

Page 1

1. Call to Order and Roll Call

Chairman Brown called the Regular Board Meeting to order at 10:02 a.m. Thursday, October 23, 2014. Roll was noted as follows:

Directors present: Chairman Ronald D. Brown

Director Tim Eichenberg Director Daniel F. Lyon Director Bruce M. Thomson

Director Danny Hernandez arrived at 10:07 a.m.

Directors excused: None

Attorney present: Attorney Vanessa Chavez, Robles, Rael & Anaya

Others present: Jerry M. Lovato, P.E., Executive Engineer

Staff

Other attendees on file at AMAFCA

A quorum was present.

2. Approval of Agenda

Director Thomson made a motion to approve the agenda. Director Lyon seconded the motion, which passed (5-0).

3. Meetings Scheduled

- a. November 20, 2014, 10:00 a.m. Regular Meeting
- b. December 18, 2014, 10:00 a.m. Regular Meeting and Holiday Luncheon
- c. January 2, 2015, 10:00 a.m. Special Meeting
- d. January 22, 2015, 10:00 a.m. Regular Meeting

No changes were made to the meeting schedule as presented.

4. Items from the Floor/Public Comment

No one had signed up for Public Comment.



Page 2

5. Approval of Minutes

a. September 25, 2014 Regular Meeting

Director Eichenberg made a motion to approve the minutes of the September 25, 2014 Regular Board Meeting. Director Thomson seconded the motion, which passed (4-0). Director Lyon abstained, as he was not present at the meeting.

6. Financial Matters

a. Approval of September 2014 Expenditures

Ms. Irene Jeffries, AMAFCA Finance and Administration Manager, presented the September 2014 Expenditures.

Director Eichenberg asked what areas were impacted by the manual trash and debris removal by Black Forest Tree Service. Mr. Kurt Wagener, AMAFCA Field Engineer, responded that Black Forest was utilized in various locations: Amole, Snow Vista Channel, and on the North Diversion Channel near the Balloon Fiesta field prior to the start of the 2014 Albuquerque International Balloon Fiesta. Director Eichenberg inquired into checks #19491 and #19497 for the dump truck, unit 212. Mr. Wagener responded that a member of the crew had backed into the backhoe. The result was damage to the truck bed and arms to the tarp. Responding to a question regarding the deductible Mr. Lovato stated that AMAFCA is self-insured. After some discussion Mr. Lovato followed-up that the deductible is around \$2,500.00. Responding to a question on the work done by TLC, it was stated that they are working under an on-call contract for Design, Bidability, and Constructability services. Director Thomson asked for the amount paid to date for the AHYMO and HEC-HMS study. Mr. Lovato responded that the study is still on going and it is estimated that over \$24,000.00 has been spent.

Director Eichenberg advised that while driving down Lomas recently he noticed that there is a billboard in the gated area at the Post Office Pond location. Mr. Troutman, AMAFCA GIS Manager, was able to pull up the location on the SmartBoard to see the billboard in question. It was noted that there are no logos on the billboard, but this is a two-sided billboard with a different set of numbers listed on either side. Mr. Lovato responded that this billboard might have been grandfathered in. Director Eichenberg stated that he would like to know the status of the billboard; who owns it and if payments are being made. He asked that if whoever is responsible for the billboard has not paid for the use of the billboard that money be collected. Mr. Lovato replied that staff would look into the ownership and see what can be done.

Director Eichenberg inquired about the \$50,000.00 that is reserved for Redistricting. He opined that since it will not be used for another six to seven years that it be moved from reserved funds.



Page 3

Director Hernandez opined that \$10K, per year, should still be put in so that the budget will be there at the time that boundaries are changed again. Director Eichenberg stated that since Mr. Troutman did everything in house and saved money that should not be the case for the upcoming redistricting. Mr. Lovato replied that this line item would be taken care of in January.

Director Thomson made a motion to approve the September 2014 Expenditure Report. Director Lyon seconded the motion, which passed (5-0), on a roll count vote.

b. Bank Reconciliation Fiscal Agent Funds

Ms. Irene Jeffries, AMAFCA Finance and Administration Manager, presented the Bank Reconciliation Fiscal Agent Funds. There were no questions, and no Board action was required.

c. Investment Report for September 2014

Ms. Irene Jeffries, AMAFCA Finance and Administration Manager, presented the Investment Report for September 2014. There were no questions, and no Board action was required.

d. Financial Position Recap September 16, 2014 through October 15, 2014 & Forecast October 16, 2014 through November 15, 2014

Ms. Irene Jeffries, AMAFCA Finance and Administration Manager, presented the September 2014 Expenditures. Ms. Jeffries advised that the forecast included a payment to CoA for payroll, as well as the purchase of the two dump trucks. The Construction Fund has \$400,000.00 forecasted that includes pay estimates to RMCI and Guzman, as well as various engineering pay estimates.

Director Lyon made a motion that the Board approve the Financial Forecast. Director Thomson seconded the motion, which passed (5-0), on a roll call vote.

7. Legal

a. Status Report

Attorney Vanessa Chavez stated that the memo on 7a pertained to various legal matters.

Director Thomson asked the Clean Water Act as listed on the Legal Status Report. Ms. Chavez responded that a Federal Register has been published for proposed rules under the Clean Water Act. Environmental Protection Agency (EPA) is changing the rules and jurisdictions which are part of a 400 page document. Director Thomson asked if AMAFCA's concern was Waters of the US. Ms. Chavez replied, yes. She also stated that there is a very broad determination in the definition. Director Thomson inquired about the deadline. Ms. Chavez replied that it is



Page 4

November 14, 2014. After further discussion, Director Thomson asked if there could be a presentation on this item at a future Board Meeting. Chairman Brown suggested a Special Session as the Board would have more comments. Director Eichenberg proposed Thursday, November 6, 2014. Ms. Chavez advised that she would not be available then. Thursday, October 30, 2014 was proposed and accepted. Director Thomson suggested that a letter be drafted for all Directors to sign; and it be sent with the comments.

Responding to a question from Director Lyon regarding the Occupational Safety Health Act item on the report, Ms. Chavez advised that it was a follow-up on the Citation received on the use of harnesses in a confined space. It had been resolved; however, since work was done during the report period it was to be listed.

