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**Sport, Culture and Heritage**

Historic Resources Branch

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January 4, 2018

Scatliff+Miller+Murray  
Suite 1120, 11<sup>th</sup> Floor  
201 Portage Avenue  
Winnipeg, MB R3B 3K6

**SUBJECT: Railside Phase II Geotechnical & Environmental Drilling at the Forks – Parcel 3**

**Permit #: A41-17**

**Dated issued: 2017-08-16**

**AAS File #: AAS-16-10499**

**Consultant File #: n/a**

Under the terms of Heritage Permit A41-17, the Historic Resources Branch has reviewed the report '*Heritage Resource Monitoring, Railside Geotechnical & Environmental Drilling at the Forks*' (December, 2017) electronically submitted by InterGroup on behalf of Scatliff+Miller+Murray to our office on December 14, 2017.

The Historic Resources Branch is satisfied by the scope of the field investigation and reporting undertaken by InterGroup that Scatliff+Miller+Murray has met the Heritage Resource Impact Assessment requirements under Section 12 (2) of *The Heritage Resources Act* (1986) for the bore hole tests described in the above mentioned report.

The Historic Resources Branch is in agreement with the 'Results and Recommendations' made by InterGroup on page 7 of this report that due to the high potential of encountering heritage resources on The Forks property, archaeological monitoring of future soil disturbances on site are required.

Since there are no further revisions required, I am pleased to accept your report as a fulfillment of the conditions outlined for heritage permit A41-17 issued to you in 2017.

Should you have any further concerns or questions regarding this matter, please do not hesitate to contact me directly at (204) 945-4389 or by email: [Donna.Dul@gov.mb.ca](mailto:Donna.Dul@gov.mb.ca).

Sincerely,

Donna Dul  
Director

c. InterGroup Consultants, Winnipeg

# HERITAGE RESOURCE MONITORING RAILSIDE GEOTECHNICAL & ENVIRONMENTAL DRILLING AT THE FORKS



*Heritage Permit A41-17  
(AAS-16-10499)*

*Submitted to:  
Scatliff+Miller+Murray  
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*Prepared by:  
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December 2017



**InterGroup**  
CONSULTANTS

## **EXECUTIVE SUMMARY**

InterGroup Consultants Ltd. (InterGroup) was retained by Scatliff+Miller+Murray, on behalf of The Forks Renewal Corporation, to conduct Heritage Resource Monitoring of geotechnical and environmental drilling within Parcel 3 (Railside) at The Forks. The Historic Resources Branch screened the development as having high heritage potential and identified the possibility of heritage resources in-vicinity to the development area. The objective of the Heritage Resource Monitoring was to determine if heritage resources located within Parcel 3 may be affected through a geotechnical drilling program.

InterGroup conducted the Heritage Resource Monitoring on August 22 to 23, 2017 under Manitoba Heritage Permit A41-17. The assessment consisted of visual inspection of exposed sediments removed through drilling/coring to determine the presence of heritage resources. The archaeological assessment revealed the presence of artifacts in 5 of the 11 drill holes, however only Bore Hole 20 contained what appeared to be pre-contact materials.

**Project Personnel**

|                            |                                         |
|----------------------------|-----------------------------------------|
| <b>Archaeologist:</b>      | Mark Paxton-MacRae                      |
| <b>Report Preparation:</b> | Mark Paxton-MacRae                      |
| <b>Reviewed By:</b>        | John Osler, M.B.A.<br>Amber Flett, M.A. |

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## 1.0 INTRODUCTION

### 1.1 PROJECT OVERVIEW

The Forks Renewal Corporation (FRC) is planning to redevelop a parcel of land referred to as Parcel 3 (Railside), located at The Forks in Winnipeg, MB (Figure 1). The project requires a Phase II Environmental Site Assessment (ESA) and Geotechnical Survey. Due to proximity of Parcel 3 to registered archaeological sites and the importance of the Forks as a meeting place for millennia, Manitoba's Department of Sport, Culture and Heritage, Historic Resources Branch (HRB) screened the project as having high potential to impact heritage resources and required that ground disturbances be monitored and assessed for impacts to heritage resources.

InterGroup was retained by Scatliff+Miller+Murry to conduct the heritage monitoring of the soil sampling and geotechnical drilling. Phase I heritage monitoring occurred in October 2016 under heritage permit A53-16. The Phase II geotechnical drilling monitoring was carried out on August 22 to 23, 2017 under Manitoba Heritage Permit A41-17 (Appendix A). Monitoring methods followed provincially mandated requirements of the HRB and Section 12(2) of *The Heritage Resources Act (1986)*.

