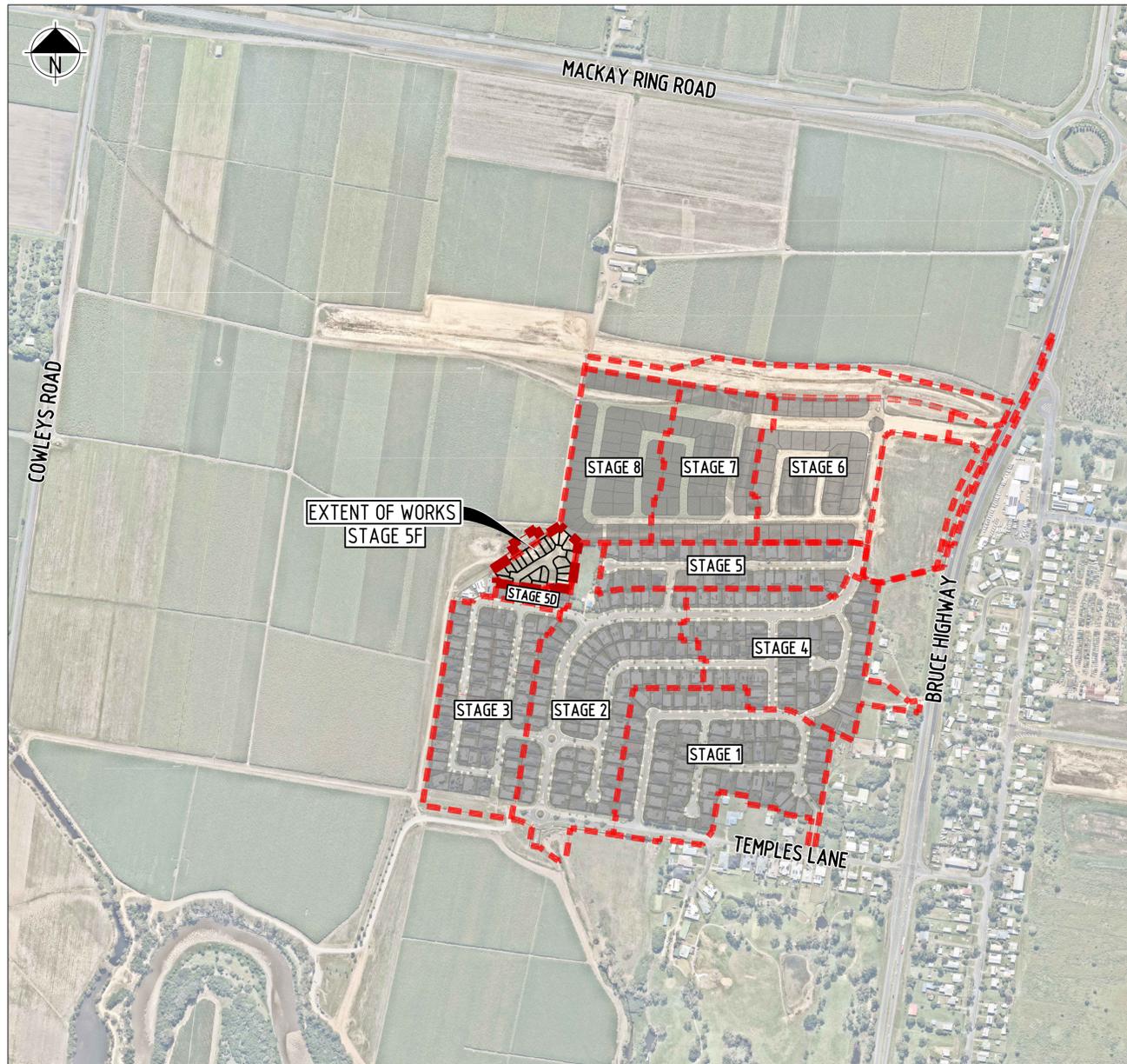


OORALEA WATERS STAGE 5F AT OORALEA, BAKERS CREEK (LOT 392 ON SP257985) PROPERTY DEVELOPMENT CIVIL WORKS



LOCALITY MAP
SCALE 1:5000

DRAWING INDEX

DRAWING No.	DRAWING TITLE
2319-STG5F-C001	COVER SHEET, LOCALITY PLAN AND DRAWING INDEX
2319-STG5F-C003	EXISTING SITE FEATURES LAYOUT PLAN
2319-STG5F-C021	GENERAL ARRANGEMENT
2319-STG5F-C031	EARTHWORKS LAYOUT PLAN
2319-STG5F-C051	ROADWORKS LAYOUT PLAN
2319-STG5F-C061	TYPICAL ROAD CROSS SECTION AND PAVEMENT DETAIL
2319-STG5F-C091	RETAINING WALL LAYOUT PLAN
2319-STG5F-C121	LONGITUDINAL SECTIONS AND CONTROL LINE SETOUT DETAILS
2319-STG5F-C131	CONTROL LINE CAMELIA COURT CROSS SECTIONS
2319-STG5F-C141	CONTROL LINE ROAD 2 CROSS SECTIONS
2319-STG5F-C171	STORMWATER LAYOUT PLAN
2319-STG5F-C211	STORMWATER LONGITUDINAL SECTIONS
2319-STG5F-C231	STORMWATER CATCHMENT LAYOUT PLAN
2319-STG5F-C241	STORMWATER CALCULATION TABLE
2319-STG5F-C242	BIO RETENTION BASIN LAYOUT PLAN
2319-STG5F-C243	BIO RETENTION BASIN SECTIONS
2319-STG5F-C244	BIO RETENTION BASIN STANDARD NOTES AND DETAILS
2319-STG5F-C251	SEWER RETICULATION LAYOUT PLAN
2319-STG5F-C261	SEWER RETICULATION LONGITUDINAL SECTIONS
2319-STG5F-C271	WATER RETICULATION LAYOUT PLAN
2319-STG5F-C272	HYDRANT COVERAGE AREA LAYOUT PLAN
2319-STG5F-C281	STREET TREE LAYOUT PLAN
2319-STG5F-C291	EROSION AND SEDIMENT CONTROL LAYOUT PLAN

DRAWING APPROVAL

BEING DULY AUTHORISED IN THIS BEHALF, DO CERTIFY THAT THE EARTHWORKS, ROADWORKS, STORMWATER DRAINAGE, SEWER RETICULATION, WATER RETICULATION AND ASSOCIATED WORKS FOR THE ABOVE DEVELOPMENT, HAVE BEEN DESIGNED IN ACCORDANCE WITH COUNCIL'S ENGINEERING GUIDELINES AND CONDITIONS OF APPROVAL FOR THE DEVELOPMENT. BY THE SIGNING OF THIS STATEMENT I HAVE DEEMED TO CERTIFY ALL DRAWINGS IN THIS CONTRACT AS LISTED ON THE DRAWING INDEX AS BEING IN ACCORDANCE WITH THE ABOVE.

SIGNED:

RPEQ No: 7198

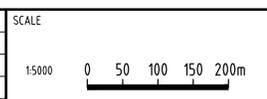
DATE: 31.10.25

FOR APPROVAL

18 Dec 2025

CAD FILENAME: C:\Users\Nara\Documents\2319 - The Waters Ooralea_2319\02\DESIGN\2319-STG5F-C001.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	



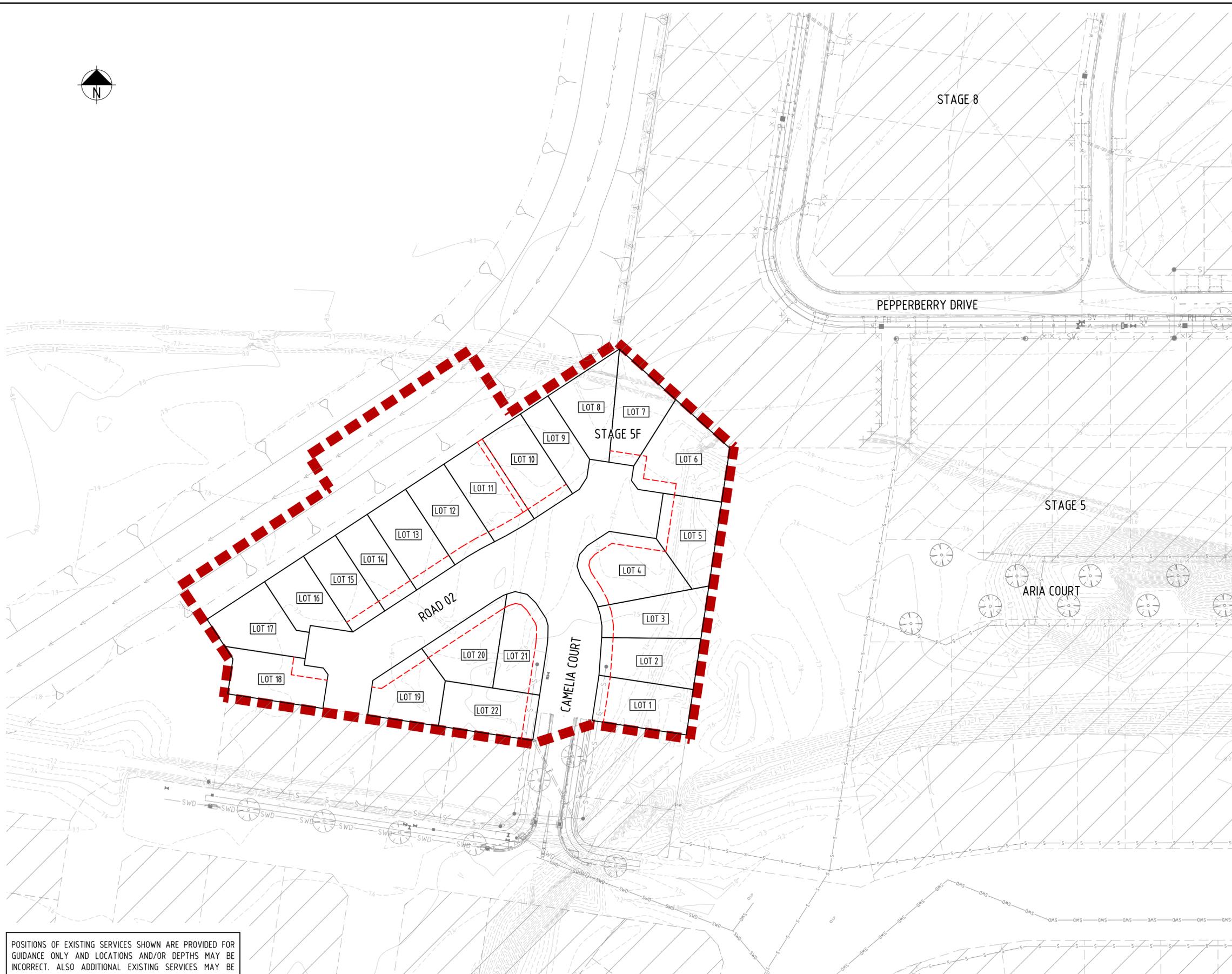
APPROVAL		
	7198	
RPEQ SIGNATURE	RPEQ No	DATE
DRAWN	DESIGNED	CHECKED
IF	MB	M.D.

**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

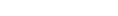
COVER SHEET,
LOCALITY PLAN
AND DRAWING INDEX

ISSUE: ISSUE FOR APPROVAL	
PROJECT No:	2319
DRAWING No:	2319-STG5F-C001
REV:	C

XREFS - X_DC_CIVIL_OPW.dwg; X_AERIAL_NEARMAP_A0.dwg; X_2319_DC_ST15F_LOTS_EXIST_STG_4-8.dwg; X_2319_DC_ST15F_LOTS.dwg; X_2319_DC_STG 8_STAGES_03_04_05_REF_Design_Sewer_Services_GDA2020.dwg; X_2319_DC_STG 8_STAGES_03_04_05_REF_Design_Stormwater_Services_GDA2020.dwg; X_2319_DC_STG 8_WATER_RETICULATION.dwg; X_2319_DC_STG 8_STORMWATER_DRAINAGE_PLAN.dwg; X_2319_DC_STG 8_SEWER_RETICULATION.dwg



LEGEND:

-  EXTENT OF WORKS BOUNDARY
 -  PROPOSED LOT BOUNDARY
 -  PROPOSED EASEMENT BOUNDARY
 -  PROPOSED RETAINING WALLS
 -  PROPOSED BATTER
 -  PROPOSED KERB
 -  EXISTING STAGES
- EXISTING FEATURES**
-  EXISTING UNDERGROUND ELECTRICAL LINE & PIT
 -  EXISTING STREET LIGHTING
 -  EXISTING POWER POLES
 -  EXISTING GRAVITY SEWER & MANHOLE
 -  EXISTING STORMWATER PIPE & MANHOLE
 -  EXISTING STORMWATER GULLY PITS
 -  EXISTING STORMWATER HEADWALL
 -  EXISTING POTABLE WATER LINE & FIRE HYDRANT
 -  EXISTING POTABLE WATER END CAP
 -  EXISTING POTABLE WATER GATE VALVE
 -  EXISTING WATER SERVICE
 -  EXISTING TELECOMMUNICATION CABLE & PIT
 -  EXISTING CONTOURS
 -  EXISTING CHANGE OF GRADE
 -  EXISTING KERB
 -  EXISTING RETAINING WALLS
 -  EXISTING BATTER
 -  EXISTING OPEN DRAIN INVERT
 -  EXISTING TREES

POSITIONS OF EXISTING SERVICES SHOWN ARE PROVIDED FOR GUIDANCE ONLY AND LOCATIONS AND/OR DEPTHS MAY BE INCORRECT. ALSO ADDITIONAL EXISTING SERVICES MAY BE PRESENT ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL EXISTING SERVICES ON SITE.

LAYOUT PLAN
SCALE 1:500

FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\Users\Nara\Documents\2319 - The Waters Ooralea\2319 - Stage 5F\DRG\OPW\2319-STG5F-C003.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	

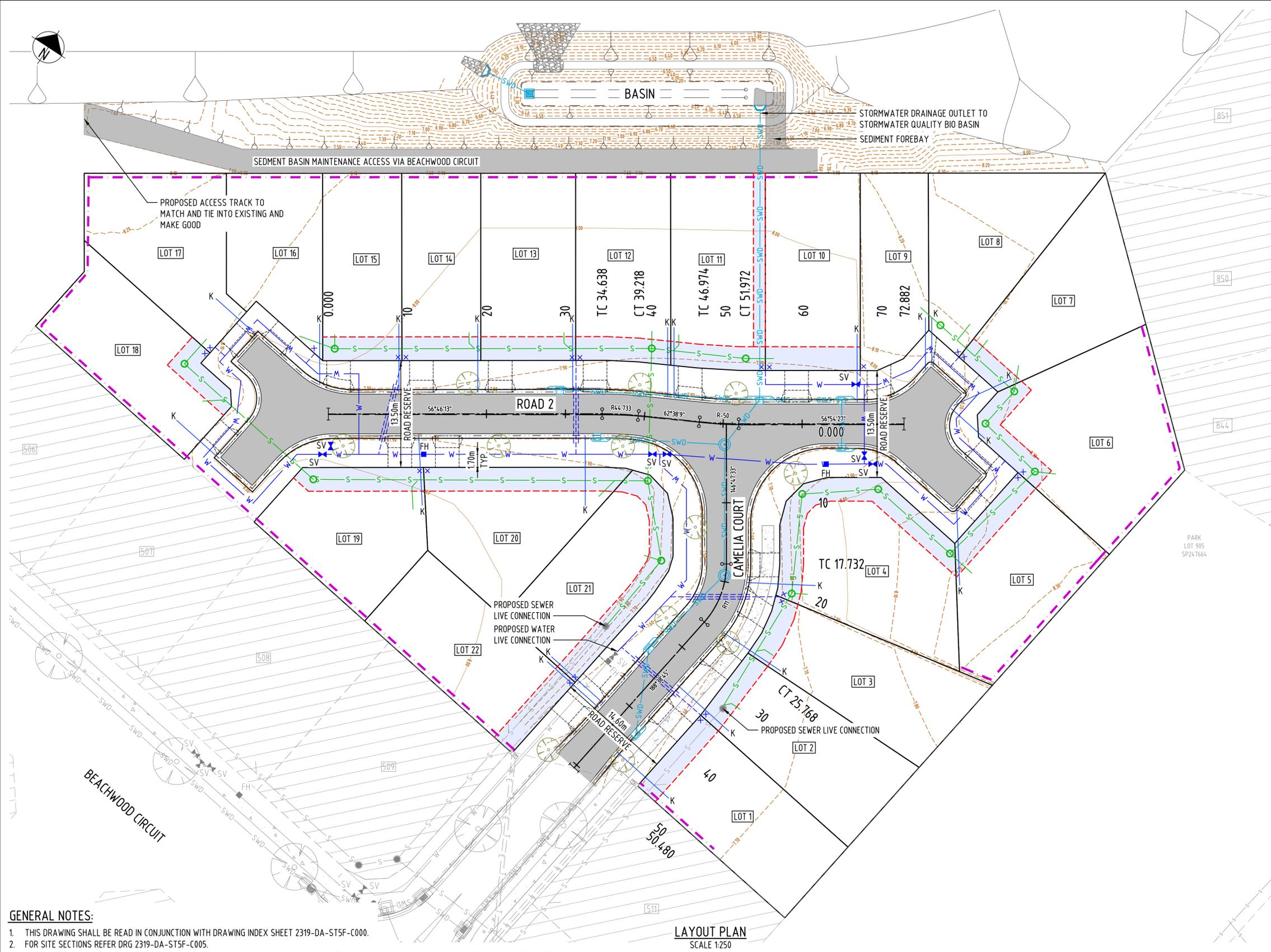


APPROVAL	7198
	RPEQ No
RPEQ SIGNATURE	31.10.25
DATE	
DRAWN	DESIGNED
IF	MB
CHECKED	M.D.

