

Virginia State Plane coordinate values. Both control files must contain date, units, coordinate type and county & scale factor used for conversion.

- C. Provide GPS Control Deliverables as referenced in VDOT Survey Manual, Chapter 10: GPS Deliverables (Sec 10.06)

Picture Points

- A. Unless otherwise arranged, VDOT Surveys & Photogrammetry Section provides picture point locations and ID's. Ground feature / picture identifiable Photogrammetric picture points will be annotated with ID numbers beginning with **(UPC #)_501**.

- B. Provide detailed sketch of each **surveyed picture point location**, along with, a Microstation .dgn design file, Adobe .pdf file, and/or Google Earth .kmz file with each point located and labeled.

- C. Provide digital pictures of each control location at the point of measurement.**

Note: A copy of the document "Photogrammetric Control Standards" will be sent with each control survey request to District or Consultant surveyors. This document supplements the guidelines for ground control surveys found in the VDOT Survey Manual, Chapter 5: Photogrammetric Surveys. [◇]

Sec. 5.07 Digital Terrain Models, Cross-Sections, Profiles and Bridge Situations

When digital terrain models (DTMs), or cross sections are being secured by Photogrammetric methods, the survey party shall provide readings as specified by the engineer along or on all edges of pavement and concrete structures, such as curb and gutter, etc., in the required DTM format. Entrance profiles, storm water management areas and mitigation sites will be secured by Photogrammetry using the DTM method unless specifically requested otherwise. VDOT symbology for DTM collection is included in the table at the end of this section.

Note to survey parties: For best terrain definition when collecting break lines on curved features (such as curb and gutter around entrances), the frequency of the readings should increase as the radius decreases.

On Photogrammetric surveys, DTMs should be used wherever possible when securing drainage data. The survey party should secure drainage data only when requested. On most of these surveys, only streambed elevations will be required.

When cross-sections or DTMs are secured by the Photogrammetric method, drainage ditch and outfall areas will be covered by contours. The survey party will secure DTM readings or cross sections necessary to cover the areas under water or otherwise obscured. On new alignment, the "drainage only" cross-section will extend left and right of the survey centerline. On existing

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