

MEMORANDUM OF UNDERSTANDING BETWEEN THE
ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS
AND SAN BENITO COUNTY

2015 REGIONAL ORTHOPHOTOGRAPHY PROJECT

THIS AGREEMENT is entered into this 1st day of June, 2016, by and between THE ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS (hereinafter referred to as "AMBAG") and the SAN BENITO COUNTY (hereinafter referred to as "COUNTY").

WITNESSETH

WHEREAS, AMBAG will enter into a technical services contract with Pictometry International Corporation (hereinafter referred to as Pictometry), a technical contractor, to provide technical and professional services related to orthophotography of the Monterey Bay region. A copy of the exhibits from the AMBAG/Pictometry contract are attached hereto, labeled Attachment "A", and incorporated herein by this reference; and

WHEREAS, COUNTY wishes to obtain orthoimagery (hereinafter referred to as "IMAGERY") for use by COUNTY in its operations.

NOW, THEREFORE, THE PARTIES HERETO DO MUTUALLY AGREE AS FOLLOWS:

1. SCOPE OF SERVICES

A. AMBAG shall provide COUNTY at COUNTY'S request any and all products developed by PICTOMETRY as defined in Exhibit "I" related to orthophotography of the area of interest as specified in COUNTY's.

B. Acceptance standards and product specifications will be adhered to as set forth in Attachment A.

C. AMBAG makes no warranties as to accuracy or fitness for use and takes absolutely no responsibility for the function or defective nature of IMAGERY. COUNTY'S payments and other obligations under this Agreement shall in no way be diminished on account or of in any way related to the above said IMAGERY.

2. COMPENSATION

A. Upon execution of this Agreement COUNTY shall pay to AMBAG the not to exceed cost as set forth in Exhibit "II" attached hereto and incorporated herein by this reference.

B. In the event AMBAG receives funding from any other jurisdiction for materials requested by COUNTY, AMBAG shall, in AMBAG'S sole discretion, reimburse COUNTY it's pro-rata share for the use of the IMAGERY, if any there be.

C. 50 percent of the not to exceed amount of \$20,972.00 (Exhibit II) will be due upon signing and will be invoiced by AMBAG. Remaining actual amount will be billed upon receipt of delivery of orthoimagery data to COUNTY.

3. TERM OF AGREEMENT

A. The term of this agreement shall be from June 1, 2016 to June 30, 2017, unless otherwise extended by mutual consent.

4. TERMINATION OF AGREEMENT

A. The right is reserved by AMBAG or COUNTY to terminate or suspend this Agreement with or without cause at any time by giving ten (10) days written notice to the other party.

5. NOTICES

A. All notices, bills, and payments shall be made in writing and may be given by personal delivery or by mail. Notices, bills and payments sent by mail should be addressed as follows:

AMBAG: Gina Schmidt
GIS Coordinator
ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS
P.O. Box 2453
Seaside, CA 93955

COUNTY: Brent Barnes
Resource Management Agency Director
SAN BENITO COUNTY
2301 Technology Parkway
Hollister, CA 95023

Any and all notices or other communications required or permitted relative to this Agreement shall be in writing and shall be deemed duly served and given when personally delivered to either of the parties, COUNTY or AMBAG, to whom it is directed; or in lieu of such personal services, when deposited in the United States mail, first class, postage prepaid, addressed to COUNTY or to AMBAG at the addresses set forth above (until notice of a different address is given to the parties pursuant to the next paragraph).

Either party may change their address for the purpose of this paragraph by giving written notice of such change to the other party in the manner provided for in the preceding paragraph.

6. INDEMNIFICATION/DEFEND/HOLD HARMLESS

A. COUNTY agrees to indemnify, protect, defend and name AMBAG, its public officials, officers and employees as additional insured and hold harmless from any loss, damage or liability arising directly from any negligent act or omission by COUNTY. COUNTY shall not be responsible for any loss, damage or liability arising from any act or omission by the AMBAG, its agents, staff, other consultants, independent contractors, third parties or others working on the project that have not been hired by COUNTY and over which COUNTY has no supervision or control.

7. ATTORNEY'S FEES AND COURT VENUE

A. Should either party to this Agreement bring legal action against the other (formal judicial proceeding, mediation or arbitration) the case shall be handled in Monterey County, California, and the party prevailing in such action shall be entitled to a reasonable attorney's fee which shall be fixed by the judge, mediator or arbitrator hearing the case and such fee shall be included in the judgment, together with all costs.

