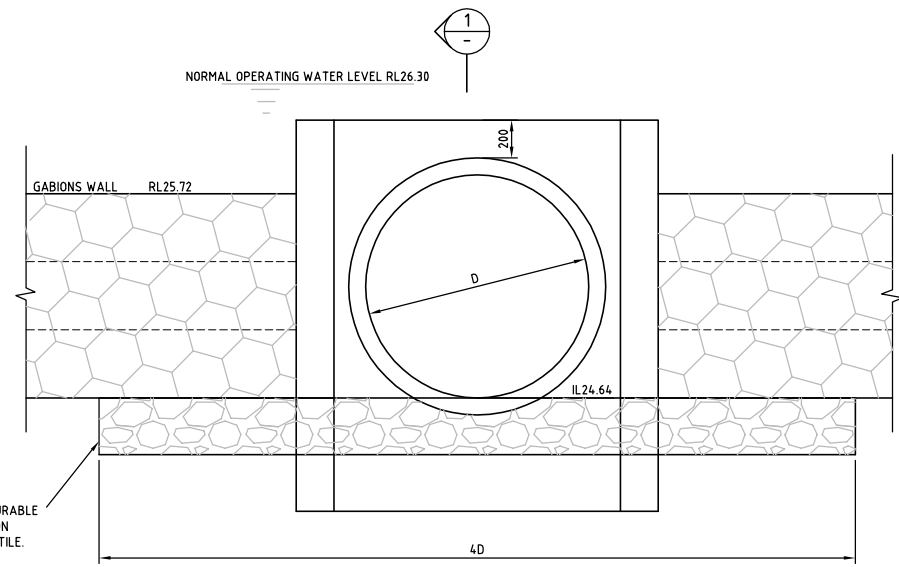
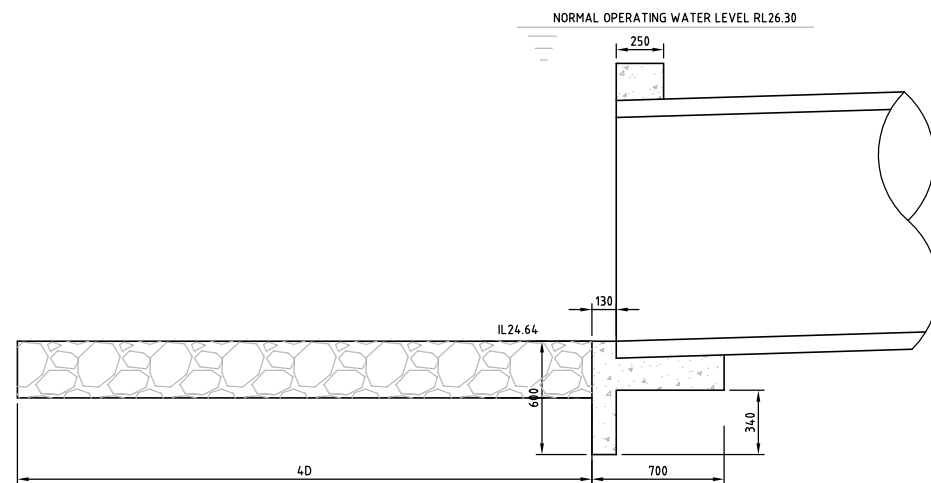


