

## SECTION 19 – MONUMENTS AND GOVERNMENT BENCHMARKS

### 19.1 MONUMENTS AND GOVERNMENT BENCHMARKS (Rev. 03-01-22)

Monuments with respect to Congressional Townships and Section Corners, and any other established corners, are covered in detail in Section 3 of these instructions. The PEMS must follow the procedures outlined in Section 3 and take every precautionary step to assure that the Department has fulfilled the statutory requirements with respect to the preservation and perpetuation of established corners.

The Department has an established system of permanent benchmarks within the State. In addition, the following governmental agencies maintain benchmark systems which may be of interest to the PEMS:

- U.S. National Geodetic Survey (NGS)
- National Oceanic and Atmospheric Administration (NOAA)
- U.S. Coast and Geological Survey
- U.S. Army Corp of Engineers
- Indiana Flood Control and Water Resources System

Normally, these benchmarks will be identified in the original survey and included within the contract plans. However, there are occasions when a benchmark is discovered in the field that has not been included in the plans. Under these conditions, the PEMS should follow the procedure below.

Upon discovering that a benchmark must be moved, the PEMS will contact the agency involved, stating the necessity for the move and providing the benchmark's designation. The DCD, AE, DDC, and PM should be copied in this correspondence. The designation consists of the letters and numbers stamped on the disk. It is desirable to furnish a photograph of this information in the correspondence.

Upon receipt of this information, the agency involved will provide instructions necessary for the establishment of the new benchmark and the transfer of elevation. The intent, in most cases, is to establish a new benchmark in a safe nearby location and transfer the elevation from the old benchmark to the new one. All elevation readings will be made to three decimal places to preserve the accuracy of the original elevation. An assumed elevation for the old benchmark may be used in the transfer, since the primary concern is the relative difference in elevation between the old and new benchmarks. The old benchmark should not be disturbed until the observer or the recorder for the involved agency has verified the measurements involved in the transfer.

After the new mark has been established and the elevation transferred to it, the old disk should be broken out and returned to the agency if requested. A complete report on the action taken, including a description of the location where the new benchmark is established and a copy of the field notes involved in the transfer of elevation, should also be forwarded.