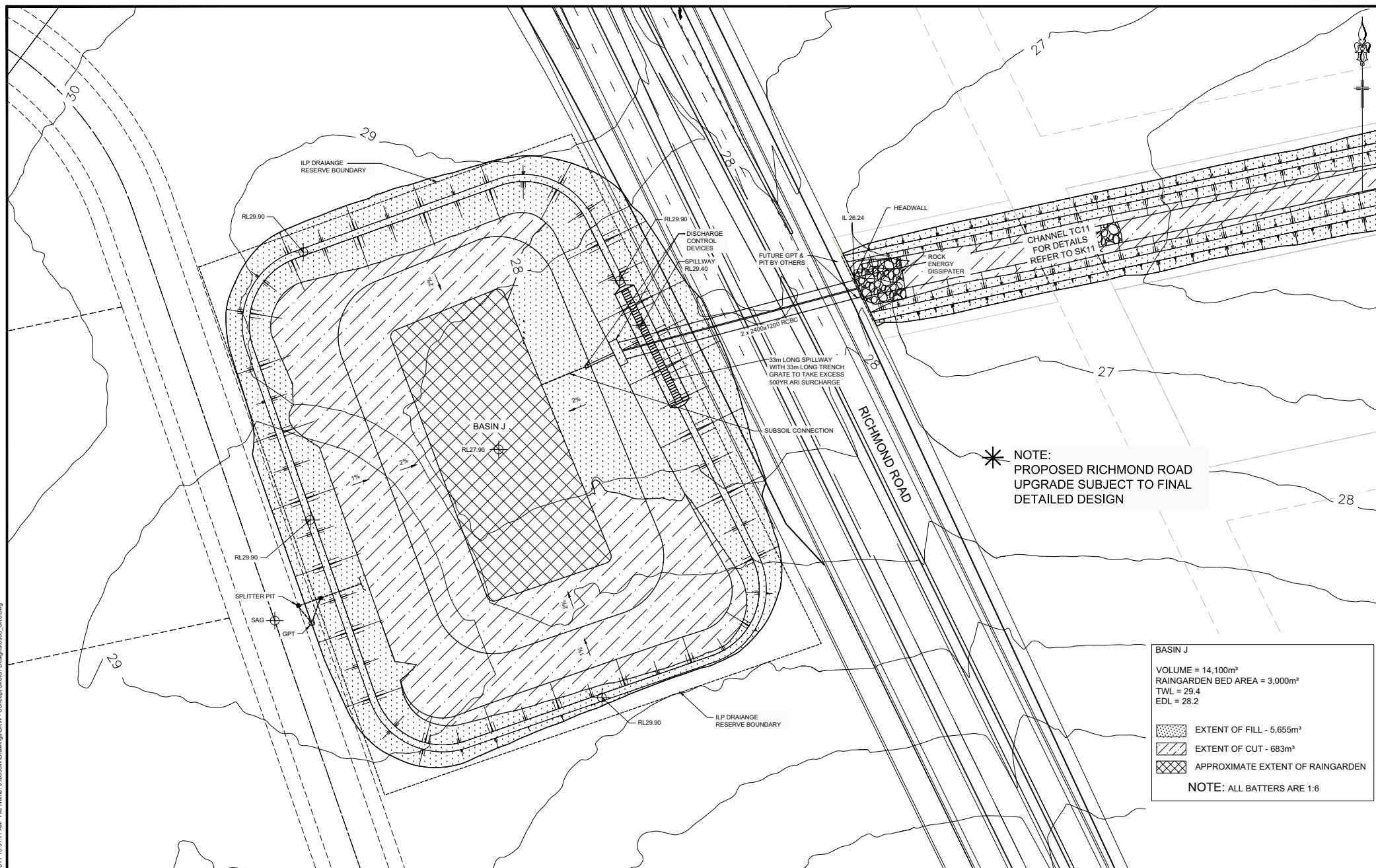


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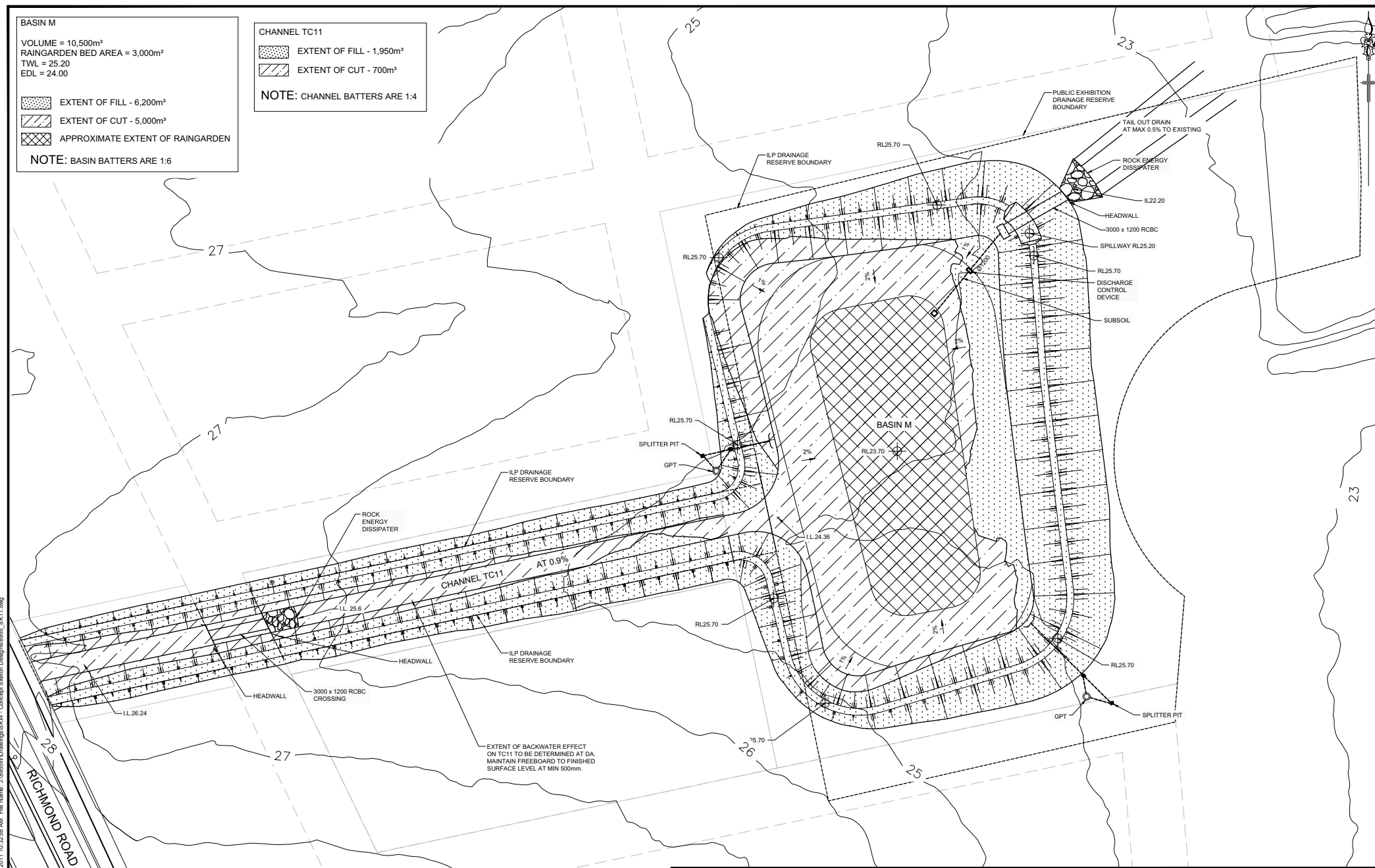
BASIN M
VOLUME = 10,500m³
RAINGARDEN BED AREA = 3,000m²
TWL = 25.20
EDL = 24.00

EXTENT OF FILL - 6,200m³
EXTENT OF CUT - 5,000m³
APPROXIMATE EXTENT OF RAINGARDEN

NOTE: BASIN BATTERS ARE 1:6

CHANNEL TC11
EXTENT OF FILL - 1,950m³
EXTENT OF CUT - 700m³

NOTE: CHANNEL BATTERS ARE 1:4



Project: 1 Feb 2011 10:32:59 AM File Name: J:\8955\Drawings\SK11 - Concept Sketch Design\8955_SK11.dwg



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D	ISSUED FOR EXHIBITION	01/02/11	GH
C	COUNCIL COMMENTS AMENDMENTS	30/11/10	MP
B	ISSUED FOR REVIEW	12/05/10	TK
A	FIRST ISSUE	23/04/10	TK

