



EIS 985 Vol 3

AB019621

Elizabeth Drive Landfill - proposal to accept general solid waste
: environmental impact statement

NSW DEPT PRIMARY INDUSTRIES
AB019621



ELIZABETH DRIVE LANDFILL Proposal to Accept General Solid Waste

**Environmental Impact Statement
Volume 3**

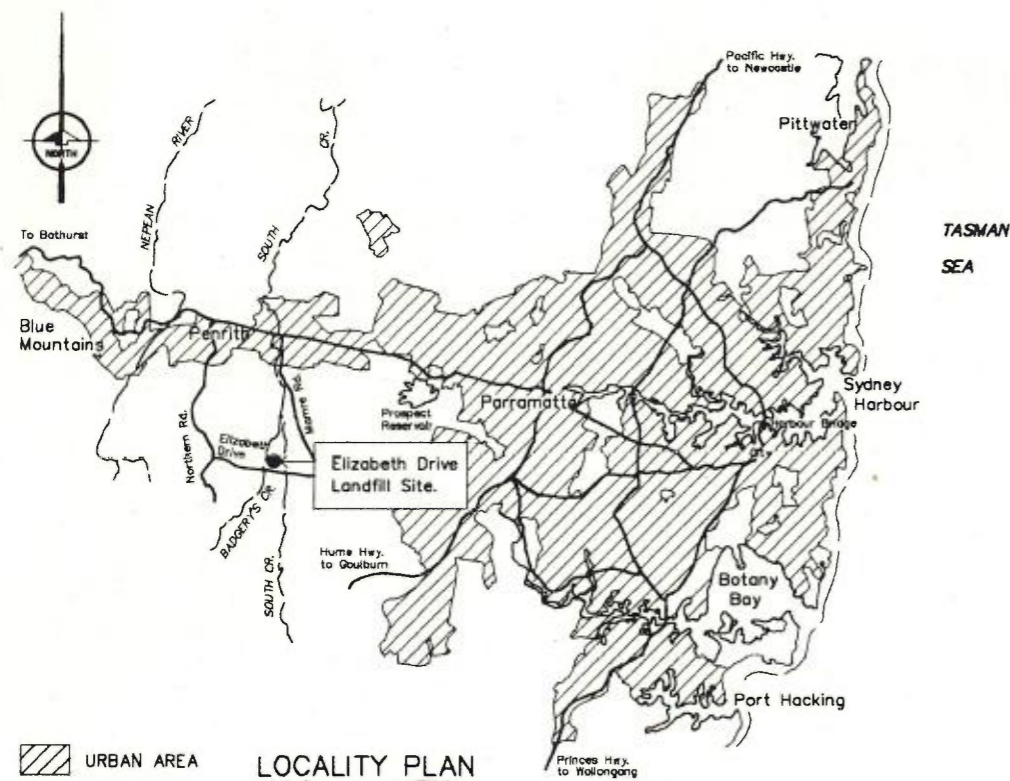


DEVELOPMENT APPLICATION PLANS



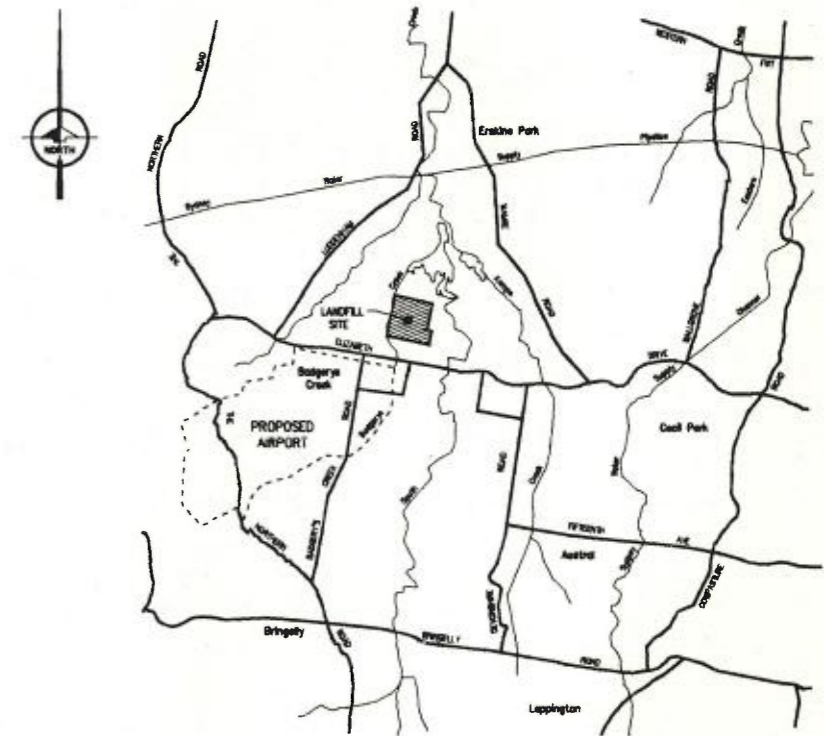
ELIZABETH DRIVE LANDFILL

OCTOBER 1993



DRAWING INDEX

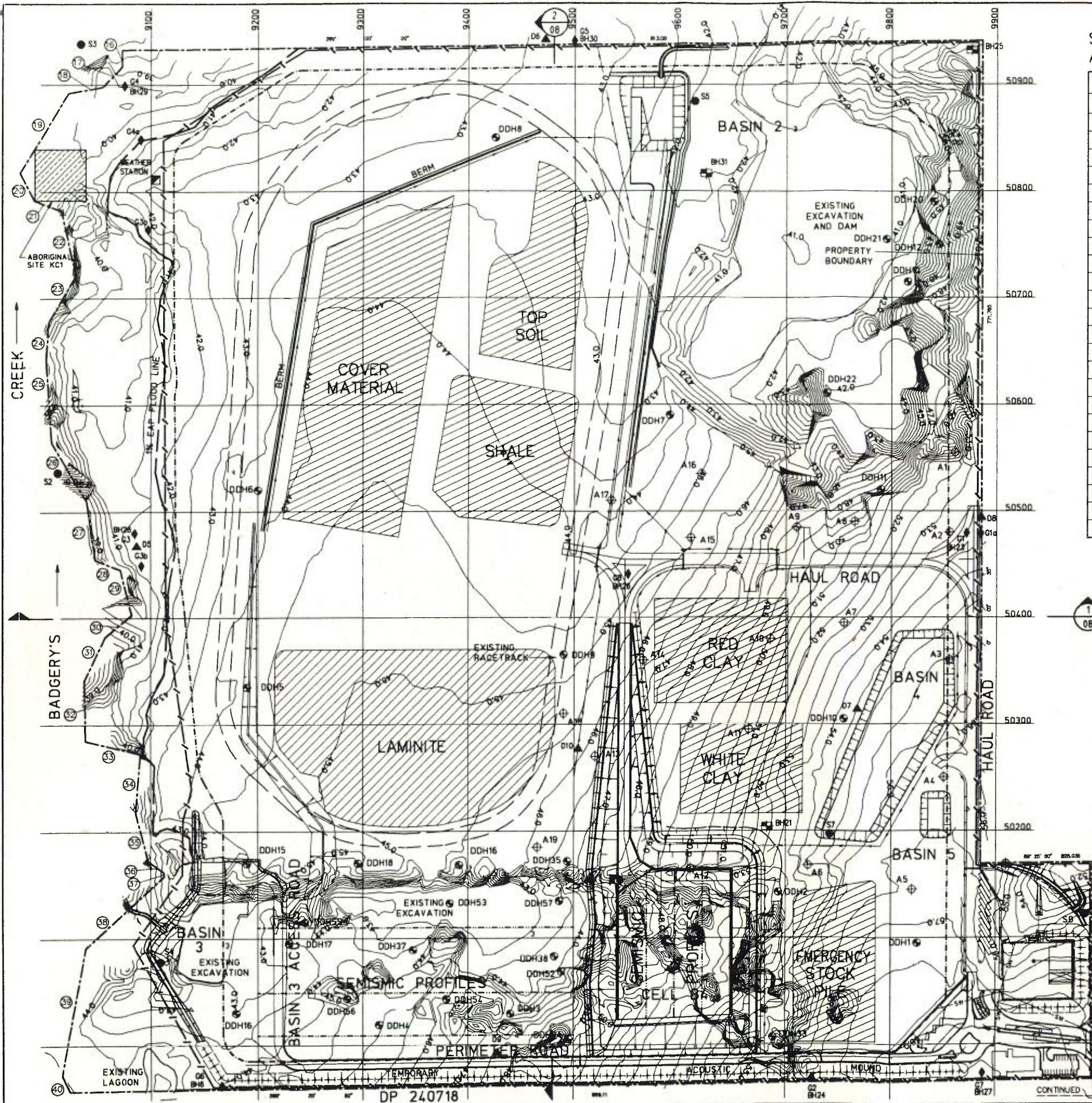
52D021A/01	EXISTING TOPOGRAPHY PLAN
52D021A/02	FINAL LAND PROFILE PLAN
52D021A/03	STORMWATER DRAINAGE/WATER MANAGEMENT PLAN
52D021A/04	BASE SURFACE PLAN
52D021A/05	LEACHATE COLLECTION SYSTEM PLAN
52D021A/06	GAS EXTRACTION SYSTEM PLAN
52D021A/07	EXISTING FACILITIES AREA PLAN
52D021A/08	CROSS SECTIONS
52D021A/09	LEACHATE COLLECTION & STORMWATER DETAILS
52D021A/10	GAS SYSTEM DETAILS SHEET 1
52D021A/11	GAS SYSTEM DETAILS SHEET 2



NSW DEPARTMENT OF
MINERAL RESOURCES
1 OCT 1993
LIBRARY

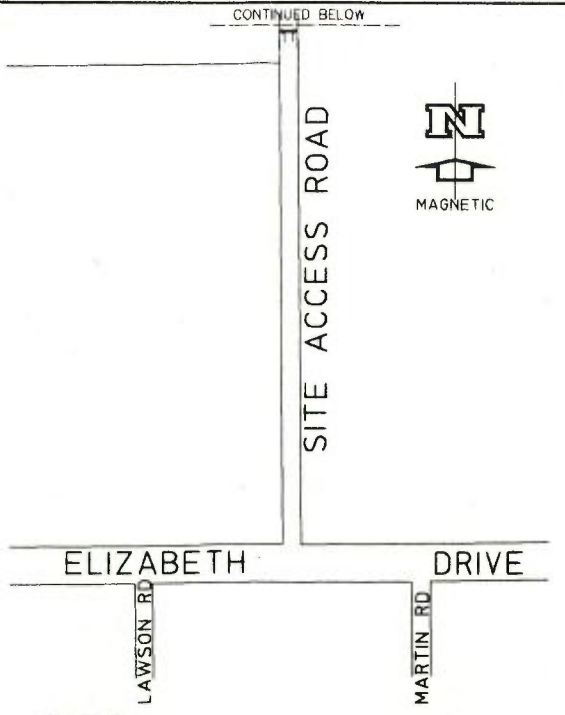


PPK Consultants Pty Ltd
CONSULTING ENGINEERS
PPK HOUSE
9 BLAXLAND ROAD
RHODES 2138 NSW



SCHEDULE OF SURVEY DATA ALONG BADGERY'S CREEK

LINE	BEARING	DISTANCE
16	179°52'25"	15.67
17	223°59'10"	26.64
18	260°15'45"	32.065
19	211°20'10"	87.29
20	152°24'35"	29.13
21	111°27'15"	27.345
22	167°34'20"	62.03
23	210°22'35"	50.395
24	184°14'10"	34.94
25	176°13'35"	78.05
26	149°05'55"	64.345
27	171°42'00"	55.86
28	111°09'50"	25.14
29	166°00'50"	43.895
30	230°22'55"	32.815
31	205°05'50"	45.01
32	178°46'10"	56.23
33	103°36'05"	53.01
34	184°49'40"	54.50
35	165°25'30"	46.595
36	335°26'30"	3.315
37	176°55'45"	19.49
38	47°55'50"	100.585
39	10°35'50"	120.70
40	333°17'50"	16.815



