SAH DAY SURGERY HORNSBY REDEVELOPMENT NORTHCOTE RD / PALMERSTON RD, HORNSBY, NSW enstruct

STRUCTURAL DRAWING LIST:

C-100.00 C-100.31 STORMWATER DRAINAGE, EROSION & SEDIMENTATION CONTROL PLAN

STORMWATER DRAINAGE DETAILS

GENERAL

- 1. FOR DETAILS OF NEW BUILDING WORKS REFER TO RELEVANT ARCHITECTURAL DRAWINGS
- 2. FOR EXISTING LEVELS AND EXISTING BUILDINGS REFER TO SITE SURVEY DRAWINGS

ROOF DRAINAGE

- ROOFWATER DRAINAGE INLET SUMPS, GUTTERS AND DOWNPIPES TO BE SIZED TO SUIT THE 20 YEAR ARI WHERE OVERFLOWS CAN BE PROVIDED OR OTHERWISE SIZED FOR THE 1 IN 100 YEAR ARI.
- ALL ROOF WATER INLETS AND GUTTERS TO HAVE PROTECTION AGAINST LEAVES OR DEBRIS BLOCKAGE BY PROVISION OF MESH GUARDS
- ALL ROOF DRAINAGE TO BE CONNECTED TO THE COMBINED RAINWATER DETENTION STORAGE TANKS

SURFACE WATER DRAINAGE

- 1. SURFACE WATER RUNOFF FROM GROUND OR NEAR GROUND LEVEL IMPERVIOUS AREAS, BEING A SMALL PERCENTAGE OF THE TOTAL SITE, TO DISCHARGE DIRECT TO NEAREST COUNCIL PIPES OR KERB AND GUTTER
- 2. IT IS NOT PRACTICAL TO DISCHARGE TO THE DETENTION TANKS DUE TO LEVEL CONSTRAINTS AND FOR ENVIRONMENTAL AND POLLUTION CONTROL REASONS AS THE DETENTION TANKS ARE COMBINED WITH RAINWATER STORAGE TANKS

EROSION AND SEDIMENT CONTROL

- THE CONTRACTOR SHALL CONSTRUCT, MAINTAIN, AND FINALLY REMOVE, SOIL EROSION AND SEDIMENT CONTROL WORKS DURING THE RELEVANT CONSTRUCTION PHASE OF THE WORKS.
- 2. THE WORKS SHALL BE CARRIED OUT TO THE REQUIREMENTS OF THE LANDCOM PUBLICATION MANAGING URBAN STORMWATER SOILS & CONSTRUCTION MANUAL 2004
- 3. THE PRIMARY PURPOSE OF THESE MEASURES IS TO PREVENT ERODED SOIL FROM BEING WASHED OR BLOWN FROM THE SITE WHILST ANY BARE EARTH IS EXPOSED TO THE ELEMENTS.
- 4. THESE MEASURES WILL INCLUDE BUT NOT BE LIMITED TO SUCH ITEMS AS:-
 - TEMPORARY SWALES OR DITCHES TO CONVEY ALL STORMWATER RUNOFF FROM THE GROUND LEVEL OR THE BELOW GROUND EXCAVATED AREA
 - . A SEDIMENT BASIN AT THE END OF THESE SWALES WITH A PUMP TO DISCHARGE FILTERED WATER TO THE NEAREST COUNCIL PIPE
 - SILT FENCES AND HAY BALES WHERE NECESSARY
 A VEHICLE WHEEL CLEANING GRID AT THE SINGLE
 - POINT OF ENTRY TO THE SITE
 - e. TEMPORARY HARD GRAVEL OR BITUMINOUS SEALED ROADS WITHIN THE SITE
 - f. DUST ELIMINATION MEASURES SUCH AS TEMPORARY COVERING OF OR FREQUENT WATERING OF THE DENUDED AREAS DURING WINDY WEATHER.
- ALL PERMANENT STRUCTURES SUCH AS PAVEMENTS, STORMWATER PIPES AND PITS, TO BE THOROUGHLY CLEANED OF ALL SILT AND DEBRIS AT PRACTICAL COMPLETION OF THE WORKS.
- 6. THE WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NSW 2000

