

LITTLEFIELD DAM PROJECT (F.E.R.C. No. 8158)

REPORT ON ARCHAEOLOGICAL RESEARCH

CONDUCTED IN MAY, 1987

by

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and

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for

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This report was prepared through Natural Resource Consulting Services, 31-A  
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## INTRODUCTION

Consolidated Hydro, Inc. plans to rebuild a breached dam on the Little Androscoggin River at Littlefield Corners in Auburn, Maine. Pursuant to the requirements of the National Historic Preservation Act of 1966, their assessment of the proposed project's impact upon the environment must include the location and evaluation of archaeological resources within the area to be impacted by the dam impoundment.

Site location work (Phase 1) was performed during June and July, 1986. It was directed by Dr. James B. Petersen of the Archaeological Research Center, University of Maine at Farmington, Farmington, Maine, under contract to "C.H.I." through Natural Resource Consulting Services of Concord, N.H. (Petersen and Hackenberger:1987).

Based upon this work, the Maine Historic Preservation Commission drafted specifications (Appendix 1) for the evaluation of archaeological resources it identified in the project area (Phase 2). This report presents the results of Phase 2 research undertaken by the Maine State Museum for C.H.I., through Natural Resource Consulting Services.

## PROJECT AREA

The Little Androscoggin is a major tributary of the Androscoggin River. It arises in mountainous terrain north of Sebago Lake. These low mountains are foothills of the White Mountains of the Northern Appalachians. Its lower reaches, including the study area, have extensive stretches of actively meandering channels, and fossil channel features like oxbow ponds. These stretches are punctuated by nickpoints, one of which is located at the Littlefield Dam site. Below that nickpoint, the river passes through a

cliff walled gorge and over a series of steep falls before joining the Androscoggin River in Auburn, c. 6.5 km. below the dam.

The Phase 1 study area included bottom land (below 220 ft. a.s.l.) above the dam site in Auburn and the towns of Minot and Poland (Fig. 1). Sediments include fine-grained glaciomarine deposits with limited Holocene alluvium along stretches of riverbank (Thompson and Borns:1985). These soils are generally moderately to excessively well drained sands. Slopes vary from 0 to 30% (McEwen:1970). A pleistocene dune system, notable because it was occupied c. 10,000 years ago [B.P.], is located adjacent to, but not within the study area (Spiess and Brush:1987). The areas designated for further attention during Phase 2 were all located on level, well drained soils.

#### Methods:

The scope of work for a Phase 2 study, as defined by the Maine Historic Preservation Commission, is included in this report as Appendix 2. For purposes of the Littlefield Dam project, these goals were manifest in a letter from Earle G. Shettleworth, M.H.P.C. Director, to Jason James of E.S.I., dated July 31, 1986, which is included here as Appendix 1. This letter indicates 5 "Sites" and "Possible sites" (Fig. 2) reported by Petersen and Hackenberger (pgs. 22-42) with evidence of prehistoric human activity sufficient to warrant further exploration. The amount and kind of work specified reflect the details of evidence at each site.

Site 23.15 - The required work, 20 square meters of excavation, was not done. The owner, Romeo Godbout, refused us permission to dig on his

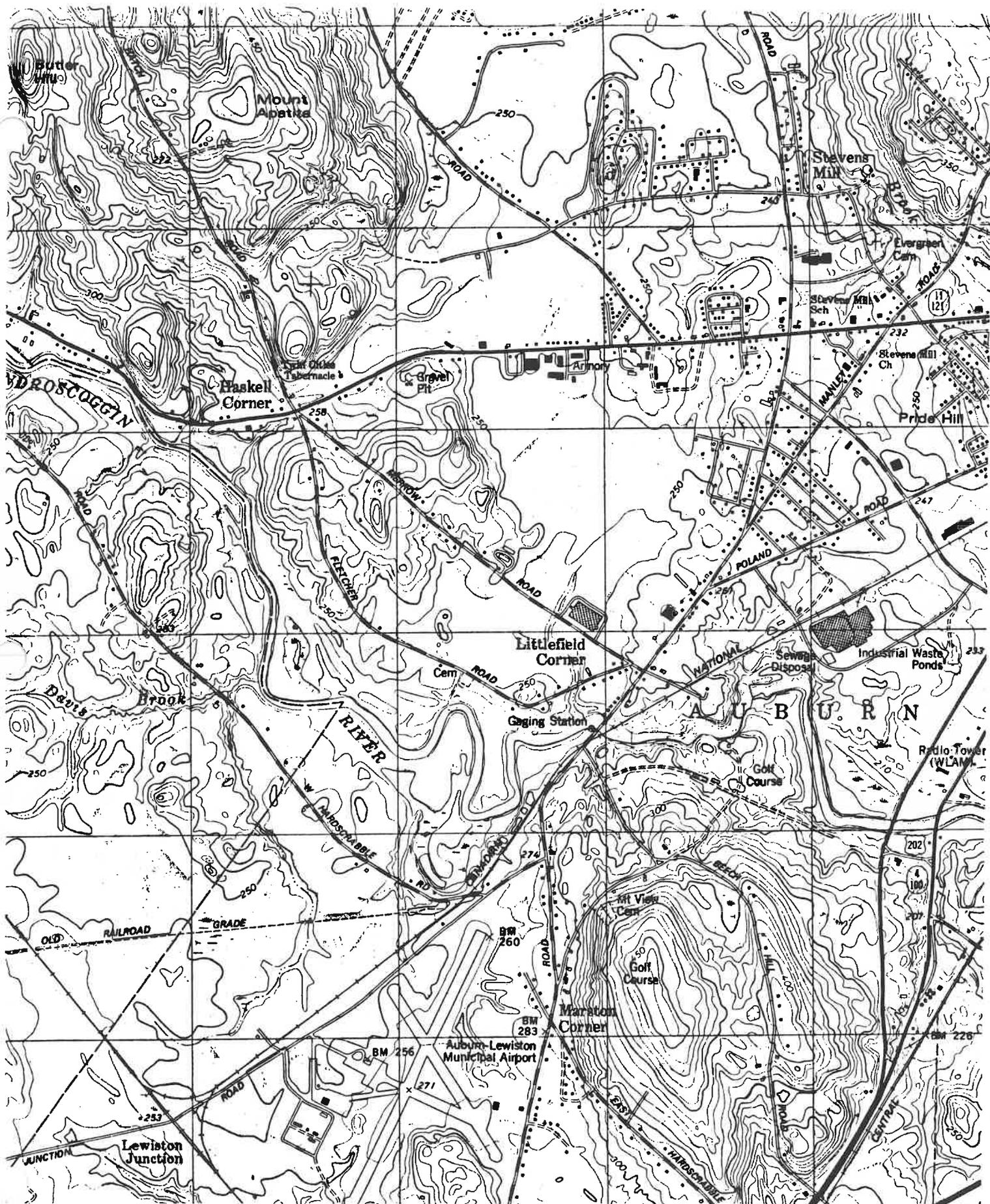


FIGURE 1: U.S.G.S. Topographic Map Showing Investigation Area.

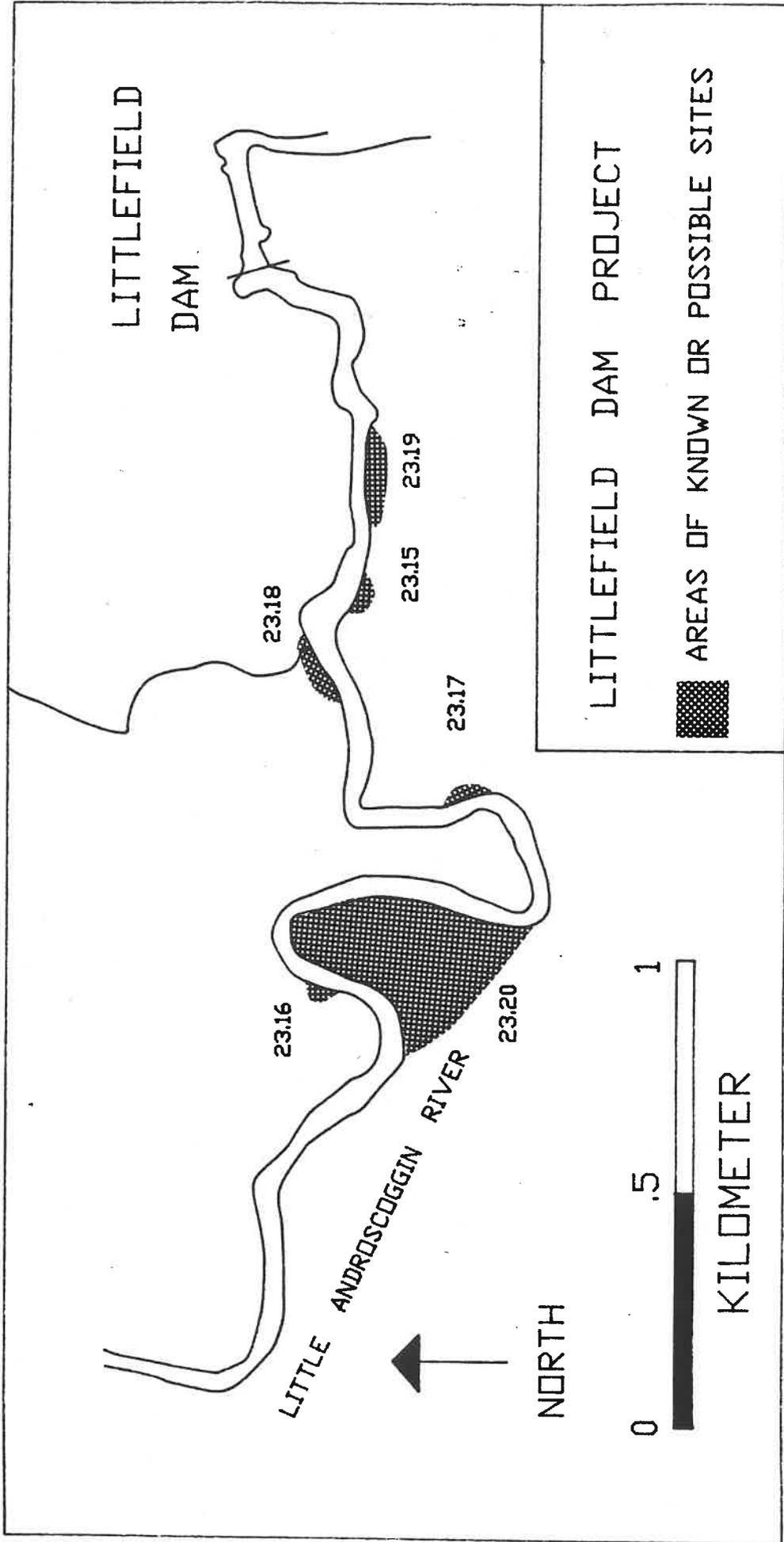


FIGURE 2: Map Showing Areas of Known or Possible Sites.

property. Phase I work produced 3 quartz flakes, 1 rhyolite flake, 1 quartz scraper, 1 quartz biface fragment (questionable), 1 quartz core, and 21 fire-cracked rocks (Plate I:B,C,D).

Site 23.16 - Phase 1 work produced one biface fragment found on a plowed surface, (Plate I:A) along with a bone fragment and several fire cracked rocks over a large area. The required work included 10 square meters of shovel testing.

Site 23.17 - Phase 1 work produced 52 quartz flakes, a possible quartz biface fragment (Plate I:E) and a fire-cracked rock. The required work included 20 square meters of excavation.

Possible site 23.18 - Phase 1 work produced a possible fire-cracked rock, later rejected in the laboratory. Required work included 10 shovel tests. No square meter requirement was indicated.

Possible site 23.19 - Phase 1 work produced a fire-cracked rock. Required work included 10 shovel tests. No square meter requirement was indicated.

Informant reported site 23.20 - An informant identified during Phase 1 work recalled a relative reporting artifacts recovered from the riverbank after a flood in 1936. Required work included 30 shovel tests and further interviews with the informant in an effort to validate his report. No square meter requirement was indicated.

### Results:

#### Site 23.15:

The required fieldwork was not done. The owner, Romeo Godbout, refused us access to his property. (Plate II)

#### Site 23.16:

We visited this site on May 13 and 14. All plowed surfaces were inspected by the crew (12 people). Following surface inspection, 31 shovel tests, each measuring .50 meters square, were excavated. Two additional pits that encountered fire-cracked rock clusters were 1 meter square. Thus, the total area opened was 9.75 m. sq.

All shovel tests extended through weathered B horizon into unweathered C horizon soils or, in this case, clayey hardpan (See appendix 3). The contents of each pit were seived through 0.25 inch (6 mm.) hardware cloth. Their placement is indicated on Fig. 3. They include the areas where a biface fragment was surface collected (Petersen and Hackenberg, 1987: 33, 35) and where their Fig. 11 (pg. 34) places T25-1. The shovel test record for the latter is indicated to have produced evidence "positive for prehistoric" [occupation]. Also included was a low terrace adjacent to the area tested during Phase 1.

This surface inspection and excavation produced no further conclusive indication of prehistoric occupation. Fire cracked rocks were frequently encountered on the surface and in the plowzone as well. If this terrace were, in fact, alluvial, as reported on Hackenberger's site form (Petersen and Hackenberger, appendix II), the mere presence of rocks would be

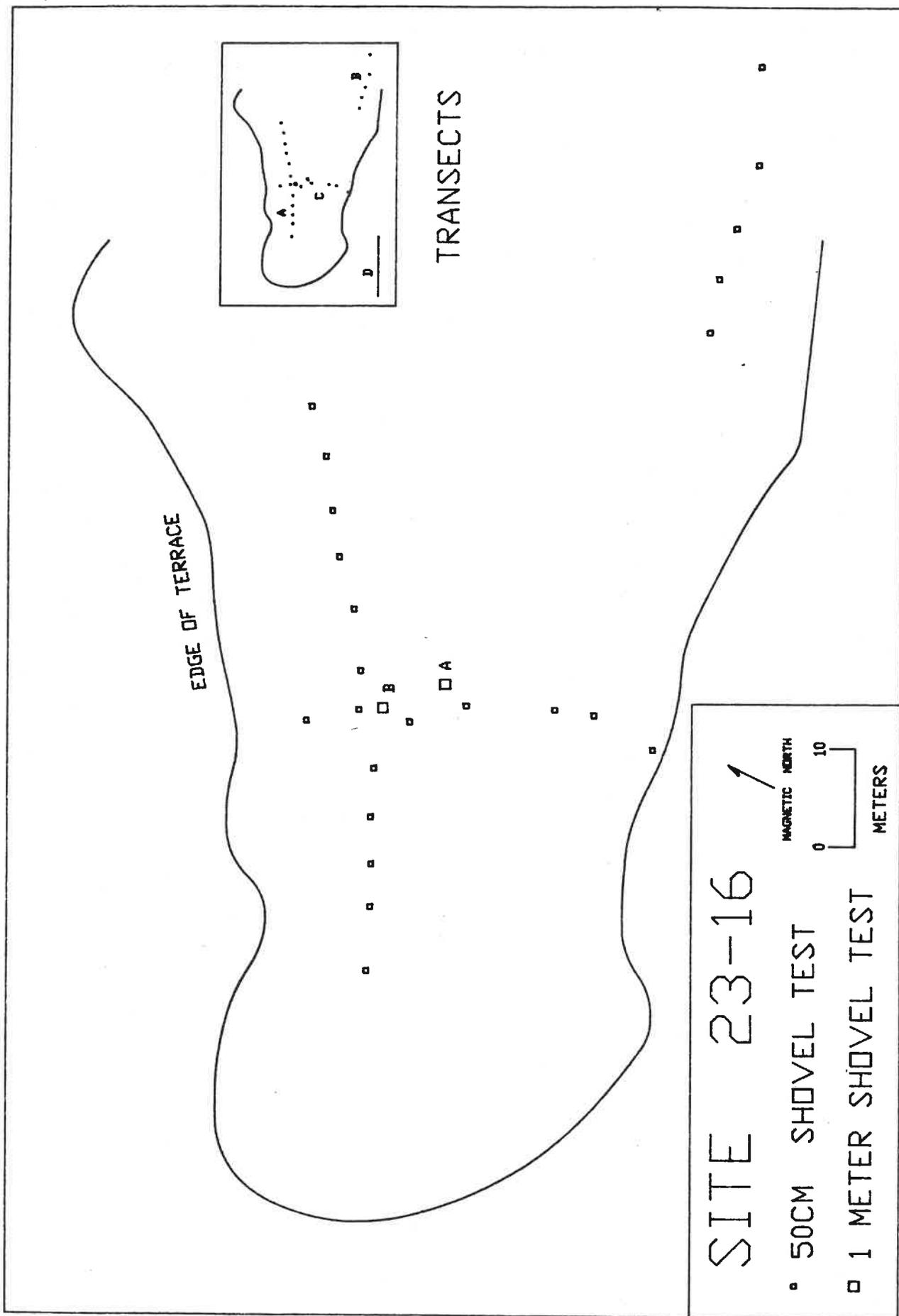


FIGURE 3: Map Showing Placement of Shovel Tests at Site 23.16

indicative of prehistoric occupation. However, the terrace is actually composed of Ninigret fine sandy loam which is defined as "Glaciofluvial materials:...Sandy over gravel" (McEwen 1970:Table 9, emphasis added). Thus, the underlying gravel is the most likely source for these rocks.

As described by Petersen and Hackenberger (33), and confirmed by us, many rocks showed signs of burning. Most probably, this alteration is the result of recent land clearance. Support for this conclusion comes from the presence of modern refuse and dense patches of apparently recent charcoal (from burned stumps?) that were also frequently encountered. Had such intensive burning derived from prehistoric human activity, it is highly unlikely that our work there would have failed to recover other conclusive evidence of it.

Our work at this site was impeded to some extent by inaccuracies in Petersen and Hackenberger's map (Figure 11) which has an inaccurate scale [probably 2x the actual scale of the map] as well as inaccurate elevation figures [closer to 220 feet than to the 250 and 255 feet shown]. We believe that our Figure 3 more accurately represents the area in question.

A second problem we encountered in addressing site 23.16 was the mislabeling of shovel test T26-1 as T25-1 on Petersen and Hackenberger's Figure 11. The latter was actually dug at site 23.15 and produced positive evidence for prehistoric occupation. It remains unclear whether this error influenced Petersen and Hackenberger's (46) recommendations regarding the site. However, it impacted our perception of the site because, taken together with Hackenberger's assertion that the site occupied an alluvial terrace, and the apparently anomalous appearance of fire cracked rock on

that terrace, it led us to test for cultural remains over the entire terrace.

Therefore, aside from the biface fragment recovered from the lower portion of this terrace, there is no reliable indication that it ever was occupied during prehistoric times. Most probably this fragment was a chance, isolated find, unrelated to any locus of human activity. Our past research in this drainage indicates that such finds are not uncommon there. (e.g., see Penney, J.W.)

Site 23.17:

Excavations at this site were conducted between April 22 and May 12. In addition, on April 22, shovel tests [2.50 m. sq.] not listed in the work specifications were made within the site [Fig. 4] and along the floodplain to its north [not on Fig. 4]. These areas were not tested during Phase 1, and we wanted to be assured that no additional evidence of prehistoric occupation would be found there. Shovel tests were .5 meters square, screened through .25 in. hardware cloth. as described for site 23.16 above.

Excavated sections measured 1 meter square. In all, 22 such sections were opened. All were hand troweled from the surface, downward through weathered B horizon into the C horizon. Profiles were drawn of all four exposed faces. All fire-cracked rocks and possibly significant soil discolorations were drawn on floorplans. Flaking debris was kept separately from each quarter section and soil horizon. Other artifacts were recorded as to horizontal location and depth below surface as well as stratigraphic association. All excavated soil was screened through 0.25 inch hardware

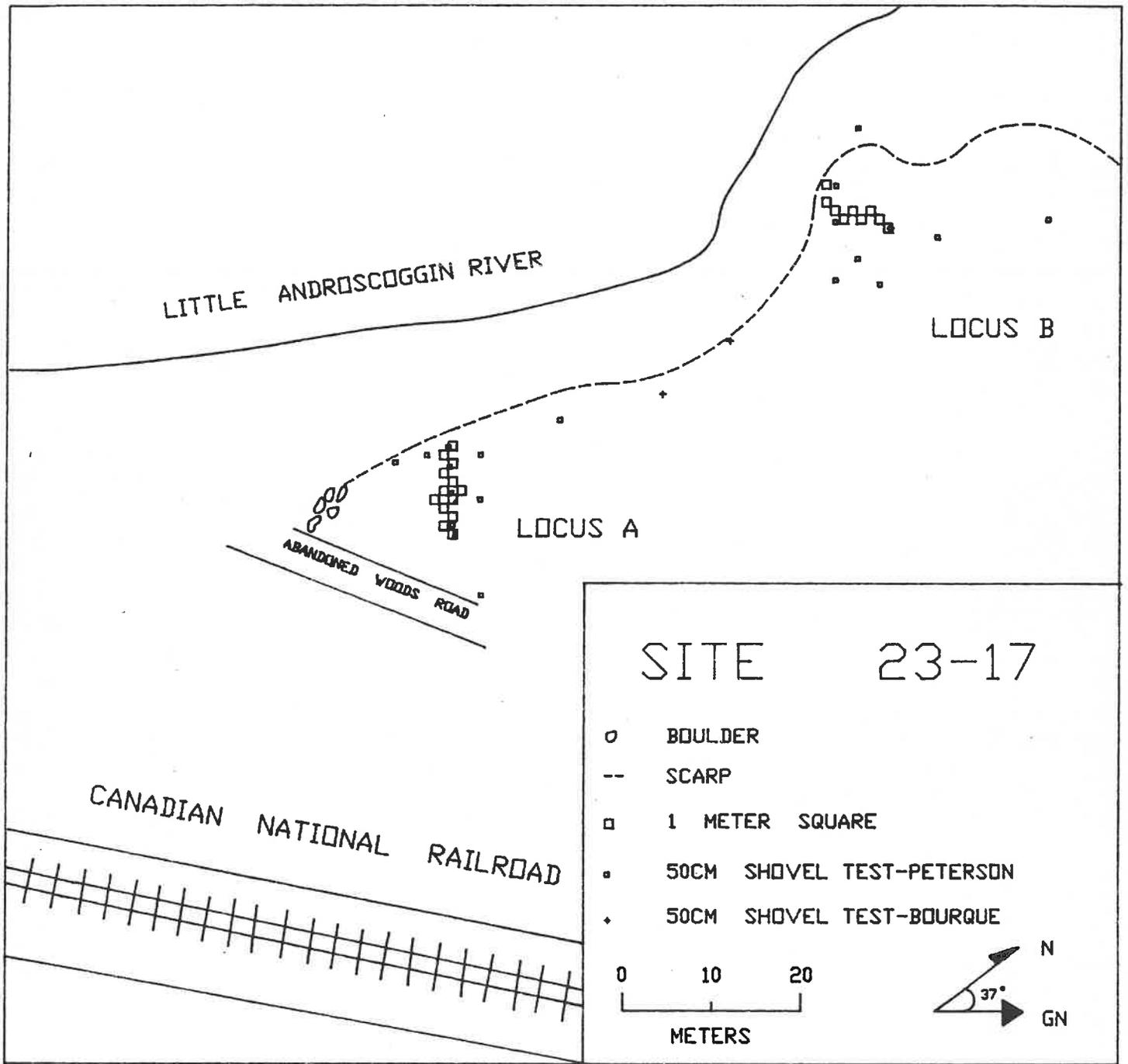


FIGURE 4: 23.17, Site Map.

cloth.

The area included by Petersen and Hackenberger under this site number is easily divisible into two loci, each occupying the level top of small, high, steep-sided tongues of an eroded Pleistocene terrace. They were separated by a lower terrace. Their relative positions are indicated on Fig. 4.

Locus A:

At Locus A (Plates III - V), datum was established close to the scarp of the modern bank and to Phase 1 testpit T46-1. A baseline was laid along the approximate center of the ridge, and 13, 1 m. sq. sections were excavated adjacent to it (Fig. 4, Plate VI).

The stratigraphic profile at Locus A began with a thin, culturally sterile O horizon. Underlying it was a uniformly brown sandy A horizon. Near the bank, this stratum reached a depth of 45 cm., but became increasingly shallow away from the bank, reaching a depth of only 20 cm. at the southeastern end of our excavation.

This stratum produced most of the cultural remains recovered here. However, there are reasons to believe that it is a plowed or otherwise disturbed horizon and that its contents are not in situ. First, historic materials were found in it but not below it. Second, below it were encountered intact charcoal patches probably representing burned trees or stumps. These features were absent from this horizon, suggesting their dispersal by plowing or some other activity. Third, all three pottery

sherds recovered were apparently from the same, thin walled vessel, and while they were found in close horizontal proximity, they came from both the plowzone and the B horizon. This indicated that their separation probably occurred after their deposition. Finally, the base of this stratum was clearly defined, as are the bases of known plowzones (Plate VII).

Beneath this probable plowzone was encountered a variably reddened, mottled sandy B horizon. Here too were found the charcoal patches mentioned above as well as other indications of root and perhaps burrowing animal disturbance. Artifact recovery rates fell off rapidly below the top of this horizon and no [prehistoric] culturally derived features were identified. Below the B horizon, at depths ranging from 30 to 60 cm. below surface was encountered a culturally sterile tan C horizon (Plate VIII).