LEGEND

- 50200 GRIDS CO-ORDINATES
- 54.0 EXISTING SURFACE CONTOUR & LEVEL
- CULVERT
- PERIMETER FENCING
- DIRECTION OF SURFACE DRAINAGE FLOW
- PROPOSED LIMIT OF LANDFILL
- SITE BOUNDARY
- PROPERTY LINE/SURVEY DATA
- 23' 07' 00" 80m
- 15 SEISMIC PROFILES
- DDH10 DIAMOND DRILL HOLE
- BH33 BORE HOLE
- A11 AUGER HOLE
- S4 SURFACE WATER MONITORING STATION
- G5 GROUND WATER MONITORING STATION
- D2 DUST MONITORING STATION
- WEATHER STATION
- TOP EXCAVATION SLOPE
- TOE
- TOP FILL SLOPE
- TOE
- CROSS REFERENCE INDICATOR
- STOCK PILE SITE
- ABORIGINAL SITE

NOTE

- EXISTING SURFACE CONTOURS DERIVED FROM SURVEY INFORMATION SUPPLIED BY B. A. HOMANN & ASSOCIATES PTY LTD
- EXISTING SURFACE CONTOURS OBTAINED FROM CAMIDE PTY. LTD. DRG FIG D & 1:4000 ORTHOPHOTOMAP BADGERY'S CREEK U7345-2

AUSTRALIAN HEIGHT DATUM

1:2000

Amendment	Description	Date	Approved

SURVEYORS B.A. HOMANN & ASSOC	
LEVEL DATUM	A.H.D.
REF. B.N.	P.M. 61613 R.L. 57.112
	10000 E
	50000 N
AZIMUTH	AS PER D.P. 810111
FIELD BOOK	LEVEL BOOK
	PLOTTED

Pacific Waste Management

APPROVED: *[Signature]* DATE 11/10/93

TITLE: NSW DIVISION MANAGER

DESIGNED: PD Fibre	DATE 11/10/93	PROJECT APPROVAL: PAR [Signature]	DATE 11/10/93
DESIGN CHECK: PAR [Signature]	DATE 11/10/93	CLIENT APPROVAL:	
DRAWN: GCS [Signature]	DATE 11/10/93	CAD REFERENCE: 52002101	
DRAWING CHECK: PD Fibre	DATE 11/10/93	DOC No: 520021A.D01 REV A	
		SCALE: AS SHOWN	

ELIZABETH DRIVE LANDFILL

DEVELOPMENT APPLICATION

EXISTING TOPOGRAPHY PLAN

PPK Consultants Pty Ltd

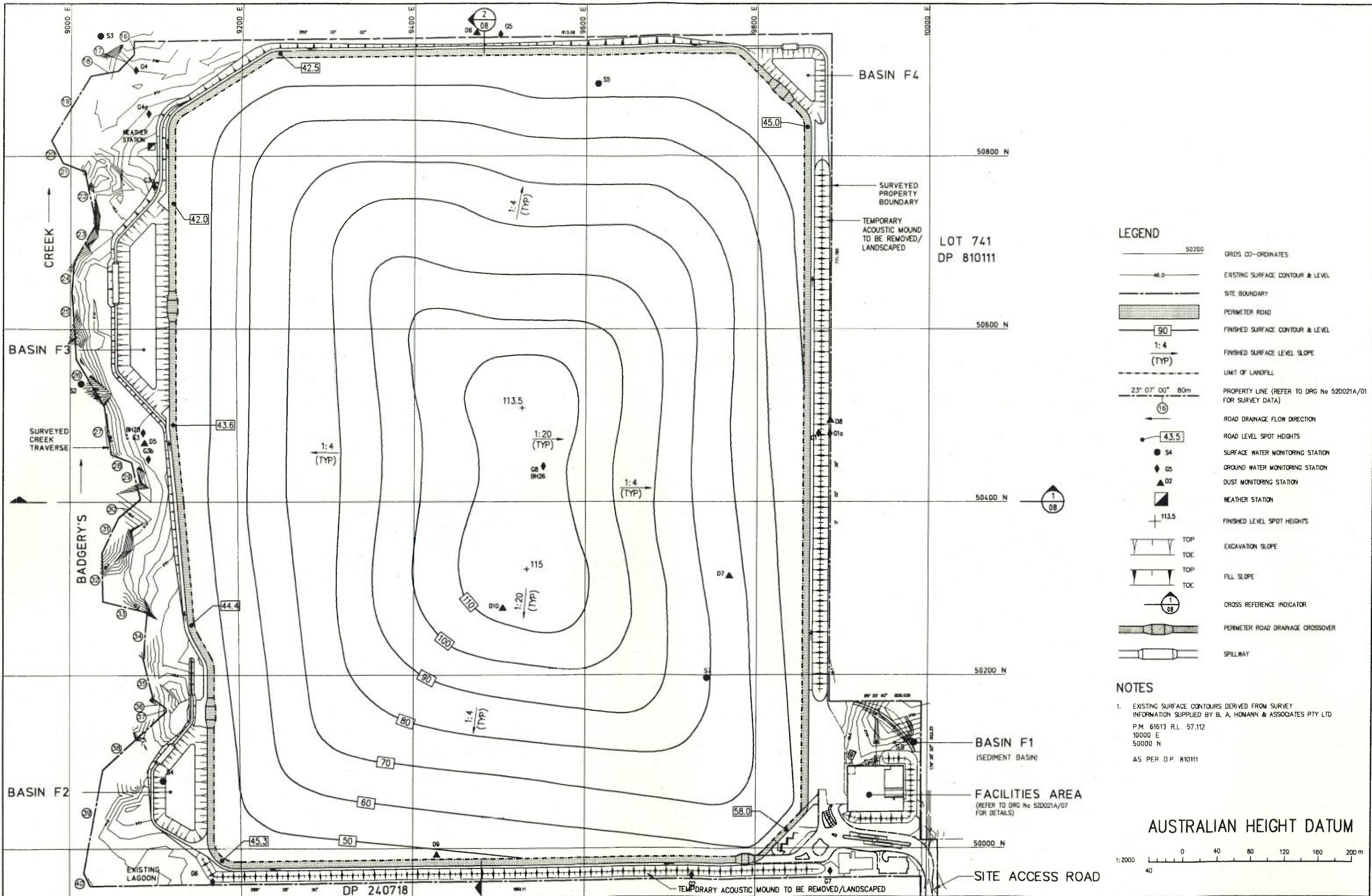
(Incorporated in South Australia)

PPK 82000
 8 Woodland Road
 Torrensville, Adelaide
 Telephone (08) 7143 0800

Job No. 52D021A

Drawing No. 01

Issue A

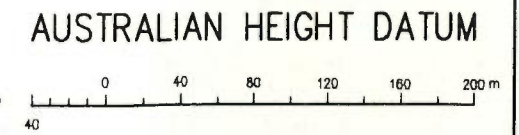


LEGEND

- 50200 GRIDS CO-ORDINATES
- 46.0 EXISTING SURFACE CONTOUR & LEVEL
- SITE BOUNDARY
- PERIMETER ROAD
- 90 FINISHED SURFACE CONTOUR & LEVEL
- 1:4 (TYP) FINISHED SURFACE LEVEL SLOPE
- LIMIT OF LANDFILL
- 23° 07' 00" 80m PROPERTY LINE (REFER TO DRG No 52D021A/01 FOR SURVEY DATA)
- 15 ROAD DRAINAGE FLOW DIRECTION
- 43.5 ROAD LEVEL SPOT HEIGHTS
- 54 SURFACE WATER MONITORING STATION
- 05 GROUND WATER MONITORING STATION
- 02 DUST MONITORING STATION
- WEATHER STATION
- 113.5 FINISHED LEVEL SPOT HEIGHTS
- TOP TOE EXCAVATION SLOPE
- TOP TOE FILL SLOPE
- 1/08 CROSS REFERENCE INDICATOR
- PERIMETER ROAD DRAINAGE CROSSOVER
- SPILLWAY

NOTES

1. EXISTING SURFACE CONTOURS DERIVED FROM SURVEY INFORMATION SUPPLIED BY B. A. HOMANN & ASSOCIATES PTY LTD
 P.M. 61613 R.L. 57.112
 10000 E
 50000 N
 AS PER D.P. 810111



Amendment	Description	Date	Approved

Pacific Waste Management

APPROVED: *[Signature]*
 TITLE: NSW DIVISION MGR. DATE: 11/10/93

DESIGNED: PD	DATE: 11/10/93	PROJECT APPROVAL: PAR	DATE: 11/10/93
DESIGN CHECK: PAR	DATE: 11/10/93	CLIENT APPROVAL:	
DRAWN: GCS	DATE: 11/10/93	CAD REFERENCE: 52D02102/02	
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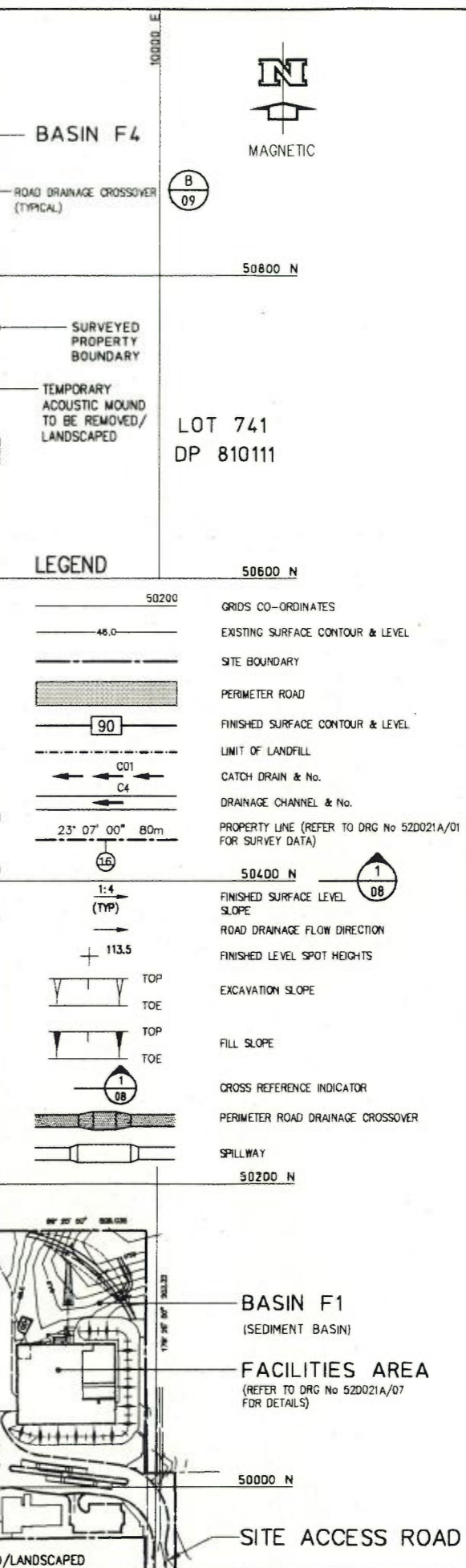
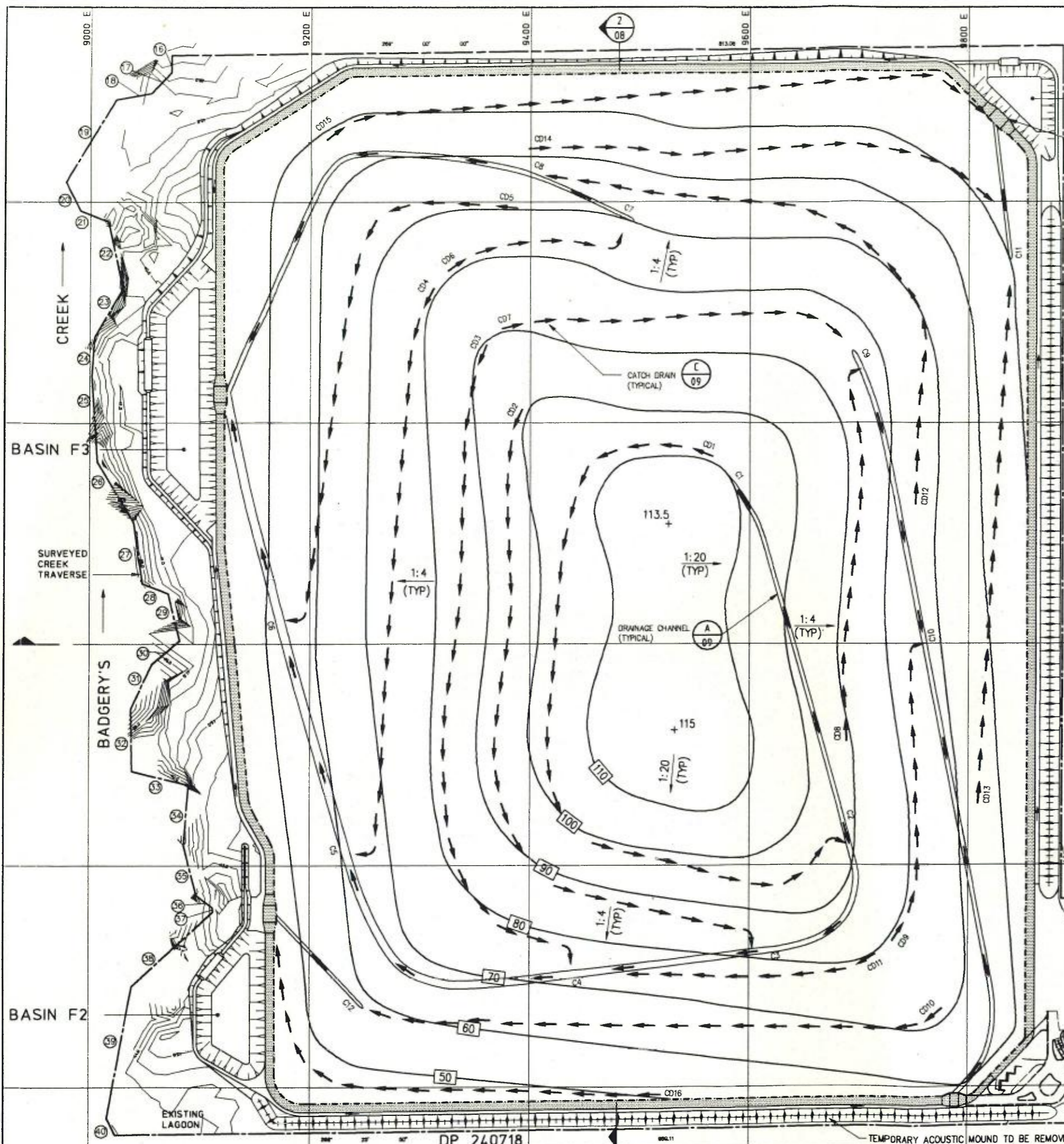
ELIZABETH DRIVE LANDFILL

