

**Delaware Department of Transportation, Office of Preconstruction, Environmental Studies  
Lower New Castle and Kent Counties, Delaware, Field Review Minutes for May 15, 2001  
FINAL**

In Attendance: Carol Sullivan, DelDOT  
Ann Montone, DelDOT  
Patrick Carpenter, DelDOT  
Mike Hahn, DelDOT  
Joanne Haughey, DNREC  
Gwen Davis, SHPO  
Kevin Faust, COE  
Eric Zuelke, DNREC Natural Heritage Program  
Thomas Nobile, ERI

Site 1: Bridge 407A (& Bridge 504) on Silver Lake Road at Silver Lake, New Castle County

**Water body:** Silver Lake mill race and spillway

**Description of Project:** Replacing bridge (Br 407A) with concrete box culvert and refurbishing sluice gates. Placement of rip-rap on pond side and vegetative cover on side slopes. Attachment of guardrail to the bridge. Reconstruction of boat ramp to tie into the existing roadway. In addition, a fish ladder is being proposed for passage over the lake impoundment (Br 504).

**Additional Personnel Joining Group at Site:** Doug Finney, DelDOT  
Barry Benton, DelDOT  
Chuck Hegberg, KCI  
Paul Nasados, KCI

**Background:** This bridge (Br 407A) crosses a steep-sided mill race at the north side of the Silver Lake impoundment. It has been widened from one lane to its current form in two stages; probably in the 1930's and then in the 1950's. The design has been reviewed by the owners. There is rip-rap in the channel at the upstream side of the bridge now. On the west side of the road there is an existing boat ramp that needs to be addressed in the design. To the east side there is a drive way that must be incorporated in the project. Flow through the race will likely be cut off during construction. At the request of the owners, work is to be scheduled for January, February and/or March. This area is being considered as an historic district.

An Alaskan steep pass with a return is proposed that will be approximately 50 feet long, down stream of Bridge 504. The return incorporates a plunge pool. A temporary dam may be necessary for the ladder construction. Species likely to use the ladder at this location are blue back herring, alewives, and shad. The individual fish are attracted by the water moving from the lower portion of the ladder flowing at 5 feet/second. Within the ladder, flow is only 1

foot/second. The structure is opened in spring for upstream migration and spawning. It is closed by June for the down stream movement of juveniles.

**U.S. Army COE:** Since the wetland impacts are likely to be minimal and there is federal funding, NP 23, Approved Categorical Exclusions, appears to be applicable for all proposed work. There are no wetlands along the race banks or in the vicinity of the fish ladder.

**DNREC:** A subaqueous lands application will be needed only for the fish ladder.

**Historic:** There are aesthetic concerns with regard to matching the existing design on Bridge 504 on the replacement of Bridge 407A. Also, the surrounding lands were the setting for milling operations, which is part of a proposed historic district. The effect of the fish ladder on the overall appearance of the impoundment (Br 504) is also a concern.

**Natural Heritage:** With regard to the mill race, there are non-native as well as rare mussel species. These stream dwellers have specific water movement and fish host needs to consider. There are shallow nests noted under structure. Therefore, winter construction is suggested. If the work is completed in late winter or early spring there are no rare species concerns.

Site 2: Choptank Road (SR 15), northwest of Middletown, New Castle County

**Water body:** unnamed tributaries to Great Bohemia Creek

**Description of Project:** Pavement rehabilitation and widening travel way. Addition and correction of drainage. Improve the horizontal and vertical geometry of the road way. Provide a lane for bicyclists and pedestrians.

**Additional Personnel Joining Group at Site:** Nick Blendy, MTA (Transportation Planner)  
Rick Kiegel, MTA (Project Engineer)  
Laren Myers, MTA (Natural Resources)  
Amy Seavey, MTA (Historic Resources)

**Background:** This 5 mile project from Bunker Hill Road to Bethel Church Road is in the planning stage. Existing right-of-way is generally 30 feet along Choptank Road which consists of 18 to 20 ft. of paved roadway in need of repair, poor drainage and serves as Bike Route 1. General goals of the plan are 11 foot travel lanes, 5 foot shoulders, no curbs, and mostly open drainage (for infiltration as there is a lack of outlets.) Improving motorized vehicle travel is the main effort. Bike and pedestrian traffic proposed along the shoulders. The option of a shared ped/bike pathway separated from the roadway would require acquisition of much more right-of-way. Drainage improvements are needed to reduce pavement damage. No storm water ponds are proposed, but locations are being evaluated in the event they are necessary. The existing center line of the road will be maintained if much as possible. Where alignment is corrected or the road widened, consideration has been given to mature trees, historic as well natural resources, and utilities to minimize impacts and complications. Roundabouts are proposed at three intersections. Bridge 377 is within the project area, but is a separate workscope being addressed by other consultants. There are no impacts from the Choptank Road work within identified wetlands of the bridge replacement. Funding sources have not been identified.

