Regional Basemap Committee

Minutes

Thursday ~ February 18, 2016 ~ 2:00 P.M.

WASHOE COUNTY ADMINISTRATION

BUILDING A – MOUNT ROSE CONFERENCE ROOM

1001 EAST NINTH STREET, RENO, NEVADA

MEMBERS

Valerie Johnson, Chair
Jon Walker, Vice-chair
Neil Bandettini
Doug Campbell
Matt Gingerich
Mike Gump
Kobe Harkins
Rebecca Reid

1. CALL TO ORDER AND ROLL CALL [Non-action item]

Chair Johnson called the meeting to order at 2:02 p.m.

PRESENT: Neil Bandettini, Doug Campbell, Mike Gump, Kobe Harkins, Valerie Johnson and Jon Walker.

ABSENT: Matt Gingerich and Rebecca Reid.

Andrew Dawson and Kevin Woolf - Geophex Surveys, joined the meeting via teleconference at 2:13 p.m.

2. PUBLIC COMMENTS [Non-action item]

There were no public comments.

3. ELECTION OF OFFICERS: *1) Chair; and 2) Vice-chair*

Chair Johnson opened nominations for the position of Chair.

Member Harkins nominated Valerie Johnson as Chair, Member Walker seconded the nomination.

Chair Johnson accepted the nomination.

The nomination to elect Valerie Johnson as Chair carried with Members Gingerich and Reid absent.

Chair Johnson opened nominations for Vice-chair.

Member Gump nominated Matt Gingerich as Vice-chair. Member Harkins seconded the nomination.

Chair Johnson nominated Jon Walker to serve as Vice-chair. Member Campbell seconded the nomination.

Matt Gingerich was not present to accept or decline the nomination.

Jon Walker accepted the nomination.

The nomination to elect Matt Gingerich as Vice-chair failed with Members Gingerich and Reid absent.

The nomination to elect Jon Walker as Vice-chair carried with Members Gingerich and Reid absent.

4. APPROVAL OF DECEMBER 15, 2015, MEETING MINUTES [For possible action]

Hearing no public or board comments Chair Johnson asked for a motion.

It was moved by Member Gump, seconded by Member Bandettini, to approve the December 15, 2015, minutes, as submitted. The motion carried with Members Gingerich and Reid absent.

Chair Johnson reordered the agenda.

6. SET NEXT MEETING DATE [For possible action] – *A review, discussion and possible action to select a date for the next Basemap Committee meeting.* [Taken out of agenda order]

There was some discussion about scheduling a follow-up meeting perhaps in June 2016 as the flights should be completed by the end of May. It was noted that the meeting date could be adjusted if necessary.

Andrew Dawson and Kevin Woolf – Geophex Surveys joined meeting via teleconference at 2:13 p.m.

Chair Johnson continued this agenda item until after the Geophex presentation.

5. GEOPHEX SURVEYS PRESENTATION [Non action item] – *An informational presentation by Geophex Surveys providing an overview of the Spring 2016 project for orthophotos and elevation data.*

Andrew Dawson (President) and Kevin Woolf (Project Manager) – Geophex Surveys, introduced themselves.

Mr. Dawson commented that generally questions and comments were taken as each slide was presented. Mr. Dawson then provided an overview of the Washoe County project and noted that Mr. Woolf would provide additional detail.

Mr. Dawson narrated the PowerPoint® presentation (copy on file), starting with the methodology of the project and the various components. Mr. Dawson explained the various mix of services, including, but not limited to, 6-inch resolution natural color orthophotos with 563 square miles of coverage and 1-foot resolution natural color orthophotos with 852 square miles of coverage. A new DTM will be used to generate 2-foot contours. Drawing attention to a map of the orthophoto project

boundaries, Mr. Dawson explained the green boundary shows the 6-inch resolution project area ande the red boundary shows the 1-foot resolution project area. Drawing attention to a map of the contour project boundaries, Mr. Dawson explained the yellow boundary shows where a new DTM and 2-foot contours will be developed. Mr. Dawson then discussed accuracy specifications. The 6-inch resolution orthophotos will meet ASPRS Class II standards for 1"=100' scale mapping with horizontal accuracy of 3.8 feet at 95-percent confidence interval (2.2 feet RMSE). The 1-foot resolution orthophotos will meet ASPRS Class II standards for 1"=200' scale mapping with horizontal accuracy of 7.6 feet at 95-percent confidence interval (4.39 feet RMSE). The 2-foot contours will meet ASPRS Class I standards for 1"=100' scale mapping, with vertical accuracy of spot heights or DTM elevation points of 0.66 feet at 95-percent confidence interval (0.33 feet RMSE) and vertical accuracy of topographic feature points of 1.32 feet at 95-percent confidence interval (0.67 feet RMSE).

