

APPENDIX D
HISTORIC STRUCTURES DOCUMENTATION
AND COORDINATION

From: Larrivee Joan (DOS)
Sent: Friday, October 21, 2011 4:51 PM
To: Hahn Michael (DeIDOT)
Cc: Davis Gwen (DOS); Fulmer Terry (DeIDOT)
Subject: Christina River Bridge Project evaluations

Dear Mike:

I have completed my review of the document which evaluates four properties related to the Christina River Bridge project. As we discussed and agreed, these evaluations would be added to the evaluation report that was prepared for the South Market Street Safety Improvement project. I reviewed your "abstract" and have some comments on this section and integrating the evaluations into the larger report, but my main purpose was to review the evaluations and determine if we concur with your determinations.

Regarding the final point above, we concur that the four properties do not retain sufficient significance and/or integrity to make them eligible for individual listing in the National Register of Historic Places. In addition, although you did not specifically make this determination in the document, the documentation contained in it supports a determination that there is no cohesive historic district that is eligible for listing in the National Register of Historic Places. However, the discussion of each property under Criterion D does need revision. There is no need to address the hazardous waste issue in this section. A separate report is being prepared which will address the below ground resources, if any, and any impediments to finding them. It is appropriate to cite the common construction of the various properties as being not significant under Criterion C. It would be important to note in this section if your research indicated evidence of any remaining equipment related to significant activities carried out on these properties. The most interesting of the activities was the rendering process carried out at N04353. However, as you have indicated the building dates to the period after the Beste Company's ownership, and no other buildings remain from the period when it was owned by the Beste Company so it is unlikely that any equipment remains.

As these evaluations will become part of a larger report prepared by a consulting firm, we felt that it was important to make clear how such an action took place. The section you have noted as an Abstract is more appropriately introductory material. The Abstract for the revised report should be limited only to contain only the dates of the surveys, location information, the purpose in which section you may expand briefly on the two projects, and the summary of the survey results (# of properties newly identified, # of properties for which survey information was updated, and # of acres), and finally the location of the records. The Abstract should be kept to one page if possible. The Introduction would contain the information you have included here integrated into any of the text from the earlier survey report. It will be important to have a map which clearly identifies the two survey areas. The Research Design, Fieldwork Results and Historic Context sections should be revised, as appropriate, to address any new information resulting from this study. This may require only a sentence or two to be added to each section. However, it should be clear that this information applies to this survey. There should be an updated summary chart which contains the CRS number, street address, tax parcel, property name, property function, and eligibility determination. It should be clear who made each determination. Therefore, if you integrate these evaluations into the same chart as those prepared by the other consultant, you will need to add a column for evaluator. The Conclusions and Recommendations section should also be checked for possible revisions. Because so many changes are being made, when the draft final of the report is submitted, a more in depth review of the document will be required.

Finally, the document would benefit from editing by an independent editor to ensure clarity. There are a few points I wanted to make because they are repeated in several places in the document. I recommend that the word "insignificant" not be used; more appropriate terms would be "not significant" or "lacks significance;" there is a subtle but important difference. Often, when a singular National Register criterion is cited, the work "criteria" is used. This is incorrect as it is the plural of the word "criterion" and only used when multiple NR criteria are being

cited. In several places the river is called the Christiana instead of the Christina. The fencing is appropriately named "barbed" or "barb" wire, not "bob" wire.

We look forward to receipt of the complete draft report. Let me know if you have questions, or wish to discuss any of my comments.

Best,

Joan

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SHAILEN P. BHATT
SECRETARY

January 31, 2012

Mr. Timothy Slavin, Director
Division of Historic and Cultural Affairs
21 The Green Suite A
Dover, Delaware 19901

RE: A Finding of No Adverse Effect for State Contract T200512102, Christina River Bridge and Approaches; Federal Aid TBD, New Castle County, Delaware

Dear Mr. Slavin:

The Delaware Department of Transportation (DelDOT), on behalf of the Federal Highway Administration (FHWA), has determined a Finding of No Adverse Effect (36 CFR 800.5(b)) for the above new bridge improvement project. The project has been developed in consultation with the Delaware State Historic Preservation Office (DE SHPO). The following documentation is being submitted to support our finding following 36 CFR Part 800.11(e).

