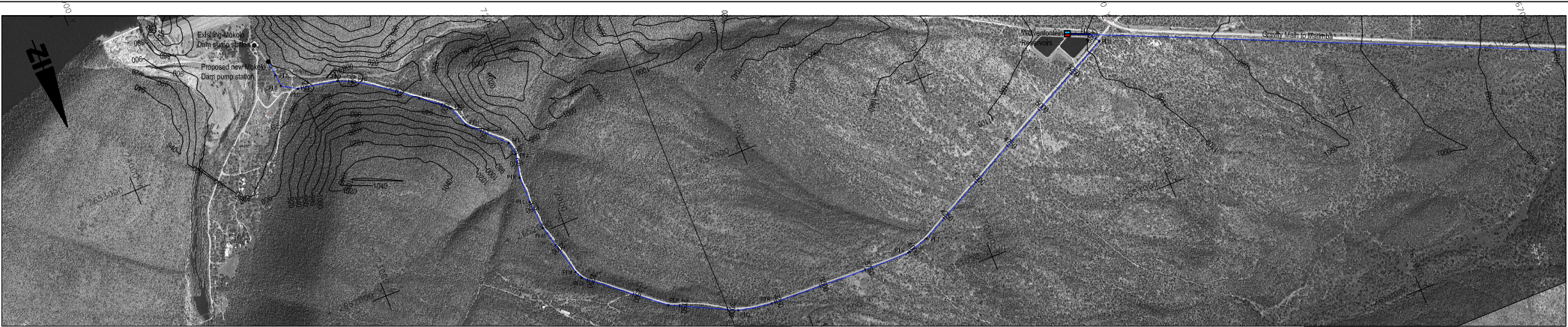
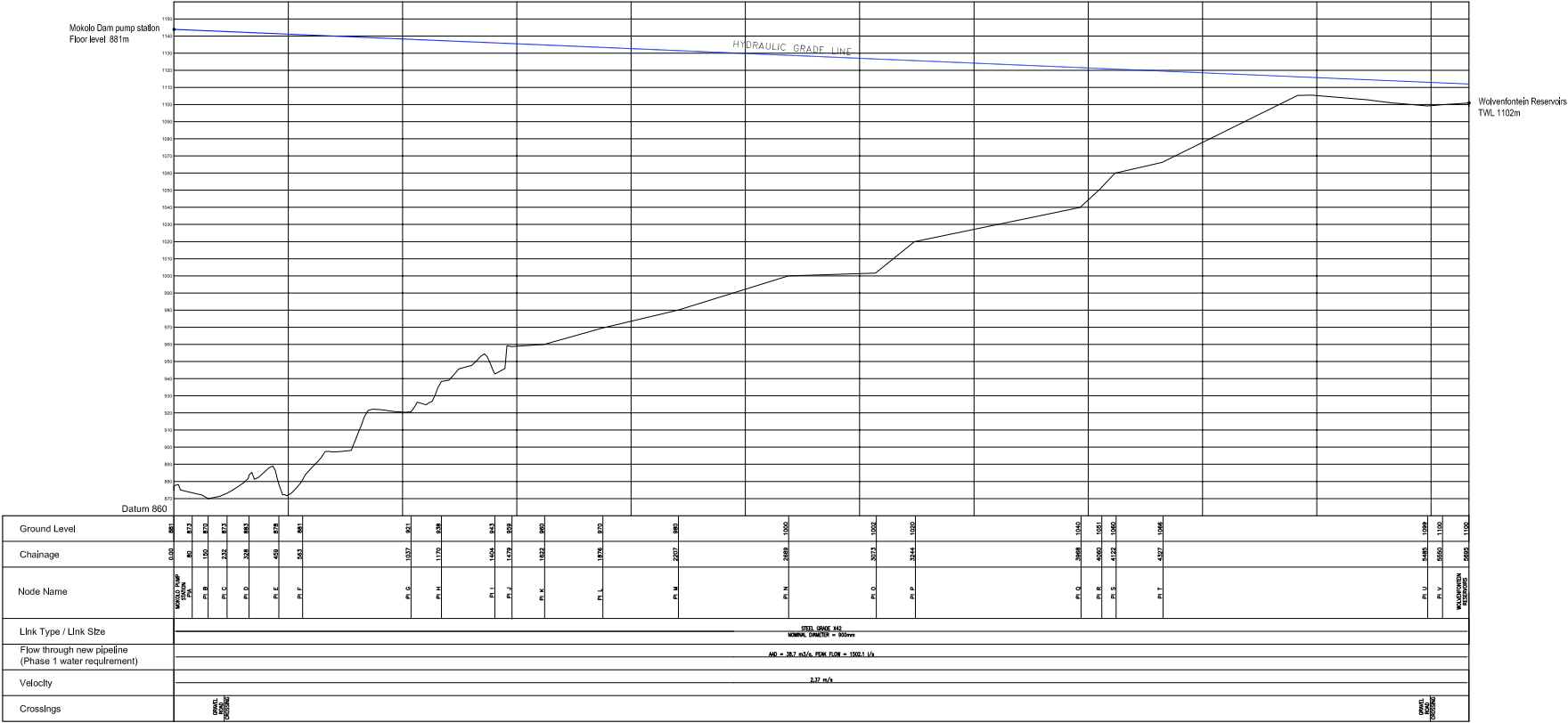