8. INTERPRETATION

A. In the event of a conflict between the provisions of this Agreement, the Agreement together with its attachments shall take precedence. Notwithstanding the fact that one or more provisions of this Agreement may have been drafted by one of the parties to this Agreement, such provisions shall be interpreted as though they were a product of a joint drafting effort and no provisions shall be interpreted against a party on the grounds that said party was solely or primarily responsible for drafting the language to be interpreted.

9. SOLE AND ONLY AGREEMENT; MODIFICATION

A. This Agreement constitutes the sole and only agreement between the parties hereto relating to the work described under this Agreement, and correctly sets forth the rights, duties and modification of each to the other as of its date. Any prior agreement, negotiation, or representation not expressly set forth in this Agreement are of not force and effect. Any modification of this Agreement must be in writing and delivered pursuant to the terms of item 5. of this Agreement.

10. THIRD PARTY BENEFICIARIES

A. Nothing contained in this Agreement shall be construed to create, and the parties do not intend to create, any rights in third parties.

11. SEVERABILITY

A. If any term of this Agreement is held invalid by a court of competent jurisdiction or arbitrator the remainder of this Agreement shall remain in effect.

IN WITNESS WHEREOF the parties have executed this Agreement on the date first hereinabove written.

AMBAG

COUNTY

By: _____

By: _____

Title: _____

Title: Robert Rivas, Chair

APPROVED AS TO LEGAL FORM:

San Benito County Counsel's Office

By: Shirley L. Murphy 6/17/16
Shirley L. Murphy, Deputy County Counsel

EXHIBIT I : County of San Benito -- Public Works / Planning

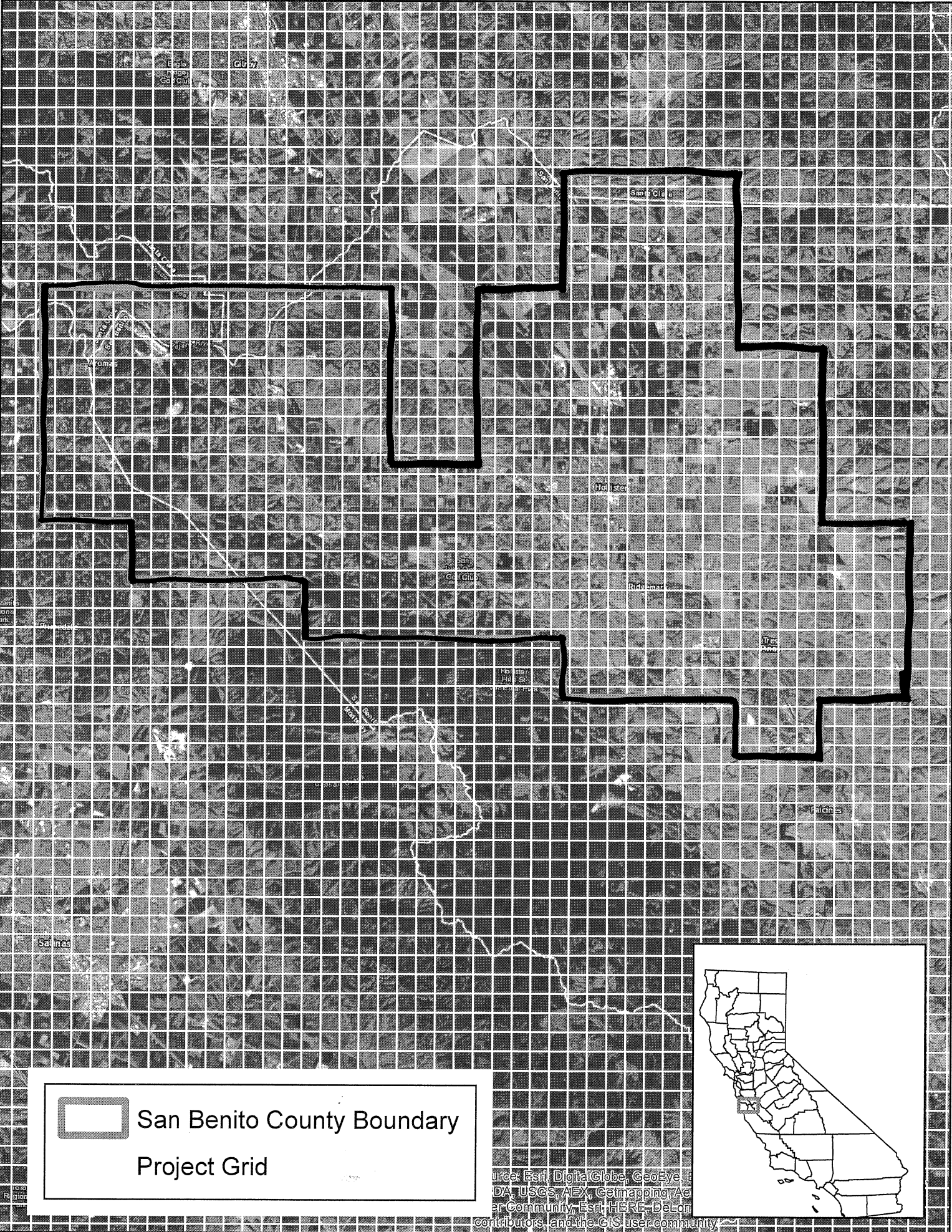


Exhibit II
APPENDIX

COUNTY

Total Not to Exceed Cost of Area as Defined in Exhibit I

Cost of Tiles:	\$	14,980.00
Control Survey	\$	2,996.00
Cost of QA/QC (5%)	\$	749.00
*Administration AMBAG (10%)	\$	1,498.00
Contingency (5%)	\$	749.00
Total Cost:	\$	20,972.00

*Includes:

- Contract Administration
- Project administration & oversight
- Vendor liaison & management
- Reporting to participants
- Approval of payments to vendor

ATTACHMENT A:

PICTOMETRY CONTRACT PHOTOGRAMMETRIC PRODUCT SPECIFICATIONS
(APPENDIX I)
Exhibit documents

APPENDIX 1

PHOTOGRAMMETRIC PRODUCT SPECIFICATIONS

Color Digital Orthophotography

Product Overview:

Seamless digital ortho-mosaic produced from individual frames and tiled to agreed to tiling scheme. Specifications and deliverables as follows:

Acquisition:

Frame Overlap: 60% forward/30% side

Capture Window: solar elevation >30 degrees, acquisition expected to be performed between May and July 2016.

Environmental Conditions: ground free of snow cover; imagery free of clouds, fog, haze, smoke, and dust

Camera System: Pictometry PentaView Sensor System, dual-nadir sensor configuration; dynamic range of 12 bits per band, RGB, resampled to 8 bits during processing

Any planned deviation from these conditions imposed by capture window constraints will be discussed with AMBAG prior to commencement of acquisition.

Ground Control:

AMBAG to provide control from 2007 flight.

Pictometry will provide any additional ground control surveyed for the project. All ground survey work will be performed by appropriately licensed personnel.

Image Processing:

Aerial Triangulation: Pictometry will perform aerial triangulation utilizing post-processed exterior orientations, calibrated camera model(s), and specified ground control points as input to the aerial triangulation process. Aerial triangulation process to be performed using Trimble Inpho's Match-AT software. Pictometry will generate a preliminary AT report for review by AMBAG prior to the final adjustment.

Elevation Surface: Pictometry will use the DEM provided by AMBAG to perform orthorectification. The provided DEM must cover the entire project area.

Orthorectification: Pictometry will use the triangulated exterior orientation values, calibrated camera interior orientation models, and the provided digital terrain model to perform the Orthorectification. To preserve the most nadir perspective, Pictometry will use the 'best nadir area' of each photo, rather than every other photo. Breaklines will be collected for bridges and overpasses to ensure proper horizontal positioning. When rectification requires a resampling of the source imagery, cubic convolution will be used.

Tonal and Color Balance: Global color balancing will be applied to all orthophotos to create homogeneous orthophotos within the project area. Local adjustments of brightness values, color, and contrast will be performed if needed.

Mosaicking: There will be no obvious seam edge between two adjacent orthophotos. Mosaic will be created using automated seamline steering, with manual edits to eliminate feature misalignment caused by seamlines which pass thru features above the elevation surface. Feature alignment across seamlines will be 3 pixels or better. When possible, seamlines will be steered away from elevated features to improve orthophoto quality. Final mosaic will be tiled and named according to the agreed upon schema for delivery or as specified below.

Tiling Schema: Imagery will be tiled according to agreed upon schema.

