



STONE MONUMENT DEVELOPMENT and HISTORIC MASONRY INTERPRETATION at MARY'S POINT

Design Outline

Contract Authority:
Garry Donaldson
Manager
Wildlife Assessment and Protected Areas
Canadian Wildlife Service, Atlantic Region
Environment and Climate Change Canada
17 Waterfowl Lane | Sackville, New Brunswick E4L 1G6
Tel: 506-224-0085 | Email: garry.donaldson@ec.gc.ca

The Contractor's representative for the Contract:
Scott Harris
Fundy Stonecraft
11 School Lane | Sackville, New Brunswick E4L 3J8
Tel: 506-233-0553 | Email: fundystonecraft@gmail.com

CONTENTS

Summary
Stone Selection + Dimensions
Ornamental Design
Methodology
Lettering
Location + Site Installation

21 January 2022

SUMMARY

This project involves creating two sandstone monuments, one with French language inscription and the other with Mi'kmaq language inscription, that commemorate the dedication of the Shepody National Wildlife Area. As outlined in the proposal document, the design objective of the two monuments shall be complimentary to the original stone monument in size and motifs but does not replicate. The proposed design has two themes to tell the story of the site:

1. the significance of the landscape as a critical shorebird habitat. This theme addresses the conservation and re-wilding of the site, giving precedence to the ecology and wildlife habitat over human uses, specifically as migration grounds of the the semipalmated sandpipers.
2. an interpretation of the historical human activity in the area (inclusive of the Mi'kmaq People, Acadians and Settlers), particularly the faded narrative of the sandstone quarrying from the mid-late 1800s. Mary's Point sandstone is fine grained and homogenous making it an ideal architectural dimension stone for fine sculpture and mouldings, notably used for Bethesda Terrace of Central park, New York City. This theme of industry, fine craft, and the transformation of natural resources is juxtaposed with the wildness of the landscape.

STONE SELECTION + DIMENSIONS

The material for the monuments was sourced from Wallace Quarries, a historic building stone quarry in Wallace, NS. This quarry produces a fine grained carving stone in the required size using a low-impact method of extraction. The Wallace deposit runs parallel to Mary's Point and has a similar carving qualities and durability.

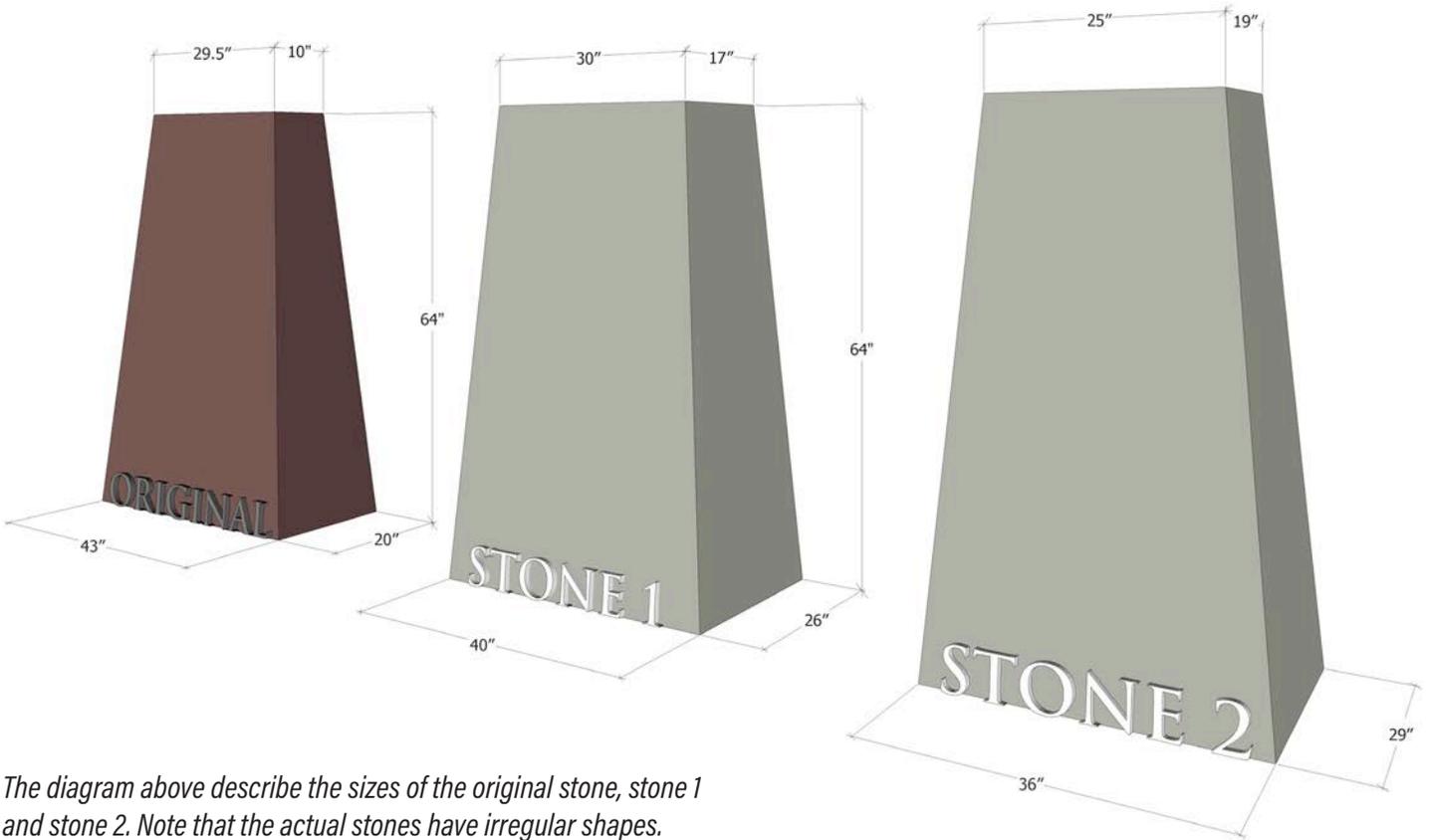
The choice to source from a separate quarry ensured access to quality material, of required dimensions and within the time constraints of the project, while foregoing some material authenticity.



