

The City of Tampa Survey Section

Staff:

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The City of Tampa Survey Section is a professional group of surveyors with the experience and dedication to provide the highest quality surveying services and support to the various departments within the City of Tampa.

While we are a part of the Transportation and Stormwater Services Department, it falls within our purview to support many of the departments within the City of Tampa. Although not a large group by modern day standards, we rely on our expertise, state of the art equipment, and a total quality service work ethic. In order to provide this quality service, we strive to keep ourselves informed and educated on the latest advancements in technology and equipment. While we can't always utilize the leading edge of technology due to budget constraints and a desire to provide a fiscally responsible use of public money, we work with nearly state of the art equipment to provide the most efficient and accurate product we can deliver.

The survey section is responsible for conducting surveys throughout the city for various projects, departments, and legal issues. We are also responsible for creating and maintaining the City's Vertical Control network. When the City of Tampa migrated to NAVD 88 a few years ago, the City Survey Section had already been involved in creating an entirely new vertical network.

We established "poured in place" concrete monuments every half mile within the City. These monuments are approximately 30" deep, 6" at the top and 8"-10" at the bottom (where possible). They have an 18" No. 5 iron rebar in the approximate center to facilitate recovery by ferrous locating instruments.



The monuments were allowed to cure for a minimum of 6 months, and then a numbered aluminum disk was set into the concrete. Level runs were then performed both in a North and South direction and an East and West direction with each monument being observed on at least two separate closed level runs, performed by two separate crews. Where the Hillsborough River runs through the City, a third crew ran level runs crossing back and forth over the river to create a run to tie the two sides together with more redundancy. We called this the “zipper” run.

After the runs were complete, all observations were adjusted a least squares routine. This adjustment was calculated as one huge network, with some 43 control benchmarks of 2nd order or better published data. The network was adjusted in both NAVD 88 datum, and NGVD 29 datum as a convenience to local surveyors.

We subsequently published the network in a file that is usable in Google Earth and available to anyone with a desire to make use of the information. You can find the file at www.tampagov.net/citysurveyor

The COT_BM Network has been met with much appreciation and favorable comments by many local engineers and surveyors. We are in the process of updating the network to include new monuments established as the older ones are destroyed. You might frequently check the above link to see if you are using the latest and greatest version of the network.

The network also received some acclaim and mention in one of our profession's National Trade Magazines, *The American Surveyor* ©. Read about it here at <http://www.amerisurv.com/content/view/11176/153/>

The future of the network includes an update to Horizontal values in the future. The City of Tampa Survey Section is presently planning on continuing in the use of NAD 83/90 adjustment for its horizontal datum, and recommends all work done for the City of Tampa be done in that datum.

The survey section performs many other types of surveys as well; including Right of Way delineation and mapping of City rights of way, Boundary surveys of City parks, properties, and conveyances, limited topographic surveys, surveys to establish boundaries for the creation of legal descriptions, easements, and other land rights. We also make various surveys for the City of Tampa legal staff for use in litigation and other actions as may be requested.



Sometimes it gets a little interesting:



The survey section has future plans to better serve the general public and the professionals that have need of our services.

We are currently in the process of creating a unique way of accessing survey information of interest to others in a format that is easily distributed and continually maintained. Organized by Section, Township and Range, the interested party would have only to request a specific section of land, and after receiving the information from us, have at their fingertips, all of the survey data (maps) we currently have in that section. We are already building this with our current projects and are working toward scanning all of our historic data to be included as well.

Our mission is produce professional surveying services and information.

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