# INTERGOVERNMENTAL COOPERATION AGREEMENT

Re: Aerial Photography

THIS AGREEMENT is between Benton County ("COUNTY"), a political subdivision of the State of Washington, and the City of Richland ("RICHLAND"), a Washington municipal corporation.

# WITNESSETH:

WHEREAS, the Interlocal Cooperation Act, as amended, and codified in Chapter 39.34 of the Revised Code of Washington provides for interlocal cooperation between governmental agencies; and

WHEREAS, the purpose of this Agreement is to cooperatively undertake and complete an aerial photography and orthophoto mapping project of portions of Benton and Franklin Counties, including the areas lying within the City of Richland; and

WHEREAS, this project will benefit both, because the COUNTY has a need to update its urban ortho-imagery of the County in 2022, and RICHLAND has a need to update its ortho-imagery of those areas lying within the limits of the RICHLAND Urban Growth Boundary; and

WHEREAS, both parties have the capability to independently acquire and/or produce 2022 ortho-imagery, but if each acted independently, the results would involve redundancies and increased costs; and

WHEREAS, a major goal of this Agreement is to reduce and/or eliminate duplication and save governmental costs; and

WHEREAS, RICHLAND has requested that the COUNTY provide and deliver orthoimagery of the RICHLAND Project Area, as described in the attached **Exhibit B**, with 4inch or better pixel resolution; and

WHEREAS, the COUNTY has entered into a personal services contract with GEOPHEX, LTD., for the purpose of undertaking and completing an aerial photography and urban orthophoto mapping project of portions of Benton and Franklin Counties; and

WHEREAS, the COUNTY has included, as part of the contract with GEOPHEX, LTD., all provisions necessary to deliver ortho-imagery of RICHLAND and the areas lying within several local urban growth areas to RICHLAND at the requested 4-inch or better pixel resolution, and the delivery of the Benton County 1 foot or better pixel resolution; and

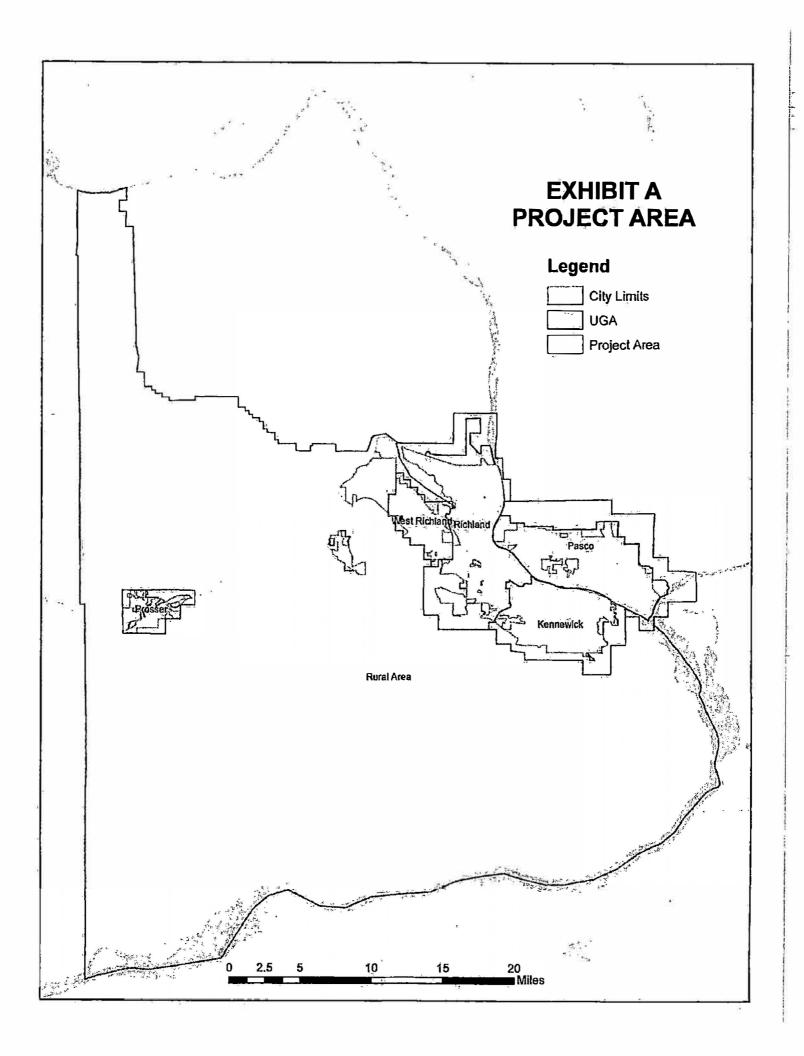
WHEREAS, RICHLAND has agreed to pay to the COUNTY the cost to deliver orthomagery of the RICHLAND Project Area with 4-inch or better pixel resolution.

