## APPENDIX 2

## LOCAL AND NONPROFIT LAND SURVEY OVERVIEW

A land survey plan prepared as part of a Green Acres project must be conducted by a New Jersey licensed professional land surveyor and must meet the following requirements:

- Size of plan must be 30x42 inches or 24x36 inches folded to approximately 8½ x 11 inches with the title block facing up.
- Orientation of parcel must have north pointing upward or left in landscape view, or upward or right in portrait view.
- Clockwise bearings must be used so that metes and bounds description of the parcel can be read in a clockwise fashion.
- Scale of parcel must be standard engineering scale in feet, and all data must be presented clearly.
- Line and curve tables are not acceptable. Label line and curve data directly on the survey course.
- Significant figures—Bearings must be rounded to whole seconds; distances and New Jersey State Plan Coordinate System (NJSPCS) NAD 1983 coordinates must be rounded to two decimals places in feet; and acres must be rounded to three decimal places except along waterways where one decimal place is required.
- Mathematical closure—All property surveys must form closed polygons with all sides defined by mathematical survey expressions being bearing and distances on all straight line segments and tie lines: radius, arc length, delta, chord bearing/distance on all curved lines; general calls must have tie lines.
- Mathematical survey expressions must be used to define all courses of the parcel being surveyed.
- Area must be stated in acres to three decimal places unless bounded by a waterway or Tidelands Claim, then one decimal place.
- Aerial photographs and planimetric mapping must be current to within two (2) years of survey.
- Areas of claim of tidelands ownership by State of New Jersey must be shown with area to 1/10th acre.
- Waterways at boundary must show mathematical tie lines. Terms "trash-line" and "debris line" are not acceptable.
- Roads—Survey lines should run to the center of the public road;
  area subject to the paramount rights of the public must be identified.
- Subdivision of lands—Survey and describe the entire property, then except out lands remaining.
- Title block must meet requirements of State Board of Professional Engineers and Land Surveyors.
- Legend of acquisition must include project name and number, funding source, acquisition partner (if any), seller name and identification number (available from Green Acres), municipality, county, list of each tax block and lot surveyed, interest being obtained for each lot, and area summary.
- Corner marking—Detailed enlargements may be required to be made to show a corner marker set or the relationship to markers found near a corner.
- Plan certification—Plan must contain the standard language certification.
- Location map must be placed in the upper right hand corner of the plan with the perimeter of survey drawn, indicating the site and the north arrow.
- Line weight and type—Perimeter survey lines shall be solid and be the most prominent line weight on the plan.
- Street address of the subject parcel being surveyed must be given only if the municipality has assigned a street number.
- Municipal tax block and lot numbers—The block and lots of the parcel and all adjoiners must be labeled. Internal lot lines and individual areas per lot shall be stated on the plan, and individual lot areas shall be restated in the metes and bounds description.
- Any permanent-type building, improvements, structures or foundations must be shown.

- Any utility easements, visible or known of record, overhead wires or pole lines within the parcel must be shown.
  - Encroachments shall be clearly drawn, labeled, and dimensioned to the property line. Such encroachments may need to be excluded from Green Acres encumbrances and funding.
  - Watercourses must be labeled including the name of the stream and showing the direction of flow and the area within the bed.
  - All drains and sewers that are visible on the surface of and within the limits of the parcel must be shown.
  - The name of record owners and the latest deed book and page reference for adjoining lands must be provided.
  - **Roads not open** are to be indicated as paper streets. If they are not vacated, they are subject to possible rights. The area of the paper streets must be labeled.
  - Tax Map—If the survey finds that the municipal tax map erroneously locates the parcel, note this discrepancy on the plan.
  - Deed book and page number of the reference deeds actually used must be indicated graphically.
  - Point of beginning must be labeled "Description Point of Beginning" or "P.O.B." with coordinates.
  - Survey to follow deed lines—The lines of the survey are to run with the lines in the deeds.
  - Public road rights-of-way and rivers that are acquired in fee must be identified as subject to such existing rights.
  - Private rights-of-way and easement widths must be shown with record or physical width provided.
  - Deed conflicts must be clearly labeled with information for all adjoiners, including name, tax block and lot, and deed book and page.
  - Record gore areas shall require a separate metes and bounds description of the gore area for potential use in a quit claim deed.
- Record overlap areas shall require a description of the overall metes and bounds of property, subject to the overlap.
- Corner marking and line marking is decided by the "Ultimate User" (the local government unit or nonprofit and also the State of New Jersey).
- Corner markers must be set at the perimeter and at limits of all public access easements.
- Omit markers that would otherwise be set at the right-of-way line of a public road or on lands common with other lands of the local government unit (or nonprofit) or internal to the project.
- Found markers that are found within a radius of 1.5 feet of the true may be considered as marked.
- Offset markers must be set if the corner is inaccessible.
- Public access corner markers must be set on all public access corridors.
- Three monument minimum—Set a minimum of three new monuments for corner markers.
- Cap detail must be drawn on the plan to show survey firm, year set, and the corner number. Also state diameter of rebar.
- Acceptable corner markers are standard  $3\frac{1}{2}$  inch or  $2\frac{1}{2}$  inch bronze or aluminum disk.
- **Disks** may be used for corner markers if the survey corner falls on a large boulder.
- Monuments may be pre-cast or poured in place, not less than 4 inches square on top containing a standard disk.
- Rebar must be capped with metal disk as plastic caps are not capable of being stamped in the field.
- Original signature and seal must appear on plan; a rubber stamp or computer-generated signature is not acceptable.

## Digital files must be submitted on a HD 1.44MB 3.5 inch, 5.25 inch or mini CD-R compact disks

 Submit a Digital file that shall be a .dxf format single layer digital drawing containing closed survey lines.

## **Deed description format**

**Deed description type** is that of a separate document metes and bounds description of property with reduced plan attached.

**Letterhead of survey firm** is required for the separate metes and bounds "Deed Description" of property and must contain the name, address, phone number, and e-mail address of survey firm. **Description heading** should include the title "Deed Description" and the qualifying supplemental such as "of Conservation Easement" or "of Gore Area" with project name and number, seller name, tax data, municipality, and county. **Description introduction** shall read: "All that certain tract or parcel of land located (at, on or along street address) in the (City, Borough, Town, or Township) of , County of , New Jersey, bounded and described as follows:" **Description second paragraph** must describe the point of commencement and/or the point of beginning with coordinates identified. Body of description should read clockwise, with numbered courses. It should not include any new information not on plan.

"together with . . ." or "subject to . . ." **Recite areas described,** total area contained, then specify the area of each included tax lot. Closing paragraph and call for survey must read: "The above

Description shall include call corners with assigned corner number

Use augmenting and qualifying clauses as required, such as

if cap stamped with number.

description was written pursuant to a survey of property designated as Block , Lot , on the municipal tax map of (

on description; rubber stamps are not acceptable.

municipality name), County of \_\_\_\_\_\_, State of New Jersey. Said survey was prepared by ( Survey firm's name and address), date), revised through ( last revision date, if any), and is marked as file No. . A reduced copy of said plan is attached hereto and made a part hereof."

Original signature, embossed seal and date signed must appear