8. Executive Engineer's Report

a. Notification of Past Month's Activities

Mr. Lovato highlighted significant activities of the past month:

• **City of Albuquerque (CoA)** - *Marble Arno Pond:* CoA had requested that AMAFCA draft an outline for a cost share agreement that would fund the design and construction of the Marble Arno Pond. AMAFCA has not put together a draft of the agreement at this time. After discussions with CoA, it makes sense for them to manage the project.

AMAFCA has been in discussion with CoA on the last piece of the west I-40 Channel near Unser. An agreement should be done in December.

• US Environmental Protection Agency (EPA) – MS4 Watershed Based Permit: AMAFCA is still waiting on the new permit. Work is complete on the 2013-2014 annual report, and AMAFCA is currently reviewing the draft information.

AMAFCA started a self-assessment of the 2012 EPA Permit. Staff interviews and review of various AMAFCA documents and projects were scheduled and should be completed by October 24, 2014. This work will identify areas that will need to be addressed in the next permit. The self-assessment will evaluate the current program and permit and provides a valuable experience for staff. Director Thomson asked if there would be a discrepancy of 10 years of data missing. Mr. Lovato replied, yes.

AMAFCA

Storm Water Quality Engineer: Interviews have been scheduled.



Page 5

FY-2014 Audit: The FY-2014 Audit is complete and the draft report is being reviewed by AMAFCA staff. An exit interview will be conducted. The audit will be presented to the full Board at the November Meeting. The audit will then be sent to the State Auditor by December 1, 2014.

• Public Outreach

South West Valley Flood Reduction Project Pond 187: Director Hernandez and staff attended the public meeting on Monday, October 13, 2014. Director Hernandez mentioned that citizens were hoping to have work completed as soon as possible; including the option of working seven days a week. Mr. Lovato stated that Rio Grande High School had requested no noise on Mondays and Tuesdays. Director Thomson asked if working seven days a week would be a cost factor. Mr. Lovato replied that it would not be for AMAFCA. Director Hernandez stated that the meeting started as an angry venting session. There were a number of individuals who said they had not received any information. He knew that was not the case since every address had been mailed information on numerous occasions. He suggested that it might be a good idea to utilize a sign of some kind to communicate the status of the project. He also stated that a number of individuals mentioned that there were concerns that children were getting into the area, as well as four wheelers and horses. Mr. Lovato advised that a fence had been installed around the area which will eliminate easy access for children. Director Hernandez suggested that the next time a project is starting, staff should plan on a public meeting two weeks after the start. He opined to start doing this type of public meeting as a standard operating procedure.

Director Thomson asked about the status of Kirtland Air Force Base (KAFB) and the runoff at Louisiana. Mr. Lovato advised that AMAFCA had identified the water at Louisiana and what water leaves the Base. KAFB wants AMAFCA to purchase the land, which would mean it will be three to four years out. To lease the land would be two years out. AMAFCA has advised that it is not interested in purchasing the land. Director Hernandez asked if AMAFCA can sue KAFB for dumping water on the residents. Director Lyon concurred that with all the issues KAFB is having with the ground water contamination, now would be the time to try legal action. Mr. Lovato responded, yes, but it would be a long drawn out battle. Director Lyon asked if AMAFCA is interested in a cooperative with CoA to take care of this area. Mr. Lovato responded that AMAFCA was approached; however, CoA does not have the money for this project. After further discussion, Director Lyon suggested getting a letter drawn up from the AMAFCA general counsel for the Board to sign and send it to KAFB. It was suggested that if KAFB does not comply with this 30 year problem, to get both Senators involved. Mr. Lovato suggested that any letter should come from staff first. The Board will be updated when more information is available.

Twinkle Light Parade: AMAFCA is making plans to participate in the parade again this year.



Page 6

b. Notification of On-Call Services Task Orders

Mr. Lovato referred to his memo for the task orders that had been issued the prior month and gave further information to the Board.

Director Thomson opined that \$15,000.00 for Sonde maintenance sounds high. Mr. Lovato stated that six of the sondes needed repair as they could not hold calibration. The sondes were rebuilt as opposed to purchasing new. NCS, who has the on-call contract, could not read data and requested help with the sondes.

Consent Agenda:

Chairman Brown stated that the agenda items 9 through 14 were on the Consent Agenda and no items were moved to the Regular Agenda.

9. On-Call Real Estate Appraisal Services Contracts – Approval of Extension of Contracts

The memo from Mr. Jeffrey S. Willis, AMAFCA Real Estate Manager, stated that the companies listed below have non-engineering Real Estate Appraisal On-Call agreements which were originally signed in October and November 2013. They all are to be considered for a first extension. The contracts will expire in late November and early December 2014.

- Brooks Pearsall and Zantow
- Commercial Appraisal, Inc.
- Shipman/Foley & Associates

All are standard one-year contracts, with the option to renew at the pleasure of the Board and the concurrence of the on-call contractor. The contracts provide that the fee schedule will remain unchanged over the term of the contract.

AMAFCA staff is satisfied with the services of the on-call contractors. All contractors have indicated that they would like to extend their respective contracts for an additional year and have provided a signed AMAFCA Campaign Contribution Disclosure Form.

Staff recommended that the Board authorize the Executive Engineer to extend the on-call contracts with Brooks Pearsal and Zantow, Commercial Appraisal, Inc., and Shipman/Foley & Associates for Real Estate Appraisal Services. Contracts are for a one-year term, as per the provisions of the contract.



Page 7

10. On-Call Oblique Aerial Photography Services – Approval of Extension of Contract

The memo from Mr. Kevin Troutman, AMAFCA GIS Manager, stated that the On-Call agreement for Oblique Aerial Photography Services with Eagle's Eye Aerial Photo Solutions was signed in November 2013. This is a standard one-year contract, with the option to renew at the pleasure of the Board and the concurrence of the on-call contractor.

AMAFCA staff is satisfied with the services of the on-call contractor. The contractor indicated he would like to extend the contract for an additional year and has signed an AMAFCA Campaign Contribution Disclosure Form. This is the first one year extension of the on-call agreement.

