

Building for Tomorrow

The Indian River Inlet Bridge Newsletter

A publication by the Delaware Department of Transportation (DelDOT)

May 2011



David Clarke
(DelDOT)

In this month's issue of *Building for Tomorrow*, we are going to be taking a closer look at the history of the Indian River Inlet Bridge and the area that it calls home. May is Archaeology Month in Delaware and we are celebrating the work that DelDOT's archaeologists and consultants do to find out the hidden stories and history of areas, like the Indian River Inlet. Like any other project, archaeological work was done at the bridge site

to determine what historically and culturally significant items might be present.

This month's featured guest is David Clarke, a DelDOT Archaeologist. David holds a Bachelor Degree in Anthropology/Archaeology from Mercyhurst College in Erie, PA, and a Master's Degree in Archaeology from the University of Montana. David has worked on projects throughout the state and has found some great artifacts during his years at DelDOT.

What's Archaeology and History Have to Do With DelDOT?



Reproduction
of George
Washington
Campaign Pin
(DelDOT)

Archaeologists, those people who uncover pieces of history and information from the past, have an important job at DelDOT. With every project that is undertaken, there is an opportunity to uncover the past.

One example is that several years ago during the Blue Ball project in New Castle County, a campaign pin for George Washington (you know, the first President) was found. They also uncovered parts of ships in areas of Sussex County, like Roosevelt Inlet.

Beginning in December 2011, DelDOT, working with the Delaware Division of Historical and Cultural Affairs, will be unveiling a new exhibit that will highlight the history of the Indian River Inlet. Be watching for this great opportunity to see what DelDOT's Archaeologists have found!

What Did Archaeologists Find at the Indian River Inlet Bridge?



As DelDOT prepared to replace the Indian River Inlet Bridge, we needed to comply with the National Historical Preservation Act of 1966, which requires archaeologists to identify cultural resources that may be impacted by the new bridge when it is being built.

A study was undertaken for the Indian River Inlet Bridge project, which consisted of collecting data on known cultural resources within five miles of the inlet, an evaluation of submerged artifacts in the surrounding bridge approach area, as well as taking a look at the sand and clay layers of the soil around the bridge.

The study found that the harsh environment (winds and tidal currents) would make it difficult for native Americans to have lived along the coast near the inlet. It was determined that no Native Americans, or anyone else, had lived there due to those difficult conditions. The lack of people living around the area meant that there were not many artifacts uncovered during the archaeological work at the bridge.

While this site was not an exciting archeological find, it did provide us with the information we needed regarding the history of the geology of the inlet.

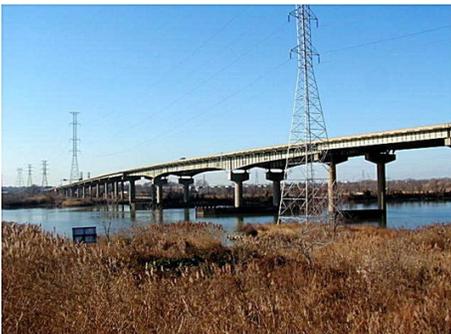
A History of Bridges at Indian River Inlet and in Delaware

While discussing the importance of archaeology to the Indian River Inlet Bridge project, we wanted to take a few moments to give some historic information about the bridges that have called the span over the Indian River Inlet home. We also wanted to include some information about other bridges in Delaware that you may not know.

The new bridge will be the fifth bridge to stand at the site since the first timber bridge was built in 1934. That bridge was replaced in 1938 by a concrete and steel movable swing bridge, which stood until it was washed away in 1948. In 1952, another concrete and steel movable swing bridge was built at the site. It was later destroyed by an ice flow. 1965 saw the construction of the current steel girder bridge that stands at the site, which had another side added in 1976 due to increases in traffic.



Delaware Memorial Bridge (Tim O'Brien, DeIDOT)



Bridge 1-813 over the Christina River (DeIDOT)

Delaware Bridge Facts

- Oldest Bridge - Bridge 1-617 on Old Lancaster Pike, Southeast of Hockessin. It is a stone arch bridge, built 1808.
- Longest Bridge - Bridge 1-813 on I-495 over the Christina River is 4,396 feet long.
- Longest Span - Bridge 1-813 on I-495 over the Christina River has a span of 325 feet.
- The Delaware Memorial Bridge is the longest Twin Span Suspension Bridge in the world.

A Moment of Bridge History



Charles W. Cullen

While Charles West Cullen is not a well-known member of Delaware history today, he was, at one time, one of the most powerful men throughout the state. Mr. Cullen was born on July 8, 1865, to Charles Mason Cullen, and his wife Catherine in Georgetown, Delaware. Charles M. Cullen was then a lawyer and judge, who later served as a member of the Delaware Supreme Court from 1890 to 1897.

