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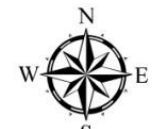
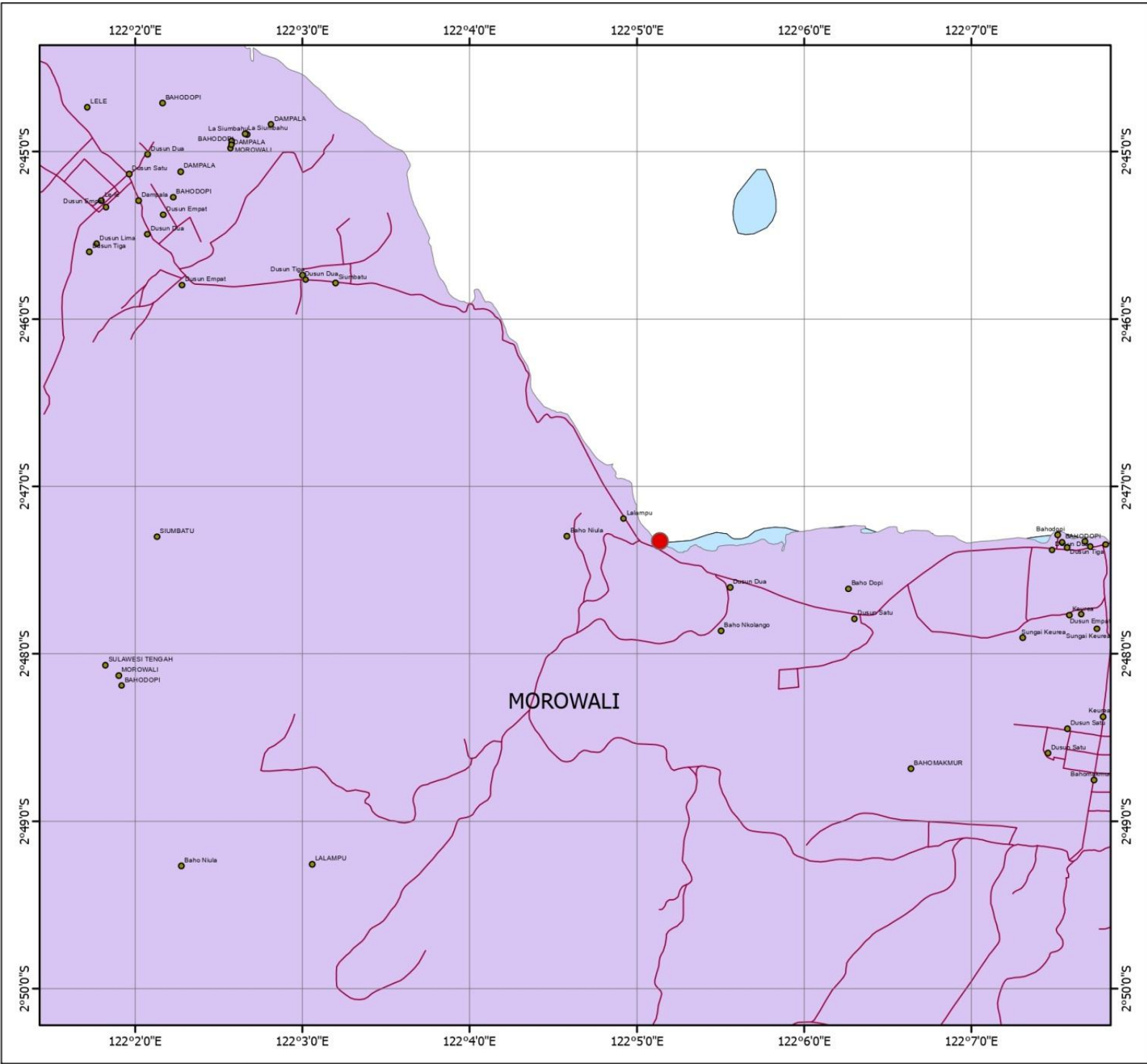
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APPENDIX A

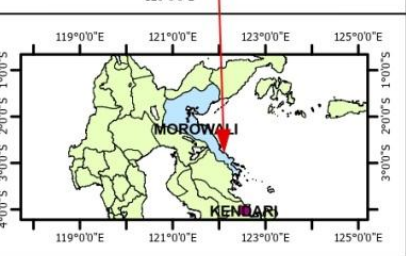
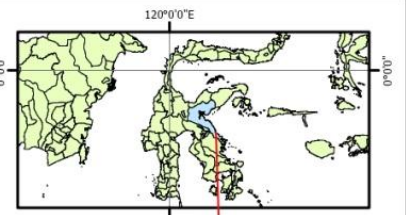
THE MAP OF RESEARCH LOCATION



PT ANG AND FANG BROTHER,
 BAHODOPI DISTRICT, MOROWALI REGENCY,
 CENTRAL SULAWESI PROVINCE

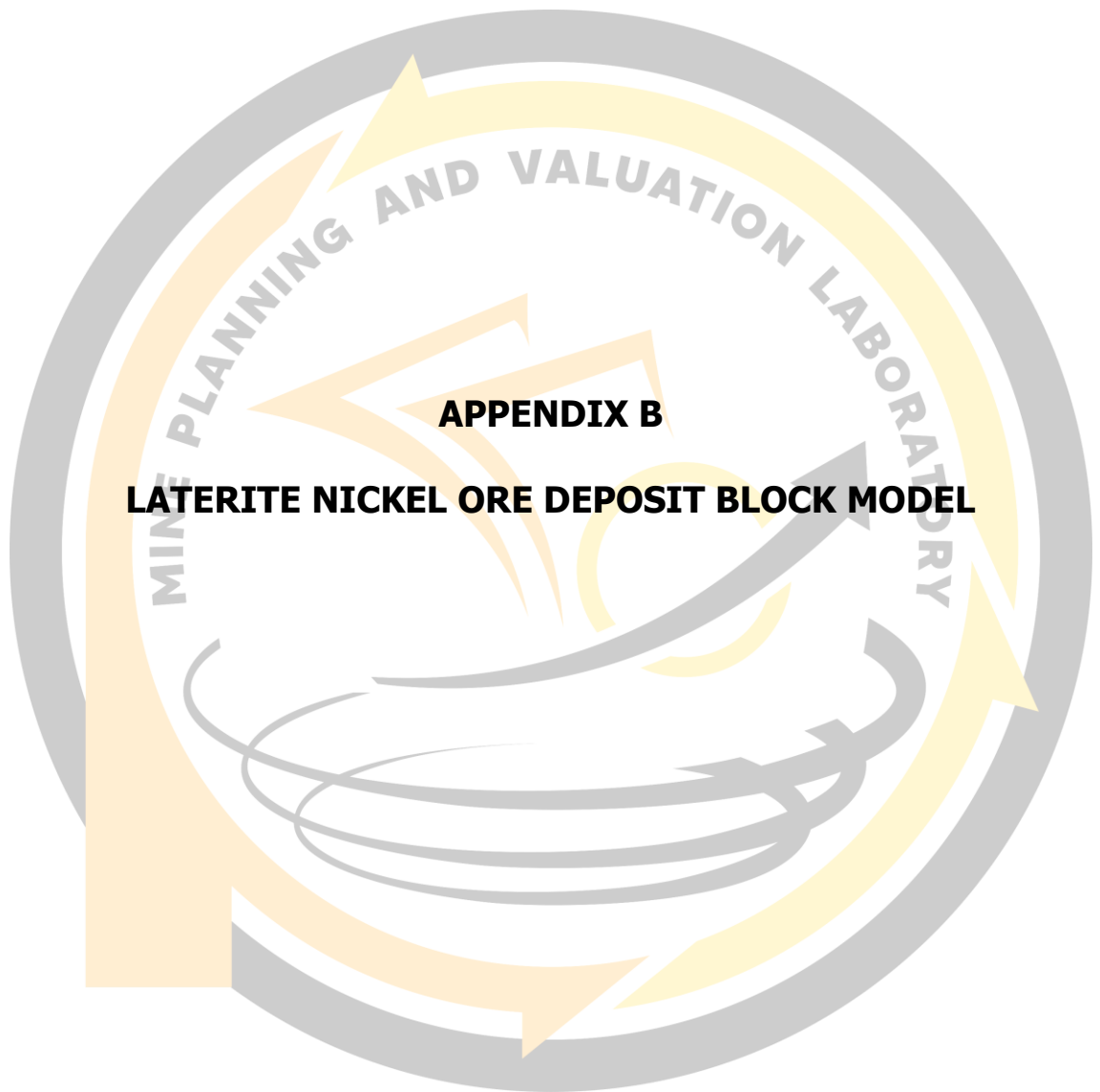
Legends

- PT Ang and Fang Brother
- Village
- Highway
- Morowali Regency
- Kendari City
- Bahodopi District



THE MAP OF RESEARCH LOCATION

DRAWN BY	TONY CHEN D111181508
SUPERVISOR	DR. ARYANTI VIRTANTI ANAS, S.T., M.T. NIP. 197010052008012026
CO-SUPERVISOR	DR. ENG. RINI NOVRIANTI SUTARJO TUL S.T., M.BA., M.T. NIP. 198311142014042001



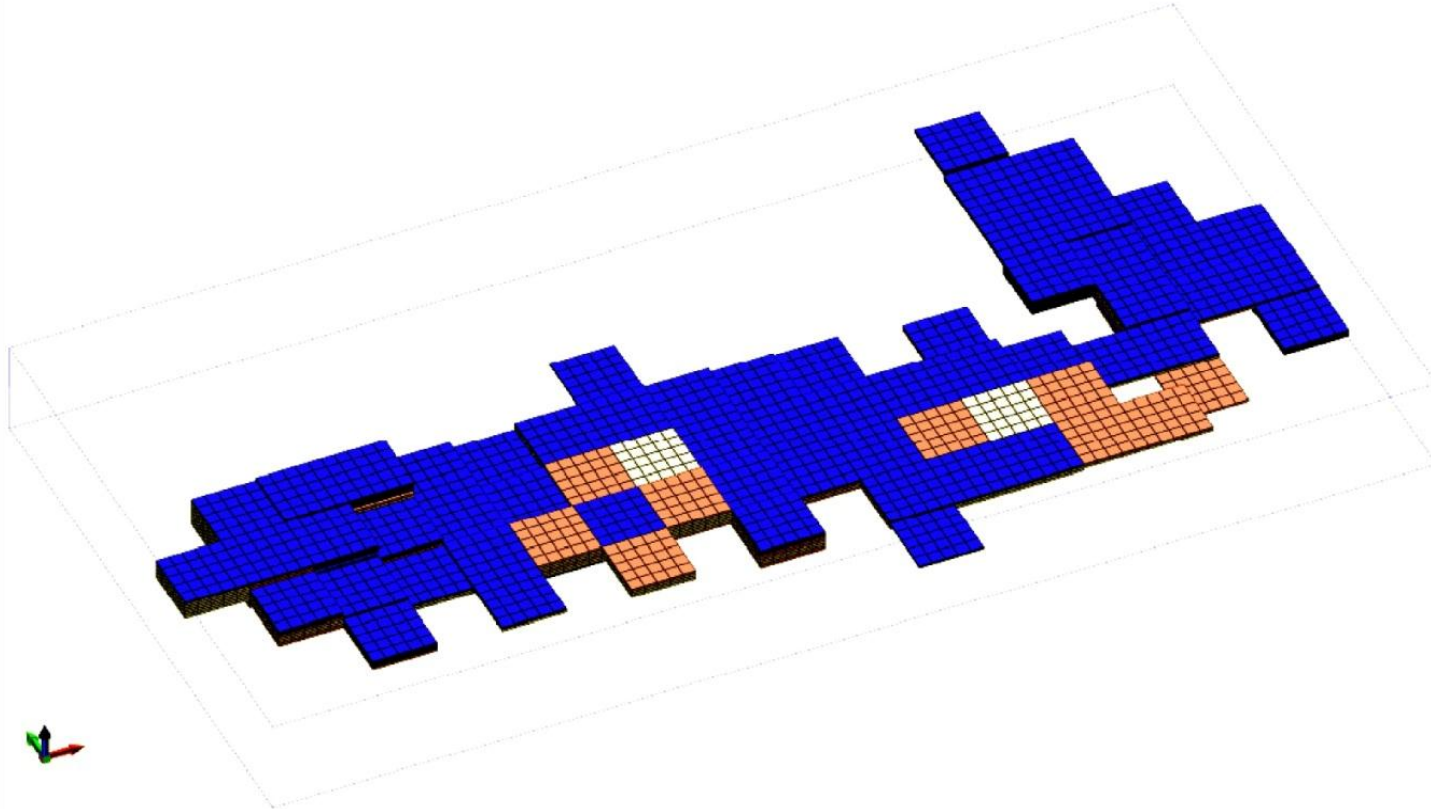
APPENDIX B

LATERITE NICKEL ORE DEPOSIT BLOCK MODEL

FRONT 8 MERANTI PIT,
PT ANG AND FANG BROTHER,
BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE



INFORMATION:

