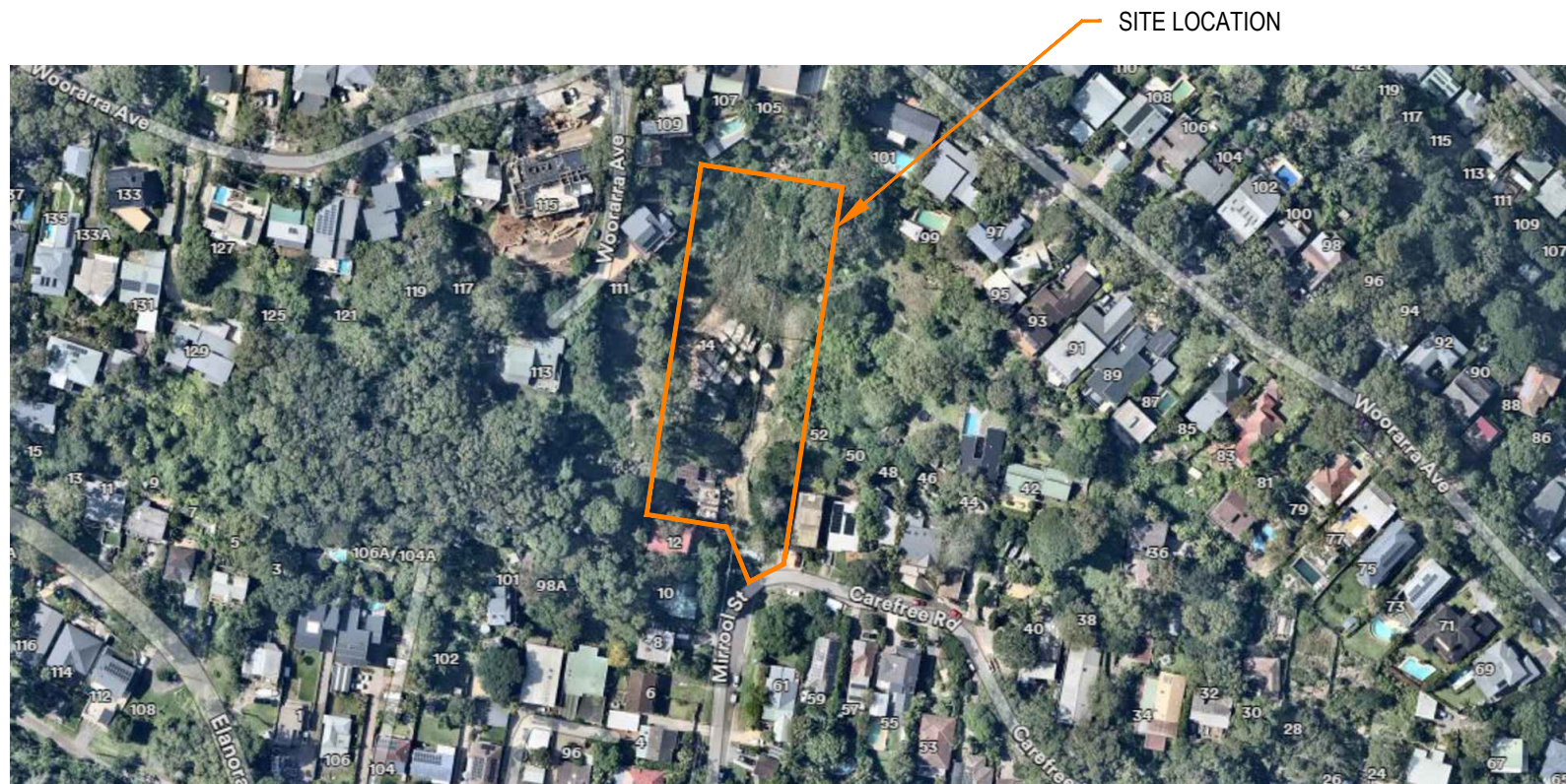


STORMWATER DESIGN

14 MIRROOL ST, NORTH NARRABEEN

MR. MICK WYKROTA



DRAWING SCHEDULE

21P54_SK_C000	COVER SHEET
21P54_SK_C122	STORMWATER MASTERPLAN (BIORETENTION SYSTEM)
21P54_SK_C123	WASTE MANAGEMENT PLAN
21P54_SK_C210	DETAILS
21P54_SK_C220	LONGITUDINAL SECTION, SHEET 1 OF 2
21P54_SK_C221	LONGITUDINAL SECTION, SHEET 2 OF 2
21P54_SK_C222	SCHEMATIC DIAGRAM OF PROPOSED TREATMENT TRAIN
21P54_SK_C223	BIORETENTION SYSTEM CROSS-SECTION (TYPICAL)

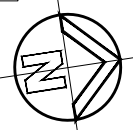
LOCALITY SKETCH

NTS

CONCEPT

			Client	 <div>optimal stormwater</div> Suite 2.01, 828 Pacific Highway GORDON, NSW 2072 Telephone : +61 2 9417 8400 Fax : +61 2 9417 8337 www.optimalstormwater.com.au	Project	Drawn	Designed	Date
			MR. MICK WYKROTA		STORMWATER DESIGN	M.Ochi	G.Amos	Apr 2025
			Architect		14 MIRROOL ST, NORTH NARRABEEN	Checked	Approved	Scale
			ADAM CLERKE SURVEYORS PTY LTD			M.Powell	M.Powell	NTS
02	ISSUED FOR CONCEPT	Apr 2025	This drawing and design remains the property of Optimal Stormwater Pty Ltd and may not be copied in whole or in part without the prior written approval of Optimal Stormwater Pty Ltd.		Title	Drawing number.		Revision
01	ISSUED FOR CONCEPT	Mar 2025			COVER SHEET	21P54_SK_C122		02
REVISION	AMENDMENT	DATE						

A3



NOTE: ALL INLET STORMWATER PITS AND ALL INLINE STORMWATER PITS TO HAVE INTERNAL BENCHING TO ENSURE THEY ARE SELF CLEANING.

