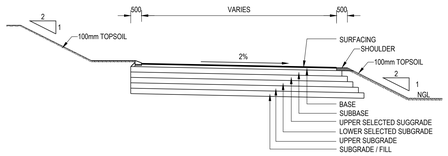
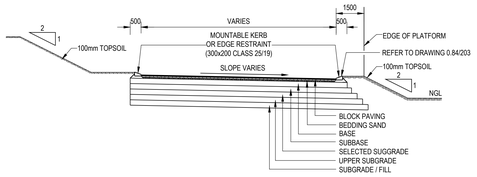
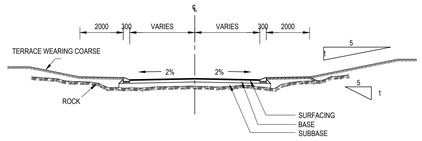


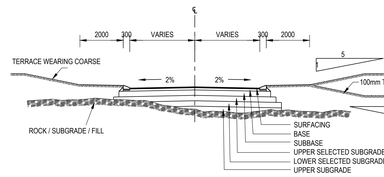
TYPICAL CROSS SECTION:
PARKING AREAS



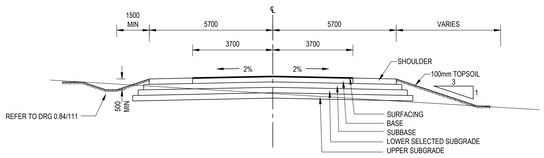
TYPICAL CROSS SECTION:
BLOCK PAVED AREAS



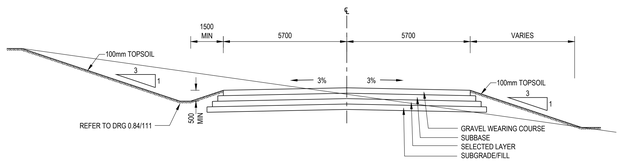
TYPICAL CROSS SECTION:
TERRACE ROAD TYPE A
ROCK AT 0-300mm BELOW FINAL ROAD LEVEL



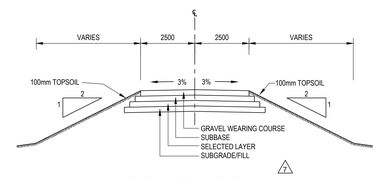
TYPICAL CROSS SECTION:
TERRACE ROAD TYPE B
ROCK DEEPER THAN 300mm BELOW ROAD LEVEL



TYPICAL CROSS SECTION:
ACCESS ROAD TO CONTRACTORS' YARDS



TYPICAL CROSS SECTION:
GRAVEL ROAD TO ASHING AREA



TYPICAL CROSS SECTION:
GRAVEL ACCESS RAMPS

	25mm ASPHALT *
	BASE : (C3) 125mm / SG / 1500kPa @ 100% MOD. AASHTO / 1,75 / 4 **
	SUBBASE : (C4) 150mm / SG / 1000kPa @ 100% MOD. AASHTO / 1,5 / 6
	UPPER SELECTED SUGGRADE : (G5-G6) 150mm/ NG / 35 CBR @ 95% MOD. AASHTO / 1,25 / < 12
	LOWER SELECTED SUBGRADE : (G7) 150mm NG / 15 CBR @ 93% MOD. AASHTO / 0,75 / < 3GM+10
	UPPER SUBGRADE : (G8) SUBGRADE : 150mm NG / 10 CBR IN-SITU @ 93% MOD. AASHTO / < 3GM+10
	SUBGRADE / FILL : (G10) 150mm NG / 3 CBR IN-SITU @ 90% MOD. AASHTO

* ALTERNATIVE: 19mm SINGLE SEAL AND SLURRY
**ALTERNATIVE: BASE COURSE : (G2) 125mm CRUSHED STONE BASE
COURSE COMPACTED TO 86% APPARENT DENSITY

PAVEMENT DETAILS: PARKING AREAS

	FULLY INTERLOCKING BLOCK PAVING : 80mm ON BEDDING SAND : 25mm
	BASE : (C3) 150mm / SG / 1500kPa @ 100% MOD. AASHTO / 1,75 / 4 (COMPACTION 97% MOD. AASHTO)
	SUBBASE : (C4) 150mm / SG / 1000kPa @ 100% MOD. AASHTO / 1,5 / 6 (COMPACTION 95% MOD. AASHTO)
	SELECTED SUBGRADE : (G7) 150mm NG / 15 CBR @ 93% MOD. AASHTO / 0,75 / < 3GM+10
	UPPER SUBGRADE : (G8) SUBGRADE : 150mm NG / 10 CBR IN-SITU @ 93% MOD. AASHTO / < 3GM+10
	SUBGRADE / FILL : (G10) 150mm NG / 3 CBR IN-SITU @ 90% MOD. AASHTO

