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CLERK OF THE BOARD
OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA

Memorandum

MIAMI-DADE COUNTY

Date: May 7, 2013

To: Honorable Chairperson Rebeca Sosa
and Members, Board of County Commissioners

Agenda Item No. 8(E)(1)

From: Carlos A. Gimenez
Mayor

Subject: Resolution Authorizing the County Mayor to Enter into Lease Agreements to Enhance Existing Communications Towers for the Completion of the Miami-Dade Fire Rescue Department Ultra-High Frequency Radio Narrowbanding Project

Resolution No. R-341-13

RECOMMENDATION

It is recommended that the Board of County Commissioners approve the attached resolution authorizing the County Mayor or County Mayor's Designee to enter into land lease agreements to construct new communications towers and enhance existing communications towers for the completion of the Miami-Dade Fire Rescue Department's Ultra-High Frequency radio narrowbanding project.

SCOPE

This item has a countywide impact.

FISCAL IMPACT/FUNDING SOURCE

Land lease Agreements secured through this authorization will be paid for from Miami-Dade Fire Rescue's Communications Division operating budget which is funded through the countywide general fund. Because the cost of each land lease agreement will vary based the location of each site, an exact cost cannot be provided at this time. Miami-Dade Fire Rescue anticipates that the total annual cost for all the sites will be no more than $200,000.00.

TRACK RECORD/MONITOR

Miami-Dade Fire Rescue Department's Division Chief of Communications, Greg Rubin, will monitor the lease agreements approved by this item.

BACKGROUND

The Federal Communications Commission's Public Notice, DA 11-1189 (released July 13, 2011), and Title 47 of the Code of Federal Regulations §1.925, requires the County to narrowband its radio stations operations by December 31, 2013. Miami-Dade County has been actively narrowbanding County operations in the 150-174 Megahertz and 421-512 Megahertz spectrum. The County has migrated 31 of its licenses to the 12.5 Kilohertz technology as mandated by the Federal Communications Commission. The Federal Communications Commission recently awarded Miami-Dade Fire Rescue a one year waiver to complete the migration of its public safety infrastructure due to the complex nature of the County's system and the technical challenges presented by narrowbanding.

Miami-Dade Fire Rescue operates a conventional, simulcast Ultra-High Frequency radio system that was designed and engineered for firefighting. The system infrastructure currently operates in the 450 Megahertz range at a bandwidth of 25 Kilohertz (wideband) on the licenses and frequencies. The Ultra-High Frequency radio system has 36 radio sites all of which are necessary to provide Miami-Dade Fire Rescue with the required level of in-building signal penetration. The County's Ultra-High Frequency radio system delivers an audio quality level that meets or exceeds 3.0 (as measured using standards in Technical Service Bulletin 88, 2008) in residential and medium commercial occupancies. In addition to

its extraordinary signal strength, the analog system allows firefighters to utilize a hybrid form of direct mode (simplex) communications allowing direct mode transmissions on the fire ground while still allowing monitoring of fire dispatcher communications on a single channel. This safety feature permits low powered portable radios that are unable to reach the systems infrastructure to connect with other onsite radios and still hear emergency communications, such as an evacuation order from fire dispatch.

The County has already completed the narrowbanding of its non-Miami-Dade Fire Rescue related facilities and has also made significant progress on the narrowbanding of its Miami-Dade Fire Rescue facilities. All equipment purchased by Miami-Dade Fire Rescue since 2004 is narrowband capable, including infrastructure, mobile and handheld radios. All non-infrastructure frequencies have been narrowbanded with only those used for dispatch and tactical operations remaining at 25 Kilohertz bandwidth. The County's process of narrowband system redesign began in 2010. The design includes adding eight new transmit sites and converting eight receive-only sites to transmit which will provide for a total of 31 transmit sites. Additionally, two new receive-only sites will be constructed for a total of 15 receive-only sites. Upon project completion, the system will have a total of 46 radio sites, five of which will require erecting new monopoles. In addition to the new Ultra-High Frequency infrastructure, a 19 point microwave system will be built to bridge from the current 16 site system that will provide reliable backhaul for the additional transmit sites.

