



CITY OF LEBANON
ENGINEERING DEPARTMENT
SURVEY REQUIREMENTS

All surveys performed for the City of Lebanon will be tied to, and closed upon, the NAD-83 Ohio South State Plane Coordinate System. The survey shall include enough Azimuth checks throughout to meet the required State of Ohio minimum standards of accuracy.

The required accuracy for centerline surveys and right-of-way surveys for paving and utility projects (i.e., sanitary sewer, water, and storm sewer) shall be at least "Second Order, Class II" (1:10,000) as explained in "Classification, Standards of Accuracy, and General Specifications of Geodetic Control Surveys" as reprinted in May, 1978, unless a more restrictive accuracy is required.

Street Centerline Surveys

- 1) All lot corners fronting on streets in this project will be searched for property line markers.
- 2) All monuments and boundary line markers will be tied to the survey and displayed on the horizontal control sheet.
- 3) All intersections, angle points, curve data, ROW monuments (found and set), and major control points will be tied and adjusted to the NAD-83, Ohio South State Plane Coordinate System.

Sanitary Sewer/Storm Sewer/Water

- 1) If a baseline survey is performed, the centerline of streets or property lines will be tied to the baseline. The final plan stationing will be based on the street centerline.
- 2) Sewer manholes, water valves, and fire hydrants will be tied to the baseline and right-of-way lines in such a way that no further preliminary surveys will have to be performed to locate sewers and water lines.
- 3) All property being affected by easements will be surveyed so that there will be no question that the sewer and/or water main is in the correct position.
- 4) All control points, bench marks, angle points, catch basins, headwalls, field grates, manholes, sanitary sewer clean-outs, water main valves, water meter pits, fire hydrants, fire hydrant watch valves, monuments (found and set), and property lines will be tied and adjusted to the NAD-83, Ohio South State Plane Coordinate System.

Park

- 1) All control points and property line corners shall be tied to the NAD-83, Ohio South State Plane Coordinate System.
- 2) Where new construction meets existing features, i.e. sidewalks, driveways, etc., coordinates shall be defined.
- 3) All new construction shall be defined by coordinates. Offsets to baselines are not acceptable.

Vertical Control

- 1) All elevations shall be referenced to sea level via the "National Vertical Datum of 1988." The accuracy of Bench Circuit shall be "Second Order, Class I."
- 2) In urban areas, cross-sections, spot elevations and structure elevations shall be by actual field observations, and shall be accurate to ± 0.05 feet on hard surface areas.
- 3) Bench marks shall be set within the project limits, spaced not more than 250 feet apart and inner visible between each other.

Monuments

- 1) Monuments shall be set with a 3/4" diameter steel rebar 30" in length.
- 2) Monuments shall be a 3 1/4" Brass Domed cap with 3/16" lettering stating "City of Lebanon Monument" with Surveyor Company Name, Surveyor's professional registration number, and year set.
- 3) Monuments shall be set at the centerline intersections of the ROW of streets and alleys within the project limits where monuments are not found. Where a conflict exists at the centerline intersection of the ROW with a utility or other structure, monuments shall be set at the ROW intersections.

"As-Builts"

"As-Built" construction plans shall show lengths, inverts, rim elevations, pipe material, and percent grades on all storm sewer and sanitary sewers and the depth to the top of the water valve nuts for all water valves, plus locations (by station number & offset and state plane coordinates), off all water main appurtenances (valves, fire hydrants, water meter pits, curb stops, etc.), of all sanitary sewer main appurtenances (manholes, clean-outs, etc), of all storm sewer appurtenances (catch basins, manholes, field grates, centerline of paved ditches, headwalls, outlet structures, etc.), and of all electrical and telecommunications appurtenances (ie, hand boxes, generators, cross-overs, light poles, etc.).

All surveys shall be performed under the direct supervision of an Ohio Registered Land Surveyor.

A map showing the complete survey, including the initial tie to a main scheme station, shall be prepared. Said map must bear the name of the Licensed Surveyor responsible for the work, his/her official seal, and the date. Said map shall also include a statement of accuracy for the survey.