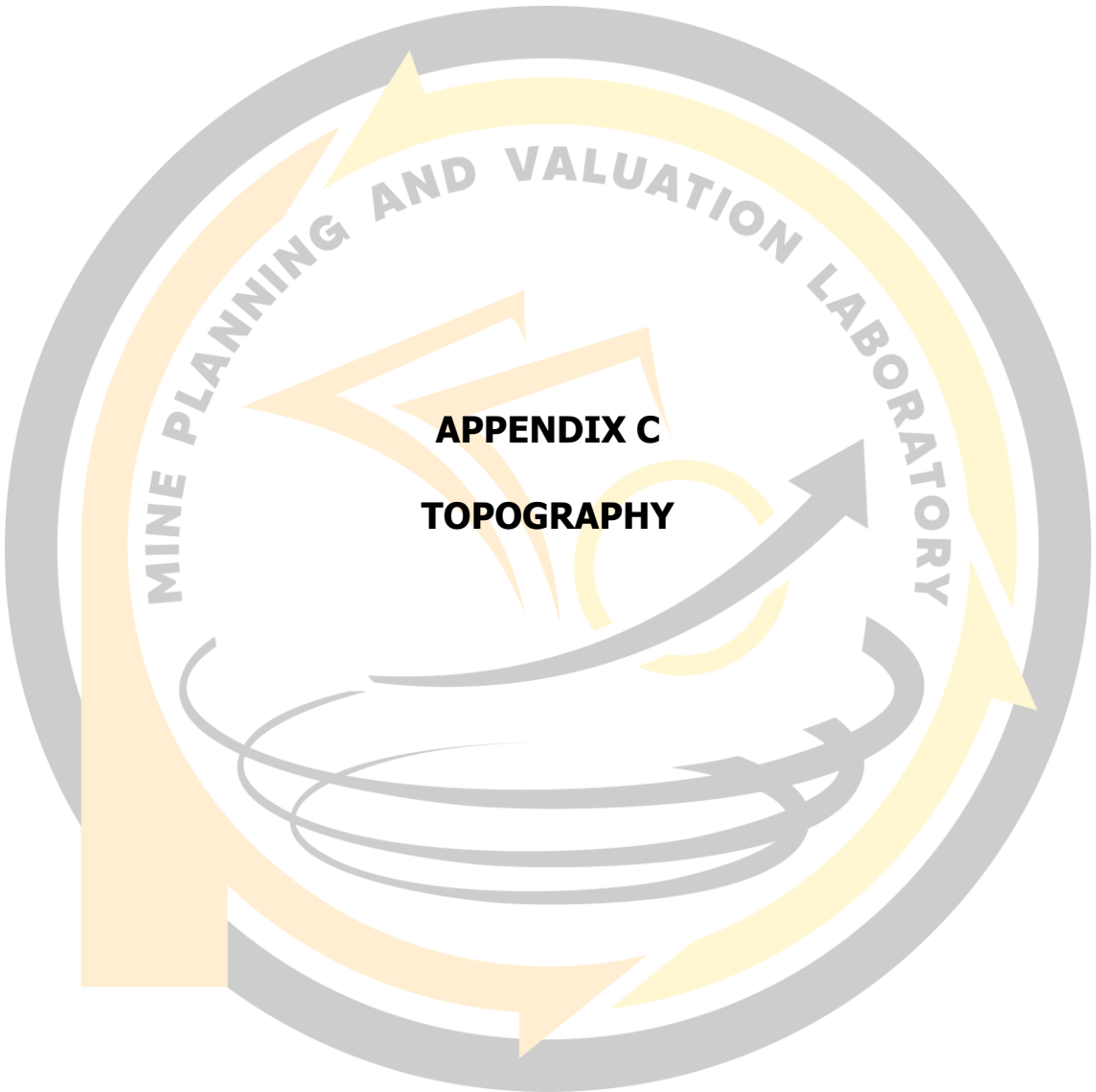


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THESIS
MINE PLANNING OF FRONT 8 MERANTI PIT AT PT ANG AND
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CENTRAL SULAWESI PROVINCE

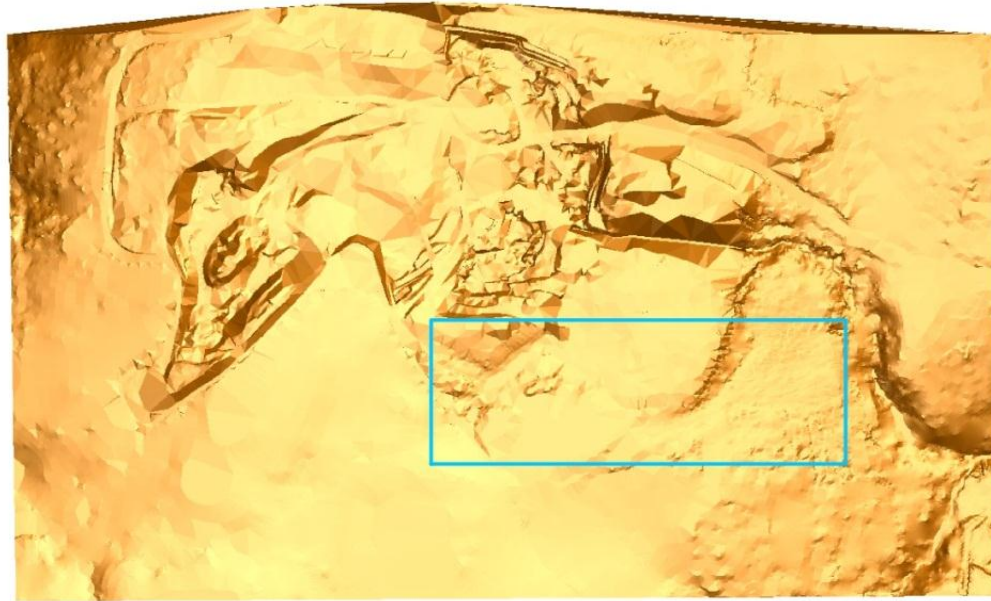
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**LATERITE NICKEL ORE DEPOSIT
BLOCK MODEL**



APPENDIX C

TOPOGRAPHY




0 335 670 1,340 2,010 2,680 3,350
Meters


FRONT 8 MERANTI PIT,
PT ANG AND FANG BROTHER,
BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

INFORMATION:


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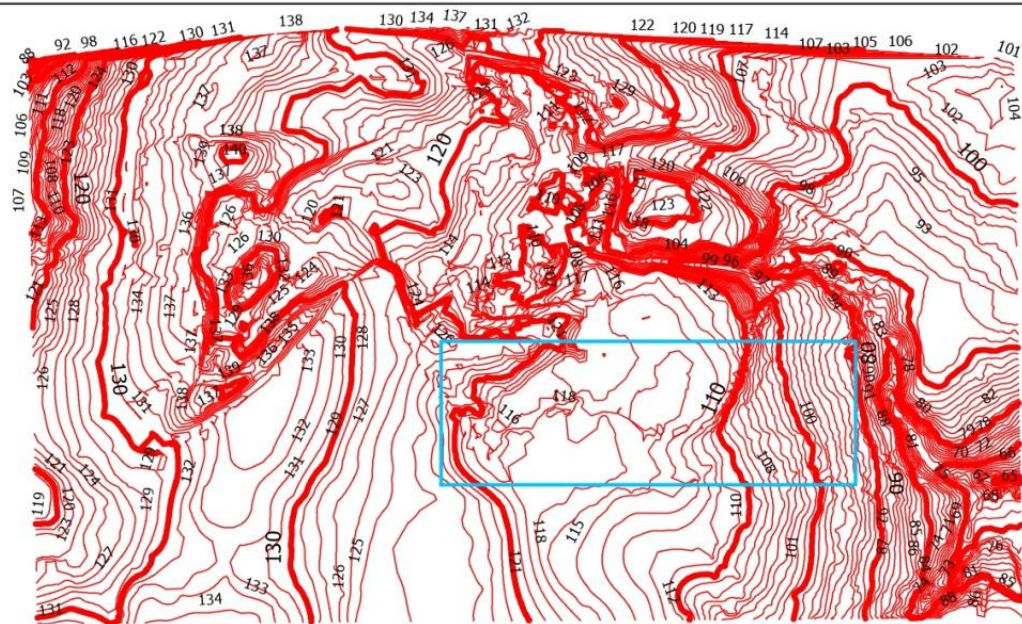
128, 137, 112,... = ELEVATION

 = CONTOUR INTERVAL

 = CONTOUR LINE

 = FRONT 8

 = TOPOGRAPHY DTM



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MINE PLANNING OF FRONT 8 MERANTI PIT AT PT ANG AND
FANG BROTHER, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

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TOPOGRAPHY OF MERANTI PIT

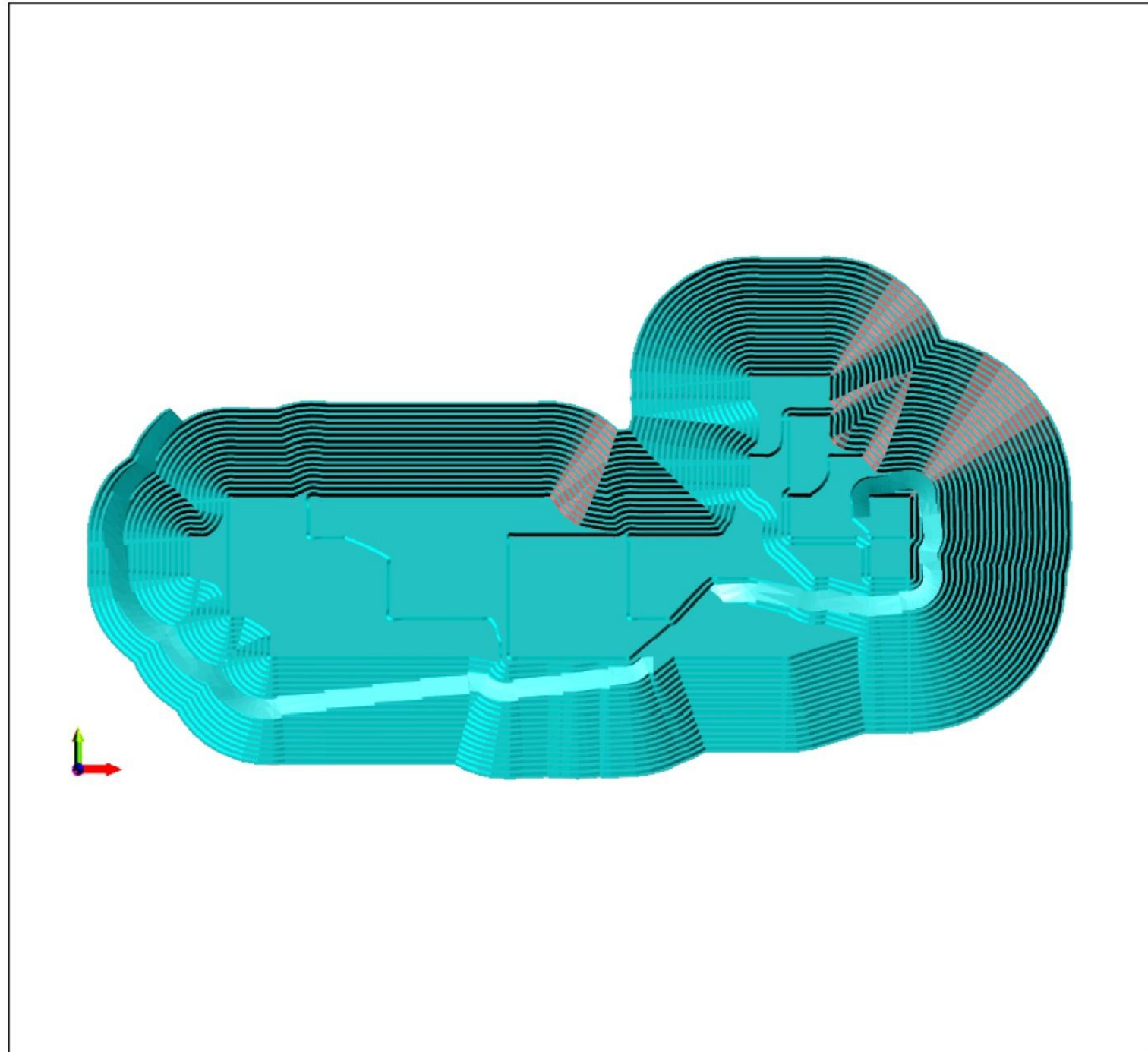
APPENDIX C

PAGE 137




APPENDIX D


PIT DESIGN



FRONT 8 MERANTI PIT,
PT ANG AND FANG BROTHER,
BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