**U.S. Army COE:** Minimal wetlands to delineate. Much of the area near the road is in active agriculture.

**DNREC:** Most of the drainage ways are small and may qualify for exemption in SB 186 as they will be replacements.

**Historic:** There are high and low probability archeological sites along the project. Some surveying may be needed.

**Natural Heritage:** No specific concerns at the time.

Site 3: Carter Road, southwest side of Smyrna, Kent County

**Water body:** Mill Creek flowing east into Lake Como

**Description of Project:** Provide pedestrian and bicycle paths. Improve drainage and correct site distance.

**Additional Personnel Joining Group at Site:** Nick Blendy, MTA (Transportation Planner)  
Laren Myers, MTA (Natural Resources)  
Amy Seavey, MTA (Historic Resources)

**Background:** This one mile project proposed along Carter Road from Sunnyside Road to Wheatley's Pond Road is in the planning stage. There is a 40 foot right-of-way with 20 feet of paving for travel lanes with intermittent sidewalks along new developments. Roundabouts are being considered for each end of the project, but may begin as four-way stops. Looking to construct 11 foot travel lanes with 5 foot wide shoulders or a separate pathway for bikes and pedestrians to improve safety. May use a combination of shoulders and sidewalks with curbs or aprons for drainage. Will need to evaluate safe pedestrian crossing locations. There are drainage improvements proposed in the vicinity of Mill Creek. The crossing of Mill Creek, Bridge 137A, does not appear to need widening. Funding sources have not been identified.

**U.S. Army COE:** Wetland boundaries will need to be delineated where appropriate.

**DNREC:** From this initial description there does not appear to be any DNREC involvement.

**Historic:** The potential storm water management area is a high probability archeological site. Location K122 is on the National Register of Historic Places, but no structures are adjacent to the road. Also, there are two historic districts just beyond the project limits.

**Natural Heritage:** There were no specific concerns at the time.

Site 4: Walker Road, northwest side of Dover, Kent County

**Water body:** McKee Run, tributary to Silver Lake

**Description of Project:** Addition of shoulders and sidewalks as well as a storm water pond.

**Additional Personnel Joining Group at Site:** Tom Carroll, Landmark Engineering

**Background:** The goal is to improve pedestrian and bike safety by adding shoulders and sidewalks within existing features and neighborhood concerns. Improvements are to be made from Saulsbury Road to Kenton Road. This has resulted in some conflicts with City of Dover sidewalk standards, but they are being resolved on an individual basis (per Tom Carroll). Bus stops may also be included. The row of pine trees along The Hamlet Homes Association is in general declining health and will be replaced. Species selection has not been made, but they will not be planted on the nearby berm. Funding sources have not been identified.

**U.S. Army COE:** The wetland boundary as illustrated on the plans along both sides of Walker Road at the head of McKee Run is fine. Impacts to be minor and likely federal funding: NP 23.

**DNREC:** Not present. The blue line for McKee Run ends north of the project.

**Historic:** There is a potential historic district to consider.

**Natural Heritage:** No specific concerns at present.

Site 5:Governors Avenue, south side of Dover, Kent County

**Water body:** Puncheon Run

**Description of Project:** Addition of turn lanes along the corridor and at the main intersections to accommodate the emerging traffic demands being generated by the changing land-use patterns. Drainage improvements are also to be addressed.

**Additional Personnel Joining Group at Site:** Nick Blendy, MTA (Transportation Planner)  
Mark Luszcz, MTA (Project Engineer)  
Laren Myers, MTA (Natural Resources)  
Amy Seavey, MTA (Historic Resources)

**Background:** This planning study covers 1.7 miles along Governors Avenue from Webbs Lane north to Water Street. Overall, the level of service at some intersections is inadequate as a result of the emerging traffic from an increasing number of commercial properties in the neighborhood. Safe movement for pedestrians and bicyclists is discontinuous and public transportation is not well incorporated. The extent of adjacent development and variable width of right-of-way allows for minimal realignment in this area. Utilities serving these businesses will likely complicate any attempts to improve service. Options are limited. The City would prefer that the design including two 11 foot travel lanes, 10 foot shoulders, a three foot buffer, and a 4 to 5 foot wide sidewalk. Another design would include two 11 foot travel lanes, a 14 foot center turn lane, shoulders reduced to 5 feet, a three foot buffer, and a 5 foot wide sidewalk. In addition, the design will seek to limit "open access" points. In addition, there are known drainage problems in the Water Street area to be addressed. Public input will be sought at workshops. Funding sources have not been identified.

Conflicts with cultural and archeological resources are likely, but research has not been completed to date. Most structures date from around the 1920's and 30's. Bridge 3B over Puncheon Run may not be one of the historical concerns and it is probably structurally sound. There is minimal resource value associated with this channelized stream with rip-rap stabilized banks within the limits of this project.

**U.S. Army COE:** Not present. If there is federal funding, NP 23 is likely suitable as the opportunity to impact jurisdictional waters is limited.

**DNREC:** Not present. It is likely that SB 186 will address any potential modification of the existing bridge.

**Historic:** No research has been completed at this time, but general knowledge of the area leads to the conclusion that potential conflicts are likely to exist.

**Natural Heritage:** No specific concerns at the present.