

**Programmatic Agreement
Among the Federal Highway Administration,
The Advisory Council on Historic Preservation,
The Delaware Department of Transportation, and
The Delaware State Historic Preservation Officer
Regarding
The Implementation of the Federal Aid Highway Program in Delaware**

WHEREAS, the Federal Highway Administration (FHWA), under the authority of 23 U.S.C. 101 et seq., implements the Federal-aid Highway Program (Program) in the State of Delaware by funding and approving state and locally sponsored transportation projects that are administered by the Delaware Department of Transportation (DelDOT); and

WHEREAS, the Delaware FHWA Division Administrator is the "Agency Official" responsible for ensuring that the Program in the state of Delaware complies with Section 106 of the National Historic Preservation Act (NHPA)(54 U.S.C. § 306108), as amended, and codified in its implementing regulations, 36 CFR Part 800, as amended (August 5, 2004);

WHEREAS, DelDOT administers Federal-aid projects throughout the State of Delaware as authorized by Title 23 U.S.C 302;

WHEREAS, the responsibilities of the Delaware State Historic Preservation Officer (SHPO) under Section 106 of the NHPA and 36 CFR Part 800 are to advise, assist, review, and consult with Federal agencies as they carry out their historic preservation responsibilities and to respond to Federal agencies' requests within a specified period of time;

WHEREAS, FHWA has determined that implementation of the Program in Delaware may have an effect upon properties included in or eligible for inclusion in the National Register of Historic Places (NRHP), hereafter referred to as historic properties, and has consulted with the SHPO and the Advisory Council on Historic Preservation (ACHP) pursuant to 36 CFR Part 800.14(b); and

WHEREAS, FHWA has consulted with Federally-recognized Indian Tribes (Tribes) who may attach religious and cultural significance to historic properties that may be affected by this Programmatic Agreement (Agreement). These Tribes currently include the Delaware Nation and the Delaware Tribe of Indians; and

WHEREAS, pursuant to the consultation conducted under 36 CFR Part 800.14(b), the signatories have developed this Agreement in order to establish an efficient and effective program alternative for taking into account the effects of the Program on historic properties in Delaware and for affording ACHP a reasonable opportunity to comment on undertakings covered by this Agreement; and

WHEREAS, DelDOT has contacted local government and private historic preservation interests, including preservation planners from New Castle, Kent and Sussex County, the City of

Wilmington, and Preservation Delaware Inc. about this Agreement and has requested their comments. DelDOT and FHWA have taken any comments received into account; and

WHEREAS, DelDOT has participated in the consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, the definitions given in Appendix F are applicable throughout this Agreement; and

WHEREAS, this Agreement supersedes the previous programmatic agreements among the FHWA, SHPO, DelDOT, and ACHP executed September 19, 2013 and April 25, 2002, as well as the state's application of the Nationwide Transportation Enhancement Program as outlined in the June 11, 1997 FHWA policy memorandum; and

WHEREAS, this Agreement takes into consideration the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141) (MAP-21) and the Fixing America's Surface Transportation Act (Pub. L. No. 114-94) (FAST ACT).

NOW, THEREFORE, FHWA, the SHPO, ACHP, and DELDOT agree that the Program shall be carried out in accordance with the following stipulations in order to take into account the effects of the Program on historic properties and that these stipulations shall govern compliance of the Program with Section 106 of the NHPA until this Agreement expires or is terminated.

STIPULATIONS

FHWA, with the assistance of DelDOT and SHPO, shall ensure that the following measures are carried out:

I. Purpose and Scope

- A. This Agreement sets forth the process by which FHWA with the assistance of DelDOT will meet its responsibilities for undertakings pursuant to Sections 106 and 110 of the NHPA.
- B. In compliance with its responsibilities under the NHPA, and as a condition of its award to DelDOT of any assistance under the Federal Aid Highway Program, FHWA will ensure that DelDOT carries out the requirements of 36 CFR Part 800 and applicable ACHP guidance, the Secretary of the Interior's Standards and Guidelines (48 CFR 44738-9), and the SHPO "Guidelines for Architectural and Archaeological Surveys in Delaware" (2015), or its successor, for undertakings subject to this Agreement.
- C. FHWA recognizes that it has a unique legal relationship with Tribes set forth in the Constitution of the United States, treaties, statutes, and court decisions; and that consultation with a Tribe must, therefore, recognize the government to government relationship between the federal government and Tribes. As such, FHWA will be directly responsible for initiating consultation with Tribes, as defined in Appendix D, and in accordance with the requirements of 36 CFR Part 800.

- D. DelDOT shall be responsible for carrying out the terms of this Agreement except for those specifically reserved for FHWA or SHPO.
- E. Personnel, Use of Consultants, and Training:
1. Implementation of this Agreement is conditioned upon DelDOT employing staff meeting the Professional Qualifications Standards established by the Secretary of the Interior (36 CFR Part 61) in the areas of architectural history, archaeology, and/or any other closely related field as appropriate, hereafter referred to as "DelDOT qualified staff." If DelDOT at any time has a staff vacancy in one of the above-cited fields, DelDOT shall:
 - a. Consult with the SHPO on all projects defined under Stipulations II – IV with regard to identification, evaluation, and assessment of effects on the resource type for which the vacancy exists; or
 - b. DelDOT may use consultant staff who have been verified by the SHPO as meeting the Professional Qualifications Standards to assume the role of DelDOT qualified staff in a temporary capacity, which is defined as less than two years;
 2. Consistent with 36 CFR Part 800.2(a)(3), DelDOT may use consultants to gather information, analyze data, and prepare documentation. DelDOT and FHWA remain responsible for all consultation, findings and determinations made under this Agreement.
 3. DelDOT will ensure that all cultural resource work conducted under this Agreement is carried out by DelDOT qualified staff and/or consultants that meet the qualifications set forth in the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61) for such work.
 4. Training:
 - a. FHWA, DelDOT and SHPO personnel, including but not limited to qualified cultural resource staff and the Environmental Studies Manager, shall undertake Section 106 training. The parties will also consult on other training that may be beneficial to the purposes of carrying out this agreement, and will participate in such training if funding allows.
 - b. FHWA, DelDOT and SHPO shall ensure that all staff of their respective agencies who have responsibilities for carrying out provisions of this Agreement are provided an overview of this Agreement and are instructed in its application.

II. Projects That Will Not Affect Historic Properties

- A. **Project Types:** The types of undertakings listed in Appendix A are activities for which DelDOT routinely utilizes Federal Aid Highway funds. Due to their low potential to affect historic properties, the activities listed in Appendix A have been determined to cause no effect and are exempted from further review by SHPO, provided the undertaking is limited to the activity specified, is not part of a larger undertaking, and is on an existing transportation facility. DelDOT may add additional activities to the list in Appendix A upon written notice to and concurrence from all parties to this agreement. Additions to or modifications of Appendix A do not require amendment of this Agreement.
- B. **Review:** DelDOT qualified staff will review and determine whether a particular project meets the exemption categories listed in Appendix A.
- C. **Documentation:** For projects which are limited to the activities listed in Appendix A, DelDOT qualified staff shall document its finding that the action is exempt from further review and maintain the documentation in its files.

III. Projects with Minimal Potential to Adversely Affect Historic Properties

- A. **Project Types:** The types of undertakings listed in Appendix B are activities for which DelDOT routinely utilizes Federal Aid Highway funds. These undertakings generally do not adversely affect historic properties. To qualify for review under this Stipulation, the undertaking must be limited to the activities specified in Appendix B, not part of or segmented from a larger undertaking, and on existing transportation facilities, as determined by DelDOT qualified staff. These types of undertakings shall not usually require Section 106 consultation with the SHPO, except as provided for in Stipulations III.B. DelDOT may add additional activities to the list in Appendix B upon written notice to and concurrence from all parties to this agreement. Additions to or modifications of Appendix B do not require amendment of this Agreement.
- B. **Review and Documentation:** DelDOT qualified staff shall identify and define an Area of Potential Effect (APE), as defined in Appendix F of this Agreement, then make a reasonable and good faith effort to identify historic properties, in keeping with the provisions of 36 CFR Part 800.4. If DelDOT qualified staff request or conduct an identification and/or evaluation survey for a project subject to this Stipulation, DelDOT shall inform the SHPO of the results of the survey, in accordance with the requirements of Stipulation I.B of this Agreement, and request SHPO concurrence on findings and determinations. If SHPO fails to respond within 30 days of receipt of adequately documented findings or determinations, DelDOT may assume concurrence and proceed.
 - 1. If DelDOT qualified staff find that there are no historic properties in the APE, the DelDOT qualified staff shall complete the Finding of No Historic Properties Affected tracking form included in Appendix B of this Agreement, and proceed with the undertaking.