INFORMATION:

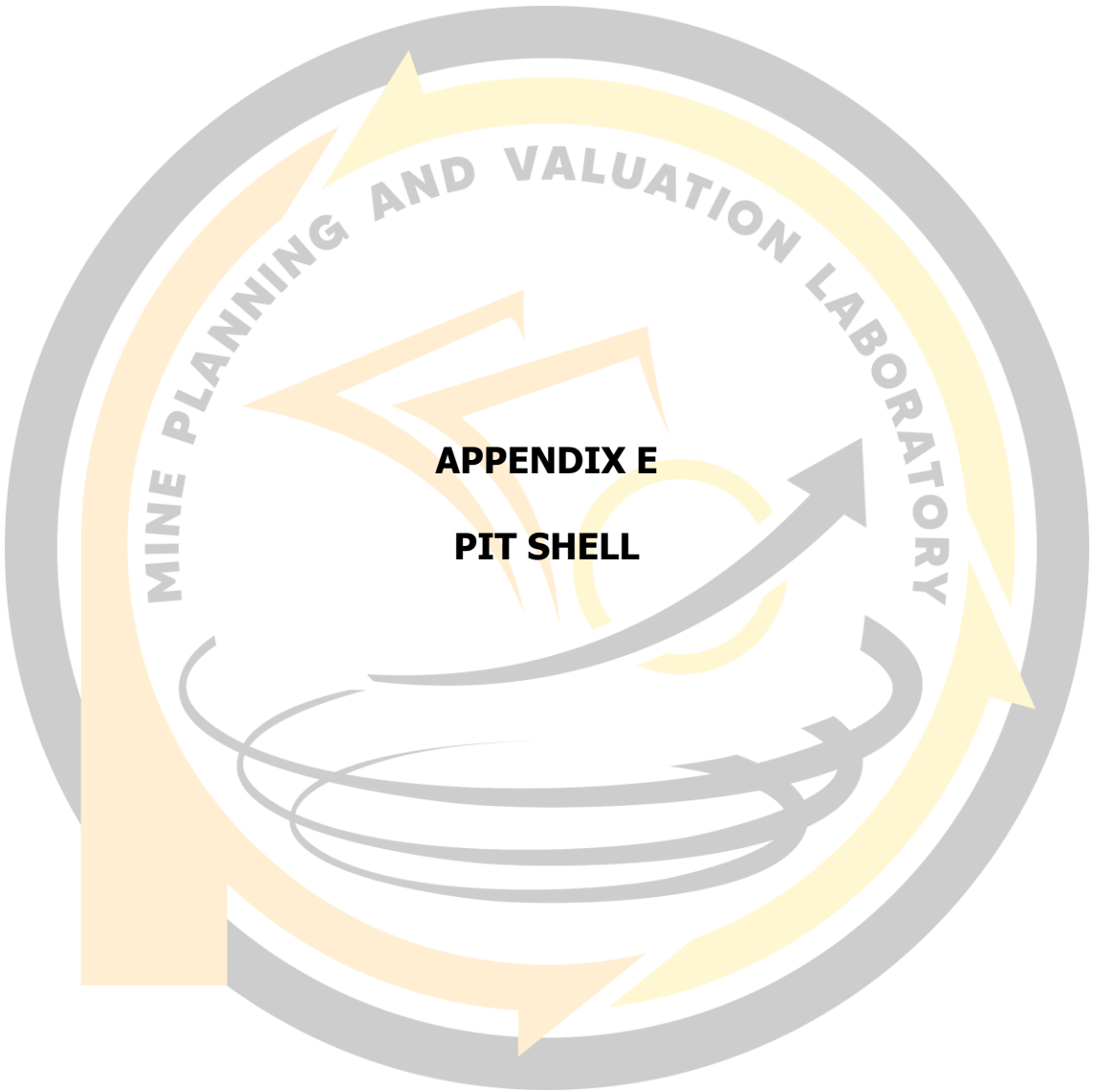
BENCH HEIGHT	= 3 METERS
BERM WIDTH	= 2 METERS
RAMP GRADIENT	= 10%
RAMP WIDTH	= 10 METERS
SLOPE ANGLE	= 60 DEGREES
	= PIT DTM

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PIT DESIGN




APPENDIX E
PIT SHELL

FRONT 8 MERANTI PIT,
PT ANG AND FANG BROTHER,
BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE



INFORMATION:

	PIT SHELL 1		PIT SHELL 12
	PIT SHELL 2		PIT SHELL 13
	PIT SHELL 3		PIT SHELL 14
	PIT SHELL 4		PIT SHELL 15
	PIT SHELL 5		PIT SHELL 16
	PIT SHELL 6		PIT SHELL 17
	PIT SHELL 7		PIT SHELL 18
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	PIT SHELL 11		PIT SHELL 22

