



CUT FILL DEPTH RANGE				Colour
Lower_value	Upper_value			
-99999	to	-14	m	Red
-14	to	-12	m	
12	to	-10	m	
-10	to	-8	m	
-8	to	-6	m	Pink
-6	to	-4	m	
-4	to	-2	m	
-2	to	0.00	m	
0.00	to	2	m	Light Green
2	to	4	m	
4	to	6	m	
6	to	8	m	
8	to	10	m	Green
10	to	12	m	
12	to	14	m	
14	to	9999	m	

TOTAL EW VOLUME	
TOTAL CUT	-317607.886m³
TOTAL FILL	88217.219m³
TOTAL BALANCE	-229390.668m³
ie excess of fill over cut	

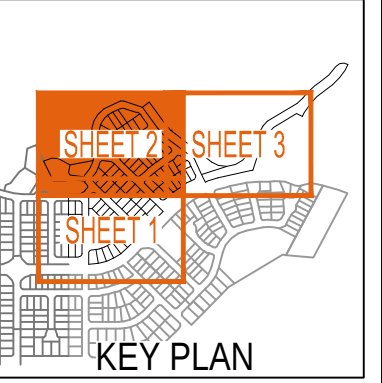
LEGEND	
	EXTENT OF WORKS BOUNDARY
	FUTURE STAGE BOUNDARY
	EXISTING STAGES EXTENT OF WORKS BOUNDARY
	5.0 PROPOSED SURFACE CONTOURS
	5.0 FUTURE STAGES SURFACE CONTOURS
	5.0 EXISTING SURFACE CONTOURS
	EARTHWORKS BATTER
	CATCH DRAIN
	BUILDING PAD AND LEVEL
	BUILDING PAD LEVELS IN FUTURE STAGE
	swd EXISTING STORMWATER DRAINAGE
	s EXISTING SEWERAGE RETICULATION
	w EXISTING WATER RETICULATION
	e EXISTING UNDERGROUND ELECTRICAL RETICULATION
	oh EXISTING OVERHEAD ELECTRICAL RETICULATION
	CONCRETE SLEEPER RETAINING WALL. REFER DRG-CV-0161 FOR DETAILS.
	TIERED CONCRETE SLEEPER. REFER DRG-CV-0161 FOR DETAILS.
	0.2m - 1.5m SINGLE TIER FRONTAGE RETAINING WALL - RENDERED BLOCKWORK
	>1.5m FRONTAGE RETAINING WALL - RENDERED BLOCKWORK
	GROUTED ROCK RETAINING WALL. REFER DRG-CV-0162 FOR DETAILS.
	BLOCKWORK RETAINING WALL TO ENERGEX DETAILS.
	BOULDER RETAINING WALL. REFER TO DRG-CV-0162 FOR DETAILS.
	TW TOP OF WALL LEVEL
	BW BOTTOM OF WALL LEVEL
	RL SPOT LEVEL
	LOT REQUIRING LANDSCAPE PLANTER. REFER DRG-CV-0163 FOR DETAILS.
	INDICATIVE 1% AEP FLOOD LINE BASED ON MASTERPLAN MODELLING BY DESIGNFLOW
	INDICATIVE 2% AEP FLOOD LINE BASED ON MASTERPLAN MODELLING BY DESIGNFLOW
	INDICATIVE 20% AEP FLOOD LINE BASED ON MASTERPLAN MODELLING BY DESIGNFLOW
	EXISTING TREES

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

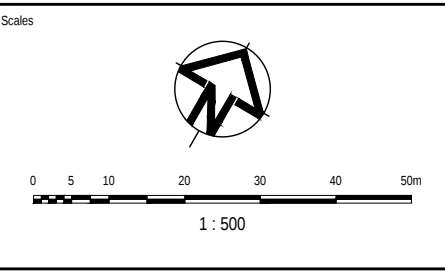
Application No: MIN/2026/240

Dated: 1 June 2026

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



Issue	Description	DR	CH	VE	Date
04	WALL LEVELS AND BATTERS UPDATED, BIO SPILLWAY UPDATED	B.F.	B.F.	M.W.	09.07.25
03	COUNCIL RFI AMENDMENTS	B.M.	E.A.	M.W.	21.10.24
02	COUNCIL RFI AMENDMENTS	B.M.	E.A.	M.W.	14.08.24
01	ORIGINAL ISSUE	B.M.	E.A.	M.W.	29.08.23



Surveyor

Client

FOR APPROVAL CONSTRUCTION SUBJECT TO APPROVAL			
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Original Issue Signatures		Original Size	
Drawn	E. PON	Height	A1
Designed	E. ANLACAN	Datum	AHD
Project Manager	M. WENZEL	Grid	LOCAL
Verified	M. WENZEL	RPEO 16855	

Project

SKYRIDGE STAGE 13
INTERNAL WORKS

Title

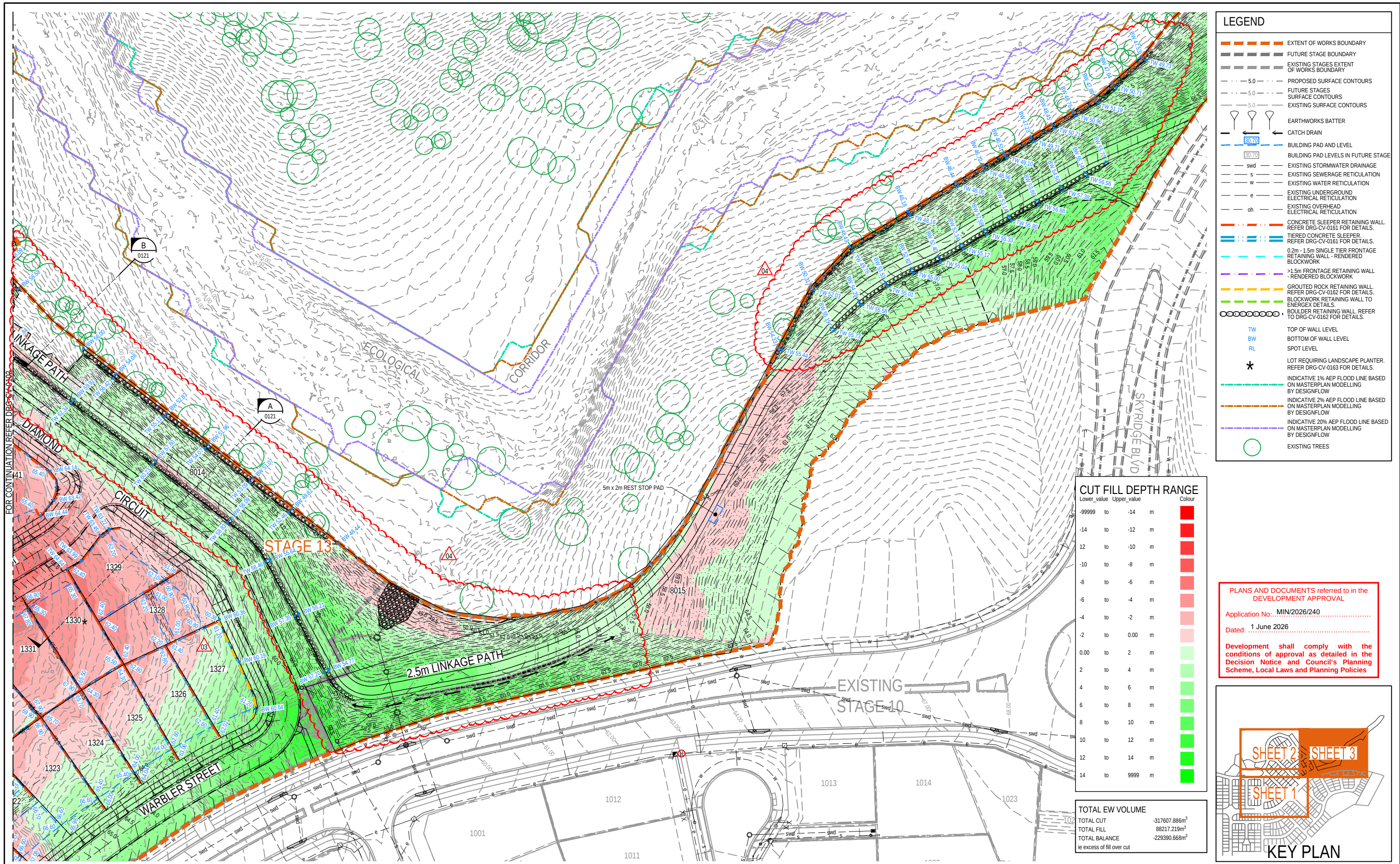
BULK EARTHWORKS
LAYOUT PLAN SHEET 2

Arcadis Australia Pacific Pty Limited
Level 7, Seabank Building, 12-14 Marine Parade
SOUTHPORT QLD 4215
ABN 76 104 485 289
Tel No: +61 7 5503 4800
www.arcadis.com.au

Project Number 30062655

Issue 04

SRE-AAP-DD-P0313-DRG-CV-0102



LEGEND

--- --

EXTENT OF WORKS BOUNDARY

FUTURE STAGE BOUNDARY

EXISTING STAGES EXTENT OF WORKS BOUNDARY

5.0

PROPOSED SURFACE CONTOURS

5.0

FUTURE STAGES SURFACE CONTOURS

5.0EARTHWORKS BATTERCATCH DRAIN

50.70

BUILDING PAD AND LEVEL

50.70

BUILDING PAD LEVELS IN FUTURE STAGE

SWD

s

w

e

ehCONCRETE SLEEPER RETAINING WALL. REFER DRG-CV-0161 FOR DETAILS.TIERED CONCRETE SLEEPER. REFER DRG-CV-0161 FOR DETAILS.0.2m - 1.5m SINGLE TIER FRONTAGE RETAINING WALL - RENDERED BLOCKWORK>1.5m FRONTAGE RETAINING WALL - RENDERED BLOCKWORKGROUTED ROCK RETAINING WALL. REFER DRG-CV-0162 FOR DETAILS.BLOCKWORK RETAINING WALL TO ENERGEX DETAILS.BOULDER RETAINING WALL. REFER TO DRG-CV-0162 FOR DETAILS.

TW

TOP OF WALL LEVEL

BW

BOTTOM OF WALL LEVEL

RL

SPOT LEVEL

*

LOT REQUIRING LANDSCAPE PLANTER. REFER DRG-CV-0163 FOR DETAILS.INDICATIVE 1% AEP FLOOD LINE BASED ON MASTERPLAN MODELLING BY DESIGNFLOWINDICATIVE 2% AEP FLOOD LINE BASED ON MASTERPLAN MODELLING BY DESIGNFLOWINDICATIVE 20% AEP FLOOD LINE BASED ON MASTERPLAN MODELLING BY DESIGNFLOWEXISTING TREES

CUT FILL DEPTH RANGE			Colour
Lower_value	Upper_value		
-99999	to	-14	m
-14	to	-12	m
12	to	-10	m
-10	to	-8	m
-8	to	-6	m
-6	to	-4	m
-4	to	-2	m
-2	to	0.00	m
0.00	to	2	m
2	to	4	m
4	to	6	m
6	to	8	m
8	to	10	m
10	to	12	m
12	to	14	m
14	to	9999	m

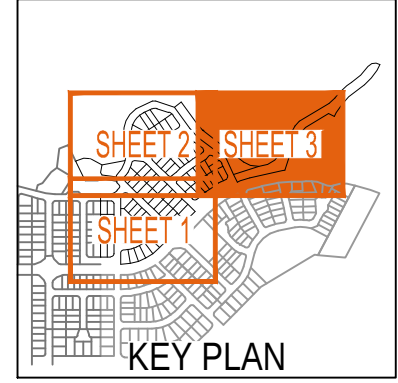
TOTAL EW VOLUME	
TOTAL CUT	-317607.886m ³
TOTAL FILL	88217.219m ³
TOTAL BALANCE	-229390.668m ³
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PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

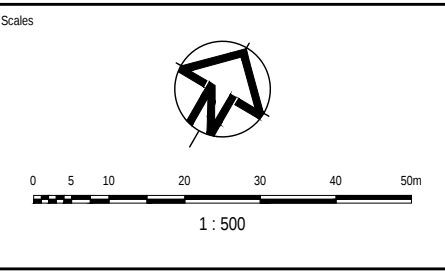
Application No: MIN/2026/240

Dated: 1 June 2026

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Issue	Description	DR	CH	VE	Date
04	WALL LEVELS AND BATTERS UPDATED FOR WALL CONSTRUCTION	B.F.	B.F.	M.W.	09.07.25
03	COUNCIL RFI AMENDMENTS	B.M.	E.A.	M.W.	21.10.24
02	COUNCIL RFI AMENDMENTS	B.M.	E.A.	M.W.	14.08.24
01	ORIGINAL ISSUE	B.M.	E.A.	M.W.	29.08.23



Surveyor

Client

Status

FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures

Drawn

E. PON

Original Size

A1

Designed

E. ANLACAN

Height Datum

AHD

Project Manager

M. WENZEL

Grid

LOCAL

Verified

M. WENZEL

LOCAL

Project

SKYRIDGE STAGE 13
INTERNAL WORKS

Title

BULK EARTHWORKS
LAYOUT PLAN SHEET 3

Arcadis Australia Pacific Pty Limited
Level 7, Seabank Building, 12-14 Marine Parade
SOUTHPORT QLD 4215
ABN 76 104 485 289
Tel No: +61 7 5503 4800
www.arcadis.com.au

Project Number

30062655

Issue

04

SRE-AAP-DD-P0313-DRG-CV-0103

CONSTRUCTION AND DESIGN LOADS ROADWORKS NOTES

1. ALL STORMWATER DRAINAGE PIPES ARE TO BE S.R.C. CLASS 3' UNLESS NOTED OTHERWISE.
2. IF DIFFERENT COMPACTION EQUIPMENT IS TO BE USED THAN THOSE IDENTIFIED BY THE CONTRACTOR SHALL ISSUE EQUIVALENT PIPE CLASSES TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO CONSTRUCTION.
3. PIPE CLASSES HAVE BEEN DESIGNED FOR A MINIMUM CONSTRUCTION TRENCH TYPE HS2.
4. THE FOLLOWING CONSTRUCTION LOADS HAVE BEEN ALLOWED FOR AT THE NOMINATED MINIMUM COVER. THESE LOADS SHALL NOT BE EXCEEDED WITHOUT THE APPROVAL OF THE SUPERINTENDENT:-
 - NAASRA A14 AXLE - 650mm
 - COMPACTOR WHEEL-15t EXCAVATOR - 700mm
 - COMPACTOR WHEEL-25t EXCAVATOR - 1050mm
 - VIBRATORY ROLLER 10T - 850mm
 - VIBRATORY RAMMER (WACKER) - 450mm