Description of the Project Undertaking

DelDOT is proposing a new fixed steel girder bridge crossing the Christina River within the City of Wilmington Riverfront Redevelopment area. The proposed bridge crossing will be located south of the Shipyard Shops (**see Attachment A**). The proposed bridge includes eleven-foot lanes in east and westward direction with a three-foot offset to a barrier on each side. On the north side of the bridge, a ten-foot wide pedestrian/bicycle shared use path will be provided with a two-foot offset on each side, and separated from the vehicular lanes by a 44 inch high barrier. On the south side of the bridge, a six-foot wide sidewalk will be provided, also separated from vehicular lanes by a 44 inch high barrier. This provides an overall bridge width of 54 feet. The bridge navigational clearance will be 12 feet from mean high water level.

The project proposes a skewed crossing of the Christina River to take advantage of the state-owned vacant parcel on the east side just north of the James Court businesses. The east site approach road continues on this parcel to a new signalized intersection at South Market Street. In order to provide alignment access to and from Walnut Street at this new signalized intersection, existing Walnut Street would be shifted west to remain parallel to Market Street through the new intersection. Bridge access from northbound South Market Street would be provided by a left turn lane at the new traffic signal.



The existing right in/right out connection at Walnut Street to Garashes Lane would be relocated north to allow Garashes Lane traffic to access the bridge crossing via the new signalized intersection. Due to the close proximity of the new intersection to James Court, direct access to businesses on and south of James Court from South Market Street would be eliminated (through access still provided via a left turn at the new intersection and the loop road under the US 13 bridge over the railroad). Proposed work on the east side of the river also includes adding sidewalk on the east side of Walnut Street from the project tie-in intersection to an area just south of A Street. This will provide greater pedestrian connectivity for communities and businesses to the new bridge crossing and an existing DART bus stop. A pedestrian signal and crosswalk will also be added to provide pedestrian access from the east side of Walnut Street sidewalk to the ShopRite development.

The western approach roadway would connect to Delmarva Lane through the Shipyard Shops parking lot. Modifications would be required to both the Shipyard Shops and Blue Rocks baseball stadium parking lots in order to limit access points along the alignment. The proposed roadway continues along the existing Delmarva Lane alignment, which connects to Beech Street and provides vehicular access back to Madison Street and Justison Street.

The existing riverwalk would be interrupted by the proposed bridge crossing. Upon completion of the project, users of the riverwalk would have two options for continuing on the path. The first option would be a new 600 linear foot boardwalk extension over the Christina River and under the proposed bridge. The second option is for an at-grade pedestrian/cyclist crossing location that would coincide with the T-intersection of a new access road to the Russell W. Peterson Urban Wildlife Refuge. On the south side of the bridge, 560 linear feet of shared use pathways would connect back to the existing riverwalk from either the at-grade crossing or the boardwalk, providing continued use of the riverwalk to access the wildlife refuge.

Other elements of the project include stormwater management, signing, stripping, and decorative lighting to complement the area.

The new bridge crossing project will be addressed in an Environmental Assessment (EA) for NEPA compliance. Greater information, including visual concepts can be obtained at <http://www.deldot.gov/information/projects/crb/index.shtml>.

APE and Description of Steps to Identify Historic Properties

In an effort to identify historic properties, our project initiation dates back to 2007. We broadly defined the Area of Potential Effect (APE) as a larger study area. The overall APE is illustrated in **Attachment B**. This APE included all possible physical disturbance areas and the bridge itself, to address any visual considerations. We believe the urbanized and contemporary built environment along with characteristics of the area warranted a more limited APE.