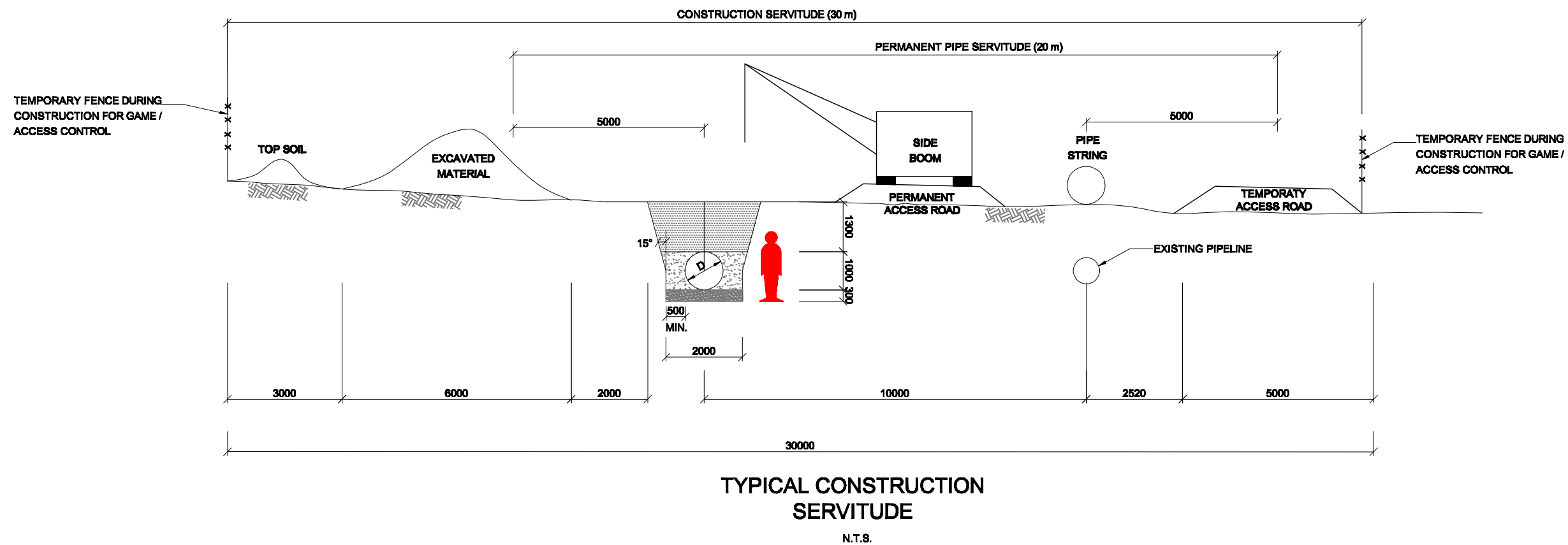
Plan Scale 1:7500



Ground Level	0+00	0+10	0+20	0+30	0+40	0+50	0+60	0+70	0+80	0+90	0+100	0+200	0+300	0+400	0+500	0+600	0+700	0+800	0+900	0+1000
Chainage	0+00	0+10	0+20	0+30	0+40	0+50	0+60	0+70	0+80	0+90	0+100	0+200	0+300	0+400	0+500	0+600	0+700	0+800	0+900	0+1000
Node Name	MOKOLO DAM PUMP STATION																			WOLVENFONTEIN RESERVOIR
Link Type / Link Size	STEEL PIPE 400mm nominal diameter = 300mm																			
Flow through new pipeline (Phase 1 water requirement)	ND = 36.7 m³/s PEAK FLOW = 100.1 l/s																			
Velocity	2.37 m/s																			
Crossings																				

Mokolo Dam Pump Station to Wolvenfontein Reservoir
Horizontal Scale 1:7500
Vertical Scale 1:1000

NOTES:



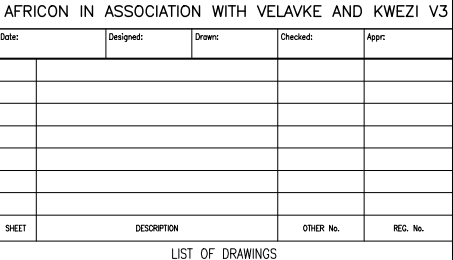
AFRICON IN ASSOCIATION WITH VELAVKE AND KWEZI V3

Date:	Designed:	Drawn:	Checked:	Appr:
SHEET	DESCRIPTION		OTHER No.	REC. No.

LIST OF DRAWINGS

[illegible]

10100FTALUNDRIZERYT, DRAMING

[illegible]