2. If DelDOT qualified staff find that a NRHP eligible or listed historic property is located within the APE of the undertaking, DelDOT shall:
 - a. Determine if the undertaking will affect the property, as defined in 36 CFR Part 800.16(i), and
 - i. If DelDOT finds that the property will not be affected, then its qualified staff shall complete the Finding of No Historic Properties Affected tracking form included in Appendix B of this Agreement, and proceed with the undertaking. DelDOT may also use this form to document its intent to make a finding of *de minimis* impact and/or an exception to Section 4(f) determination, as applicable.
 - ii. If DelDOT finds that the property will be affected, then DelDOT shall notify the SHPO and other consulting parties, describing any standard provisions that could be applied that would avoid adverse effects using the Minor Projects Proposed Finding of No Adverse Effect form, included as Appendix B of this Agreement. If the SHPO and other consulting parties agree that the provisions are sufficient, or do not comment within 30 days of receiving the notification, the project will be considered to have No Adverse Effect on historic properties provided that the aforementioned standard provisions are included in the project, and DelDOT may proceed with the undertaking. If the parties do not agree, then the parties shall consult in accordance with Stipulation IV.D of this Agreement.
 - iii. If DelDOT anticipates that the property could be adversely affected, DelDOT shall proceed with consultation in accordance with Stipulation IV of this Agreement.
 - b. If the effects to a historic property identified under III.B.2.a.ii have been evaluated by DelDOT qualified staff and determined to be "no adverse effect" as defined in 36 CFR Part 800, then DelDOT may, as applicable, indicate that it intends to make a finding of *de minimis* impact and/or an exception to Section 4(f) determination on the Minor Projects: Proposed Finding of No Adverse Effect letter.

IV. Projects Subject to SHPO Review

For those undertakings not exempt from SHPO review under the terms of Stipulations II and III, the process set forth in 36 CFR Part 800.3 to 800.6 shall be followed with DelDOT acting as the Agency Official except where otherwise noted:

- A. **Initiation of the Section 106 Process – 36 CFR Part 800.3**

The DelDOT qualified staff is responsible for establishing the undertaking, defining the APE and initiating consultation with the SHPO. Prior to defining the APE, DelDOT shall request the FHWA to initiate consultation with appropriate Tribes. DelDOT shall, in consultation with the SHPO, define the APE and identify and invite other appropriate parties (such as local governments) to participate in the consultation.

B. Identification of Historic Properties – 36 CFR Part 800.4

The DelDOT qualified staff is responsible for identifying historic properties, including landscapes, traditional cultural places and those properties of religious and cultural significance to the Tribes, within the APE, and evaluating the eligibility of historic properties for the NRHP. DelDOT shall carry out these activities in consultation with the SHPO and any other consulting parties, in accordance with 36 CFR Part 800.4 and the Internal review and Consultation Process outlined in Appendix C.

C. Finding of No Historic Properties Affected – 36 CFR Part 800.4 (d)(1)

1. If a cultural resource survey is conducted as part of the process to identify historic properties, all cultural resource reports generated for the project, must have SHPO concurrence and be finalized before DelDOT can submit a finding of No Historic Properties Affected unless considered under Stipulation I.C.3.c. below.
2. If DelDOT, in consultation with the SHPO, finds that either there are no historic properties present or there are historic properties present within the APE, but the undertaking will have no effect on them as defined in 36 CFR 800.16(i), DelDOT shall document the finding of no historic properties affected as provided for in 36 CFR 800.11(d). DelDOT shall provide the documentation to FHWA, the SHPO, and any other consulting parties before proceeding with the undertaking.
3. Under the following conditions, DelDOT will request the written concurrence of the SHPO on findings of No Historic Properties Affected before proceeding with the undertaking:
 - a. When there is public controversy on historic preservation issues,
 - b. When Tribes and/or consulting parties are actively consulting on a project and have concerns,
 - c. When DelDOT has not finalized all cultural resource survey and eligibility reports for the project,
 - d. When a signatory makes a request in writing prior to the submittal of the No Historic Properties Affected finding.

D. Assessment of Adverse Effects – 36 CFR Part 800.5

1. If DelDOT determines, and the SHPO concurs, that historic properties will be affected by the undertaking, DelDOT shall apply the Criteria of Adverse Effect, 36 CFR Part 800.5(a)(1). If DelDOT determines that the undertaking will have no adverse effect on historic properties, it will notify the SHPO and other consulting parties in writing with supporting documentation as required by 36 CFR Part 800.11 (e). The SHPO will review this determination and provide written comments to DelDOT within 30 calendar days after receipt of DelDOT's documentation. If neither the SHPO nor another consulting party objects to DelDOT's no adverse effect determination, DelDOT shall document that finding, make it available to the consulting parties and to the public upon request (per Stipulation V.), and may then proceed with the undertaking as planned. If the

SHPO or another consulting party objects to the DelDOT finding, DelDOT shall attempt to resolve the objection through consultation. If the objection cannot be resolved, DelDOT will refer the objection to FHWA and consultation will continue under Stipulation XVIII. of this Agreement.

2. If DelDOT in consultation with the SHPO determines that the undertaking shall have an adverse effect on historic properties, DelDOT shall notify FHWA, other consulting parties if any, and ACHP and proceed with consultation under 36 CFR Part 800.6.

V. Public Participation

DelDOT shall, through opportunities afforded by DelDOT project development process, seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects to historic properties and confidentiality concerns of private individuals and businesses. DelDOT will use existing procedures to solicit public participation early in the project development process and consistent with 36 CFR Part 800.2 (d).

VI. Change in Nature or Scope of Undertaking

If, after conclusion of the processes outlined in Stipulations II, III, and IV of this Agreement, any undertaking is modified in a manner that substantially changes the undertaking's methods, materials, footprint, or design, DelDOT shall consult with SHPO and other consulting parties to reassess the appropriateness of the initial findings and determinations. If there is disagreement, consultation will continue under Stipulation XVIII. of this Agreement.

VII. Treatment of Human Remains and Burials

Unmarked human remains and burials are subject to protection under the Delaware Unmarked Human Remains Act (7 Del.C. Chapter 54). If human remains and/or burials are discovered prior to or during project construction, DelDOT shall ensure that work in that portion of the project stop immediately. The DelDOT project supervisor will immediately (within 24 hours) notify DelDOT's Archaeologist who in turn will notify both FHWA and the SHPO. The remains and/or burials will be covered and/or protected in place in such a way that minimizes further exposure of and damage to the remains and/or burials. FHWA, DelDOT, and SHPO will ensure that any treatment plan for the disposition of remains is fully implemented. Avoidance and preservation in place is the preferred option for treating human remains.

If the remains are Native American, FHWA will immediately notify the Federally Recognized Tribes. FHWA and DelDOT will forward information regarding Native American discoveries to the SHPO and the Federally Recognized Tribes for review and comments. This will occur as soon as possible, within a period of no longer than two (2) weeks. FHWA will request that the parties comment on the information within two (2) weeks of receipt. FHWA will then consult with the Federally Recognized Tribes, the SHPO, and DelDOT to determine an appropriate course of action in accordance with 36 CFR Part 800, and taking into account the above cited state law. The SHPO will comply with the above cited state law and the Native American Graves Protection and Repatriation Act of 1990 (PL 101-601) with regard to disposition of the remains and/or associated funerary objects, as applicable.

VIII. Post Review Discoveries

In the event that previously unidentified cultural resources are discovered or unanticipated effects to known historic properties occur during construction, DelDOT shall instruct the contractor to cease construction in the immediate area, and immediately notify FHWA, and in compliance with 36 CFR Part 800.13, consult with the SHPO. If said discovery or unanticipated effects pertain to resources of Native American affiliation, FHWA and DelDOT shall include the Federally Recognized Tribes in the consultation. The FHWA will notify the SHPO and the Federally Recognized Tribes within two (2) working days of the discovery. The FHWA, DelDOT, and the SHPO will meet at the location of the discovery within five (5) days of the initial notification to determine appropriate treatment of the discovery prior to resumption of construction activities within the area of discovery. DelDOT shall ensure that construction work within the affected area does not proceed until appropriate treatment measures are developed and implemented or the determination is made that the resource is not eligible for the NRHP. If the affected resource is of Native American affiliation, FHWA shall first consult with the Federally Recognized Tribes before implementing any such treatment option.