The APE involves consideration of one known cultural resource property. The Shellpot Cut-off Railroad Bridge #2 (N04318) had been identified and is being treated as eligible for the National Register. The rail bridge is located approximately 1500 feet south of the new bridge crossing or construction area (see attachment). The circa 1888 swing bridge is similar to its former counterpart, the

Shellpot Cut-off Bridge #1 (N04317), which had been located north along the same railroad line. Bridge #1 was confirmed eligible back in 2002. Since that time, it has been replaced, leaving Bridge #2 as the only remaining bridge in place that displays the historic and engineering significance of the area. In coordination with your office, we agree that impacts to Bridge #2 needs to be evaluated. It is the only remaining original component and feature of the Shellpot Cut-off railroad line with significance and integrity. Although the Shellpot Cut-off rail line (N14118) was not recommended linearly eligible in earlier CRS effort, the supporting bridge is unique. The engineering and design type is the last example known in Delaware and along this railway line.

Under further consultation with your office, we also identified 4 other cultural resource properties as standing structures that could be involved and affected by the undertaking. Those properties had been identified and submitted to your office during the fall of 2011. The cultural resource properties (N04352, N04353, N04354, and N04355) were recommended not-eligible. Your office agreed. As such, we are working to provide a revised draft in the coming days of this report that will be combined with previous overlapping efforts on the Market Street Safety Improvement.

In terms of archaeological studies, our office undertook an in-depth Phase IA background analysis of the anticipated footprint of the undertaking. That report was reviewed by our offices. Results and office consultation recommended no further effort.

A Description of the Affected Historic Property

The Shellpot Cut-off Bridge #2 over the Christina River is the only known cultural resource property within the project's APE that will be involved and potentially affected by the project. The circa 1888 swing bridge is considered eligible for listing on the National Register of Historic Places (NRHP) for its association and engineering design under Criteria A and C. The bridge rail crossing will be situated approximately 1,500 feet south, but within (minimal) visual sight distance for the new Christina River Bridge crossing.

While an individual write up was not specifically prepared for Shellpot Bridge No. 2 this movable swing bridge has unique similarities form its counterpart (i.e. Bridge #1), which was confirmed eligible back in 2002. Both bridges have the same transportation association with being on the same line along with an original construction date (1888) and fabrication company (Philadelphia Bridge Works). In addition, both bridges have the same engineering designer of Cofrode & Saylor that is nationally known. Both bridges exemplify similar design qualities of a Pratt through truss riveted and pinned connection. This bridge type is rare and few remain in the state.

It is uncertain whether the two, movable swing bridges originally had the same dimensions. This is doubtful. Bridge # 1 is further downstream with a more complex navigation system exemplifying a wider river and navigational channel. However within the eligibility form/nomination for Shellpot Bridge # 1, the statement of significance indicates that both bridges are of unique engineering quality and of important transportation association. The SHPO agreed that both structures are significant.

The Philadelphia Bridge Works of Pottstown, PA designed and erected the Pennsylvania Railroad's Christiana River Bridge. The main span consists of a pin-connected, Pratt through truss,

swing span measuring 192 feet in length resting on pivot pier of ashlar sandstone masonry and stone piers also of ashlar sandstone. The bridge also contains eight recently constructed plate girder spans resting on concrete piers. An electric motor formerly powered the swing span that operated with rim bearing rollers and rack and pinion gearing. The bridge is currently operating in the close position and it appears the pivoting mechanisms no longer function. The double track bridge was originally on a part of the Philadelphia, Wilmington and Baltimore Line (current day Norfolk Southern), known as the Shellpot Cut-off line.

Bridge #2 is locked in position and the mechanical systems are inoperable. The bridge has been known to be locked in-place for decades. It is uncertain whether the swing bridge can be maneuvered manually with backup cranks, or must be pulled and opened by other manual forces. Although there is a 150 foot navigable river channel on charts, shipping or water transport is limited towards smaller boats and rowing crews. Bridges both upstream and down have differences in operation and underclearance. The proposed 12-foot navigational underclearance with a fixed span will effectively permit existing emergency and limited recreational activities to continue under current day operations. Bridge # 2, however, has the least vertical clearance of 6 feet (mean high water).

A Description of the Undertaking's Effects on Historic Properties

Based on the proposal to construct a new fixed span bridge approximately 1500 feet away, the proposed undertaking could have a visual impact on the Shellpot Cut-off Railroad Bridge #2. The historic rail crossing will be visually seen from a distance for travelers and pedestrians on the new bridge, approach areas, and extended river walk.