*Above: stone block procured from Wallace Sandstone Quarry, Wallace NS.
Photo: Scott Harris, fall 2021.*



*Above: quarried stone blocks found on the shoreline of Mary's Point
Photo: Scott Harris, summer 2020.*



The diagram above describe the sizes of the original stone, stone 1 and stone 2. Note that the actual stones have irregular shapes.

ORNAMENTAL DESIGNS

The two monuments will include hand-carved ornamentation and sculptural motifs that relate to the site's narrative and aforementioned themes:

- 1] Semipalmated sandpipers in relief carvings - life-size birds portrayed in different positions of grazing and in flight; spanning the two stones, the birds fly en masse surrounding the plaque, occasionally breaching the perimeter of the moulding signifying the sandpipers which inhabiting the rock supersede human activity (the moulding).





2] Moulding, a typical 19th century stringcourse moulding creating depth and shadow to the plaque; the moulding represents the final destination of the amassment of quarried stone that once belonged to the outcropping of the Shepody shoreline.

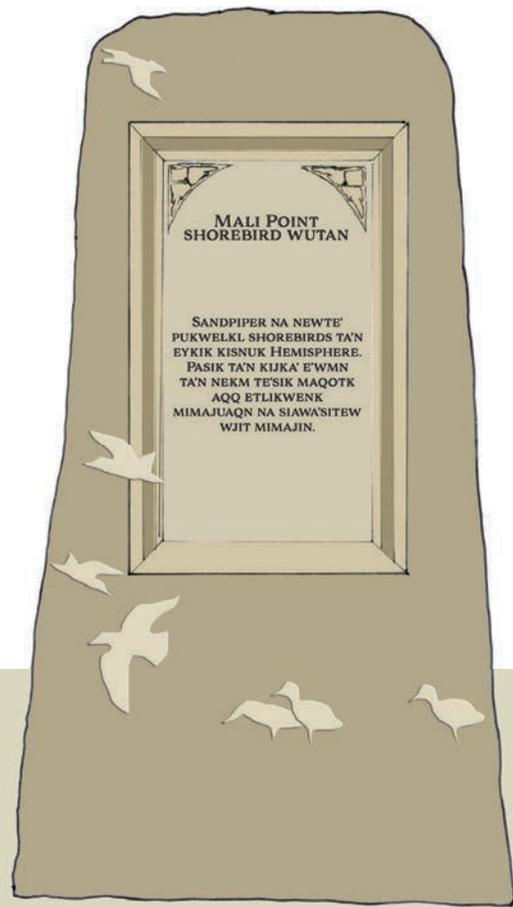
3] Spandrels - non-descript leafy or floral ornamentation, typical of Bethesda Terrace ornamentation; stylized representation of nature in architecture.

