

**CARROLL COUNTY, ILLINOIS  
JO DAVIESS COUNTY, ILLINOIS  
WHITESIDE COUNTY, ILLINOIS**



**PROPOSAL REQUEST FOR  
COOPERATIVE MULTI-COUNTY 2021  
DIGITAL ORTHOPHOTOGRAPHY PROJECT**

**PROPOSALS DUE BY 12:00 PM (CST) ON FRIDAY, JANUARY 22, 2021**

## **1.0 INTRODUCTION**

Carroll County, Illinois, Jo Daviess County, Illinois and Whiteside County, Illinois (“Counties”) are seeking proposals from qualified photogrammetric firms to obtain true color digital orthophotography with a spring 2021 flight of the three counties.

## **2.0 BACKGROUND**

Carroll County is located in northwest Illinois, bordered on the west by the Mississippi River, on the north by Jo Daviess and Stephenson Counties, on the east by Ogle County and on the south by Whiteside County. The County covers approximately +/- 468 square miles. The northwest part of the County is quite hilly and wooded, while the eastern part is more rolling and has better soils. According to the 2010 U.S. Census data, the population of Carroll County is 15,387. Agriculture is the main economic resource as there is little industry. Mt. Carroll, which is the county seat, has a population of 1,717. Savanna is the largest community in the County with a population of 3,062. Other communities in Carroll County are: the Village of Thomson (population 590), the Village of Chadwick (population 551), the Village of Milledgeville (population 1,032), the Village of Shannon (population 757), and the Town of Lanark (population 1,457). There is one large developed but unincorporated area in the County called Lake Carroll.

Jo Daviess County is located in the extreme northwest corner of the State of Illinois, and it is situated in the “driftless area,” making the hills and valleys throughout the County unique to much of the State. The County covers approximately +/- 618 square miles. According to the 2010 U.S. Census data, the current population of Jo Daviess County is 22,678. The County is considered rural with agriculture and tourism being the top two economic resources. The City of Galena is the county seat, and it is also the largest city in Jo Daviess County with a population of 3,429. Other communities found in the County include: the City of East Dubuque (population of 1,704), the Village of Elizabeth (population of 761), the Village of Hanover (population of 844), the Village of Apple River (population of 366), the Village of Warren (population of 1,428), the Village of Scales Mound (population of 376), the Village of Nora (population of 121), the Village of Menominee (population of 248), and the Village of Stockton (population of 1,862). Two other developed, but unincorporated areas in the County are The Galena Territory and Apple Canyon Lake.

Whiteside County is located in northwestern Illinois, with only Jo Daviess and Carroll Counties lying north of it. The County covers +/- 687 miles. According to the 2010 U.S. Census data, the population of Whiteside County is 58,498. The County is considered rural with agriculture and manufacturing being the top two economic resources. The City of Morrison is the county seat with a population of 4,188. The largest city in Whiteside County is Sterling with a population of 15,370. Other communities include Rock Falls, population 9,266; Tampico, population 790; Deer Grove, population 48; Coleta, population 164; Lyndon, population 648; Prophetstown, population 2,080; Erie, population 1,602; Albany, population 891; and Fulton, population 3,481.

### **3.0 PROJECT OVERVIEW**

Six-inch resolution, true color orthophotography extending beyond the counties' boundaries approximately 1 mile. Image footprints in digital format for each county will be provided to bidders. The aerial photography shall be captured in the spring of 2021, during leaf off conditions, after all the snow and ice has melted, all streams and rivers within their banks with the sun angle not less than 30 degrees above the horizon and ground. The photography shall not be obscured by snow, haze, smoke, dust, cloud shadows or other ground cover. Deciduous trees shall be barren.

All imagery must be ortho-rectified using the most recent State of Illinois LIDAR. Rectification shall seek to minimize feature displacement and loss of features along mosaic lines. The LIDAR shall be reviewed and updated where needed to meet the horizontal accuracies.

All products developed from this project shall meet or exceed American Society for Photogrammetry and Remote Sensing (ASPRS) Class 1 accuracy standards.

### **4.0 SCOPE OF WORK**

All products developed from this project must meet the American Society for Photogrammetry and Remote Sensing (ASPRS) Class I accuracy standards. The project involves the following separate, but related components listed below. Bidders are required to provide the information requested for each phase of the project. All phases will be awarded to a single vendor.