RAINWATER TANK IN ACCORDANCE WITH BASIX REQUIREMENTS (10,000L MINIMUM), OVERFLOW TO BIORETENTION SYSTEM

5m(L) x 3m(W)(TYPICAL) BIORETENTION SYSTEM WITH TREATED FLOW DIRECT TO OSD TANK

EXISTING OSD AS PER DA N0336/09

10 MIRROOL STREET

12 MIRROOL STREET

ACCESS DRIVEWAY TO 12 MIRROOL STREET TO SEPARATE DA

EXISTING Ø450 HDPE STORMWATER PIPE

EXISTING Ø525 RCP STORMWATER PIPE

EXISTING PIT

PROPOSED SAG PIT

REMOVE EXISTING TREES

EXISTING WALL
EXTEND EXISTING EMBANKMENT
RETAINING WALL

PROPOSED OVERLAND FLOW PATH
REFER TO DWG.C210 FOR
TYPICAL SECTION (2)

EXISTING Ø525 HDPE STORMWATER PIPE
EXISTING Ø525 HDPE STORMWATER PIPE
EXISTING HEADWALL

CATCHMENT
(APPROX. 1.5 HA)

OSD (12,000L MINIMUM)
REFER TO DA N0336/09
5m(L) x 3m(W)(TYPICAL)
BIORETENTION SYSTEM WITH
TREATED FLOW DIRECT TO OSD TANK

RAINWATER TANK IN ACCORDANCE WITH
BASIX REQUIREMENTS (10,000L MINIMUM),
OVERFLOW TO BIORETENTION SYSTEM

RAINWATER TANK IN ACCORDANCE WITH
BASIX REQUIREMENTS(10,000L MINIMUM),
OVERFLOW TO BIORETENTION SYSTEM

5m(L) x 3m(W)(TYPICAL)
BIORETENTION SYSTEM WITH
TREATED FLOW DIRECT TO OSD TANK

14 MIRROOL STREET
LOT 2 (1295m²)
CURRENT DA N0336/09
UNDER CONSTRUCTION

PROPOSED SAG PIT
PROPOSED FOOTPATH
PROPOSED DRIVEWAY

PROPOSED FOOTPATH
RETAINING WALL

D.P.564.711

LEGEND

EXISTING STORMWATER PIPE

EXISTING SEWER LINE

OVERLAND FLOW PATHS

PROPOSED STORMWATER PIPE

PROPOSED GRATED JUNCTION PIT

PROPOSED SAG PIT

PROPOSED KERB INLET PIT

107 WOORARRA AVENUE

105 WOORARRA AVENUE

14 MIRROOL STREET
LOT 3 (1170m²)
FUTURE
DEVELOPMENT NOT
PART OF WORKS

OSD (12,000L MINIMUM)

NORTHERN AND WESTERN BOUNDARIES
SHALL HAVE A RETAINING WALL APPROX.
500MM ABOVE GROUND LEVEL TO DIRECT
SURFACE FLOW AROUND EACH LOT

OVERLAND FLOW PATH
REFER TO DWG.C210
FOR TYPICAL SECTION (1)

EXISTING Ø375 STORMWATER
PIPE FROM WOORARRA AVE
(APPROX. 1.2 HA)

EXISTING HEADWALL (IL:30.06)
EXISTING CREEK
RETAINING WALL

CONCEPT

SCALE 1:400

06	ISSUED FOR CONCEPT	Jun 2025	Client
05	ISSUED FOR CONCEPT	May 2025	MR. MICK WYKROTA
04	ISSUED FOR CONCEPT	Apr 2025	Surveyor
03	ISSUED FOR CONCEPT	Mar 2025	ADAM CLERKE SURVEYORS PTY LTD
02	ISSUED FOR CONCEPT	Oct 2024	This drawing and design remains the property of Optimal Stormwater Pty Ltd and may not be copied in whole or in part without the prior written approval of Optimal Stormwater Pty Ltd.
REVISION	AMENDMENT	DATE	



optimal stormwater

LEVEL 5 79 VICTORIA AVENUE
CHATSWOOD NSW 2067

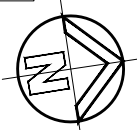
Telephone : +61 2 9417 8400
Fax : +61 2 9417 8337
www.optimalstormwater.com.au

Project
STORMWATER DESIGN
14 MIRROOL ST, NORTH NARRABEEN

Title
STORMWATER MASTERPLAN
(BIORETENTION SYSTEM)