DEVELOPMENT APPLICATION

FINAL LAND PROFILE PLAN

PPK Consultants Pty Ltd
 (Incorporated in South Australia)
 52 DORSET STREET
 ADELAIDE SA 5000
 Tel: (08) 823 1111

Job No. **52D021A** Drawing No. **02** Issue **A**



DRAINAGE CHANNEL SCHEDULE

CHANNEL	TOP WIDTH (mm)	DEPTH (mm) (NOTE 2)	SLOPE (%)	DESIGN FLOW (m ³ /sec)(NOTE 4)
C1	3500	700	5	0.868
C2	5000	700	5	2.238
C3	6000	700	5	3.219
C4	7200	700	5	4.435
C5	8000	700	5	5.655
C6	8000	800	5	6.762
C7	3000	750	5	0.599
C8	4400	700	5	1.789
C9	3800	700	5	1.205
C10	4000	700	5	1.428
C11	4200	700	5	1.547
C12	2500	650	10	0.538

CATCH DRAIN SCHEDULE

CATCH DRAIN	TOP WIDTH (mm)	DEPTH (mm) (NOTE 2)	SLOPE (%)	DESIGN FLOW (m ³ /sec)(NOTE 3)
CD1	2500	650	2	1.008
CD2	2500	650	2	0.779
CD3	2500	650	2	0.790
CD4	2500	650	2	0.876
CD5	2500	650	2	0.593
CD6	2500	450	2	0.338
CD7	2500	625	2	0.585
CD8	2500	625	2	0.620
CD9	2500	625	2	0.412
CD10	2500	625	2	0.476
CD11	2500	350	2	0.124
CD12	2500	625	2	0.701
CD13	2500	625	2	0.828
CD14	2500	625	2	0.719
CD15	2500	625	2	0.570
CD16	2500	625	2	0.538

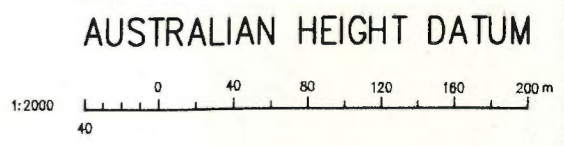
BASIN SCHEDULE

BASIN	DEPTH (m)	CAPACITY (ML)
F1(EXIST)	1.5	1.2
F2	2.3	8.5
F3	3.3	24.5
F4	2.5	5.7

- #### DESIGN NOTES
- ALL DRAINS ARE TO HAVE SIDE SLOPES OF 1:2
 - DEPTH OF CHANNELS INCLUDES 300mm MINIMUM FREEBOARD
 - DEPTH OF CATCH DRAINS INCLUDES 75mm MINIMUM FREEBOARD
 - CATCH DRAINS & CHANNELS DESIGNED TO CONVEY RUNOFF FROM 1% AEP EVENT
 - BASINS F2-F4 DESIGNED FOR 1% AEP EVENT WITH 300mm MINIMUM FREEBOARD
 - ALL BASINS TO HAVE MIN SIDE SLOPES OF 1:3
 - DETENTION BASINS TO HAVE FILTERED OUTLETS TO COUNCIL REQUIREMENTS

NOTES

- EXISTING SURFACE CONTOURS DERIVED FROM SURVEY INFORMATION SUPPLIED BY B. A. HORNMAN & ASSOCIATES PTY LTD
P.M. 61613 R.L. 57.112
10000 E
50000 N
AS PER D.P. 610111



Amendment	Description	Date	Approved

Pacific Waste Management

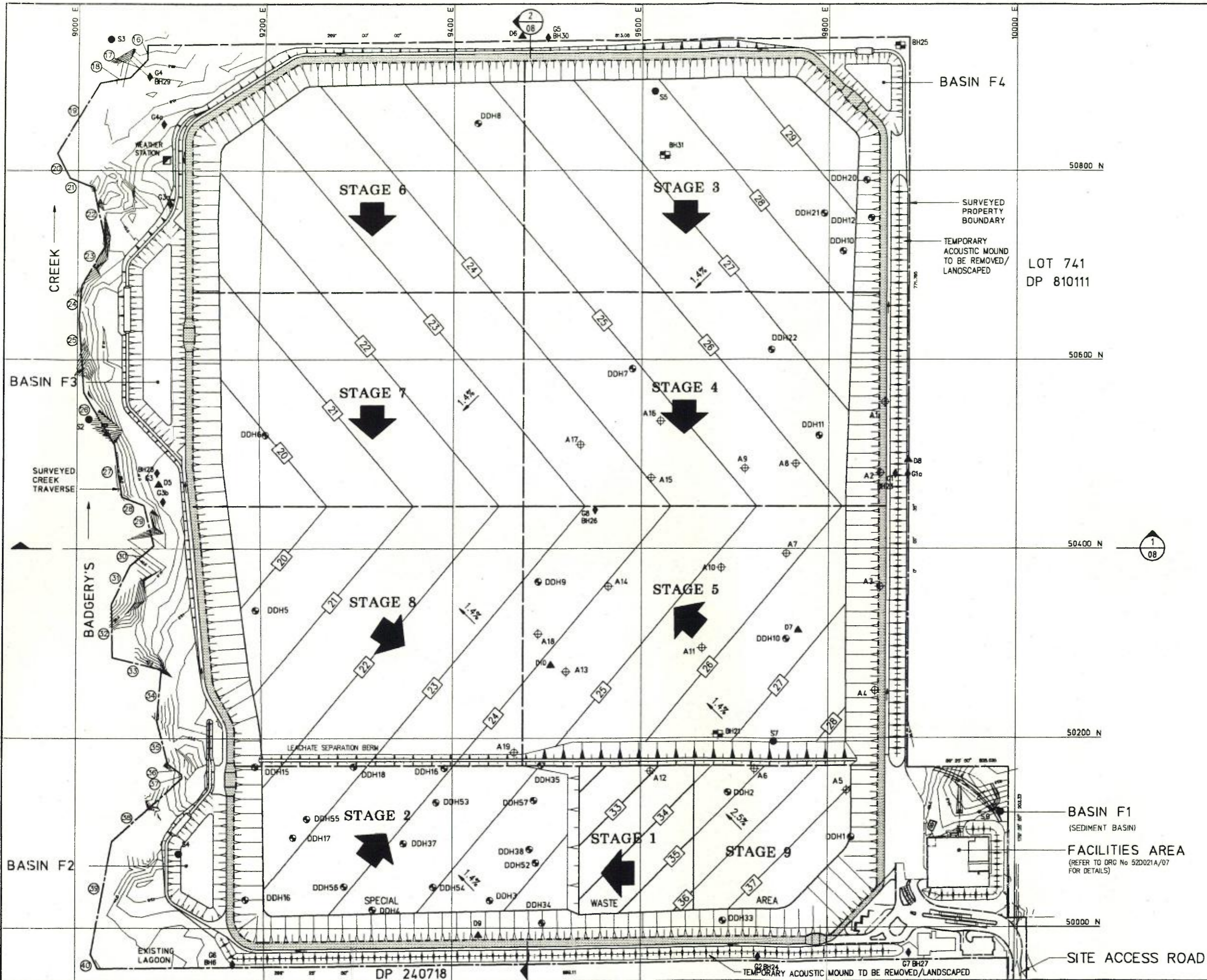
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TITLE: NSW DIRECTION MGR

DESIGNED: PD [Signature] 4/10/93	DATE: 4/10/93	PROJECT APPROVAL: PAR [Signature] 4/10/93	DATE: 4/10/93
DESIGN CHECK: PAR [Signature] 4/10/93	CLIENT APPROVAL:	CAD REFERENCE: 52002102/03 DOC No: 520021A.D03 REV A	
DRAWN: GCS [Signature] 4/10/93	SCALE: AS SHOWN	ELIZABETH DRIVE LANDFILL	
DRAWING CHECK: PD [Signature] 11/10/93		DEVELOPMENT APPLICATION	

ELIZABETH DRIVE LANDFILL
DEVELOPMENT APPLICATION
STORMWATER DRAINAGE/WATER MANAGEMENT PLAN

PPK Consultants Pty Ltd
(Incorporated in South Australia)
PPK 80000, 80 Beach Road, New South Wales 2200
Telephone (02)745 0800

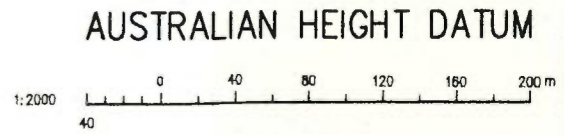
Job No. 52D021A
Drawing No. 03
Issue A



- LEGEND**
- 50200 GRIDS CO-ORDINATES
 - 48.0 EXISTING SURFACE CONTOUR & LEVEL
 - SITE BOUNDARY
 - PERIMETER ROAD
 - BASE SURFACE CONTOUR & LEVEL
 - 32 LIMIT OF LANDFILL
 - STAGING BOUNDARIES
 - 23° 07' 00" 80m PROPERTY LINE (REFER TO DRG No 52D021A/01 FOR SURVEY DATA)