Charles W. Cullen enjoyed a privileged childhood, attending the Georgetown Academy and Dr. Thompson's Private School in Milton. He followed in his father's footsteps through college, graduating in 1885 from Delaware College with a law degree. Following graduation, he returned to Georgetown to study law at his father's practice, where he diligently worked until being admitted to the Delaware bar in April 1888. After his admittance to the bar, Mr. Cullen officially became associated with his father's practice, which became known as "Charles M. Cullen and Son." Father and son continued to work together until the father's appointment to the Delaware Supreme Court in 1890. Even though he was no longer associated with his father, the younger Cullen continued to gain a reputation for his work. By 1933, He was so well respected, he was appointed as a federal referee to oversee the bankruptcy of Pick Barth Holding Corporation and the Radio-Keith-Orpheum (RKO) Southern and Western Corporations.

Mr. Cullen was inherently civic minded, which is evident when you look at some of the activities in which he was involved. He was a member of the Sussex County Bar Association, the Delaware Bar Association, the Free and Accepted Masons, and he served as the Captain of Company "G" in the Delaware State Militia. Mr. Cullen was also a member of Governor Robert J. Reynolds' personal staff, which prepared him for some of his future work.

In 1930, Mr. Cullen joined the State Highway Commission, which oversaw the State Highway Department, created on April 2, 1917. There he served as the Chairman of the Commission from 1938 to 1939, and remained as a member of the Board until 1940. It was during his time as Chairman that work began on a new bridge to span the Indian River Inlet, to replace a deteriorated wooden span that had been constructed in 1934. The new bridge was dedicated on May 18, 1940. Because of Mr. Cullen's service to the citizens of Delaware as Chairman of the Department during its construction, the bridge was officially dedicated as the Charles W. Cullen Bridge. Sadly, over the years Mr. Cullen's name has been forgotten and the bridge became better-known as the Indian River Inlet Bridge. Since that time, each bridge that has served the Indian River Inlet has been dedicated to Charles W. Cullen.

Following his service on the State Highway Commission, Mr. Cullen continued to be active professionally and personally. He continued to practice law and he, and his wife Mary, who he had married in 1934, would spend time at "Hawk's Nest," their summer home along the Indian River. It was at "Hawk's Nest" on Saturday, July 10, 1948, that Mr. Cullen suffered a heart attack and was rushed to Beebe Medical Center, where he died that same day. At the time of his death, Mr. Cullen was one of the oldest members of the Delaware Bar Association.

What Is It About Bridges That Fascinates People?

We asked DeIDOT bridge engineers, as well as others from other agencies, what it is about bridges that fascinates people, and here is what they said...



"I think people are fascinated by bridges, especially large bridges, because of their gracefulness and complexity. On the reverse side I think some people are afraid of bridges because of the uncertainty they have in not knowing why they stand up. Depending on your outlook, the complexity can fascinate you or scare you."

- Dennis O'Shea, Division Bridge Engineer, Federal Highway Administration

"Every time I am involved in the design of a bridge, I think about the fact that we are creating something that will serve people long after I am gone. I take pride in the design and construction of every structure I have been involved with (118 total)."

- Barry Benton, Supervising Engineer, DeIDOT



Do you want to take a tour at the site of the new Indian River Inlet Bridge?

You can sign up today!

Tours end August 26, 2011

[Click Here to Sign Up!](#)



Employee Spotlight!



This is where you get to meet someone who is building the Indian River Inlet Bridge!



What is your name?: Cheryl King

Who is your employer?: Skanska USA, Civil Southeast, Inc.; employed for 5 years

What is your job title?: Business Manager

Where are you from?: Lake George, New York

Where do you live now?: Lewes, Delaware

What are some special skills or experience that you bring to the project?: My experience with Skanska has given me background knowledge that has enabled me to know what is expected by our main office from those of us on the job site.

What is your favorite part about working on the project?: The footprint in history that we're leaving...this is a page out of history that for years down the line we will be able to bring our kids and grandkids to see.



Photos from the Job Site

April 2011



A view from the form traveler shows rebar steel being prepared for a concrete pour. Once work is complete on the section, the traveler will move out further for the next pour (Skanska USA Civil Southeast).



As work continues on the new Indian River Inlet Bridge, it is easy to note the progress being made by the form traveler by looking at the increasing number of stay cables (Skanska USA Civil Southeast).



Stay cables are visible as they are being placed in an anchor box on the new Indian River Inlet Bridge. As the cables are fed into the anchor box, they are locked in place to provide the support that the bridge needs (Skanska USA Civil Southeast).



Concrete that has been freshly poured on the form traveler is smoothed. The concrete will provide the base for the road deck that will be placed when the bridge is complete (Skanska USA Civil Southeast).



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Office of Public Relations

800 Bay Road, P.O. Box 778
Dover, DE 19903
1-800-652-5600 or 302-760-2080
dotpr@state.de.us

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