**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

EXISTING SITE FEATURES
LAYOUT PLAN

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C003
REV:	C



- LEGEND:**
GENERAL
- PROPOSED LOT BOUNDARY
 - PROPOSED EASEMENT BOUNDARY
 - PROPOSED CONTOURS
 - PROPOSED RETAINING WALLS
 - PROPOSED BATTER
 - PROPOSED ROAD CENTRE LINE
 - PROPOSED MOUNTABLE KERB & CHANNEL
 - PROPOSED CONCRETE EDGE
 - PROPOSED ROAD ASPHALT SURFACE
 - PROPOSED CONCRETE AREA
 - EXISTING STAGES
 - PROPOSED TREES
 - PROPOSED DRIVEWAY LOCATION

- LEGEND:**
PROPOSED SERVICES
- PROPOSED EASEMENT
 - PROPOSED GRAVITY SEWER & MANHOLE
 - PROPOSED STORMWATER PIPE & MANHOLE
 - PROPOSED STORMWATER GULLY PITS
 - PROPOSED KERB ADAPTER
 - PROPOSED POTABLE WATER LINE & FIRE HYDRANT
 - PROPOSED POTABLE WATER END CAP
 - PROPOSED TEE
 - PROPOSED POTABLE WATER GATE VALVE
 - PROPOSED FIRE HYDRANT
 - PROPOSED WATER SERVICE

- LEGEND:**
EXISTING FEATURES
- EXISTING CONTOURS
 - EXISTING LOT BOUNDARY
 - EXISTING CHANGE OF GRADE
 - EXISTING KERB
 - EXISTING TREES
 - EXISTING CONCRETE AREA
 - EXISTING BATTER
 - EXISTING UNDERGROUND ELECTRICAL LINE & PIT
 - EXISTING STREET LIGHTING
 - EXISTING POWER POLES
 - EXISTING GRAVITY SEWER & MANHOLE
 - EXISTING STORMWATER PIPE & MANHOLE
 - EXISTING STORMWATER GULLY PITS
 - EXISTING POTABLE WATER LINE & FIRE HYDRANT
 - EXISTING TELECOMMUNICATION CABLE & PIT

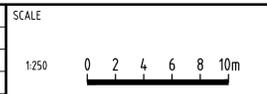
- GENERAL NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING INDEX SHEET 2319-DA-ST5F-C000.
 - FOR SITE SECTIONS REFER DRG 2319-DA-ST5F-C005.
 - ALL WORKS THAT ARE INCLUDED ON THESE ENGINEERING PLANS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT TECHNICAL SPECIFICATION, AND TO THE SATISFACTION OF THE PROJECT SUPERINTENDENT.
 - NO WORK ASSOCIATED WITH THESE DRAWINGS IS TO COMMENCE ON SITE UNTIL APPROVAL IS PROVIDED FROM THE LOCAL AUTHORITY, AND THE CONTRACTOR RECEIVES WRITTEN APPROVAL FROM THE SUPERINTENDENT. A PRE-START MEETING MUST BE HELD PRIOR TO COMMENCEMENT OF WORKS.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE SERVICES AUTHORITIES (INCLUDING BUT NOT LIMITED TO ERGON ENERGY, TELSTRA, NBN AND THE LOCAL AUTHORITY) AND LOCATE EXISTING UNDERGROUND SERVICES PRIOR TO ANY EXCAVATION WORKS COMMENCING ON SITE.
 - ANY DAMAGE CAUSED TO EXISTING INFRASTRUCTURE AS A RESULT OF CONSTRUCTION WORKS IS TO BE REPAIRED IMMEDIATELY.

POSITIONS OF EXISTING SERVICES SHOWN ARE PROVIDED FOR GUIDANCE ONLY AND LOCATIONS AND/OR DEPTHS MAY BE INCORRECT. ALSO ADDITIONAL EXISTING SERVICES MAY BE PRESENT ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL EXISTING SERVICES ON SITE.

FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\2025\Bakers\Ooralea\2319-DA-ST5F-C000.dwg - Stage 5F\DRG\OPW\2319-ST5F-C002.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	M.D.

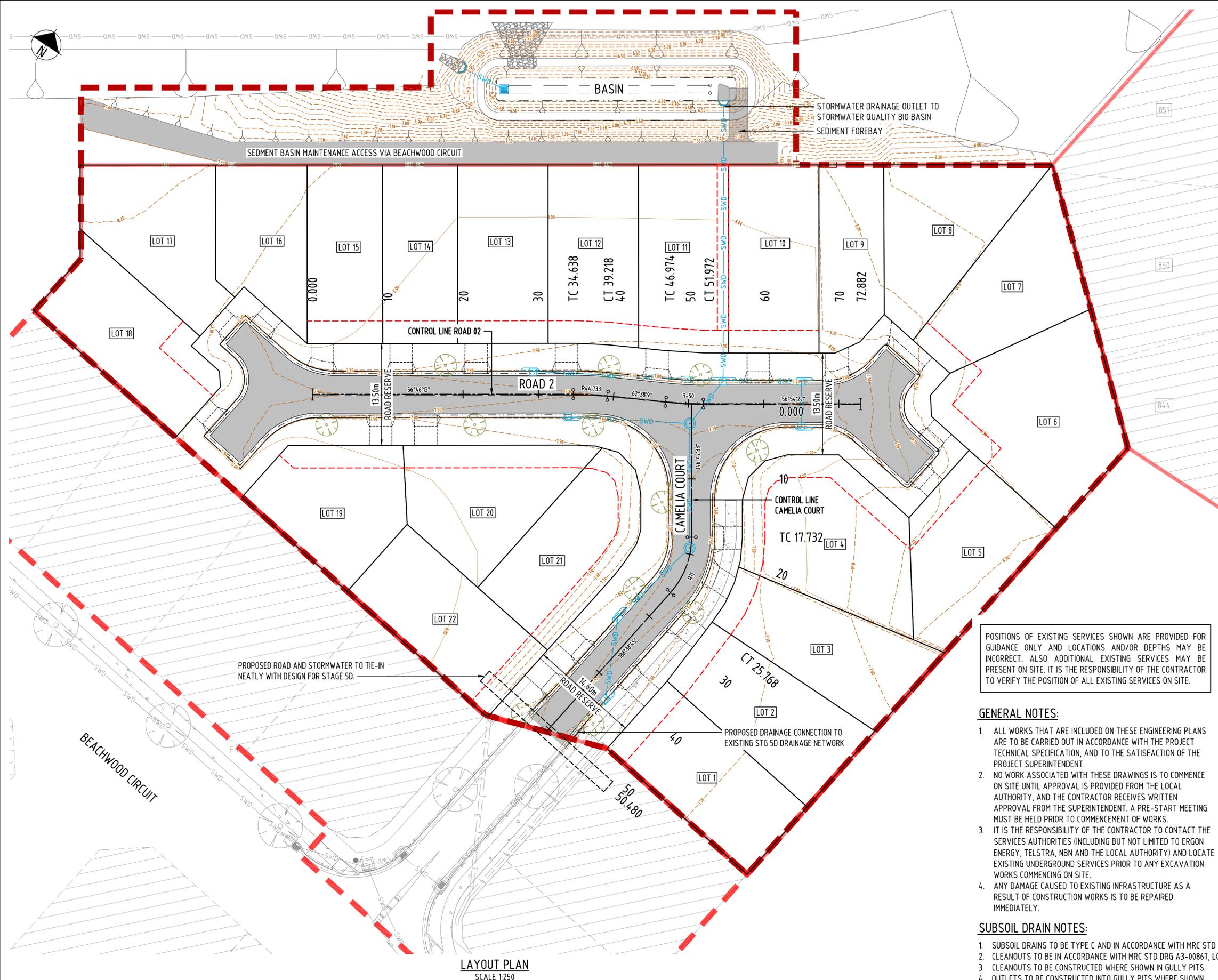


APPROVAL	7198
	RPEQ No
	31.10.25
RPEQ SIGNATURE	DATE
DRAWN	DESIGNED
IF	MB
CHECKED	M.D.

**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

GENERAL ARRANGEMENT

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C021
REV:	C



- LEGEND:**
- STAGE BOUNDARY
 - PARCEL BOUNDARY
 - EXTENT OF WORKS BOUNDARY
 - PROPOSED LOT BOUNDARY
 - PROPOSED EASEMENT BOUNDARY
 - PROPOSED CONTOURS
 - PROPOSED RETAINING WALLS
 - PROPOSED BATTER
 - PROPOSED CHANGE OF GRADE
 - PROPOSED OPEN DRAIN INVERT
 - PROPOSED SUBSOIL DRAIN & FLUSH POINT
 - PROPOSED BITUMEN EDGE
 - PROPOSED ROAD CENTRE LINE
 - PROPOSED BARRIER KERB & CHANNEL
 - PROPOSED MOUNTABLE KERB & CHANNEL
 - PROPOSED BARRIER KERB
 - PROPOSED MEDIAN KERB
 - PROPOSED CONCRETE EDGE
 - PROPOSED FENCE
 - PROPOSED SIGNS
 - PROPOSED GUIDE POSTS
 - PROPOSED ASPHALT SURFACE
 - PROPOSED CONCRETE AREA
 - EXISTING STAGES
 - PROPOSED STORMWATER PIPE & MANHOLE
 - PROPOSED STORMWATER GULLY PITS

- LEGEND:**
- EXISTING FEATURES**
- EXISTING CONTOURS
 - EXISTING LOT BOUNDARY
 - EXISTING CHANGE OF GRADE
 - EXISTING KERB
 - EXISTING TREES
 - EXISTING CONCRETE AREA
 - EXISTING BATTER
 - EXISTING UNDERGROUND ELECTRICAL LINE & PIT
 - EXISTING STREET LIGHTING
 - EXISTING POWER POLES
 - EXISTING GRAVITY SEWER & MANHOLE
 - EXISTING STORMWATER PIPE & MANHOLE
 - EXISTING STORMWATER GULLY PITS
 - EXISTING POTABLE WATER LINE & FIRE HYDRANT
 - EXISTING TELECOMMUNICATION CABLE & PIT

POSITIONS OF EXISTING SERVICES SHOWN ARE PROVIDED FOR GUIDANCE ONLY AND LOCATIONS AND/OR DEPTHS MAY BE INCORRECT. ALSO ADDITIONAL EXISTING SERVICES MAY BE PRESENT ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL EXISTING SERVICES ON SITE.

GENERAL NOTES:

1. ALL WORKS THAT ARE INCLUDED ON THESE ENGINEERING PLANS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT TECHNICAL SPECIFICATION, AND TO THE SATISFACTION OF THE PROJECT SUPERINTENDENT.
2. NO WORK ASSOCIATED WITH THESE DRAWINGS IS TO COMMENCE ON SITE UNTIL APPROVAL IS PROVIDED FROM THE LOCAL AUTHORITY, AND THE CONTRACTOR RECEIVES WRITTEN APPROVAL FROM THE SUPERINTENDENT. A PRE-START MEETING MUST BE HELD PRIOR TO COMMENCEMENT OF WORKS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE SERVICES AUTHORITIES (INCLUDING BUT NOT LIMITED TO ERGON ENERGY, TELSTRA, NBN AND THE LOCAL AUTHORITY) AND LOCATE EXISTING UNDERGROUND SERVICES PRIOR TO ANY EXCAVATION WORKS COMMENCING ON SITE.
4. ANY DAMAGE CAUSED TO EXISTING INFRASTRUCTURE AS A RESULT OF CONSTRUCTION WORKS IS TO BE REPAIRED IMMEDIATELY.

SUBSOIL DRAIN NOTES:

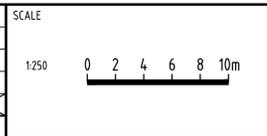
1. SUBSOIL DRAINS TO BE TYPE C AND IN ACCORDANCE WITH MRC STD DRG A3-00867.
2. CLEANOUTS TO BE IN ACCORDANCE WITH MRC STD DRG A3-00867, LOCATED WHERE SHOWN.
3. CLEANOUTS TO BE CONSTRUCTED WHERE SHOWN IN GULLY PITS.
4. OUTLETS TO BE CONSTRUCTED INTO GULLY PITS WHERE SHOWN.

LAYOUT PLAN
SCALE 1:250

FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\1265\Bakers\Ooralea\Waters\Ooralea - Stage 5F\DRG\OPW\2319-STG5F-C051.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	M.D.

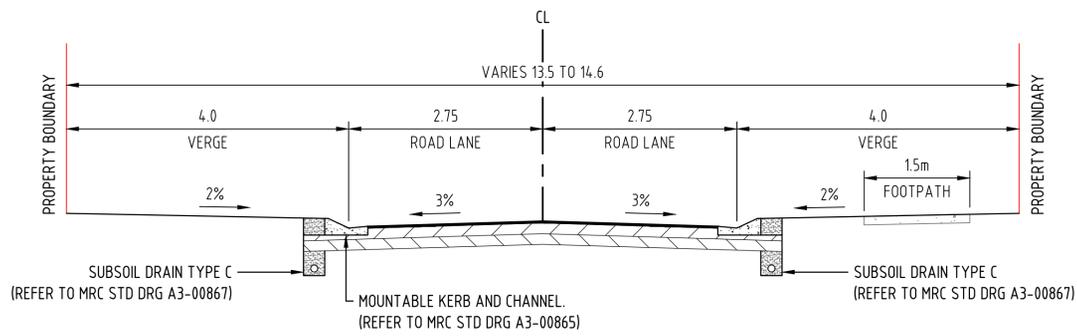


APPROVAL	7198
	RPEQ No
	31.10.25
RPEQ SIGNATURE	DATE
DRAWN	DESIGNED
IF	MB
CHECKED	M.D.

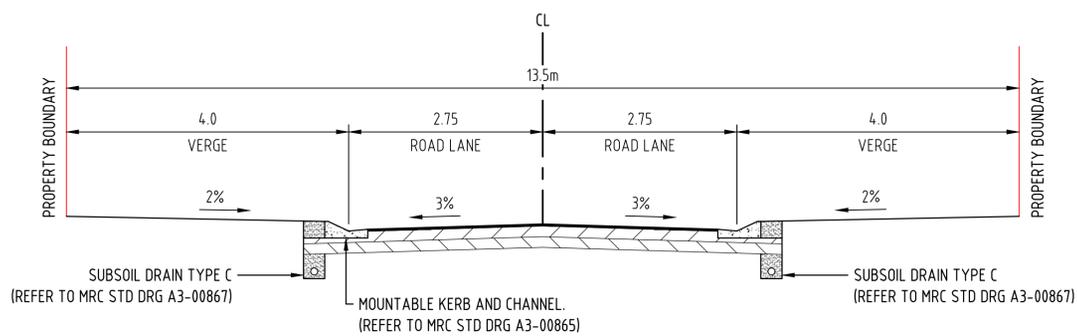
**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

ROADWORKS
LAYOUT PLAN

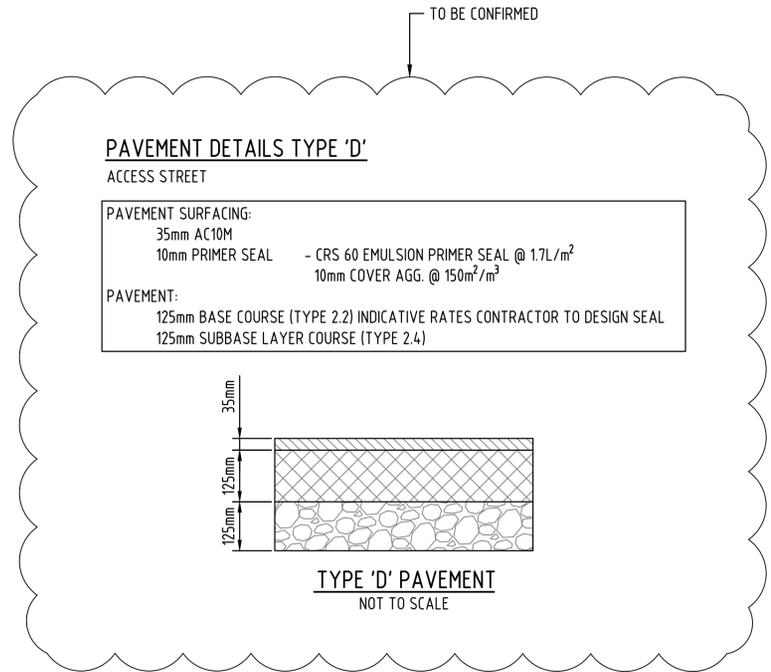
ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C051
REV:	C



**TYPICAL CROSS SECTION
CAMELIA COURT**
SCALE 1:50



**TYPICAL CROSS SECTION
ROAD 2**
SCALE 1:50



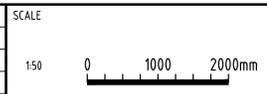
NOTES:

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING INDEX SHEET 2319-DA-ST5F-C000.
- INTERNAL SERVICES ARE INDICATIVE ONLY, AND WILL BE FURTHER INVESTIGATED IN OPERATION WORKS PHASE.

FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\2025\Bakers\Ooralea\Drawings\2319 - Stage 5\DRG\OPW\2319-ST5F-C061.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	

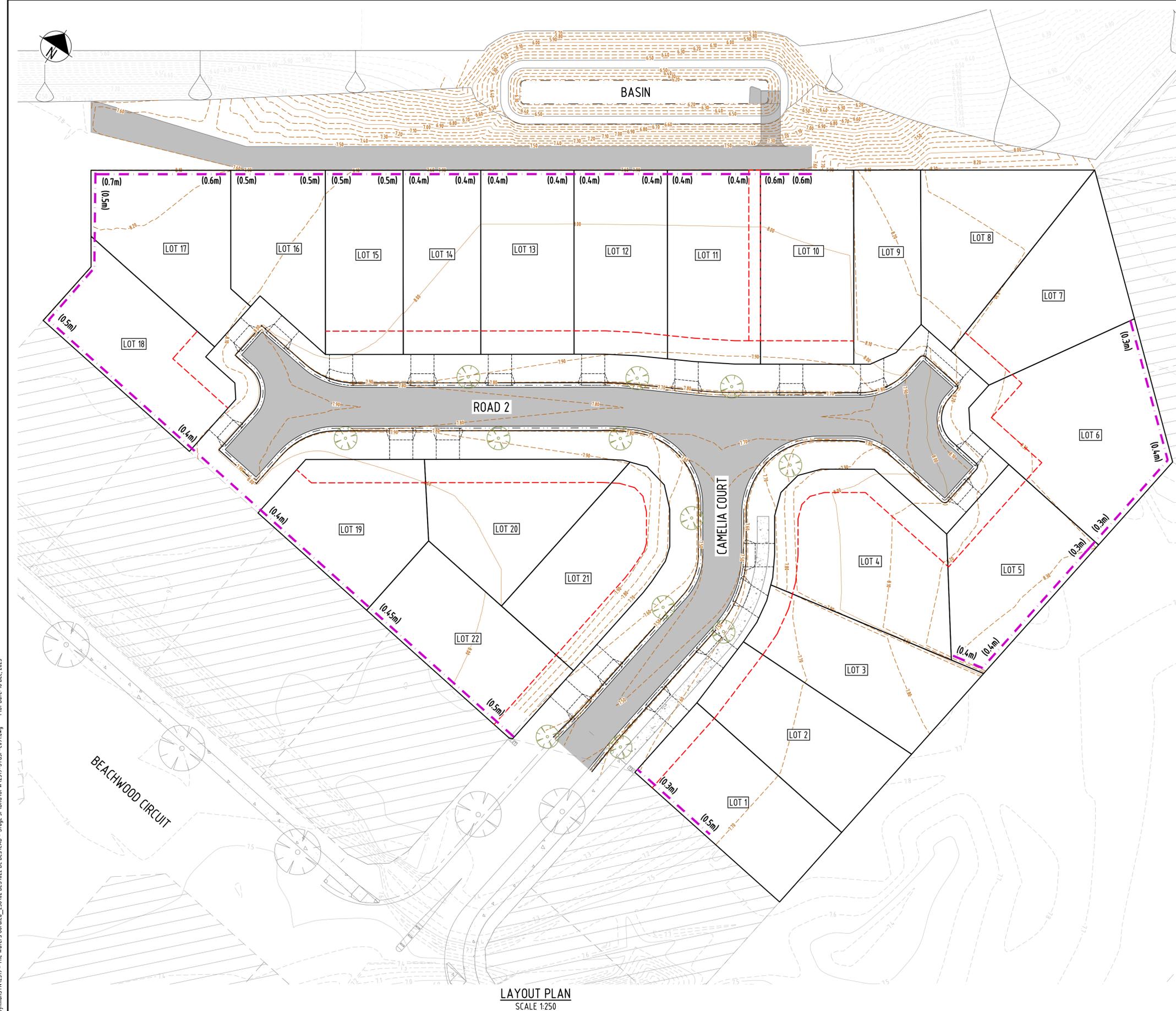


APPROVAL		7198
RPEQ SIGNATURE		RPEQ No
DATE		31.10.25
DRAWN	DESIGNED	CHECKED
1F	M.B	M.D

**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

TYPICAL ROAD CROSS SECTION
AND PAVEMENT DETAIL

ISSUE: ISSUE FOR APPROVAL	
PROJECT No:	2319
DRAWING No:	2319-STG5F-C061
REV:	C



- LEGEND:**
- GENERAL**
- PROPOSED LOT BOUNDARY
 - - - PROPOSED EASEMENT BOUNDARY
 - - - PROPOSED CONTOURS
 - - - PROPOSED RETAINING WALLS
 - = PROPOSED MOUNTABLE KERB & CHANNEL
 - = PROPOSED CONCRETE EDGE
 - PROPOSED ROAD ASPHALT SURFACE
 - PROPOSED CONCRETE AREA
 - EXISTING STAGES
 - PROPOSED TREES
 - PROPOSED DRIVEWAY LOCATION
- LEGEND:**
- EXISTING FEATURES**
- - - EXISTING CONTOURS
 - - - EXISTING LOT BOUNDARY
 - - - EXISTING CHANGE OF GRADE
 - = EXISTING KERB
 - EXISTING TREES
 - EXISTING CONCRETE AREA
 - = EXISTING BATTER
 - = EXISTING UNDERGROUND ELECTRICAL LINE & PIT
 - = EXISTING STREET LIGHTING
 - = EXISTING POWER POLES
 - = EXISTING GRAVITY SEWER & MANHOLE
 - = EXISTING STORMWATER PIPE & MANHOLE
 - = EXISTING STORMWATER GULLY PITS
 - = EXISTING POTABLE WATER LINE & FIRE HYDRANT
 - = EXISTING TELECOMMUNICATION CABLE & PIT

RETAINING WALL CERTIFICATION:

1. THE CONTRACTOR IS RESPONSIBLE FOR DESIGN AND CERTIFICATION OF RETAINING WALLS BY AN APPROPRIATELY QUALIFIED & REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ), INCLUDING PROVISION OF CERTIFIED FORMS 15 & 16. DESIGN CERTIFICATION TO BE PROVIDED TO THE SUPERINTENDENT A MINIMUM OF TWO WEEKS PRIOR COMMENCEMENT OF CONSTRUCTION SHALL NOT COMMENCE UNTIL INSTRUCTIONS TO PROCEED FROM THE SUPERINTENDENT.
2. THE DESIGN OF THE WALLS TO ALLOW FOR LOADING OF ADJACENT WALLS, SERVICES, FENCES, BUILDING AND ACCOUNT FOR OVERALL STABILITY.
3. TEMPORARY BARRIER FENCING TO BE PROVIDED AT THE TOP OF ALL BATTERS AND WALLS TO REMAIN IN PLACE AFTER CONSTRUCTION UNTIL HOUSE BUILDER TAKES POSSESSION OF SITE.

NOTES:

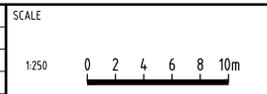
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING INDEX DRAWING No. 2319-STG5F-C001.
2. FOR COMBINED SILT, EROSION AND STORMWATER MANAGEMENT REFER DRAWING No. 2319-STG5F-C291.
3. FOR INDICATIVE STRUCTURAL WALL DETAILS REFER DRAWING No. 2319-STG5F-C092.
4. ALL BATTERS STEEPER THAN 1 ON 6 MUST BE CERTIFIED BY AN AUTHORISED GEOTECHNICAL CONSULTANT THAT THEY ARE STABLE AND APPROPRIATELY DRAINED.

FOR APPROVAL
18 Dec 2025

LAYOUT PLAN
SCALE 1:250

CAD FILENAME: C:\1265\Bakera\dykman\2319 - The Waters\Oralea_2319\02\DESIGN\2319-STG5F-C091.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	M.D.



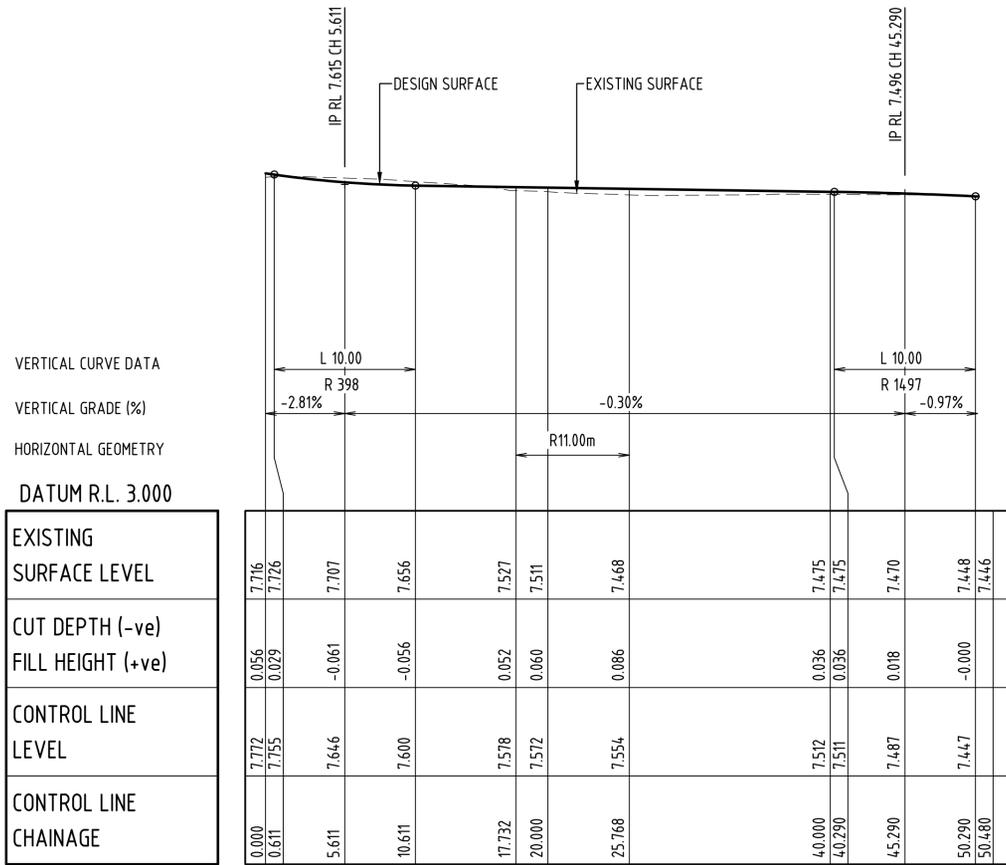
APPROVAL	7198
	RPEQ No
	31.10.25
	DATE
RPEQ SIGNATURE	
DRAWN	DESIGNED
IF	MB
	CHECKED
	M.D.

OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT

RETAINING WALL
LAYOUT PLAN

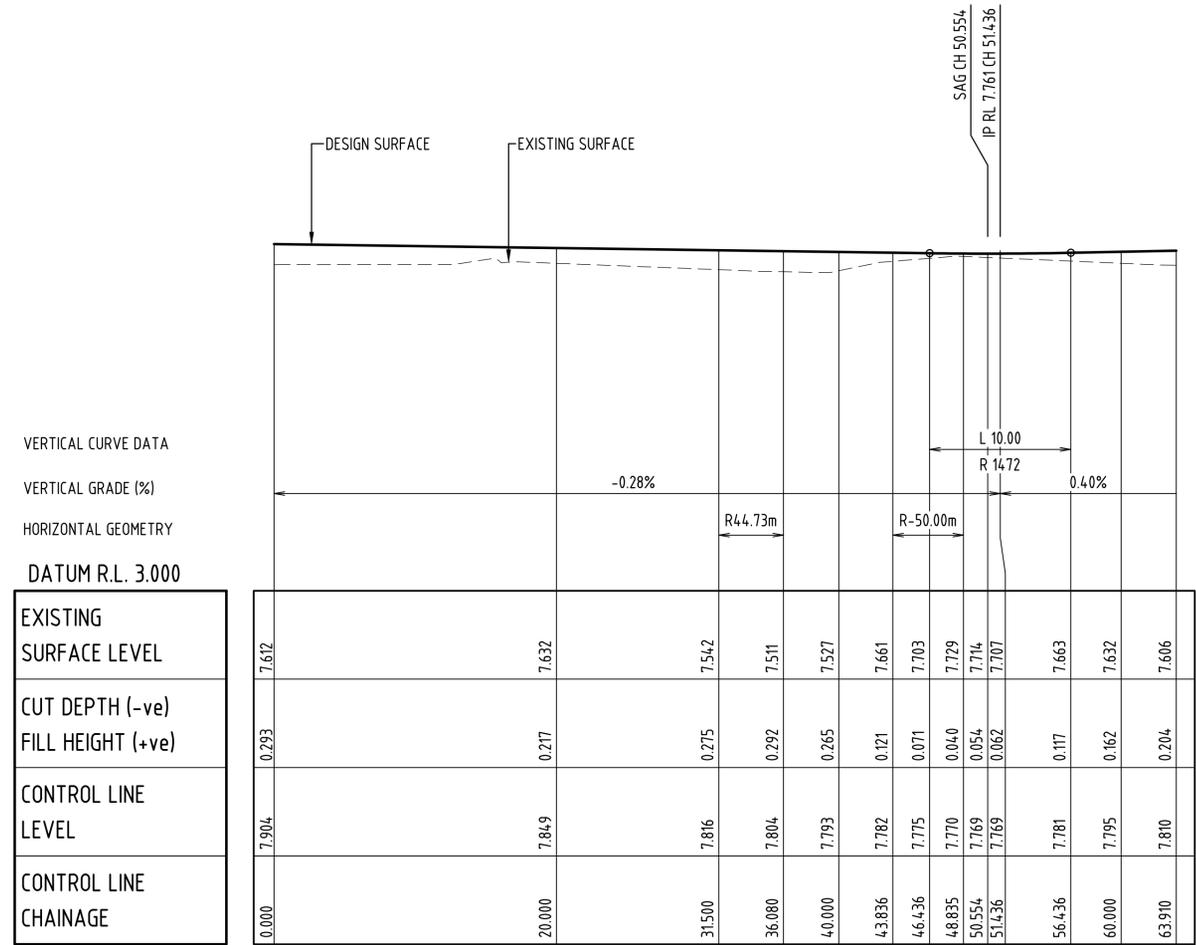
ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C091
REV:	C

CAD FILENAME: C:\Users\Natalia.Dykman\My Documents\2319 - The Waters Oralea\2319 - Stage 5\DRG\OPW\2319-STG5F-C121.dwg Plot Date: 18 Dec, 2025



LONGITUDINAL SECTION - CAMELIA COURT

HORIZ SCALE 1:250
 VERT SCALE 1:25



LONGITUDINAL SECTION - ROAD 2

HORIZ SCALE 1:250
 VERT SCALE 1:25

FOR APPROVAL
 18 Dec 2025

SCALE	1:25	0 500 1000mm	
SCALE	1:250	0 2 4 6 8 10m	
REV	ISSUED FOR APPROVAL	18.12.25	M.D.
	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
	ISSUED FOR APPROVAL	31.10.25	M.D.
	REVISION DETAILS	DATE	APPR



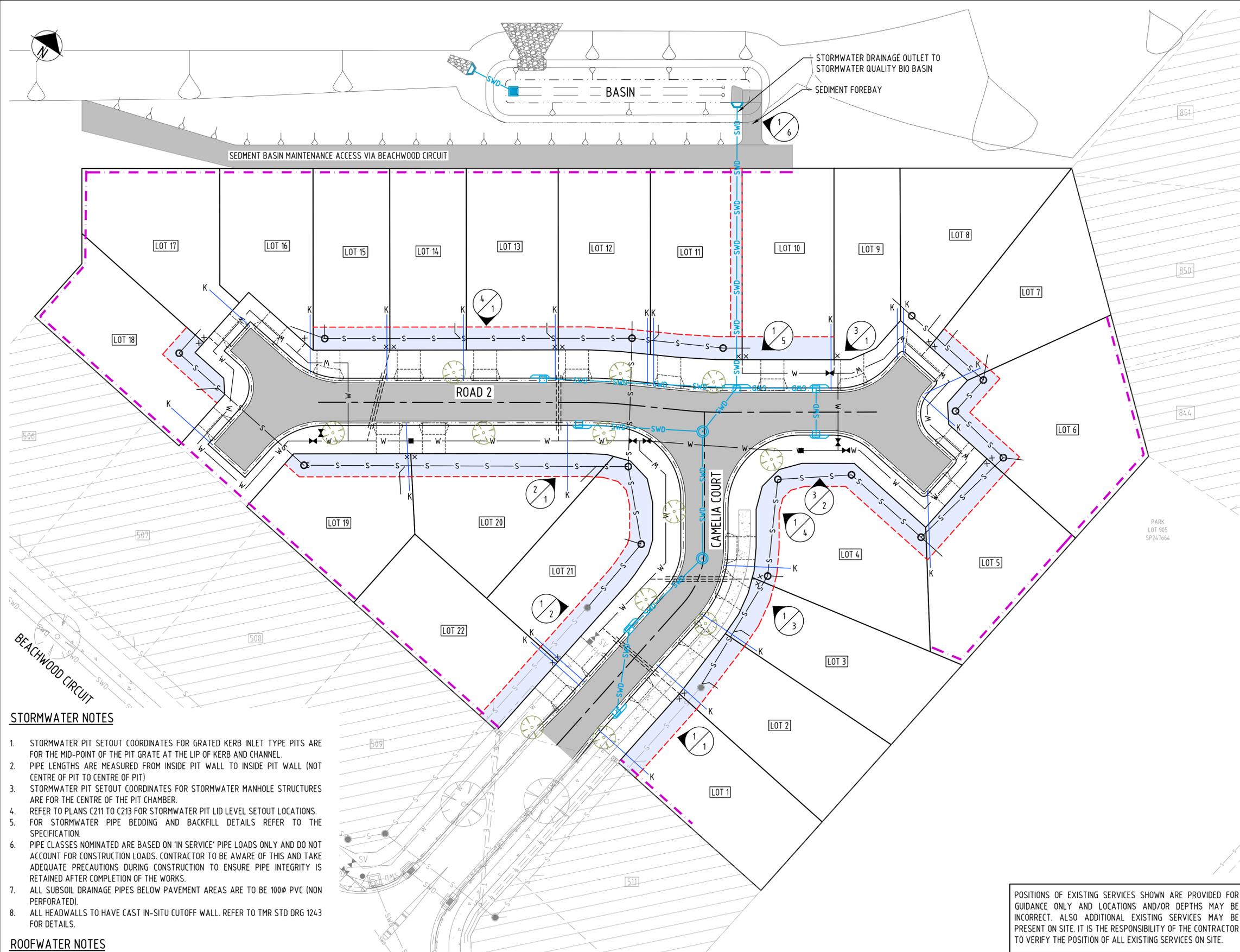
APPROVAL	7198	
RPEQ SIGNATURE	31.10.25	
DATE		
DRAWN	DESIGNED	CHECKED
1F	M.B	M.D

