DRUMMOND TOWNSHIP

P.O. BOX 225. DRUMMOND ISLAND, MICHIGAN 49726

FRANK SASSO, SUPERVISOR GEORGIANNA POTTER, TREASURER KATHERINE COULTER, CLERK

EARL BAILEY, TRUSTEE BLAINE TISCHER, TRUSTEE

November 22, 2004

Ms. Jami Harrington Michigan Department of Environmental Quality 420 Fifth St. Gwinn, MI 49841

Re:

Grant Project Number 455551-76

Clean Michigan Initiative

Restoration of DeTour reef Light

Dear Ms. Harrington

On September 15, 2004, the State Historic Preservation Office (Brian Conway and Bryan Lijewski) carried out a final inspection of the work done under the referenced project number. This inspection verified that the work conducted at the DeTour Reef Light was consistent with the approved plans and specifications and that the Project Scope had been completed.

Also present at this inspection were representatives from Michigan Department of Transportation, National Park Service (representing Department of Interior), Drummond Island Township Board of Supervisors and DeTour Reef Light Preservation Society.

A final report on this project has been completed and two copies are enclosed. Copies have also being sent to SHPO.

At this time we are requesting reimbursement of the ten percent (10%) retainer of all payments that has been withheld by DEO. The amount of the reimbursement due is \$70,500.

If you have any questions regarding the final report or other matters related to this project, please contact Dr. Charles Feltner of the DeTour Reef Light Preservation Society as he is representing Drummond Island Township on these matters.

It has been a pleasure working with you and the DEQ on this project. The Drummond Island Township wishes to thank you for your support. We look forward to your continued cooperation as we move to project closure. Thank you.

Respectfully

Frank J. Sasso, Supervisor Drummond Island Township

Cc: Bryan Lijewski Bryan Conway

Ken Czapski

Charles Feltner

Final Report

CLEAN MICHIGAN INITIATIVE WATERFRONT REDEVELOPMENT GRANT FOR MICHIGAN LIGHTHOUSES

The Restoration of the DeTour Reef Light

Department of Environmental Quality Site Reclamation Program November 21, 2004

1) Name of Grantee and Lighthouse:

- Drummond Island Township, Frank Sasso, Township Supervisor
- DeTour Reef Light, Northern Lake Huron at the entrance to the St. Mary's River

2) **Project Number:**

455551-76

3) Name of Grant Coordinator, Architect, Contractor and Supporting Organization:

- Department of Environmental Quality, Marquette Office, Jami Harrington
- UP Engineers and Architects, Ken Czapski, Project Engineer
- Mihm Enterprises, Frank Mihm, President
- DeTour Reef Light Preservation Society, Dr. Charles Feltner, President

4) Description of Project Work Completed:

Under this project, the exterior and interior of the DeTour Reef Light were restored to near original condition as built in 1931. Following is a description of the work tasks completed under this restoration project. The task descriptions are divided into exterior and interior tasks.

A. Exterior Restoration Work Tasks Completed

- 1. Removed steel plate located on pier deck level and bent plates at deck edge and building base.
- 2. Removed steel angle and cable guardrail located on pier deck level.
- 3. Cleaned concrete surface of pier deck.
- 4. Patched and repaired damaged vertical concrete surfaces of crib structure.
- 5. Installed new guardrail at pier deck level.
- 6. Mechanically cleaned, refinished and restored to operational condition all steel plate window and door shutters.
- 7. Mechanically cleaned, refinished and restored with new coatings all steel plate wall surfaces, decorative metal trim, solid plate railings and pipe railings.
- 8. Mechanically cleaned and refinished steel ladders and replaced damaged ladder components below pier deck.

