

Indian River Inlet Bridge



2012 Winter Workshop Presentation

By: Craig Stevens

DelDOT Project Engineer

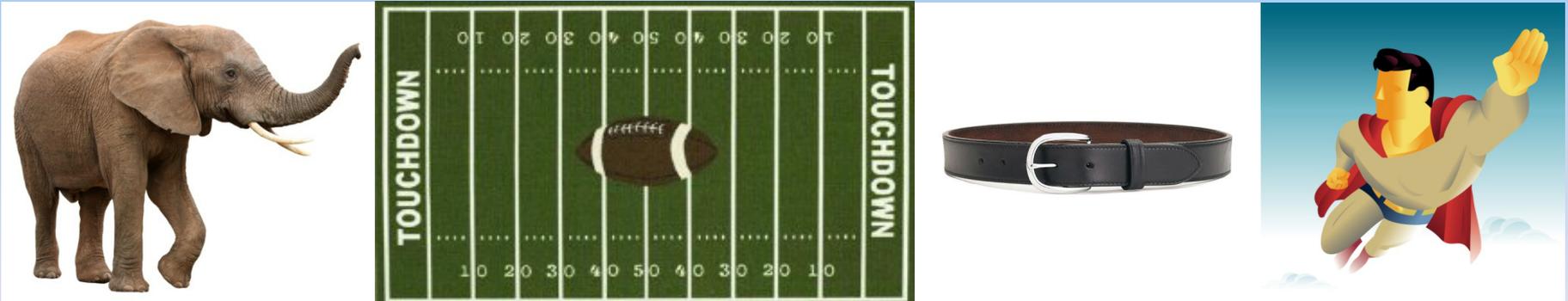
Winter Workshop 2012

Presentation Overview

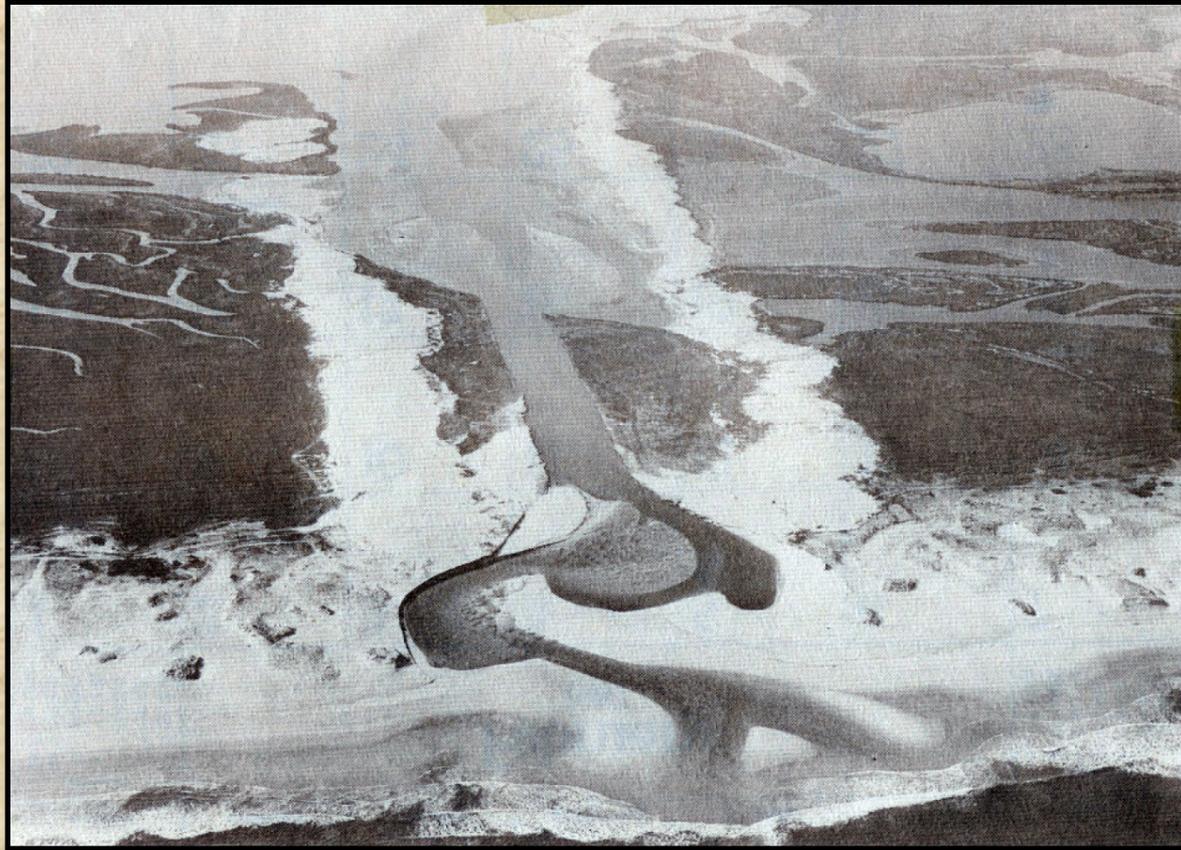
- ❖ Bridge History
- ❖ Construction Update
 - ❖ Bridge Opening
 - ❖ Job Facts
- ❖ Future of Indian River Inlet

