APPENDIX VII

Research Design

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MITIGATION PROPOSAL, SCHEDULE & BUDGET FOR CONDUCTING DATA RECOVERY (PHASE III) INVESTIGATIONS AT THE H. GRANT TENANCY SITE (7NC-B-6) WILMINGTON, NEW CASTLE COUNTY, DELAWARE

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Length of Project: 7 months

Introduction

This transmittal presents a proposal for conducting data recovery investigations at the H. Grant Tenancy site in New Castle County, Delaware (Figures 1 & 2). Significant archeological remains will be affected by proposed construction connected with intersection improvements to Rt. 48 (Lancaster Pike). This proposal was prepared in response to a request for proposal from the Delaware Department of Transportation.

Background and Research Questions

In respone to changing economic conditions in the beginning of the nineteenth century, land tenure became consolidated into the hands of fewer individuals in northern Delaware. Landowners often had business interests connected with industrialization or commerce in urban centers and frequently lived in the city. To maintain agricultural production, a system of tenancy was employed. Tenants were probably drawn from groups of lower economic status in both urban and rural populations, but very little historical research has been devoted to these individuals and little is known of their economic or cultural background. Likewise, little remains of their material culture, including their housing, have survived. It appears that the H. Grant Tenancy site represents a tenant occupation for reasons presented in the Phase I & II report (Barse 1985).

The testing program at this site revealed the remains of a structure and other sub-plowzone features, as well as a large quantity of artifact remains within the plowzone. The data recovery program proposed here has been designed to retrieve a sample of data to address several research questions. We would

like to learn more about the spatial arrangement and relationships of the dwelling and other service buildings such as storage sheds, animal pens, privies, etc., to show how these compare to the larger complexes of the owners, many of which are still extant. We also expect that discarded material possessions in the plowzone and features will allow a more precise characterization of the social and economic status of the tenant occupants of the site. Patterning in the distribution of economically significant attributes in the artifacts can be compared with data collected in future research to see if there are broad patterns reflecting the economic conditions of tenants as a group.

Both the spatial and artifact patterns identified at this site can serve as a baseline for comparison with data developed in future research into this little known class of archeological occupations. Future research questions might include the examination of the effects of proximity to a major market center (Wilmington) in comparison with situations more removed from such centers.

Research Methods

The research methodology has been designed to gather data to address these, and other research questions. The Background and Archival research will attempt to identify the occupants of the site and also develop more general data concerning the economic and social conditions in which tenant farmers lived. If specific information on the site and its occupants can be discovered this will be used for comparison with the results of the field work.

Research strategies for the field work will vary for different portions of the site (Figure 3). The area around the foundation (Area A) that was identified during the survey and testing program will be excavated by hand. The alignment of the remaining foundation wall will be exposed, and the overlying and adjacent soil will be screened through 1/4" mesh. In the 18th Century, artifact concentrations were usually located next to structure openings such as doors and windows, and such concentrations may be preserved beneath and even within the plow zone, allowing the identification of the location of these structure openings. Alternatively, this disposal pattern may not survive into the early nineteenth century when this site was occupied and a diffuse distribution of artifacts may be found. This result would be one step in establishng the characteristic archaeological patterns for tenant occupations in the first half of the nineteenth century. The equivalent of 45 five-foot-by-five-foot units has been allocated for this portion of the work.

While the hand excavations of that part of the site are underway, the remainder of the site will be plowed and a 10 foot grid set up over the plowed area. The roughly 470 ten-foot-by-ten-foot squares will be surface collected and bagged separately, and artifact concentrations mapped. The equivalent of up to 20 additional five-foot-by-five-foot units will be distributed in locations where artifact concentrations suggest the presence of artifact-bearing features. Such features are important because they will provide raw data for the economic and functional analysis, and trash pits and abandoned wells and pivies are likely to be helpful for this purpose. All such features will be

