MSU Campus Archaeology Program Survey
Summary Sheet

Survey No. 32

Date of Survey: 06/03/2010-06/04/2010

Site Name: MSC Powerplant

Principal Investigator: Terry Brock

Physical Plant Project Name: N/A

Project Justification: Done in response to the MSC Powerplant tower being removed

Location: Corner of W Shaw Ln. and Red Cedar Rd.

Campus Zone: Athletic District

Survey Type: Shovel Test Pit

Methodology: Survey consisted of two sweeps (grids) each with a series of transects, which were based on 5-meter intervals, so final hole number = 1 (sweep)-1(transect)-1(hole). Twenty-two positive STPs.

Summary/Conclusions: Very few shovel test pits had artifacts of historic value, but there was a distinct coal layer present in all pits. A railroad spike was recovered from the site. There is no obvious historic association though the presence of heavy coal deposits corroborates its long-term use for generating power, possibly overspill from unloading train. No diagnostic artifacts recovered.

Recommendations and Priority: Construction can proceed in this area, and the priority is medium low.

STPs:

Notes: All STPs had a distinct coal layer from 20 – 40 cmbs deeps. 1-2-1 had the highest concentration of coal, and a subsurface at the bottom at 40 cmbs. This surface is 7 cm thick, and a hard, compact gravel layer w. orangey (redish-yellow / yellowish-brown?) color. This STP is located along where the old rail line may have run, the heavy coal deposits in 1-1-1 and 1-3-1 may have been from overspill. 1-2-2 continues to have the gravel subsurface, as well as a layer of clay on top of it. This has been the most interesting thus far. Don’t seem to have any diagnostic artifacts.
Map:

- 1-1-1
  - End depth: 56 cmbs
  - Strata:
    - Topsoil: 0 – 15 cmbs
    - Coal layer: 15 – 26 cmbs
    - Compact soil: 26 – 41 cmbs
    - Subsoil: 41 – 56 cmbs
  - Artifacts: coal, glass (1)
- 1-2-1
  - End depth: 68 cm (88?)
  - Strata
    - Top soil: 0 - 13
    - Coal layer: 13 - 40
    - Compact gravel: 40 – 47
    - Mottled soil 47 – 60
    - Sterile soil: 60 – 88
  - Artifacts: coal, brick frags, ceramic pipe (1)
  - This STP had a distinct gravel subsurface
• 1-3-1
  o End depth: 46 cmbs
  o Strata
    ▪ Topsoil: 0 – 17
    ▪ Coal layer: 17 – 26
    ▪ Sand: 26 – 33
    ▪ Compact sand: 33 – 46
  o Artifacts: beer caps (not saved), coal (sample)

• 1-4-1
  o End depth: 45 cmbs
  o Strata:
    ▪ Topsoil: 0 – 23
    ▪ Coal layer: 23 – 34
    ▪ Compact sand: 34 – 45
  o Artifacts: coal (sample)

• 1-5-1
  o Depth: n/a
  o Strata
    ▪ Topsoil: n/a
    ▪ Coal: n/a
    ▪ Subsoil: n/a
  o Artifacts: coal (sample)

• 1-6-1
  o Same as 1-5-1

• 1-1-2
  o Depth: 36 cmbs
  o Strata:
    ▪ Topsoil: 0 -10
    ▪ Coal layer: 10 – 18
    ▪ Brown sand: 18 – 36
    ▪ Sterile sand w. probe: 36 – 44
  o Artifacts: coal (sample)

• 1-2-2
  o Depth: 83 cmbs
  o Strata
    ▪ Topsoil: 0 – 10
    ▪ Compact soil: 10 – 17
    ▪ Coal layer: 17 – 24
    ▪ Slag layer: 24 – 43
    ▪ Gravel subsurface: 43 – 50
    ▪ Mottled soil: 50 – 67
    ▪ Sandy subsoil: 67 – 83
  o Artifacts: brick (1), coal (sample)

• 1-3-2
  o Depth: 53 cmbs
Strata:
- Topsoil: 0 - 15
- Coal layer: 15 - 27
- Sandy subsoil w. clay lens: 27 - 53
- Artifact: coal (sample), cement (1)

