

- b. Care should be taken when setting a control monument or station, (see [Figure 10-D](#)) so that the effect of obstructions or canopy can be minimized. The monument and disk, or iron pin should be set according to normal VDOT procedures.
- c. A site log form (see [Figure 10-E](#)) has been developed by VDOT for VDOT surveyors to corroborate data entered into the receiver. One site-log form shall be filled out for each receiver for each occupation. The pertinent data includes: the date, observer, receiver #, station occupied (name), beginning antenna height, the antenna offset, session start time, start intermediate and end minimum QI & satellite number, end session time, end antenna height and comments. The form is self-explanatory. It is the responsibility of the surveyor operating the receiver to complete each form. The QI is the Quality Index of the satellite signal being received from each satellite. Regarding VDOT's equipment, Leica System 300, a value of 99 is best. Regarding Leica's System 500, a QI of 99 is best and anything below 92 is unacceptable. The norm for this system is either 99 or 92. VDOT requires knowledge of which value is lowest and from which satellite. This knowledge will assist with processing baselines later on. The comment section is for the surveyor operating the receiver to describe any problems affecting the satellite data or satellite signal received.
- d. The antenna height will be measured in meters. Measurements for antenna height shall be taken at the beginning and end of each session. If a station is to be occupied simultaneously through more than one session. The antenna will be reset over the station and a new antenna height at the beginning and end of each session will be measured. **It is the responsibility of the surveyor to insure that the antenna height measured in the field is recorded correctly on the site log form and entered correctly into the receiver. *Site log forms should be filled out in the field during the session.** Please refer to [Figure 10-A](#), for assistance with the components of the antenna height measurements.
- e. Prior to every new project, the memory card of the receiver should be formatted (or cleared) once it has been definitely proven that the data has been downloaded and saved. It shall be the priority of the person who downloads the mission data to clear the cards of data only after a successful download and back up has been verified. Verification of a successful download will consist of examining mission data for session times, antenna height, and baseline quality and saving the data to another source or location.
- f. Two-way radios shall not be used within 25 feet of the GNSS receiver. Vehicles will be parked a minimum of 50 feet away from the GNSS receiver.
- g. Every member of the GNSS survey mission should know his or her responsibilities, session starting and ending times, station locations and basic operation of the GNSS equipment.

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