Prehistoric artifacts from our work at Locus A (Table 1, Fig. 5, Plate IX) include three small pottery sherds, two pecked stone fragments, a biface fragment, a scraper and a utilized flake. As Fig. 5 illustrates, these were encountered sporadically throughout the excavation. Only flaking debris occurred with sufficient frequency to show a clear tendency to cluster near the bank (Fig. 6). However, it is probable that this clustering has been slightly enhanced by the apparent bankward movement of the plowzone. In addition, a possible quartz biface, 50 quartz flakes and 1 fire cracked rock were recovered during phase 1.

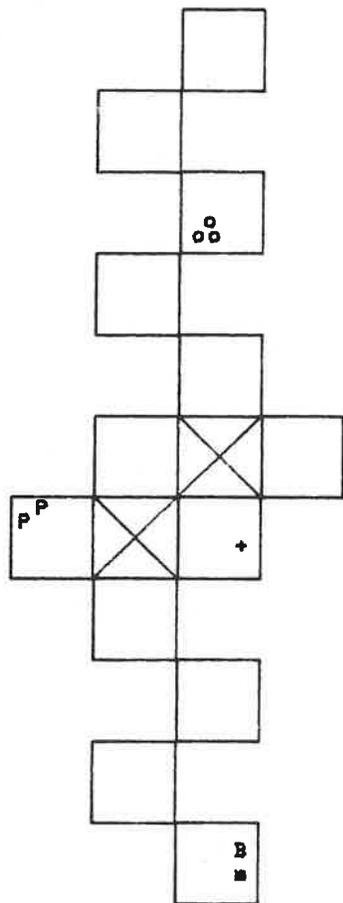
Conclusions about the human behavior represented by this site must remain quite limited, given the sample size and its lack of association with food remains, hearths and other archaeological data normally relied upon as the basis for such inferences. However, there are enough data to suggest

TABLE 1: Artifacts from Site 23.17, Locus A

Artifact #	Type	Section	Quad	Depth	Soil Description
23.17.1	Scraper	E10N0	NE	13.5cm	A Horizon - med. brown soil
23.17.2	Pottery Sherd	E2N0	SE	15-25cm	B Horizon - found in screen
23.17.3	Pottery Sherd	E2N0	SE	15-20cm	B Horizon - found in screen
23.17.4	Pottery Sherd	E2N0	SE	5-15cm	A Horizon - found in screen
23.17.5	Utilized Flake	E6N0	NW	15cm	A Horizon - brown sandy soil
23.17.6	Biface Fragment	E10N0	NW	16cm	B Horizon - mottled sandy soil
23.17.7	Pecked Stone	E5S1	SW	3-6cm	A Horizon - brown sandy soil
23.17.8	Pecked Stone	E5S1	SW	12cm	A Horizon - brown sandy soil

**Note: Artifact numbers 23.17.7 and 23.17.8 fit together**

EONO



SITE 23-17

ARTIFACT  
DISTRIBUTION



UNEXCAVATED

- POTTERY
- P PECKED STONE FRAGMENT
- + UTILIZED FLAKE
- B BIFACE FRAGMENT
- QUARTZ SCRAPER

LOCUS A

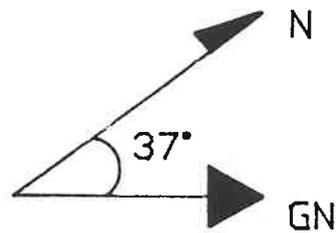


FIGURE 5: Distribution of Artifacts, Locus A, Site 23.17

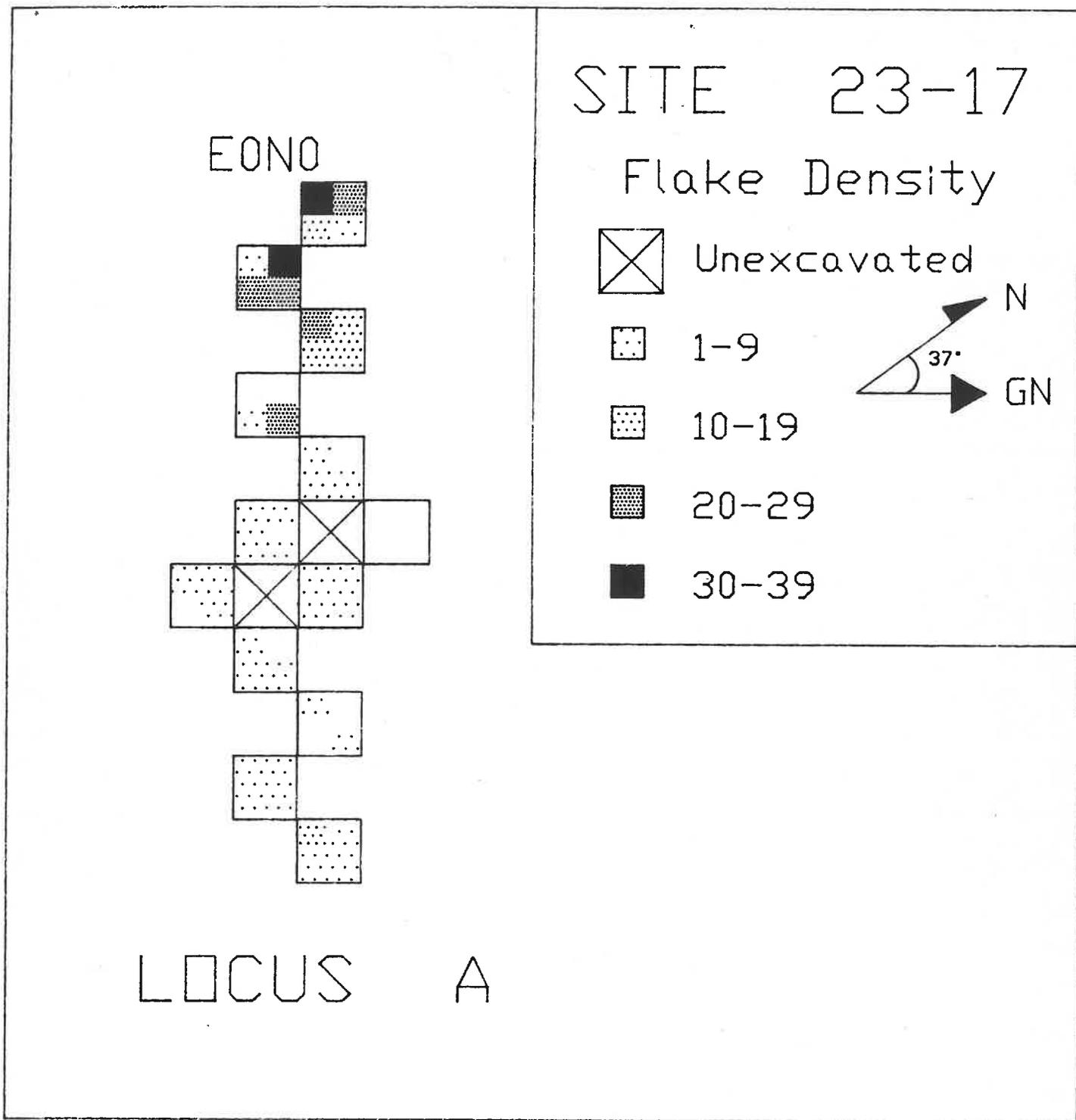


FIGURE 6: Flake Density Distribution, Locus A, Site 23.17

that the site represents a brief period of occupation by a small group.

First, though artifacts were found below the plowzone in Locus A, we encountered no indications of stratigraphic separations of intersecting features, as might be expected if repeated occupation had occurred. The upper portion of the stratigraphic column may once have had such stratification, but if so, it probably was destroyed by plowing during the historic period.

Second, though our excavations probably did not extend to the limits of the site, it is unlikely that they were far from it, for the slope increases rapidly beyond them to the northeast and southwest. The shoreward portion of the site is distinctly truncated by an erosional scarp that has retreated in the face of active meander building. However, while oxbow ponds or other features associated with unstable meandering channels are found in the Littlefield Dam study area, none are found in this locality, suggesting that little meander development has occurred here during recent Holocene times. Thus, the remaining portion of Locus A appears to be quite small and spatially discrete, with no clear indications of long term or multiple episodes of occupation.

Finally, all lithic artifacts, except the pecked stone, but including some 370 waste flakes, are of quartz. In Maine, this raw material was used occasionally from Paleoindian times onward, but rarely was it the primary material. Its frequency of use in this vicinity may be higher than elsewhere in the region because a source is available at Mt. Apatite, only 3.6 km. to the north (Fig. 1); and other sources exist in the area, e.g. Berry-Havey

Quarry in Poland, as well as sources in Oxford County (W. Thompson, Me. Geological Survey, personnel communication, 1987). Nevertheless, the absence of all other materials at Locus A suggests that it represents a single brief occupation.

If these inferences are correct, then the three small ceramic sherds provide some chronological control for the whole locus, or at least for the remaining portions of it. Their extremely small size precludes the observation of stylistic details that would allow us to place them precisely within the nearly 2,500 year long ceramic period here. However, their unusual thinness indicates that they are either quite early in that sequence, c. 2,300 - 2,000 B.P., or that they fall near the end of the prehistoric period, c. 550 - 350 B.P.

#### Locus B:

Excavations at Locus B included one section at the verge of the modern bank scarp and adjacent to Phase 1 test pit T49-1a. The remaining 9 sections were arrayed contiguously back from the bank on level ground between the slopes that define this high terrace remnant (Plates X and XI).

The stratigraphic profile encountered here closely resembled that of Locus A. Beneath the duff was a brown probable plowzone that reached a maximum depth of 10 cm. near the scarp. Beneath this was a B horizon that reached a maximum depth of 35 cm. Below this was a tan C horizon (Plate XII).

As at Locus A, most artifacts were recovered from the plowzone. These included 54 quartz flakes, apparently from two separate clusters (Fig. 7). Our excavations seem clearly to have extended beyond the distribution of

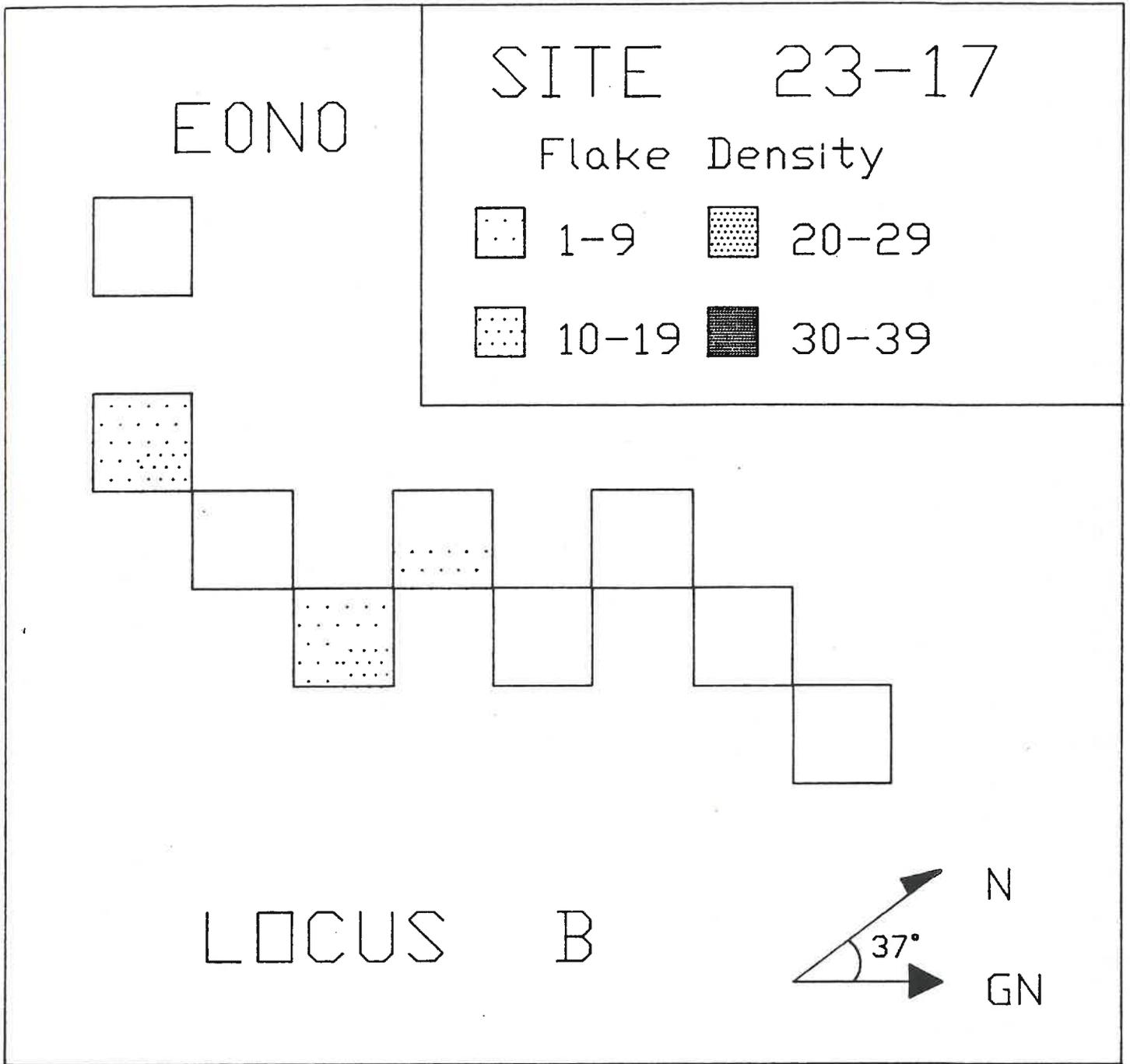


FIGURE 7: Flake Density Distribution, Locus B, Site 23.17

damaged them. Indeed, giving the reduction in energy of the narrow dam pool, as opposed to the natural channel, prospects for their surviving erosional forces would seem to be enhanced should the dam be reconstructed.

Site 23.18: (Plate XIII)

The ten required shovel tests at this suspected site were excavated in November 1986 and May 1987. As shown in Figures 8 and 9, nine of the ten shovel tests were arrayed in c. 10 meter intervals along the river bank, eight west of the gully and one east of it. One additional pit was dug inland from the eastern most pit. Each opened 50 cm. sq. areas extended down through the A, B, and into the C horizon (See appendix 3). All excavated sediment was passed through .25 in. [6 mm.] hardware cloth.

The existence of normal soil formation here indicates that aluvial deposition has not been great during recent times. Nevertheless, no culturally derived material, indeed no rock at all, was encountered in any of these shovel tests. It seems unlikely that any significant prehistoric occupation ever occurred at this location.

Site 23.19:(Plate XIV)

The ten required shovel tests at this suspected site were excavated in November 1986, as described above for site 23.18. We had not yet learned that Mr. Godbout owned the property. Instead, we had been told that it was on Auburn - Lewiston Railroad land. However, since the site lies out of view of the Godbout house, we completed the work unnoticed.

Much of this stretch of riverbank consists of a low levy, raising the

cultural remains to the east and north, though not to the south (Fig. 5). Like the scarp at Locus A, its western scarp appears to have long been stable, and therefore it is likely that few artifacts have been lost to erosion.

Behavioral inferences regarding this small component are even more tenuous than for Locus A. However, its small size, topographical isolation and erosional truncation parallel that of Locus A. Furthermore, the exclusive presence of quartz in the flaking debris suggests close association, possibly contemporaneity, with that locus. However, the artifacts were less densely clustered and typologically more limited than at Locus A, suggesting an even more ephemeral occupation by a very small number of people.

In sum, neither Locus A or B promise much more information on prehistoric cultural behavior than that recovered during our Phase 2 work there. Additional excavation might yield more ceramic sherds that would allow for a slightly more accurate estimate of their ages. However, I do not recommend them for nomination to the National Register of Historic Places.

Regarding the possibility that reconstruction of the Littlefield dam would lead to their substantial erosion, as asserted by Petersen and Hackenberger (46), we see no evidence to support this contention. As explained above, even the relatively unstable natural channel does not appear to have reduced their size much, prior to the initial dam construction. Neither can we point to clear evidence that the original dam

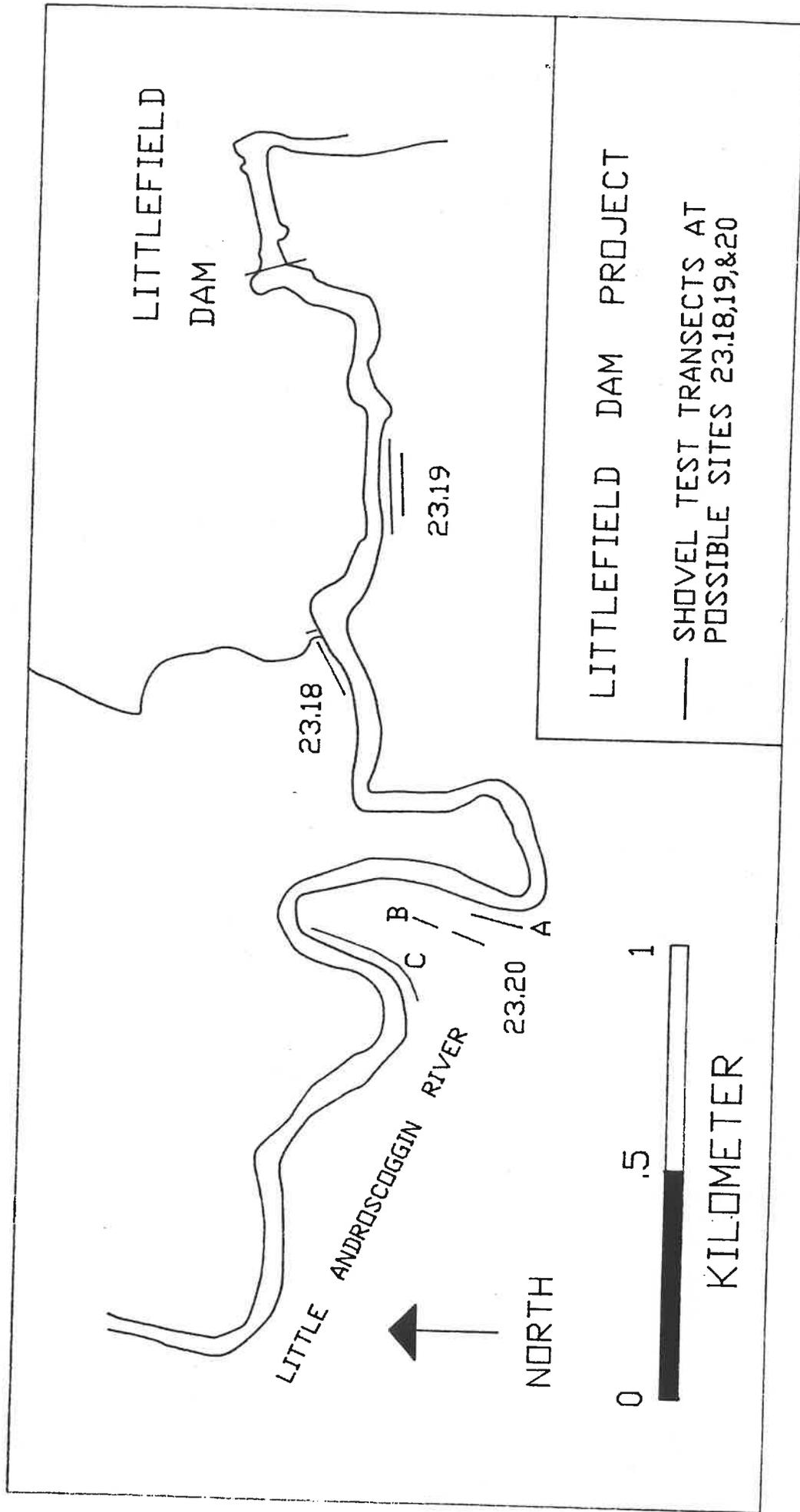


FIGURE 8: Map Showing Transects at Sites 23.18, 23.19, and 23.20

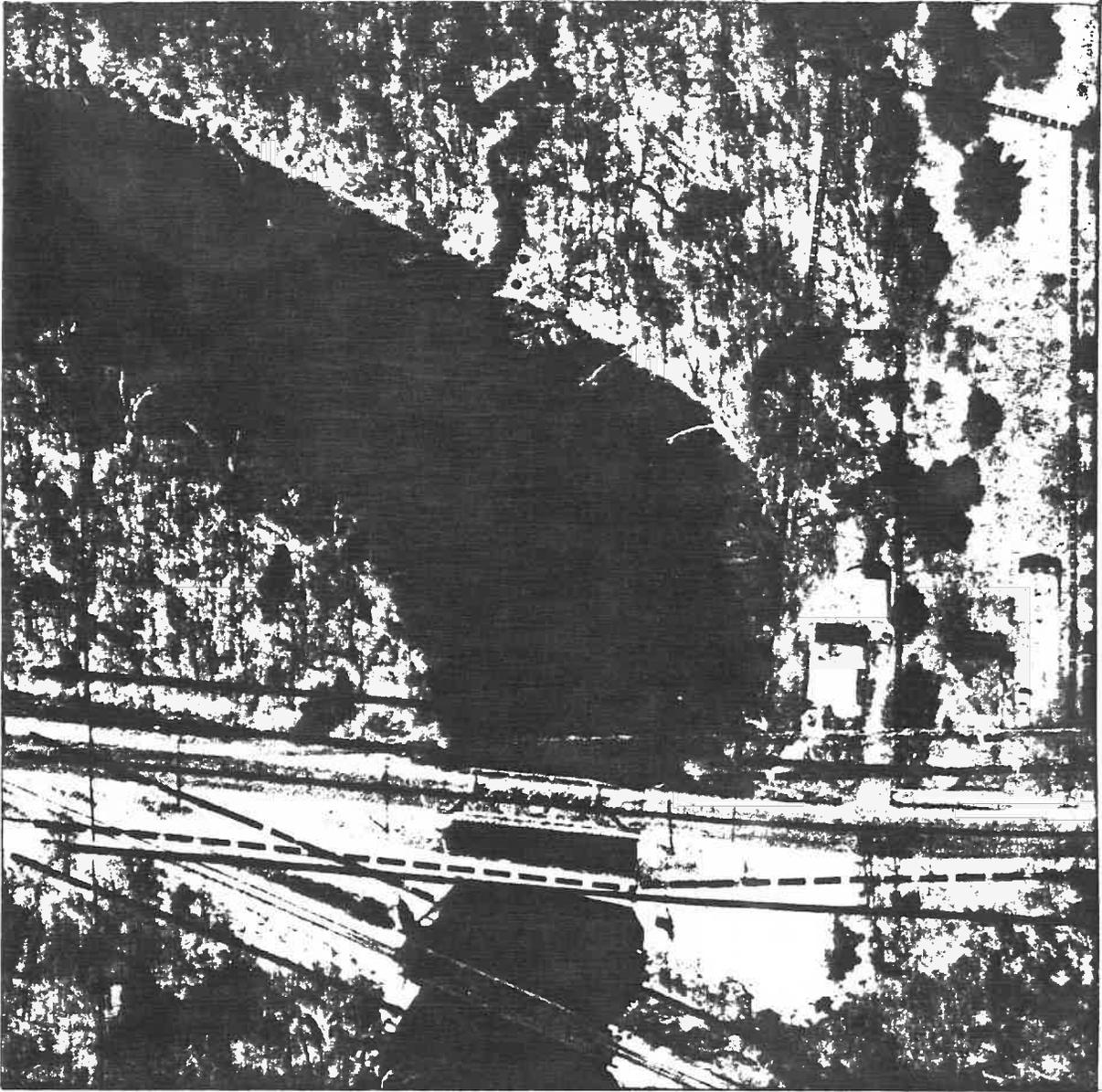


FIGURE 9: Site 23.18, Placement of Shovel Tests

possibility that prehistoric cultural remains may be deeply buried. However, with a single exception, all pits showed well developed A and B horizons, suggesting no great recent alluvial deposition (See appendix 3).

Our excavations produced not a single pebble or any other indication of prehistoric occupation. Therefore, it seems doubtful that any ever occurred there.

Site 23.20:

Petersen and Hackenberger (pg. 24) identified this site on the basis of an oral report from its present owner, Mr. George Fields, that artifacts had been found there. We asked Mr. Fields to relate to us all his recollections regarding the purported artifact finds. In addition, he contacted his brother-in-law who claimed to have made the original finds. These inquiries indicated that none of the items found could be located, but did indicate the area of the washout from which they were recovered.

Fortunately, the flood of this spring washed out a section of bank very near the reported find spot. Careful inspection of this newly eroded bank revealed no evidence at all for prehistoric occupation. The mandated 30 shovel tests [Figure 8] were then excavated at c. 10 meter intervals along the riverbank throughout the area designated in Petersen and Hackenberger. In addition, an examination was conducted of the extensive area that had been plowed (see appendix 3).

Since none of these activities produced any evidence of prehistoric occupation, there seems to be little support for the informant's belief that a relative found Indian artifacts on his property. This is not an uncommon

result of investigating such indirect reports.

It is perhaps significant to note that this area lies well above the proposed dam, near the limits of the proposed impoundment. We noticed no topographic impact from the previous dam pool in this area, but did notice clear indications of erosion arising from recent channel movement under the normal drainage regime. Therefore, like site 23.18, the reconstruction of the dam would probably serve to lower the energy available for erosion here, rendering the shoreline more stable. Thus, any cultural remains that conceivable remain undetected here would probably be better preserved adjacent to the dam pool than along the naturally unstable river channel.