Staff recommended that the Board authorize the Executive Engineer to extend the on-call contract with Eagle's Eye Aerial Photo Solutions. The contract is for a one-year term, as per the provisions of the contract.

11. On-Call Real Estate Survey Services and Geotechnical / Environmental Engineering Services Contracts – Approval of Extension of Contracts

The memo from Mr. Jeffrey S. Willis, AMAFCA Real Estate Manager, stated that the companies listed below have non-engineering for Surveying Services and Geotechnical / Environmental Engineering Services On-Call agreements which were originally signed in October and November 2013. They all are to be considered for a first extension. The contracts will expire in late November and early December 2014. The following are up for the first extension:

- Surveying Services: Wilson & Company, High Mesa Consulting Group, Community Sciences Corporation, and Souder Miller & Associates
- Geotechnical / Environmental Engineering Services: X8e Vinyard & Associates, Terracon Consultants, Inc., Kleinfelder West, Inc., and AMEC Environmental & Infrastructure, Inc.

All are standard one-year contracts, with the option to renew at the pleasure of the Board and the concurrence of the on-call contractor. The contracts provide that the fee schedule will remain unchanged over the term of the contract.

AMAFCA staff is satisfied with the services of the on-call contractors. All contractors have indicated that they would like to extend their respective contracts for an additional year and have provided a signed AMAFCA Campaign Contribution Disclosure Form.

Staff recommended that the Board authorize the Executive Engineer to extend the On-Call contracts with Wilson & Company, High Mesa Consulting Group, Community Services Corporation, and Souder Miller & Associates for Surveying Services; and X8e Vinyard &



Page 8

Associates, Terracon Consultants, Inc., Kleinfelder West, Inc., and AMEC Environmental & Infrastructure Inc., for Geotechnical/Environmental Engineering Services. All contracts are for a one-year term, as per the provisions of the contract.

12. Ditch Safety Coordinator – Approval of Professional Services Agreement

The memo from Mr. Jeffrey S. Willis, AMAFCA Real Estate Manager, stated that at the September Board meeting, the Board authorized the Executive Engineer to negotiate an agreement with Griffin & Associates for Ditch Safety Coordination Services.

As per the procurement code, the agreement allows for three extensions to the original agreement, not to exceed four years. The agreement is currently in legal review.

Staff recommended that the Board approve the Professional Services Agreement with Griffin & Associates for Ditch Safety Coordination Services and authorize the Executive Engineer to sign the contract.

13. Legislative Liaison / Lobbyist Services – Consideration of Executive Engineer Recommendation

The memo from Mr. Jerry Lovato, Executive Engineer, stated that the Request for Proposal (RFP) for Legislative Liaison / Lobbyist Services was issued on August 31, 2014. The RFP was advertised in the Journal and posted on AMAFCA's website. Six firms requested the Scope of Services and one firm submitted their proposal by the 2:00 p.m. deadline on September 18, 2014. Five of the six firms that requested the Scope of Services were located out of state with the majority of the firms based in Washington D.C. The proposal submitted met the requirements of the RFP, including number of pages, and was declared responsive. The lack of submitted proposals is due to the local nature of the services requested by AMAFCA.

Staff recommended that the Board approve the Executive Engineer's recommendation to award the contract to Alarid Consulting and authorize AMAFCA's Executive Engineer to negotiate an agreement for Legislative Liaison / Lobbyist Services. The negotiated agreement will be presented for Board consideration at the November Board Meeting.

14. Agency and Area-Wide Contract – Authorization to Advertise for Request for Proposal

The memo from Mr. Kurt Wagener, AMAFCA Field Engineer, stated that AMAFCA, CoA, and the New Mexico Department of Transportation (NMDOT) all agree to continue the Agency and Area-Wide Contract. Staff is seeking Board approval to advertise for RFP. The Legal Notice of RFP and Scope of Engineering Services detailing the evaluation criteria and weights assigned



Page 9

were provided in the Board mailout. The Agreement spells out that each agency will have two representatives on the Selection Advisory Committee.

Timing of the RFP would be as follows:

- Authorization to advertise RFP on October 23, 2014
- First advertisement for RFP on October 26, 2014
- Proposals received at 2:00 p.m. on November 7, 2014
- Selection Advisory Committee (SAC) Meeting on November 11, 2014
- Recommendation to the Board of Directors on November 14, 2014
- Acceptance of SAC recommendation on November 20, 2014
- Approval of the Agreement on December 18, 2014

The schedule, as presented, will help to ensure that there is a construction contract in place for scheduled construction work in the spring of 2015 and any emergency work during the 2015 storm season.

Staff recommended that the Board authorize advertisement of RFP for the Agency and Area-Wide Flood Control Maintenance Design and Construction Management Services Contract 2014-2015.

There being no further items on the consent agenda, and no questions, Director Hernandez made a motion that the Board:

- Authorize the Executive Engineer to extend the On-Call contracts with Brooks Pearsal and Zantow, Commercial Appraisal, Inc., and Shipman/Foley & Associates for Real Estate Appraisal Services; for a one-year term, as per the provisions of the contract;
- Authorize the Executive Engineer to extend the On-Call contract with Eagle's Eye Aerial Photo Solutions; for a one-year term, as per the provisions of the contract;
- Authorize the Executive Engineer to extend the On-Call contracts with Wilson & Company, High Mesa Consulting Group, Community Services Corporation, and Souder Miller & Associates for Surveying Services; and X8e Vinyard & Associates, Terracon Consultants, Inc., Kleinfelder West, Inc., and AMEC Environmental & Infrastructure, Inc., for Geotechnical/Environmental Engineering Services; for a one-year term, as per the provisions of the contract;
- Approve the Professional Services Agreement with Griffin & Associates for Ditch Safety Coordination Services and authorize the Executive Engineer to sign the contract;
- Approve the Executive Engineer's recommendation to award the contract to Alarid Consulting and authorize AMAFCA's Executive Engineer to negotiate an agreement for Legislative Liaison / Lobbyist Services; and



Page 10

• Authorize advertisement of the Request for Proposals for Agency and Area-Wide Flood Control Maintenance Design and Construction Management Services Contract 2014-2015.

