

Attachment #2 – Agreement with Toronto Event Centre
EB Cox's sculpture of Hercules: Conservation Repair to Lower Foot Zone of the Sculpture
Exhibition Place, Toronto

1.0 BACKGROUND

Following on from our condition and conservation recommendations report of the Hercules sculpture from February 2019, the actual conservation work to repair and preserve the damaged lower leg and feet zone was carried out over three sessions during the month of June this year. The statue was positioned horizontally upon a wagon which was parked inside the North Extension of the Enercare Centre at Exhibition Place (fig.1).



Fig. 1

As described in the February condition report, the spalled pieces of limestone that were collected during the lifting process were fragmented and amounted to so many pieces of a difficult puzzle. These pieces sorted according to completeness, were cleaned and set out near the repair area (fig.2).



Fig.2

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There were 6 main areas of severe damage loss and cracks/fissures: 1) the left foot and general left side adjacent; 2) the front base side; 3) the right foot and adjacent lion paw; 4) the top surface behind the right foot where the EB Cox had inscribed his name; 5) the rear right foot ankle area and adjacent area between the two feet; and 6) crack repair at base bottom. This latter no. 5 area was very difficult to access due to the low, upward working and difficult to view position with which the statue was set on the wagon-table.

Each of these critical zone surfaces is illustrated with Before, During and After intervention photo documentation below.

2.0 DESCRIPTION OF THE REPAIRS

From the salvaged pieces provided by the client, the majority were reattached to their original surface location wherever possible. This often meant finding and reconnecting several pieces of the same surface detail. The pieces were attached using small dots of epoxy resin and slurried mortar or injection mortar applied on the remaining interface surfaces.

All fissures and cracks, which were numerous within the damaged areas, especially at the base front, were mechanically consolidated by drilling through the detaching surface downward into the sound substrate, and then injected with epoxy resin and/or stainless steel pins of small diameter. The hole tops were filled with repair mortar in order to disguise the drill locations. All associated fissures and cracks were injected with a pigmented injection mortar.

While it was not the intention to restore the sculpted surface, there was, nevertheless, an opportunity at several locations to fill missing zones with a repair mortar. For this repair, the gap was prepared for a cavity that would provide both keying and increased durability. These mortar repairs are considered strategic in that water shedding and visual appeal is improved.

Finally, a crack in the base that ran from front to rear ends was mechanically consolidated with three stainless steel threaded rods (6mm diameter). These rods were set internally within three holes drilled from the left side and were secured with epoxy resin. The drill hole tops were filled with repair mortar. One of these stitch hole tops is not detectable on the surface because it was drilled within a surface area that later received a larger mortar fill surface repair.

3.0 REPAIR PHOTO DOCUMENTATION FOR EACH OF THE MAJOR ZONES

Area zone 1: The left foot and general left side adjacent

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Fig.3



Fig.4



Fig.5



Fig.6

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Fig. 7



Fig. 8



Fig. 9

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Area zone 2: The front base side



Fig.10



Fig.11



Fig.12

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Area zone 3: The right foot and adjacent lion paw



Fig.13



Fig.14



Fig.15

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Area zone 4: The top surface behind the right foot where the EB Cox had inscribed his name



Fig.16



Fig.17

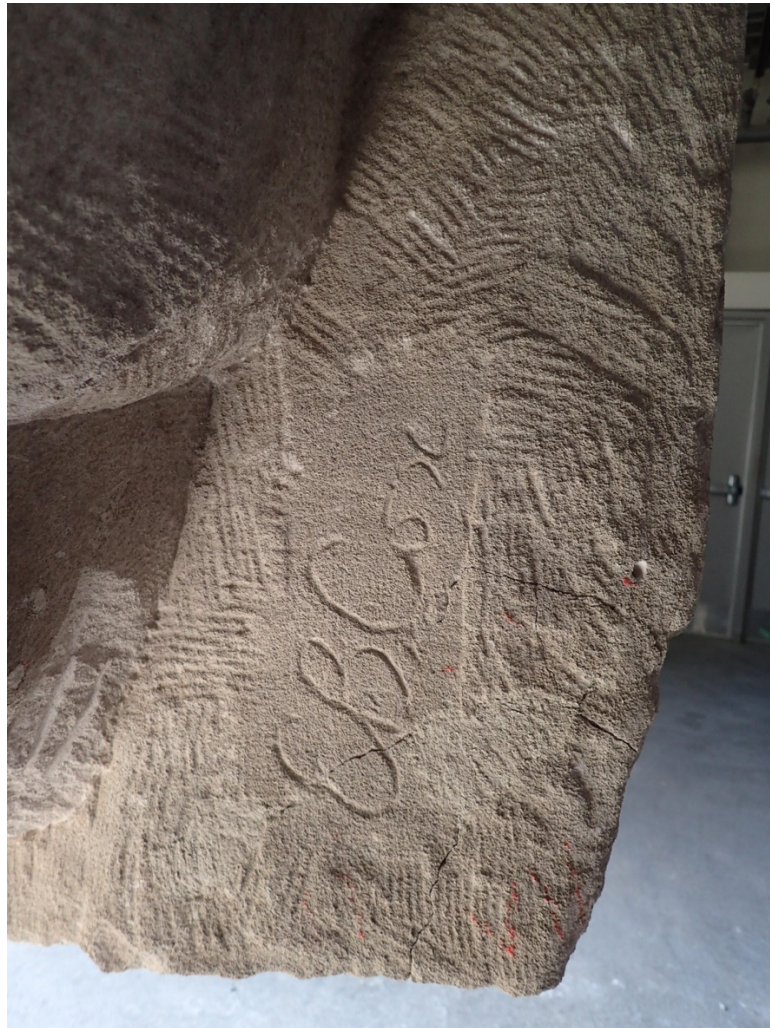


Fig.18

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Area zone 5: The rear right foot ankle area