IX. Disposal Site Review

For projects that qualify as a Categorical Exclusion as defined under 23 CFR Part 771.117, no review of locations to be used for disposal of project-related materials will be required. For projects that qualify as an Environmental Assessment as defined under 23 CFR Part 771.119, DelDOT will consult with the SHPO to determine the need for disposal site review; if DelDOT and SHPO agree that review is needed, DelDOT qualified staff shall conduct such reviews. For projects that require an Environmental Impact Statement as defined under 23 CFR Part 771.123, review of disposal sites is required and DelDOT qualified staff shall conduct such reviews and document the findings in the project general file. DelDOT will consult the SHPO in cases where such activities may affect historic properties and the contractor(s) could not identify an alternative location.

X. Re-Evaluation of Findings

DelDOT shall reevaluate all Section 106 findings and determinations under this Programmatic Agreement for projects that have not been funded for construction within five (5) years following completion of the Section 106 review process. The re-evaluation shall establish whether the findings and documentation concerning the undertaking remain accurate, and will go through Section 106 review in accordance with the terms of this Agreement.

XI. Emergency Undertakings

As defined in 36 CFR Part 800.12, an emergency undertaking is an essential and immediate response to a disaster or emergency formally declared by the President or Governor; such undertakings can be separated into two categories which shall be addressed as follows:

- A. Undertakings that will be implemented within thirty (30) days after the formal declaration of the disaster or emergency: DelDOT qualified staff shall immediately determine if the emergency response could affect the physical integrity, character and/or use of historic properties. If so, DelDOT shall notify FHWA, SHPO and ACHP within 48 hours. The parties will then consult, review and comment on the emergency undertaking, as soon as possible to determine how to, as fully as practicable under the circumstances, avoid, minimize and/or mitigate for any potential adverse effects to historic properties. Nothing in this Agreement shall be construed as prohibiting DelDOT from taking such actions as it deems necessary to stabilize the situation to protect the safety of the travelling public.
- B. Immediate rescue and salvage operations conducted to preserve life or property such as necessitated by natural disaster or other catastrophic events are exempt from the provisions of Section 106 and this Programmatic Agreement, in accordance with 36 CFR Part 800.12(d).

XII. Curation of Archaeological Materials

All objects of historical or archaeological value or interest found on archaeological sites owned or controlled by the State and related records resulting from research, surveys and excavation under this Agreement (Collections) shall be curated at the Division of Historical and Cultural Affairs (the Division), or its designee, following the policies of the institution. DelDOT shall ensure that all records and materials resulting from the archaeological investigations will be processed, prepared for, and curated in accordance with 36 CFR Part 79 and the Division's "Guidelines for the Curation of Archaeological Collections" (2001) or its successor. DelDOT shall comply with any additional state regulations regarding curation of archaeological materials, including any fees that may be assessed.

XIII. Preservation of Historic Properties in DelDOT Ownership

This stipulation applies only to property acquired with the use of federal funds as part of a federally funded project administered under this Agreement, when through consultation the parties have agreed that preservation in place is the preferred treatment.

- A. DelDOT, in consultation with SHPO, FHWA, and ACHP if participating in the consultation, will develop appropriate legal instruments such as, but not limited to, preservation easements or preservation covenants for historic properties DelDOT acquires or uses in association with undertakings subject to this Agreement, to ensure protection from future actions or to ensure appropriate treatment.
- B. FHWA, DelDOT, SHPO, and ACHP if participating in the consultation shall determine the need for and negotiate the terms of any legal instruments that would ensure long-term preservation or protection of the historic properties. Any such legal instrument shall include, at a minimum, the following elements:
 - 1. A clearly defined list of allowed uses and prohibited uses of the site; and

2. For standing structures, a mechanism for periodic monitoring of the site to ensure that protection measures are being appropriately implemented and maintained; and
 3. An acknowledgement that protection measures are being instituted in order to minimize or mitigate the Project's adverse effects to a historic property; and
 4. A prohibition on any party, its successors, heirs or assigns, from terminating, modifying, altering or otherwise setting aside any such legal instrument unless the party, prior to taking such action: first provides the signatories to this Agreement with written justification for termination; then consults with the signatories to develop a new treatment plan to address the adverse effects pursuant to 36 CFR Part 800.5, regardless of whether the term of this Agreement has expired or not; and finally obtains the signatories' written concurrence on the plan.
- C. DelDOT shall maintain an inventory of all properties protected by legal preservation instruments, and shall make that inventory available to the SHPO upon request.
- D. DelDOT shall commit to annually monitor all properties protected by legal preservation instruments and shall provide a status report annually as described in Stipulation XVII.B.

XIV. Residual Right of Way

Occasionally property is acquired in excess of what is needed for operational right-of-way and associated design requirements (e.g. land-locked parcels). In these cases, should the need or desire arise to dispose of this excess right-of-way (to be leased, transferred, or sold), archaeological surveys and/or preservation covenants for that subject parcel will first be considered by DelDOT, FHWA, SHPO, and ACHP if participating in the consultation before DelDOT takes any action to divest itself from such lands. The parties will determine if the subject parcel(s) contains, or has the potential to contain, any historic properties. If so, the parties will determine the need for an archaeological survey to identify potential historic properties and negotiate the terms of any legal instruments that would ensure long-term preservation of such properties. Any such legal instrument shall include, at a minimum, the elements described in Stipulation XIII.B of this Agreement. This will adequately address any reasonably foreseeable adverse effects that could occur due to transfer, lease, or sale of property purchased with Federal funds out of State ownership or control without adequate and legally enforceable restrictions to ensure long-term preservation (or mitigation) of historic properties (36 CFR Part 800.5(a)(2)(vii)).

XV. Historic Bridges

- A. In order to identify and address the needs of historic bridges in the State and, as much as practical, to preserve their significant character and ensure their long-term preservation, DelDOT commits to the following procedures when a bridge, older than 45 years, is present in the APE of an undertaking not listed in Appendix A:

1. If a bridge has been previously evaluated, and the determination of eligibility is older than 10 years, DelDOT, in consultation with SHPO, will reevaluate the bridge using the criteria provided in the DelDOT Historic Bridge Criteria for Determining Significance (Appendix E).
 2. If a bridge has never been evaluated and is not exempt under the Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges, then DelDOT, in consultation with SHPO, will evaluate the bridge using the criteria provided in DelDOT Historic Bridge Criteria for Determining Significance (Appendix E).
- B. DelDOT, in consultation with SHPO, will maintain a publicly available GIS layer and database with the eligibility status of all of Delaware's bridges. The development of this geodatabase will be completed in consultation with SHPO. DelDOT shall provide a status report annually as described in Stipulation XVII.B.
- C. The signatories will consider developing new contexts and/or reports for historic bridges as needs are identified.

XVI. Cultural Resource Planning Studies

DelDOT, in consultation with SHPO, commits to assist in creating, reviewing, and/or updating historic contexts based on a synthesis of information obtained from DelDOT projects and other related information.

XVII. Review and Monitoring of the Agreement

- A. DelDOT shall maintain documentation on the project and tracking forms for undertakings reviewed under Stipulations II and III of this Agreement in the project general file. DelDOT will submit annually to FHWA and the SHPO copies of completed tracking forms provided for under this Agreement.
- B. DelDOT shall prepare and provide to all parties to this Agreement an annual report by calendar year addressing the number of projects reviewed under Stipulations II and III of this Agreement. The report shall be submitted to FHWA, ACHP, and SHPO on or before March 1 of the following year.
- C. Within 30 days of submitting the annual report, DelDOT shall invite FHWA, ACHP and SHPO to meet to discuss the report and the implementation of the terms of this Agreement. At least FHWA, DelDOT, and SHPO will meet to discuss the report within 60 days of its submittal.
- D. ACHP and SHPO, at any time, may monitor, review, and audit the delegated activities carried out pursuant to this Programmatic Agreement, and ACHP shall review such activities if so requested. The FHWA and DelDOT shall cooperate with ACHP and SHPO in carrying out their monitoring and review responsibilities.

