The designer is responsible for loading calculations necessary to verify that the standard and arm will support the signal indications and signs. When the loading of a traffic signal standard or traffic signal arm is approaching its limit, a warning note "consult Traffic Signal & Safety Engineering for additional load" shall be shown near the installation on the plan.

Mast arm signs shall be free swinging in accordance with the standard details.

Traffic signal standards shall be located as follows:

- 1. The minimum offset shall be 32" from face of curb or edge of pavement to center of the standard.
- Steel traffic signal standards should be located as far off the roadway as possible. A minimum of 5 feet from the face of the curb to the center of the steel traffic signal standard should be maintained.
- 3. Traffic signal standards shall not be located in areas of handicap ramps nor shall they obstruct the crosswalks.
- 4. Traffic signal standards, where feasible, shall also be used to support pedestrian signals and push buttons.
- 5. Traffic signal standards shall not be located on the traffic side of (in front of) the guide rail or any natural or manmade deflecting barrier. The location should provide the distance necessary for rail deflection when struck and a reachable distance for pedestrians to push the pedestrian push button. Exceptions on a case by case basis may be made only with approval of the Electrical Engineer in the Office of Traffic Signal and Safety Engineering.
- 6. Traffic signal standards shall not be located near the curve of:
  - A. A corner with a radius of less than 15 feet, or;
  - B. A corner with a radius of less than 30 feet provided where trucks and buses turn right occasionally, or;
  - C. A corner with a radius of less than 50 feet provided where large truck combinations and buses frequently turn right.
- 7. The designer is responsible for locating and identifying the horizontal and vertical clearances of the utility companies primary (750 volts or more) and secondary power lines and shall assure that the minimum clearances are in accordance with the NEW JERSEY ADMINSTRATIVE CODE CHAPTER 25 UTILITY ACCOMMODATION, Section 16:25-5.3 (b) and Section 10 of the NJDOT *Procedures Manual.* The designer shall coordinate the electrical design work with the present and future plans of the utility companies. All overhead and underground utilities must be shown on the plans. There shall be no conflicts with the lighting installation. See Figure 11-C.