PAVEMENT DETAILS: BLOCK PAVED AREAS

	25mm ASPHALT *
	BASE : (C3) 150mm / SG / 1500kPa @ 100% MOD. AASHTO / 1,75 / 4 **
	SUBBASE : (C4) 150mm / SG / 1000kPa @ 95% MOD. AASHTO / 1,5 / 6

* ALTERNATIVE 19mm SINGLE SEAL AND SLURRY
**ALTERNATIVE : BASE COURSE : (G2) 150mm CRUSHED STONE BASE COURSE COMPACTED TO 86%
APPARENT DENSITY

PAVEMENT DETAILS: TERRACE ROADS TYPE A

	25mm ASPHALT *
	BASE : (C3) 150mm / SG / 1500kPa @ 100% MOD. AASHTO / 1,75 / 4 **
	SUBBASE : (C4) 150mm / SG / 1000kPa @ 100% MOD. AASHTO / 1,5 / 6
	UPPER SELECTED SUGGRADE : (G5-G6) 150mm/ NG / 35 CBR @ 95% MOD. AASHTO / 1,25 / < 12
	LOWER SELECTED SUBGRADE : (G7) 150mm NG / 15 CBR @ 93% MOD. AASHTO / 0,75 / < 3GM+10
	UPPER SUBGRADE : (G8) SUBGRADE : 150mm NG / 10 CBR IN-SITU @ 93% MOD. AASHTO / < 3GM+10
	SUBGRADE / FILL : (G10) 150mm NG / 3 CBR IN-SITU @ 90% MOD. AASHTO

* ALTERNATIVE: 19mm SINGLE SEAL AND SLURRY
**ALTERNATIVE: BASE COURSE : (G2) 150mm CRUSHED STONE BASE COURSE COMPACTED TO 86% APPARENT DENSITY

PAVEMENT DETAILS: TERRACE ROADS TYPE B

	19mm SINGLE SEAL AND SLURRY
	BASE : (C4) 150mm / SG / 1500kPa @ 100% MOD. AASHTO / 1,75 / 4 **
	SUBBASE : (G5) 150mm / NG /45 CBR @ 95% MOD. AASHTO / 1,5 / 10
	LOWER SELECTED SUBGRADE : (G6) 150mm NG / 25 CBR @ 95% MOD. AASHTO / 0,75 / < 12
	UPPER SUBGRADE : (G8) SUBGRADE : 150mm NG / 10 CBR IN-SITU @ 93% MOD. AASHTO / < 3GM+10
	SUBGRADE / FILL : (G10) 150mm NG / 3 CBR IN-SITU @ 90% MOD. AASHTO

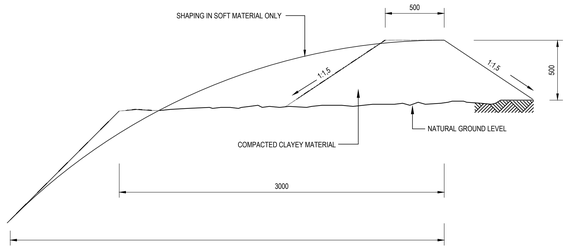
PAVEMENT DETAILS: CONTRACTORS' YARDS ROADS

	WEARING COURSE : (G6) 200mm COMPACTED TO 95% MOD AASHTO MAX. SIZE 375mm, (OVERSIZE INDEX < 5%, SHRINKAGE PRODUCT MAX. 240, GRADING COEFFICIENT 16-34)
	SUBBASE : (G6) 150mm / NG / 25 CBR @ 95% MOD. AASHTO / 1,20 / < 12
	SELECTED LAYER : (G7) 150mm / NG / 15 CBR @ 93% MOD. AASHTO / 0,75 / < 3 GM+10
	SUBGRADE / FILL : (G10) 150mm / NG / 3 CBR IN-SITU @ 90% MOD. AASHTO