However, it is determined that a Finding of No Adverse Effect is the appropriate finding and that none of the defining characteristics on the historic property would be adversely affected.

An Explanation of Why the Criteria of Adverse Effect were Applicable or Inapplicable, Including Conditions or Future Actions to Avoid, Minimize, or Mitigate Adverse Effects

As described in 36 CFR 800.5 (a)(1) and (2), the Criteria of Adverse Effect has been applied to this undertaking. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. When considering the criteria of adverse and what constitutes as an effect (36 CFR 800.16(i)) effect, DelDOT on behalf of the FHWA, and in consultation with the DE SHPO, has concluded that this undertaking does not result in an adverse effect.

The following examples of adverse effects under 36 CFR 800.5(a)(2) are cited below. They were applied to the undertaking and were not found adverse.

Introduction of visual, atmospheric or audible elements that could diminish the integrity of the property's significant historic features (36 CFR 800.5(2)(V)).

The remaining examples considered under 36 CFR 800.5(a)(2) did not apply.

The minimal visual change along the Christina River involving the construction of new fixed span bridge and river walk extension is minor and would not be deemed adverse. In fact, bridges around or over the Christina River (and elsewhere) are meant to be visually seen and appealing to complement one another. Based on our visuals that we have provided, the new bridge crossing will be harmonious within this area and relatively consistent with other bridge crossings and engineering types in the area. From the pedestrian's visual perspective, just because bridges in the area can be seen from other another does not mean that visual effects are judged adverse against each other and within their urbanized setting. Moreover, concepts developed of the undertaking are visually appearing and would not detract the area or overshadow relevance of the Shellpot Cut-off Bridge #2. Moreover, on portions of the existing riverwalk, the Shellpot Cut-off Bridge #2 can already be seen and viewed. With new elements being approximately 1500 feet away, this aspect would not change or negatively impact defining characteristics now or in the future.

As such, visual changes in the area would not be intrusive and would not negatively diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. Contributing elements of the railway bridge are not adversely affected.

The above evaluations and past coordination is the basis for determining that known historic properties will not be adversely effected.

To ensure that this project is consistent with our finding of no adverse effect, the following provisions and special notes can be developed during development of the plans and construction phases.

- Any plan modification, alteration, or additional scope proposed will first be coordinated with the DelDOT Project Engineer and the Environmental Studies Office. If necessary, they will coordinate with the SHPO, Federal Highway Administration (FHWA), or any other interested party such as the City of Wilmington Preservation Planner before any action is implemented. Proposed or necessary modifications and changes will be reviewed to ensure proper treatment and considerations to any existing or potential historic properties.
- Stipulation of our general disposal site provisions.

Copies or Summaries of Any Views Provided by Consulting Parties and the Public

During the project development, the DelDOT, Wilmapco, the City of Wilmington, the Riverfront Development Corporation, and FHWA hosted and/or sponsored public workshops and special initiatives meetings. To our knowledge, no concerns were ever issued or tabled for concerns on impacts to historic properties. Potential visual impacts to Shellpot Cut-off Railroad Bridge #2 were never an issue.

We understand that significant change in the scope of the project or expanding the level of effort would require us revisiting our Finding of No Adverse Effect. Furthermore, if measurable changes or damages occur in the field, we may have to consult. However, we believe that none of those measures will occur.

Based on the above and our coordination with your office, we request your 30-day concurrence with our finding of no adverse effect. If there are any questions, please contact Michael Hahn (302-760-2131) of my section.

