



DESIGN SUMMARY

CATCHMENT CALCULATIONS:

	PRE-DEVELOPMENT	POST-DEVELOPMENT
TOTAL AREA	552m <sup>2</sup>	552m <sup>2</sup>
IMPERVIOUS AREA	293m <sup>2</sup> (53%)	462m <sup>2</sup> (84%)
PERVIOUS AREA	259m <sup>2</sup> (47%)	90m <sup>2</sup> (16%)

SITE DISCHARGE CALCULATIONS:

	100 YEAR ARI	
PRE-DEVELOPMENT	35L/s	
POST-DEVELOPMENT	36 L/s	

ON-SITE DETENTION:

ON-SITE DETENTION IS REQUIRED FOR THIS SITE. DETENTION IS PROPOSED ABOVE THE PROPOSED RWT. THE PROPOSED 100YR DISCHARGE RATES FOR THE SITE ARE AS FOLLOWS:

ROOF - 360m<sup>2</sup> (100% IMPERVIOUS) - 24L/S  
REMAINING SITE - 198m<sup>2</sup> (100% IMPERVIOUS) - 12L/S  
TOTAL - 36L/S

RESTRICT SITE DISCHARGE FROM THE ROOF TO 23L/S  
RESULTANT POST SITE DISCHARGE = 35L/S +- PRE-DEVELOPED.

ALLOW FOR 600L OF STORAGE ABOVE RAINWATER TANK. REFER TO DETAIL. ANALYSIS UNDERTAKEN USING DRAINS.

RAINWATER RE-USE:

RAINWATER RE-USE TO BE IN ACCORDANCE WITH BASIX REQUIREMENTS. 2000L TANK WITH 300mm ROOF CATCHMENT DRAINING TO TANK.

GRAVEL TRENCH:

GRAVEL TRENCHES HAVE BEEN PROPOSED TO ASSIST IN REDUCING EXCESS FLOW FROM THE SITE

- NOTES
1.

ALL LEVELS ARE AUSTRALIAN HEIGHT DATUM (AHD).
2.

GUTTER GUARD TO BE INSTALLED ON ALL EAVES GUTTERS.
3.

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3.2-2003 'STORMWATER' DRAINAGE.
4.

ALLOW FOR SEALED CLEAR OUT AT EVERY BEND.
5.

RAINWATER RE-USE TO BE IN ACCORDANCE WITH BASIX REQUIREMENTS. 2000L TANK WITH 300mm ROOF CATCHMENT DRAINING TO TANK. A PERMANENT SIGN IS TO BE LOCATED IN THE VICINITY OF THE TANK AND AT ALL RAINWATER SERVICES STATING THE WATER IS "NON POTABLE WATER" WITH APPROPRIATE HAZARD IDENTIFICATION.
3.

PIPEWORK USED FOR RAINWATER SERVICES SHALL BE COLOURED LILAC IN ACCORDANCE WITH AS1345.
4.

ALL VALVES AND APERTURES SHALL BE CLEARLY AND PERMANENTLY LABELED WITH SAFETY SIGNS TO COMPLY WITH AS1319.
6.

RAINWATER TANK RETICULATION SYSTEM AND MAINS WATER BYPASS ARRANGEMENT TO BE INSTALLED IN ACCORDANCE WITH AS/NZS 3500.12-2003 AND THE NSW CODE OF PRACTICE - PLUMBING AND DRAINAGE.
7.

A FIRST FLUSH FILTRATION DEVICE IS REQUIRED TO BYPASS THE FIRST 1mm OF RAINWATER.
8.

ANY VARIATIONS TO THE NOMINATED DESIGN SHALL BE REFERRED TO ENGINEER
9.

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
10.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNO UNLESS NOTED OTHERWISE).
11.

CONTRACTOR TO ENSURE IN-GROUND PIPE TRENCHES AND PITS ARE OUTSIDE TO ZONE OF INFLUENCE OF FOOTINGS. REFER AS3500.3 - 2015 CLAUSE 6.2.8

- SEDIMENT AND SOIL EROSION
1.

THE CONTRACTOR SHALL INSTIGATE ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH STATUTORY REQUIREMENTS AND IN PARTICULAR THE 'BLUE BOOK' (MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION), PRODUCED BY THE DEPARTMENT OF HOUSING AND COUNCILS POLICIES. THESE MEASURES ARE TO BE INSPECTED AND MAINTAINED ON A DAILY BASIS.
2.

THE CONTRACTOR SHALL INFORM ALL SUB CONTRACTORS OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.
3.

WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE SHALL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE;  
3.1. CONSTRUCT TEMPORARY STABILISED SITE ACCESS INCLUSIVE OF SHAKE DOWN / WASH PAD.  
3.2. INSTALL ALL TEMPORARY SEDIMENT FENCES AND BARRIER FENCES. WHERE FENCES ADJACENT EACH OTHER, THE SEDIMENT FENCE CAN BE INCORPORATED INTO THE BARRIER FENCE.  
3.3. INSTALL SEDIMENT CONTROL MEASURES AS OUTLINED ON THE APPROVED PLANS.
4.

AT ALL TIMES AND IN PARTICULAR DURING WINDY AND DRY WEATHER, LARGE UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL ENSURING CONFORMITY TO REGULATORY AUTHORITY REQUIREMENTS.
5.

ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) SHALL BE REMOVED AS SOON AS POSSIBLE
6.

WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN STABILISED AND/OR ANY LIKELY SEDIMENT BEEN FILTERED OUT.
7.

ALLOW FOR GRASS STABILISATION OF EXPOSED AREAS DURING ALL PHASES OF CONSTRUCTION.
8.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIRS AND/OR MAINTENANCE SHALL BE UNDERTAKEN REGULARLY AND AS REQUIRED, PARTICULARLY FOLLOWING RAIN EVENTS.
9.

RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH REGULATORY AUTHORITY REQUIREMENTS. CONTRACTOR TO PAY ALL FEES AND PROVIDE EVIDENCE OF SAFE DISPOSAL.