PAVEMENT DETAILS: GRAVEL ROAD TO ASHING AREA AND ACCESS RAMPS TO CONVEYORS ⚠1

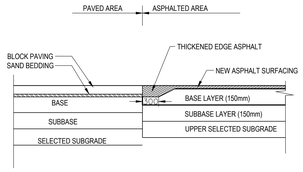
	300mm GRAVEL WEARING COURSE COMPACTED TO 95% MOD. AASHTO
	UPPER SELECTED SUGGRADE : (G5 – G6) 150mm/ NG / 35 CBR @ 95% MOD. AASHTO / 1,25 / < 12
	LOWER SELECTED SUBGRADE : (G7) 150mm NG / 15 CBR @ 93% MOD. AASHTO / 0,75 / < 3GM+10

PAVEMENT DETAILS: TERRACE GENERAL

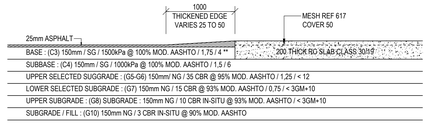


NOTE:
CATCHWATER BANKS TO FOLLOW THE CONTOURS IN HIGHLY EROSIVE SOIL.

DETAIL OF CATCHWATER BANK



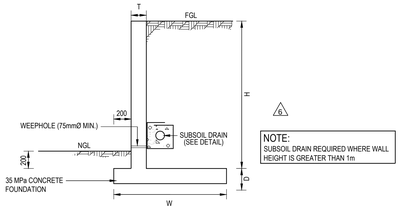
DETAIL OF CONSTRUCTION JOINT BETWEEN BLOCK PAVING AND ASPHALT WHEN APPLICABLE
N.T.S.



DETAIL OF CONSTRUCTION JOINT BETWEEN CONCRETE PAVEMENT AND ASPHALT
N.T.S.

NOTES:

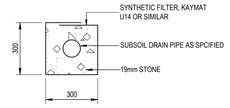
1. THE GROUND OR FILL BEHIND THE RETAINING WALL MUST NOT BE SUBJECTED TO SUPERIMPOSED LOAD SUCH AS TRAFFIC OR SURCHARGE OF FILL WITHIN A DISTANCE EQUAL TO THE HEIGHT OF THE WALL.
2. MOVEMENT JOINTS SHALL BE PROVIDED AT DISTANCES NOT EXCEEDING 10m
3. SUBSOIL DRAINS SHALL BE PROVIDED BEHIND THE RETAINING WALL.
4. WEEPHOLES THROUGH THE WALL SHALL BE PROVIDED AT THE BOTTOM OF THE WALL AT 2m DISTANCES.
5. ALL CONCRETE TO BE CLASS 35/19.
6. ALL CONCRETE TO HAVE A SMOOTH FINISH WITH 25 x 25 CHAMFERS ON ALL EXPOSED EDGES.
7. ALL WORK TO BE ACCORDING TO THE SABS 1200 SPECIFICATIONS.
8. MINIMUM REQUIRED BEARING CAPACITY OF FOUNDING MATERIAL = 120kPa.



TYPICAL SECTION

RETAINING WALL DIMENSIONS IN MILLIMETRES			
HEIGHT OF WALL	WALL THICKNESS	FOUNDATION DIMENSIONS	
H	T	W	D
1700	300	1400	300
2200	300	1800	300
2800	300	2200	300

NOTE:
SUBSOIL DRAIN REQUIRED WHERE WALL HEIGHT IS GREATER THAN 1m



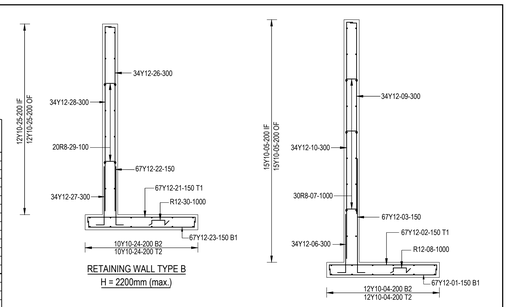
DETAIL OF SUBSOIL DRAIN

CONCRETE DETAILS OF CONCRETE RETAINING WALL
N.T.S.