ROADWORKS NOTES

1. ALL DIMENSIONS ON THE DRAWINGS ARE IN METRES UNLESS SHOWN OTHERWISE.
2. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT GOLD COAST CITY COUNCIL SPECIFICATIONS AND STANDARD DRAWINGS AND PROJECT DRAWINGS.
3. THE CONTRACTOR SHALL VERIFY THE LOCATION AND RELATIVE LEVELS OF EXISTING SERVICES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS REGARDING CONSTRUCTION ADJACENT TO EXISTING SERVICES. CONTRACTOR TO PROTECT IN PLACE EXISTING SERVICES. ANY DAMAGE TO EXISTING SERVICES TO BE REPAIRED AT CONTRACTORS EXPENSE.
4. THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS PLANS, SPECIFICATIONS AND OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED BY THE SUPERINTENDENT DURING THE COURSE OF THE CONTRACT.
5. THE CONTRACTOR SHALL ERECT TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE APPROVED TRAFFIC MANAGEMENT PLAN.
6. THE CONTRACTOR SHALL VERIFY OFFSET PEG LOCATIONS AND BENCH MARK LEVELS AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCY BEFORE COMMENCEMENT OF CONSTRUCTION.
7. THE ROAD PAVEMENT ADOPTED WILL BE DETERMINED BY THE ENGINEER AND APPROVED BY GOLD COAST CITY COUNCIL. THIS PAVEMENT SHALL BE BASED ON SOIL TEST TAKEN IN ACCORDANCE WITH COUNCIL STANDARDS. ANY VARIATIONS TO THE NOMINAL PAVEMENT THICKNESS WILL BE PAID AT THE RATES SHOWN IN THE PRICED SCHEDULE OF RATES.
8. SIDE DRAINS SHALL BE PROVIDED UNDER ALL KERBS AS PER GOLD COAST CITY COUNCIL STANDARDS.
9. MITRE DRAINS LOCATION AND EXTENTS SHALL BE CONFIRMED WITH THE SUPERINTENDENT ON SITE. THE CONTRACTOR SHALL ENSURE THAT ALL SUBSOIL AND SIDE DRAINS ARE FREE DRAINING AND CONNECTED TO A SUITABLE OUTLET STRUCTURE.
10. CONTRACTOR TO PROVIDE TACTILE GROUND SURFACE INDICATORS TO ALL KERB RAMPS AS PER IPWEA STD DRG RS-092.
11. REFER TO IPWEA STD DRG RS-080 FOR STANDARD KERB PROFILES.
12. CONTRACTOR TO CONFIRM ALL STORMWATER OUTLET LEVELS PRIOR TO CONSTRUCTION.
13. ALL EXISTING SURFACE STRUCTURES IMPACTED BY WORKS ARE TO BE ADJUSTED TO SUIT FINISHED SURFACE LEVELS.

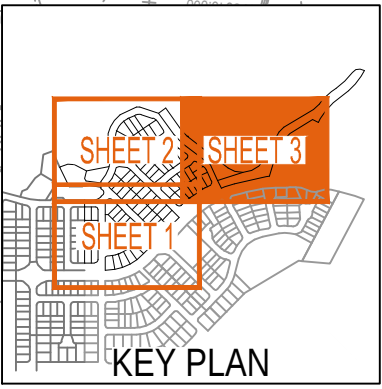
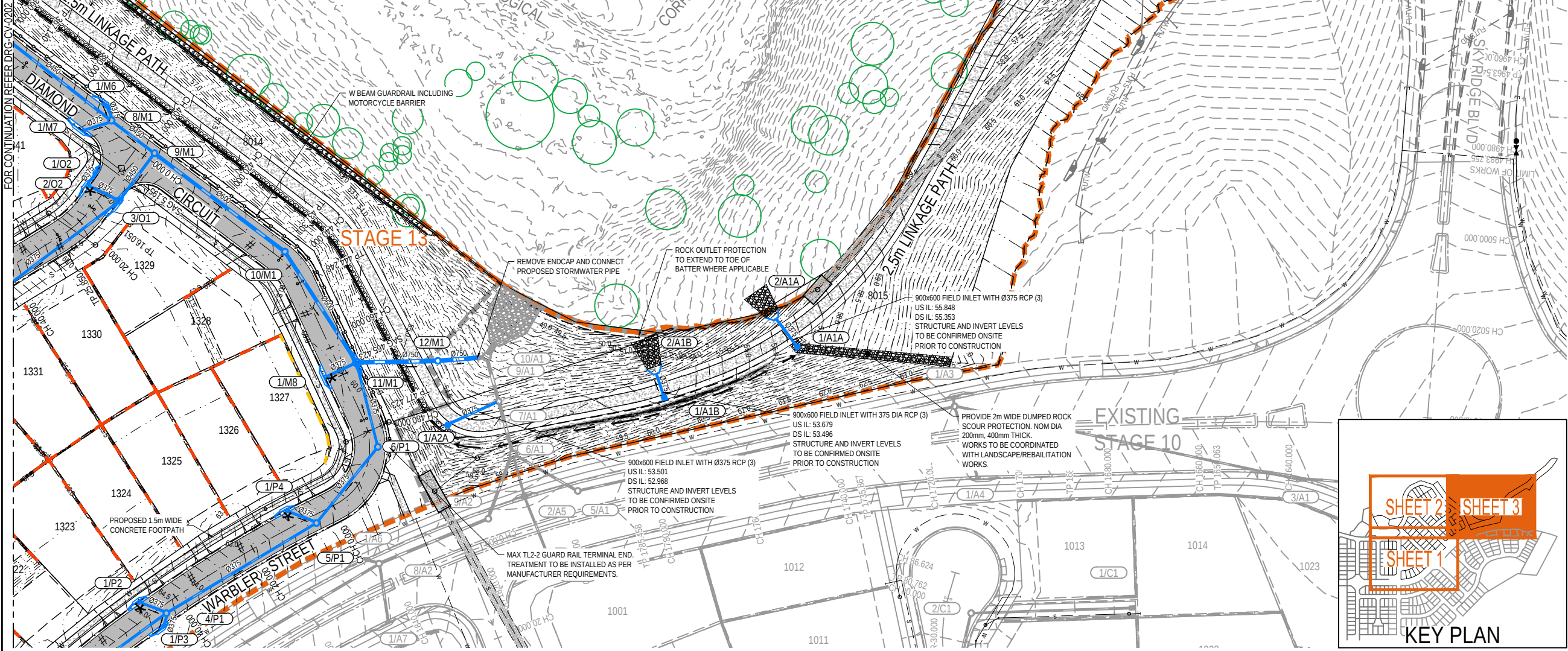
STORMWATER DRAINAGE NOTES

1. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT GOLD COAST CITY COUNCIL SPECIFICATIONS & STANDARD DRAWINGS & ARCADIS DRAWINGS.
2. CONTRACTOR IS TO VERIFY ALL FINISHED SURFACE LEVELS OF PROPOSED ROOFWATER PITS BEFORE CONSTRUCTING TO FINISHED LEVELS.
3. ROOFWATER DRAINAGE LINES SHALL BE Ø375mm RCP (2) MIN. & TO BE LAID 1.5M FROM THE PROPERTY BOUNDARY UNLESS NOTED OTHERWISE. ROOFWATER PITS TO BE AS PER GOLD COAST CITY COUNCIL STANDARDS.
4. ALL ROOFWATER CONNECTIONS ARE TO EXTEND 1.0M BEYOND THE SEWER LINE UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT.
5. KERB ADAPTORS SHALL BE PROVIDED 0.5M FROM THE SIDE PROPERTY BOUNDARY.
6. ALL ROOFWATER DRAINAGE CONNECTIONS THAT CROSS UNDER CONCRETE FOOTPATHS ARE TO HAVE A TWIN 100mm x 75mm RHS CONSTRUCTED FROM THE KERB ADAPTOR TO THE PROPERTY BOUNDARY PRIOR TO CONSTRUCTING THE PATH. ROOFWATER CONNECTIONS ARE NOT TO EXCEED 1.0m IN DEPTH.
7. CONTRACTOR TO CONFIRM ALL STORMWATER OUTLET LEVELS PRIOR TO CONSTRUCTION.
8. Ø150 RWD CONNECTION TO BE PROVIDED TO INTER-ALLOTMENT STORMWATER STRUCTURES.
9. ROOFWATER CONNECTIONS TO BE EXTENDED PAST FRONTAGE OR SIDE RETAINING WALLS AND BROUGHT TO SURFACE WHERE APPLICABLE

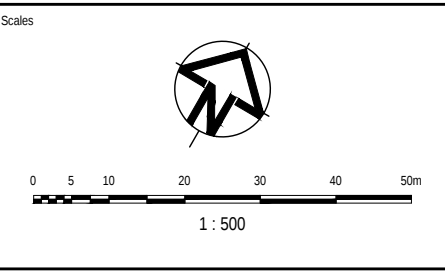
LEGEND

- EXTENT OF WORKS BOUNDARY
- FUTURE STAGE BOUNDARY
- EXISTING STAGE EXTENT OF WORKS BOUNDARY
- EXISTING CONTOURS (0.50m INTERVALS)
- DESIGN CONTOURS (0.25m INTERVALS)
- FUTURE STAGES SURFACE CONTOURS
- PROPOSED B1 TYPE BARRIER KERB AND CHANNEL AS PER IPWEA STD DRG RS-080
- PROPOSED B2 TYPE BARRIER KERB AS PER IPWEA STD DRG RS-080
- PROPOSED SMS TYPE SEMI-MOUNTABLE KERB AS PER IPWEA STD DRG RS-080
- PROPOSED B7 TYPE BARRIER KERB ONLY AS PER IPWEA STD DRG RS-080
- PROPOSED M6 TYPE MOUNTABLE KERB AS PER IPWEA STD DRG RS-080
- EDGE OF BITUMEN
- PROPOSED AC SURFACE
- PROPOSED CONCRETE INFILL MEDIAN. REFER LANDSCAPE ARCHITECT DRGS FOR DETAILS.
- PROPOSED LANDSCAPE INFILL MEDIAN. REFER LANDSCAPE ARCHITECT DRGS FOR DETAILS.
- CONCRETE FOOTPATH AS PER IPWEA STD DRG RS-065. WIDTH VARIES.
- PROPOSED CONCRETE VEHICLE CROSSOVER AS PER IPWEA STD DRG RS-051
- PROPOSED STORMWATER DRAINAGE STRUCTURE IDENTIFIER
- EXISTING STORMWATER DRAINAGE STRUCTURE IDENTIFIER
- FUTURE STORMWATER DRAINAGE STRUCTURE IDENTIFIER
- PROPOSED STORMWATER RETICULATION AND STRUCTURE
- EXISTING STORMWATER RETICULATION AND STRUCTURE
- FUTSWD - FUTURE STORMWATER DRAINAGE
- # - 1000 uPVC CLASS SN8 ROOFWATER OUTLET PIPE TO KERB AS PER IPWEA STD DRG RS-081
- * - 1500 uPVC CLASS SN8 ROOFWATER OUTLET PIPE TO NEAREST STORMWATER DRAINAGE STRUCTURE
- INDICATIVE DRIVEWAY LOCATION
- TYPE A 750 WIDE MEDIAN ISLAND. REFER DRG 07-215 FOR DETAILS.
- TYPE B 500 WIDE MEDIAN ISLAND. REFER DRG 07-215 FOR DETAILS.
- CONCRETE SLEEPER RETAINING WALL. REFER DRG-CV-0161 FOR DETAILS.
- TIERED CONCRETE SLEEPER. REFER DRG-CV-0161 FOR DETAILS.
- 0.2m - 1.5m SINGLE TIER FRONTAGE RETAINING WALL - RENDERED BLOCKWORK
- >1.5m FRONTAGE RETAINING WALL - RENDERED BLOCKWORK
- GROUTED ROCK RETAINING WALL. REFER DRG-CV-0162 FOR DETAILS.
- BLOCKWORK RETAINING WALL TO ENERGEX DETAILS.
- BOULDER RETAINING WALL. REFER TO DRG-CV-0162 FOR DETAILS.
- FUTURE CONCRETE SLEEPER RETAINING WALL
- EXISTING CONCRETE SLEEPER RETAINING WALL
- S - PROPOSED SEWER RETICULATION
- W - PROPOSED WATER RETICULATION
- w - EXISTING WATER RETICULATION
- s - EXISTING SEWERAGE RETICULATION
- e - EXISTING UNDERGROUND ELECTRICAL RETICULATION
- dh - EXISTING OVERHEAD ELECTRICAL RETICULATION
- FUTS - FUTURE SEWER RETICULATION
- FUTW - FUTURE WATER RETICULATION
- EXISTING TREES

FOR CONTINUATION REFER DRG-CV-0202



Issue	Description	DR	CH	VE	Date
06	ADDITIONAL PIT 4/A1C ADDED OVER EXISTING PIPE AT TOP OF WALL	B.F.	B.F.	M.W.	18.07.25
05	PIT AND SWD LINE A1D ADDED AT TOP OF RETAINING WALL	B.F.	B.F.	M.W.	04.07.25
04	LINE M1 SWD OUTLET CONFIGURATION AND BATTER GRADING REVISED	B.F.	B.F.	M.W.	04.06.25
03	COUNCIL RFI AMENDMENTS	B.M.	E.A.	M.W.	21.10.24
02	COUNCIL RFI AMENDMENTS	B.M.	E.A.	M.W.	14.08.24
01	ORIGINAL ISSUE	B.M.	E.A.	M.W.	29.08.23



FOR APPROVAL CONSTRUCTION SUBJECT TO APPROVAL			
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Original Issue Signatures		Original Size	
Drawn	E. PON	Original Size	A1
Designed	E. ANLACAN	Height Datum	AHD
Project Manager	M. WENZEL	Grid	LOCAL
Verified	M. WENZEL	RPEO 16955	

Project	SKYRIDGE STAGE 13 INTERNAL WORKS
Title	CIVIL WORKS PLAN SHEET 3

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ABN 76 104 485 289
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www.arcadis.com.au

Project Number 30062655

Issue 06

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

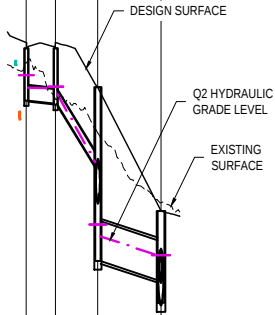
CO-ORDINATES	32461.504E 99101.183N 32457.568E 99107.842N 32448.400E 99114.098N 32437.995E 99127.118N
STRUCTURE NAME	1/S8 2/S8 3/S8 11/R1
STRUCTURE DESCRIPTION	GULLY PIT (SAG) L.I.L: 3.6m Linel. BK&C GULLY PIT (SAG) L.I.L: 3.6m Linel. BK&C MANHOLE 1500mm DIA REFER TO PIT DETAILS MANHOLE 1800mm DIA REFER TO PIT DETAILS

LEGEND

Q2 HYDRAULIC GRADE LEVEL

NOTE:

- ALL STRUCTURES DEEPER THAN 3m TO BE STRUCTURALLY DESIGNED AND CERTIFIED BY CONTRACTOR.
- REFER TO SEWER LONGITUDINAL SECTION FOR LOCATION OF BRIDGING SLABS WHERE SEWER PASSES UNDER STORMWATER PIPES >600Ø.
- ALL EXISTING AND DESIGN LEVELS TO BE CONFIRMED ONSITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.



