	DATE: 05/20/2026	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/20/2026	SIGNED:	SURVEY DATE:

ISSUE STATUS: **FAST TRACK CONSENT**

PROJECT No:	SCALES: AS SHOWN	A1
-------------	------------------	----

A2515591.00		
DRAWING No:		REV
A2515591.00-4271		A

FOR CONSENT





ASSOCIATION OF CONSULTING
ENGINEERS NEW ZEALAND

ISO 9001
QUALITY
ASSURED

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.

NOTES:

- SEE DRAWING A2515591.00-4212 FOR SECTION DETAILS.
- FOR WETLAND PLANTING REFER TO STUDIO PACIFIC PLANTING PLANS.
- ALL PLANTED AREA ARE TO HAVE 200mm GOOD QUALITY TOPSOIL PLACED PRIOR TO PLANTING.
- ALL WETLAND PLANTS TO BE PRUNED TO PREVENT REMOVAL BY NATIVE BIRDS.
- ACCESS TRACK TO BE 150mm COMPACTED GAP65 OVERLAID WITH 50mm TOPSOIL AND GRASS SEEDED.

LEGEND:

-  FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
-  EXISTING CONTOURS SHOWN AT 1m INTERVALS
-  PERMANENT WATER LEVEL EXTENTS
-  SPILLWAY EXTENTS
-  MAINTENANCE ACCESS TRACK
-  LOT BOUNDARY
-  MAXIMUM WATER LEVEL
-  PROPOSED RETAINING WALL
-  INTERMITTENT OR PERMANENT STREAM
-  MODIFIED NATURAL STREAM
-  FLOOD EXTENT
-  BOLLARDS

REF	REVISIONS	BY	DATE
A	FOR CONSENT	JEP	05/2026

HARRISON GRIERSON

AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:

WETLAND 06 LAYOUT PLAN

ORIGINATOR	DATE	SIGNED	PLLOT BY:
JEP	05/2026		ABE

DRAWN	DATE	SIGNED	PLLOT DATE:
JEP	05/2026		05/06/26

CHECKED	DATE	SIGNED	SURVEY BY:
CJM	05/2026		

APPROVED	DATE	SIGNED	SURVEY DATE:
CJM	05/2026		

ISSUE STATUS:

FAST TRACK CONSENT

PROJECT No:	SCALE:	1200 - A1	1400 - A3
A2515591.00			

DRAWING No:	REV
A2515591.00-4272	A

FOR CONSENT

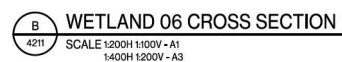
INDICATES WETLAND SURFACE

INDICATES EXISTING GROUND SURFACE

INDICATES PROPOSED GROUND SURFACE

MAXIMUM WATER LEVEL

PERMANENT WATER LEVEL



**HARRISON
GRIERSON**

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: **WETLAND 06 SECTIONS**

ORIGINATOR: JEP	DATE: 05/20/26	SIGNED:	PLOT BY: ABE
DRAWN: JEP	DATE: 05/20/26	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/20/26	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/20/26	SIGNED:	SURVEY DATE:

FAST TRACK CONSENT

PROJECT No: A2515591.00	SCALES: AS SHOWN	A1
DRAWING No: A2515591.00-4273		REV A

FOR CONSENT



1. SEE DRAWING A2515591.00-4214 FOR SECTION DETAILS.
2. FOR WETLAND PLANTING REFER TO STUDIO PACIFIC PLANTING PLANS.
3. ALL PLANTED AREA ARE TO HAVE 200mm GOOD QUALITY TOPSOIL PLACED PRIOR TO PLANTING.
4. ALL WETLAND PLANTS TO BE PRINNED TO PREVENT REMOVAL BY NATIVE BIRDS.
5. ACCESS TRACK TO BE 150mm COMPACTED GAP65 OVERLAIAD WITH 50mm TOPSOIL AND GRASS SEED.

	FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
	EXISTING CONTOURS SHOWN AT 1m INTERVALS
	PERMANENT WATER LEVEL EXTENTS
	SPILLWAY EXTENTS
	MAINTENANCE ACCESS TRACK
	LOT BOUNDARY
	MAXIMUM WATER LEVEL
	PROPOSED RETAINING WALL
	INTERMITTENT OR PERMANENT STREAM
	MODIFIED NATURAL STREAM
	FLOOD EXTENT
	BOLLARDS

A	FOR CONSENT	JEP	05/20
REF	REVISIONS	BY	DAT

**HARRISON
GRIERSON**

962 PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: WETLAND 07 LAYOUT PLAN

ORIGINATOR: JEP	DATE: 05/20/26	SIGNED:	PLOT BY:
DRAWN: JEP	DATE: 05/20/26	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/20/26	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/20/26	SIGNED:	SURVEY DATE:

ISSUE STATUS:		FAST TRACK CONSENT	
PROJECT No: A251559100	SCALES: 1:200 - A1 1:400 - A3	A1	
DRAWING No:		REV	
A2515591.00-4274		A	

FOR CONSENT

INDICATES WETLAND SURFACE

INDICATES EXISTING GROUND SURFACE

INDICATES PROPOSED GROUND SURFACE

MAXIMUM WATER LEVEL

PERMANENT WATER LEVEL



**HARRISON
GRIERSON**

PROJECT:

**BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND**

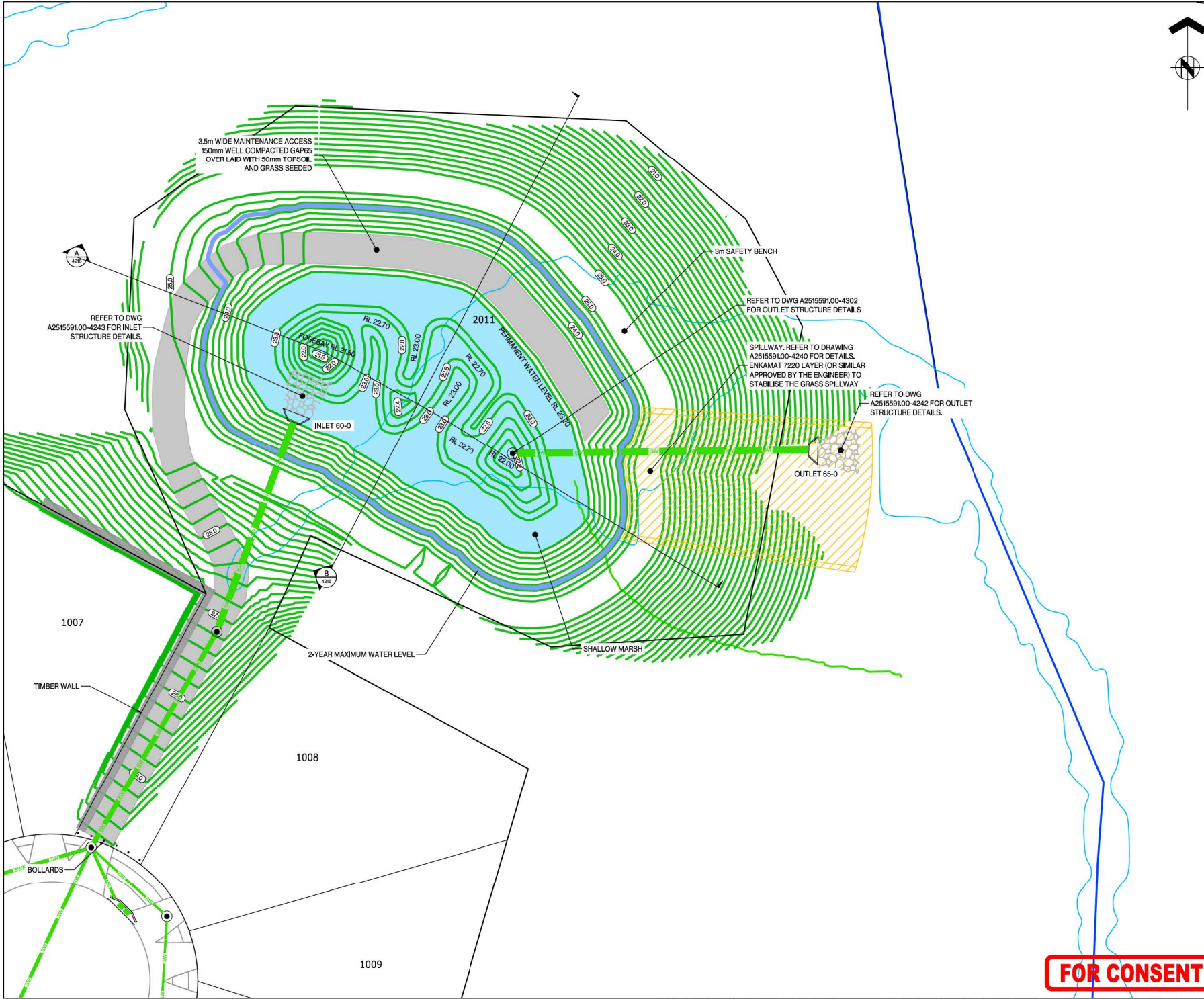
TITLE: **WETLAND 07 SECTIONS**

ORIGINATOR: JEP	DATE: 05/20/26	SIGNED:	PLOT BY: ABE
DRAWN: JEP	DATE: 05/20/26	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/20/26	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/20/26	SIGNED:	SURVEY DATE:

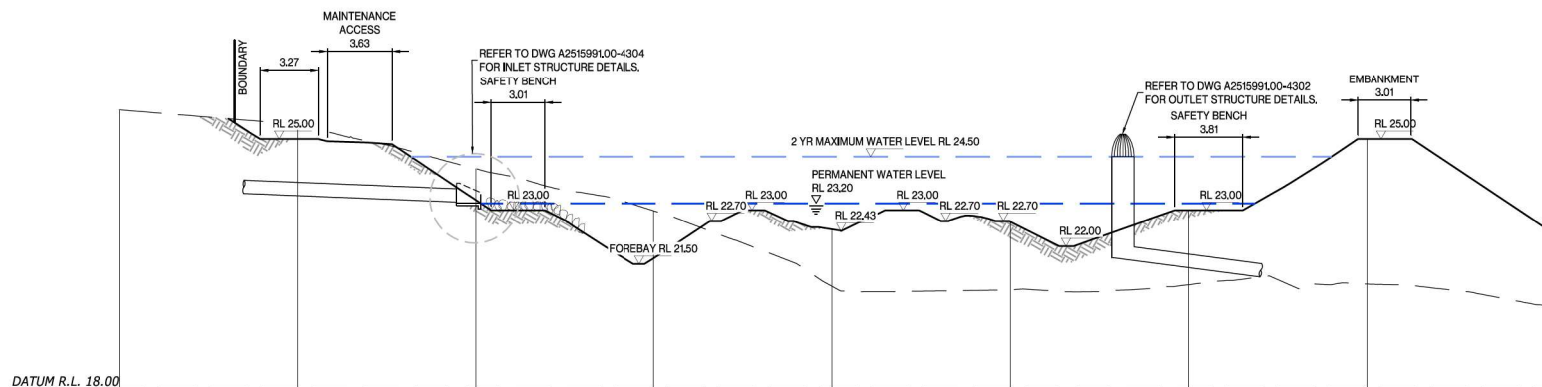
ISSUE STATUS: **FAST TRACK CONSENT**

PROJECT No: A2515591.00	SCALES: AS SHOWN	A1
DRAWING No: A2515591.00-4275		REV A

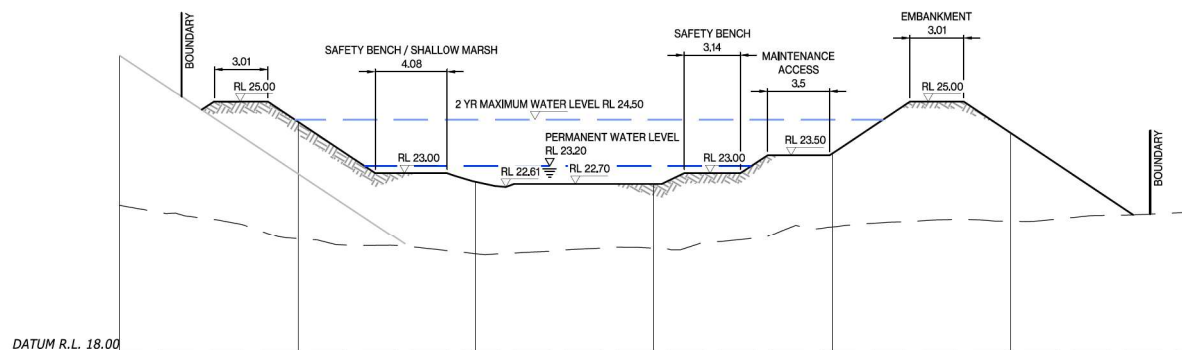
FOR CONSENT



- LEGEND:
- INDICATES WETLAND SURFACE
 - INDICATES EXISTING GROUND SURFACE
 - INDICATES PROPOSED GROUND SURFACE
 - MAXIMUM WATER LEVEL
 - PERMANENT WATER LEVEL



WETLAND 08 LONGITUDINAL SECTION
SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3



WETLAND 08 CROSS SECTION
SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3

A	FOR CONSENT	JEP	05/2026
REF	REVISIONS	BY	DATE

HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT:
**BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND**

TITLE:
WETLAND 08 SECTIONS

ORIGINATOR: JEP	DATE: 05/2026	SIGNED:	PLOT BY: ABE
DRAWN: JEP	DATE: 05/2026	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/2026	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/2026	SIGNED:	SURVEY DATE:

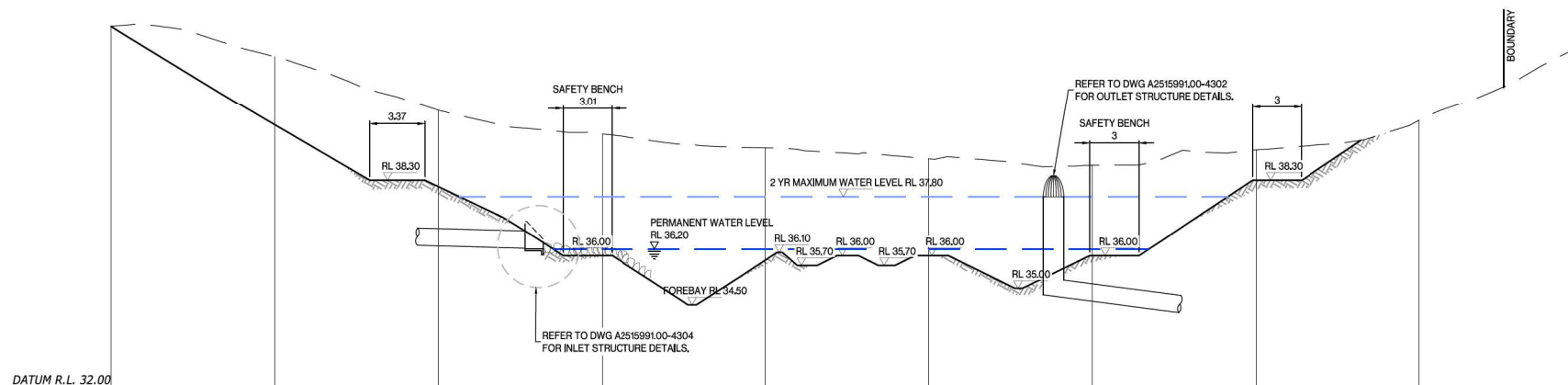
ISSUE STATUS:
FAST TRACK CONSENT

PROJECT No: A2515591.00	SCALE: AS SHOWN	A1
DRAWING No:	REV	REV
A2515591.00-4277	A	

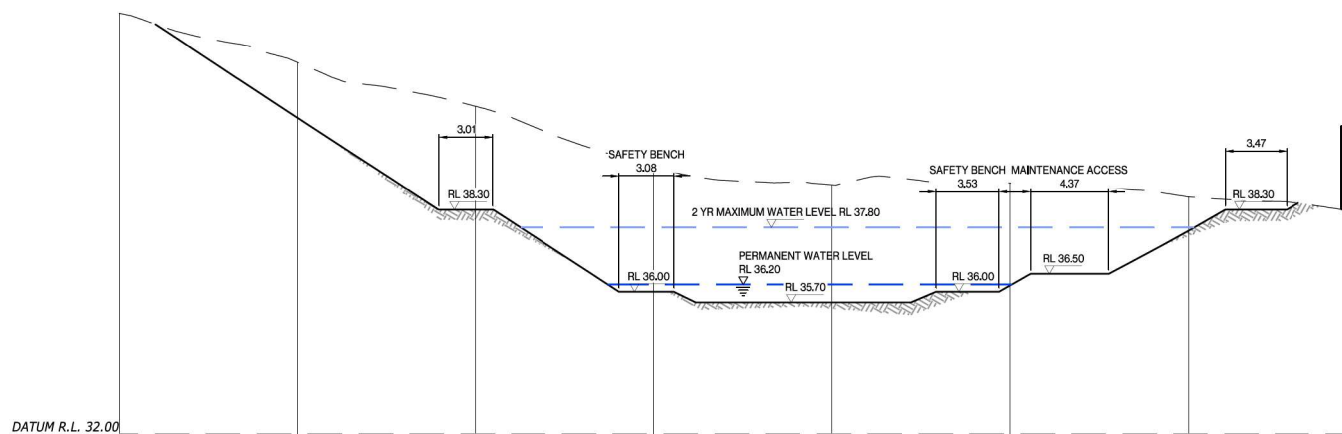
FOR CONSENT



- LEGEND:
- INDICATES WETLAND SURFACE
 - INDICATES EXISTING GROUND SURFACE
 - INDICATES PROPOSED GROUND SURFACE
 - MAXIMUM WATER LEVEL
 - PERMANENT WATER LEVEL



A WETLAND 09 LONGITUDINAL SECTION
SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3



B WETLAND 09 CROSS SECTION
SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3

A	FOR CONSENT	JEP	05/2026
REF	REVISIONS	BY	DATE

HARRISON GRIERSON AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: WETLAND 09 SECTIONS

ORIGINATOR: JEP	DATE: 05/2025	SIGNED:	PLOT BY: ABE
DRAWN: JEP	DATE: 05/2026	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/2026	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/2026	SIGNED:	SURVEY DATE:

ISSUE STATUS: FAST TRACK CONSENT

PROJECT No: A2515591.00 SCALES: AS SHOWN A1

DRAWING No: A2515591.00-4279 REV

FOR CONSENT



ISO 9001
QUALITY
ASSURED

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORISED USE OF THIS DRAWING.