- Ground Survey Control and Airborne GPS acquisition
- Aerial Photography acquisition
- Fully Analytical Aerial Triangulation
- DEM/DTM development
- Digital Orthophotography production

#### **4.1 Ground Survey Control and Airborne GPS Acquisition**

Please provide a project approach/methodology for the ground survey control and airborne GPS acquisition process and identify the following:

- Provide a list and map of existing control points that will be used
- Provide a list and map of new control points that will be established
- Identify National Geodetic Survey (NGS) Standards that will be met

#### **4.2 Aerial Photography Acquisition**

Please provide a project approach/methodology for the aerial photo acquisition process and identify the following:

- Provide a flight plan for each County's project
- Provide the flight altitude based on the native resolution of the camera when producing digital color orthophotography meeting the ASPRS Class I standards at a map scale of 1" = 100' with a six-inch ground pixel resolution (GPR)
- Describe in detail the aircraft(s) to be used

- Describe in detail the camera system(s) to be used and provide a USGS calibration report for each system
- Describe in detail the flying/weather conditions on the day of the flight including:
  - a.) Sun angle
  - b.) Cloud cover
  - c.) Ground conditions
- Identify flight line orientation and tolerances
- Identify photo overlap tolerances
- Identify tilt tolerances
- Identify crab tolerances

#### 4.3 Fully Analytical Aerial Triangulation

Please provide a project approach/methodology for the Fully Analytical Aerial Triangulation process and identify the following:

- Type of environment to be used in the measurement process (“hardcopy” or “softcopy”)
- Identify the values that will be utilized to evaluate the final positional quality of the aerial triangulation adjustments

#### 4.4 DEM/DTM Development

Please provide a project approach/methodology for the DEM/DTM development.

#### 4.5 Digital Orthophotography

Please provide a project approach/methodology for the Digital Orthophotography production.

#### 4.6 Rejection of Product

The Counties reserve the right to reject and have the selected bidder redo any or all products pertaining to problems including but not limited to coverage, cloud cover, endlap & sidelap, quality, resolution, low sun angle, tone or contrast, artifacts, leaf cover, etc., at no extra cost to the Counties unless the selected bidder and the Counties had previously agreed in writing that a given condition is allowed.

#### 4.7 Re-flights

The selected bidder shall present a plan for re-visitation of areas in the event of image rejection during the Quality Control (QC) process, or where original imagery could not be collected because weather or ground conditions, or other factors outside the control of the selected bidder precluded collection at the scheduled time of the flyover. Mechanical or technical problems shall not be considered a legitimate reason for non-collection.

## **5.0 PROJECT DELIVERABLES**

### **5.1 Carroll County Project Specifications & Deliverables**

All photogrammetric mapping products shall meet or exceed ASPRS Class I standards. Delivered products will be referenced horizontally to the Illinois West (Zone 1202) State Plane Coordinate System (NAD83) and vertically to the NAVD88 datum (where applicable), utilizing the US survey foot as the unit of measure.

The selected bidder will utilize a digital mapping camera to acquire and produce digital color orthophotography meeting the ASPRS Class I standards at a map scale of 1" = 100' with a six-inch ground pixel resolution (GPR) for the entirety of Carroll County. A butt-matched tiling scheme will be used and delivered in GeoTIFF with JPEG compression and MRSID compression formats. The existing 5,000' x 5000' tile grid file will be provided. No blank pixels will be allowed in any of the tiles.

The most recent LIDAR acquired by the State of Illinois may be used by the selected bidder in the Digital Elevation Model (DEM) development.

Ground control points set for previous Carroll County Digital Orthophotography Projects may be utilized by the selected bidder for this project. The ground control points are available upon request in shapefile format.

Metadata meeting the Federal Geographic Data Committee standards will be provided to Carroll County in digital format for each product delivered.

### **5.2 Jo Daviess County Project Specifications & Deliverables**

All photogrammetric mapping products shall meet or exceed ASPRS Class I standards. Delivered products will be referenced horizontally to the Illinois West (Zone 1202) State Plane Coordinate System (NAD83) and vertically to the NAVD88 datum (where applicable), utilizing the US survey foot as the unit of measure.

