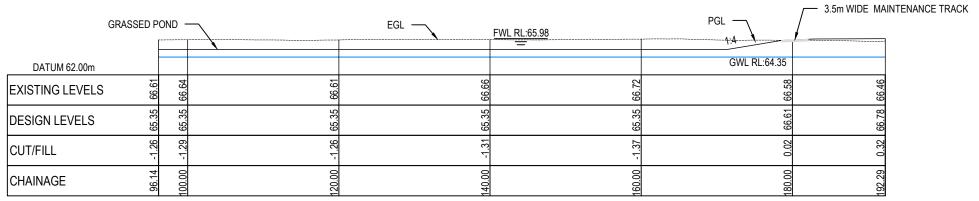


Pond 1 (North East) A-A SCALE: HORI 1:100 VERT 1:100

		3.5m WIDE MAINTENANC	E TRACK			
	r	1:4 PGL	EGL —	FWL RL:65.98	GRASSED PON	
DATUM 62.00m		GWL RL:64.35				
EXISTING LEVELS	66.62	66.22	08.99	66.44	66.44	66.61
DESIGN LEVELS	66.47	65.35	65.35	65.35	65.35	65.35
CUT/FILL	-0.15	78.0-	-0.95	-1.09	-1.09	-1.26
CHAINAGE	0.00	20.00	40.00	00.09	80.00	96.14

Pond 1 (North East) B-B SCALE: HORI 1:100 VERT 1:100



Pond 1 (North East) B-B SCALE: HORI 1:100 VERT 1:100

**FOR CONSENT** 

Notes

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- 2. Co-ordinates in terms of Mount Eden 2000.
- 3. Reduced Levels are in terms of NZVD 2016.
- It is the contractors responsibility to locate all services that may be affected by his operations.
- Pipe bedding: 0 10% granular bedding,10 20% weak concrete bedding.greater than 20% weak concrete bedding (7mpa plus anti scour blocks at 6m crs).
- Approved hardfill is to be used in backfilling of all road crossings and vehicle crossings to council standards.
- Heavy duty manhole lids and frames to be used in trafficked areas.
- All cesspit leads shall have min cover 0.9m.
- All lines to be abandoned shall be sealed at each end. timing of all sealing to be coordinated with council staff.
- 10. Refer to C4700 for Soakage Tank details.

В		FOR CONSENT		MS	04/25	
Α		FOR REVIEW		DP	01/25	
Rev	Description			Ву	Date	
		Ву	Date			
Surve	у	MAVEN	10/20	10/2024		
Desigr	n	KQ	12/2024			
Drawn DP		12/2024				
Check	ed	SB	12/20	24		



ASHBOURNE
RETIREMENT VILLAGE
MATAMATA
FOR
UNITY DEVELOPMENT LTD

Title

PROPOSED
STORMWATER POND 1
CROSS SECTION PLAN

Project no.	J00606				
Scale	AS SHOWN				
Cad file	C4600 - SW POND.DWG				
Drawing no.	C4600	Rev	В		

	-		VILLA ES	5.511 WIDE 111	AINTENANCE TRACK  EGL ————————————————————————————————————	3.5m WIDE MAINTENANCE TRA	\
DATUM 63.00m		GWL RL:65.31					
EXISTING LEVELS	67.66	67.55	67.69	67.64	67.70	67.67	67.74
DESIGN LEVELS	67.86	68.20	68.15	66.31	66.31	66.39	67 74
CUT/FILL	0.20	0.65	0.46	-1 33	-1.39	-1.28	00 υ
CHAINAGE	0.00	20.00	40.00	00.00	00.08	100.00	110.69
				Pond 2 (South West SCALE: HORI 1:100 VE			

	[	3.5m WIDE MAINTI	FWL RL:66.70	GRASSED PONE	
DATUM 63.00m		GWL RL:65.31			
EXISTING LEVELS	68.01	67.65	67.73	67.75	67.82
DESIGN LEVELS		66.31	66.31	66.31	66.31
CUT/FILL		-1.34	-1.42	4.1-	-1.51
CHAINAGE	0.00	20.00	40.00	90.00	73.50

Pond 2 (South West) B-B SCALE: HORI 1:100 VERT 1:100

GRASSED POND	_		EGL — PGL —	SPILL FWL RL:66.70	WAY RL:66.70	
DATUM 63.00m					GWL RL:65.31	EXISTING SWAL
EXISTING LEVELS	67.82	67.86	67.51	67.64	06.79	
DESIGN LEVELS	66.31	66.31	66.31	66.31	66.28	
CUT/FILL	-1.51	-1.55	-1.20	-1.33	-1.62	
CHAINAGE	73.50	80.00	100.00	120.00	140.00	147.10

Pond 2 (South West) B-B (1) SCALE: HORI 1:100 VERT 1:100

# **FOR CONSENT**

- 1. All works to be in accordance with RITS standards.
- 2. Co-ordinates in terms of Mount Eden 2000.
- 3. Reduced Levels are in terms of NZVD 2016.
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- 5. Pipe bedding: 0 10% granular bedding,10 -20% weak concrete bedding.greater than 20% weak concrete bedding (7mpa plus anti scour blocks at 6m crs).
- Approved hardfill is to be used in backfilling of all road crossings and vehicle crossings to council standards.
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- 9. All lines to be abandoned shall be sealed at each end. timing of all sealing to be coordinated with council staff.
- 10. Refer to C4700 for Soakage Tank details.