1. SEE DRAWING A2515591.00-4220 FOR SECTION DETAILS.
2. FOR WETLAND PLANTING REFER TO STUDIO PACIFIC PLANTING PLANS.
3. ALL PLANTED AREA ARE TO HAVE 200mm GOOD QUALITY TOPSOIL PLACED PRIOR TO PLANTING.
4. ALL WETLAND PLANTS TO BE PRINNED TO PREVENT REMOVAL BY NATIVE BIRDS.
5. ACCESS TRACK TO BE 150mm COMPACTED GAP65 OVERLAIWD WITH 50mm TOPSOIL AND GRASS SEED.

	FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
	EXISTING CONTOURS SHOWN AT 1m INTERVALS
	PERMANENT WATER LEVEL EXTENTS
	SPILLWAY EXTENTS
	MAINTENANCE ACCESS TRACK
	LOT BOUNDARY
	MAXIMUM WATER LEVEL
	PROPOSED RETAINING WALL
	INTERMITTENT OR PERMANENT STREAM
	MODIFIED NATURAL STREAM
	FLOOD EXTENT
	BOLLARDS

A	FOR DISSEMINATION	JEP	0520
REF	REVISIONS	BY	DAT

**HARRISON
GRIERSON**

PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:

WETLAND 10 LAYOUT PLAN

ORIGINATOR: JEP	DATE: 05/20/26	SIGNED:	PLOT BY:
DRAWN: JEP	DATE: 05/20/26	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/20/26	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/20/26	SIGNED:	SURVEY DATE:

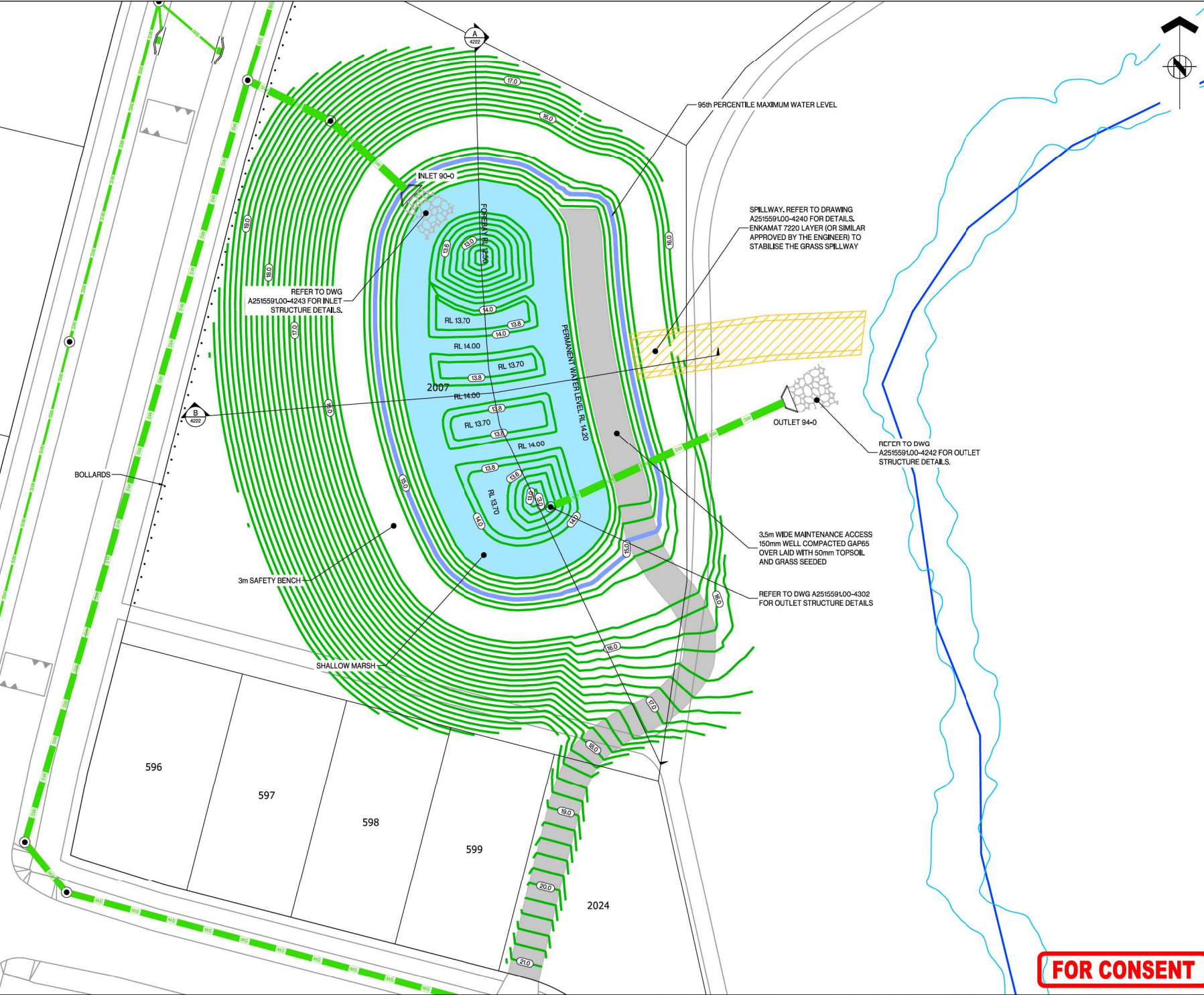
ISSUE STATUS: **FAST TRACK CONSENT**

PROJECT No: A2515591.00	SCALES: 1:200 - A1 1:400 - A3	A
----------------------------	----------------------------------	---

A2515591.00-4280 A

REFER TO APPROVED MASTER DRAWINGS FOR ORIGINAL SIGNATURES File: LATE C:\AUTODESK\ACCDOS\ACCDOS\HARRISON GRIERSON US\BEACHLANDS SOUTH FAST TRACK CONSENT PROJECT FILES\01 DESIGN\02 CIVIL\04 SHEETS\A2515591.00-4261 STORMWATER DEVICE LAYOUT PLAN.DWG

FOR CONSENT



THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.

- NOTES:
- SEE DRAWING A2515591.00-4222 FOR SECTION DETAILS.
 - FOR WETLAND PLANTING REFER TO STUDIO PACIFIC PLANTING PLANS.
 - ALL PLANTED AREA ARE TO HAVE 200mm GOOD QUALITY TOPSOIL PLACED PRIOR TO PLANTING.
 - ALL WETLAND PLANTS TO BE PRINNED TO PREVENT REMOVAL BY NATIVE BIRDS.
 - ACCESS TRACK TO BE 150mm COMPACTED GAP65 OVERLAID WITH 50mm TOPSOIL AND GRASS SEED.

- LEGEND:
- FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
 - EXISTING CONTOURS SHOWN AT 1m INTERVALS
 - PERMANENT WATER LEVEL EXTENTS
 - SPILLWAY EXTENTS
 - MAINTENANCE ACCESS TRACK
 - LOT BOUNDARY
 - MAXIMUM WATER LEVEL
 - PROPOSED RETAINING WALL
 - INTERMITTENT OR PERMANENT STREAM
 - MODIFIED NATURAL STREAM
 - FLOOD EXTENT
 - BOLLARDS

A	FOR CONSENT	JEP	05/2026
REF	REVISIONS	BY	DATE

HARRISON GRIERSON AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: WETLAND 11 LAYOUT PLAN

ORIGINATOR	DATE	SIGNED	PLOT BY:
JEP	05/2026		ABE
DRAWN	DATE	SIGNED	PLOT DATE:
JEP	05/2026		05/06/26
CHECKED	DATE	SIGNED	SURVEY BY:
CJM	05/2026		
APPROVED	DATE	SIGNED	SURVEY DATE:
CJM	05/2026		

FAST TRACK CONSENT			
PROJECT No:	SCALE:		A1
A2515591.00	1200 - A1		
DRAWING No:	1400 - A3		REV
A2515591.00-4282			A

FOR CONSENT

1. SEE DRAWING A2515591.00-4224 FOR SECTION DETAILS.
2. FOR WETLAND PLANTING REFER TO STUDIO PACIFIC PLANTING PLANS.
3. ALL PLANTED AREA ARE TO HAVE 200mm GOOD QUALITY TOPSOIL PLACED PRIOR TO PLANTING.
4. ALL WETLAND PLANTS TO BE PRINNED TO PREVENT REMOVAL BY NATIVE BIRDS.
5. ACCESS TRACK TO BE 150mm COMPACTED GAP65 OVERLAD WITH 50mm TOPSOIL AND GRASS SEED.

	FINISHED CONTOURS SHOWN AT 0.25m INTERVALS
	EXISTING CONTOURS SHOWN AT 1m INTERVALS
	PERMANENT WATER LEVEL EXTENTS
	SPILLWAY EXTENTS
	MAINTENANCE ACCESS TRACK
	LOT BOUNDARY
	MAXIMUM WATER LEVEL
	PROPOSED RETAINING WALL
	INTERMITTENT OR PERMANENT STREAM
	MODIFIED NATURAL STREAM
	FLOOD EXTENT
	BOLLARDS

A	FOR CONSENT	JEP	05/20/2017
REF	REVISIONS	BY	DATE

**HARRISON
GRIERSON**

PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:

RAINGARDEN 01 LAYOUT PLAN

ORIGINATOR: JEP	DATE: 05/20/26	SIGNED:	PLOT BY: A
DRAWN: JEP	DATE: 05/20/26	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/20/26	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/20/26	SIGNED:	SURVEY DATE:

ISSUE STATUS: **FAST TRACK CONSENT**

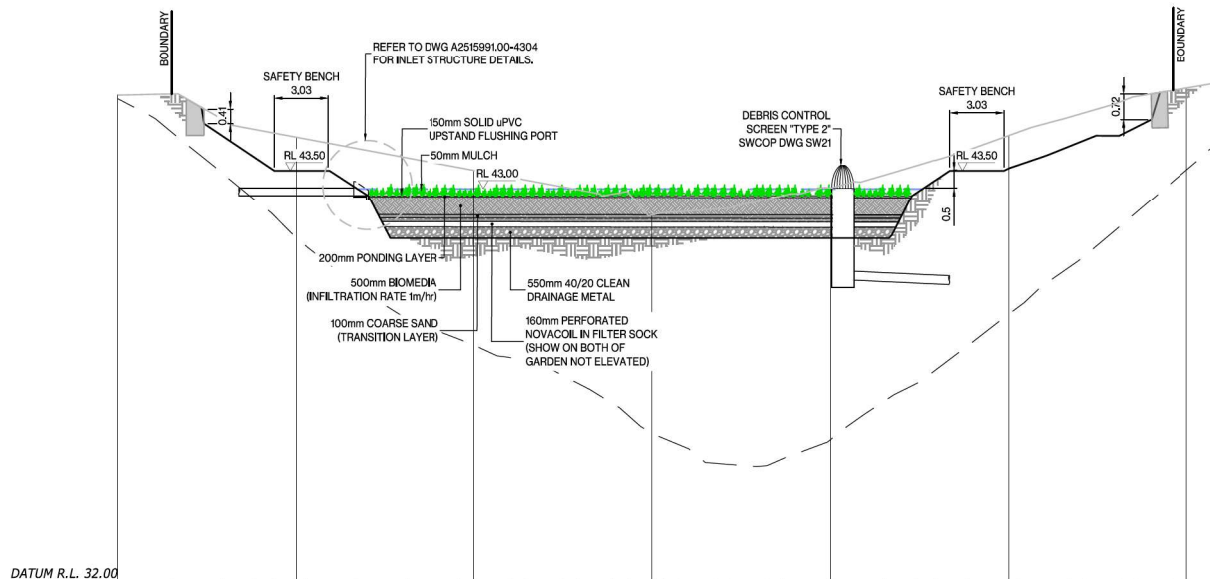
PROJECT No: A251559100	SCALES: 1:200 - A1 1:400 - A3	A1
---------------------------	----------------------------------	----

A2515591.00	1:400 - AS	
DRAWING No:		REV

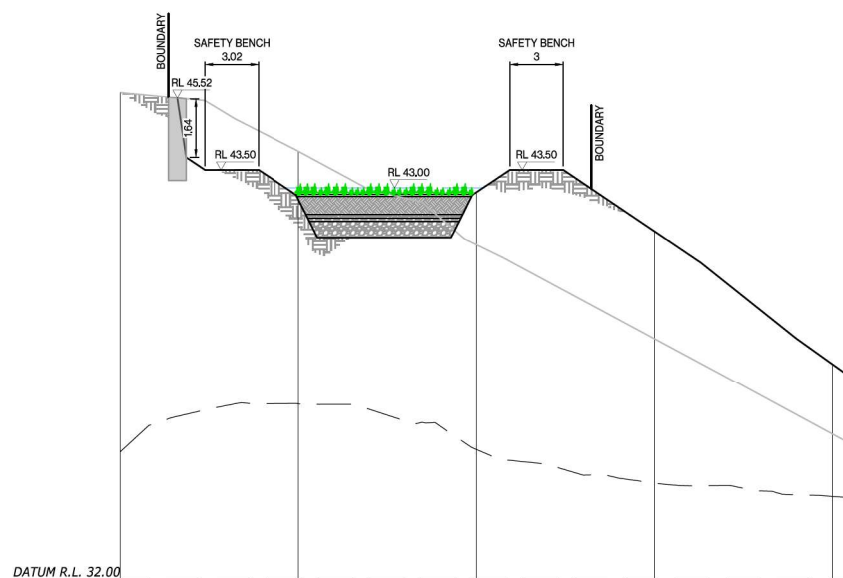
A2515591.00-4284 A

FOR CONSENT

- LEGEND:
- INDICATES WETLAND SURFACE
 - INDICATES EXISTING GROUND SURFACE
 - INDICATES PROPOSED GROUND SURFACE
 - MAXIMUM WATER LEVEL
 - PERMANENT WATER LEVEL



RAINGARDEN 1 LONGITUDINAL SECTION
SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3



RAINGARDEN 1 CROSS SECTION
SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3

REF	REVISIONS	DATE
A	FOR CONSENT	JEP 05/2026

HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT:
BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:
RAINGARDEN 01 SECTIONS

ORIGINATOR JEP	DATE 05/2026	SIGNED	PLOT BY: ABE
DRAWN JEP	DATE 05/2026	SIGNED	PLOT DATE: 05/06/26
CHECKED CJM	DATE 05/2026	SIGNED	SURVEY BY:
APPROVED CJM	DATE 05/2026	SIGNED	SURVEY DATE:

ISSUE STATUS:
FAST TRACK CONSENT

PROJECT No: A2515591.00
SCALES: AS SHOWN
A1

DRAWING No: A2515591.00-4285
REV
A

FOR CONSENT

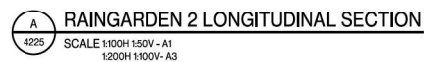
INDICATES WETLAND SURFACE

INDICATES EXISTING GROUND SURFACE

INDICATES PROPOSED GROUND SURFACE

MAXIMUM WATER LEVEL

PERMANENT WATER LEVEL



A	FOR CONSENT	JEP	05/20
REF	REVISIONS	BY	DAT

PROJECT:

**BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND**

TITLE: RAINGARDEN 02 SECTIONS

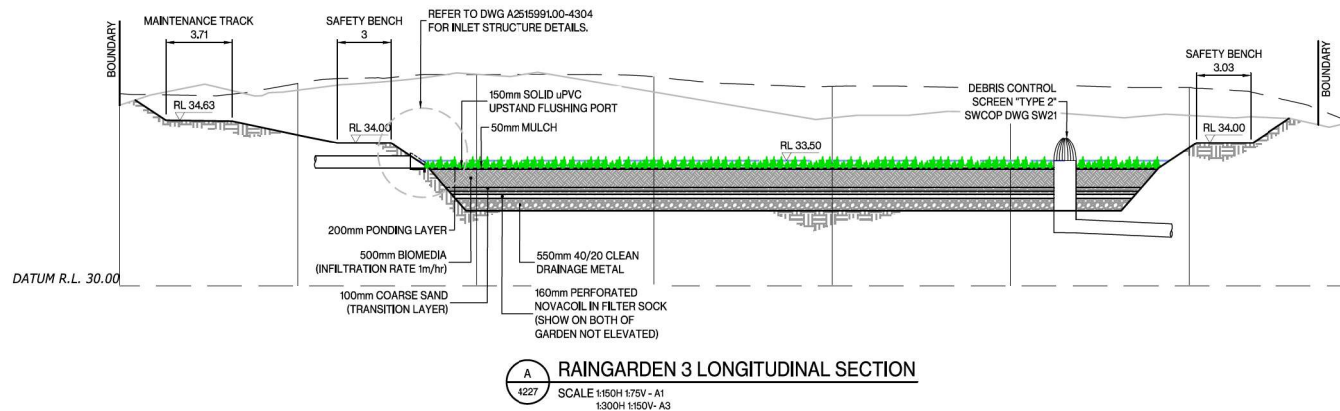
ORIGINATOR: JEP	DATE: 05/20/26	SIGNED:	PLOT BY: ABE
DRAWN: JEP	DATE: 05/20/26	SIGNED:	PLOT DATE: 05/06/26
CHECKED: CJM	DATE: 05/20/26	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05/20/26	SIGNED:	SURVEY DATE:

ISSUE STATUS: **FAST TRACK CONSENT**

PROJECT No: A2515591.00	SCALES: AS SHOWN	A1
DRAWING No: A2515591.00-4287		REV A

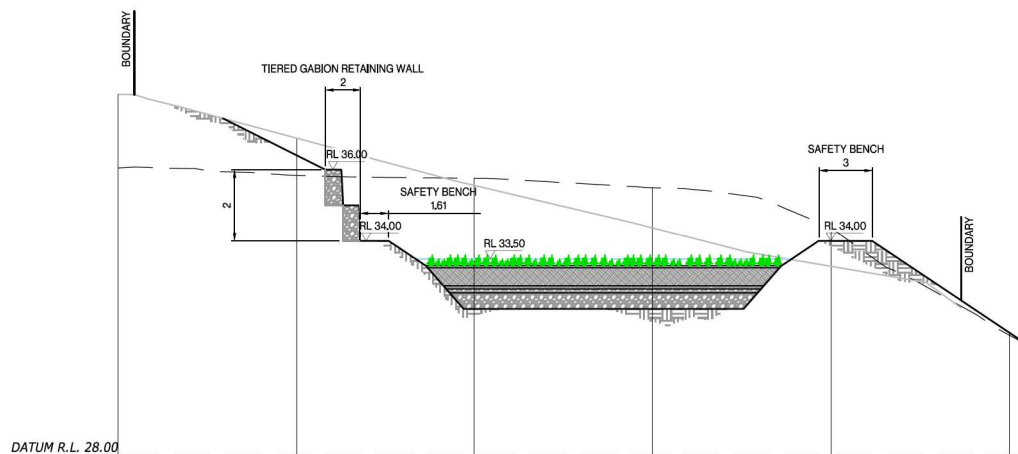
FOR CONSENT

- LEGEND:
- INDICATES WETLAND SURFACE
 - INDICATES EXISTING GROUND SURFACE
 - INDICATES PROPOSED GROUND SURFACE
 - MAXIMUM WATER LEVEL
 - PERMANENT WATER LEVEL



RAINGARDEN 3 LONGITUDINAL SECTION

SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3



RAINGARDEN 3 CROSS SECTION

SCALE 1:150H 1:75V - A1
1:300H 1:150V - A3

HARRISON GRIERSON AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: RAINGARDEN 03 SECTIONS

ORIGINATOR JEP	DATE 05.2026	SIGNED	PLOT BY: ABE
DRAWN JEP	DATE 05.2026	SIGNED	PLOT DATE: 05.06.26
CHECKED CJM	DATE 05.2026	SIGNED	SURVEY BY:
APPROVED CJM	DATE 05.2026	SIGNED	SURVEY DATE:

ISSUE STATUS: FAST TRACK CONSENT

PROJECT No: A2515591.00 SCALES: AS SHOWN A1

DRAWING No: A2515591.00-4289 REV A

FOR CONSENT



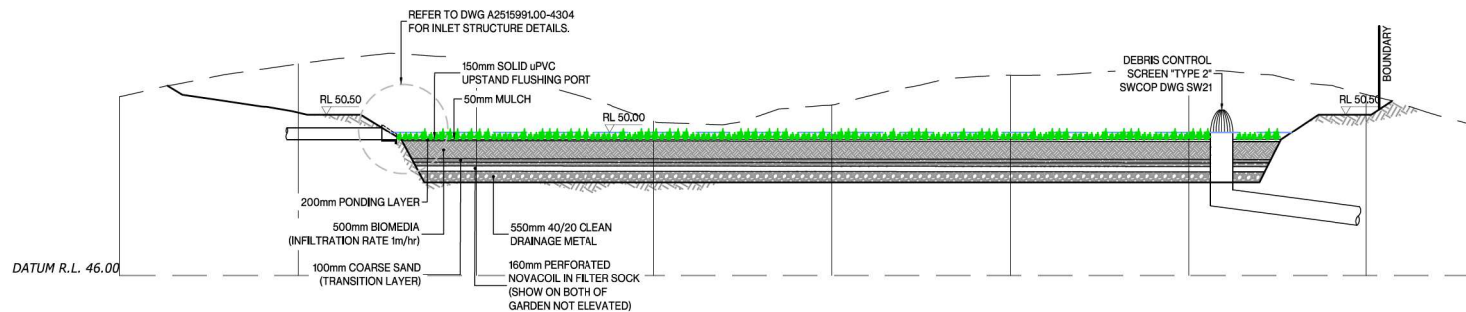
ASSOCIATION OF CONSULTING
ENGINEERS NEW ZEALAND

ISO 9001
QUALITY
ASSURED

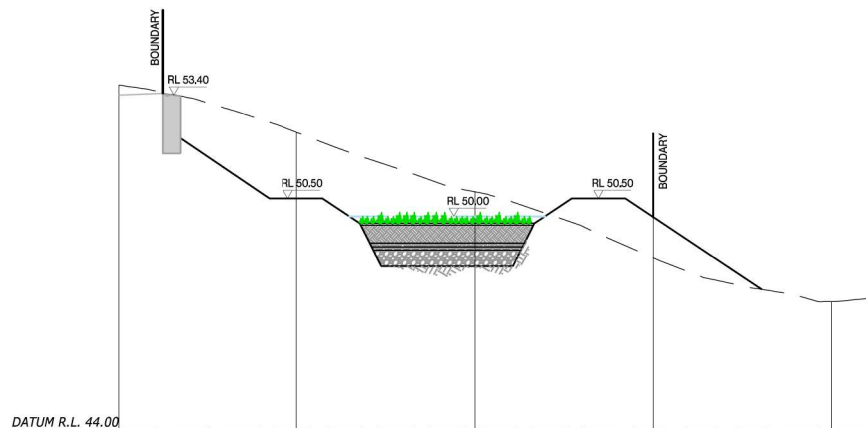
THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED
OR ALTERED WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS
LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.

LEGEND:

- INDICATES WETLAND SURFACE
- INDICATES EXISTING GROUND SURFACE
- INDICATES PROPOSED GROUND SURFACE
- MAXIMUM WATER LEVEL
- PERMANENT WATER LEVEL



RAINGARDEN 4 LONGITUDINAL SECTION
SCALE 1:150H 1:300V - A1
1:300H 1:600V - A3



RAINGARDEN 4 CROSS SECTION
SCALE 1:150H 1:300V - A1
1:300H 1:600V - A3

HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT:
**BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND**

TITLE:
RAINGARDEN 04 SECTIONS

ORIGINATOR: JEP	DATE: 05.2026	SIGNED:	PLOT BY: ABE
DRAWN: JEP	DATE: 05.2026	SIGNED:	PLOT DATE: 05.06.26
CHECKED: CJM	DATE: 05.2026	SIGNED:	SURVEY BY:
APPROVED: CJM	DATE: 05.2026	SIGNED:	SURVEY DATE:

ISSUE STATUS:
FAST TRACK CONSENT

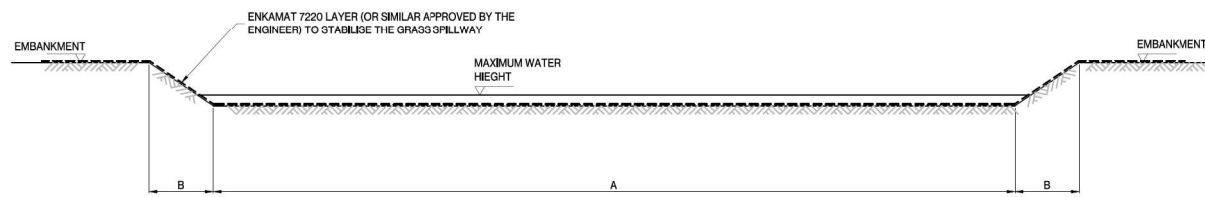
PROJECT No: A2515591.00	SCALE: AS SHOWN	A1
----------------------------	-----------------	----

DRAWING No: **A2515591.00-4291** REV **A**

FOR CONSENT

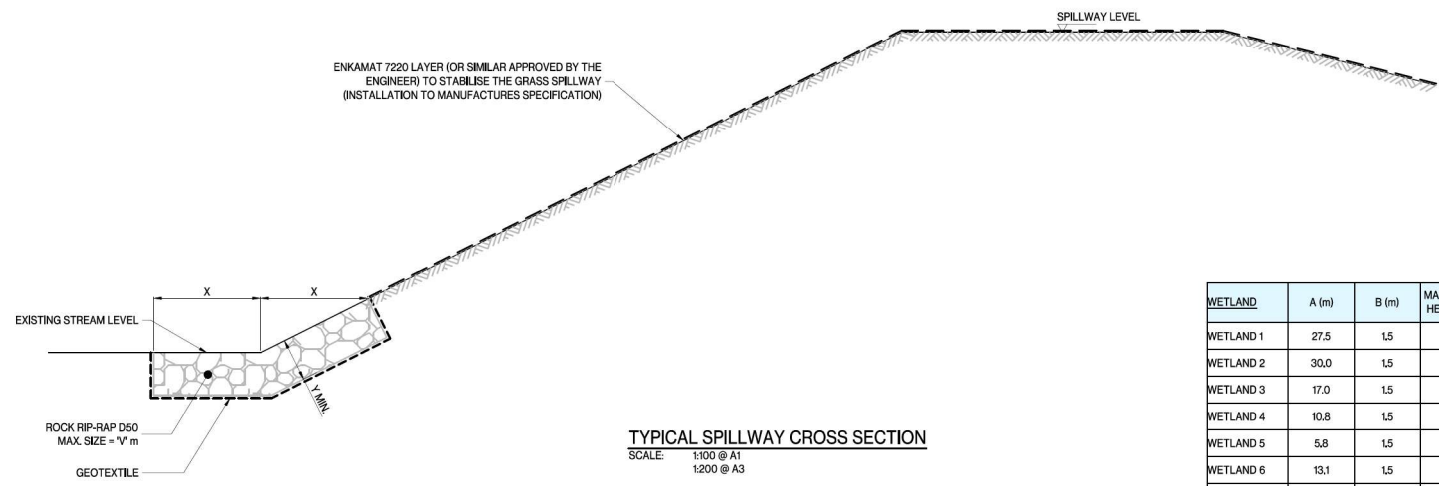
NOTES

- ENKAMAT TO BE LAID ON 100mm OF TOPSOIL SHAPED TO FINAL SURFACE GRADES.
- MAT SURFACE SHOULD BE PINNED A 1m CENTRES TO ENSURE FIXED TO UNDERLYING TOPSOIL SURFACE. AFTER PINNING THE AREA SHALL BE GRASSED SEED AT A RATE OF 20-30 g/m².
- TOPSOIL IS THEN RAKED INTO THE MAT UNTIL THE AREA IS COMPLETELY COVERED WITH 20mm TOPSOIL. PRIOR TO THE TOPSOIL SPREAD, THE SURFACE IS TO BE INSPECTED BY THE ENGINEER.
- MAT IS TO BE LAID FROM THE DOWNSTREAM TO UPSTREAM AND OVERLY DISTRIBUTED CONTACT WITH SUBSOIL.
- THE MAT IS TO BE SECURED WITH PEGS OR PINS. ALL EDGES TOP/BOTTOM AND SIDES SHOULD BE FIRMLY ANCHORED IN SPADE DEEP TRENCHES WITH PINS. ALL OVER LAPS MINIMUM OF 300mm SHOULD BE PINNED TIGHTLY.



TYPICAL WETLAND SPILLWAY

SCALE: 1:100 H 1:50 V - A1
1:200 H 1:100 V - A3



WETLAND	A (m)	B (m)	MAX WATER HEIGHT (m)	X (m)	Y (m)	V (m)
WETLAND 1	27.5	1.5	0.2	4.7	0.6	0.4
WETLAND 2	30.0	1.5	0.1	4.3	0.5	0.3
WETLAND 3	17.0	1.5	0.2	4.5	0.5	0.3
WETLAND 4	10.8	1.5	0.1	4.3	0.5	0.3
WETLAND 5	5.8	1.5	0.1	4.3	0.5	0.3
WETLAND 6	13.1	1.5	0.1	4.3	0.5	0.3
WETLAND 7	7.2	1.5	0.2	4.7	0.6	0.4
WETLAND 8	13.7	1.5	0.1	4.3	0.5	0.3
WETLAND 9	9.0	1.5	0.1	4.3	0.5	0.3
WETLAND 10	16.1	1.5	0.1	4.3	0.5	0.3
WETLAND 11	3.9	1.5	0.1	4.3	0.5	0.3
RAINGARDEN	A (m)	B (m)	MAX WATER HEIGHT (m)	X (m)	Y (m)	V (m)
RAINGARDEN 1	12.5	1.5	0.2	4.7	0.6	0.4
RAINGARDEN 2	5.0	1.5	0.2	4.4	0.5	0.3
RAINGARDEN 3	4.7	1.5	0.5	4.5	0.5	0.3
RAINGARDEN 4	9.3	1.5	0.1	4.5	0.5	0.3

FOR CONSENT

HARRISON GRIERSON

AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

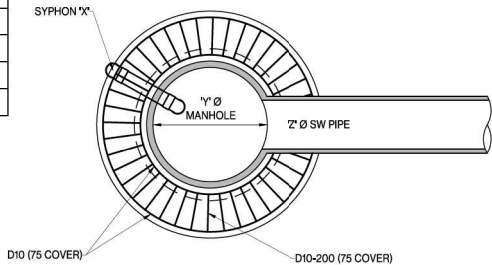
TITLE:

1% AEP EMERGENCY SPILLWAYS
STORMWATER WETLAND DETAILS
SHEET 1 OF 8

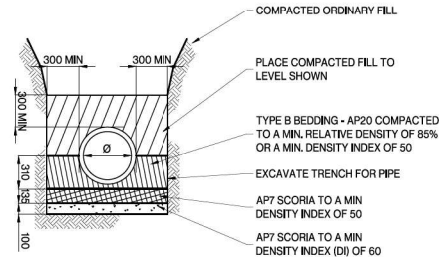
ORIGINATOR	DATE	SIGNED	PLOT BY:
SCT	04.2026		ABE
DRAWN	DATE	SIGNED	PLOT DATE:
SCT	11.2025		08.06.26
CHECKED	DATE	SIGNED	SURVEY BY:
PZS	04.2026		SURVEYED BY
APPROVED	DATE	SIGNED	SURVEY DATE:
CJM	04.2026		SURVEYED DATE