Director Lyon seconded the motion, which passed (5-0).

15. HEC-HMS White Paper Update

Mr. Bradley Bingham, AMAFCA Drainage Engineer, introduced Mr. Chuck Easterling with Easterling Associates. Mr. Easterling had provided information on the status of the white paper. A recap was provided to the Board in their Board mailout package. Along with Mr. Bingham's memo and Mr. Easterling's presentation, the following was noted:

Mr. Chuck Easterling advised that Albuquerque is the only city that utilizes Arid Land Hydrologic Modeling (AHYMO). Easterling Associates reached out to other local agencies and other states with the same type of climate looking for municipalities of a similar size to see what they utilize. There were 30-40 agencies that utilize HEC-HMS. The Corp of Engineers uses and supports the program, it is taught in Collages, the program is free, and there is a high level of technical support with updates twice a year. He opined that all of the bugs have been worked out. Both Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) and the City of Rio Rancho have adopted another program entirely.

The state of the practice in New Mexico and surrounding states allow or require Hydrologic Engineering Center - Hydrologic Modeling System (HEC-HMS) with TR-55 Hydrology for Urban Waters methodology. TR-55 presents a simplified procedure to calculate runoff volume, peak discharge, hydrographs, and storage volumes required for reservoirs. It uses the selection of a Curve Number to describe hydrologic soil factors, vegetative cover, land treatment, and antecedent moisture. It also factors in whether the runoff is directly connected to the drainage system or not.

There are numerous reasons why Hydrologic Engineering Center - Hydrologic Modeling System (HEC-HMS) should be used as a *qualitative* alternative to Arid Land Hydrologic Modeling (AHYMO). More research and testing has been completed and the white paper criteria was expanded to include:

- the "state of practice" of urban hydrology in the urban southwest;
- review of computer model programs that would produce reasonable, consistent results and utilize the latest technology and information available;
- hydrologic data input recommendations; and
- comparison of AHYMO and HEC-HMS programs, using TR-55, to provide a *quantitative* assessment of peaks flows and volumes.



Page 11

Five different rainfall distributions were modeled using eight different watershed models. The results were provided in the Board mailout titled <u>Appendix C - Rainfall Distribution Sensitivity Analysis</u>. The various rainfall distributions did not have a dramatic effect on runoff quantities. Results from analyzing a specific watershed are highly dependent on a number of input parameters. The parameters include different rainfall distribution types, rainfall/runoff transformation methods, loss methods, and methods of determining the time of concentration. Rainfall distribution is the term used to describe when and how intense the rain is during different time steps within the rain event. There are numerous distributions possible.

A side-by-side comparison of AHYMO and HEC-HMS was done for a site near Alameda and I-25. Using the inputs specified in the CoA Development Process Manual (DPM), and recommended herein, produced similar runoff and volume amounts. In addition, comparisons were done of various artificial "projects," ranging in size from 1 to 200 acres with both east and west side precipitation values. AHYMO vs. HEC-HMS Model comparison results were provided in the Board mailout titled <u>Appendix F - Method Comparisons</u>.

The white paper has been vetted by a panel of local drainage experts from private firms and public agencies. Additional research and testing was requested, and comments generated by the panel were addressed. A second panel review was held on October 20, 2014. Consensus of the panel was that the quantitative comparison needed to be done on a watershed level. This will need to be completed and reviewed by the panel before a submittal to the CoA's DPM Executive Committee requesting amendment to the Development Process Manual can be made.

Director Thomson suggested a transition period. Mr. Easterling opined that the program is so easy that it will not be a difficult transition. Chairman Brown suggested that there be a defined period of time for both programs to be used.

Director Thomson opined that the money spent by AMAFCA was well spent. The work done gives him confidence that it will work.

16. Calabacillas Arroyo Watershed Management Plan and West Branch Project Update

Between his memo and the presentation, Mr. Jerry Lovato, AMAFCA Executive Engineer, presented the following:

The Calabacillas Arroyo watershed, upstream of Swinburne Dam, encompasses 80 square miles. It has three primary branches - the Main, Middle and West. The Main and Middle Branches are mostly in Sandoval County and the West Branch is entirely within AMAFCA jurisdiction. All three arroyo branches are the subject of ongoing watershed management plans. The draft Calabacillas Arroyo Watershed Management Plan, prepared by SSCAFCA, is currently undergoing a third-party peer review. That study includes the Main and Middle branches of the



Page 12

Calabacillas. The study of the West Branch of the Calabacillas is being managed by AMAFCA. Both studies are coordinating methodology and input parameters.

The Boca Negra Drainage Management Plan (DMP) stipulated that upper basins above the Paseo de Volcan alignment would be "diverted to the Calabacillas." There is no mention in the DMP regarding to which branch of the Calabacillas it was intended to be diverted. Preliminary engineering is underway to determine the feasibility of a diversion to the West Branch, Middle Branch or to have no diversion at all.

Mr. Lovato stated that staff anticipates an update to the Board on both studies, as well as the diversion feasibility at the next Board meeting. He further stated that there has not been a land purchase. Chairman Brown asked how far it is from the break at the Rio Puerco. Mr. Lovato responded it is approximately 3/4 to 1 mile. The alignment from Quail/Black Ranch analysis has moved to the west. 1,000 acres west/upstream are to be considered in this diversion.

Director Hernandez asked about the annexation in the area. Mr. Lovato advised that Rio Rancho has annexed the area; it is within both AMAFCA's and BernCo's jurisdiction. Director Eichenberg asked Mr. Easterling to provide information on runoff in the area. Mr. Easterling responded that the alignment assumption had changed. The other assumption was that everything upstream had very sandy soil, there would be low density, and that there would be conservation practices with little to no runoff. Sandia Properties took over and some of the assumptions were changed. He opined that unless the zoning has changed the assumption for low runoff should be valid for a 100 year event. There is very little evidence of runoff currently.