Presentation Overview

You will learn what an elephant, a football field, a belt, and a hero have to do the Indian River Inlet Bridge



Bridge History



Aerial photo taken of the Indian River Inlet around 1929
prior to the construction of Route 1.

Bridge History



This photo was taken around 1930 and shows two workers for the Army Corps of Engineers working on Indian River Inlet.

Bridge History



Photos taken around 1933 showing the first bridge (timber) to ever span the Indian River Inlet.

Bridge History



Photo from 1935 showing the construction of a concrete and steel swing span bridge to the left of the first timber bridge that spanned the Inlet.

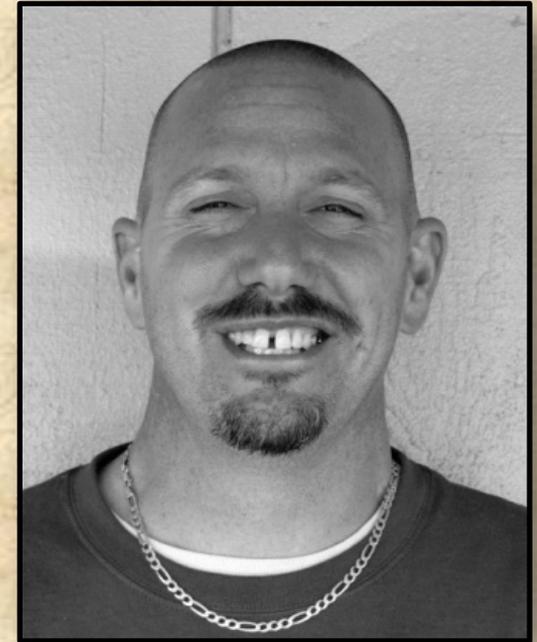
Bridge History

- This is when the bridge was named the Charles W. Cullen Bridge Due to his service to the citizens of Delaware as Chairman of the Department during its construction



Bridge History

- Perhaps its time for a new name....



- How about the Craig A. Stevens Bridge

Bridge History



Another photograph of the original Charles W. Cullen taken in 1940 after construction was complete.

Bridge History



This photograph was taken around 1963 and shows the start of construction for the existing Bridge.

Wait!

Before we go any further...

Barry's Benton's Second Chance

Look here



Last Year's To Do List

- Superstructure (on form traveler)
- Form Travelers
- Cable Stay System (95% Completed To Date)
- Approach Roadway

Approach Roadway Lightweight Foam Fill



Approach Roadway Lightweight Foam Fill



Approach Roadway Lightweight Foam Fill



Approach Roadway

Then the storms rolled in...