Figure 1: Map of Study Area



## **1.2 PROVINCIAL LEGISLATION**

Heritage Resource Impact Assessments and Monitoring are required by provincial legislation when a planned or proposed development or project and associated structures and activities are deemed to potentially affect heritage resources or human remains.

Heritage resources are defined in *The Heritage Resources Act* (Government of Manitoba 1986) to include:

“a heritage site, a heritage object, and any work or assembly of works of nature or of human endeavor that is of value for its archaeological, palaeontological, pre-historic, historic, cultural, natural scientific or aesthetic features, and may be in the form of sites or objects or a combination thereof” (p3).

Heritage sites refer to selected sites that are recognized for their provincial significance. Heritage objects include archaeological (materials made or modified by humans), palaeontological (fossilized animal remains), natural heritage (geological features that may or may not contain floral or faunal evidence); and human remains that are discovered outside a recognized cemetery. This last noted heritage resource, referred to as “found human remains” is subject to *The Heritage Resources Act* (Manitoba 1986) and the *Policy Respecting the Reporting, Exhumation and Reburial of Found Human Remains* (Manitoba 1987), provided the remains are identified as non-forensic. If forensic, *The Fatality Inquiries Act* (Manitoba 1990) takes precedence.

## **1.3 BACKGROUND**

### **1.3.1 Environmental**

The development area is located within the heart of downtown Winnipeg. The general environment is part of Winnipeg Ecodistrict 849 of the Prairies Ecozone and Lake Manitoba Plain Ecoregion, which is characterized by short, warm summers and long, cold winters. Native vegetation consisted of tall prairie grass and meadow prairie grass. Tree species within this Ecozone include bur oak, trembling aspen and an undergrowth of snow berry, hazelnut and red-osier dogwood. While on the alluvial floodplain, white elm, basswood, cottonwood, Manitoba maple and green ash with an undergrowth of willow, ferns and herbaceous plants are present. Generally soils in the ecodistrict are predominantly imperfectly drained clayey glaciolacustrine sediments (Smith et al 1998:260-261).

The area is currently characterized by an expanse of riverside development (The Forks) which includes The Forks National Historic Site, The Forks Market, The Canadian Museum of Human Rights, Manitoba Children's Museum and various other facilities. The development area is currently a paved parking lot.

### **1.3.2 Cultural History**

The Forks, strategically located at the junction of two major rivers, the Assiniboine and the Red, forming part of a vast continental network, has observed many of the key events of Western Canadian history. This critical intersection point of major north/south and east/west river systems has been a transportation point



and important 'meeting place' for generations including Pre-European Contact and historic periods (Manitoba Historical Society 2011, Parks Canada 2009, Badertscher 1988:1).

The development area lies within Treaty 1 lands, which historically included the Cree, Ojibway and Assiniboine. For over 6,000 years, the intersection of the Assiniboine and Red Rivers has been a congregation site for people including First Nations people, Métis and European Fur Traders. Traditionally a First Nations stopping place, the European fur traders decided the area would be ideal for establishing posts. The establishment of fur trade posts at The Forks began in 1738 with the building of Fort Rouge. Subsequently four more fur trade era forts, Fort Gibraltar (1807), Fort Garry (1821) and Upper Fort Garry (1835) were constructed around the confluences of the Red and Assiniboine Rivers (Parks Canada 2012).

Since the establishment of the fur trade posts, the Forks has been a centre for trade and exploration, a focus for the first permanent European settlement in the Canadian west, the core of the province of Manitoba, a hub of rail and road transport, and the gateway for the settlement of the prairies (FNPC 2016). Urban revitalization and waterfront development have transformed the designated place over time, but its historic values and sense of place remain. Today, the Forks has been redeveloped, and the meeting place theme has incorporated an exceptional and distinct all-season gathering and recreation place that includes shops and eateries, museums, walking trails and a multitude of attractions.