В	FOR CONSENT			MS	04/25	
Α		FOR REVIEW			DP	01/25
Rev	Desc	Description			Ву	Date
		Ву		Date		
Surve	у	MAVEN		10/20	24	
Desig	n KQ			11/2024		
Drawr	wn DP			12/2024		
Check	ced	SB		12/20	24	•

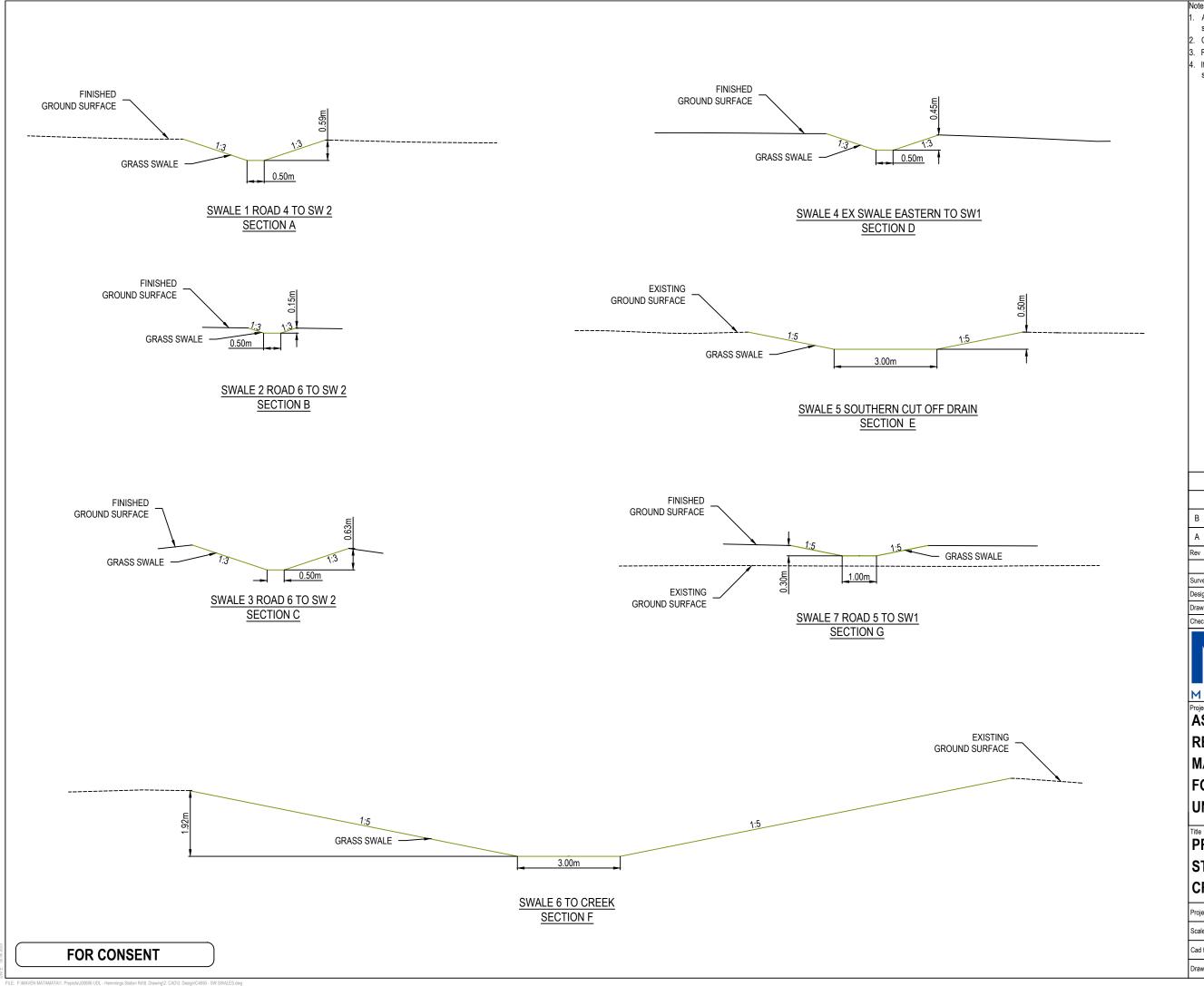


**ASHBOURNE** RETIREMENT VILLAGE MATAMATA FOR UNITY DEVELOPMENT LTD

PROPOSED STORMWATER POND 2 CROSS SECTION PLAN

Project no.	J00606			
Scale	AS SHOWN			
Cad file	C4600 - SW POND.DWG			
Drawing no.	C4601	Rev	В	





