

Dam: Duck River

Country USA

River Duck

34°10'37.13"N 86°41'26.41"W

34.176983 -86.690666

Owner/Client Cullman Utilities Board

Designer/Engineer CH2M Hill

Contractor ASI Constructors, Inc.

Purpose (code) W

Site start 06.01.2014

RCC start 16.12.2014

RCC completion 22.09.2015

Site completion 31.12.2016

Height (m) 41

Length (m) 90

Volume of RCC (m<sup>3</sup>x10<sup>3</sup>) 121

Total volume (m<sup>3</sup>x10<sup>3</sup>) 128

Reservoir capacity (m<sup>3</sup>x10<sup>6</sup>) 1

Upstream slope 0.10

Forming of upstream face (code)

Downstream slope 1.00

Forming of downstream face (code)

Spillway slope 1.00

Forming of spillway face (code)

Depth of layers (mm) 300

Depth of lifts (mm) 300

Cement content (kg/m<sup>3</sup>) 107

Pozzolan content (kg/m<sup>3</sup>) 55

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0640

### Under Construction



RCCDAM0640UC

### Completed Dam



RCCDAM0640CD

### Google Earth



RCCDAM0640GE

# 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