

RESOLUTION NO. 04-100

A RESOLUTION OF THE MAYOR AND VILLAGE COUNCIL OF THE VILLAGE OF PALMETTO BAY, FLORIDA, RELATING TO TRAFFIC CALMING IN THE NEIGHBORHOODS OF MANGOWOOD, SOUTHWOOD, AND THE AREA OF 148TH STREET WITHIN THE VILLAGE OF PALMETTO BAY; AUTHORIZING THE VILLAGE MANAGER TO ENTER INTO CONTRACT WITH THE CORRADINO GROUP, INC. TO PROVIDE A TRAFFIC CALMING IMPLEMENTATION PLAN FOR THE ABOVE AREAS AND TO APPROVE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED \$65,000.00 ON A PROJECT THAT WILL SUBSTANTIALLY IMPROVE THE TRAFFIC INTRUSION INTO NEIGHBORHOOD STREETS; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the data collected as part of the Transportation Master Plan determined that traffic calming strategies should be implemented in the neighborhoods of Mangowood, Southwood, and the area of 148th Street within the Village of Palmetto Bay; and

WHEREAS, the traffic calming improvements will be designed in accordance with the Village's Transportation Master Plan and will create a relaxed but efficient flow of traffic within the neighborhoods; and

WHEREAS, these specific projects should redirect non-local traffic onto main arterials and reserve local streets for local traffic; and

WHEREAS, the Administration has determined that The Corradino Group, Inc., is a very capable firm and qualified to provide traffic calming design services for the Village of Palmetto Bay; and

WHEREAS, the Administration desires to select The Corradino Group, Inc., to design traffic calming techniques in accordance with the Village's Transportation Master Plan; and

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND VILLAGE COUNCIL OF THE VILLAGE OF PALMETTO BAY, FLORIDA, AS FOLLOWS:

Section 1: The Village Manager is authorized to contract for Traffic Engineering Services with the Corradino Group, Inc., and approve expenditure of funds in an amount not to exceed \$65,000 on traffic calming improvement projects that will substantially improve the traffic conditions in the neighborhoods of Mangowood, Southwood, and the area of SW 148th Street within the Village of Palmetto Bay.

Section 2: This Resolution shall take effect immediately upon approval.

PASSED and ADOPTED this 6th day of December, 2004.

ATTEST: Meighan Pier
Meighan Pier
City Clerk

APPROVED: Eugene P. Flinn
Eugene P. Flinn
Mayor

READ AND APPROVED AS TO FORM:

Eve A. Boutsis
Eve A. Boutsis
Village Attorney

FINAL VOTE AT ADOPTION:

| | |
|------------------------------|------------|
| Council Member Ed Feller | <u>YES</u> |
| Council Member Paul Neidhart | <u>YES</u> |
| Council Member John Breder | <u>YES</u> |
| Vice-Mayor Linda Robinson | <u>YES</u> |
| Mayor Eugene P. Flinn | <u>YES</u> |

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148th Street / Mangowood / Southwood Neighborhoods Traffic Calming Proposal

Background

This project attempts to determine whether traffic calming strategies should be implemented along 148th Street, in the Mangowood neighborhood and in the Southwood neighborhood of Palmetto Bay, and if so what are the most appropriate. Corradino's approach is one of communication and coordination combined with technical analysis to determine the most appropriate type of traffic calming for the area.

There are several traffic calming solutions that can be implemented in a variety of situations that may solve the problems, as well as accommodate FDOT and Miami Dade County, as they will have input due to the proximity of the study area to US-1. Therefore, it is important to select the most appropriate solution that serves both the needs of the neighborhood and the governing bodies. Each party has particular interests. It is Corradino's utmost goal to provide an objective and impartial analysis of the situation and work diligently to implement the solutions that are most efficient. In most cases there are solutions mitigate speeding, maintain a consistent flow of traffic to achieve level of service standards, as well as providing access for municipal service, emergency and transit vehicles. These may lie in less physical impediments to the traffic flow and more passive traffic calming or management techniques.