4] Display of stone cutting methodology on sides and rear - wedge splitting technique and pick axe markings; replicating the tools and techniques used to quarry the stone, still visible on the stones left on the peninsula. * See Methodology section below.

Photos: Carvings and ornamentation examples from Bethesda Terrace NYC, Scott Harris 2019



STONE 1
French Language Inscription



STONE 2
Mi'kmaq Language Inscription

METHODOLOGY

The remains of the Mary's Point quarries display a number of historic quarrying methodologies through the markings on the stones and remaining tools including wedges, pry bars and point chisels. By repeating these methodologies on the monuments, visitors to the site will have exposure to the visible result of these techniques. Some may interpret these markings to make sense of how the stone was shaped, thereby learning about the human activity on the site.



The rusted iron wedge found in the Mary's Point quarry was one of many placed in V-shaped cuts to split one stone in two along a plane. I mimicked these tools using a modified log-splitter wedge.



A selection of new and old pick axes that are being used to shape the new monuments.



The vertical faces on the stone above are the result of fractures caused by the pressure of iron wedges hammered into a V-cut on the horizontal surface of the stone. One side of the V-cut can be seen at the top 5-6" of the vertical face. These cuts were made with a pointed chisel or pick axe.



A faster method of using wedges for making fractures that require less pressure. These V or U-shaped indentations are made using a mallet and point chisel along a plane. The wedges are placed in the holes and repeatedly struck with a hammer to create enough pressure along a plane until the stone splits. On this stone, the indentations were made but the stone was never split.

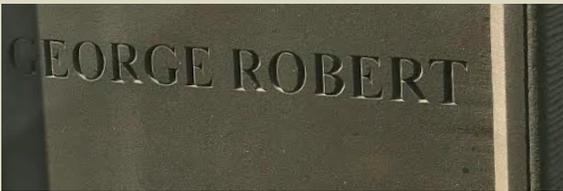


The stone above was roughly squared with hand tools. The long diagonal markings suggest strong swings of a pick axe.



Above, these quarrying techniques are being used to remove mass from the bottom of Stone 1 and Stone 2 using wedges in V-cut indentations. This method, along with pick axes and point chisels will shape the general form of the monument. Mallet and chisel will be used to carve all mouldings, ornament, and letters.

LETTERING



The inscriptions will be traditional V-cut letters in a serif font carved on a flat face.
Translations provided by CWS:

Réserve d'oiseaux de rivage de pointe Mary's – le Bécasseau semipalmé est l'un des nombreux oiseaux de rivage qui migrent sur toute la longueur de l'hémisphère occidental. La conservation de leurs lieux d'alimentation et de nidification naturels est essentielle à leur survie.

“Mali Point shorebird wutan” - Sandpiper na newte' pukwelkl shorebirds ta'n eykik kisnuk Hemisphere. Pasik ta'n kijka' e'wmn ta'n nekm te'sik maqotk aqq etlikwenk mimajuaqn na siawa'sitew wjit mimajin.



LOCATION + INSTALLATION

The recommended location for the three stone monuments is on the North side of the walking path as one is lead East toward the Peninsula from the Discovery Centre building. The first monument in the linear arrangement is the original, followed by Stone 1 (French Language), then Stone 2 (Mi'kmaq Language). Each stone will be rotated to align with the walking path, as well as the southern daylight for optimal legibility of the inscriptions and carvings. Here, the three interpretive stones will stand in context with their surroundings, drawing connections to the landscape in which they represent.

The monuments will be set on a level 3-6" footing of Mary's Point sandstone with a 3" compact gravel substrate. The level footing will be positioned at a mid-elevation in the sloped landscape to avoid tripping hazards.

The installation of the footing will require an area roughly 12' x 12' to pile stone and 10' x 10' for excavated soils. This must be located in close proximity to the building site and will not obstruct the walking path, suitably, an area in the tall grass that can be tarped and used for this purpose for the duration of construction.

* We will require a permit to operate a small ATV and trailer along the beach to the southern point of the quarry for the purpose of obtaining roughly 30 cubic feet of rubble stone. No extraction from bedrock is required.