XVIII. Resolving Objections to Implementation of this Agreement

- A. Should any signatory party object in writing to FHWA regarding the manner in which the terms of this Agreement are carried out, FHWA will immediately notify the other signatory parties of the objection and proceed to consult with the objecting party to resolve the objection. FHWA will honor the request of any signatory party to participate in the consultation and will take any comments provided by such parties into account. The FHWA shall establish a reasonable time frame for such consultations.
- B. Should any signatory party object to a DelDOT or FHWA determination of eligibility, FHWA will submit the determination to the Keeper of the National Register of Historic Places for resolution.
- C. If the objection is resolved through consultation, FHWA may authorize the disputed action to proceed in accordance with the terms of such resolution.
- D. If after initiating such consultation, FHWA determines that the objection cannot be resolved through consultation, FHWA shall forward all documentation relevant to the objection to the ACHP and other signatory parties, including FHWA's proposed response to the objection. Within 30 days after receipt of all pertinent documentation, ACHP shall exercise one of the following options:
 - 1. Advise FHWA that ACHP concurs in FHWA's proposed response to the objection, whereupon FHWA will respond to the objection accordingly; or
 - 2. Provide FHWA with recommendations, which FHWA shall take into account in reaching a final decision regarding its response to the objection; or
 - 3. Notify FHWA that the objection will be referred for comment pursuant to 36 CFR 800.7(a)(4) and proceed to refer the objection and comment. In this event, FHWA shall ensure that the Agency Official is prepared to take the resulting comments into account in accordance with 36 CFR 800.7(~)(4).
- E. Should ACHP not exercise one of the foregoing options within 30 days after receipt of all pertinent documentation, FHWA may assume ACHP's concurrence in its proposed response to the objection.
- F. FHWA shall take into account any ACHP recommendation or comment and any comments from the other signatory parties to this Agreement in reaching a final decision regarding the objection. FHWA's responsibility to carry out all actions under this Agreement that are not the subjects of the objection shall remain unchanged.
- G. FHWA shall provide all other signatory parties to this Agreement with a written copy of its final decision regarding any objection addressed pursuant to this Stipulation.
- H. FHWA may authorize any action subject to objection under this Stipulation to proceed, provided the objection has been resolved in accordance with the terms of this Stipulation.

- I. At any time during implementation of the terms of this Agreement, should any member of the public raise an objection in writing pertaining to such implementation to any signatory party to this Agreement, that signatory party shall immediately notify FHWA. FHWA shall immediately notify the other signatory parties in writing of the objection. Any signatory party may choose to comment on the objection to FHWA. FHWA shall establish a reasonable time frame for this comment period. FHWA shall consider the objection, and in reaching its decision, FHWA will take all comments from the other parties into account. Within 15 days following closure of the comment period, FHWA will render a decision regarding the objection and respond to the objecting party. FHWA will promptly notify the other parties of its decision in writing, including a copy of the response to the objecting party. FHWA's decision regarding resolution of the objection will be final. Following the issuance of its final decision, FHWA may authorize the action subject to dispute hereunder to proceed in accordance with the terms of that decision.

XIX. Amendment

- A. Any signatory party to this Agreement may at any time propose amendments, whereupon all signatory parties shall consult to consider such amendment. This Agreement may be amended only upon written concurrence of all signatory parties.
- B. Each attachment to this Agreement may be individually amended through consultation of the signatory parties without requiring amendment of the Agreement, unless the signatory parties through such consultation decide otherwise.

XX. Termination

- A. Any signatory party may terminate this agreement. If this Agreement is not amended as provided for in Stipulation XIX, or if any signatory party proposes termination of this Agreement for other reasons, the party proposing termination shall notify the other signatory parties in writing, explain the reasons for proposing termination, and consult with the other parties for no more than 30 days to seek alternatives to termination.
- B. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with that agreement.
- C. Should such consultation fail, the signatory party proposing termination may terminate this Agreement by promptly notifying the other parties in writing.
- D. Should this Agreement be terminated, FHWA would carry out the requirements of 36 CFR Part 800 for individual undertakings.
- E. Beginning with the date of termination, FHWA shall ensure that until and unless a new Agreement is executed for the actions covered by this Agreement, such undertakings shall be reviewed individually in accordance with 36 CFR 800.4-800.6.

XXI. Term of Agreement

This Programmatic Agreement will become effective on the date it is signed by the ACHP and will continue in force five (5) years from the date of the final signature. Six (6) months prior to the end of this five year period, the parties to this Agreement will consult to determine if extension or other amendment of the Agreement is needed, and if so agree on the length of the extension. No extension or amendment will be considered in effect unless all the signatories have agreed to it in writing. If no extension is pursued in writing, the programmatic agreement is void and FHWA shall then consult with SHPO on all individual undertakings in accordance with 36 CFR Part 800.

Execution and implementation of this Programmatic Agreement evidence that the Federal Highway Administration has afforded ACHP a reasonable opportunity to comment on the Program and its individual undertakings in Delaware, and that FHWA has taken into account the effects of the Program on historic properties and has complied with Section 106 of the NHPA.

FEDERAL HIGHWAY ADMINISTRATION

By: Mary Ridgeway

Mary Ridgeway, Division Administrator

Date: 9/19/2018

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: John M. Fowler

John M. Fowler, Executive Director

Date: 9/21/18

DELAWARE STATE HISTORIC PRESERVATION OFFICER

By: Timothy Slavin

Timothy Slavin, State Historic Preservation Officer

Date: 9.19.18

DELAWARE DEPARTMENT OF TRANSPORTATION

By: Robert B. McCleary

Robert McCleary, Chief Engineer, DelDOT

Date: 9/11/18

APPENDIX A:

Project Types That Will Not Affect Historic Properties

1. Pavement milling, overlaying, patching, chip seal, on existing roads or trails when the roadway footprint is not widened to include new shoulders or travel lanes. Some overlay projects may include shoulder flattening, within the existing roadway footprint.
2. Minor safety improvement projects, such as, but not limited to intersections listed on the Hazard Elimination Program (HEP); when the roadway footprint is not widened.
3. Chemical surfacing treatments applied to roads to protect or preserve existing pavement.
4. Routine maintenance of existing roads, trails, guardrail, drainage structures, including pipe replacements, drainage ditches, and fences that does not include changes in the alignment or footprint of the roadway or include changes in the location or extent of drainage structures and ditches.
5. Roadway striping, pavement marking and installation of vehicle monitoring equipment.
6. Rest area repair and maintenance.
7. Bridge deck rehabilitation and stabilization confined strictly to road surface work on the structure.
8. Bridge structural maintenance, stabilization, and rehabilitation work; provided the bridge is less than 45 years of age and/or not listed on or eligible for the NRHP.
9. Bridge maintenance activities on NRHP eligible or listed bridges, including and limited to: cleaning of the bridge; in-kind replacement of expansion joints and compression seals; overlay of existing approach roads, where there will be no expansion of the wearing surface; cleaning scuppers or other drainage conveyances; and in-kind replacement of rip rap, protective jackets, and fenders, provided all activities comply with the Secretary of Interior's Standard for Historic Properties.
10. Repair and replacement of existing sidewalks, curbs, and ramps, such as those made under the Americans with Disabilities Act (ADA); provided in-kind or compatible materials are used for construction, and the alignment or radius of curb is not substantially changed.
11. Repair or replacement of lighting, signals, signage, and other traffic control devices.
12. Replacement of safety appurtenances such as guardrails, barriers, glare screens, and energy attenuators.

APPENDIX B:

Project Types With Minimal Potential to Adversely Affect Historic Properties

1. Bridge and culvert replacement provided that the structure:
 - a. Is less than 50-years old; and listed in DelDOT's Bridge Management Inventory; or
 - b. Has been evaluated and found not eligible for listing in the NRHP by DelDOT in consultation with SHPO; or
 - c. Is exempt from Section 106 review under the provisions of the Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges, issued November 2, 2012.
2. Bridge structural maintenance, stabilization, and rehabilitation work on bridges listed in or eligible for the NHRP; examples of activities include, but are not limited to: in-kind replacement of bridge decking; in-kind replacement or repair of steel beam plates and/or bridge bearings; repair of guardrails which are already attached to parapets; in-kind replacement or repair of existing modern fencing; repainting; repair of cracks in superstructure and substructure; and limited superstructure replacement; provided all work complies with the Secretary of Interior Standard for Historic Properties.
3. All work within existing interchanges, within existing medians of existing divided highways, and between an existing highway and an existing adjacent frontage road.
4. Installation of safety appurtenances such as guardrails, barriers, glare screens, and energy attenuators.
5. New landscaping in areas previously disturbed.
6. Installation of new lighting, signals and other traffic control devices.
7. Safety projects at existing railroad crossing approaches, signals, and signing where highway alignments cross rail alignments at grade.
8. Roadway rehabilitation and reconstruction which may include construction of turning lanes, parking lots, auxiliary lanes (i.e. truck climbing, acceleration, and deceleration lanes) and shoulder widening within a previously disturbed area.
9. Placement of fill material on the side slopes of intersection crossroads and access for purposes of flattening these slopes to meet safety criteria, provided that no soil is removed beyond the area of previous disturbance.
10. Placement of riprap, scour control measures or other erosion control material, including retaining walls, within an area previously disturbed by construction activities, to prevent erosion of waterways, bridge piers, and substructure elements and slopes.