Approach Roadway Beach Erosion



Approach Roadway Beach Erosion



Approach Roadway Construction



Approach Roadway Barrier Slip Forming



Approach Roadway Construction



Bridge Superstructure Closure Pour



Bridge Superstructure Closure Pour



Form Travelers

Farewell old friends



Form travelers leave Indian River Inlet to become scrap metal in VA.

Bridge Superstructure Polymer Overlay



Bridge Superstructure Polymer Overlay



Bridge Superstructure Polymer Overlay

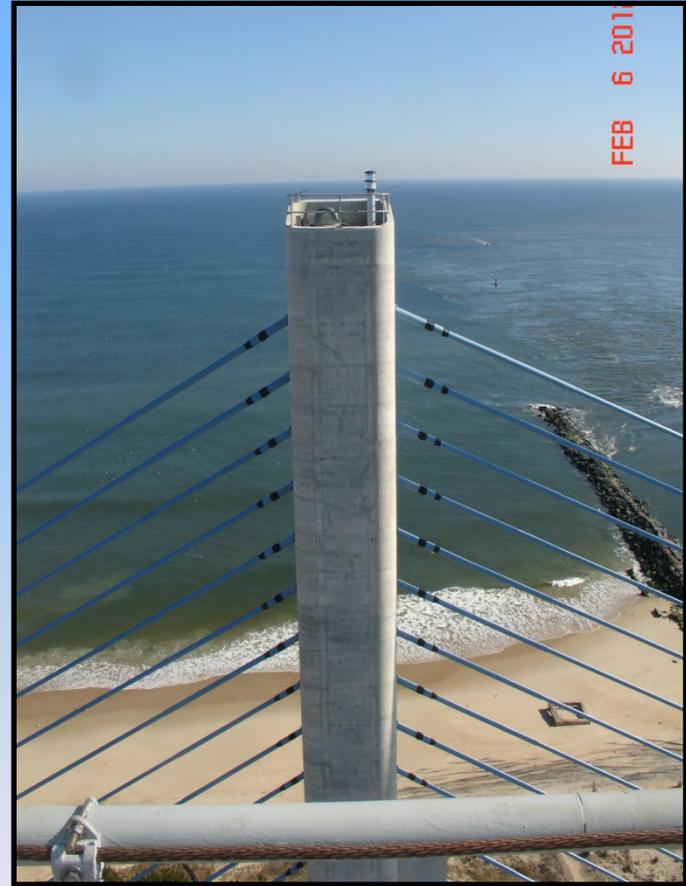


Cable Stay System



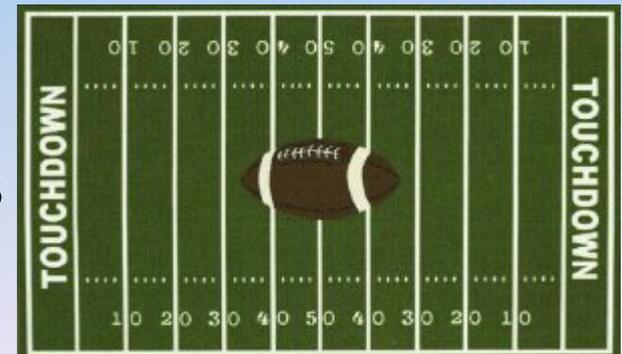
**Stay Cables
Completed –
152 of 152**

**Stay Strand
Installed –
345 of 345
miles**



Indian River Inlet Bridge Fun Facts

- ❖ Total # Piles = 293
- ❖ Single Pile Dimensions:
 - ❖ 3' X 3' X 100' (long)
- ❖ Totaling 29,300' (+/-) of concrete piles in the ground
- ❖ How long is that?
 - ❖ Over 97 American football fields
 - ❖ Over 81 soccer fields



Indian River Inlet Bridge Fun Facts

❖ Cable Stay Steel Length (7 strands per cable) = 1,820,874'

❖ This equates to 345 miles of 7 strand cables

❖ How many football fields?

