

APPENDIX I:
SCOPES OF WORK



JOHN MILNER ASSOCIATES, INC.

Restoration & Rehabilitation • Preservation Planning • Archeological & Historical Research • Cultural Landscapes • Materials Conservation

PRINCIPALS

Allan H. Steenhusen
Daniel G. Roberts, RPA
F. Neale Quenzel, AIA
Peter Richardson, AIA, RIBA
Thomas L. Struthers
Charles D. Check, Ph.D.
Peter C. Benton, AIA
John K. Mott, FAIA
Kathryn L. Bowers, SPHR

Via JMA Courier

October 13, 2003

Rummel, Klepper & Kahl, LLP
81 Mosher Street
Baltimore, MD 21217

ASSOCIATES

Joseph F. Balicki, RPA
Tod L. Benedict
Wade P. Catts, RPA
Robert G. Kingsley, Ph.D.
Joel I. Klein, Ph.D., RPA
Robert M. McGinnis, ASLA
Richard Meyer
Alfonso A. Narvaez
Charles S. Raith, AIA
Sarah Jane Ruch
Donna J. Seifert, Ph.D., RPA
Peter E. Siegel, Ph.D., RPA
Elizabeth A. Sullivan
B.J. Titus
Rebecca Yamin, Ph.D., RPA
Philip E. Yocum, AIA

Attn: William Hellmann

Re: I-95/Newark Toll Plaza Project
New Castle County, Delaware and Cecil County, Maryland
Phase IB Cultural Resources Investigations
Supplemental Professional Services Proposal

Dear Mr. Hellmann:

John Milner Associates, Inc. (JMA) is pleased to submit this Supplemental Professional Services Proposal for the referenced project. Presently JMA is conducting Phase IA cultural resources investigations for I-95 improvements in accordance with three professional services proposals: the first for the SR 1 to SR 141 segment, dated October 4, 2001; the second for the SR 1/I-95 interchange segment, dated October 26, 2001; and the third for the I-95 toll plaza segment, dated October 26, 2001. Since these proposals were submitted, the project was restructured. The SR 1 to SR 141 and SR 1/I-95 interchange segments were combined, while the I-95 toll plaza segment remains independent.

The present proposal addresses the I-95 toll plaza segment. The tasks proposed herein are intended to supplement on-going investigations and further assist the Federal Highway Administration (FHWA) and the Delaware Department of Transportation (DelDOT) in meeting their Section 106 compliance responsibilities. The Scope of Services was developed in consultation with Rummel, Klepper & Kahl (RKK), DelDOT, and the State Historic Preservation Office (SHPO).

JMA proposes to provide the professional services necessary to carry out the investigations outlined above, in accordance with current (April 1997) guidelines for archeological surveys issued by the Delaware State Historic Preservation Office (SHPO). This Proposal defines the proposed scope of services, identifies a schedule for the project, and specifies compensation and terms for the proposed services.

The objective of the Phase I archeological survey is to document the presence or absence of archeological resources within the area of potential effects (APE). The objective of the historic architectural survey is to evaluate historic properties within the APE and determine if these properties are eligible for listing in the National Register of Historic Places (NRHP).

535 North Church Street, West Chester, Pennsylvania 19380-2397 • 610-436-9000 / fax 610-436-8468

West Chester, PA Philadelphia, PA Alexandria, VA Charlottesville, VA Croton-on-Hudson, NY Louisville, KY

www.JohnMilnerAssociates.com

I. SCOPE OF SERVICES

The proposed project will entail five tasks, as follows: 1) Phase IB archeological investigation, 2) historic architectural evaluations, 3) artifact processing and analysis, 4) preparation of a report, and 5) project coordination and meetings. Each task is described briefly below.

PHASE IB ARCHEOLOGICAL INVESTIGATION

Phase IB archeological survey will be conducted within the APE defined for the toll plaza project areas. JMA will archeologically survey the maximum proposed extent of construction disturbance, as currently illustrated on the alternatives maps supplied by RKK. Background research, such as examination of the SHPO site files, review of previous studies, and information on the prehistory and history of the area have already been completed as part of the Phase IA report. JMA's proposed field investigations will take into account soils, hydrography, and topography, and will be focused on areas that are sensitive for prehistoric and historic archeological remains.