Corradino's approach will be to gain an initial understanding of the issues from the interested parties. At such time the firm will collect the necessary data to understand the existing conditions along in the neighborhood. An analysis of such data will be undertaken to arrive at determining what, if any, traffic calming measures would be appropriate to mitigate the real issues affecting the area, particularly related to speeding or abundant traffic intrusion. Such recommendations will be suggested as they pertain to maintaining the roads primary function as a neighborhood street as well as their ability to mitigate the prevalent issues. Preliminary cost estimates will be provided for each suggested alternative.

Once a clear understanding of the issues is developed, Corradino will get additional input from the Village and the neighbors. With this input, further analysis and estimating will be provided to arrive at a final list of recommendations for traffic calming in the neighborhoods. These feasible traffic-calming measures will also take into account their affect on the surrounding roadway network. Corradino would then return to the Village with a final Traffic Calming Implementation Plan which would outline the suggested measures, their cost, the agencies that need to be coordinated with, the area of influence for the particular measure, the impact on the surrounding road network, any further information to be collected, and a possible timeframe for implementation, including subsequent analysis that would be required prior to making such measures permanent.

Corradino's strategy on this project would focus on involving the public in the study, analysis, design and implementation of the proposed traffic calming. To this end the firm will include representatives from the Village, FDOT and MDCPW, because it is these parties that in the end must be comfortable with the recommendations. Often times each party has differing goals and objectives. The suggested alternatives will be designed and implemented taking care of urban design as well as transportation issues, incorporating the need for functionality, aesthetics and safety. Finally the implementation of such treatments must be done quickly and efficiently as to

not disrupt the neighborhood. The following tasks describe the scope of services which will occur in each neighborhood.

TASK 1 Introductory Meetings/Data Collection

At the onset of the project Corradino will hold a kickoff meeting with the Village project manager and all three of the neighborhood groups to discuss the issues. Subsequent to this, Corradino will meet with each of the government agencies to initiate the project. These include FDOT, Miami-Dade Public Works, and any Village departments such as Police, Public Works, etc. At such time outstanding information will be collected and reviewed.

Following these meetings an assessment will be made on the necessary data to be collected. This may include, but will not be limited to: **crash data, 24-hour counts, am/midday/pm peak hour counts, and spot speed data.** In addition field observation will be made to gather the roadway characteristics including geometry, posted speed limits, signal timing, as well as to assess the general operations of the facility under normal and peak conditions. At this time it is believed traffic counts will need to be taken at the following locations. A final list of count locations will be provided after the initial neighborhood meetings.

148th Street Neighborhood:

- 148th St
- 149th St
- 88th Ave

Mangowood Neighborhood:

- 86th Ave
- 146th St
- 148th Dr
- 149th Dr
- 150th Dr
- 151st St
- 152nd St

Southwood Neighborhood:

- 77th Ct (north and south)
- 79th Ave
- 78th Ave
- 80th Ave
- 160th St
- 162nd St
- 163rd St

TASK 2 Data Analysis

Corradino will provide analysis of the data collected that will adequately determine if there is a need for traffic calming measures. This will lead to a formulation of what measures will be most appropriate. The following is a general description of how traffic calming analysis is performed. Traffic calming projects are required in local streets under certain conditions. The three most

common reasons for the need of traffic calming projects are: high volumes, through traffic, and speeding. Residential streets lose livability as a combination of high volumes and high speeds. The former is the result of arterial traffic diverting to local streets, either to shorten the travel distance and time, or to avoid traffic congestion. The latter is generally caused by long stretches of roadways without obstructions or conflicts. 148th Street is an access point from US-1 into a residential neighborhood. Mangewood is a potential short cut between 152nd Street and 82nd Ave. Southwood has two schools that it is affected by twice daily. There is the possibility that cut through traffic is negatively affecting these neighborhoods.

