

DAM SAFETY PROGRAM

DEPARTMENT OF CONSERVATION & HISTORIC RESOURCES
Division of Soil & Water Conservation
203 Governor Street, Suite 206
Richmond, Virginia 23219-2094

INVENTORY REPORT FOR CLASS III AND CLASS IV IMPOUNDING STRUCTURES

Reference: Impounding Structure Regulations, Chapter 3, Virginia Soil and Water Conservation Board

1. Project Information:

- a. Name of Impounding Structure Woodland Pond Dam
- b. Inventory Number 04129 Other Name (if any) _____
- c. Name of Reservoir Woodland Pond
- d. Purpose of Reservoir Recreation

2. Location of Impounding Structure:

- a. County Chesterfield Magisterial District Matoaca
- b. Located 400 feet/miles upstream/downstream of Highway Number 636
- c. Name of River or Stream Licking Creek
- d. Latitude N 37° 21' 17" Longitude W 77° 32' 30"

3. Ownership:

- a. Owner's Name Midlothian Enterprises, Inc.
- b. Mailing Address 9211 Forest Hill Ave., Suite 101, Richmond, VA 23235
- c. Telephone (804) 330-0338

4. Owner's Engineer:

- a. Engineering Firm/Engineer J. K. Timmons and Associates, P.C./Charles K. Hurt
- b. Virginia Number 21209
- c. Mailing Address 711 N. Courthouse Road
Richmond, VA 23236
- d. Telephone (804) 794-3500

5. Impounding Structure Data (All elevations NGVD unless noted):

a. Type of Material X earth _____ concrete _____ masonry _____ other _____

		<u>Design Con</u>
b.	Top of Dam	180.6 E (own)
c.	Downstream Toe (Lowest)	146 Ele (wn)
d.	Height of Dam	35 Feet
e.	Crest Length (Exclusive of Spillway)	1370 F
f.	Crest Width	14 Fe
g.	Upstream Slope	3 H: -
h.	Downstream Slope	3 H: -

6. Reservoir Data

		<u>Design Con</u>
a.	Maximum Capacity	1870 A
b.	Maximum Pool	180.6 E (own)
c.	Maximum Pool Surface Area	170 A
d.	Normal Capacity	1342 A
e.	Normal Pool	174 E (own)
f.	Normal Pool Surface Area	122 A
g.	Freeboard (Normal Pool to Top)	8.6 F
h.	Freeboard (Normal Pool to Emergency)	1.3 F

7.	Spillway Data	<u>Type</u>	<u>Construction Material</u>	<u>Maximum Capacity</u>
a.	Low Level Drain	_____	_____	_____
b.	Principal Spillway	<u>Riser</u>	<u>CMP</u>	<u>5 CFS</u>
c.	Emergency Spillway	<u>Channel</u>	<u>Vegetative Earth</u>	<u>0.5 CFS</u>

		<u>Design Con</u>
d.	Low Level Drain	_____ Elev. (if known)
e.	Principal Spillway	174.0 (if known)
f.	Emergency Spillway	175.3 (if known)

g. Briefly describe the low level drain and principal spillway dimensions, materials of construction, trash guards, location in reservoir and through structure of intake and discharge to dam if looking downstream:

The P.S. consists of a 60" CMP riser with a 36" CMP on top. It is located approximately 450' from right abutment.

h. Describe the emergency spillway to include dimensions, whether it is an earth channel or other construction, spillway surface protection, and orientation looking downstream:

The E.M.S. is a vegetative earth channel. The control section with 3:1 side slopes. It is located at the right abutment.

8. Watershed Data (Class III only):

- a. Drainage Area 2.93 Acres/Sq. Miles
- b. Type and Extent of Watershed Development wooded and residential
- c. Time of Concentration 1.78 Method TR-55
- d. Spillway Design Flood used (mark appropriate box)
- _____ PMF, source _____
- _____ 1/2 PMF, source _____
- X 100 Year, source TR-55
- _____ 50 Year, source _____
- _____ Other, source _____
- e. Design inflow hydrograph: Volume 8.32 acre-feet; Peak inflow 4221 C.F.S.;
- Rainfall duration of design inflow hydrograph 2.4 hours
- f. Freeboard during passage of spillway design flood 2.4 feet.

9. Impounding Structure History

- a. Date construction completed 1970
- b. Design by _____ Date: _____
- c. Built by Shoosmith Bros. Date: 1970
- d. Inspection dates 1/25/93
- e. Inspections by C. Hurt, R. Bass
- f. Description of repairs None
- g. Has the impounding structure ever been overtopped? _____ Yes X No

10. Impounding Structure Assessment:

- a. Provide brief descriptions for each item:
- i. Condition of the impounding structure good; toe of dam exhibits minor seepage.

- ii. Condition of the reservoir excellent condition
- iii. Condition of the upstream area good
- iv. Condition of the downstream area spillway outfall channel eroding
approximately 75' from outfall below the dam.

b. Provide a narrative describing any recent changes in the impounding structure, reservoir, upstream area, and downstream area.

Woodland Pond Subdivision was recently developed in the drainage basin.

c. Recommended for remedial measures:

- Mow dam slopes and emergency spillway.

- Armor outfall channel at eroded areas.

11. Provide a sketch of the impounding structure on Page 5.

CERTIFICATION BY OWNER'S ENGINEER (Class III Only)

I hereby certify that the information provided in this Inventory Report has been examined by me and found to be true and correct in my professional judgment.

Signed Charles K. Hurt Virginia Number 21209 this 17th day of APRIL 1993
Professional Engineer
Charles K. Hurt

CERTIFICATION BY OWNER (Class IV Only)

I hereby certify that the information provided in this Inventory Report is true and correct.

Signed _____ this _____ day of _____, 19 _____
Owner