11. Installation, replacement and/or rehabilitation of sidewalks and related curbs, gutters and ramps.
12. Installation, replacement and/or rehabilitation of transit facilities, including bus bays, bus pullouts, shelters and park and ride facilities, located in previously disturbed areas.
13. Intersection improvements at existing highway intersections where safety control is required, including construction of turn lanes in previously disturbed areas, lighting, signalization and signing, installation of posts, poles, and support bases.
14. Paving or minor widening of existing shoulders and right of way- this type of project is limited to laying road surface over sub-base gravel within previously disturbed areas. Generally these projects involve slight shoulder widening or flattening for safety reasons.
15. Installation of noise barriers within previously disturbed areas.
16. Projects funded or programmed as Transportation Alternatives in accordance with the MAP-21 legislation. Except the following activities:
 - a. Historic Preservation and rehabilitation of historic transportation buildings, structures or facilities, including historic railroad facilities and canals, that are listed or eligible for the NRHP;
 - b. Archaeological activities relating to impacts from implementation of a transportation project;
 - c. Environmental mitigation to address pollution due to highway runoff;
 - d. Control or removal of outdoor advertising only when the object or fixture is a historic property.
17. Other non-vehicular on-alignment FHWA funded transportation projects such as, but not limited to, rail to trail projects, greenways or similar recreational trail projects.
18. Other minor undertakings that the SHPO, FHWA, ACHP and DeIDOT may subsequently agree generally do not adversely affect historic properties, and therefore qualify for review under the terms of this stipulation. The signatories must agree to add these undertakings in writing. DeIDOT shall maintain a list of all such approved undertakings and include the list in its annual reports prepared pursuant to Stipulation XVII.B.

FINDING OF NO HISTORIC PROPERTIES AFFECTED
 Programmatic Agreement Tracking Form

Date

Project Name/Location

State Contract No.

Federal Aid Project No.

Finding Classification

III.B.2.a.i.

Project Type

USACE Permit

Yes

No

Project Description

In accordance with Stipulation III.B.1 or III.B.2.a.i. of the 2018 Programmatic Agreement for the Federal Aid Highway Program in Delaware, DelDOT Qualified Staff have reviewed the above-referenced project and determined that no historic properties will be affected. This form provides the information supporting that finding.

Area of Potential Effects (APE):

Level of Effort to Identify Historic Properties:

Desk Review

Field Reconnaissance

Previous Studies:

Resources present in the APE?

No

Yes, listed in the table

NAME or TYPE	CRS #	DATE	DESCRIPTION	NR STATUS

Exempt Under the Post 1945 Bridge Program Comment

Yes

Additional Information (List):

By this form, DelDOT is documenting its intent to apply a finding of *de minimis* impact (23 CFR Part 774.5(b)) based on a finding of no historic properties affected and/or an exception to the requirement for Section 4(f) approval 23 CFR Part 774.13.

Justification for Finding:

DelDOT Architectural Historian:

Signature: _____

Justification for Finding:

DelDOT Archaeologist:

Signature: _____



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

JENNIFER COHAN
SECRETARY

PROPOSED FINDING OF NO ADVERSE EFFECT
Programmatic Agreement Stipulation III.B.2.a.ii

Date:

Project Name/Location:

State Contract No.:

Federal Aid Project No.:

Project Type:

Timothy Slavin, Director
State Historic Preservation Officer
Division of Historical and Cultural Affairs
21 The Green
Dover, DE 19901

Dear Mr. Slavin,

The Delaware Department of Transportation (DelDOT) proposes to conduct an undertaking subject to compliance with Section 106 of the National Historic Preservation Act, and its implementing regulations, 36 CFR Part 800.

In accordance with Stipulation III.B. of the 2018 Programmatic Agreement (Agreement) for the Federal Aid Highway Program in Delaware, DelDOT Qualified Staff have identified the following historic properties/potential historic properties in the Area of Potential Effect:

NAME or TYPE	CRS #	DATE	DESCRIPTION	NR STATUS

Further, pursuant to Stipulation II.B.3.a.ii. of the Agreement, DelDOT proposes that the undertaking, as it is currently defined, will have No Adverse Effect on these historic properties, as DelDOT will ensure that the standard design requirements are met and/or other provisions are applied, as identified on the attached checklist.

Additional Information (List):

- By this form, DelDOT is also notifying you of its intent to apply a finding of *de minimis* impact (23 CFR Part 774.5(b)) based on a finding of no adverse effect and SHPO concurrence and/or an exception to the requirement for Section 4(f) approval 23 CFR Part 774.13.

If you agree with this finding, please sign below. If within 30 days you notify DelDOT that you do not agree with this finding, consultation will proceed in accordance with Stipulation IV.D. of the Agreement.

Sincerely,

DelDOT Environmental Studies

Reviewed By: Signature _____

DelDOT Architectural Historian:

Reviewed By: Signature _____

DelDOT Archaeologist:

cc:

Date:

Proposed NAE Finding for:

SHPO Response: **CONCUR**
 DO NOT CONCUR
Reason:

State Historic Preservation Office

By: Signature _____

Date: _____

Name/Title _____

Date:

DelDOT Proposed NAE Finding for:

CHECK ALL THAT APPLY

Standard note(s) will be included in the project plans, specifications and/or other contract documents that instruct the contractor to:

Alert all contractors and subcontractors of the presence and location(s) of the historic properties, contributing elements thereof.

Follow guidance in DelDOT's *Historic Bridge Manual: Guidance and Treatment for Delaware's Historic Bridges*, as applicable.

Avoid any use of the property (no Right of Way acquisition, Temporary Construction Easement, or Permanent Easement). All properties? If not, specify.

Limit any use of the property to area(s) specified in the plans. All properties? If not, specify.

Prepare mock up, test panels, or samples of replacement materials or finishes for review and approval by DelDOT Environmental Studies Qualified Staff. DelDOT will invite the SHPO and consulting or interested parties to review these materials. DelDOT will document decisions, in conjunction with the District Engineer.

If unforeseen damage to any historic properties occurs, notify DelDOT Environmental Studies Qualified Staff prior to implementing repairs to ensure that repairs will meet *The Secretary of The Interior Standards*, as determined by DelDOT in consultation with SHPO and other consulting parties.

Notify DelDOT Environmental Studies Qualified Staff prior to implementing any changes affecting location, design, methods of construction, materials, or footprint of the project, to ensure the proposed change will not alter the finding of No Adverse Effect.

Placement of geotextile or other temporary, protective material on ground surfaces to protect known or potential archaeological site areas during construction. DelDOT shall ensure that installation and removal of such materials does not result in disturbance of the ground surface or soil compaction.

DelDOT Environmental Studies Qualified Staff to attend Pre-Construction meeting to explain special provisions to contractors and inspectors.

Other, similar provisions that will avoid adverse effects; describe:

APPENDIX C:

Internal Review and Consultation Process

The internal review and consultation processes are not limited to these procedures, nor are all of these procedures required for all undertakings. The level of review and consultation should be appropriate to the specific complexity, scale, and location of the undertaking.

Internal Review Process

For projects under Stipulations III and IV that are subject to SHPO review, DeIDOT will employ a multi-disciplinary approach to implement the following internal review process.

1. Review of project plans to determine impacts and potential impacts.
2. Literature search and/or records review as laid out in DeIDOT's Desk Review Protocols (Appendix D) to determine the potential for involvement of historic properties.
3. Field review of the project area or windshield survey performed using satellite imagery.
4. Determine the degree of existing disturbance within the Area of Potential Effects.
5. Assess the likelihood that unidentified properties exist in the project area and determine whether an archaeological or historic architectural survey is needed.
6. Consult with Federally and State recognized Native American tribes who may attach religious or cultural significance to properties within the project area, as appropriate for the scope of the undertaking.
7. Consult with Certified Local Governments, local historic societies, or knowledgeable informants, as appropriate for the scope of the undertaking.

Consultation Process

Formal Communication: Formal Communication with SHPO shall be submitted in writing. Submittals will first be sent electronically and a hard copy version of the materials shall be forwarded to SHPO. All formal communication will occur under a signed cover letter.

Informal Communication: Informal Communication with SHPO may include telephone conversations, meetings, and electronic mail.

Monthly Coordination Meeting: DeIDOT qualified staff will meet monthly with SHPO to discuss project design updates and schedules, Section 106 status, project impacts, etc.

