

Drq. No. C2014B / DR / 0504

DRAINAGE - LONG SECTIONS AND CONTROL CHAMBER DETAILS

C2014B HARBOURSIDE STRATEGIC EMPLOYMENT SITE

Job Title

*** SWALE EXCEEDENCE FLOW CHAMBER COVER LEVELS ARE RELATIVE TO THE ACO SWALE INLET UNITS *
SEE DRAINAGE CROSS SECTIONS FOR FULL DETAILS**

S-1
CL=8.720
IL=7.320
D=1.4

S4
CL=7.290
IL=5.667
D=1.698

S7
CL=7.100
IL=5.401
D=1.699

S10
CL=7.424
IL=5.197
D=2.227

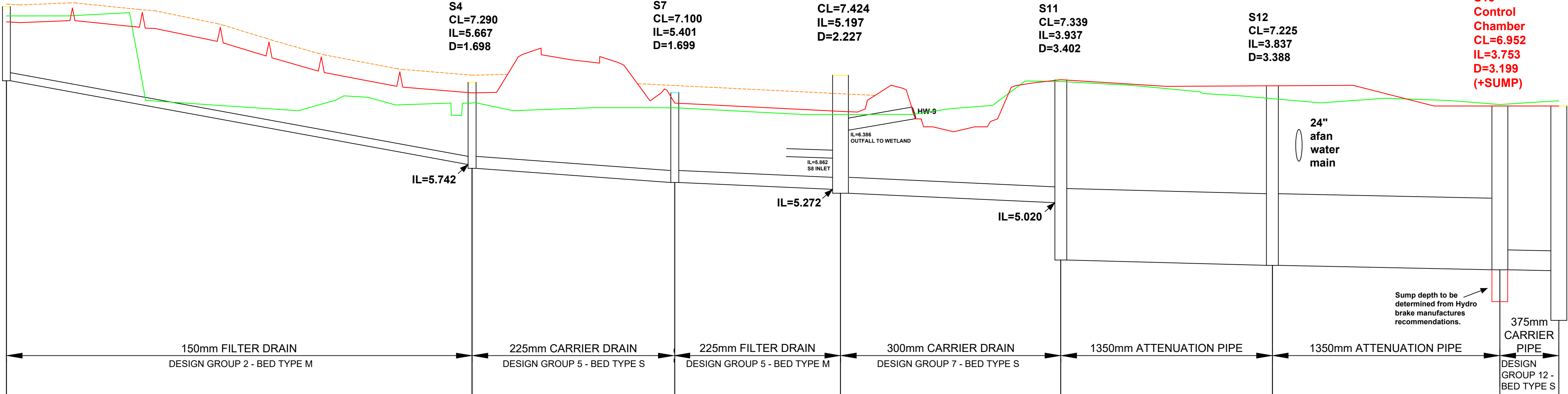
S11
CL=7.339
IL=3.937
D=3.402

S12
CL=7.225
IL=3.837
D=3.388

S13
Control
Chamber
CL=6.952
IL=3.753
D=3.199
(+SUMP)

**PUMPING
STATION**
CL= 6.952
Incoming Pipe
IL = 3.734
Wet Well IL =
2.800
Depth = 4.152m

**Refer to Sewers
for Adoption
7th Edition Part
D for full
Specification**



Level Datum =1.000

PROPOSED INVERT LEVELS	7.320			5.592			5.197		3.937		3.837		3.753	3.734
Gradient				-50.865			-13.891		-33.002		-399.587		-511.196	-586.833
EXISTING LEVELS	8.544	8.544	8.604	8.549	8.559	8.559	8.559	8.559	8.559	8.559	8.559	8.559	8.559	8.559
DESIGN LEVELS	8.431	8.416	8.455	8.454	8.455	8.455	8.455	8.455	8.455	8.455	8.455	8.455	8.455	8.455
LD01 LEVEL DIFF.	-1.112													
Distance														
Point Number														