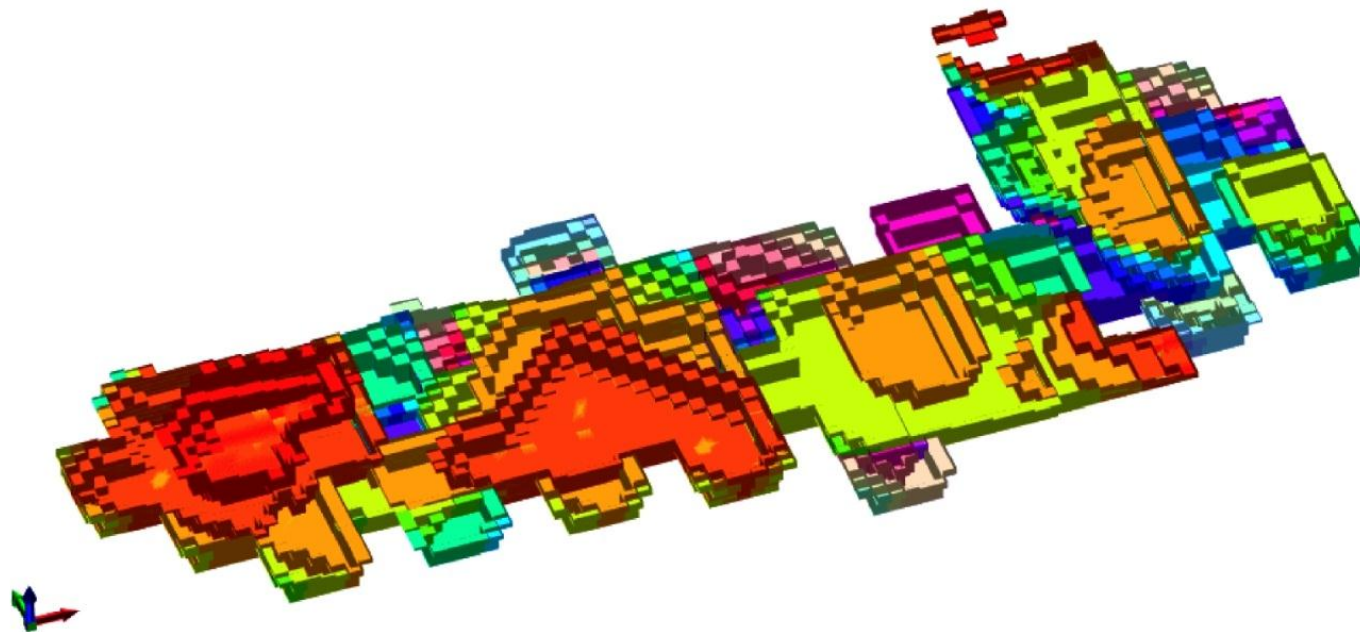


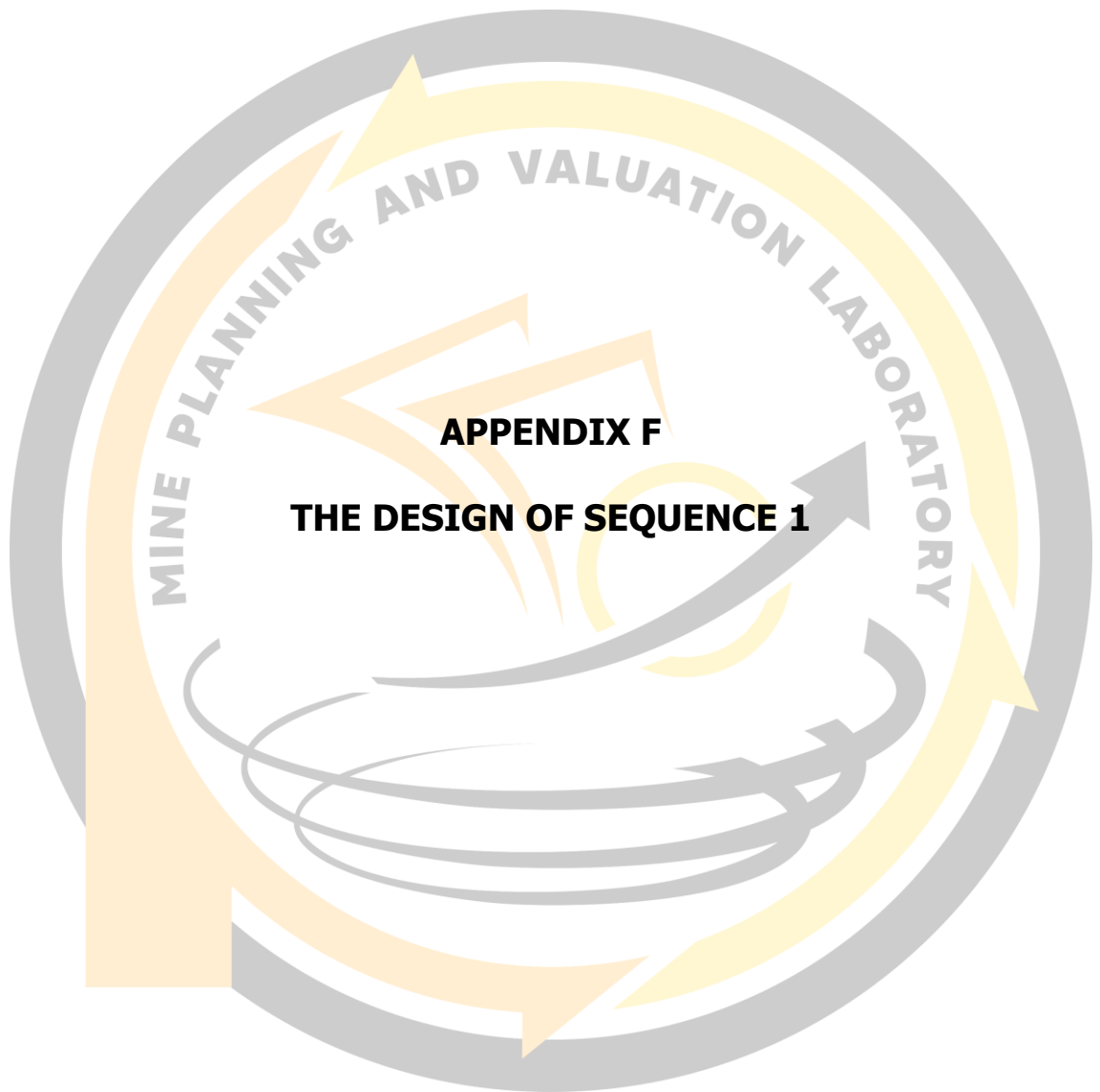
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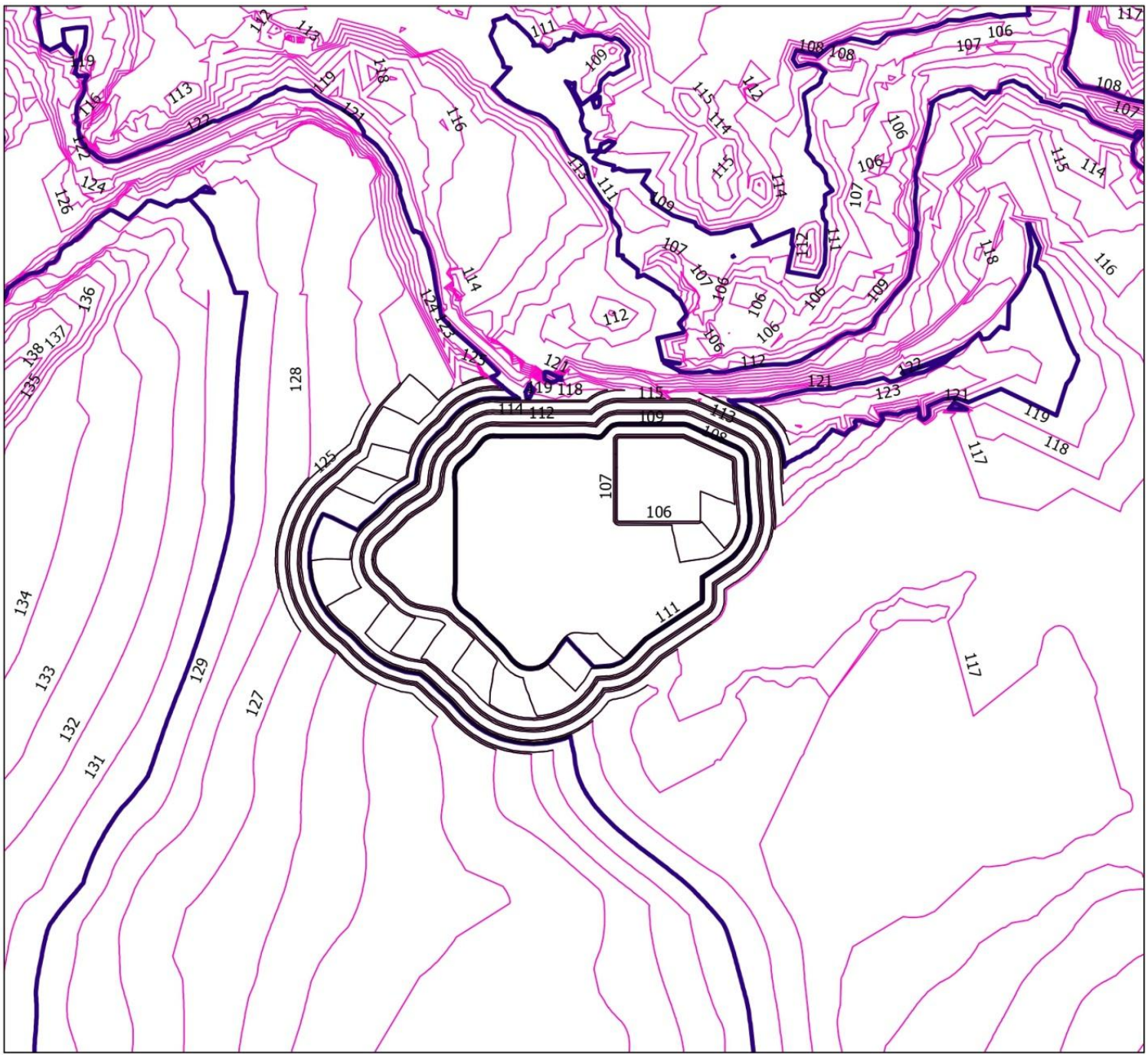
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PIT SHELLS





APPENDIX F
THE DESIGN OF SEQUENCE 1



0 410 820 1,640 2,460 3,280 4,100
Meters

FRONT 8 MERANTI PIT,
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BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

INFORMATION:

- 90, 100, 110, ...** = CONTOUR INDEX
- 128, 137, 112,... = ELEVATION
- = CONTOUR INTERVAL
- = CONTOUR LINE
- = SEQUENCE 1 DESIGN



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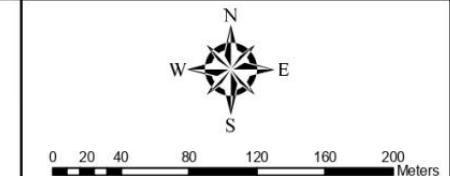
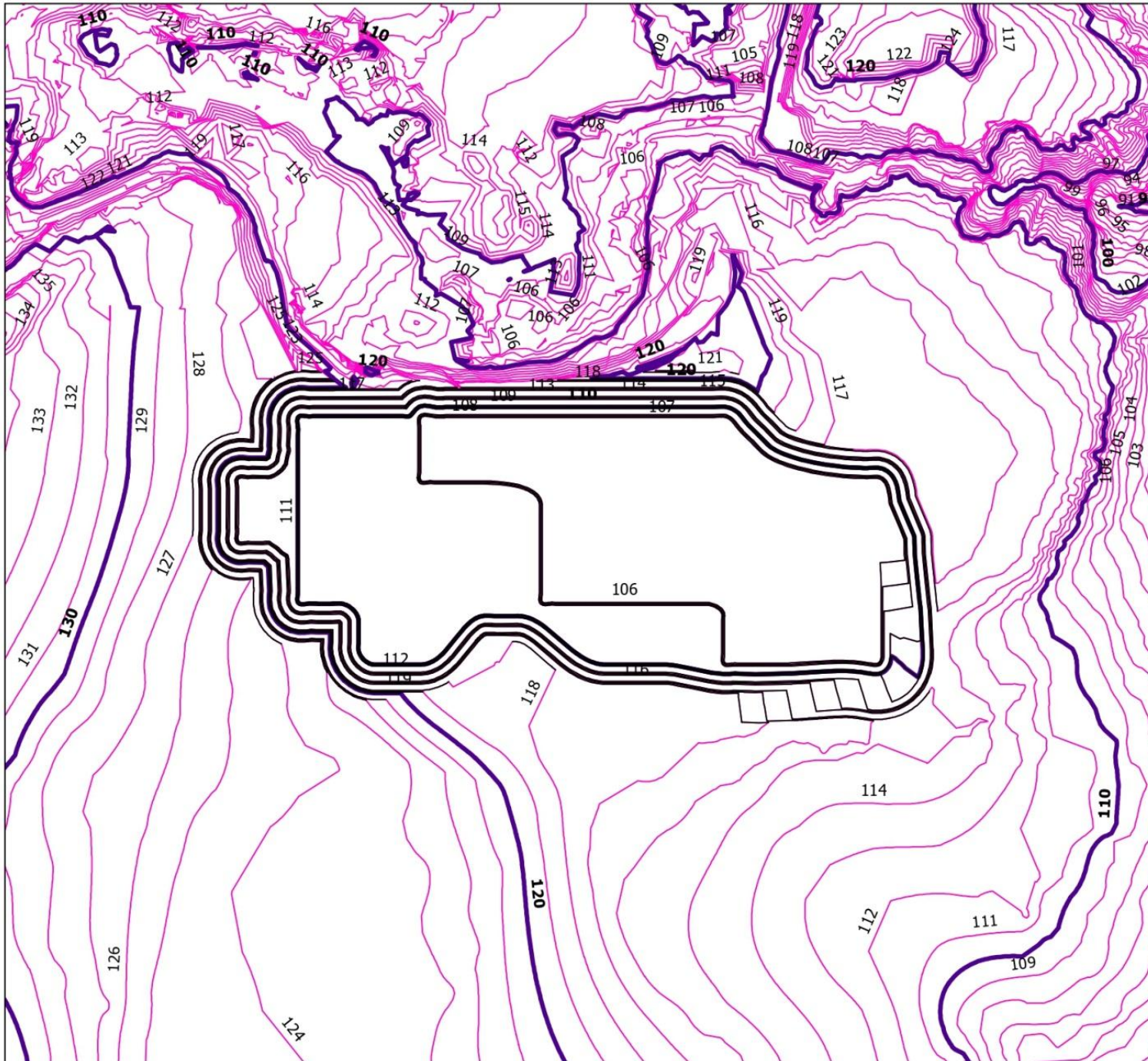
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THE DESIGN OF SEQUENCE 1



APPENDIX G

THE DESIGN OF SEQUENCE 2



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PT ANG AND FANG BROTHER,
BAHODOI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