A Microsoft Ultracam X camera with AGPS and IMU will be used under the following conditions: Spring 2016; between 10:00 a.m. and 3:00 p.m.; sun angle 30 degrees or greater; stereo coverage; in downtown Reno and Sparks (areas with high rise buildings) the image capture shall occur between 10:00 a.m. and 2:00 p.m. to reduce building shadows, with an 80-percent lap and lateral overlap of 60-percent to reduce building lean; no snow (with the exception of mountain peaks), haze, fog, or dust; when streams are within normal banks; not when clouds appear on more than 5-percent of the area in any one tile; and during the leaf-free season.

A new DTM will be created for the purpose of orthophoto rectification in areas outside the 2-foot contour boundary. It will include breaklines for bridges, decks, and raised roadways to ensure that the above ground features are orthorectified in their true position in the final orthophoto imagery. A new denser DTM will also be created for generating 2-foot contours within the 2-foot contour boundary. It will include additional breakline features such as ditches, curbs, and bottom of creek beds (features that affect the hydrologic flow on the surface of the earth) as well as spot elevations.

The anticipated schedule of deliverables was then outlined. During the discussion it was noted that Mr. Woolf had already been in contact with Washoe County staff several times about the existing ground control points needed to target the 6-inch resolution project area as well as additional control points that need to be established. It was pointed out that a number of the existing control points had been damaged and were in need of replacement. The flight plan will be finalized and the flight contractor be ready to fly once the control points are in place and the weather windows and sun angles are appropriate. The flight contractor is aware of the need for specific sun angles. It is thought that the first flights may occur as early as the beginning of March.

Discussion then turned to how the Basemap Committee members will be notified once the plane is mobilized. It was noted that while notices of the intent to fly are generally emailed in advance to a single point of contact, sometimes the plane is already in the air when the notice is sent. Typically, the flight crew (based in Idaho) will operate out of a regional airport that is in the best location for the work. However, landing fees and other expenses are also taken into consideration.

Mr. Dawson then outlined the production process which incorporates every frame of imagery into the final orthophoto rectification. Technicians will manually inspect each mosaic, with special attention to above-ground features such as tall buildings, towers, and trees.

It was noted that imagery will be shared with the committee as it becomes available, in a lower resolution format. As the project moves forward, blocks of data will be shared to the committee. This will allow members an opportunity to review the work done and assure that the work meets specifications and accuracy. It is anticipated that the delivery schedule will run from June 15 through August 30, 2016, with some products, such as the 2-foot contours, being completed in November 2016. It was emphasized that the denser DTM for the contours will take somewhat longer to create due to the level of manual work needed to assure the highest quality. It was pointed out that the color infrared (CIR) orthophotos could be a single file with the natural color orthophotos or be a separate file. A revised schedule will be provided to Chair Johnson to share with the group.

Other discussion focused on the flight pattern, which can be done going from south to north or some other configuration based on the needs of the group or to accommodate priority areas. Chair Johnson will review this with the two Basemap Committee members from NV Energy that are not present at today's (February 18, 2016) meeting. Chair Johnson noted that possible priority area is the Tahoe-Reno Industrial Center in Storey County on the eastern boundary of Washoe County along I-80. This area includes the Tesla factory, which is under construction. Other discussion suggested that perhaps the flight pattern should start with the southern densely populated areas of Washoe County. It was noted that weather patterns will influence which areas are flown first. An update on the preliminary flight schedule will be provided by email to Chair Johnson for distribution to the group.

The conference call ended at 3:05 p.m.

Chair Johnson reopened agenda item 6.

6. SET NEXT MEETING DATE [For possible action] – *A review, discussion and possible action to select a date for the next Basemap Committee meeting.* [Reopened]

A consensus was reached to meet at 2:00 p.m., June 17, 2016.

7. REGIONAL BASEMAP COMMITTEE MEMBER AND/OR STAFF ANNOUNCEMENTS, REQUESTS FOR INFORMATION, AND SELECTION OF TOPICS FOR FUTURE AGENDAS [Non-action item] **–** *No discussion among committee members will take place on this item.*

No new agenda items were identified.

8. PUBLIC COMMENT [Non-action item]

There were no public comments.

9. ADJOURNMENT [Non action item]

Chair Johnson adjourned the meeting at 3:09 p.m.

AS APPROVED BY THE REGIONAL BASEMAP COMMITTEE IN SESSION ON JUNE 17, 2016.