JMA proposes to focus survey efforts on the portions of the project area in the field area north of I-95 and west of Ott's Chapel Road, and in the wooded area south of the toll plaza, particularly focused in the vicinity of streams and drainages. Field investigations will commence with a pedestrian reconnaissance, provided that surface visibility is adequate. If surface visibility is not adequate, subsurface testing in the form of shovel tests is proposed. JMA proposes to excavate shovel test units (STUs) placed at 15 meter intervals in transects spaced 30 meters apart. The testing interval may be further tightened to 7.5 meters in those loci with high artifact densities and/or identified features are encountered. In those areas where testing will be centered on stream drainages, the survey area will extend approximately 100 meters to the east and west away from the drainages. The number of shovel tests excavated will depend on several factors, including local conditions, topography, and background research. JMA anticipates that the number of shovel tests excavated will approximate 600. JMA anticipates that the field crew will consist of a project archeologist (field supervisor) and a team of five (5) archeologists.

The locations of STUs will be recorded on plans of the project area, and the soil profiles will be recorded on standardized forms. Excavated soils will be passed through one-quarter-inch hardware cloth to ensure uniform recovery of cultural material. Cultural material will be retained in bags marked with standard provenience information. Narrative field notes and black-and-white and color photographs will be taken to document the setting and results of the field investigations. Following excavation and recordation, the locations of shovel tests will be restored to as close as original condition as possible by backfilling with the screened soil.

HISTORIC ARCHITECTURAL EVALUATIONS

In accordance with SHPO guidelines, JMA will prepare National Register of Historic Places (NRHP) evaluations for historic architectural properties within the preliminary area of potential effects (APE) that meet the NRHP 50-year age consideration. The Phase IA field examination indicated that the following properties meet these requirements:

771 Chestnut Hill Road
779 Chestnut Hill Road
803 Chestnut Hill Road
844 Chestnut Hill Road
879 Chestnut Hill Road
648 Churchmans Road (CRS# N-1603)
1653 Dixie Line Road
1463 Otts Chapel Road
104 Stanton Christiana Road
120 Stanton Christiana Road
128 Stanton Christiana Road
92 Welsh Tract Road
159 Welsh Tract Road (CRS# N-13339)
180 Welsh Tract Road
188 Welsh Tract Road

In addition, JMA will prepare a NRHP evaluation of the existing toll plaza. While this property does not yet meet the 50-year age consideration, it will be addressed under Criteria Consideration G.

JMA will conduct background research in local historical collections to establish relevant historic contexts within which to evaluate each historic architectural property. Following DelDOT's notification of all property owners, JMA will conduct a field survey to confirm the results of background research and photograph each property, as appropriate.

ARTIFACT PROCESSING AND DATA ANALYSIS

Artifacts recovered in the course of the field investigations will undergo laboratory processing and analysis. Materials will be cleaned and inventoried following guidelines established by the SHPO. The recovered artifacts will be identified as to material, temporal or cultural/chronological association, style, and function. Preliminary analysis will seek patterns in the relative composition of the recovered artifact assemblage, particularly to the extent that such patterns may indicate the functional nature of the assemblages and/or the site formation processes associated with their deposition. These attributes are particularly relevant to the evaluation of potential archeological significance. Field data will be evaluated, synthesized, and placed in a broader regional perspective based on JMA's

knowledge of regional archeological resources and previous background research, the *Management Plan for the Prehistoric Archeological Resources of Northern Delaware* and the *Management Plan for Delaware's Historical Archaeological Resources*. For purposes of this proposal, JMA estimates that the number of artifacts recovered from the Phase I survey will not exceed 1,000.