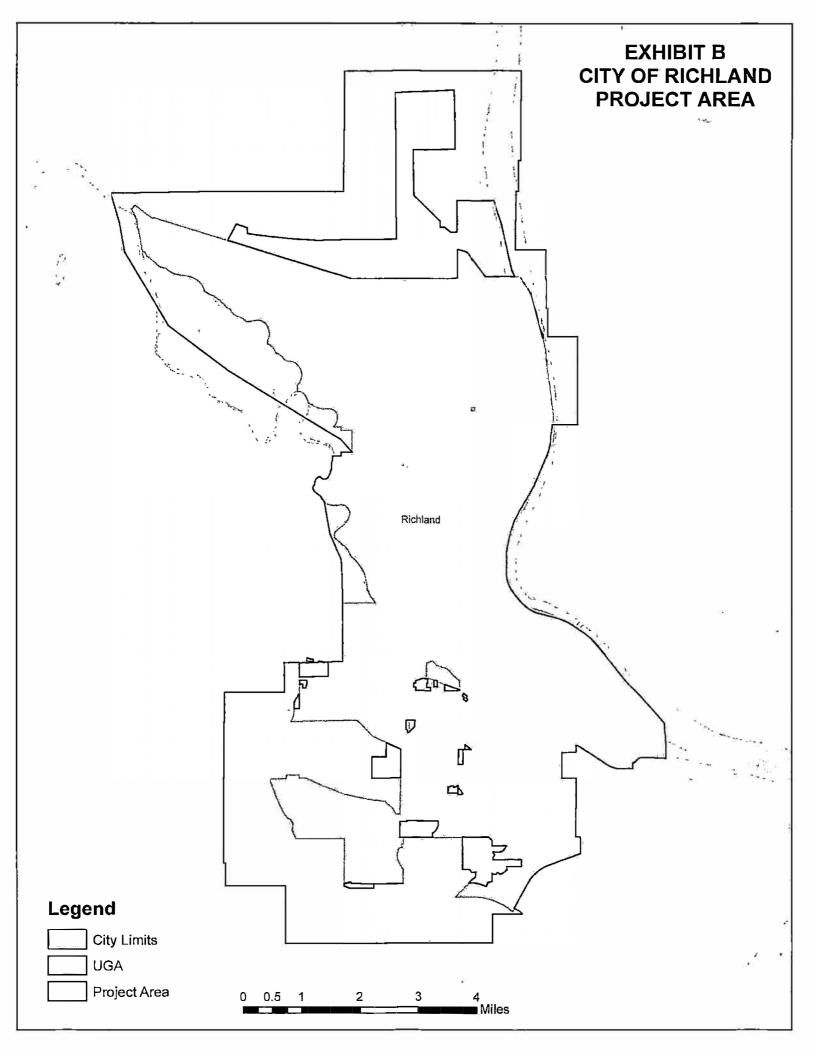
# NOW, THEREFORE, the parties agree as follows:

- 1. The COUNTY shall provide all data and resources necessary for GEOPHEX, LTD., to complete the work as outlined in the personal services contract it entered into with GEOPHEX, LTD., for the purpose of undertaking and completing an aerial photography and urban orthophoto mapping project of portions of Benton and Franklin Counties.
- 2. The COUNTY shall provide all preliminary data received from GEOPHEX, LTD., for the RICHLAND Project Area, as described in the attached **Exhibit B**, to RICHLAND for their review and comment.
- 3. The COUNTY shall relay RICHLAND's concerns regarding accuracies and visual issues such as seams or structures with edge or displacement effects to GEOPHEX, LTD. and assure that such concerns are addressed in the final product produced by the COUNTY'S contract with GEOPHEX, LTD.
- 4. The COUNTY shall deliver to RICHLAND a copy of all project deliverables across the entire extent of the Project Area as described in attached **Exhibit A**, including both project documentation and project data, as described in the personal services contract to be entered with GEOPHEX, LTD.
- 5. RICHLAND shall reimburse the COUNTY for the cost of the delivery of ortho-imagery with 4-inch or better pixel resolution across the RICHLAND Project Area as described in **Exhibit B**. The amount to be reimbursed by RICHLAND to the COUNTY shall be **Eighteen Thousand Six Hundred and Thirty-Eight Dollars and Zero Cents (\$18,638.00)** plus B&O tax.
- The COUNTY shall submit an invoice to RICHLAND for reimbursement to the COUNTY upon the successful delivery of the project documentation and project data, which shall be payable by RICHLAND within thirty (30) calendar days of receipt.
- 7. This Agreement does not involve the creation of a separate legal or administrative entity. Except as otherwise provided herein, there will be no real or personal property acquired, held, or disposed of relating to this Agreement, unless agreed upon in writing by the Parties. In the event that joint property is acquired, then it shall be distributed, when the Agreement is terminated, to the Parties in proportion to that Party's contribution to purchase such property, except as may otherwise be provided herein.
- 8. The duration of this Agreement will be from the date last signed until December 31, 2022.

- 9. The administrator of this Agreement will be the Benton County Information Technology Manager.
- 10. Upon execution of this Agreement, each party will provide the other with a certified copy of the resolution, ordinance, or other authority given to execute this Agreement pursuant to RCW 39.34.030(2), and those documents will be attached hereto and incorporated herein as **Exhibit C** (COUNTY) and **Exhibit D** (RICHLAND).
- 11. A copy of this Agreement will be filed with the Benton County Auditor's Office or posted on the COUNTY's or RICHLAND's website as provided in RCW 39.34.040.

BOARD OF COUNTY COMMISSIONERS BENTON COUNTY, WASHINGTON	CITY OF RICHLAND RICHLAND, WASHINGTON		
Inl/	Febru	ary 7, 2022	
Shon Small, Chairman	Jon Amundson, ICMA-CM City Manager	Date	
Will McKay Chair Pro-Tem	Attest:	Q.	
Jerome Dervin, Member	Jennifer Rogers, City Clerk		
3-/-2022 Date			
Attest:	Approved as to Form:		
Cami McKenzie, Clerk to the Board	Heather Kintzley, City Attorney		
Approved as to Form:	## N 영 중 : 변경 전 : 10 전 : 10 T		
Encludrus			
Enc Andrews, Deputy Prosecuting Attorney	*		



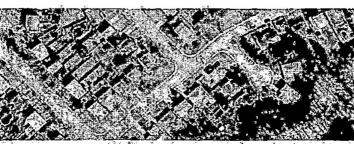




# **Benton County WA**

2022 Orthophoto Update - Revised Quote













## Submitted to:

Benton County GIS Department 620 Market Street Prosser WA 99350

Anthony Von Moos, GIS Supervisor Benton County Information Technology

Email: Anthony VonMoes@co.benton.wa.us

# Submitted by:

Geophex, Ltd. 605 Mercury Street Raleigh, North Carolina 27603

Andrew Dawson President

Email: <u>adawson@geophexsurveys.com</u> Ph. (919) 578-8857 (ext. 101) Fax: (919) 578-8849



November 18, 2021 Quote# 20210004

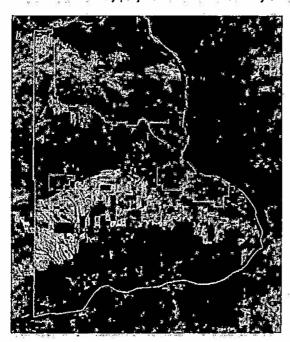
Subject: 2022 Orthophoto Update - Revised Quote

# To Anthony Von Moos,

Geophex Surveys would like to offer Benton County our professional orthophoto and photogrammetry services for the County's 2022 Orthophoto Update project. These services will include 4-inch orthophotography for the urban areas of the City of Pasco, Prosser, Richland, West Richland and Kennewick, and 1-foot resolution orthophotography for the entire Benton County area.

