

8.0 PHASE I ARCHAEOLOGY SURVEY WORK PLAN

8.1 Introduction

The Barratts Chapel Road Improvements project Phase I archaeology survey fieldwork is predicated on the combined results of the background research and the geomorphology investigations discussed above, and includes testing for both pre-contact and historic period archaeological resources. Portions of the archaeological APE were coded for testing with regard to numerous variables, such as the presence of *in situ* soils of appropriate age to contain pre-contact archaeological remains and perceived associations with historic events and/or persons important to local history. Other portions of the archaeological APE were coded as not testable due to the presence of modern period disturbances that have extensively interrupted or obliterated the subsurface stratigraphic record, the presence of natural wetland soils that are typically not associated with pre-contact habitation, and the presence of paving or other conditions that make the subsurface inaccessible. When these factors are considered, most of the Barratts Chapel Road Improvements project archaeological APE is categorized as testable at the Phase I survey level.

8.2 Work Plan

The Phase I archaeological survey fieldwork will take place in all testable portions of the archaeological APE that contain relatively undisturbed *in situ* developed soil/sediment profiles and sufficient potential for pre-contact and/or historic period archaeological resources to exist based on the previously completed background research, geomorphological investigations, and field inspections. Because there is no updated archaeological site location predictive model which accounts for current areal conditions in the project area, and that the Barratts Chapel Road Improvements project archaeological APE is very homogenous in soil types, landforms, historic landuse, and modern development, a high interval testing methodology will be used uniformly across the archaeological APE, unless localized conditions warrant a lower interval.

A combination of plowing/disking-rainwashing-pedestrian reconnaissance, and hand-excavated STPs is suggested for the field methodology. However, the extent to which the plowing/disking-rainwashing-pedestrian reconnaissance method can be used will be dependent on landowner permission, the season in which the fieldwork is done, the size and configuration of the



land to be surveyed, and the availability of someone to do the plowing/disking. If conditions are not appropriate for plowing/disking-rainwashing-pedestrian reconnaissance, then STPs will be used. The breakdowns for the testable versus not testable portions of the archaeological APE are presented below in Table 2 and shown on Figure 2. The testable and not testable areas will be refined as the fieldwork for the project progresses, with localized anomalies identified, in concert with information gathered from other sources, including continuing historic structures research and information supplied by landowners and the general public.

**Table 2.
Proposed Phase I Archaeology Survey of the
Barratts Chapel Road Improvements Project Archaeological APE**

Project APE Segment	Testing Methodology*	Expected Resources	Justification
A, B, C, D	STPs at 15 m intervals to minimize impacts to landscaped yards and because segments are small	Pre-contact - Paleoindian isolates; Archaic small, temporary, single to multiple use sites, lithic scatters, micro-band camps, procurement sites; Woodland isolates, procurement sites Historic – domestic; agricultural; mill-related; transportation	<i>In situ</i> soils of appropriate age; located on higher landform overlooking confluence of two drainages and headwaters of one; well-drained soils; Custer's high probability area; moderate modern disturbances (roads, utilities, structures, plowing) Properties 50+ years old (K-02749, K-02750, K-07601, K-07602, K-02748) present; adjacent to mill, mill pond, and dam; residences including miller's home; historic crossroads
E, F, H, J, L	Plowing/disking-rainwashing-pedestrian reconnaissance, if possible, or STPs at 15 m intervals	Pre-contact - Paleoindian isolates; Archaic small, temporary, single to multiple use sites, lithic scatters, micro-band camps, procurement sites; Woodland isolates, procurement sites Historic – agricultural	<i>In situ</i> soils of appropriate age; located near a drainage; well-drained soils; Custer's high probability area; minor modern disturbances (road, utilities, plowing) No properties 50+ years old present; no documented previous historic structures; historically agricultural fields
G, K	STPs at 15 m intervals to minimize impacts to landscaped yards	Pre-contact – Archaic small, temporary, single to multiple use sites, lithic scatters, microband camps, procurement sites Historic – agricultural	<i>In situ</i> soils of appropriate age; Custer's high probability area; moderate modern disturbances (road, structures, utilities, landscaping) No properties 50+ years old present; no documented previous historic structures; historically agricultural fields
I, M	STPs at 15 m intervals to minimize impacts to landscaped yards	Pre-contact – Archaic small, temporary, single to multiple use sites, lithic scatters, microband camps, procurement sites Historic – rural; agricultural	<i>In situ</i> soils of appropriate age; located near a drainage; well-drained soils; Custer's moderate and high probability areas; moderate modern disturbances (road, structures, utilities, landscaping) Properties 50+ years old (K-02747, K-07603) present; farmstead; residence; historic road