Miami-Dade County requires all traffic calming projects to follow the guidelines contained in the *Street Closure/Traffic Flow Modification Study* report conducted in 1996. The need for traffic calming projects can be determined as follows:

Traffic Volumes: Machine counts are conducted to determine the traffic volumes. The *Street Closure/Traffic Flow Modification Study* provides guidelines concerning traffic volumes. The Study indicates that a residential street begins to lose its livability if the following thresholds are surpassed:

| Roadway Classification | Daily Threshold* | Peak-Hour Threshold** |
|-------------------------------|-------------------------|------------------------------|
| Residential local street | 1,500 vpd | 150 vph |
| Residential collector | 3,000 vpd | 300 vph |

*vpd = vehicles/day

**vph = vehicles/hour

Origin-Destination Surveys: Surveys are conducted to determine the number of vehicles going through the neighborhood, without either a local destination or a local origin. There are several methods of conducting an origin-destination survey. One of them records the license plates of vehicles at the entry/exit points of the neighborhood. By matching the license plates at those locations, it is possible to determine the magnitude of the through traffic.

If the level of through traffic volume is determined to be incompatible with the function of a residential street, the street begins to lose its livability. If the thresholds are surpassed, traffic calming devices should be considered.

Travel Speeds: The determination of the average speeds can be made using several methodologies. These include radar guns and pressure-tube machines. The Florida Department of Transportation recommends a methodology to determine spot speeds in its *Manual of Uniform Traffic Studies*. Usually the 85-percentile speed (85% of the vehicles operates at that speed or lower) is used to determine the prevailing speeds.

The maximum tolerable speeds are determined as a consensus within the neighborhood. Once the surveyed speeds are determined to be significantly higher than the acceptable thresholds, traffic calming devices should be considered.

TASK 3 Identification of Feasible Traffic Calming Strategies

At such time that the analysis is completed Corradino will suggest a menu of feasible traffic calming strategies for both neighborhoods. These may include any number of solutions that may be appropriate in such conditions. Such solutions may be physical, or strategic in nature. Physical calming tools may include vertical deflections, horizontal shifts, and roadway narrowing. Some of the more non-physical strategies include an increase in enforcement, landscaping edges to provide a narrow appearance to the roadway, signal timing, painting, and future streetscaping. The emphasis will be on the mitigation of the stated problem by the most appropriate means.

TASK 4 Assessment of Implementing Traffic Calming Measures

Upon identification of feasible strategies, an assessment of the entire menu of suggestions will be made. Each measure will be assessed on its ability to adequately address the concerns of the neighborhood, maintain the neighborhood integrity of 148th Street, Mangewood and Southwood, as well as their influence on emergency and public service vehicles. In addition the impacts of each tool on the surrounding area and the remainder of the roadway network will be examined.

TASK 5 Recommendations for Traffic Calming Implementation Plan

After the assessment of the entire menu of suggestions Corradino, in conjunction, with the Village, participating agencies and residents will make final recommendations for a traffic calming implementation plan. This report will detail the following issues:

- Final menu of suggested improvements
- Effects and impacts of improvements on 148th St, and the surrounding roadway system
- Location of improvements
- Preliminary cost estimate of entire program
- Coordinating agencies and agency requirements
- Emergency service performance at specific areas of treatment
- Required analysis to assess impacts of trial devices
- Requirements to formally implement permanent devices.

TASK 6 Final Reports

The study's findings will be presented in a traffic calming report detailing the above tasks focusing on the implementation plan. Such a report will be textual and graphic in nature, explaining each device and the process of the project, as well as locating the menu of recommendations on a project map. The report will be developed in such a way that it will be

clearly understandable from both the technical and non-technical standpoint of its readers, whether it be neighbors, Village staff or participating agencies.

TASK 7 Presentations / Meetings

Corradino will provide the Village a public participation schedule for this project. The project team will meet at a pre-designated schedule as set up by the Village's project manager. Corradino will meet with FDOT, Miami-Dade County Public Works, Village departments, neighborhood groups, and any Village boards that have an interest in the project. At such meetings the team will be available to present its findings and the status of the work to date. As always it is hoped that communication is open. It is suggested that meetings with the public be held at three times during the project. Once at the outset, again mid point and then prior to recommendations. Subsequently a meeting to present to the Village Council for approval will be provided.

TASK 8 End Product

Individual final reports will be issued for each individual neighborhood, and will contain all of the items as mentioned above. A highly graphic document will be produced indicating locations of traffic calming devices, the type of device specified, its cost and intended results. This will be adequate to present to the city's design team to begin formal implementation of the recommendations. Corradino feels that 120 days is adequate to produce such a study.

PRICE PROPOSAL

This project can be completed for \$65,000.