The selected bidder will utilize a digital mapping camera to acquire and produce digital color orthophotography meeting the National Map Accuracy Standards at a map scale of 1" = 100' with a six-inch ground pixel resolution (GPR) for the entirety of Jo Daviess County. A butt-matched tiling scheme will be used and delivered in GeoTIFF with JPEG compression ECW, and MRSID compression formats. The existing 5,000' x 5000' tile grid file will be provided. No blank pixels will be allowed in any of the tiles.

The most recent LIDAR acquired by the State of Illinois may be used by the selected bidder in the Digital Elevation Model (DEM) development.

Ground control points set for previous Jo Daviess County Digital Orthophotography Projects may be utilized by the selected bidder for this project if desired. The ground control points are available upon request in shapefile format.

Metadata meeting the Federal Geographic Data Committee standards will be provided to Jo Daviess County in digital format for each product delivered.

### 5.3 Whiteside County Project Specifications & Deliverables

All photogrammetric mapping products to be delivered by the selected bidder must meet ASPRS Class I standards. Delivered products will be referenced horizontally to the Illinois West (Zone 1202) State Plane Coordinate System (NAD83) and vertically to the NAVD88 datum (where applicable), utilizing the US survey foot as the unit of measure.

The selected bidder will utilize a digital mapping camera to acquire and produce digital color orthophotography meeting the National Map Accuracy Standards at a map scale of 1" = 100' with a six-inch ground pixel resolution (GPR) for the entirety of Whiteside County. A butt-matched tiling scheme will be used and delivered in GeoTIFF with JPEG compression and MRSID 10x compression formats. The existing 5,000' x 5000' tile grid file will be provided. No blank pixels will be allowed in any of the tiles.

The most recent LIDAR acquired by the State of Illinois may be used by the selected bidder in the Digital Elevation Model (DEM) development.

Monumentation set for the 1991 aerial flight of Whiteside County may be utilized in this flight. Any new ground control set for this flight will be tied to the existing Whiteside County GPS network. The ground control points are available upon request in shapefile format.

Metadata meeting the Federal Geographic Data Committee standards will be provided to Whiteside County in digital format for each product delivered.

### **6.0 PROPOSAL REQUIREMENTS**

It is recognized that the formal basis of any agreement between the successful bidder and the Counties is a contract rather than a proposal. In submitting proposals, bidders must indicate that they are prepared to complete a contract containing all the information submitted in their proposals. This RFP and the submitted proposal will become part of the contract between the Counties and the successful bidder.

Proposals must have the following information to be considered. Incomplete or failure to respond to each area below may be the basis for rejecting the proposal.

- A. A scope of work which includes a description of all project phases identified in Section 4.0, along with other information the vendor deems relevant to the Counties' selection process.
- B. Organizational capabilities and technical requirements – describe experiences and capabilities in providing similar services to those required in the scope of work. Be specific and identify projects, dates, and results.
- C. Length of time in business and staff qualifications.
- D. Location of principal office that will be responsible for implementation of contracts and location of other offices from which resources may be drawn.
- E. References – provide contact information for at least three clients where your firm has provided similar services.
- F. Each proposal will include a letter of transmittal not to exceed two (2) pages in length which bears the signature of an authorized representative of the bidder and designates by name the individual(s) authorized to negotiate with the Counties on behalf of the bidder and sign contracts.

## 6.1 Price Quotes

Price quotes must be firm prices and not subject to increase during the term of the contractual agreement arising between the Counties and the successful bidder as a result of said bid. Bidder must state the expiration date of the quoted bid.

## 6.2 Product Development

Bidder must provide in writing an affidavit from the president of the bidding company indicating that all services and products developed from this project will be completed by the bidder's firm in the United States. Subcontracting of services to other businesses in the United States or internationally will result in immediate rejection of that proposal.

## 6.3 Ownership of Completed Products

Bidder must acknowledge in the proposal that all products including: maps, photographs, documents, reports or digital data prepared or completed during the performance of services for this project will become the sole property of the County requesting the products and shall not be copyrighted by the chosen vendor. Also, the same products shall not be released or made available to any third party or used for other purposes without the written approval of the County owning the products.

