

Dam: S.W. Freese - formerly Stacy - spillway

Country USA

River Colorado

31°30'2.03"N 99°40'3.49"W

31.500565 -99.667633

Owner/Client Colorado River Municipal Water District

Designer/Engineer Freese & Nichols, Fort Worth, Texas

Contractor Brown & Root, Houston

Purpose (code) W

Site start 01.05.1987

RCC start 01.05.1988

RCC completion 30.04.1989

Site completion 31.01.1990

Height (m) 31

Length (m) 173

Volume of RCC ($m^3 \times 10^3$) 89

Total volume ($m^3 \times 10^3$) 158

Reservoir capacity ($m^3 \times 10^6$) 700

Upstream slope V

Forming of upstream face (code) (13)

Downstream slope 0.831

Forming of downstream face (code) (17)

Spillway slope ogee

Forming of spillway face (code) (12)

Depth of layers (mm) 300

Depth of lifts (mm) 300

Cement content (kg/m^3) 125

Pozzolan content (kg/m^3) 62

Code for pozzolan (C)

RCCDAM Unique Serial No. RCCDAM0051

Under Construction



RCCDAM0051UC

Completed Dam



RCCDAM0051CD

Google Earth



RCCDAM0051GE

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