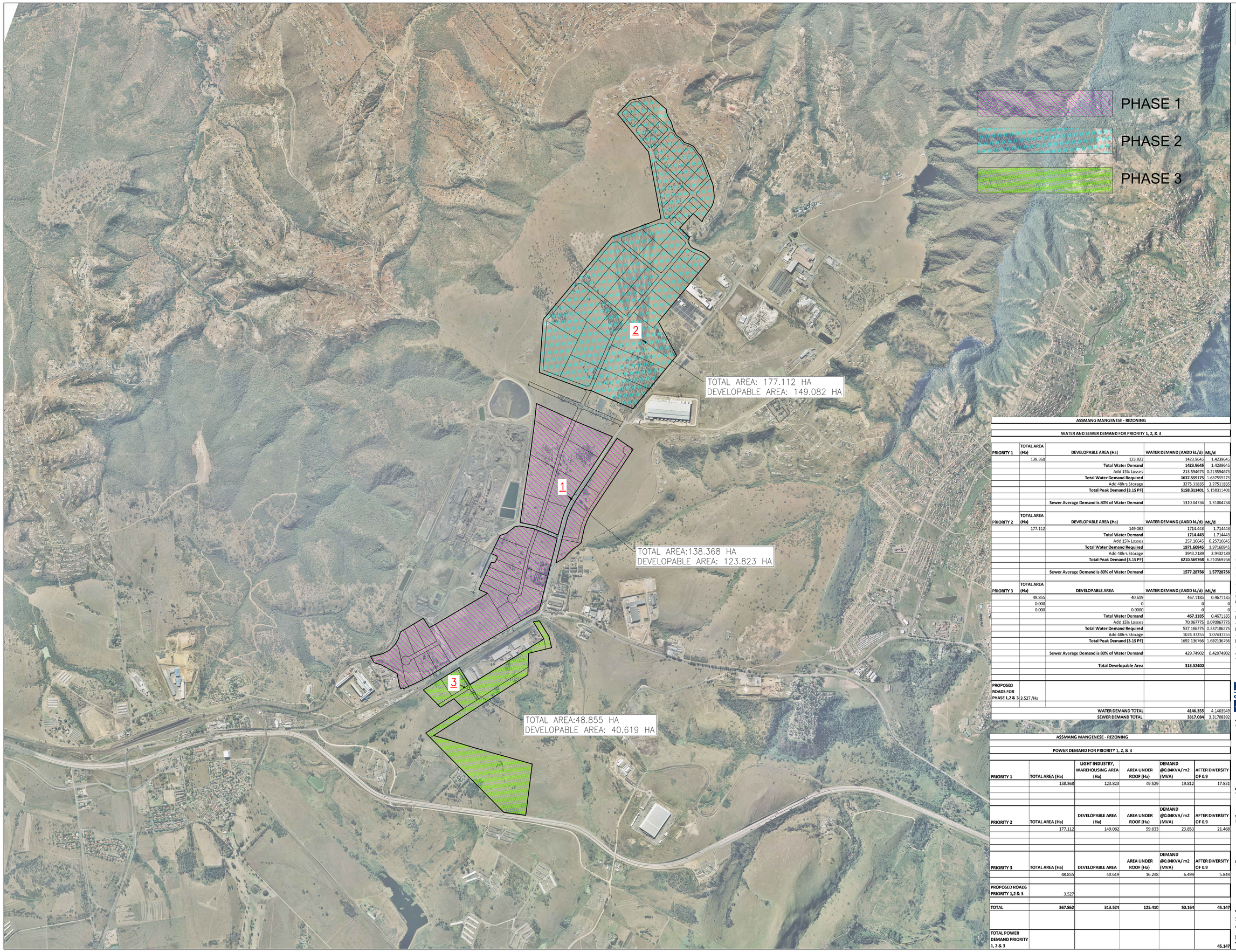

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REFERENCE DRAWING

ASSMANG MANGENESE - REZONING

WATER AND SEWER DEMAND FOR PRIORITY 1, 2, & 3

PRIORITY 1	TOTAL AREA (Ha)	DEVELOPABLE AREA (Ha)	WATER DEMAND (AADD kL/d)	ML/d
	138.368	123.823	1423.9645	1.4239645
		Total Water Demand	**1423.9645**	1.4239645
		Add 15% Losses	213.594675	0.213594675
		Total Water Demand Required	**1637.559175**	1.637559175
		Add 48hrs Storage	3275.11835	3.275118335
		Total Peak Demand (3.15 PF)	**5158.311401**	5.158311401
		Sewer Average Demand is 80% of Water Demand	1310.04734	1.310004734
PRIORITY 2	**TOTAL AREA (Ha)**	**DEVELOPABLE AREA (Ha)**	**WATER DEMAND (AADD kL/d)**	**ML/d**
	177.112	149.082	1714.443	1.714443
		Total Water Demand	**1714.443**	1.714443
		Add 15% Losses	257.16645	0.257166645
		Total Water Demand Required	**1971.60945**	1.971609945
		Add 48hrs Storage	3943.2189	3.943218 9
		Total Peak Demand (3.15 PF)	**6210.569768**	6.210569768
		Sewer Average Demand is 80% of Water Demand	**1577.28756**	**1.577287568**
PRIORITY 3	**TOTAL AREA (Ha)**	**DEVELOPABLE AREA**	**WATER DEMAND (AADD kL/d)**	**ML/d**
	48.855	40.619	467.1185	0.4671185
	0.000	0	0	0
	0.000	0.0000	0	0
		Total Water Demand	**467.1185**	0.4671185
		Add 15% Losses	70.067775	0.070067775
		Total Water Demand Required	537.186275	0.537186275
		Add 48hrs Storage	1074.37255	1.074372255
		Total Peak Demand (3.15 PF)	1692.136766	1.692136766