# **Project Areas**

The Benton Country project areas are defined by the following diagram.



Benton Project Areas	3
Kennewick (4-inch)	42.61 mi²
Pasco (4-irich)	72.71 mi²
Prosser (4-inch)	11.91 mi²
Richland (4-inch)	73.60 mi²
West Richland (4-inch)	16.35 mi²
Total Urban Area:	217.18 mi²
Rural Area (1-foot)	1,333 mi²

## Acquisition

The Benton County imagery will be captured by a Vexcel UltraCam Eagle M3 large format digital aerial camera. The 4-inch photography will be flown with industry standard 60% forward and 30% side overlap and the 1-foot photography will be flown with 80% forward and 30% side overlap. The 1-foot resolution imagery is to be flown with higher forward overlap as autocorrelation methodology will be utilized to generate the DEM for the orthophotography.

The aerial photography will be flown in early spring (late February to mid-March) weather permitting during leaf-off conditions with the 4-inch resolution urban areas being flown as a priority.

## **Ground Control**

The 2022 orthophoto update project will use existing ground control from previous projects wherever possible, with airborne GPS and IMU data being utilized as a secondary control source for the aerial photography. Any additional ground control required to meet the project accuracies will be provided by Benton County in consultation with Geophex Surveys.



#### DEM

Geophex Surveys will utilize and update the existing DEM for the 4-inch project areas, using the same methodology and processes that we have done for the 2014, 2016, 2018 and 2020 Benton County projects. The 1-foot resolution imagery will be rectified using an autocorrelated DEM generated from the high forward overlap aerial photography. The autocorrelation methodology will provide a DEM that will be generated faster and at a cost savings as compared to a traditionally collected DEM, while still providing high accuracy data that will meet the project specifications for the 1-foot rectifications.

Please note that the auto-correlated 1-foot DEM is an internally generated software product used for the orthorectifications, and is unavailable for delivery and unusable for other applications.

#### Processing

All aerial photography will undergo full aerial triangulation processing and will be rectified with current DEMs to generate high accuracy orthophotography. All imagery will be also be radiometrically balanced and seamlessly mosaiced to provide orthophotography that is even in tone and consistency. Prior to delivery, all data will undergo a thorough quality control procedure.

#### **Accuracy**

The 2020 Benton County orthophoto update project will meet the required project accuracies of ±1ft RMSE for the 4-inch resolution and ±3ft RMSE for the 1-foot resolution.

#### Deliverables

All project areas shall include:

- 4-band color (R,G,B,NiR) orthophoto imagery in 4-inch and 1-ft resolution as required
- Digital orthophoto tiles delivered in uncompressed, rectified GeoTIFF format
- Compressed tiles in ECW, JPG2000 and MrSID formats
- Updated DEM for the 4-inch orthopholography
- An ESRI shapefile containing all seamlines used for the orthophoto tiles
- Final digital data (orthophotography, 4-inch DEM) shall be delivered on a USB 3 with USB 2 compatible external hard drive

## Schedule

- The aerial photography will be flown in early spring (late February to mid-March) weather permitting during leaf-off conditions with the 4-inch resolution urban areas being flown as a priority.
- Final deliverables will be completed approximately 16 weeks following confirmation of successful
  acquisition of the aerial imagery,

#### Ownership

 Benton County and its partner cities will retain 100% ownership of the delivered data with no restriction on use.

### Project Experience

Geophex Surveys has extensive experience successfully providing orthophoto data to Benton County, with our 2014, 2016, 2018 and 2020 projects meeting all project and accuracy specifications. Providing geospatial data over multiple years allows for familiarity with specific project requirements resulting in a more efficient workflow, and accumulation of valuable data including ground control. Geophex Surveys would look forward to working with Benton County again for their 2022 orthophoto update program.



