

**NOTES:**

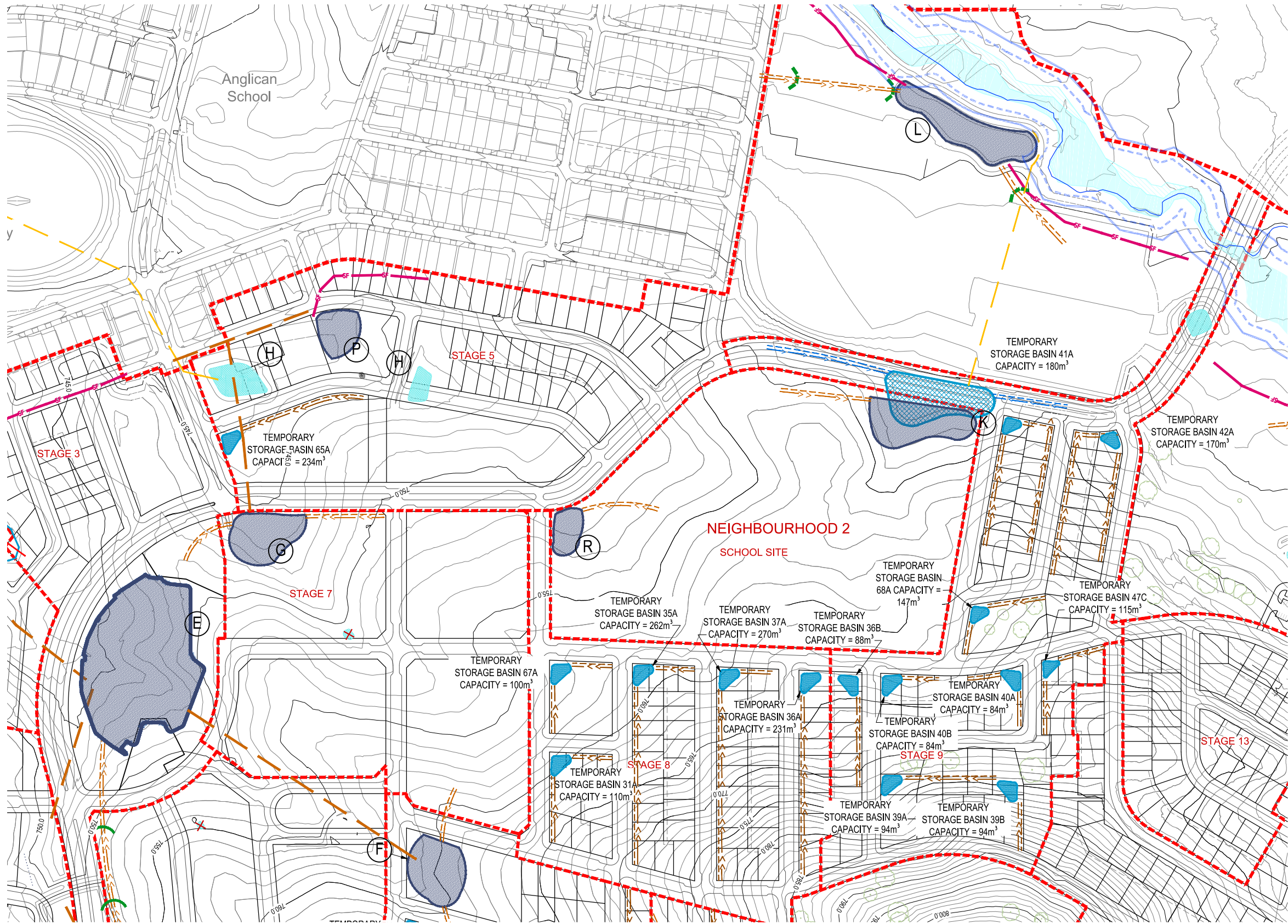
1. CONTOURS AT 0.5m INTERVALS.
2. REFER TO DRAWING 16-001756-D240+ FOR NOTES AND LEGEND

FIRST ISSUE						AMENDMENT DETAILS		WRE No.	A3 PLOT	SCALE (METRES)	A1 PLOT	CLIENT	PROJECT	DRAWING TITLE		DRAWING NUMBER	AMEND.
DATE	DESIGN	DRAWN	CHECK	APPROVED	DATE												
23/03/2017	BC	VVB	HL	HL	23/03/2017				1:2000	10 5 0 10 20 30 40 50	1:1000		GOOGONG NORTH NEIGHBOURHOOD 2	WSUD POND DETAILS SHEET 5		16-001756-D245+	A
29/06/2017	A	BC	IC	HL	29/06/2017	OPRC COMMENTS ADDRESSED							DA SUBMISSION				









