HALIFAX PUBLIC GARDENS:

ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT

Heritage Research Permit A2006NS10



August 2006

Submitted by: Davis Archaeological Consultants Limited 6519 Oak Street Halifax, Nova Scotia B3L 1H6 Submitted to: Halifax Regional Municipality PO Box 1749 Halifax, Nova Scotia B3J 3A5

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Heritage Research Permit A2006NS10 Category C

Davis Archaeological Consultants Limited

Principal Investigator: April D. MacIntyre
Report Compiled by: April D. MacIntyre, Heather MacLeod-Leslie & Stephen A. Davis

Cover: Excavated area on east side of female's washroom, showing mottled soil likely displaced from entrance way.

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EXECUTIVE SUMMARY

In January 2006, Davis Archaeological Consultants (DAC) Limited conducted an archaeological resource impact assessment in the Halifax Public Gardens, under contract to Halifax Regional Municipality. The assessment was limited to archaeological monitoring of mechanical excavation adjacent to the male washroom near South Park Street and a reconnaissance of the area immediately west of the female's washroom near Spring Garden Road as well as an area southeast of Horticultural Hall near the Spring Garden Road entrance gate. In July 2006, the construction was expanded to include the installation of catch basins on the west side of Horticultural Hall. The second phase of construction was conducted by Permacrete and was monitored by DAC's senior technicians from 10 July to 19 July 2006 and by DAC's president on 20 July and 26 July 2006. The assessment was conducted under an extension of Heritage Research Permit A2006NS10, issued by the Nova Scotia Museum in January 2006. No significant archaeological resources were encountered during monitoring activities, although several artifacts were collected from disturbed contexts. Consequently, construction was allowed to proceed as scheduled.

1.0 INTRODUCTION

In July 2006, Davis Archaeological Consultants (DAC) Limited conducted an archaeological resource impact assessment in the Halifax Public Gardens, under contract to Halifax Regional Municipality. The assessment was conducted by DAC's senior technician, April MacIntyre, on 10 July to 12 July 2006, by Heather MacLeod-Leslie on 17 July to 19 July, and by DAC president Stephen Davis on 20 July and 26 July. The assessment was conducted under an extension of Category C Heritage Research Permit A2006NS10 (Appendix A).

2.0 DEVELOPMENT/STUDY AREA

The assessment was limited to archaeological monitoring of mechanical excavation surrounding the female's washroom near the Spring Garden Road entrance to the Gardens as well as on the west side of Horticultural Hall (Figure 2.0-1). Four concrete catch basins were installed along the western and southern boundary of the development area and were hooked into the existing drainage system in front of Horticultural Hall which connects to the storm sewerage main on Spring Garden Road. This required excavation of the entrance way into the Gardens as well, although this area has been previously disturbed on several occasions and, therefore, monitoring was not required.

Historical Background 2.0.1

Prior to 1837, the land now known as the Halifax Public Gardens was part of the city Commons which stretched northward to the present-day skateboard park. Freshwater Brook connected Griffins Pond at the south end to Egg Pond (no longer in existence) near the skateboard park to the north. The land in between, now the Wanderer's Ground, was largely marsh land and the area from Griffins Pond to the Nova Scotia Museum parking lot appears to have been used as a city dump. In 1837, the Nova Scotia Horticultural Society received 5.5 acres to establish a public garden on the south boundary of this dumping ground. The earthen berms at the south end of the Gardens paralleling Spring Garden Road were built at this time. By 1845, the Gardens featured "two dwellinghouses, two hot-houses, a new hall, a new barn". In 1848, a lodge was built near the site of the present-day canteen. In Hopkin's Atlas for the City of Halifax (1879), this is likely the building referred to as a root house (Figure 2.0-2). In 1859, a covered skating rink was built to the southeast of Griffins Pond and may have been the first covered skating rink in Canada.3

¹ Black Spruce Heritage Services, 2004:5-6.

² Fowler, 2003.

³ Black Spruce Heritage Services, 2004:6.