- All works to be in accordance with RITS standards.
- Co-ordinates in terms of Mount Eden 2000.
- Reduced Levels are in terms of NZVD 2016.
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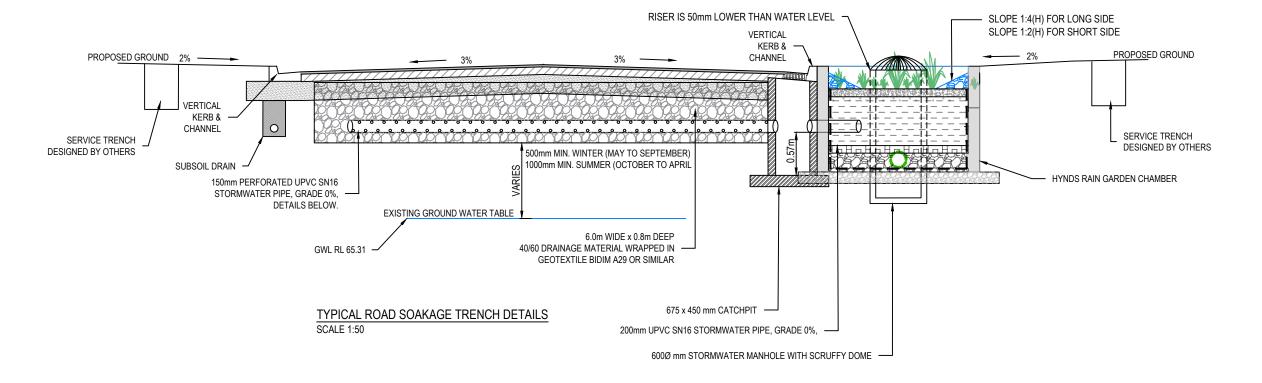
В		FOR C	CONSENT		MS	04/25
Α		FOR	REVIEW		DP	01/25
Rev	Desc	ription			Ву	Date
		Ву		Date		
Surve	у	MAVEN		10/20	24	
Desig	n	KQ		12/20	24	
)rawr	1	DP		12/20	24	
Check	ced	SB		12/20	24	
			(B)			

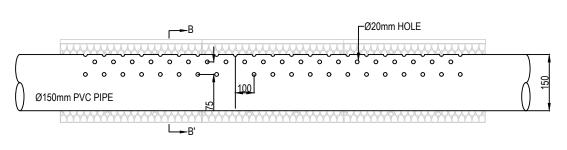


**ASHBOURNE** RETIREMENT VILLAGE MATAMATA **FOR** UNITY DEVELOPMENT LTD

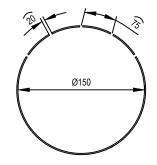
PROPOSED STORMWATER SWALES CROSS SECTIONS

Project no.	J00606					
Scale	1:100					
Cad file	C4650 - SW SWALES.DWG					
Drawing no.	C4651	Rev	В			





LINEAR ACCESS PIPE (150mm) DETAIL NOT TO SCALE



SECTION B-B' NOT TO SCALE

# No

- All works to be constructed in accordance with RITS.
- 2. Reduced Levels are in terms of NZVD 2016.
- Site specific testing is required at building consent to determine the soakage rate and optimal soakage trench location.
- Invert of soakage device must be 1m above the winter groundwater table.
- 5. Sizing is based on an assumed depth of 1m and or inside the sand layer
- Soakage trench device is sized to cater for the
   10year ARI event including climate change.
- Soakage trench must maintain minimum 3m clearance from building footprint in accordance with NZBC and MPDC.
- 8. Soakage device to be either a soakage trench, soak hole or an approved alternative.
- Soakage device must be constructed in accordance with the MPDC and BC requirements.

В		FOR CONSENT		MS	04/25
Α		FOR REVIEW		DP	01/25
Rev	Description			Ву	Date
		Ву	Date		
Surve	у	MAVEN	10/2024		
Desig	esign DP		12/2024		
Drawn DP		12/20	24		
Check	ked	SB	11/2024		