		Sewer Average Demand is 80% of Water Demand	429.74902	0.42974902
		Total Developable Area	**313.52400**	
PROPOSED ROADS FOR PHASE 1,2 & 3	3.527 /Ha			
		WATER DEMAND TOTAL	**4146.355**	4.1463549
		SEWER DEMAND TOTAL	**3317.084**	3.317083992

ASSMANG MANGENESE - REZONING

POWER DEMAND FOR PRIORITY 1, 2, & 3

PRIORITY 1	TOTAL AREA (Ha)	LIGHT INDUSTRY, WAREHOUSING AREA (Ha)	AREA UNDER ROOF (Ha)	DEMAND @0.04KVA/ m2 (MVA)	AFTER DIVERSITY OF 0.9
	138.368	123.823	49.529	19.812	17.831
PRIORITY 2	**TOTAL AREA (Ha)**	**DEVELOPABLE AREA (Ha)**	**AREA UNDER ROOF (Ha)**	**DEMAND @0.04KVA/ m2 (MVA)**	**AFTER DIVERSITY OF 0.9**
	177.112	149.082	59.633	23.853	21.468
PRIORITY 3	**TOTAL AREA (Ha)**	**DEVELOPABLE AREA**	**AREA UNDER ROOF (Ha)**	**DEMAND @0.04KVA/ m2 (MVA)**	**AFTER DIVERSITY OF 0.9**
	48.855	40.619	16.248	6.499	5.849
PROPOSED ROADS PRIORITY 1,2 & 3	3.527				
TOTAL	**367.862**	**313.524**	**125.410**	**50.164**	**45.147**
TOTAL POWER DEMAND PRIORITY 1, 2 & 3					**45.147**

REV	DESCRIPTION	DR.	APP.	DATE
D	ISSUED FOR DISCUSSION	SKM	KH	24/10/22
C	ISSUED FOR DISCUSSION	SKM	KH	17/10/22
B	ISSUED FOR DISCUSSION	RN	KH	19/09/22
A	ISSUED FOR DISCUSSION	ZC	KH	02/08/22

	INITIALS	SIGN	DATE
DESIGNED	RK		
DRAWN	ZC		
PROJECT ENG.	KH		
APPROVED			

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CLIENT LOGO

CLIENT
ASSMANG MANGANESE

PROJECT
ASSMANG REZONING

TITLE
WATER, SEWER AND POWER DEMAND 367.862 HA SCENARIO

SCALE : 1:10000

DRAWING No. 20207-DSWE 01 REV D

KT-pmb-A0.dwg (SCALE) A0 SHEET