FAST TRACK CONSENT			
PROJECT No:	SCALE:	NOT TO SCALE	A1
A2515591.00			
DRAWING No:			REV
A2515591.00-4300			A

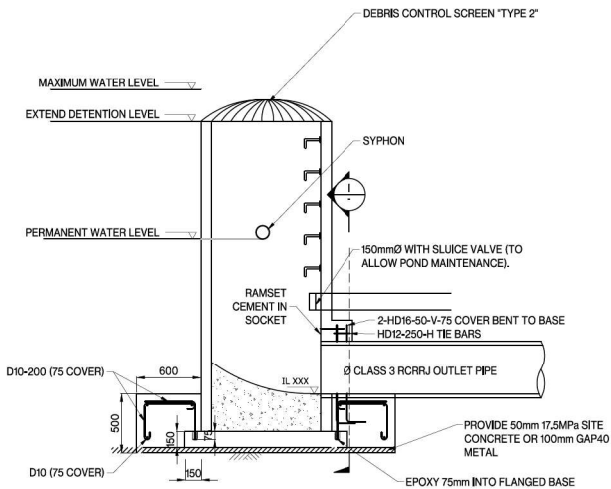
WETLAND	MANHOLE SIZE Y (mm)	SYPHON SIZE X (mm)	ORIFICE SIZE X1 (mm)	OUTLET PIPE Z (mm)
WETLAND 01	DN1400	150	110	1200
WETLAND 02	DN1050	100	100	1050
WETLAND 03	DN1050	150	125	1050
WETLAND 04	DN1050	225	180	1800
WETLAND 05	DN1050	150	125	1200
WETLAND 06	DN1050	100	85	1050
WETLAND 07	DN1050	100	75	825
WETLAND 08	DN1050	100	75	750
WETLAND 09	DN1050	100	85	1050
WETLAND 10	DN1050	100	85	675
WETLAND 11	DN1050	100	90	825



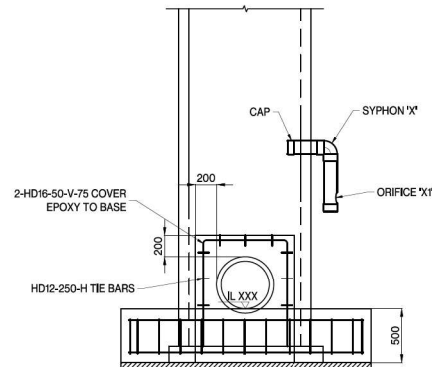
WETLAND OUTLET BASE STRUCTURE PLAN VIEW
SCALE: N.T.S



TYPICAL PIPE BEDDING DETAILS (CONVENTIONALLY LAID)
SCALE: N.T.S



WETLAND OUTLET STRUCTURE DETAIL
SCALE: N.T.S



SECTION VIEW
SCALE: 1:20=41146-43

NOTES

- OUTLET SIZING TO BE CONFIRMED AT ENGINEERING PLAN APPROVAL STAGE.

A	FOR CONSENT	SCT	05/2026
REF	REVISIONS	BY	DATE

HARRISON GRIERSON AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisonsongrierson.com

PROJECT: BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: 1% AEP EMERGENCY SPILLWAYS
STORMWATER WETLAND DETAILS
SHEET 2 OF 8

ORIGINATOR	DATE	SIGNED	PLOT BY
SCT	04/2026		ABE
DRAWN	DATE	SIGNED	PLOT DATE
SCT	11/2025		08/06/26
CHECKED	DATE	SIGNED	SURVEY BY
PZS	04/2026		
APPROVED	DATE	SIGNED	SURVEY DATE
CJM	04/2026		

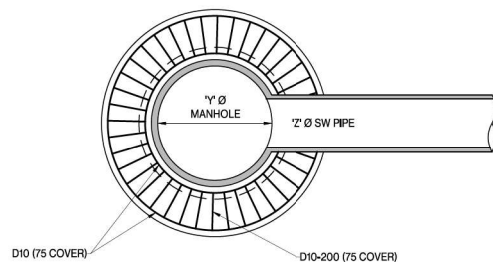
ISSUE STATUS: FAST TRACK CONSENT

PROJECT No: A2515591.00 SCALES: AS SHOWN A1

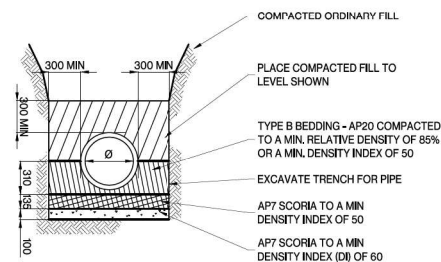
DRAWING No: A2515591.00-4301 A

FOR CONSENT

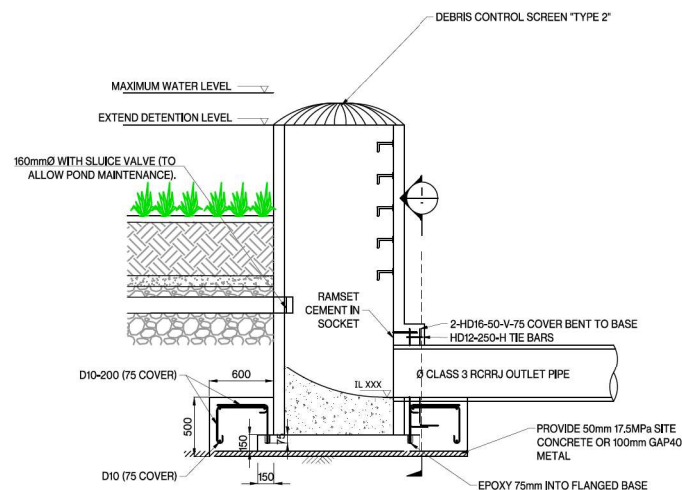
RAIN GARDEN	MANHOLE SIZE Y(mm)	OUTLET PIPE Z (mm)
RAIN GARDEN 01	DN1050	450
RAIN GARDEN 02	DN1050	375
RAIN GARDEN 03	DN1050	675
RAIN GARDEN 04	DN1050	525



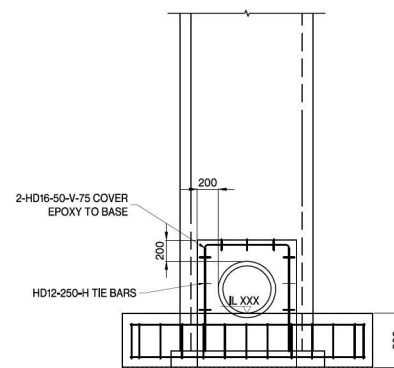
RAINGARDEN OUTLET BASE STRUCTURE PLAN VIEW
SCALE: N.T.S.



TYPICAL PIPE BEDDING DETAILS (CONVENTIONALLY LAID)
SCALE: N.T.S.



RAINGARDEN OUTLET STRUCTURE DETAIL
SCALE: N.T.S.



SECTION VIEW
SCALE 1/20-A11:40-A3



		ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND		ISO 9001 QUALITY ASSURED	
THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON OBERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.					
A	FOR CONSENT	CJM	05/2026		
REF	REVISIONS	BY	DATE		

**HARRISON
GRIERSON**

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:

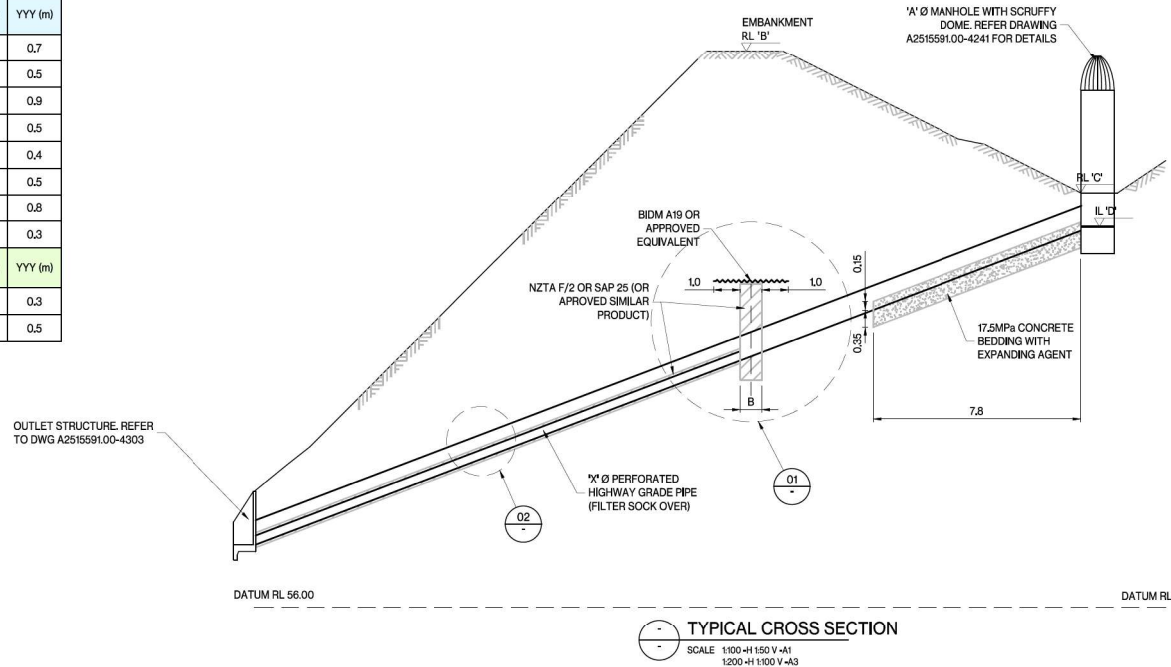
WETLAND & RAINGARDEN OUTLET
STORMWATER WETLAND DETAILS
SHEET 4 OF 8

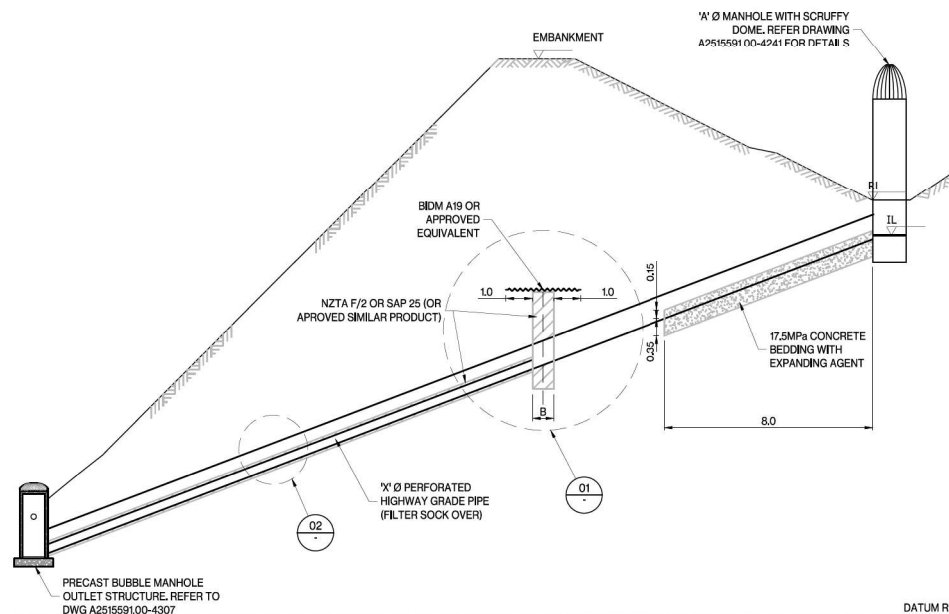
ORIGINATOR: SCT	DATE: 04.2026	SIGNED:	PLOT BY: ABE
DRAWN: SCT	DATE: 11.2025	SIGNED:	PLOT DATE: 09.06.26
CHECKED: PZS	DATE: 04.2026	SIGNED:	SURVEY BY: SURVEYED BY
APPROVED: CJM	DATE: 04.2026	SIGNED:	SURVEY DATE: SURVEYED DATE

ISSUE STATUS:			FAST TRACK CONSENT		
PROJECT No: A2515591.00		SCALES: AS SHOWN			A1
DRAWING No:					REV
A2515591.00-4303					A

FOR CONSENT

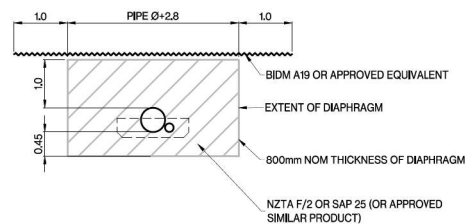
WETLAND/RQ	OUTLET NUMBER	A (m)	B (m)	C (m)	D (m)	E (m)	XXX (m)	YYY (m)
WETLAND 1	19-0	1200	4.1	4.1	11.17	1.875	0.4	0.7
WETLAND 3	79-0	1050	3.8	3.8	7.38	1.55	0.2	0.5
WETLAND 4	248-0	1600	4.8	4.8	14.04	2.4	0.4	0.9
WETLAND 5	46-0	1200	4.1	4.1	7.59	1.875	0.2	0.5
WETLAND 6	55-0	1050	3.8	3.8	6.59	1.55	0.2	0.4
WETLAND 7	35-0	825	3.35	3.35	8.22	1.595	0.3	0.5
WETLAND 8	65-0	750	3.35	3.35	10.38	1.595	0.4	0.8
WETLAND 11	94-0	825	3.35	3.35	5.1	1.595	0.2	0.3
RAINGARDEN	OUTLET NUMBER	A (m)	B (m)	C (m)	D (m)	E (m)	XXX (m)	YYY (m)
RAINGARDEN 2	17-0	375	2.3	2.3	4.7	0.91	0.2	0.3
RAINGARDEN 4	192-0	525	2.3	2.3	6.83	0.91	0.3	0.5





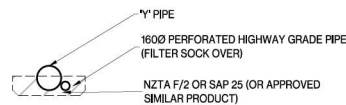
TYPICAL CROSS SECTION

SCALE: N.T.S.



DETAIL 01

SCALE: N.T.S.



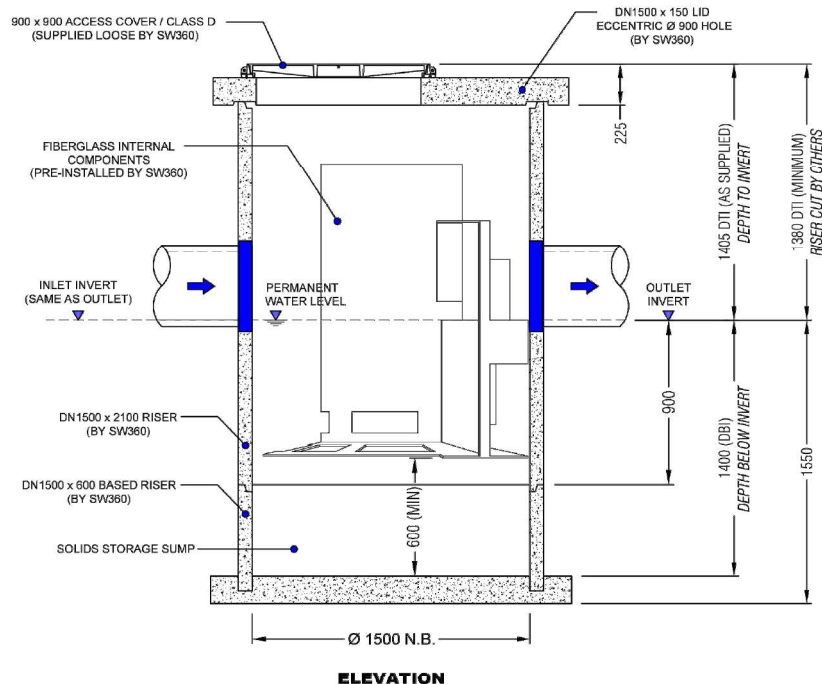
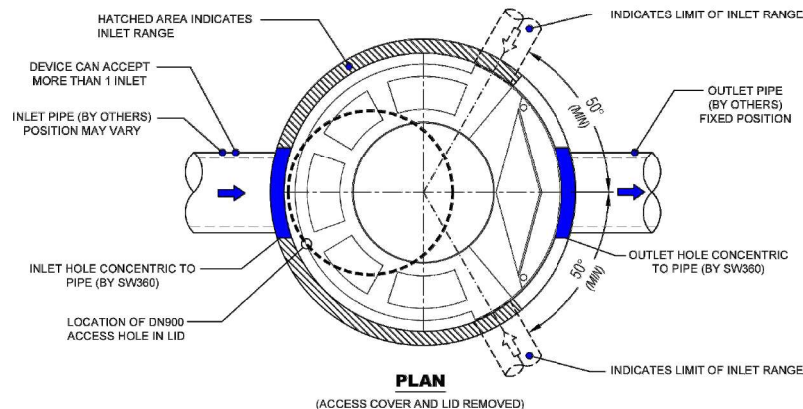
DETAIL 02

SCALE: N.T.S.

