

***Brevard County Public Works  
Finance and Contracts Administration***

*Public Works Survey & Mapping Division  
Review Check Sheet  
for  
Land Acquisition, Drainage, Roadway and Pedway  
Expansion, Asbuilts, Maintenance Maps, and Sketch and  
Descriptions*

*Updated May 26, 2011*

**GENERAL** - All survey work shall be accomplished in accordance with the Florida Minimum Technical Standards (MTS) as set forth in Chapter 5J-17 Florida Administrative Code, and the Brevard County Public Works Finance & Contracts Administration requirements set forth herein. The County survey requirements are to augment the Florida MTS standards, and in all situations where a conflict arises between the two, the County survey requirements shall yield to the Florida MTS standards.

Modifications to the County's survey requirements set forth herein shall be at the discretion of the Public Works Director and/or the County Surveyor. It is suggested that the Consultant and/or the Consultant's surveyor contact the County Survey & Mapping division to check for any updates to the survey requirements.

**A. Survey/Plans/Maps** - General county requirements for all types of surveys.

County Use Only	Surveyors Use – enter Key Code	<p align="center"><b>KEY CODE: C – complies, NC – Noncompliance, UTD – Unable to determine, NA – Not applicable.</b></p>
<input type="checkbox"/>	<input type="checkbox"/>	All survey data shown on the map shall be legible, complete and sufficient to positively describe the location of the Right of Way line(s), deed line(s), section line(s), baselines, and any other survey/regulatory lines pertinent to the project.
<input type="checkbox"/>	<input type="checkbox"/>	The text size and drawing scale shall be sufficient to show all survey data.
<input type="checkbox"/>	<input type="checkbox"/>	The text height shall be a minimum of (Leroy) L80.
<input type="checkbox"/>	<input type="checkbox"/>	Neatness and clarity is mandatory. Details are to be utilized when clarity is needed.
<input type="checkbox"/>	<input type="checkbox"/>	All survey monumentation along the right of way/deed/plat lines shall be described with a location value, i.e. station & offsets, coordinates, cardinal directions, and bearing & distance.
<input type="checkbox"/>	<input type="checkbox"/>	Various AutoCAD line types shall be utilized to distinguish features. The line type for the Right of Way line shall be the standard AutoCAD “phantom” line type and shall be labeled and distinguished from all other lines. The line type for acquisition boundary lines shall be a continuous line. Lot/deed lines that are not part of the fee simple acquisition may be a dash line type.
<input type="checkbox"/>	<input type="checkbox"/>	Adjoining deed/plat lines shall be shown for graphic purposes, and labeled accordingly. All adjoining parcels shall be labeled with owner name, parcel ID#, and recording document.
<input type="checkbox"/>	<input type="checkbox"/>	Match line shall be labeled with stations or alpha designations.
<input type="checkbox"/>	<input type="checkbox"/>	Sufficient dimensions shall be provided from the baseline to existing features, i.e. pavement, fence lines, sidewalks, etc. . . . Dimensions may be in the form of station and offsets, coordinate values, and direct dimensions with leaders. Special attention shall be paid to features that are near or on the right of way/property line.
<input type="checkbox"/>	<input type="checkbox"/>	All curve data (including chord bearings and chord distance and/or radial bearing) shall be labeled along a curvilinear right of way lines and/or baselines.
<input type="checkbox"/>	<input type="checkbox"/>	A key/index map is required when multiple sheets are used.
<input type="checkbox"/>	<input type="checkbox"/>	All survey control points must be identified with size, type of material, stamping and location (i.e., station/offset, coordinates, bearings and distance).
<input type="checkbox"/>	<input type="checkbox"/>	The bearing basis shall be so labeled (i.e., assumed, grid, true north) and referenced to a well monumented line. A random baseline set by the surveyor is not to be considered a well monumented line.

<input type="checkbox"/>	<input type="checkbox"/>	The survey data shown on the survey map should be so complete that the user does not have to rely on a digital file to extract pertinent survey data. All easements known or provided to the surveyor shall be shown on the survey.
<input type="checkbox"/>	<input type="checkbox"/>	All surveys shall be tied to the Florida State Plane Coordinate System, East zone NAD83/adjustment date. The primary and secondary GPS station utilized shall be provided on the survey.
<input type="checkbox"/>	<input type="checkbox"/>	VERTICAL CONTROL – When preparing a topographic survey, all vertical control shall be established in accordance with the Brevard County Department of Surveying and Mapping Vertical Control Manual. Said manual is provided in a PDF format on the County’s website. Temporary construction benchmarks shall be established at approximately 500 ft. intervals, but no more than 800 ft. A minimum of two permanent benchmarks shall be set within the project limits. The benchmarks shall be shown on the survey map with a location value. The vertical datum shall be based on NAVD 1988, unless otherwise requested by the Public Works Director.
<input type="checkbox"/>	<input type="checkbox"/>	BASELINE – When a baseline is utilized, the surveyor shall establish and monument the survey baseline with intervisible control points not greater than 1000 feet apart and at all PC’s, PT’s, PRC’s, PCC’s. and P.I.’s. The baseline shall be tied to the right of way line and or deed line. Show stations along the baseline at the begin, end, change in direction, and all centerline points of intersection. If the traffic volume is heavy, the baseline of survey should be offset from the centerline of pavement a safe distance. Bearings and stationing shall be shown on all baseline changes in direction. Where secondary baselines are established from the primary, an equation station shall be provided. When random survey control points are set instead of monumenting the baseline, all pertinent location data shall be provided.
<input type="checkbox"/>	<input type="checkbox"/>	BASELINE/SURVEY REFERENCE POINTS – References for the baseline/survey control points shall be set and described. The reference points shall be located outside existing or proposed right of way. The reference points shall be shown on the survey map graphically or in tabular form. Reference points shown in tabular form shall be labeled with coordinates and/or station offset and description.