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DRAWN: DJH
CHECKED: _____

DATUM: AHD
ORIGIN:
SCALES:
1:500 @ A1




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MARSDEN PARK
DRAFT S94 BASIN REVIEW
BASIN M & CHANNEL TC11

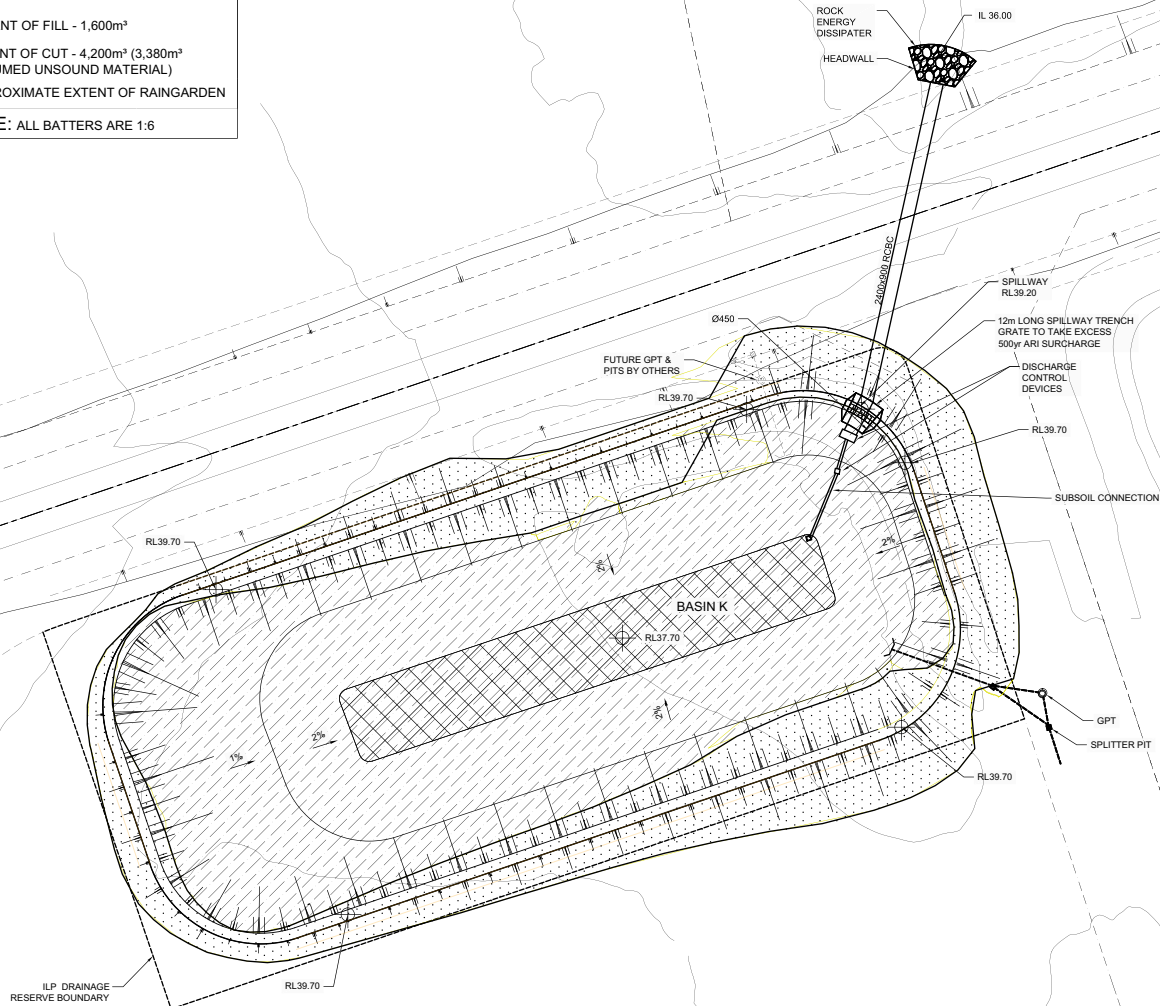
PLAN No. 8955/SK11	D
FILE No. 8955_SK11	

Project: 1 Feb 2011 10:34:09 AM File Name: J:\8955\W\Drawings\SK13 - Concept Sketch Design\8955_SK13.dwg

BASIN K
VOLUME = 9,540m³
RAINGARDEN BED AREA = 1,000m²
TWL = 39.2
EDL = 38.00

 EXTENT OF FILL - 1,600m³
 EXTENT OF CUT - 4,200m³ (3,380m³ ASSUMED UNSOUND MATERIAL)
 APPROXIMATE EXTENT OF RAINGARDEN

NOTE: ALL BATTERS ARE 1:6



1:500 (AT A1)

10 0 10 20 30 40 50

METRES

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DRAWN TK
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DRAFT S94 BASIN REVIEW
BASIN K