FOR CONSENT

ORIGINATOR:	DATE:	SIGNED:	PLOT BY:
SCT	04.2026		ABE
DRAWN:	DATE:	SIGNED:	PLOT DATE:
SCT	11.2025		08.06.26
CHECKED:	DATE:	SIGNED:	SURVEY BY:
PZS	04.2026		SURVEYED BY:
APPROVED:	DATE:	SIGNED:	SURVEY DATE:
CJM	04.2026		SURVEYED DATE:

ISSUE STATUS	
FAST TRACK CONSENT	
PROJECT No:	SCALE: AS SHOWN
A2515591.00	A1
DRAWING No:	REV
A2515591.00-4306	A



TO BE COMPLETED BY CUSTOMER / CONTRACTOR			
COMPANY :		P.O. NUMBER :	
SITE ADDRESS :			
SITE CONTACT & PHONE :			
PREFERRED DELIVERY DATE (TBC SW360) :			
FILTER REFERENCE (IF APPLICABLE) :		LID LEVEL (INPUT REQUIRED) :	
INLET PIPE DATA: DN750 (max)	DIA :	IL :	MATERIAL :
OUTLET PIPE DATA: DN750 (max)	DIA :	IL :	MATERIAL :
INLET PIPE ORIENTATION :	AS DRAWN : Yes / No	IF NO THEN PLEASE: SKETCH ORIENTATION ON THE DRAWING	IF MULTIPLE INLETS ARE REQUIRED THEN PLEASE: SKETCH ADDITIONAL PIPES WITH ORIENTATIONS ON THE DRAWING
COMPLETED BY :		SIGNED :	DATE :

- NOTES**
1. MANHOLE COMPONENTS AND CONCRETE LID FITTED WITH SWIFTLIFT ANCHOR POINTS. SPREADER BAR RECOMMENDED FOR MANHOLE LIFTS.
 2. UNIT SUPPLIED WITH INLET AND OUTLET HOLES CORE DRILLED.
 3. SEALING / GROUTING OF MANHOLE COMPONENTS AND PIPES BY CONTRACTOR. ENSURING LOCAL CODES AND REGULATIONS ARE COMPLIED WITH.
 4. ANY RISERS REQUIRED TO INCREASE THE DEPTH TO INVERT (DTI) FROM THAT AS DRAWN TO BE SUPPLIED BY THE CONTRACTOR.
 5. FOR A DTI EXCEEDING 5m PLEASE CONTACT 0800STORMWATER
 6. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT DEVICE FROM CONSTRUCTION RELATED EROSION RUNOFF.
 7. BACKFILL, BEDDING AND BUOYANCY DESIGN BY ENGINEER OF RECORD.
 8. CONCRETE MANHOLE RISERS ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AS/NZS 4058 : 2007
 9. CONCRETE MANHOLE BASES ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH NZS 3101 : 2006 & NZS 3109 : 1997
 10. CONCRETE LID DESIGNED AND MANUFACTURED TO HN-HO-72
 11. FOR REQUIREMENTS OUTSIDE OF DRAWING SPECIFICATIONS PLEASE CONTACT 0800STORMWATER

APPROX WEIGHTS			
DN1500 X 600 MHB:	1675 Kg		
DN1500 X 2100 RISER (INCL INSERT):	2100 Kg		
DN1500 CONCRETE LID:	950 Kg		



0800 STORMWATER
sales@stormwater360.co.nz
www.stormwater360.co.nz

CONDITION OF USE

© STORMWATER360 2019
Any unauthorised reproduction of this drawing in part or in full is prohibited

CASCADE SEPARATOR™ HYDRODYNAMIC SEPARATOR DN1500 / CS-5 GENERAL ARRANGEMENT				JOB NO :	REV	REVISION DETAIL	DATE
SCALE : N.T.S.				PROJECT :	1	REVISED	18.02.20
DRG No : CS-MH-CS5-1500-T-20				DRN :	0	APPROVED	09.02.20
REV : 1				CKD :			
DATE : 09.02.20							

FOR CONSENT

HARRISON GRIERSON

AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:

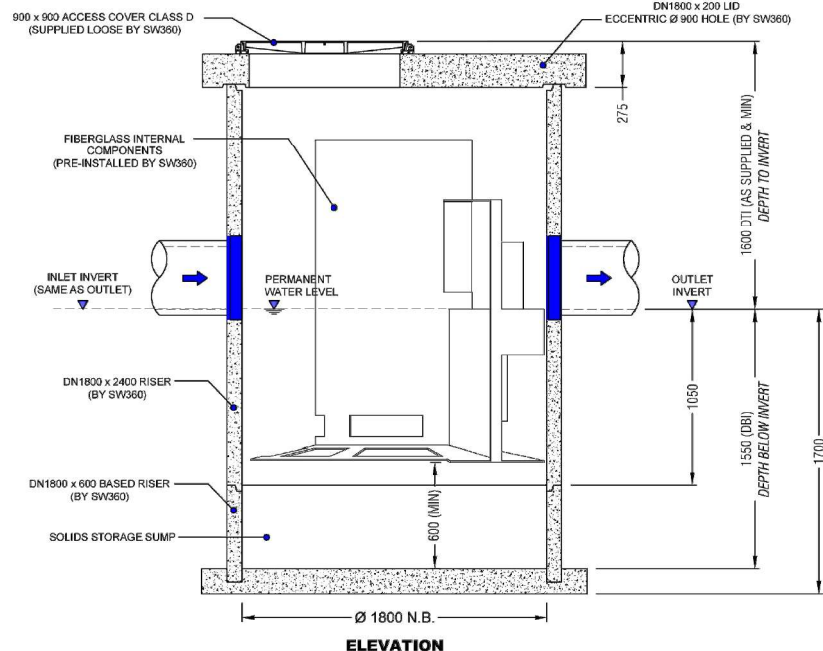
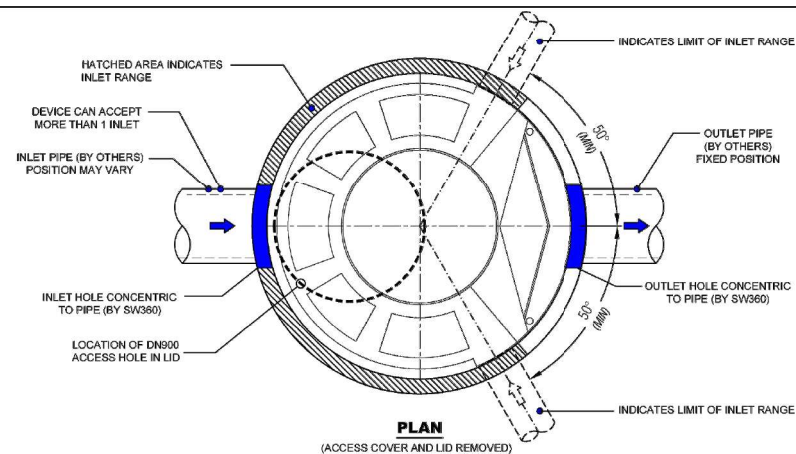
STORMWATER DETAILS
SHEET 1 OF 6

ORIGINATOR	DATE	SIGNED	PLOT BY
SCT	04.2026		REB
DRAWN	DATE	SIGNED	PLOT DATE
SCT	11.2025		29.05.26
CHECKED	DATE	SIGNED	SURVEY BY
PZS	04.2026		
APPROVED	DATE	SIGNED	SURVEY DATE
CJM	04.2026		

FAST TRACK CONSENT

PROJECT No: A2515591.00
DRAWING No: A2515591.00-4900

SCALE: NOT TO SCALE
REV A1



TO BE COMPLETED BY CUSTOMER / CONTRACTOR

COMPANY :		P.O. NUMBER :	
SITE ADDRESS :			
SITE CONTACT & PHONE :			
PREFERRED DELIVERY DATE (TBC SW360) :			
FILTER REFERENCE (IF APPLICABLE) :		LID LEVEL (INPUT REQUIRED) :	
INLET PIPE DATA: DN1050 (max)	DIA :	IL :	MATERIAL :
OUTLET PIPE DATA: DN1050 (max)	DIA :	IL :	MATERIAL :
INLET PIPE ORIENTATION :	AS DRAWN : Yes / No	IF NO THEN PLEASE: SKETCH ORIENTATION ON THE DRAWING	IF MULTIPLE INLETS ARE REQUIRED THEN PLEASE: SKETCH ADDITIONAL PIPES WITH ORIENTATIONS ON THE DRAWING
COMPLETED BY :		SIGNED :	DATE :

NOTES

1. MANHOLE COMPONENTS AND CONCRETE LID FITTED WITH SWIFTLIFT ANCHOR POINTS. SPREADER BAR RECOMMENDED FOR MANHOLE LIFTS.
2. UNIT SUPPLIED WITH INLET AND OUTLET HOLES CORE DRILLED.
3. SEALING / GROUTING OF MANHOLE COMPONENTS AND PIPES BY CONTRACTOR. ENSURING LOCAL CODES AND REGULATIONS ARE COMPLIED WITH.
4. ANY RISERS REQUIRED TO INCREASE THE DEPTH TO INVERT (DTI) FROM THAT AS DRAWN TO BE SUPPLIED BY THE CONTRACTOR.
5. FOR A DTI EXCEEDING 5m PLEASE CONTACT **0800STORMWATER**.
6. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT DEVICE FROM CONSTRUCTION RELATED EROSION RUNOFF.
7. BACKFILL, BEDDING AND BUOYANCY DESIGN BY ENGINEER OF RECORD.
8. CONCRETE MANHOLE RISERS ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AS/NZS 4086 : 2007.
9. CONCRETE MANHOLE BASES ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH NZS 3101 : 2006 & NZS 3109 : 1997.
10. CONCRETE LID DESIGNED AND MANUFACTURED TO HN-HO-72.
11. FOR REQUIREMENTS OUTSIDE OF DRAWING SPECIFICATIONS PLEASE CONTACT **0800STORMWATER**.

APPROX WEIGHTS

DN1800 X 600 MHB: 2320 Kg
DN1800 X 2400 RISER (INCL INSERT): 3400 Kg
DN1800 CONCRETE LID: 1850 Kg



0800 STORMWATER
sales@stormwater360.co.nz
www.stormwater360.co.nz

CONDITION OF USE

© STORMWATER360 2019
Any unauthorised reproduction of this drawing in part or in full is prohibited

CASCADE SEPARATOR™
HYDRODYNAMIC SEPARATOR
DN1800 / CS-6
GENERAL ARRANGEMENT

SCALE : N.T.S. DRG No : CS-MH-CS6-1800-T-20 REV : 1 DATE : 09.02.20

JOB NO :	REV	REVISION DETAIL	DATE
PROJECT :	1	REVISED	18.02.20
DRN :	0	APPROVED	09.02.20
CKD :			

FOR CONSENT

HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

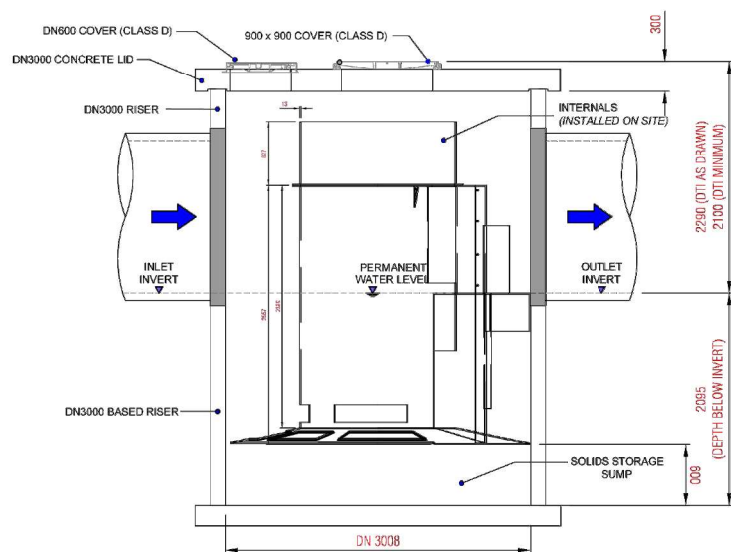
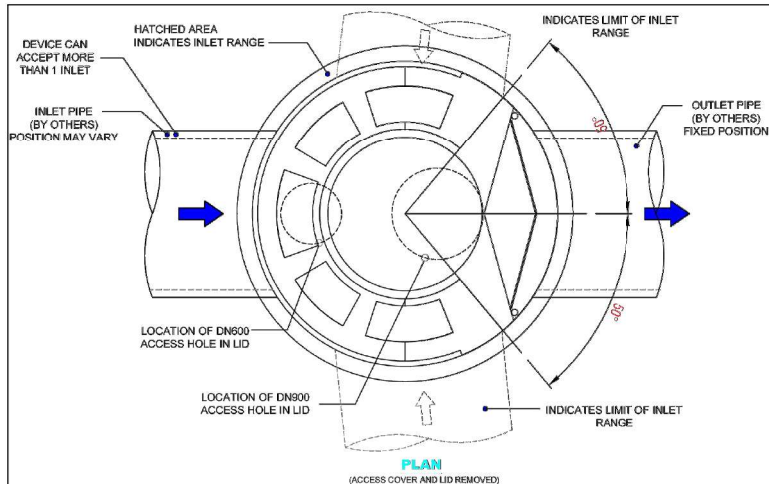
PROJECT:
BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:
STORMWATER DETAILS
SHEET 2 OF 6

ORIGINATOR SCT	DATE 04.2026	SIGNED	PLOT BY REF
DRAWN SCT	DATE 11.2025	SIGNED	PLOT DATE 29.05.26
CHECKED JZS	DATE 04.2026	SIGNED	SURVEY BY SURVEYED BY
APPROVED CJM	DATE 04.2026	SIGNED	SURVEY DATE SURVEYED DATE

FAST TRACK CONSENT

PROJECT No: A2515591.00
DRAWING No: A2515591.00-4901
SCALE: NOT TO SCALE
REV A1



PRELIMINARY DESIGN DETAILS

[illegible]

NOTES

1. DRAWING SHOWS THE GENERAL ARRANGEMENT FOR A CS10 MODEL CASCADE. FOR ASSISTANCE WITH DESIGN, SELECTION AND OTHER LAYOUT OPTIONS PLEASE CONTACT THE DESIGN TEAM AT STORMWATER360 ON 0800STORMWATER.
2. CS10 WILL REQUIRE SITE INSTALLATION OF THE FIBREGLASS INTERNALS.
3. ASSEMBLY INSTRUCTIONS AND DRAWINGS TO BE PROVIDED PRIOR TO SUPPLY. ENGINEERING SUPERVISION AVAILABLE AS REQUIRED.
4. MANHOLE COMPONENTS AND CONCRETE LID FITTED WITH SWIFTLIFT ANCHOR POINTS. SPREADER BAR RECOMMENDED FOR MANHOLE LIFTS.
5. UNIT SUPPLIED WITH INLET AND OUTLET HOLES CORE DRILLED.
6. SEALING / GROUTING OF MANHOLE COMPONENTS AND PIPES BY CONTRACTOR. ENSURING LOCAL CODES AND REGULATIONS ARE COMPLIED WITH.
7. RISERS REQUIRED TO INCREASE THE DEPTH TO INVERT (DTI) FROM THAT AS DRAWN TO BE SUPPLIED BY THE CONTRACTOR.
8. FOR A DEPTH TO INVERT (DTI) EXCEEDING 5m ADDITIONAL LOAD CHECKS MAY BE REQUIRED.
9. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT DEVICE FROM CONSTRUCTION RELATED EROSION RUNOFF.
10. BACKFILL, BEDDING AND BUOYANCY DESIGN BY ENGINEER OF RECORD.
11. CONCRETE MANHOLE RISERS ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AS/NZS 4058 : 2007.
12. CONCRETE MANHOLE BASES ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH NZS 3101 : 2006 & NZS 3109 : 1997.
13. CONCRETE LID DESIGNED AND MANUFACTURED TO HN-HO-72
14. FOR REQUIREMENTS OUTSIDE OF DRAWING SPECIFICATIONS PLEASE CONTACT 0800STORMWATER.