ASHBOURNE
RETIREMENT VILLAGE
MATAMATA
FOR
UNITY DEVELOPMENT LTD

PROPOSED
SOAKAGE TRENCH
CROSS SECTION PLAN

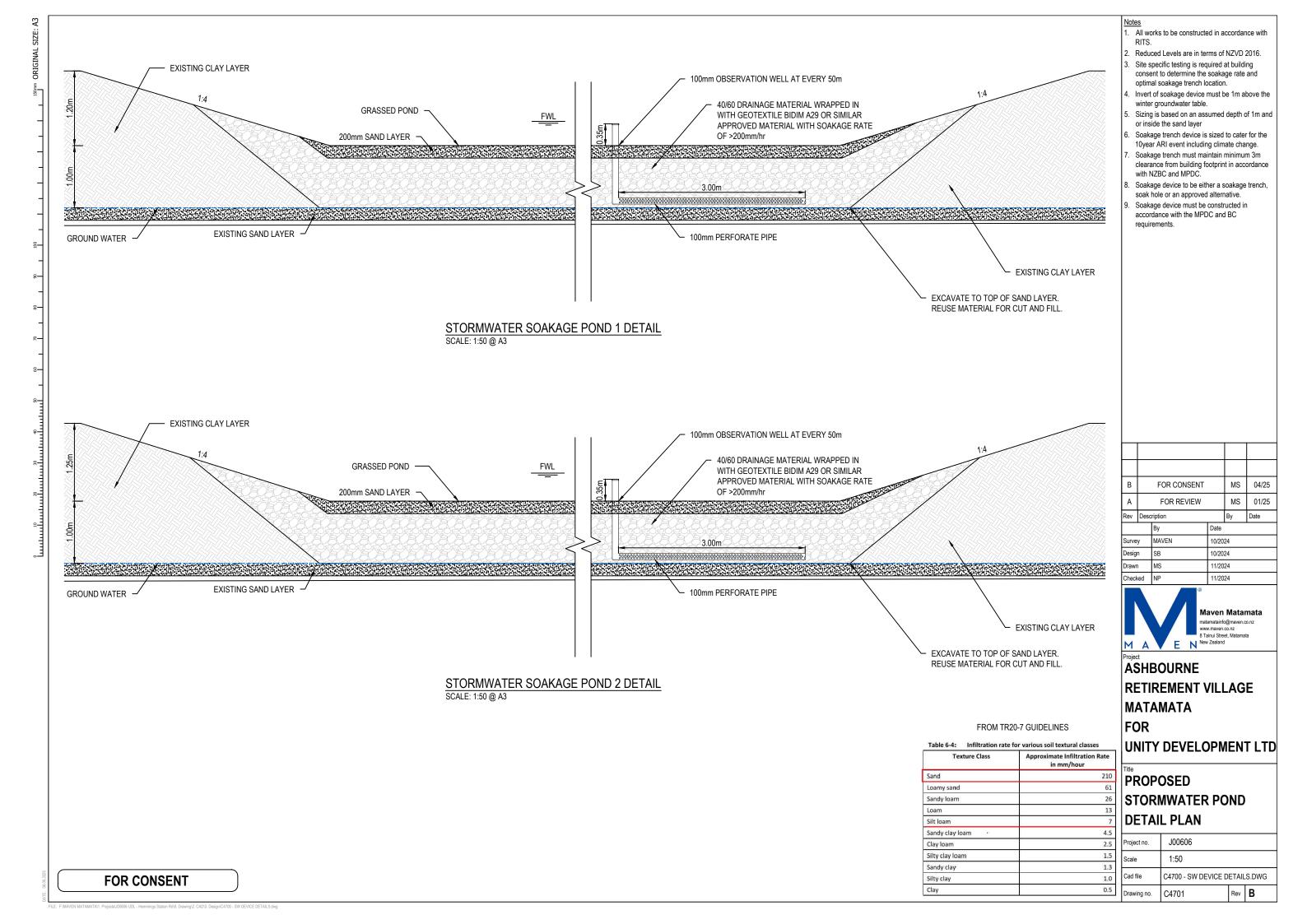
 Project no.