## 6.4 Responses, Inquiries, and Correspondence

All responses, inquiries, or correspondence related to or in reference to this request for bids, and all reports, charts, displays, schedules, exhibits, and other documentation by the bidders and the contractor will become the property of the Counties when received. All proposals submitted in response to this RFP become property of the three Counties. Supporting technical manuals will be returned at the request of the Bidder. Selection or rejection of the proposal does not affect the right.

## 6.5 Interpretations

No oral interpretations made to any bidder will be binding. Requests for interpretation or changes to the bid document must be made in writing at least three (3) days prior to the bid opening.

## 6.6 Addenda

If required, addenda will be faxed or emailed to each bidder issued a bid document. Addenda shall become part of the contract and all bidders shall be bound by such addenda, whether or not received by the bidders. Any addenda shall be placed on file and made available for review upon request.

## 6.6 Bid Bond and Performance Bond

Bids shall be accompanied by a Bid Bond. The successful bidder shall provide a performance bond within seven (7) days of the award. Failure to provide said bond in seven (7) days will void the award.

## **7.0 CERTIFICATE OF INSURANCE**

The successful bidder will be required to show evidence of adequate insurance coverage by furnishing the Counties certificates of insurance. All certificates of insurance will name each County as an additional insured and document the following minimum limits:

It is the requirement of the Counties that for work performed under contract and/or authorized by the Counties and conducted on either county property that the contractor/supplier (Contractor) procure and maintain insurance at the expense of the Contractor and without expense to the Counties, until final acceptance of the work. All insurance must be procured and maintained in a form satisfactory to the Counties.

Before a purchase order is released, a contract signed, or any work commenced, contractors doing business with the Counties are required to provide proof of insurance satisfactory to the Counties and documentation evidencing that the Contractor maintains insurance that meets the following requirements:

- A. General Liability Insurance of not less than \$1,000,000.00 combined single limit per occurrence for bodily injury and property damage, \$2,000,000.00 aggregate.
- B. Personal and Advertising Injury of not less than \$1,000,000.00 per occurrence.
- C. Worker's Compensation and Employer's Liability Insurance, of not less than 500/500/500, covering all employees and subcontractors of Contractor as required by law in the State of Illinois.
- D. Automobile Liability Insurance of not less than \$1,000,000.00 is required in the event motor vehicles are used by the Contractor in the performance of the Agreement.
- E. In the event Contractor is a licensed professional, and is performing professional services under Agreements with the Counties, professional liability (for example, errors and omissions) is required with a limit of liability of not less than \$1,000,000.00 per occurrence, \$3,000,000.00 aggregate.
- F. Contractor shall furnish a certificate of insurance satisfactory to the Counties as evidence that the insurance required above is being maintained.
- G. The certificate of insurance must include the following provisions:
  1. Carroll County, Jo Daviess County and Whiteside County must be named as an additional insured under the Contractor's General Liability insurance. This provision shall apply to all liability policies except worker's compensation and professional liability insurance policies.
  2. The Contractor shall not cancel insurance coverage. Insurance shall be kept in force during the duration of the job and for a minimum of at least 30 days thereafter.
  3. When entering into a contractual agreement with the Counties the Contractor shall agree to indemnify and hold harmless the Counties, their officers and employees, from and against any and all claims, losses, judgments, liabilities or claims for attorneys' fees arising out of or resulting from Contractor's performance of its duties pursuant to the contract.
- H. The Contractor's insurance coverage shall be primary insurance as respects the Counties, their officers, officials, employees and volunteers.



- I. Any failure of the contractor to comply with the reporting provisions of the policies shall not affect the contractor's obligations provided to the Counties, their officers, officials, employees, or volunteers under this agreement.
- J. Contractor's obligations shall not be limited by the forgoing insurance requirements and shall survive expiration of any agreements with the Counties.
- K. The standards as outlined above are the minimum acceptable requirements. Certificates of insurance may be required to meet additional standards that are considered essential for protection of the Counties. Depending upon the level of exposure, additional limits of liability or additional coverages may be required for individual jobs or projects, as determined by the Counties.