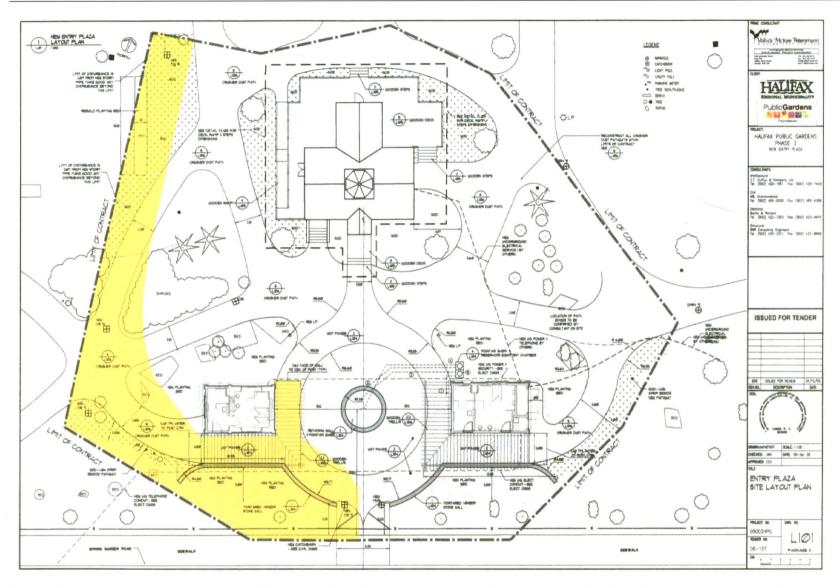


Figure 2.0-1: Site layout plan (courtesy Vollick McKee Petersmann & Associates Limited) showing the approximate area of archaeologically monitored excavation in yellow (yellow shaded area by DAC Ltd.).

and the surrounding matrix was comprised of medium brown/grey sandy loam fill with gravel to a depth of 0.61 metres below the surface. Beyond this was natural till (Plate 2). At the north end of the trench 0.35 metres below the surface was a layer of ironstone (rock) in a mottled orange and brown disturbance lot (Plate 3). Several scattered fragments of broken brick were observed in this trench and the ironstone did not appear to be structural. This may be associated with demolition of a nineteenth century building, possibly the lodge or root house constructed in 1848. A complete stoneware ink well was recovered from this trench and catalogued.

Monitoring of the southern extension of this trench by Heather MacLeod-Leslie revealed a single feature which was breached. This appeared to be a drainage feature, apparently late 19th century in origin, which resulted from infilling with soils and cultural materials (fragmentary artifacts) and rocks, to reify and drain a swampy depression. A site visit by Steve Powell ensured that a decision to continue trenching through the feature, with proper recording of its location and the breach of it, would be an acceptable course of action. The feature began at approximately 18 metres south of the northernmost catch basin and continued for approximately 3 to 4 metres south at 0.35 metres below the surface (Plate 4).

4.0 CONCLUSION AND RECOMMENDATIONS

No significant archaeological resources were encountered in the impact areas during excavation. The north end of the catch basin trench was previously impacted by installation of the electrical hook ups and some structural debris was encountered at the north edge of the trench. Consequently, the area to the north of this trench may contain a concentration of structural debris or even an in situ feature. In the future, should this area be disturbed, it is recommended that it be subjected to an archaeological resource impact assessment by a qualified archaeologist.

Furthermore, should additional subsurface disturbance be conducted within the Public Gardens, it is recommended that an archaeological assessment be conducted. Very little historic documentation exists for the Gardens prior to 1837 and, to date, no archaeological record exists for the southwest quadrant of the Gardens.

5.0 REFERENCES CITED

Black Spruce Heritage Services. 2004. *Halifax Public Gardens: Archaeology During the 2004 Restoration*. Heritage Research Permit A2004NS51. Manuscript of file, Nova Scotia Museum and Halifax Regional Municipality.

Fowler, Jonathan. 2003. Archaeological Salvage Excavations at the Halifax Public

areas had been disturbed by prior construction activities and, consequently, monitoring was not required by an archaeologist in those areas although artifacts recovered from disturbed contexts by construction and engineering crew members during those times were recovered and catalogued. Monitoring of mechanical excavation on the west side of Horticultural Hall and surrounding the female's washroom immediately southwest of the Hall was monitored at various times by archaeologists April MacIntyre, Stephen Davis, or Heather MacLeod-Leslie. All field activities were documented and a photographic record maintained (Appendix B). Several artifacts were recovered and catalogued, although all were collected from disturbed contexts (Appendix C).

Archaeological monitoring by April MacIntyre on 10 July to 12 July ensured that excavation on the east and south sides of the female's washroom and at the north end of the trenching west of Horticultural Hall for catch basin installation did not impact on any significant archaeological resources. At this time, the soil on both sides of the washroom was excavated to the same grade as the entrance way in front of Horticultural Hall and the catch basin trench was excavated well into the natural till. Further archaeological monitoring by Heather MacLeod-Leslie ensured trenching activity carried out between 17 and 19 July did not impact any archaeological structures. Finally, Stephen Davis monitored further excavations on the south side of the female's washroom to the fence. At the northwest corner of the entrance gate, the soil was excavated well into the natural till.