PLAN No.
8955/SK13
FILE No.
8955_SK13

F

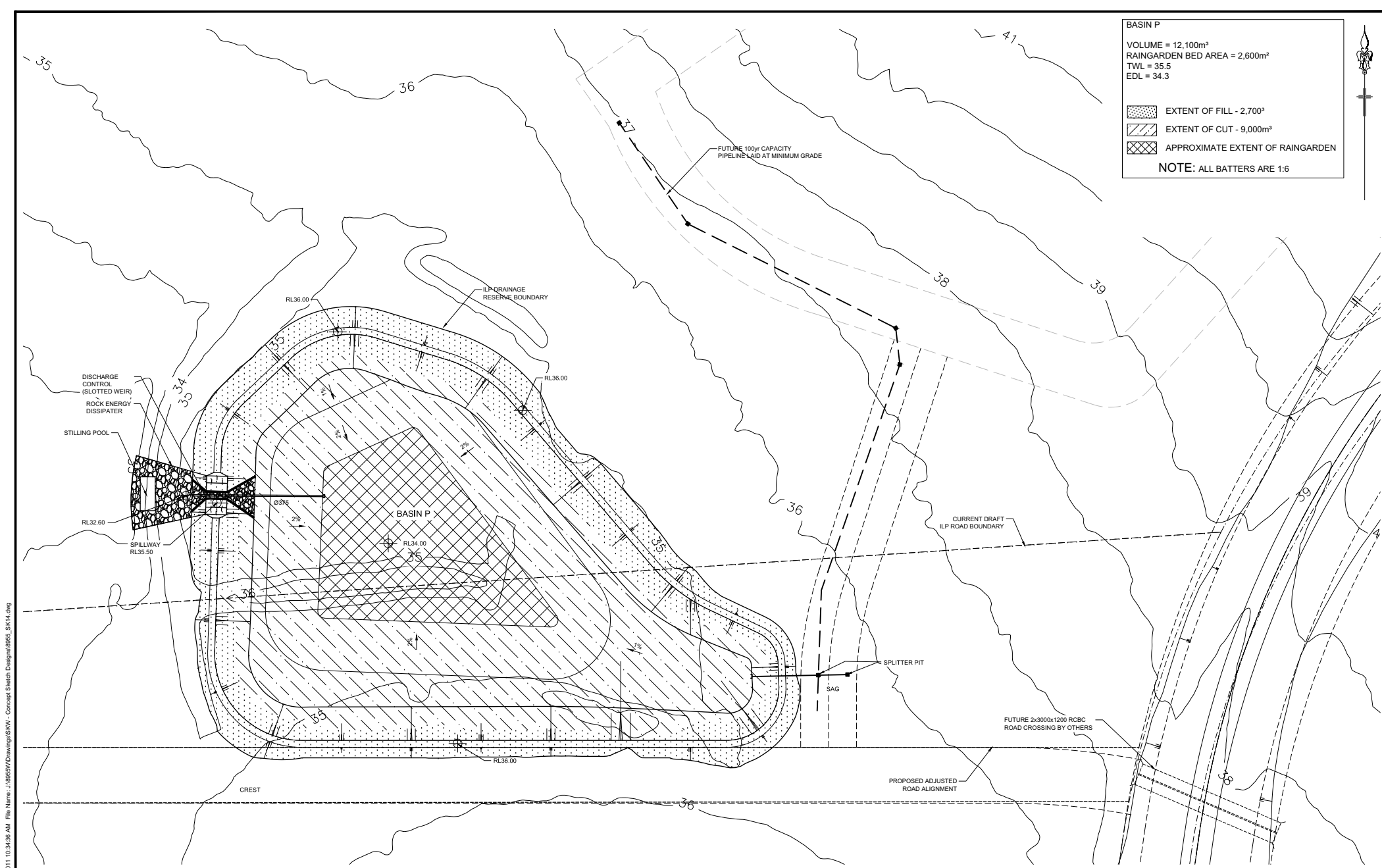
F	ISSUED FOR EXHIBITION	01/02/11	GH
E	COUNCIL COMMENTS AMENDMENTS	30/11/10	MP
D	MINOR AMENDMENTS	24/06/10	DJH
C	ISSUED FOR REVIEW	12/05/10	TK
B	MINOR AMENDMENTS TO BASIN	27/04/10	TK
A	FIRST ISSUE	20/04/10	TK
ISSUE	AMENDMENT	DATE	BY

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Project: 1 Feb 2011 10:34:36 AM File Name: J:\8955\Drawings\SK14 - Concept Sketch Design\8955_SK14.dwg

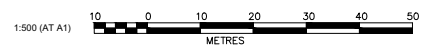


BASIN P

VOLUME = 12,100m³
RAINGARDEN BED AREA = 2,600m²
TWL = 35.5
EDL = 34.3

EXTENT OF FILL - 2,700³
 EXTENT OF CUT - 9,000m³
 APPROXIMATE EXTENT OF RAINGARDEN

NOTE: ALL BATTERS ARE 1:6



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F	ISSUED FOR EXHIBITION	01/02/11	GH
E	COUNCIL COMMENTS AMENDMENTS	30/11/10	MP
D	BASIN P ILP BOUNDARY ADJUSTED	23/06/10	DJH
C	ISSUED FOR REVIEW	12/05/10	TK
B	MINOR AMENDMENTS TO BASIN	28/04/10	TK
A	FIRST ISSUE	23/04/10	TK
ISSUE	AMENDMENT	DATE	BY