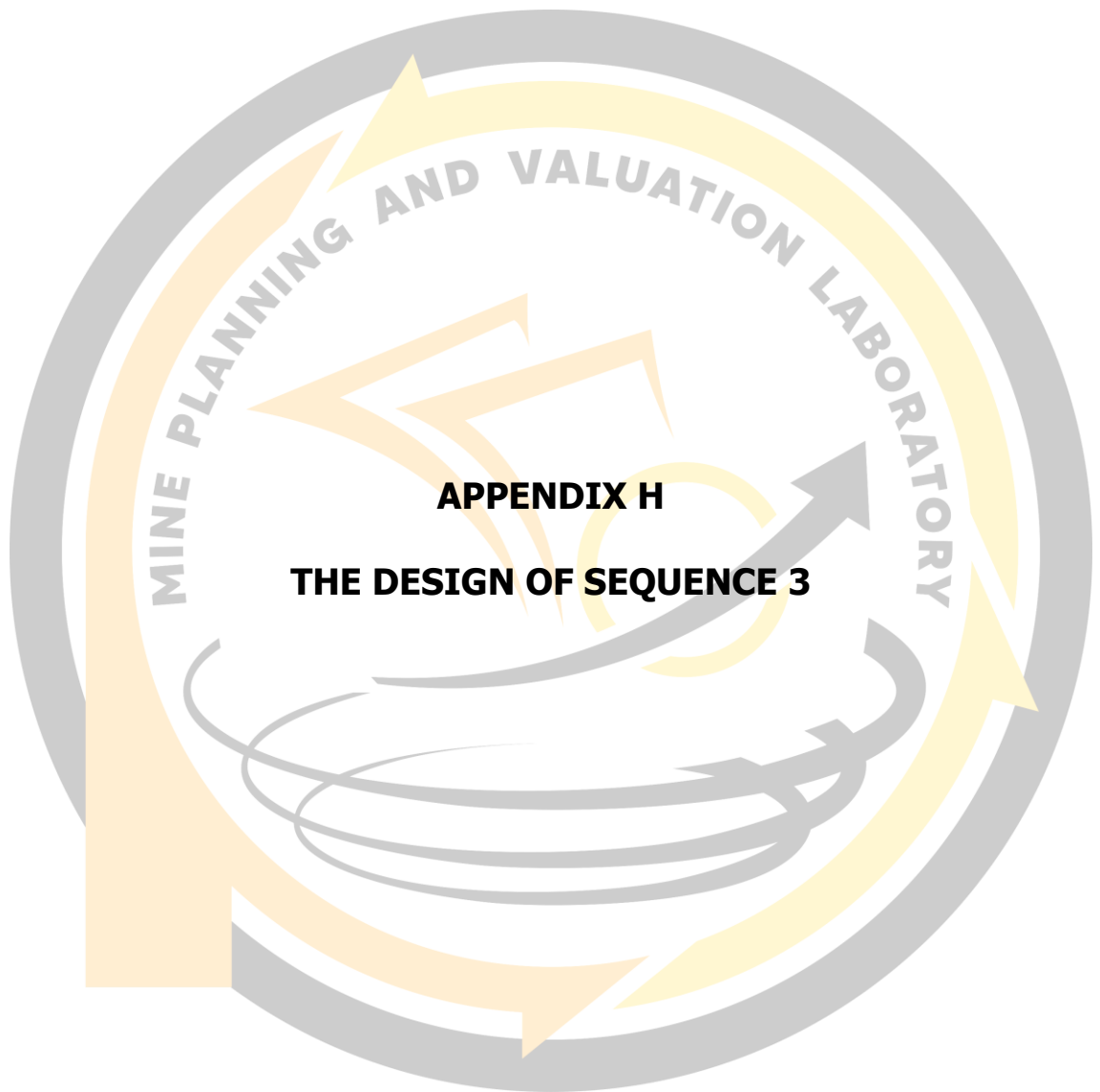
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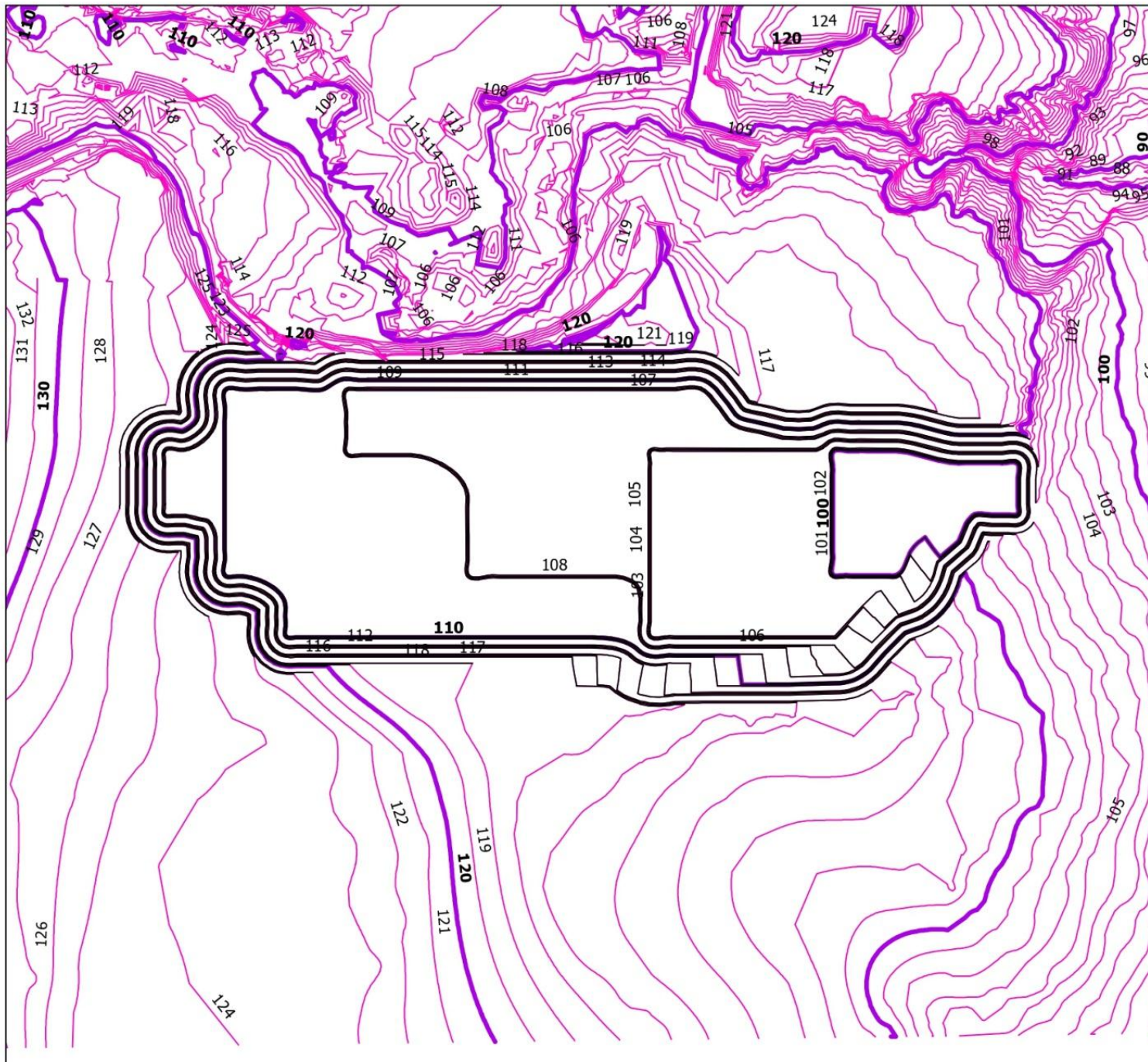
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THE DESIGN OF SEQUENCE 2



APPENDIX H

THE DESIGN OF SEQUENCE 3




FRONT 8 MERANTI PIT,
PT ANG AND FANG BROTHER,
BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

INFORMATION:

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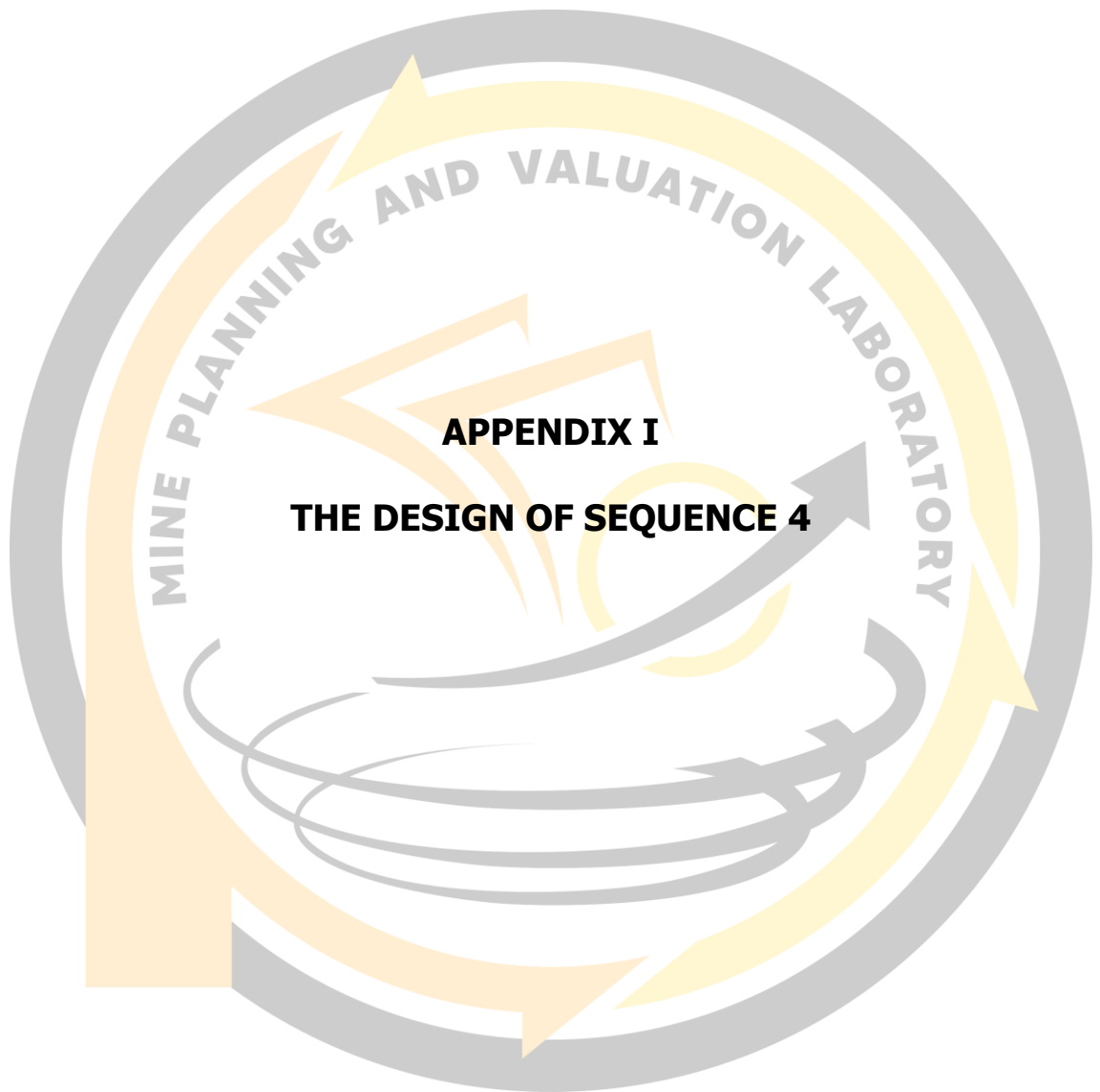


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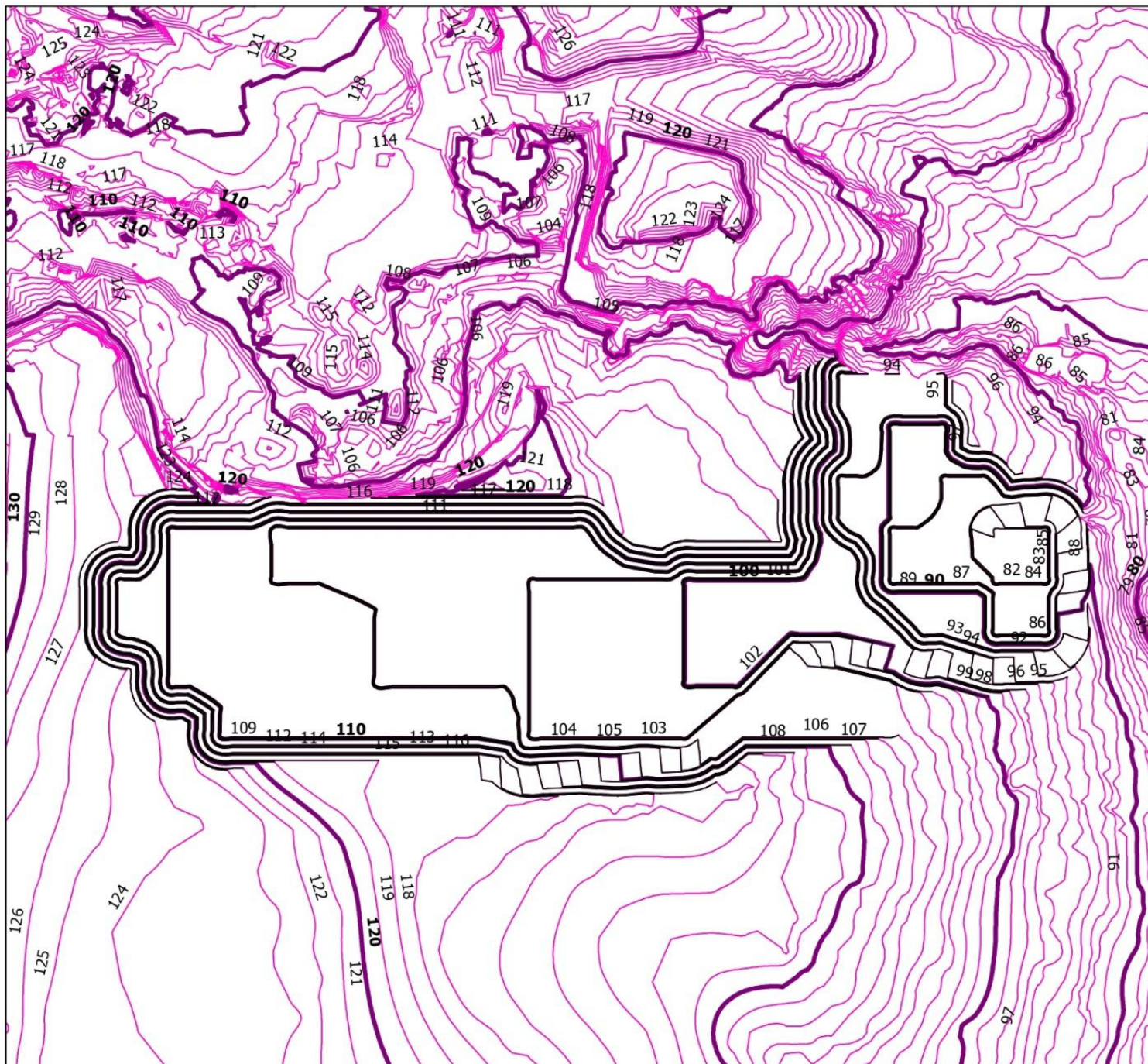
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FANG BROTHER, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