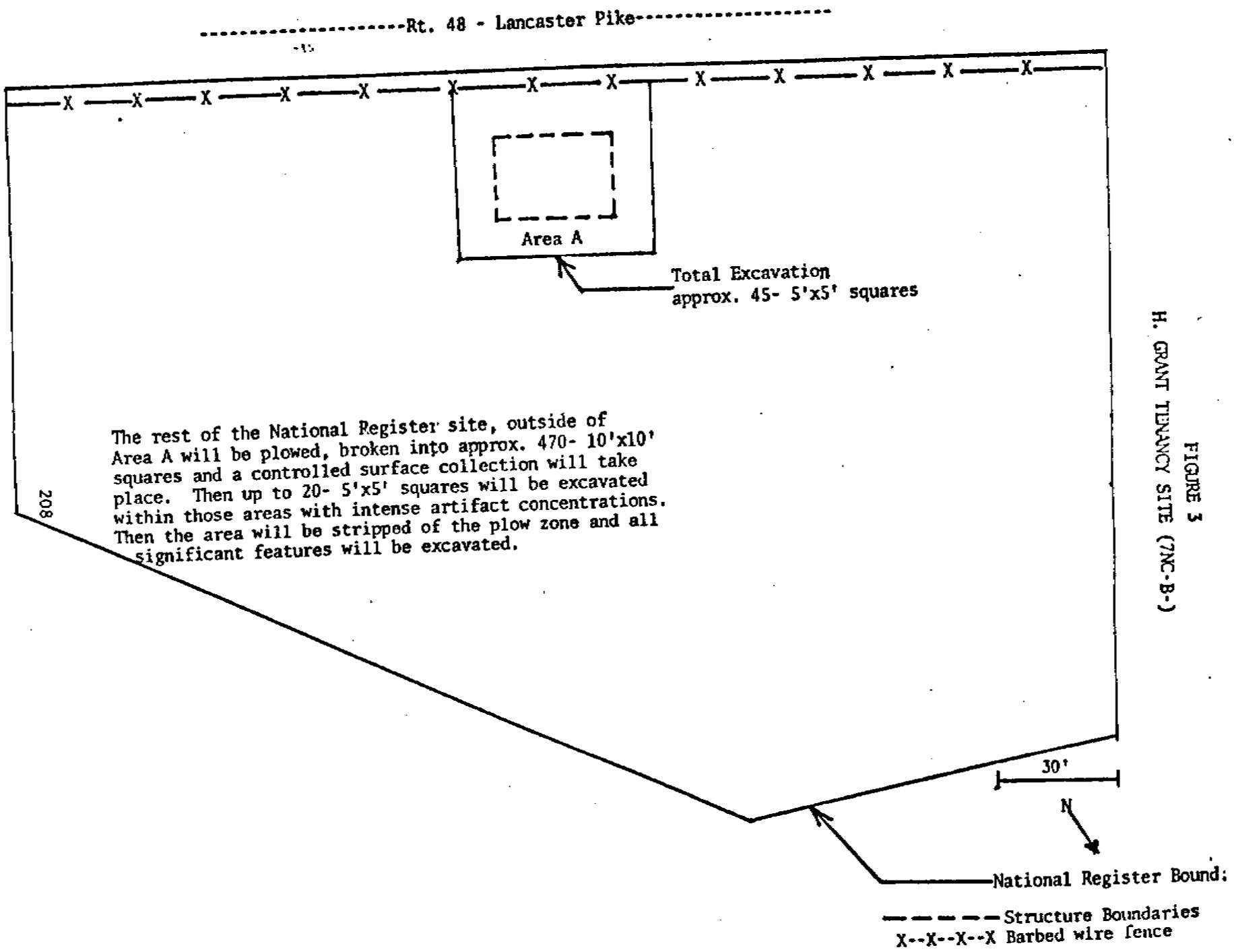

FIGURE 3
H. GRANT TENANCY SITE (7NC-B-)

excavated.

Not all significant features will produce noticeable quantities of artifacts, however, so after the excavation of artifact concentrations identified in the controlled surface collection, the plow zone will be stripped off the site with heavy equipment and features such as fence lines and post foundations from outbuildings will be mapped and excavated. This will allow for the characterization of at least those portions of the spatial organization of the farmstead for which evidence remains below the plowzone. In addition to the collection of artifacts, soil samples will be taken and samples collected from feature matrix for laboratory analysis.

Up to 16 crew days have been allocated for this last procedure, but if it becomes clear that further work will be unproductive or redundant, the field work will end. A maximum of forty days has been allocated for the field work described here.

All field work will be coordinated and reviewed weekly with the appropriate officials from DelDOT, FHWA and BAHP offices.

After the completion of the fieldwork, all artifacts will be returned to the laboratory, washed, marked and subjected to any needed conservation measures. To address research questions about economic status and intra-site functional patterning, the artifacts from all proveniences will be subject to a comprehensive analysis procedure which records formal, decorative and functional attributes for all materials (to the degree possible). The analysis procedure will consist of numerically coding the attribute variates for each variable, and entering

these codings into the computer for further statistical manipulation.

Soil sampleas will be analyzed for chemical composition, and floral and faunal samples analyzed for information on diet. Matrix samples from features will be water-screened for micro-floral and micro-faunal data.

The personnel hours for the field work, lab processing, data coding, and analysis hours are based on extensive experience with similar procedures on other projects, as are the report preparation hours.

Costs, shown in the attached budget, are therefore based directly on work activity, and ajustments in the budget can only be made by altering the amount of work produced. Plowing and stripping will be provided by the Delaware Department of Transportation.