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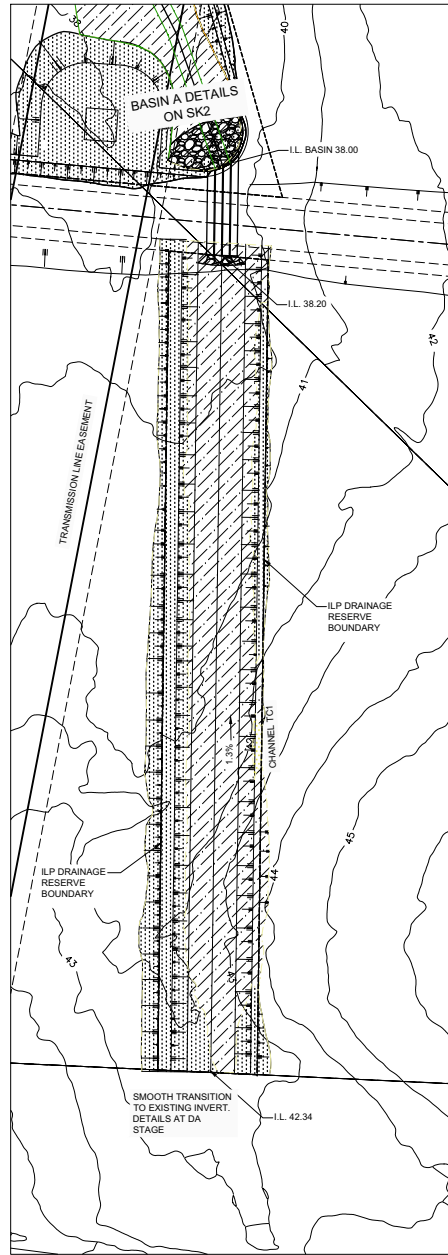
MARSDEN PARK
DRAFT S94 BASIN REVIEW
BASIN P

