

Chapter 6

Conclusion



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A word in closing

This dissertation explored how a landscape design intervention may strengthen the experience of regional identity along a freeway. This could be achieved by embracing and protecting the elements of our natural and man-made environments that make them unique, be they a view, a landmark or an abandoned quarry. The investigation considered a freeway route connecting O.R Tambo International Airport to the capital city of Pretoria, which became the testing ground through which to unlock the regional landscape.

Although the dissertation provides no evidence of an enhanced experience it further more challenges the reader about issues concerning regional character, and specifically aesthetic values related to the Gauteng Highveld regional landscape.

The dissertation serves as a challenge to the discipline of landscape architecture and our role along freeways.

Appendices

WATER MANAGEMENT MODEL

A WATER RESOURCE INFORMATION (YIELD, m³)

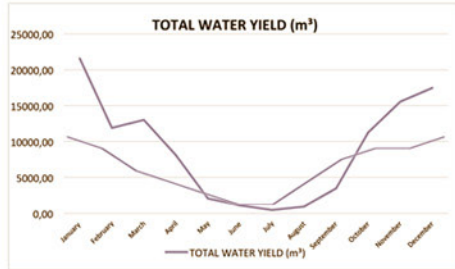
A1 RAIN WATER HARVESTING DATA

DESCRIPTION	AREA (m ²)	RUNOFF COEFF. (C)
Roof structures	0	0,9
Paving A	198371,6	0,8
Paving B	0	0,7
Lawn	0	0,1
Other	0	0,3
TOTAL AREA (A)	198371,60	
WEIGHTED C		0,80

A3 TOTAL WATER YIELD

MONTH	AVE RAINFALL, P (m)	CATCHMENT YIELD (m ³) (Yield = PxAxC)	ALTERNATIVE WATER SOURCE (m ³)	TOTAL WATER YIELD (m ³)
January	0,136	21582,83	0,00	21582,83
February	0,075	11902,30	0,00	11902,30
March	0,082	13013,18	0,00	13013,18
April	0,051	8093,56	0,00	8093,56
May	0,013	2063,06	0,00	2063,06
June	0,007	1110,88	0,00	1110,88
July	0,003	476,09	0,00	476,09
August	0,006	952,18	0,00	952,18
September	0,022	3491,34	0,00	3491,34
October	0,071	11267,51	0,00	11267,51
November	0,098	15552,33	0,00	15552,33
December	0,110	17456,70	0,00	17456,70
ANNUAL AVE.	0,674	106961,97	0,00	106961,97

By Fourie Pretorius (October 2014)



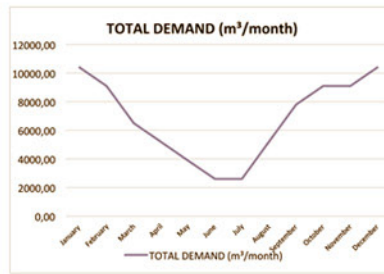
B WATER DEMAND

B3 EVAPORATION LOSS (For 'open' reservoirs)

MONTH	AREA OF RESERVOIR (m ²): 64954		TOTAL LOSS (m ³ /month)
	EVAPORATION RATE (m/week)	EVAPORATION RATE (m/month)	
January	0,04	0,16	10392,64
February	0,035	0,14	9093,56
March	0,025	0,1	6495,4
April	0,02	0,08	5196,32
May	0,015	0,06	3897,24
June	0,01	0,04	2598,16
July	0,01	0,04	2598,16
August	0,02	0,08	5196,32
September	0,03	0,12	7794,48
October	0,035	0,14	9093,56
November	0,035	0,14	9093,56
December	0,04	0,16	10392,64
ANNUAL TOTAL	0,32	1,26	81842,04

35mm - 45mm/week in summer

B4 TOTAL WATER LOSS & DEMAND



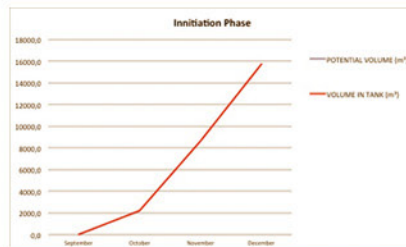
MONTH	TOTAL DEMAND (m ³ /month)
January	10392,64
February	9093,56
March	6495,40
April	5196,32
May	3897,24
June	2598,16
July	2598,16
August	5196,32
September	7794,48
October	9093,56
November	9093,56
December	10392,64
ANNUAL TOTAL	81842,04

C WATER BUDGET

RESERVOIR CAPACITY (m ³):	38000
MIN VOLUME (m ³):	0

C1 WATER BUDGET INNIATION PHASE

MONTH	YIELD (m ³ /month)	DEMAND (m ³ /month)	MONTHLY BALANCE	POTENTIAL VOLUME (m ³)	VOLUME IN TANK (m ³)
September	3491,3	7794,5	-4303,1	0,0	0,0
October	11267,5	9093,6	2173,9	2173,9	2173,9
November	15552,3	9093,6	6458,8	8632,7	8632,7
December	17456,7	10392,6	7064,1	15696,8	15696,8
ANNUAL TOTAL	47767,9	36374,2	11393,6		



C2 WATER BUDGET YEAR 1

MONTH	YIELD (m ³ /month)	DEMAND (m ³ /month)	MONTHLY BALANCE	POTENTIAL VOLUME (m ³)	VOLUME IN TANK (m ³)
January	21582,8	10392,6	11190,2	26887,0	26887,0
February	11902,3	9093,6	2808,7	29695,7	29695,7
March	13013,2	6495,4	6517,8	36213,5	36213,5
April	8093,6	5196,3	2897,2	39110,7	38000,0
May	2063,1	3897,2	-1834,2	37276,6	36165,8
June	1110,9	2598,2	-1487,3	35789,3	34678,5
July	476,1	2598,2	-2122,1	33667,2	32556,5
August	952,2	5196,3	-4244,1	29423,1	28312,3
September	3491,3	7794,5	-4303,1	25119,9	24009,2
October	11267,5	9093,6	2173,9	27293,9	26183,1
November	15552,3	9093,6	6458,8	33752,6	32641,9
December	17456,7	10392,6	7064,1	40816,7	38000,0
ANNUAL AVE.	106962,0	81842,0	25119,9		