## **2.0 HERITAGE RESOURCE MONITORING METHODS**

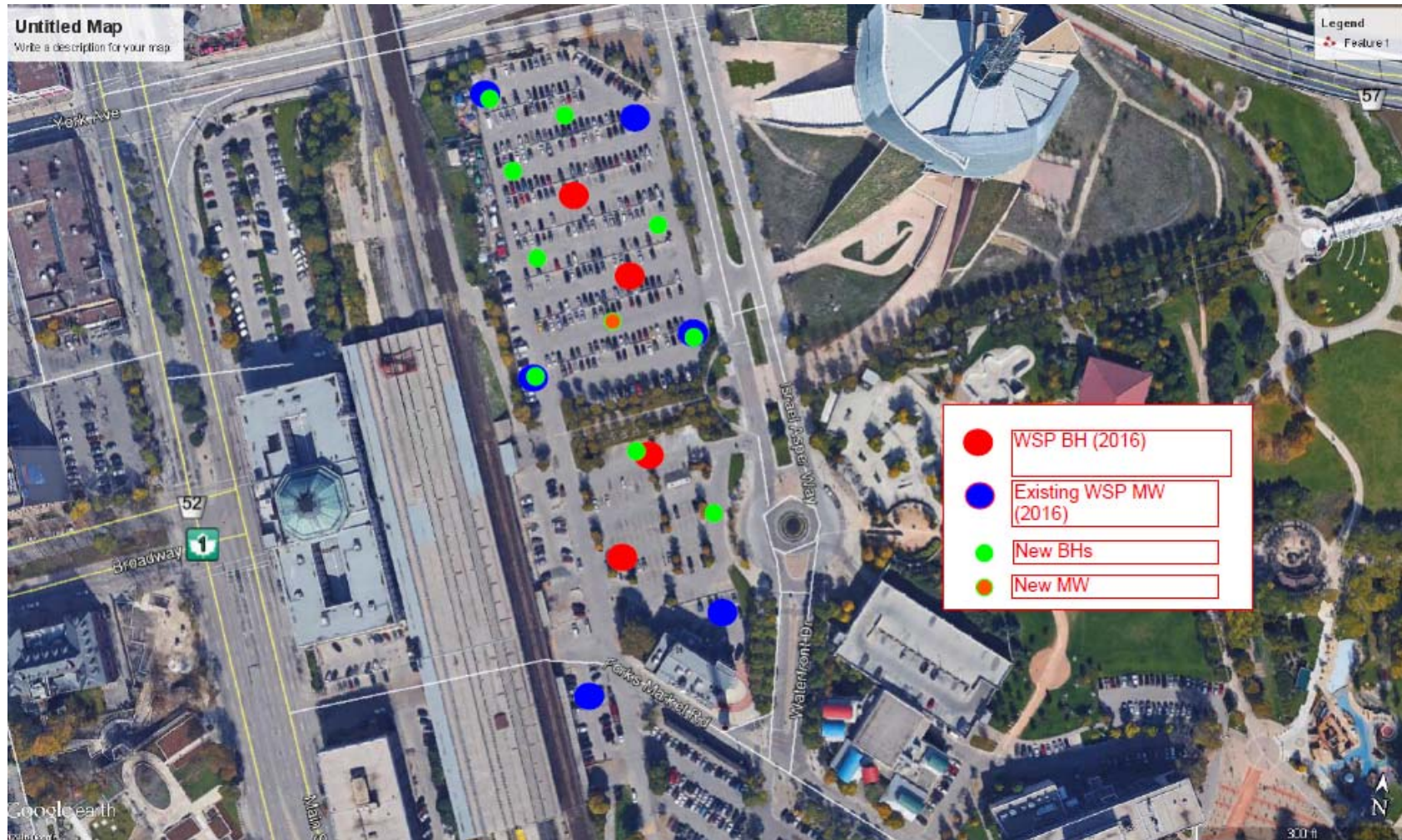
### **2.1 SOIL SAMPLING AND GEOTECHNICAL DRILLING**

The soil sampling and geotechnical drilling was conducted by WSP Canada Inc. (WSP), utilizing the services of Maple Leaf Drilling Ltd. Soil testing as part of the Environmental Site Assessment (ESA) was conducted at eleven locations across the site (Figure 2). The GPS Coordinates for these locations are in Appendix B. Soil samples were taken by two inch split-spoon method, which splits the extracted tube length-ways to allow for a true cross section evaluation and gentle sample removal (Figure 3). It should be noted that this method of soil extraction compresses the materials considerably and that the depths noted using the split-spoon method are somewhat inaccurate. Archaeological monitoring consisted of visual inspection of the extracted tube and soils within. On average the boreholes were dug to a depth of 6 meters.

In addition to the boreholes, two well-hole test drillings (MW 16 and MW 21) were taken to a depth of 9 meters using a six inch auger bit and examined on the auger immediately after extraction by InterGroup's archaeologist. These auger bit cores, although uncompressed, tumble the soils through a screwing action and the depths are therefore somewhat inaccurate.



