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NOTES:
 ELEVATIONS ARE GEODESIC
 COORDINATES NAD 83 UTM ZONE 11
 AVERAGE COMBINED SCALE FACTOR 0.999495411
 MULTIPLY GRID BY 1.000504844 TO GET GROUND

DATE OF SURVEY: MAY 02-04 2009
 CONTOUR INTERVAL: 1m
 CONTOURS PRODUCED FROM LIMITED FIELD MEASUREMENTS IN TREADED AREAS.
 RECOMMEND NEW SURVEY AFTER CLEANING DONE.

No.	Date/Date	Description/Description	Drawn by Dessiné par	Approved Approuvé
1	23/06/09	ISSUED FOR PRELIMINARY REVIEW	PC	DT
0	13/05/09	ISSUED FOR REVIEW	VB	JT

Revision / Révision	
A	detail number / numéro de détail
B	source drawing no. / no. de dessin
C	detail on drawing no. / détail sur dessin no.

Consultant's Stamp /
 Sceau de l'expert-conseil

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Client / client

Parks Canada Agency Western and Northern Region
 L'Agence Parcs Canada Ouest et Nord Région

Consultant's Name /
 Nom de l'expert-conseil

McElhanney

Project title / titre du projet

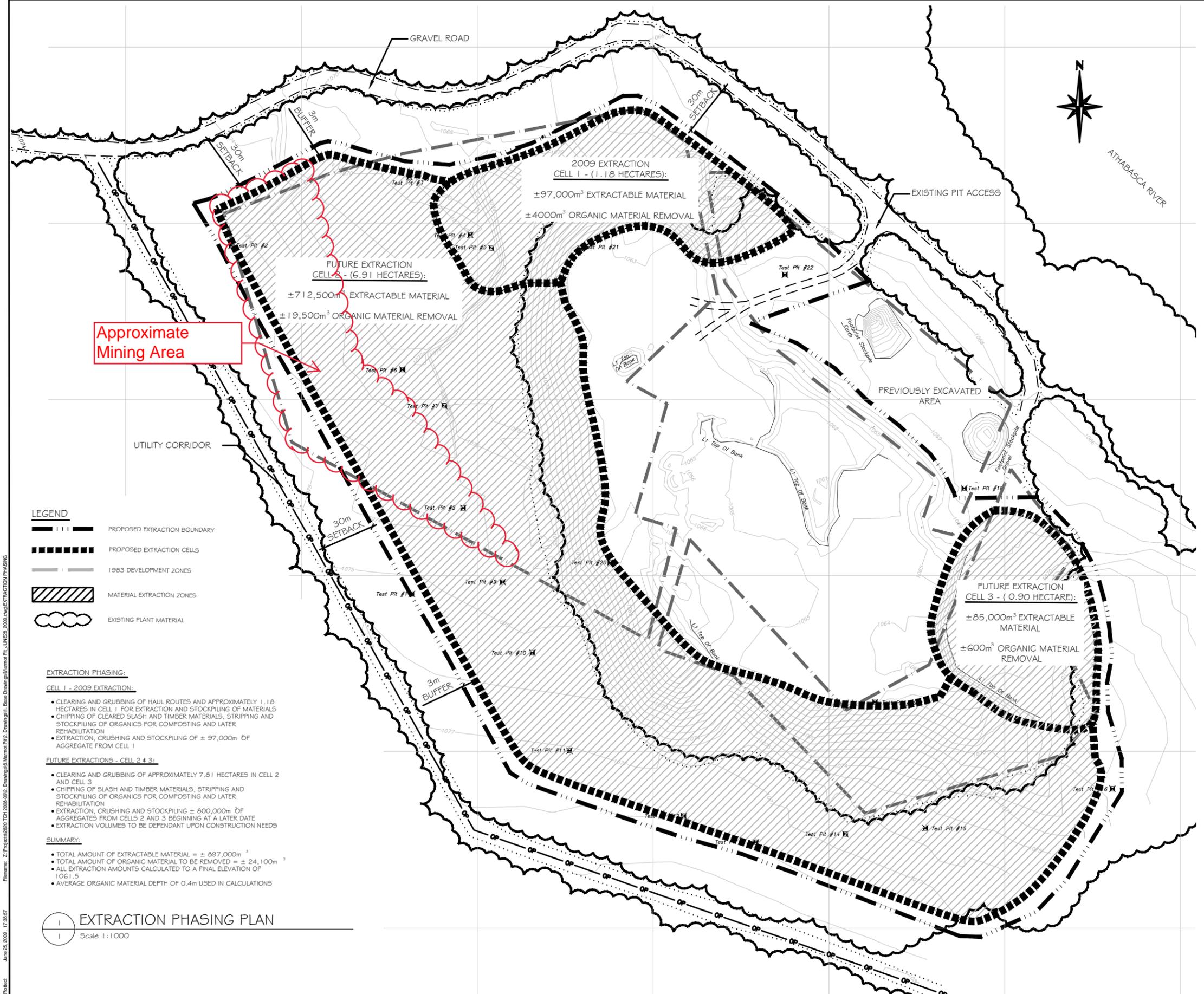
MARMOT PIT JASPER, ALBERTA

JASPER NATIONAL PARK, ALBERTA

Drawing title / titre du dessin

MARMOT PIT EXTRACTION PHASING PLAN

Surveyed by / arpenté par	Drawn by / dessiné par	Date / date
	VB	
Designed by / concepté par	Reviewed by / revêlé par	Scale / échelle
		1:1000
Parks Canada Project Manager / Administrateur de Projets Parcs Canada		
Client Acceptance / Acceptation du client	Approved by / approuvé par	