Sincerely,



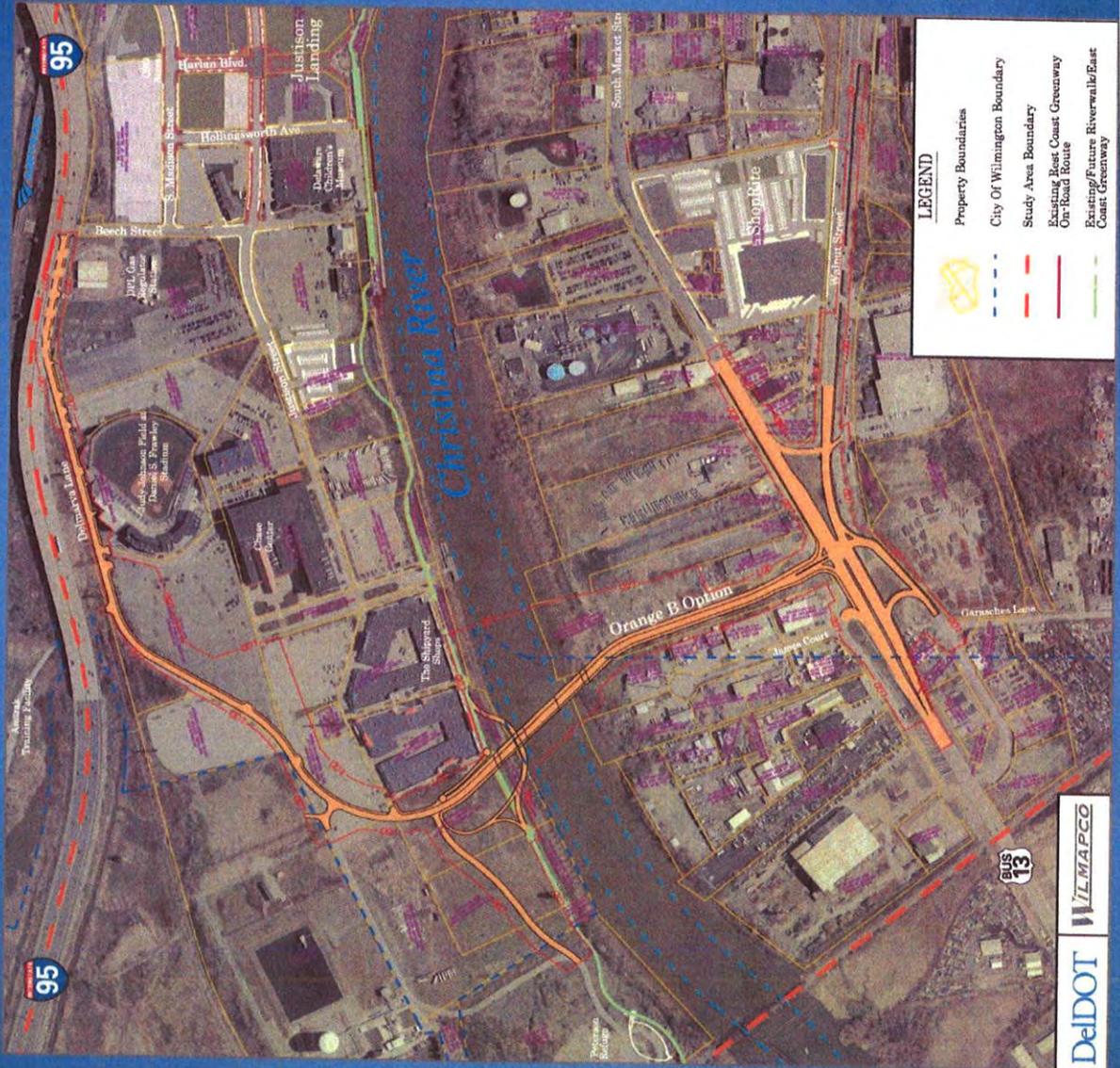
Therese M. Fulmer, Manager
Environmental Studies

TMF/mh

(attachement)

cc: Dan Montag, FHWA
Nick Blendy, FHWA
Gwen Davis, DE SHPO
Robert McCleary, Assistant Director, Engineering Support
Ray Petrucci, Project Engineer
Michael Hahn, Project Manager
David Clarke, Archeologist
Peter Besecker, City of Wilmington
Debbie Martin, City of Wilmington
Dave Blankenship, City of Wilmington
Erron Ramsey, R, K & K Engineers, Inc.
Nancy Bergeron, R, K, & K Engineers, Inc.
Michael S. Purzycki, Riverfront Development Corporation
File