DEPARTMENT OF WATER AFFAIRS AND FORESTRY  HEAD OFFICE DIRECTORATE: OPTIONS ANALYSIS PRIVATE BAG X313 TRETORIA 0001 	
P. YAKO DIRECTOR GENERAL	
DESIGN:	TRACED:
DRAWN:	CHECKED:
APPROVED	ENGINEER:
SIGNATURE	RANK:
	CHIEF ENGINEER

DEPARTMENT OF WATER AFFAIRS AND FORESTRY REPUBLIC OF SOUTH AFRICA			
MOKOLO-CROCODILE WATER AUGMENTATION PROJECT			
FEASIBILITY STUDY: PIPELINES			
TYPICAL DETAILS: PIPELINES PARALLEL OR CROSSING RAIL / ROAD RESERVES			
PROVINCE: LIMPOPO	DISTRICT: WATERBERG	KEYWORDS:	OTHER No.
	TENDER No.	CONTRACT No. WP9528	SHEET REG. No.
DIRECTOR	CALCULATION FILE: WP 9528/TD/CS/002		1 OF 1



N.T.S.



N.T.S.



Date:	Designed:	Drawn:	Checked:	Appr:
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SHEET		DESCRIPTION		OTHER No.		REC. No.

LIST OF DRAWINGS

SCALES:

[illegible]

REVISION				
MOD. NO.	DATE	DESCRIPTION	FOR	DRAWN
A	21/05/09	FEASIBILITY STUDY	BCV	



DIRECTOR GENERAL	
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TRACED

	CHECK
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ANK	ENG
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CHIEF ENGINEER

