

## CFLHD POINT SERIES NUMBERING SPECIFICATIONS

- I POINT NUMBERING** - The purpose of the point numbering system is to provide for easy recognition of the data type assigned to a particular point. The digit furthest to the left constitutes a series or data type. Beginning with 1 (one), points within that series will be numbered consecutively. Gaps in the sequence should be noted to avoid the possibility of unaccounted points within the series. In the event that there is a conflict between a traditional use for a point and the method used to establish it, the point number assigned should agree with traditional use for the point. For instance, if a series of Class B points are set along the route, some of the points were established with G.P.S. and some were established terrestrially, with elevations established by digital levels. All of the points should be designated with the 3000 series to remain consistent with the traditional use of the point. The method of establishment should be noted in any reports. Unique situations will occur which require deviations from this system. The judgment of the Project Surveyor, in conjunction with other users of the data, will determine the final sequence: The following list is to be used in numbering points for all projects
- (a) 1 to 999 - reserved for level runs;
  - (b) 1000 to 1999 - reserved for existing primary control. These may be established by any reliable source. Include the origin of the control in the report;
  - (c) 2000 to 2999 (CFLHD Class A) - reserved for primary G.P.S. control monuments established by the survey;
  - (d) 3000 to 3999 (CFLHD Class B) - reserved for primary G.P.S. control monuments and traditional traverse control monuments with elevations established by differential levels;
  - (e) 4000 to 4999 (CFLHD Class C) - reserved for secondary control monuments set to facilitate mapping, cadastral traverses or other purposes. These monuments will not be plotted in the mapping. Do not include these points on the control sheet;
  - (f) 5000 to 5999 (CFLHD Class B) - reserved for supplemental primary control necessitated by the destruction of previously established control, established from the original control network at a later date or required by a change of scope. Should the point be a replacement for a previously established point in the approximate location of the previously established point, number the point such that the new number does not resemble the previous point number;
  - (g) 6000 to 6999 (CFLHD Class D) - reserved for boundary control points. These include Public Land Survey System monuments as well as other monuments that purport to represent boundaries of private or public lands;
  - (h) 7000 to 7999 - reserved for benchmarks;
  - (i) 8000 to 8999 (CFLHD Class E) - reserved for aerial panel points;
  - (j) 9000 to 9999 - can be used at the discretion of the surveyor;
  - (k) 10000 and above - are to be used for mapping purposes and are points that do not require monumentation.
  - (l) An example. The first G.P.S. (Global Positioning System) point would be named 2000. The first traditional terrestrial traverse point would be named 3000. The numbering should ascend in the same direction as the project stationing. Field conditions and the judgment of the Project Surveyor will determine the final configuration;
  - (m) In the event that a monument has a previously established name or number from an internal or external source, append that name or number to the point and include it as a comment;

- II CLARIFICATIONS AND OTHER EXAMPLES** - The distinction between the 2000 series and the 3000 series is that 3000 series points have an elevation derived from differential leveling methods. 2000 series points are very rare. No distinction is made regarding what surveying method was used to establish coordinates for the point. If it meets the standards and specifications for primary control, it is a 3000 series point:
- (a) Always use the lowest number series that fits the criteria for the point. If an existing monument were used as primary control, it would be a 3000 series point. If it is also a property monument or PLSS monument, the second digit would indicate a 6000 series point, i.e. 36\_\_\_. If a benchmark was used as primary control, it would be designated as a 37\_\_\_;
  - (b) Duplicate point numbers for control points within the same Park, Refuge or Forest Highway route are to be avoided. Determine what projects have been controlled in the past and develop a new series that does not use duplicate previously numbered control points;
  - (c) The standard control monument for permanent control points 2000, 3000, and 5000 series points is a rebar 48 inches in length driven flush with the ground, or slightly countersunk, capped with a FHWA cap. See “CFLHD Survey Specifications” for additional clarification.