## PHASE 2 - STAGES 5, 6, 7, 8, 9, 10 & 11

- (E) UTILISE AS TEMPORARY SEDIMENT BASIN FOR STAGES 6 & 7 AND ADDITIONAL STORAGE SUPPORT FOR 8, 9, 10 & 11. CONVERT TO WATER QUALITY POND AT THE COMPLETION OF STAGE 11.
- (F) CONSTRUCT TEMPORARY SEDIMENT BASIN AT THE COMMENCEMENT OF STAGE 8 FOR THE DURATION OF STAGES 8 & 10. UTILISE AS ADDITIONAL STORAGE FOR STAGE 11. REMOVE AT THE COMPLETION OF STAGE 11.
- (G) CONVERT CLEAR WATER POND TO TEMPORARY SEDIMENT POND FOR STAGES 6, 7, 8 & 9. REMOVE AT THE COMPLETION OF STAGE 9. CONNECT POND VIA TEMPORARY STORMWATER PIPE TO POND E.
- (H) REMOVE CLEAR WATER PONDS AT THE COMPLETION OF STAGE 4 AND CAP EXISTING STORMWATER PIPE.
- (K) UTILISE EXISTING CLEAR WATER POND FOR STAGES 1, 3, 5 & 7. RELOCATE AND CONVERT TO TEMPORARY SEDIMENT BASIN FOR STAGES 8 & 9. REMOVE AT COMPLETION OF STAGE 9.
- (L) UTILISE EXISTING TEMPORARY SEDIMENT BASIN FOR STAGES 8, 9 & 12. CONVERT TO WATER QUALITY CONTROL POND AT THE COMPLETION OF STAGE 12.
- (P) CONSTRUCT TEMPORARY SEDIMENT BASIN FOR STAGE 5. CONVERT TO WATER QUALITY CONTROL POND AT COMPLETION OF STAGE 5. CONNECT TO EXISTING TEMPORARY STORMWATER.
- (R) CONSTRUCT TEMPORARY SEDIMENT BASIN FOR STAGES 8 & 9. REMOVE AT COMPLETION OF STAGE 9.