PIPE SIZE (mm)	375	375	1050
PIPE CLASS	3	3	3
PIPE GRADE (%)	1.00%	14.66%	3.00%
PIPE SLOPE (1 in X)	100.0	6.8	33.3
FULL PIPE FLOW VELOCITY (m/s)	0.92	1.29	1.52
PART PIPE FLOW VELOCITY (m/s)	1.65	4.82	4.68
DATUM RL	56.000		
HYDRAULIC GRADE LEVEL	72.471 72.141 72.121 72.164	71.970 70.168 68.519	68.204 67.701 67.657
PIPE FLOW (cumecs)	0.102	0.142	1.319
PIPE CAPACITY AT GRADE (cumecs)	0.175	0.672	4.732
DEPTH TO INVERT	1.383	1.461	1.823
INVERT LEVEL OF DRAIN	71.799	71.722	67.051
DESIGN (& EXISTING) SURFACE LEVEL	73.183 (72.793)	73.183 (71.836)	72.143 (70.942)
CHAINAGES	0.000 7.735	11.196 18.931	16.666 35.597

LINE

S8

S9

U1

A1A

A1B

A1C

A2A

A1D

STRUCTURE NAME	1/S9 2/S9 3/S9 4/S9 12/S1
STRUCTURE DESCRIPTION	FIELD INLET 600x600 FLUSH GRATE OVER 1050 CHAMBER FIELD INLET 600x600 FLUSH GRATE OVER 1050 CHAMBER FIELD INLET 600x600 FLUSH GRATE OVER 1050 CHAMBER FIELD INLET 600x600 FLUSH GRATE OVER 1050 CHAMBER MANHOLE 1050mm DIA
PIPE SIZE (mm)	225 225 225 375
PIPE CLASS	PVC PVC PVC 3
PIPE GRADE (%)	8.60% 6.77% 6.47% 5.10%
PIPE SLOPE (1 in X)	11.6 14.8 15.5 19.6
FULL PIPE FLOW VELOCITY (m/s)	0.40 0.78 1.16 0.55
PART PIPE FLOW VELOCITY (m/s)	2.23 2.48 2.72 2.59
DATUM RL	70.000
HYDRAULIC GRADE LEVEL	88.536 88.479 87.053 86.315 86.231 85.257 85.149 84.099 81.864 81.816 81.504 81.548 81.285
PIPE FLOW (cumecs)	0.016 0.031 0.046 0.061
PIPE CAPACITY AT GRADE (cumecs)	0.132 0.117 0.114 0.396
DEPTH TO INVERT	1.624 2.816 1.356 1.386 1.826 4.188 1.778
INVERT LEVEL OF DRAIN	88.376 87.000 86.084 85.000 84.970 81.637 81.000
DESIGN (& EXISTING) SURFACE LEVEL	90.000 (87.085) 88.900 (84.189) 86.356 (82.063) 85.826 (80.206) 82.778 (78.784)
CHAINAGES	0.000 16.000 18.000 16.000 32.000 15.000 12.500 59.500

STRUCTURE NAME	14/U1 3/S8
STRUCTURE DESCRIPTION	MANHOLE 1500mm DIA FUTURE STAGE MANHOLE 1500mm DIA REFER TO PIT DETAILS
PIPE SIZE (mm)	1050 3
PIPE CLASS	3
PIPE GRADE (%)	3.00%
PIPE SLOPE (1 in X)	33.3
FULL PIPE FLOW VELOCITY (m/s)	1.39
PART PIPE FLOW VELOCITY (m/s)	4.57
DATUM RL	57.000
HYDRAULIC GRADE LEVEL	70.317 70.318 70.243 69.496 68.519 68.204
PIPE FLOW (cumecs)	1.207
PIPE CAPACITY AT GRADE (cumecs)	4.732
DEPTH TO INVERT	3.729 3.759 3.008 4.592
INVERT LEVEL OF DRAIN	69.650 69.620 69.134 67.551
DESIGN (& EXISTING) SURFACE LEVEL	73.379 (73.873) 72.143 (70.942)
CHAINAGES	315.956 16.192 332.148

STRUCTURE NAME	1/A1A 2/A1A
STRUCTURE DESCRIPTION	FIELD INLET 600x900 FLUSH GRATE HEADWALL
PIPE SIZE (mm)	375 3
PIPE CLASS	3
PIPE GRADE (%)	6.01%
PIPE SLOPE (1 in X)	16.6
FULL PIPE FLOW VELOCITY (m/s)	0.13
PART PIPE FLOW VELOCITY (m/s)	1.82
DATUM RL	42.000
HYDRAULIC GRADE LEVEL	55.943 55.934 55.400
PIPE FLOW (cumecs)	0.015
PIPE CAPACITY AT GRADE (cumecs)	0.432
DEPTH TO INVERT	1.005 0.375 0.375
INVERT LEVEL OF DRAIN	55.848 55.353 55.353
DESIGN (& EXISTING) SURFACE LEVEL	56.354 55.728 (55.091)
CHAINAGES	0.000 8.235 (95.091)

STRUCTURE NAME	1/A1B 2/A1B
STRUCTURE DESCRIPTION	FIELD INLET 600x900 FLUSH GRATE HEADWALL
PIPE SIZE (mm)	375 3
PIPE CLASS	3
PIPE GRADE (%)	3.07%
PIPE SLOPE (1 in X)	32.5
FULL PIPE FLOW VELOCITY (m/s)	0.13
PART PIPE FLOW VELOCITY (m/s)	1.41
DATUM RL	39.000
HYDRAULIC GRADE LEVEL	53.771 53.763 53.551
PIPE FLOW (cumecs)	0.014
PIPE CAPACITY AT GRADE (cumecs)	0.309
DEPTH TO INVERT	1.028 0.375 0.375
INVERT LEVEL OF DRAIN	53.679 53.496 53.496
DESIGN (& EXISTING) SURFACE LEVEL	54.707 (51.952) 53.871 (51.771)
CHAINAGES	0.000 5.964 (51.771)

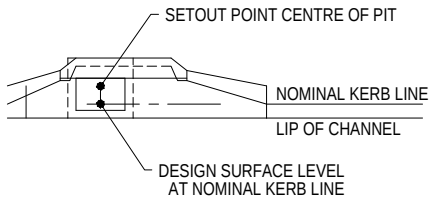
STRUCTURE NAME	1/A1C 2/A1C 3/A1C 4/A1C 5/A1C
STRUCTURE DESCRIPTION	MANHOLE 1050mm DIA FIELD INLET 600x900 FLUSH GRATE MANHOLE 1050mm DIA FIELD INLET 600x900 FLUSH GRATE HEADWALL
PIPE SIZE (mm)	375 450 450 450
PIPE CLASS	3 3 3 3
PIPE GRADE (%)	10.00% 10.80% 9.68% 6.44%
PIPE SLOPE (1 in X)	10.0 9.3 10.3 15.5
FULL PIPE FLOW VELOCITY (m/s)	0.08 1.85 0.37 3.30 0.36 3.12 1.97 4.38
PART PIPE FLOW VELOCITY (m/s)	1.85 3.30 3.12 4.38
DATUM RL	37.000
HYDRAULIC GRADE LEVEL	51.659 51.658 51.246 51.036 50.981 50.245 47.232 47.234 47.244 47.245 46.538 46.520
PIPE FLOW (cumecs)	0.009 0.060 0.057 0.313
PIPE CAPACITY AT GRADE (cumecs)	0.555 0.937 0.887 0.724
DEPTH TO INVERT	4.097 4.097 1.099 1.499 1.326 4.514 1.352 1.422 0.532 0.532
INVERT LEVEL OF DRAIN	51.592 51.213 50.813 50.169 46.981 46.220 46.150 46.068 46.068 46.068
DESIGN (& EXISTING) SURFACE LEVEL	55.689 (52.015) 52.312 (50.516) 51.495 (49.362) 47.572 (46.730) 46.600 (46.433)
CHAINAGES	0.000 3.786 5.971 9.757 7.863 17.620 1.268 18.887

STRUCTURE NAME	1/A2A 7/A1
STRUCTURE DESCRIPTION	FIELD INLET 600x900 FLUSH GRATE REFER TO PIT DETAILS MANHOLE 1050mm DIA
PIPE SIZE (mm)	375 3
PIPE CLASS	3
PIPE GRADE (%)	7.15%
PIPE SLOPE (1 in X)	14.0
FULL PIPE FLOW VELOCITY (m/s)	0.17
PART PIPE FLOW VELOCITY (m/s)	2.06
DATUM RL	37.000
HYDRAULIC GRADE LEVEL	53.911 53.897 52.951 51.937 51.370
PIPE FLOW (cumecs)	0.019
PIPE CAPACITY AT GRADE (cumecs)	0.469
DEPTH TO INVERT	0.878 1.162 3.194
INVERT LEVEL OF DRAIN	53.800 52.900 50.866
DESIGN (& EXISTING) SURFACE LEVEL	54.678 (50.622) 54.062 (47.283)
CHAINAGES	0.000 12.585 12.585

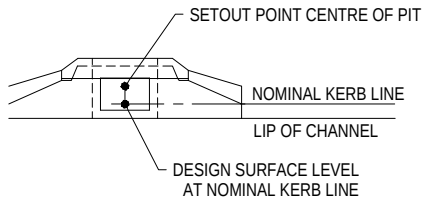
STRUCTURE NAME	1/A1D 1/A1C
STRUCTURE DESCRIPTION	FIELD INLET 600x900 FLUSH GRATE MANHOLE 1050mm DIA
PIPE SIZE (mm)	375 3
PIPE CLASS	3
PIPE GRADE (%)	1.11%
PIPE SLOPE (1 in X)	90.5
FULL PIPE FLOW VELOCITY (m/s)	0.09
PART PIPE FLOW VELOCITY (m/s)	0.88
DATUM RL	39.000
HYDRAULIC GRADE LEVEL	53.922 53.919 53.758 51.659 51.658
PIPE FLOW (cumecs)	0.010
PIPE CAPACITY AT GRADE (cumecs)	0.184
DEPTH TO INVERT	1.006 1.989 4.097
INVERT LEVEL OF DRAIN	53.850 53.700 51.592
DESIGN (& EXISTING) SURFACE LEVEL	54.856 (52.204) 55.689 (52.015)
CHAINAGES	0.000 13.571 13.571

SETOUT POINT CENTRE OF MANHOLE OR AS SHOWN ON MANHOLE DETAILS DRAWINGS

MANHOLE SETOUT POINT



ON GRADE GULLY SETOUT POINT



SAG GULLY SETOUT POINT

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

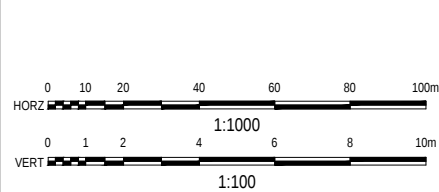
Application No: MIN/2026/240

Dated: 1 June 2026

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

Issue	Description	DR	CH	VE	Date
06	ADDITIONAL PIT 4/A1C ADDED AT SAG OVER EXISTING PIPE	B.F.	B.F.	M.W.	18.07.25
05	SWD LINE A1D ADDED AT TOP OF RETAINING WALL	B.F.	B.F.	M.W.	04.07.25
04	SWD LINE A2A UPDATED	B.F.	B.F.	M.W.	04.06.25
03	LEVELS AMENDMENTS	B.M.	M.B.	M.W.	21.10.24
02	COUNCIL RFI AMENDMENTS	B.M.	M.B.	M.W.	14.08.24
01	ORIGINAL ISSUE	B.M.	B.V.	M.W.	29.08.23

Scales



Surveyor

BENNETT • BENNETT

Client

SKYRIDGE

Status	FOR APPROVAL CONSTRUCTION SUBJECT TO APPROVAL
Original Issue Signatures	© Copyright reserved
Drawn	E. PON
Designed	B. VALENCIA
Project Manager	M. WENZEL
Verified	M. WENZEL

Project	SKYRIDGE STAGE 13 INTERNAL WORKS
Title	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 5

ARCADIS

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SOUTHPORT QLD 4215
ABN 76 104 485 289
Tel No: +61 7 5503 4800
www.arcadis.com.au