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THE DESIGN OF SEQUENCE 3



APPENDIX I
THE DESIGN OF SEQUENCE 4





FRONT 8 MERANTI PIT,
PT ANG AND FANG BROTHER,
BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE


INFORMATION:

90, 100, 110, ... = CONTOUR INDEX

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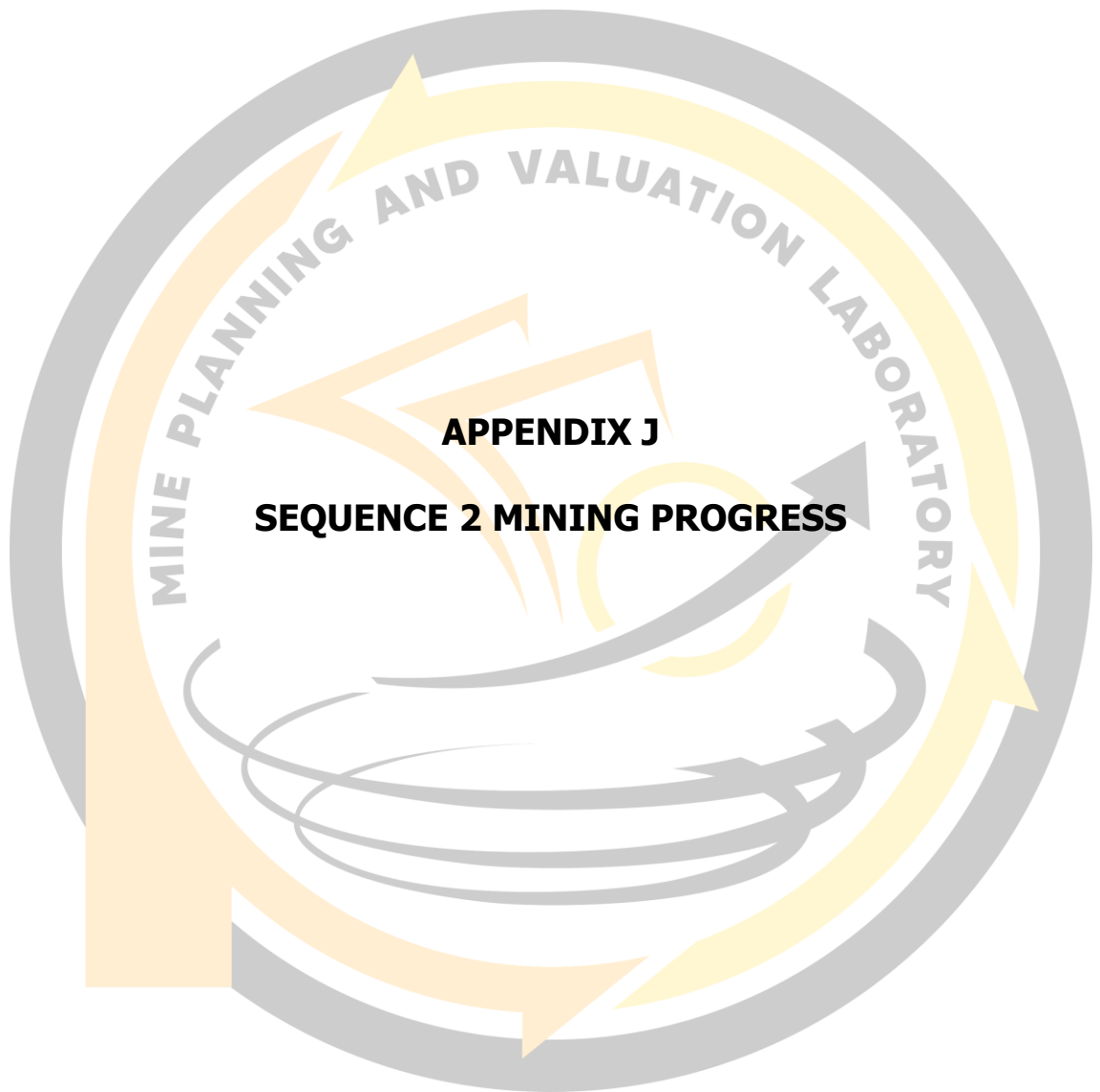


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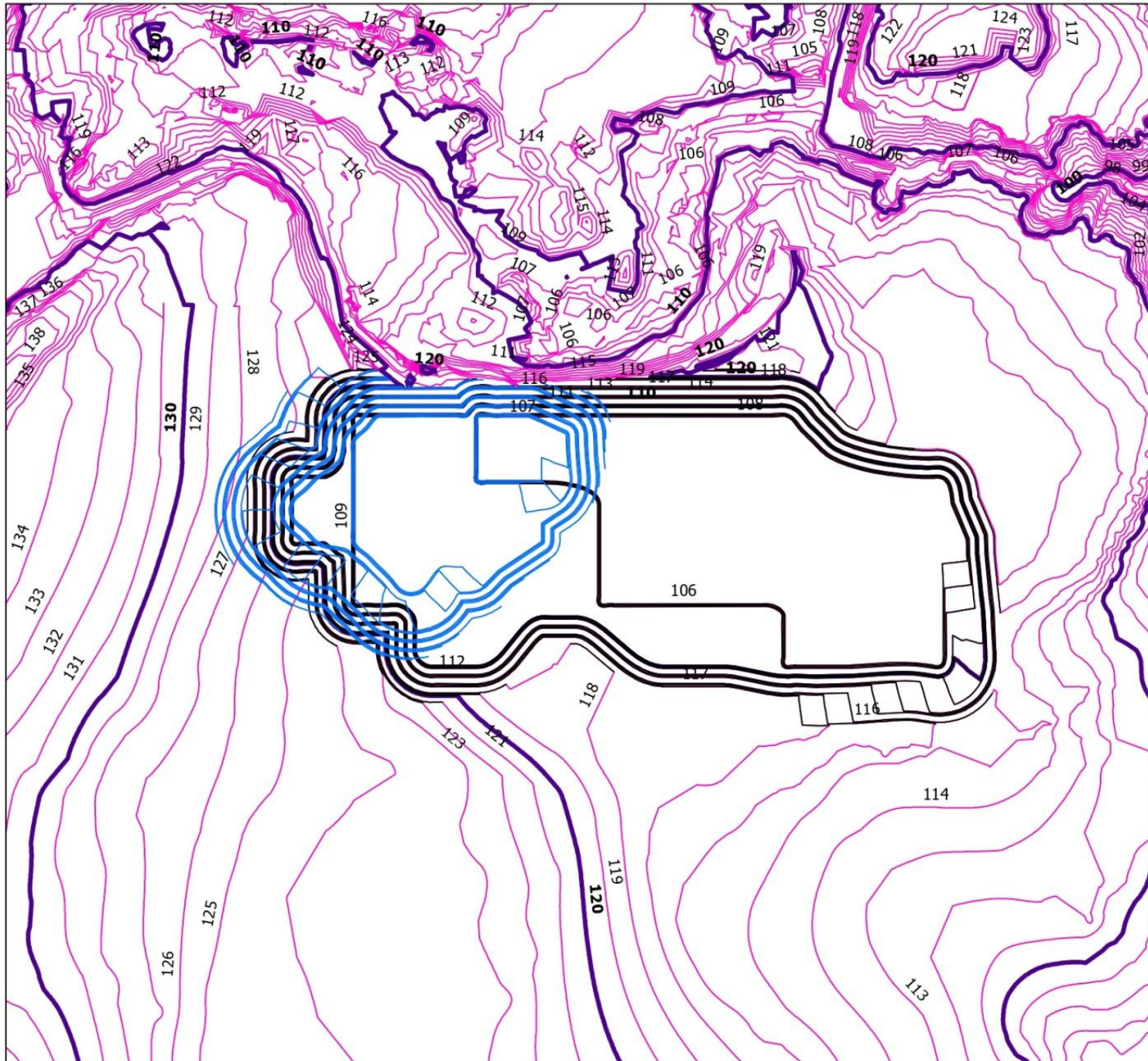
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CENTRAL SULAWESI PROVINCE

DRAWN BY	TONY CHEN D11181508
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CO-SUPERVISOR	DR. ENG. RINI NOVRIANTI SUTARDJO TUI, S.T., M.BA., M.T. NIP. 198311142014042001

THE DESIGN OF SEQUENCE 4



APPENDIX J
SEQUENCE 2 MINING PROGRESS



0 20 40 80 120 160 200 Meters


FRONT 8 MERANTI PIT,
PT ANG AND FANG BROTHER,
BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

INFORMATION:


90, 100, 110, ... = CONTOUR INDEX

128, 137, 112,... = ELEVATION

 = CONTOUR INTERVAL

 = CONTOUR LINE

 = SEQUENCE 2 DESIGN

 = SEQUENCE 1 DESIGN
(ALREADY BEEN MINED)



MINING ENGINEERING STUDY PROGRAM
FACULTY OF ENGINEERING
HASANUDDIN UNIVERSITY

THESIS
MINE PLANNING OF FRONT 8 MERANTI PIT AT PT ANG AND
FANG BROTHER, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

DRAWN BY TONY CHEN
D111181508

SUPERVISOR DR. ARYANTI VIRTANTI ANAS, S.T., M.T.
NIP. 197010052008012026

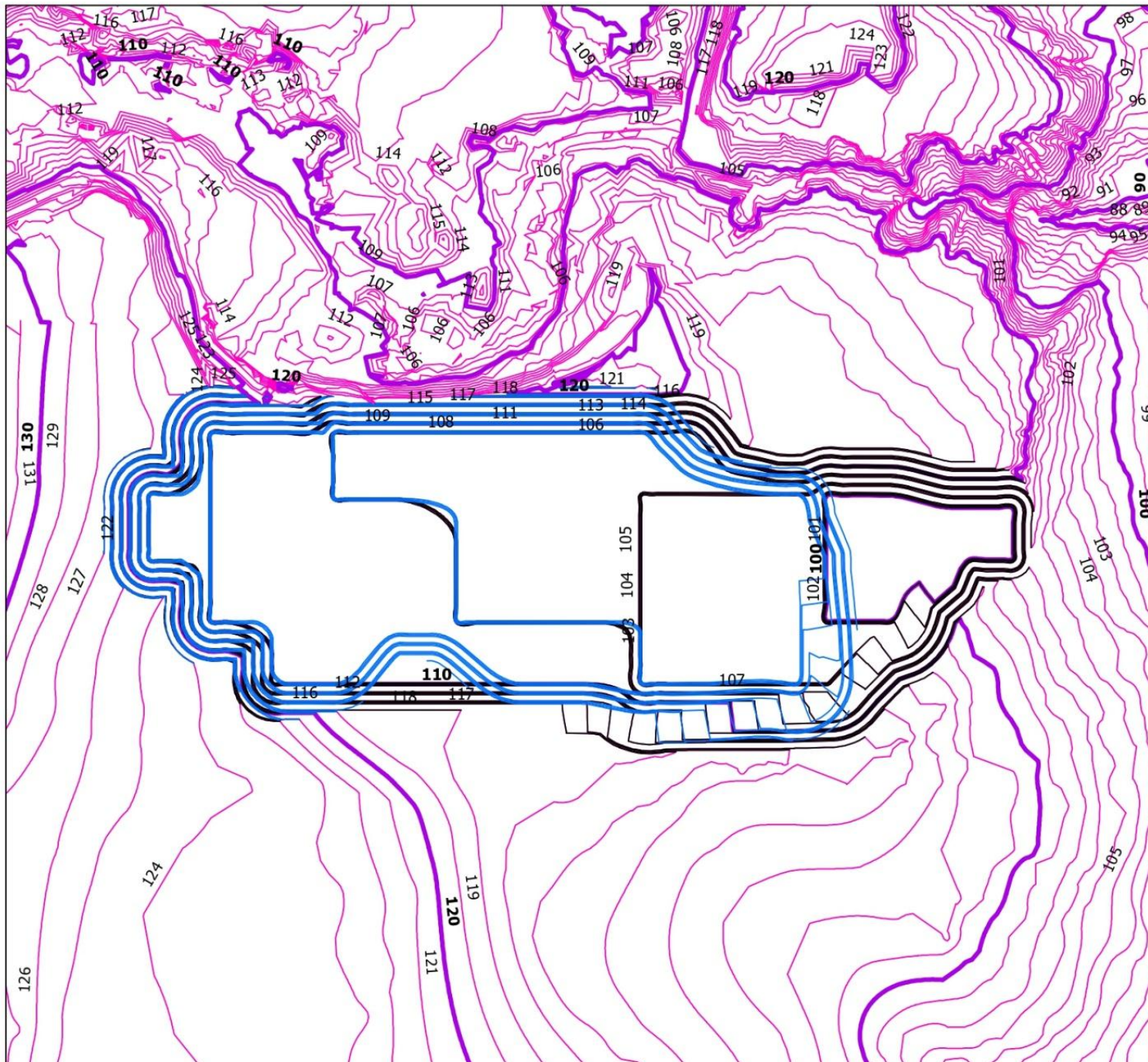
CO-SUPERVISOR DR. ENG. RINI NOVRIANTI SUTARDJO TUI, S.T., M.BA., M.T.
NIP. 198311142014042001