Figure 2: Location of Bore Holes (BH) and Monitoring Wells (MW)WSP



Source: WSP, 2017

Figure 3: Split Spoon Core Sample (BH15 – Core 1)



## 2.2 OBSERVATIONS

The soil profile at Parcel 3 (Railside), as determined by the core sampling, is characterized by a thin layer of gravel and/or clay fill, generally less than one metre thick, mostly underlain with lacustrine clayey or sandy silts.

All eleven of the bore holes were excavated to a depth of 3 meters, or 10 feet. Although charcoal, wood residue and some ash were recovered from several holes, only three bore holes yielded a small amount of archaeological artifacts, and only Bore Hole 20 (BH20) contained materials likely to be pre-contact cultural materials. The majority of the artifacts were recovered between 20 and 40 cm of the current ground surface, and are likely from post-contact land use. However, core sample BH20 yielded two likely cultural layers, the first between 90 cm and 100cm, and the second between 130 to 160cm below surface.

### Recovered Materials:

**Bore Hole 11 (BH11):** Partial Square-cut nail, ash, charcoal and wood fibre

**Depth of Recovery:** approximately 30 cm

**Bore Hole 11 (BH11):** Thick charcoal band

**Depth of Recovery:** approximately 45 cm

**Bore Hole 15 (BH15):** Unidentifiable oxidized iron, clinker (exhausted coal slag), ash and charcoal, glass fragment

**Depth of Recovery:** approximately 15-20 cm

**Bore Hole 16 / Monitoring Well 16 (BH16/MW16):** Clinker

**Depth of Recovery:** approximately 45 cm

**Bore Hole 17 (BH17):** Wood fibre (possibly pressboard)



**Depth of Recovery:** 38-48 cm

**Bore Hole 20 (BH20):** Fish bone, partial medium or large mammal bone, band of charcoal and ash. It should be noted that several thin bands of charcoal and mixed, dense clays that formed an apparent cultural layer was encountered between 58cm to 86cm (Figure 4). Further, the mammal bone, burnt fish bone and remnant fish scales were recovered in another apparent cultural layer at approximately 127 to 193cm below surface (Figure 5).

**Depth of Recovery:** Band A at 58cm to 86cm. Band B at 127cm to 193cm

**Figure 4: Split-Spoon Core Sample (BH 20 – Core 1)**



Figure 5: Split-Spoon Core Sample (BH20 – Core 2)



### 3.0 RESULTS AND RECOMMENDATIONS

The Heritage Monitoring of geotechnical drilling within Parcel 3 at The Forks was conducted on August 22 to 23, 2017. The investigation included monitoring of soil sampling and geotechnical drilling. The monitoring resulted in the discovery of heritage resources during the Environmental Site Assessment (ESA) and Geotechnical Surveys. Some cultural materials recovered were noted to be part of the former East Yards fill and are of minimal heritage concern.

The two possible occupation levels in Bore Hole 20 (BH20) were deemed to be archaeologically noteworthy due to the presence of fish bone, a band of charcoal, and ash in the upper layer (58-86 cm dbs) and burnt fish bone, ash, charcoal, and a large mammal bone fragment (127-193 cm dbs) in the lower layer. It should be noted as well that thin beds of charcoal were noted between these two layers. While these layers are not strict predictors of archaeologically significant layers, in the experience of this writer they are indicators of a high likelihood of the presence of cultural layers in this area. A two inch bore is a small impact zone and the likelihood of missing significant artifacts is high. While this exploratory method can provide an indication of the presence of cultural layers, it is not definitive.

In summary, the Heritage Monitoring of the ESA, Geotechnical Surveys encountered some archaeologically noteworthy resources in Bore Hole 20 (BH 20). ***Due to the high potential and possibility of heritage resources at The Forks site as a whole, a recommendation is made to have archaeological monitoring of all future soil disturbances on site.***

## **4.0 REFERENCES CITED**

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1988 Editors Notes. Manitoba Archaeological Quarterly, April, 2 (2), p. 1. Winnipeg, Manitoba.

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1998 Terrestrial ecozones, ecoregions and ecodistricts of Manitoba: an ecological stratification of Manitoba's natural landscapes. Research Branch Technical Bulletin 98-9E. Land Resource Unit, Brandon Research Centre. Research Branch, Agriculture and Agri-Food Canada, Winnipeg, MB. [Accessed online Sept 14, 2016]

[http://sis.agr.gc.ca/cansis/publications/ecostrat/provDescriptions/mbteee/mbteee\\_report.pdf](http://sis.agr.gc.ca/cansis/publications/ecostrat/provDescriptions/mbteee/mbteee_report.pdf)

The Forks North Portage Corporation (FNPC)

2016 History. The Forks. [Online]. Available at: <http://www.theforks.com/about/history> [Accessed online November 4, 2016].