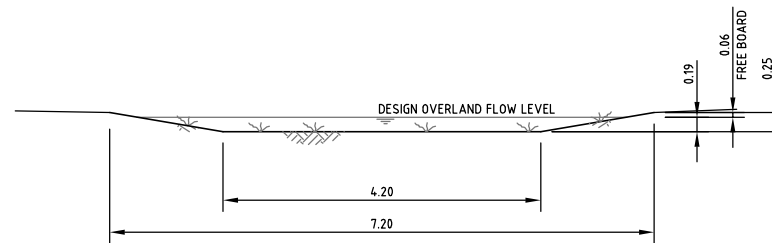
DATE PLOTTED: 05 June 2007 - 5:59pm



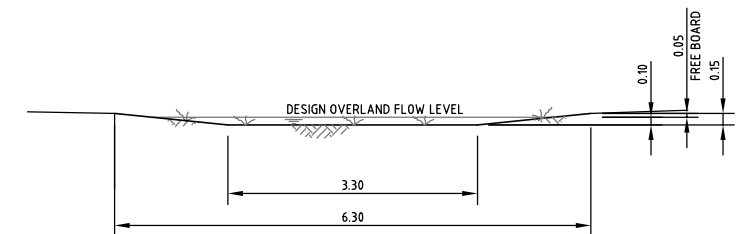
TYPICAL HEADWALL DETAIL
SCALE 1:20



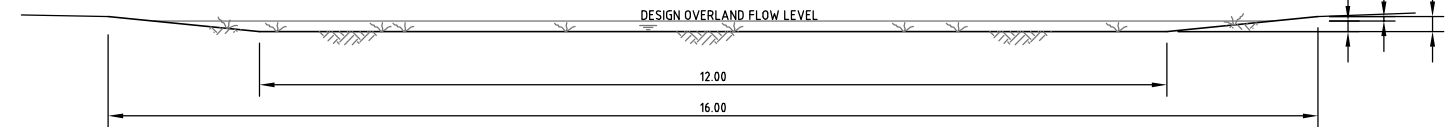
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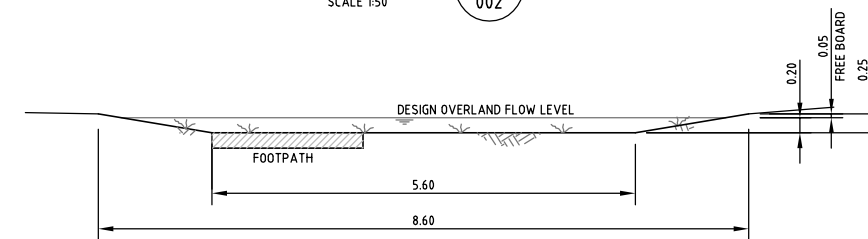
SECTION 1
SCALE 1:50



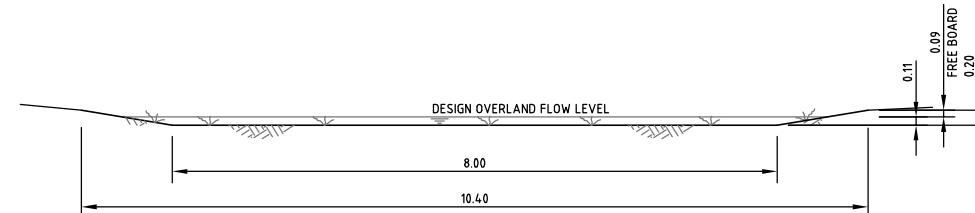
SECTION 3
SCALE 1:50



SECTION 2
SCALE 1:50



SECTION 4
SCALE 1:50



SECTION 5
SCALE 1:50

SPILLWAY CALCULATION TABLE

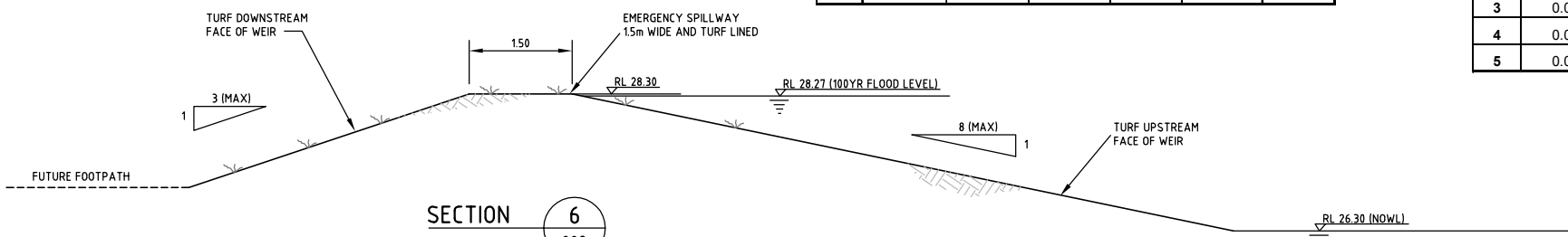
	EMERGENCY OVERFLOW	WEIR 'C' VALUE	WEIR LENGTH	FLOW DEPTH	SIDE SLOPE	FLOW VELOCITY OVER WEIR
	m ³ /s		m	m		m/s
SPILLWAY	2.04	2	60	0.07	1:3	0.55