CONCEPT ONLY SUBJECT  
TO DETAIL DESIGN &  
PROCUREMENT STRATEGY

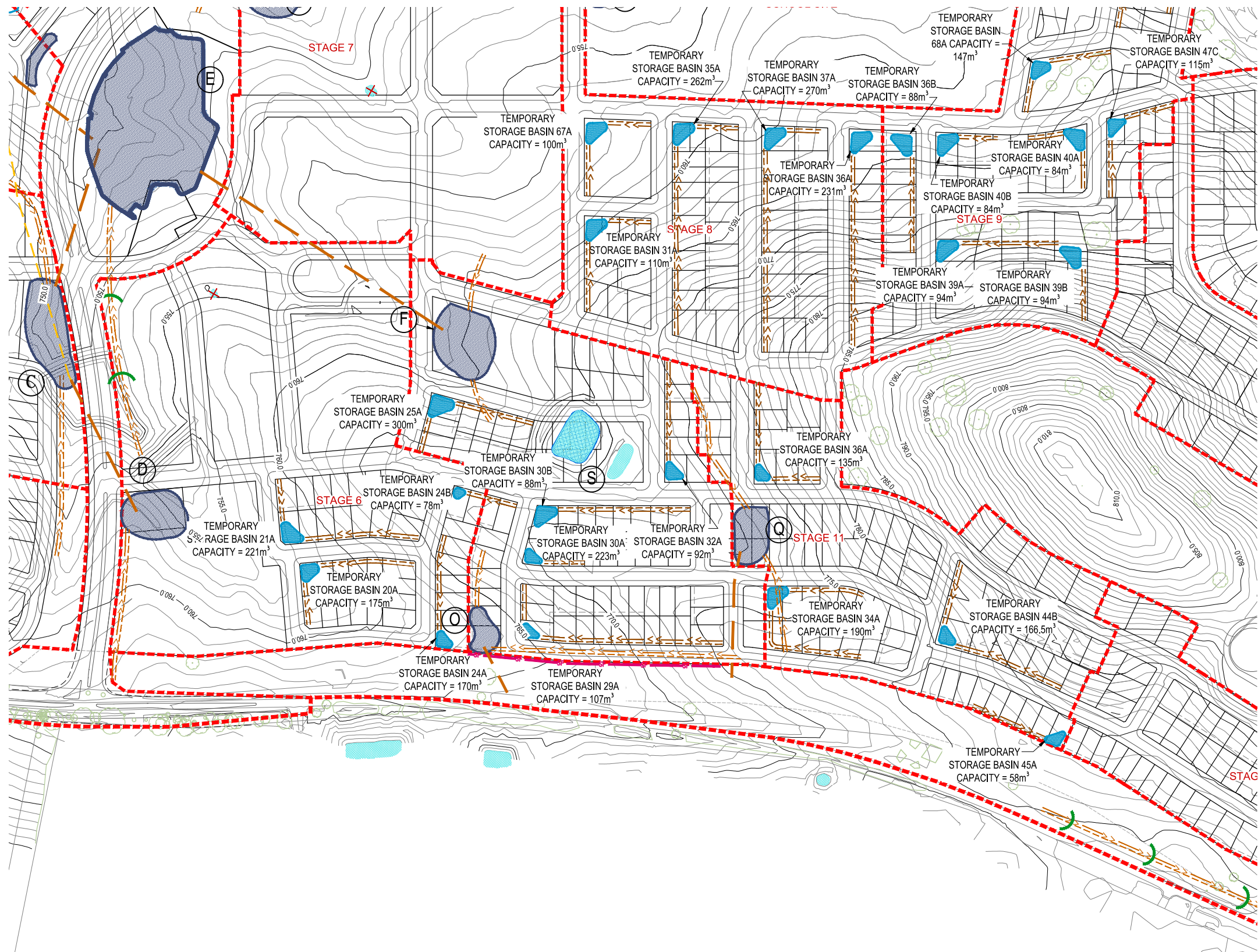
### NOTES:

- REFER DRAWING 16-001756-D259+ FOR NOTES, LEGEND AND TABLE.
- ALL TEMPORARY STORMWATER PIPES TO BE CAPPED WHEN TEMPORARY SEDIMENT BASINS OR CLEARWATER PONDS ARE REMOVED.

FIRST ISSUE	DESIGN	DRAWN	CHECK	APPROVED	DATE	AMENDMENT DETAILS		WAE No.	A3 PLOT	SCALE (METRES)	A1 PLOT	CUSTOMER	PROJECT	DRAWING NUMBER	AMEND.
1	BC	VVB	CSC		23/03/2017				1:4000	20 10 0 20 40 60 80 100	1:2000		GOOGONG NORTH NEIGHBOURHOOD 2	16-001756-D256+	A
2	BC	KC			29/09/2017	QPR COMMENTS ADDRESSED							DA SUBMISSION		