**OORALEA WATERS STAGE 5F
 AT OORALEA, BAKERS CREEK
 PROPERTY DEVELOPMENT**

LONGITUDINAL SECTIONS
 AND CONTROL LINE
 SETOUT DETAILS

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C121
REV:	C

XREFS: X_DC_CIVIL_OPW.dwg; X_2319_STG5F_ROAD_LONGITUDINAL_SECTIONS.dwg



- LEGEND:**
- EXISTING FEATURES**
- 2.0 — EXISTING CONTOURS
 - XXXX EXISTING RETAINING WALLS
 - AAA EXISTING BATTER
 - E — EXISTING OPEN DRAIN INVERT
 - E — EXISTING UNDERGROUND ELECTRICAL LINE & PIT
 - S — EXISTING GRAVITY SEWER & MANHOLE
 - SWD — EXISTING STORMWATER PIPE & MANHOLE
 - G — EXISTING STORMWATER GULLY PITS
 - W — EXISTING STORMWATER HEADWALL
 - W — EXISTING POTABLE WATER LINE & FIRE HYDRANT
 - J — EXISTING POTABLE WATER END CAP & GATE VALVE
 - T — EXISTING TELECOMMUNICATION CABLE & PIT
 - EXISTING LOT BOUNDARY
 - EXISTING CHANGE OF GRADE
 - EXISTING KERB
 - EXISTING TREES
 - EXISTING CONCRETE AREA

- LEGEND:**
- GENERAL**
- PROPOSED LOT BOUNDARY
 - PROPOSED EASEMENT BOUNDARY
 - 2.0 — PROPOSED CONTOURS
 - PROPOSED RETAINING WALLS
 - AAA PROPOSED BATTER
 - PROPOSED BITUMEN EDGE
 - PROPOSED ROAD CENTRE LINE
 - PROPOSED MOUNTABLE KERB & CHANNEL
 - PROPOSED ROAD ASPHALT SURFACE
 - PROPOSED CONCRETE AREA
 - EXISTING STAGES
 - PROPOSED TREES

- LEGEND:**
- PROPOSED SERVICES**
- PROPOSED SEWER EASEMENT
 - S — PROPOSED GRAVITY SEWER & MANHOLE
 - SWD — PROPOSED STORMWATER PIPE & MANHOLE
 - G — PROPOSED STORMWATER GULLY PIT & HEADWALL
 - 8 1 — PROPOSED STORMWATER STRUCTURE ID
 - K — PROPOSED KERB ADAPTER
 - W — PROPOSED POTABLE WATER LINE FIRE HYDRANT, METER, GATE VALVE & END CAP
 - X — PROPOSED WATER SERVICE

POSITIONS OF EXISTING SERVICES SHOWN ARE PROVIDED FOR GUIDANCE ONLY AND LOCATIONS AND/OR DEPTHS MAY BE INCORRECT. ALSO ADDITIONAL EXISTING SERVICES MAY BE PRESENT ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL EXISTING SERVICES ON SITE.

STORMWATER NOTES

1. STORMWATER PIT SETOUT COORDINATES FOR GRATED KERB INLET TYPE PITS ARE FOR THE MID-POINT OF THE PIT GRATE AT THE LIP OF KERB AND CHANNEL.
2. PIPE LENGTHS ARE MEASURED FROM INSIDE PIT WALL TO INSIDE PIT WALL (NOT CENTRE OF PIT TO CENTRE OF PIT)
3. STORMWATER PIT SETOUT COORDINATES FOR STORMWATER MANHOLE STRUCTURES ARE FOR THE CENTRE OF THE PIT CHAMBER.
4. REFER TO PLANS C211 TO C213 FOR STORMWATER PIT LID LEVEL SETOUT LOCATIONS.
5. FOR STORMWATER PIPE BEDDING AND BACKFILL DETAILS REFER TO THE SPECIFICATION.
6. PIPE CLASSES NOMINATED ARE BASED ON 'IN SERVICE' PIPE LOADS ONLY AND DO NOT ACCOUNT FOR CONSTRUCTION LOADS. CONTRACTOR TO BE AWARE OF THIS AND TAKE ADEQUATE PRECAUTIONS DURING CONSTRUCTION TO ENSURE PIPE INTEGRITY IS RETAINED AFTER COMPLETION OF THE WORKS.
7. ALL SUBSOIL DRAINAGE PIPES BELOW PAVEMENT AREAS ARE TO BE 100Ø PVC (NON PERFORATED).
8. ALL HEADWALLS TO HAVE CAST IN-SITU CUTOFF WALL. REFER TO TMR STD DRG 1243 FOR DETAILS.

ROOFWATER NOTES

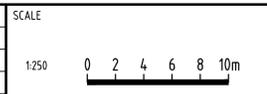
1. GALV. STEEL KERB ADAPTORS (AS PER MRC STD DRG A3-3871) SHALL BE INSTALLED IN THE NEW KERB AND CHANNEL. ADAPTORS ARE TO BE PLACED IN THE KERB 1.0m INSIDE THE BOUNDARY ON EACH SIDE OF THE ALLOTMENT U.N.O. NEW CONNECTIONS ARE DEPICTED THUS

LAYOUT PLAN
SCALE 1:250

FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\Users\kara\Documents\2319 - The Waters Oralea - Stage 5\DRG\OPW\2319-STG5F-C11.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	



APPROVAL	7198
RPEQ SIGNATURE	RPEQ No
DATE	31.10.25
DRAWN	DESIGNED
IF	MB
CHECKED	M.D.

OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT

STORMWATER
LAYOUT PLAN

ISSUE: ISSUE FOR APPROVAL	
PROJECT No:	2319
DRAWING No:	2319-STG5F-C171
REV:	C

STRUCTURE NAME	1-1	1-2	1-3	1-4	1-5	1-6
STRUCTURE DESCRIPTION	LIL (ON-GRADE) GULLY PIT "S" LINTEL MOUNTABLE K&C	LIL (ON-GRADE) GULLY PIT "S" LINTEL MOUNTABLE K&C	1050Ø STORMWATER ACCESS CHAMBER	1050Ø STORMWATER ACCESS CHAMBER	LIL (SAG) GULLY PIT "M" LINTEL MOUNTABLE K&C	HEADWALL
PIPE SIZE (mm)	375	375	375	375	525	
PIPE CLASS	3	3	3	3	3	
PIPE GRADE (%)	0.30%	0.30%	0.30%	0.31%	0.30%	
PIPE SLOPE (1 in X)	333.52	330.94	330.49	326.44	332.70	
FULL PIPE VELOCITY (m/s)	0.40	0.70	0.69	0.69	0.78	
PART FULL VELOCITY (m/s)	0.85	0.97	0.97	0.97	1.18	
DATUM RL	1.000					
WATER LEVEL IN STRUCTURE	6.982	6.909	6.831	6.748	6.686	6.446
PIPE FLOW (Cumecs)	0.045	0.077	0.077	0.076	0.168	
PIPE CAPACITY AT GRADE (Cumecs)	0.096	0.096	0.096	0.097	0.236	
HYDRAULIC GRADE LEVEL	6.901	6.894	6.823	6.740	6.678	6.446
DEPTH TO INVERT	1.041	1.102	1.222	1.425	1.461	0.400
INVERT LEVEL OF DRAIN	6.422	6.389	6.349	6.299	6.277	6.171
DESIGN SURFACE LEVEL	7.397	7.426	7.570	7.730	7.693	6.700
SETOUT COORDINATES	E 722245.455 N 7653972.531	E 722240.910 N 7653982.555	E 722243.833 N 7653995.466	E 722234.830 N 7653909.323	E 722235.440 N 7653916.479	E 722246.206 N 7653946.038
RUNNING CHAINAGE	0.000	11.006	13.237	16.525	17.82	35.266

LINE 1

STRUCTURE NAME	2-1	1-4
STRUCTURE DESCRIPTION	LIL (ON-GRADE) GULLY PIT "S" LINTEL MOUNTABLE K&C	REFER TO LINE 1
PIPE SIZE (mm)	375	
PIPE CLASS	3	
PIPE GRADE (%)	0.40%	
PIPE SLOPE (1 in X)	248.53	
FULL PIPE VELOCITY (m/s)	0.00	
PART FULL VELOCITY (m/s)	0.00	
DATUM RL	1.000	
WATER LEVEL IN STRUCTURE	6.740	6.748
PIPE FLOW (Cumecs)	0.000	0.168
PIPE CAPACITY AT GRADE (Cumecs)	0.111	0.236
HYDRAULIC GRADE LEVEL	6.740	6.740
DEPTH TO INVERT	1.058	1.071
INVERT LEVEL OF DRAIN	6.718	6.653
DESIGN SURFACE LEVEL	7.703	7.730
SETOUT COORDINATES	E 722220.838 N 7653907.249	E 722234.830 N 7653909.323
RUNNING CHAINAGE	0.000	16.155

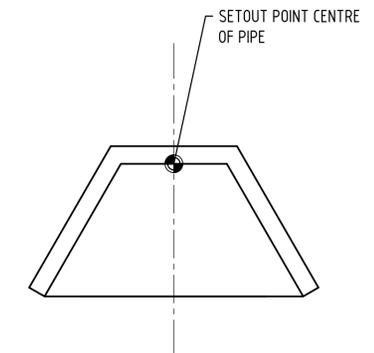
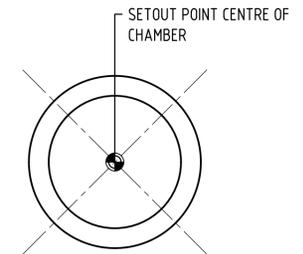
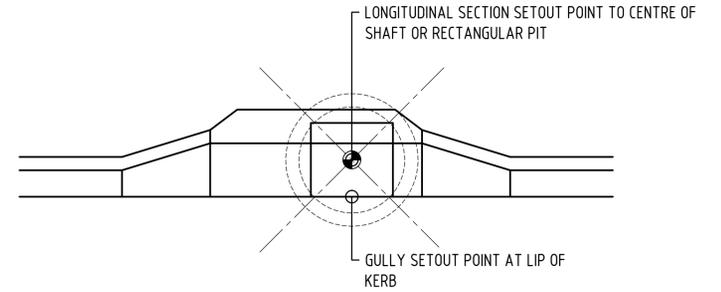
LINE 2

STRUCTURE NAME	3-2	3-1	1-5
STRUCTURE DESCRIPTION	LIL (ON-GRADE) GULLY PIT "S" LINTEL MOUNTABLE K&C	LIL (ON-GRADE) GULLY PIT "S" LINTEL MOUNTABLE K&C	REFER TO LINE 1
PIPE SIZE (mm)	375	375	
PIPE CLASS	3	PVC	
PIPE GRADE (%)	0.40%	0.34%	
PIPE SLOPE (1 in X)	251.36	296.84	
FULL PIPE VELOCITY (m/s)	0.00	0.26	
PART FULL VELOCITY (m/s)	0.00	0.79	
DATUM RL	1.000		
WATER LEVEL IN STRUCTURE	6.860	6.860	6.686
PIPE FLOW (Cumecs)	0.000	0.029	0.168
PIPE CAPACITY AT GRADE (Cumecs)	0.111	0.102	0.236
HYDRAULIC GRADE LEVEL	6.860	6.835	6.785
DEPTH TO INVERT	1.039	1.073	1.461
INVERT LEVEL OF DRAIN	6.722	6.698	6.663
DESIGN SURFACE LEVEL	7.697	7.713	7.693
SETOUT COORDINATES	E 722247.438 N 7653917.097	E 722244.144 N 7653922.151	E 722235.440 N 7653916.479
RUNNING CHAINAGE	0.000	6.033	16.422

LINE 3

STRUCTURE NAME	4-1	1-5
STRUCTURE DESCRIPTION	LIL (ON-GRADE) GULLY PIT "S" LINTEL MOUNTABLE K&C	REFER TO LINE 1
PIPE SIZE (mm)	375	
PIPE CLASS	3	
PIPE GRADE (%)	0.53%	
PIPE SLOPE (1 in X)	190.20	
FULL PIPE VELOCITY (m/s)	0.36	
PART FULL VELOCITY (m/s)	1.02	
DATUM RL	1.000	
WATER LEVEL IN STRUCTURE	6.939	6.686
PIPE FLOW (Cumecs)	0.040	0.168
PIPE CAPACITY AT GRADE (Cumecs)	0.127	0.236
HYDRAULIC GRADE LEVEL	6.892	6.758
DEPTH TO INVERT	1.053	1.124
INVERT LEVEL OF DRAIN	6.747	6.614
DESIGN SURFACE LEVEL	7.800	7.693
SETOUT COORDINATES	E 722206.950 N 7653899.407	E 722235.440 N 7653916.479
RUNNING CHAINAGE	0.000	25.297

LINE 4



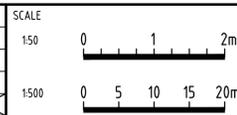
DRAINAGE STRUCTURE SETOUT DETAILS

NOT TO SCALE

POSITIONS OF EXISTING SERVICES SHOWN ARE PROVIDED FOR GUIDANCE ONLY AND LOCATIONS AND/OR DEPTHS MAY BE INCORRECT. ALSO ADDITIONAL EXISTING SERVICES MAY BE PRESENT ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL EXISTING SERVICES ON SITE.

FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\Users\Natalia.Dykman\My Documents\2319 - The Waters Ororalea - Stage 5F\DRG\OPW\2319-STG5F-C211.dwg Plot Date: 18 Dec, 2025



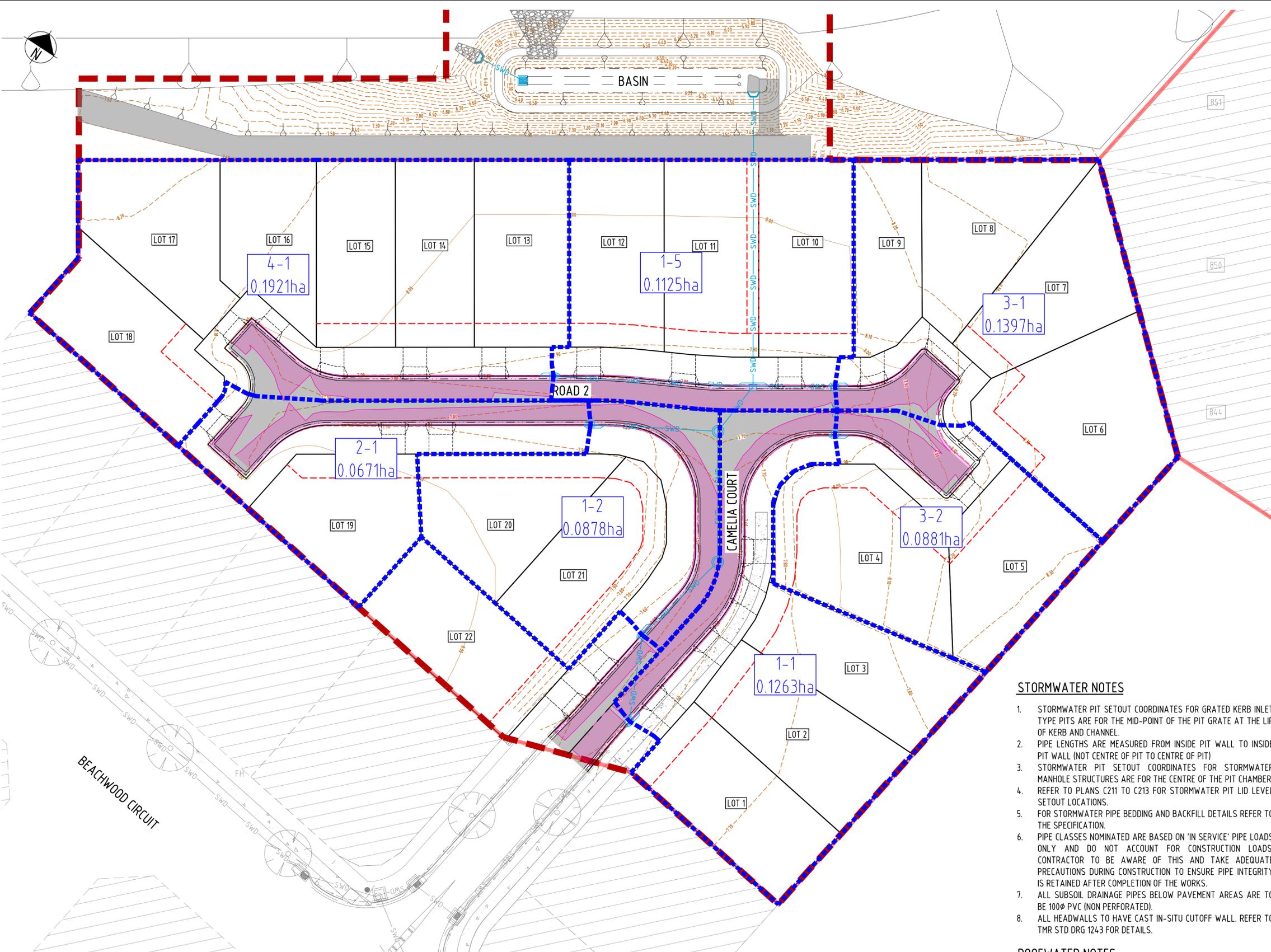
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RPEQ SIGNATURE	RPEQ No
DRAWN	DATE
DESIGNED	CHECKED
1F	M.B
	M.D