Mr. Lovato advised that this is an actual PMP diversion with a design flow of 6,000 cfs. It will not be a 100-year storm event, but 17-20 inches of rain falling in the area. That is what is identified in the Boca Negra DMP. If that is the case, AMAFCA will need to inform SSCAFCA so they can modify their DMP to include the additional water. Director Hernandez was concerned about making plans that far ahead in the future, but if it needs to be done to modify the plan for Boca Negra then he understands.

Mr. Bingham advised that using the HMS inputs, SSCAFCA had come up with a draft number of 173,000 cfs inflow into Swinburne Dam for a PMP event. There was further discussion on the SSCAFCA draft number, the capacity of the Calabacillas, and the DMP for both SSCAFCA and AMAFCA.

17. Tower Road Storm Drain – Approval of the Cost Share Agreement

Between his memo and the presentation, Mr. Bradley Bingham, AMAFCA Drainage Engineer, advised that the Board reviewed and commented on the draft cost share agreement between AMAFCA, CoA, and BernCo at the September Board meeting. Comments from the Board had



Page 13

been incorporated into the Agreement which had been reviewed by CoA, BernCo, and AMAFCA attorneys. The Agreement provides that AMAFCA and CoA will split the cost of construction evenly. BernCo will provide the design and construction management and submit a Letter of Map Revision (LOMR) to the Federal Emergency Management Agency (FEMA) upon completion of the project to remove floodplain on numerous residential lots.

Staff recommended that the Board approve the Agreement for the Design, Construction and Management of Tower Road Storm Drain between Stinson and Autumn View Street SW and authorize the Chair to execute the Agreement with BernCo and the CoA.

Director Hernandez made a motion that the Board approve the Agreement for the Design, Construction and Management of Tower Road Storm Drain between Stinson and Autumn View Street SW and authorize the Chair to execute the Agreement with BernCo and the CoA. Director Lyon seconded the motion, which passed (5-0).

18. AMAFCA Projects

a. Calabacillas Arroyo Grade Control Structure 6a – Award of Contract

Mr. Kurt Wagener, AMAFCA Field Engineer, stated that the Board authorized the advertisement for the Calabacillas Grade Control Structures 6a and Bank Protection Project at the September Board meeting. The project includes a grouted boulder grade control structure and approximately 900 lineal feet of rip rap bank protection.

Competitive bids for the project were received at AMAFCA on Thursday October 16, 2014, at 2:00 p.m. Five contractors submitted bids with the following results:

Company Name	Base Bid	Adjusted Bid*
Salls Brothers Construction, Inc.	\$ 998,387.12	\$ 948,467.76
RMCI, Inc.	\$1,024,478.50	\$ 973,254.58
Mountain States Constructors, Inc.	\$1,040,481.34	\$ 988,457.27
Guzman Construction Solutions	\$1,058,000.00	\$1,005,100.00
Kimo Construction, Inc.	\$1,285,644.70	\$1,182,793.12
Engineer's Estimate	\$1,206,980.00	

^{*}NM Resident or NM Resident Veteran Preference

All of the bids were found to be responsive.

The Recommendation of Award letter from Bohannan Huston, Inc. was provided to the Board in their mailout package. Bohannan Huston tabulated bids and found no mathematical errors. Bohannan Huston recommended award of the construction contract to Salls Brothers



Page 14

Construction, Inc. in the amount of \$998,387.12, plus New Mexico Gross Receipts Tax (NMGRT). Staff concurred with the recommendation. A copy of the signed AMAFCA Campaign Disclosure Form was also provided to the Board in their mailout package.

Staff recommended that the Board accept Salls Brothers Construction, Inc., as the lowest responsible bidder and authorize the Chair to execute the contract with them for the construction of Calabacillas Grade Control Structures 6a and Bank Protection Project in the amount of \$998,387.12, plus NMGRT.

Mr. Wagener advised that AMAFCA received the United States ARMY Corps of Engineers (USACE) 404 permit in four weeks at a cost of approximately \$1,800.00 which was a substantial savings in both time and money.

Director Thomson made a motion that the Board accept Salls Brothers Construction, Inc. as the lowest responsible bidder and authorize the Chair to execute the contract with them for the construction of Calabacillas Grade Control Structures 6a and Bank Protection Project in the amount of \$998,387.12, plus NMGRT. Director Hernandez seconded the motion, which passed (5-0).

b. NDC Outfall GCS Modifications – Authorization to Advertise for Bids

Mr. Kurt Wagener, AMAFCA Field Engineer, pointed out that the North Diversion Channel Bathtub is the area of the Balloon Fiesta. There are three pieces that AMAFCA will be doing which are: the bathtub, hard lining the equipment crossing, and fill the embayment area. The objective is to make it a little higher and raise the grade control structures. Director Hernandez asked how high it would be raised. Mr. Wagener replied that the embayment will be raised three to four feet at the river, and less at the equipment crossing. Director Hernandez asked how deep the water in the embayment will be. Mr. Wagener stated that there will be no water. Director Hernandez asked how the water would get out. Mr. Wagener stated that the water would sheet flow out during storms. Chairman Brown clarified that the objective was to illuminate the backwash from the river into the embayment. Mr. Wagener agreed that it was to keep the river from flowing into the embayment. Mr. Wagener further stated that the Pueblo of Sandia had recently checked the relatively dry embayment and they found no silvery minnows. Mr. Wagener advised that Fish and Wildlife has agreed that this area is not a good place for the silvery minnows. They have agreed to let the project go forward. Mr. Wagener advised that the Corps of Engineers has said that AMAFCA can use a Regional General Permit for the project. Director Eichenberg asked if there is a cost share agreement for this project. Mr. Wagener replied, no.

The final plans and specifications were being completed and the North Diversion Channel Outfall Grade Control Structures Modifications Project was ready to be bid. The project provides for the



Page 15

construction of the "Bathtub" modification, the concrete lined equipment crossing, filling in the embayment area and raising the embayment grade control structures.

The current Engineer's Estimate of the cost of construction for the project is \$3,000,000.00, plus NMGRT.

Timing of the RFP would be as follows:

- First advertisement for Bid on October 26, 2014
- Mandatory Pre-Bid Tour on November 7, 2014
- Bid Opening at 2:00 p.m. on November 13, 2014
- Recommendation of Award on November 14, 2014
- Award of Contract on November 20, 2014
- Construction Notice to Proceed on December 18, 2014

Staff recommended that the Board authorize the Executive Engineer to advertise for construction bids for the North Diversion Channel Outfall Grade Control Structures Modifications Project.

