

Dam: Spring Grove

Country South Africa

River Mooi

29°19'8.32"S 29°57'56.52"E

-29.318977 29.9657

Owner/Client TCTA (Trans Caledon Tunnel Authority)

Designer/Engineer BKS

Contractor Group 5

Purpose (code) W

Site start 01.03.2011

RCC start 01.06.2012

RCC completion 31.05.2013

Site completion 31.05.2014

Height (m) 39

Length (m) 300

Volume of RCC ( $m^3 \times 10^3$ ) 96

Total volume ( $m^3 \times 10^3$ ) 114

Reservoir capacity ( $m^3 \times 10^6$ ) 140

Upstream slope *Unknown*

Forming of upstream face (code) (3')

Downstream slope *Unknown*

Forming of downstream face (code) (3') \*

Spillway slope *Unknown*

Forming of spillway face (code) *Unknown*

Depth of layers (mm) 300

Depth of lifts (mm) 300

Cement content ( $kg/m^3$ ) 50

Pozzolan content ( $kg/m^3$ ) 110

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0574

## Under Construction



RCCDAM0574UC

## Completed Dam



RCCDAM0574CD

## Google Earth



RCCDAM0574GE

# Guide to Abbreviations

## Purpose

- E Environmental
- F Flood control
- G Groundwater recharge
- H Flood control
- I Irrigation
- N Navigation
- P Pollution control
- R Recreation
- W Water supply

## Facing method

- (1) Traditional concrete against formwork
- (2) Traditional concrete against formwork with external geomembrane
- (3) RCC against formwork
- (4) RCC against formwork with external geomembrane
- (5) Traditional concrete against precast concrete panels
- (6) Traditional concrete against precast concrete panels with geomembrane
- (7) RCC against precast concrete panels
- (8) RCC against precast concrete panels with geomembrane
- (9) RCC against precast concrete panels with hot poured membrane
- (10) RCC against precast concrete blocks
- (11) Reinforced conventional concrete cast before RCC placement
- (12) Reinforced conventional concrete cast after RCC placement
- (13) Reinforced concrete cast against precast units or slip-formed facing elements
- (14) Slip-formed/extruded facing elements
- (15) RCC supported by fill shoulders
- (16) Mechanically compacted unformed face of RCC
- (17) Unformed face of RCC
  - ' GEVR/GE-RCC
  - \* Stepped face

## Pozzolans

- (-) No Pozzolan Used
- (C) High-lime flyash (ASTM Class C)
- (F) Low-lime flyash (ASTM Class F)
- (M) Milled sand
- (N) Natural pozzolan (ASTM Class N)
- (R) ROLAC (mixture of flyash and slag with or without limestone fines)
- (S) Ground-granulated blast-furnace slag
- (L) Mixture of GGBFS and limestone fines