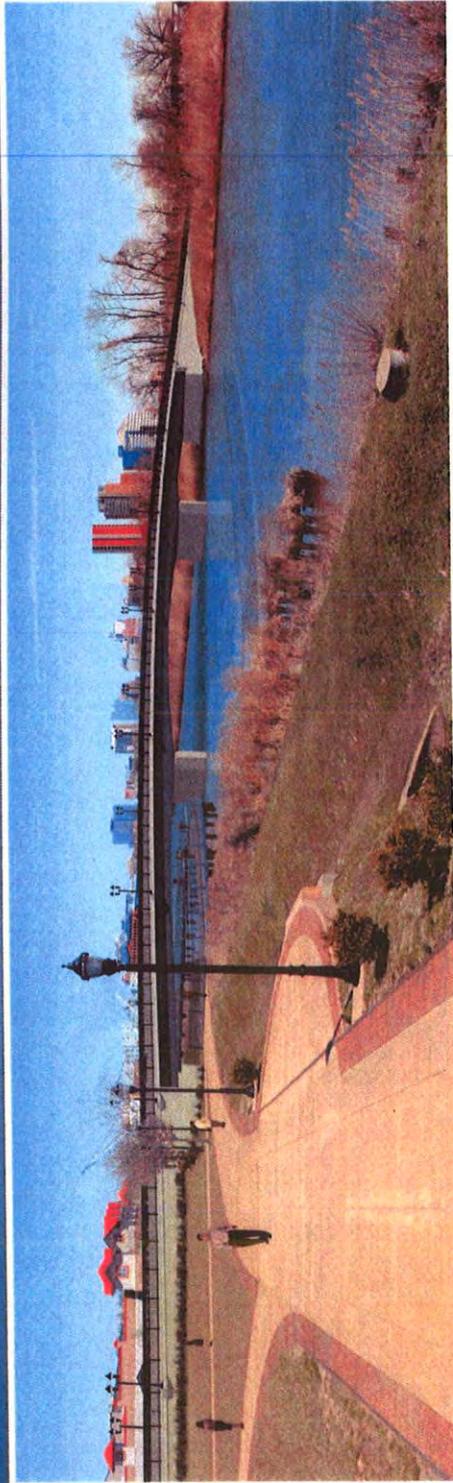
RECOMMENDED ALIGNMENT



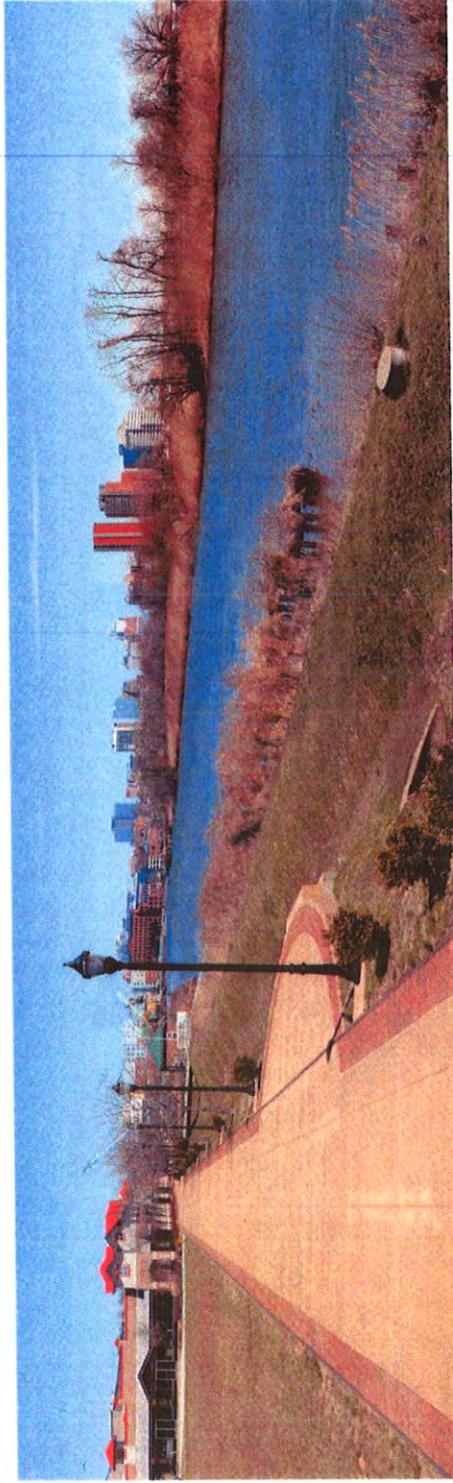


RECOMMENDED ALIGNMENT

Attachment A: page 2 of 2



Conceptual Rendering

