

# PROJECT OVERVIEW FACT SHEET



## **OVERVIEW**

On October 15, 2009, the State of Florida and MAT Concessionaire LLC (Miami Access Tunnel), executed the Final Agreement for the Port of Miami Tunnel (POMT) project, which is a Public-Private Partnership (P3) and is a Design, Build, Finance, Operation and Maintenance (DBFOM) Contract. The Concessionaire's team shareholders are Meridiam Infrastructure (90%) and Bouygues Travaux Publics (10%). Its subcontractors are Bouygues Civil Works Florida responsible for design and construction and Transfield Services Infrastructure responsible for the operation and maintenance.

The project consisted of three components:

- Twin tunnels under Government Cut
- Connections to PortMiami's roadway system
- MacArthur Causeway Bridge widening, realignment of eastbound State Road A1A/MacArthur Causeway lanes and reconstruction of Parrot Jungle Trail frontage road

# MacArthur Cswy Bridge Widening Twin tunnels under Government Cut Modification of Dodge Island Roadway System PROJECT OVERVIEW

**ESTIMATED DESIGN & CONSTRUCTION COST:** 

Tunnels Connecting Watson Island and PortMiami (Dodge Island)

\$667 Million

• Tunnel Length: Approximately 4,200 feet each

• Tunnel Structure: Two tunnels, each containing two traffic lanes, curbs, walkways, ventilation

fans and additional safety features. They connect Watson Island and PortMiami beneath Government Cut, the main shipping channel in Biscayne Bay, moving

traffic eastbound (in) and westbound (out)

from the Port.

Inside Tunnel Diameter: Approximately 39 feet each

• **Depth of Tunnel:** The bottom of the tunnels are approximately

120 feet below the surface of Government Cut

at their deepest point.

Construction: The Tunnel Boring Machine (TBM) shown below excavated the twin tunnels.

It consisted of a cutter head with an outside diameter of **42.3 feet** (as high as a 4 story building) and a **361 foot** long trailing support gear made up of 6 gantries.

The total length of the TBM was **428.5** feet long (more than a football field).

• Tunneling Process:

**WORK PERFORMED** 



The cutter head rotated as a cutting wheel boring out the underground area, while the trailing gear contained the electrical, mechanical, guidance systems and additional support equipment. Excavated material was carried back through the trailing gear on an enclosed conveyor belt and deposited outside the tunnel entrance, or portal. It was moved off-site to be used as fill material and was disposed of in a manner consistent with applicable environmental rules and regulations. As the TBM moves forward it erected precast concrete liners (known as segments) that became the finished wall of the tunnel. Once the liners were in place, grout was pumped into the space between it and the excavated area to



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# Connections to PortMiami Roadways

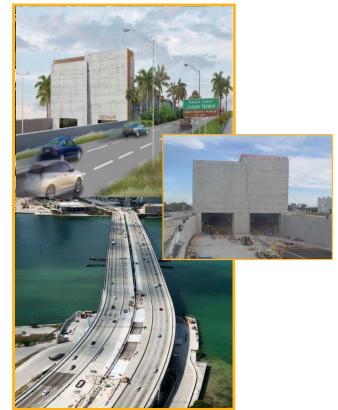
• The existing internal PortMiami roadway system includes a bridge that separates inbound cruise traffic from outbound cargo traffic. The east approach ramp of this bridge was removed during construction and traffic was rerouted in order to perform necessary soil improvements. In addition, a new bridge was constructed on Westbound Port Blvd. to maintain the grade separation between cargo and cruise traffic and to provide improved access for specific areas of the Port.



# Widening MacArthur Causeway Bridge

- Bridge lanes were expanded from three to four lanes in each direction and include:
  - o 10-foot inside shoulder lane
  - Four 12-foot traffic lanes
  - 10-foot outside shoulder lane
  - Six-foot sidewalk

The expanded width created acceleration and deceleration lanes for trucks and buses using the tunnel, allowing them direct access as they enter and exit the tunnel portals. On the eastbound side of the causeway, two of the four lanes lead to the tunnel entrance, with the second lane (from the median side) also providing the option to enter the tunnel or to continue on MacArthur Causeway. The remaining two lanes continue to serve MacArthur Causeway traffic only. Additionally, existing lighting was adapted as necessary.



### **PROJECT SCHEDULE:**

May 24, 2010 – Construction began on Watson Island
December 2010 – Construction began on Dodge Island
June 23, 2011 – Arrival of TBM in Miami
November 11, 2011 – Beginning of eastbound tunnel boring
July 31, 2012 – Completion of eastbound tunnel

October 29, 2012 – Beginning of westbound tunnel boring

May 6, 2013 – Completion of westbound tunnel

May 2014 - Completion of Dodge Island roadway improvements

May 2014 – Substantial Completion - Port of Miami Tunnel opens to traffic, O&M Period begins

**August 2014 – Final Completion** 

# FOR MORE INFORMATION CONTACT:

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www.portofmiamitunnel.com