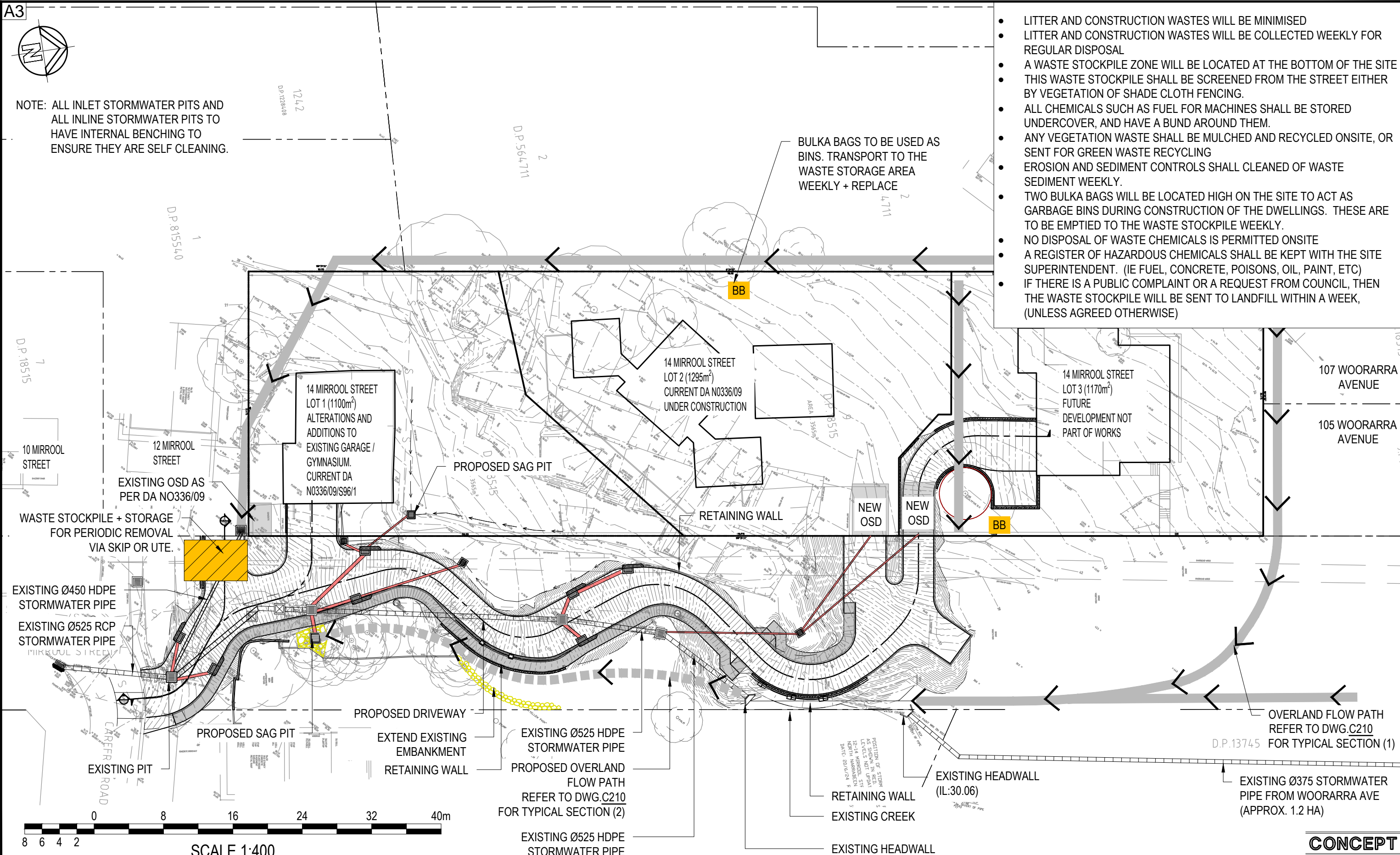
Drawn M.Ochi	Designed G.Amos	Date Jun 2025
Checked M.Powell	Approved M.Powell	Scale 1:400
Drawing number. 21P54_SK_C122		Revision 06


A3

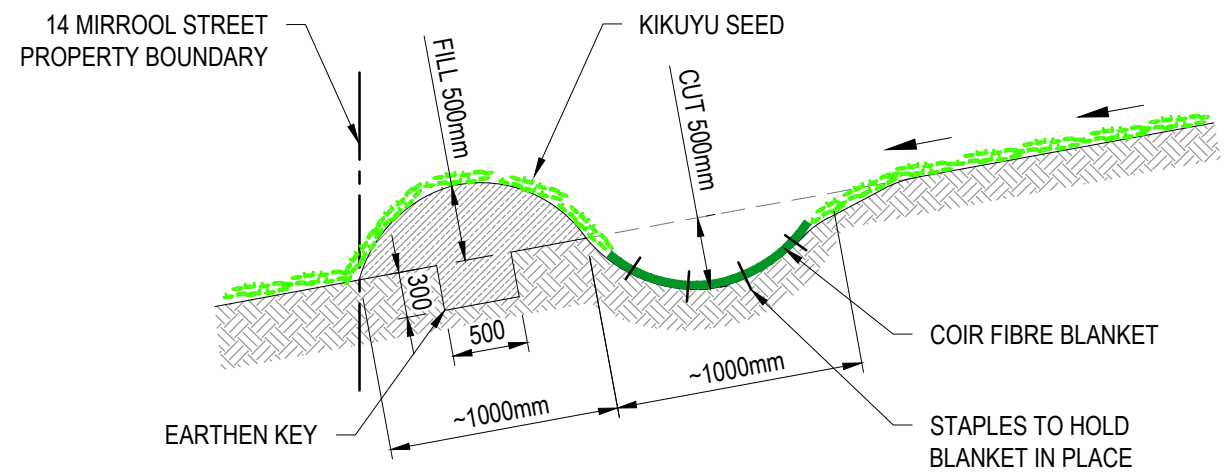


NOTE: ALL INLET STORMWATER PITS AND ALL INLINE STORMWATER PITS TO HAVE INTERNAL BENCHING TO ENSURE THEY ARE SELF CLEANING.