#### CONCLUSIONS AND RECOMMENDATIONS

The fieldwork described above has demonstrated that no significant prehistoric occupation occurred at locations designated by Petersen and Hackenberger as sites 23.16, 23.18 or 23.19. The single prehistoric tool fragment recovered from the surface of 23.16 during Phase 1 is insufficient evidence to contradict the negative evidence amassed by our work there. Furthermore, it was found in an area that shows no evidence of soil reworking or bank erosion resulting from the earlier dam pool. Therefore, even if a few other artifacts do exist there, they seem not to be threatened by re-creation of the dam pool. The other two sites seem to be completely barren of any evidence for prehistoric occupation.

The informant reported site, 23.20, likewise proved unproductive of any positive evidence for prehistoric occupation, and the area it occupies would

probably be rendered more stable by reconstruction of the dam than if left to normal movement of the unstable channel.

Site 23.17 clearly includes two very small, spatially discrete prehistoric loci. Locus A pertains to the ceramic period. The smaller Locus B may be close in age to, perhaps contemporary with it.

Our work there removed an estimated 25-50% [surface area] of both Loci. The artifact and lithic type diversities of both are unusually low, as are the overall artifact counts, with the exception of flaking debris. No hearths, pits or postmold patterns were encountered at either, perhaps because both seem to have been plowed or otherwise disturbed during the historic period. In sum, these seem to be extremely shortlived components, inhabited by very small populations for a very brief span of time, perhaps as little as a day or two. The possibility that further excavation there would greatly amplify our understanding of them seems remote. Therefore, I do not recommend their nomination to the National Register of Historic Sites.

Furthermore, the current erosional scarp configuration in front of both appears not to have changed a great deal during the existence of the early dam pool. Instead, it appears to have been formed by channel meandering, a process that would probably be halted by the dam pool.

In sum, reliable evidence for intact prehistoric archaeological remains in the study area has been confirmed only at Sites 23.15 and 23.17. The characterization of Site 23.15 was not possible during this research because we were denied access to the majority of it. Our work at Site 23.17 removed

substantial portions of the archaeological deposits remaining there. Furthermore, our observations of the shoreline suggest that the proposed dam pool does not pose any great threat to this very small, partially disturbed site. Therefore, I recommend that no further attention to it be mandated by the Maine Historic Preservation Commission.

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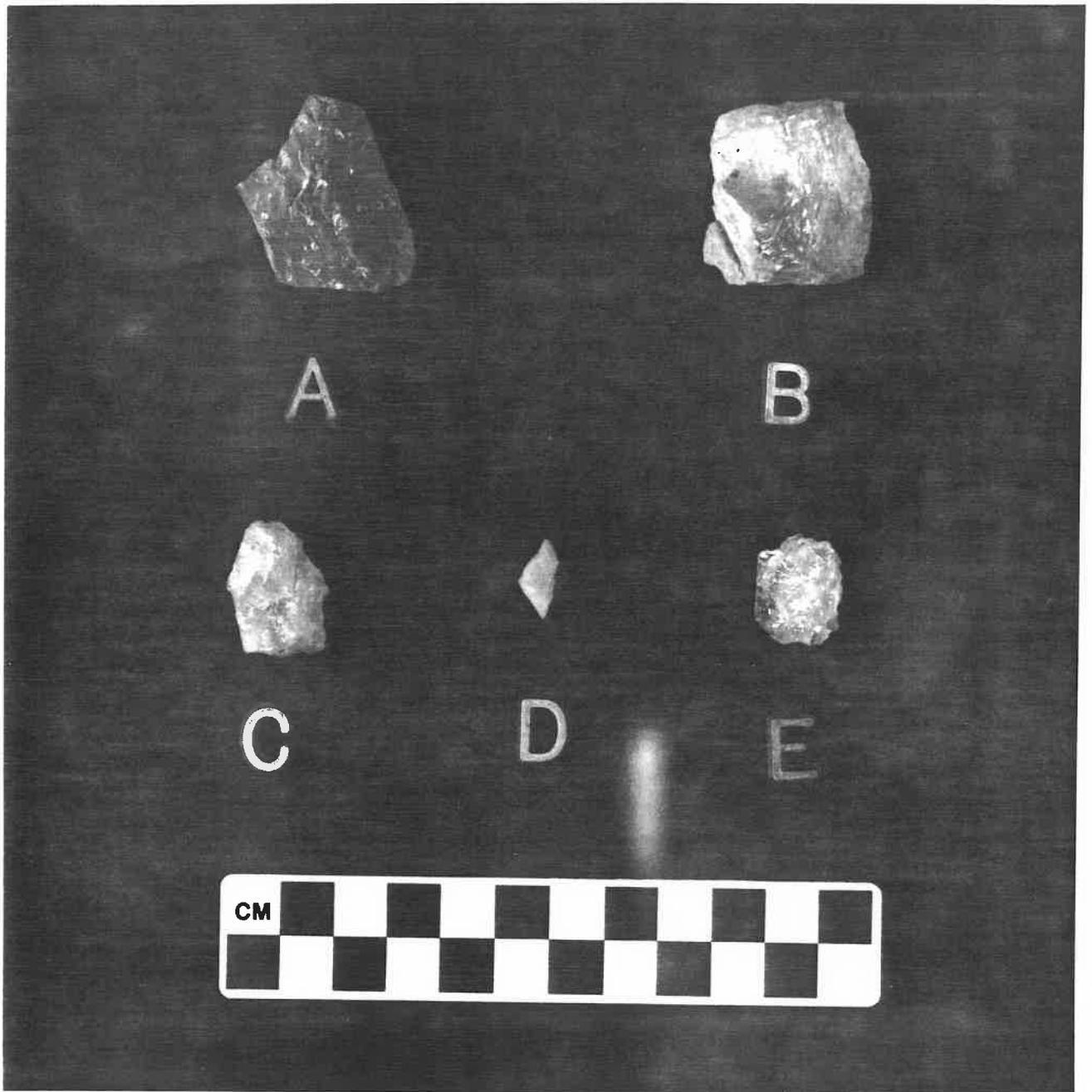


Plate I: Artifacts from Phase I project.  
Conducted by Petersen & Hackenberger.

- A. 23.16 Green rhyolite biface drill, surface collected.
- B. 23.15 Quartz core, T25-1.
- C. 23.15 Quartz scraper, T25-1.
- D. 23.15 Quartz biface fragment (questionable), T11-3.
- E. 23.17 Possible quartz biface fragment, T46-3.



Plate II: Site #23.15 Romeo Godbout's property.



Plate III: Site #23.17 Locus A  
Looking north from abandoned woods road.



Plate IV: Site #23.17 Locus A  
Looking west.



Plate V: Site #23.17  
Looking from Locus B toward Locus A.



Plate VI: Site #23.17 Locus A  
Looking west, showing grid layout.



Plate VII: Site #23.17 Locus A  
Profile shot of section EONO -- looking west.  
South wall shows Petersen's shovel test T46-1.



Plate VIII: Site #23.17 Locus A  
Showing typical soil horizons.

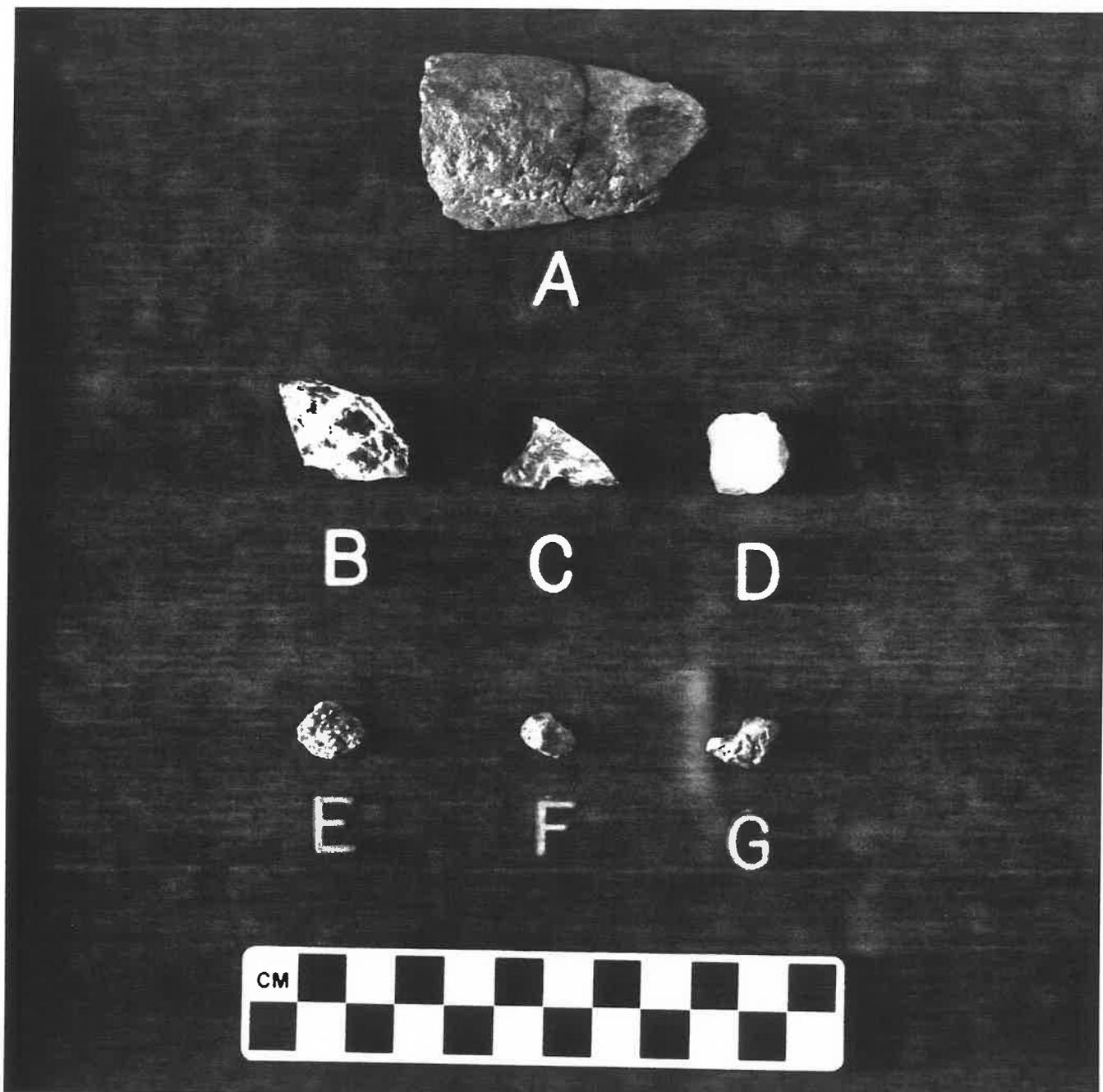


Plate IX: Artifacts from Site #23.17 Locus A.

- A - Pecked stone fragment (2 fragments) 23.17.7 and 23.17.8
- B - Quartz biface fragment 23.17.6
- C - Quartz utilized flake 23.17.5
- D - Quartz scraper 23.17.1
- E, F, G - Pottery sherds 23.17.2, 23.17.3, 23.17.4



Plate X: Site 23.17 Locus B  
Looking south.



Plate XI: Site 23.17 Locus B  
Looking west.



Plate XII: Site 23.17 Locus B  
Showing typical soil horizons.



Plate XIII: Site 23.18



Plate XIV: Site 23.19

APPENDIX 1



MAINE HISTORIC PRESERVATION COMMISSION  
55 Capitol Street  
State House Station 65  
Augusta, Maine 04333

AUG - 7 1986  
ON-BM-TM-KT-RS-JJ

Earle G. Shettleworth, Jr.  
Director

Telephone:  
207-289-2133

July 31, 1986

Mr. Jason James  
Energy Supply International  
Two Greenwich Plaza  
Greenwich, Connecticut 06830

Re: FERC 8158 Littlefield Project Archaeological Survey

Dear Mr. James:

Dr. James Petersen's detailed letter-form preliminary report on the Littlefield Project has been examined in detail by Dr. Spiess of my staff. In this letter we outline our requirements for the next phase of archaeological work on the project. Please feel free to contact Dr. Petersen, or any contractor on our recommended list, to obtain bids and to proceed with the work.

We have assigned the following Maine Archaeological Survey site numbers to the sites listed in Petersen's letter:

Site 1 assigned site #23.15  
Site 2 assigned site #23.16  
site 3 assigned site #23.17  
Site 4 assigned site #23.18  
Site 5 assigned site #23.19

"Informant reported" site is assigned site 23.20 in anticipation of its confirmation.

Our requirements, expressed in terms of minimal excavation and testing areas for Phase II work, are as follows:

- 1) On site 1/23.15, a minimum of 20 meter square excavation to develop information sufficient to judge eligibility of the site to the National Register of Historic Places.
- 2) On site 2/23.16, a minimum of 10 m. square in shovel testpitting to determine if any concentrations of cultural

55 Capitol Street  
State House Station 65  
Augusta, Maine 04333



-2-

material can be identified and if any unplowed deposits can be located.

- 3) Site 3/23.17, minimum of 20 meter square excavation to develop information leading to a determination of National Register eligibility.
- 4) Possible sites 4/23.18 and 5/23.19, 10 shovel pits at each to develop further information on their cultural content.
- 5) Excavation of 30 shovel testpits minimum in the area of the informant reported site (23.20) to confirm its presence and being characterization.

Additionally, we recommend that ESI include funds for an additional 10 square meters of excavation area as a contingency, should either of possible sites 4 or 5 or the "Informant reported" site show substantial promise of yielding significant information. This contingency budget should be used to develop information necessary for a National Register eligibility determination on each site.

We are particularly disturbed by Petersen's report based on his field experience and landowner reports of flooding that the inundation map supplied by the applicant may not be accurate. An accurate, verifiable inundation map will be required by this office as part of future decision making concerning archaeological mitigation measures should any of these sites in fact prove eligible to the National Register of Historic Places. Based on Petersen's comment we will not use the current applicant-supplied inundation map without either further data showing that it is accurate, or modification to improve its reliability.

Sincerely,

Earle G. Shettleworth, Jr.  
State Historic Preservation Officer

cc: Dr. James B. Petersen  
Mr. Kenneth Plumb, Secretary, FEPC  
Mr. Dana Murch, MDEP

APPENDIX 2

## SCOPE OF WORK

### Goals of a Phase II Study

1. to locate presently unknown sites within the area of impact;
2. to collect sufficient information about each identified site to enable a "determination of eligibility" for the National Register of Historic Places to be made. The study should provide an estimate of the size, content, structure, age and function of the site (s). The site's "significance" is directly determined by such data, the integrity of the site, the research problems which might be answered at the site, and the importance of the site in relation to the known archaeological record;
3. to provide the contracting agency with an adequate plan which can be used to mitigate or avoid any anticipated adverse impacts.

### Contents of a Phase II Report

1. a description of the project and U.S.G.S. map showing the investigation area;
2. a more precise map showing the locations of fieldwork and known sites;
3. maps of site areas showing specific testing locations;
4. a description of the research design including specific mention of the survey, excavation and laboratory techniques;
5. a list of sites considered not eligible for the National Register and justification for that judgment;
6. a list of sites suggested as eligible for the National Register;

7. a description of the spatial, contextual and structural characteristics, and present condition of each site located and examined;
8. a quantitative and qualitative summary of the artifacts and features at each site;
9. a description and justification of the method and intensity of investigation at each site;
10. photographs and sketch maps of each site;
11. a discussion of the known and expected artifacts and feature categories at each site and their known or potential importance;
12. a discussion of research topics which might be investigated using the known or expected materials at each site;
13. a summary outlining how the known or expected materials can contribute to the investigation of the research topics;
14. a list of the impacts likely to occur to each site if the project proceeds, including a discussion of any irreversible or irretrievable commitment of resources;
15. a suggested program which the contracting agency can use to adequately mitigate or avoid the expected impacts;
16. if necessary, additional information required for the Department of the Interior to make the determination of eligibility;
17. a curation plan for the cultural materials recovered during the Phase II archaeological study.

APPENDIX 3

Soil Horizon Definitions. From (Faust and LaFlamme 1978,  
Soil Survey of Kennebec County. ,pg. 86.)

**Horizon, soil.** A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. The major horizons of mineral soil are as follows:

- O horizon.*—An organic layer, fresh and decaying plant residue, at the surface of a mineral soil.
- A horizon.*—The mineral horizon, formed or forming at or near the surface, in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon most of which was originally part of a B horizon.
- A<sub>2</sub> horizon.*—A mineral horizon, mainly a residual concentration of sand and silt high in content of resistant minerals as a result of the loss of silicate clay, iron, aluminum, or a combination of these.
- B horizon.*—The mineral horizon below an A horizon. The B horizon is in part a layer of change from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics caused (1) by accumulation of clay, sesquioxides, humus, or a combination of these; (2) by prismatic or blocky structure; (3) by redder or browner colors than those in the A horizon; or (4) by a combination of these. The combined A and B horizons are generally called the solum, or true soil. If a soil lacks a B horizon, the A horizon alone is the solum.
- C horizon.*—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the A or B horizon. The material of a C horizon may be either like or unlike that from which the solum is presumed to have formed. If the material is known to differ from that in the solum the Roman numeral II precedes the letter C.
- R layer.*—Consolidated rock beneath the soil. The rock commonly underlies a C horizon, but can be directly below an A or a B horizon.

LOE- Limit of excavation.

Project: L. #15012 2000

Transect: A

Date: 5/12/02

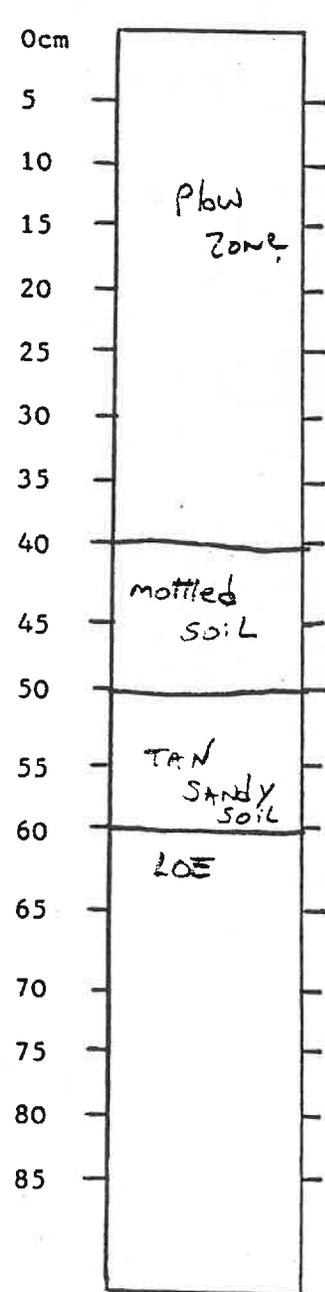
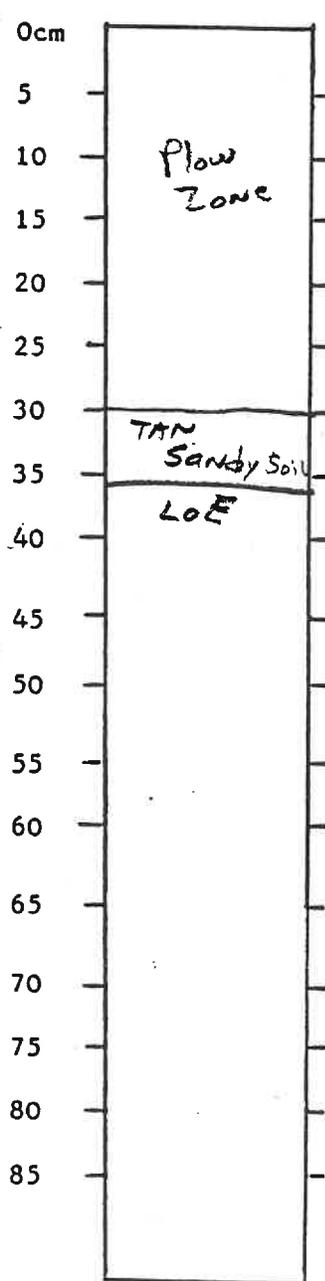
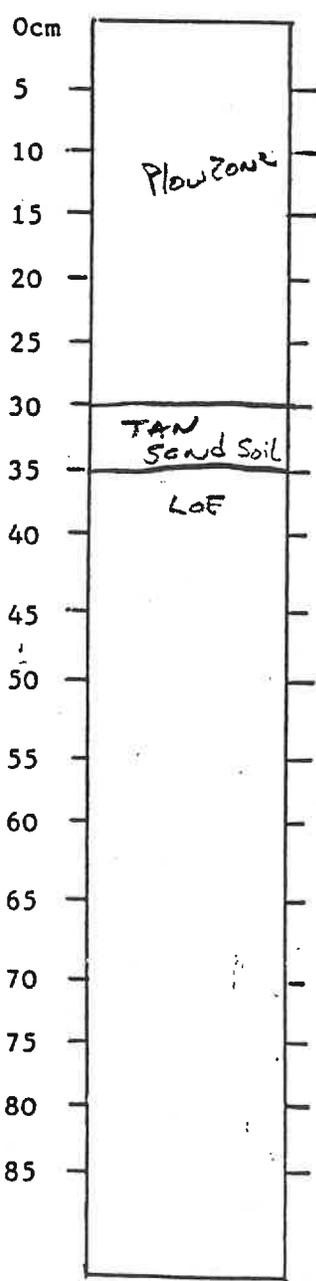
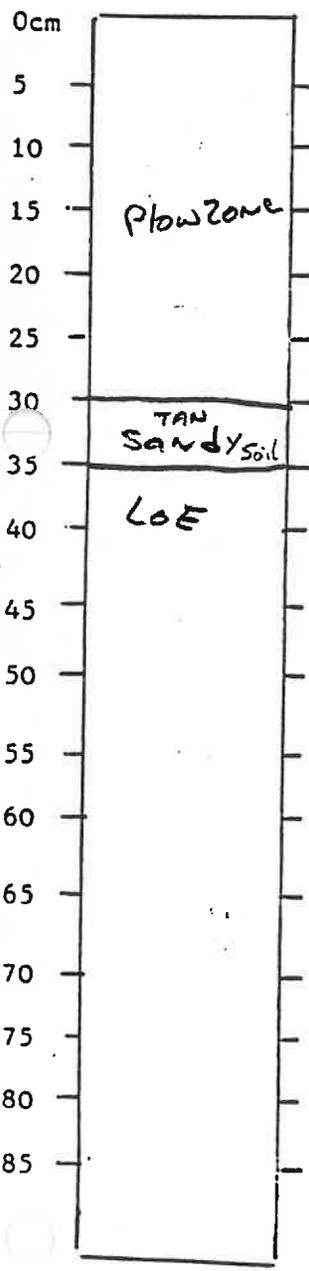
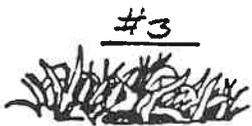
Sampling Interval: CA. 5 meters