1-4-2
- Depth: 49 cmbs
- Strata
  - Topsoil: 0 - 20 cm
  - Coal layer: 20 - 33 cm
  - Sand: 33 - 37
  - Sandy subsoil: 37 - 49
- Artifact: coal (sample)

1-5-2
- Depth: 64 cmbs
- Strata
  - Topsoil: 0 – 23
  - Coal layer: 23 – 30
  - Clay sand: 30 – 35
  - Sandy subsoil: 35 – 64
- Artifacts: brick (1), coal (sample)

1-6-2
- Not excavated due to tree

1-1-3
- Depth: 69 cmbs
- Strata:
  - Topsoil: 0 – 10
  - Coal layer: 10 – 28
  - Sandy loam: 28 – 52
  - Sandy subsoil: 52 – 69
- Artifacts: window glass (1), bottle glass (1), concrete (1), coal (discarded)

1-2-3
- Depth: 60 cmbs
- Strata:
  - Topsoil: 0 – 10
  - Compact soil (B-horizon): 10 – 20
  - Coal: 20 – 24
  - Slag: 24 – 39
  - Gravel sub surface: 39 – 44
  - Mottled soil: 44 – 51
  - Subsoil: 51 – 60
- Artifacts: brick (sample), coal (sample)

1-3-3
- Depth: 52 cmbs
• Strata
  - Topsoil: 0 – 23
  - Sand: 23 – 28
  - Coal layer: 28 – 30 – coal ash throughout layer
  - Sand: 30 – 52
• Artifact: window glass (1), coal (sample)

• 1-4-3
  - Depth: 32
  - Strata:
    - Topsoil: 0 – 9
    - Sand: 9-13
    - Coal layer: 13 – 30
    - Clay (v. compact): 30 – 32
  - Artifact: coal (sample), burnt wood (7)

• 1-6-3 → moved 1m south
  - Depth: 30 cmbs
  - Strata:
    - Topsoil 0 – 9
    - Sand, ash, coal: 9 – 24
    - Coal layer: 24 – 27
    - Yellow clay: 27 – 30
    - Light grey, heavily compacted soil: stopped here
    - Coal (sample), brick (1), fieldstone (1)

• 1-4-1
  - Depth: 56 cmbs
  - Strata:
    - Topsoil: 0 – 8
    - Compact soil: 8 – 16
    - Coal layer: 16 – 24
    - Sandy loam: 24 – 48
    - Sandy sub: 48 – 56
  - Artifact: ceramic utility pipe (1), metal band (1), wire nail (1), clinkers (2)

• 1-2-4
  - Depth: 70 cmbs
  - Strata
    - Topsoil: 0 – 12
    - Light brown soil: 12 – 22
    - Coal layer: 22 – 30
    - Slag layer: 30 – 44
    - Gravel layer(compact): 44 – 55
    - Mottled soil: 55 – 65
    - Sandy sub: 65 – 70
  - Artifact: coal (sample)

• 1-3-4
  - Depth: 61 cmbs
o Strata
  ▪ Topsoil: 0 – 14
  ▪ Sand: 14 – 29
  ▪ Coal layer: 29 – 32
  ▪ Sand: 32 – 61
  ▪ Artifact: coal (sample), bottle glass (1), brick (9)

• 1-4-4
  o Depth: 49 cmbs
  o Strata
    ▪ Topsoil: 0 - 21
    ▪ Coal layer: 21 – 23
    ▪ Buried A-horizon: 23 – 26
    ▪ Coal layer: 26 – 28
    ▪ Sand: 28 – 30
    ▪ Soil: 30 – 48
    ▪ Sand: 48 – 49
    ▪ Artifact: coal (sample), ash (discarded)

• 1-5-4
  o Depth: n/a
  o Strata:
    ▪ Topsoil: n/a
    ▪ Coal: n/a
    ▪ Artifact: coal (sample)

• 1-6-4
  o Depth: 28 cmbs
  o Strata:
    ▪ Topsoil: 0 – 18
    ▪ Compacted soil: 18 – 28
    ▪ Artifact: coal (sample)