Director Hernandez made a motion that the Board authorize the Executive Engineer to advertise for construction bids for the North Diversion Channel Outfall Grade Control Structures Modifications Project. Director Thomson seconded the motion, which passed (5-0).

19. 2014 Monsoon Season Recap/Winter Outlook

Between his presentation and memo to the Board, Mr. Kevin Troutman, AMAFCA GIS Manager, provided the following:

The onset of the 2014 monsoon season in Albuquerque officially began on July 2. The onset date is defined as the first of three consecutive days with an average daily dew point above 47 degrees. The average date of onset is around July 7th.

2014 was the 14th wettest monsoon season on record with 5.67 inches of rain. The average summertime precipitation for Albuquerque is 0.45 inches in June (15th-30th), 1.50 inches in July, 1.58 inches in August, and 1.08 inches in September, for a total of 4.61 inches for the season. In 2014, Albuquerque saw a trace of precipitation (less than 0.01 inches) in June (15th-30th), 3.49 inches in July, 1.45 inches in August, and 0.73 inches in September. The top days for precipitation at the airport were 1.06 inches on July 29th, 0.96 inches on July 16th, and 0.91 inches on August 1st. These three days account for 52% of the total 2014 monsoon precipitation. The airport reached the average total of 4.61 inches for monsoon season precipitation on August 4th. Looking at



Page 16

runoff, the North Diversion Channel had only two large flows, neither of which exceeded 5,000 cubic feet per second (cfs).

July 2014

The moisture transport into New Mexico started as a reverse monsoon for the second year in a row. The reverse monsoon is a condition where high pressure was located to the west of New Mexico. Moisture came from the north and east rather than the south, as in a traditional monsoonal weather pattern. July was the 4th wettest July on record with 3.49 inches of rain at the official reporting site for Albuquerque. Average July rainfall is 1.50 inches. The North Diversion Channel, however, had

only one flow of over 1,000 cfs. This occurred on July 16, peaking at 2,990 cfs. A storm overnight on July 2 created localized flooding in the south valley.

July 2, 2014

A cell developed around 11:30 pm over the far south valley and continued for over an hour. One observer had reported 1.83 inches of rain in the 24 hour period ending at 7:00 a.m. on July 3. Localized flooding was reported, appearing to be from sheet flow west of Coors Blvd. There was water ponding on properties near Coors Blvd. and Lucca. Ponding in low spots on residential streets in the area was also evident as well as sediment deposition on Coors Blvd. There were minor erosions around McCoy Dam along with an additional 5 feet of water in the dam pool. There was some sediment transport due to the lack of small vegetation as a result of the on-going drought. From start to stop, the rain lasted around 3 hours over the location where 1.83 inches was measured. Radar estimates match well with the one report and show areas of 2.25 to 2.50 inches of rain west of that location in the area where flooding was observed.

August 2014

After an active July, August continued that trend at the start of the month. A stationary storm formed over the UNM area producing a significant rain late at night on August 1st. This produced the largest flow in the North Diversion channel for the season, peaking at 4,530 cfs. After that event, however, upper air pattern shifted resulting in high pressure developing over the state, similar to 2013. Monsoon moisture was able to work north, twice during the month to recharge atmospheric moisture, but it did not generate significant flooding. The last part of August was marked by zonal flow with dryer air, suppressing the daily dew point value and reducing the number of storms that formed. The monthly rainfall total was 0.13 inches below the August average with most of the rainfall occurring during the August 1st storm.

August 1, 2014

A slow moving storm formed around 10:00 pm west of the intersection of I-25 and I-40. This storm moved slowly south west, reaching peak intensity near the UNM main campus. There was one gauge report of 2.77 inches, which corresponds to a 500 year event. Radar estimates place over 3.4 inches of rain near Central and I-25, 3.2 inches over parts of the UNM main campus, 3.1 inches



Page 17

over a portion of the North Diversion Channel, 3 inches over I-25 and Lomas, and 2.8 inches over the Albuquerque Convention Center. These estimates may be skewed higher due to the presence of hail within the storm.

September 2014

September started with the same upper level weather pattern that was present in August. This changed mid-month when tropical moisture from the remains of Hurricane Norbert and Tropical Storm Dolly moved into the state. A strong outflow boundary interacted with this moisture overnight on September 15th, generating a strong storm over Broadway and Rio Bravo. Moisture also increased with the approach of hurricane Odile from the Pacific Ocean. Albuquerque received light rainfall from the storm, but the circulation center and the bulk of the moisture remained in the southern half of the state. On September 29th, a cold front moving in from the west scoured out the remaining monsoonal moisture and started our fall weather pattern. Albuquerque finished September 0.35 inches below the monthly normal value.

Hurricane Odile

Hurricane Odile started as a low pressure area south of Mexico in the tropical eastern Pacific Ocean. On September 7th, Odile became the 14th tropical storm of the season in the eastern Pacific. The storm was classified as a hurricane on September 13th. By September 14th, Odile had strengthened into a category 4 hurricane, with sustained wind speeds of 135 mph. The storm made landfall on the Baja Peninsula near Cabo San Lucas on September 15 with maximum sustained winds of 125 mph. Odile slowly weakened due to interactions of the terrain, downgrading to a tropical storm on September 16th and a remnant low pressure system by September 17th. Moisture had moved out ahead of the storm and a large area of light to moderate rainfall moved up through Arizona and into New Mexico. Albuquerque saw light rainfall of September 17th. A strengthening area of high pressure over Colorado pushed the moisture and remnant circulation into the southern portion of the state. Flooding occurred in the southeastern part of New Mexico, closing roads and schools.

While the tropical system did not hit Albuquerque, it did cause us to move to a Level 0 in the Flood Annex. AMAFCA staff was in communication with other flood control partners in preparation for the storm. Internally, staff identified who would be available during the event and verified that stockpiles were in place and equipment was ready. The National Weather Service provided daily briefings on the storm. Fortunately, no additional mobilization was needed for this event.

