

Memorandum



Date: November 3, 2015

To: Honorable Chairman Jean Monestime
and Members, Board of County Commissioners

From: Carlos A. Gimenez
Mayor

A handwritten signature in black ink, appearing to read "Carlos A. Gimenez". The signature is fluid and cursive, written over the printed name.

Subject: Report on the Cost and Feasibility of Building a Noise Buffering Wall Along the North and South Sides of Ives Dairy Road (County Road 854) Adjacent to Residential Subdivisions Bounded by Highland Lakes Boulevard to the West and NE 26 Avenue to the East

This report was prepared by the Public Works and Waste Management Department (PWWM) in response to Board of County Commissioners (Board) Resolution R-507-15, adopted on June 2, 2015, to advise on the probable cost and feasibility of building a noise wall along the residential subdivisions abutting Ives Dairy Road from Highland Lakes Boulevard to NE 26 Avenue, and to provide potential funding sources.

Background

Ives Dairy Road is an existing six-lane major arterial roadway with raised medians, existing curb and gutters, sidewalks, drainage, and decorative lighting. The average peak traffic volume (east and west bound) along the roadway is 4,300 vehicles per hour. Through the years, six-foot fences, hedges, and walls have been installed by the residential subdivisions adjoining the roadway. This report provides for the process and feasibility of constructing a uniform noise barrier to mitigate current noise levels in residential neighborhoods along the north and south sides of the roadway.

Since Miami-Dade County (County) does not have standards for the construction of noise abatement barriers, this report was developed following Federal Highway Administration guidelines adopted by the Florida Department of Transportation (FDOT) for conducting transportation noise studies, and constructing noise abatement features. The actual process followed by FDOT is extensive, requiring a Project Development and Environmental (PD&E) evaluation, and conformance with Florida Statute FS 335.17(2) and the Code of Federal Regulations 23 C.F.R. 772, which provide procedures for noise studies and noise abatement measures. These types of studies are typically conducted in conjunction with a roadway capacity improvement project at locations where it is found to be reasonable, feasible, and desired by the affected public and where a noise reduction of at least 5 A-weighted decibels (dBA) is attainable.

Cost and Feasibility of Building a Noise Buffering Wall Along Ives Dairy Road

Following FDOT's guidelines, the total cost to build a noise buffering wall along the subject limits is estimated at \$4 million. This includes the approximate costs of designing and surveying, acquisition costs for a permanent five-foot easement, utility relocation costs, and the actual costs of construction. Additionally, recurring expenses for maintenance are estimated to be \$81,000 per year. This funding would produce an 11-foot high and 6,100 linear foot long wall located at the back of the sidewalk along the right-of-way line, where the current privacy walls/fences are located. These dimensions provide for the most cost

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effective solution while still providing adequate noise reduction levels in accordance with the guidelines referenced above.

Although the construction of the noise barrier could potentially reduce current noise levels for the affected residents, noise abatement measures are typically only considered when future predicted traffic noise levels approach or exceed the Federal Highway Authority's Noise Abatement Criteria, or when the predicted traffic noise level substantially exceeds the existing noise level as a result of a transportation improvement project. In this instance, there is no anticipated widening of the roadway, therefore, no anticipated increase in noise levels are expected. However, should the County pursue the implementation of the wall, the services of a noise control consultant would need to be procured to determine the effectiveness in reducing noise levels the wall would provide.

Potential Funding Sources

Projects that propose noise abatement on existing highways are considered Type II projects under federal regulations and are not currently programmed for funding from FDOT. Therefore, since this project would neither propose the addition of vehicular travel lanes nor modifications to the roadway's horizontal or vertical alignment, it would not qualify for State funding for noise abatement.

The only eligible County funding source that could be assigned to this project would be derived from General Funds. However, monies would need to be appropriated as part of a future budget process as there are currently no provisions to fund this specific improvement.

Pursuant to Ordinance 14-65, this memorandum will be placed on the next available Board meeting. If additional information is required, please contact Alina T. Hudak, Deputy Mayor / Director, PWWM, at (305)375-2531.

C: Alina T. Hudak, Deputy Mayor/Director, Public Works and Waste Management
Alice Bravo, P.E., Director, Miami-Dade Transit
Eugene Love, Agenda Coordinator
Jennifer Moon, Director, Office of Management and Budget