177 -2020

CERTIFIED COPY OF ORDER

STATE OF MISSOURI	April Session of the April Adj	n of the April Adjourned		Term. 2020
County of Boone				
In the County Commission of said county, or	a the 14th	day of	April	20 20

the following, among other proceedings, were had, viz:

Now on this day, the County Commission of the County of Boone does hereby approve the attached Approval of Proposal for Consultant Services form with Engineering Surveys and Services, LLC for provision of survey, geotechnical, design and engineering services for the project of constructing a radio tower on the Rockbridge, Columbia Career Center, and Gentry Middle School property.

The terms of the agreement are stipulated in the attached Proposal for Consultant Services form. It is further ordered the Presiding Commissioner is hereby authorized to sign said Proposal for Consultant Services form.

Done this 14th day of April 2020.

ATTEST: lanna Brianna L. Lennon

Clerk of the County Commission

Daniel Atwill

DanieAK, Atwill Presiding Commissioner

Fred J. Parry District I Commissioner

12MQ

Jane M. Thompson District II Commissioner

Boone County Purchasing

Melinda Bobbitt, CPPO Director of Purchasing



613 E. Ash St, Room 110 Columbia, MO 65201 Phone: (573) 886-4391 Fax: (573) 886-4390

MEMORANDUM

TO:	Boone County Commission
FROM:	Melinda Bobbitt, CPPO, CPPB
DATE:	April 14, 2020
RE:	Consulting Services Contract: 19-31DEC20C – Consulting Services for
	Radio Tower Project at Gentry Schools

Dave Dunford, on behalf of Boone County Joint Communications as our Radio Consultant, requests Consulting Services for the Radio Tower Project at Gentry Schools with Engineering Surveys and Services LLC of Columbia, MO as follows:

Provision of survey, geotechnical, design and engineering services for project to construct a radio tower on the Rockbridge, Columbia Career Center, and Gentry Middle School property, located northwest of the baseball field.

Cost of services is \$16,300 and will be paid from 2706 – Radio Network Improvements, 91300 – Machinery & Equipment. \$506,000 is budgeted for the Rockbridge (RKB) radio tower project. There is \$6,000 budgeted in 2706/91300 for preliminary costs (engineering, etc.) and \$500,000 in 2706/91800 for land acquisition. We are only going to use \$300,000 for land (easements), so there will be funds left in Class 9 to cover the difference for engineering services.

cc: Chad Martin, Patricia Schreiner, Joint Communications Dave Dunford, Radio Consultant Contract File

APPROVAL OF PROPOSAL FOR CONSULTANT SERVICES

Effective the ______ day of ______, 2020, Boone County, Missouri, a political subdivision of the state of Missouri through its County Commission (herein "Owner") hereby approves and authorizes professional services by the Consultant referred to below for the services specified herein.

Consultant Name: Engineering Surveys and Services LLC

Project/Work Description: Provision of survey, geotechnical, design and engineering services for project to construct a radio tower on the Rockbridge, Columbia Career Center, and Gentry Middle School property, located northwest of the baseball field.

Proposal Description: See attached

Modifications to Proposal: Fees and expenses shall not exceed **\$16,300.00** without prior written approval of Owner.

\$800 - Task 1 - Prepare Two Concept Plans
\$2,500 - Task 2 - Boundary and Topographic Survey
\$2,000 - Task 3 - Easement preparation
\$3,000 - Task 4 - Geotechnical Investigation
\$3,500 - Task 5 - Site Plan
\$1,500 - Task 6 - Construction Staking
\$3,000 - Task 7 - Materials Testing and Inspections

This form agreement and any attachments to it shall be considered the approved proposal; signature by all parties below constitutes a contract for services in accordance with the above described proposal and any approved modifications to the proposal, both of which shall be in accordance with the terms and conditions of the General Consultant Services Agreement signed by the Consultant and Owner for the current calendar year on file with the Boone County Resource Management Department, which is hereby incorporated by reference. Performance of Consultant's services and compensation for services shall be in accordance with the approved proposal and any approved modifications to it and shall be subject to and consistent with the General Consultant Services Agreement for the current calendar year. In the event of any conflict between the proposal approved herein and the General Consultant Services Agreement, or the inclusion of additional terms in the Consultant's proposal not found in the General Consultant Services Agreement with a specific term or terms of Consultant's proposal not found in the General Consultant's proposal not found in the General shall control unless this Approval of Proposal indicates agreement with a specific term or terms of Consultant's proposal not found in the General Consultant's proposal not found in the General Services Agreement.

ENGINEERING SURVEYS AND SERVICES LLC	BOONE COUNTY, MISSOURI
By: Fridrick E. Carroy III, PLS.	By: Daniel K. Atwill BA4B034CED0E4EB
Vice President of Surveying Title:	Presiding Commissioner
4/2/2020 Dated:	Dated:
APPROVED AS TO FORM:	ATTEST:
DocuSigned by: J. J. J	Brianna L Lunnon by Mt 270820A086666495
County Counselor	County Clerk

AUDITOR CERTIFICATION

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of the contract do not create in a measurable county obligation at this time.)