Project Number 30062655
Issue 06
SRE-AAP-DD-P0313-DRG-CV-0445



WSUD - P - 301	DETAILS - SHEET 1
WSUD - P - 302	DETAILS - SHEET 2
WSUD - P - 303	DETAILS - SHEET 3
WSUD - P - 304	DETAILS - SHEET 4
WSUD - P - 305	DETAILS - SHEET 5

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



B	MINOR CHANGE AMENDMENTS	ST	30.04.26	S.L.	30.04.26
A	ISSUED FOR APPROVAL	ST	28.11.23	N.S.	28.11.23
REVISION	DESCRIPTION	INITS	DATE	INITS	DATE
			DRAFTED		APPROVED

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APPROVAL
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Approved  RPEQ 15631
(S. LEINSTER) Date 30.04.2026

337	SCALE	AS SHOWN	A1
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PROJECT No	4480	DRAWING No	WSUD - P - 001	REVISION	B
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DATE PLOTTED: 30 April 2026 BY: STEPHEN TOLPUTT

XREF: FILE: C:\05\DESIGN\FLOW\4480 - SKYRIDGE\ACAD\STAGE 13\4480_P-002 (NOTES).DWG

CONSTRUCTION NOTES / SPECIFICATIONS:

ENGINEERING SPECIFICATIONS

1. ALL EARTHWORKS AND CIVIL WORKS TO OCCUR IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS AND MANAGEMENT PLANS:
- THESE CONSTRUCTION NOTES
 - CITY OF GOLD COAST COUNCIL STANDARDS AND SPECIFICATIONS
 - ARCADIS ENGINEERING SPECIFICATIONS (GENERAL WORKS, EARTHWORKS, STORMWATER AND DRAINAGE, EROSION AND SEDIMENT CONTROL)
 - RELEVANT CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN FOR PACIFIC VIEW ESTATE STAGE 1 TO 6
 - IPWEAQ DWG DS-078

GENERAL NOTES

1. WSUD SYSTEMS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THESE NOTES AND THE "WATER SENSITIVE URBAN DESIGN CONSTRUCTION AND ESTABLISHMENT GUIDELINES - SWALES, BIORETENTION SYSTEMS AND WETLANDS" (WATER BY DESIGN, 2010 OR LATER VERSION) HEREAFTER REFERRED TO AS THE WSUD CONSTRUCTION AND ESTABLISHMENT GUIDELINE (WATER BY DESIGN, CURRENT VERSION).
2. CONSTRUCTION SHOULD BE DELAYED AS LONG AS PRACTICAL UNTIL THE MAJORITY OF THE EARTHWORKS AND INFRASTRUCTURE WITHIN THE CONTRIBUTING CATCHMENT HAS BEEN COMPLETED.
3. WSUD SYSTEMS ARE TO BE PROTECTED FROM CONSTRUCTION PHASE SEDIMENT LOADS IN ACCORDANCE WITH THE WSUD CONSTRUCTION AND ESTABLISHMENT GUIDELINE (WATER BY DESIGN, CURRENT VERSION). PROTECTIVE MEASURES TO BE REGULARLY CHECKED FOR INTEGRITY.
4. ALL DESIGN LEVELS SHOWN ARE FINISHED SURFACE LEVELS. BULK EARTHWORKS TO ALLOW FOR PLACEMENT OF TOPSOIL, CONCRETE AND GRAVEL AS SHOWN ON DRAWINGS.
5. ANY VARIATION TO THE DETAILS SHOWN ON THE DRAWING MUST BE AUTHORISED BY THE SUPERINTENDENT PRIOR TO FABRICATION AND/OR CONSTRUCTION.
6. ALL PROPRIETARY AND PRE-CAST PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
7. NOMINAL ROCK SIZE (D50) REFERS TO THE EQUIVALENT DIAMETER FOR WHICH 50% OF THE ROCKS (BY VOLUME) ARE EQUAL TO OR SMALLER THAN. MAXIMUM ROCK SIZE TO BE NO GREATER THAN 1.5 X D50.
8. FOR ALL VEGETATION AND LANDSCAPE DETAILS, REFER TO LANDSCAPE DRAWINGS.
9. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
10. ALL R.L's, I.L's AND F.S.L's ARE IN METRES AHD.

CONSTRUCTION INSPECTIONS

1. CONSTRUCTION HOLD-POINTS, COMPLIANCE INSPECTIONS AND SIGN-OFF FORMS ARE TO BE COMPLETED WITH THE APPROPRIATE PARTIES IN ATTENDANCE AS IDENTIFIED IN THE CONSTRUCTION SPECIFICATION AND THE WSUD CONSTRUCTION AND ESTABLISHMENT GUIDELINE (WATER BY DESIGN, CURRENT VERSION).
2. CRITICAL HOLD-POINTS FOR CONSTRUCTION ARE:
- A.EARTHWORKS AND FUNCTIONAL STRUCTURES
 - B.IMPERMEABLE LINER
 - C.HYDRAULIC STRUCTURES
 - D.UNDERDRAINAGE INSTALLATION
 - E.BIORETENTION MEDIA
 - F.FINISHED LEVELS (INCLUDING TOPSOIL)
3. THE CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING AN INDEPENDENT SURVEYOR TO PROVIDE ALL AS-CONSTRUCTED SURVEY TO COMPLY WITH THE CONSTRUCTION TOLERANCES TO DESIGN LEVEL. AS CONSTRUCTION SURVEY TO BE PROVIDED BY AN INDEPENDENT SURVEYOR AT ALL HOLD POINTS IDENTIFIED IN THESE CONSTRUCTION NOTES. FINAL AS CONSTRUCTED TO BE PROVIDED IN ACAD AND ADAC FORMAT TO BE SUBMITTED TO COUNCIL

EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AN EROSION AND SEDIMENT CONTROL PLAN FOR THESE PLANS. THE PLAN IS TO BE CERTIFIED BY A CPESC.
2. CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE CERTIFIED EROSION AND SEDIMENT CONTROL PLAN AND THE CPESC IS TO CERTIFY THE WORK ON A FORTNIGHTLY BASIS.
3. IMMEDIATELY FOLLOWING EARTHWORKS ALL EXPOSED SURFACES SHALL EITHER MULCHED OR BE CHEMICALLY STABILISED (VITA BOND OR EQUIVALENT). LANDSCAPE WORKS SHOULD COMMENCE AS SOON AS PRACTICALLY POSSIBLE FOLLOWING STABILISATION. THE STABILISATION MUST BE CERTIFIED BY A CPESC BEFORE THE CONTRACTOR LEAVES THE SITE. WHERE LANDSCAPE WORKS ARE DELAYED THEN RESTABILISATION WILL NEED TO OCCUR UNDER THE INSTRUCTION OF CPESC.
4. FOLLOWING THE FIRST FEW RAINFALL EVENTS, THE INLET TO THE SEDIMENT PONDS OR SEDIMENT FOREBAYS MUST BE INSPECTED TO ENSURE EROSION PROTECTION MEASURES ARE SUFFICIENT.

EARTHWORKS

1. ALL EARTHWORKS TO MEET THE "ENGINEERING SPECIFICATIONS"
2. ALL EARTHWORKS (INCLUDING EMBANKMENTS AND IMPERMEABLE LINER CONSTRUCTION) TO BE UNDERTAKEN UNDER SUPERVISION OF GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO PROVIDE LEVEL 1 CERTIFICATION THAT THE EARTHWORKS (AND IMPERMEABLE LINER) MEET THESE CONSTRUCTION NOTES AND ENGINEERING SPECIFICATIONS.

IMPERMEABLE LINER (CLAY)

1. THE IMPERMEABLE LINER FOR THE WSUD SYSTEMS MUST ACHIEVE THE REQUIRMENTS OF THESE SEPCIFICATION. LEVEL 1 GEOTECH SUPERVISION AND CERTIFICATION OF IMPERMEABLE LINERS MUST OCCUR.
2. THE CLAY LINER WILL BE 300 MM THICK COMPACTED TO 95% SMDD AS PER AS1289 METHOD 5.1.1 (+/- 2% FROM OPTIMUM MOISTURE CONTENT) AND SHALL ACHIEVE A MAXIMUM PERMEABILITY OF 1×10^{-9} M/SEC IN ACCORDANCE WITH AS1289 6.7.1. THE CLAY MUST ACHIEVE THE FOLLOWING:
- CONSIST OF PREDOMINATELY CLAYEY SOILS
 - FREE OF ORGANIC MATERIAL (INCLUDING VEGETATION AND TOPSOIL)
 - FREE OF RUBBLE AND DELETERIOUS MATERIAL
 - GREATER THEN 40% PASSING THE 75 MICRON SIEVE, PREDOMINATELY CONSISTING CLAY FRACTION LIQUID LIMIT - 35-55% WHEN TESTED IN ACCORDANCE WITH AS1289 3.1.2
 - PLASTICITY INDEX - 15-45% WHEN TESTED IN ACCORDANCE WITH AS1289.3.2.1
 - NON-DISPERSIVE (EMERSON CLASS >5)
3. THE CONTRACTOR IS TO SEEK SUPPORT OF A QUALIFIED GEOTECHNICAL ENGINEER TO COMPLETE TESTING OF IN-SITU SOILS. IF THE TESTING CONFIRMS THE IN-SITU CLAY MEETS THIS SPECIFICATION (WITH COMPACTION OR OTHER AMENDMENTS) THEN THE IN-SITU CLAYS CAN BE USED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERS ADVICE (AND LEVEL 1 CERTIFICATION PROVIDED BY THE GEOTECHNICAL ENGINEER). IF THE INSITU SOILS DO NOT MEET THIS SPECIFICATION THEN AN IMPORTED CLAY LINER IS REQUIRED TO THE BASE OF WSUD SYSTEMS AS SHOWN ON DRAWINGS.
4. THE CLAY LINER IS TO BE CONSTRUCTED IN TWO LAYERS EACH OF 150mm MINIMUM THICKNESS OR AS ADVISED IN WRITING BY A QUALIFIED GEOTECHNICAL ENGINEER.
5. CLAY LINER IS TO BE SOURCED FROM CLAY ON SITE WHERE POSSIBLE.
6. ALTERNATIVE LINER PRODUCTS/MATERIALS (EG. ECOSEAL, BENTOFIX OR SIMILAR) ARE TO BE INSTALLED IN ACCORDANCE WITH SUPPLIERS SPECIFICATIONS AND APPROPRIATELY TESTED TO ENSURE WATERTIGHT. THE LINER IS TO BE KEYED/ANCHORED INTO BATTERS IN ACCORDANCE WITH SUPPLIER'S SPECIFICATIONS. CERTIFICATION FROM A QUALIFIED GEOTECHNICAL ENGINEER IS REQUIRED TO SHOW THE LINER IS INSTALLED CORRECTLY AND WATERTIGHT (WITH MAXIMUM PERMEABILITY OF 1×10^{-9} m/sec).
7. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM SOURCE OF CLAY OR ALTERNATIVE AS PART OF THE TENDER AND INCLUDE QUANTITIES AND COST.
8. ALL PERFORATIONS (PIPES) THROUGH LINER MUST BE SEALED WATER TIGHT.

TOPSOIL

1. SITE TOPSOIL IS TO BE AMELIORATED FOR USE. THE CONTACTOR MUST CONSULT WITH A SOIL SCIENTIST / AGRONOMIST TO CONFIRM THE CONDITION OF THE STOCKPILED TOPSOIL AND THE AMELIORATION REQUIRED. SOIL SCIENTIST / AGRONOMIST IS TO CONFIRM THE SUITABILITY OF THE AMELIARATED TOPSOIL PRIOR TO PLACEMENT AND CERTIFY THE FINAL TOPSOIL QUALITY IS FIT FOR PURPOSE.
2. TOPSOIL GENERALLY TO CONFORM TO AS4419 - 2018 'SOILS FOR LANDSCAPING AND GARDEN USE'. I.E. TOPSOIL SHALL BE FREE OF ANY DELETERIOUS MATTER INCLUDING SUB-SOIL, TURF, WEEDS, STICKS AND ROOTS, STONES OVER 25 mm DIAMETER AND ANY MATERIAL TOXIC TO PLANT GROWTH. ACIDITY RANGE SHALL BE PH 6-7 OR AS RECOMMENDED BY AN AGRONOMIST. USE OF EXISTING (OR AMELIORATED) SITE TOPSOIL IS SUBJECT TO APPROVAL BY AGRONOMIST AND SITE SUPERINTENDENT.
3. PLACED TOPSOIL SHALL BE LIGHTLY COMPACTED SO THAT THE FINISHED SURFACE IS SMOOTH AT THE REQUIRED LEVELS READY FOR PLANTING.

ACCESS ROADS

1. ACCESS TRACKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH RELEVANT STANDARD SPECIFICATIONS (QUEENSLAND DEPARTMENT OF TRANSPORT AND MAIN ROADS AND COGC).
2. ROAD BASE MATERIAL SHALL BE TYPE 2.3 WITH 2% CROSSFALL.
3. WHERE DIRECTED, ROAD BASE MATERIAL SHALL BE CEMENT STABILISED OR APPROVED EQUIVALENT.

TOLERANCES

1. THE BASE AND FINISHED SURFACE OF WSUD SYSTEMS SHALL BE FREE FROM LOCALISED DEPRESSIONS AND LOW POINTS.
2. CONSTRUCTION TOLERANCES REQUIRED FOR WORKS AS PER TABLE 1.