- 9. Installed new flagpole at lantern deck level.
- 10. Installed new steel pipe smokestack at lantern deck level and reconnected existing stack.
- 11. Removed membrane roof and installed new copper roof at tower level.
- 12. Mechanically cleaned and refinished copper gutters and downspouts.
- 13. Restored glass skylight openings in pier deck.
- 14. Repaired lantern room exterior steel storm door.
- 15. Restored steel windows.
- 16. New doors and hardware installed at pier deck/gallery level.
- 17. New glazing applied at lantern level including restoration of frame components.
- 18. Mechanically cleaned and refinished copper dome and pinnacle.
- 19. New diaphones installed.
- 20. New material transport cage constructed.
- 21. Patched and repaired damaged horizontal concrete surfaces of pier deck (1,620 s.f.) and applied new deck coating to entire pier deck surface.
- 22. Electrical/lighting on pier deck installed.
- 23. Black water plumbing drain installed.

B. Interior Restoration Work Tasks Completed

- 1. Demolition/disposal of post 1931 partition walls.
- 2. Concrete work/repair throughout, especially in machinery room.
- 3. New partitions installed to replicate 1931 floor plan.
- 4. Plaster restoration performed throughout the interior.
- 5. Painting/finishing throughout matching original 1931 color scheme.
- 6. Floor coverings replaced to match original.
- 7. New replica doors and hardware installed.
- 8. Casework/cabinetry/metal trim replaced or repaired.
- 9. New electric hoist installed in gallery room.
- 10. Plumbing including fixtures, piping and water treatment system installed.
- 11. Marine sanitation device installed.

- 12. Electric power, lighting, and new transformer installed.
- 13. Electric baseboard heat installed.

5) Description of Altered, Changed, or Uncompleted Project Work:

The only change in the contracted work tasks was the restoration of the decklights on the pier deck. The decklights were found to be in such poor condition that they could not be restored. SHPO approved the replacement of these decklights with new near exact replicas. The decklights were removed and the openings repaired and prepared to accept the new units. The cost and timing for completion of construction and installation of these decklights could not be contained in the budget and project completion date. With SHPO and DEQ approval, they were removed from the project content and are being funded separately under a Michigan Lighthouse Assistance Program grant.

6) Description of How the Lighthouse will be Used:

Starting in the summer of 2005, the DeTour Reef Light Preservation Society (DRLPS) will be conducting tours of the lighthouse for the general public. These tours will include boat transportation to the lighthouse with photographic opportunities from the boat as it circles the lighthouse. Tour participants will then board the lighthouse and be given a complete guided tour of the facility.

7) Plan and Schedule for Public Access:

Beginning in late June, 2005 and continuing through mid August, 2005, the DRLPS will run weekend tours to the lighthouse (Saturday and Sunday). This will allow for at least 14 days of public access. Other tours will be arranged through special appointment. This tour program will be expanded in the future as experience is gained by DRLPS.

8) Total Project Cost:

\$1,021,710

9) Final Expenditures for Grant Funded Activities:

\$705,000

10) Sources and Amounts of Local Match:

A. TEA-21 Federal Grant \$241,500 B. Donated Boat \$40,000

11) Photographs of Work and Activities on the Project:

Attachment A – Before and After Exterior Photographs

Attachment B - Before and After Interior Photographs

Attachment C – In Process Construction Photographs

Attachment D – Final Inspection by SHPO, MDOT and NPS, 9-15-04

Attachment E – Some Special Project Photographs

Photographs provided courtesy of Ken Czapski, Dave Bardsley, Dick Moehl and Jeri Feltner



