



PORT OF MIAMI TUNNEL PROJECT

Noise Impact Overview

The Florida Department of Transportation has performed thorough testing and has measures in place to insure that construction and operation of the Port of Miami Tunnel Project will not produce noise levels that affect the residential and commercial developments near the proposed project site.

In February, 2006, testing was conducted to measure existing noise levels from receptors placed on five key locations on Dodge and Watson Islands.

The five locations were:

- The Miami Children's Museum (Watson Island)
- Jungle Island (Watson Island)
- Ichimura Miami-Japan Garden (Watson Island)
- Stella Maris Seaman's Center (Dodge Island)
- Miami World Trade Center (Dodge Island)



These locations were selected due to their close proximity to the project's proposed alignment and to their potential sensitivity to noise of their intended land-uses. The receptors gathered data that included long-term temporal and short-term spectral noise levels that were sampled during three different times of the day; **daytime** (7 AM to 6 PM), **evening** (6 PM to 10 PM) and **nighttime** (10 PM to 7 AM). This data provided the average amount of noise at each of the five locations during these times. Using the sound level exceeded 10% of the time, FDOT calculated acceptable noise criteria the construction team must adhere to. Additionally, equipment used on site must be tested and certified that it does not exceed established maximum noise limits set for that specific type of equipment.

Three teams submitted bids to design, build, finance, operate and maintain the POMT as the project's concessionaire. On February 15, 2008, the Miami Access Tunnel (MAT) consortium was selected by FDOT as the project's concessionaire. MAT has received reference documents (**Section 01565**) that detail the construction noise control procedures and Design and Construction Criteria (**Section 3.2.1.5.2**) which defines their requirements as concessionaire in relation to noise mitigation.

These procedures and responsibilities include, but are not limited to, the following:

- The hiring of a full-time Acoustical Engineer
- Submission of a Noise Control Plan
- Submission of Noise Measurement Reports
- Submission of working drawings, computations, data and other descriptions for abatement measures during construction.

Acoustical Engineer

The Engineer shall oversee all FDOT requirements regarding construction noise control. This includes the preparation of Noise Control Plans, preparation of Equipment Noise Certifications, and construction and complaint response noise monitoring.

Noise Control Plan

The Plan predicts the noise levels associated with work and equipment that will be used within a subsequent 6-month period. It is required prior to the beginning of construction and an updated version shall be resubmitted every 6 months. The Plan also evaluates anticipated compliance with noise criteria



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limits and describes the mitigation measures that will be implemented to reduce any excessive noise levels.

Noise Measurement Reports

These Reports will be submitted weekly during the construction phase of the Project and shall include all noise level measurements taken during the previous week, including construction compliance monitoring and any required complaint response investigations. The noise levels will be measured at least weekly throughout the daytime, evening and nighttime at the nearest sensitive receptor to ongoing construction activities.

Noise Mitigation Measures

The concessionaire is required by FDOT to implement any reasonable method of noise reduction to minimize noise levels during construction. These methods include:

- Noise Barriers and curtain systems
- Configuring construction site to avoid noise-sensitive locations
- Attach noise-deadening material and intake/exhaust mufflers to hoppers or chutes
- Use techniques to reduce the duration of impact or vibratory pile driving
- Limit the use of PA systems and air/gasoline-driven hand tools

Complaints and Penalties to Concessionaire

FDOT has provided the MAT team a complaint procedure to guarantee that public and agency complaints are addressed and resolved quickly and consistently. Upon receipt of complaints, MAT shall perform noise measurements at the location in the complaint; these measurements are then forwarded to FDOT. If the measured noise levels exceed allowable limits specified in the reference documents, MAT will implement any additional noise reduction materials and methods as described above to reduce the noise to within acceptable limits.

In the event that MAT does not comply with all FDOT regulations stipulated in the Reference Documents, penalties shall be applied at the discretion of FDOT. The scale used to penalize noncompliance is:

- **1st Violation** – Written warning to MAT identifying violation
- **2nd Violation** – Written Deficiency Report requiring MAT to demonstrate an understanding and commitment to FDOT noise regulations stipulated in the Reference Documents
- **3rd Violation** – Issuance of a Stop Work order
- **4th Violation** – Issuance of a Stop Work order and penalty of \$5,000
- **5th Violation** – Issuance of a Stop Work order and penalty of \$10,000
- **6th Violation** – Issuance of a Stop Work order and penalty of \$25,000

In order to comply with the proposed 47-month construction, MAT must reach certain construction-based incentives within a particular time frame to receive “milestone payments” from FDOT. Therefore, any stoppage of work results in a larger monetary loss than the penalties specified above.

MAT must meet all noise limitations set by FDOT during construction in addition to **City of Miami Noise Ordinance 11483, Section 36-6**. In the event that FDOT requirements differ from the City of Miami Ordinance, the Concessionaire must follow the more stringent of the two.