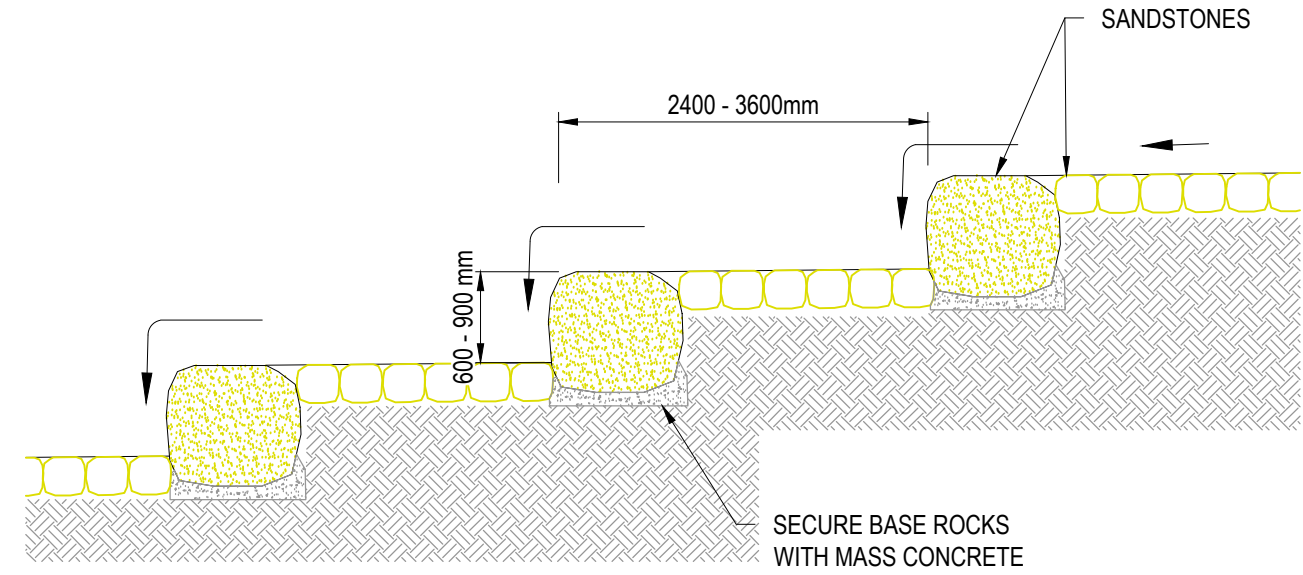
- LITTER AND CONSTRUCTION WASTES WILL BE MINIMISED
- LITTER AND CONSTRUCTION WASTES WILL BE COLLECTED WEEKLY FOR REGULAR DISPOSAL
- A WASTE STOCKPILE ZONE WILL BE LOCATED AT THE BOTTOM OF THE SITE
- THIS WASTE STOCKPILE SHALL BE SCREENED FROM THE STREET EITHER BY VEGETATION OF SHADE CLOTH FENCING.
- ALL CHEMICALS SUCH AS FUEL FOR MACHINES SHALL BE STORED UNDERCOVER, AND HAVE A BUND AROUND THEM.
- ANY VEGETATION WASTE SHALL BE MULCHED AND RECYCLED ONSITE, OR SENT FOR GREEN WASTE RECYCLING
- EROSION AND SEDIMENT CONTROLS SHALL CLEANED OF WASTE SEDIMENT WEEKLY.
- TWO BULKA BAGS WILL BE LOCATED HIGH ON THE SITE TO ACT AS GARBAGE BINS DURING CONSTRUCTION OF THE DWELLINGS. THESE ARE TO BE EMPTIED TO THE WASTE STOCKPILE WEEKLY.
- NO DISPOSAL OF WASTE CHEMICALS IS PERMITTED ONSITE
- A REGISTER OF HAZARDOUS CHEMICALS SHALL BE KEPT WITH THE SITE SUPERINTENDENT. (IE FUEL, CONCRETE, POISONS, OIL, PAINT, ETC)
- IF THERE IS A PUBLIC COMPLAINT OR A REQUEST FROM COUNCIL, THEN THE WASTE STOCKPILE WILL BE SENT TO LANDFILL WITHIN A WEEK, (UNLESS AGREED OTHERWISE)



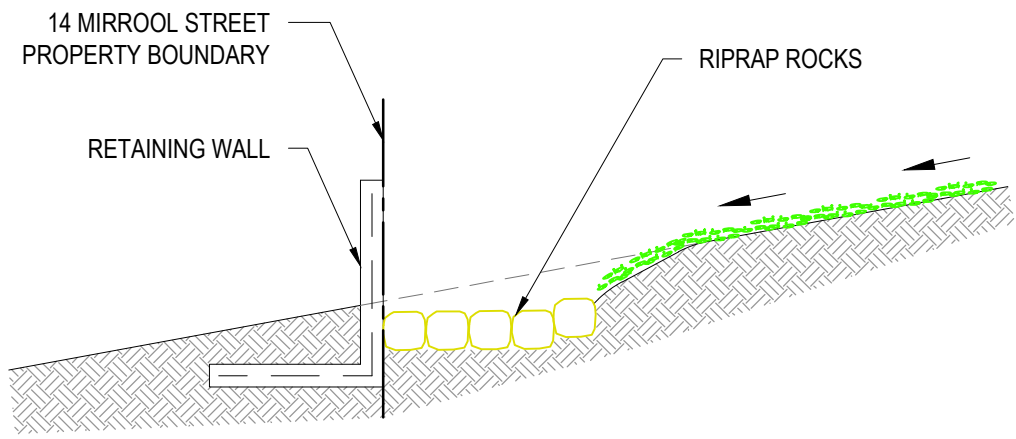
			Client	 <div>optimal stormwater</div> <div>LEVEL 5 79 VICTORIA AVENUE CHATSWOOD NSW 2067</div> <div>Telephone : +61 2 9417 8400 Fax : +61 2 9417 8337 www.optimalstormwater.com.au</div>	Project	Drawn	Designed	Date
			MR. MICK WYKROTA		STORMWATER DESIGN	M.Ochi	G.Amos	Jun 2025
03	ISSUED FOR CONCEPT	Jun 2025	Surveyor		14 MIRROOL ST, NORTH NARRABEEN	Checked	Approved	Scale
02	ISSUED FOR CONCEPT	Apr 2025	ADAM CLERKE SURVEYORS PTY LTD			M.Powell	M.Powell	1:400
01	ISSUED FOR CONCEPT	Mar 2025	This drawing and design remains the property of Optimal Stormwater Pty Ltd and may not be copied in whole or in part without the prior written approval of Optimal Stormwater Pty Ltd.			Title	Drawing number.	
REVISION	AMENDMENT	DATE		WASTE MANAGEMENT PLAN	21P54_SK_C123		03	