Location: 33-16

Recorder: BTB/RL

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: A

Date: 5/12/87

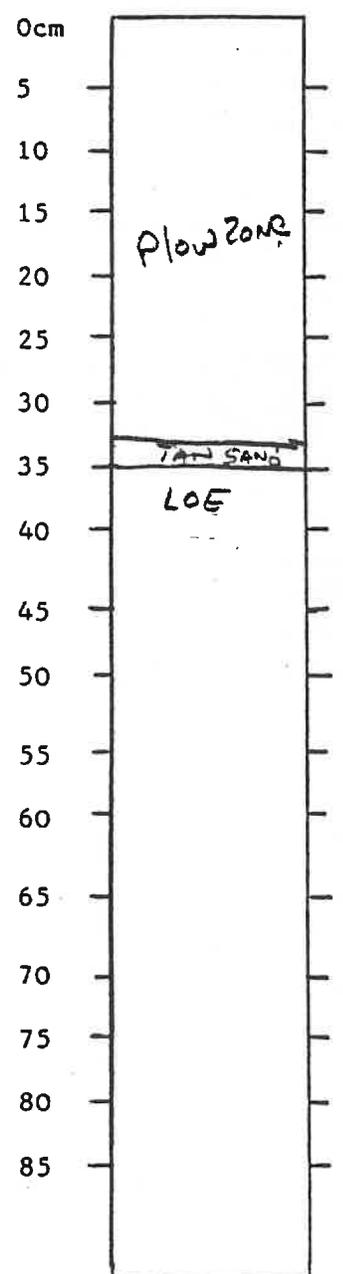
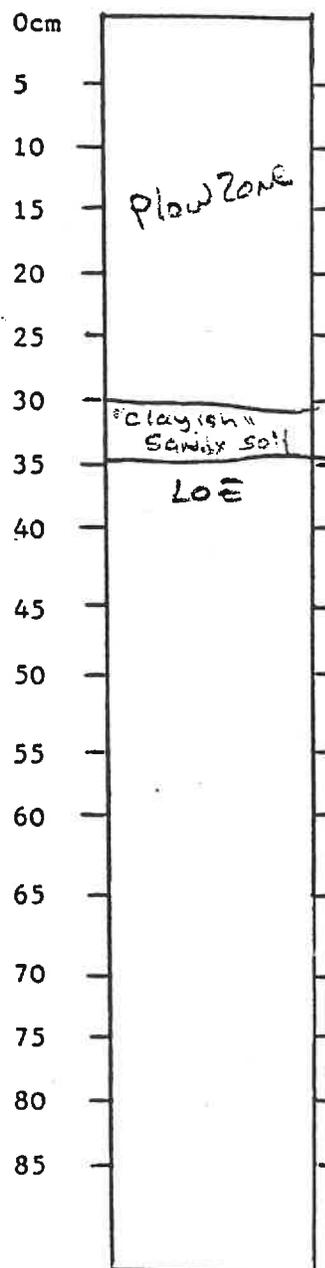
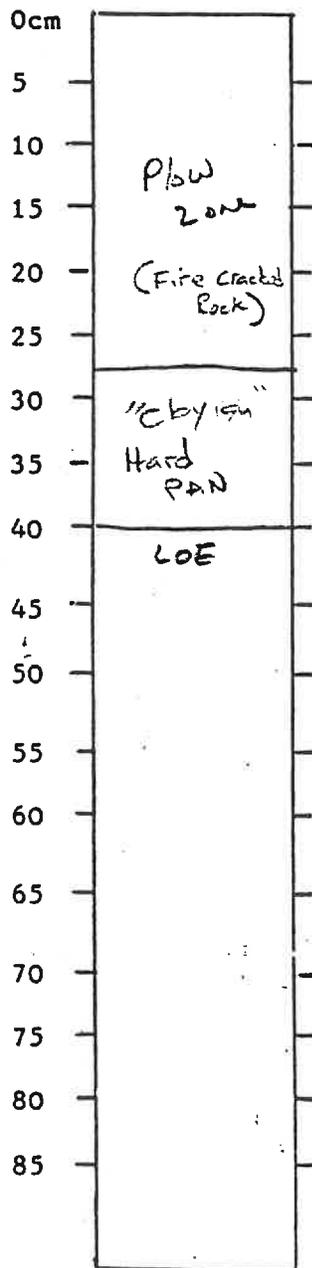
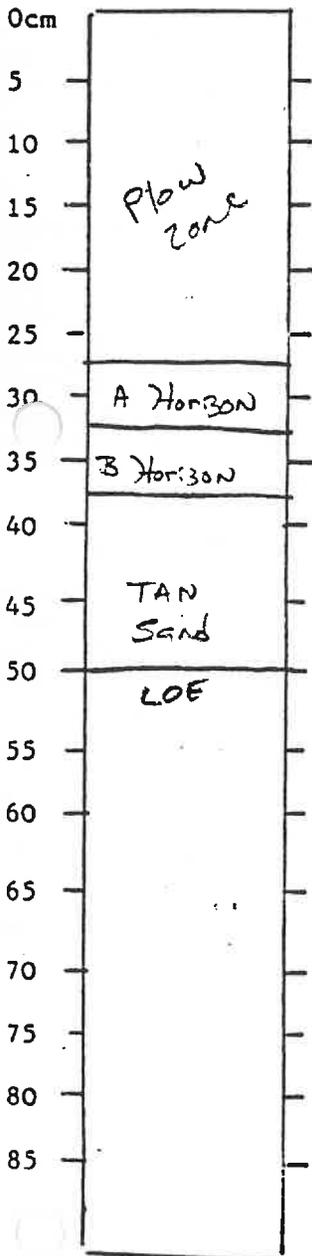
Sampling Interval: CA. 5 meters

Location: 23-16

Recorder: BTR/RL

Sampling Unit: 50x50cm

Comments: \_\_\_\_\_



Project: Little Rock Dam

Transect: A

Date: 5/13/27

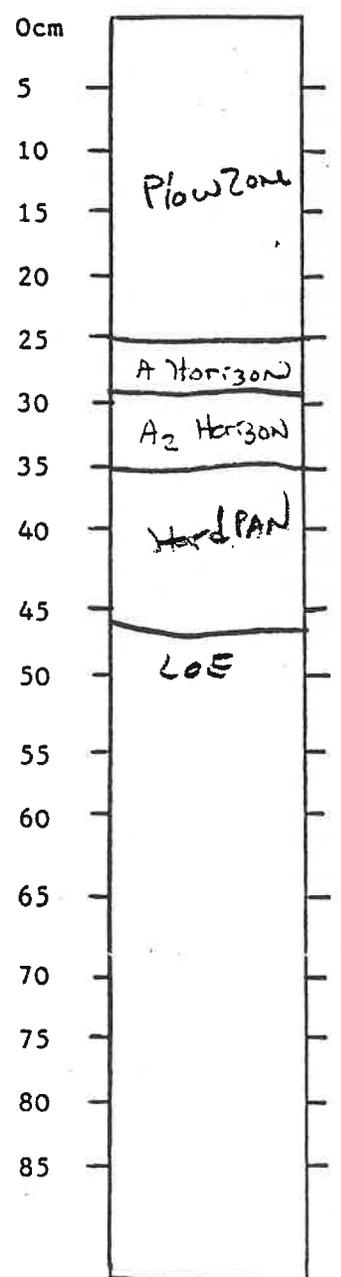
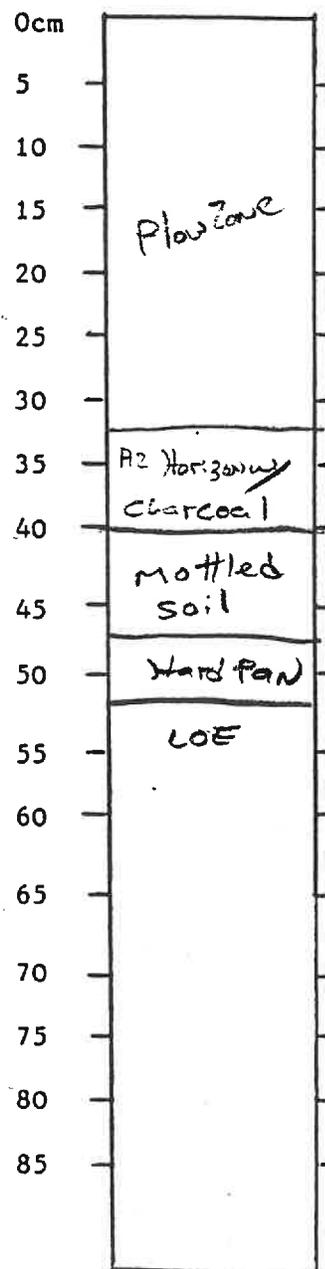
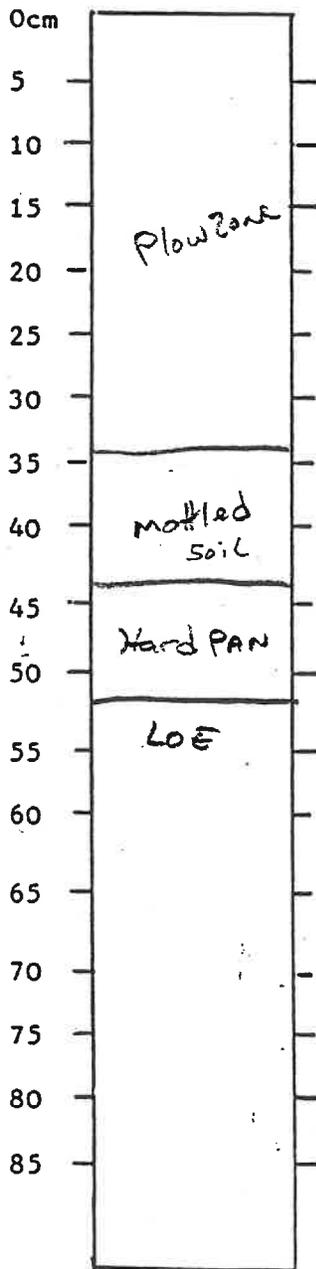
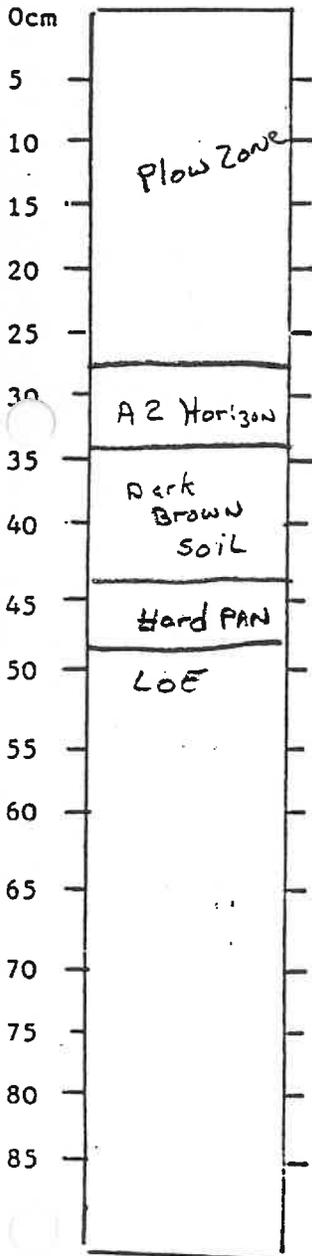
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Location: 23-16

Recorder: RL/RTB

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: \_\_\_\_\_

Transect: R

Date: 5/13/07

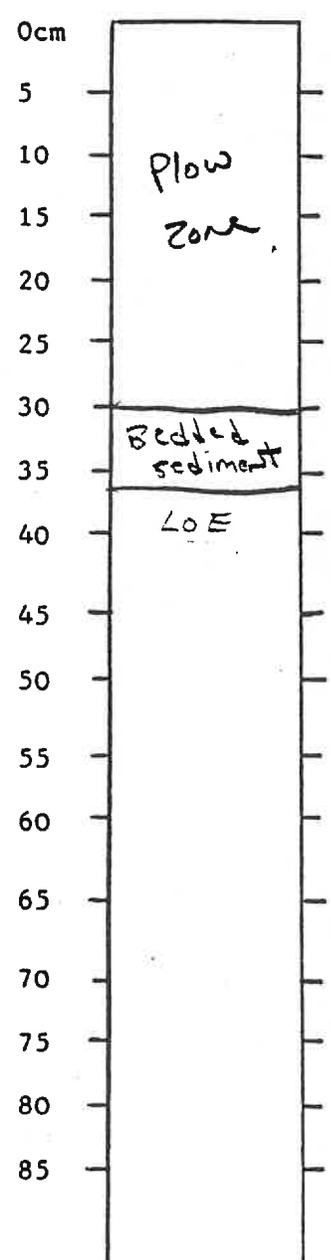
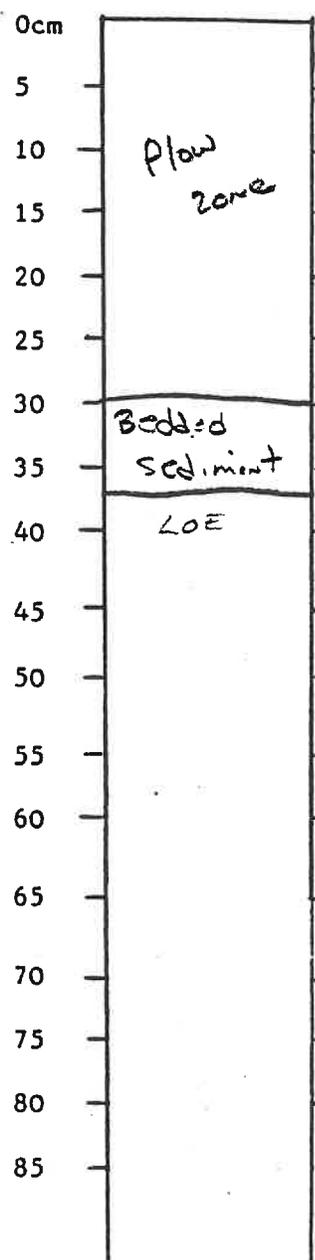
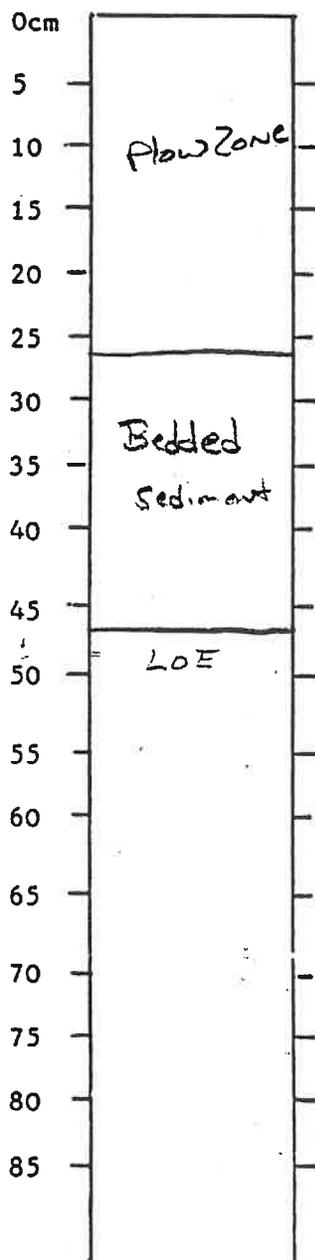
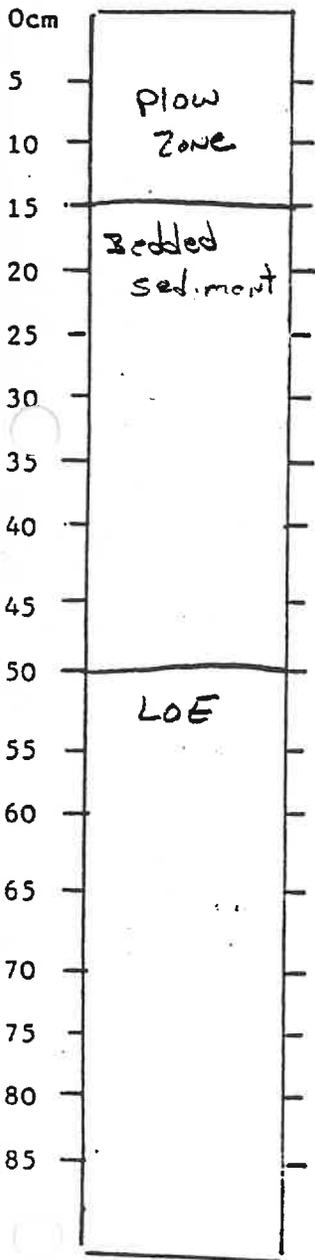
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Location: 23-16

Recorder: BTB / RL

Sampling Unit: 50 X 50cm

Comments: \_\_\_\_\_



Project: \_\_\_\_\_

Transect: B

Date: 5/13/87

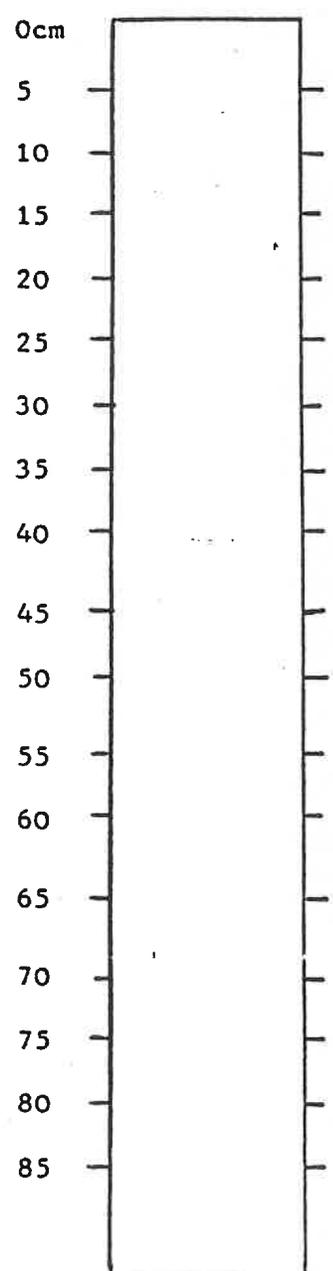
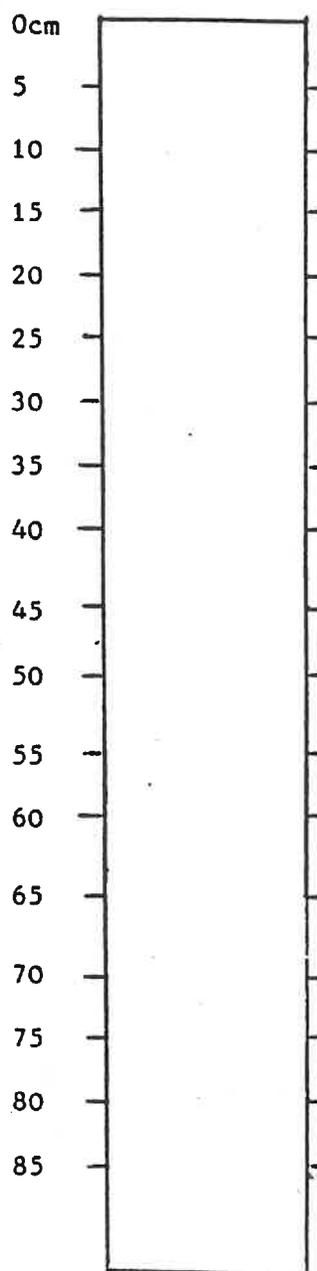
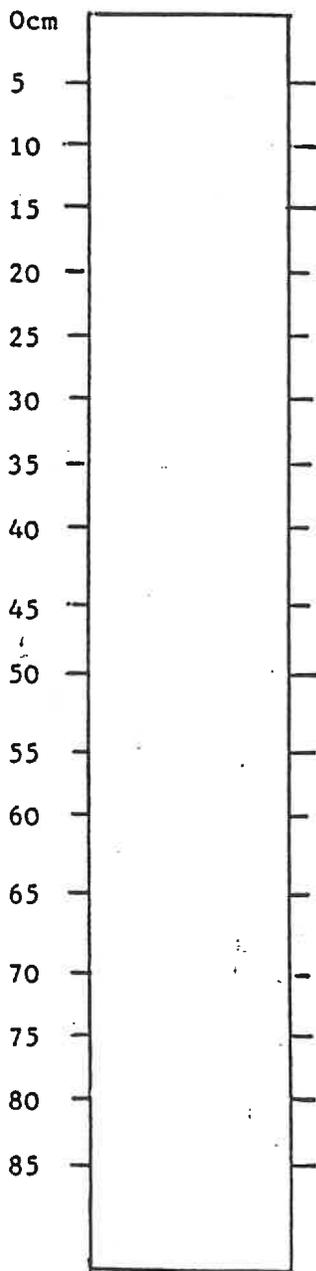
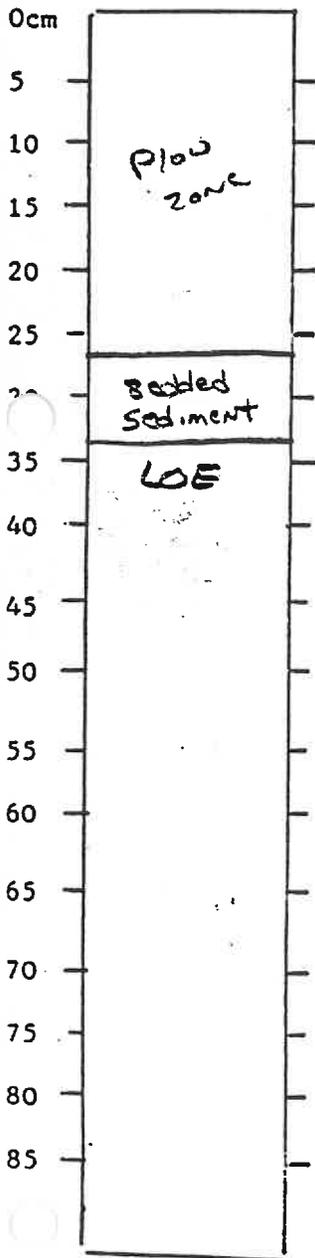
Sampling Interval: ca. 5 meters

Location: 23-1b

Recorder: BJG / PL

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: C

Date: 5/14/87

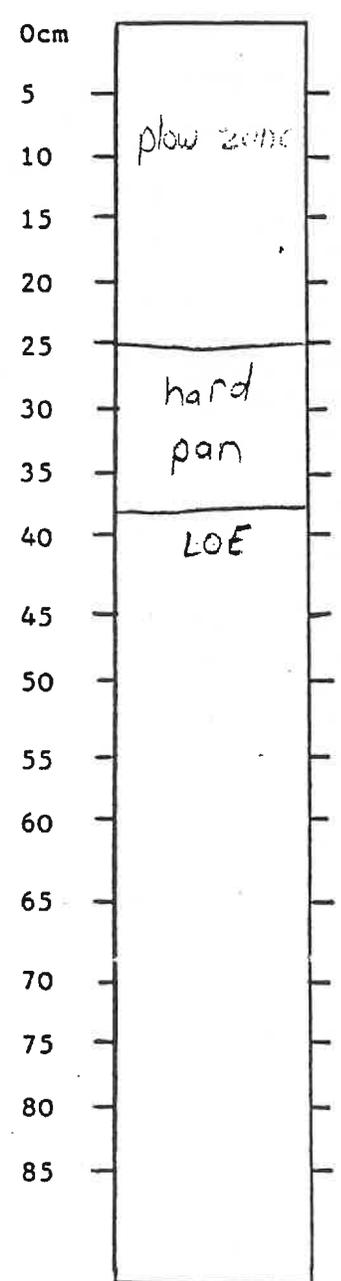
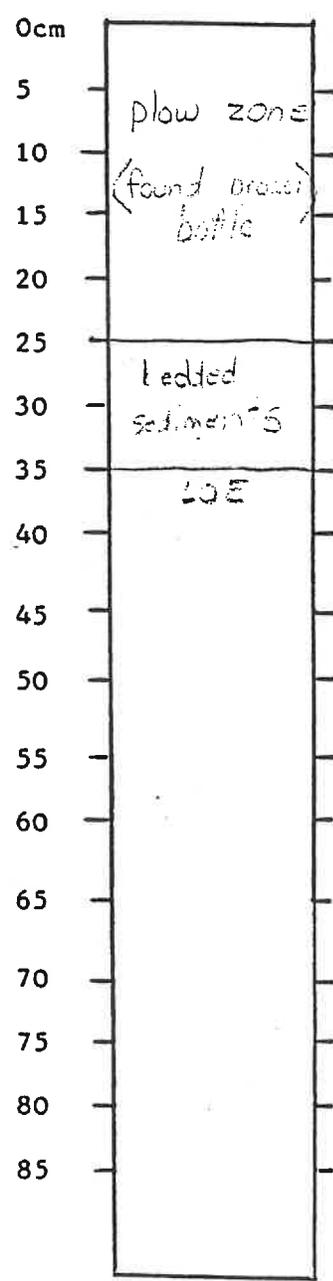
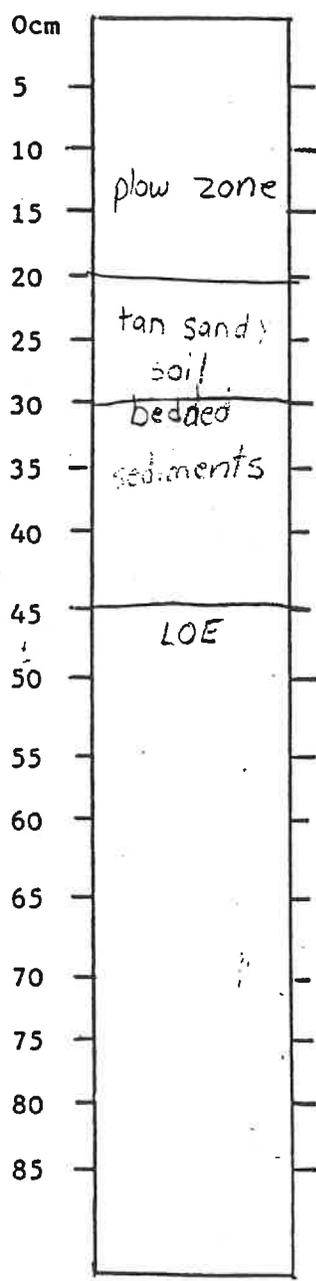
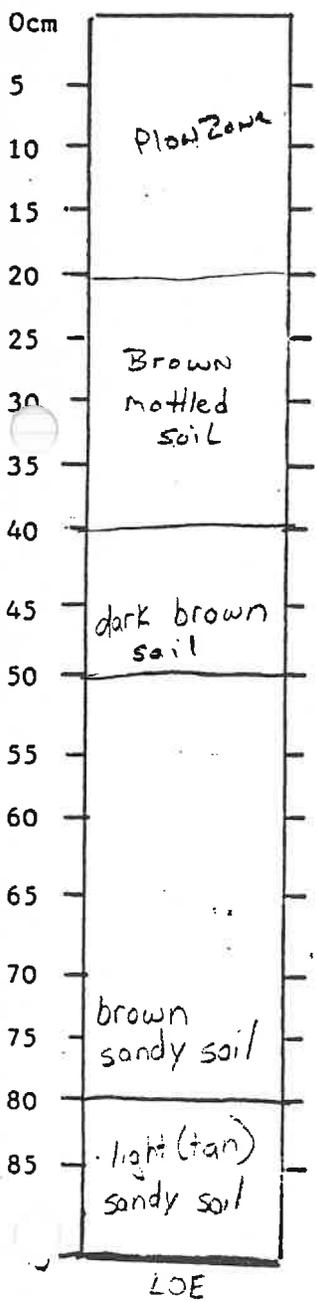
Sampling Interval: ca 5 meters