SEQUENCE 2 MINING PROGRESS



APPENDIX K

SEQUENCE 3 MINING PROGRESS




FRONT 8 MERANTI PIT,
PT ANG AND FANG BROTHER,
BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

INFORMATION:


90, 100, 110, ... = CONTOUR INDEX

128, 137, 112,... = ELEVATION

 = CONTOUR INTERVAL

 = CONTOUR LINE

 = SEQUENCE 3 DESIGN

 = SEQUENCE 2 DESIGN
(ALREADY BEEN MINED)



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FACULTY OF ENGINEERING
HASANUDDIN UNIVERSITY

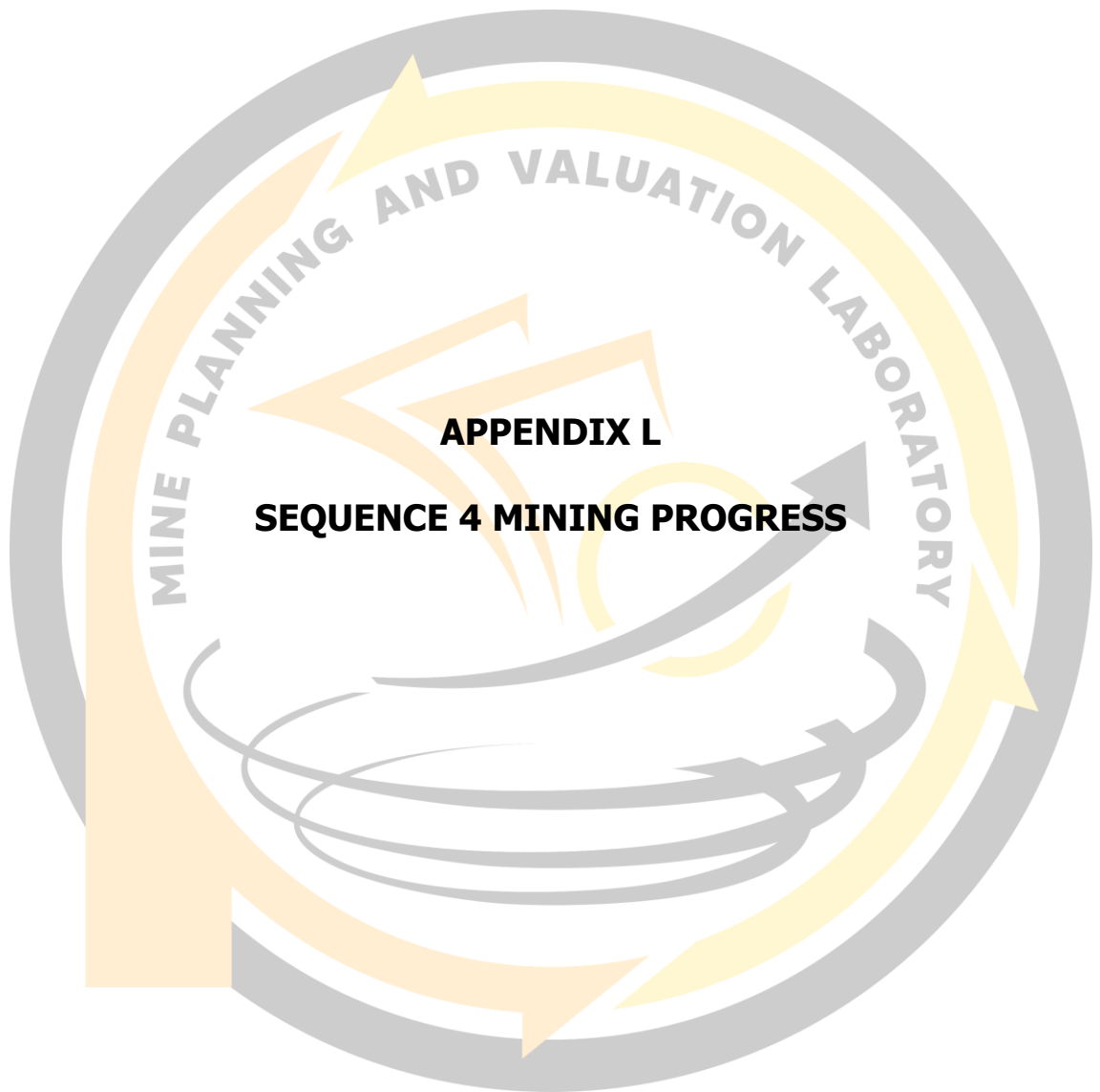
THESIS
MINE PLANNING OF FRONT 8 MERANTI PIT AT PT ANG AND
FANG BROTHER, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

DRAWN BY	TONY CHEN D111181508
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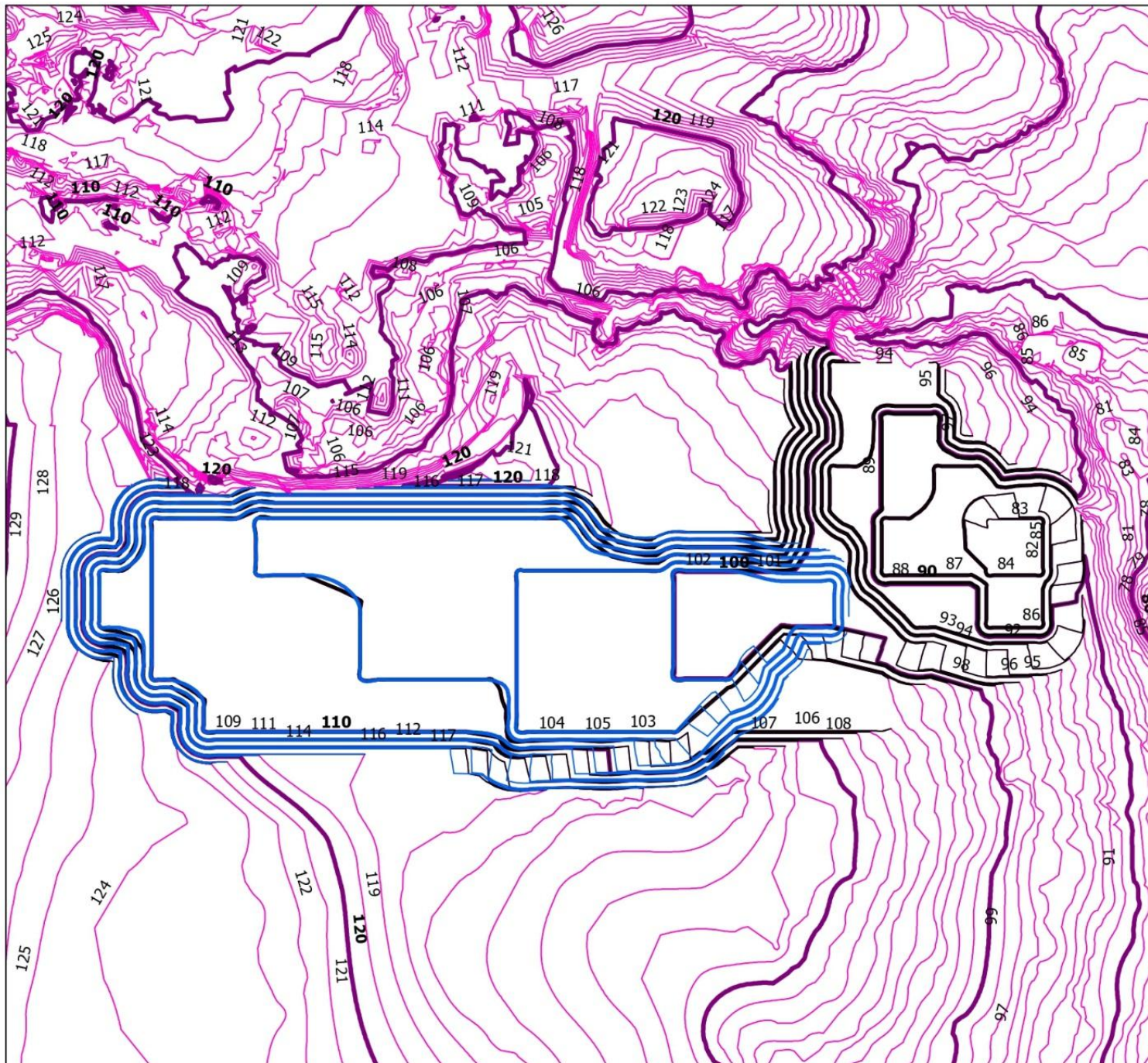
SUPERVISOR	DR. ARYANTI VIRTANTI ANAS, S.T., M.T. NIP. 197010052008012026
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CO-SUPERVISOR	DR. ENG. RINI NOVRIANTI SUTARDJO TUI, S.T., M.BA., M.T. NIP. 198311142014042001
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SEQUENCE 3 MINING PROGRESS



APPENDIX L
SEQUENCE 4 MINING PROGRESS





FRONT 8 MERANTI PIT,
PT ANG AND FANG BROTHER,
BAHODOPI DISTRICT, MOROWALI REGENCY,
CENTRAL SULAWESI PROVINCE

INFORMATION:


90, 100, 110, ... = CONTOUR INDEX

128, 137, 112,... = ELEVATION

 = CONTOUR INTERVAL

 = CONTOUR LINE

 = SEQUENCE 4 DESIGN

 = SEQUENCE 3 DESIGN
(ALREADY BEEN MINED)