1. All projects that are subject to SHPO review per Stipulation IV will be formally Initiated with the SHPO and any appropriate consulting parties. As part of the Initiation process, DelDOT qualified staff will consult with SHPO and any appropriate consulting party on an APE for the project and will receive concurrence. If project modifications lead to changes in potential impacts, DelDOT qualified staff will reopen consultation with SHPO and any appropriate consulting parties and will request concurrence on a revised APE.
2. Results of any identification and/or evaluation survey for a project under Stipulations III and IV.B. will be submitted to SHPO and any appropriate consulting parties for their review and concurrence pursuant to 36 CFR 800.4(b). SHPO and any appropriate consulting party will have 30 calendar days to review and provide comments. All identification and/or evaluation surveys will be finalized and submitted in hard copy and digital format to the SHPO per Stipulation I.B.
3. For projects that are subject to SHPO review per Stipulation IV, project design and potential impacts will be discussed with SHPO at Monthly Coordination Meetings as project plans become available. DelDOT will consult with SHPO on potential project impacts before submitting a finding under Stipulation IV.C. and IV.D.

APPENDIX D:

Desk-Review Assessment

Through an examination of pertinent data sets, DelDOT's Archaeologists will locate and identify known cultural resource points, gain an impression of the prehistoric and historic environment, and assess the likelihood for unidentified archaeological resources within the project's APE or ACOE Permit Area. The desk-review assessment provides guidelines and resources for DelDOT's Archaeologists to complete a good-faith review of the APE or ACOE Permit Area for scoping and/or planning of further archaeological work.

A desk-review assessment will be conducted for all II.B and II.C projects as identified in the Programmatic Agreement regarding the Implementation of the Federal Aid Highway Program in Delaware (2013). To comply with NEPA, the desk-review assessment will also be conducted for all projects that qualify as a Categorical Exclusion as defined under 23 CFR Part 771.117. For projects that qualify as an Environmental Assessment as defined under 23 CFR Part 771.119, DelDOT will consult with the SHPO to determine the need for a desk-review assessment versus a formal Phase I level survey. For projects that require an Environmental Impact Statement as defined under 23 CFR Part 771.123, a desk-review assessment is not necessary as a formal Phase I level survey will be performed.

Given the wide range of cultural activity in Delaware, by both prehistoric and historic peoples, the contexts below will provide a framework for periods of archaeological sensitivity and potential. Although these guidelines are geared toward archaeological resources, equal weight should be given to above-ground cultural resources, since archaeological sites may be associated with these resources.

A. Prehistoric Context

There are four general, chronological periods of Native American cultures of Delaware defined by Custer's Management Plan for Delaware's Prehistoric Cultural Resources (1986) and referenced in DESHPO's guidelines for Archaeological Survey in Delaware (2013):

1. Paleo-Indian (12000–8500 B.P.)
2. Archaic (8500–5000 B.P.)
3. Woodland I (5000–1000 B.P.)
4. Woodland II (1000 B.P.–circa A.D. 1650)

In addition to the above periods, there is an overall Mid-Atlantic/Eastern Woodland Prehistoric Context that differs in how the chronological periods are split up. Archaeologists working in Delaware need to be cognizant of this distinction.

1. Paleo-Indian (12000-10000 B.P.)
2. Early Archaic (10000-8500 B.P.)
3. Middle Archaic (8500-5000 B.P.)

4. Late Archaic (5000-3000 B.P.)
5. Early Woodland (3000-2000 B.P.)
6. Middle Woodland (2000-1000 B.P.)
7. Late Woodland (1000 B.P.-circa A.D. 1650)

B. Historic Context

In accordance with Delaware Comprehensive Historic Preservation Plan (Ames et al. 1989) and referenced in in DESHPO's guidelines for Archaeological Survey in Delaware (2013), the history of Delaware is generally divided into six time periods beginning with the exploration of the area by numerous European peoples in North America and continuing through recent development trends in suburbanization and the policies that have shaped the landscape during the latter-half of the twentieth century. These historic periods are:

1. Exploration and Frontier Settlement (1630–1730 A.D.)
2. Intensification and Durable Occupation (1730–1770 A.D.)
3. Early Industrialization (1770–1830 A.D.)
4. Industrialization and Early Urbanization (1830–1880 A.D.)
5. Urbanization and Early Suburbanization (1880–1940 A.D.)
6. Suburbanization and Early Ex-urbanization Period (1940–present)

C. Resources

The archaeologist(s) undertaking desk-review assessments should consider all appropriate sources of information and give an assessment of their relevance and reliability. All sources consulted should be documented, whether or not they have been productive.

1. CHRIS (Cultural Resource Database)

CHRIS, managed by the DE SHPO, is Delaware's online GIS-based application used to map previously identified cultural resources. This includes completed cultural resource reports, National Register listed properties, historic districts, historic structures, and archaeological sites. In addition to cultural resource points, CHRIS also has GIS layers for Aerial photography from 1937 through 2007 and State Planning Maps. This should be the first resource consulted during a desk review to provide the archaeologist with an idea of cultural resources already identified in the APE and start to get an idea of archaeological resource probability.

2. Historic Maps

Although this list is not inclusive, nor is it georeferenced, it is a good place to start to get an overall picture of Delaware over time. One does not need to look at every map of Delaware for every desk review. Significant maps one would consult are listed below; other maps should be consulted if more information is needed to make a sound decision.

The below maps from 1778 – 1827 can be found online through the University of Delaware Library's Digital Collections and hosted at Shared Shelf Commons:
<http://www.sscommons.org/openlibrary/welcome.html#3|collections|7729471||UD20Library3A20Historic20Map20Collection||>

The Province of New Jersey, Divided into East and West, commonly called The Jerseys. Engraved and Published by William Faden, 1778

The *Province of New Jersey* is a second edition “with considerable improvements” of two surveys made in 1769 by Bernard Ratzer and Gerard Banker. Although the map focuses on the New Jersey area, it includes the Delaware area, labeled on the map as “The Three Lower Counties.” This reference indicates waterways, early roads, towns, and a few taverns.

Maryland und Delaware. By D.F. Sotzmann, 1797

This post-Revolutionary War map provides a different perspective of Delaware and its westward association with Maryland as opposed to a northern and eastern relationship with New Jersey and Pennsylvania. In addition to state and county boundaries, the map illustrates waterways, roads, and towns, as well as mills, furnaces, forges, and warehouses.

Roads of Newcastle County. Surveyed and Printed by Henry Heald, 1820

The Henry Heald map of *Roads of Newcastle County* illustrates an early nineteenth-century view of New Castle County using county and hundred boundaries established by an act of the Delaware Assembly in 1775. In addition to roads, creeks, and towns, the map references meeting houses, manufactories, school houses, taverns, and work shops.

Geographical, statistical and historical map of Delaware. Fielding Lucas, 1827

This map provides an overview of the state of Delaware. It is one of the earliest maps to show both the Canal and the first rail line in Delaware. Additional information on the state is written in text around the map.

Map of New Castle County, Delaware, Samuel M. Rea and Jacob Price, 1849

The Rea and Price map provides a detailed mid-nineteenth century view of New Castle County with the earliest railroads present. Also mapped are locations of grist, saw, and paper mills, school houses, post offices, Methodist Episcopal Churches, and some land owners. An inset of Wilmington is also present with a more detailed directory. This map can be viewed online at

<http://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~252228~5517841:Map-of-New-Castle-County,-Delaware->

Map of Kent County, Delaware: from actual surveys Published by A.D. Byles, 1859

The Byles map provides a counterpart to the Rea and Price map and presents a mid-nineteenth century view of Kent County. The county map shows general content of roads, railroads, hundreds, etc. In addition, rural buildings with owners' names, school houses,

churches, and stores. Eleven town insets are included that show lots, buildings, owners' names, and business directories. This map can be viewed online in color through the Library of Congress at <http://www.loc.gov/item/2013593082>.

Atlas of the State of Delaware. By D.G. Beers Published by Pomeroy & Beers, 1868

The D.G. Beers *Atlas of the State of Delaware* provides a view of Delaware just after the Civil War. The maps not only show roads and geographic landmarks, they also identify buildings, property owners and property names, cemeteries and churches. City inset maps also list business owners and their occupations. The Beers *Atlas* is geo-referenced as a GIS layer in CHRIS. A digital copy of the entire atlas in color can be found in the University of Delaware Library's Digital Collections and hosted by Shared Shelf Commons at <http://www.sscommons.org/openlibrary/welcome.html#3|collections|7729469||UD20Library3A20Atlas20of20the20State20of20Delaware||>.