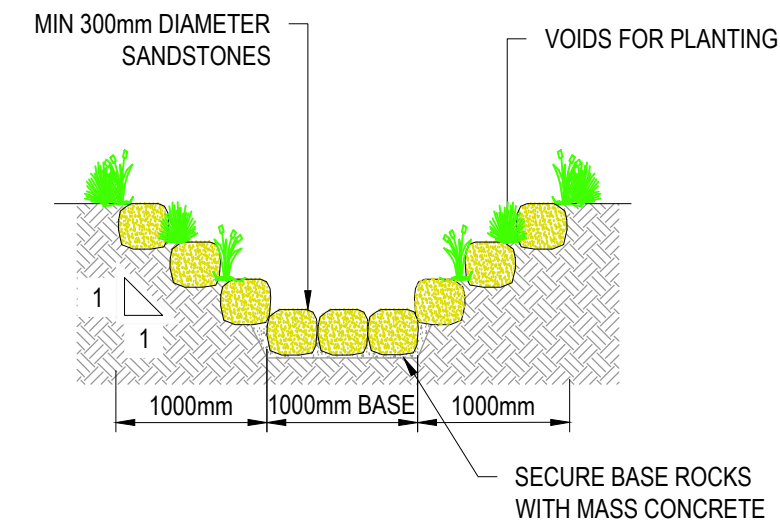
TYPICAL OVERLAND FLOW PATH (1)
BEHIND THE PROPERTY
SCALE: 1:50



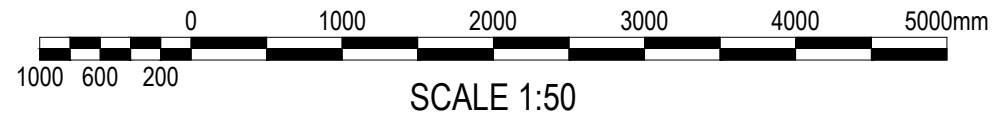
TYPICAL OVERLAND FLOW PATH (2)
FROM THE CREEK TO MIRROOL
SCALE: 1:50




TYPICAL OVERLAND FLOW PATH (3)
BEHIND THE PROPERTY
SCALE: 1:50

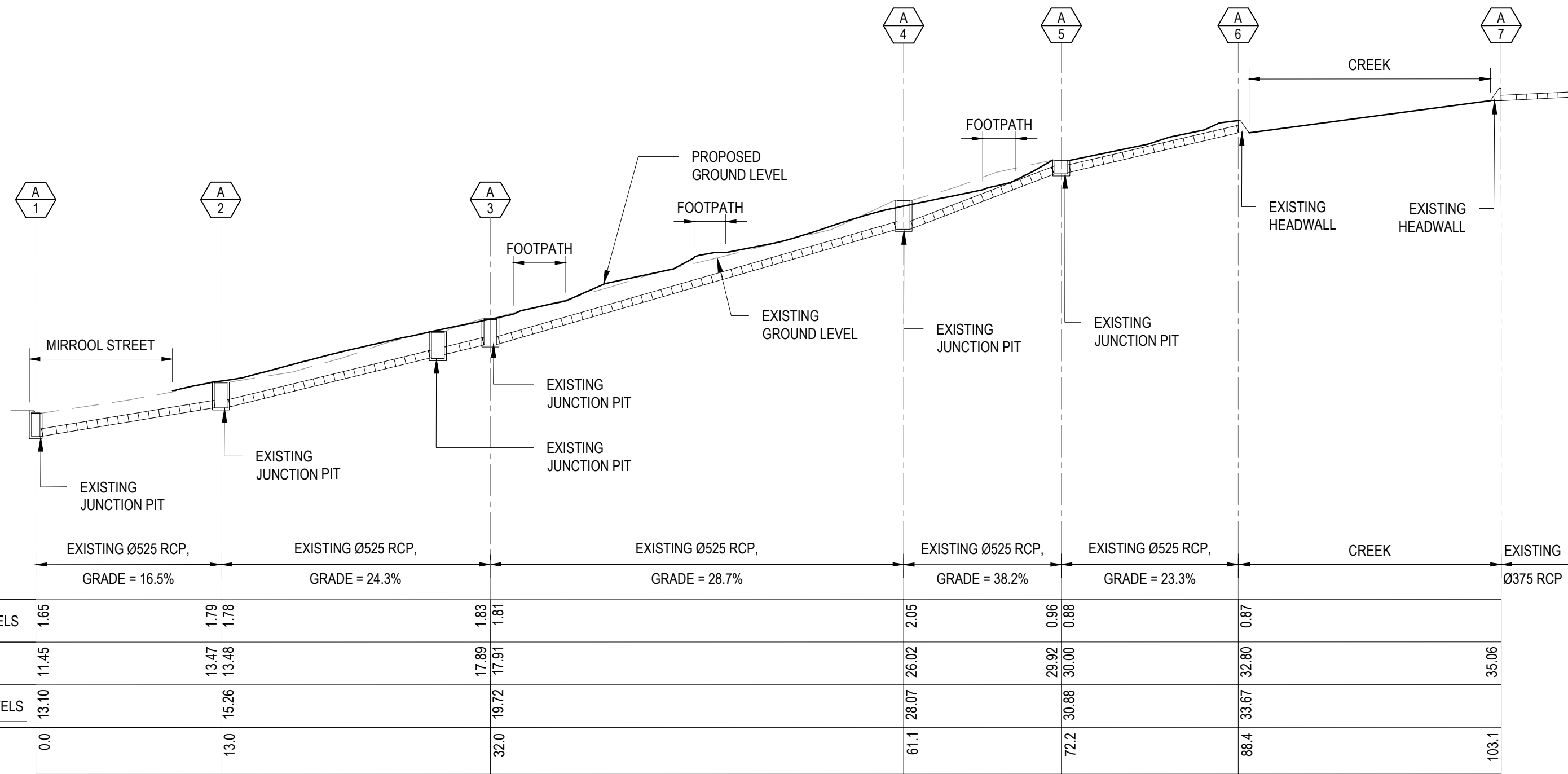


TYPICAL CREEK DETAIL
SCALE: 1:50



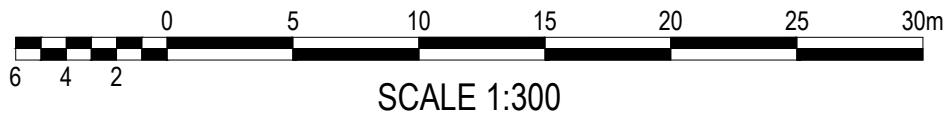
CONCEPT

			Client	 <div>optimal stormwater</div> LEVEL 5 79 VICTORIA AVENUE CHATSWOOD NSW 2067 Telephone : +61 2 9417 8400 Fax : +61 2 9417 8337 www.optimalstormwater.com.au	Project	Drawn	Designed	Date
