

Dam: Gwayi-Shangani

Country Zimbabwe

River Gwayi

18°27'54.39"S 27°10'10.63"E

-18.465109 27.169619

Owner/Client Zimbabwe National Water Authority (Zinwa)

Designer/Engineer *Unknown*

Contractor China International Water and Electrical Corporation

Purpose (code) H I W

Site start 01.09.2004

RCC start 01.01.2022

RCC completion 31.12.2026

Site completion 31.12.2027

Height (m) 72

Length (m) 305

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

Total volume ($m^3 \times 10^3$) 300

Reservoir capacity ($m^3 \times 10^6$) 634

Upstream slope *Unknown*

Forming of upstream face (code) *Unknown*

Downstream slope *Unknown*

Forming of downstream face (code) *Unknown*

Spillway slope *Unknown*

Forming of spillway face (code) *Unknown*

Depth of layers (mm) *Unknown*

Depth of lifts (mm) *Unknown*

Cement content (kg/m^3) 60

Pozzolan content (kg/m^3) 140

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0714

Under Construction



RCCDAM0714UC

Completed Dam



RCCDAM0714CD

Google Earth



RCCDAM0714GE

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