PLAN No.
8955/SK14

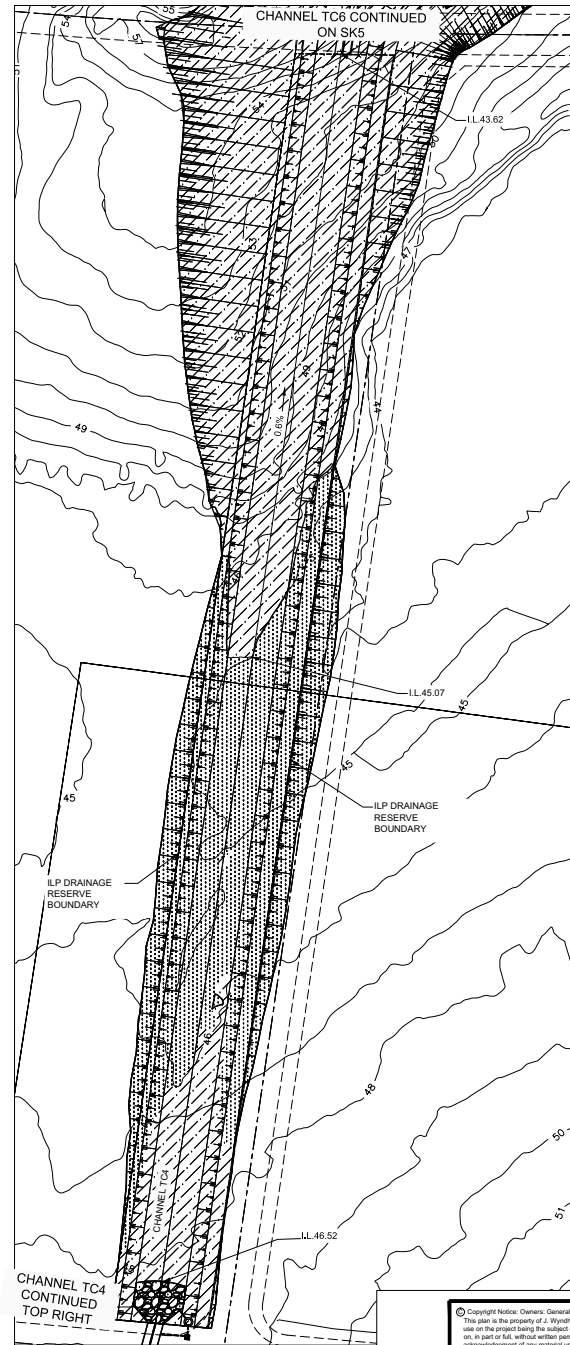
FILE No.
8955_SK14

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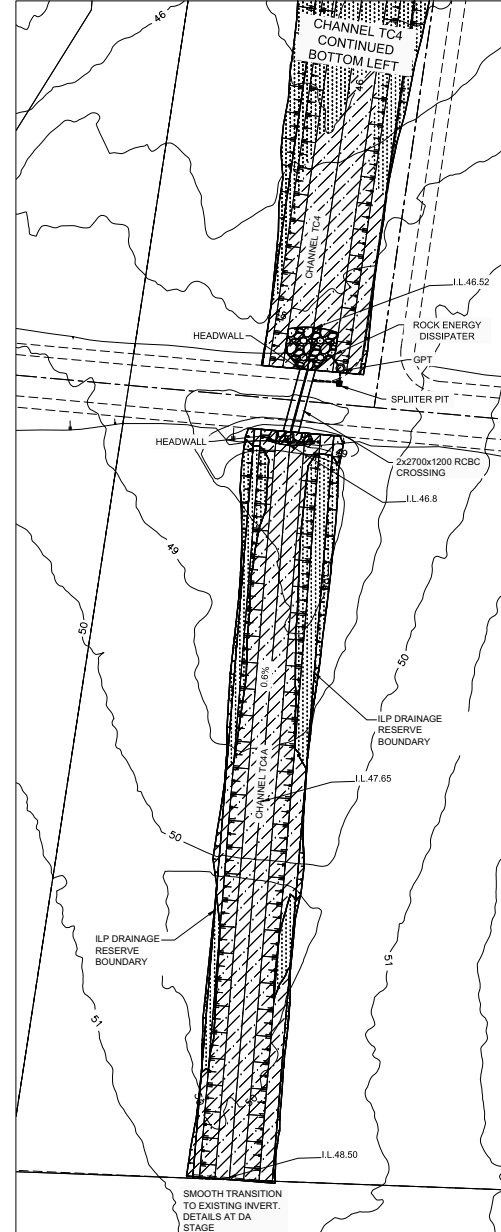
Project: 1 Feb 2011 10:35:35 AM File Name: J:\8955\Drawings\SK15 - Concept Sketch Design\8955_SK15.dwg



CHANNEL TC1



CHANNEL TC4
CHANNEL TC4 CONTINUED
TOP RIGHT



CHANNEL TC4 & TC4A

CHANNEL TC1

- EXTENT OF FILL - 4,090m³
- EXTENT OF CUT - 6,860m³

NOTE: ALL BATTERS ARE 1:4 UNO

CHANNEL TC4

- EXTENT OF FILL - 8,570m³
- EXTENT OF CUT - 62,100m³

NOTE: ALL BATTERS ARE 1:4 UNO

CHANNEL TC4A

- EXTENT OF FILL - 950m³
- EXTENT OF CUT - 6,400m³

NOTE: ALL BATTERS ARE 1:4 UNO

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DRAFT S94 BASIN REVIEW
CHANNELS 1, 4 AND 4A

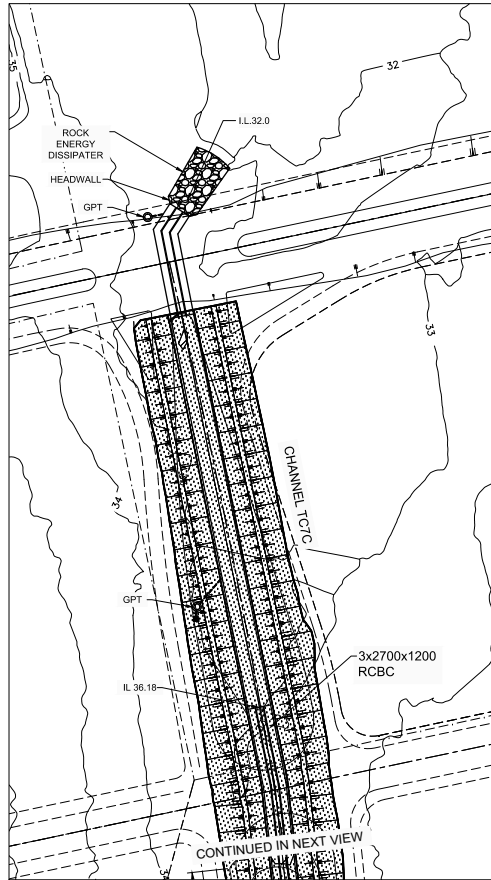
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A	ISSUED FOR REVIEW	12/05/10	TK

Project: 1 Feb 2011 10:36:35 AM File Name: J:\8955\W\Drawings\SK16 - Concept Sketch Design\8955_SK16.dwg