FOR CONTINUATION REFER 16-001756-D256+



## PHASE 2 - STAGES 5, 6, 7, 8, 9, 10 & 11

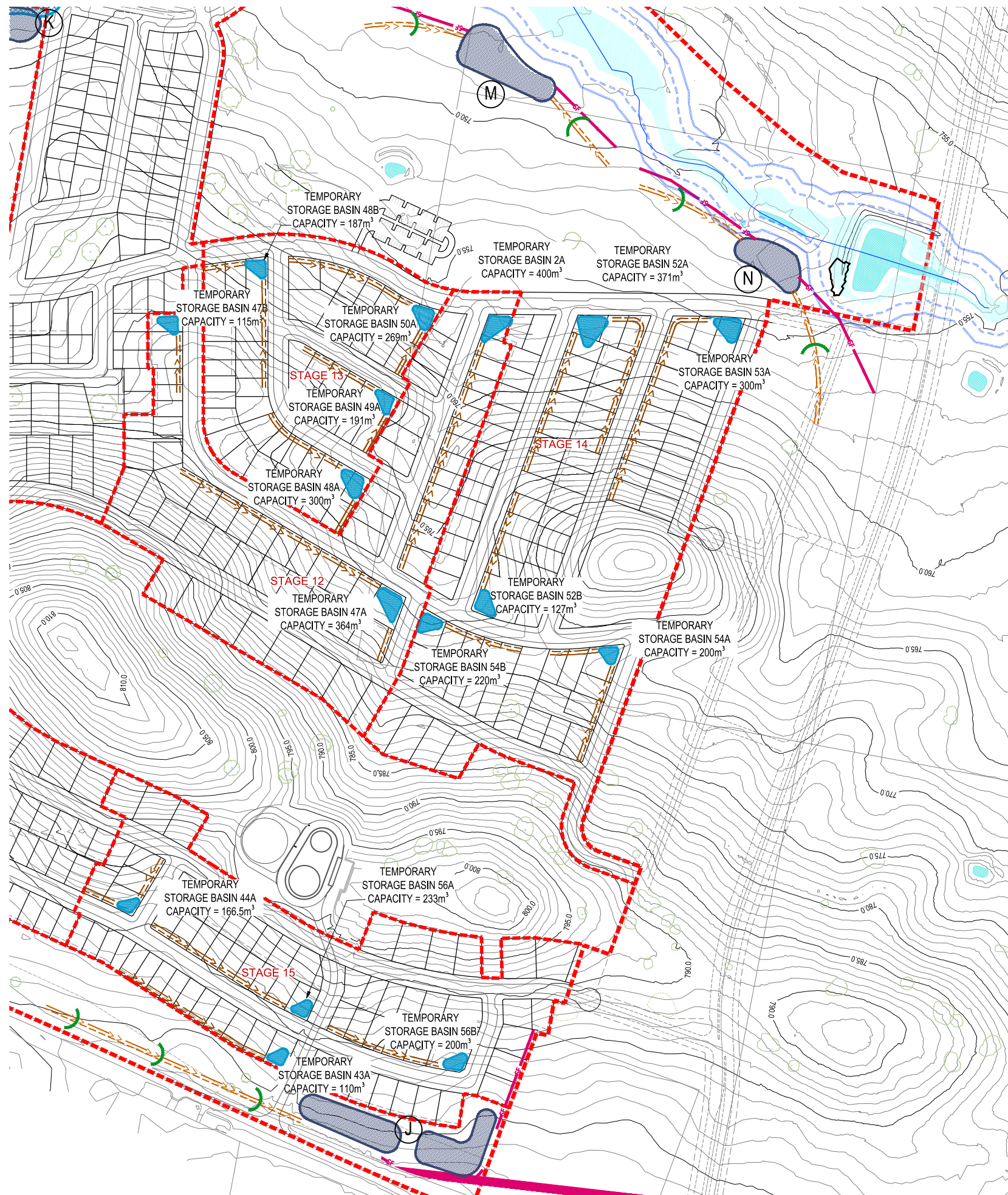
- C** ADDITIONAL STORAGE SUPPORT FOR STAGES 10 & 11. CONVERT TO WATER QUALITY CONTROL POND AT COMPLETION OF STAGE 11.
- D** CONSTRUCT TEMPORARY SEDIMENT BASIN FOR STAGES 6, 10 & 11. REMOVE AT THE COMPLETION OF STAGE 11.
- E** UTILISE AS TEMPORARY SEDIMENT BASIN FOR STAGES 5, 6 & 7 AND ADDITIONAL STORAGE SUPPORT FOR 8, 9, 10 & 11. CONVERT TO WATER QUALITY POND AT THE COMPLETION OF STAGE 11.
- F** CONSTRUCT TEMPORARY SEDIMENT BASIN AT THE COMMENCEMENT OF STAGE 6 FOR THE DURATION OF STAGES 6, 7, 8 & 10. UTILISE AS ADDITIONAL STORAGE FOR STAGE 11. REMOVE AT THE COMPLETION OF STAGE 11.
- O** CONSTRUCT TEMPORARY SEDIMENT BASIN FOR STAGE 10. REMOVE AT COMPLETION OF STAGE 10.
- Q** CONSTRUCT TEMPORARY SEDIMENT BASIN FOR STAGE 11. REMOVE AT COMPLETION OF STAGE 11.
- S** UTILISE EXISTING FARM DAM AS CLEAR WATER POND FOR STAGES 1, 2, 4, 6 & 7. REMOVE AT COMPLETION OF STAGE 10.

CONCEPT ONLY SUBJECT  
TO DETAIL DESIGN &  
PROCUREMENT STRATEGY

### NOTES:

- REFER DRAWING 16-001756-D259+ FOR NOTES, LEGEND AND TABLE.
- ALL TEMPORARY STORMWATER PIPES TO BE CAPPED WHEN TEMPORARY SEDIMENT BASINS OR CLEARWATER PONDS ARE REMOVED.