REPORT PREPARATION

The results of the Phase IB investigations will be presented in a combined report with the results of on-going Phase IA investigations for the I-95 toll plaza segment. The report will include the following elements:

- a. Statement of purpose and goals of the investigation
- b. Description of the project and preliminary APE
- c. Description of the environmental setting as it pertains to cultural resources
- d. Synthesis of cultural development and land use patterns within the preliminary APE
- e. Description of the research and field methods that were employed
- f. Description of Phase IA results and recommendations
- g. Description of Phase IB archeological testing and results
- h. Description and evaluation of historic architectural properties with reference to appropriate historic contexts and NRHP criteria (36 CFR Part 60.4)
- i. Maryland historic sites survey (HSS) and Delaware cultural resource survey (CRS) form for each property/site, as appropriate
- j. GIS data for each CRS form (to be submitted on CD)
- k. Supporting illustrations

Under the terms of this proposal three (3) review copies of the draft report will be delivered to RKK. After review of the draft report by RKK, DelDOT and the DE and MD SHPOs, the report will be revised accordingly and produced in a final version. Upon approval of the final report, JMA will provide six (6) bound copies, and one (1) unbound copy, all with original photographs, to RKK and DelDOT, and one (1) bound copy each to the DE and MD SHPOs.

PROJECT COORDINATION AND MEETINGS

JMA will participate in on-going project coordination and meetings as directed by RKK. It is anticipated that these activities will involve preparation of letters, memoranda, and presentation copy for project team and agency review; participation in meetings and telephone conferences with RKK, DelDOT, DE and MD SHPOs, and other parties, as appropriate; and preparation for and participation in public workshops.

Rummel, Klepper & Kahl, LLP

October 13, 2003

Page 5

II. SCHEDULE

Project initiation will commence within one week of receipt of Notice to Proceed, barring the occurrence of adverse weather conditions or other delaying factors beyond the control of JMA. We anticipate that field investigations can be completed within approximately two to three weeks (10 to 15 days), weather permitting. The draft of the full report will be submitted for review within six (6) weeks of the completion of fieldwork. The final report will be delivered on a mutually agreed upon schedule, following receipt of review comments on the draft report.

We have prepared this proposal based upon available information and our understanding of the required additional services. We appreciate the opportunity to continue our association on this significant and challenging assignment, and look forward to the successful completion of the project.

Sincerely,

JOHN MILNER ASSOCIATES, INC.



Richard Meyer
Senior Project Manager

enc.

cc: Wade P. Catts
Daniel G. Roberts
Douglas C. McVarish
John P. McCarthy



JOHN MILNER ASSOCIATES, INC.

Restoration & Rehabilitation • Preservation Planning • Archeological & Historical Research • Cultural Landscapes • Materials Conservation

PRINCIPALS

Allan H. Steenhusen
Daniel G. Roberts, RPA
F. Neale Quenzel, AIA
Peter Richardson, AIA, RIBA
Thomas L. Struthers
Charles D. Cheek, Ph.D.
Peter C. Benton, AIA
John K. Mott, FAIA
Kathryn L. Bowers, SPHR

ASSOCIATES

Joseph F. Balicki, RPA
Tod L. Benedict
Wade P. Catts, RPA
Robert G. Kingsley, Ph.D.
Joel I. Klein, Ph.D., RPA
Robert M. McGinnis, ASLA
Richard Meyer
Alfonso A. Narvaez
Charles S. Raith, AIA
Sarah Jane Ruch
Donna J. Seifert, Ph.D., RPA
Peter E. Siegel, Ph.D., RPA
Elizabeth A. Sullivan
B.J. Titus
Rebecca Yamin, Ph.D., RPA
Philip E. Yocum, AIA

Via JMA Courier

October 13, 2003

**Rummel, Klepper & Kahl, LLP
81 Mosher Street
Baltimore, MD 21217**

Attn: William Hellmann

**Re: I-95/SR 1 Interchange/Mainline Project
New Castle County, Delaware
Phase IB Cultural Resources Investigations
Supplemental Professional Services Proposal**

Dear Mr. Hellmann:

John Milner Associates, Inc. (JMA) is pleased to submit this Supplemental Professional Services Proposal for the referenced project. Presently JMA is conducting Phase IA cultural resources investigations for I-95 improvements in accordance with three professional services proposals: the first for the SR 1 to SR 141 segment, dated October 4, 2001; the second for the SR 1/I-95 interchange segment, dated October 26, 2001; and the third for the I-95 toll plaza segment, dated October 26, 2001. Since these proposals were submitted, the project was restructured. The SR 1 to SR 141 and SR 1/I-95 interchange segments were combined, while the I-95 toll plaza segment remains independent.