Location: 23-16

Recorder: RL

Sampling Unit: 50x50cm

Comments: \_\_\_\_\_



Project: Little Rock dam

Transect: C

Date: 5/14/83

Sampling Interval: ca. 5 meters

Location: 23-16

Recorder: RL /

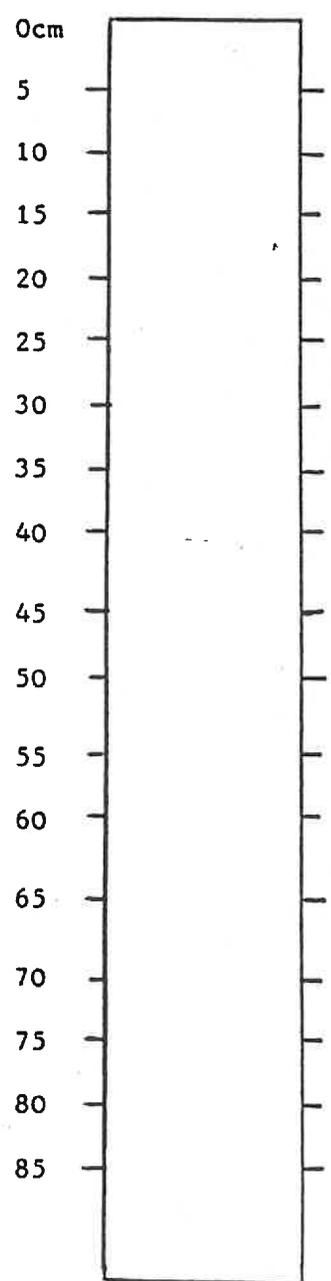
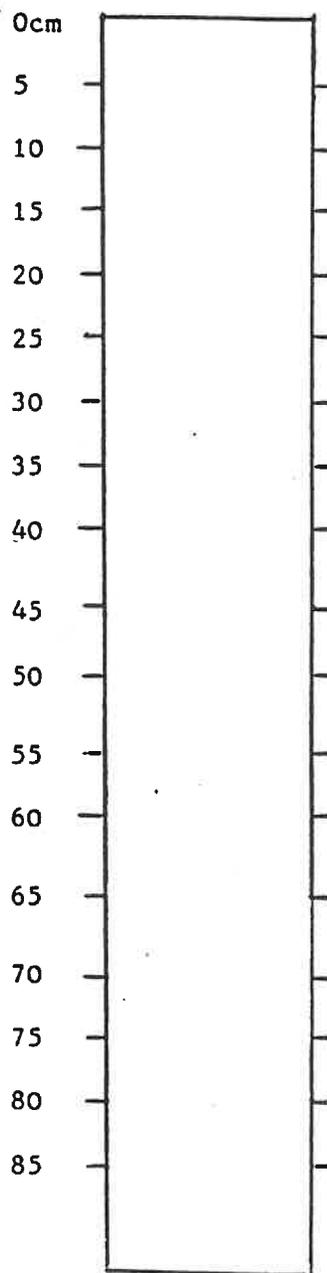
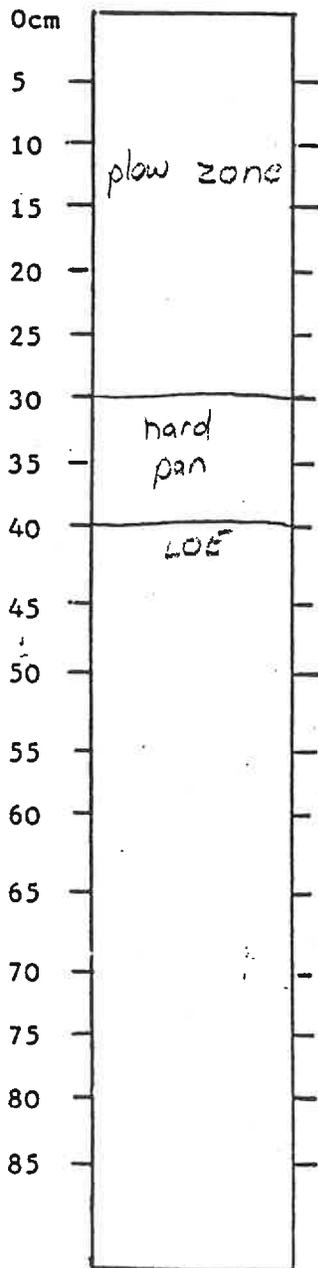
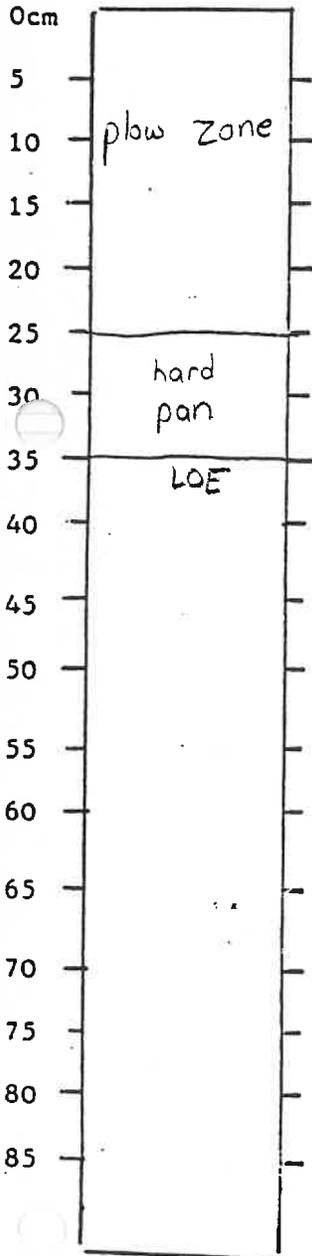
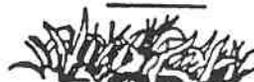
Sampling Unit: 50 X 50 cm

Comments: \_\_\_\_\_

#5



#6



Project: L.H. Field Dam

Transect: D

Date: 5/14/97

Sampling Interval: ca. 5 meters

Location: 23-16 low terrace

Recorder: \_\_\_\_\_

Sampling Unit: 50 X 50 cm

Comments: \_\_\_\_\_

#1



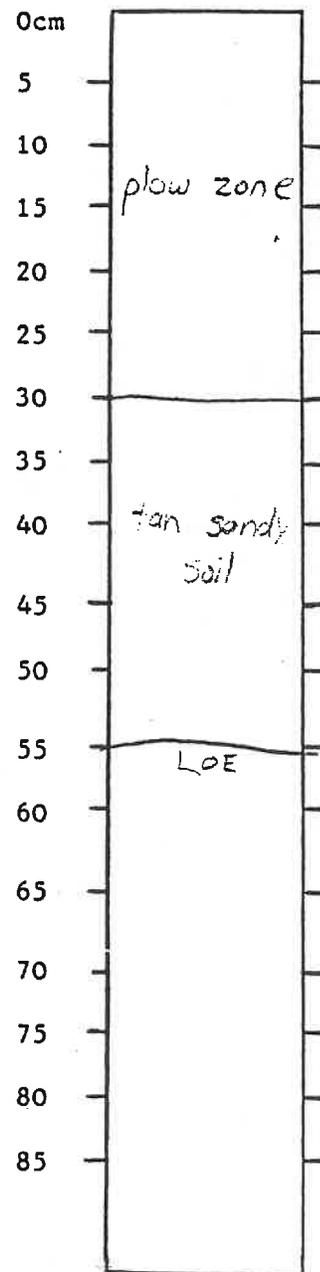
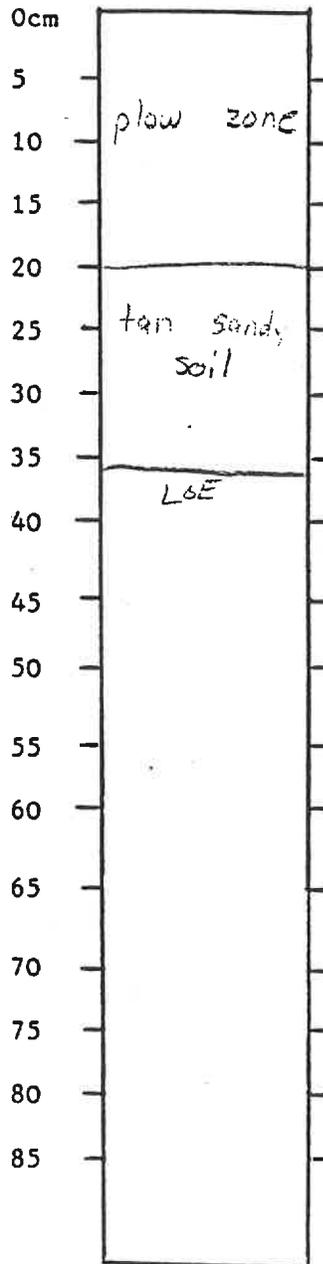
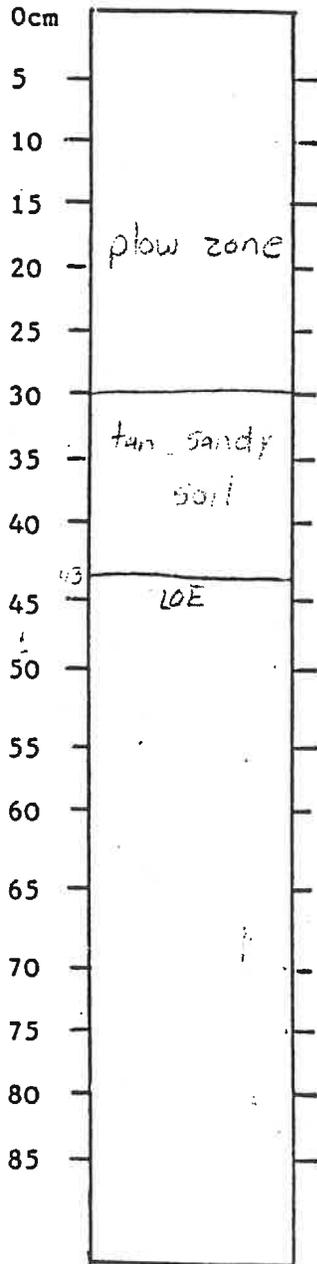
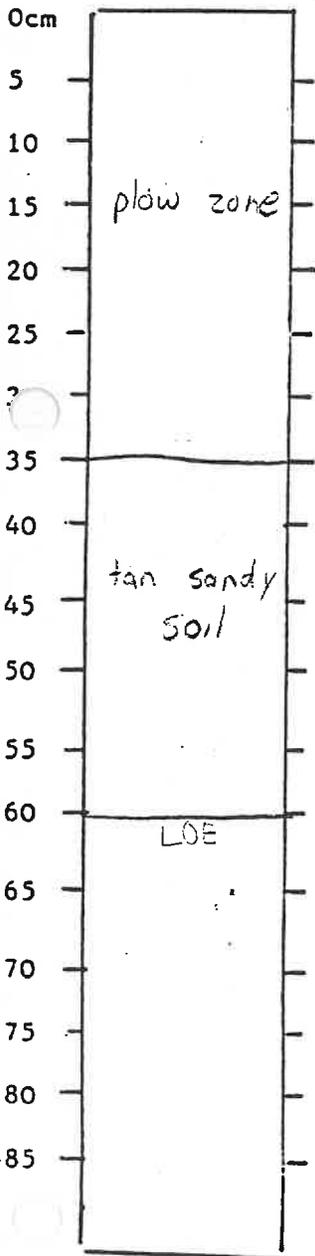
#2



#3



#4



Project: Littlefield Dam

Transect: D

Date: 5/14/87

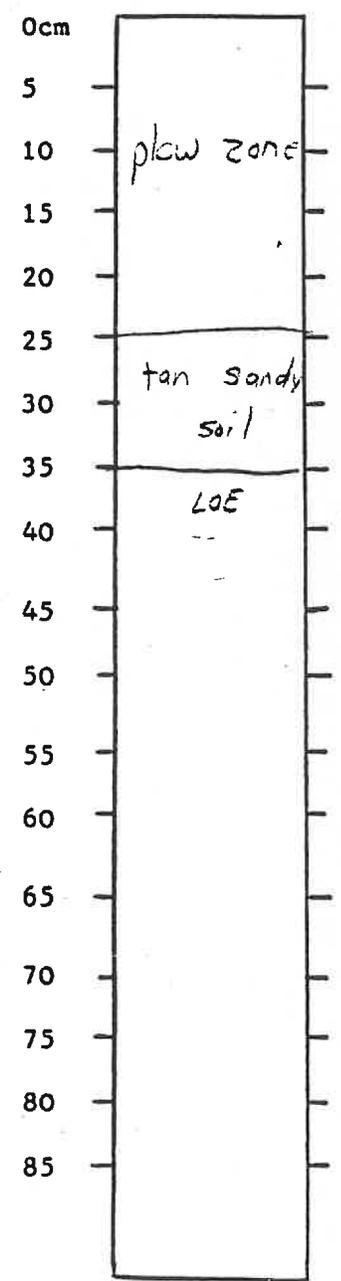
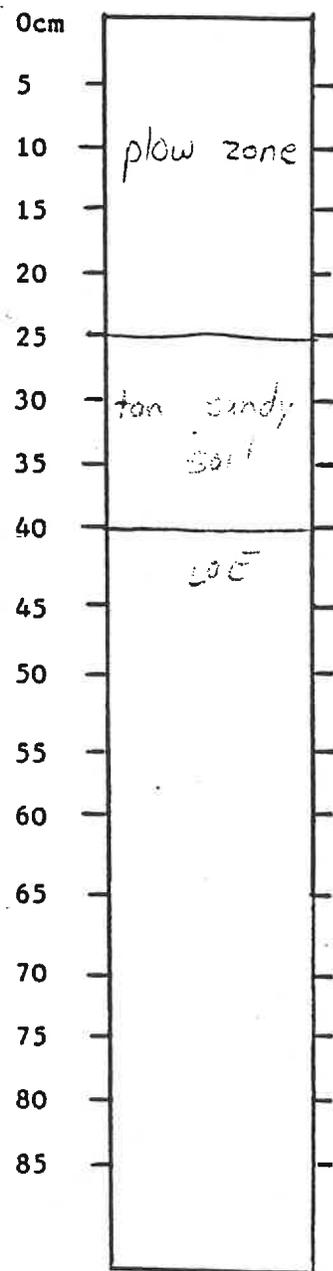
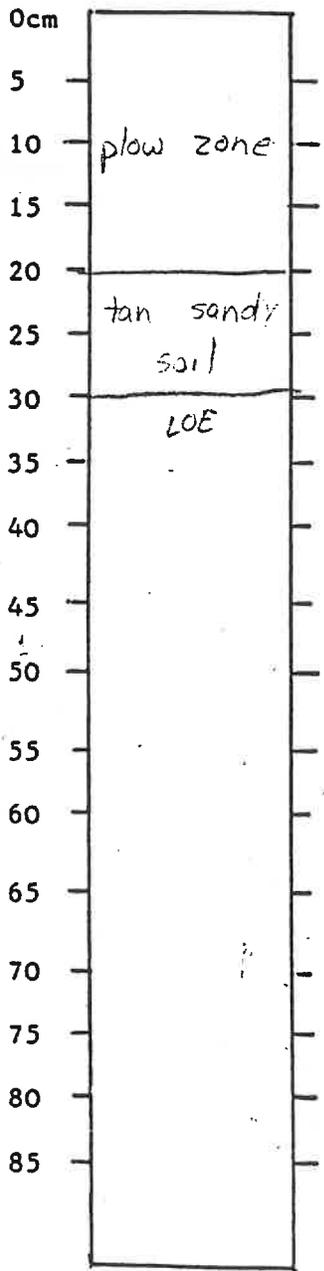
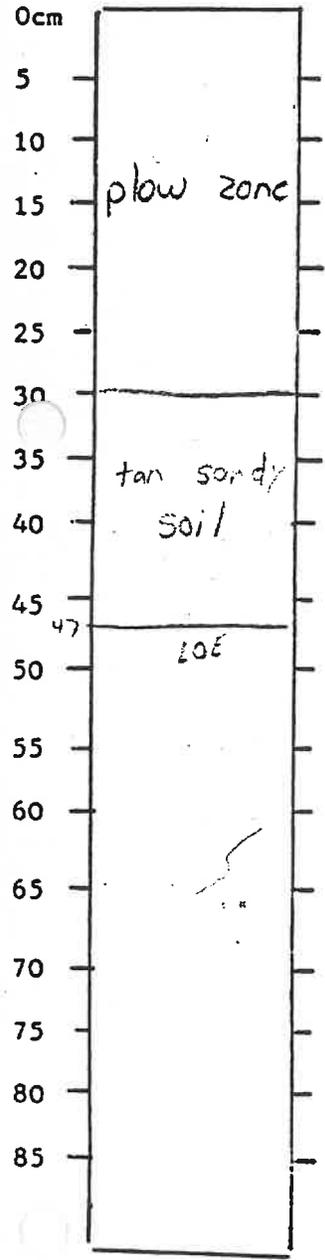
Sampling Interval: ca. 5 meters

Location: 23-16 low terrace

Recorder: \_\_\_\_\_

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: Littlefield

Transect: \_\_\_\_\_

Date: 5/14/87

Sampling Interval: \_\_\_\_\_

Location: 23-16

Recorder: RL

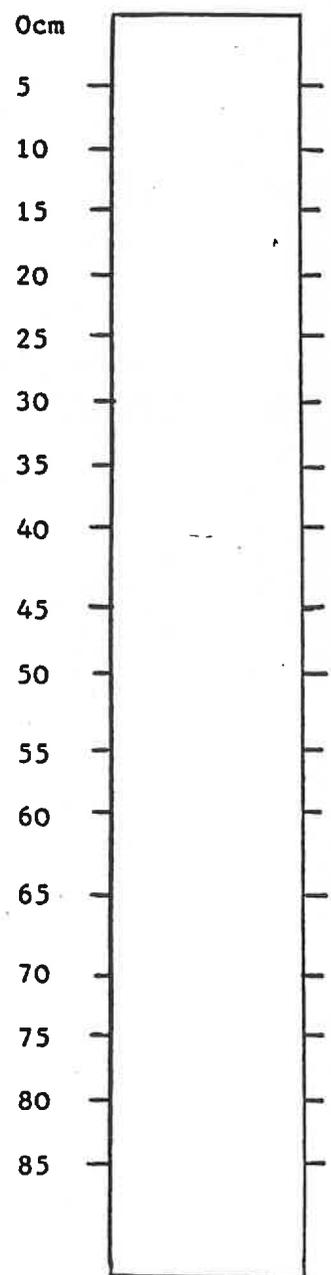
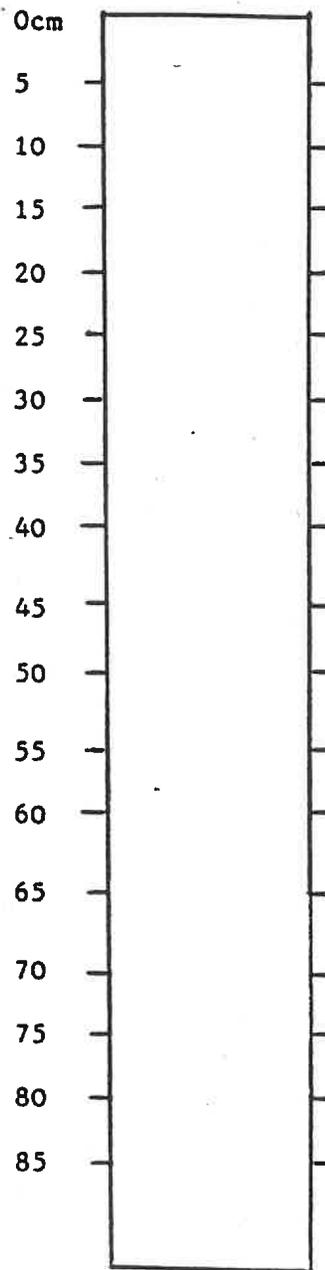
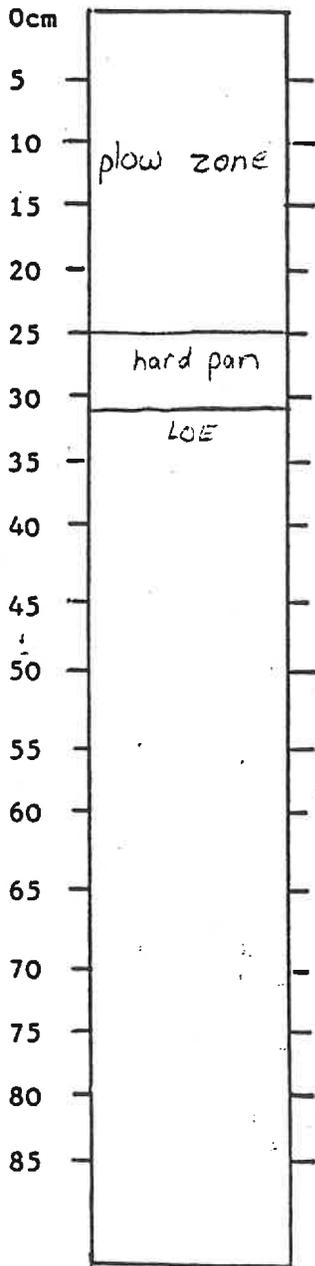
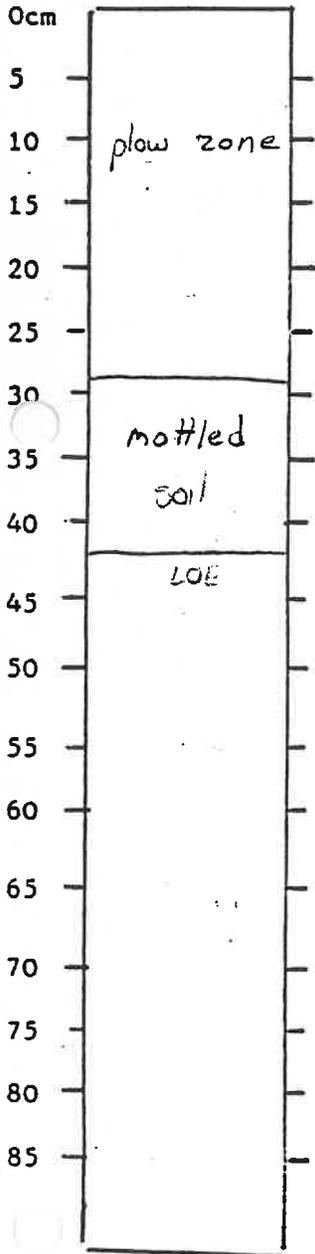
Sampling Unit: 1 meter square

Comments: \_\_\_\_\_

Pit A



Pit B



Project: 200 Field Dam

Transect: West side of Dam

Date: 5/12/87

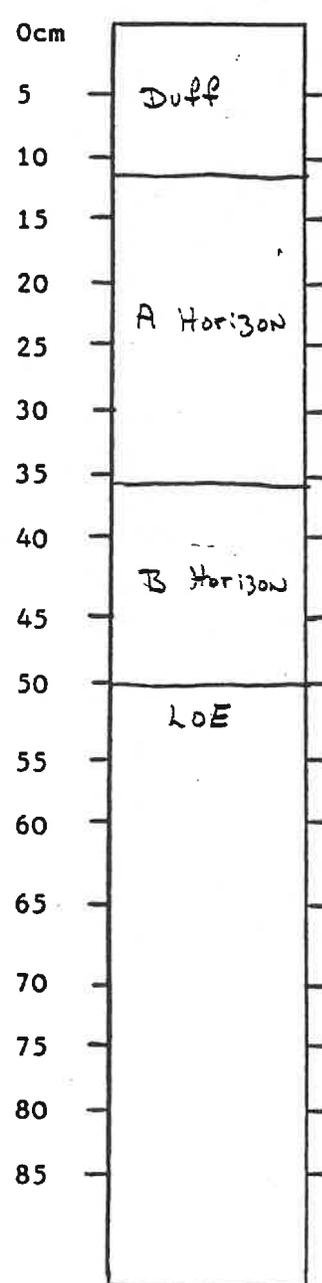
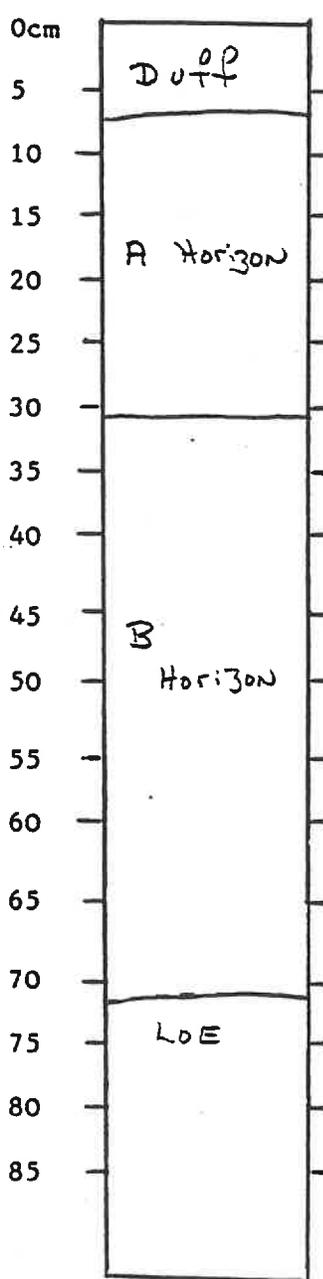
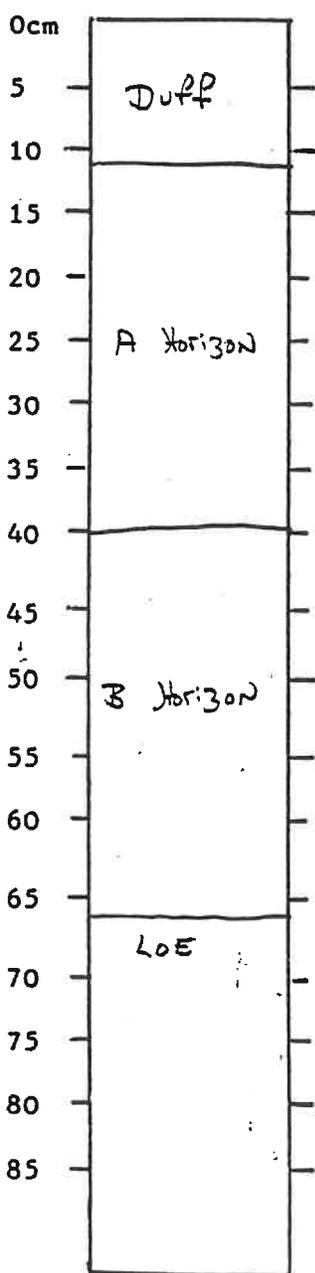
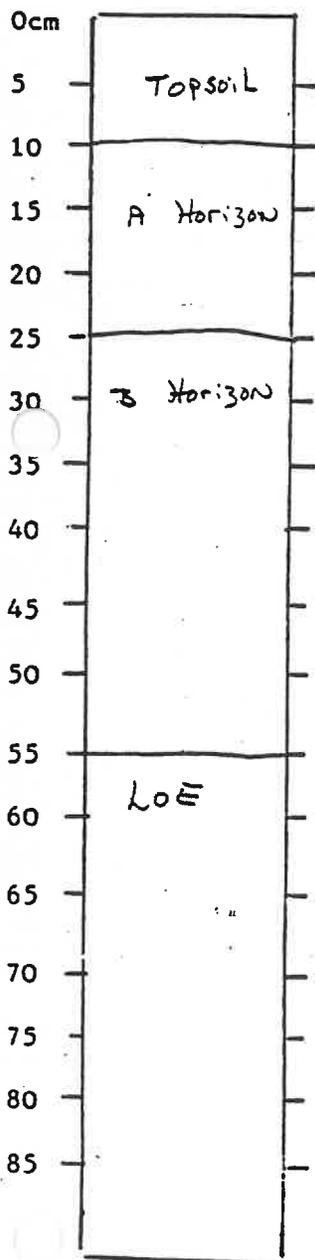
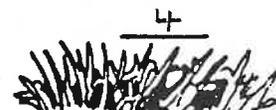
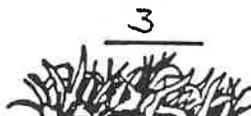
Sampling Interval: ca. 10 meters