REPUBLIC OF SOUTH AFRICA

MOKOLO-CROCODILE WATER AUGMENTATION PROJECT

FEASIBILITY STUDY: PIPELINES

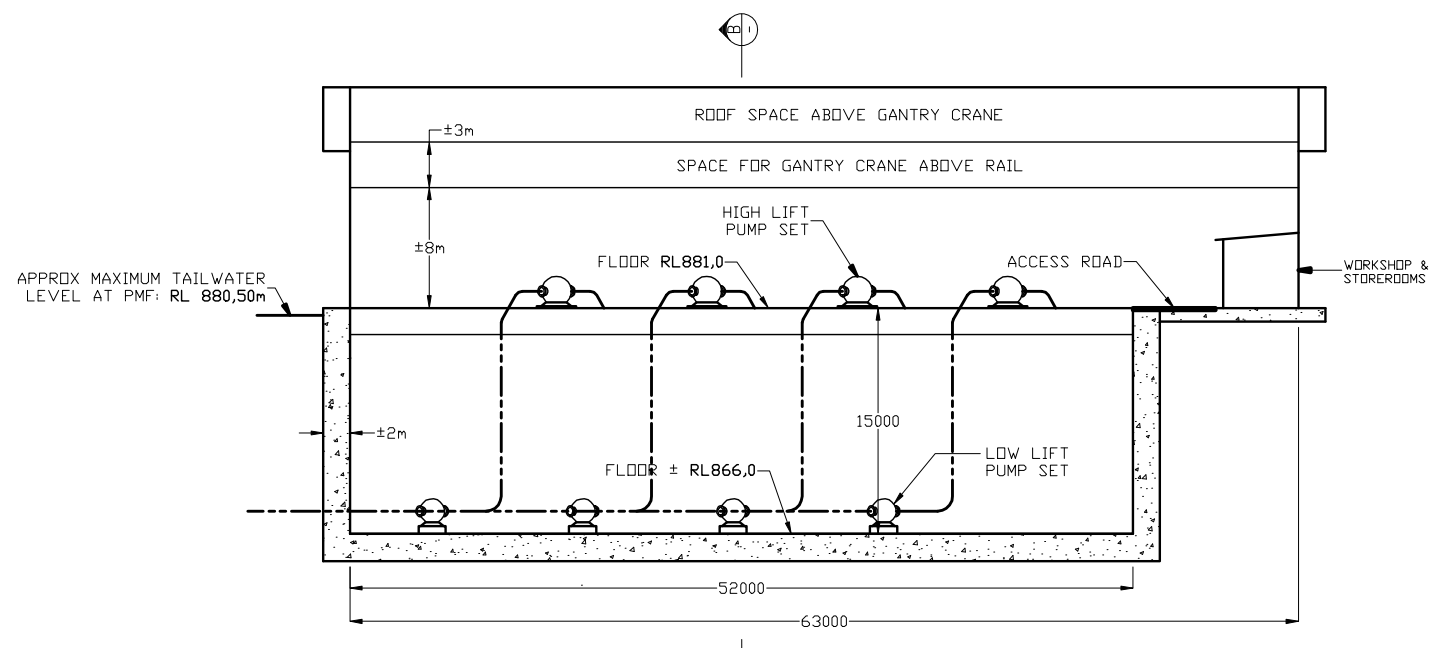
TYPICAL DETAILS: PIPELINE PARALELL OR CROSSING PROVINCIAL ROAD RESERVE

PROVINCE:	LIMPOPO	DISTRICT:	WATERBERG	KEYCODES:						OTHER No.	
		TENDER No.	.	CONTRACT No.	WP9528			SHEET 1 of 1		RES. No.	
REF/TFD		CALCULATION FILE: WP 9528/TD/CS/003									