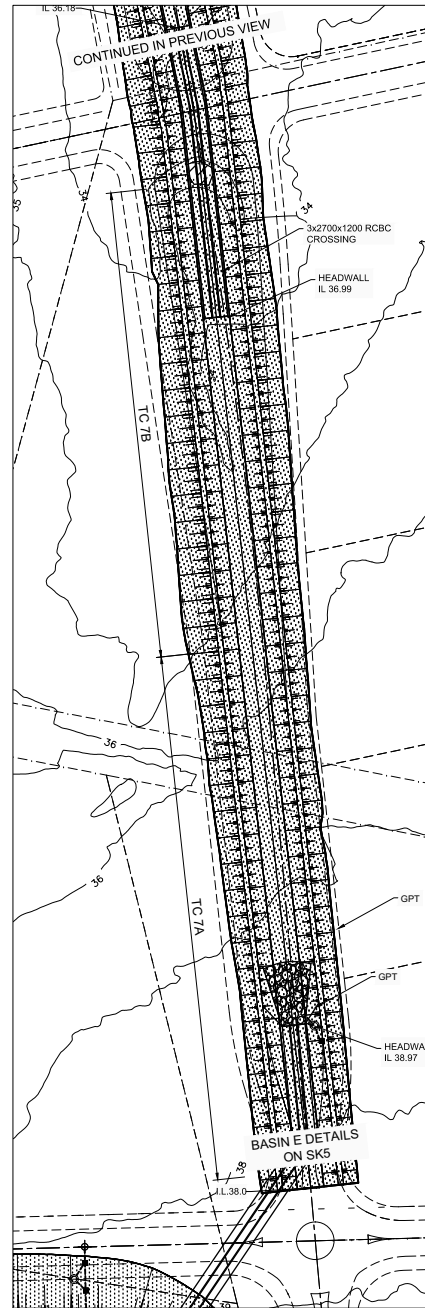
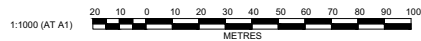


CHANNEL TC7C

CHANNEL TC7

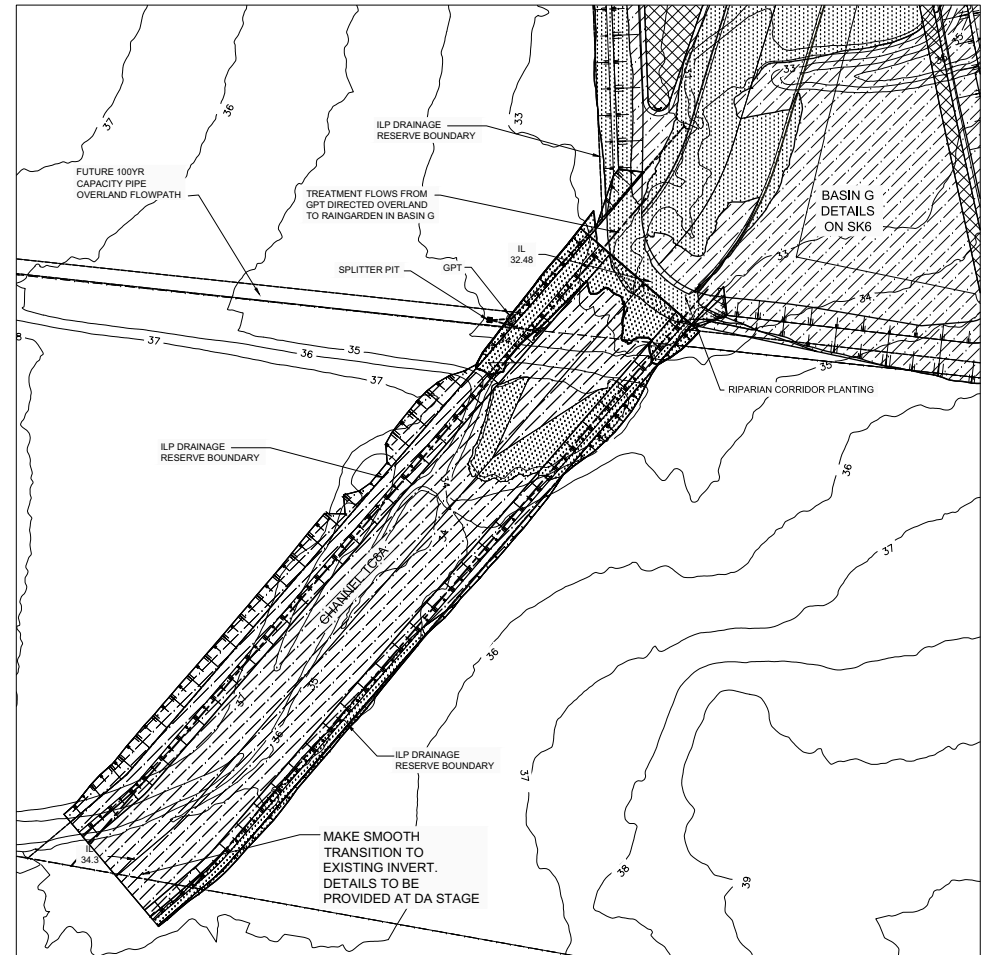
- EXTENT OF FILL - 24,700m³
- EXTENT OF CUT - 0m³

NOTE: ALL BATTERS ARE 1:4



CHANNEL TC7 A & B (CONTINUED)

- CHANNEL TC8A
- EXTENT OF FILL - 1,450m³
 - EXTENT OF CUT - 16,670m³
 - EXTENT OF RIPARIAN CORRIDOR
 - LOW FLOW DIVERSION TO RAINGARDEN
- NOTE: ALL BATTERS ARE 1:4