Map of New Castle County, Delaware: from actual surveys & records. G.M. Hopkins & Co. 1881

This map provides an updated view of the Rea and Price map. In addition to the detail provided in Rea and Price, hundred boundaries are mapped, as well as the acreage of property owners. In addition to the Wilmington inset, twelve other town insets are included. A digital copy of the map in color can be viewed through the Library of Congress at <http://www.loc.gov/item/2013593083/>.

USGS Historic Quad Maps

USGS topographic quad maps are used to identify changes in early twentieth century land use and structure location. These maps can be accessed in multiple places, but the USGS has recently provided their collection via the Historical Topographic Map Explorer at <http://historicalmaps.arcgis.com/usgs/>. The Explorer allows the user to overlay multiple historic topographic maps from 1884 to the present.

3. Aerial Photography and Satellite Images

Aerial photography is used to identify modern disturbances and land use in project areas. Google Earth shows aerial views from the 1990s to the present as well as a current ground-level view. As mentioned earlier, CHRIS offers the aerial photography from 1937 through 2007. Aerial photography is useful in identifying areas that have been previously disturbed and therefore have little to no potential for archaeological resources.

4. Predictive Models

Predictive models are essential to the desk-review assessment; if the APE falls within an existing model then the desk-review assessment should evaluate the appropriateness of using that predictive model as a primary basis for a determination of further archaeological work. A synthesis of predictive model research completed for DeIDOT by A.D. Marble & Company can be found in the Environmental Studies library or at <G:\Design Support\FILES\Environmental\Cultural Resources\Archaeology\Resources>. (*US 301 Archaeological Site Predictive Model Study*, 2015)

5. Soil Survey Maps

Assessing Soil Survey maps is imperative for both prehistoric and historic archaeological site predictability. The United States Department of Agriculture has provided the public an electronic tool to access specific soil survey data. Specific to Delaware, archaeologists need to be cognizant of soil types that are well drained and have a higher potential to contain archaeological deposits such as (Matapeake, Sassafrass, etc.) versus soils that are too wet or comprised of tidally influenced salt water such as (Broadkill mucky peat, Transquaking, etc.). <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

6. Tax Ditches

Tax ditch information is useful to determine modern disturbances along drainage channels. Tax Ditches in Delaware date to the second half of the twentieth century per the 1951 Drainage Law. Delaware has 228 individual tax ditch organizations. Dimensions depend on the acreage being drained and the topography of the land. More information on the tax ditches can be found on the DNREC website. The Environmental Studies section of DelDOT has a GIS layer of tax ditch areas and segments. GIS data on tax ditches can also be viewed online through <http://maps.dnrec.delaware.gov/navmap/>.

D. Archaeological Site Probability

The determination of archaeological site probability within an APE should involve a consideration of the factors influencing the formation of all types of archaeological sites. Understanding the natural and built environment will aid in forming a holistic assessment of archaeological site probability. Water sources and soil types will be useful for determining the prehistoric potential, whereas the location of historic roads and railroads, along with waterways will be useful in identifying potential historic site locations. Archaeological site probability should be based on considerations of both prehistoric and historic resources. Although not inclusive, below are some considerations to keep in mind when assessing the archaeological site probability within an APE:

1. Are archaeological sites or historic resources located in or immediately adjacent to the APE?
2. Are archaeological or historic resources listed in the NRHP located in the APE?
3. Is an archaeological or historic district or districts located in the proposed APE?
4. Is a cemetery located in or near the proposed APE?
5. Is a historic bridge located in the proposed APE?
6. Is there a historic roadway/cart road located in the vicinity of the proposed APE?
7. Are watercourses (rivers, streams) located in the immediate vicinity of the proposed APE?
8. Are well-drained soils located in the immediate vicinity of the proposed APE?

Based on the proposed APE and the archaeological assessment, a determination is reached that will lead to one of three outcomes. This decision will guide the direction of further archaeological work if necessary.

1. Little to no potential for archaeological resources and **No Further Work** is necessary
2. Additional **SHPO research and/or Field Scoping** is needed to make a decision
3. High potential for cultural resources: this would lead to an **in-house Phase I** or **Consultant-based Work**

E. Documentation and Tracking

Documentation should be used to provide adequate information and justification for the decision made. Additional documentation and tracking will be conducted as part of the Programmatic Agreement. The desk-review assessment tracking excel file can be found at G:\Design Support\FILES\Environmental\Archaeology\Guidelines

APPENDIX E:

DelDOT Historic Bridge Criteria For Determining Significance

Criteria for Determining Significance

Each bridge will be evaluated on its own merits against the National Register of Historic Places criteria for evaluation as enumerated in 36 CFR 60.4. The National Register criteria are broadly defined, and there are numerous areas of significance associated with those criteria, such as transportation, community planning and development, engineering, and landscape architecture, that relate to bridge and transportation development. The criteria are also discriminating and can be used to distinguish the subtle yet often crucial distinctions of significance among large numbers of similar resources with a common history, separating those that are eligible from those that are not.

The National Register of Historic Places criteria for evaluation are

The quality of significance in American history, architecture, archeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of person significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield information important in prehistory or history.

To assist with applying the criteria for evaluation, several considerations addressing specific types of resources are included in the criteria. Two of the "criteria considerations" are relevant:

Ordinarily ... structures that have been moved from their original locations ... and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- b. A building or structure removed from its original location but which is significant primarily for architectural value or which is the surviving structure most importantly associated with a historic person or event; or
- g. A property achieving significance within the past 50 years if it is of exceptional importance.

Reasoning that time is needed to develop "historical perspective and evaluate significance," the National Register criteria for evaluation generally excludes properties that are not 50 years old. In so much as the time period addressed in the bridge survey is contextually based (common history and common technologies), rather than chronology, bridges that are less than 50 years of age can be evaluated for exceptional importance.

Applying the Criteria for Evaluation

The following explain how the individual criterion will be applied in the evaluation of historic bridges in Delaware:

Criterion A addresses an event or pattern of events that made an important contribution to the historical and physical development of a locality, region, or the state. This could range from the development of a settlement as a regional trading or industrial center or the influence of the Delaware Railroad on the subsequent transportation network development in lower Delaware. Criterion A can include significant transportation routes like the Philadelphia, Wilmington & Baltimore Railroad that became the Pennsylvania RR through Northern Delaware and spurred industrial development and growth in Wilmington, the Du Pont Highway, which ended downstate dependence on railroad and water-borne transportation, or the improvements done in conjunction with the 1952 opening of the Delaware Memorial Bridge.

All bridges have a history. They were built by a railroad, a county, the state, or a private commission, and were thus related to larger historic contexts such as development of improved railroad rights-of-way or expanding the state highway system with the then-prevailing bridge technology. Criterion A differentiates between history that is common to like features, such as all railroads having an impact on the subsequent development of the areas through which they passed or 1950s dualized state highways facilitating the suburbanization of the northern part of the state, and distinguishable events that made a significant contribution to historical development. Thus, representative examples of common bridge types, such as steel and wood multi girder bridges, reinforced concrete slab and T beam bridges, and box culverts, with no distinctive or unusual historical background or setting will not be evaluated as meeting criterion A.

Criterion B addresses historic association with great persons from the past. This criterion is not commonly applied to bridges, as the works of noted engineers and builders are usually better represented under criterion C.

Criterion C addresses the distinctive characteristics of a type, period, or method of construction, the work of a master, or the significance of a historic district and is thus the most broadly applicable criterion. The criterion affords recognition of the evolution of bridge building technology as well as the setting of the structure, or of the importance of the engineer who designed it and fabricator/contractor who erected it. Bridges with unusual construction details or rare survivors of a type that was significant in the development of bridge technology, were the work of noted engineers, engineering firms, or bridge companies, or were particularly good examples of their type are eligible under criterion C.

Criterion C applies to common resource types, like steel multi girders or reinforced concrete T beam spans. Common resource types are analyzed to identify which examples of types and designs best represent the population and distinguish some examples as being noteworthy and historic.

Priority is placed on recognizing (1) examples that mark technological/engineering advances, improvements, or variations and (2) the better or best examples of a resource type or construction detail when a sufficient population is identified. Parameters of distribution also include common topographical, economic, historic, and development factors as well as political boundaries. Better or best was often meant being the earliest, larger, more complicated, or least altered example of a type or a structure that exhibits several distinctive details or notable historical association(s). At times, some noteworthy feature like a particularly well-detailed, custom balustrade or original light standards and luminaires, will be required to merit an eligibility recommendation. This policy will apply to all bridge types and designs, both fixed and movable.

