

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>) 31

Upstream slope 0.10

Forming of upstream face (code) (1)  
(3)

Downstream slope Unknown

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

Spillway slope 1.00

Forming of spillway face (code) (1') \*  
(3') \*

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