			MR. MICK WYKROTA		STORMWATER DESIGN	M.Ochi	G.Amos	Jun 2025
03	ISSUED FOR CONCEPT	Jun 2025	Surveyor		14 MIRROOL ST, NORTH NARRABEEN	Checked	Approved	Scale
02	ISSUED FOR CONCEPT	Oct 2024	ADAM CLERKE SURVEYORS PTY LTD			M.Powell	M.Powell	1:50
01	ISSUED FOR CONCEPT	May 2023	This drawing and design remains the property of Optimal Stormwater Pty Ltd and may not be copied in whole or in part without the prior written approval of Optimal Stormwater Pty Ltd.		Title	Drawing number.		Revision
REVISION	AMENDMENT	DATE		DETAILS	21P54_SK_C210		03	




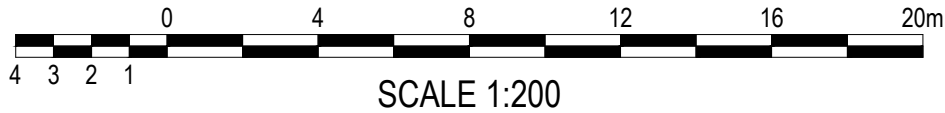
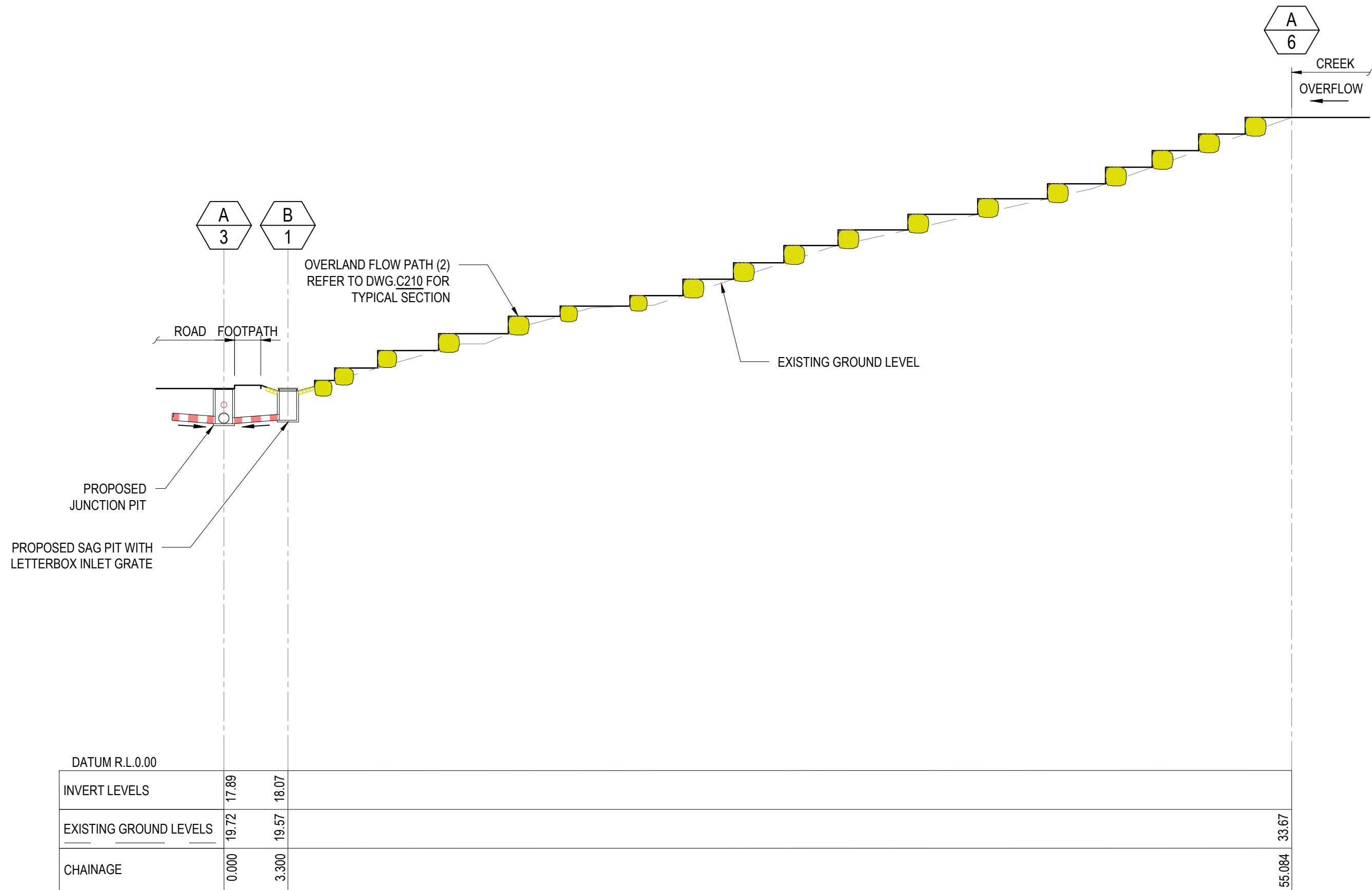
LONGITUDINAL SECTION (1)