MAIN DEVELOPMENT SITE DRAINAGE LONG SECTION - 1:500 HORIZONTAL, 1:50 VERTICAL

S-1
CL=8.286
IL=7.132
D=1.153

S-2
CL=8.225
IL=6.603
D=1.621

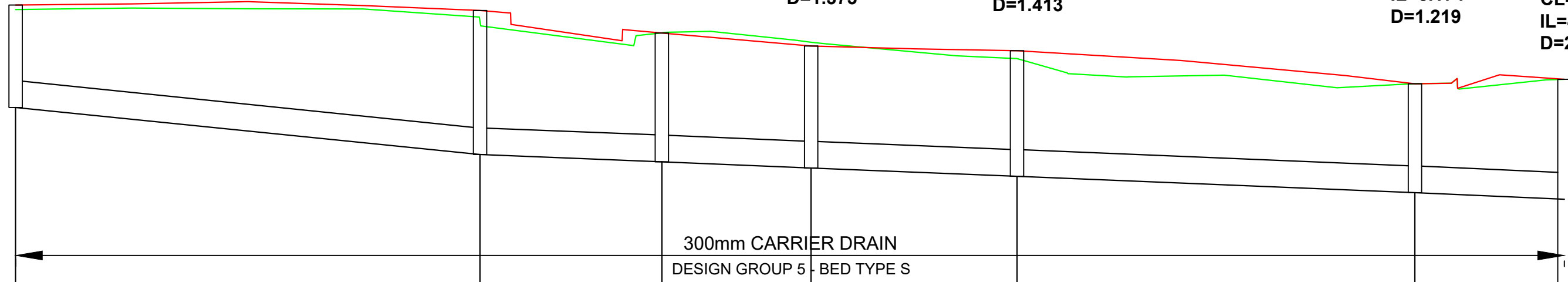
S-3
CL=7.971
IL=6.521
D=1.458

S-4
CL=7.824
IL=6.452
D=1.373

S-5
CL=7.771
IL=6.358
D=1.413

S-6
CL=7.398
IL=6.174
D=1.219

EXISTING
CHAMBER
CL=7.383
IL=4.900
D=2.483

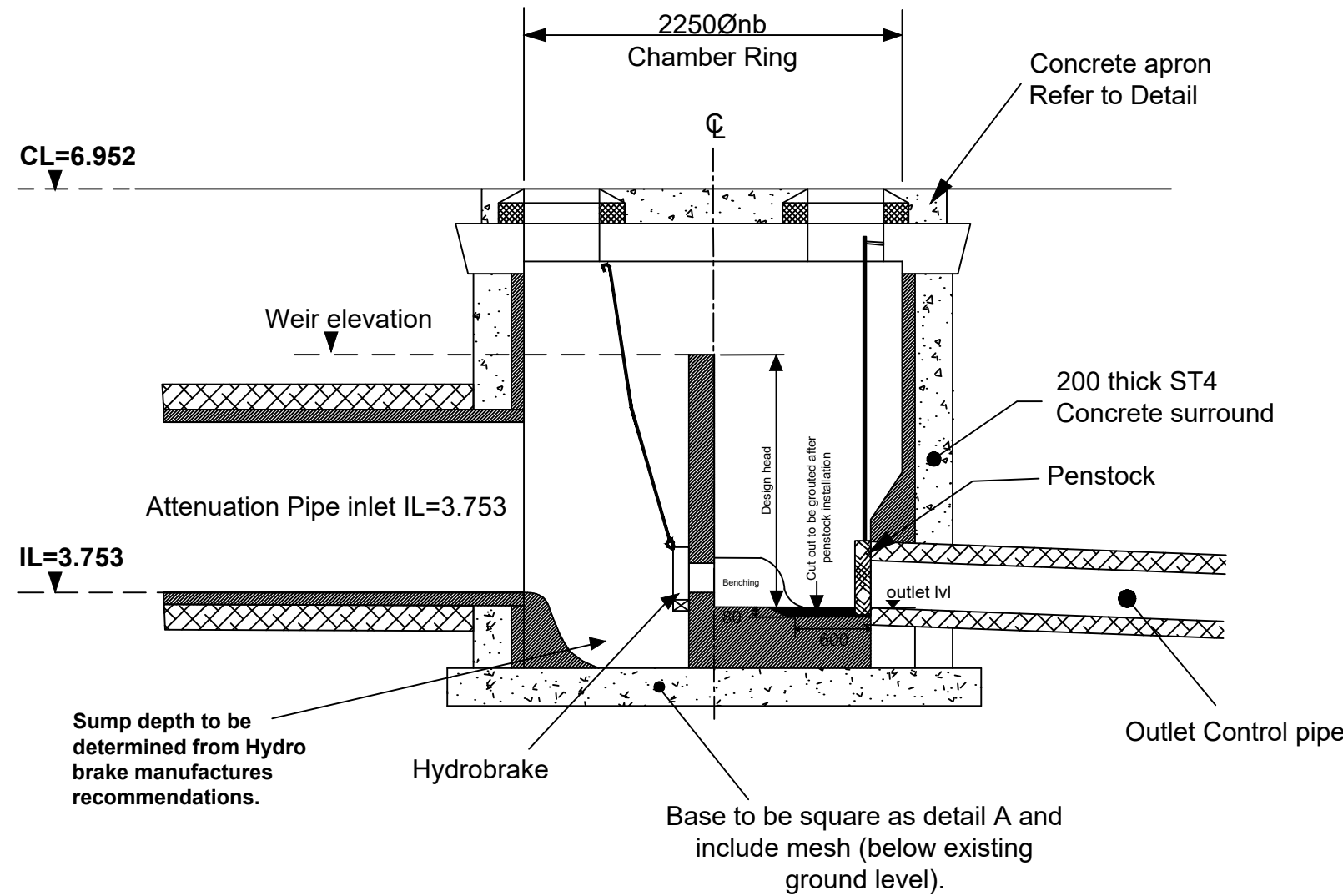


Level Datum =4.900

PROPOSED INVERT LEVELS	7.132													
Gradient														
EXISTING LEVELS	8.254	8.251	8.244	8.242	8.251	8.251	8.251	8.251	8.251	8.251	8.251	8.251	8.251	8.251
DESIGN LEVELS	8.286	8.299	8.314	8.280	8.225	8.196	8.196	8.196	8.196	8.196	8.196	8.196	8.196	8.196
DESIGN LEVEL DIFF.	-1.133													
Distance														
Point Number														

Hydro-Brake Technical Specification		
Control Point	Head (m)	Flow (l/s)
Primary Design	2.0	25.000
Flush-Flo	0.587	24.963
Kick-Flo	1.253	20.000
Mean Flow		21.718

drawings to be read in conjunction
with manhole and pipe schedules



TYPICAL DETAIL OF FLOW CONTROL CHAMBER S13 - SCALE 1:50

NOTES

1. All dimensions are in millimetres unless otherwise stated.
2. All levels are quoted in metres above Ordnance Datum.
3. For Drainage notes refer to dwg no D30168/D0502. Drainage notes are to be read in conjunction with all the drainage series drawings.
4. For drainage details refer to Highway Construction Details:
 - F1 - Surface Water Drains - Trench and Bedding Details
 - F2 - Filter Drains pipe and bedding details
 - F3 - Type 1 Chamber (Brick or In-situ concrete manhole)
 - F10 - Chamber fittings - ladder handhold and safety chain
 - F13 - Precast and in-situ gullies
 - F28 - Chamber fittings - guardrail
5. Penstocks shall be on-seating to suit 225 NB outlet pipe and as described in the notes on drawing No. C1493/DR/0502
6. The outlet control chambers shall be designed in conjunction with the Hydro brake design for each network case. Hydro brakes shall be designed by Hydro international to suit each outlet (Network) and mounted on the weir wall. The chamber, weir wall and benching shall be designed to the Hydro brake manufactures recommendations and shall be approved by the designer prior to any construction. Sump depth to be determined from Hydro brake manufactures recommendations.
7. (WET LAND AREA ONLY)
If the overflow pipe is within 200mm of the main outlet pipe from the swale, then the overflow pipe shall be positioned off centre to give the minimum clearance between both pipes. (minimum clearance diameters = 200mm)



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File No.	Financial Code No. 26.007500.B054.300916		
Drawn	Checked	MCB	Approved
Date	JAN '20	Date	JAN '20
Scales	1:500	Status	PLANNING
Drawing No.	C2014B / DR / 0504		