In order to construct the aforementioned eight new transmit sites, Miami-Dade Fire Rescue will install five monopoles at existing fire stations and will lease space on three existing privately owned towers. Two of the five monopoles, located at Miami-Dade Fire Rescue Cutler Ridge Station 34 and West Bird Station 37, will require approval from the Board of County Commissioners through a governmental facilities hearing. Three of the five monopoles located at Miami-Dade Fire Rescue Opa-Locka Airport Station 25, Doral Station 69 and planned Dolphin Station 68, will require permitting through the corresponding municipality.

Approval of this resolution will allow Miami-Dade Fire Rescue to expedite the lease process for three new transmit towers in the same manner as the original Ultra-High Frequency communications towers, after consultation with the County's Internal Services Department and review by the County Attorney for legal sufficiency. Miami-Dade Fire Rescue will also modify some existing agreements, after consultation with the Internal Services Department and approval by the County Attorney, to allow for additional narrowbanding equipment to be installed at current locations.

Genaro "Chip" Iglesias
Deputy Mayor/Chief of Staff

MEMORANDUM
(Revised)

TO: Honorable Chairwoman Rebeca Sosa
and Members, Board of County Commissioners

DATE: May 7, 2013

FROM: R. A. Cuevas, Jr.
County Attorney

SUBJECT: Agenda Item No. 8(E)(1)

Please note any items checked.

_____ **"3-Day Rule" for committees applicable if raised**

_____ **6 weeks required between first reading and public hearing**

_____ **4 weeks notification to municipal officials required prior to public hearing**

_____ **Decreases revenues or increases expenditures without balancing budget**

_____ **Budget required**

_____ **Statement of fiscal impact required**

_____ **Ordinance creating a new board requires detailed County Mayor's report for public hearing**

_____ **No committee review**

_____ **Applicable legislation requires more than a majority vote (i.e., 2/3's ____, 3/5's ____, unanimous _____) to approve**

_____ **Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required**

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(E)(1)
5-7-13

RESOLUTION NO. R-341-13

RESOLUTION AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO ENTER INTO LEASE AGREEMENTS TO ENHANCE EXISTING COMMUNICATIONS TOWERS FOR THE COMPLETION OF THE MIAMI-DADE FIRE RESCUE DEPARTMENT ULTRA-HIGH FREQUENCY RADIO NARROWBANDING PROJECT IN AN AMOUNT NOT TO EXCEED $200,000.00 ANNUALLY

WHEREAS, the attached memorandum recommends approval for the County Mayor or County Mayor's Designee to enter into lease agreements to enhance existing communications towers for the completion of the Miami-Dade Fire Rescue Department Ultra-High Frequency Narrowbanding project,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that:

SECTION 1. The Board of County Commissioners does hereby authorize the Mayor or Mayor's designee to enter into lease agreements, subject to County Attorney approval, on an as needed basis, to enhance existing communications towers for the completion of the Miami-Dade Fire Rescue Ultra-High Frequency Narrowbanding project in an amount not to exceed $200,000.00 annually.

SECTION 2. This resolution shall become effective upon its adoption in accordance with the law.

The foregoing resolution was offered by Commissioner **Lynda Bell**, who moved its adoption. The motion was seconded by Commissioner **Sally A. Heyman** and upon being put to a vote, the vote was as follows:

Rebeca Sosa, Chairwoman			**aye**
Lynda Bell, Vice Chair			**aye**
Bruno A. Barreiro	**aye**	Esteban L. Bovo, Jr.	**aye**
Jose "Pepe" Diaz	**absent**	Audrey M. Edmonson	**aye**
Sally A. Heyman	**aye**	Barbara J. Jordan	**aye**
Jean Monestime	**absent**	Dennis C. Moss	**aye**
Sen. Javier D. Souto	**absent**	Xavier L. Suarez	**aye**
Juan C. Zapata	**absent**		

The Chairperson thereupon declared the resolution duly passed and adopted this 7th day of May, 2013. This resolution shall become effective ten (10) days after the date of its adoption unless vetoed by the Mayor, and if vetoed, shall become effective only upon an override by this Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By: ***Christopher Agrippa***
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency. DF

Daniel Frastai