Location: 23-13

Recorder: RL, JK, TD, VR, JR, KL, AT

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: 1000 SW of Pond

Date: 5/12/87

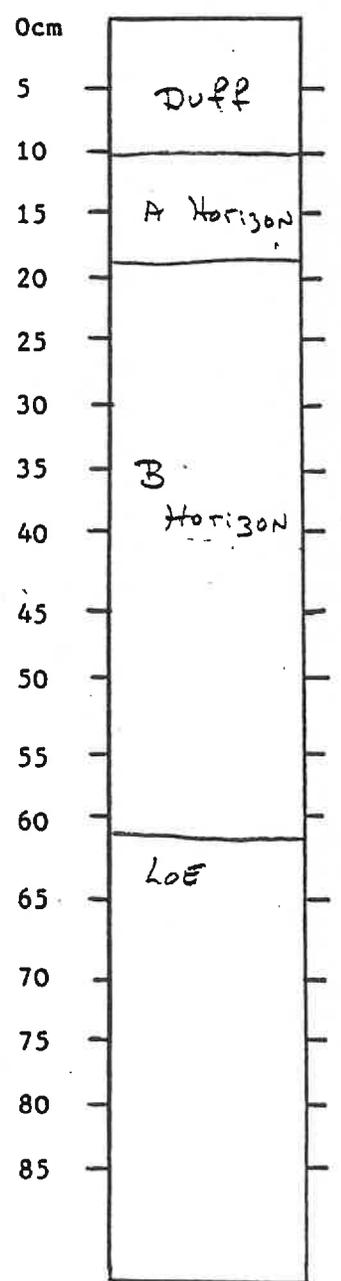
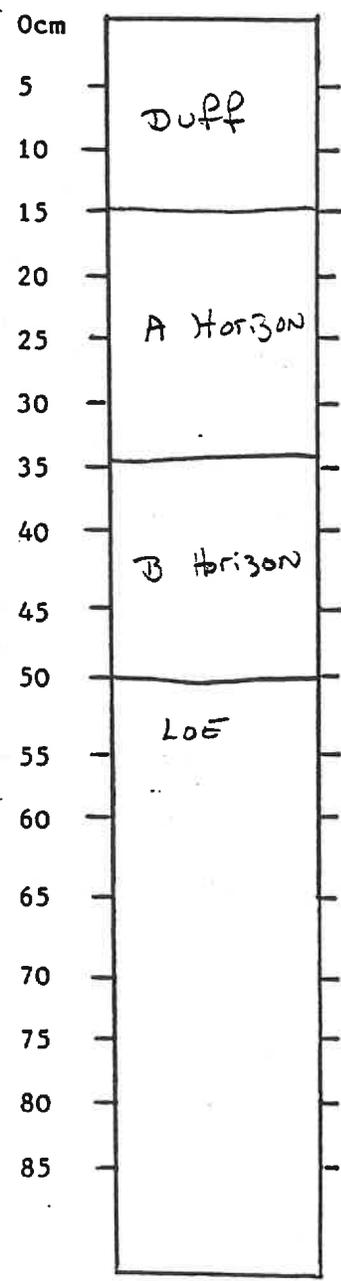
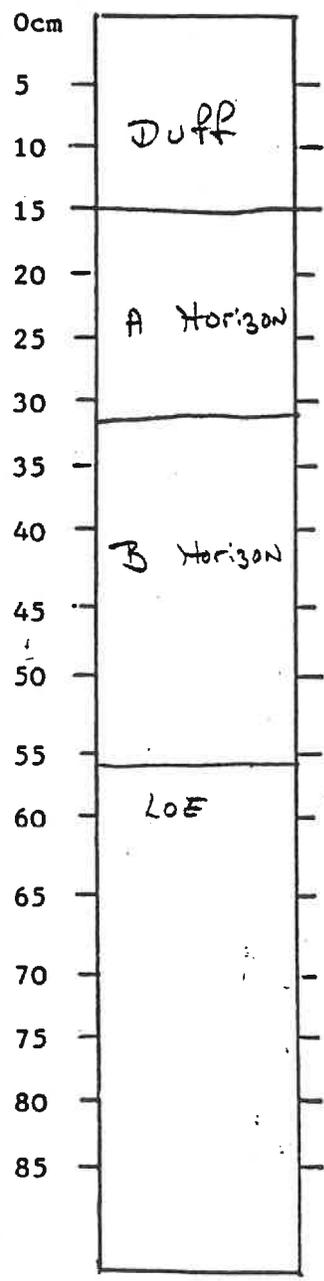
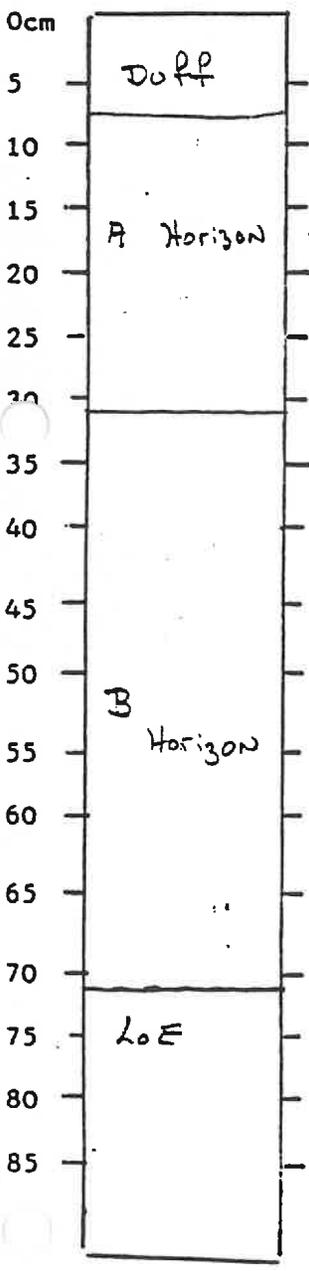
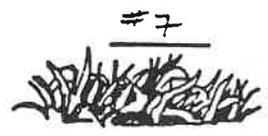
Sampling Interval: CA. 10 meters

Location: 23-18

Recorder: RL, JK, TD, YR, JR, KL, AT

Sampling Unit: 50 X 50 cm

Comments: \_\_\_\_\_



Project: Little Rock Forest

Transect: East side of road

Date: 11/5/86

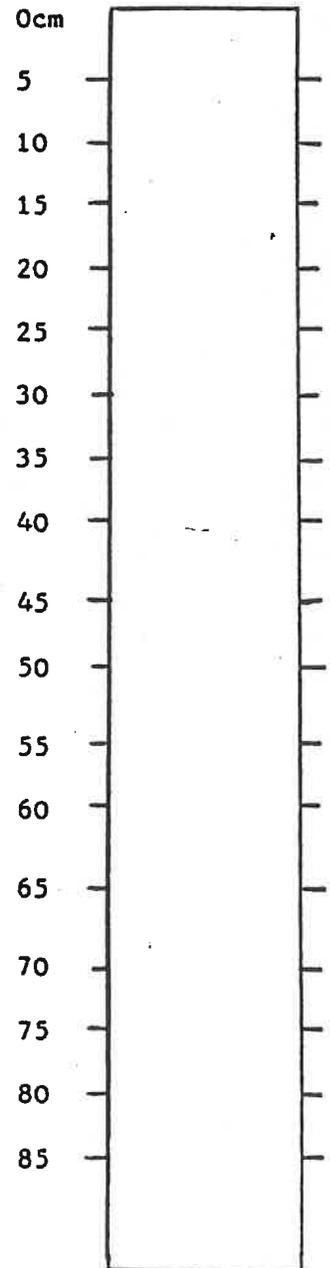
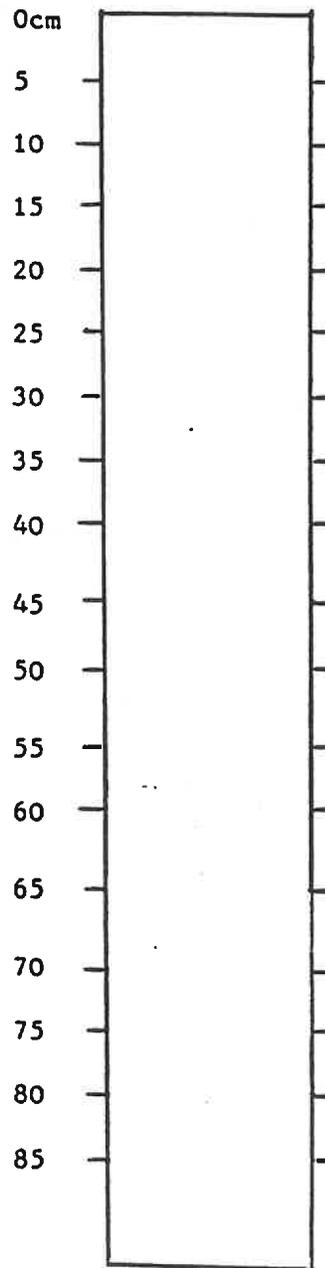
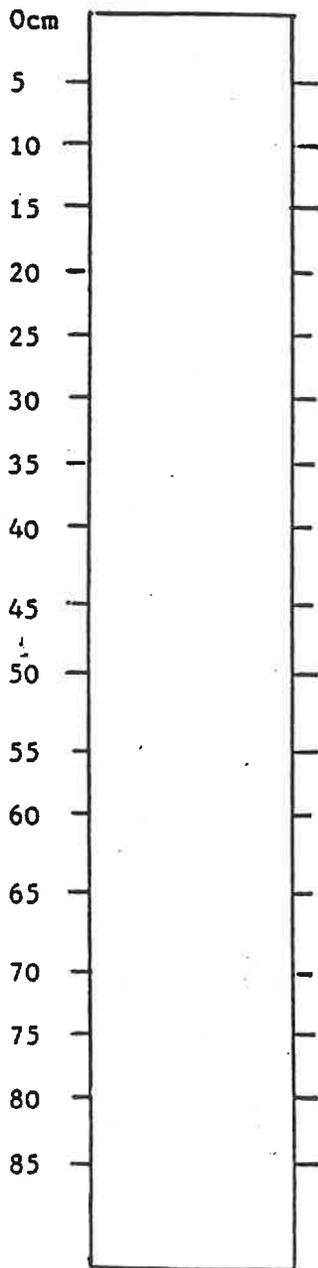
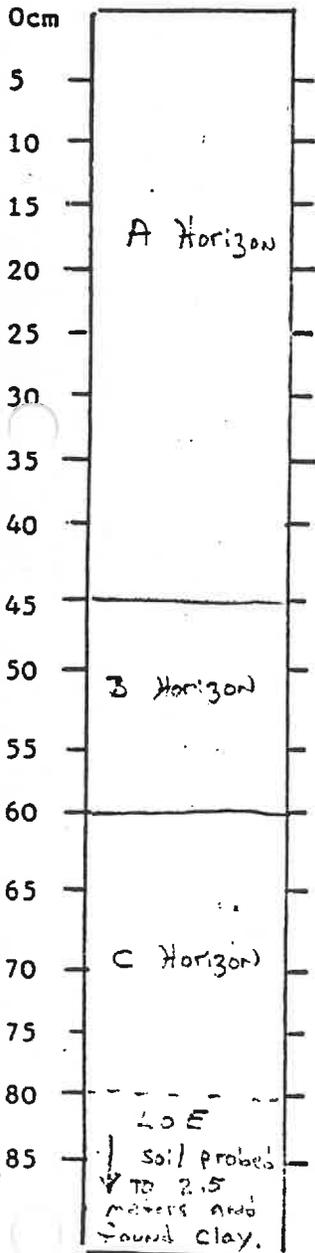
Sampling Interval: \_\_\_\_\_

Location: 23-18

Recorder: RL

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: \_\_\_\_\_

Date: 11/86

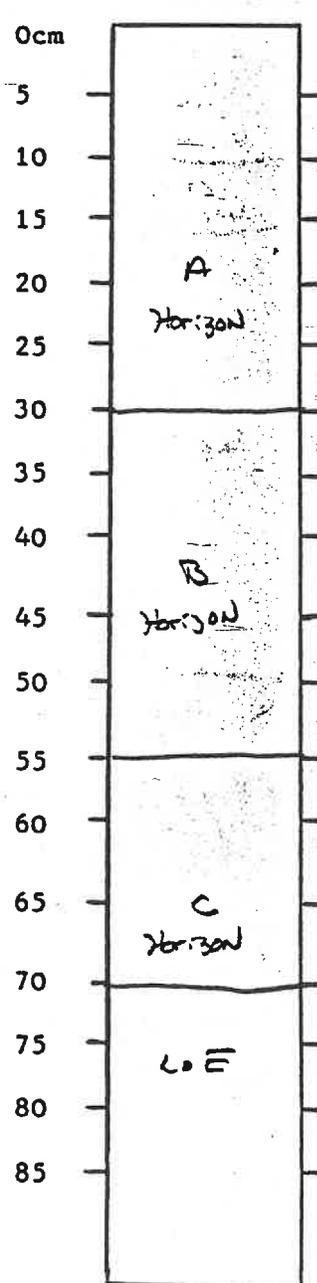
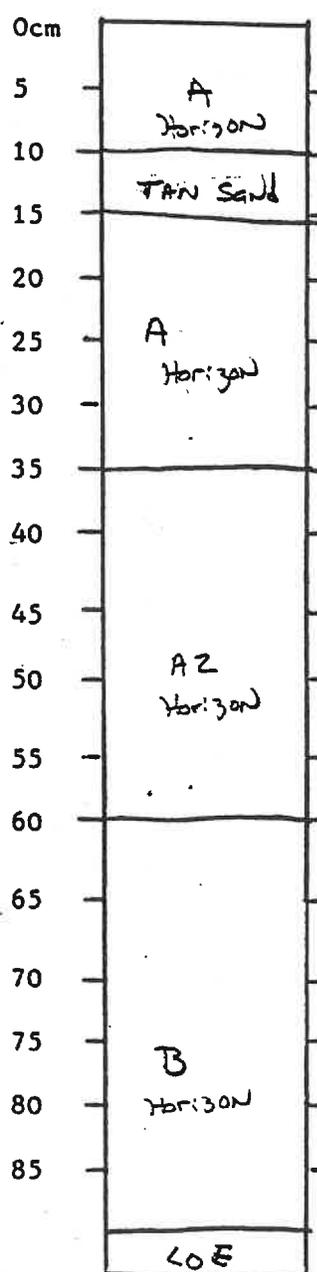
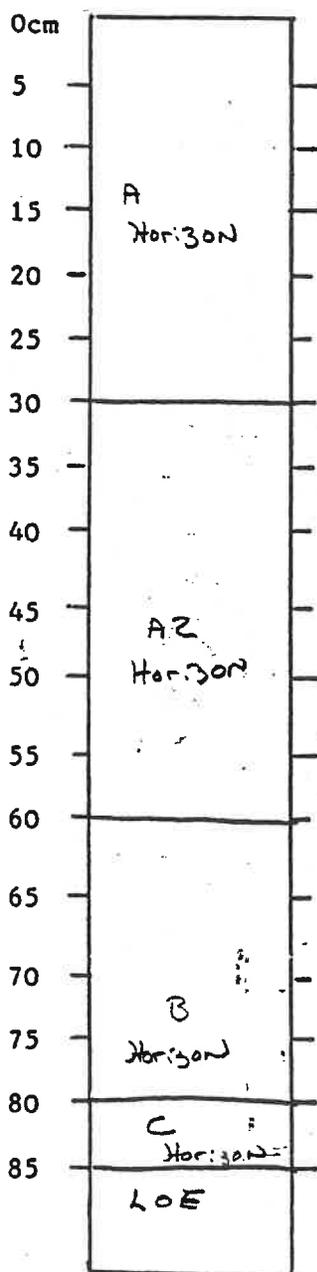
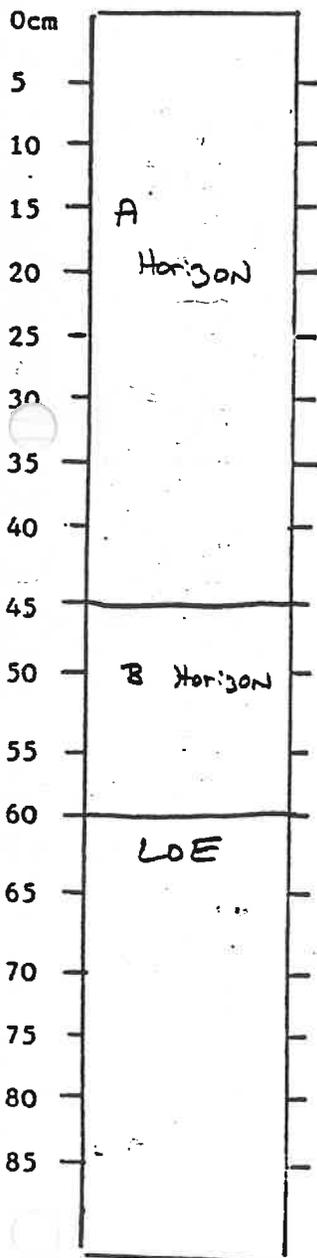
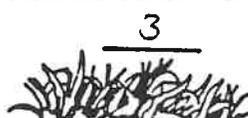
Sampling Interval: ca 10 meters

Location: 23-19

Recorder: \_\_\_\_\_

Sampling Unit: 50 X 50 cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: \_\_\_\_\_

Date: 11/86

Sampling Interval: ca 10 meters

Location: 23-19

Recorder: BJB/RL

Sampling Unit: 50 X 50 cm

Comments: \_\_\_\_\_

5



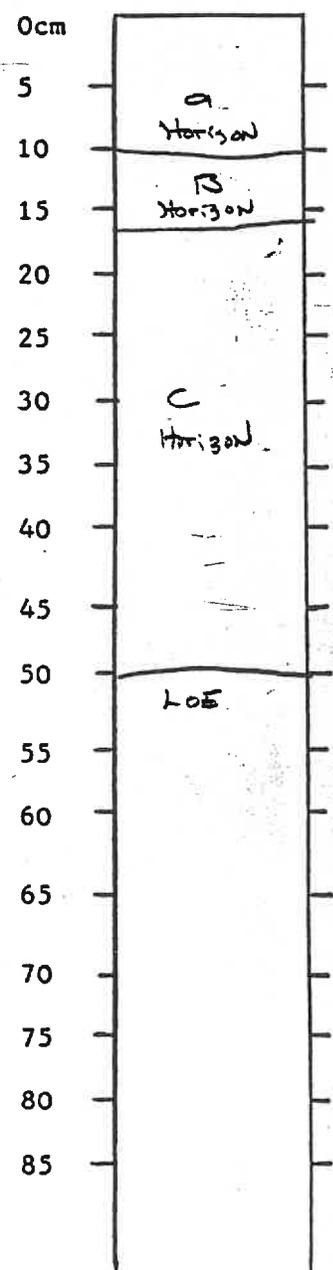
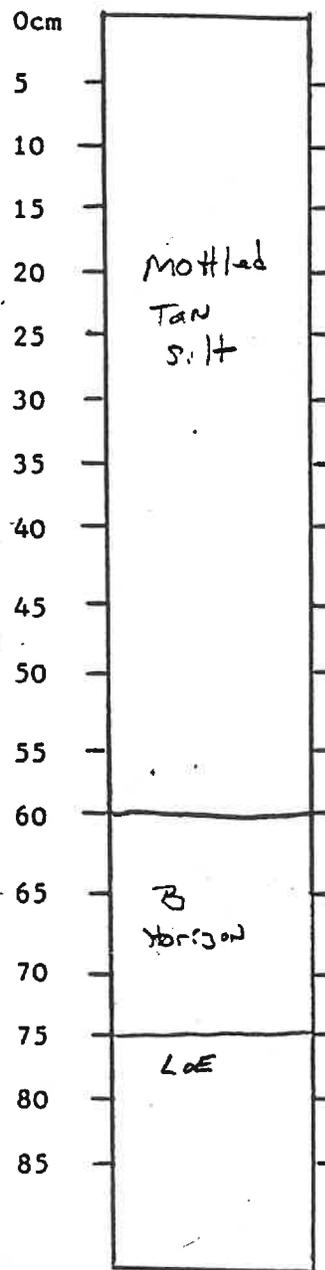
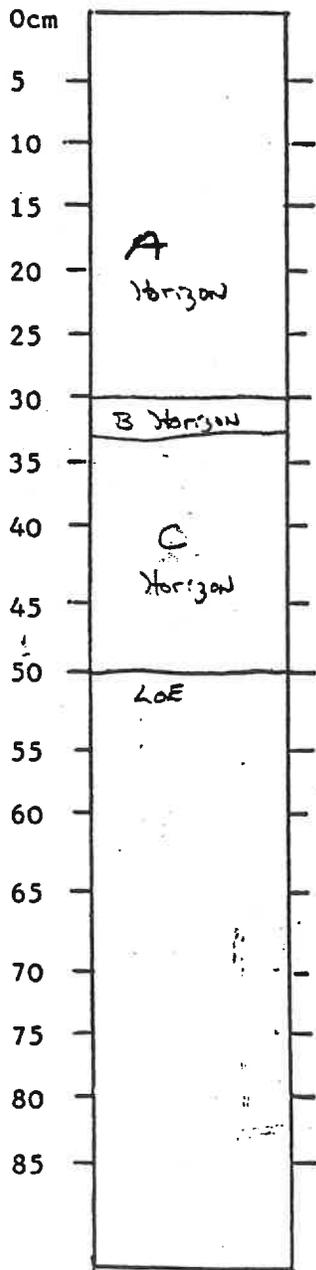
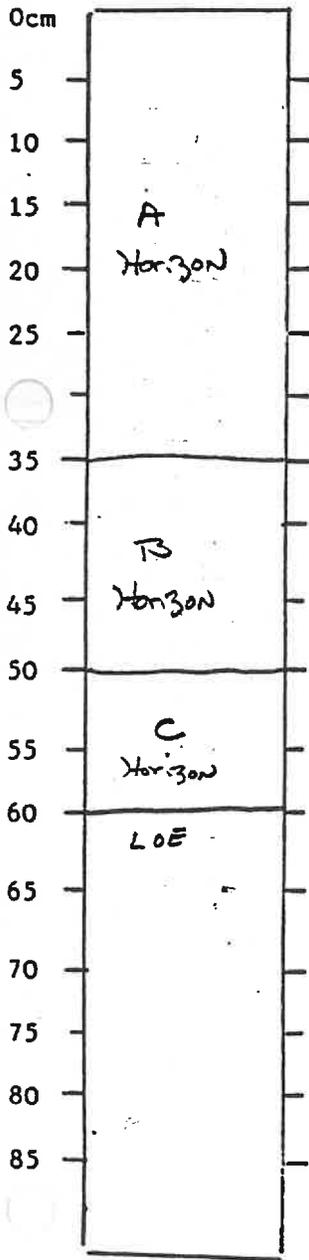
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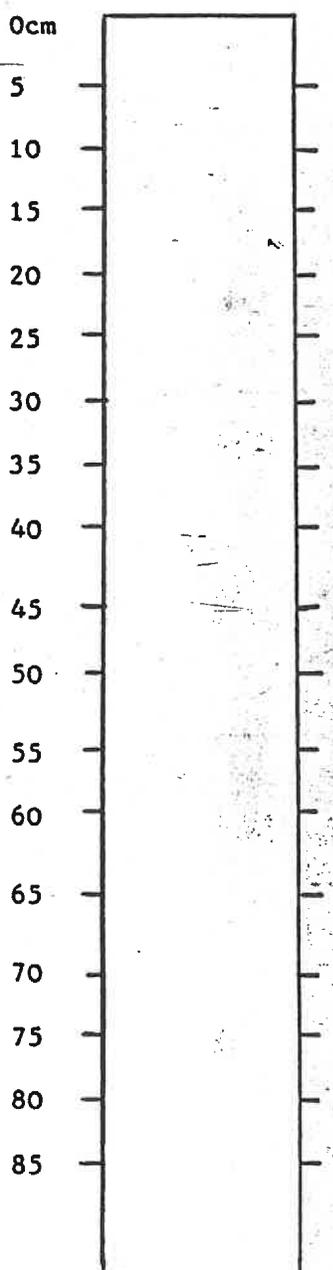
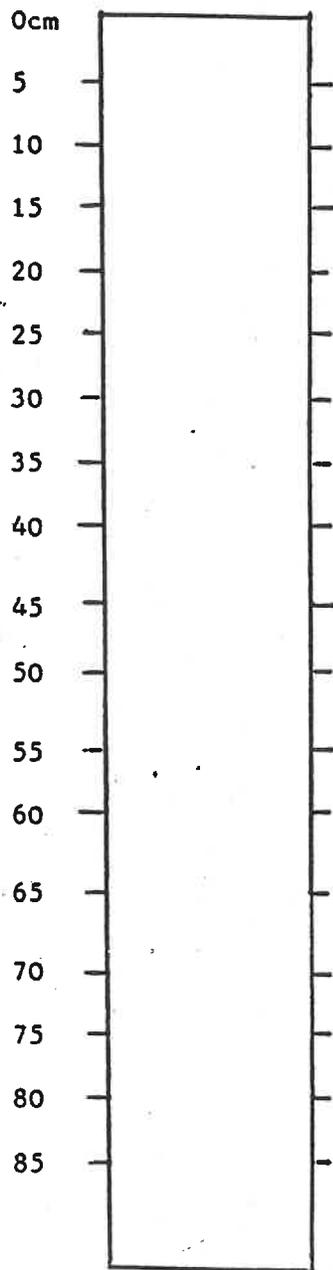
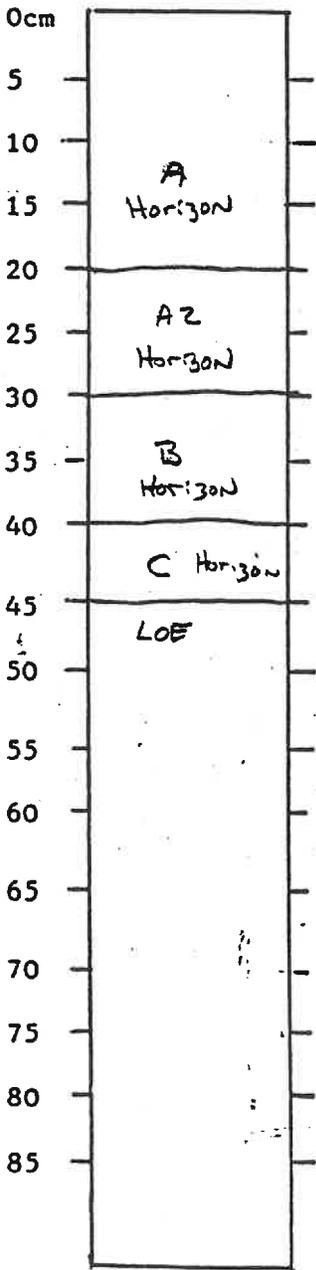
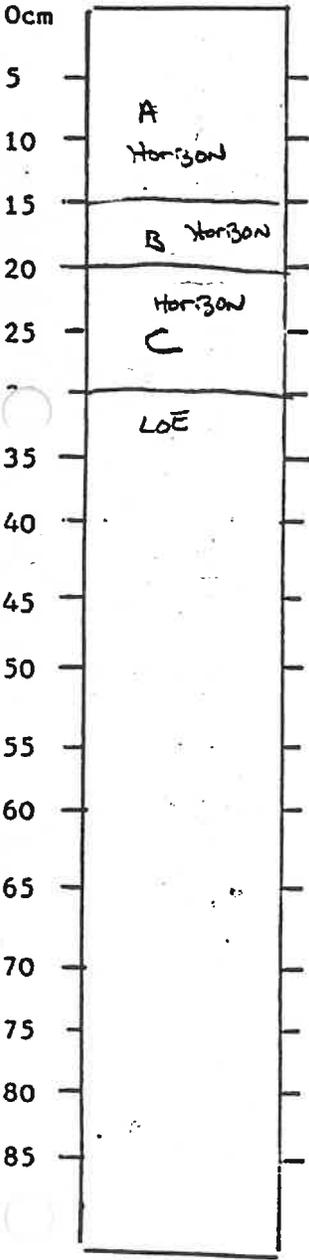
7