Deliverables:

The following will be delivered in California State Plane NAD83 US Survey Feet Zone 3/4:

3-inch GSD ortho mosaic tiles (GeoTIFF format; according to specified tiling schema)

3-inch GSD area-wide ortho mosaic (ECW format)

3-inch GSD area-wide ortho mosaic (MrSID format)

Raw frame images with stereo information

9-inch GSD ortho mosaic tiles (GeoTIFF format; according to specified tiling schema)

9-inch GSD area-wide ortho mosaic (ECW format)

9-inch GSD area-wide ortho mosaic (MrSID format)

Raw frame images with stereo information

Flight plan map and shapefiles

Photo center shapefiles

Breaklines delineating bridges and overpasses

Any additional ground control established as part of this project and Survey report

FGDC compliant metadata

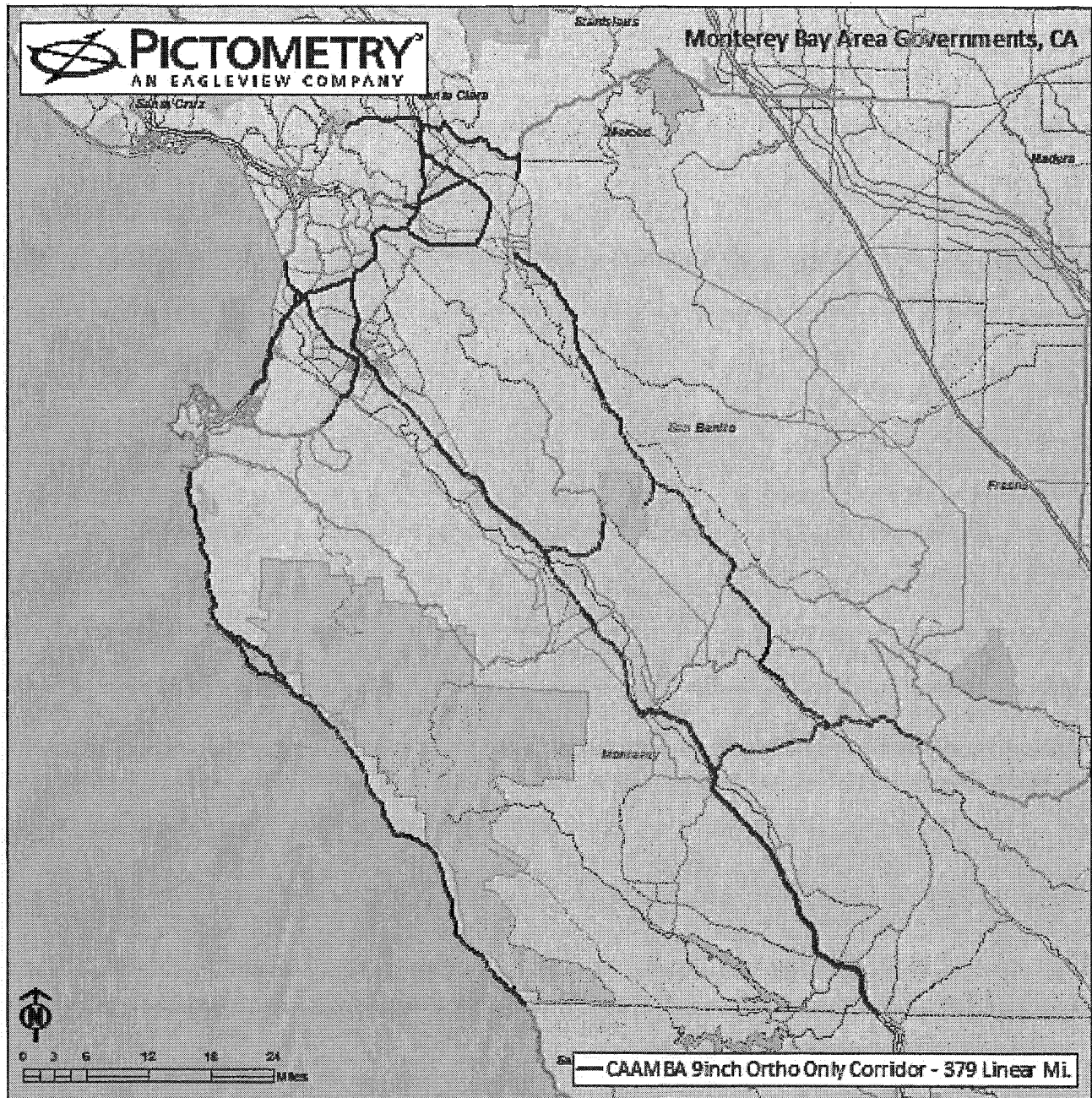
Preliminary and Final AT Report

Orthomosaic Accuracy:

3-inch GSD: RMSE(x or y) 0.50 ft; RMSE(r) 0.71 ft; NSSDA (95%) 1.21 ft;

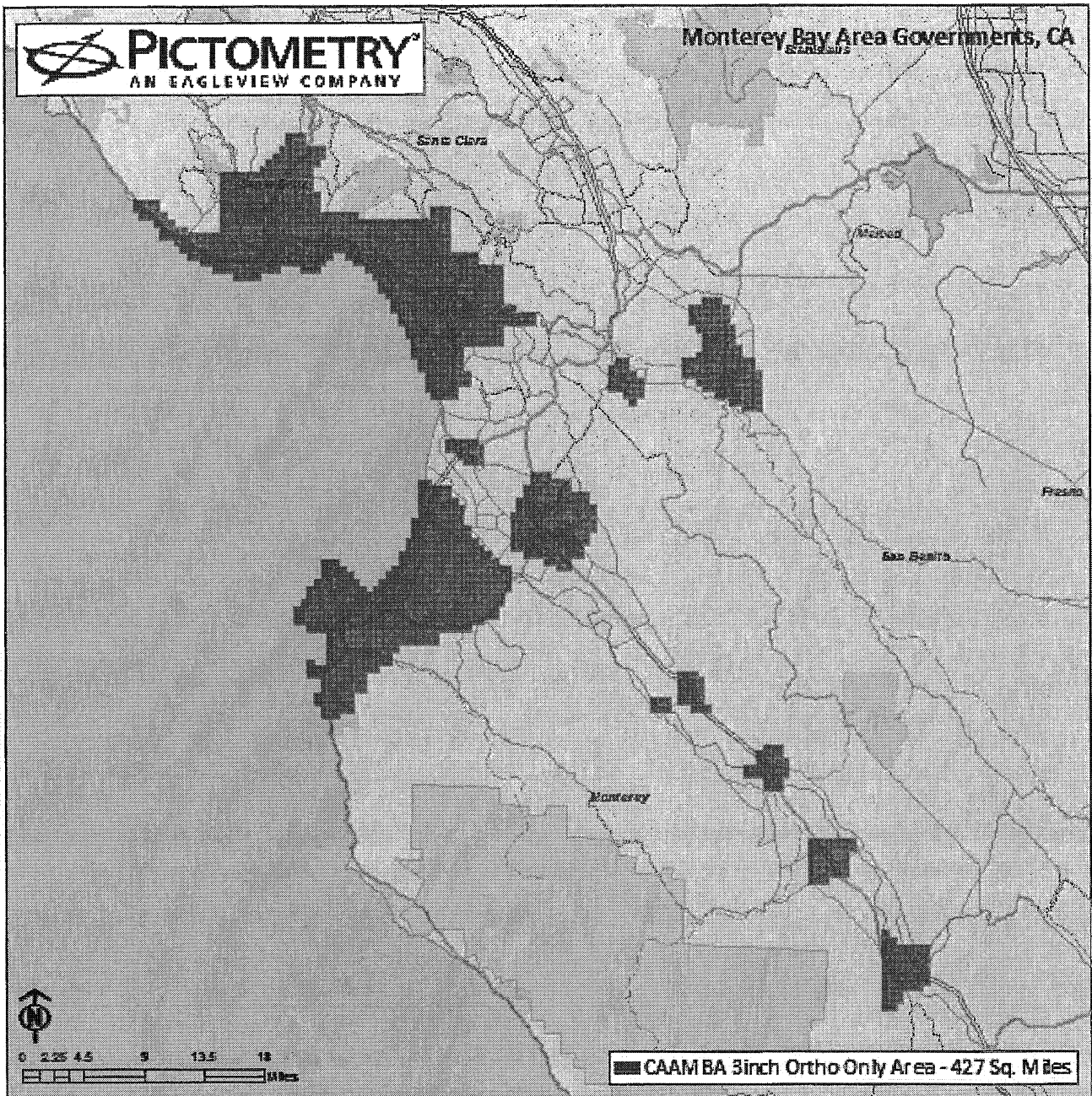
9-inch GSD: RMSE(x or y) 1.41 ft; RMSE(r) 2.00 ft; NSSDA (95%) 3.46 ft;

MAPS





Monterey Bay Area Governments, CA





Monterey Bay Area Governments, CA