TABLE 1: CONSTRUCTION TOLERANCES (WHERE RELEVANT TO BIORETENTION AND WETLAND)

CONSTRUCTION ELEMENT	TOLERANCE (mm)	METHOD FOR COMPLIANCE
HYDRAULIC STRUCTURES	15	SURVEY x
UNDERDRAINS (BIORETENTION)	25	DUMPY LEVEL OR LASER
EARTHWORKS (BASE OF WETLAND OR BIORETENTION)	50	SURVEY x
DRAINAGE AND TRANSITION LAYER (BIORETENTION)	25	DUMPY LEVEL OR LASER
FILTER MEDIA SURFACE (BIORETENTION)	40	SURVEY x
EMBANKMENTS AND BUNDS	25 (UP TO 50 HIGHER)	SURVEY x

x LAND OR ENGINEERING SURVEY BY QUALIFIED SURVEYOR

BIORETENTION BASIN ELEMENTS

1. BIORETENTION FILTER MEDIA, TRANSITION LAYER SAND AND DRAINAGE LAYER GRAVEL ARE TO BE TESTED AND CERTIFIED AS COMPLIANT WITH THE WATER BY DESIGN "BIORETENTION TECHNICAL DESIGN GUIDELINE" AND THE FACILITY FOR ADVANCING WATER BIOFILTRATION "GUIDELINES FOR FILTER MEDIA IN BIORETENTION SYSTEMS" (VERSION 3.01 OR LATER) BEFORE ANY MATERIAL IS INSTALLED. THE NUMBER OF SAMPLES TO BE TESTED SHALL BE IN ACCORDANCE WITH THE "WATER SENSITIVE URBAN DESIGN CONSTRUCTION AND ESTABLISHMENT GUIDELINES - SWALES, BIORETENTION SYSTEMS AND WETLANDS" (WATER BY DESIGN, LATEST VERSION) CERTIFICATION MUST BE PRODUCED BY THE SUPPLIER STATING THESE REQUIREMENTS HAVE BEEN ACHIEVED.
2. ALL BIORETENTION BASIN EXCAVATIONS ARE TO BE LINED WITH AN IMPERMEABLE LINER AS REQUIRED TO ACHIEVE PERMEABILITY OF $<1 \times 10^{-9}$ m/sec (COMPACTED CLAY OR APPROVED EQUIVALENT PRODUCT) AND LEVEL CERTIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER, UNLESS OTHERWISE SHOWN.
3. UNDERDRAINS SHALL BE SLOTTED RIGID PIPE (UPVC OR APPROVED EQUIVALENT) AND COMPLY WITH AS 2439.1 TYPE 2 PIPES. SLOTTED PIPES MUST NOT BE INSTALLED WITH A FILTER SOCK SURROUNDING PIPE. SLOTS ARE TO BE NO WIDER THAN 2.0mm.
4. COLLECTOR PIPES TO BE NON-SLOTTED RIGID PIPE (UPVC OR APPROVED EQUIVALENT). ALL PIPE CONNECTION TO BE SEALED AS PER ENGINEERING SPECIFICATIONS (I.E. PIPE JOINS TO BE GLUED USING PLUMBING CEMENT).
5. COLLECTOR PIPES AND VALVES (OR OTHER PIPES) SHALL BE SEALED INTO PITS USING GROUT OR OTHER APPROVED WATERTIGHT SEAL.
6. ALL UNDERDRAINAGE PIPE CONNECTIONS ARE TO BE CONFIGURED TO ALLOW RODDING AND FLUSHING
7. BASIN FINISHED SURFACE LEVEL IS TOP OF FILTER MEDIA. WHERE DIRECTED, FILTER SURFACE IS TO BE COVERED WITH GEOFABRIC AND 25mm COARSE SAND AND OVERLAYED WITH TURF. LAYER TO BE PINNED IN PLACE AND APPROPRIATELY SECURED NEAR INFLOW POINTS TO BASIN. THIS PROTECTIVE LAYER MUST REMAIN IN PLACE UNTIL AT LEAST 80-90% OF ALL LAND DISTURBING ACTIVITIES IN THE CONTRIBUTING CATCHMENT HAVE CEASED AND EXPOSED SOIL STABILISED. CONTRACTOR TO CONFIRM APPROACH AS PART OF TENDER.
8. A SEDIMENT FENCE MUST BE INSTALLED AROUND THE FULL PERIMETER OF THE TURF PROTECTED FILTER MEDIA AT THE TOE OF BATTER FOR THE DURATION OF THE SEDIMENT PROTECTION PHASE.

DRAINAGE PIPES AND PITS

1. DRAINS TO BE INSPECTED AND APPROVED BY THE SUPERINTENDENT PRIOR TO BACK FILLING
2. ALL CONSTRUCTED PIPEWORK SHALL BE FLUSHED AND CLEANED AT THE COMPLETION OF WORKS TO THE SUPERINTENDENT'S APPROVAL.
3. ALL PITS SHALL HAVE MASS CONCRETE SHAPED BASES FOR SMOOTH HYDRAULIC CONVEYANCE TO THE SUPERINTENDENT'S APPROVAL. PIT WALLS MUST BE SMOOTH ON INNER AND OUTER SIDE (FORMED).
4. ALL GRATED PITS SHALL BE HINGED AND PROVIDED WITH HANDLE TO OPEN AND A SECURE LOCK DOWN SYSTEM.
5. ALL LIDS TO PITS (WITH NO GRATE) ARE TO BE TRAFFICABLE BY LIGHT VEHICLES AND LOCKABLE
6. ALL STORMWATER PIPES AND CULVERTS SHALL BE CLASS 2 EXPOSURE CLASS C STEEL REINFORCED CONCRETE PIPE UNLESS NOTED OTHERWISE.
7. TO BE IN ACCORDANCE WITH AS3600, MRTS70, MRTS24 AND MRTS25.
8. ALL HEADWALLS TO BE CLASS C AND MEET THE ENGINEERING SPECIFICATIONS OF MRTS72.
9. ALL PIPE CONNECTIONS INTO PITS TO BE PROPERLY SEALED.
10. ALL PIPES THROUGH CLAY LINER MUST BE SEALED WITH CLAY AND WATER TIGHT (I.E. REMOVE BEDDING LAYER AND SEAL)

B	MINOR CHANGE AMENDMENTS	ST	30.04.26	S.L.	30.04.26	
A	ISSUED FOR APPROVAL	ST	28.11.23	N.S.	28.11.23	
REVISION	DESCRIPTION	INITS	DATE	INITS	DATE	
		DRAFTED		APPROVED		

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Approved  RPEQ 15637
Date 30.04.2026
(S. LEINSTER)

DF JOB No. - 4480

CLIENT PACIFIC VIEW FARM (QUEENSLAND) PTY LTD		PROJECT SKYRIDGE - STAGE 13 BASIN P	
DRAWN S.T.	DATE 30.04.2026	DRAWING TITLE CONSTRUCTION NOTES	
DESIGNED N.S.	DATE 30.04.2026		
SCALE AS SHOWN	A1	PROJECT No 4480	DRAWING No WSUD - P - 002
		REVISION B	

DATE PLOTTED: 30 April 2026 BY: STEPHEN TOLPITT

FILE: C:\005\DESIGNFLOW\4480 - SKYRIDGE\ACAD\STAGE 13\4480_P-101(OVERALL).DWG

XREF:



FUTURE FLOOD BASIN 3
REFER TO ARCADIS DRAWINGS

BIORETENTION BASIN P
AREA = 800m²
S.L. = 66.0
BUND R.L. = 67.2

FLOOD WARNING SIGN.
REFER DETAIL

STAGE 13
REFER TO ARCADIS
DETAILED DESIGN
DRAWINGS

NOTE:
BALANCE OF WORKS SHOWN IS
INDICATIVE ONLY. REFER TO ARCADIS
DRAWINGS FOR DETAIL DESIGN.

SEDIMENT FOREBAY
AREA = 76m²
RL = 66.10
REFER TO DETAIL ON DWG 202

STORMWATER OUTLET
DRAIN REFER TO
ARCADIS PLANS.



TYPICAL MANHOLE SETOUT (MH)
SCALE 1 : 50 (A1)



TYPICAL FIELD INLET SETOUT (FI)
SCALE 1 : 50 (A1)



TYPICAL HEADWALL SETOUT (HW)
SCALE 1 : 50 (A1)



SIGN
600mm x 400mm

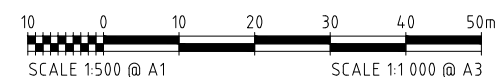
BASIN SIGNAGE DETAIL
N.T.S.

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: MIN/2026/240

Dated: 1 June 2026

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



REVISION	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
B	MINOR CHANGE AMENDMENTS	ST	30.04.26	S.L.	30.04.26
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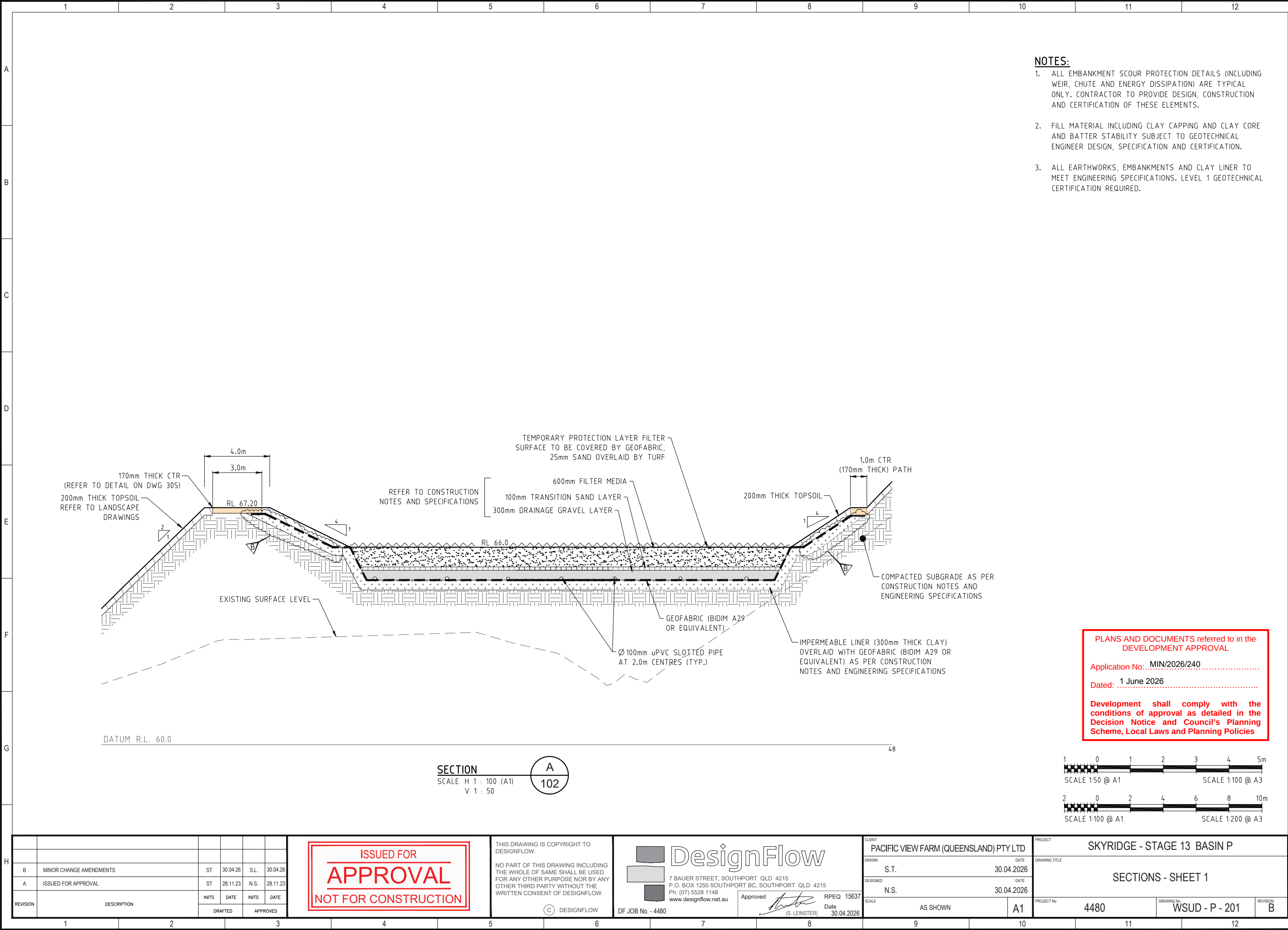
Approved
(S. LEINSTER)
RPEQ 15637
Date 30.04.2026

CUSTOMER	PACIFIC VIEW FARM (QUEENSLAND) PTY LTD
DRAWN	S.T.
DATE	30.04.2026
DESIGNED	N.S.
DATE	30.04.2026
SCALE	AS SHOWN

PROJECT	SKYRIDGE - STAGE 13 BASIN P
DRAWING TITLE	OVERALL LAYOUT PLAN
PROJECT No	4480
DRAWING No	WSUD - P - 101
REVISION	B



DATE PLOTTED: 30 April 2026 BY: STEPHEN TOLPITT
XREF: FILE: C:\085\DESIGNFLOW\4480 - SKYRIDGE\ACAD\STAGE 13\4480_P-201 TO 202 (SECTIONS).DWG



- NOTES:**
1. ALL EMBANKMENT SCOUR PROTECTION DETAILS (INCLUDING WEIR, CHUTE AND ENERGY DISSIPATION) ARE TYPICAL ONLY. CONTRACTOR TO PROVIDE DESIGN, CONSTRUCTION AND CERTIFICATION OF THESE ELEMENTS.
 2. FILL MATERIAL INCLUDING CLAY CAPPING AND CLAY CORE AND BATTER STABILITY SUBJECT TO GEOTECHNICAL ENGINEER DESIGN, SPECIFICATION AND CERTIFICATION.
 3. ALL EARTHWORKS, EMBANKMENTS AND CLAY LINER TO MEET ENGINEERING SPECIFICATIONS. LEVEL 1 GEOTECHNICAL CERTIFICATION REQUIRED.

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

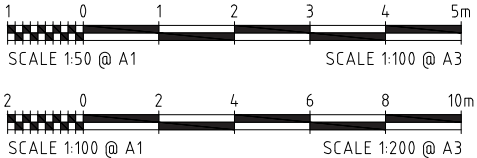
Application No: MIN/2026/240

Dated: 1 June 2026

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

SECTION
SCALE H 1 : 100 (A1)
V 1 : 50

A
102



REVISION	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
B	MINOR CHANGE AMENDMENTS	ST	30.04.26	S.L.	30.04.26
A	ISSUED FOR APPROVAL	ST	28.11.23	N.S.	28.11.23
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DF JOB No. - 4480

Approved
(S. LEINSTER)

RPEQ 15637
Date 30.04.2026

CLIENT
PACIFIC VIEW FARM (QUEENSLAND) PTY LTD

DRAWN
S.T.

DESIGNED
N.S.