### PHASE 3 - STAGES 12, 13, 14 & 15

- J** CONSTRUCT TEMPORARY SEDIMENT BASIN FOR STAGE 15.  
CONVERT TO WATER QUALITY CONTROL POND AT COMPLETION OF STAGE 15.
- M** CONSTRUCT TEMPORARY SEDIMENT BASIN FOR STAGES 9, 12, & 13.  
CONVERT TO WATER QUALITY CONTROL POND AT COMPLETION OF STAGE 13.
- N** CONSTRUCT TEMPORARY SEDIMENT BASIN FOR STAGES 13 & 14.  
CONVERT TO WATER QUALITY CONTROL POND AT COMPLETION OF STAGE 14.

CONCEPT ONLY SUBJECT  
TO DETAIL DESIGN &  
PROCUREMENT STRATEGY

### NOTES:

- REFER DRAWING 16-001756-D259+ FOR NOTES, LEGEND AND TABLE.
- ALL TEMPORARY STORMWATER PIPES TO BE CAPPED WHEN TEMPORARY SEDIMENT BASINS OR CLEARWATER PONDS ARE REMOVED.








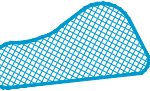


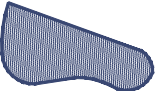







FIRST ISSUE	DESIGN CC	DRAWN VVB	CHECK CSC	APPROVED	DATE	AMENDMENT DETAILS		WAE No.	A3 PLOT	SCALE (METRES)	A1 PLOT	CUSTOMER	PROJECT	DRAWING TITLE		DRAWING NUMBER	AMEND.
A	BC	KC			23/03/2017				1:4000	20 10 0 20 40 60 80 100	1:2000		GOOGONG NORTH NEIGHBOURHOOD 2	SOIL, WATER AND VEGETATION CONCEPT MANAGEMENT PLAN PHASE 3		16-001756-D258+	A
						AMENDMENT DETAILS		PROJECT No.									



BASIN NAME	CATCHMENT AREA (ha)	STORAGE REQUIRED 75%ILE (m³)	STORAGE REQUIRED 85%ILE (m³)	SEDIMENT BASIN VOLUME (m³)	IN CATCHMENT BASIN VOLUME (m³)	TOTAL SEDIMENT VOLUME AVAILABLE (m³)	EQUIVALENT Y-%ILE 5 DAY RAINFALL (mm)	EQUIVALENT Y-DAY %ILE EVENT	TOTAL VOLUME ≥ REQUIRED 85% VOLUME
A	9.4	994	2047	1455	881	2336	29.45	87	✓
B	4.7	494	2143	1250	1029	2279	47.00	96	✓
C	10.5	1147	2361	3020	688	3708	35.45	90	✓
D	7.6	803	1653	2180	644	2824	38.57	92	✓
E	31.5	3320	6833	12000	0	12000	39.65	92	✓
F	13.0	1364	2807	2905	644	3549	32.62	89	✓
G	10.7	1126	2318	2807	0	2807	31.24	88	✓
H	6.0	CLEAR WATER POND ONLY							
J	10.7	1129	2323	3000	601	3601	35.00	90	✓
K	12.8	1343	2765	3573	1173	4746	38.75	92	✓
L	15.0	1582	3255	5636	1173	6809	43.80	94	✓
M	12.9	1355	2789	3568	479	4047	32.76	89	✓
N	4.0	418	860	1882	1618	3500	74.44	100	✓
O	2.4	251	517	662	872	1534	54.30	100	✓
P	6.9	727	1495	1500	0	1500	25.90	85	✓
Q	0.3	30	62	1470	725	2195	649.93	100	✓
R	5.3	554	1140	463	881	1344	30.43	87	✓
S	8.4	CLEAR WATER POND ONLY							
T	8.5	890	1833	1090	858	1948	27.41	86	✓

CONSTRAINT/CHARACTERISTIC	VALUE/RATING
RAINFALL EROSIVITY	R-FACTOR IS 1,500
SLOPE GRADIENT	UP TO 15 PERCENT
POTENTIAL EROSION HAZARD	LOW
RAINFALL ZONE	ZONE 10
SOIL ERODIBILITY (SUBSOIL)	MODERATE
CALCULATED SOIL LOSS	up to 242 t/ha/yr
SOIL LOSS CLASS	CLASS 3
SOIL TEXTURE GROUP	TYPE D
RUNOFF COEFFICIENT	0.56 MINIMUM
TOTAL SITE AREA	176.92 ha
DISTURBED SITE AREA	176.92 ha
75%ILE 5-DAY RAINFALL EVENT	18mm QUEANBEYAN
85%ILE 5-DAY RAINFALL EVENT	25.8mm QUEANBEYAN