3.0 RESOURCE INVENTORY

The mottled soil matrix on the east side of the female's washroom was comprised of recent fill pushed up by repeated excavation and grading of the entrance way into Horticultural Hall from Spring Garden Road (cover photo). Disconnected electrical wires and a wooden stake from previous excavations were unearthed as well as a 7Up bottle. Removal of the artificial berm on the south side of the washroom also revealed fill, although of an earlier origin (Plate 1). The medium to dark brown loam contained only very small (less than 2 cm-sized) sherds of white refined earthenware, yellow ware, and ironstone as well as glass fragments, amounting to less than ten artifacts which were not collected. These few artifacts were likely transported in early nineteenth-century fill from other parts of the city Commons when the berms were constructed. Further mechanical excavation from 20 July to 26 July revealed more of the same fill extending to the iron fence on Spring Garden Road and out to the entrance way into Horticultural Hall. Excavation along the western edge of the entrance way revealed a coarse earthenware drainage pipe at a depth of over 1 metre below the surface which was breached during excavation. The depth of the pipe could not be accurately measured due to concerns for safety.

At the north end of the basin trench near the canteen, at 0.37 metres below the surface, an unexpected electrical trench was breached which ran roughly parallel to the north-south walkway adjacent to Horticultural Hall. The electrical trench was filled with fine sand

Gardens. Heritage Research Permit A2003NS32. Manuscript of file, Nova Scotia Museum and Halifax Regional Municipality.

Hopkins Land Use Atlas of Halifax. 1879. Public Archives of Nova Scotia, Map Collection V6/240.

PLATES



Plate 1: Excavation of artificial berm to west of park entrance on Spring Garden Road, looking southwest.



Plate 2: East wall profile of catch basin trench showing the previously-excavated electrical trench.



Plate 3: North edge of catch basin trench showing ironstone 0.35 metres below surface, looking north.



Plate 4: Drainage feature in catch basin trench, looking east. Cultural stratum (organic) & yellow stratum below it define depression that was filled (below rocks).

APPENDIX A: HERITAGE RESEARCH PERMIT

A2006NS10

Permit No.



Nova Scotia Museum Special Places Protection Act, R.S.N.S. 1989

Application for Heritage Research Permit

(Archaeology)

(Original becomes Permit when approved by the Executive Director of the Nova Scotia Museum)

The undersigned April MacIntyre
of c/o 6519 Oak Street, Halifax, NS B3L 1H6
representing (institution) Davis Archaeological Consultants Limited
hereby applies for a permit under Section 8 of the Special Places Protection Act to carry out archaeological investigations during the period:
from 10 January 2006 to 31 January 2006
Halifax Public Gardens
general location South Park and Spring Garden Roads, Halifax
specific location(s) (cite Borden numbers and UTM designations where appropriate
and as described separately in accordance with the attached Project Description. Please refer to the appropriate Archaeological Heritage Research Permit Guidelines for the appropriate Project Description format.
I certify that I am familiar with the provisions of the Special Places Protection Act of Nova Scotia, and that I will abide by the terms and conditions listed in the Heritage Research Permit Guidelines for the category (check one).
O Category A - Archaeological Reconnaissance O Category B - Archaeological Research O Category C - Archaeological Resource Impact Assessment
Signature of applicant Cipil Mas Integra Date 16 January 2006
Approved: Executive Director Bell Men Date 30 January 25th

APPENDIX B: FIELD NOTES

HALIFAX PUBLIC GARDENS

JULY 10/06

A. MacIntyre

HRM contact: Phil Townsend Contractor: Permacrete (Paul)

10:00 Stopped by site and spoke to Permacrete contractor (Paul). Excavation is not ready to start yet. Went over blueprints with Paul to determine where digging would take place. Four or five drainage basins to be excavated on west side of Horticultural Hall adjacent to walkway as well excavation of a trench in front of Horticultural Hall and excavation in front of women's washroom. Removal of an existing manhole in front of Horticultural Hall is also planned, although I will not likely be needed for this. There is a drainage pipe running out from Horticultural Hall to Spring Garden Road, indicating there is previous disturbance here.