# Pricing

4-Inch Urban Orthopholo	Area (mi²)	% area	Total cost
Pasco	72.71	33.5	\$ 18,412.00
Kennewick	42.61	19.6	\$ 10,790.00
Richland	73.60	33.9	\$ 18,638.00
W Richland	16.35	7.5	\$ 4,140.00
Prosser	11.91	5.5	\$ 3,016.00
Total Benton Franklin Cities	217.18	100%	\$ 54,996.00

12-Inch County Orthophoto	Area (mi²)	% area	Total cost
County Orthophoto	1333.00	100%	\$ 57,483.00
Total cost	419 ( * ) * ) * ( * ) * ( * )		\$ 112,479.00

- Applicable taxes not included.
- Involcing will be monthly based on work complete
- This price is valid for 90 days

Sincerely,

**Andrew Dawson** 

Email: <u>adawson@geophexsurveys.com</u> Ph: (919) 578-8857 (ext. 101) Fax: (919) 578-8849

# RESOLUTION 2022 161

### BEFORE THE BOARD OF COUNTY COMMISSIONERS OF BENTON COUNTY WASHINGTON:

IN THE MATTER OF APPROVING AN INTERGOVERNMENTAL COOPERATION AGREEMENT WITH THE CITY OF RICHLAND FOR HIGH RESOLUTION COLOR DIGITAL ORTHOPHOTOGRAPHY FOR 2022 FOR THE AREA WITHIN THE RICHLAND PROJECT AREA

WHEREAS, the Interlocal Cooperation Act, as amended and codified in Chapter 39.34 of the Revised Code of Washington, provides for interlocal cooperation between governmental agencies; and

WHEREAS, in order to keep up with growth and the associated public services, Benton County continually updates its GIS base and periodically updates its digital orthophotography base; and

WHEREAS, in association with Benton County, the City of Richland will be updating its urban digital orthophotography base in 2022; and

WHEREAS, both Benton County and the City of Richland have the capability to independently acquire 2022 ortho-imagery, but if each acted independently, the results would involve significant redundancies and increased costs; and

WHEREAS, the City of Richland has requested Benton County administer a contract for 4-inch or better pixel resolution orthophotography within the Richland Project Area; and

WHEREAS, the City of Richland has agreed to pay Benton County the amount of the cost of the delivery of the 4-inch or better pixel resolution orthophotography within the Richland Project Area; NOW THEREFORE,

**BE**.IT **RESOLVED**, the Board of Benton County Commissioners, Benton County, Washington hereby agrees to approve this Intergovernmental Cooperation Agreement with the City of Richland in the amount of Eighteen Thousand Six Hundred and Thirty-Eight Dollars and Zero Cents (\$18,638.00) plus B & O tax; and

**BE IT FURTHER RESOLVED** the term of the attached contract commences upon execution by both parties and shall expire on December 31, 2022.

Dated this 1st day of March 2022.

Chairman of the Board

Chairman ProTem

Member

Constituting the Board of Commissioners of Benton County, Washington

Attest. Amu Me Clerk of the Board

# **RESOLUTION NO. 2022-20**

A RESOLUTION OF THE CITY OF RICHLAND, WASHINGTON, AUTHORIZING AN INTERLOCAL AGREEMENT WITH BENTON COUNTY FOR AERIAL PHOTOGRAPHY.

WHEREAS, the Interlocal Cooperation Act, Chapter 39.34 RCW provides for interlocal cooperation between governmental agencies; and

WHEREAS, in 2010, as part of the Information Technology Strategic Plan, the City launched an effort to standardize its existing Graphical Information Systems (GIS) onto a common enterprise-wide GIS platform, and to keep GIS content current by updating aerial photography on a regular basis; and

WHEREAS, in 2012, 2014, 2018, and 2019, the City partnered with Benton County to obtain updated aerial photography for the City's GIS system; and

WHEREAS, the City will partner with Benton County and multiple government agencies in 2022 for orthophotography services in support of this ongoing effort, with Benton County taking the lead in contracting with a vendor; and

WHEREAS, Geophex, Ltd. was selected by Benton County to perform the work; and

WHEREAS, Benton County will administer the contact with Geophex, Ltd. and seek reimbursement from the City of Richland for its portion of the project cost; and

WHEREAS, the funds for the City's portion of this project are included in the 2022 Information Technology Divisional budget.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Richland that the City Manager is authorized to sign and execute an interlocal agreement with Benton County for aerial photography.

BE IT FURTHER RESOLVED that this Resolution shall take effect immediately.

**ADOPTED** by the City Council of the City of Richland, Washington, at a regular meeting on the 1<sup>st</sup> day of February, 2022.

Michael Alvarez, Mayor

Attest:

Approved as to Form:

Heather Kintzley, City At