 J00606

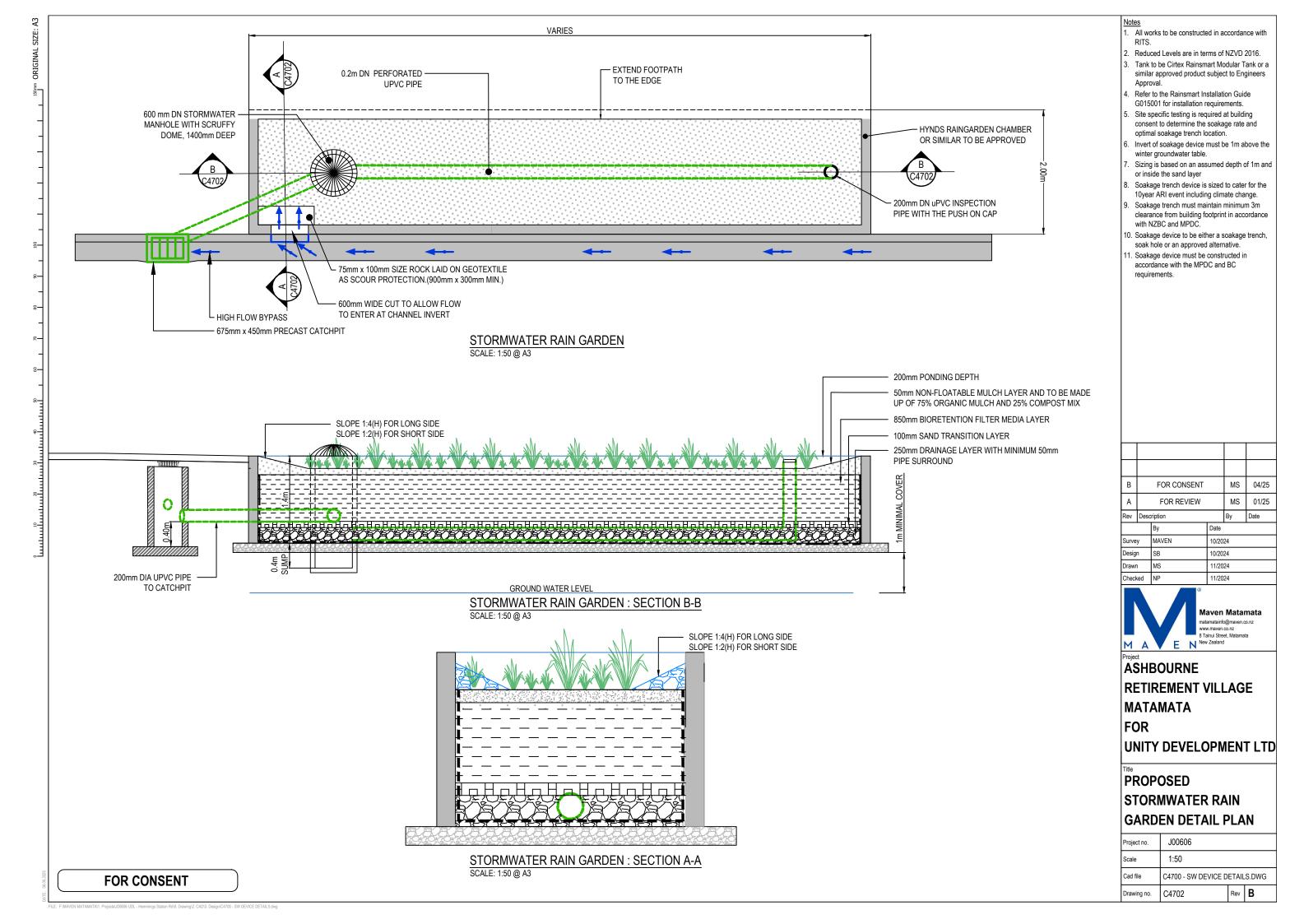
 Scale
 AS SHOWN

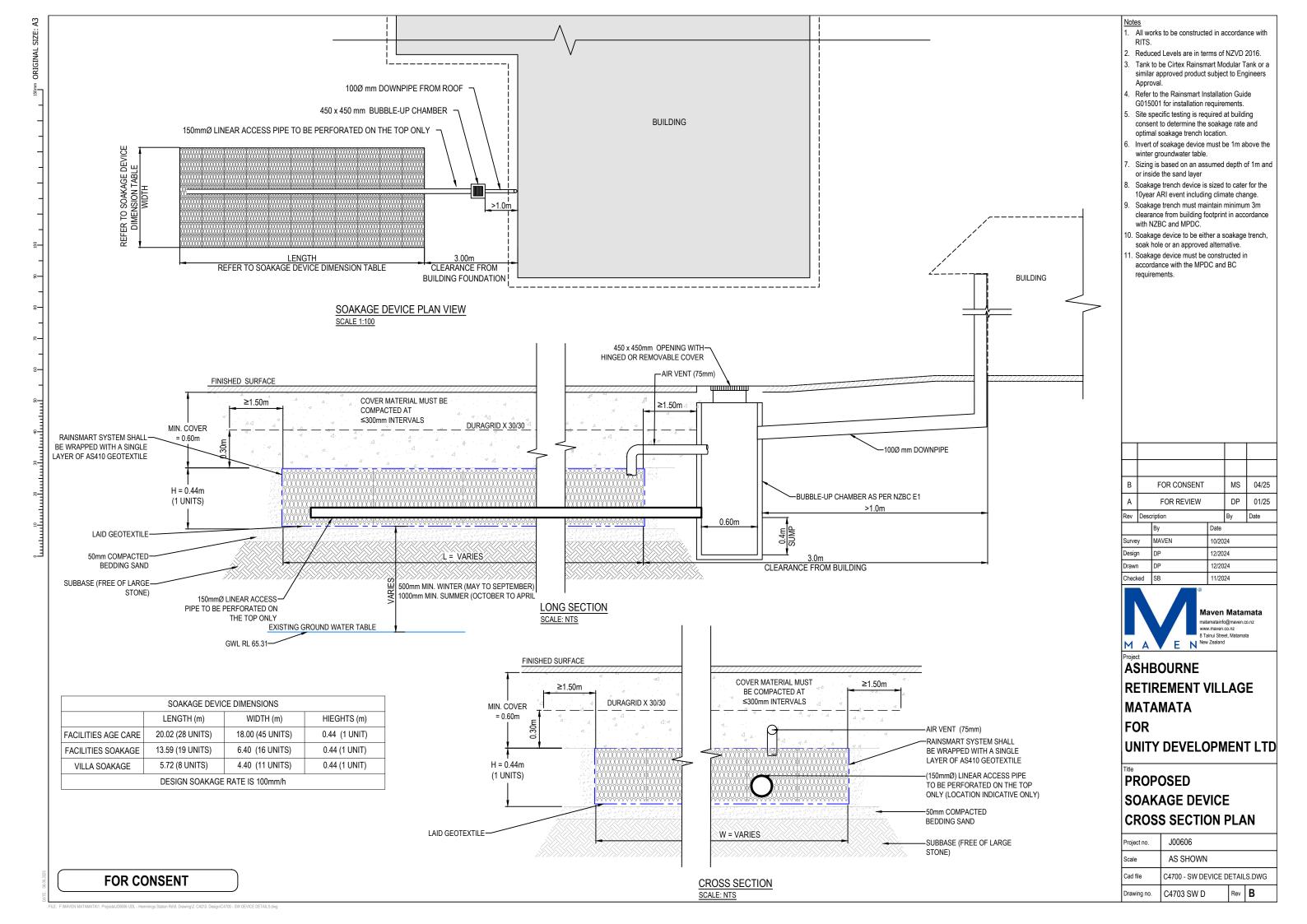
 Cad file
 C4700 - SW DEVICE DETAILS.DWG