Under criterion C, bridges that are documented as to designer, builder, and/or fabricator will be evaluated as more significant than those that are undocumented. Such information establishes the historical, and frequently, technological significance of the span.

Because of the historically important role the Bridge Division of the Delaware Highway Department has played in the development of the state's roads and bridges since 1917, the historical and technological significance of standardized bridge designs will be a dominant consideration. The historic contexts establish when and under what historical circumstances standardized bridge designs and details were introduced, the frequency at which a standardized design was built, and the technological significance of the designs. The contexts coupled with the survey database provide a means of acknowledging on a statewide basis the oldest extant examples of a type, design or detail in an effort to set the engineering history in the state context. These examples are generally regarded as more significant than later examples. Identifying the early application of a particular technology is an objective of the survey, and tabulating the findings make it possible to determine which structures truly marked transitions from one technology or design to another. Unique, rare, or infrequent survivors of a type or construction detail are also evaluated as having engineering significance under criterion C. Bridge types like a Pratt thru truss or reinforced concrete deck arch are often evaluated as significant because they are no longer common. Yet, they represent the development of bridge technology in this country. Likewise, unusual construction details, like the first use of hammerhead piers in the 1950s or the early use of continuous designs with rigid frame or T beam bridges are evaluated as significant because they reflect an era of experimentation in the development and popularization of different bridge technologies.

Criterion D is generally interpreted to refer to archaeological resources, and has limited application to this survey. It may be applied to structures and objects that contain important information that themselves are the principal sources of information. This could apply to an unusual and technologically significant bridge for which no plans or other documentation survives. The study of the bridge would have to yield important information for the structure to be evaluated as eligible under criterion D. An example of such a bridge might be a wood bridge from the colonial period that has remained buried or submerged for the past 200 years and would yield important information about colonial bridge construction techniques. The vast majority of identified extant bridges in Delaware date to within the last 100 years. They represent bridge types that are well documented in historical literature including engineering journals and textbooks, plans, and photos.

Historic Districts

Another component of assessing National Register eligibility is evaluating the setting and contexts to determine if they meet the criteria as a potential historic district. Entire routes or portions of routes can also be historic districts. There are three ways a resource located within a listed or potential historic district can be considered a contributing and thus National Register-eligible resource.

Firstly, the bridge was present in the district during the years that the district achieved its significance. The period of significance is determined by historical research and the physical development of a district. To be evaluated as a contributing resource within a historic district a structure must have been built within that period of significance, such as a 1950 reinforced concrete slab bridge built as part of a well preserved and architecturally significant post-World War II suburban community. Conversely, a late-1940s steel multi girder bridge built in a historic district that achieved its significance prior to World War I would be evaluated as noncontributing regardless of its state of preservation because it is outside the period of significance of the district.

Secondly, the bridge needs to support the historic themes or areas of significance for which the district is being recognized. It must add to the historic architectural qualities, historic associations, or archaeological values for which a district is significant. Thus, unless a structure is related to one of the themes or areas of significance for which the district is eligible, it is evaluated as noncontributing.

Thirdly, some structures located in historic districts meet the National Register criteria on individual merit and are thus eligible independent of their setting and associations. Provisions for such individually significant structures located in historic districts are made in the programmatic procedures of the National Register. The conclusion of the evaluation will be specified on the individual survey forms.

Emphasis will be placed on looking at entire roads as potential historic districts to ascertain if they possess sufficient integrity and significance to meet criteria A and/or C. Did its development make a significant contribution to the broad patterns of our history, and thus meet criterion A, or was it part of the overall history of the ongoing development of roadways in the state? Did the road possess engineering significance or was it a typical solution to common traffic bridge engineering problem? Does it possess the integrity of original design, setting and feeling?

Integrity

One of the most important considerations in the evaluation of National Register status is integrity. A synonym for the state of completeness or preservation, integrity refers to the retention of original fabric and historic appearance. It does not refer its structural or functional adequacy. Integrity is defined in the criteria for evaluation as an integral part of the assessment of the significance of a structure. The seven elements of integrity are "location, design, setting, materials, workmanship, feeling and association." A majority of these elements must be retained for a resource to be evaluated as eligible. In other words, a structure must appear much as it did when it achieved its significance in order to meet the National Register criteria. The issue of integrity is applied to structures that are individually evaluated as well as to those that are located in historic districts, contexts, and routes or corridors.

To arrive at an accurate assessment of integrity, alterations will be studied to determine if they (1) are historic or not (executed within the past 50 years), (2) changed the design or how a bridge functions, or (3) compromised the technological and/or historical significance of the structure. These issues figure greatly in the assessment of the historical and technological significance of each bridge.

Alterations that may be considered as drastic enough to make a bridge not eligible include removal of original concrete balustrades/parapets from common bridge types, widening on both sides so that the original structure is undiscernible in elevation, removal of the major portions of the operating mechanisms on a movable bridge, and modern rebuilding, even if it is in-kind. A higher degree of alteration is acceptable as significance in other areas increased, especially for very old or very rare structures.

Some modifications common to a particular bridge type or design were not considered as alterations that detracted from the potential significance of a span because the changes (1) were necessary to address inherent weaknesses in the original design, (2) were necessary replacements to keep the bridge operational, (3) were such minor changes that they did not affect the overall appearance or design of the span, (4) were sensitive alterations that were done in a manner which did not detract from the original design, or (5) are reversible alterations that did not involve the removal of original fabric. These common modifications include replacement of decks or wearing surfaces on multi girder bridges and the replacement of sources of power, brakes, locks, and control panels on movable bridges. Other common alterations that do not diminish integrity include the addition of beam guide rails when they were attached in a manner so as not to irreversibly impact the historic fabric or repointing to masonry when done in a reasonably sensitive manner. Limited in-kind replacement does not adversely affect the technological and historical significance of a bridge, but reconstruction of the structure does, especially in cases such as timber multi girder bridges that have had wholesale superstructure replacements.

Movable spans that survive in complete condition have greater historical and technological significance than examples that have altered movable leaves, machinery, and/or operators houses. This became an important consideration with well-represented 20th-century movable bridge types such as the simple trunnion bascules. It was a less weighty issue with rare types such as Delaware's two Scherzer bridges. In-kind replacement of open gear sets is not regarded as an alteration that compromises integrity.

Certain allowances in integrity are made for bridges that are a unique or rare surviving example of their type and or/design. When a resource type or detail becomes so infrequent or rare that losing one or two examples will mean that it is no longer represented, then the integrity question is secondary to recognizing a disappearing historic artifact. Examples of these bridge types in Delaware include metal trusses, wood trusses, and stone arches. The integrity necessary for a resource to contribute to a historic district is commonly interpreted differently from the integrity needed for individual eligibility. This is because a district as a whole can meet the criteria for significance and integrity even though some of the components are altered somewhat (criterion C). For example, a reinforced concrete slab bridge that has been widened on one side might not be individually eligible, but if it has retained much of its original appearance and is from the period and area(s) of significance of the district, the bridge might contribute to the historic character of the district and thus be evaluated as a contributing resource. On the other hand, a steel multi girder bridge that has been widened to both sides and had original railings removed and replaced

with safety shape barriers, no longer appears or functions as it did when the district achieved its significance and would be evaluated as noncontributing.

APPENDIX F:

Definitions for Programmatic Agreement on the Federal Aid Highway Program

- A. Previously Disturbed: As pertains to Stipulations II. and III. of this Agreement, shall be understood to mean areas in which the natural stratigraphic soil profile has been significantly altered due to construction activities (e.g., cut and fill, grading). This definition does not include relatively minor alterations of the profile such as are caused by plowing or intermittent disturbance such as logging.
- B. Area of Potential Effect (APE): "The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." (36 CFR Part 800.16(d)). For the purposes of this Agreement, this definition shall be understood to include, but not necessarily limited to, an undertaking's proposed footprint of construction, right of way acquisition, permanent and temporary easements, as well as any staging, stockpile, disposal, access, new borrow, stormwater management and wetland mitigation areas, or other ancillary activity area(s) directly associated with the undertaking. SHPO's guidance on Assessing Visual Effects on Historic Properties shall be used to aid in developing a visual APE.
- C. Pipe: A pipe structure that carries water and is constructed from, concrete, corrugated metal pipe, or high-density polyethylene (HDPE).
- D. Federally Recognized Indian Tribes (Tribes): Tribes means an Indian tribe, band, nation, or other organized group or community, including a native village, regional corporation, or village corporation, as those terms are defined in Section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians (36 CFR Part 800.16(m)).