- STAGE 8**
- STAGE AND FILL SEQUENCE
- DDH10 DIAMOND DRILL HOLE
 - A11 AUGER HOLE
 - B3 BORE HOLE
 - S4 SURFACE WATER MONITORING STATION
 - G5 GROUND WATER MONITORING STATION
 - D2 DUST MONITORING STATION
 - WEATHER STATION
 - 1.4% BASE GRADE
 - ROAD DRAINAGE FLOW DIRECTION
 - TOP TOE EXCAVATION SLOPE
 - TOP TOE FILL SLOPE
 - CROSS REFERENCE INDICATOR
 - PERIMETER ROAD DRAINAGE CROSSEVER
 - SPILLWAY

- NOTES**
- EXISTING SURFACE CONTOURS DERIVED FROM SURVEY INFORMATION SUPPLIED BY B. A. HOMANN & ASSOCIATES PTY LTD
 P.M. 61613 R.L. 57.112
 10000 E
 50000 N
 AS PER D.P. 810111



Amendment	Description	Date	Approved

Pacific Waste Management

APPROVED: *[Signature]*

TITLE: NSW DIVISION MGR DATE 11/10/93

DESIGNED: PD <i>[Signature]</i>	DATE: 11/10/93	PROJECT APPROVAL: PAR <i>[Signature]</i>	DATE: 11/10/93
DESIGN CHECK: PAR <i>[Signature]</i>	DATE: 11/10/93	CLIENT APPROVAL:	
DRAWN: GCS <i>[Signature]</i>	DATE: 11/10/93	CAD REFERENCE: 52D021G2/D4	
DRAWING CHECK: PD <i>[Signature]</i>	DATE: 11/10/93	DOC No: 52D021A.D04 REV A	
		SCALE: AS SHOWN	

ELIZABETH DRIVE LANDFILL

DEVELOPMENT APPLICATION

BASE SURFACE PLAN
PLAN

PPK Consultants Pty Ltd

(Incorporated in South Australia)

PPK 8000, 9 Elizabeth Drive, Adelaide, South Australia

Formerly PPK-Poy & Associates Pty Ltd

Now trading under PPK

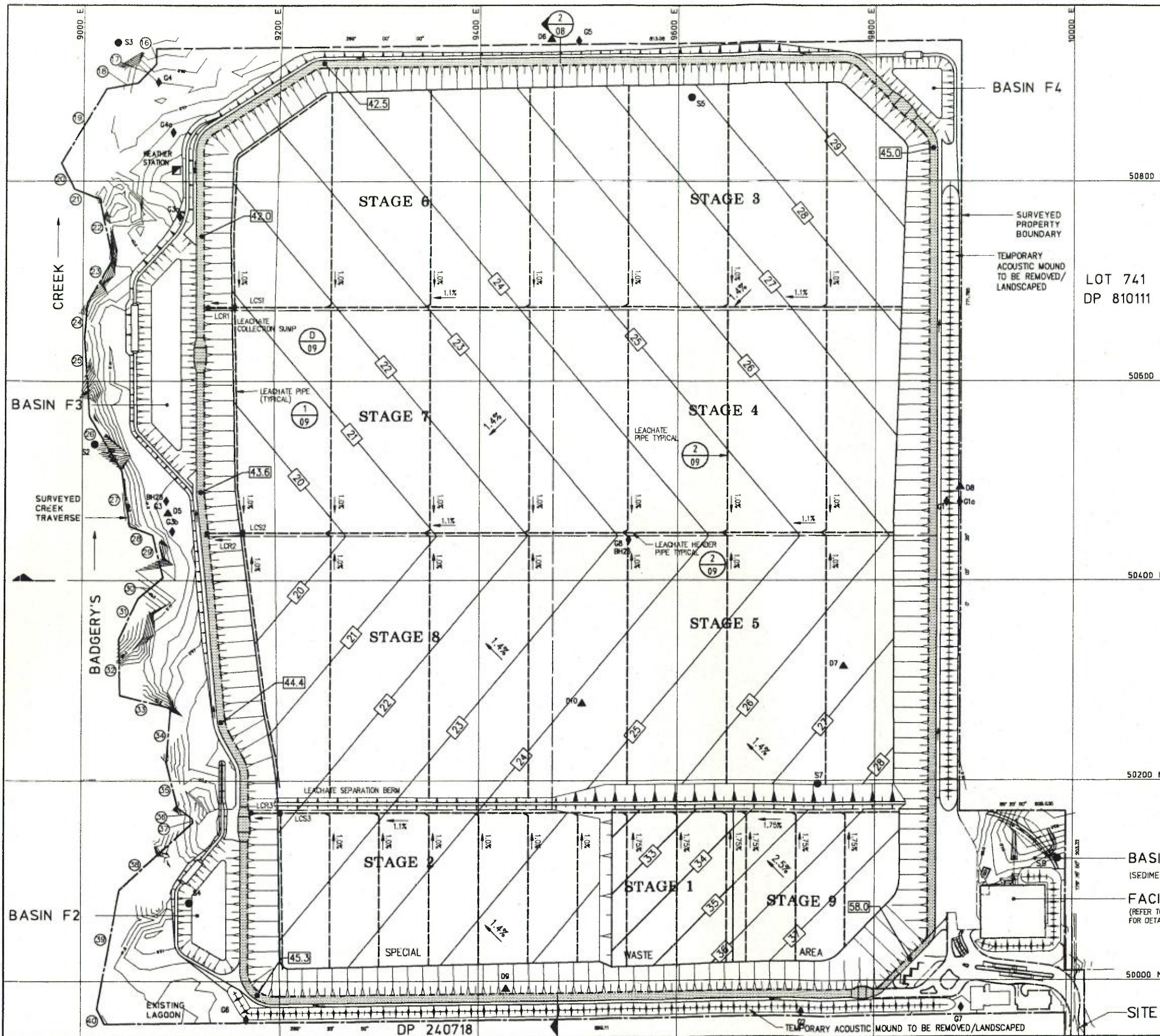
Longwater & McInnes Pty Ltd

Telephone (08) 43 8888

Job No. **52D021A**

Drawing No. **04**

Issue **A**



LEACHATE COLLECTION RISER AND SUMP SCHEDULE

ITEM	BASE		TOP		GROUND LEVEL (m)	PIPE INVERT (m)	SUMP INVERT (m)
	NORTHING	EASTING	NORTHING	EASTING			
LCR1	50674	9153	50674	9122	42.0	19.85	-
LCR2	50488	9162	50488	9126	43.7	17.95	-
LCR3	50188	9200	50188	9171	44.7	19.85	-
LCS1	50674	9153	50674	9153	-	-	19.7
LCS2	50488	9162	50488	9162	-	-	17.8
LCS3	50188	9200	50188	9200	-	-	19.7

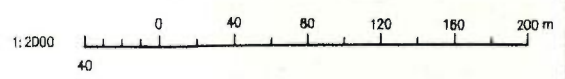
LEGEND

- 50200 GRIDS CD-COORDINATES
- 46.0 EXISTING SURFACE CONTOUR & LEVEL
- SITE BOUNDARY
- PERIMETER ROAD
- 32 BASE SURFACE CONTOUR & LEVEL
- LIMIT OF LANDFILL
- 1.1% STAGING BOUNDARIES
- 1.1% LEACHATE DRAIN AND GRADE
- 2.3' 07" 00" 80m PROPERTY LINE (REFER TO DRG No 52D021A/01 FOR DATA)
- 16 STAGE 8
- LCR 2 STAGES
- LCS 2 LEACHATE COLLECTION RISER
- 09 LEACHATE COLLECTION SUMP
- 58.0 ROAD LEVEL SPOT HEIGHTS
- S4 SURFACE WATER MONITORING STATION
- G5 GROUND WATER MONITORING STATION
- D2 DUST MONITORING STATION
- 16 WEATHER STATION
- 1.4% BASE GRADE
- ROAD DRAINAGE FLOW DIRECTION
- TOP EXCAVATION SLOPE
- TOP TOE
- TOP TOE
- TOP TOE
- 16 CROSS REFERENCE INDICATOR
- PERIMETER ROAD DRAINAGE CROSSOVER
- SPILLWAY

NOTES

- EXISTING SURFACE CONTOURS DERIVED FROM SURVEY INFORMATION SUPPLIED BY B. A. HOMANN & ASSOCIATES PTY LTD
P.M. 61613 R.L. 57.112
10000 E
50000 N
AS PER D.P. 810111
- LEACHATE DRAIN SPACING SUBJECT TO DETAILED DESIGN

AUSTRALIAN HEIGHT DATUM



Amendment	Description	Date	Approved

Pacific Waste Management

APPROVED:

TITLE: NSW DIVISION MGR DATE 11/10/93

DESIGNED: PD	DATE: 11/10/93	PROJECT APPROVAL: PAR	DATE: 11/10/93
DESIGN CHECK: PAR	CLIENT APPROVAL:	CAD REFERENCE: 52D02102/05	
DRAWN: GCS		DOC No: 52D021A.D05 REV A	
DRAWING CHECK: PD		SCALE: AS SHOWN	

ELIZABETH DRIVE LANDFILL

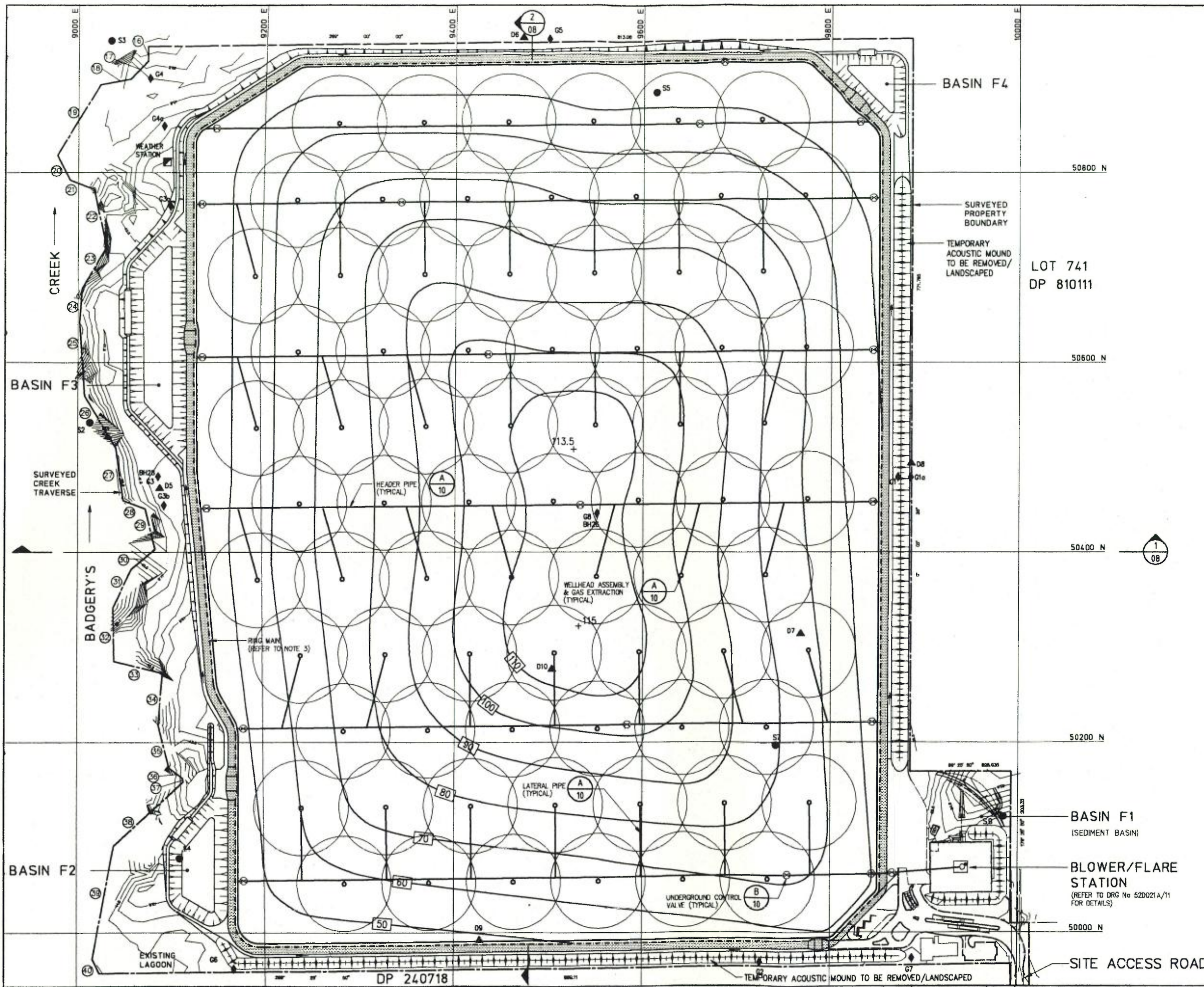
DEVELOPMENT APPLICATION

LEACHATE COLLECTION SYSTEM PLAN

PPK Consultants Pty Ltd

(Incorporated in South Australia)