DeTour Reef Light (DRL) As Built in 1931



USCG Declares DRL as Excess Property in 1997



DRL as Restored, September 4, 2004



View of Pediment above Front Door and of Upper Tower Levels





Northeast Corner of Tower Roof



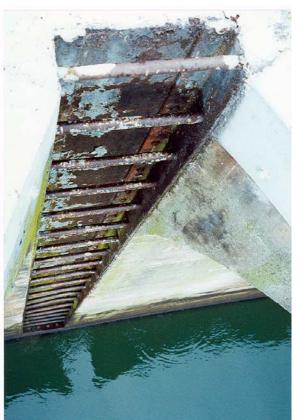


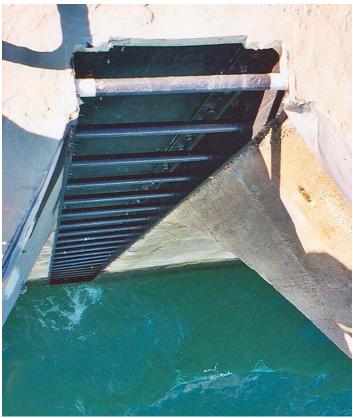
Upper Tower Including View of Watch Room and Lantern Room





Guard Rail around the Periphery of the Pier Deck





One of the Four Ladders that Provide Access to the Pier Deck from a Boat





West Wall of Lower Tower





Southeast Corner of Office/Radio Room





Dining Room Looking Toward South Wall with Sitting Bench and Upper Access to Fog Horns





The Bathroom in the Keepers Quarters





View from Head Keepers Bedroom Looking along Hallway To Radio Room





Northwest Corner of Head Keepers Bedroom





Storage Cabinet in Southeast Corner of Tower Room





Spiral Staircase Leading from Tower Room up to Lantern Room



Stairway Leading Down to Keepers Quarters from Tower Room





Stairway Leading Down from Keepers Quarters to the Gallery Level





Gallery Level Looking towards East Wall and Front Door





Stair Case Going up from Machinery Room to Gallery Room Level





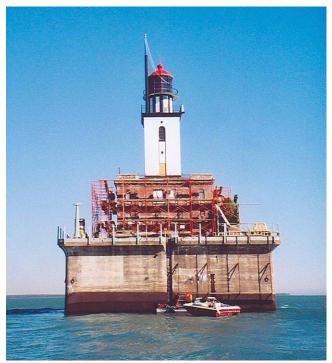
Machinery Room Level Showing Area where New Marine Sanitation System is Installed





Former Fuel Storage Area in Machinery Room With New Water Treatment System Installed

Attachment C – Construction in Process



Lower Tower being Prepared for Painting



Sand Blasting Shroud Around Upper Tower



Plasterers at Work



Jami Harrington of DEQ Inspects the Work



UPEA Engineers Examine Broken Railing



Mihm Enterprises Work Boat Arrives

Attachment C – Construction in Process



Restoring the Lantern Dome



Working in the Fog



Checking Out the Demolition of a Wall



Installing One of the Fog Horns



Discussing How to Repair the Roof



The Mihm Work Crew after a Long Day

Attachment D – The Final Inspection, September 15, 2004



The Inspection Team Arrives



Examining the Pier Deck Surface Coating



Discussing the Details of Exterior Restoration



Viewing the Restored Kitchen Area



The Inspection Team in the Machinery Room



Inspecting the Marine Sanitation System

Attachment D – The Final Inspection, September 15, 2004



"When it ignites and takes off, it makes a helluva noise"



"I told you he was going to light the damn thing"



"How about that, the darn fool did actually light it"



"This is the most pristine lighthouse I have ever seen"



"No more questions, it's time for lunch"



"Everybody has to sign the guest book before they leave"

Attachment E – Some Special Photographs



DeTour Reef Light with DeTour Point in Background (note white roof of 1861 Keepers quarters on shore)



The Effective Way to Get Aboard the Lighthouse



The "F2T" fog horn on the right is original



The Main Entrance to the Lighthouse Quarters

Attachment E – Some Special Photographs



The Dining Room



Freighters Passing as Seen from the Lantern Room



Downward View of Spiral Staircase in Upper Tower



Existing Conditions Study by Cullen Chambers



Ken Czapski The People Who Got the Restoration Job Done



Chuck Feltner



Frank Mihm



Jeri Baron Feltner, the Motivating Force Behind it All