SCALE
AS SHOWN

PROJECT
SKYRIDGE - STAGE 13 BASIN P

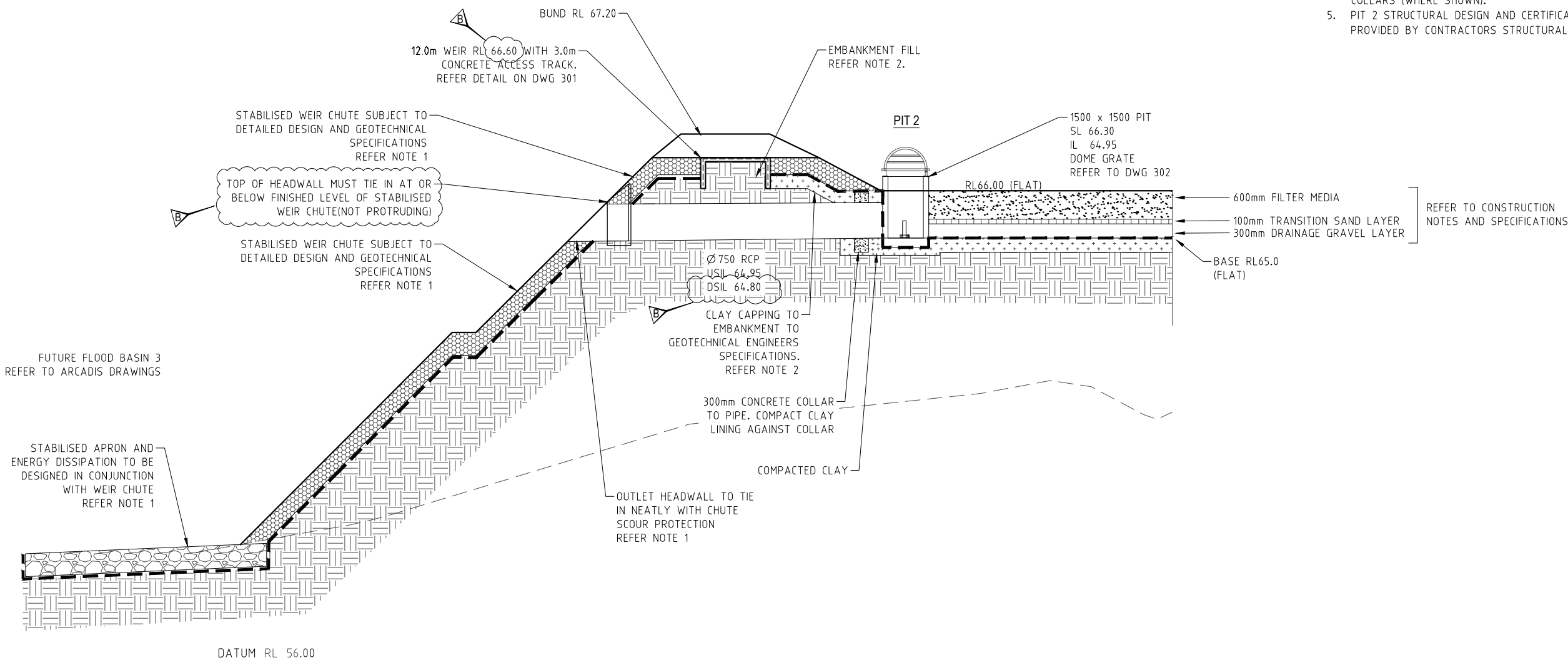
DRAWING TITLE
SECTIONS - SHEET 1

PROJECT No
4480

DRAWING No
WSUD - P - 201

REVISION
B

DATE PLOTTED: 30 April 2026 BY: STEPHEN TOLPITT
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- NOTES:**
1. ALL EMBANKMENT SCOUR PROTECTION DETAILS (INCLUDING WEIR, CHUTE AND ENERGY DISSIPATION) ARE TYPICAL ONLY. CONTRACTOR TO PROVIDE DESIGN, CONSTRUCTION AND CERTIFICATION OF THESE ELEMENTS.
 2. FILL MATERIAL INCLUDING CLAY CAPPING AND CLAY CORE AND BATTER STABILITY SUBJECT TO GEOTECHNICAL ENGINEER DESIGN, SPECIFICATION AND CERTIFICATION.
 3. ALL EARTHWORKS, EMBANKMENTS AND CLAY LINER TO MEET ENGINEERING SPECIFICATIONS. LEVEL 1 GEOTECHNICAL CERTIFICATION REQUIRED.
 4. ALL PIPE PENETRATIONS OF CLAY LINING TO BE SEALED AND COMPACTED AROUND THE PIPE AND CUT-OFF COLLARS (WHERE SHOWN).
 5. PIT 2 STRUCTURAL DESIGN AND CERTIFICATION TO BE PROVIDED BY CONTRACTORS STRUCTURAL ENGINEER.

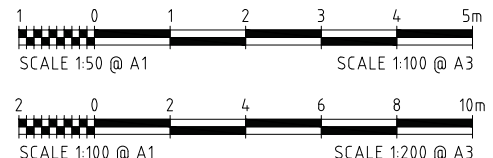
SECTION B
SCALE H 1 : 100 (A1)
V 1 : 50

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: MIN/2026/240

Dated: 1 June 2026

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



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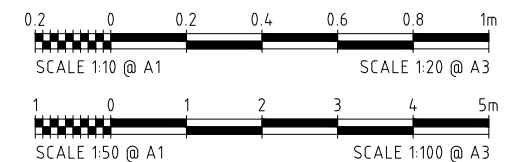
Approved: *[Signature]* (S. LEINSTER)
RPEQ 15637
Date 30.04.2026

DF JOB No. - 4480

CUSTOMER	PACIFIC VIEW FARM (QUEENSLAND) PTY LTD	PROJECT	SKYRIDGE - STAGE 13 BASIN P
DRAWN	S.T.	DATE	30.04.2026
DESIGNED	N.S.	DATE	30.04.2026
SCALE	AS SHOWN	A1	
PROJECT No	4480	DRAWING No	WSUD - P - 202
REVISION	B		



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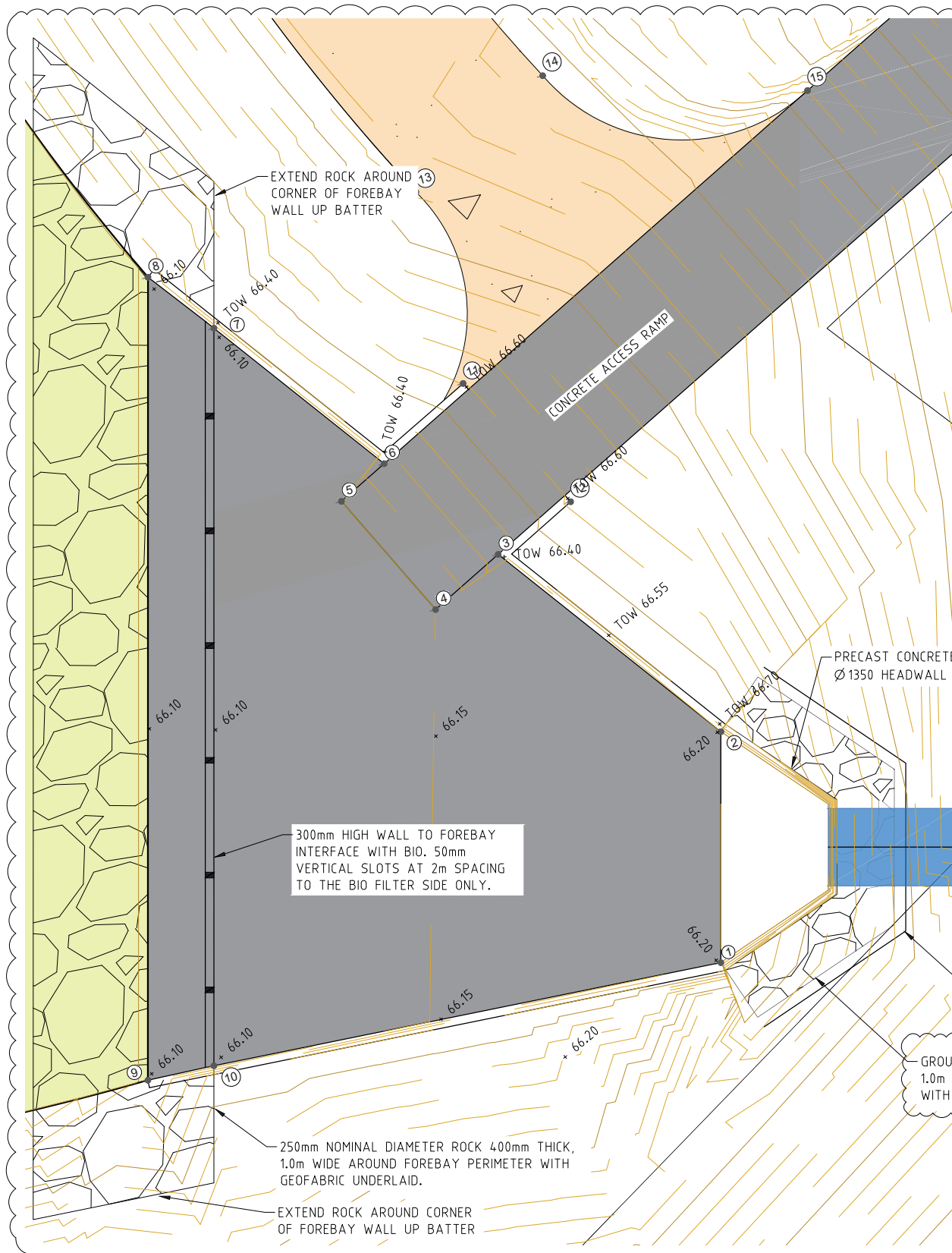
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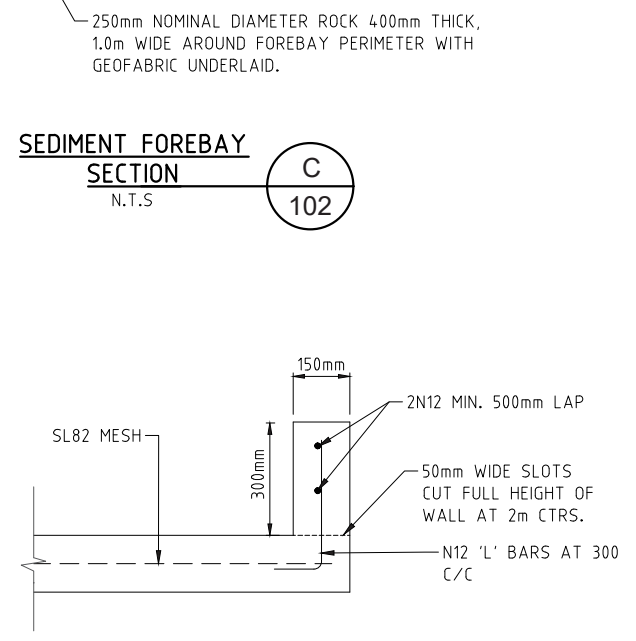
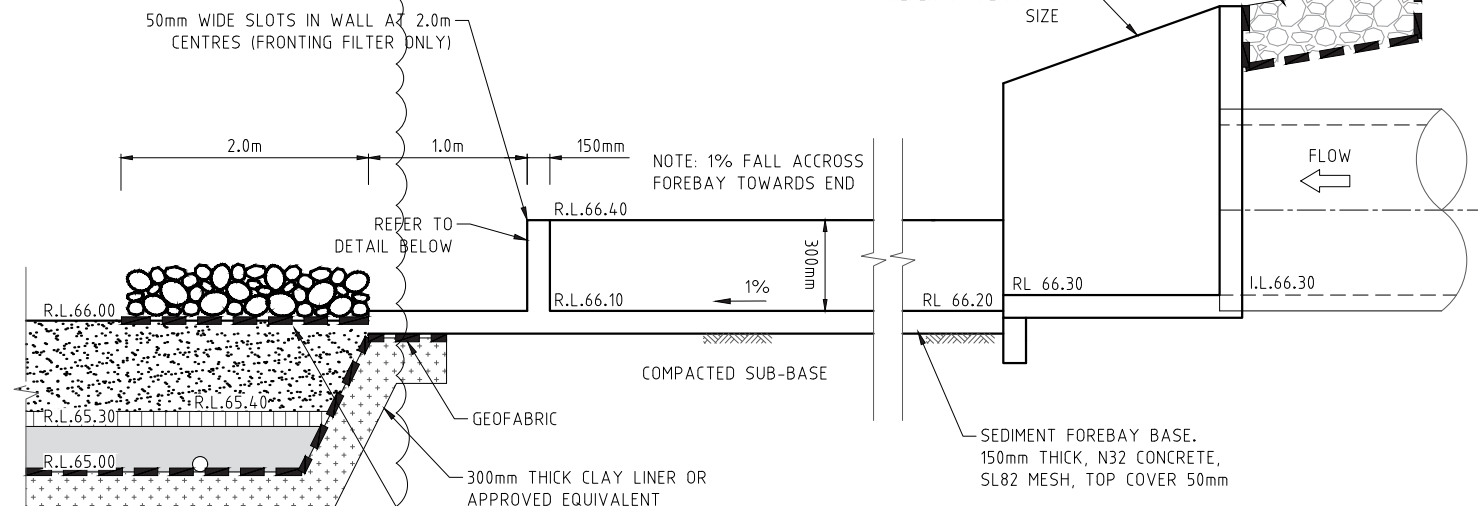
CLIENT		PACIFIC VIEW FARM (QUEENSLAND) PTY LTD	
DRAWN	S.T.	DATE	30.04.2026
DESIGNED	N.S.	DATE	30.04.2026
37 SCALE	AS SHOWN		A1
26			

PROJECT	SKYRIDGE - STAGE 13 BASIN P		
DRAWING TITLE	DETAILS - SHEET 1		
PROJECT No	4480	DRAWING No	WSUD - P - 301
		REVISION	B

DATE PLOTTED: 30 April 2026 BY: STEPHEN TOLPITT
XREF: FILE: C:\005\DESIGN\LOW4480 - SKYRIDGE\ACAD\STAGE 13\4480_P-302 (DETAILS).DWG



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL
Application No: MIN/2026/240
Dated: 1 June 2026
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



SETOUT CO-ORDINATES		
POINT No.	EASTING	NORTHING
1	32421.232	99129.782
2	32422.332	99133.654
3	32419.438	99137.686
4	32418.125	99137.059
5	32417.060	99139.321
6	32417.957	99139.749
7	32415.745	99142.831
8	32414.881	99143.999
9	32411.061	99130.537
10	32412.236	99130.465
11	32419.663	99140.718
12	32420.903	99138.223
13	32419.782	99144.152
14	32422.462	99145.500
15	32426.834	99143.990



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Approved: *[Signature]* RPEQ 15637
Date: 30.04.2026
(S. LEINSTER)

DF JOB No. - 4480

CUSTOMER	PACIFIC VIEW FARM (QUEENSLAND) PTY LTD	PROJECT	SKYRIDGE - STAGE 13 BASIN P
DRAWN	S.T.	DATE	30.04.2026
DESIGNED	N.S.	DATE	30.04.2026
SCALE	AS SHOWN	A1	
PROJECT No	4480	DRAWING No	WSUD - AB - 302
REVISION	B		

DATE PLOTTED: 30 April 2026 BY: STEPHEN TOLPUTT
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NOTES:

1. REFER TO CONSTRUCTION NOTES ON WSUD-P-002.
2. ALL PERFORATIONS INTO PITS SHALL BE CONFIGURED TO PROVIDE A WATER TIGHT SEAL.
3. A 300mm COMPACTED CLAY PLUG SHALL BE PROVIDED AT EACH PIT AS SHOWN.
4. PIT 2 STRUCTURAL DESIGN AND CERTIFICATION TO BE PROVIDED BY CONTRACTORS STRUCTURAL ENGINEER.