SCALE: 1:300



CONCEPT

			Client	 <div>optimal stormwater LEVEL 5 79 VICTORIA AVENUE CHATSWOOD NSW 2067 Telephone : +61 2 9417 8400 Fax : +61 2 9417 8337 www.optimalstormwater.com.au</div>	Project	Drawn	Designed	Date
			MR. MICK WYKROTA		STORMWATER DESIGN	M.Ochi	G.Amos	Mar 2025
01	ISSUED FOR CONCEPT	Apr 2025	Surveyor		14 MIRROOL ST, NORTH NARRABEEN	Checked	Approved	Scale
02	ISSUED FOR CONCEPT	Mar 2025	ADAM CLERKE SURVEYORS PTY LTD			M.Powell	M.Powell	1:300
01	ISSUED FOR CONCEPT	Oct 2024	This drawing and design remains the property of Optimal Stormwater Pty Ltd and may not be copied in whole or in part without the prior written approval of Optimal Stormwater Pty Ltd.		Title	Drawing number.		Revision
REVISION	AMENDMENT	DATE		LONGITUDINAL SECTION, SHEET 1 OF 2	21P54_SK_C220		03	

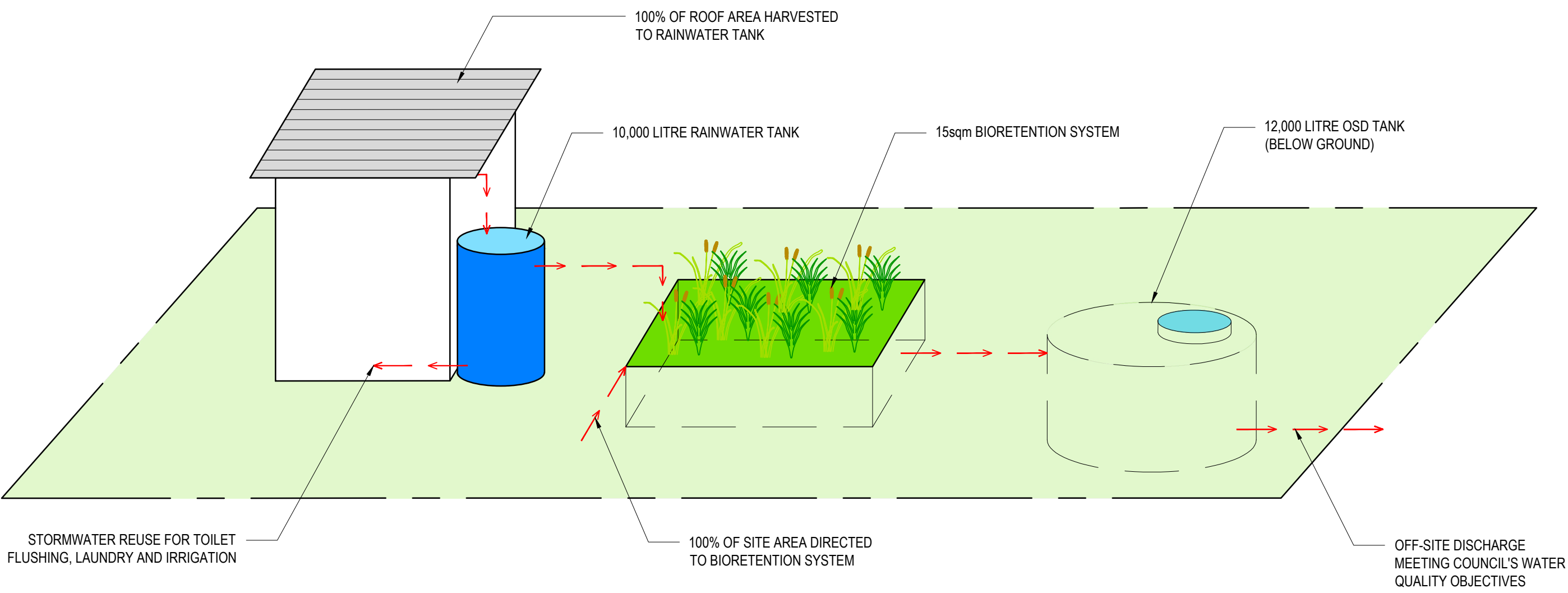


LONGITUDINAL SECTION (2)