Project APE Segment	Testing Methodology*	Expected Resources	Justification
N	STPs at 15 m intervals to minimize impacts to landscaped yards	Pre-contact - Paleoindian isolates; Archaic small, temporary, single to multiple use sites, lithic scatters, micro-band camps, procurement sites; Woodland isolates, procurement sites Historic – rural; agricultural	<i>In situ</i> soils of appropriate age; located adjacent to Double Run; well-drained soils; Custer's low, moderate, and high probability areas; moderate modern disturbances (road, utilities, plowing) Properties 50+ years old (K-07604, K02743) present; residence; farmstead; historic road
O	Plowing/disking-rainwashing-pedestrian reconnaissance, if possible, or STPs at 15 m intervals	Pre-contact - Paleoindian isolates; Archaic small, temporary, single to multiple use sites, lithic scatters, micro-band camps, procurement sites; Woodland isolates, procurement sites Historic – agricultural; domestic	<i>In situ</i> soils of appropriate age; located adjacent to Double Run; well-drained soils; Custer's low, moderate, and high probability areas; minor modern disturbances (road, utilities, plowing) Property 50+ years old (K-02744) present; farm related; residence; historic road
P, Q	No testing	Pre-contact – none Historic - none	Double Run drainage; steep slopes; poorly drained soils; Custer's low probability area No properties 50+ years old present; no documented previous historic structures; wetlands
R, T	Plowing/disking-rainwashing-pedestrian reconnaissance, if possible, or STPs at 15 m intervals	Pre-contact - Paleoindian isolates; Archaic small, temporary, single to multiple use sites, lithic scatters, micro-band camps, procurement sites; Woodland isolates, procurement sites Historic – agricultural; domestic; military	<i>In situ</i> soils of appropriate age; located adjacent to Double Run; well-drained soils; Custer's low and moderate probability areas; minor modern disturbances (road, utilities, plowing) Properties 50+ years old (K-02741, K-07606, K-07607, K02746) present; farmsteads; residence; Air Force related building; historic road; historically agricultural fields
S, U	STPs at 15 m intervals to minimize impacts to landscaped yards and because partially wooded	Pre-contact - Paleoindian isolates; Archaic small, temporary, single to multiple use sites, lithic scatters, micro-band camps; procurement sites; Woodland – isolates, procurement sites Historic – suburban domestic; agricultural	<i>In situ</i> soils of appropriate age; well-drained soils; Custer's low probability area; moderate modern disturbances (road, structures, utilities, plowing) Property 50+ years old (K-07605, K-02739) present; residence; farmstead; historic road
V	STPs at 15 m intervals to minimize impacts to landscaped yards	Pre-contact – Archaic small, temporary, single to multiple use sites, lithic scatters, microband camps, procurement sites; Woodland isolates, procurement sites Historic – agricultural	<i>In situ</i> soils of appropriate age; Custer's low probability area; moderate modern disturbances (road, structures, utilities, landscaping) No properties 50+ years old present; no documented previous historic structures; historically agricultural fields; historic road



Project APE Segment	Testing Methodology*	Expected Resources	Justification
W, X, Y	Plowing/disking-rainwashing-pedestrian reconnaissance, if possible, or STPs at 15 m intervals	Pre-contact – Archaic small, temporary, single to multiple use sites, lithic scatters, microband camps, procurement sites; Woodland isolates, procurement sites Historic - agricultural	<i>In situ</i> soils of appropriate age; well-drained soils; Custer's low and moderate probability areas; minor modern disturbances (road, structures, utilities, plowing) No properties 50+ years old present; no documented previous historic structures; historically agricultural fields; historic road

Plowing/disking-rainwashing-pedestrian reconnaissance will only be used in larger areas of existing agricultural fields. Areas that are not existing agricultural fields will not be surveyed via this method. If plowing/disking-rainwashing-pedestrian reconnaissance is used, the area will be plowed/disked for a minimum of two passes. Pedestrian reconnaissance with surface collection will not take place until the plowed/disked area has been exposed to a reasonable rainfall which would allow lithic raw materials to be identified while walking the field. Controlled surface collection will consist of three repetitions of systematically walking over the tilled areas, in different directions, looking for artifacts and/or other indications of previous human activity. Any identified archaeological resources will be flagged and mapped *in situ* in order to provide artifact density and distributions. STPs will be excavated in the vicinity of any identified archaeological resources in order to define the basic stratigraphic/depositional setting of the resources.

In areas that are not appropriate to till and surface collect, the survey will utilize hand-excavated STPs spaced at 15.0 m (49.2 ft) intervals along transects. Should artifacts be found during the STP excavations, the boundaries of the artifact distribution will be delineated by lessening the STP interval. Judgmentally emplaced STPs may also be used in areas where field observations warrant their emplacement. The STPs will measure 50.0 cm (19.7 in) in diameter and will be excavated 10.0 cm (3.9 in) into culturally sterile subsoil. All sediments removed from the STPs will be screened through 0.64 cm (0.25 in) mesh hardware cloth. If cultural features are identified during the survey, Skelly and Loy will immediately notify the DeIDOT Archaeologist in order to determine how to proceed.

Any recovered artifacts will be preliminarily processed and analyzed in order to allow questions of site integrity and occupation span to be addressed. The recovered artifacts will be transported to Skelly and Loy's Monroeville laboratory facility where they will be washed, labeled, and re-bagged. Preliminary analyses will consist of dividing the artifacts into major categories according to material type, with further subdivisions made by the appropriate analysts. Following



identification and classification of an artifact, a date range will be assigned, if possible. The specificity of the assigned date range will be based on the number and type of diagnostic characteristics present for any given artifact. Since the quantity of artifacts that will be recovered is not known, no costs for the preparation of the artifacts and project materials for final curation at Delaware State Museums are included in this proposal.

Daily notes will be recorded and digital photographs will be taken of the Phase I survey research. The results of the archaeological studies will be presented in a Phase IB archaeology report. The report will include by reference, the information contained in the Phase IA report, as well as plan view maps, representative profiles, drawings and photographs, detailed archaeological results of the fieldwork, preliminary analysis of the recovered artifacts, and any historic documentary information necessary to make recommendations regarding the need for additional research (e.g., Phase II testing, historic documentation, etc.) at the location. The Management Summary will only include background and cultural potential information by reference, and only if needed to directly assess any cultural resources identified. A NRHP eligibility discussion, including any Phase II recommendations, will be presented for each site identified. If Phase II studies are authorized, they will be completed under supplemental agreement.