## **Appendix A: Manitoba Heritage Permit A41-17**

**AUG 18 2017**

*The Heritage Resources Act (Subsection 14(2) and Sections 52 and 53)*

**Heritage Permit No. A41-17**

**Manitoba**   
Tourism, Culture, Sport and Consumer Protection

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**Pursuant to Section/Subsection: 53 of *The Heritage Resources Act*:**

**Name:** Mark Paxton-MacRae  
InterGroup Consultants

**Address:** 500-280 Smith Street  
Winnipeg MB R3C 1K2

**Attention:** Mark Paxton-MacRae

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

Conduct archaeological monitoring of geotechnical drilling on behalf of the Forks Renewal Corporation as part of pre-development studies for Parcel 3, The Forks, Winnipeg.

during the period:

**August 21, 2017 to August 26, 2017 (window)**

This permit is issued subject to the following conditions:

- (1) That the information provided in the application for this permit dated the **August 15, 2017** is true in substance and in fact;
- (2) That the permittee shall comply with all of the provisions of *The Heritage Resources Act* and any regulations or orders thereunder; PLEASE NOTE ATTACHMENT RE: CUSTODY AND OWNERSHIP OF HERITAGE OBJECTS;
- (3) That the Permittee shall provide to the Minister a written report or reports with respect to the Permittee's activities pursuant to this permit, the form and content of which shall be satisfactory to the Minister and which shall be provided on the following dates:  
**March 31, 2018**
- (4) That this permit is not transferable;
- (5) This permit may be revoked by the Minister where, in the opinion of the Minister, there has been a breach of any of the terms or conditions herein or of any provision of *The Heritage Resources Act* or any regulations, thereunder;



(6) Special conditions:

- a. The permittee must obtain permission from any landowner, lessee or regulatory authority as applicable, concerning access to any property to be examined;
- b. Neither the Government of Manitoba nor the party issuing this permit shall be liable for any damages resulting from any activities carried out pursuant to this permit, and the Permittee specifically agrees, in consideration for receiving this permit, to indemnify and hold harmless the Minister and the Government of Manitoba, the Minister and any employees and officials of the Government, against any and all actions, liens, demands, loss, liability, cost, damage and expense including, without limitations, reasonable legal fees, which the Government, Minister or any employee or official of the Government may suffer or incur by reasons of any of the activities pursuant to or related to this permit.
- c. The permittee has, along with this permit, received enclosure:  
*Provisions Regarding Found Human Remains Under THE HERITAGE RESOURCES ACT, And Manitoba's Policy Respecting the Reporting, Exhumation and Reburial of Found Human Remains (1987).*

Dated at the City of Winnipeg, in Manitoba, this 16th day of April, 2017



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Minister of Tourism, Culture, Heritage, Sport and Consumer Protection

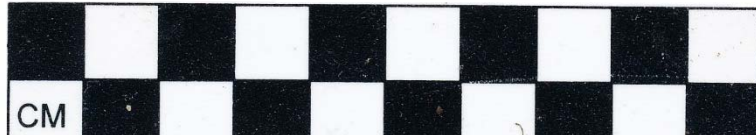
**Manitoba Tourism, Culture, Heritage, Sport and Consumer Protection  
Historic Resources Branch**

## **Appendix B: Well and Bore Hole Geolocations**

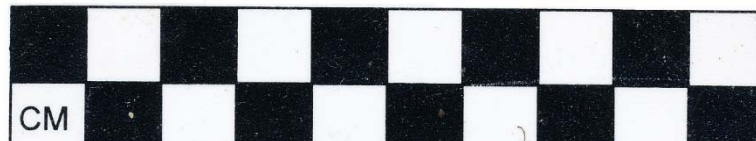
| Borehole/<br>Monitoring Well ID | UTMX    | UTMY   | Zone | Elevation<br>(m) |
|---------------------------------|---------|--------|------|------------------|
| BH11                            | 5528138 | 634058 | 14   | 230.154          |
| BH12                            | 5528131 | 634092 | 14   | 230.196          |
| BH13                            | 5528103 | 634072 | 14   | 230.147          |
| BH14                            | 5528068 | 634085 | 14   | 230.181          |
| BH15                            | 5528094 | 634144 | 14   | 230.394          |
| MW16                            | 5528060 | 634112 | 14   | 230.129          |
| BH17                            | 5528026 | 634099 | 14   | 230.146          |
| BH18                            | 5528049 | 634164 | 14   | 230.457          |
| BH19                            | 5527989 | 634151 | 14   | 230.301          |
| BH20                            | 5527966 | 634179 | 14   | 230.579          |
| MW21                            | 5527928 | 634184 | 14   | 230.53           |