Drought Impacts

To start the season, most of the AMAFCA jurisdiction was categorized as Severe Drought. In June 2013, by comparison, the AMAFCA jurisdiction was categorized by Exceptional Drought, the most severe category. The monsoon season provided a second year of short term drought relief.



Page 18

The AMAFCA jurisdiction was downgraded to Abnormally Dry by August. The limited precipitation of August and September, however, placed the area in Moderate Drought by the end of the season.

For the 2014 calendar year to date, Albuquerque is below normal as well. The wet July and early August put us above normal for part of the summer. The limited rainfall in later in August pushed us back below normal.

Winter Outlook

Throughout much of the summer, sea surface temperature anomalies in the equatorial Pacific have been above normal. They have not, however, reached the sustained 0.5 degrees Centigrade for three consecutive months to be declared an El Niño event. The Climate Prediction Center has kept an El Niño watch active since spring. They are predicting that an El Niño event will be declared in the next 1-2 months. The CPC is only predicting a weak to moderate El Niño rather that the strong El Niño that was predicted earlier in the year.

The Pacific Decadal Oscillation (PDO) has moved into a warm or positive phase. This results in warm sea surface temperature anomalies along the eastern Pacific.

According to the National Weather Service Albuquerque Office, New Mexico does very well when there is a weak to moderate El Niño and a positive PDO. The CPC is predicting a chance of above normal precipitation for New Mexico for the winter into early next spring. There is a corresponding chance of below normal temperatures for the same time frame.

The presentation was well received.

20. Field Highlights

a. Construction Report

The memo from Mr. Kurt Wagener, AMAFCA Field Engineer, contained a summary of current construction projects. There were no questions.

b. Field Report

Mr. Wagener gave a report of various projects and events over the past month, answering several questions from the Board during his presentation.

The slides opened with a picture of the beautiful sunset over from the AMAFCA offices. The slide presentation covered some of the following: various pictures of the dumpsters that are being utilized at the Bernalillo County Fire Station 32 for sandbags. AMFACA crew work at the



Page 19

following: Sediment removal and access control at Amole Dam, sediment removal at South Diversion Channel, fencing at Pond 187 and the new bobtail dump truck. For Bernalillo County: Goff roadway improvements, Sunset Gardens road drainage improvements. Mutt mitt stations at the Hahn, underdrain system at Mariposa, MISC AMAFCA Construction Projects 2014 Ladera Dam 9, various pictures of the SWVFDR Phase 11c – USACE, and Boca Negra Detention Dam. The Bear Canyon Shared Use Path, the HEC-HMS vs. AHYMO Technical Review meeting, Avenida Cesar Chavez Grate Replacement along with a video and closed with a picture of the Bond Election billboard and noted that this year's Bond Committee has collected approximately \$27,000.00.

Director Hernandez inquired when CoA will be taking care of the North Diversion Channel (NDC) Bike trail. Mr. Wagener advised he will check with Mr. James Lewis. He asked Director Hernandez for the locations and his response was it was the entire bike trail on the NDC.

21. OSE Update

Mr. Lovato stated that AMAFCA staff has been in discussion with the Dam Safety Bureau regarding the Extreme Precipitation Analysis Tool (EPAT). The OSE spent approximately \$475,000 on the development of EPAT, and AMAFCA has been asking for the update since the Office of the State Engineer has not ordained the study. Texas will take care of 3/4 of what New Mexico would need to pay.

Director Thomson advised that Texas, Arizona, and Colorado are all using the same software and consultant. If AMAFCA can take advantage of this there will be some consistency across the states. There is a possibility of a regional meeting with the states and New Mexico Water and Dam Owner Coalition; most likely in Albuquerque or Santa Fe.

22. North Branch of South Domingo Baca Arroyo – Consideration of Turnkey Agreement associated with Hawk's Landing Subdivision

Between her memo and presentation, Ms. Lynn Mazur, AMAFCA Development Review Engineer, provided the following:

The 10-acre tract east of the intersection of Tramway Boulevard and Paseo del Norte is known as Tract 5 of Lands of Mhoon. The North Branch of the South Domingo Baca Arroyo conveys a 100-year flow rate of 1,200 cfs across the southern section of the tract. The arroyo is in a designated Federal Emergency Management Agency (FEMA) floodplain. It crosses under Tramway Boulevard through a concrete box culvert that flows into the South Domingo Baca Diversion, an AMAFCA facility. BernCo is requiring a 100-year crossing at Tramway Lane on the east side of the tract.



Page 20

Ms. Mazur stated that staff has met several times with the developer, Mr. John Lowe with Panorama Homes, and his engineer, Mr. David Soule of Rio Grande Engineering, to discuss improvements to the arroyo to reclaim floodplain area. Mr. Lowe is proposing a 31-lot subdivision, to be known as Hawk's Landing. Ms. Mazur pointed out there are still some design issues to work out.

The channel will be tinted concrete. The eastern section of the channel will use the existing North Branch South Domingo Baca Arroyo slope paving (also known as the Morgan Floodwall) as the

southern bank. The second phase of the slope paving was never constructed. Ms. Mazur had opined that it was because the western part of the Tramway Vista Subdivision was determined to be out of the prudent line.

The channel will be major public infrastructure that will convey public water. Mr. Lowe has requested that AMAFCA maintain the facility. He will dedicate fee right-of-way for the channel and submit a LOMR to FEMA to revise the floodplain.

Director Eichenberg asked Mr. Schiabor, representing Panaroma Homes, if he wanted to present anything. Mr. Schiabor expressed his interest in getting the agreement approved and that he and Panaroma Homes have worked with neighbors to keep the area looking as naturalistic as possible. He stated that there is slope paving on the south side of the arroyo currently in place; however, it is not going to provide enough protection to the area. There is no protection on one side of the arroyo. Mr. David Soule with Rio Grande Engineering advised that the arroyo slope is a steep slope. There are many parameters, and to force it to be more naturalistic would cause more problems.

Director Eichenberg asked if there were unlimited funds available, what they would do differently. Mr. Schiabor replied that he did not think they would change it. It is beautiful as designed. He followed up with the design plans. He thinks they have done a good job, and Mr. Soule concurred. He advised that a pedestrian trail is being added into the right away.