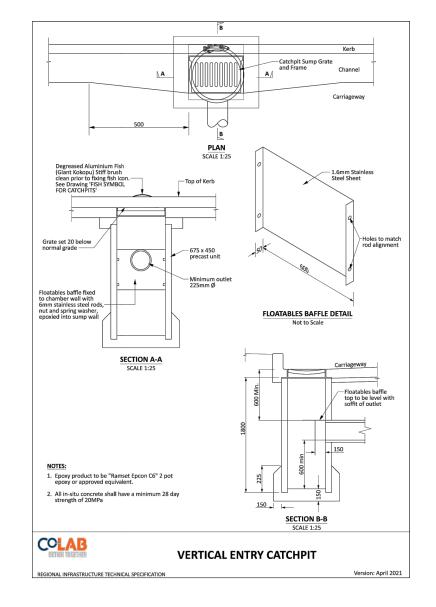
 Drawing no.
 C4700

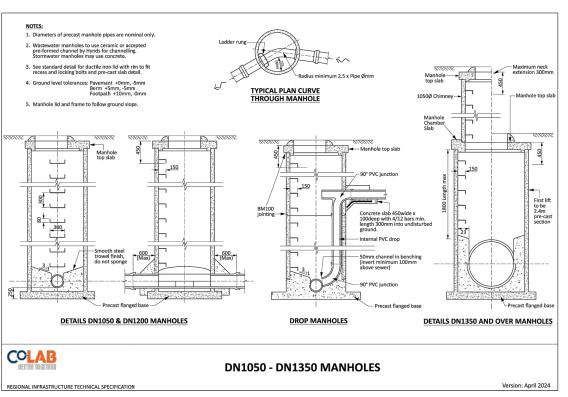
 Rev
 B

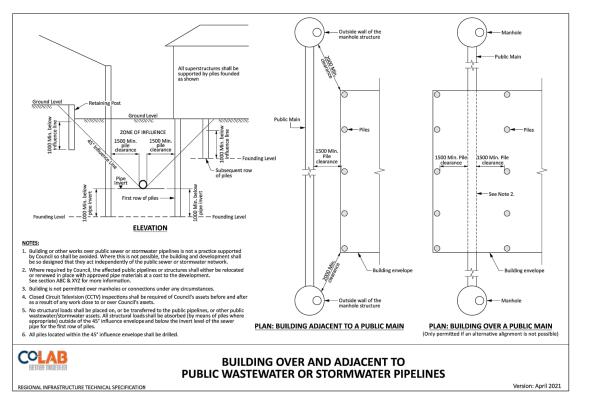






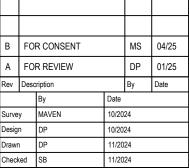






Notes

- All works to be in accordance WITH RITS standards.
- All bends and connections to be no more than 45°
- All connections to existing drains shall be carried out by a licensed Drainlayer/Plumber.
- Drainage shall comply in full with E1/AS1 building cod for storm water.
  - All cesspits shall have half syphons installed.
- All sanitary waste drains shall be uPVC to AS/NZS 1260
   Sewer shall comply in full with AS/NZS 3500.2 2003 and/or G13 Building Code
- Refer to Hydraulic engineers drawings for building plumbing beyond that shown including down pipe sizes.
- All pipes shall be SN16 grade unless otherwise stated
- Drainlayer shall locate and confirm connection invert before starting building works.
- Plans to be read in conjunction with Hydraulic Engineers
   and differences shall clarified be before contractor starts
- All chamber lids shall have a minimum 200mm maximu 300 throat to provide sufficient cover for landscape and pavement over the top.





