



1046 E. Chestnut Street
Louisville, Kentucky 40204
502-585-2222

June 3, 2022

Ms. Emma Moore
RossTarrant Architects
101 Old Lafayette Avenue
Lexington, KY 40502
(859)254-4018
emoore@rosstarrant.com

**New Mercer Co ES Site Selection
RTA 2229
Harrodsburg, Kentucky
Boundary Survey**



Qk4 is pleased to be given the opportunity to respond to this Request for Proposal for surveying services for the above referenced project. The following items are included in the scope of work:

BOUNDARY SURVEY (Base Bid)

Qk4 surveyors will prepare a boundary survey of the area shown in the attached RFP for the Mercer County Board of Education located at US-127 By-Pass/Bohon Road, Harrodsburg,

- Survey per Kentucky Standards of Practice 201 KAR 18:150
 - Survey will reference current Deed and Record Information and note any discrepancies
 - Deliverables will be a 8 ½" by 11" Boundary Plat and Legal Description

TOPOGRAPHIC SURVEY (Alternate)

Qk4 surveyors will prepare a topographic survey of the area shown in the attached RFP for the Mercer County Board of Education located at US-127 By-Pass/Bohon Road, Harrodsburg, KY including visible improvements such as pavement, sidewalks, playground, fence, trails, poles and signs. Individual Trees 4" or larger will be picked up in open areas, and the outline of wooded areas will be shown. Contours will be rendered at 1-foot intervals and spot elevations will be based on data generated from conventional ground survey, photogrammetric mapping utilizing survey mapping drones operated by a Certified Remote Pilot. Other controlling elevations, invert elevations, critical spot elevations, etc., where a higher level of accuracy is required will be obtained by conventional survey methods. We will set at least two benchmarks on site tied to horizontal and vertical controls.

Please see attached RFP dated, 6/2/22 and labeled RTA 22029 for detailed scope narratives and the following are clarifications:

- Survey Area: See RFP pages 3 and approximately 26 acres in total.
- Survey per Kentucky Standards of Practice 201 KAR 18:150
 - Not a Boundary Survey, Survey will reference current Deed and Record Information and note any discrepancies.
- Utilities:
 - Additional utility information for Water/Gas/Communication/Electric (i.e. material/size/depth) will be based on plans provided by the utility company and site representative, QK4 will not excavate to verify said information.
 - QK4 will place a KY811 Utility Locate Request and locate the lines as marked and compare with plans provided by the local utility company.
 - Third Party Utility Locator: See below scope
 - Markout of the site using ground-penetrating radar (350, 400 or 450MHz antenna), electromagnetic locating equipment.

- If utilities are non-metallic and tracer wires/tape are not installed, all efforts will be made to locate these items with ground-penetrating radar (GPR), but results cannot be guaranteed.
- GPR is limited by high-conductivity materials such as clay, rocky, and salt contaminated soils. It also needs a fairly open and flat area to conduct the survey. How deep and what utilities, UST's, voids, etc you will see depends on these factors. Sandy and dry soils are ideal.
- All utilities located will be indicated on the ground with marking flags and/or paint as per the national color code.

GENERAL SURVEY CONSIDERATIONS:

- Survey equipment to complete this survey will include GNSS Multi-Channel GPS receivers, Robotic total stations, Digital levels (if needed), UAS mapping drones, and 3D Laser Scanning (if needed).
- Survey will be tied to Kentucky State Plane Coordinates, NAD 83 KY Single Zone, US Survey Feet Horizontal Datum and NAVD 88 Vertical Datum.
- Deliverables will be in:
 - Boundary Survey
 - 8 ½"x11" Survey Plat & Legal Description
 - Topographic Survey
 - AutoCAD DWG and PDF file formats
 - DTM will be in TIN / XML / DWG file formats

Schedule of Hourly Rates for Surveying Services:

- | | |
|---|--------------|
| • 2-Man Survey Crew | \$185.00/hr. |
| • 1-Man Survey Crew | \$105.00/hr. |
| • CADD Operator | \$80.00/hr. |
| • Professional Land Surveyor (PLS) | \$125.00/hr. |
| • Mileage (included in rates above) | \$0.60/mile |
| • Per Diem / Lodging (at cost)(Included in rates above) | |

FEE SUMMARY

Compensation for the Survey services, as described shall be a lump sum fee of:

Boundary Survey (Base Bid)	\$ 6,950.00
Alternate 1: (Topographic Survey):	\$ 10,000.00
3 rd Party Utility Locate:	\$ 1,000.00
Total Combined Cost:	\$ 17,950.00

Please do not hesitate to contact me if I can provide any additional information or clarifications.

Schedule: From a NTP QK4 can have deliverables within **8 weeks** or sooner.

Sincerely,



Bob Neuhaus, PLS
Survey Manager
bneuhaus@qk4.com
(270) 570-6295



Ben Shinabery, PLS
Vice President
bshinabery@qk4.com
(502) 618-6255

June 2, 2022

Mr. Bob Neauhaus
Qk4 Land Survey
1046 East Chestnut Street
Louisville, KY 40204

Via e-mail: bneuhaus@qk4.com

Re: New Mercer County ES Site Selection
RTA 2229

Dear Bob:

Rosstarrant Architects, Inc. (RTA) has been asked by the Mercer County Board of Education to solicit proposals to perform a site survey for the above referenced project. Currently the school board is considering purchasing the property at US 127 by-pas/Bohon Rd, Harrodsburg, Mercer County, KY 40390. Survey is to include a deed description for the base bid boundary survey so that the property may be severed and recorded at the local courthouse.