8



Project: Littlefield Dam Transect: \_\_\_\_\_  
 Date: 11/86 Sampling Interval: ca 10 meters  
 Location: 23-19 Recorder: BJB/RL  
 Sampling Unit: 50 X 50 cm Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: A

Date: 5/12/97

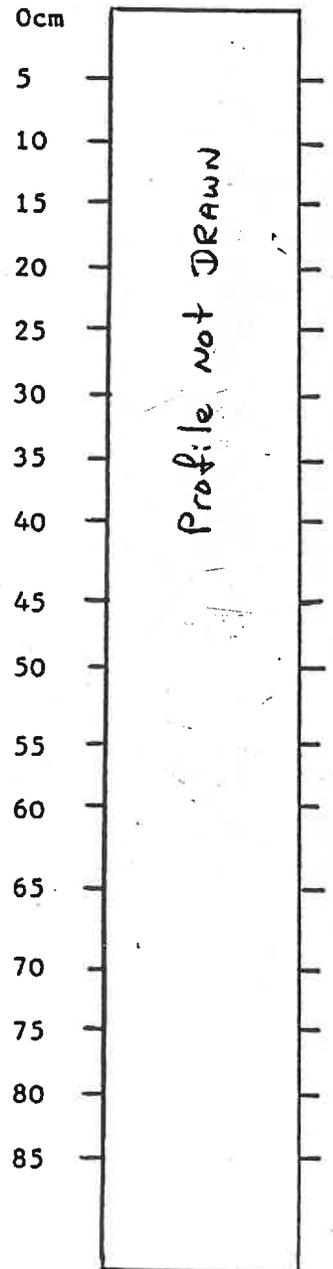
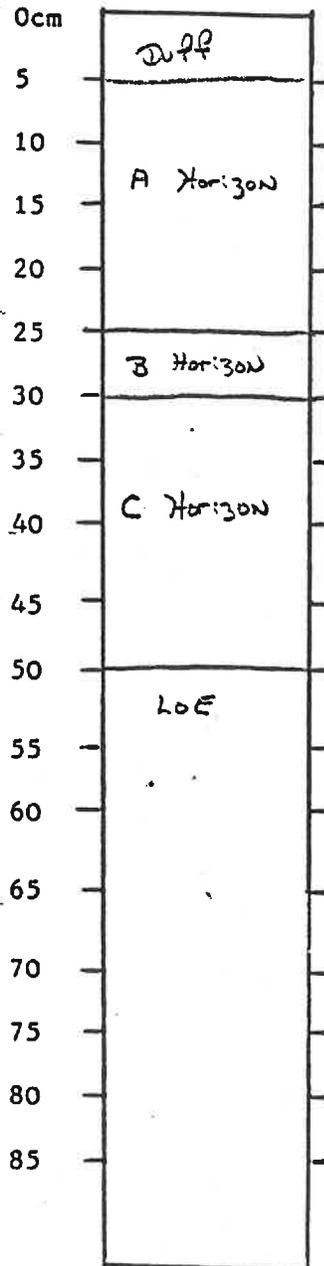
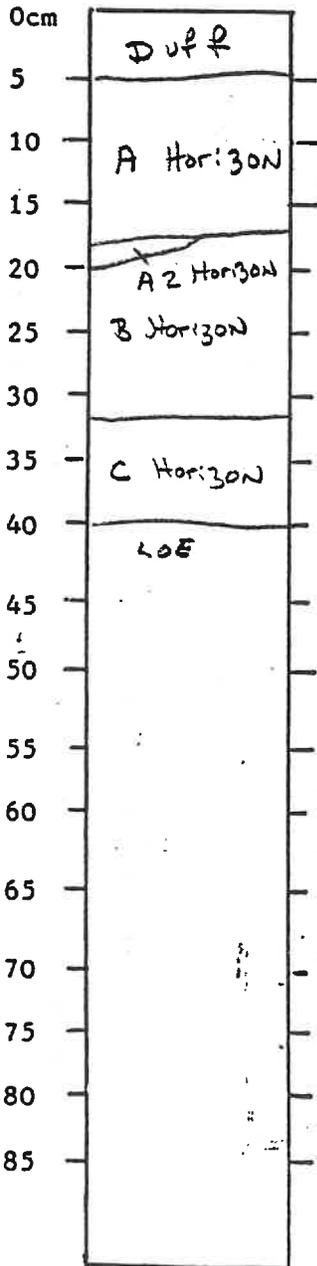
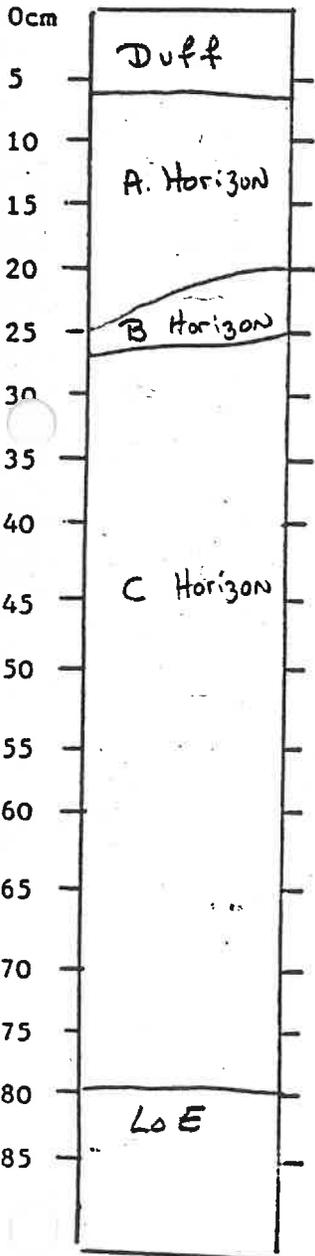
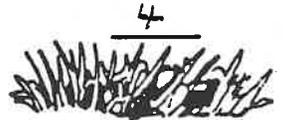
Sampling Interval: ca 10 meters

Location: 23-20

Recorder: RL / RTB

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: A

Date: 5/13/87

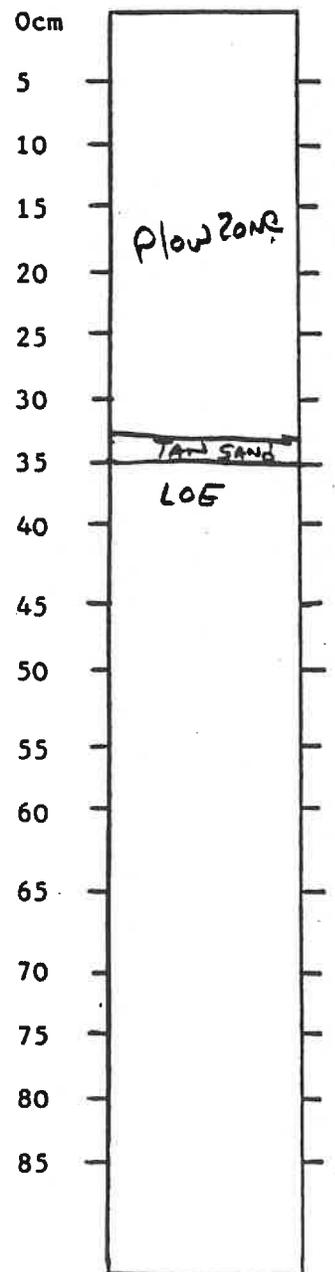
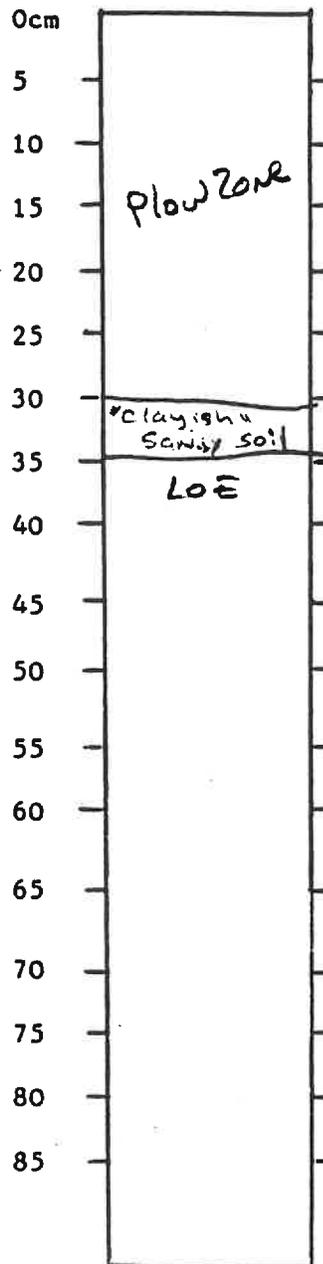
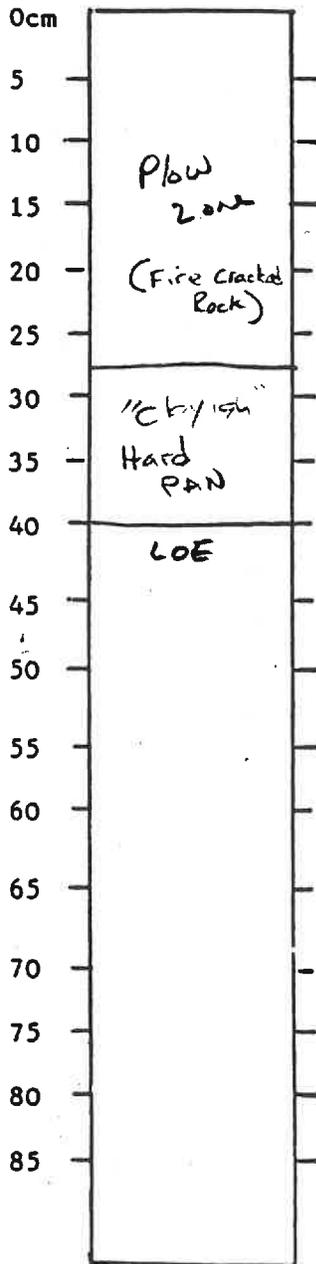
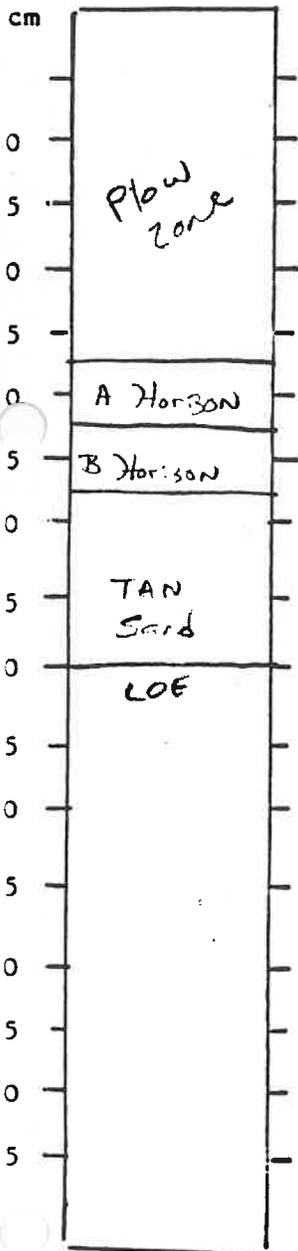
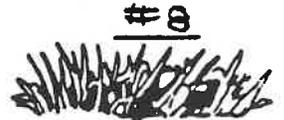
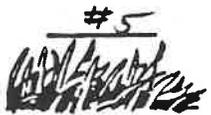
Sampling Interval: CA. 5 meters

Location: 23-16

Recorder: BTB/RL

Sampling Unit: 50x50cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: A

Date: 5/12/87

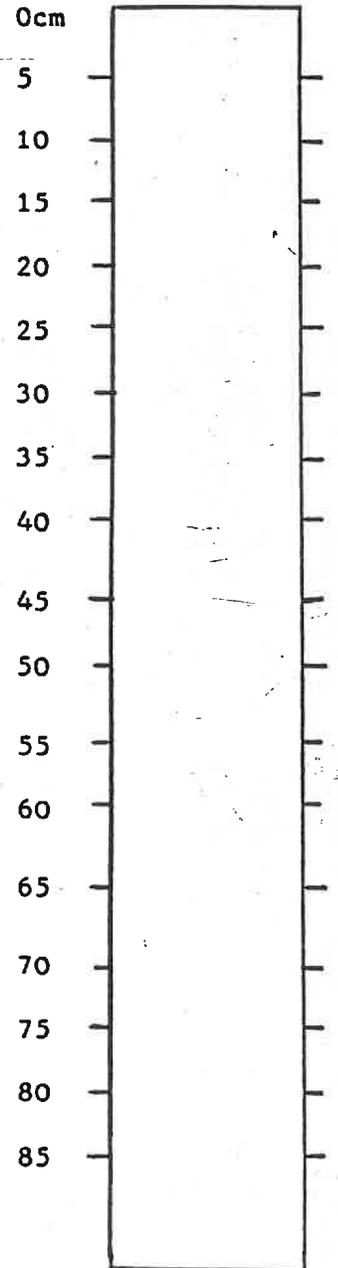
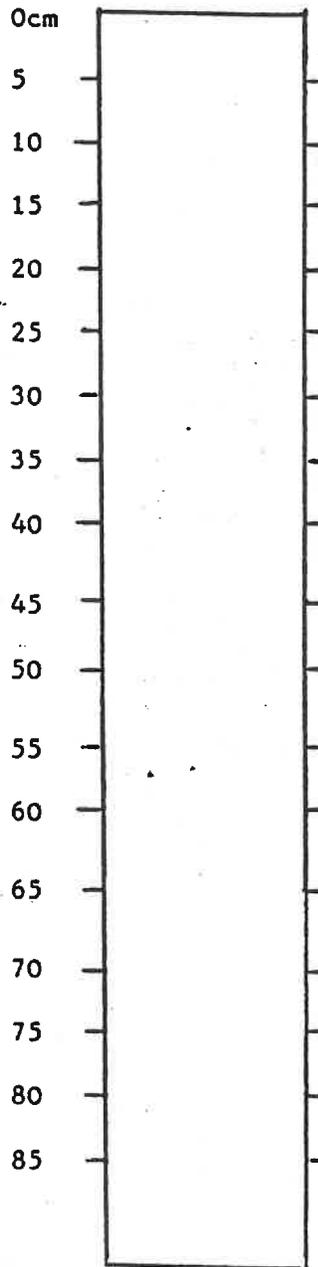
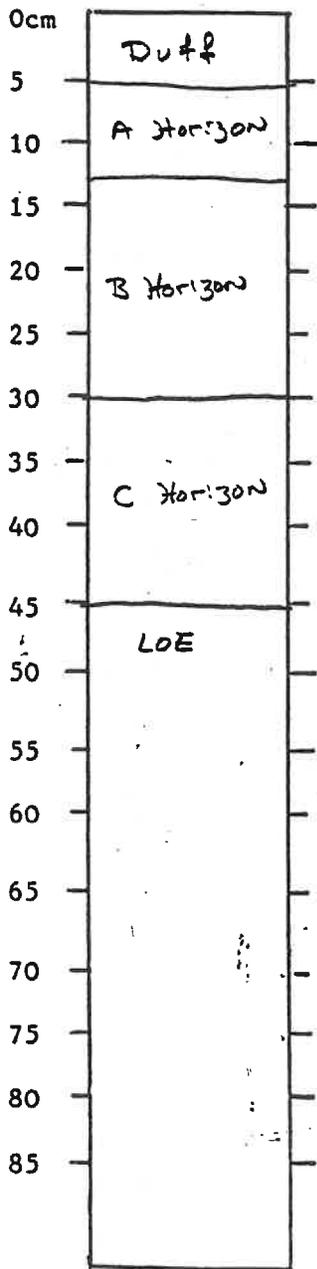
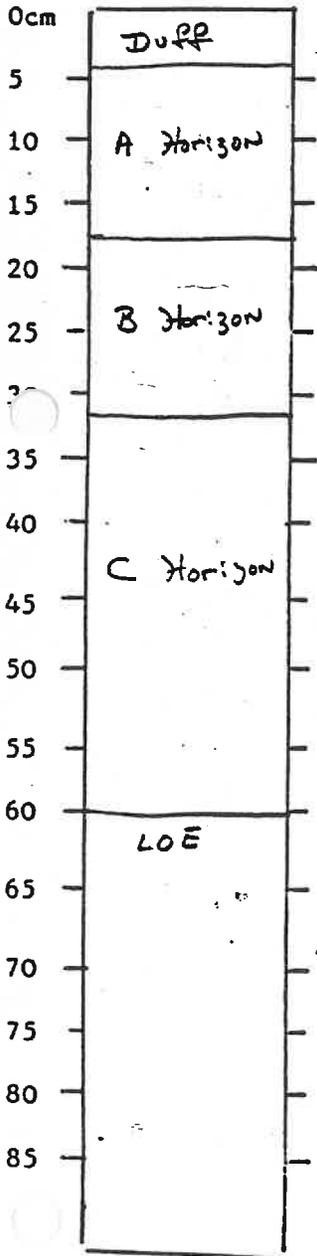
Sampling Interval: ca 10 meters

Location: 23-20

Recorder: RL / BTA

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: C

Date: 5/13/07

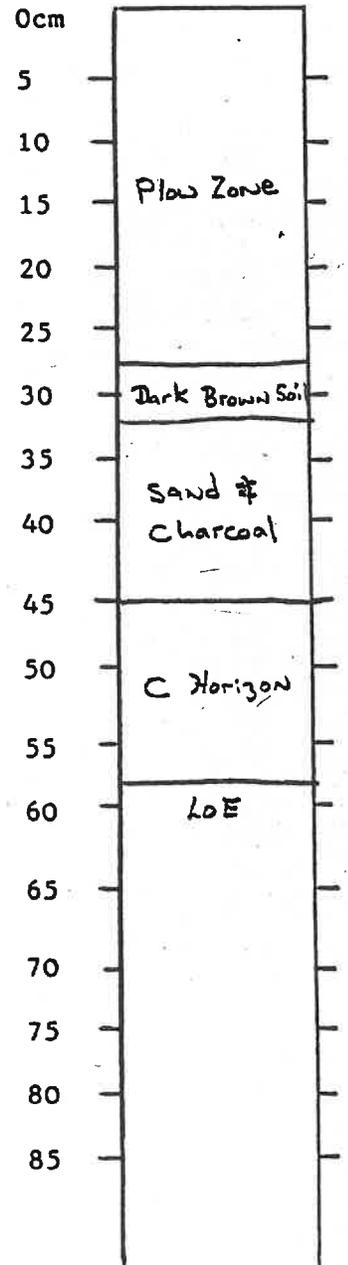
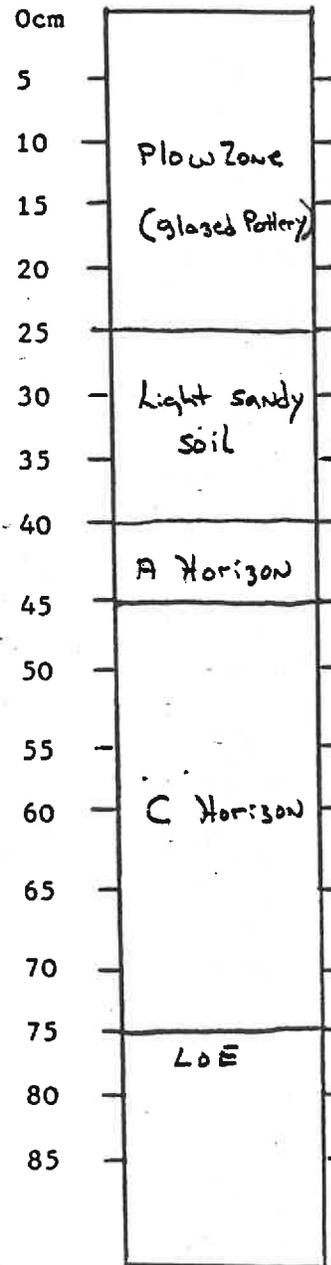
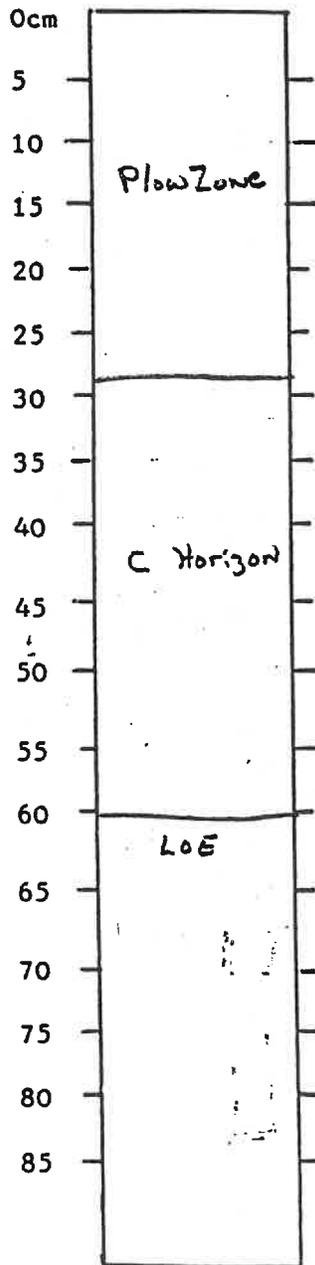
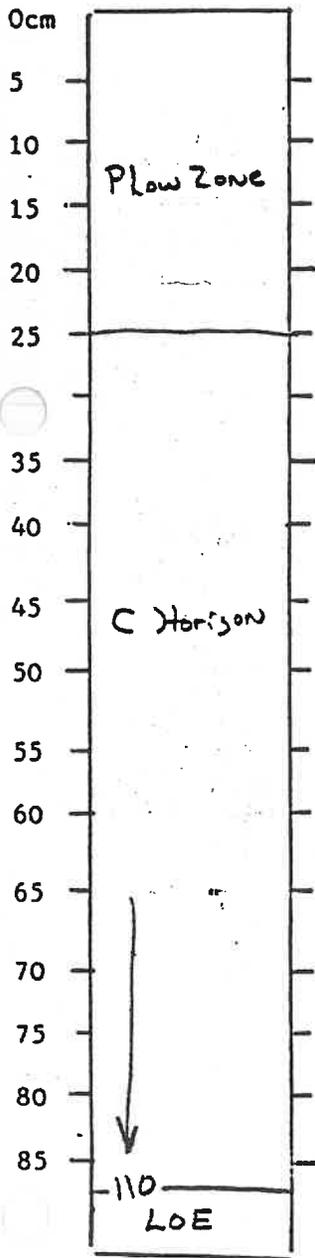
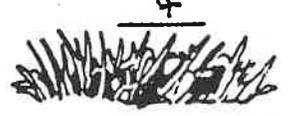
Sampling Interval: CA 10 meters