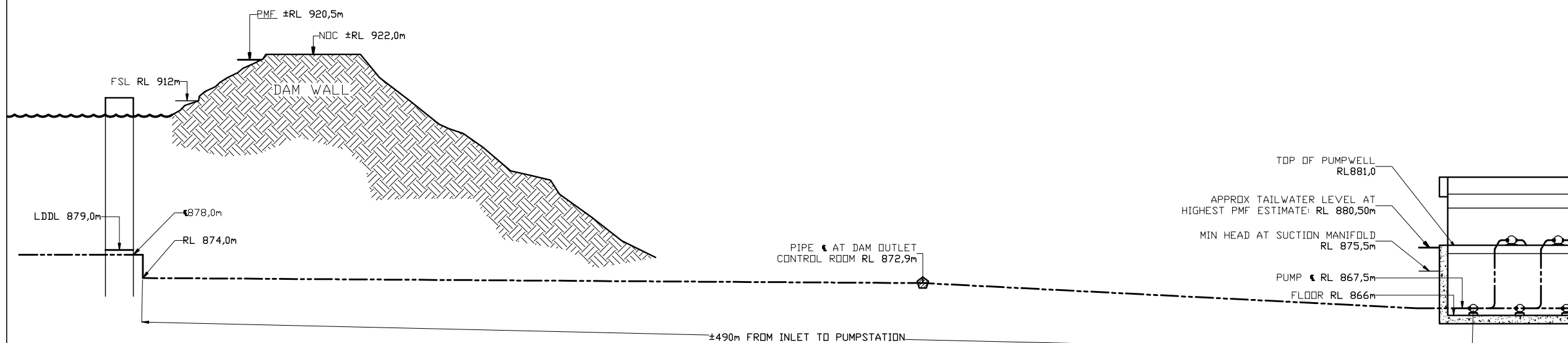
104100FT/401000ZSERV. DRAWINGS



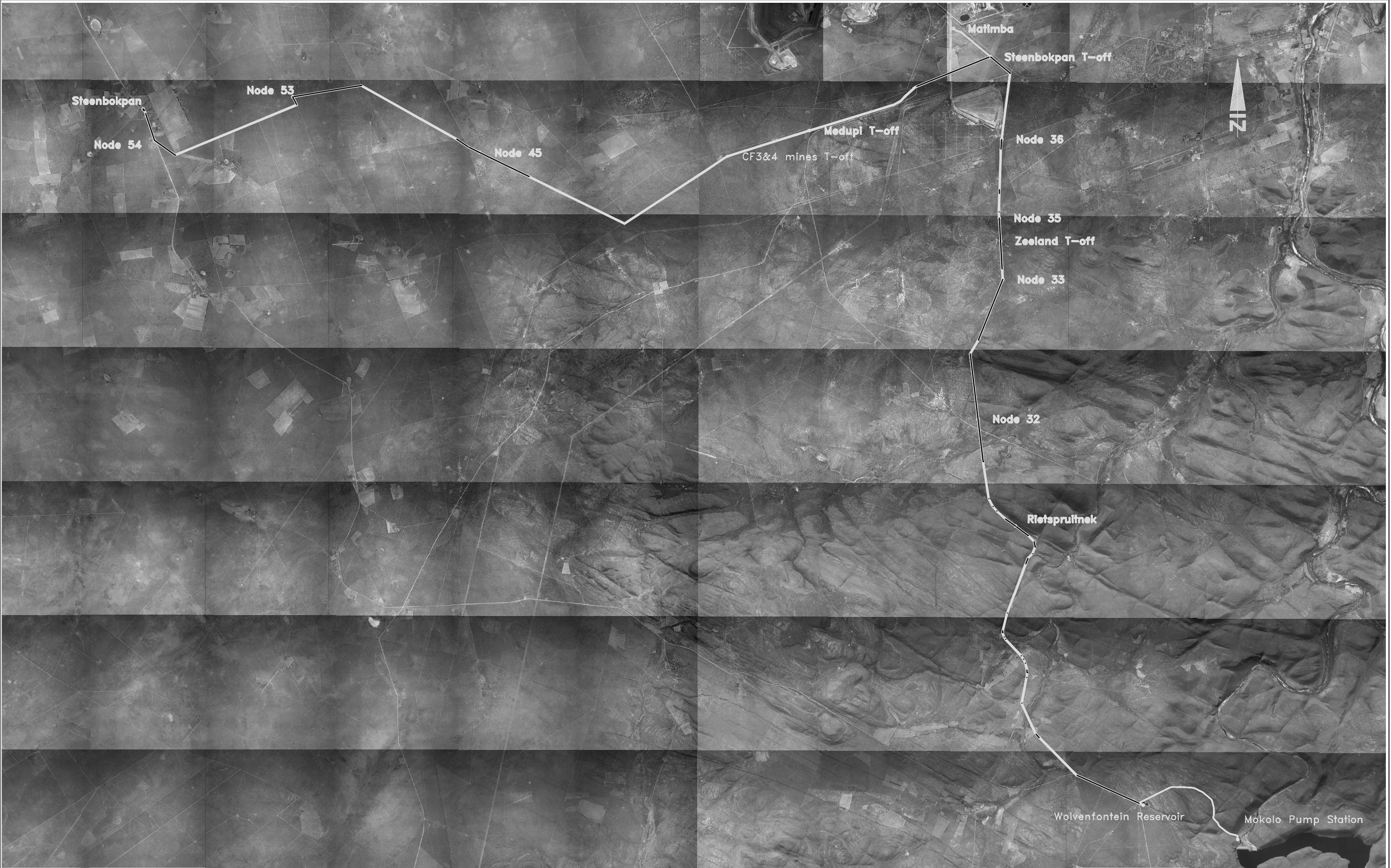
10110AFTAU10RZERYT, DRAMING



SECTION A-A
SCALE 1:500



DEPARTMENT OF WATER AFFAIRS AND FORESTRY REPUBLIC OF SOUTH AFRICA									
MOKOLO—CROCODILE WATER AUGMENTATION PROJECT									
PROJECT					DRAWING DESCRIPTION				
MOKOLO AND CROCODILE (WEST) WATER AUGMENTATION PROJECT (MCWAP) FEASIBILITY STUDY: TECHNICAL MODULE PROJECT WP 95285					MOKOLO DAM PUMPSTATION CROSS SECTIONS				
PROVINCE:	LIMPOPO	DISTRICT:	WATERBERG	KEYWORDS:					OTHER No.
TENDER No.				CONTRACT No.		WP9528		SHEET	REC. No.
DIRECTOR		CALCULATION FILE:		WP 9528/DD/MTS/001		1 OF 1			





AFRICON IN ASSOCIATION WITH VELAVKE AND KWEZI V3

SCALES:

LONGITUDINAL SECTION

PLAN:  SCALE 1:50 000