1:00 Paul called at 1:50 to say excavation was about to begin. Monitoring of backhoe excavation on east side of women's washroom adjacent to main entrance off Spring Garden Road. Crew is removing an artificial push-up from grading of entrance way in front of Horticultural Hall. Soil is clean medium brown sandy loam fill. Cobble fill on easternmost boundary of the push-up. 7Up bottle approximately 1m below the surface. Coarse earthenware drainage pipe fragments as well, indicating previous disturbance/displacement. Also old electrical wire (dead) and wooden stake from previous electrical trench excavation. Soil at the level of the adjacent asphalt is mottled brown, orange, and black (evidence of previous disturbance). In north profile of the excavation area, a void can be seen leading northward, likely resulting from a previously excavated trench for wiring or a waterline. Excavation is moving toward south side of washroom where there is an artificial landscaping berm adjacent to the park entrance.

Dump truck was full by 1:25 and needs to be taken to Dartmouth for unloading. Expecting a 1 hr round trip so I left to get batteries for the camera as I discovered they were dead shortly after arriving and I could not get a photo of the profile at the south side of the washroom during excavation.

2:15 Returned to site. Sod has been stripped from area on south side of washroom. Soil consists of uniform medium brown sandy loam fill. Small piece of white refined earthenware, coarse stoneware, and red and yellow brick fragments (all dating to late nineteenth century). By 3:00, truck was full again and it was clear that the only soil being excavated today would be the same recent fill so I left for the day. Informed Paul that I would return at 8:00 tomorrow morning to check on progress.

JULY 11/06

8:15 Checked in with John (backhoe operator). Not much more fill has been excavated since I left yesterday afternoon and the plan for the day is to continue excavating in this

area so I am not needed. John indicated that they found crushed gravel from a previous trench (electrical or water line) on the south side of the washroom, which indicates more recent disturbance and fill. Told the crew I would check back in around lunch time. Paul has my cell phone number if anything changes in the meantime.

1:15 Berm on the south side of Horticultural Hall has been taken down almost to the same grade as the adjacent asphalt in the park entrance. The soil is still consistent medium brown clean fill. Crew is prepared to start digging out a recent push-up on the west side of the washroom which was likely created when the washroom was built. The catch basins are on the truck and ready to be unloaded. They may be dug tomorrow. Rain is expected on Thursday (July 13) so if they are not installed tomorrow, it will have to wait until Friday.

JULY 12/06

11:45 Catch basin trench is being dug starting at the north end. The trench is located on the west side of Horticultural Hall and runs southward roughly in line with the existing walkway. At approximately 0.37 m below the surface, crew unexpectedly hit an electrical trench with several wires. It is not known if these wires are live and what they connect to. They are not in conduit. The wires run under the walkway in a north-south direction and then turn toward Horticultural Hall where they are then encased in conduit. The electrical trench is filled with sand and at the south end, where the conduit turns, there are some wood planks overlying the trench. Throughout the rest of the trench, the soil is medium brown/grey sandy loam to a depth of 0.61 m below the surface. This overlies the orange/brown/grey natural till. A few sherds of white refined earthenware were found in this till including blue Willow and blue shell-edged ceramics, a complete stoneware inkwell, a yellow ware sherd, and four to five fragments of red brick. At the north end of the trench is ironstone (rock) in mottled orange and brown/grey disturbance. This may be a small remnant of building demolition as historic documents indicate that there was a 19th century building in the approximate location of the canteen.

Crew is concentrating on getting the northernmost catch basin installed today. They likely won't dig the trench any further south today as heavy rain is expected tomorrow. James McKee (Vollick McKee Petersmann, engineer) arrived at 1:45 to advise on the electrical conduit running through the trench. These wires are live and are likely the main power source for much of the adjacent area, including the fountain and bandstand.

I left at 2:00 as the crew now has to survey the necessary grade and no more digging will likely occur today.

JULY 13/06

Heavy rain day. Drove by the site at 8:15 but there was no activity.

