OFFICE OF THE CITY MANAGER

NO. LTC # 011-2012

LETTER TO COMMISSION

TO:

Mayor Matti Herrera Bower and Members of the City Commission

FROM:

Jorge M. Gonzalez, City Manager

DATE:

January 12, 2012

SUBJECT: Citywide Radio System

The purpose of this LTC is to update the Mayor and Commissioners about the City's Radio System.

The City successfully implemented the upgrade of the Public Safety Radio system to a new Motorola 800 MHz ASTRO Trunked Simulcast Smart Zone Radio System in 2005. At that time, Motorola removed the old radio system, re-configured the existing microwave system (which serves as the backhaul for the Smart Zone radio system) and entered into a contract with the City to maintain the entire system for 10 years following implementation.

The new radio system addressed the coverage issues with the previous system, and provided opportunities for interoperability among various local public safety agencies. Further, the new radio system provides simultaneous transmission of radio signals from three (3) sites, a significant improvement over the single transmission site of the prior system, which resulted in improved building penetration throughout the City's seven miles coverage area.

Additionally, the new radio system provided the ability to work in both analog and digital modes simultaneously. The Fire Department and all other City radio system users have continuously operated in analog mode since the new system was implemented.

During the period from March to August 2007 the City experienced approximately five intermittent, isolated failures of the digital mode of the radio system. The City escalated the digital mode failure issue to Motorola's Corporate Level VP, who responded by sending their technicians as well as an independent team of engineers to test and evaluate the radio system digital mode failures, which included months of re-optimizing the microwave system. Following the testing, Motorola concluded that the microwave system caused the radio system digital mode failure. It was Motorola's recommendation, that the City replace the entire microwave system.

The City issued and awarded an RFP for the replacement of the microwave system and implementation is underway with an estimated completion date in the first quarter of 2012. Upon successful implementation, the Police Department will have the choice of returning to the digital mode of operation.

Since August 2007, Police officers have been operating continuously in the analog mode, like Fire and City users have been operating since implementation in 2005. The City has not experienced any failure of the radio system while operating in the analog mode.

Although the issues with the microwave system caused difficulty to the users, there were no "dead spots" caused by it. When there are issues with the radio system, the Police Department has three forums where the issues can be shared and resolved:

- The first forum is directly with Motorola. An October 2011 report of radio tickets for Police Department complaints of radio transmission dead spots detailed 12 issues since October 2008. Of the 12 issues reported, 11 could not be duplicated by Motorola while working with the Police Department, and the remaining issue was caused by a competing radio repeater owned by Sprint which Sprint immediately corrected. Since October 2011, approximately 5 tickets have been entered for potential dead spots. Motorola has investigated the incidents and has either been unable to duplicate or has indicated that the radio system is performing as designed.
- The second forum is the monthly status meeting with Motorola. The IT
 Department holds these with the Police and Fire Departments, as well as
 their respective union representatives. All meeting members are copied
 on the meeting minutes which are signed by the representatives present
 at the meeting. A review of all the minutes from the Motorola meetings
 for the past year does not reveal any reference to dead spots.
- The last forum is the IT Department monthly departmental meetings with the Police Department. During these meetings, the status of all types of technical projects is reviewed. All meeting members are copied on the meeting minutes which are signed by the units present at the meeting. A review of all the minutes from these meetings for the past year does not reveal any reference to dead spots.

The Motorola report and both sets of meeting minutes are available should you wish to review.

JMG: PDW: AS

F:\cmgr\\$ALL\LTC 2011\radio system LTC.docx