The survey includes a base bid and an alternate. One cost for the base bid and one cost for the alternate is to be provided.

The base bid includes:

- 1) A boundary survey showing the location of all easements adjacent to or through the property, the 100-year flood elevation, the street address, adjacent property owners and the total acreage, including a deed description. In addition, all boundary, easements, and property line information including meets and bounds and 8.5"x11" drawing will need to be provided for a new deed to be prepared.
- 2) Three (3) permanent, cast aluminum construction benchmarks set in concrete are to be located at the property corners nearest to the construction area and in locations where they will not be disrupted by construction.
- 3) The surveyor will need to provide a plat by a registered land surveyor indicating property boundaries, acreage, road access, easements, and certification that the property is above the 100-year flood plain.
- 4) All survey information is to be referenced to the NAD83 datum using Latitude/Longitude projections in decimal degrees and true elevations in feet above sea level.

The alternate is to consist of a full site topographic survey with the following minimum requirements:

- 1) Existing structures and buildings including building overhangs. Elevations are to be recorded at all building corners and at all entrances.
- 2) Location of existing fencing, roads, pavements, curbs, sidewalks, drainage swales/ditches with spot elevations every 20 feet along the top and bottom of curbs and retaining walls, along both edges

of sidewalks and roads and along the centerline of roads. Existing curb cuts of driveways and roads along the opposite side of the adjacent roads.

- 3) All paint striping of existing roads.
- 4) Existing utilities on the property and along adjacent streets including:
 - a) All water lines and fire hydrants, water meters, valves, etc. with pipe sizes and pipe material identified.
 - b) All sanitary sewers, manholes, pump stations, package plants, vents, etc. with inverts, pipe sizes and types of piping identified on all pipes. Where structures have multiple connected inlet pipes, invert elevations are to be recorded and identified for each pipe penetration.
 - c) Gas piping, valves, meters, etc. with pipe sizes, materials and gas pressures where available from the local utility provider
 - d) Storm sewers, manholes, surface inlets, headwalls, etc. with inverts, pipe sizes and types of piping identified on all pipes. Where structures have multiple connected inlet pipes, invert elevations are to be recorded and identified for each pipe penetration.
 - e) Underground and overhead electric lines with transformers, pole lights, guy wires, meters, etc. and identification of 2-phase or 3-phase.
 - f) All communication lines (underground and overhead) for telephone, television, satellite, fiber optic etc. with poles, manholes, satellite dishes, pull boxes, etc.
 - g) All other utilities that may be present (steam piping, geothermal well fields and piping, gas transmission piping, septic tanks, grease traps, known underground storage tanks, etc.)
 - h) Survey information is to include pipe sizes and materials for all piped utilities. If an essential utility (water, gas, electric, sanitary sewer or telephone) is not located on the site, the closest location of that particular utility is to be identified.
 - i) The Surveyor is to meet with School District personnel to discuss existing utilities and underground work.
 - j) Identify all utility locations via an independent third-party utility locator.
- 5) Name of the operating authority for each utility on or adjacent to the site.
- 6) All easements and right-of-ways on or adjacent to the site.
- 7) Site contours at one-foot intervals with labels on every index contour. Representative spot elevations are to be shown for all high points, low points, top and bottom of slopes, drainage swales & channels and between contours at regular intervals in order to indicate general topography.
- 8) Landscape features including individual trees of 4" diameter and over. Identify type of tree, and accurately show the canopy spread and the trunk diameter to scale on the drawing. Accurate tree and drip line locations are required. Where trees are in groves or massing's, identify trees in excess of 8-inches in diameter.
- 9) Location and height of existing fences, gate locations and widths and signs. Surveyor is to record fencing materials, heights and openings on the survey drawings.
- 10) All survey information is to be referenced to the NAD83 datum using Latitude/Longitude projections in decimal degrees and true elevations in feet above sea level.

Drawing format shall be PDF for the project and shall be a sheet size of 30" x 42", stamped and signed by a registered land surveyor. Surveyor shall also provide a three-dimensional, AutoCAD DWG format copy of the drawing on disc for use by the Architect (or via e-mail). Survey points and elevations used to generate

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contours should be included with the digital file, and each item classification (roads, walks, trees, etc.) shall be on a separate layer as identified on the attached survey layer list.

The consultant must be able to provide a minimum of \$1,000,000 in professional liability and \$1,000,000 in general liability with an additional \$2,000,000 umbrella of general liability. The consultant shall submit insurance listing the Mercer County Board of Education as the certificate holder before receiving a signed agreement. No proposal fee agreement with limitations of liability will be considered. Please modify your solicitation for services to include the requirement that **NO LIMITATION OF LIABILITY** will be allowed, and that payment terms will be scheduled and coordinated with the Architect and Owner in order to schedule payment to be approved at the next regularly School Board Meeting.

Proposals are to be broken down into unit rates, hours per rate and itemized direct costs. Proposals should be submitted to RTA by **12:00 p.m. on Thursday, June 9th, 2022**. If you have any questions, or require additional information of the site, please feel free to contact me.

Sincerely,

Emma Moore, EIT
Civil Designer

Enclosures

c: Michael B. Mays, PE
Beth Bauer, AIA, LEED AP
File 2229-1A
LT220602-survey-QK4-2229

US 127 BY-PASS/BOHON ROAD,
HARRODSBURG, MERCER COUNTY, KY 40390

SURVEY AREA

Shannon Oaks Dr
Shannon Oaks Dr

CC Auto Parts and Service

390

BYP
127

BYP
127

127

Moberly Rd

Mercer County Intermediate School

Arrowhead Rd

Chippewa Dr