Fig.19

Area zone 6: Crack repair at base bottom



Fig.20

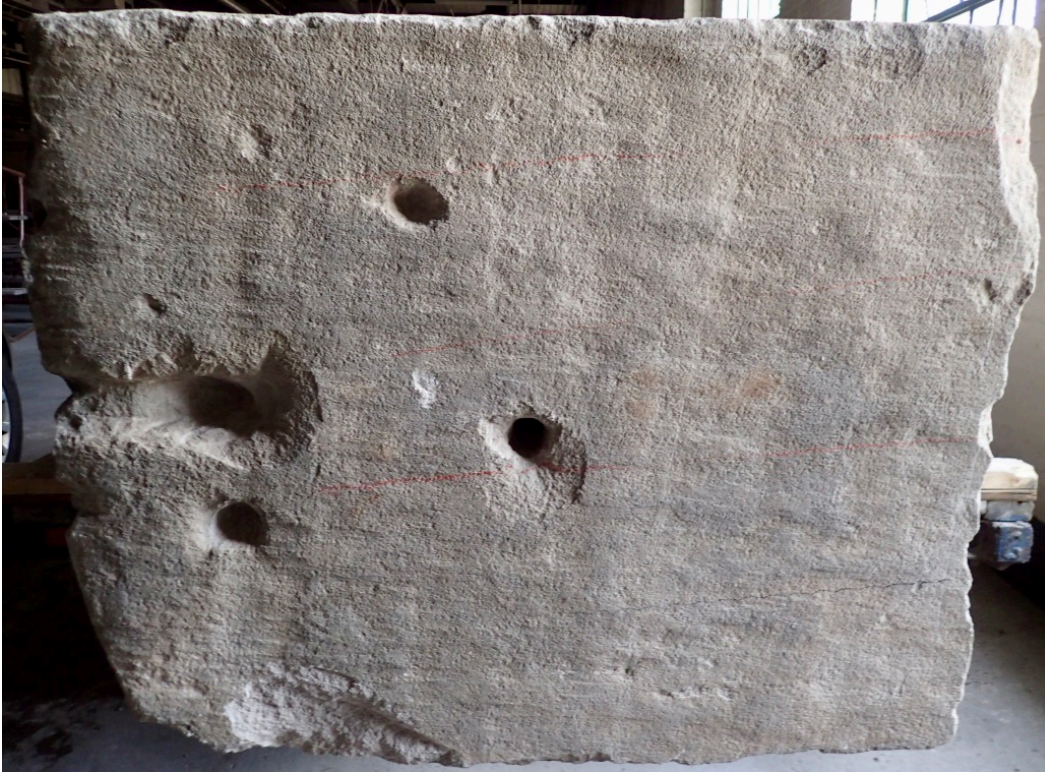


Fig. 21

4.0 FURTHER DISCUSSION ON CONDITION AND FUTURE INSTALLATION OF THE STATUE

As will be clear from the repairs documented in this report, they involved complex and surgically precise conservation interventions that are not unlike what a repair treatment for a museum piece might receive. This helps return visual integrity and appeal to the sculpture. However, it must be remembered that this sculpture is destined to be returned to the outdoor environment where EB Cox intended it to be enjoyed. The delicacy and often shallow type of repairs involved in securing these numerous detached pieces of the surface back to their original position does come with risk of repair failures if the sculpture is returned to a poorly prepared base and environmental location. The vulnerability lies in the density and numbers of small repairs that have been carried out. These zones are numerous and densely applied. And though every effort has been made to ensure moisture and fluid water transmission through the stone body and repairs is homogeneous, there still remains the possibility for repair failure if the surfaces are subjected to severe conditions of prolonged moisture and frosts acting upon them.

As such, the sculpture needs to be provided with a proper concrete foundation that certifies the limestone will be set sufficiently above ground level to have full and positive drainage/drying under both normal and poor weather conditions.

Humid conditions can be retained by crowding vegetation such as shrubs or plants, even tall grass, so these must be kept well away from the limestone base zone. Irrigation sprinkler systems must also be kept well away from the sculpture in order to prevent unnecessary retention of water and humidity.

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It is recommended that this sculpture be provided added protection through the late Autumn and early Spring months by the addition of a weather-tight hard box built around it. The aim of such protection is to ensure against saturation and how cold temperatures, especially extreme fluctuating temperatures, can instigate deteriorating conditions at the surface.

Finally, as concrete is loaded with soluble salts, it is important that the concrete base upon which the sculpture is attached be separated from the limestone sculpture through the use of a horizontal DPM (Damp Proof Membrane). Set on mortar, but do not caulk the perimeter base joint.

With regards to the subject of returning the Hercules statue to the Toronto Event Centre patio location, it is my opinion that the existing foundation design on that property is far from adequate in offering the protections that I describe above. I also am concerned that excessive handling, the stresses and risks involved with that major activity to move the statue to a temporary installed location at the patio followed by yet another move in the near future to a permanent location, is not in the best interest of conservation care for this exceptionally large art piece.

END