June E Atalford by JF 802480846EZA483	4/3/2020	2706-91300 / \$16,300.00
Signature	Date	Appropriation Account

Engineering Surveys & Services

Consulting Engineers, Land Surveyors, and Geoprofessionals Analytical and Materials Laboratories

1113 Fay Street Columbia, MO 65201 573-449-2646 802 El Dorado Drive Jefferson City, MO 65101 573-636-3303 1775 West Main Street Sedalia, MO 65301 660-826-8618 2464 Taylor Road, #130 Wildwood, MO 63040 314-254-4498

February 7, 2020

RE:

Rockbridge High School Antenna Site Submitted Via Email

Mr. Chad Martin - Director Boone Co. Joint Communication 2145 E. County Drive Columbia, MO 65202

Dear Mr. Martin:

Engineering Surveys & Services appreciates the opportunity to present this proposal to provide engineering and surveying support services for the above referenced project. It is our understanding that Boone County and Columbia Public School are in the early stages of discussions regarding Boone County constructing a join communications tower on the Rockbridge, Columbia Career Center, and Gentry Middle School property, located northwest of the baseball field. We propose to provide the following services:

Task 1 - Concept Layout: Prepare two concept plans based on discussions with Mr. David Dunford on February 5^{th.} These concepts will be presented to Dr. Stiepleman, and the Columbia Board of Education. Both concepts will show the equipment site, tower, shelter building, generator, LP tank, fence, access drive, site easement, fall radius easement, ingress/egress easement, and underground electric easement. The concepts will also show aerial imagery, and entire Columbia Public School property they relate to the existing, and proposed features.

Task 2 - Boundary and Topographic Survey: We will survey the: property boundary lines in order to establish the minimum tower distance from of the property lines, and properly establish any existing or proposed easements; the topography of an area approximately 100 feet outside the proposed 40 foot by 60 foot site; a 50 foot wide corridor along the access route; any utilities within the survey limits; and the corridor by which power will be supplied to the site.

Task 3 - Easement Preparation: We will prepare easement descriptions and easement exhibits for the tower and equipment area, ingress/egress, fall zone easement, temporary construction, and underground electric. The descriptions and exhibits will be inserted in to technical easement language (standard easement forms) provide by Boone County.

Task 4 - Geotechnical Investigation: We propose to drill one soil and rock boring at the proposed tower location, to a depth of 30 feet. This proposal assumes 15 feet of soil drilling and 15 feet of rock coring. A track mounted drill rig will be utilized to perform the geotechnical investigation. Undisturbed sampling and penetration resistance testing will be performed in the boring in accordance with ASTM D1587 and D1586, respectively. Samples obtained from our drilling activities will be transported to our laboratory for additional classification in accordance with the Unified Soil Classification System. The boring will be immediately backfilled following completion.

In general, our geotechnical report will include the following items:

- Boring log indicating subsurface strata, standard penetration resistance test data, time of boring groundwater levels, and a graphical representation of soil characteristics.
- A boring location plan showing the locations of the boring.
- A summary of site and subsurface conditions.
- Foundation support systems recommendations and construction criteria.

Mr. Chad Martin February 7, 2020 Page 2

- Seismic site classification per IBC.

 Recommended construction practices specifically related to onsite soils, and groundwater parameters.

Task 5 - Site Plan: We will prepare a site layout plan with grading, and erosion control for the tower site. Based on the site location chosen, we will also design a gravel access drive and associated culvert pipe. Other stormwater related design is not included in this scope of work. We will coordinate with the utility providers to show the proposed utility alignments to serve the radio tower.

Task 6 - Construction Staking: We will provide a onetime, two site visits, construction staking for the tower, shelter building, LP tank, equipment area corners, access driveway, temporary construction easement.

Task 7 - Materials Testing and Inspection:

Pier observations for deep foundation.

- Assumed 12 hours of onsite inspections during pier installation, which includes the
- reinforcement inspection.

Concrete testing.

- One (1) Cylinder for 7-day strength, three (3) cylinders for 28-day strength (per ACI and ASTM), and one (1) cylinder held as a spare.
- Assumed 3 sets of concrete cylinders for the pier and slab-on-grade.
- Structural reinforced concrete observation.
- Pier reinforcement observations will be performed while on site for the respective foundation observations.

Review: Not included with this proposal are any City of Columbia, submittals, applications, reviews, fees, or other approvals, and any Boone County review fees.

Project Fees: We propose to provide these services on a time expended basis for the not-to-exceed fees listed below.

\$800 – Task 1 – Prepare Two Concept Plans \$2,500 – Task 2 – Boundary and Topographic Survey \$2,000 – Task 3 – Easement preparation \$3,000 – Task 4 – Geotechnical Investigation \$3,500 – Task 5 – Site Plan \$1,500 – Task 6 – Construction Staking \$3,000 – Task 7 – Materials Testing and Inspections \$16,300 – Total

If you have any questions or believe we have not properly understood the scope of work, please contact me so appropriate adjustments can be made. My contact information is provided below.

Respectfully,

Ami

Frederick E. Carroz III, PLS. Vice President of Surveying O: 573-449-2646 | M: 573-881-3733 fcarroz@ess-inc.com

Engineering Surveys & Services