NOTE :
1. THIS BENDING SCHEDULE IS FOR A 10000mm LONG RETAINING WALL ONLY.
2. CONCRETE COVER TO REINFORCEMENT TO BE AS FOLLOWS:
- WALLS : 60mm
- FOUNDATION : 60mm

BENDING SCHEDULE

MEMBER	Mk.	R/Y Dia.	No.of Memb.	No.in each	Total Numb.	Cutting Lenght	Shape Code	A	B	C	D	E or r
RETAINING WALL TYPE A H = 2800mm	01	Y12	1	67	67	2450	38	200	2080			
	02	Y12	1	67	67	2450	38	200	2080			
	03	Y12	1	67	67	1700	37	300	1400			
	04	Y10	1	24	24	9900	20					
	05	Y10	1	30	30	9900	20					
	06	Y12	1	34	34	1200	37	300	900			
	07	R8	1	30	30	300	85	100	170	60		
	08	R12	1	20	20	1100	83	350	160	300		
	09	Y12	1	34	34	2350	37	150	2250			
	10	Y12	1	34	34	2750	37	150	2650			
RETAINING WALL TYPE B H = 2200mm	21	Y12	1	67	67	2000	38	150	1680			
	22	Y12	1	67	67	1050	37	250	800			
	23	Y12	1	67	67	2000	38	150	1680			
	24	Y10	1	20	20	9900	20					
	25	Y10	1	24	24	9900	20					
	26	Y12	1	34	34	2150	37	100	2050			
	27	Y12	1	34	34	950	37	250	700			
	28	Y12	1	34	34	2150	37	100	2050			
	29	R8	1	20	20	300	85	100	170	60		
	30	R12	1	20	20	1100	83	350	160	300		
RETAINING WALL TYPE C H = 1700mm	41	Y10	1	34	34	1600	37	70	1550			
	42	Y10	1	67	67	1600	38	150	1280			
	43	Y10	1	67	67	950	37	250	700			
	44	Y10	1	67	67	1600	38	150	1280			
	45	Y10	1	16	16	9900	20					
	46	R8	1	20	20	300	85	100	170	60		
	47	Y10	1	34	34	950	37	250	700			
	48	Y10	1	34	34	1600	37	70	1550			
	49	Y10	1	18	18	9900	20					
	50	R12	1	20	20	1100	83	300	160	300		



RETAINING WALL TYPE B
H = 2200mm (max.)

RETAINING WALL TYPE A
H = 2800mm (max.)

RETAINING WALL TYPE C
H = 1700mm (max.)

REINFORCEMENT FOR CONCRETE RETAINING WALL
N.T.S.

NOTES:

1. CUT AND FILL SLOPES ARE COVERED WITH 100mm TOPSOIL WHERE DIRECTED.
2. IN SITU SOILS SHOWING A COLLAPSIBLE GRAIN STRUCTURE
- SOILS MUST BE REMOVED TO A DEPTH OF 750mm.
- WATER EXPOSED SUBGRADE THOROUGHLY.
- A 150mm PIONEER LAYER OF ROCK/GRAVEL PLACED ON THE SUBGRADE AND THE LAYER IMPACT ROLLED AS DIRECTED BY THE ENGINEER
- THE PREVIOUSLY REMOVED SANDY MATERIAL WILL BE PLACED AS FILL IN ACCORDANCE WITH THE SPECIFICATIONS FOR FILL MATERIAL.

⚠1 KKS CODE: 00UZA

REV	DATE	DESCRIPTION OF ISSUE OR REVISION	DRN BY	CHKD BY	AUTH BY	KKS APP
7	20 03 11	ACCESS RAMPS	GG	PAH	GD	
6	22 06 11	NOTE AND KKS CODE ADDED	LJ	PAH	GD	
5	06 06 11	CONCRETE COVER	LJ	PAH	GD	
4	11 02 10	CONC PAVEMENT & RETAINING WALL	GG	PAH	GD	
3	24 02 10	BLOCK PAVING DETAILS ADDED	MLS	PAH	GD	
2	01 06 07	ISSUE FOR CONSTRUCTION		PAH	GD	
1	06 03 07	FORMERLY 0.84/114		PAH	AGS	
00	0	FIRST ISSUE				201

D.O. REV DATE — ** REVISION ** — REV BY | CHKD BY | AUTH BY | KKS APP | 0.84/ | REFERENCE DRAWINGS

INDEX REFERENCE

DRG REGSTR		APPROVED FOR ISSUE BY	DATE
DESIGN APPROVED	3 06 07	GD	01/06/07
KKS APP		AGS	
DO AUTH	3 06 07	AGS	
CHKD BY	3 06 07	PAH	
DRAWN BY	3 06 07	MLS	
SCALE	N.T.S.		

Eskom Enterprises | GIBB | PB power

MEDUPI POWER STATION
TYPICAL CROSS SECTION FOR TERRACE AND CONTRACTORS ROADS

J26182/A/TER/TYP/01

0.84/202

SHEET 1 | REV 7

SIZE A0 GROOTTE