ASHBOURNE
RETIREMENT VILLAGE
MATAMATA
FOR
UNITY DEVELOPMENT LTD

PROPOSED
STORMWATER STANDARD
DETAIL

Project no.	no. J00606				
Scale	1:1000@A3				
Cad file	C4800 - SW SD DETAI	C4800 - SW SD DETAILS.DWG			
Drawing no.	C4800	Rev	В		



DATUM 64.00m

EXISTING LEVELS

DESIGN LEVELS

CUT/FILL

CHAINAGE

DISTRICT STORY

DOWN 10.0513m³/s

D = 0.156m

V = 0.71m/s

V x D = 0.11< 0.3 OK

EXISTING LEVELS

SOME SERVING

SOME

PV - OLF CROSS-SECTION-A SCALE: HORI 1:1000 VERT 1:1000

> 100Yr - 0.33m³/s D = 0.205m V = 0.614m/s V x D = 0.13< 0.3 OK

DATUM 64.00m				
EXISTING LEVELS				
DESIGN LEVELS	67.15	: 이	66.94	71 29
CUT/FILL	0.00	0.00	0.00	000
CHAINAGE	0.00	4.00	8.00	11 84

PV - OLF CROSS-SECTION C SCALE: HORI 1:1000 VERT 1:1000

> 100Yr - 0.205m³/s D = 0.125m V = 0.536m/s V x D = 0.067< 0.3 OK

DATUM 64.00m					
EXISTING LEVELS					
DESIGN LEVELS	67.24	67.09	67.01	67.09	67.20
CUT/FILL	0.00	0.00	0.00	0.00	0.00
CHAINAGE	0.00	4.00	8.00	12.00	15.62

PV - OLF-CROSS-SECTION-E SCALE: HORI 1:1000 VERT 1:1000 DATUM 64.00m

EXISTING LEVELS

DESIGN LEVELS

CUT/FILL

CUT/FILL

DESIGN LEVELS

CUT/FILL

CUT/FILL

DESIGN LEVELS

DESIGN LEV

PV - OLF -CROSS-SECTION-B SCALE: HORI 1:1000 VERT 1:1000

> 100Yr - 0.635m³/s D = 0.179m V = 0.679m/s V x D = 0.12< 0.3 OK

				, and the second	
DATUM 64.00m					
EXISTING LEVELS					
DESIGN LEVELS	67.58	67.39	67.31	67.33	67.43
CUT/FILL	0.00	0.00	0.00	0.00	0.00
CHAINAGE	0.00	4.00	8.00	12.00	15.53

PV - OLF-CROSS-SECTION-D SCALE: HORI 1:1000 VERT 1:1000

> 100Yr - 0.505m<sup>3</sup>/s D = 0.128m V = 0.705m/s V x D = 0.09< 0.3 OK

DATUM 64.00m					
EXISTING LEVELS					
DESIGN LEVELS	67.17	67.06	86.99	66.99	67.23
CUT/FILL	0.00	0.00	0.00	0.00	0.00
CHAINAGE	0.00	4.00	8.00	12.00	12.99

PV - OLF-CROSS-SECTION-F SCALE: HORI 1:1000 VERT 1:1000 Not

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Α		FOR CONSENT		DP	04/25	
Rev	Desc	ription		Ву	Date	
		Ву	Date			
Surve	y	MAVEN	10/2024			
Design		KQ	12/2024			
Drawn		DP	04/20	04/2025		
Check	ked	SB	12/20	24		



ASHBOURNE
RETIREMENT VILLAGE
MATAMATA
FOR
UNITY DEVELOPMENT LTD

Title

PROPOSED
OVERLAND FLOW
CROSS SECTION (1 OF 3)

Project no.	J00606						
Scale	AS SHOWN						
Cad file	C4900 - SW OVERLAND FLOW PATH						
Drawing no.	C4901	Rev	Α				

DATUM 64.00m

EXISTING LEVELS

DESIGN LEVELS

CUT/FILL

CHAINAGE

DO 0.335m³/s

D = 0.191m

V = 0.696m/s

V x D = 0.132< 0.3 OK

DATUM 64.00m

EXISTING LEVELS

CUT/FILL

CHAINAGE

DESIGN LEVELS

CHAINAGE

PV - OLF-CROSS-SECTION-G SCALE: HORI 1:1000 VERT 1:1000

> 100Yr - 0.371m³/s D = 0.141m V = 0.635m/s V x D = 0.089< 0.3 OK

		V X D = 0.089< 0.3 OK				
DATUM 64.00m						
EXISTING LEVELS						
DESIGN LEVELS	66.97	06.99	66.81	67.05		
CUT/FILL	0.00	0.00	0.00	0.00		
CHAINAGE	0.00	4.00	8.00	11.98		

PV - OLF-CROSS-SECTION-I SCALE: HORI 1:1000 VERT 1:1000

> 100Yr - 0.330m<sup>3</sup>/s D = 0.142m V = 0.604m/s V x D = 0.085< 0.3 OK

DATUM 64.00m					
EXISTING LEVELS					
DESIGN LEVELS	62.89	67.79	67.71	67.83	67.97
CUT/FILL	0.00	00.0	0.00	00.0	0.00
CHAINAGE	0.00	4.00	8.00	12.00	12.91

