



CUT AND FILL VOLUMES	
CUT (TOTAL)	6,850m³
CUT (ROCK)	1,800m³
CUT (SOIL)	5,050m³
FILL (TOTAL)	9,250m³
NET FILL	2,400m³

LEGEND:				
CUT AND FILL BANDING				
	BAND	COLOUR	FROM (m)	TO (m)
CUT	1	Red	-6.000	-5.000
	2	Red	-5.000	-4.000
	3	Red	-4.000	-3.000
	4	Red	-3.000	-2.000
	5	Red	-2.000	-1.000
	6	Red	-1.000	0.000
FILL	7	Light Green	0.000	1.000
	8	Light Green	1.000	2.000
	9	Light Green	2.000	3.000
	10	Light Green	3.000	4.000

- NOTES:**
- THE CUT AND FILL ANALYSIS AND ASSOCIATED VOLUMES APPLY TO THE SHADED AREAS ON THE PLAN ONLY.
  - AREAS SHADED IN RED REPRESENT AREAS OF CUT AND AREAS SHADED IN GREEN REPRESENT AREAS OF FILL. AREAS IN WHITE ARE ASSUMED TO REMAIN UNAFFECTED AND AT EXISTING LEVELS OR HAVE BEEN DELIBERATELY EXCLUDED FROM THE ANALYSIS.
  - CUT AND FILL VOLUMES REPRESENT THE BULK EARTHWORKS VOLUMES BETWEEN UNDERSIDE OF STRUCTURE, PAVEMENT, TOPSOIL AND THE EXISTING GROUND LEVELS.
  - AN ASSUMED 500mm THICK STRUCTURAL SLAB AND UNDERLYING GRANULAR MATERIAL ZONE BELOW FINISHED FLOOR LEVEL HAS BEEN USED TO MODEL THE CUT AND FILL VOLUMES. FINISHED FLOOR LEVELS ARE TAKEN FROM THE CURRENT ARCHITECTURAL PROPOSALS.
  - NO ALLOWANCE HAS BEEN MADE WITHIN THE CALCULATIONS FOR REMOVAL OF TOPSOIL WHICH MUST BE STOCKPILED SEPARATELY AND REUSED IN LANDSCAPED AREAS ONLY. TOPSOIL OR OTHER MATERIAL WHICH IS UNSUITABLE AS ENGINEERING FILL SHALL NOT BE PLACED BENEATH THE DEVELOPMENT AND MAY ONLY BE RE-USED IN LANDSCAPED AREAS.
  - ALL EXISTING TREES WITHIN THE DEVELOPMENT FOOTPRINT SHALL BE REMOVED. ROOTS SHALL BE REMOVED FOR A DEPTH OF 1m BELOW EXISTING OR PROPOSED LEVELS, WHICHEVER IS DEEPER. CAVITIES FORMED BY THE REMOVAL OF ROOTS SHALL BE BACKFILLED AND COMPACTED. THE REMOVAL OF TREES HAS NOT BEEN INCLUDED IN THE ANALYSIS.
  - A LAYER OF EXTREMELY HARD SANDSTONE AND LATITE ROCK IDENTIFIED IN THE GEOTECHNICAL INVESTIGATION IS ASSUMED TO BE AT A CONSTANT DEPTH OF 1.6m BELOW GROUND LEVEL FOR MODELING PURPOSES; THIS REFLECTS THE AVERAGE DEPTH TO ROCK IN THE BOREHOLES IN THE VICINITY OF THE DEVELOPMENT.
  - THE CUT AND FILL ANALYSIS MAKES NO ALLOWANCE FOR PAD OR STRIP FOUNDATION EXCAVATION, SERVICES TRENCHES, TEMPORARY EARTHWORKS, BURIED TANKS OR ANY OTHER IN GROUND INSTALLATION.
  - ALL EXCESS CUT MATERIAL NOT USED IN LANDSCAPED AREAS IS TO BE REMOVED FROM SITE.
  - CONTOURS SHOW FINISHED LEVELS

rev	date	description	dm	ch
06	24/10/14	FOR TENDER	LS	DC
05	02/09/14	85% DESIGN DEVELOPMENT	LS	DC
04	07/07/14	FOR INFORMATION	LS	DC
03	05/05/14	FOR INFORMATION	LS	DC
02	07/02/14	FOR INFORMATION	LS	DC
01	31/01/14	PRELIMINARY	DC	DC

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Project  
**SHELLHARBOUR CITY HUB**

Drawing title  
**BULK EARTHWORKS**

Status  
**FOR TENDER**

Scale at A1 1:250	drawn by DC	checked DC	date FEB-14
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Project no. 4600	Drawing no. CV-0300	rev. 06
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