❖ **6,072**

❖ Cable Stay Steel "Strand" Length = 12,746,118'

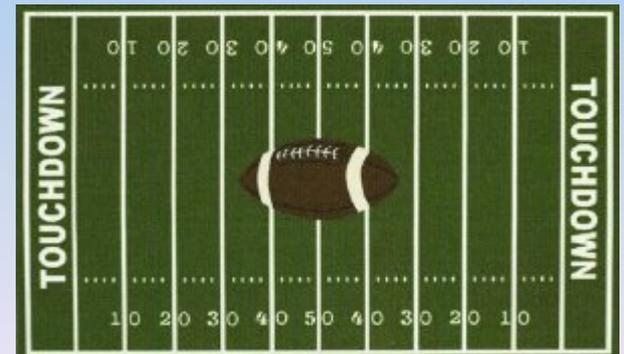
❖ This equates to 2,414 miles

❖ Same as driving distance from

❖ Dover, DE to Phoenix, AZ

❖ How many football fields?

❖ **42,487**



Indian River Inlet Bridge Fun Facts

❖ Concrete

- ❖ Volume poured on-site = 28,093 CY
- ❖ Weight poured on-site = 113,776,650 lbs.

❖ How heavy is that?

- ❖ Equates to approximately 9,481 African Elephants
- ❖ Equates to approximately 568,883 Craig's

❖ How many truck loads of concrete?

- ❖ Equates to approximately 2,810 trucks





Indian River Inlet Bridge Opening Announcement Event
Friday, January 20, 2012

11:30 a.m. at the
DelDOT Field Office
39368 Inlet Road
Rhoboth Beach, DE 19971

Agenda

The event will include
Bridge Opening Announcement with Brief Comments
made by

Governor Jack Markell
Secretary of Transportation Shailen Bhatt
Representative of Skanska USA Civil Southeast, Inc.
Senator Thomas R. Carper

This will immediately be followed by a
VIP Drive Over The Bridge
to include those above and
Senator Chris Coons and Congressman John Carney

FHWA Officials
Senator George Bunting
Representative Gerald Hoyer
Secretary of DNREC Colin O'Mara
Skanska Officials
George & Lynch Officials
DelDOT Officials