BIORETENTION MEDIA AND LINER REFER TO CONSTRUCTION NOTES / SPECIFICATIONS

75-100mm ROCK ON GEOFABRIC 200mm HIGH TO MIN. 500mm WIDE AROUND PERIMETER TO PIT.

EXTENDED DETENTION DEPTH 300mm

SURFACE LEVEL RL 66.00

FILTER MEDIA

TRANSITION SAND LAYER (100mm)

DRAINAGE LAYER (300mm)

IMPERMEABLE LINER TO BASE TO SIDES (300mm COMPACTED CLAY) OVERLAID WITH GEOFABRIC (BIDIM A29 OR EQUIVALENT)

GEOFABRIC (BIDIM A29 OR EQUIVALENT)

uPVC MANHOLE CONNECTOR WITH WEEP RINGS (SEALED INTO PIT)

SL92 MESH PLACED CENTRALLY

150mm WIDE WALL WITH SL81 MESH PLACED CENTRALLY. FLOOR AND SIDE WALL 'L' BARS TO BE HOT DIPPED GALVANISED PLACED EITHER SIDE OF MESH AT 300mm CENTRES.

HINGED FIELD INLET DOME TOP COVER AS PER (IPWEAQ STD DWG DS-0069)

Ø100 MANHOLE SPIGOT CONNECTOR M&M-IRRJ (SANDED) COMPLETE WITH WEEP RINGS CAST INTO WALL 25mm OFF PIT FLOOR. EXTEND 100mm PAST WALL.

SL92 MESH PLACED CENTRALLY

RL 65.35

RL 64.95

Ø750 RCP FLOW

COMPACTED SUBGRADE (AS PER TMR MRTS04)

CONCRETE COLLAR MIN. 300mmx300mm TO BE POURED AFTER COMPACTED CLAY AND PIPE PLACEMENT.

300mm THICK COMPACTED CLAY. (NO BEDDING GRAVELS TO BE LEFT IN PLACE AT CLAY SEAL)

N12 STARTER BARS @ 200 CENTRES 'L' BARS TYP. 300 LAP FLOOR 'L' BARS TO BE HOT DIPPED GALVANISED

SCREW CAP TO BE FIXED DURING NORMAL OPERATIONS

BIORETENTION OVERFLOW SECTION B-B

SCALE 1:20 (A1)

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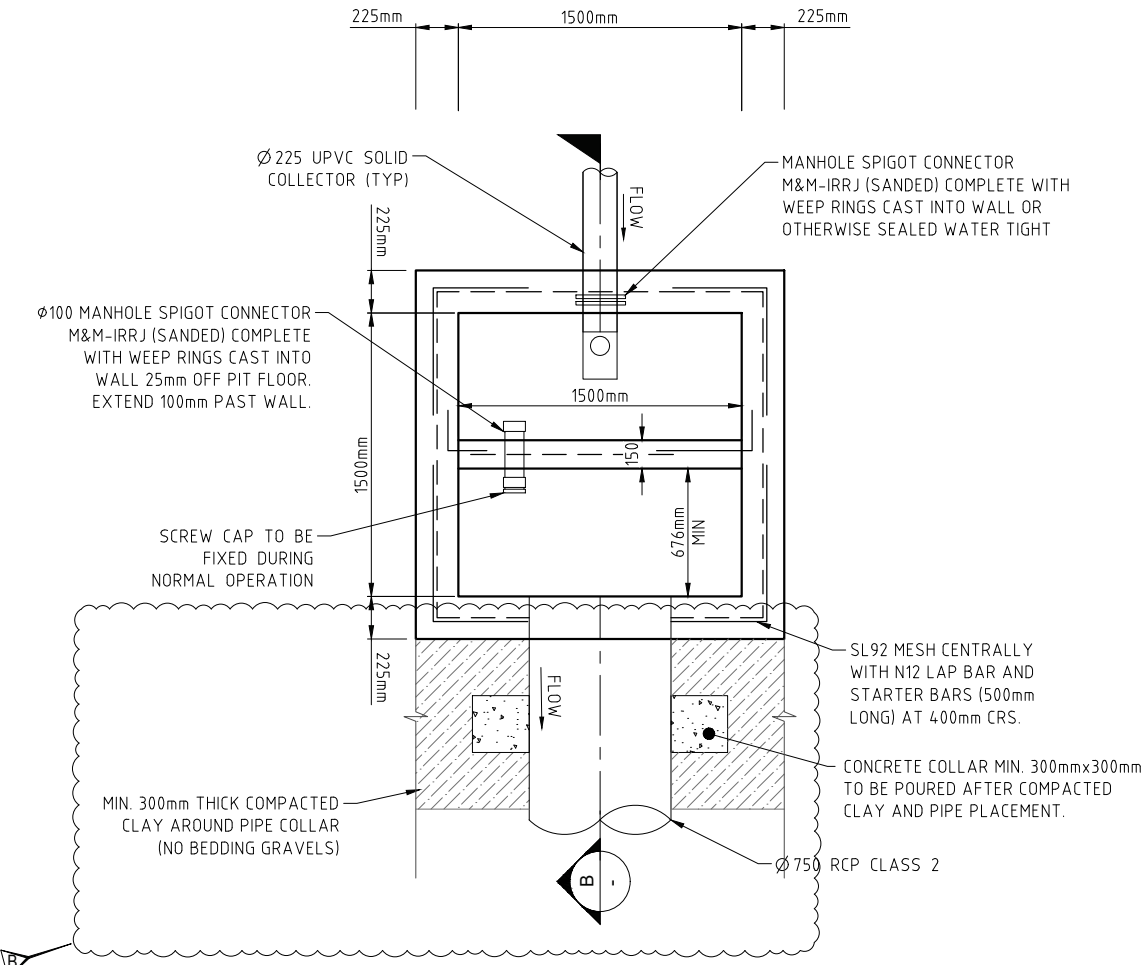
Approved
(S. LEINSTER)
RPEQ 15637
Date 30.04.2026

DF JOB No. - 4480

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PACIFIC VIEW FARM (QUEENSLAND) PTY LTD
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DESIGNED
N.S.
DATE
30.04.2026
SCALE
AS SHOWN
A1

PROJECT
SKYRIDGE - STAGE 13 BASIN P
DRAWING TITLE
DETAILS - SHEET 3
PROJECT No
4480
DRAWING No
WSUD - P - 303
REVISION
B

0.4 0 0.4 0.8 1.2 1.6 2m
SCALE 1:20 @ A1 SCALE 1:40 @ A3



BIORETENTION OVERFLOW PIT
TYPICAL LAYOUT PLAN

SCALE 1:20 (A1)

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL
Application No: MIN/2026/240
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BIORETENTION MEDIA

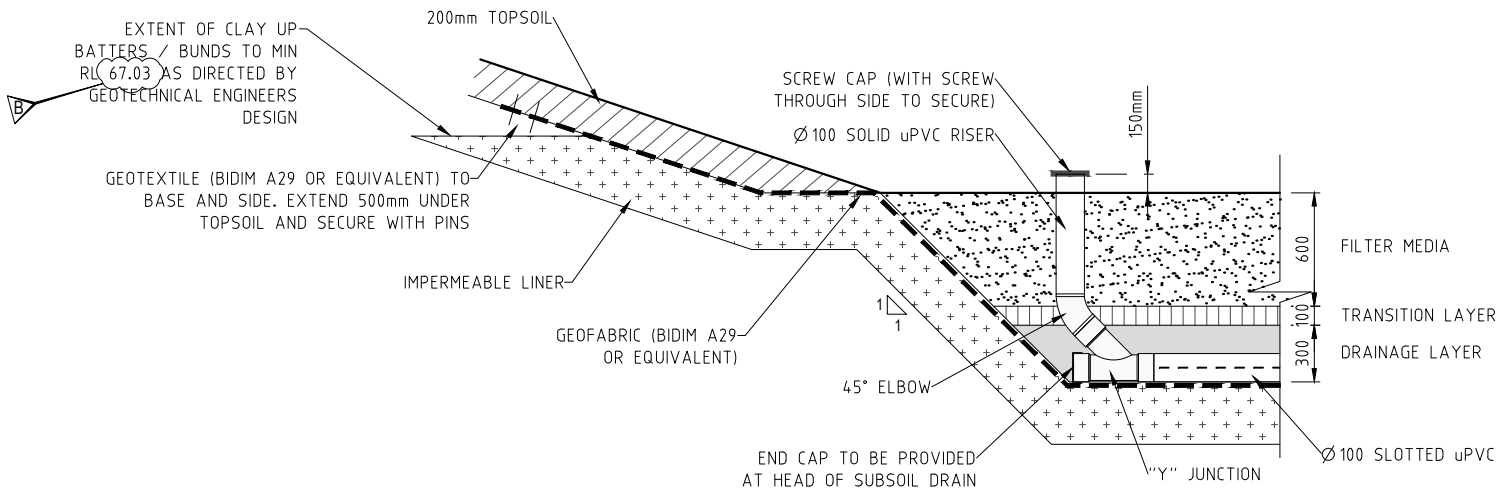
BIORETENTION FILTER MEDIA, TRANSITION LAYER AND DRAINAGE LAYER TO MEET THE SPECIFICATIONS OUTLINED IN THE BIORETENTION TECHNICAL DESIGN GUIDELINES (WATER BY DESIGN) AND CONSTRUCTION AND ESTABLISHMENT GUIDELINES (WATER BY DESIGN). THE SOURCE OF THE MATERIAL AND CERTIFICATION OF THE MATERIAL BY THE SUPPLIER MUST BE PROVIDED TO THE SITE SUPERINTENDENT AND BIORETENTION DESIGNER FOR REVIEW PRIOR TO DELIVERY AND INSTALLATION. INTALLATION OF THE MEDIA MUST OCCUR IN ACCORDANCE WITH THE CONSTRUCTION AND ESTABLISHMENT GUIDELINES (WATER BY DESIGN).

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

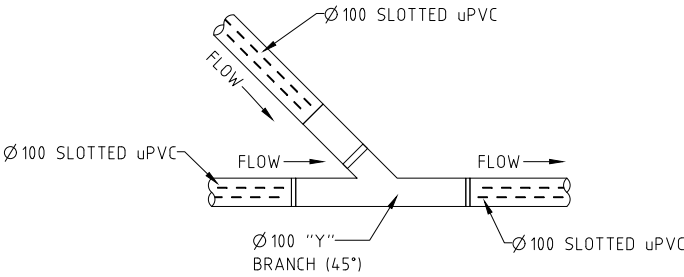
Application No: MIN/2026/240

Dated: 1 June 2026

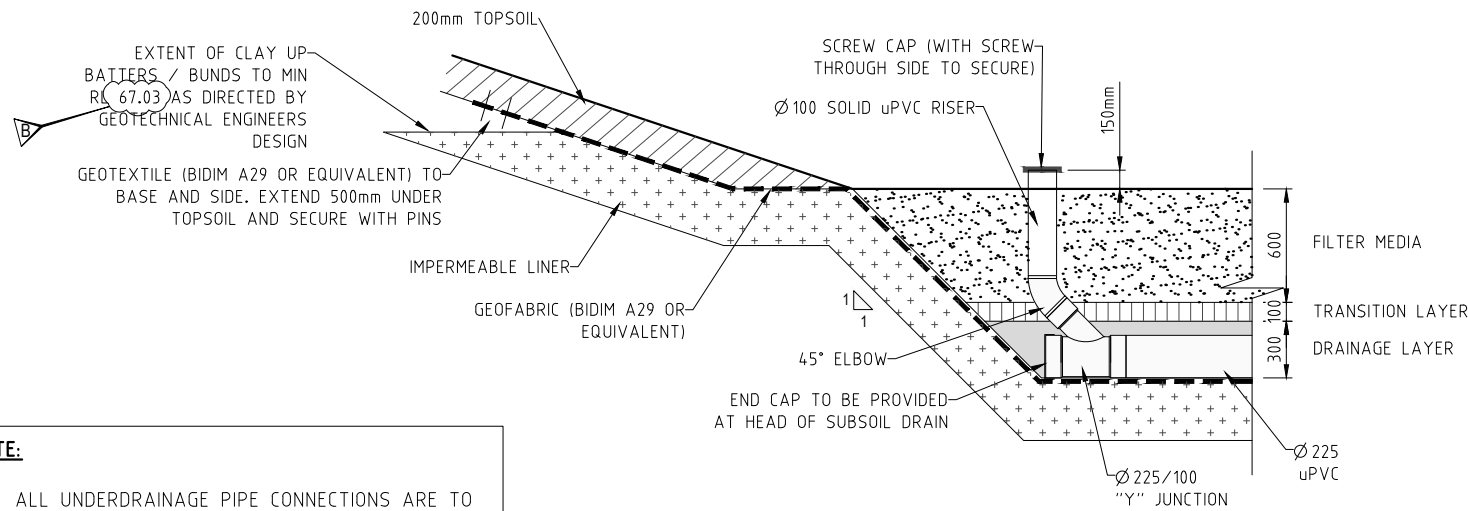
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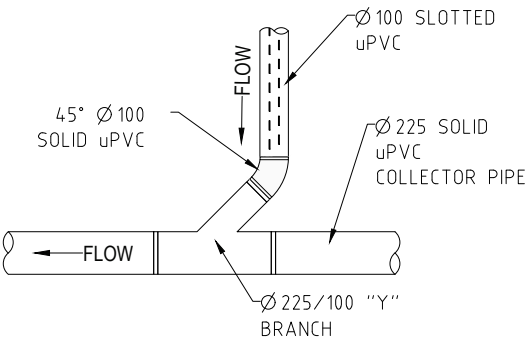
Ø100 UNDERDRAIN CLEAN OUT POINT - TYPICAL DETAIL
SCALE 1 : 20 (A1)



UNDERDRAIN CONNECTOR LAYOUT
SCALE 1 : 20 (A1)



Ø225 COLLECTOR CLEAN OUT POINT - TYPICAL DETAIL
SCALE 1 : 20 (A1)



COLLECTOR PIPE CONNECTOR (MID SECTION) LAYOUT
SCALE 1 : 20 (A1)

NOTE:

- ALL UNDERDRAINAGE PIPE CONNECTIONS ARE TO BE CONFIGURED TO ALLOW RODDING AND FLUSHING.
- SLOTTED PIPES MUST NOT BE INSTALLED WITH FILTER SOCK SURROUNDING THE PIPE.