RAINWATER COLLECTION TANK

- THE RAINWATER COLLECTION TANK SIZES ARE INDICATIVE ONLY AND THE VOLUME MAY BE INCREASED AS REQUIRED DURING CONSTRUCTION STAGE DESIGN
- 2. THE RAINWATER STORAGE IS COMBINED WITH THE DETENTION TANKS AND FORMS THE LOWER PART OF THE STORAGE TANKS
- 3. THE TOP WATER LEVEL OF THE RAINWATER IS GOVERNED BY THE LEVEL OF THE DETENTION TANKS OUTLET ORIFICE INVERT LEVEL
- 4. THE DETENTION TANK VOLUME IS TOTALLY INDEPENDENT OF THE RAINWATER TANKS VOLUME AND THERE IS NO OFFSET ALLOWED IN THE DETENTION TANK VOLUME CALCULATIONS
- 5. THE RAINWATER COLLECTED MAYBE USED FOR EXTERNAL LANDSCAPE WATERING AND WITHIN THE BUILDING AS NON POTABLE WATER REUSE SUCH AS TOILET FLUSHING
- 6. THE RAINWATER REUSE REQUIRES THE USE OF MECHANICAL PUMPS WHICH ARE TO BE DESIGNED AND DETAILED AT CONSTRUCTION STAGE DESIGN

FOR APPROVAL

03	30.06.10	PART 3A SUBMISSION	J.D.B.	C.M.
02	30.06.10	PART 3A SUBMISSION	J.D.B.	C.M.
01	22.06.10	ISSUED FOR INFORMATION	J.D.B.	C.M.

description

date

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SAH DAY SURGERY HORNSBY
REDEVELOPMENT

drawing title

project

Cover Sheet/General Notes

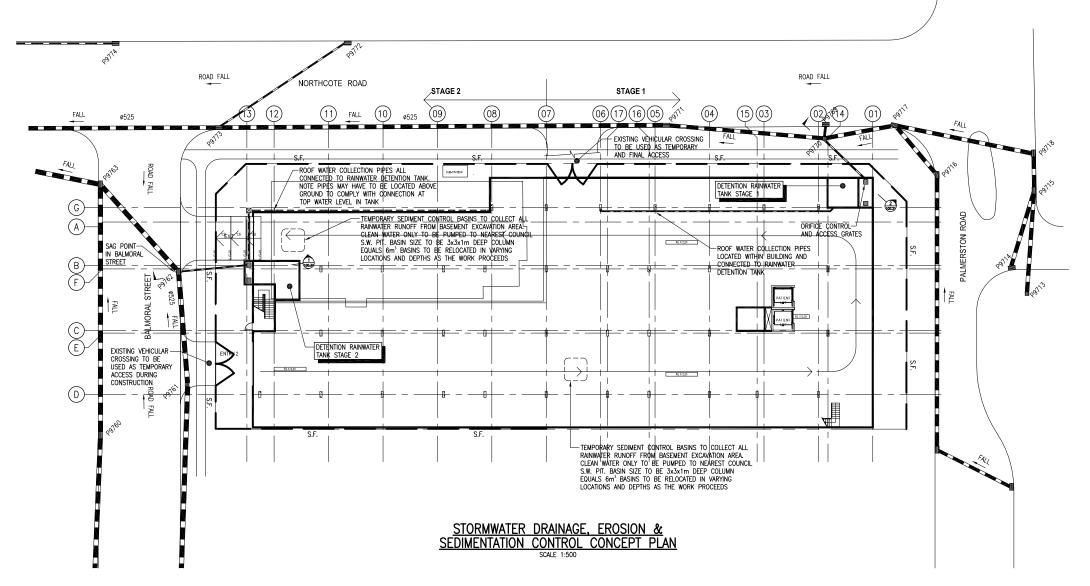
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project no. 4123