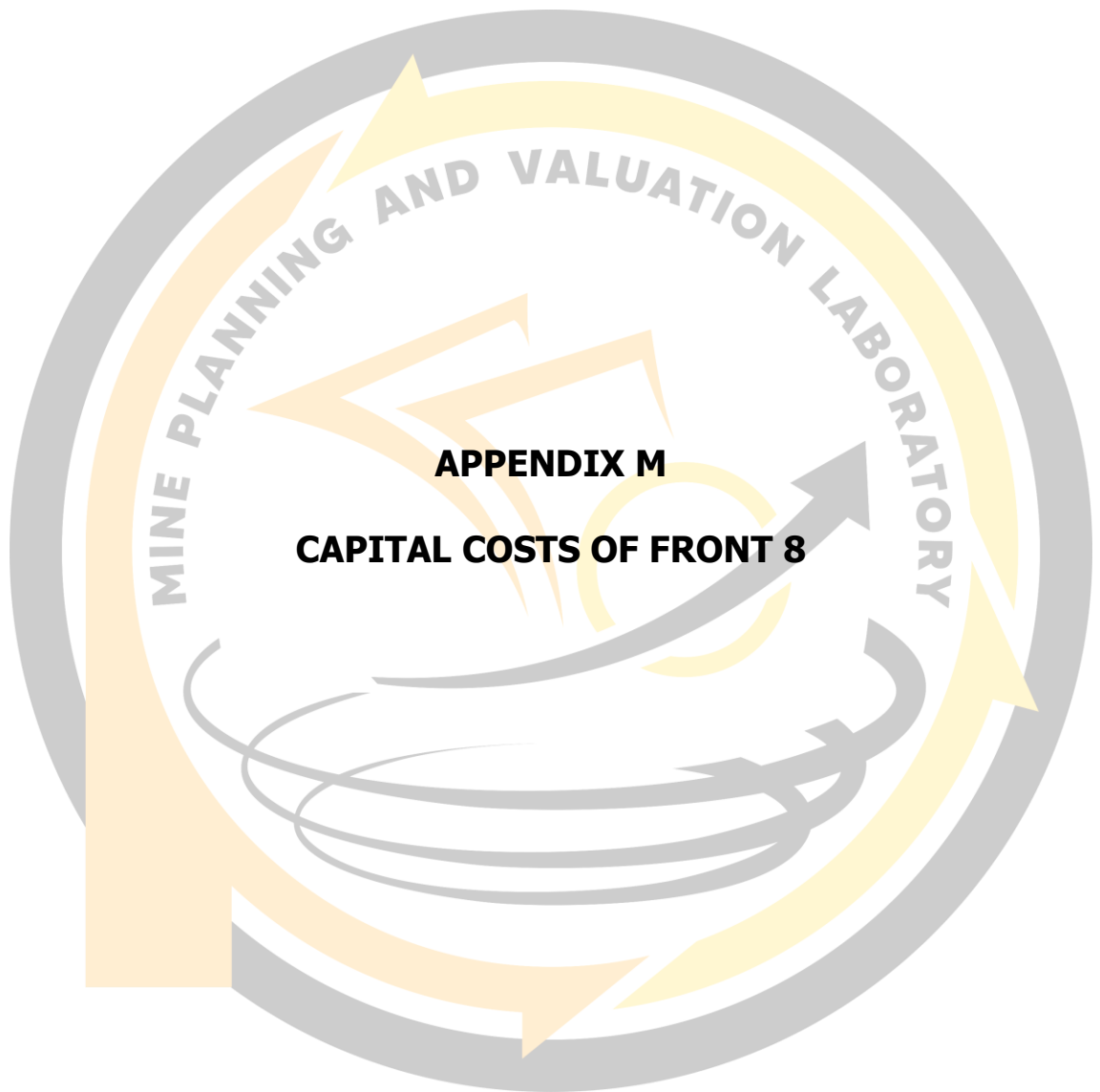


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THESIS
MINE PLANNING OF FRONT 8 MERANTI PIT AT PT ANG AND
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CENTRAL SULAWESI PROVINCE

DRAWN BY	TONY CHEN D111181508
SUPERVISOR	DR. ARYANTI VIRTANTI ANAS, S.T., M.T. NIP. 197010052008012026
CO-SUPERVISOR	DR. ENG. RINI NOVRIANTI SUTARDJO TUI, S.T., M.BA., M.T. NIP. 198311142014042001

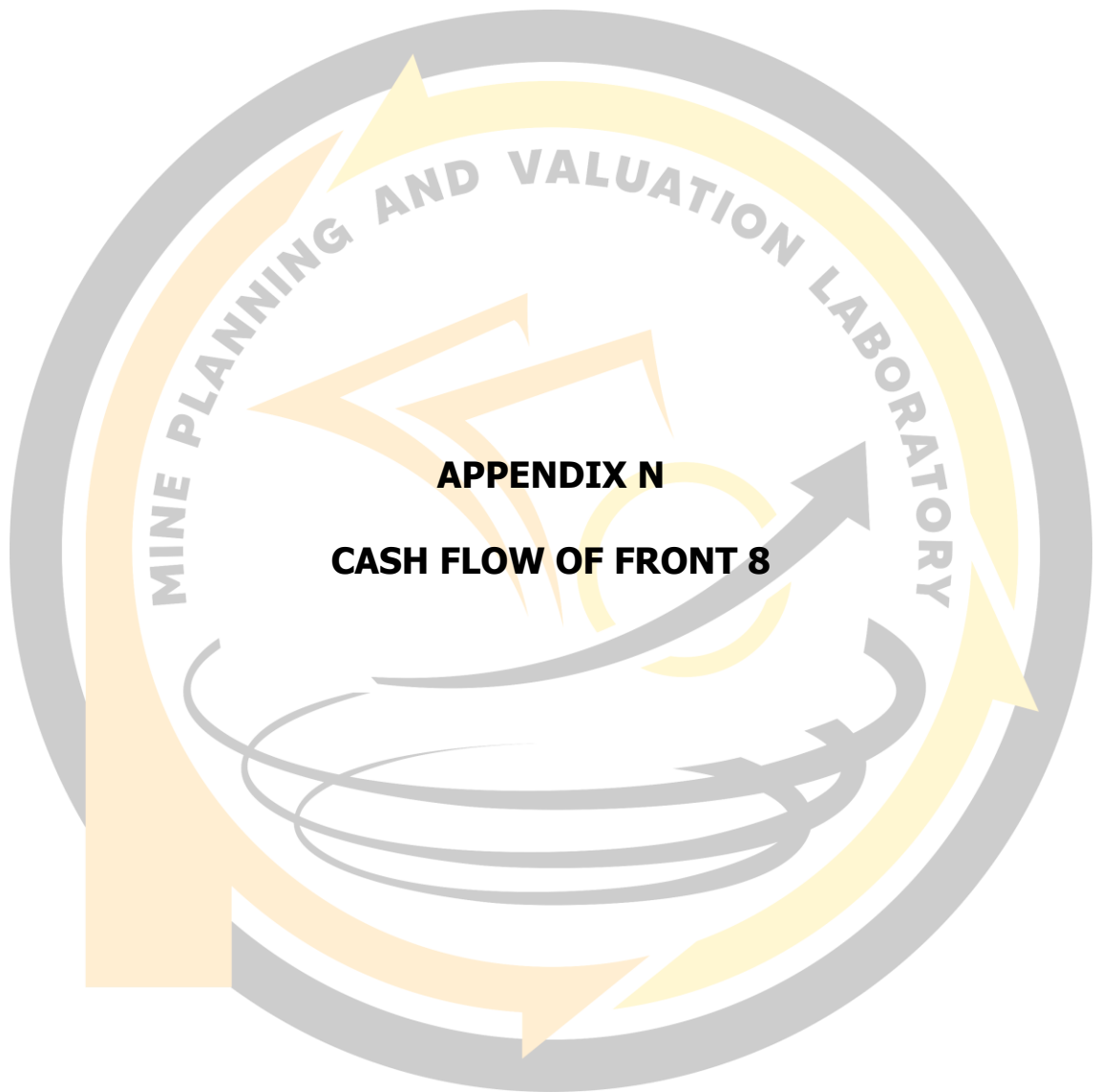
SEQUENCE 4 MINING PROGRESS



APPENDIX M
CAPITAL COSTS OF FRONT 8

Table M. Capital cost of Front 8

Parameters	Value (USD)
Licensing cost	472.35
Land acquisition cost	141,704.11
Exploration costs	
Element analysis	5,703.40
Worker salary	4,876.40
Detail exploration consultant	39,606.91
Preliminary exploration consultant	15,842.77
Geotechnical consultant	3,485.41
Groundwater tapping cons	633.71
General research consultant	6,178.68
Mineral logging	1,425.85
Map making	1,159.69
Sample preparation	1,425.85
Rental of drilling tools and supporting coordination	3,136.87
Construction costs	
Dock	2,985.59
Road	29,855.87
Construction consultant	746.40
Security posts	199.04
Generator house	373.20
Preparation house	746.40
Site office	995.20
Stockyar	35,827.04
Fuel tank	1,990.39
Workshop	746.40
Feasibility study cost	708.52
Environment impact analysis	1,180.87
Equipment cost	1,018,582.96
Total	1,320,589.85



APPENDIX N
CASH FLOW OF FRONT 8

Table N. Cash flow of Front 8

Year	JAN (USD)	FEB (USD)	MAR (USD)	APR (USD)	MAY (USD)
Production	0	69,609.00	56,485.00	66,562.00	30,469.00
Nickel price	0	38.00	38.00	38.00	38.00
Gross revenue	0	2,645,142.00	2,146,430.00	2,529,356.00	1,157,822.00
Licensing cost	472.35	0	0	0	0
Land acquisition cost	141,704.11	0	0	0	0
Exploration cost	83,475.53	0	0	0	0
Construction cost	74,465.51	0	0	0	0
Feasibility study cost	708.52	0	0	0	0
Environmental analysis cost	1,180.87	0	0	0	0
Equipment cost	1,018,582.96	-	-	-	-
Working capital	-	797,837.59	-	-	-
Overhead cost	-	22,186.31	22,186.31	22,186.31	22,186.31
General expenses	-	10,439.87	10,439.87	10,439.87	10,439.87
Operating cost	-	71,256.42	85,998.84	106,615.99	53,374.69
Salary	-	6,507.52	6,507.52	6,507.52	6,507.52
Total Cost	1,320,589.85	908,227.70	125,132.53	145,749.68	92,508.38
Depreciation	-	7,867.65	7,867.65	7,867.65	7,867.65
Royalty	-	264,514.20	214,643.00	252,935.60	115,782.20
Earning Before Interest and Tax (EBIT)	(1,320,589.85)	1,464,532.45	1,798,786.82	2,122,803.07	941,663.78
Interest	-	3,521.57	3,521.57	3,521.57	3,521.57
Principal	-	8,803.93	8,803.93	8,803.93	8,803.93
Taxable Income	-	1,716,721.14	2,001,104.32	2,363,413.17	1,045,120.47
Tax	-	343,344.23	400,220.86	472,682.63	209,024.09
Earning After Interest and Tax (EAIT)	(1,320,589.85)	1,121,188.22	1,398,565.96	1,650,120.44	732,639.68
Depreciation	-	7,867.65	7,867.65	7,867.65	7,867.65
Cash Flow	(1,320,589.85)	1,129,055.87	1,406,433.61	1,657,988.08	740,507.33






Lampiran B 10

Kartu Konsultasi Tugas Akhir

JUDUL: Mine Planning of Front 8 Meranti Pit at PT Ang and Fang Brother, Marabali Regency, Central Sulawesi Province

(Konsultasi minimal 8 kali)

TANGGAL	MATERI KONSULTASI	PARAF DOSEN
30 Juli 2022 1 Juli	<ul style="list-style-type: none"> - Penggunaan huruf kapital / huruf kecil tidak tepat. - Penggunaan / penulisan tanda baca kurang tepat - Tidak ada kalimat pengantar antara subjudul 	
8 Juli 2022	<ul style="list-style-type: none"> - Perbaiki lampiran - Perbaiki format daftar pustaka - Perbaiki kata latar belakang. - Perbaiki tujuan 	
15 Juli 2022	<ul style="list-style-type: none"> - Perbaiki abstrak - Perbaiki grammar - Perbaiki: kata pengantar. 	
5 Agustus 2022	<ul style="list-style-type: none"> - Perbaiki poster - Perbaiki istilah resource dan reserve - Perbaiki artikel ilmiah 	

TANGGAL	MATERI KONSULTASI	PARAF DOSEN
5 Agustus 2022	- Perbaiki abstrak	/r
12 Agustus 2022	<ul style="list-style-type: none"> - Penggunaan huruf kapital / huruf kecil tidak tepat. - Lengkapi lampiran - Judul tabel diperbaiki (font normal) 	/r
19 Agustus 2022	<ul style="list-style-type: none"> - Perbaiki artikel - Perbaiki lembar pengesahan 	/r
9 September 2022	<ul style="list-style-type: none"> - Perbaiki isi artikel - Perbaiki istilah resource and reserve - Perbaiki tabel hasil estimasi 	/r
16 September 2022	<ul style="list-style-type: none"> - Perbaiki lembar pengesahan - Perbaiki daftar lampiran, tabel, dan gambar 	/r.