Bridge Opening



Our first customers

Bridge Opening



Bridge Opening



Bridge Opening



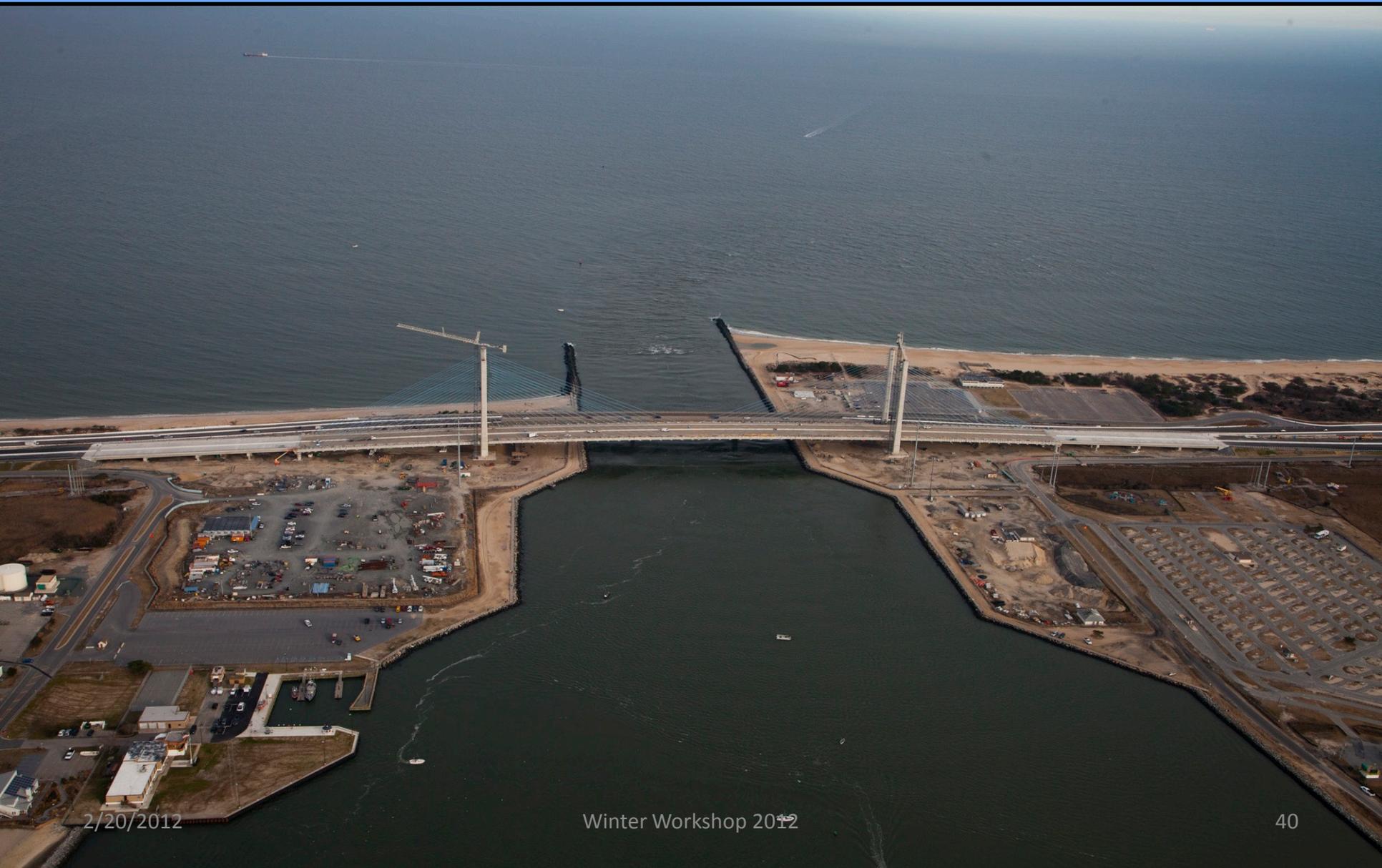
Looking North

Bridge Opening



Looking South

Almost Done



2/20/2012

Winter Workshop 2012

40

More Fun Facts

Database

- ❖ Emails logged into data base?
 - ❖ 29,900 and counting
- ❖ Number of transmittals?
 - ❖ 1,590 and counting
- ❖ Number of DeIDOT issued letters?
 - ❖ 1,170 and counting
- ❖ RFIs logged?
 - ❖ 652 and counting

More Fun Facts

Database

- ❖ Official DeIDOT issued letters to date?
 - ❖ 1,170 and still going
- ❖ Number of official D-B letters?
 - ❖ 523 and still going
- ❖ Total NCRs (both DeIDOT and D-B)?
 - ❖ 161 and hopefully no more

More Fun Facts

Public Outreach

❖ Number of students visiting site?

❖ 1,088 from ages 10 to 21

❖ Number of college groups that visited us?

❖ 17 different groups, same as the number of DeIDOT groups

❖ Number of school groups?

❖ 215 different groups

❖ Number of people that attended our public workshops?

❖ 1600

A DeIDOT Hero



Ladies and Gentlemen, Mr. Douglass Robb

A DeIDOT Hero

Someone didn't think so...



Thanks Doug



Delaware owes a lot to Doug Robb

Thanks to all of you



We couldn't have done it without you