drawing no. **C-000.00**

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LEGEND

TEMPORARY SITE FENCING LOCATED ON SITE BOUNDARY

DETENTION / RAINWAT	TER TANK	DATA
	STAGE 1	STAGE 2
ROOF AREA CONNECTED	1700m²	1050m²
S.W. DETENTION VOLUME	17m³	12m³
S.W. DETENTION DEPTH	0.7m	0.5m
S.W. DETENTION AREA	25m²	24m²
RAINWATER VOLUME	40m³	36m³
RAINWATER DEPTH	2.0m	1.5m
RAINWATER AREA	22m²	24m²

FOR APPROVAL

03	30.06.10	PART 3A SUBMISSION	J.D.B.	C.M.
02	30.06.10	PART 3A SUBMISSION	J.D.B.	C.M.
01	22.06.10	ISSUED FOR INFORMATION	J.D.B.	C.M.
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STORMWATER DRAINAGE CONCEPT PLAN

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drawn by J.D.B.

C.M.

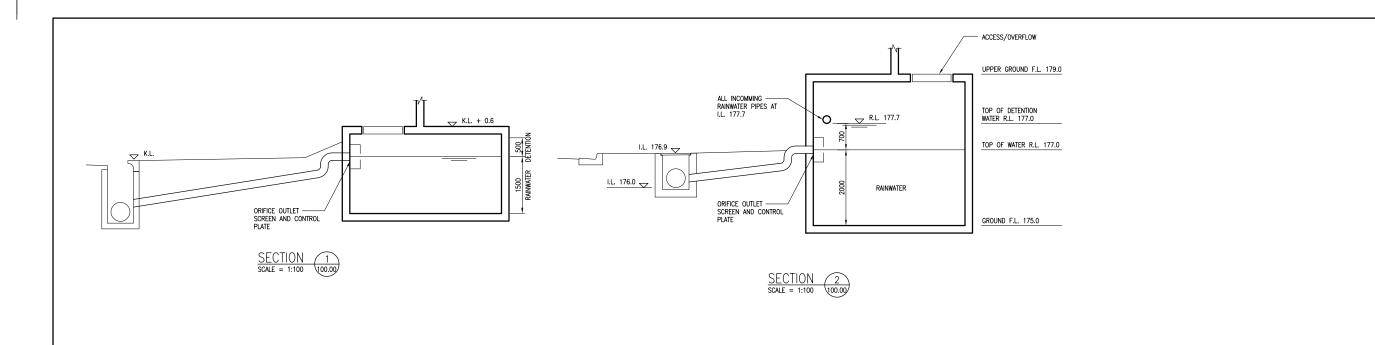
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rev	date	description	drn	ch'k

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	REDEVELOPMENT

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STORMWATER DRAINAGE DETAILS

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checked C.M.

JUNE 2010

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14th July 2010

Sydney Adventist Hospital

c/o JBA Planning Level 7, 77 Berry Street North Sydney NSW 2060

For the attention of: Stephanie Ballango

Dear Stephanie,

SAH Day Surgery Hornsby - Stormwater Drainage

The proposed Day Surgery will incorporate a site drainage system that will be designed to comply with the applicable guidelines. This system will manage all the stormwater from the site and will consist of a piped network designed to convey the 1 in 20 year event for all areas where overflow is unrestricted or the 1 in 100 year event where overflow paths are not available. Concept details of this system are shown on drawings C-000.00, C-100.00 and C-100.31.

The existing stormwater drainage system consists of a 525mm main and the onsite detention system will be used to manage flows into this system to an acceptable level. Also any stormwater that is present within the basement levels will be pumped out via a basement pump-out pit.

The site is situated close to a natural ridge in Hornsby and there are no natural watercourses nearby. The probability of the site experiencing flooding is therefore considered as low.

We also note that the effect of sea water level rise will be insignificant due to the sites significant elevation above current sea water levels.

for

enstruct group pty ltd

Craig Muckay

Craig Mackay Senior Associate