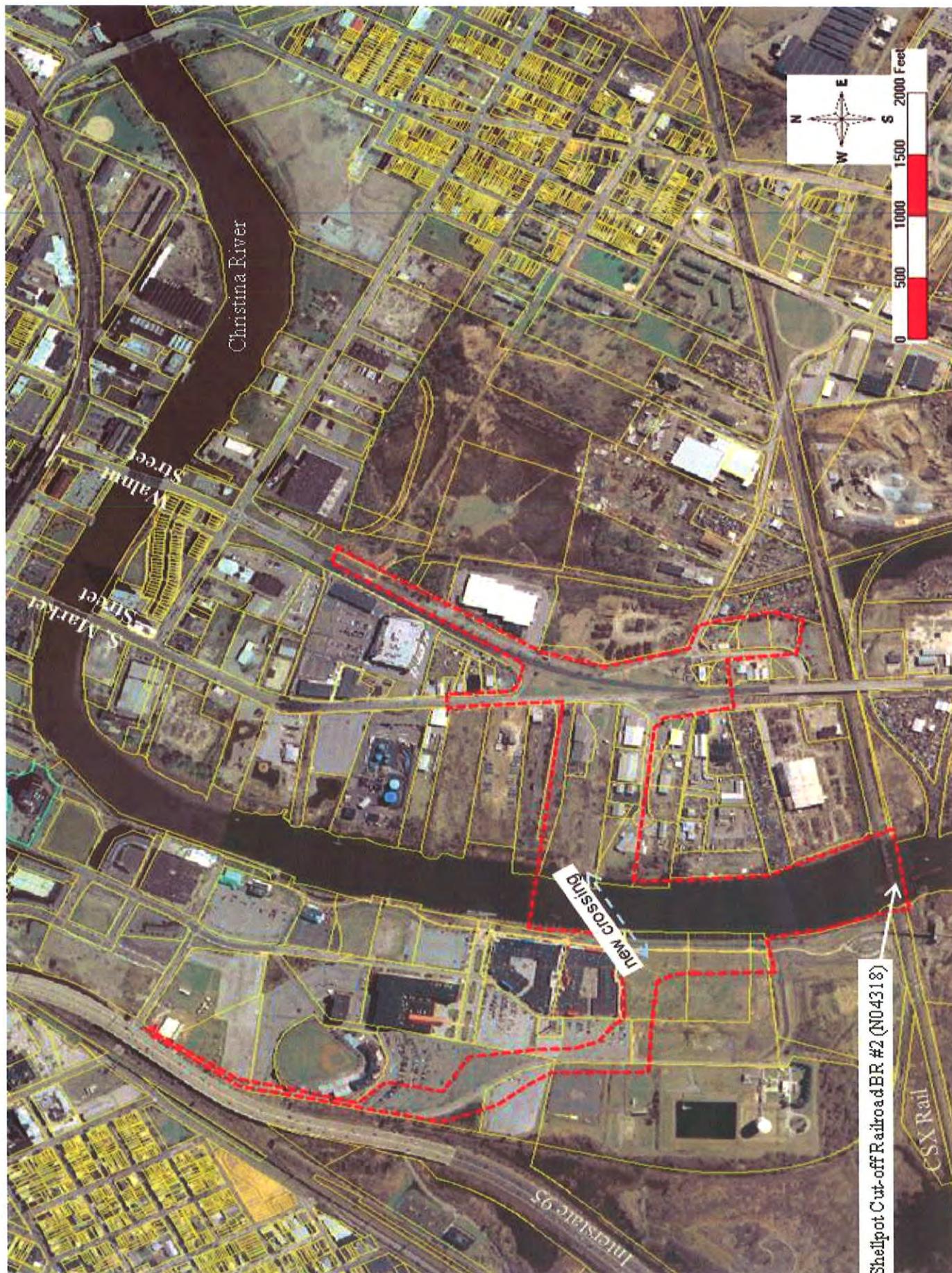


Existing Conditions

WILMINGTON RIVERFRONT
Christina River Bridge
Recommended Alternative
Rendering

SHEET: 081 DATE: 03.11.2011

Logos for project partners:



Area of Potential Effects for Christina River Bridge

Attachment B

From: Davis Gwen (DOS)
Sent: Wednesday, February 22, 2012 7:00 PM
To: 'Debbie Martin'; Hahn Michael (DeIDOT)
Cc: Larrivee Joan (DOS); Fulmer Terry (DeIDOT); 'Nick.Blendy@dot.gov'; Montag Daniel (FHWA); Petrucci Raymond (DeIDOT)
Subject: RE: T200512102: Christina River Bridge, Finding of No Adverse Effect

Mike, sorry I did not have the opportunity to return your call during regular working hours today.

All,

Having now reviewed the effect documentation, our file on the project, and the recent email exchange, I would like to offer the following comments:

Area of Potential Effect

Documents we have on file over the history of the project include 4 different proposed APEs. The 2007/2008 (project initiation materials) maps and a January 13, 2011, map prepared by RK&K depict large areas that encompassed the various alternatives under consideration at those times. The October 2011 Phase IA archaeological reconnaissance report identified an APE that was confined to the Limits of Disturbance, as known at that time. Finally, the effect document included a new APE (Attachment B); I believe this is the first time we have seen this particular map (?).

While I agree that it is appropriate for the APE to be more limited than is typical for a project of this nature, it is still important for the APE to include all areas in which physical disturbance could occur and immediately adjacent areas which are known to contain or may contain historic properties that *may* be affected by the project. On the first point, the APE shown in Attachment B should be adjusted to match the LOD line south of the Shipyard Shops as shown on Attachment A. On the second point, I agree with Debbie that if it is reasonable to include the Shellpot Cutoff Railroad Bridge #2, then it is equally reasonable to include the extant Dravo cranes that are closest to the LOD.

Efforts to Identify Historic Properties

The effects document inaccurately states that Shellpot Cutoff Railroad Bridge #1 was replaced. It did undergo significant rehab ca. 2002, but to our knowledge it was not replaced. Please let us know if you have found information to the contrary, so we may update our records for this National Register-eligible resource. As previously discussed with DeIDOT, we agree that Shellpot Cutoff Railroad Bridge #2 should be considered eligible for listing in the National Register of Historic Places.

As to the archaeological reconnaissance, I advised DeIDOT of concerns with the consultant's overly broad assertions about the potential significance of industrial archaeological resources such as might be within the LOD. Consultation with other SHPO archaeologists did not, however, result in a strong objection to the recommendation of no further work in this case. Nevertheless, I caution DeIDOT against assuming that this study represents a consensus on

criteria of eligibility for such resources, and recommend that the report be amended in consideration of our comments (November 30, 2011).

The effects document accurately reflects the SHPO's concurrence with the scope and result of the architectural evaluations conducted for this project. We hope the final report will fully take into account our October 2011 comments, as well as our 2009 comments on earlier submittals.

Effects on Historic Properties

I concur that the Railroad Bridge #2 (and the Dravo Cranes) will not be adversely affected by the proposed project. This concurrence is given with the standard conditions, partly referenced in the effects documentation, e.g., further consultation with DE SHPO, the City and other interested parties if the project design and/or footprint are significantly modified from those presented in the conceptual plans. DelDOT should keep us informed on the project status as construction plans are developed.

Thank you for your consideration of these comments. If you have any questions, please do not hesitate to contact me.

-- Gwen

-- Gwenyth A. Davis, Deputy State Historic Preservation Officer

Delaware Division of Historical & Cultural Affairs

21 The Green, Dover, DE 19901