LEGEND

- STAGE BOUNDARY
- SILT FENCE
- TEMPORARY HAY BALES
- EXISTING TEMPORARY STORMWATER PIPE
- FUTURE TEMPORARY STORMWATER PIPE
- EXISTING STORMWATER
- EXISTING FARM DAM / DAM TO BE REMOVED
- PROPOSED CLEAR WATER POND
- CLEAR WATER DIVERSION DRAIN
- CLEAR WATER PIPE/HEADWALL
- PROPOSED TEMPORARY SEDIMENT BASIN
- TEMPORARY SEDIMENT BASIN DIVERSION DRAIN
- TEMPORARY ON BLOCK STORAGE BASIN
- ON SITE WATER DIVERSION BUND
- RIPARIAN CORRIDOR
- OUTER 50% CRZ
- INNER 50% CRZ
- TREES TO BE RETAINED

NOTES:

1. THESE DRAWING ARE CONCEPT PLAN ONLY. DETAILED SOIL, WATER AND VEGETATION PLANS WILL NEED TO BE DESIGNED TO COMPLY WITH THE REQUIREMENTS OF THE ENVIRONMENT PROTECTION ACT 1997, THE QUEANBEYAN - PALERANG REGIONAL COUNCIL DEVELOPMENT DESIGN SPECIFICATION D7 - EROSION CONTROL AND STORMWATER MANAGEMENT AND THE MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION BY LANDCOM (BLUE BOOK)
2. ALL VARIATIONS TO APPROVED CONCEPTS AND PROPOSALS ARE TO BE REVIEWED AND APPROVED BY QUEANBEYAN - PALERANG REGIONAL COUNCIL
3. SEDIMENTATION CONTROL POND LOCATION SHALL BE APPROVED BY SUPERINTENDENT PRIOR TO ITS CONSTRUCTION
4. ENVIRONMENTAL PROTECTION MEASURES SUCH AS STABILISED ACCESS POINTS, DUST SUPPRESSION, RECYCLING OF WATER ARE TO BE MAINTAINED AT ALL TIMES AND AN APPROPRIATE MAINTENANCE SCHEDULE SHALL BE PROVIDED PRIOR TO COMMENCEMENT OF WORKS.
5. FOR ALL IMPORTED MATERIAL, THE DETAILS OF ORIGIN AND QUANTITY ARE TO BE RECORDED AND PROVIDED BY THE SUPERINTENDENT AND QUEANBEYAN - PALERANG REGIONAL COUNCIL PRIOR TO COMMENCEMENT OF EARTHWORKS
6. FOR SEDIMENT CONTROL MEASURES LOCATED ON LINE WITH WATERCOURSE, STRINGENT AND REGULAR INSPECTION AND MAINTENANCE SHALL BE MAINTAINED.
7. DETAILED DESIGN OF SEDIMENT CONTROL PONDS TO BE DONE IN ACCORDANCE WITH SECTION 6.3.4 OF THE BLUE BOOK.
8. CONTOURS AT 1m INTERVALS.
9. ON BLOCK SEDIMENT BASIN TO BE RETAINED UNTIL SURROUNDING ROADS HAVE BEEN ESTABLISHED. REMOVAL SUBJECT TO THE APPROVAL OF THE SUPERINTENDENT.
10. CONTRACTOR IS TO ESTABLISH A MAINTENANCE PROGRAM FOR SEDIMENT AND EROSION CONTROL DEVICES TO ENSURE INSPECTION AFTER SIGNIFICANT RAINFALL AND THAT ANY REPAIRS NECESSARY ARE QUICKLY ATTENDED TO.

WRE No.

PROJECT No.

A3 PLOT

SCALE (METRES)

A1 PLOT

CLIENT



PROJECT

GOOGONG NORTH NEIGHBOURHOOD 2

DA SUBMISSION



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DRAWING TITLE

SOIL, WATER AND VEGETATION CONCEPT MANAGEMENT NOTES, LEGEND & TABLE

DRAWING NUMBER

16-001756-D259+

AMEND.

A