Photographic Record

Photo #	Description	Date
		(mm/dd/yyyy)
01	Excavated area on east side of washroom, showing mottled	07/10/2006
	soil likely displaced from entrance way.	
02	North profile of the same area, showing void resulting	07/10/2006
	from previous trenching.	
03	South profile of the same area showing mottled soil	07/10/2006
	associated with disturbance and displacement of soil.	
04	North profile of the same area, showing void resulting	07/10/2006
	from previous trenching.	
05	North profile of the same area, showing void resulting	07/10/2006
	from previous trenching.	
06	Excavation of artificial berm to west of park entrance on	07/10/2006
	Spring Garden Road, looking southwest.	
07		
08	Panoramic shot of the south profile of the berm on the	07/11/2006
09	south side of the washroom (moving east to west).	07/11/2000
10		
11	Recent push-up on west side of washroom to be removed,	07/11/2006
	looking north.	
12	North edge of catch basin trench showing ironstone 0.35	07/12/2006
	metres below surface, looking north.	
13	East wall profile of catch basin trench.	07/12/2006
14	East wall profile of catch basin trench.	07/12/2006
15	Catch basin trench, looking south.	07/12/2006
16	West wall profile of catch basin trench.	07/12/2006

HALIFAX PUBLIC GARDENS

H. MacLeod-Leslie

July 17th/06 - - Public Gardens / DAC on-call

Received a call from Paul at Permacrete at 8 a.m., onsite by 9 a.m.

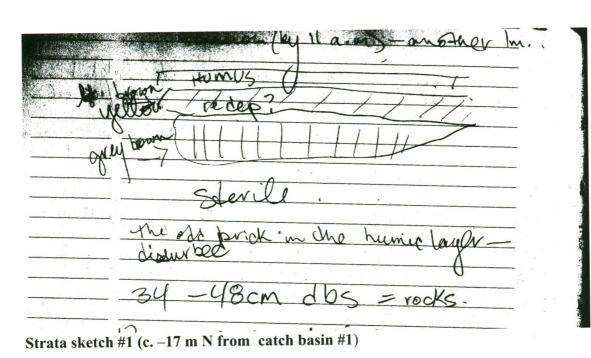
Viewed backdirt from Saturday's digging. No artifacts or cultural material of any sort on top – not surprising as trench is 3-4 feet deep and sterile soil is on top of pile. Watched Aaron (excavator operator) move Saturday's back dirt – nothing in topsoil layer at bottom of pile. Wait, 1 or 2 fragments of ceramic – late REW – whiteware, 1 piece of flat glass – disturbance/fill. Saturday's trench running N-S c. 13 m long, beginning at roughly 4 m from catch basin #1 (see Public Gardens map sketch #1), west of "house"/canteen.

Pics: 0010: looking northeast – shows degraded brick concentration in organic layer. 0011: looking east: stratigraphy of Saturday's trench, organic brown loam on top.

Saturday's trench c. 1.4 m deep. Organic layer 35 – 55 cm dbs – then sterile.

0012: looking south: cleaning bottom of Saturday's trench 0013: ditto.

10:50 – extending trench southward. Organic layer under tree and scrub is c. 25-30 cm thick. Extension, by 11 a.m. another m. from Saturday's trench.



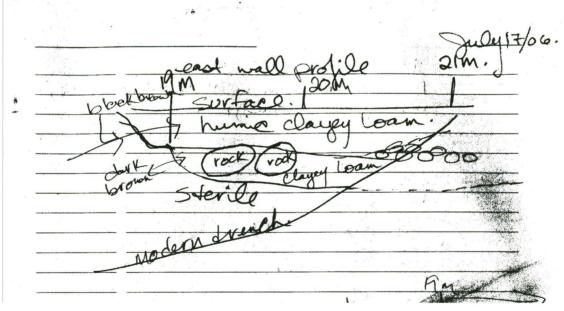
The odd brick in the humic layer, noted earlier, is disturbance.

34 - 48 cm dbs - rocks

12 noon: stopped digging to investigate rocks that seemed to be linear. Rocks are amidst fill containing cultural material: yellowware, blue transfer-print, black transfer-print, hand-painted polychrome porcelain, N. American stoneware, green transfer-print, charcoal, brick frags.

Called Steve and April – left a message. Called David C. left a message. Called Steve Powell – answered and offered to jog down to take a peek and deliver some historic plans of the gardens. By the time Steve arrived, I figured out it wasn't a building footing, but rather something else. Steve P. suggested it was a fill/stabilization episode of a low, swampy depression. Steve D. called, informed he and April of the course of my actions with Steve P. – no worries, carry on.

Steve P. no worries about feature...carry on trenching , but shave top of trench carefully for next little bit to confirm interpretation as a drainage feature, as I had planned. Yay – right call.



Strata sketch #2 (c. -19 to -21m N from catch basin #1)

Linear rock stratum is c. 30 cm dbs at top of deposit and c. 45 cm dbs at bottom (15 cm thick).

