

Hudson Valley Office

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September 22, 2011

Abraham Zambrano
Village Manager
Village of Croton-on-Hudson
1 Van Wyck Street
Croton-on-Hudson, NY 10509



*Re: Proposal for Archeological Services in Support of SEQRA
Expansion/Revisions to Water Supply Facilities*

Dear Mr. Zambrano:

The Chazen Companies (Chazen) is please to provide this proposal for professional services to the Village of Croton-on-Hudson (the Village). This proposal is for only the archeological research required in support of the SEQRA process, which will be required for the work associated with pending master plan for the Village's water supply system.

Project Understanding

Chazen understands the following:

- A larger plan for overall improvements to the water supply is pending. Chazen is to provide the Village with further analysis and recommendations to aid in finalizing the overall plan.
- Previous work at the site by Chazen has included wetland delineation, endangered species research, and topographic mapping of the site. A Joint Determination of wetland boundaries has been obtained from ACOE. A survey of the site for endangered and threatened species has already been accomplished, with the only limitation being a recommendation regarding a schedule for clearing of trees. The mapping of the site already done by Chazen will be used as the base map for the proposed work, and the remainder of the work already performed is applicable to the SEQRA process.
- Because the proposed work will require SEQRA/SEPA, archeological research will be necessary for completion of SEQRA. As this work is weather-dependent, we are recommending the Village move ahead with this task, in anticipation of the larger planning and design work in the future.

Scope of Services

The following represents the tasks that we believe are necessary to accomplish the desired objective.

Task 01: Phase 1A Literature Review & Phase 1B Archaeological Field Reconnaissance Survey

Scope - The first work to be undertaken is the preparation of a Phase 1A report, which is an investigation that examines the potential of the site to yield prehistoric and/or historic archaeological cultural material. Normally, it is on the basis of the information gathered in the Phase 1A that a recommendation for a Phase 1B Archaeological Field Survey is formulated. However, the area in which the project is located is known to be sensitive for prehistoric cultural resources, which indicates that both a Phase 1A and a Phase 1B investigation will be required.

Phase 1A Investigation

- **Field Visit-** At the time of the site visit, the consultant will evaluate the property to examine the structures on the site, and determine whether any of them are of historic importance. We will also assess the environmental conditions on the property and evaluate the overall potential for the site to contain either prehistoric or historic resources. Photographs will be taken of the structures on the site, and of those buildings in the vicinity that are more than 50 years old.
- **Consultation with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and other agencies** - The consultant will make a visit to the OPRHP office in Albany will identify known prehistoric and/or historic resources located in the vicinity of the project area. Archaeological site maps identifying cultural resources in the area are housed at Peebles Island in Waterford, New York. It is necessary to make a visit to review these site files, which are closed to all but qualified archaeologists and researchers. If needed, local informants may be consulted.
- **Research component** - The next task will be to examine the historic maps and atlases of the area at the New York Library and the Westchester County Archives to identify the historic resources, which are now or may have been located on the site or in the immediate vicinity. Here one is looking for the names of former owners, the locations of buildings or other features. At the same time, the surrounding area is examined for historic structures, roads, and the like. In conjunction with this investigation, county histories and other historic material are consulted. This information will be outlined in the Phase 1A Literature Review.
- **Preparation of the Phase 1A Literature Review** - This report will include several sections: the environmental setting of the project, additional information on potential prehistoric occupation of the site, some discussion of the way that the site fits into the history of the county and the town (based on the map research), and finally, the history of the ownership and land use for the site. The Phase 1A will evaluate the site and comment on the types of resources that might be present. The Phase 1A Literature Review will be included with the Phase 1B Archaeological Field Reconnaissance report and submitted as one document.

Phase 1B Investigation

In terms of testing strategies, we propose to hand excavate a series of shovel tests situated at 50-foot intervals across those areas deemed suitable for testing. Slopes in excess of 12% will be excluded from testing, as will open water, wetlands and wetland buffer areas. Subsurface testing will focus on testing undisturbed areas within the APE. Having established the above outlined approach, the work required will be:

- **Field Testing Strategy** - Based on the topographical maps of the site, a testing strategy has been developed to determine the presence or absence of prehistoric and/or historic cultural remains on the site. As noted above, the approach will employ the excavation of shovel tests using a 50-foot grid for those areas of the property requiring subsurface testing. At the time that work begins, a second walkover of the site will assist us in refining those areas that can be eliminated from consideration due to prior disturbance. As noted, open water, wetlands and wetland setback areas will be excluded from testing, as will any slopes in excess of 12%. The determination of those areas is based on the sensitivity model developed by the New York State Museum and the Office of Parks, Recreation and Historic Preservation (OPRHP).
- **Excavations** - In the field, transects will be laid out and shovel tests hand excavated along transects. Where feasible, shovel tests will be excavated to sterile soil. The material from these holes will be passed through a 0.25-inch metal hardware cloth and the residue examined for cultural material. The depth of the hole, the colors of the soil, and any unusual features, such as dark bands in the soil, will be recorded on work sheets. Cultural material, if any, will be placed in bags and identified as to location and stratum. If identified, the artifacts will be bagged, labeled and transferred to the CITY/SCAPE laboratory for processing and analysis. The location of the shovel test excavations will be recorded on a topographical map. This system is identical for prehistoric and historic shovel testing.
- **Photographs** - The entire Phase 1B survey will be documented through photographs that will provide information concerning the general character of the site, the types of soils encountered, and the materials recovered.
- **Laboratory Work** - Recovered cultural material (if any) will be taken to the laboratory, where it will be washed, identified, and recorded in a log. Analysis of the material in the laboratory will provide dates for the collection based on the topology of prehistoric lithic or ceramic materials and/or a general assessment of the dates for any historic materials (including ceramics and glass). The cost estimate for the laboratory work is based on the recovery of not more than 150 artifacts; if significantly more artifacts are recovered, they will be processed on a time and material basis. The additional cost will be discussed with Chazen and the client before the work is undertaken. If appropriate, photographs of recovered material will be included in the final report.

Substantive Revisions

This Scope of Services is developed based on known conditions of the site as of the date of this proposal. Please note that regulatory agencies may request additional technical studies, plans and documentation not outlined herein. Should such work be requested, Chazen will prepare a technical services change order (TSCO) for your review, and will commence work upon receipt of an executed copy of same. In addition, any changes the Client requests to the plans after the originals are submitted to regulatory agencies will constitute a change in services and will also require a technical services change order.

Professional Services Fee Schedule

Chazen proposes to have the archeological services performed for the Lump Sum of \$5,200.

The projected start and end dates are subject to change, but Chazen is available to begin this work at October 2011. As such, the projected start and end dates are based on the October start, provided that written authorization is received in time to not delay start.

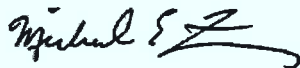
Authorization

As formal authorization to proceed, please forward written notification in accordance with the Village's standard format.

We look forward to providing the Village with professional services for this project. If you have any questions or require additional information, please do not hesitate to me at (845) 486-1539.

Sincerely,

THE CHAZEN COMPANIES



Michael E. Fanning
Project Manager
Municipal Services

cc: Janine King, Assistant Village Manager
Marco Gennarelli, Superintendent of Public Works
Daniel O'Connor, P.E., Village Engineer
Jeffrey Econom, P.E., Director, Municipal Services
Proposal Distribution List