CHANNEL TC8A

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DRAFT S94 BASIN REVIEW
CHANNELS 7 AND 8A

PLAN No.
8955/SK16
FILE No.
8955_SK16

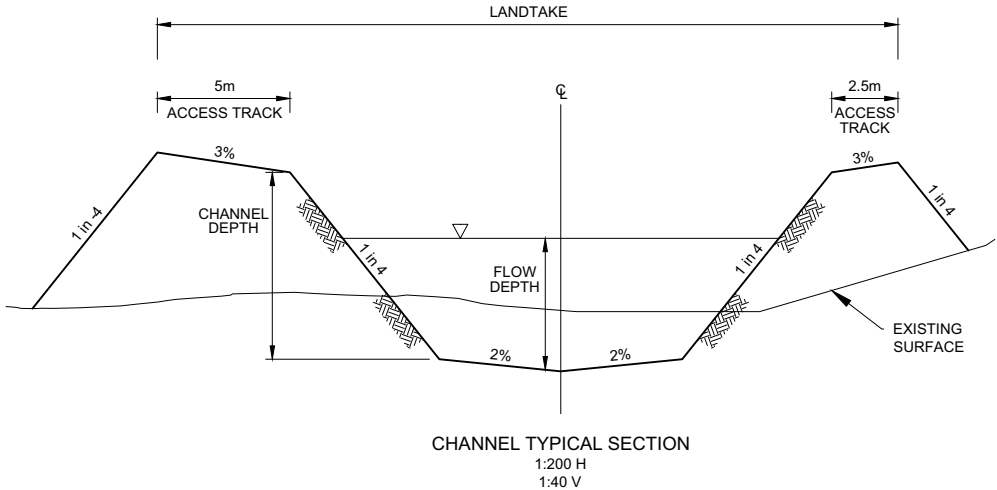
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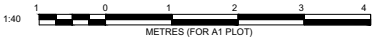
ISSUE	AMENDMENT	DATE	BY
C	ISSUED FOR EXHIBITION	01/02/11	GH
B	COUNCIL COMMENTS AMENDMENTS	30/11/10	MP
A	ISSUED FOR REVIEW	12/05/10	TK

Channel	Channel Length (m)	Channel Grade (%)	Manning's n	Base Width (m)	Batter Slope (H: 1V)	100yr Design Flow (m³/s)	Flow Depth (m)	Freeboard (m)	Channel Depth (m)	Channel Width (m) Hydraulic Conveyance	Overall Width (m)	Maintenance Provisions (looking downstream)	
												5m wide Major Access	2.5m wide Minor Access
TC1	310	1.3%	0.07	14.0	4	21.6	1.0	0.5	1.5	25.0	36	Left	Right
TC4A	280	0.6%	0.07	10.7	4	12.0	1.0	0.5	1.5	21.8	30	Right	Left
TC4	480	0.6%	0.07	18.8	4	18.3	1.0	0.5	1.5	29.3	32	Internal Road at Right	Left
TC6	400	0.5%	0.07	21.3	4	18.3	1.0	0.5	1.5	31.6	40	Left	Right
TC7A	200	0.8%	0.07	9.5	4	12.7	1.0	0.5	1.5	20.7	21	Internal Road at Left	Internal Road at Right
TC7B	200	0.8%	0.07	10.0	4	13.2	1.0	0.5	1.5	21.2	22	Internal Road at Left	Internal Road at Right
TC7C	175	0.8%	0.07	11.0	4	14.2	1.0	0.5	1.5	22.2	23	Internal Road at Left	Internal Road at Right
TC8A	300	0.8%	0.07	33.2	4	32.0	1.0	0.5	1.5	42.7	51	Left	Right
TC8B	215	existing grade retained	0.07	varies	varies (4H:1V max)	28.2*	varies	0.5	varies	varies	varies	Right	Left
TC11	210	0.5%	0.07	6.0	4	7.3	1.0	0.5	1.5	17.5	20	Internal Road at Left	Right
TC12A	272	0.5%	0.07	2.0	4	10.4	1.5	0.5	2.0	17.8	23	Left	Richmond Road at Right
TC13	103	0.5%	0.07	7.1	4	8.2	1.0	0.5	1.5	18.6	27	Left	Right

*- POST CLIMATE CHANGE



CHANNEL TYPICAL SECTION
1:200 H
1:40 V



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DATUM: AHD
ORIGIN:
SCALES:
H 1:200
V 1:40

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DRAFT S94 BASIN REVIEW
CHANNEL TYPICAL SECTION & CHANNEL SUMMARY

PLAN No.
8955/SK17
FILE No.
8955_SK17

ISSUE	AMENDMENT	DATE	BY
C	ISSUES FOR EXHIBITION	01/02/11	GH
B	COUNCIL COMMENTS AMENDMENTS	30/11/10	MP
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