As of 1:30 p.m. trench is continuing southward still. At c. -21 m to - 21.5 m N, from catch basin #1 (west of the canteen) nearly

Around 2 p.m. Trench stops advancing south. Paul says rest of the day to be spent clearing water (that has run in through the historic drainage feature – water is likely coming from bog to the west), placing catch basin #2 and filling northern end of trench. I am to return tomorrow at 8 a.m. as they plan to advance the trench in the morning. No more digging until then.

Took 2 pics of state of site at my departure: looking NNW: Paul & bucket & trench.

Offsite by 2:30. Today's KM - 48.

July 18th/06.

Received a call at 7:30 (I was already on the Ferry) to say that yesterday's water was a bigger problem than anticipated, still trying to place catch basin #2 and fill in around it. No digging this a.m. – but due to water, overnight walls of trench had caved in. I decided to do a quick site visit to inspect wall collapse for cultural material – since I was already half way across the harbour by the phone call.

Arrived on site at 8 a.m. – inspected collapse, no surprises, same as yesterday's strata. Off site within 5 mins. or so.

Remained at SMU today in case of calls as Paul thought digging might continue in afternoon.

Got a call from Paul at around 4:10 – requesting I be on-site at 8 tomorrow a.m. No further visits today – Public Transit travel costs \$4.00.

July 19th/06.

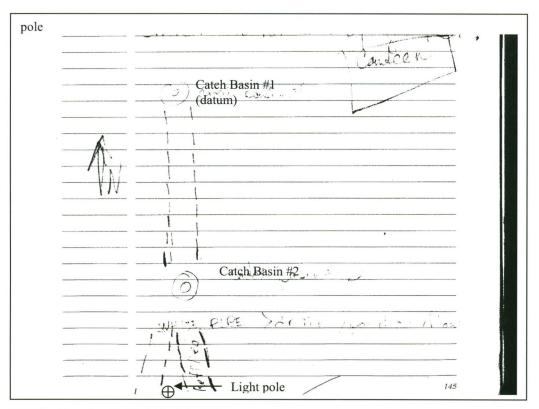
Arrived on site at 8 a.m. to find surface of south of white drain pipe (c. -21 m N) had been heavily impacted by the twisting and turning of the excavator in the one spot (the tracks just chewed into the surface. (Pic -0031) I expected they've not been digging with the bucket, but the "spinning" of the excavator has chewed up the surface to a likely 30-50 cm dbs. Spoke to Aaron (excavator operator) and explained that digging to an archaeologist is a whole different scale than what folks in his line of work think of, we think of any surface disturbance as digging – wasn't trying to make anyone feel bad, just avoid future problems....Aaron was fine with it, wasn't upset at all. Cool. No worries in this case anyhow – not many artifacts present more of yesterday's

fragmentary pieces.

Pic: 0032: looking west: west wall strata at c. -22 to -23 m N

Pic: 0032: looking west: west wall strata at c. -22 to -23 m N 0033:

Aaron advanced the trench southward another c. 6 m by 8:50. Cleaning up the bottom of the trench, correcting vertical angle and realized that trench beyond (south of) white pipe (c. -21m N) was on the wrong horizontal angle – refill & pack. Re-dig trench from white pipe/catch basin #2 toward Spring Garden Rd. to run west of light pole.



Public Gardens: sketch map #2

0034: looking west:

0035: ditto: 0036: ditto:

Drain appears to extend c 1.5-2 m. south of white bog drain pipe. Water is clearly flowing freely just south of white pipe. The trench for this pipe impacted the older (rock & fill) drainage feature, which continues for another 1-1.5 m south of the white pipe trench.

0037-Video Clip: shows where water flows from drain. James McKee site visit c. 10:30

0038: looking WNW. Paul (Permacrete) & James McKee standing over and watching flowing water.

0039: looking WNW: ? s/limits of drain ?

0040: looking WSW: exposing electrical cable for light pole.

Lots of dark brown loamy topsoil c. 15-20 cm thick. Some artifacts – a couple of brick fragments, light blue (milky, not burned) glass, blue transfer-print, whiteware, late, late, late – c. 25 cm dbs

Off-site 11:45 a.m. – no digging for a few hours yet.

Got a call from Paul at 2 p.m. – want me back on site. Arrive on-site in about 15 minutes.

1 pic: looking south: strata, on southern wall of trench at juncture with E-W course of trench. Topsoil c. 50 cm thick. No further artifacts present.

3 p.m. – Danny, (Permacrete owner) arrives at 3 p.m. Done digging for today. Rest of day to be used to place pipes & catch basin #3. Need an archaeologist on site tomorrow 8 a.m.