The present proposal addresses the SR 1 to SR 141 and SR1/I-95 interchange segments. The tasks proposed herein are intended to supplement on-going investigations and further assist the Federal Highway Administration (FHWA) and the Delaware Department of Transportation (DelDOT) in meeting their Section 106 compliance responsibilities. The Scope of Services was developed in consultation with Rummel Klepper & Kahl (RKK), DelDOT, and the State Historic Preservation Office (SHPO).

JMA proposes to provide the professional services necessary to carry out the investigations outlined above, in accordance with current (April 1997) guidelines for archeological surveys issued by the Delaware State Historic Preservation Office (SHPO). This Proposal defines the proposed scope of services, including a research design for the survey, identifies a schedule for the project, specifies compensation and terms for the proposed services.

The objective of the Phase I archeological investigation is to document the presence or absence of archeological resources within the area of potential effects (APE). The objective of the historic architectural survey is to evaluate historic properties within the APE and determine if these properties are eligible for listing in the National Register of Historic Places (NRHP).

I. SCOPE OF SERVICES

The proposed project will entail five tasks, as follows: 1) Phase IB archeological investigation, 2) historic architectural evaluations, 3) artifact processing and data analysis, 4) preparation of a report, and 5) project coordination and meetings. Each task is described briefly below.

PHASE IB ARCHEOLOGICAL INVESTIGATION

Phase IB archeological investigation will be conducted within the APE defined for the I-95/SR 1 Interchange/Mainline project area. JMA will archeologically survey the maximum proposed extent of construction disturbance, as currently illustrated on the alternatives maps supplied by RKK. Background research, such as examination of the SHPO site files, review of previous studies, and information on the prehistory and history of the area have already been completed as part of the Phase IA report. JMA's proposed field investigations will take into soils, hydrography, and topography, and will be focused on areas that are sensitive for prehistoric and historic archeological remains. Based on the results of the Phase IA documentation, there are few areas within the APE for the I-95/SR 1 interchange that retain the potential for intact archeological deposits. Notable areas include the wooded area west of the southbound exit ramp from I-95 to SR 1, the remnant area of the Stafford farm (a former National Register-listed site), and the slopes immediately north of I-95 bordering Churchman's Marsh.

Field investigations will commence with a pedestrian reconnaissance, provided that surface visibility is adequate. If surface visibility is not adequate, subsurface testing in the form of shovel tests is proposed. JMA proposes to excavate shovel test units (STUs) placed at 15 meter intervals in transects spaced 30 meters apart. The testing interval may be further tightened to 7.5 meters in those loci with high artifact densities and/or identified features are encountered. The number of shovel tests excavated will depend on several factors, including local conditions, topography, and background research. JMA anticipates that the number of shovel tests excavated will approximate 250 to 300. JMA anticipates that the field crew will consist of a project archeologist (field supervisor) and a team of five (5) archeologists.

The locations of STUs will be recorded on plans of the project area, and the soil profiles will be recorded on standardized forms. Excavated soils will be passed through one-

quarter-inch hardware cloth to ensure uniform recovery of cultural material. Cultural material will be retained in bags marked with standard provenience information. Narrative field notes and black-and-white and color photographs will be taken to document the setting and results of the field investigations. Following excavation and recordation, the locations of shovel tests will be restored to as close as original condition as possible by backfilling with the screened soil.

