



 **CLEVELAND METROPARKS ZOO**®

SECURING A FUTURE FOR WILDLIFE

RainForest Facility Improvement Assessment

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Opened to much acclaim in 1992, the RainForest has proven a destination for families and tourists, housing over 10,000 plants and 600 animals. The RainForest is one of the most popular exhibits at the Zoo. There are five animals from opening day in 1992 that still live in The RainForest.



RainForest Facility Improvement Assessment

First Level

- 25' waterfall
- Water-loving, water-dwelling creature exhibits
- Simulated tropical rainstorm, complete with lightening, wind, thunder, and rain



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Second Level

- Nose to nose views of Bornean Orangutans in a space capped with a landmark geodesic dome
- Other exhibits include the Francois' Langur and the free-flight aviary



RainForest Facility Improvement Assessment

Assessment Components

- Geodesic Dome
- Building Systems
- Building Envelope



RainForest Facility Improvement Assessment

Geodesic Dome

Evaluate and make recommendations on:

- Existing dome, panel failure, potential replacement options
- Skylight repair or replacement
- Existing roofing system, and flashing details



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Building Systems

The operation and use of the RainForest relies upon a unique and complex HVAC system that is responsible for maintaining high minimum temperatures with high relative humidity.

Evaluate and make recommendations on:

- Heating, ventilation, and air conditioning system
- Electrical systems, controls, and monitoring to improve efficiency



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Building Envelope

Evaluate and make recommendations on:

- The south and west wall glazing
- Panel degradation
- Masonry wall repair
- Potential energy saving opportunities



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Targeting energy efficiency in the operation and maintenance can potentially reduce energy consumption by 5 to 20 percent, therefore reducing the RainForest's carbon footprint.

Next Steps

- Select a qualified firm to complete the assessment, establishing energy use baseline and identifying inefficient fixtures and equipment
- Establish a plan and schedule for recommended repairs or replacements