Project No. / No. du projet	Asset No. / No. du bien	Sheet No. / No. de la feuille
2511 00105-2000		01
Drawing Reference No. / No. de référence du dessin		



Approximate Mining Area

LEGEND

	PROPOSED EXTRACTION BOUNDARY
	PROPOSED EXTRACTION CELLS
	1983 DEVELOPMENT ZONES
	MATERIAL EXTRACTION ZONES
	EXISTING PLANT MATERIAL

EXTRACTION PHASING:

CELL 1 - 2009 EXTRACTION:

- CLEARING AND GRUBBING OF HAUL ROUTES AND APPROXIMATELY 1.18 HECTARES IN CELL 1 FOR EXTRACTION AND STOCKPILING OF MATERIALS
- CHIPPING OF CLEARED SLASH AND TIMBER MATERIALS, STRIPPING AND STOCKPILING OF ORGANICS FOR COMPOSTING AND LATER REHABILITATION
- EXTRACTION, CRUSHING AND STOCKPILING OF ± 97,000m³ OF AGGREGATE FROM CELL 1

FUTURE EXTRACTIONS - CELL 2 & 3:

- CLEARING AND GRUBBING OF APPROXIMATELY 7.81 HECTARES IN CELL 2 AND CELL 3
- CHIPPING OF SLASH AND TIMBER MATERIALS, STRIPPING AND STOCKPILING OF ORGANICS FOR COMPOSTING AND LATER REHABILITATION
- EXTRACTION, CRUSHING AND STOCKPILING ± 800,000m³ OF AGGREGATES FROM CELLS 2 AND 3 BEGINNING AT A LATER DATE
- EXTRACTION VOLUMES TO BE DEPENDANT UPON CONSTRUCTION NEEDS

SUMMARY:

- TOTAL AMOUNT OF EXTRACTABLE MATERIAL = ± 97,000m³
- TOTAL AMOUNT OF ORGANIC MATERIAL TO BE REMOVED = ± 24,100m³
- ALL EXTRACTION AMOUNTS CALCULATED TO A FINAL ELEVATION OF 1061.5
- AVERAGE ORGANIC MATERIAL DEPTH OF 0.4m USED IN CALCULATIONS

EXTRACTION PHASING PLAN
 Scale 1:1000

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