**B. BOUNDARY/SPECIFIC PURPOSE SURVEY**

<u>County Use only</u>	<u>Surveyors Use – enter Key Code</u>	<b>KEY CODE: C – complies, NC – Noncompliance, UTD – Unable to determine, NA – Not applicable.</b>
----------------------------	---	--

<input type="checkbox"/>	<input type="checkbox"/>	All Right of Way and/or deed line(s) shall be labeled with bearings, curve data (including chord distance and chord bearings). All survey monumentation held to establish the Right of Way and/or deed line(s) shall be shown with a station/offset, or coordinate value, or bearing/distance.
<input type="checkbox"/>	<input type="checkbox"/>	The linear relationship between the baseline and the Right of Way (and/or deed line(s)) shall be shown. All record documentation supporting and/or establishing the Right of Way lines(s) and or deed line(s) shall be shown e.g., (deed, plat). All gaps and overlaps shall be shown and labeled. A surveyor's report shall be included <u>on the survey</u> with detailed explanation regarding the gaps/overlaps.
<input type="checkbox"/>	<input type="checkbox"/>	The Right of Way line type shall be a standard ACAD "phantom" line type and shall be distinguished from all other survey lines.

**C. MAINTENANCE MAPS** – All survey work shall be accomplished in accordance with the Florida Statute, Chapter 95, Subsection 95.361, and the Florida Minimum Technical Standards, Chapter 5J-17, the Brevard County Public Works Land Acquisition Maintenance Map Administrative Process, and the Brevard County Public Works Finance and Contracts Administration requirements set forth herein.

<u>County Use only</u>	<u>Surveyors Use – enter Key Code</u>	<b>KEY CODE: C</b> – complies, <b>NC</b> – Noncompliance, <b>UTD</b> – Unable to determine, <b>NA</b> – Not applicable.
<input type="checkbox"/>	<input type="checkbox"/>	The maintenance right of way limits shall be approved by the Transportation Engineer Director and/or the County Surveyor prior to the commencement of the map preparation.
<input type="checkbox"/>	<input type="checkbox"/>	The maintenance map shall be prepared on a standard 24" x 36" road plat book border. The standard road plat book drawing file can be downloaded from the Brevard County website.
<input type="checkbox"/>	<input type="checkbox"/>	The maintenance limits shall be tied to a well monumented survey line(s), (i.e., deed lines, plat line, section line, etc.).
<input type="checkbox"/>	<input type="checkbox"/>	All survey control points and their horizontal position shall be shown, and labeled on the maintenance map.
<input type="checkbox"/>	<input type="checkbox"/>	The maintenance line shall be so labeled with appropriate dimensions, e.g., bearings, distance and curve data.
<input type="checkbox"/>	<input type="checkbox"/>	The existing improvements within the maintenance limits shall be shown.
<input type="checkbox"/>	<input type="checkbox"/>	A legal description of the maintenance right of way limits shall be shown on the maintenance map.
<input type="checkbox"/>	<input type="checkbox"/>	Survey monumentation shall be set along the maintained right of way line at all changes in direction.
<input type="checkbox"/>	<input type="checkbox"/>	The maintenance map shall provide an approval signature block for the Transportation Engineer Director and the County Surveyor.
<input type="checkbox"/>	<input type="checkbox"/>	Prior to final approval the maintenance map, the Surveyor of Record and/or designee shall meet the County Surveyor and/or his/her designee on site to inspect said monumentation.

**D. SKETCH AND DESCRIPTIONS** – All legal descriptions prepared at the request of the County shall be accompanied with a sketch of the land described in the legal description.

County Use only	Surveyors Use – enter Key Code	<b>KEY CODE:</b> C – complies, NC – Noncompliance, UTD – Unable to determine, NA – Not applicable.
<input type="checkbox"/>	<input type="checkbox"/>	The sketch and description shall be submitted on the Brevard County Public Works standard 8 ½ x 11 border.
<input type="checkbox"/>	<input type="checkbox"/>	Large project plans (defined as 1 mile or greater) shall include an overall sketch of the project limits. The overall sketch shall include the delineation of each proposed easement; a table of ownership with associated station/offsets, addresses, and parcel ID#.
The sketch and description shall comply with the Florida Minimum Technical Standards and shall include the following:		
<input type="checkbox"/>	<input type="checkbox"/>	Parcel Tax ID#'s, project name, owner name, section, township and range, type of easement, and purpose of the easement (refer to Land Acquisition template).
<input type="checkbox"/>	<input type="checkbox"/>	Property lines, current and proposed R/W lines, limited access lines, proposed parcel takings (e.g. Fee, TCG, Easements), and baseline/centerline of construction (if applicable).
<input type="checkbox"/>	<input type="checkbox"/>	POC/POB, section lines and all information referenced in the legal description shall be shown and labeled on the sketch.
<input type="checkbox"/>	<input type="checkbox"/>	Bearings and distances along the easement and/or right of way parcel, whether metes and bounds, lot & block or fractional.
<input type="checkbox"/>	<input type="checkbox"/>	Acreage of easement or right of way parcel.
<input type="checkbox"/>	<input type="checkbox"/>	Title block
<input type="checkbox"/>	<input type="checkbox"/>	Show the owner name(s), project parcel number or tax number for all adjoining properties.
<input type="checkbox"/>	<input type="checkbox"/>	Show all known easements of record.
<input type="checkbox"/>	<input type="checkbox"/>	Show and label roadway(s).
<input type="checkbox"/>	<input type="checkbox"/>	Add "EXHIBIT _____" at the top of the sketch (refer to Land Acquisition template).