OORALEA WATERS STAGE 5F AT OORALEA, BAKERS CREEK PROPERTY DEVELOPMENT

STORMWATER LONGITUDINAL SECTIONS

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C211
REV:	C

XREFS :- X_DC_CIVIL_OPW.dwg; X_2319_DC_STG5F_STORMWATER_LONGITUDINAL_SECTIONS.dwg; X_2319_DC_STG5F_STORMWATER_STRUCTURE_DETAILS.dwg



LEGEND:

GENERAL

- STAGE BOUNDARY
- PARCEL BOUNDARY
- EXTENT OF WORKS BOUNDARY
- PROPOSED LOT BOUNDARY
- PROPOSED EASEMENT BOUNDARY
- PROPOSED CONTOURS
- PROPOSED RETAINING WALLS
- PROPOSED BATTER
- PROPOSED CHANGE OF GRADE
- PROPOSED OPEN DRAIN INVERT
- PROPOSED SUBSOIL DRAIN & FLUSH POINT
- PROPOSED BITUMEN EDGE
- PROPOSED ROAD CENTRE LINE
- PROPOSED BARRIER KERB & CHANNEL
- PROPOSED MOUNTABLE KERB & CHANNEL
- PROPOSED BARRIER KERB
- PROPOSED MEDIAN KERB
- PROPOSED CONCRETE EDGE
- PROPOSED FENCE
- PROPOSED SIGNS
- PROPOSED GUIDE POSTS
- PROPOSED ROAD ASPHALT SURFACE
- PROPOSED CONCRETE AREA
- EXISTING STAGES

LEGEND:

PROPOSED STORMWATER

- PROPOSED SUBSOIL DRAIN & FLUSH POINT
- PROPOSED SUBSOIL DRAIN (UNSLOTTED)
- PROPOSED STORMWATER PIPE
- PROPOSED ROOF WATER DRAIN
- PROPOSED STORMWATER PIPE & MANHOLE
- PROPOSED STORMWATER GULLY PITS
- PROPOSED STORMWATER HEADWALL
- STORMWATER PIT ID
- STORMWATER CATCHMENT BOUNDARY
- CATCHMENT ID AND AREA
- Q100 FLOOD IMMUNITY LEVEL

STORMWATER NOTES

- STORMWATER PIT SETOUT COORDINATES FOR GRATED KERB INLET TYPE PITS ARE FOR THE MID-POINT OF THE PIT GRATE AT THE LIP OF KERB AND CHANNEL.
- PIPE LENGTHS ARE MEASURED FROM INSIDE PIT WALL TO INSIDE PIT WALL (NOT CENTRE OF PIT TO CENTRE OF PIT)
- STORMWATER PIT SETOUT COORDINATES FOR STORMWATER MANHOLE STRUCTURES ARE FOR THE CENTRE OF THE PIT CHAMBER. REFER TO PLANS C211 TO C213 FOR STORMWATER PIT LID LEVEL SETOUT LOCATIONS.
- FOR STORMWATER PIPE BEDDING AND BACKFILL DETAILS REFER TO THE SPECIFICATION.
- PIPE CLASSES NOMINATED ARE BASED ON 'IN SERVICE' PIPE LOADS ONLY AND DO NOT ACCOUNT FOR CONSTRUCTION LOADS. CONTRACTOR TO BE AWARE OF THIS AND TAKE ADEQUATE PRECAUTIONS DURING CONSTRUCTION TO ENSURE PIPE INTEGRITY IS RETAINED AFTER COMPLETION OF THE WORKS.
- ALL SUBSOIL DRAINAGE PIPES BELOW PAVEMENT ARE TO BE 100Ø PVC (NON PERFORATED).
- ALL HEADWALLS TO HAVE CAST IN-SITU CUTOFF WALL. REFER TO TMR STD DRG 1243 FOR DETAILS.

ROOFWATER NOTES

- GALV. STEEL KERB ADAPTORS (AS PER MRC STD DRG A3-3871) SHALL BE INSTALLED IN THE NEW KERB AND CHANNEL. ADAPTORS ARE TO BE PLACED IN THE KERB 1.0m INSIDE THE BOUNDARY ON EACH SIDE OF THE ALLOTMENT U.N.O. NEW CONNECTIONS ARE DEPICTED THUS

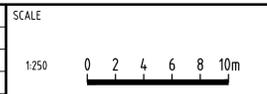
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LAYOUT PLAN
SCALE 1:250

FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\1205\Bakers\Ooralea\2319 - The Waters\Ooralea\2319 - Stage 5\DRG\OPW\2319-STG5F-C231.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	M.D.



APPROVAL	7198
RPEQ SIGNATURE	RPEQ No
DRAWN	DATE
DESIGNED	CHECKED
IF	MB
	M.D.

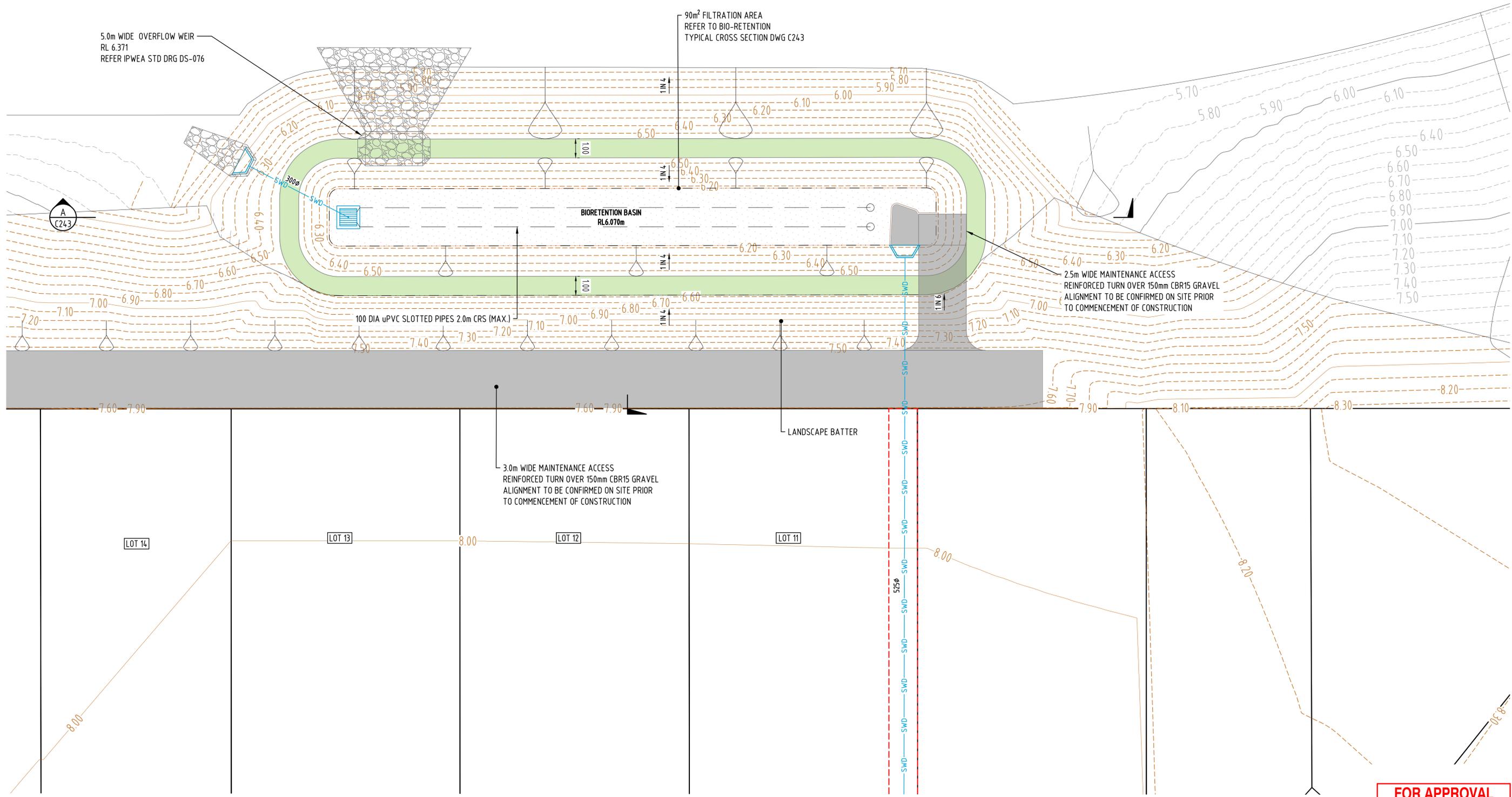
**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

**STORMWATER
CATCHMENT
LAYOUT PLAN**

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C231
REV:	C



EXISTING NORTH/SOUTH DRAIN

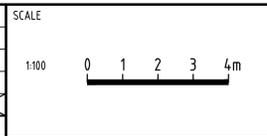


LAYOUT PLAN
 SCALE 1:100

FOR APPROVAL
 18 Dec 2025

CAD FILENAME: C:\1265\Water\Ooralea\2319 - The Waters Ooralea_2319\02\DESIGN\2319-STG5F-C242.dwg Plot Date: 18 Dec, 2025
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REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	M.D.

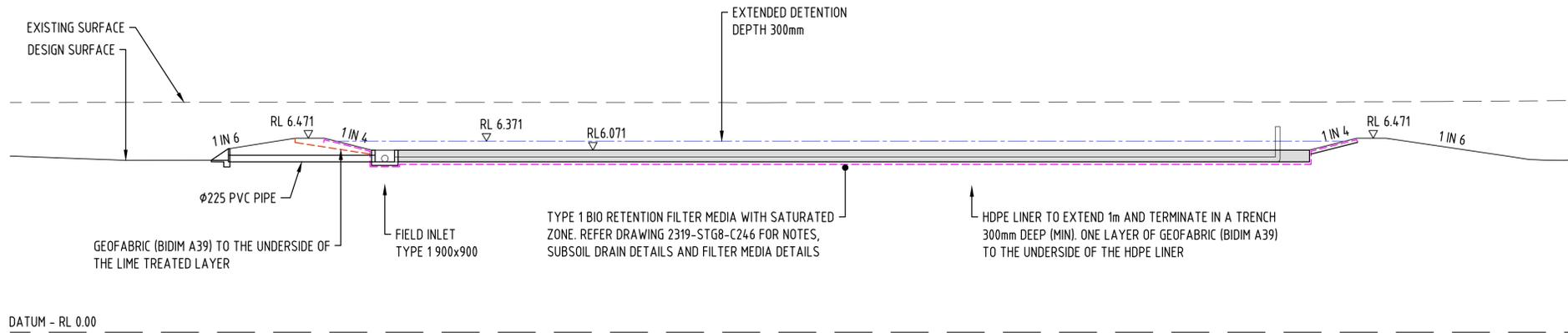


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RPEQ SIGNATURE	RPEQ No
DRAWN	DATE
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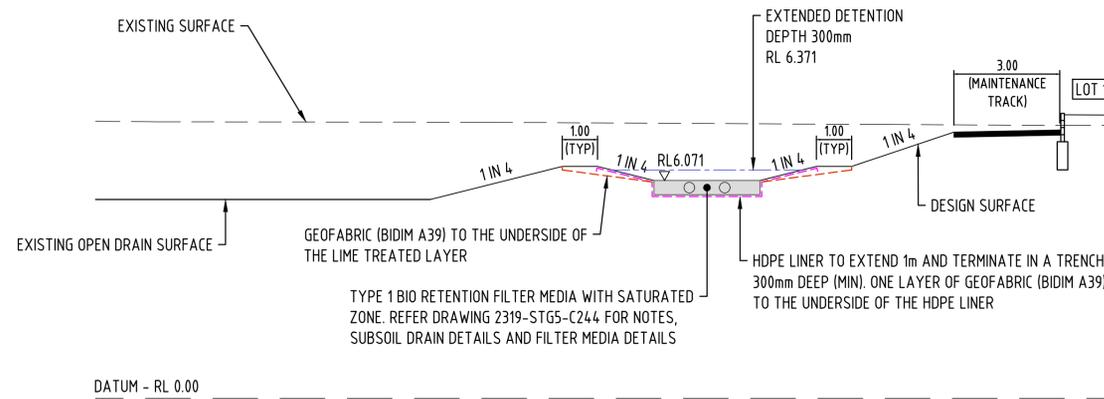
**OORALEA WATERS STAGE 5F
 AT OORALEA, BAKERS CREEK
 PROPERTY DEVELOPMENT**

**BIO RETENTION BASIN
 LAYOUT PLAN**

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C242
REV:	C



BASIN - SECTION A
SCALE 1:100

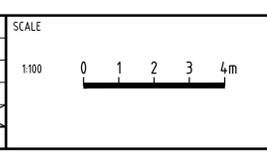


BASIN - SECTION B
SCALE 1:100

FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\Users\Nara\Documents\2319 - The Waters Ororalea_238102\BES\02\DC Des\CAD - Stage 5\DRG\OPW\2319-STG5-C243.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	M.D.



APPROVAL	7198
<i>AA</i>	RPEQ No
	DATE
RPEQ SIGNATURE	31.10.25
DRAWN	CHECKED
1F	M.D.

**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

**BIO RETENTION BASIN
SECTIONS**

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C243
REV:	C

XREFS :- X_DC_CIVIL_OPW.dwg ; X_2319_DC_STG 8_LOTS.dwg

8. - BIO-RETENTION BASIN NOTES

8.1 - CONSTRUCTION NOTES

8.1.1 - GENERAL

- (1) REFER TO IPWEA STANDARD BIO-RETENTION STANDARD NOTES DS-078 IN ADDITION TO THE NOTES BELOW.
- (2) CONSTRUCT BIO-RETENTION BASIN AS PER IPWEA STD DRG DS-070 AND DS-071 AND WATER BY DESIGN TECHNICAL DESIGN GUIDELINES.
- (3) JOINT OF COLLECTOR PIPE TO OUTLET PIT TO BE SEALED WITH HYDROTITE OR APPROVED EQUIVALENT.
- (4) LINER TO BE FIXED TO FACE OF OVERFLOW PIT WALL MIN. 300mm WIDE x 100mm HIGH AS PER IPWEA STD DRG DS-071.
- (5) ALL BIO-RETENTION BASIN EXCAVATIONS ARE TO BE LINED WITH AN IMPERMEABLE LINER.
- (6) BASIN FINISHED SURFACE LEVEL TO TOP OF FILTER MEDIA.

8.1.2 - COLLECTOR PIPES

- (1) UNDERDRAINS SHALL BE SLOTTED RIGID PIPE (UPVC OR APPROVED EQUIVALENT). SLOTTED PIPES MUST NOT BE INSTALLED WITH A FILTER SOCK SURROUNDING PIPE. SLOTS ARE TO BE NO WIDER THAN 3.0mm.
- (2) COLLECTOR PIPES TO BE NON-SLOTTED RIGID PIPE (UPVC OR APPROVED EQUIVALENT). PIPE JOINTS TO BE GLUED USING PLUMBING CEMENT. COLLECTOR PIPES SHALL BE SEALED INTO PITS USING HYDROTITE OR OTHER APPROVED WATERSTOP SEAL.
- (3) ALL UNDERDRAINAGE PIPE CONNECTIONS ARE TO BE CONFIGURED TO ALLOW RODDING AND FLUSHING.
- (4) Y BRANCHES TO BE USED TO CONNECT Ø100 SLOTTED RIGID UPVC PIPE TO Ø225 COLLECTOR PIPE.

8.2 - 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.
- (2) HOLD-POINTS FOR BIORETENTION CONSTRUCTION:
 - (I) EARTHWORKS AND FUNCTIONAL STRUCTURES
 - (II) UNDERDRAINAGE INSTALLATION
 - (III) BIORETENTION MEDIA
 - (IV) FINISHED LEVELS
- (3) SPECIFICATION AND THE WSUD CONSTRUCTION AND ESTABLISHMENT GUIDELINE (WATER BY DESIGN, CURRENT VERSION).

8.3 - BIO-RETENTION MEDIA

- (1) BIO-RETENTION FILTER MEDIA, TRANSITIONS LAYER AND DRAINAGE LAYER TO MEET THE SPECIFICATIONS OUTLINED IN THE ABOVE MENTIONED TECHNICAL DESIGN GUIDELINES (WATER BY DESIGN) AND CONSTRUCTION AND ESTABLISHMENT GUIDELINES (WATER BY DESIGN).
- (2) THE SOURCE OF THE MATERIAL AND CERTIFICATION OF THE MATERIAL BY THE SUPPLIER SHALL BE PROVIDED TO THE SITE SUPERINTENDENT AND BIO-RETENTION DESIGNER FOR REVIEW PRIOR TO DELIVERY AND INSTALLATION.
- (3) INSTALLATION OF THE MEDIA MUST OCCUR IN ACCORDANCE WITH THE CONSTRUCTION AND ESTABLISHMENT GUIDELINES (WATER BY DESIGN).
- (4) BIORETENTION FILTER MEDIA, TRANSITION LAYER SAND AND DRAINAGE LAYER GRAVEL ARE TO BE TESTED AND CERTIFIED AS COMPLIANT WITH THE CONSTRUCTION SPECIFICATION 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).

8.4 - STAGED CONSTRUCTION NOTES

STAGE 1: FUNCTIONAL INSTALLATION

- (1) CONSTRUCT THE FUNCTIONAL ELEMENTS OF THE BIO-RETENTION BASIN AT THE END OF CONSTRUCTION (DURING LANDSCAPE WORKS).
- (2) INSTALL TEMPORARY PROTECTION TO THE BIO-RETENTION BASIN (2x4 BIDIM GEOFABRIC WITH 50mm TOPSOIL AND TURF).
- (3) 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.