HISTORIC ARCHITECTURAL EVALUATIONS

In accordance with SHPO guidelines, JMA will prepare National Register of Historic Places (NRHP) evaluations for historic architectural properties within the preliminary area of potential effects (APE) that meet the NRHP 50-year age consideration. The Phase IA field examination indicated that the following properties meet these requirements:

424 Old Airport Road
??? Old Airport Road (south side)
433 Old Airport Road
467 Old Airport Road
491 Old Airport Road
495 Old Airport Road

JMA will conduct background research in local historical collections to establish relevant historic contexts within which to evaluate each historic architectural property. Following DelDOT's notification of all property owners, JMA will conduct a field survey to confirm the results of background research and photograph each property, as appropriate.

ARTIFACT PROCESSING AND DATA ANALYSIS

Artifacts recovered in the course of the field investigations will undergo laboratory processing and analysis. Materials will be cleaned and inventoried following guidelines established by the SHPO. The recovered artifacts will be identified as to material, temporal or cultural/chronological association, style, and function. Preliminary analysis will seek patterns in the relative composition of the recovered artifact assemblage, particularly to the extent that such patterns may indicate the functional nature of the assemblages and/or the site formation processes associated with their deposition. These attributes are particularly relevant to the evaluation of potential archeological significance. Field data will be evaluated, synthesized, and placed in a broader regional perspective based on JMA's knowledge of regional archeological resources and previous background research, the *Management Plan for the Prehistoric Archeological Resources of Northern Delaware* and the *Management Plan for Delaware's Historical Archaeological Resources*. For purposes of this proposal, JMA estimates that the number of artifacts recovered from the Phase I survey will not exceed 500.

REPORT PREPARATION

The results of the Phase IB investigations will be presented in a combined report with the results of on-going Phase IA investigations for the SR 1 to SR 141 and SR 1/I-95 interchange segments. The report will include the following elements:

- a. Statement of purpose and goals of the investigation
- b. Description of the project and preliminary APE
- c. Description of the environmental setting as it pertains to cultural resources
- d. Synthesis of cultural development and land use patterns within the preliminary APE
- e. Description of the research and field methods that were employed
- f. Description of Phase IA results and recommendations
- g. Description of Phase IB archeological testing and results
- h. Description and evaluation of historic architectural properties with reference to appropriate historic contexts and NRHP criteria (36 CFR Part 60.4)
- i. Delaware cultural resource survey (CRS) form for each property/site, as appropriate
- j. GIS data for each CRS form (to be submitted on CD)
- k. Supporting illustrations

Under the terms of this proposal three (3) review copies of the draft report will be delivered to RKK. After review of the draft report by RKK, DelDOT and the SHPO, the report will be revised accordingly and produced in a final version. Upon approval of the final report, JMA will provide six (6) bound copies, and one (1) unbound copy, all with original photographs, to RKK and DelDOT, and one (1) bound copy each to the DE and MD SHPOs.

PROJECT COORDINATION AND MEETINGS

JMA will participate in on-going project coordination and meetings as directed by RKK. It is anticipated that these activities will involve preparation of letters, memoranda, and presentation copy for project team and agency review; participation in meetings and telephone conferences with RKK, DelDOT, and SHPO, and other parties, as appropriate; and preparation for and participation in public workshops.

II. SCHEDULE

Project initiation will commence within one week of receipt of Notice to Proceed, barring the occurrence of adverse weather conditions or other delaying factors beyond the control of JMA. We anticipate that architectural and archeological field investigations can be completed within approximately 3 weeks (fifteen working days), weather

Rummel, Klepper & Kahl, LLP

October 13, 2003

Page 5

permitting. The draft of the full report will be submitted for review within six (6) weeks of the completion of fieldwork. The final report will be delivered on a mutually agreed upon schedule, following receipt of review comments on the draft report.

We have prepared this proposal based upon available information and our understanding of the required additional services. We appreciate the opportunity to continue our association on this significant and challenging assignment, and look forward to the successful completion of the project.

Sincerely,

JOHN MILNER ASSOCIATES, INC.



Richard Meyer
Senior Project Manager

enc.

cc: Wade P. Catts
Daniel G. Roberts
Douglas C. McVarish
John P. McCarthy