

APPENDIX D

WSSC Survey and Right of Way Criteria

a. General Survey Information.

- 1) The WSSC developed, maintains and perpetuates a comprehensive survey control and mapping system and requires that all surveys and related work performed within WSSD be based upon WSSD Datum.
- 2) This Appendix of the WSSC Pipeline Design Manual is intended to provide information, guidance and the minimum criteria necessary for the performance of surveys needed or required for any design, land or right of way acquisition, or construction within the WSSD.
- 3) The WSSC maintains a list of all established horizontal and vertical controls within the WSSD. Contact WSSC for additional information or data that may be available.

b. Surveying Controls (Datum).

- 1) Horizontal Control: The current WSSC control system is based on the North American Datum (NAD) of 1983 as defined by the 1991 adjustment (NAD 83/91). This system was adopted by the State of Maryland as the State Plane Coordinate system in 1991.
 - a) Montgomery County requires the horizontal survey control to be based upon NAD 83/91 Datum. For information on horizontal controls, contact Geodetic Control Densification Administrator, Research and Technology Center, MNCPPC.
 - b) Prince George's County requires the horizontal survey control to be based upon NAD 83/91 Datum, however there are some areas in the County where NAD 83/91 Datum isn't available. In this case, request a written waiver from the Development Review Board of MNCPPC. For information on horizontal controls, contact Development Review Board, MNCPPC, 14741 Governor Odon Bowie Drive, Upper Marlboro, Maryland 20772.
- 2) Vertical Control: The current WSSC control system is based on NGVD 1929 Datum.

c. Stakeout Information and Width of Rights of Way and Construction Strips.

- 1) For stakeout information, see Part Three, Section 1 (Survey and Stakeout Information).
- 2) For width of rights of way and construction strips, location of pipelines within the right of way and other requirements, see Part Three, Section 2 (Rights of Way and Construction Strips).

d. Survey Checklist.

- 1) The following Survey Checklist can be used as a guide when submitting plans to WSSC. Items listed in the checklist are general and may not cover all items that may be required to complete the design.



SURVEY CHECKLIST

PROJECT NAME _____ CONTRACT NO. _____

1. Right(s) of Way provided as needed for proposed pipeline(s) crossing private property.
2. Submit record plats, etc. along with proposed pipeline, showing dedication of public streets.
3. Pipeline stakeout to be in accordance with Part Three, Section 1 (Survey and Stakeout Information).
4. Horizontal Control.
 - a. Traverse references shown on plans.
 - b. Pipeline curve data, in accordance with Part Three, Section 1 (Survey and Stakeout Information).
 - c. Horizontal datum in accordance with this Appendix.
5. Vertical Control.
 - a. Minimum of 3 benchmarks, each plan sheet, in accordance with Part Three, Section 1 (Survey and Stakeout Information).
 - b. Vertical datum in accordance with this Appendix.
6. North arrow with scales and coordinates, with grid ticks shown on plan sheets.
7. Horizontal and vertical datum shown on all plan sheets.
8. Private streets labeled in plan. If work is within a private street, right(s) of way needed for proposed pipeline(s) shown.
9. Private property identification.
 - a. On plan sheet, provide property owner's name(s), recording information (Liber/Folio).
 - b. On profile sheet, provide property owner's name(s).
10. Election district shown on plan.
11. Two-hundred (200) foot sheet number shown on all plan sheets.
12. Accurate vicinity map.
13. On plan sheet, label all existing pipeline(s), right(s) of way recording information (Liber/Folio).



e. WSSC Right of Way Standards.