SETTING OUT POINTS:

LOCATION / NUMBER	Y	X	LEVEL (mOD)

REV	NO.	DATE	DESCRIPTION	FOR	CHKD
A	01/11/08	FOR FEASIBILITY REPORT - DRAFT		XXX	
B	01/05/09	FOR FEASIBILITY REPORT - FINAL		XXX	

DEPARTMENT OF WATER AFFAIRS AND FORESTRY

HEAD OFFICE
DIRECTORATE: OPTIONS ANALYSIS
PRIVATE BAG 1313
PRETORIA 0001

P. YAKO
DIRECTOR GENERAL

DESIGN: N.J.	TRACED: J.v.d.M.
DRAWN: W.v.S.	CHECKED: J.v.d.M.
SIGNATURE: 	DATE: 

D. SMOCK
CHIEF ENGINEER

DEPARTMENT OF WATER AFFAIRS AND FORESTRY REPUBLIC OF SOUTH AFRICA			
MOKOLO-CROCODILE WATER AUGMENTATION PROJECT			
PHASE 1: PIPELINE FROM MOKOLO DAM (FEASIBILITY STAGE)			
LAYOUT: PHASE 1			
PROJECT: LIMPOPO	DISTRICT: WATERBERG	KEYWORDS: 	
TENDER NO. 	CONTRACT NO. WP9528	SHEET 1 of 4	REL. NO. 
DRAWING NO. WP9528/LD/MTS/003/B			