SCALE: 1:200


CONCEPT

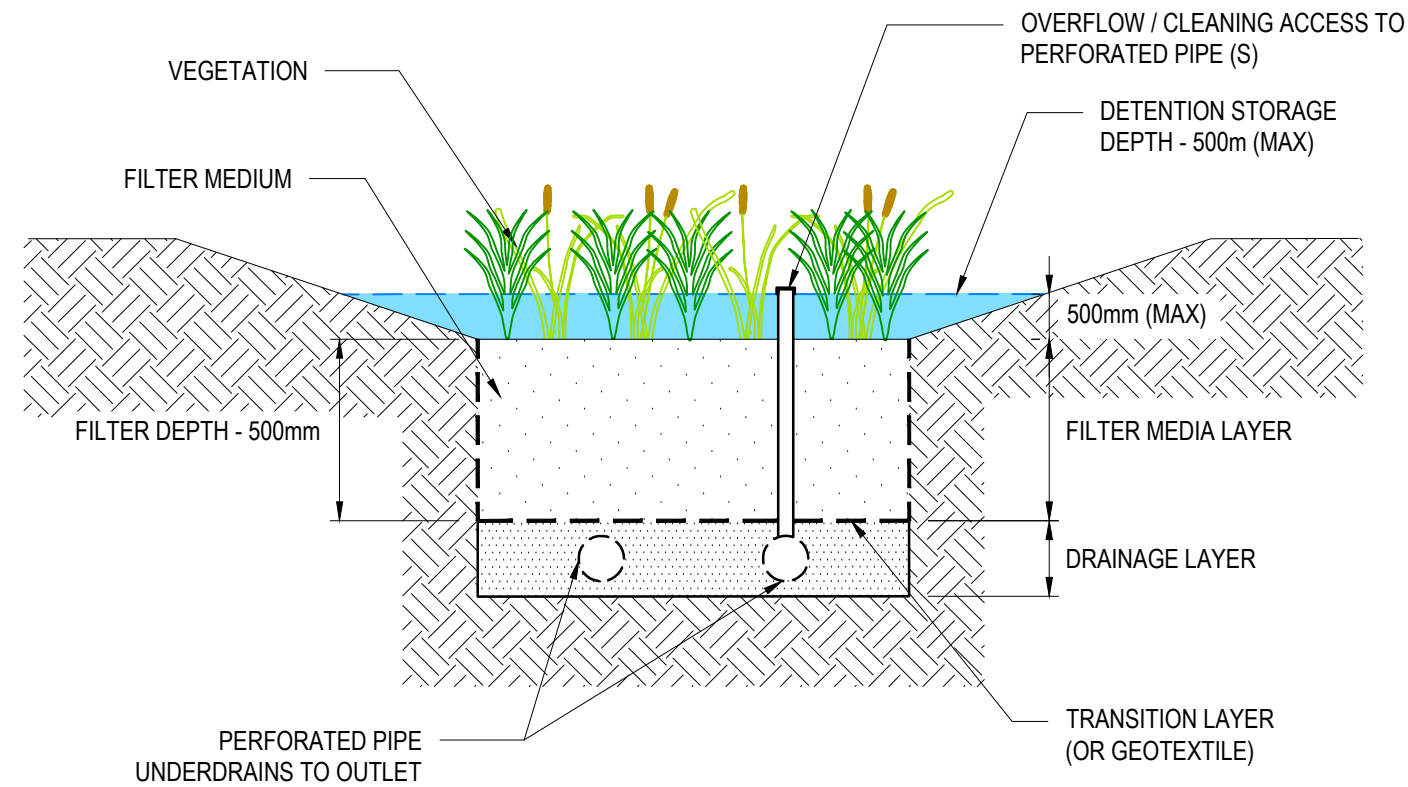
			Client				Project			Drawn	Designed	Date
			MR. MICK WYKROTA				STORMWATER DESIGN			M.Ochi	G.Amos	Apr 2025
03	ISSUED FOR CONCEPT	Apr 2025	Surveyor				14 MIRROOL ST, NORTH NARRABEEN			Checked	Approved	Scale
02	ISSUED FOR CONCEPT	Mar 2025	ADAM CLERKE SURVEYORS PTY LTD							M.Powell	M.Powell	1:200
01	ISSUED FOR CONCEPT	Oct 2024	This drawing and design remains the property of Optimal Stormwater Pty Ltd and may not be copied in whole or in part without the prior written approval of Optimal Stormwater Pty Ltd.				Title			Drawing number.		Revision
REVISION	AMENDMENT	DATE					LONGITUDINAL SECTION SHEET 2 OF 2			21P54_SK_C221		03



SCHEMATIC DIAGRAM OF PROPOSED TREATMENT TRAIN
SCALE: NTS


CONCEPT

			Client	 <div>optimal stormwater LEVEL 5 79 VICTORIA AVENUE CHATSWOOD NSW 2067 Telephone : +61 2 9417 8400 Fax : +61 2 9417 8337 www.optimalstormwater.com.au</div>	Project STORMWATER DESIGN 14 MIRROOL ST, NORTH NARRABEEN	Drawn M.Ochi	Designed G.Amos	Date Apr 2025
			Surveyor ADAM CLERKE SURVEYORS PTY LTD			Checked M.Powell	Approved M.Powell	Scale NTS
01	ISSUED FOR CONCEPT	Apr 2025	This drawing and design remains the property of Optimal Stormwater Pty Ltd and may not be copied in whole or in part without the prior written approval of Optimal Stormwater Pty Ltd.		Title SCHEMATIC DIAGRAM OF PROPOSED TREATMENT TRAIN	Drawing number. 21P54_SK_C222		Revision 01
REVISION	AMENDMENT	DATE						



BIORETENTION SYSTEM CROSS-SECTION (TYPICAL)
SCALE: NTS

CONCEPT

			Client	 <div>optimal stormwater LEVEL 5 79 VICTORIA AVENUE CHATSWOOD NSW 2067 Telephone : +61 2 9417 8400 Fax : +61 2 9417 8337 www.optimalstormwater.com.au</div>	Project	Drawn	Designed	Date
			MR. MICK WYKROTA		STORMWATER DESIGN	M.Ochi	G.Amos	Apr 2025
			Surveyor		14 MIRROOL ST, NORTH NARRABEEN	Checked	Approved	Scale
			ADAM CLERKE SURVEYORS PTY LTD		Title	M.Powell	M.Powell	NTS
01	ISSUED FOR CONCEPT	Apr 2025	This drawing and design remains the property of Optimal Stormwater Pty Ltd and may not be copied in whole or in part without the prior written approval of Optimal Stormwater Pty Ltd.	BIORETENTION SYSTEM CROSS-SECTION (TYPICAL)	Drawing number.		Revision	
REVISION	AMENDMENT	DATE			21P54_SK_C223	01		