Job No. **52D021A** Drawing No. **05** Issue **A**



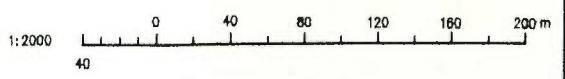
LEGEND

- GRIDS CO-ORDINATES
- EXISTING SURFACE CONTOUR & LEVEL
- SITE BOUNDARY
- PERIMETER ROAD
- FINISHED SURFACE CONTOUR & LEVEL
- LIMIT OF LANDFILL
- UNDERGROUND CONTROL VALVE
- GAS COLLECTION HEADER
- GAS EXTRACTION WELL AND ZONE OF INFLUENCE
- PROPERTY LINE (REFER TO DRG No 52D021A/01 FOR SURVEY DATA)
- SURFACE WATER MONITORING STATION
- GROUND WATER MONITORING STATION
- DUST MONITORING STATION
- WEATHER STATION
- FINISHED LEVEL SPOT HEIGHTS
- ROAD DRAINAGE FLOW DIRECTION
- EXCAVATION SLOPE
- FILL SLOPE
- CROSS SECTION INDICATOR
- PERIMETER ROAD DRAINAGE CROSSOVER
- SPILLWAY

NOTES

1. EXISTING SURFACE CONTOURS DERIVED FROM SURVEY INFORMATION SUPPLIED BY B. A. HOMANN & ASSOCIATES PTY LTD
P.M. 61613 R.L. 57.112
10000 E
50000 N
AS PER D.P. 810111
2. GAS MONITORING BORES WILL BE PLACED AT APPROPRIATE LOCATIONS AROUND THE PERIMETER OF THE SITE
3. RING MAIN SHOWN DIAGRAMMATICALLY TO BE LOCATED IN ROAD RESERVE
4. GAS EXTRACTION SYSTEM SUBJECT TO DETAILED DESIGN

AUSTRALIAN HEIGHT DATUM



LOT 741
DP 810111

BASIN F1
(SEDIMENT BASIN)

BLOWER/FLARE
STATION
(REFER TO DRG No 52D021A/11
FOR DETAILS)

SITE ACCESS ROAD

Amendment	Description	Date	Approved

Pacific Waste Management

APPROVED: *[Signature]*

TITLE: NSW DIVISION MGR. DATE 11/10/93

DESIGNED: MAUNSELL	DATE 11/10/93	PROJECT APPROVAL: PAR	DATE 11/10/93
DESIGN CHECK: PD	11/10/93	CLIENT APPROVAL:	
DRAWN: GCS	11/10/93	CAD REFERENCE: 52D02102/06	
DRAWING CHECK: PD	11/10/93	DOC No: 52D021A.D06 REV A	
		SCALE: AS SHOWN	

ELIZABETH DRIVE
LANDFILL

DEVELOPMENT APPLICATION

GAS EXTRACTION SYSTEM
PLAN

PPK Consultants Pty Ltd

(Incorporated in South Australia)

9 Mackay Road
Mackay
Queensland 4740

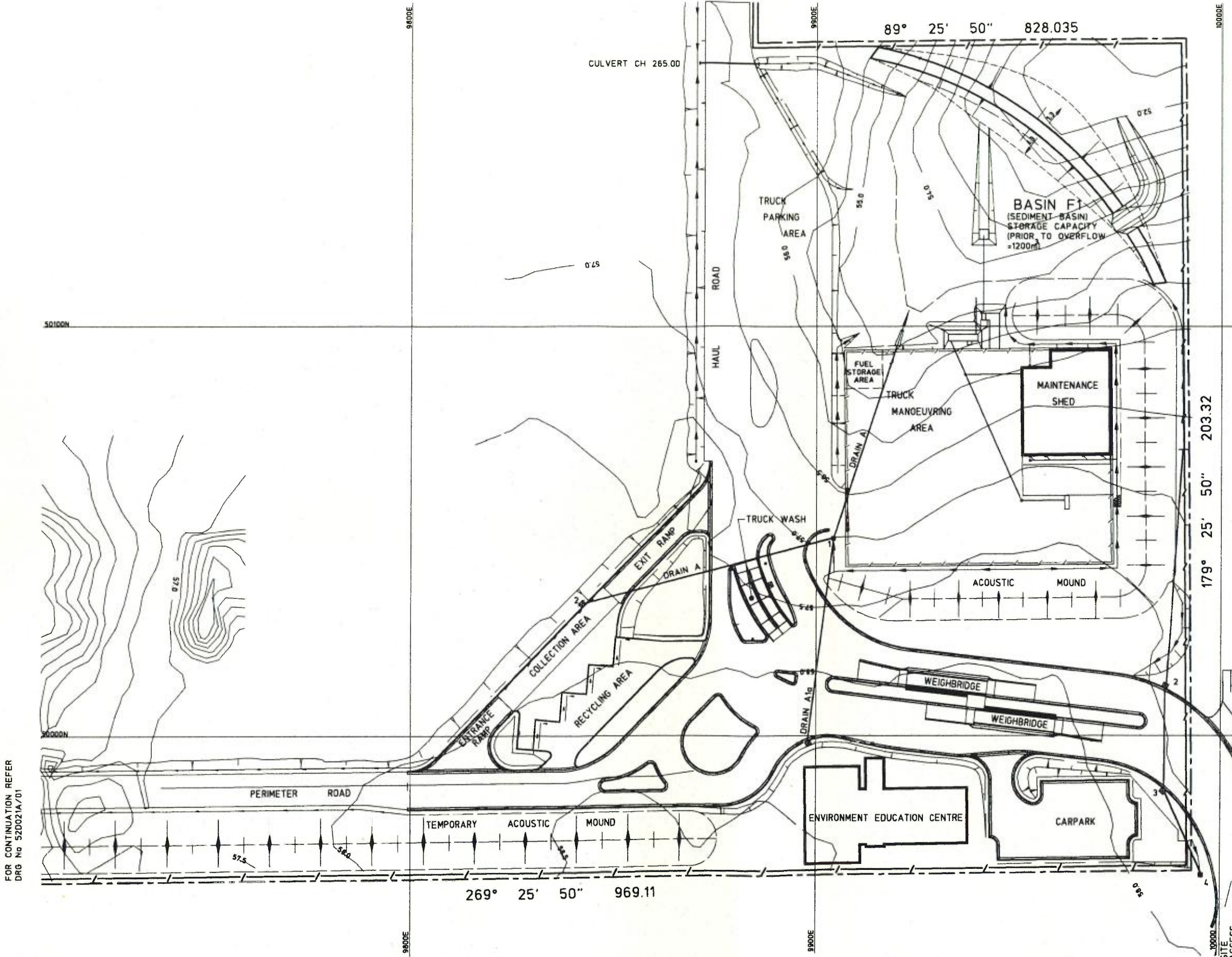
PPK 80000
9 Mackay Road
Mackay
Queensland 4740
Telephone (08)745 0800

Job No. 52D021A

Drawing No. 06

Issue A

FOR CONTINUATION REFER
DRG No 52D021A/01



LEGEND

- 50200 GRIDS CO-ORDINATES
- 54.0 EXISTING SURFACE CONTOUR & LEVEL
- DIRECTION OF SURFACE DRAINAGE FLOW
- CULVERT
- DRAIN A STORMWATER DRAIN & REFERENCE
- ROAD DRAINAGE FLOW DIRECTION
- 269° 25' 50" 203.32 PROPERTY LINE (REFER TO DRG No 52D021A/01 FOR SURVEY DATA)
- PERIMETER FENCING
- TOP TOE EXCAVATION SLOPE
- TOP TOE FILL SLOPE

NOTE

1 INFRASTRUCTURE LAYOUT OBTAINED FROM 'McINTYRE & ASSOCIATES PTY LTD DRG No 7231/4 (AS CONSTRUCTED)

AUSTRALIAN HEIGHT DATUM



FOR CONTINUATION REFER
DRG No 52D021A/01

Amendment	Description	Date	Approved

Pacific Waste Management

APPROVED: *[Signature]*
TITLE: NSW DIVISION MGR DATE 11/10/93

DESIGNED: McINTYRE & ASSOCIATES	DATE 10/11/93	PROJECT APPROVAL: PAR	DATE 10/11/93
DESIGN CHECK: PD [Signature]	DATE 11/10/93	CLIENT APPROVAL:	
DRAWN: GCS [Signature]	DATE 11/10/93	CAD REFERENCE: 52D02103	
DRAWING CHECK: PD [Signature]	DATE 11/10/93	DOC No: 52D021AD07 REV A	
		SCALE: AS SHOWN	

**ELIZABETH DRIVE
LANDFILL**

DEVELOPMENT APPLICATION

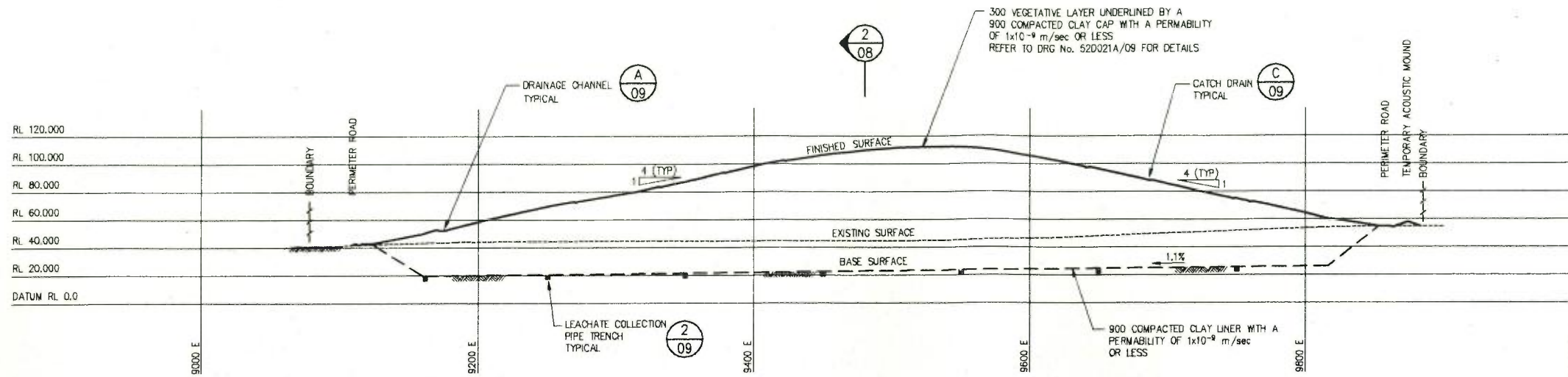
EXISTING FACILITIES AREA
PLAN

PPK Consultants Pty Ltd
(Incorporated in South Australia)
1000th Road
New South Wales 2200
Tel: (02) 9411 8888