**HARRISON
GRIERSON**

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:

STORMWATER DETAILS

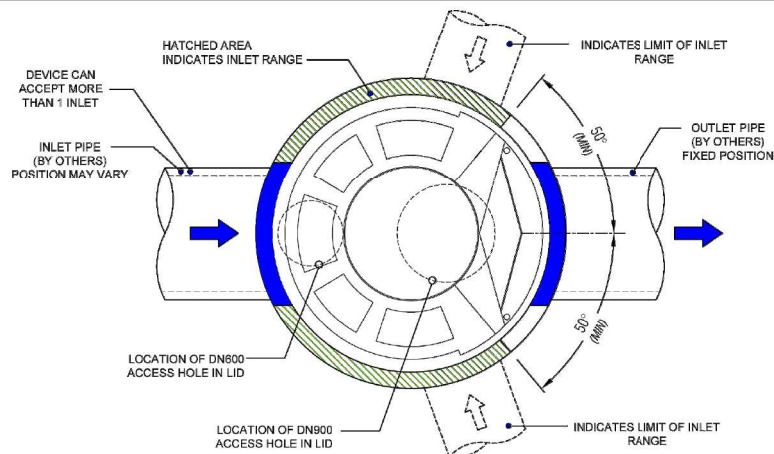
SHEET 3 OF 6

ORIGINATOR: SCT	DATE: 04.2026	SIGNED:	PLOT BY:
DRAWN: SCT	DATE: 11.2025	SIGNED:	PLOT DATE: 29.05.2025
CHECKED: PZS	DATE: 04.2026	SIGNED:	SURVEY BY: SURVEYED BY
APPROVED: CJM	DATE: 04.2026	SIGNED:	SURVEY DATE: SURVEYED DATE

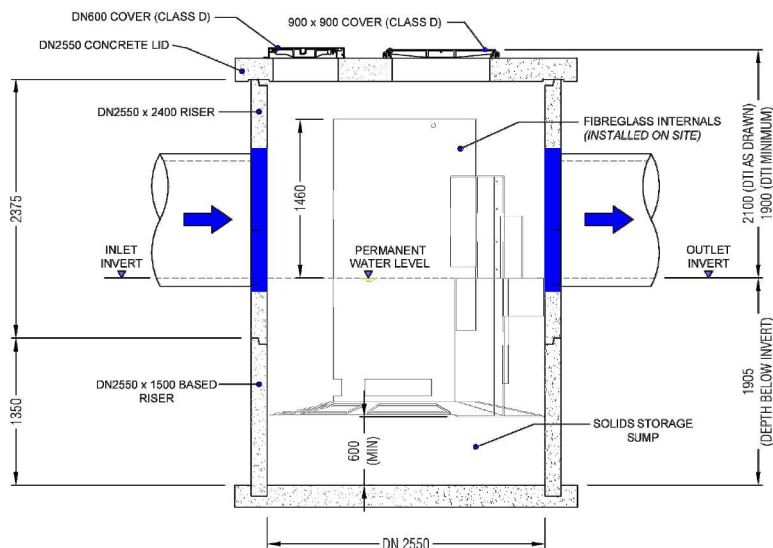
FAST TRACK CONSENT

PROJECT No: A2515591.00	SCALE: AS SHOWN	A1
DRAWING No: A2515591.00-4902		REV A

FOR CONSENT



PLAN
 (ACCESS COVER AND LID REMOVED)



ELEVATION

PRELIMINARY DESIGN DETAILS

CONSULTING ENGINEER:		SW360 DESIGN ENGINEER:	
SW360 PROJECT NUMBER:		DESIGN REVISION:	DATE:
SITE ADDRESS / PROJECT NAME:			
WATER QUALITY FLOW RATE:		CATCHMENT AREA:	
PEAK FLOW RATE:		EXTERNAL BYPASS: YES or NO	
INLET PIPE 1 DATA: DN1200 (max)	DIA :	IL :	MATL:
INLET PIPE 2 DATA: DN1200 (max)	DIA :	IL :	MATL:
OUTLET PIPE DATA: DN1200 (max)	DIA :	IL :	MATL:
FILTER REFERENCE (IF APPLICABLE) :		REQUIRED DTI (DEPTH TO INVERT) :	

DESIGN NOTES:

APPROX WEIGHTS

DN2550 x 1500 MHB:	8950 Kg
DN2550 x 2400 RISER:	7800 Kg
DN2550 CONCRETE LID:	3600 Kg
FIBREGLASS INSERT:	150 Kg

NOTES

- DRAWING SHOWN IS THE GENERAL ARRANGEMENT FOR A CS8 MODEL CASCADE. FOR ASSISTANCE WITH DESIGN, SELECTION AND OTHER LAYOUT OPTIONS PLEASE CONTACT THE DESIGN TEAM AT STORMWATER360 ON **0800STORMWATER**.
- CS8 WILL REQUIRE SITE INSTALLATION OF THE FIBREGLASS INTERNALS.
- ASSEMBLY INSTRUCTIONS AND DRAWINGS TO BE PROVIDED PRIOR TO SUPPLY. ENGINEERING SUPERVISION AVAILABLE AS REQUIRED.
- MANHOLE COMPONENTS AND CONCRETE LID FITTED WITH SWIFTLIFT ANCHOR POINTS. SPREADER BAR RECOMMENDED FOR MANHOLE LIFTS.
- UNIT SUPPLIED WITH INLET AND OUTLET HOLES CORE DRILLED.
- SEALING / GROUTING OF MANHOLE COMPONENTS AND PIPES BY CONTRACTOR. ENSURING LOCAL CODES AND REGULATIONS ARE COMPLIED WITH.
- RISERS REQUIRED TO INCREASE THE DEPTH TO INVERT (DTI) FROM THAT AS DRAWN TO BE SUPPLIED BY THE CONTRACTOR.
- FOR A DEPTH TO INVERT (DTI) EXCEEDING 5m ADDITION LOAD CHECKS MAY BE REQUIRED.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT DEVICE FROM CONSTRUCTION RELATED EROSION RUNOFF.
- BACKFILL, BEDDING AND BUOYANCY DESIGN BY ENGINEER OF RECORD.
- CONCRETE MANHOLE RISERS ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AS/NZS 4058 : 2007
- CONCRETE MANHOLE BASES ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH NZS 3101 : 2006 & NZS 3109 : 1997
- CONCRETE LID DESIGNED AND MANUFACTURED TO HN-HO-72
- FOR REQUIREMENTS OUTSIDE OF DRAWING SPECIFICATIONS PLEASE CONTACT **0800STORMWATER**.



0800 STORMWATER
 sales@stormwater360.co.nz
 www.stormwater360.co.nz

CONDITION OF USE
 © STORMWATER360 2020
 Any unauthorised reproduction of this drawing in part or in full is prohibited

CASCADE SEPARATOR™
 HYDRODYNAMIC SEPARATOR
 DN2550 / CS-8
 SPECIFICATION DRAWING

SCALE : N.T.S. DRG No : CS-MH-CS8-2550-T-10 REV : 1 DATE : 21.04.20

JOB NO :	REV	REVISION DETAIL	DATE
PROJECT :	0	APPROVED	21.04.20
DRN :	1	UPDATED	13.03.25
CKD :			

FOR CONSENT

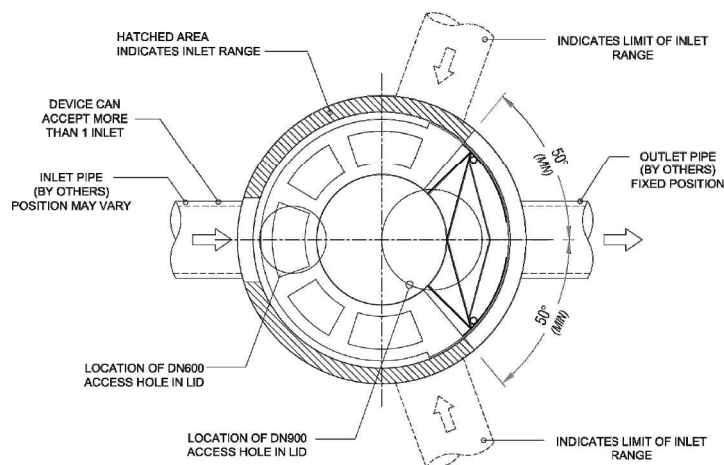
HARRISON GRIERSON
 AUCKLAND OFFICE
 Level 4, 96 St. Georges Bay Road
 Parnell, Auckland 1052
 T +64 9 917 5000
 W www.harrisongrierson.com

PROJECT:
 BEACHLANDS
 FAST TRACK CONSENT APPLICATION
 BEACHLANDS SOUTH, AUCKLAND

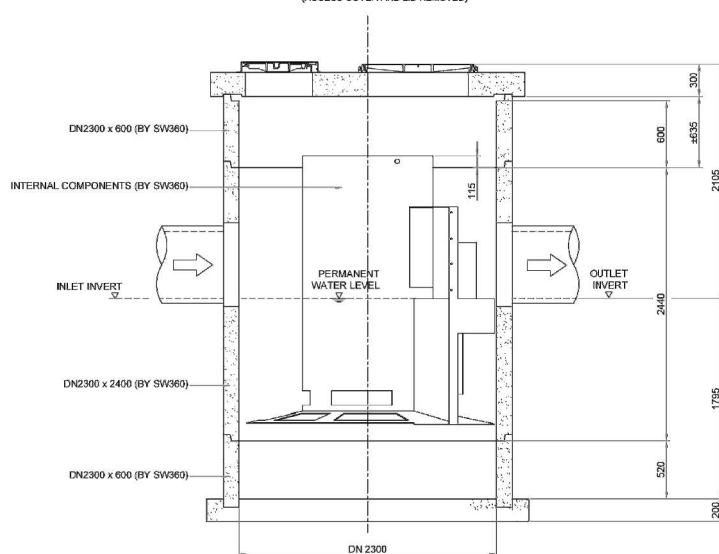
TITLE:
 STORMWATER DETAILS
 SHEET 4 OF 6

ORIGINATOR	DATE	SIGNED	PLOT BY
SCT	04.2026		REB
DRAWN	DATE	SIGNED	PLOT DATE
SCT	11.2025		29.05.26
CHECKED	DATE	SIGNED	SURVEY BY
NZS	04.2026		
APPROVED	DATE	SIGNED	SURVEY DATE
CJM	04.2026		

FAST TRACK CONSENT
 PROJECT No: A2515591.00
 SCALE: AS SHOWN
 DRAWING No: A2515591.00-4903
 REV: A



PLAN
(ACCESS COVER AND LID REMOVED)



ELEVATION

TO BE COMPLETED BY CUSTOMER / CONTRACTOR

COMPANY :		P.O. NUMBER :	
SITE ADDRESS :			
SITE CONTACT & PHONE :			
PREFERRED DELIVERY DATE (TBC SW360) :			
FILTER REFERENCE (IF APPLICABLE) :		LID LEVEL (INPUT REQUIRED) :	
INLET PIPE DATA: DN1050 (max)	DIA :	IL :	MATERIAL :
OUTLET PIPE DATA: DN1050 (max)	DIA :	IL :	MATERIAL :
INLET PIPE ORIENTATION :	AS DRAWN : Yes / No	IF NO THEN PLEASE: SKETCH ORIENTATION ON THE DRAWING	IF MULTIPLE INLETS ARE REQUIRED THEN PLEASE: SKETCH ADDITIONAL PIPES WITH ORIENTATIONS ON THE DRAWING
COMPLETED BY :		SIGNED :	DATE :

NOTES

1. MANHOLE COMPONENTS AND CONCRETE LID FITTED WITH SWIFTLIFT ANCHOR POINTS. SPREADER BAR RECOMMENDED FOR MANHOLE LIFTS.
2. UNIT SUPPLIED WITH INLET AND OUTLET HOLES CORE DRILLED.
3. SEALING / GROUTING OF MANHOLE COMPONENTS AND PIPES BY CONTRACTOR. ENSURING LOCAL CODES AND REGULATIONS ARE COMPLIED WITH.
4. ANY RISERS REQUIRED TO INCREASE THE DEPTH TO INVERT (DTI) FROM THAT AS DRAWN TO BE SUPPLIED BY THE CONTRACTOR.
5. FOR A DTI EXCEEDING 5m PLEASE CONTACT 0800STORMWATER.
6. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT DEVICE FROM CONSTRUCTION RELATED EROSION RUNOFF.
7. BACKFILL, BEDDING AND BUOYANCY DESIGN BY ENGINEER OF RECORD.
8. CONCRETE MANHOLE RISERS ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AS/NZS 4068 : 2007.
9. CONCRETE MANHOLE BASES ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH NZS 3101 : 2006 & NZS 3109 : 1997.
10. CONCRETE LID DESIGNED AND MANUFACTURED TO HN-HO-72.
11. FOR REQUIREMENTS OUTSIDE OF DRAWING SPECIFICATIONS PLEASE CONTACT 0800STORMWATER.

APPROX WEIGHTS

DN2300 X 700 MHB: 5300 Kg
DN2300 X 2400 RISER (INCL INSERT): 7500 Kg
DN2300 X 500 RISER: 1400 Kg
DN2300 CONCRETE LID: 3600 Kg



0800 STORMWATER
sales@stormwater360.co.nz
www.stormwater360.co.nz

CONDITION OF USE
© STORMWATER360 2019
Any unauthorised reproduction of this drawing in part or in full is prohibited

CASCADE SEPARATOR™
HYDRODYNAMIC SEPARATOR
DN2300 / CS-7.5
GENERAL ARRANGEMENT

SCALE : N.T.S. DRG No : CS-MH-CS7 5-2300-T-20 REV : C DATE : 09.02.20

JOB NO :	REV	REVISION DETAIL	DATE
PROJECT :	A	DRAFT	21.09.20
DRN : G.S. 21.06.20	B	NEW INTERNALS	22.11.24
CKD : K.J. 22.11.24	C	M/H UPDATED	20.02.25

HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisingrierson.com

PROJECT:
BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:
STORMWATER DETAILS
SHEET 5 OF 6

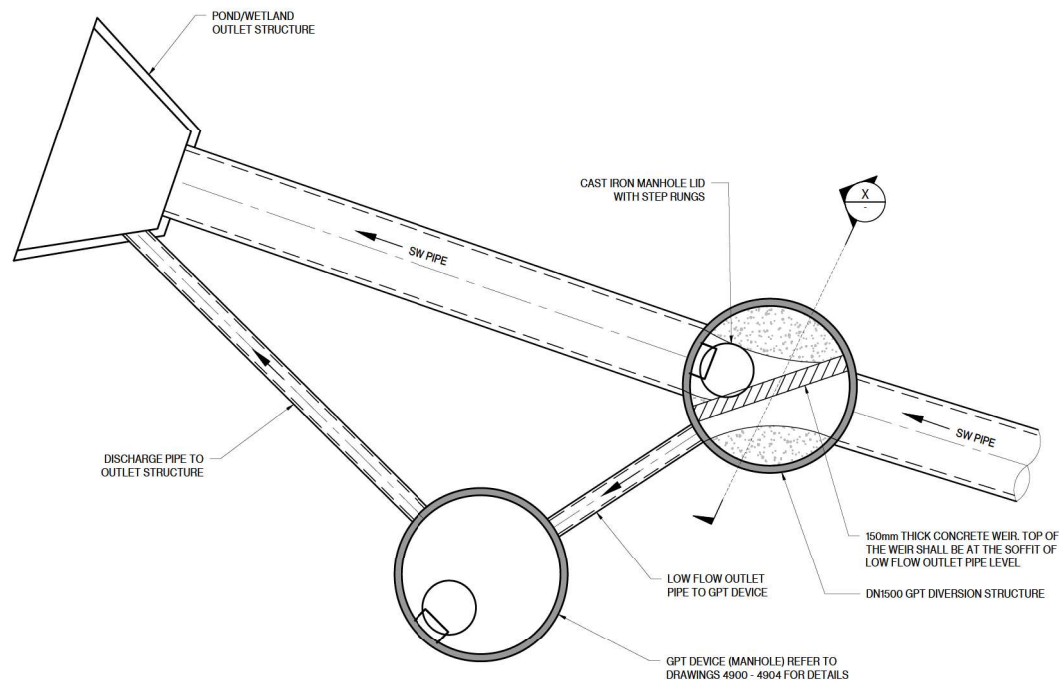
ORIGINATOR	DATE	SIGNED	PLOT BY
SCT	04.2026		REF
DRAWN	DATE	SIGNED	PLOT DATE
SCT	11.2025		29.05.26
CHECKED	DATE	SIGNED	SURVEY BY
NZS	04.2026		
APPROVED	DATE	SIGNED	SURVEY DATE
CJM	04.2026		

FAST TRACK CONSENT
PROJECT No: A2515591.00 SCALES: AS SHOWN A1
DRAWING No: A2515591.00-4904 REV

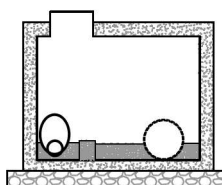
FOR CONSENT

NOTES

1. FOR PIPE SIZE SEE STORMWATER LAYOUT DRAWINGS.
2. SIZING OF GPT DIVERSION IS BASED ON 10mm RAIN EVENT FOR POND CATCHMENT. SIZINGS TO BE CONFIRMED AT ENGINEERING APPROVAL STAGE.
3. DIVERSION MANHOLE SIZE VARIES DEPENDANT UPON CATCHMENT.