### **8.0 HOLD HARMLESS AND INDEMNIFICATION CLAUSE**

Notwithstanding any other terms and conditions stated herein, including any obligations regarding insurance, the successful bidder will be expected to defend, indemnify, keep, save and hold harmless the counties their agents, boards and commissions and individual members thereof, volunteers, officials and employees, from and against all liabilities, losses, suits, claims, judgments, fines or demands of every kind and nature (including all reasonable costs for investigation, reasonable attorney's fees, court costs and expert fees) arising out of or as a consequence of the successful bidders performance or non-performance related to this engagement or the enforcement thereof, including the enforcement of this indemnification provision, including any error, omission, negligence, or willful or intentional tortuous conduct of the successful bidder or of any person employed or engaged by the successful bidder to perform services on the successful bidder's behalf. The duty to indemnify shall survive the expiration or termination of the award contract.

### **9.0 AWARD AND ACCEPTANCE**

The Counties openly solicit the best possible value on all requests for proposal. Bids will be opened at a meeting open to the public. Results will be compiled and available to the public.

The Counties reserve the rights to reject any or all bids, to waive technicalities or informalities, and to accept any bid deemed to be in the best interest of the Counties. The Counties reserve the rights to purchase from any source or sources in part or in whole any desired services and products. Where two or more bidders are considered equal, the Counties reserve the rights to make award to one of the two bidders. If an award is made, it will based upon price, ability, qualifications and experience of the bidder.

Each bidder must submit one (1) original of the proposed document in hardcopy form and provide a PDF version by USB or email to [jkratcha@jodaviess.org](mailto:jkratcha@jodaviess.org)

The Counties will not be responsible for late mail deliveries and no proposals will be accepted if received after the time stipulated in this RFP. All respondents are responsible for the costs incurred in responding to this RFP.

The selected bidder will contract with each County separately.

Proposals will be opened at 1:00 PM (CST) on January 22, 2021 in the County Board room of the Jo Daviess County Courthouse located at 330 North Bench Street in Galena, Illinois and the public may join the meeting via Zoom:

Join Zoom Meeting

<https://zoom.us/j/96753719270?pwd=NDh2dVMxekVoOHlxaE91ZHM1TGxJZz09>

Meeting ID: 967 5371 9270

Passcode: 136062

Dial by your location

+1 312 626 6799 US (Chicago)

### **10.0 CONTACTS**

All requests for further information should be directed to:

Joe Kratcha, IT/GIS Director

815.776.9297

[jkratcha@jodaviess.org](mailto:jkratcha@jodaviess.org)

### **11.0 CLOSING DATE**

An original hardcopy proposal must be submitted in a sealed envelope by 12:00 PM (CST) on January 22, 2021 to:

Jo Daviess County GIS/IT Department

Attn: Joe Kratcha, IT/GIS Director

PROPOSAL FOR CARROLL, JO DAVIESS & WHITESIDE COUNTIES 2021 ORTHO PROJECT

330 North Bench Street

Jo Daviess County Courthouse, Room 101

Galena, IL 61036

### **12.0 BILLING PROCEDURES AND REQUIREMENTS**

- A. Payment procedures during the course of the project will be negotiated between the selected bidder and the Counties; however, 15% of the project price will be retained by the Counties until final delivery and customer approval.
- B. Each County shall be invoiced separately.

### **13.0 EQUAL EMPLOYMENT OPPORTUNITY AND FAIR EMPLOYMENT COMPLIANCE**

Each bidder shall submit with his bid the information specified in the bid documents for compliance with the laws covering Fair Employment Practice and Equal Employment and Business Opportunity. Each bidder shall also submit a statement of intent, to preferentially hire qualified residents from Carroll County, Jo Daviess County or Whiteside County for work on this project, to the extent that such additional persons are otherwise reasonably available and required for such work.

#### **14.0 WAGE RULES**

In compliance with the Illinois Prevailing Wage Act (ILCS Ch. 48 Sec. 39ss-10012), the general prevailing rate of wages in each of the Counties shall be paid for each craft or type of worker or mechanic needed to execute the contract or perform such work.

#### **15.0 ADA COMPLIANCE**

Bids must be in compliance with current Federal and State ADA laws and regulation. U.S. Title I (Employment) requirements can be obtained from the U.S. Equal Employment Opportunity Commission. U.S. Title II (State and Local Government Services) can be obtained from the U.S. Department of Justice.

#### **16.0 TAXES**

Proposals should not include any tax from which the Counties are exempt.