Job No. **52D021A**

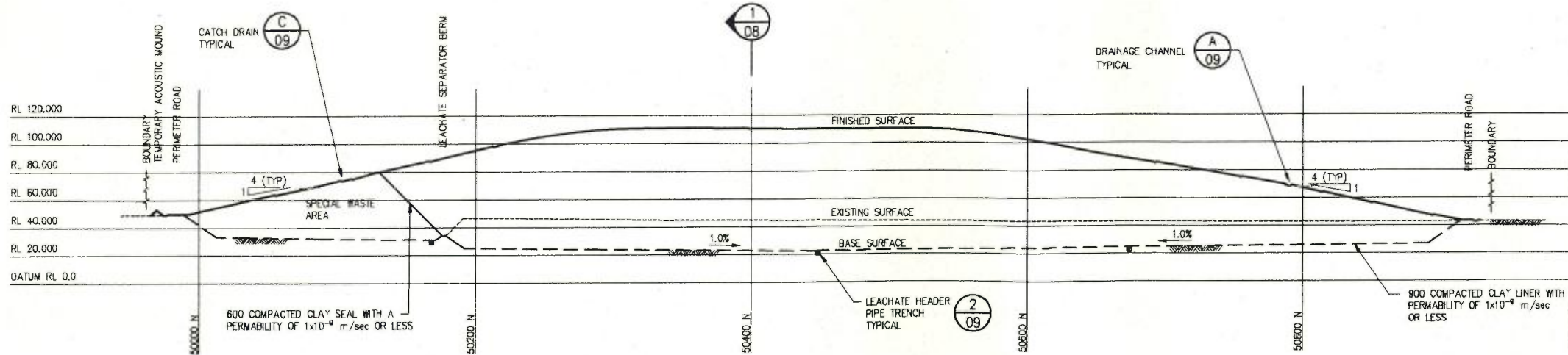
Drawing No. **07**

Issue **A**



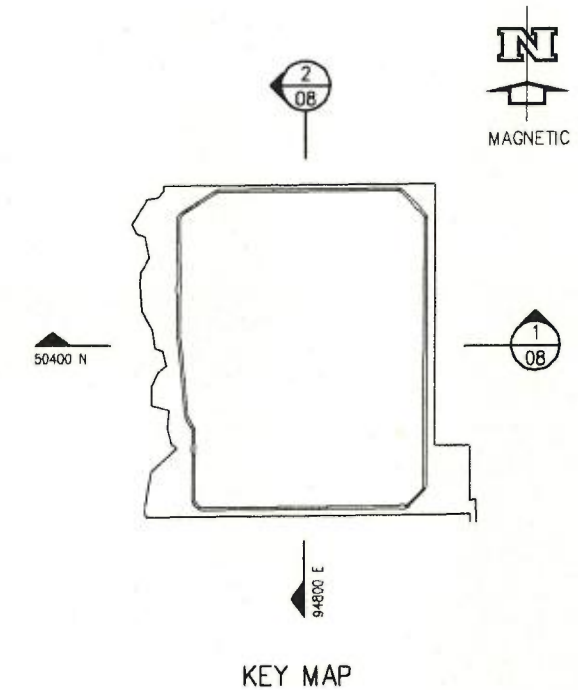
CROSS SECTION AT 50400 N

01,02,03,04,08

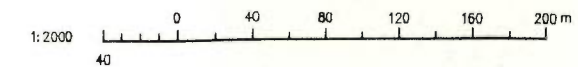


CROSS SECTION AT 94800 E

01,02,03,04,08



AUSTRALIAN HEIGHT DATUM



Amendment	Description	Date	Approved



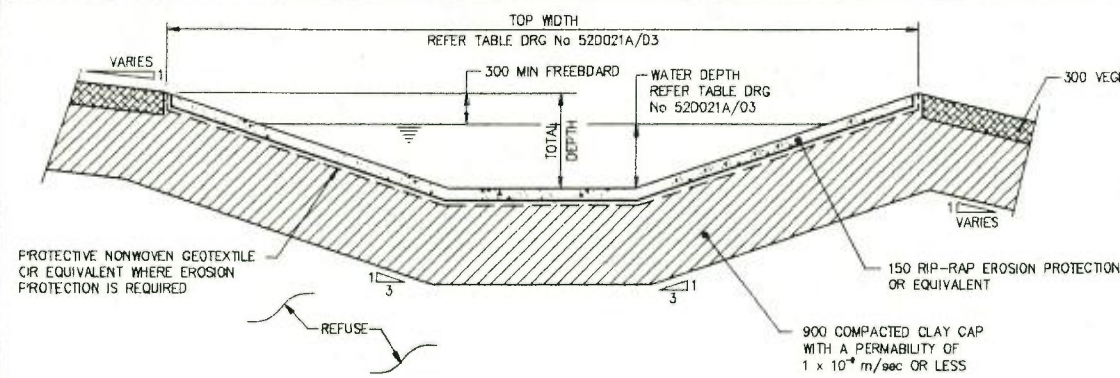
Pacific Waste Management

APPROVED: *[Signature]*
 TITLE: NSW DIVISION MGR DATE 11/10/93

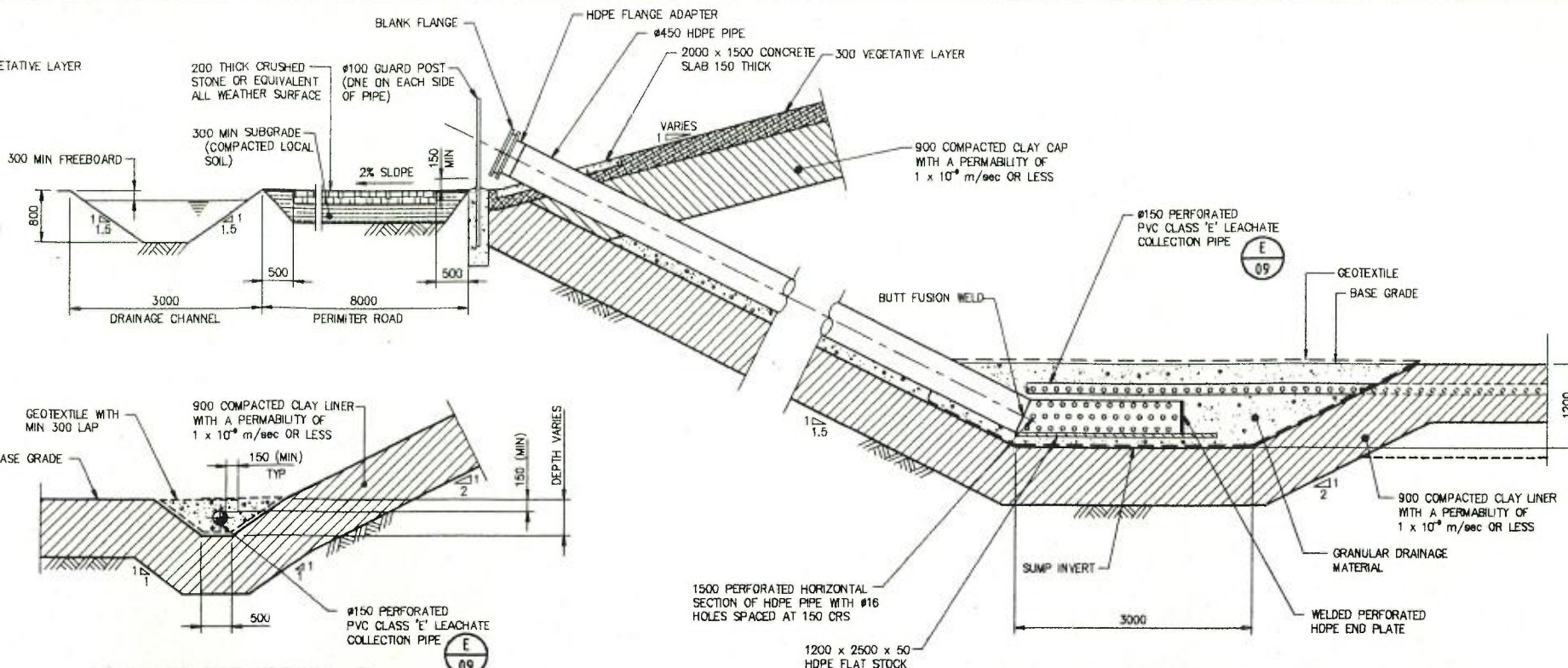
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DESIGN CHECK: PAR <i>[Signature]</i>	DATE: 11/10/93	CLIENT APPROVAL:	
DRAWN: GCS <i>[Signature]</i>	DATE: 11/10/93	CAD REFERENCE: 52D02104	
DRAWING CHECK: PD <i>[Signature]</i>	DATE: 11/10/93	DOC No: 52D021A.D08 REV A	
		SCALE: AS SHOWN	

ELIZABETH DRIVE LANDFILL
 DEVELOPMENT APPLICATION
 CROSS SECTIONS

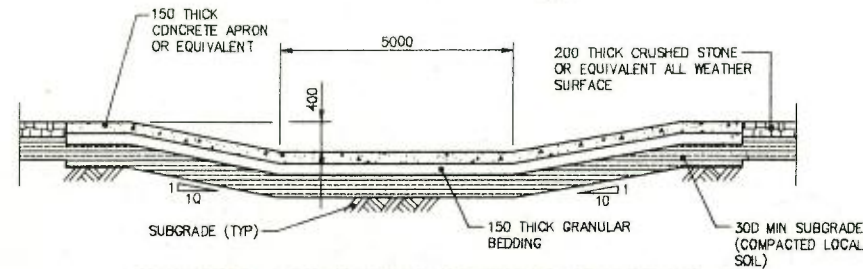
<p>PPK Consultants Pty Ltd <small>(Incorporated in South Australia) Formerly PPK-Pty & Associates Pty Ltd Incorporating Longworth & McInnes Pty Ltd</small></p>	Job No.	Drawing No.	Issue
	52D021A	08	A



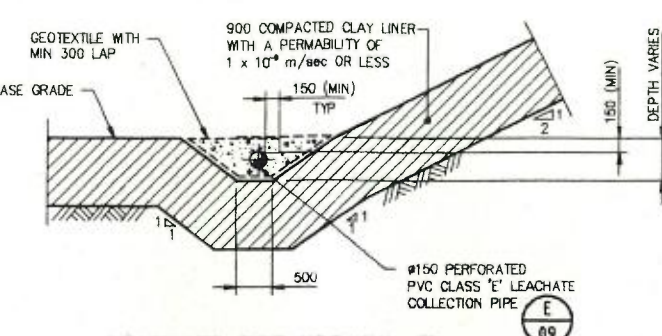
DRAINAGE CHANNEL (A) 03.09



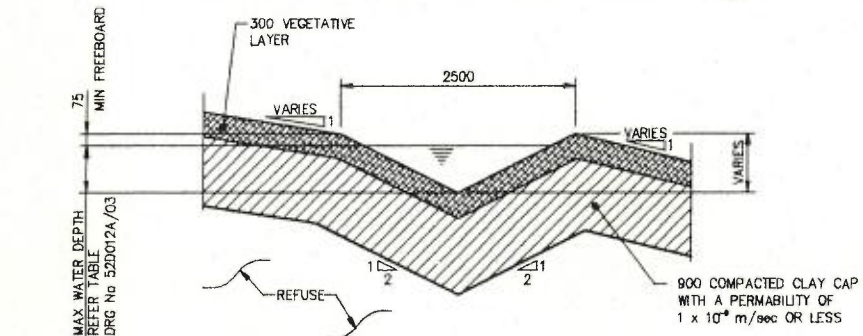
LEACHATE PIPE TRENCH AT BATTER (1) 02.08



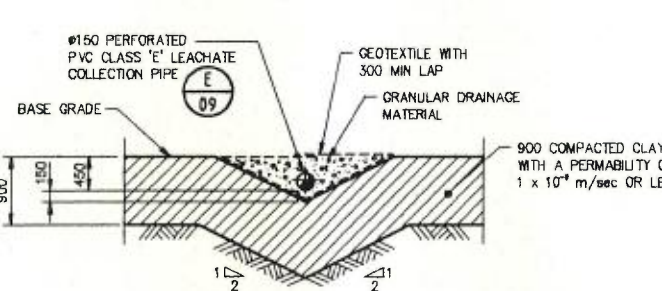
PERIMETER ACCESS ROAD DRAINAGE CROSSOVER (B) 03