GPT DIVERSION STRUCTURE TYPICAL DETAILS
SCALE 1:25-A1, 1:50-A3



SECTION X
SCALE 1:25-A1, 1:50-A3

A	FOR CONSENT	SCT	0220
RFF	REVISIONS	RY	DAT

**HARRISON
GRIERSON**

PROJECT:

BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE: TYPICAL GPT DIVERSION
STORMWATER DETAILS
SHEET 6 OF 6

ORIGINATOR: SCT	DATE: 04.2026	SIGNED:	PLOT BY:
DRAWN: JXA	DATE: 11.2025	SIGNED:	PLOT DATE: 29.05
CHECKED: PZS	DATE: 04.2026	SIGNED:	SURVEY BY: SURVEYED
APPROVED: CJM	DATE: 04.2026	SIGNED:	SURVEY DATE: SURVEYED DA

FAST TRACK CONSENT

PROJECT No: A2515591.00	SCALE: AS SHOWN	A
DRAWING No: A2515591.00-4905		REV A

FOR CONSENT

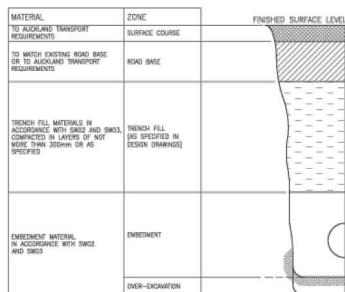


ISO 9001
QUALITY
ASSURED

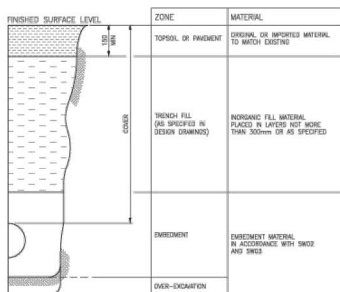
THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORIZED USE OF THIS DRAWING.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. EMBANKMENT, TRENCH FILL AND COMPACTION SHALL MEET THE REQUIREMENT OF DESIGN DIMENSIONS OR SPECIFICATIONS.
3. BEDS OF EXCAVATION SHALL BE NOT VERTICAL TO AT LEAST 150mm ABOVE THE PIPE.



VEHICULAR LOADING (CARRIAGEWAY)



NO VEHICULAR LOADING (NON CARRIAGEWAY)

INCLUDES LOCATIONS WHERE OCCASIONAL VEHICLE LOADING OCCURS

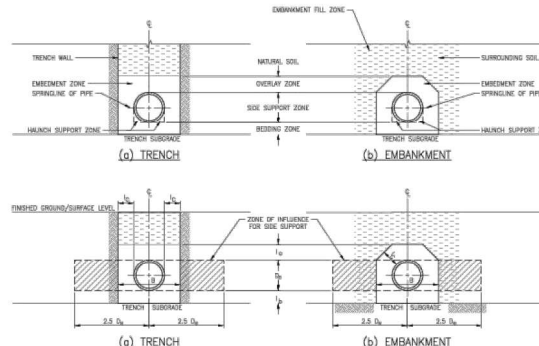
STORMWATER CODE OF PRACTICE
STANDARD DETAILS
REVISION: 3
REV DATE: 1 JULY 2023
CND FILENAME: AC-STD-SWD2_VA1.DWG

AUCKLAND COUNCIL
EMBEDMENT & TRENCHFILL
TYPICAL ARRANGEMENT

ENVIRONMENTAL-SW
DESIGNER: J. L. L. L.
CHECKED: J. L. L. L.
APPROVED: J. L. L. L.
1 OF 1
3

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SWD1.
2. FLEXIBLE PIPES INCLUDES PVC, HDPE, PP AND PE.
3. PLACEMENT OF EMBANKMENT, TRENCHFILL, & COMPACTION SHALL MEET THE REQUIREMENTS OF DIMENSIONS AND SPECIFICATIONS.
4. EXCAVATE OR COMPACT TRENCH FLOOR TO PROVIDE A FLAT FIRM BASE TO SUPPORT BEDDING MATERIAL AND MINIMIZE PIPELINE SETTLEMENT. REPLACE EXCAVATED MATERIAL WITH SUITABLE GRANULAR MATERIAL FOR BEDDING.
5. ENSURE THAT THE BEDDING IS DEEP ENOUGH SO THAT PIPE JOINT PROJECTIONS (SOCKETS, FLANGES) DO NOT TOUCH THE TRENCH FLOOR (SEE CROSS-BELOW).
6. BEDDING MATERIALS SHALL BE GW/SAP 20.
7. THIS DRAWING IS BASED ON AS/NZS 2884 PART 2: 2002. TYPICAL TRENCH FILL PROFILE IS INDICATED AND APPROVED WITH THE PERMISSION OF STANDARDS NEW ZEALAND.



D _p (mm)	MINIMUM EMBEDMENT ZONE DIMENSIONS (mm)			
	I _b	I _c	I _d	B=D _p +2I _c
75 < D _p ≤ 100	75	100	100	275 - 300
100 < D _p ≤ 300	100	150	150	400 - 600
300 < D _p ≤ 450	100	200	150	700 - 850
450 < D _p ≤ 800	150	300	150	1050 - 1300
800 < D _p ≤ 1800	150	350	200	1600 - 2300
1800 < D _p ≤ 4000	150	0.25D _p	300	2350 - 6000

DEFINITIONS OF SYMBOLS USED:
D_p TRENCH WIDTH
I_b EXTERNAL DIAMETER OF PIPELINE
I_c DEPTH OF BEDDING UNDER SPANSEL OF PIPELINE
I_d MINIMUM DISTANCE BETWEEN SPANSELS OF PIPE AND PERMANENT SIDE OF TRENCH
I_e MINIMUM DEPTH OF COVER OVER SOFT OF PIPELINE

PIPE JOINT BEDDING POCKETS
FOR JOINT PROJECTIONS

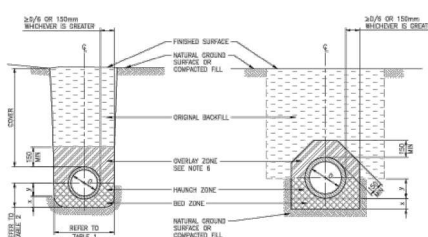
STORMWATER CODE OF PRACTICE
STANDARD DETAILS
REVISION: 4
REV DATE: 1 JULY 2023
CND FILENAME: AC-STD-SWD2_VA1.DWG

AUCKLAND COUNCIL
PIPE EMBEDMENTS
STANDARD EMBEDMENT FOR FLEXIBLE PIPES

ENVIRONMENTAL-SW
DESIGNER: J. L. L. L.
CHECKED: J. L. L. L.
APPROVED: J. L. L. L.
1 OF 1
4

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SWD1.
2. CONCRETE PIPE CLASS SHALL BE DESIGNED IN ACCORDANCE WITH AS/NZS 3720:2007, USING H2 BEDDING TO CONSTRUCTION OF PIPE CONSTRUCTION LENGTH. MINOR CRACKS ARE PERMITTED.
3. PLACEMENT OF EMBANKMENT, TRENCHFILL, & COMPACTION SHALL MEET THE REQUIREMENTS OF DIMENSIONS AND SPECIFICATIONS.
4. EXCAVATE OR COMPACT TRENCH FLOOR TO PROVIDE A FLAT FIRM BASE TO SUPPORT BEDDING MATERIAL AND MINIMIZE PIPELINE SETTLEMENT. REPLACE EXCAVATED MATERIAL WITH SUITABLE GRANULAR MATERIAL FOR BEDDING.
5. ENSURE BEDDING IS DEEP ENOUGH THAT PIPE JOINT PROJECTIONS (SOCKETS) DO NOT TOUCH TRENCH FLOOR (SEE CROSS-BELOW).
6. OVERLAY ZONE ADEQUATE TO BE IN ACCORDANCE WITH AS/NZS 3720:2007.
7. MATERIAL SHALL BE COMPACTED AS NECESSARY TO PREVENT EXCESSIVE SETTLEMENT IN THE GROUND SURFACE LEVEL OVER THE INSTALLED PIPE.
8. WHERE REQUIRED BY SITE CONDITIONS SPECIFIC DESIGN OF PIPE EMBARKMENT MAY BE REQUIRED. THIS SHOULD BE UNDERSTANDING IN ACCORDANCE WITH AS/NZS 3720:2007 TO THE APPROVAL OF AUCKLAND COUNCIL.
9. EMBARKMENT FOR 'RIGID PIPES' OTHER THAN CONCRETE IS SUBJECT TO SPECIFIC DESIGN AND APPROVAL.



H2 TYPE BEDDING - CONCRETE PIPES

TABLE 1

MAXIMUM PERMISSIBLE TRENCH WIDTHS (IF TRENCH WIDER, USE EMBANKMENT CONDITION)													
NORMAL INTERNAL PIPE DIAMETER (mm)	150	225	300	375	450	525	600	675	750	825	900	975	1050
MAXIMUM TRENCH WIDTH (mm)	600	800	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700

TABLE 2

H2 SUPPORT TYPE	MINIMUM DEPTH (mm)	
	RED ZONE (mm)	HAUNCH ZONE (mm)
100 ≤ D ≤ 1500	100	0.30
1500 ≤ D ≤ 1800	150	0.30



STORMWATER CODE OF PRACTICE
STANDARD DETAILS
REVISION: 4
REV DATE: 1 JULY 2023
CND FILENAME: AC-STD-SWD2_VA1.DWG

AUCKLAND COUNCIL
PIPE EMBEDMENTS
STANDARD EMBEDMENT FOR CONCRETE PIPES

ENVIRONMENTAL-SW
DESIGNER: J. L. L. L.
CHECKED: J. L. L. L.
APPROVED: J. L. L. L.
1 OF 1
4

NOTES:

1. REFER SWD1 SECTION 4.3.5.3 FOR MINIMUM PIPE DIMENSIONS.
2. REFER SWD1 SECTION 4.3.11 FOR PUBLIC/PRIVATE DEMARCATION REQUIREMENTS.
3. REFER SWD1 SECTION 4.3.12 FOR LATERAL CONNECTION REQUIREMENTS.
4. REFER SWD1 SECTION 4.3.13 FOR CATCHMENT CONNECTIONS DETAILS.
5. THE CENTERLINE OF THE LATERAL SHALL BE ABOVE THE SPRING LINE OF THE PUBLIC MAIN IT CONNECTS TO.
6. THE LATERAL CONNECTION SHALL BE FULLY SUPPORTED WITH COMPACTED BEDDING MATERIAL, WHICH SHALL EXTEND FROM THE BEDDING OF THE PUBLIC MAIN TO AT LEAST THE SPRING LINE OF THE LATERAL CONNECTION PIPE THROUGH ITS LENGTH UNTIL BEYOND THE TRENCH WALL OF THE PUBLIC MAIN.

NOTES FOR CONNECTION TO A PVC PUBLIC MAIN:

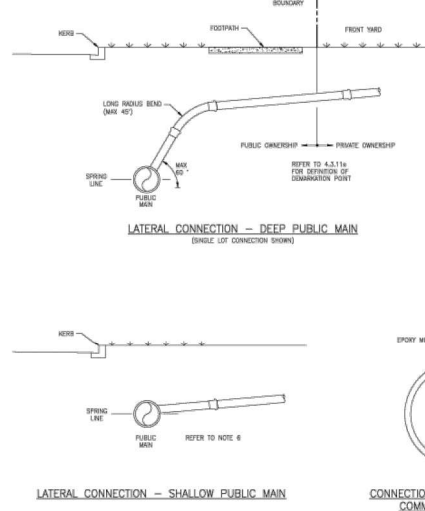
1. LATERAL CONNECTIONS SHALL BE CONSTRUCTED USING A REINFORCED MORTAR RIGID SADDLE OR Y-JUNCTION FITTING. WHERE SUCH FITTINGS ARE NOT AVAILABLE WITHIN THE LOCAL MARKET, SADDLE CONNECTIONS ARE PERMITTED ONLY WHEN SWD1 TEE OR Y-JUNCTIONS ARE UNAVAILABLE.

NOTES FOR CONNECTION TO A REINFORCED CONCRETE PUBLIC MAIN:

1. LATERAL CONNECTIONS SHALL BE CONSTRUCTED USING A FLANGED RIGID SADDLE OR Y-JUNCTION FITTING. WHERE SUCH FITTINGS ARE NOT AVAILABLE WITHIN THE LOCAL MARKET, SADDLE CONNECTIONS ARE PERMITTED ONLY WHEN SWD1 TEE OR Y-JUNCTIONS ARE UNAVAILABLE.
2. THE HOLE INTO THE EXISTING PUBLIC MAIN SHALL BE DRILLED. THE SADDLE INSERT SHALL BE SEALED WITH EPOXY MORTAR TO THE PUBLIC MAIN.
3. THERE SHALL BE NO PROHIBITION OF THE SADDLE INSERT INSIDE THE BORE OF THE PUBLIC MAIN.

NOTES FOR CONNECTION TO A PE PUBLIC MAIN:

1. LATERAL CONNECTIONS SHALL BE CONSTRUCTED USING A JOINT CUT IN WITH EPOXY/RESIN COUPLERS. ALTERNATIVELY A SADDLE MAY BE ELECTROFUSED OVER THE PIPE. SPECIFIC APPROVAL FROM AUCKLAND COUNCIL IS REQUIRED TO INSTALL INTO A PE MAIN.
2. ELECTROFUSION FITTINGS SHALL BE SELECTED TO MATCH SIZE AND RIGIDITY OF HOST PIPE AND SHALL BE INSTALLED DIRECTLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.



