## Sec. 3.01 Responsibility

It is the responsibility of the State Location and Design Engineer or his representative to secure, assign and keep in good working order all major surveying instruments and equipment. This does not preclude a mutually agreed upon purchase by the District should a specific item be required, or the purchase of such items as hand-held calculators paid for with District funds.

The assignment of instruments within a district is the responsibility of the District Survey Manager. This should be reported quarterly to the State Location and Design Engineer.

In the event a survey party is disbanded, all instruments and equipment should be returned to District Stock.

## Sec. 3.02 Care and Adjustment of Instruments

## **Electronic Total Station and Data Collector**

The electronic total station and the data collector are the most important instruments used by the survey party, each representing a considerable monetary investment. These are carefully adjusted scientific instruments constructed to a very fine degree of accuracy and precision. They are necessarily delicate, very sensitive to vibration and subject to being seriously damaged by careless handling. The realization of just what a survey instrument is and how it should be handled is an essential requirement of a competent instrument (survey) technician. Each Total Station and Data Collector has an operator's manual containing instructions on operating procedures. Every operator should read and become familiar with the procedures before attempting to operate these instruments.

The Survey Party Manager (Land Surveyor) is responsible for all equipment and at no time shall a senior technician assign these instruments to the care of a junior technician unless authorized to do so.

When not in use, all instruments should be placed in its carrying case, or protective cover, even when it is necessary to suspend work. Before climbing a fence or similar obstacle, the instrument should be put in the carrying case and, along with the tripod, placed on the other side. **Under no circumstances should an instrument be carried on the tripod**, and under no circumstances should the equipment be positioned in a vehicle so that it could bounce around.

## Levels

Many levels are assigned to other VDOT Divisions and Departments. These instruments also are delicate, very sensitive to vibration and subject to serious damage by careless handling. The District Survey Manager should facilitate minor adjustments and cleaning when necessary. They should never be disassembled except as authorized by the District Survey Manager. If these instruments have been exposed to inclement weather, they must be wiped dry as soon as possible, in any event, as soon as brought indoors.