FLOWPATH CALCULATION TABLE

FLOW PATH	Q ₁₀₀ OVERLAND FLOW	50% BLOCKAGE Q ₁₀₀ PIPED FLOW	Q ₁₀₀ TOTAL OVERLAND FLOW	CHANNEL LONGITUDINAL GRADE	MANNINGS 'n'	CHANNEL BASE WIDTH (BW)	FLOW TOP WIDTH	CHANNEL TOP WIDTH (TW)	FLOW DEPTH (D)	CHANNEL DEPTH (H)	SIDE SLOPE	FLOW VELOCITY (V)	V ² D	MAX V ² D	FREE BOARD	CAPACITY (Q)
	m ³ /s	m ³ /s	m ³ /s	%		m	m	m	m	m		m/s	m ² /s	m ² /s	m	m ³ /s
1	1.00	0.50	1.50	2.50	0.03	4.20	6.48	7.20	0.19	0.25	1:6	1.5	0.29	0.29	0.06	1.56
2	3.33	0.19	3.52	5.00	0.03	12.00	14.80	16.00	0.14	0.20	1:10	1.9	0.26	2.26	0.06	3.53
3	0.08	0.79	0.87	10.70	0.03	3.30	5.30	6.30	0.10	0.15	1:10	2.0	0.20	0.22	0.05	0.88
4	0.06	1.87	1.93	2.00	0.03	5.60	8.00	8.60	0.20	0.25	1:6	2.0	0.29	0.29	0.05	1.96
5	0.06	1.87	1.93	7.80	0.03	8.00	9.32	10.40	0.11	0.20	1:6	2.0	0.22	0.23	0.09	1.94

NOTE:

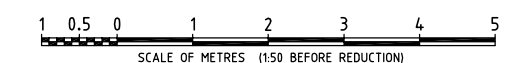
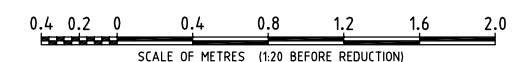
THE FUTURE ROAD HAS BEEN ASSESSED FOR CAPACITY TO CONVEY FLOWS FROM THE EMERGENCY OVERFLOW WEIR (IE 2M³/S). FOR THE PURPOSE OF THESE CALCULATIONS THE ROAD CARRIAGEWAY HAS BEEN ASSUMED 3.5M WIDE AT 3% CROSS FALL WITH KERB AND GUTTER EACH SIDE WITH THE FOOTPATH AREA GRADED AT 4%. FLOW DEPTH WHEN THE ROAD IS GRADED AT 1% LONGITUDINALLY IS APPROXIMATELY 0.225M, HAS A VD RATIO OF 0.36 AND DOES NOT ENCR OACH THE PROPERTY BOUNDARIES.



SECTION 6
SCALE 1:50

NOTES:

- MAX V²D ADOPTED FROM ITEM 8.7.1 IN RYDE COUNCIL DCP2006.
- EMERGENCY SPILLWAY SIZED BY APPLYING 50% BLOCKAGE FACTOR TO MAIN BASIN OUTLET.
- EMERGENCY OVERFLOWS IN 50% BLOCKAGE CASE ARE FULLY CONTAINED WITH FUTURE ROAD CROSS SECTION.



REF: X-000000
CAD FILE: N:\C:\0000 - 609\A00110 - BRCS SW Design\Drawings\600110-016.dwg

REV	DATE	FOR APPROVAL	REVISIONS	DRN	CHK
A	04/06/2007	FOR APPROVAL		VP	RC

ARCHITECT:	PREPARED: PL	CHECKED: RC	
	DRAWN: VP		
	APPROVED:	REVIEWED:	
PROJECT DIRECTOR	DATE	PROJECT MANAGER	DATE

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PELTON GROUP ROYAL REHABILITATION CENTRE SYDNEY CHARLES STREET, RYDE DETENTION BASIN & ASSOCIATED STORMWATER INFRASTRUCTURE MISCELLANEOUS DETAILS
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DRAWING STATUS:	FOR APPROVAL
DRAWING NUMBER:	600110-D-016
REV	A