AUCKLAND COUNCIL
STORMWATER LATERAL CONNECTIONS
DIRECT CONNECTIONS

STORMWATER CODE OF PRACTICE
STANDARD DETAILS
REVISION: 5
REV DATE: 1 JULY 2023
CND FILENAME: AC-STD-SWD2_VA1.DWG

ENVIRONMENTAL-SW
DESIGNER: J. L. L. L.
CHECKED: J. L. L. L.
APPROVED: J. L. L. L.
1 OF 1
5

FOR CONSENT

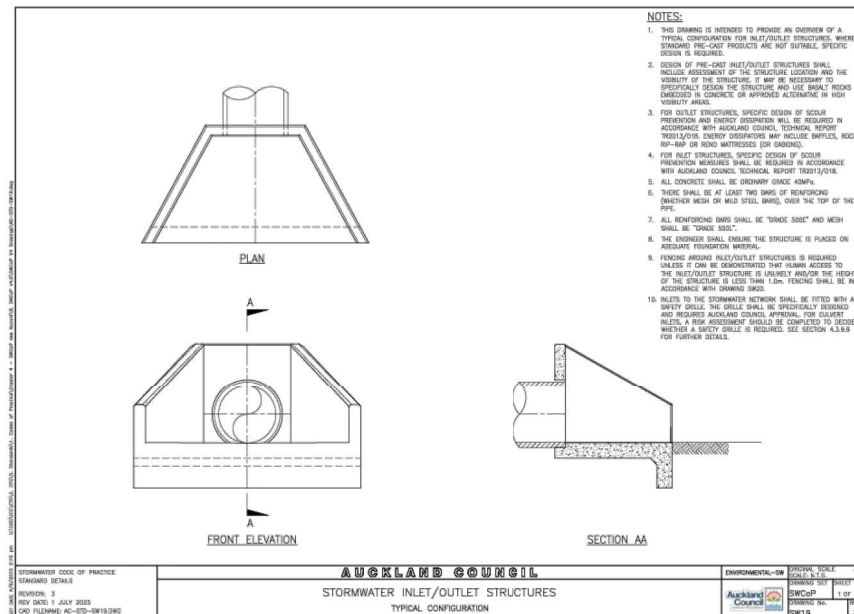
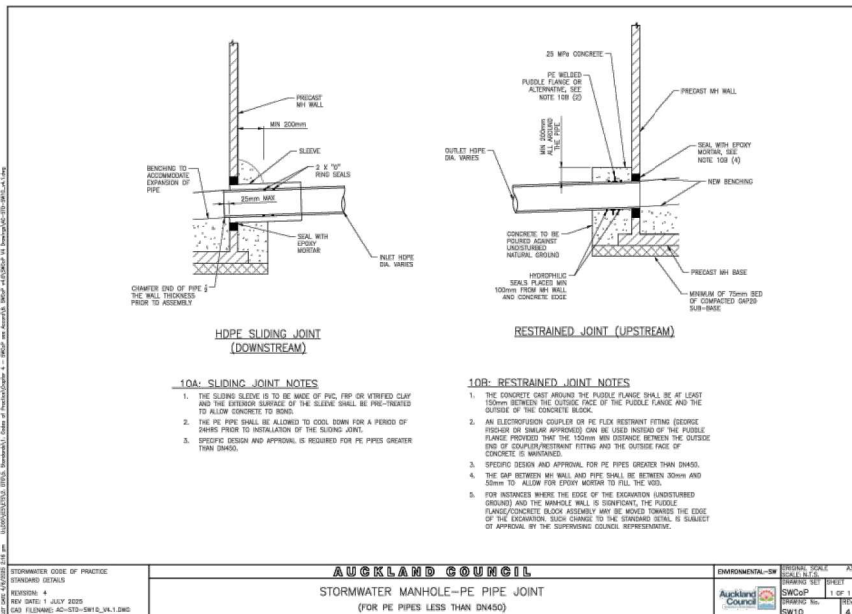
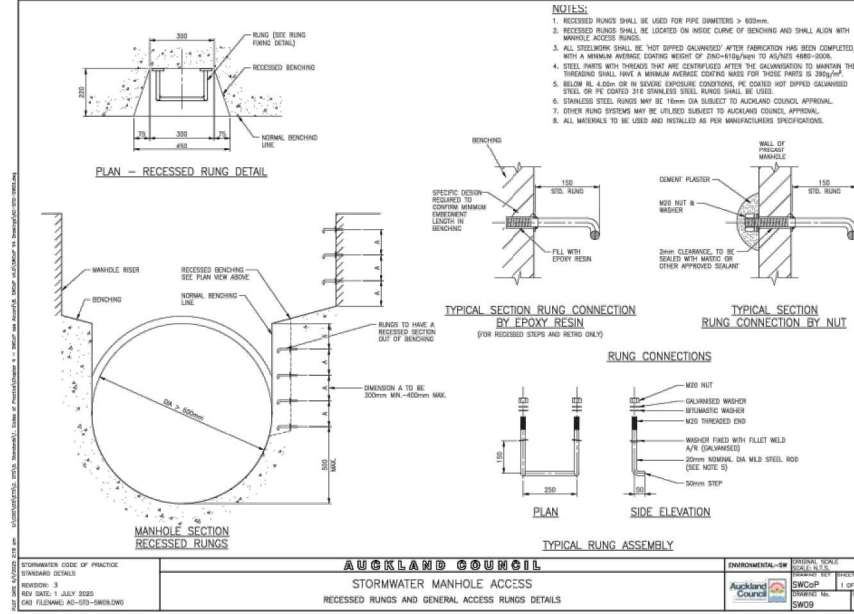
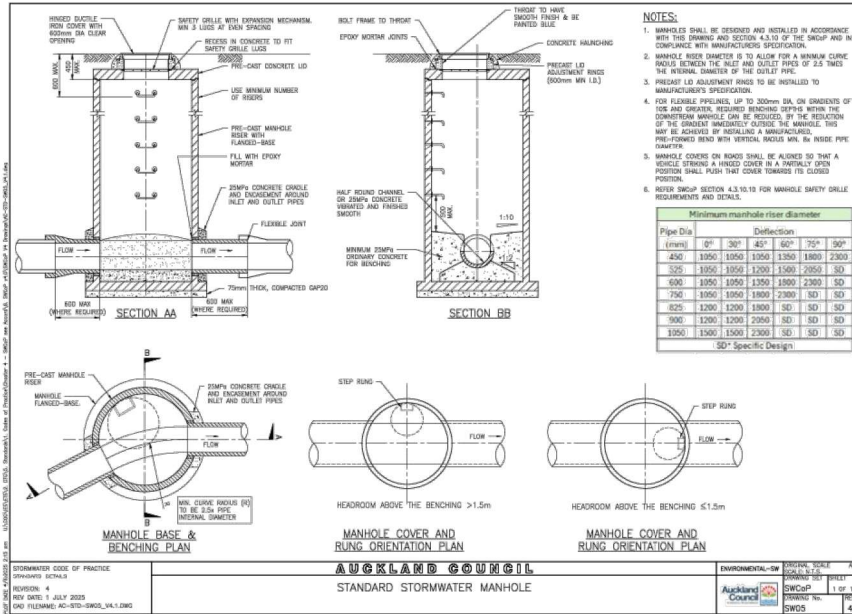
HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierison.com

PROJECT: **BEACHLANDS FAST TRACK CONSENT APPLICATION BEACHLANDS SOUTH, AUCKLAND**

TITLE: **STORMWATER STANDARD DETAILS SHEET 1 OF 5**

CRATOR: DATE: 04.2026 SIGNED: PLOT BY: ENW
SCT DATE: 11.2025 SIGNED: PLOT DATE: 23/04/26
DRAWN: DATE: 11.2025 SIGNED: SURVEY BY: SURVEYED BY: PZS DATE: 04.2026 SIGNED: SURVEY DATE: SURVEYED DATE: APPROVED: CUM DATE: 04.2026 SIGNED: SURVEY DATE: SURVEYED DATE: ISSUE STATUS:

FAST TRACK CONSENT
PROJECT No: A2515591.00 SCALES: NOT TO SCALE A1
DRAWING No: A2515591.00-4910 REV
A2515591.00-4910 A



FOR CONSENT

A	FOR CONSENT	SC1	02/2026
REF	REVISIONS	BY	DATE

HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St. Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT:
BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:
STORMWATER STANDARD DETAILS
SHEET 2 OF 5

CREATION	DATE: 04/2026	SIGNED:	PLOT BY:
SCT	04/2026		ENW
DRAWN	DATE: 11/2025	SIGNED:	PLOT DATE:
SCT	11/2025		23/04/26
CHECKED	DATE: 04/2026	SIGNED:	SURVEY BY:
P23	04/2026		SURVEYED BY
APPROVED	DATE: 04/2026	SIGNED:	SURVEY DATE:
CJM	04/2026		SURVEYED DATE

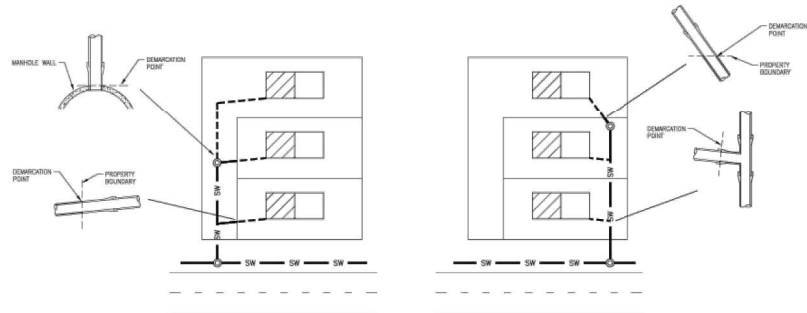
FAST TRACK CONSENT
PROJECT No: A2515591.00
DRAWING No: A2515591.00-4911
A1
A

1. Minimum pipeline diameter are subject to 4.3.9.5
2. Minimum connection to public main requirements are subject to 4.3.11 & 4.3.12
3. Minimum requirements for vehicle and non-access chambers are subject to 4.3.10
4. Alternative connection scenario to be used only when not practicable to install pipeline in shared access way area and is subject to approval by Auckland Council.

STORMWATER 2000 SW PRACTICE
STANDARD DETAILS
REVISION: 4
REV DATE: 1 JULY 2025
GEO FILENAME: AC-STD-SW24_V4.0.DWG

BEACHLANDS SOUTH
STORMWATER BOUNDARIES - CONNECTIONS

PROJECT No: A2515591.00
DRAWN BY: SCT
CHECKED BY: PZ3
APPROVED BY: C.J.M.
DATE: 04.2026
SCALE: NOT TO SCALE
SHEET: 4 OF 5
PROJECT TITLE: FAST TRACK CONSENT APPLICATION
PROJECT No: A2515591.00



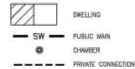
PREFERRED CONNECTION SCENARIO

ALTERNATIVE CONNECTION SCENARIO
(REFER NOTE 4)

NOTES:

1. MINIMUM PIPELINE DIAMETER ARE SUBJECT TO 4.3.9.5
2. MINIMUM CONNECTION TO PUBLIC MAIN REQUIREMENTS ARE SUBJECT TO 4.3.11 & 4.3.12
3. MINIMUM REQUIREMENTS FOR VEHICLE AND NON-ACCESS CHAMBERS ARE SUBJECT TO 4.3.10
4. ALTERNATIVE CONNECTION SCENARIO TO BE USED ONLY WHEN NOT PRACTICABLE TO INSTALL PIPELINE IN SHARED ACCESS WAY AREA AND IS SUBJECT TO APPROVAL BY AUCKLAND COUNCIL.

LEGEND:



ISO 9001
QUALITY
ASSURED

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORISED USE OF THIS DRAWING.

FOR CONSENT

HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT:
**BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND**

TITLE:
**STORMWATER STANDARD DETAILS
SHEET 4 OF 5**

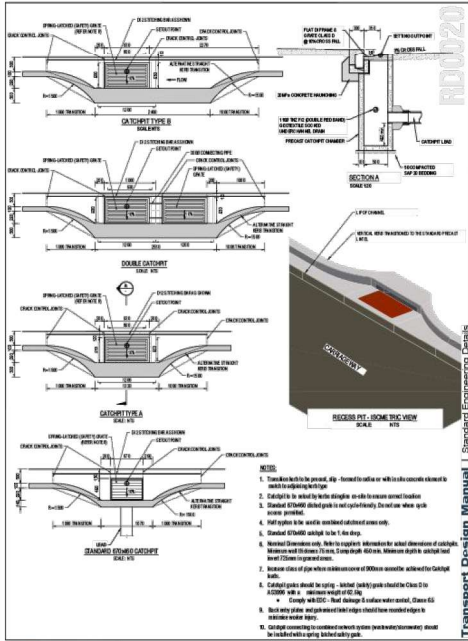
ORIGINATOR: SCT	DATE: 04.2026	SIGNED:	PLOT BY: ENW
DRAWN: SCT	DATE: 11.2025	SIGNED:	PLOT DATE: 23/04/26
CHECKED: PZ3	DATE: 04.2026	SIGNED:	SURVEYED BY: SURVEYED DATE
APPROVED: C.J.M.	DATE: 04.2026	SIGNED:	SURVEYED DATE

ISSUE STATUS:

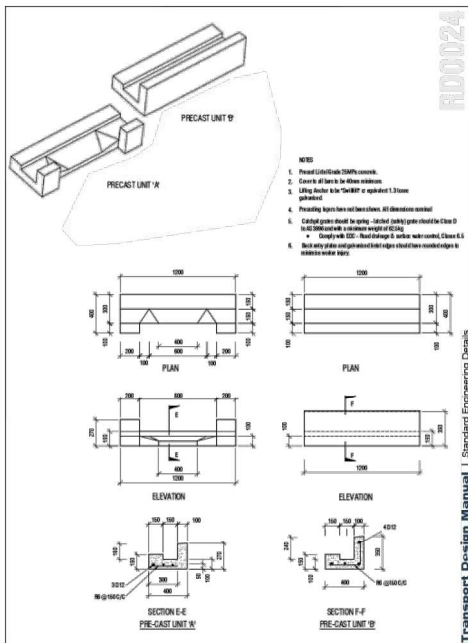
FAST TRACK CONSENT

PROJECT No: A2515591.00
SCALE: NOT TO SCALE
A1

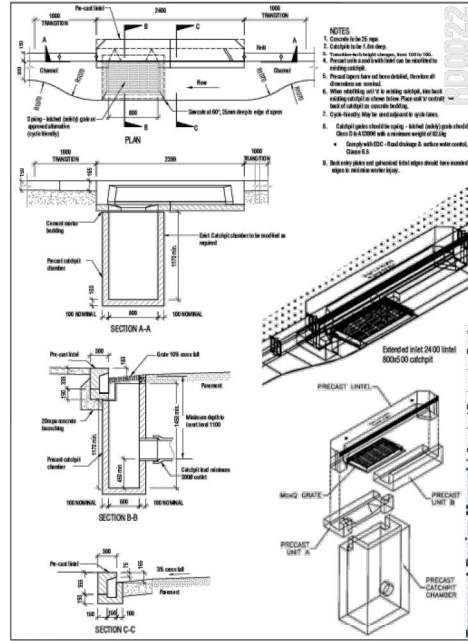
DRAWING No: A2515591.00-4913
REV
A



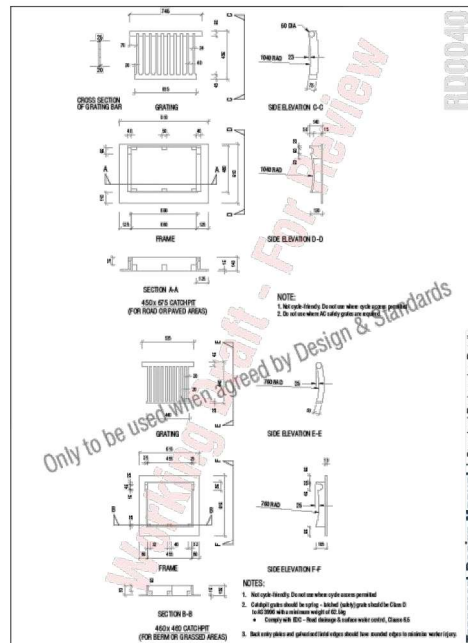
TDM TECHNICAL STANDARDS
Semi recessed catchpit
30/11/2021
RD0020 C



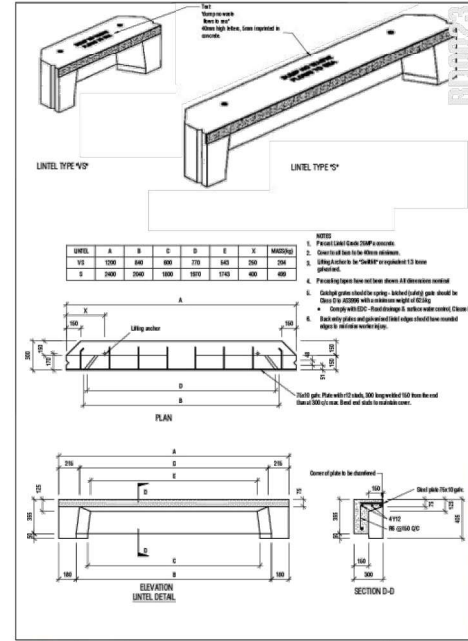
TDM TECHNICAL STANDARDS
Street catchpit 800 x 500 precast unit details
30/11/2021
RD0024 B



TDM TECHNICAL STANDARDS
Street catchpit 800 x 500
30/11/2021
RD0022 B



TDM TECHNICAL STANDARDS
Catchpit grating and frames
30/11/2021
RD0040 B



TDM TECHNICAL STANDARDS
Street catchpit 800 x 500 precast unit details
30/11/2021
RD0023 B

FOR CONSENT

A	FOR CONSENT	SC1	02/2026
REF	REVISIONS	BY	DATE

HARRISON GRIERSON
AUCKLAND OFFICE
Level 4, 96 St Georges Bay Road
Parnell, Auckland 1052
T +64 9 917 5000
W www.harrisongrierson.com

PROJECT:
BEACHLANDS
FAST TRACK CONSENT APPLICATION
BEACHLANDS SOUTH, AUCKLAND

TITLE:
STORMWATER STANDARD DETAILS
SHEET 5 OF 5

ORIGINATOR	DATE	SIGNED	PLOT BY
SC1	04/2026		ENW
DRAWN	DATE	SIGNED	PLOT DATE
SC1	11/2025		23/04/26
CHECKED	DATE	SIGNED	SURVEY BY
P23	04/2026		SURVEYED BY
APPROVED	DATE	SIGNED	SURVEY DATE
CJM	04/2026		SURVEYED DATE

ISSUE STATUS:
FAST TRACK CONSENT

PROJECT No:	SCALE: AS SHOWN	A1
A2515591.00		
DRAWING No:		REV

A2515591.00-4913 A