January 30th, 2012

To Mastics - Moriches - Shirley Community Library,

A+ Technology has been working with the Mastics-Moriches-Shirley Community Library over the last year to identify the issues and problems with the current network infrastructure, network equipment and cabling. A+ has found that the existing infrastructure is insufficient to meet the current library's needs let alone the future needs of the library and community. Troubleshooting, repair and upkeep of the existing infrastructure has become a large problem, inconvenience and unreasonable cost to the library and community which uses and depends on this infrastructure on a daily basis.

The network switches are constantly failing, creating difficult to diagnose and costly to repair network issues. All of the current wiring in the library is outdated and in an unacceptable condition for proper use. This building was built before anyone could foresee the future network and communication needs. Proper wiring channels and paths were never developed and the library staff was left to deal with retro-fitting the infrastructure into an existing building that was never designed to house such equipment and or cabling. The library itself has been expanded upon over the years and this caused additional problems and associated costs with the upkeep of the infrastructure and network. The staff was forced to temporarily expand upon and "band-aid" solutions together in order to continue to keep up with the constant demands of both technology and the community.

In addition to the challenges that the building has caused, the infrastructure in the library is too slow and outdated to be able to handle the communications and bandwidth demands of today yet alone the demands that we will inevitably be facing in the years to come. The community expects a certain level of communication and efficiency when using the resources at their local library, these demands will not be able to be met with the current infrastructure in place. The more money that is placed towards upkeep and temporary solutions, the lower the total cost of ownership (TCO) becomes for the library and the community. Replacement of this infrastructure is necessary and inevitable, the longer the library postpones addressing system wide deficiencies, the more money will be wasted.

Issues have stemmed from many areas including but not limited to the following:

Retro-fitting the existing infrastructure due to the age of the building expansions that were added onto the building design causing temporary solutions to be created to meet demands age of both wire and infrastructure equipment, overpopulation of wiring closets, length of wire runs beyond the recommended distances, inability to meet current and future bandwidth needs of the community downtime, and repair costs exceeding the estimated standard operational costs of a typical network.

A systematic design of bundled cabling to designated locations for proper switching should be incorporated into a coordinated renovation program. With proper cabling and infrastructure, technological upgrades in the future should be limited to equipment only.