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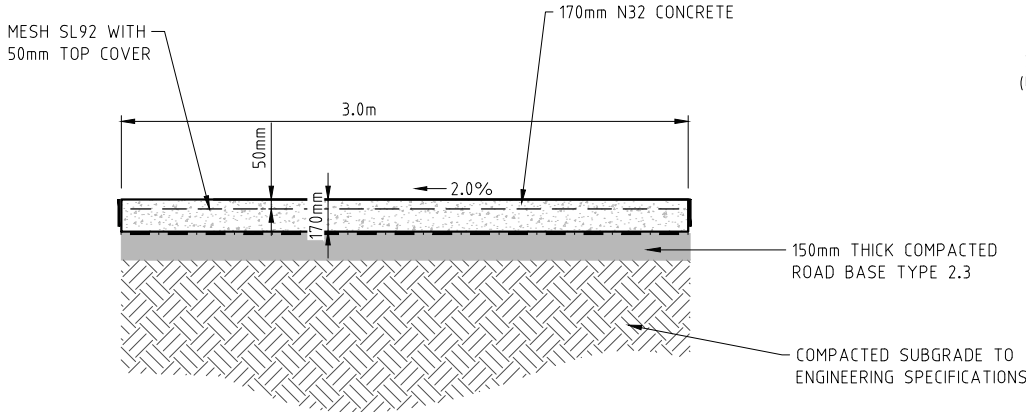
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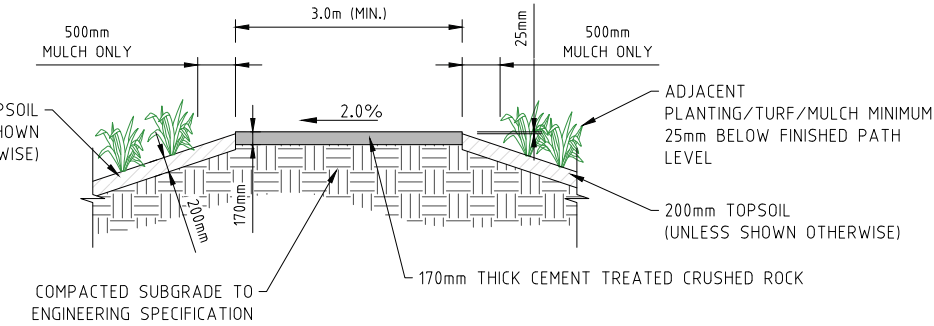
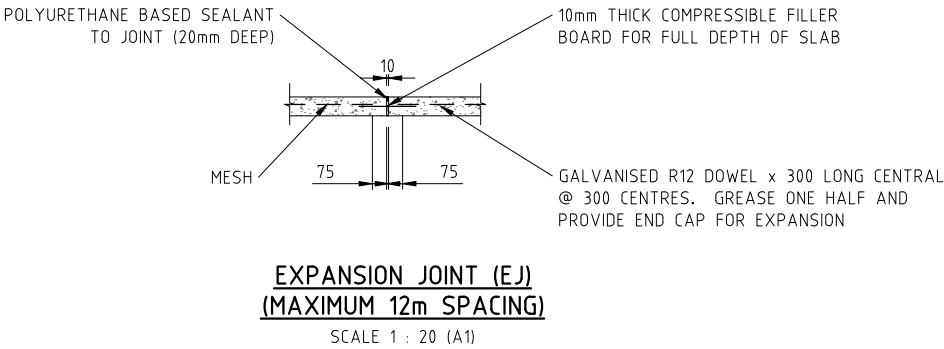
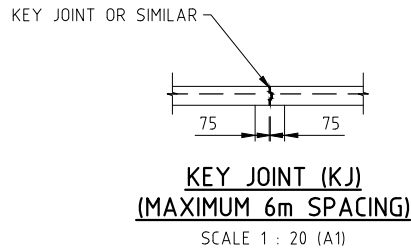
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RPEQ 15637
Date 30.04.2026

CUSTOMER	PACIFIC VIEW FARM (QUEENSLAND) PTY LTD	PROJECT	SKYRIDGE - STAGE 13 BASIN P
DRAWN	S.T.	DATE	30.04.2026
DESIGNED	N.S.	DATE	30.04.2026
SCALE	AS SHOWN	A1	
PROJECT No	4480	DRAWING No	WSUD - P - 304
REVISION	B		

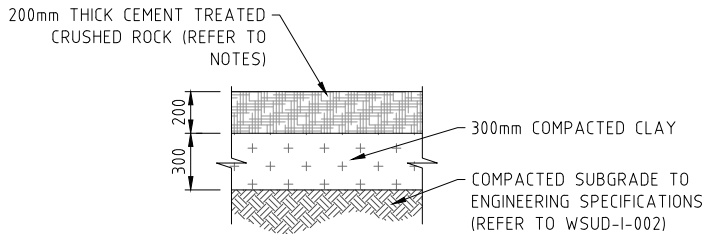
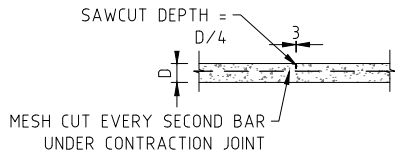
DATE PLOTTED: 30 April 2026 BY: STEPHEN TOLPUTT
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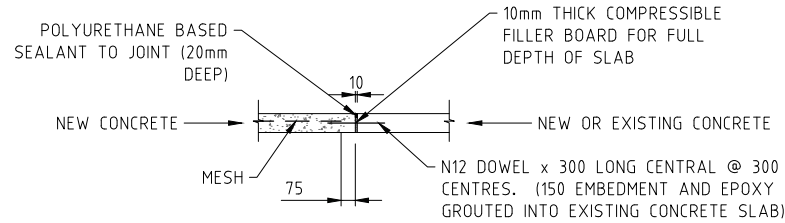
HEAVY VEHICLE CONCRETE ACCESS
TYPICAL DETAIL
SCALE 1 : 20 (A1)



3m CEMENT TREATED CRUSHED ROCK PATH - TYPICAL DETAIL
SCALE 1 : 50 (A1)



CEMENT TREATED CRUSHED ROCK TO SEDIMENT BASIN
SCALE 1 : 20 (A1)



KEY CONSTRUCTION JOINTS TO BE PROVIDED BETWEEN ALL ABUTTING NEW AND EXISTING CONCRETE WORKS

JOINTS NOTES:

- PROVIDE CONTRACTION JOINTS (CJ) AT A MAXIMUM SPACING APPROXIMATELY 1.5 TIMES THE WIDTH OF THE CONCRETE PATH. CUT EVERY SECOND BAR OF MESH UNDER JOINT. SAW CUT JOINT SHALL BE A WET CUT WITHIN 24 HOURS OF CONCRETE POUR.
- PROVIDE KEY JOINT (KJ) AT MAXIMUM 6m SPACING.
- PROVIDE EXPANSION JOINT (EJ) AT MAXIMUM 12m SPACING. JOINTS TO BE FILLED WITH APPROVED FILLER AND SEALANT.
- KEY CONSTRUCTION JOINT TO BE PROVIDED ADJACENT TO ALL CONCRETE PROPERTY CROSSINGS AND ANY SIGNIFICANT CHANGE IN WIDTH AND DIRECTION.
- LAYOUT OF JOINTS TO BE PROVIDED TO SUPERINTENDENT PRIOR TO CONSTRUCTION.

CEMENT TREATED CRUSHED ROCK (CTR) NOTES:

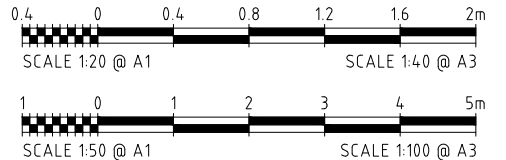
THE CTR SHALL COMPLY WITH THE FOLLOWING;

- THE CTR SHALL COMPRISE A COMBINATION OF WELL GRADED COARSE AND FINE AGGREGATES MIXED WITH CEMENT AND WATER TO FORM A HOMOGENEOUS MIX WHICH IS ABLE TO BE SPREAD AND COMPACTED TO FORM A UNIFORM STABLE BASE. THE MIXTURE OF FINE AND COARSE AGGREGATE FORMING THE ROCK BASE SHALL BE FREE FROM VEGETABLE MATTER, LUMPS OF CLAY, OVERBURDEN, OR ANY OTHER DELETERIOUS MATTER.
- COARSE AGGREGATES (RETAINED 4.75mm SIEVE) SHALL CONSIST OF CLEAN, HARD, DURABLE, ANGULAR ROCK FRAGMENTS OF UNIFORM QUALITY PRODUCED BY CRUSHING SOUND UNWEATHERED ROCK AND SHALL NOT INCLUDE MATERIALS WHICH BREAK UP WHEN ALTERNATELY WETTED AND DRIED.
- FINE AGGREGATE (PASSING 4.75mm SIEVE) SHALL CONSIST OF CLEAN, HARD, DURABLE, ANGULAR CRUSHED ROCK FRAGMENTS OF UNIFORM QUALITY OR A MIXTURE OF CRUSHED ROCK FRAGMENTS WITH NATURAL SAND OR CLAYEY SAND.
- A PARTICLE SIZE DISTRIBUTION (PSD) OF THE AGGREGATE TO BE USED IN THE CTR MUST BE PROVIDED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO DELIVERY TO SITE.
- THE PSD SHALL COMPLY WITH THE REQUIREMENTS SHOWN IN TABLE 1. THE GRADING OF MATERIAL PASSING THE 26.5mm SIEVE SHALL VARY FROM COARSE TO FINE IN A UNIFORM AND CONSISTENT MANNER. THE MATERIAL SHALL NOT BE GAP GRADED AS REPRESENTED BY THE GRADING CROSSING FROM THE MAXIMUM LIMIT FOR ONE SIEVE SIZE TO THE MINIMUM LIMIT FOR ANOTHER SIEVE SIZE, AND SHALL CONFORM AS CLOSELY AS POSSIBLE TO THE SPECIFIED TARGET GRADING.

TABLE 1: PARTICLE SIZE DISTRIBUTION (CTR AGGREGATE)

AS1152 SIEVE SIZE (mm)	% PASSING BY MASS (OPTIMAL)	TARGET GRADING
26.5	100	100
19	100	95 - 100
13.2	82	70 - 90
9.5	70	60 - 80
4.75	50	40 - 60
2.36	38	30 - 45
1.18	25	20 - 35
0.6	19	13 - 27
0.425	17	11 - 23
0.3	13	8 - 20
0.15	10	5 - 14
0.075	8	5 - 11

- IF ALL OR PART OF THE FINE AGGREGATES (IGNEOUS AND METAMORPHIC ROCK SOURCES ONLY) IS TO BE IMPORTED FROM A DIFFERENT SOURCE OR MANUFACTURED FROM A DIFFERENT ROCK TYPE TO THAT OF THE COARSE AGGREGATES, THE CONTRACTOR SHALL OBTAIN APPROVAL OF THE SUPERINTENDENT PRIOR TO USE.
- GRADED CRUSHED ROCK SHALL BE BATCH MIXED (PUGMILL OR SIMILAR) WITH ADDITION OF 4.0% (BY DRY MASS) OF CEMENT AND WATER. MIXING MUST ENSURE THAT THE WATER AND CEMENT ARE UNIFORMLY DISTRIBUTED TO PRODUCE A HOMOGENEOUS PRODUCT SUITABLE FOR PLACEMENT INTO FINAL POSITION.
- THE CTR SHALL BE PLACED IN A SINGLE 170mm THICK LAYER AND ROLLED WITH A SUITABLE SMOOTH DRUM ROLLER TO PROVIDE A WELL COMPACTED BASE WITH A UNIFORM SURFACE.



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No.: MIN/2026/240

Dated: 1 June 2026

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RPEQ 15637
Date 30.04.2026

CLIENT	PACIFIC VIEW FARM (QUEENSLAND) PTY LTD	PROJECT	SKYRIDGE - STAGE 13 BASIN P
DRAWN	S.T.	DATE	30.04.2026
DESIGNED	N.S.	DATE	30.04.2026
SCALE	AS SHOWN	A1	
PROJECT No	4480	DRAWING No	WSUD - P - 305
REVISION	B		