

# LAS VEGAS VALLEY WATER DISTRICT

## *ENGINEERING SYSTEMS* *TECHNICAL BULLETIN NO. 16*

February 2000

### **NEW PROCEDURE FOR TURNING WATER MAINS BACK ON AFTER SHUT DOWNS**

Due to revisions to the Nevada State Health Regulations for scheduled and unscheduled shut downs of the District's facilities, the following steps will be required.

- A service saddle with a 2" tap, (pipe size x 2" outlet), with a 2" corporation stop needs to be provided and installed on the pipeline by the Contractor at the repair/relocation of said pipeline. This will be used for flushing and performing the necessary testing and water sampling listed below.
- A chlorine residual test to verify the amount of chlorine in the pipeline. This must be from .02 ppm to 1.0 ppm.
- A turbidity test. This must not exceed 5.0 ntu.
- A water sample is to be taken for bacteriological analysis if the chlorine and turbidity tests are within the ranges listed above.

Questions may be directed to the District's Construction Division at 258-3118.

### **USE OF NATIVE SOIL MATERIAL FOR PIPE BACKFILL**

The process for a contractor to obtain permission to use native soil material for pipeline backfill in lieu of the specified select backfill material could take up to three weeks. A request received without this amount of time before placement is desired cannot be granted. The process involves having a geotechnical firm test the material and write a report about its suitability for backfill and the construction procedure to be used for its placement in the trench. When installed in a public street, the appropriate public entity must also approve the request, i.e. Clark County or the City of Las Vegas Public Works. The soils analysis may include, but is not limited to, sieve size screening, Atterberg limits, liquid and plastic limits, plasticity limit, water soluble sulfate content, grain size, moisture content and optimum moisture and maximum density for compaction testing. Further, monitoring and documentation by a geotechnical firm during backfill installation has been required as a condition of native soil material use.

If you have any questions, please call the District's Construction Division at 258-3290.

### **INTERNET CONSTRUCTION ASSISTANCE NOW AVAILABLE**

The District's web site is <http://www.lvwd.com>. Available on this web site are Notices Inviting Bids (Invitations to Bid); current planholder's names while a project is on the street; bid result tabulations; the Approved Products List; and the e-mail address of District project engineers to whom you may forward questions about projects being bid. The web path after accessing the District's web site, is through clicking on the "Business Opportunities" link. Here you will be able to choose from a various number of links highlighted under the heading of "Construction Opportunities" and "Purchasing." By selecting the construction opportunities link under the "Construction Opportunities" heading, you will find a table of projects listed by referenced contract numbers. This table allows you to view certain project information, further allowing you to select more detailed project information, as mentioned above, through the highlighted blue colored links. To obtain bid results, look for a flashing blue and yellow icon "open results" under the column titled "Bid Openings." Clicking on this item will allow you

**INTERNET CONSTRUCTION ASSISTANCE NOW AVAILABLE (Continued)**

to view the Report of Bid Opening table. You may view the "Detailed Bid Results" by selecting this referenced link on the bottom line of the Report of Bid Opening table. You must have an Adobe Acrobat Reader (PDF) to view this information. (There are several links throughout our web site to Adobe to give you the opportunity to download Adobe Acrobat Reader, if necessary.)

You can find a list of the District's Approved Products for construction installation by selecting "Business Opportunities" on the home page, and then select the "Approved Products" link under the "Purchasing" group.

Note that the web site has a link to SNWA's web site (<http://www.snwa.com>) for Construction Opportunities.

If you have any questions, please contact the District's Purchasing Division at 258-3200.

**DISTRICT GPS BASE STATION AND DATA AVAILABLE FOR PUBLIC USE**

The Engineering Department has been relying on the benefits of a Global Positioning System (GPS) base station and related equipment for approximately 5 years. We offer the opportunity for consultants and contractors to share our base station data. The GPS data is available in many formats that are used by a host of governmental agencies as well as private firms. The variations of data are useful in two modes: a) The so-called Real-Time Kinematic (RTK) method which provides generally instantaneous positioning information at a reasonable accuracy, and; b) the so-called "Static" post-processed method which provides generally a higher accuracy but requires longer occupation times at positions.

In order for consultants to use the RTK system, a radio modem capable of receiving (demodulating) a specific data (modulation) format and a certain brand name receiver with specific RTK programming functionality is required. The District is finalizing a new plan to implement a change in radio frequencies for RTK. Similarly in order to use the Static system, the user needs to have the ability to collect post-processing data and own GPS post-processing software which recognizes the Receiver Independent Exchange (RINEX) format widely used by most GPS manufacturers. Check with your GPS manufacturer for details.

For more information on particulars concerning the District's GPS base station, please visit our GPS web site at [www.lvvwd.com/data\\_share/gps.html](http://www.lvvwd.com/data_share/gps.html).

If you have any questions, please contact the District Surveyor at 258-7163.