Location: 23-20

Recorder: BJB/RL

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: C

Date: 5/13/87

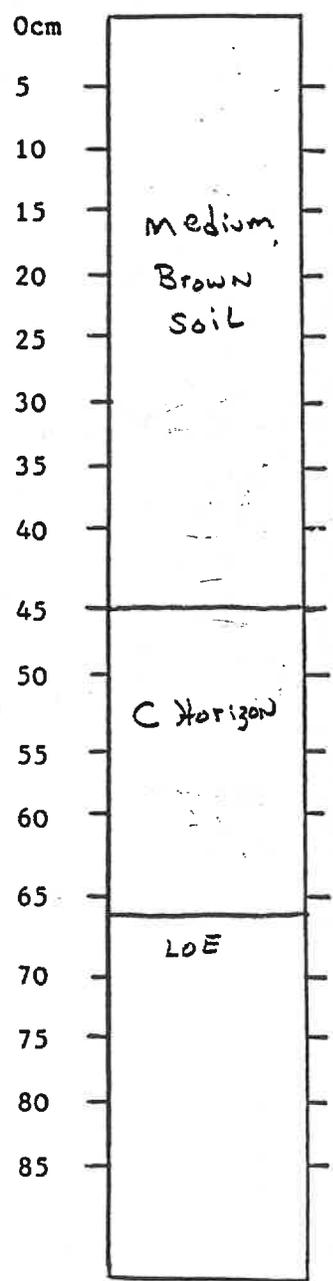
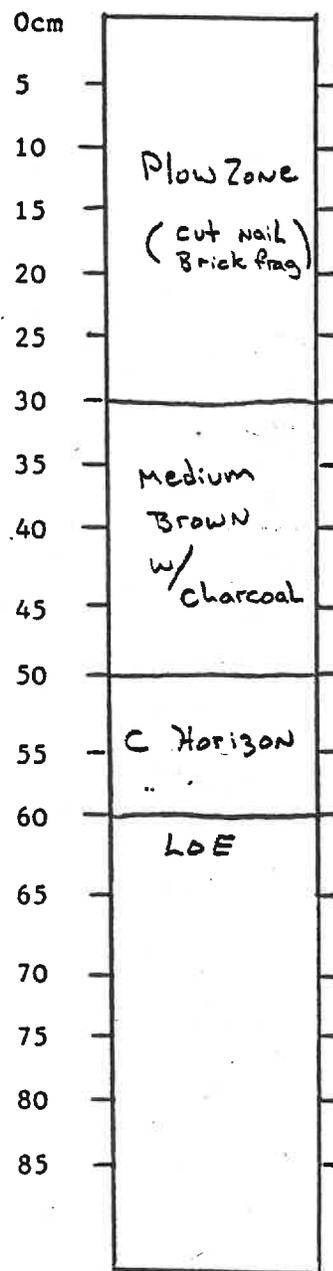
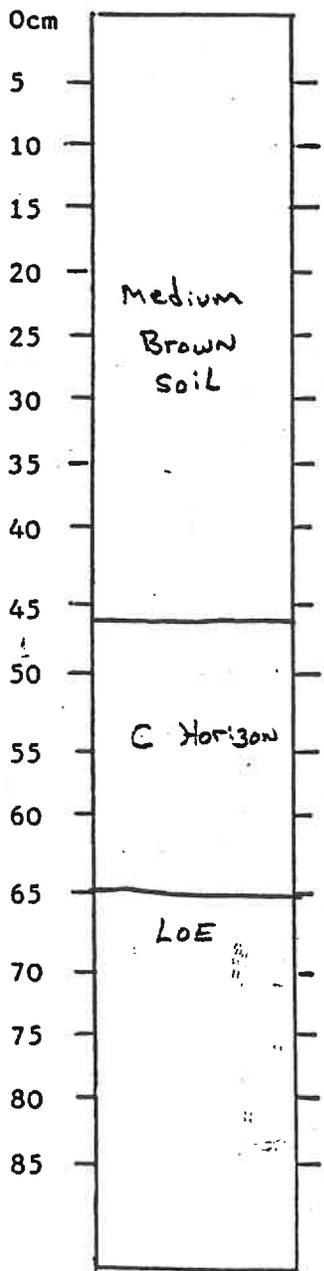
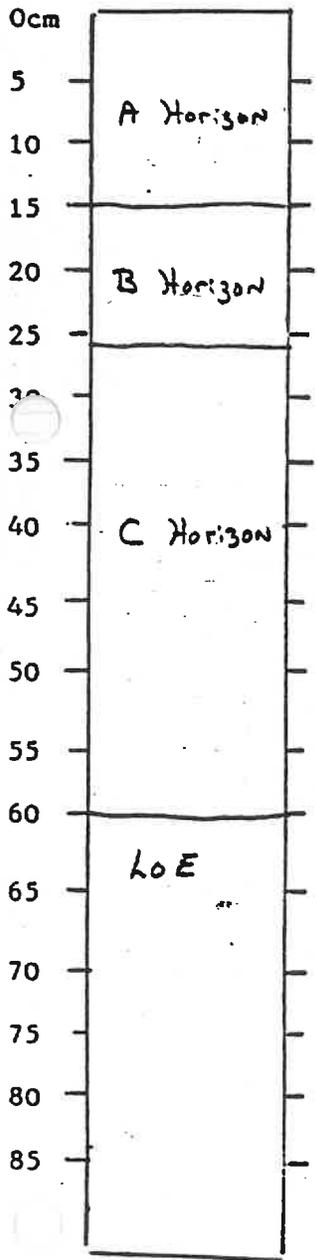
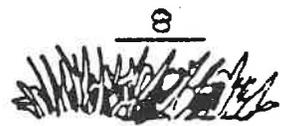
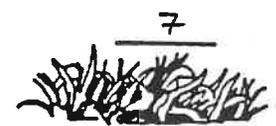
Sampling Interval: ca 10 meters

Location: 23-20

Recorder: BTR / RL

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



Project: Littlefield Dam

Transect: C

Date: 5/13/87

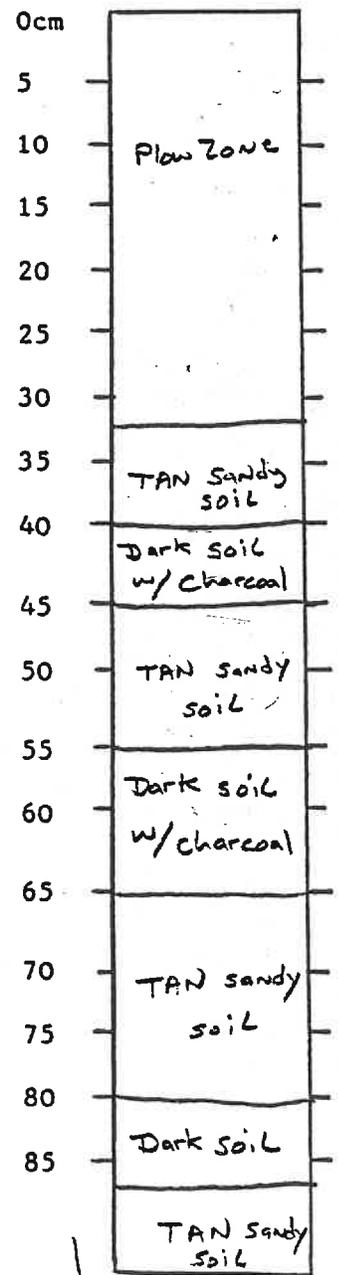
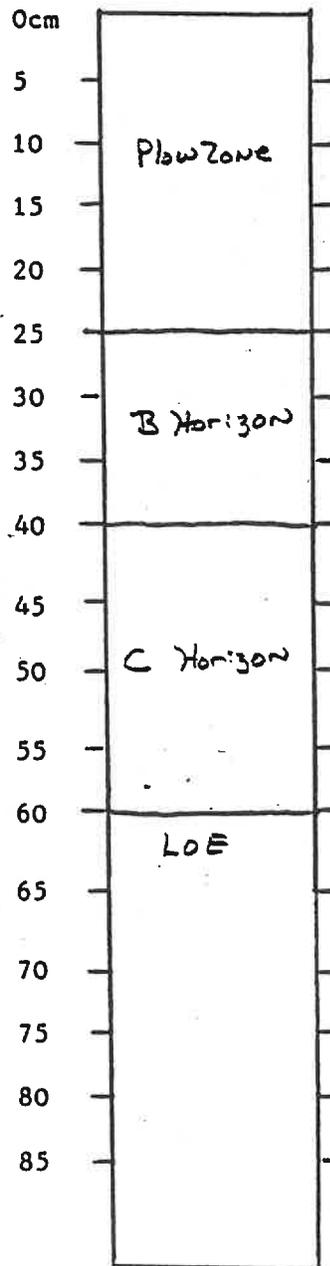
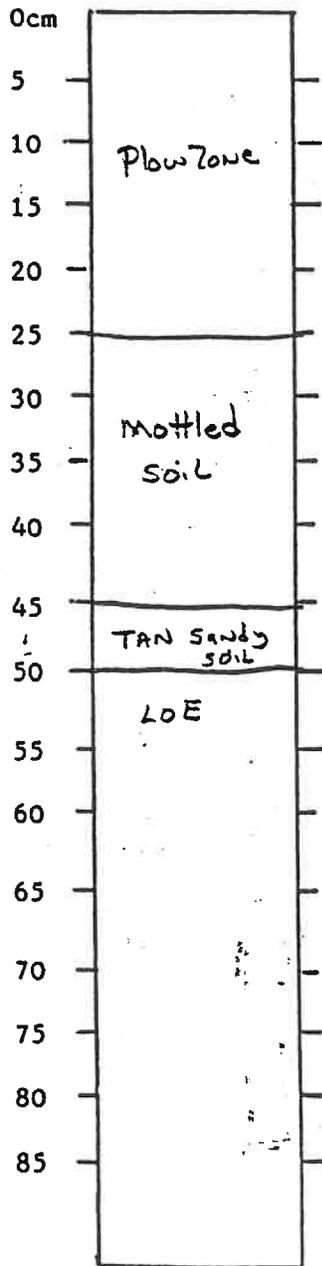
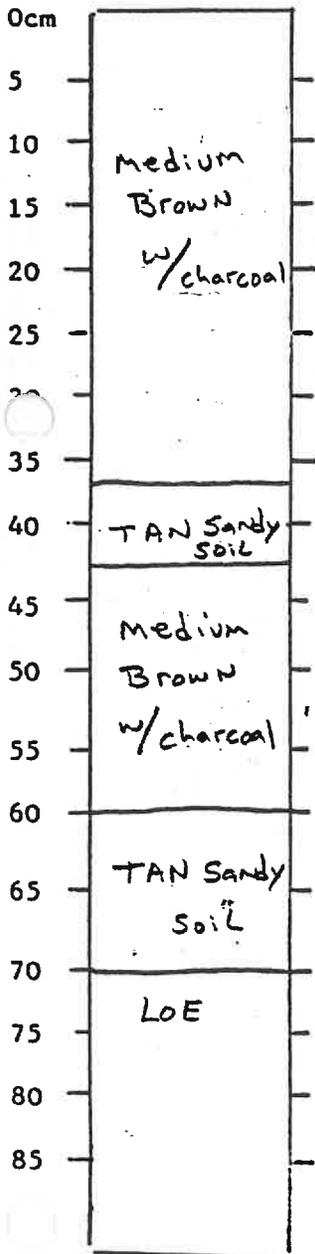
Sampling Interval: ca 10 meters

Location: 23-20

Recorder: BTR / RL

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_



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LOE

Project: Littlefield Dam

Transect: C

Date: 5/13/87

Sampling Interval: ca 10 meters

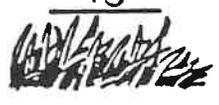
Location: 23-20

Recorder: BTR / RL

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_

13



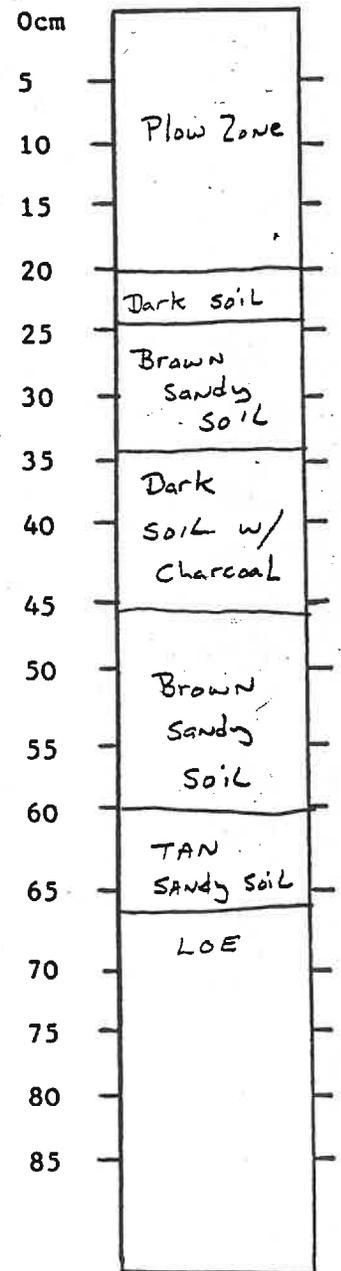
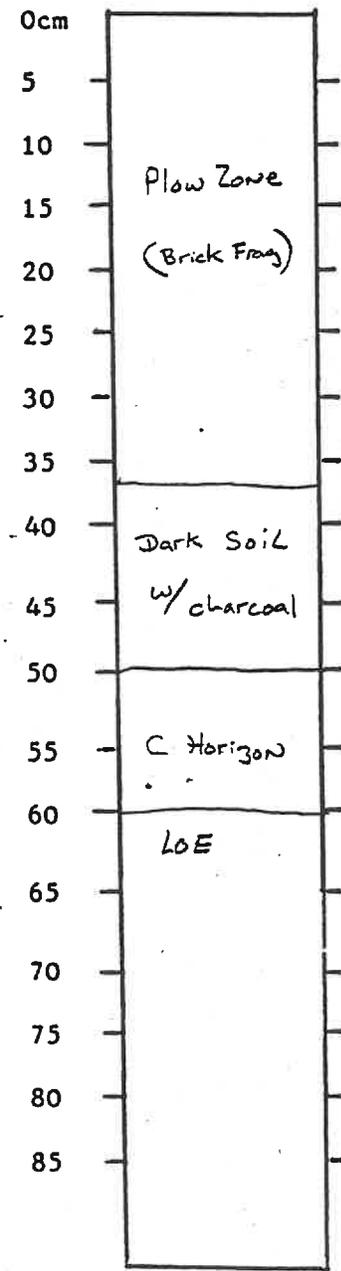
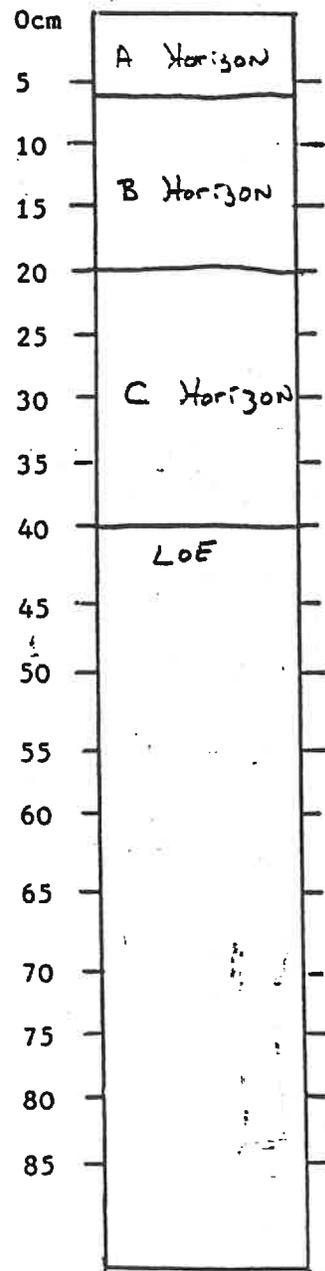
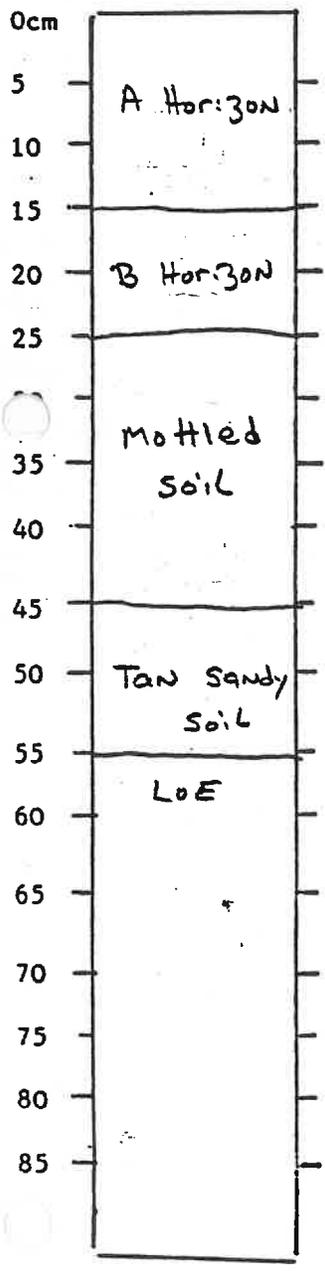
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16



Project: Littlefield Dam

Transect: C

Date: 5/13/87

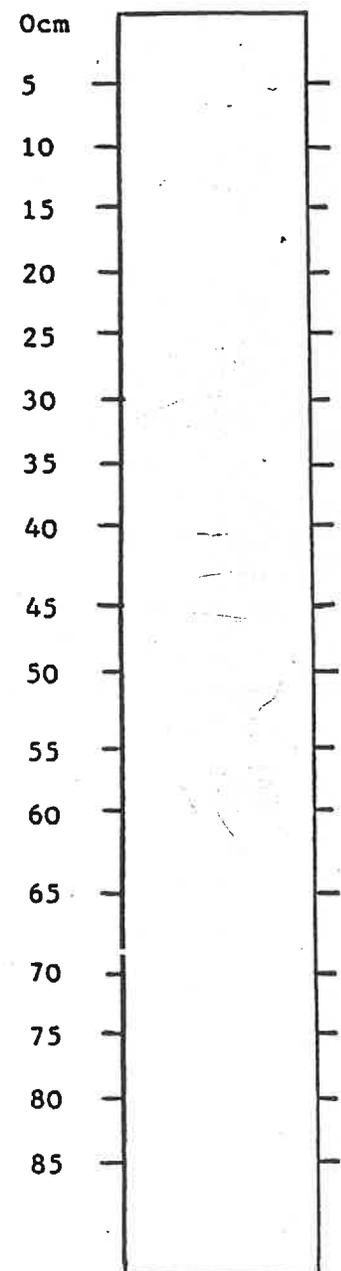
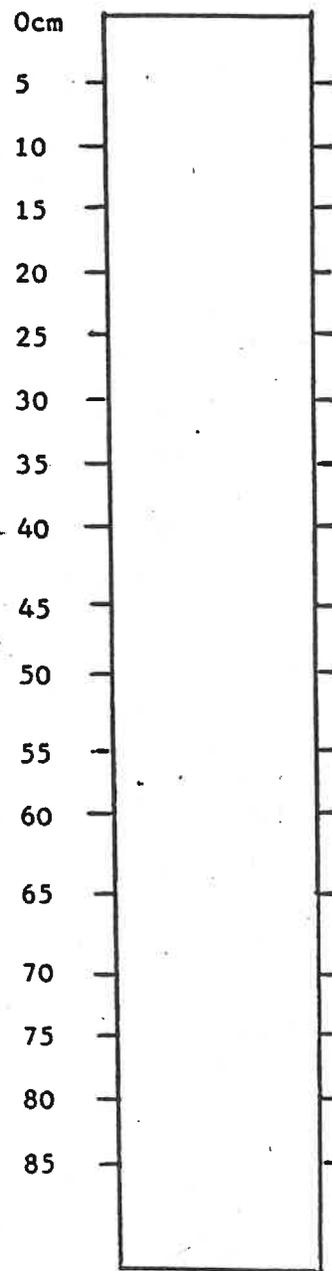
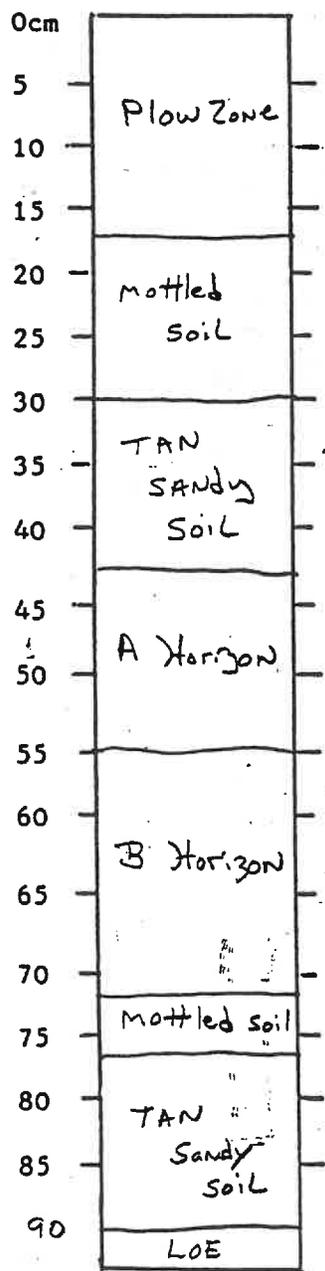
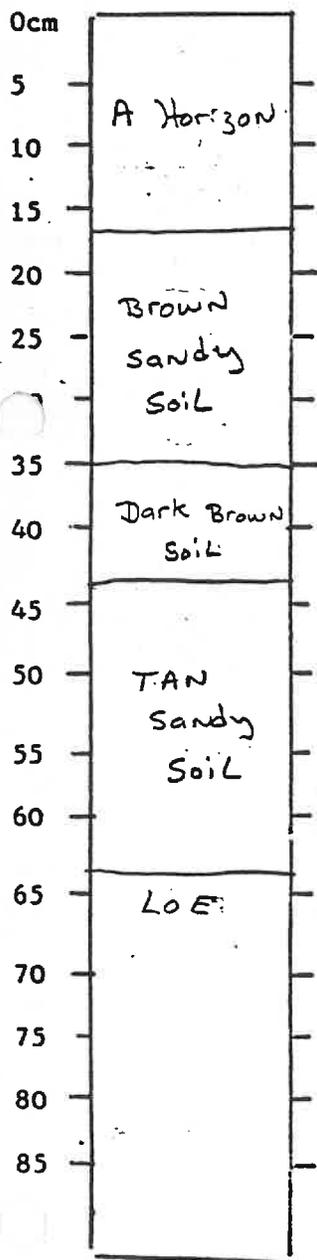
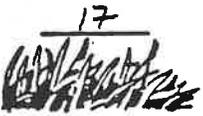
Sampling Interval: ca 10 meters

Location: 23-20

Recorder: BJB / RL

Sampling Unit: 50 x 50 cm

Comments: \_\_\_\_\_







Project No. 8158-002  
Schedule A.

January 8, 1988

5. The proposed access road would be approximately 650 feet long, from the present terminus of Merrow Road to the powerhouse.