PV - OLF-CROSS-SECTION-K SCALE: HORI 1:1000 VERT 1:1000 100Yr - 1.24m³/s D = 0.171m V = 1.132m/s V x D = 0.193< 0.3 OK

	1			
DATUM 64.00m				
EXISTING LEVELS				
DESIGN LEVELS	67.07	66.81	66.89	
CUT/FILL	0.00	0.00	0.00	
CHAINAGE	0.00	4.00	8.00	

PV - OLF-CROSS-SECTION-H SCALE: HORI 1:1000 VERT 1:1000

> 100Yr - 0.270m³/s D = 0.133m V = 0.507m/s V x D = 0.067< 0.3 OK

DATUM 64.00m						
EXISTING LEVELS						
DESIGN LEVELS	67.87		69.79	67.67	72.79	67.82
CUT/FILL	0.00	00.0	00.0	0.00	00.0	0.00
CHAINAGE	0.00	4.00	8.00	12.00	16.00	18.06

PV - OLF-CROSS-SECTION-J SCALE: HORI 1:1000 VERT 1:1000

> 100Yr - 0.250m³/s D = 0.139m V = 0.501m/s V x D = 0.069< 0.3 OK

		V X D = 0.003 \ 0.3 OK			
DATUM 64.00m					
EXISTING LEVELS					
DESIGN LEVELS	67.86	67.72	67.65	67.65	67.83
CUT/FILL	0.00	0.00	0.00	0.00	0.00
CHAINAGE	0.00	4.00	8.00	12.00	15.98

PV - OLF-CROSS-SECTION-L SCALE: HORI 1:1000 VERT 1:1000

## Note

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services that may be affected by his operations.

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Α		FOR CONSENT		DP	04/25
Rev	Desc	ription		Ву	Date
		Ву	Date		
Surve	у	MAVEN	10/20	24	
Design		n KQ		11/2024	
Orawn		DP	04/20	24	
Check	red	SB	12/20	24	



ASHBOURNE
RETIREMENT VILLAGE
MATAMATA
FOR
UNITY DEVELOPMENT LTD

Title

PROPOSED
OVERLAND FLOW
CROSS SECTION (2 OF 3)

	,		,	
Project no.	J00606			
Scale	AS SHOWN			
Cad file	C4900 - SW OVERLAND FLOW PATH -			DWG
Drawing no.	C4902	Rev	В	

100Yr - 0.170m<sup>3</sup>/s D = 0.097m V = 0.473m/s V x D = 0.045< 0.3 OK

8.00 0.00 67.80 8.00 0.00 67.65 12.00 0.00 67.63

> PV - OLF-CROSS SECTION-M SCALE: HORI 1:1000 VERT 1:1000

100Yr - 0.320m³/s D = 0.107m V = 0.440m/s V x D = 0.047< 0.3 OK

DATUM 64.00m					
EXISTING LEVELS					
DESIGN LEVELS	67.80	67.56	67.56	67.65	67.85
CUT/FILL	0.00	0.00	0.00	0.00	0.00
CHAINAGE	0.00	4.00	8.00	12.00	14.65

PV - OLF-CROSS SECTION-N SCALE: HORI 1:1000 VERT 1:1000

100Yr - 0.360m<sup>3</sup>/s D = 0.149m V = 0.476m/s V x D = 0.070< 0.3 OK

DATUM 64.00m						
EXISTING LEVELS						
DESIGN LEVELS	67.65	67.55	67.57	67.50	67.64	67.72
CUT/FILL	0.00	0.00	00.0	00.0	0.00	0.00
CHAINAGE	0.00	4.00	8.00	12.00	16.00	18.55

PV - OLF-CROSS SECTION-O SCALE: HORI 1:1000 VERT 1:1000

## Note

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  5. Pipe bedding: 0 10% granular bedding, 10 -
- Pipe bedding: 0 10% granular bedding,10 -20% weak concrete bedding.greater than 20% weak concrete bedding (7mpa plus anti scour blocks at 6m crs).
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Α		FOR COSENT		DP	01/25		
Rev	Desc	ription		Ву	Date		
		Ву	Date	Date			
Survey		MAVEN	10/2024				
Design		KQ	11/2024				
Drawn		DP	04/2024				
Chec	kod	SB	12/2024				



ASHBOURNE
RETIREMENT VILLAGE
MATAMATA
FOR
UNITY DEVELOPMENT LTD

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PROPOSED
OVERLAND FLOW
CROSS SECTION (3 OF 3)

	Project no.	J00606			
	Scale	AS SHOWN			
	Cad file	C4900 - SW OVERLAND FLOW PATH -			
	Drawing no.	C4903	Rev	Α	

**FOR CONSENT** 

DATUM 64.00m

EXISTING LEVELS

DESIGN LEVELS

CUT/FILL

CHAINAGE