- 1) See Part Three, Section 2 (Rights of Way and Construction Strips) for required widths and sizes.
- 2) Deed Descriptions for the right of way. Descriptions should be metes and bounds or by centerline, and should conform to Maryland minimum standards. The following is the format to be used in writing a right of way description:
 - a) Heading:
 - (1) Label heading as Schedule "A".
 - (2) Give purpose for the right of way (for a sewer, water main, etc.).
 - (3) All the names of those who will be signatory to the document, (Grantor(s) name(s) should be same as listed on their deed unless evidence can be provided why not). After the name of owner, insert OWNER. If the right of way is within Montgomery County, also include the address of grantor and grantee and Parcel I.D. number. In Prince George's County, provide Tax ID # (address not needed).
 - b) First paragraph of the description.
 - (1) List all documents by which owner(s) obtained property if by multiple deeds or plats, state number, then list.
 - (2) Which documents contain descriptions (deeds and plats) (any referenced material must be submitted to WSSC, e.g., MSHA Plats, Subdivision Plats, Deeds, Will Records, etc.).
 - c) Second paragraph of the description.
 - (1) Point of Beginning. Reference the starting point of the right of way to a deed or plat line of the property the right of way is going through and also the adjacent property. Call out the line number, bearing and distance, as reference in the deeds. Include the meridian used in the deed or plat.
 - (2) Proof read description against sketch. (description to run clockwise). For curved courses, specify if they are Tangent or Non-tangent curves and give the following: arc length, direction, radius, chord, bearing and distance.
 - (3) Tie last line of the right of way to a reference line of the deed or plat, see Point of Beginning.
 - d) Construction Strips. Reference proper side of the right of way. Describe them simply but carefully. Determine if the right to trim or cut down trees is needed.
 - e) Surveyor's Certification: A statement should be included to the effect that the licensee either prepared or was in responsible charge of preparation of the description and any surveying work reflected in it.



3) Right of Way Sketch.

- a) Show the following on the right of way sketch: Owner's name, Adjacent owners with the deed reference (Liber/Folio), Point of beginning, Width of Right of Way and Construction Strips, Plat References, North Arrow with scale and meridian, Deed and/or plat line referenced, Sketch scale same as water and sewer plans. Show existing WSSC rights of way with deed references (Liber/Folio) and buildings/dwellings if close to right of way or construction strip. Signed and sealed by a Maryland Registered Land Surveyor.
- b) Outline the sketch with the following color scheme.
 - (1) Property Owner Names: underline in RED, and outline Owner's Property in RED.
 - (2) Proposed Right of Way Lines: outline in GREEN.
 - (3) Existing WSSC Right of Way Lines: outline in BROWN.
 - (4) Proposed Construction Strips: outline in ORANGE.
 - (5) Point of beginning: underline in BLUE.
- c) Sketch may show multiple rights of way and property owners, color scheme to be shown only for the applicable property.
- d) WSSC will provide the sketch number, when size has been determined. Sketch Number is to be placed in Lower Right Corner of right of way sketch.
- e) Sketch sizes for rights of way.

A 8-1/2" × 11"	F 11" × 30"	L 16" × 24"	Y 20" × 30"
B 11" × 12"	G 11" × 36"	M 16" × 30"	Z up to 24" × 36"
C 11" × 16"	H 11" × 36"	N 16" × 36"	
D 11" × 20"	J 16" × 16"	P 20" × 20"	
E 11" × 24"	K 16" × 20"	S 20" × 24"	

- f) On the sketches show the lines as follows:

All WSSC Right of Way Lines ——— — — ——— — — ———

Baseline or Centerline ——— — ——— — ———

Construction Strips — — — — — — — — — —

(These lines are not to scale)

4) Submittal of Package for the Right of Way. Submit each Right of Way with the following:

- (a) Transmittal (one (1) original and three (3) copies).
- (b) Right of Way Description (one (1) original and three (3) copies).
- (c) Sketch (one (1) original, three (3) colored copies and one (1) plain copy).
- (d) Applicable plan drawings showing the right of way colored per property owner.



- (e) Two (2) complete sets of plan drawings per contract (one (1) colored set showing all the rights of way and one (1) non-colored set).
 - (f) Copies of owner deeds, adjacent property deeds, deeds for existing rights of way, record plats, SRC plats and any other supporting documents.
- 5) Submittal of Package for Plat Dedication.
- a) Schedule "A" will be a recorded document and altered to fit specific situations. (i.e. dedicating two or more plats, property obtained by two or more deeds, etc.).
 - b) Submit each Plat Dedication with the following:
 - (1) Transmittal (one original and three copies)
 - (2) Schedule "A" for plat dedication (one original and three copies) – must have a metes and bounds (or centerline) description and the surveyor's certificate.
 - (3) Plat (three colored copies and one plain copy) – plat must contain language in the owner's dedication specifically granting the easements to WSSC.
 - (4) One (1) complete set of plan drawings, with all of the rights of way colored.
 - (5) Copy of property owner deed(s) – ownership should be the same as when the plat was recorded.
- 6) If plat is submitted, a separate metes and bounds description of the right of way must also be submitted for recordation.