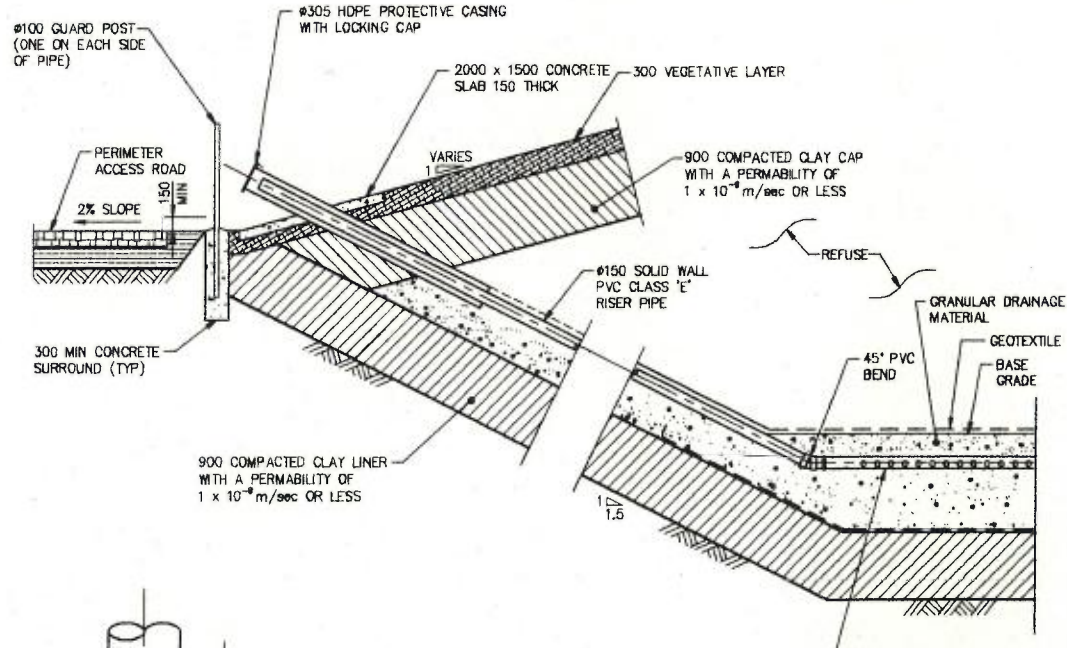
LEACHATE PIPE TRENCH AT BASE (2) 08.09



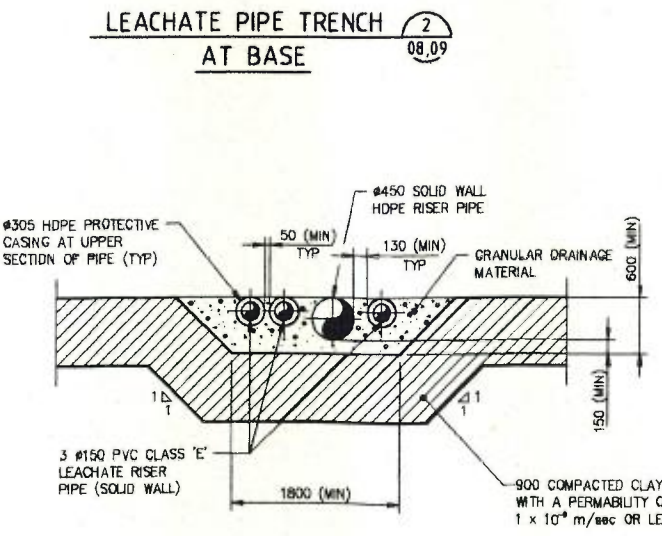
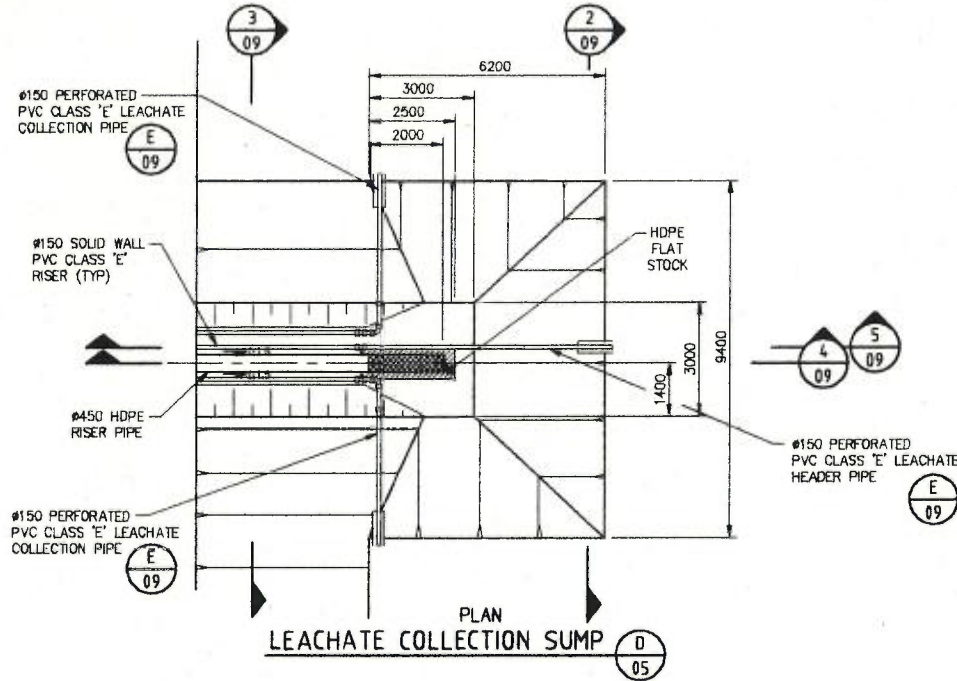
CATCH DRAIN (C) 03.08



LEACHATE PIPE TRENCH AT BASE (2) 08.09



LEACHATE CLEANOUT RISER (5) 09



SUMP RISER TRENCH (3) 09

PVC LEACHATE COLLECTION PIPE PERFORATION (E) 09

NOTES:
 1. SUMPS AND LEACHATE COLLECTION TRENCHES SUBJECT TO DETAILED DESIGN.

Amendment	Description	Date	Approved

Pacific Waste Management
 APPROVED: [Signature]
 TITLE: NSW DIVISION MGR DATE 11/10/93

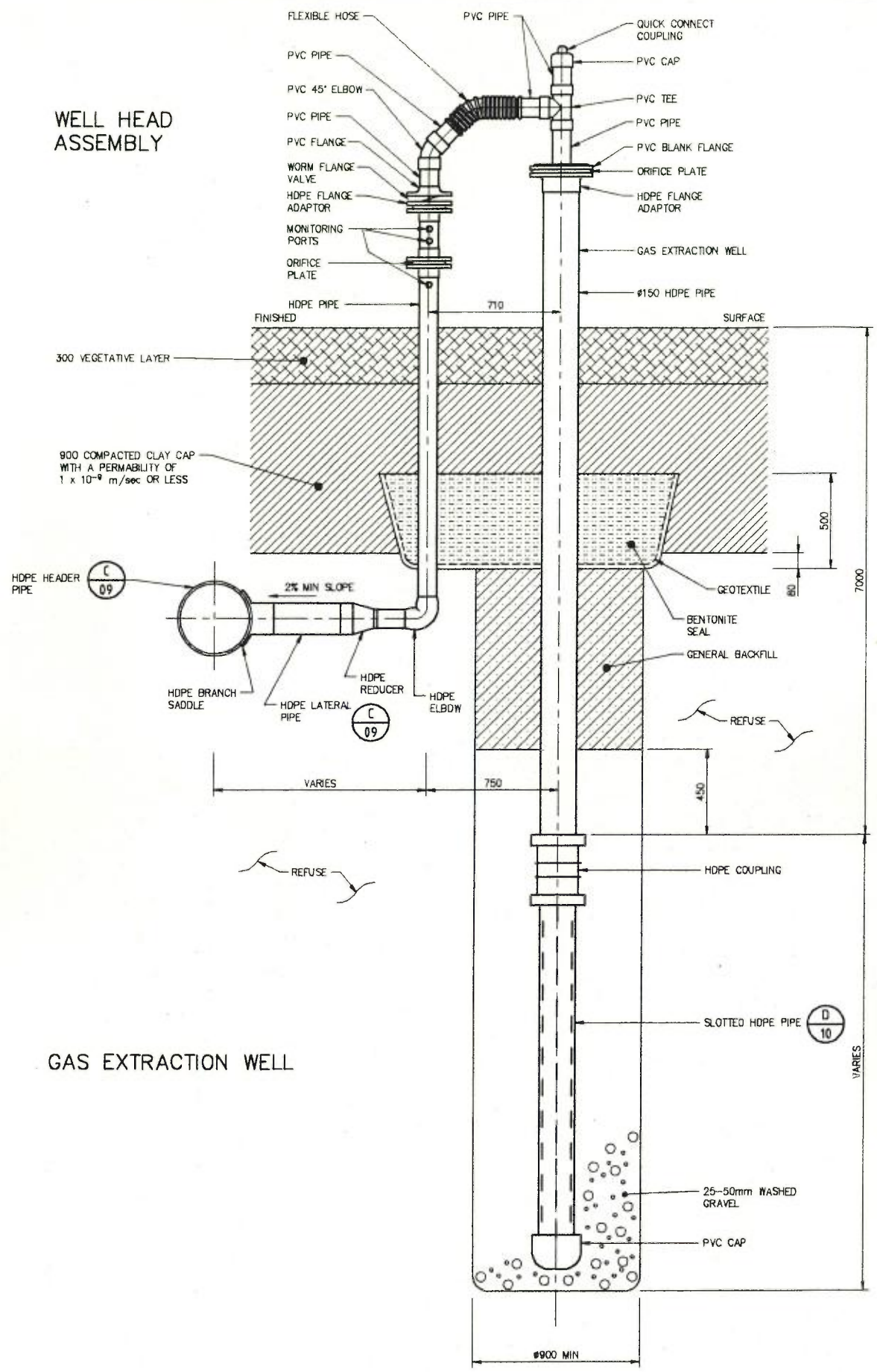
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DRAWN: JSC [Signature] 11/10/93	DOC No: 52D021A.009 REV A	SCALE: NOT TO SCALE	
DRAWING CHECK: GCS [Signature] 11/10/93			

ELIZABETH DRIVE LANDFILL
 DEVELOPMENT APPLICATION
 LEACHATE COLLECTION AND STORMWATER DETAILS

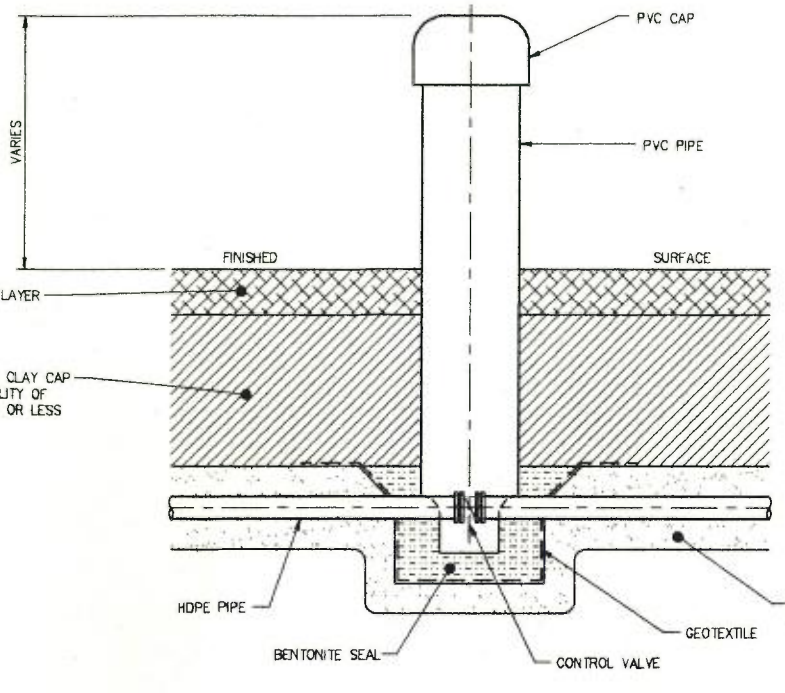
PPK Consultants Pty Ltd
 (Incorporated in South Australia)
 9 Bevan Road, Mawson
 P.O. Box 10, Mawson SA 5072
 Telephone (08) 744 0888