STAGE 2: SEDIMENT AND EROSION CONTROL

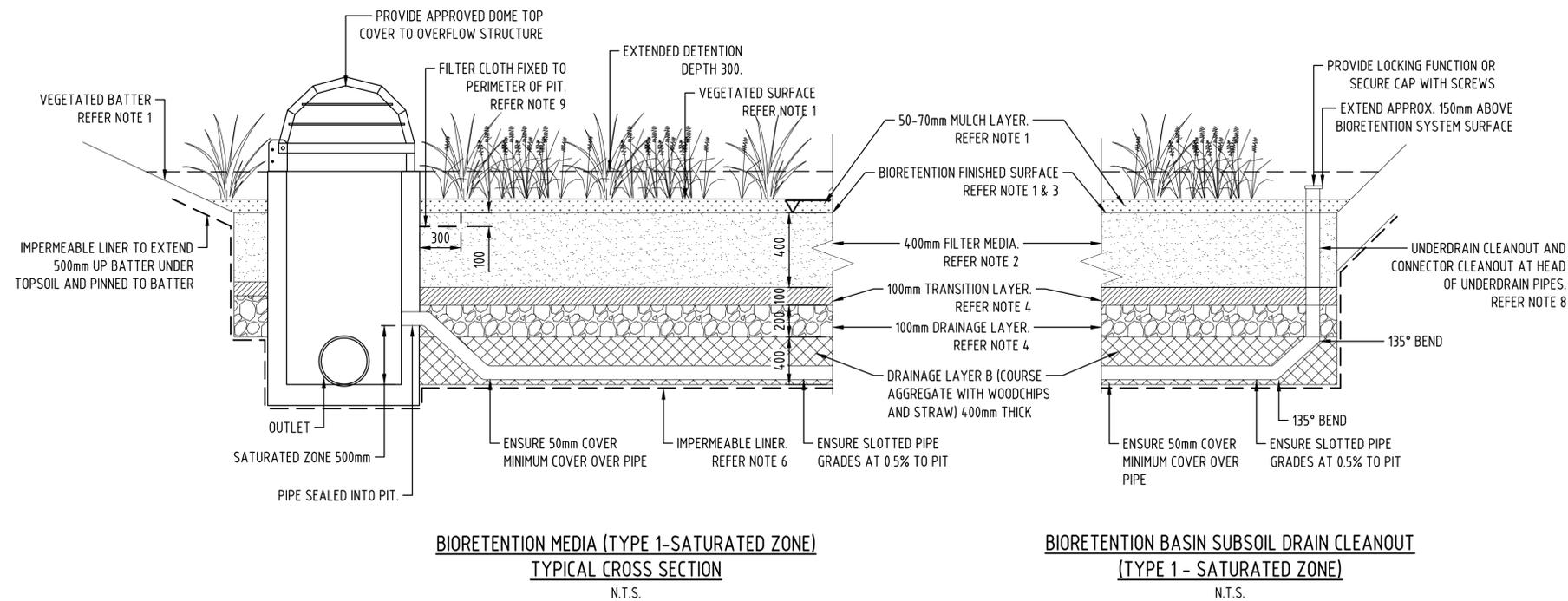
- (1) DURING THE BUILDING PHASE (INCL. MAINTENANCE PERIOD) THE TEMPORARY ADAPTIVE MEASURES PRESERVE THE FUNCTIONAL INFRASTRUCTURE OF THE BIO-RETENTION BASIN AGAINST DAMAGE WHILST ALSO PROVIDING A TEMPORARY EROSION AND SEDIMENT CONTROL FACILITY THROUGHOUT THE BUILDING PHASE TO PROTECT DOWNSTREAM WATERS.

STAGE 3: OPERATIONAL ESTABLISHMENT

- (1) UPON COMPLETION OF THE BUILDING PHASE, THE TEMPORARY MEASURES PROTECTING THE FUNCTIONAL ELEMENTS OF THE BIO-RETENTION BASIN ARE TO BE REMOVED ALONG WITH ALL ACCUMULATED SEDIMENT AND THE SYSTEM PLANTED IN ACCORDANCE WITH THE DESIGN PLANTING SCHEDULE AS PER THE BIO BASIN LANDSCAPE DRAWING(S).

NOTES:

1. BIORETENTION SYSTEM SURFACE, SURFACE LEVEL IS TOP OF FILTER MEDIA. SURFACE TO BE MULCHED AND PLANTED AS PER THE BIORETENTION TECHNICAL DESIGN GUIDELINES (WATER BY DESIGN).
2. FILTER MEDIA SPECIFICATION SHALL BE IN ACCORDANCE WITH THE 'ADOPTION GUIDELINES FOR STORMWATER BIOFILTRATION SYSTEMS (CRC FOR WATER SENSITIVE CITIES) AND THE BIORETENTION TECHNICAL DESIGN GUIDELINES' (WATER BY DESIGN).
3. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH THE 'CONSTRUCTION AND ESTABLISHMENT GUIDELINES - SWALES, BIORETENTION SYSTEMS AND WETLANDS' (WATER BY DESIGN).
4. TRANSITION LAYER AND DRAINAGE LAYER, DEPTH AND SPECIFICATION TO BE IN ACCORDANCE WITH THE 'BIORETENTION TECHNICAL DESIGN GUIDELINES' (WATER BY DESIGN).
5. UNDERDRAIN. SLOTTED RIGID PIPE LAID FLAT. PIPE SHOULD NOT BE INSTALLED WITH A FILTER SOCK SURROUNDING PIPE. UNDERDRAIN PIPES SHALL BE SEALED INTO PITS USING GROUT OR OTHER APPROVED WATERTIGHT SEAL.
6. IMPERMEABLE LINER. COMPACTED CLAY OR SYNTHETIC LINER WITH PERMEABILITY OF NO GREATER THAN 1 x 10⁻⁹ m/s. IMPERMEABLE LINER TO BE SEALED AROUND ALL PROTRUSIONS. SYNTHETIC LINERS TO BE INSTALLED AND SEALED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. IMPERMEABLE LINER AS PER "BIORETENTION TECHNICAL DESIGN GUIDELINES" (WATER BY DESIGN).
7. VEGETATED BATTER, SLOPE AND PLANTING TO BE IN ACCORDANCE WITH 'BIORETENTION TECHNICAL DESIGN GUIDELINES' (WATER BY DESIGN).
8. INSPECTION/CLEANOUT POINT. VERTICAL SOLID PIPE SECTION ATTACHED TO THE END OF EACH UNDERDRAIN IN ACCORDANCE WITH THE 'BIORETENTION TECHNICAL DESIGN GUIDELINES' (WATER BY DESIGN).
9. FILTER CLOTH TO BE FIXED TO PERIMETER IF PIT TO AVOID RUNNELLING OF WATER BETWEEN PIT AND SOIL INTERFACE. BEGIN FILTER CLOTH 100 ABOVE SURFACE. EXTEND TO 100 BELOW SURFACE. CONTINUE 300 HORIZONTALLY INTO FILTER MEDIA.
10. ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED.



FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\Users\Natalia.Dykman\OneDrive\Work\2319 - Stage 5F\DRG\OPW\2319-STG5F-C244.dwg Plot Date: 18 Dec, 2025 XREFS: - X_DC_CIVIL_OPW.dwg

SCALE	1:250	0 2 4 6 8 10m
REV	REVISION DETAILS	DATE APPR
C	ISSUED FOR APPROVAL	18.12.25 M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25 M.D.
A	ISSUED FOR APPROVAL	31.10.25

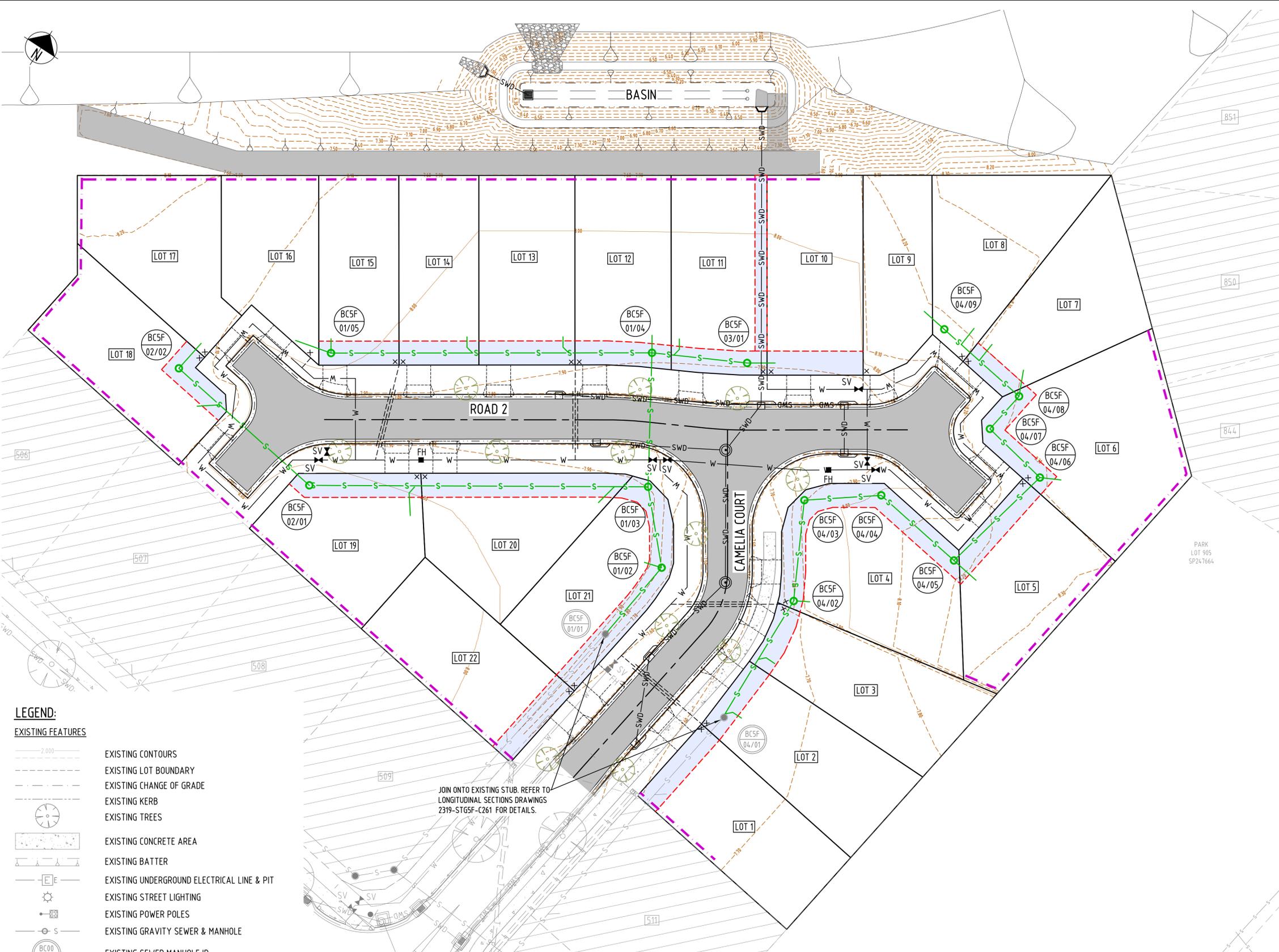


APPROVAL	7198
RPEQ SIGNATURE	RPEQ No
DRAWN	DATE
DESIGNED	CHECKED
1F	M.B
	M.D

OORALEA WATERS STAGE 5F AT OORALEA, BAKERS CREEK PROPERTY DEVELOPMENT

BIO RETENTION BASIN STANDARD NOTES AND DETAILS

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C244
REV:	C



- LEGEND:**
- GENERAL**
- PROPOSED LOT BOUNDARY
 - PROPOSED EASEMENT BOUNDARY
 - PROPOSED CONTOURS
 - PROPOSED RETAINING WALLS
 - PROPOSED BATTER
 - PROPOSED CHANGE OF GRADE
 - PROPOSED ROAD CENTRE LINE
 - PROPOSED MOUNTABLE KERB & CHANNEL
 - PROPOSED CONCRETE EDGE
 - PROPOSED ROAD ASPHALT SURFACE
 - PROPOSED CONCRETE AREA
 - EXISTING STAGES
 - PROPOSED TREES
 - PROPOSED DRIVEWAY LOCATION

- LEGEND:**
- PROPOSED SERVICES**
- PROPOSED EASEMENT
 - PROPOSED GRAVITY SEWER & MANHOLE
 - PROPOSED SEWER MANHOLE ID
 - PROPOSED STORMWATER PIPE & MANHOLE
 - PROPOSED STORMWATER GULLY PITS
 - PROPOSED POTABLE WATER LINE & FIRE HYDRANT
 - PROPOSED POTABLE WATER END CAP
 - PROPOSED TEE
 - PROPOSED POTABLE WATER GATE VALVE
 - PROPOSED FIRE HYDRANT
 - PROPOSED WATER SERVICE

- LEGEND:**
- EXISTING FEATURES**
- EXISTING CONTOURS
 - EXISTING LOT BOUNDARY
 - EXISTING CHANGE OF GRADE
 - EXISTING KERB
 - EXISTING TREES
 - EXISTING CONCRETE AREA
 - EXISTING BATTER
 - EXISTING UNDERGROUND ELECTRICAL LINE & PIT
 - EXISTING STREET LIGHTING
 - EXISTING POWER POLES
 - EXISTING GRAVITY SEWER & MANHOLE
 - EXISTING SEWER MANHOLE ID
 - EXISTING STORMWATER PIPE & MANHOLE
 - EXISTING STORMWATER GULLY PITS
 - EXISTING POTABLE WATER LINE & FIRE HYDRANT
 - EXISTING TELECOMMUNICATION CABLE & PIT

POSITIONS OF EXISTING SERVICES SHOWN ARE PROVIDED FOR GUIDANCE ONLY AND LOCATIONS AND/OR DEPTHS MAY BE INCORRECT. ALSO ADDITIONAL EXISTING SERVICES MAY BE PRESENT ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL EXISTING SERVICES ON SITE.

JOIN ONTO EXISTING STUB. REFER TO LONGITUDINAL SECTIONS DRAWINGS 2319-STG5F-C261 FOR DETAILS.

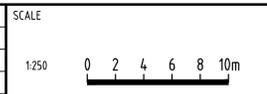
LAYOUT PLAN
SCALE 1:250

- SEWERAGE RETICULATION NOTES:**
1. ALL CONSTRUCTION WORK TO COMPLY WITH THE CTM WATER SERVICE D&C CODE. ALL SEWER LINE LENGTHS AND GRADES ARE MEASURED FROM CENTRE OF MANHOLE TO CENTRE OF MANHOLE U.N.O.
 2. ALL SEWER LINES AND MANHOLES TO BE OFFSET 15m FROM PROPERTY BOUNDARIES UNLESS CO-ORDINATES OR DIMENSIONS INDICATE OTHERWISE.
 3. TOP OF NEW SEWER MANHOLES TO BE CONSTRUCTED 50mm MINIMUM ABOVE FINISHED SURFACE LEVEL IN ACCORDANCE WITH SEQ-SEW-1308-1, AND FLUSH WITH FINISHED SURFACE IN ROADWAYS AND FOOTPATHS U.N.O.
 4. ALL SEWER HOUSE CONNECTION BRANCHES (HCB'S) ARE TO TERMINATE 1.0m FROM PROPERTY BOUNDARIES U.N.O.
 5. HCB'S ARE TO BE PROVIDED WITH INSPECTION TEE AND TEE LOCATION MARKER AS PER SEQ-SEW-1104-1.
 6. ALL WORKS UNDERTAKEN ON LIVE SEWERS TO BE ARRANGED BY THE CONTRACTOR BUT CARRIED OUT BY MACKAY WATER AND WASTE.
 7. FOR SEWER MANHOLE SETOUT REFER TO PLAN 0944-19-043.
 8. FOR SEWER MANHOLE TYPE, REFER TO SEQ-SEW-1300-1 FOR DETAILS.
 9. FOR SEWER MANHOLE DROP TYPE, REFER TO SEQ-SEW-1303-1 FOR DETAILS.
 10. FOR SEWER MANHOLE COVER TYPE, REFER TO SEQ-SEW-1308-1 FOR DETAILS.
 11. SEWER EASEMENTS SHOWN ON THESE DRAWINGS ARE INDICATIVE ONLY. SEWER EASEMENT LOCATIONS AND REQUIREMENTS SHALL BE DETERMINED AS PART OF THE SURVEY PLAN DOCUMENTATION.
 12. FOR MANHOLE PROTECTIVE COATING REQUIREMENT REFER TO CLAUSE 4.7.2 IN THE CTM WATER SERVICE D&C CODE.

FOR APPROVAL
18 Dec 2025

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C	ISSUED FOR APPROVAL	18.12.25	M.D.
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APPROVAL	7198	
	RPEQ No	
	31.10.25	
	DATE	
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DRAWN	DESIGNED	CHECKED
IF	MB	M.D.

OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT

SEWER RETICULATION
LAYOUT PLAN

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C251
REV:	C

MAINTENANCE HOLE/SHAFT No.	BCSF 01/01	BCSF 01/02	BCSF 01/03	BCSF 01/04	BCSF 01/05	BCSF 01/03	BCSF 02/01	BCSF 02/02	BCSF 01/04	BCSF 03/01	BCSF 04/01	BCSF 04/02	BCSF 04/03	BCSF 04/04	BCSF 04/05	BCSF 04/06	BCSF 04/07	BCSF 04/08	BCSF 04/09	
MH/MS TYPE	MH/P2 ø1050																			
MH/MS COVER TYPE	EXIST	(B)	EXIST	(B)																
MH/MS DROP TYPE	V	V	V	X	V	X	V	V	X	V	V	V	V	V	V	V	V	V	V	V
BRANCH LINE No.	1					1	2		1	3	1	4								

- NOTES:**
- ALL LEVELS, CHAINAGES AND DISTANCES IN METRES
 - REFER SEQ-SEW-1200 SERIES FOR BEDDING AND BACKFILL REQUIREMENTS
 - REFER SEQ-SEW-1300 SERIES FOR MAINTENANCE STRUCTURE TYPES AND DROPS AND FOR RIGGS COMPLIANT APPURTENANCES
 - PIPE MATERIAL TO BE SPECIFIED AS REQUIRED BY RIGGS
 - REFER SEQ-SEW-1106 SERIES FOR PROPERTY CONNECTION TYPES
 - REFER TO SEQ-SEW1206-1 FOR BULKHEADS AND TRENCHSTOP DETAILS

PROPERTY CONNECTION DETAILS
 LOT NO xx HC TYPE x INVERT LEVEL (ILI) xxxxxx
 CHAINAGE TO OS MH/MS xx xxx DEPTH (D) xxx
 SERVICE CONFLICT DETAILS
 SERVICE SIZE øMM SERVICE TYPE xxxxxx
 INVERT LEVEL (ILI) xxxxxx CHAINAGE FROM START OF LINE (CH) xxxxxx
 OR INVERT LEVEL (ILI) xxxxxx

x HC INVERT LEVEL

LEGEND

FP = VERGE
 PP = PRIVATE PROPERTY
 MH = MANHOLE
 MS = MAINTENANCE SHAFT
 B = CLASS B NON-TRAFFICABLE

DATUM R.L.	-1.000				
PROP. DESCRIPTION	PP				
PIPE DIAMETER/TYPE	DN150 PVC-U SN8				
PIPE GRADE	1 IN 180	1 IN 100			
EMBEDMENT TYPE	TYPE 4				
DEPTH TO INVERT	2.373	2.373	2.264	2.224	0.902
JUNCTION INVERT LEVEL					
INVERT LEVEL	5.460	5.460	5.521	5.561	7.120
FINISHED SURFACE LEVEL	7.833		7.785	7.867	8.022
EXISTING SURFACE LEVEL	7.511		7.556	7.656	7.684
CHAINAGE/LENGTH	0.000	10.855	16.509	37.716	77.859

DATUM R.L.	0.000			
PROP. DESCRIPTION	PP			
PIPE DIAMETER/TYPE	DN150 PVC-U SN8			
PIPE GRADE	1 IN 100			
EMBEDMENT TYPE	TYPE 4			
DEPTH TO INVERT	2.202	1.561	1.302	1.142
JUNCTION INVERT LEVEL				
INVERT LEVEL	5.665	6.306	6.734	6.983
FINISHED SURFACE LEVEL	7.867		8.036	8.125
EXISTING SURFACE LEVEL	7.656		7.636	7.675
CHAINAGE/LENGTH	0.000	4.2832	21.886	64.718

DATUM R.L.	0.000		
PROP. DESCRIPTION	PP		
PIPE DIAMETER/TYPE	DN150 PVC-U SN8		
PIPE GRADE	1 IN 100		
EMBEDMENT TYPE	TYPE 4		
DEPTH TO INVERT	2.060	1.070	0.940
JUNCTION INVERT LEVEL			
INVERT LEVEL	5.860	6.850	6.970
FINISHED SURFACE LEVEL	7.920		7.910
EXISTING SURFACE LEVEL	7.585		7.618
CHAINAGE/LENGTH	0.000	11.951	11.951

DATUM R.L.	0.000																
PROP. DESCRIPTION	PP																
PIPE DIAMETER/TYPE	DN150 PVC-U SN8																
PIPE GRADE	1 IN 180				1 IN 100												
EMBEDMENT TYPE	TYPE 4																
DEPTH TO INVERT	1.438	1.438	1.492	1.462	1.471	1.431	1.433	1.403	1.394	1.354	1.331	1.291	1.219	1.179	1.140	1.100	0.935
JUNCTION INVERT LEVEL																	
INVERT LEVEL	6.210	6.210	6.302	6.332	6.402	6.442	6.542	6.572	6.694	6.734	6.883	6.923	7.010	7.050	7.108	7.148	7.273
FINISHED SURFACE LEVEL	7.648		7.793	7.873	7.975	8.088	8.214	8.229	8.214	8.229	8.248	8.248	8.208				
EXISTING SURFACE LEVEL	7.456		7.529	7.573	7.685	7.701	7.677	7.696	7.705	7.705	7.705	7.720					
CHAINAGE/LENGTH	0.000	16.497	16.497	12.600	29.097	39.068	51.257	66.178	74.884	80.700	87.05	93.232					

LINE BCSF 01

LINE BCSF 02

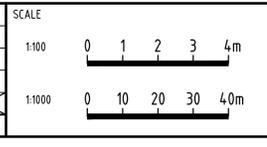
LINE BCSF 03

LINE BCSF 04

FOR APPROVAL
18 Dec 2025

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 XREFS - X_DC_CIVIL_OPW.dwg; X_2319_DC_STG5F_SEWER_RETICULATION_LONGITUDINAL_SECTIONS.dwg

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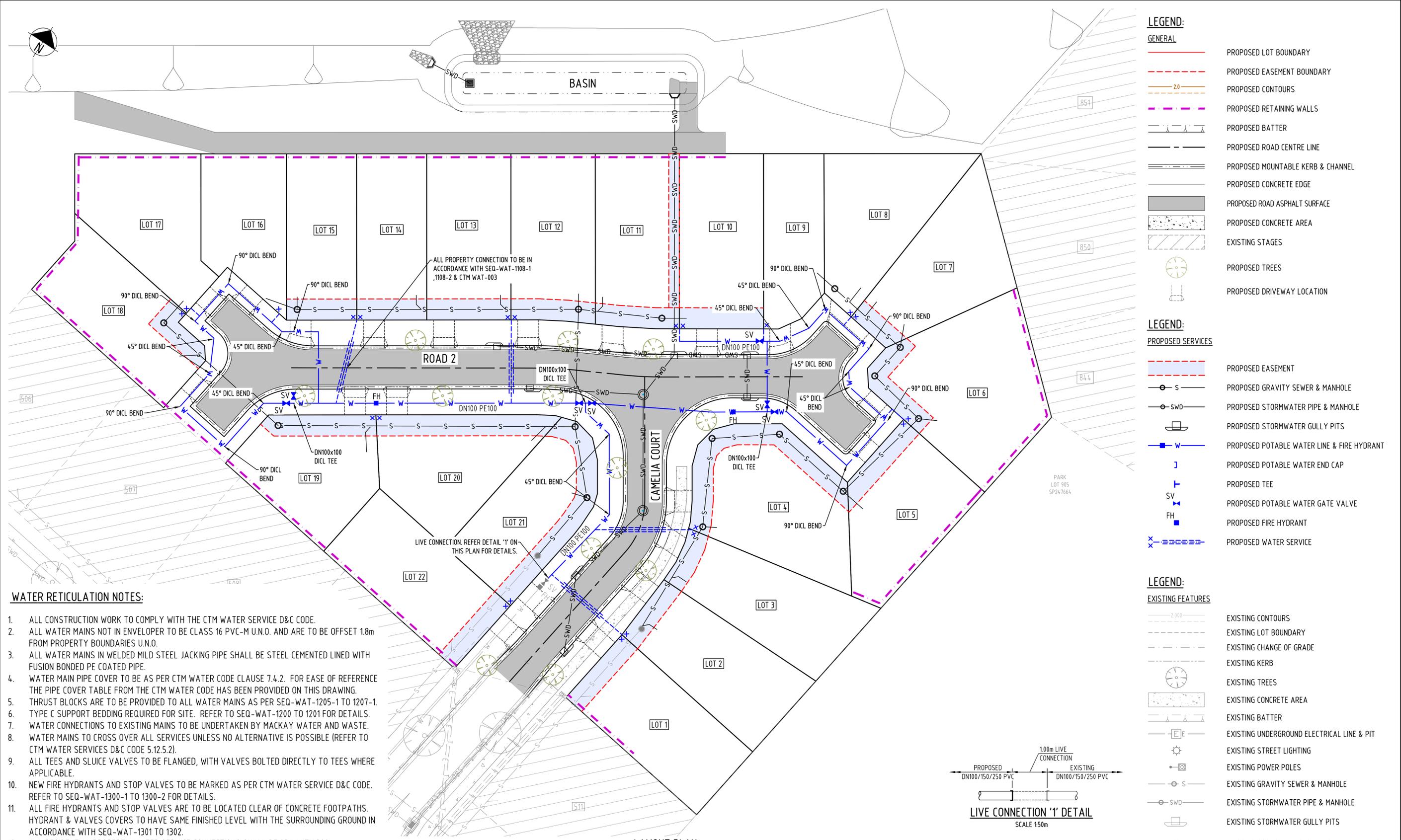


APPROVAL		7198
RPEQ SIGNATURE		RPEQ No 31.10.25
DRAWN	DESIGNED	DATE
IF	M.B	M.D

**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

**SEWER RETICULATION
LONGITUDINAL SECTIONS**

ISSUE FOR APPROVAL	
PROJECT No:	2319
DRAWING No:	2319-STG5F-C261
REV:	C



- LEGEND:**
- GENERAL**
- PROPOSED LOT BOUNDARY
 - PROPOSED EASEMENT BOUNDARY
 - PROPOSED CONTOURS
 - PROPOSED RETAINING WALLS
 - PROPOSED BATTER
 - PROPOSED ROAD CENTRE LINE
 - PROPOSED MOUNTABLE KERB & CHANNEL
 - PROPOSED CONCRETE EDGE
 - PROPOSED ROAD ASPHALT SURFACE
 - PROPOSED CONCRETE AREA
 - EXISTING STAGES
 - PROPOSED TREES
 - PROPOSED DRIVEWAY LOCATION

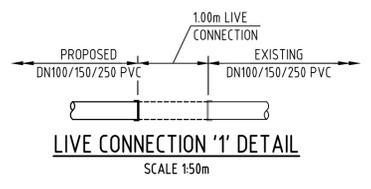
- LEGEND:**
- PROPOSED SERVICES**
- PROPOSED EASEMENT
 - PROPOSED GRAVITY SEWER & MANHOLE
 - PROPOSED STORMWATER PIPE & MANHOLE
 - PROPOSED STORMWATER GULLY PITS
 - PROPOSED POTABLE WATER LINE & FIRE HYDRANT
 - PROPOSED POTABLE WATER END CAP
 - PROPOSED TEE
 - PROPOSED POTABLE WATER GATE VALVE
 - PROPOSED FIRE HYDRANT
 - PROPOSED WATER SERVICE

- LEGEND:**
- EXISTING FEATURES**
- EXISTING CONTOURS
 - EXISTING LOT BOUNDARY
 - EXISTING CHANGE OF GRADE
 - EXISTING KERB
 - EXISTING TREES
 - EXISTING CONCRETE AREA
 - EXISTING BATTER
 - EXISTING UNDERGROUND ELECTRICAL LINE & PIT
 - EXISTING STREET LIGHTING
 - EXISTING POWER POLES
 - EXISTING GRAVITY SEWER & MANHOLE
 - EXISTING STORMWATER PIPE & MANHOLE
 - EXISTING STORMWATER GULLY PITS
 - EXISTING POTABLE WATER LINE & FIRE HYDRANT
 - EXISTING TELECOMMUNICATION CABLE & PIT

WATER RETICULATION NOTES:

1. ALL CONSTRUCTION WORK TO COMPLY WITH THE CTM WATER SERVICE D&C CODE.
2. ALL WATER MAINS NOT IN ENVELOPER TO BE CLASS 16 PVC-M U.N.O. AND ARE TO BE OFFSET 1.8m FROM PROPERTY BOUNDARIES U.N.O.
3. ALL WATER MAINS IN WELDED MILD STEEL JACKING PIPE SHALL BE STEEL CEMENTED LINED WITH FUSION BONDED PE COATED PIPE.
4. WATER MAIN PIPE COVER TO BE AS PER CTM WATER CODE CLAUSE 7.4.2. FOR EASE OF REFERENCE THE PIPE COVER TABLE FROM THE CTM WATER CODE HAS BEEN PROVIDED ON THIS DRAWING.
5. THRUST BLOCKS ARE TO BE PROVIDED TO ALL WATER MAINS AS PER SEQ-WAT-1205-1 TO 1207-1. TYPE C SUPPORT BEDDING REQUIRED FOR SITE. REFER TO SEQ-WAT-1200 FOR DETAILS.
6. WATER CONNECTIONS TO EXISTING MAINS TO BE UNDERTAKEN BY MACKAY WATER AND WASTE.
7. WATER MAINS TO CROSS OVER ALL SERVICES UNLESS NO ALTERNATIVE IS POSSIBLE (REFER TO CTM WATER SERVICES D&C CODE 5.12.5.2).
8. ALL TEES AND SLUICE VALVES TO BE FLANGED, WITH VALVES BOLTED DIRECTLY TO TEES WHERE APPLICABLE.
9. NEW FIRE HYDRANTS AND STOP VALVES TO BE MARKED AS PER CTM WATER SERVICE D&C CODE. REFER TO SEQ-WAT-1300-1 TO 1300-2 FOR DETAILS.
10. ALL FIRE HYDRANTS AND STOP VALVES ARE TO BE LOCATED CLEAR OF CONCRETE FOOTPATHS. HYDRANT & VALVES COVERS TO HAVE SAME FINISHED LEVEL WITH THE SURROUNDING GROUND IN ACCORDANCE WITH SEQ-WAT-1301 TO 1302.
11. ALL RESIDENTIAL PROPERTY WATER SERVICE CONNECTIONS SHALL BE 25Ø WITH 300mm CLEARANCE FROM PROPERTY BOUNDARY IN ACCORDANCE WITH MRC STANDARD DRAWING CTM-WAT-003 AND CTM WATER CODE CLAUSE 5.11.5.
12. ALL PROPERTY WATER SERVICE ROAD CROSSINGS SHALL BE CONTAINED WITHIN AN ENVELOPER PIPE. REFER TO SEQ-WAT-1108-1 TO 1108-2 FOR DETAILS.
13. ALL WATER SERVICE ROAD CROSSINGS UNDERNEATH CONCRETE FOOTPATHS SHALL BE CONTAINED WITHIN AN ENVELOPER PIPE. REFER TO MRC STANDARD DRAWING CTM-WAT-003 FOR DETAILS.

POSITIONS OF EXISTING SERVICES SHOWN ARE PROVIDED FOR GUIDANCE ONLY AND LOCATIONS AND/OR DEPTHS MAY BE INCORRECT. ALSO ADDITIONAL EXISTING SERVICES MAY BE PRESENT ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL EXISTING SERVICES ON SITE.

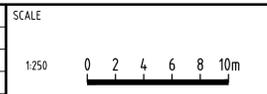


LAYOUT PLAN
SCALE 1:250

FOR APPROVAL
18 Dec 2025

CAD FILENAME: C:\1265\Bakers\Ooralea\Ooralea\DWG\2319-STG5F-C271.dwg Plot Date: 18 Dec, 2025

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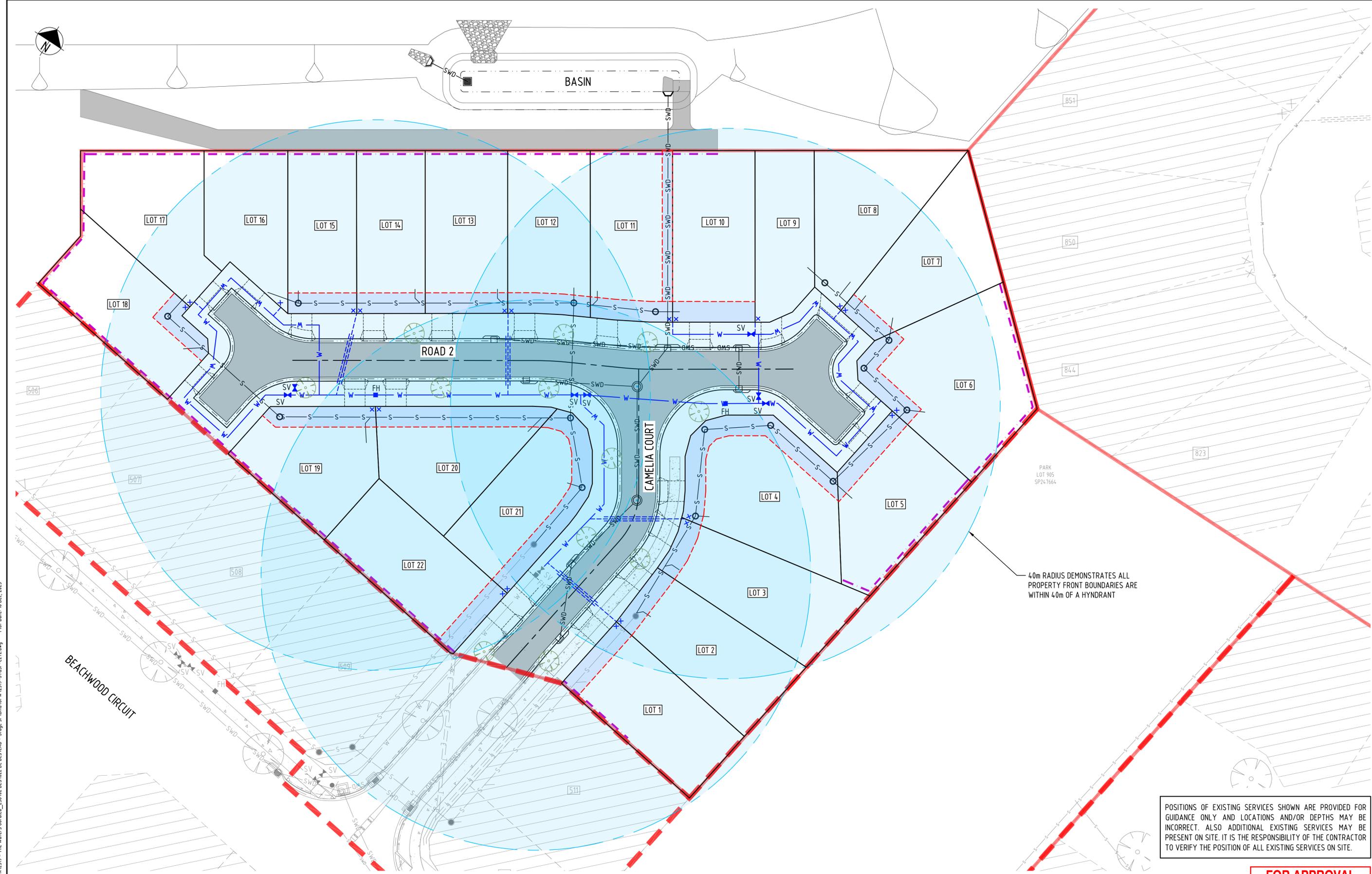


APPROVAL	7198	
	RPEQ No	
	31.10.25	
	DATE	
RPEQ SIGNATURE	DATE	
DRAWN	DESIGNED	CHECKED
IF	MB	M.D.

OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT

WATER RETICULATION
LAYOUT PLAN

ISSUE:	ISSUE FOR APPROVAL
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REV:	C



40m RADIUS DEMONSTRATES ALL PROPERTY FRONT BOUNDARIES ARE WITHIN 40m OF A HYDRANT

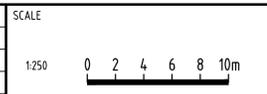
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LAYOUT PLAN
SCALE 1:250

CAD FILENAME: C:\Users\Nara\Documents\2319 - The Waters Oralea_2319\02 BE5\022 DC Des\CAD - Stage 5\DRG\OPW\2319-STG5F-C272.dwg Plot Date: 18 Dec, 2025

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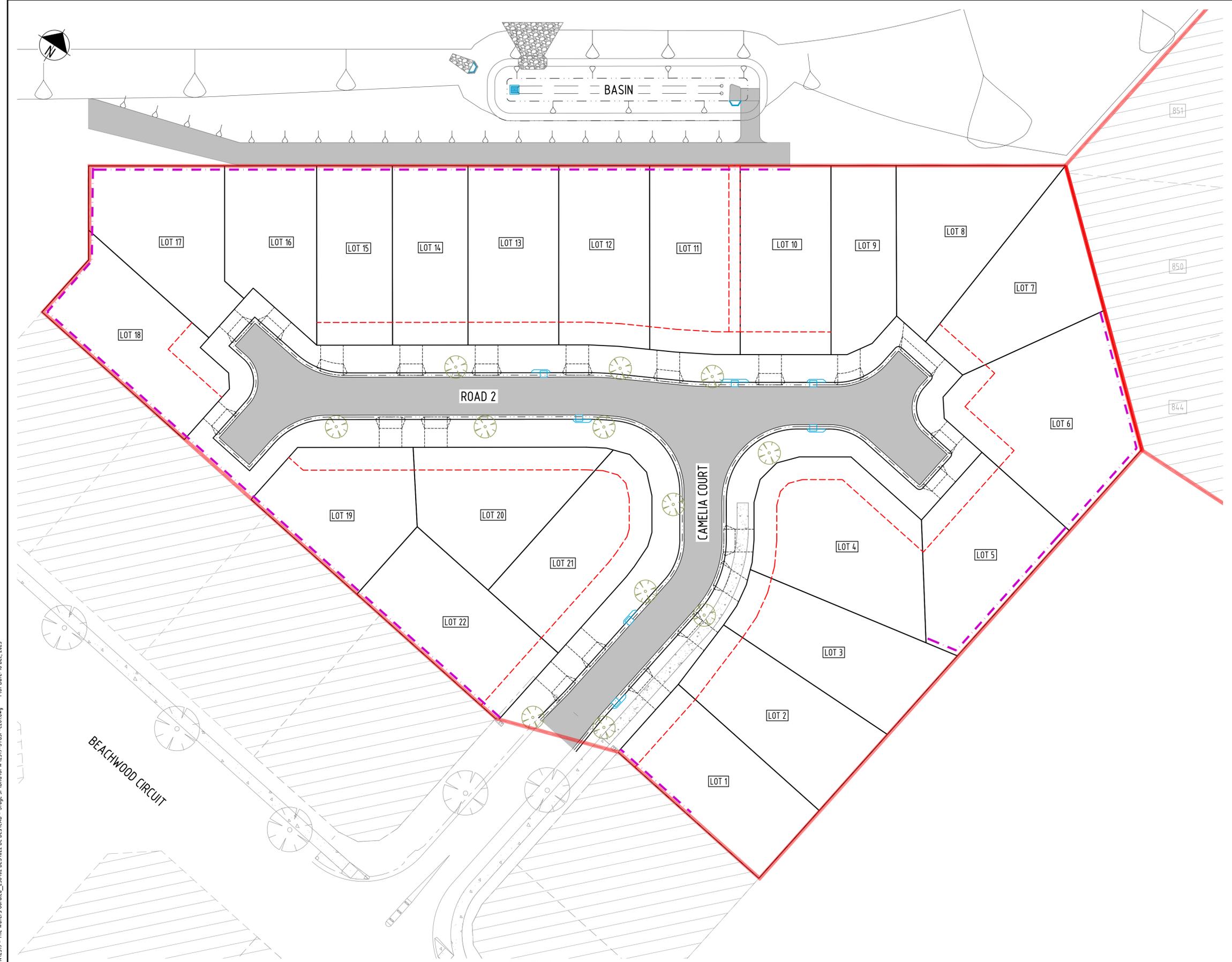
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**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

HYDRANT COVERAGE AREA
LAYOUT PLAN

ISSUE:	ISSUE FOR APPROVAL
PROJECT No:	2319
DRAWING No:	2319-STG5F-C272
REV:	C

XREFS: -X_DC_CIVIL_OPW.dwg; X_2319_DC_STSF_LOTS_EXIST_STG_4-8.dwg; X_2319_DC_STSF_LOTS.dwg; X_2319_DC_STG 8_STAGES_03_04_05_REF_Design_Sewer_Services_GDA2020.dwg; X_2319_DC_STG 8_STAGES_03_04_05_REF_Design_Stormwater_Services_GDA2020.dwg; X_2319_DC_STG 8_WATER_RETICULATION.dwg; X_2319_DC_STG 8_STORMWATER_DRAINAGE_PLAN.dwg; X_2319_DC_STG 8_SEWER_RETICULATION.dwg; X_2319_DC_STSF_DESIGN.dwg; X_2319_DC_STSF_CONT_FINISHED.dwg; X_2319_DC_STSF_RW.dwg



- LEGEND:**
- GENERAL**
- PROPOSED EASEMENT BOUNDARY
 - PROPOSED CONTOURS
 - PROPOSED RETAINING WALLS
 - PROPOSED BATTER
 - PROPOSED CHANGE OF GRADE
 - PROPOSED ROAD CENTRE LINE
 - PROPOSED MOUNTABLE KERB & CHANNEL
 - PROPOSED CONCRETE EDGE
 - PROPOSED SIGNS
 - PROPOSED GUIDE POSTS
 - PROPOSED ROAD ASPHALT SURFACE
 - PROPOSED CONCRETE AREA
 - EXISTING STAGES
 - PROPOSED TREES
 - PROPOSED DRIVEWAY LOCATION

- LEGEND:**
- EXISTING FEATURES**
- EXISTING CONTOURS
 - EXISTING LOT BOUNDARY
 - EXISTING CHANGE OF GRADE
 - EXISTING KERB
 - EXISTING TREES
 - EXISTING CONCRETE AREA
 - EXISTING BATTER

- STREET TREE NOTES**
- REFER TO THE TECHNICAL SPECIFICATION FOR TREE FERTILISING AND WATERING REQUIREMENTS.
 - ROOT CONTROL BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH MACKAY REGIONAL COUNCIL SUPPLEMENTARY SPECIFICATION 8304.
 - REFER TO MACKAY REGIONAL COUNCIL STANDARD A4-00049K FOR TREE PLANTING DETAIL.

- LANDSCAPED AREAS**
- ROOT CONTROL BARRIERS SHALL BE INSTALLED ALONG THE BACK OF ALL KERBS THAT ADJOIN LANDSCAPED AREAS IN ACCORDANCE WITH MACKAY REGIONAL COUNCIL SUPPLEMENTARY SPECIFICATION 8304.

TREE PLANTING SCHEDULE

TYPE	POT SIZE	NUMBER
MIMUSOPS ELENGI	200	
HABISCUS TILIACEUS	400	
MELALEUCA VIMINALIS	50	

(POT SIZE IN MILLIMETRES AND INDICATIVE ONLY)

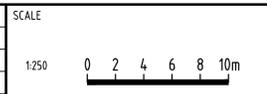
POSITIONS OF EXISTING SERVICES SHOWN ARE PROVIDED FOR GUIDANCE ONLY AND LOCATIONS AND/OR DEPTHS MAY BE INCORRECT. ALSO ADDITIONAL EXISTING SERVICES MAY BE PRESENT ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL EXISTING SERVICES ON SITE.

FOR APPROVAL
18 Dec 2025

LAYOUT PLAN
SCALE 1:250

CAD FILENAME: C:\Users\Nara\Documents\2319 - The Waters Ooralea - Stage 5F\DRG\DWG\2319-STG5F-C281.dwg Plot Date: 18 Dec, 2025

REV	REVISION DETAILS	DATE	APPR
C	ISSUED FOR APPROVAL	18.12.25	M.D.
B	ISSUED FOR OPW APPROVAL	06.11.25	M.D.
A	ISSUED FOR APPROVAL	31.10.25	

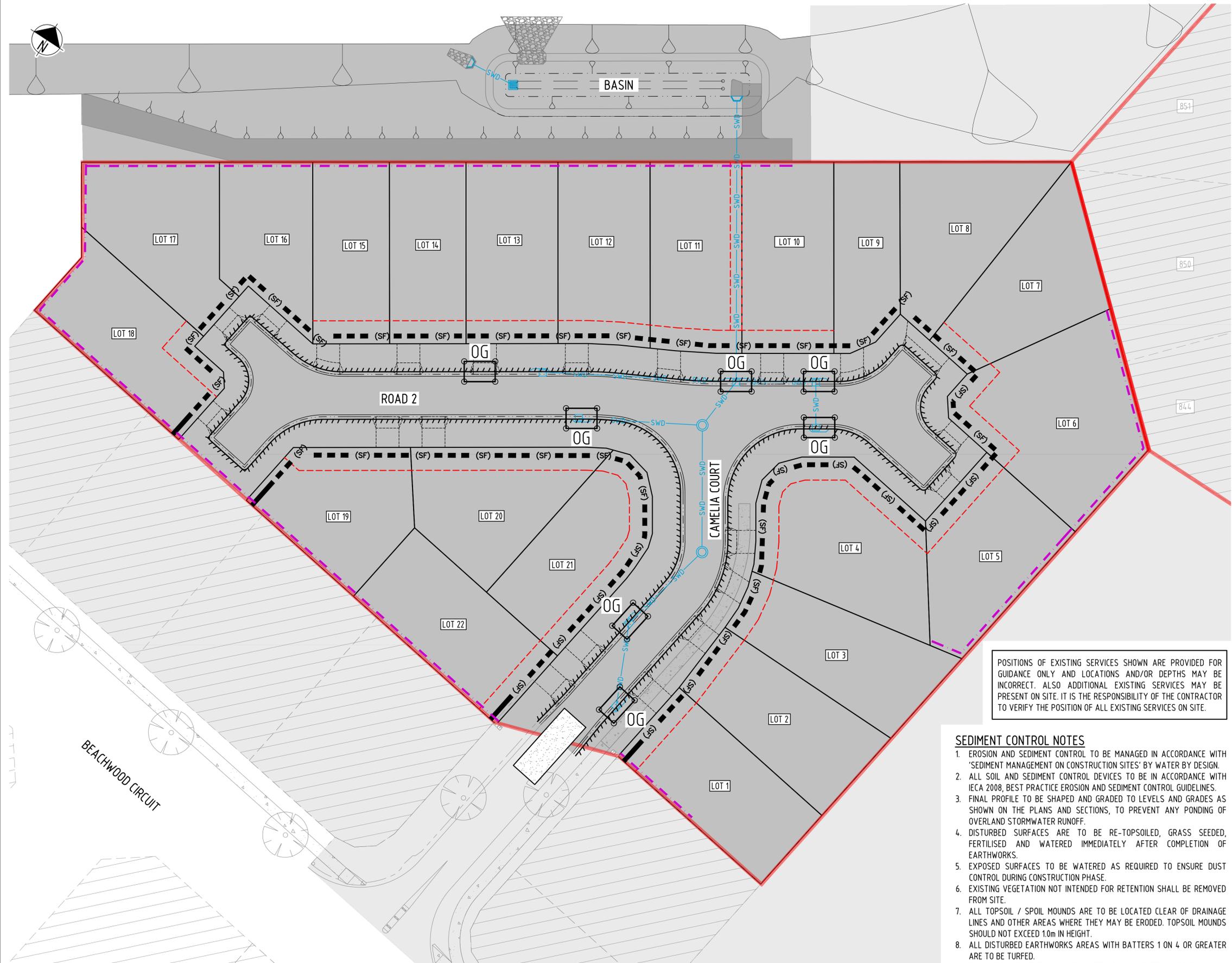


APPROVAL	7198	
	RPEQ No	
	31.10.25	
RPEQ SIGNATURE	DATE	
DRAWN	DESIGNED	CHECKED
IF	MB	M.D.

**OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT**

STREET TREE
LAYOUT PLAN

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- LEGEND:**
- GENERAL**
- PROPOSED LOT BOUNDARY
 - PROPOSED EASEMENT BOUNDARY
 - PROPOSED CONTOURS
 - PROPOSED RETAINING WALLS
 - PROPOSED BATTER
 - PROPOSED CHANGE OF GRADE
 - PROPOSED ROAD CENTRE LINE
 - PROPOSED MOUNTABLE KERB & CHANNEL
 - PROPOSED CONCRETE EDGE
 - PROPOSED SIGNS
 - PROPOSED GUIDE POSTS
 - EXISTING STAGES
 - PROPOSED TREES

- LEGEND:**
- PROPOSED EROSION SEDIMENT CONTROL**
- SEDIMENTATION DISTURBED AREA
 - SEDIMENTATION UNDISTURBED AREA
 - PROPOSED STORMWATER PIPE & MANHOLE
 - PROPOSED STORMWATER GULLY PITS
 - SEDIMENT FENCE
 - PROPOSED GRASS FILTER STRIP
 - STRAW BALE BARRIER
 - CONSTRUCTION EXIT/EGRESS
 - ON-GRADE KERB INLET SEDIMENT TRAP
 - SAG INLET SEDIMENT TRAP

- LEGEND:**
- EXISTING FEATURES**
- EXISTING CONTOURS
 - EXISTING LOT BOUNDARY
 - EXISTING CHANGE OF GRADE
 - EXISTING KERB
 - EXISTING TREES
 - EXISTING CONCRETE AREA
 - EXISTING BATTER

POSITIONS OF EXISTING SERVICES SHOWN ARE PROVIDED FOR GUIDANCE ONLY AND LOCATIONS AND/OR DEPTHS MAY BE INCORRECT. ALSO ADDITIONAL EXISTING SERVICES MAY BE PRESENT ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL EXISTING SERVICES ON SITE.

SEDIMENT CONTROL NOTES

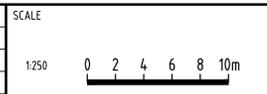
1. EROSION AND SEDIMENT CONTROL TO BE MANAGED IN ACCORDANCE WITH 'SEDIMENT MANAGEMENT ON CONSTRUCTION SITES' BY WATER BY DESIGN.
2. ALL SOIL AND SEDIMENT CONTROL DEVICES TO BE IN ACCORDANCE WITH IECA 2008, BEST PRACTICE EROSION AND SEDIMENT CONTROL GUIDELINES.
3. FINAL PROFILE TO BE SHAPED AND GRADED TO LEVELS AND GRADES AS SHOWN ON THE PLANS AND SECTIONS, TO PREVENT ANY PONDING OF OVERLAND STORMWATER RUNOFF.
4. DISTURBED SURFACES ARE TO BE RE-TOPSOILED, GRASS SEED, FERTILISED AND WATERED IMMEDIATELY AFTER COMPLETION OF EARTHWORKS.
5. EXPOSED SURFACES TO BE WATERED AS REQUIRED TO ENSURE DUST CONTROL DURING CONSTRUCTION PHASE.
6. EXISTING VEGETATION NOT INTENDED FOR RETENTION SHALL BE REMOVED FROM SITE.
7. ALL TOPSOIL / SPOIL MOUNDS ARE TO BE LOCATED CLEAR OF DRAINAGE LINES AND OTHER AREAS WHERE THEY MAY BE ERODED. TOPSOIL MOUNDS SHOULD NOT EXCEED 1.0m IN HEIGHT.
8. ALL DISTURBED EARTHWORKS AREAS WITH BATTERS 1 ON 4 OR GREATER ARE TO BE TURFED.
9. FULL WIDTH OF VERGE MUST BE TURFED UPON COMPLETION OF THE WORKS.
10. CONTRACTOR TO PREPARE STAGED SEDIMENT BASIN DESIGNS TO SUIT THE EARTHWORKS CONSTRUCTION STAGING.

FOR APPROVAL
18 Dec 2025

LAYOUT PLAN
SCALE 1:250

CAD FILENAME: C:\2025\Bakers\Ooralaea\2319-105\2319-105F-C291.dwg Plot Date: 18 Dec, 2025

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C	ISSUED FOR APPROVAL	18.12.25	M.D.
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OORALEA WATERS STAGE 5F
AT OORALEA, BAKERS CREEK
PROPERTY DEVELOPMENT

EROSION AND
SEDIMENT CONTROL
LAYOUT PLAN

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