Chairman Brown had gone out and met with the Sandia Heights Association earlier this year to look at the area. He is aware of the severely degrading area. Director Hernandez opined that AMFACA is known for ugly, trapezoid facilities, and the Hahn Arroyo should become the state of practice. It is his hope that it will become standard practice. Mr. Schiabor advised that the County Commission had approved the plan; however, it was appealed to Federal Court.

Director Eichenberg asked why there is access on both sides of what would be the improved arroyo. Mr. Lovato advised that if AMAFCA were maintaining the arroyo, the access on both sides would be needed. The trucks need a place to work and turn around as opposed to backing up. Mr. Wagener explained that Piedras Marcadas, behind Smith's on Golf Course, has access on



Page 21

one side. It is very difficult to do repairs or crack sealing. It is preferred to have access on both sides for each AMAFCA maintained facility. Director Eichenberg stated that a second road does not make it look good, and he would not vote for it. He opined he knows the kind of crew AMAFCA has; give them a challenge, and they will meet it. He asked what time frame is needed. After further discussion, Mr. Schiabor advised that in November they would need to get a Conditional Letter of Map Revision (CLOMR) in. They are willing to work within the parameters of AMAFCA.

Mr. John Lowe with Panaroma Homes advised that he lives there and knows the area. Lot number one was eliminated on the east side of the subdivision. There will be landscaping there. They have met many times with staff. The preference is a beautiful channel, lots of landscaping, and an open space corridor.

Director Eichenberg asked that they come back in November. Chairman Brown summarized that the Board is asking for consideration of eliminating one of the two maintenance roads and advise what that would do in making the channel more naturalistic. Look at something on the model of the Hahn. Staff's position is that two roads are needed. Mr. Wagener provided an example of a 4X4 road to serve as one maintenance road. The 4X4 road would have smaller vegetation like grasses and flowers, but no large vegetation allowed like on the North Domingo Baca. Mr. Lovato pointed out that this is a rectangular channel and not the normal shape that AMAFCA maintains. AMAFCA needs to be down in the bottom and have access to the top, as well as minimize the channel footprint. After further discussion between Board members, staff, and those representing Pamaroma Homes, Chairman Brown summarized that, the combination of the bike trail and service road, as drawn meets the objective. The Board would like to see about modifying the configuration of the 15-foot maintenance road. AMAFCA staff will be having further discussions with Panaroma Homes and they will present the plan to the Board in the future.

23. Real Estate

a. Renewal of License and Agreement from the Bureau of Reclamation and the Middle Rio Grande Conservancy District to the Albuquerque Metropolitan Arroyo Flood Control Authority – Consideration of renewal of a 1964 License and Agreement from BOR and MRGCD to AMAFCA for portions of the North and South Diversion Channels on BOR right-of-way

Director Lyon asked that the Board approve the renewal as called out in the memo from Mr. Jeffrey S. Willis, AMAFCA Real Estate Manager. The Board approved renewing the original License and Agreement for an additional 25 years on November 19, 1989.



Page 22

The first 25 year renewal period expires on November 19, 2014. AMAFCA continues to operate and maintain portions of the North and South Diversion Channels on BOR right-of-way. The renewal agreement was provided to the Board in their mailout package.

Staff recommended that the Board approve the renewal of the original License and Agreement for a second 25-year term and authorize the Chairman to sign the renewal agreement to be sent to the MRGCD and the BOR with a cover letter requesting their signatures.

Director Lyon made a motion that the Board approve the renewal of the original License and Agreement for a second 25-year term and authorize the Chairman to sign the renewal agreement. Director Hernandez seconded the motion, which passed (5-0).

24. Unfinished Business

Mr. Jerry Lovato, AMAFCA Executive Engineer, advised that AMAFCA has been working for over two years with the Pueblo of Sandia on Avulsion #1. The Pueblo has never agreed with the avulsion. He stated within Avulsion #1 there is a site that the pueblo considers sacred. The Pueblo also has an interest in protecting the PNM substation, near the Balloon Fiesta Park, which is located where a concrete wall could be installed. It would be approximately 12 feet high, with 5 feet exposed. Mr. Lovato stated that AMAFCA would pay the Pueblo to build the wall, but AMAFCA would not maintain it. It would fall under the Department of the Interior, Bureau of Indian Affairs (BIA), to maintain the wall. AMAFCA will not ask for an easement. FEMA floodplain will be remapped; however, Pueblo land is not mapped. In order for AMAFCA to pay the Pueblo to build the wall, BIA will guarantee that it will be maintained and will need to identify the site.

He stated that part of the Avulsion #1 deal is to extend the North Camino Channel west of I-25 to protect the PNM substation. He further stated there is an AMAFCA easement in a fenced area up to Roy Road where the PNM Substation is located. Mr. Lovato presented some options on how to take care of this channel. Either option would require that the Pueblo contribute to the project. A 50/50 cost share, with AMAFCA providing design and construction, would be proposed. Ms. Lynn Mazur, AMAFCA Development Review Engineer, had contracted with Weston Solutions for the North Albuquerque Acres Drainage Management Plan Audit (DMP). The DMP identified where the water was coming in.

The Pueblo has asked for a formal proposal to present to their counsel next month. Director Lyon asked why AMAFCA is talking with the War Chief instead of the Governor. Mr. Lovato responded that the War Chief handles religious matters for the Pueblo. Director Lyon asked if AMAFCA's legal counsel had someone on staff who is an expert in Indian Law. Ms. Chavez advised that there is no one on their staff who is an expert in Indian Law.



Page 23

After viewing the slides on the area and further discussion on the importance of the project, it was the consensus of the Board to have the Executive Engineer proceed with discussions with the Pueblo of Sandia to reconfigure the avulsion as presented.

25. New Business

None.

26. Adjourn

There being no further business to come before the Board, Chairman Brown adjourned the meeting at 1:44 p.m.

Bruce M. Thomson, P.E., Secretary-Treasurer, 11/20/14

Recorded by Guylene Harris, Executive Administrative Assistant