Job No. **52D021A** Drawing No. **09** Issue **A**

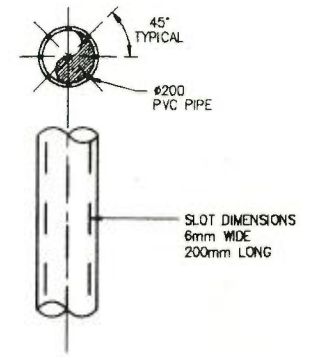
WELL HEAD ASSEMBLY



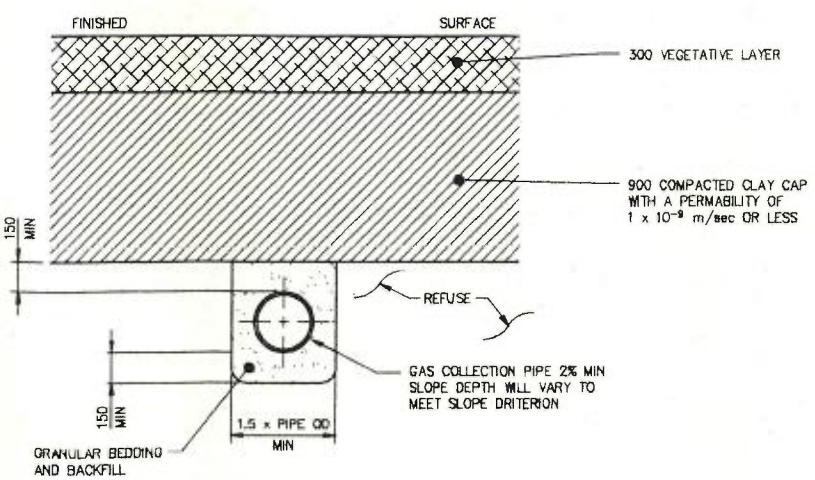
GAS EXTRACTION ARRANGEMENT (A/06)



UNDERGROUND CONTROL VALVE (B/06)



SLOTTED HDPE PIPE (D/10)



TYPICAL TRENCH DETAIL (C/09)

NOTES:
1. GAS WELLS AND COLLECTION PIPES SUBJECT TO DETAILED DESIGN

Amendment	Description	Date	Approved

Pacific Waste Management

APPROVED: *[Signature]*

TITLE: NSW DIVISION MGR. DATE 11/10/93

DESIGNED: MAUNSELL	DATE: 11/10/93	PROJECT APPROVAL: PAR	DATE: 11/10/93
DESIGN CHECK: PD	CLIENT APPROVAL:	CAD REFERENCE: 52D02106	DOC No: 52D021A.D10 REV A
DRAWN: JSC	SCALE: NOT TO SCALE		
DRAWING CHECK: GCS			

ELIZABETH DRIVE LANDFILL

DEVELOPMENT APPLICATION

GAS SYSTEM DETAILS SHEET 1 OF 2

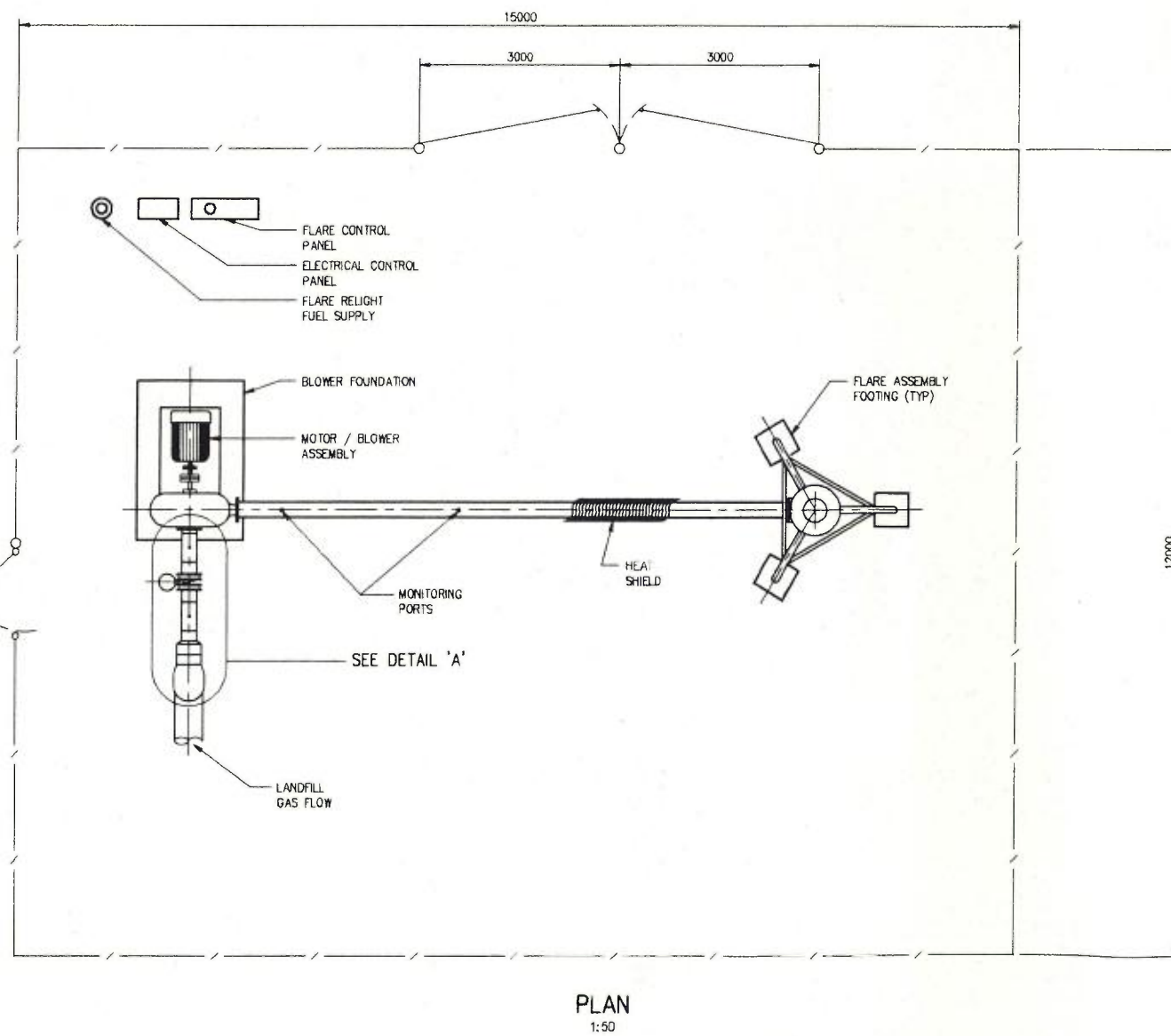
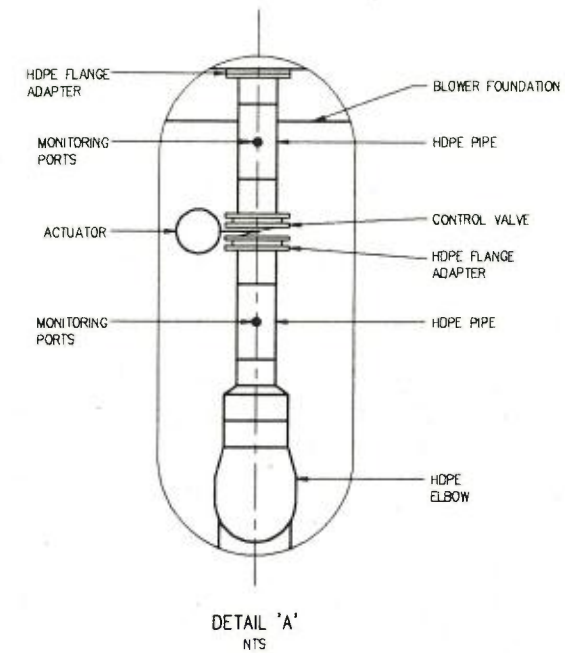
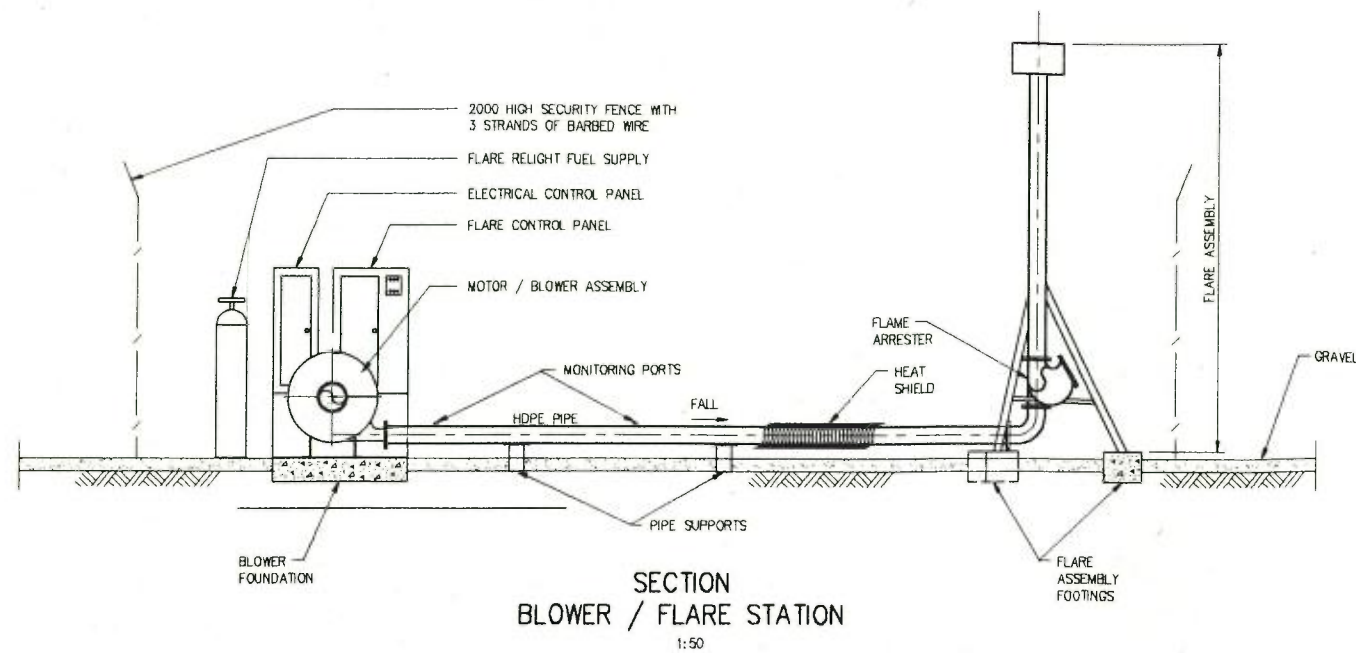
PPK Consultants Pty Ltd

(Incorporated in South Australia)

Job No. 52D021A

Drawing No. 10

Issue A



NOTES:


- 1. BLOWER STATION SUBJECT TO DETAILED DESIGN

Amendment	Description	Date	Approved


Pacific Waste Management
 APPROVED: *[Signature]*
 TITLE: NSW DIVISION MGR DATE: 11/10/93

DESIGNED: MAUNSELL	DATE: 11/10/93	PROJECT APPROVAL: PAR	DATE: 11/10/93
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DRAWN: JSC	DATE: 11/10/93	CAD REFERENCE: 52D02107	
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		SCALE: AS SHOWN	

ELIZABETH DRIVE LANDFILL
 DEVELOPMENT APPLICATION
 GAS SYSTEM DETAILS SHEET 2 OF 2


PPK Consultants Pty Ltd
(Incorporated in South Australia)
 formerly
 Pak-Pak & Associates Pty Ltd
 incorporating
 Longwell & McKeen Pty Ltd

Job No. 52D021A
 Drawing No. 11
 Issue A