## **Appendix C: Scans of Recovered Artifacts**

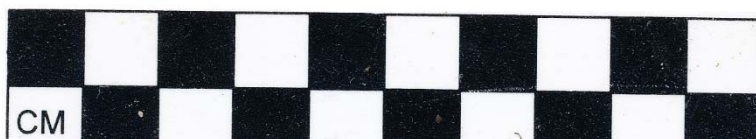
**Bore Hole 11 (BH 11): Thick charcoal**  
**Depth of Recovery:** approximately 30 cm dbs



**Bore Hole 11 (BH 11): Ash-Charcoal-Wood Fiber**  
**Depth of Recovery:** approximately 30 cm dbs

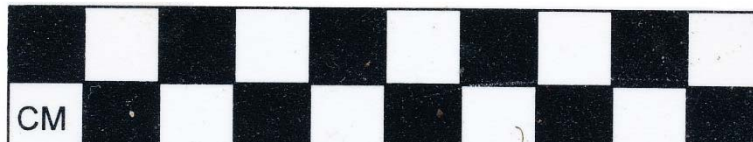


**Bore Hole 11 (BH 11): Square Cut Nail**  
**Depth of Recovery:** approximately 30 cm dbs

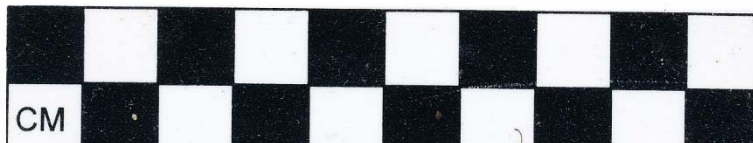




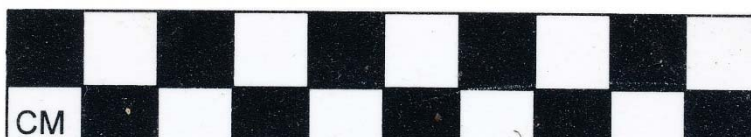
**Bore Hole 11 (BH 11): Wood and Charcoal**  
**Depth of Recovery:** approximately 30 cm dbs



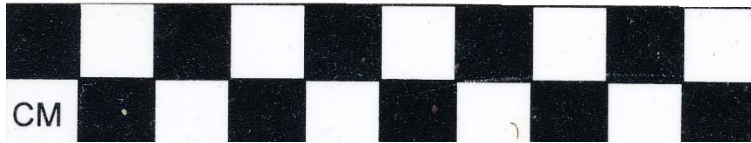
**Bore Hole 15 (BH 15): Metal**  
**Depth of Recovery:** approximately 38 cm dbs



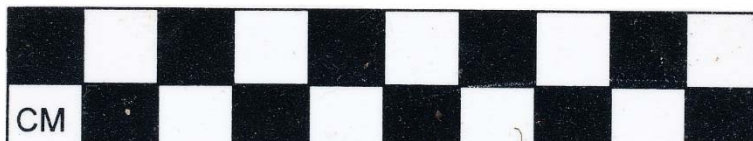
**Bore Hole 15 (BH 15): Clinker**  
**Depth of Recovery:** approximately 38 to 45 cm dbs



**Bore Hole 15 (BH 15):** Glass Fragment  
**Depth of Recovery:** approximately 114 cm dbs



**Bore Hole 16 (BH 16):** Undetermined  
**Depth of Recovery:** approximately 53 cm dbs



**Bore Hole 16 (BH 16):** Undetermined  
**Depth of Recovery:** approximately 25 cm dbs



**Bore Hole 17 (BH 17): Wood Pressboard**  
**Depth of Recovery:** approximately 40-45 cm dbs



**Bore Hole 20 (BH 20): Burnt bone**  
**Depth of Recovery:** approximately 180 cm dbs



**Bore Hole 20 (BH 20): Large Mammal Bone**  
**Depth of Recovery:** approximately 180 cm dbs

