

RECORD OF PROCEEDINGS

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE BACA GRANDE WATER AND SANITATION DISTRICT HELD JANUARY 15, 2016

A Regular Meeting of the Board of Directors (referred to hereafter as "Board") of the Baca Grande Water and Sanitation District (referred to hereafter as "District") was held on Friday, the 15th day of January, 2016, at 9:00 a.m. at the offices of the District, BGWSD Shop, 57 Baca Grant Way South, Crestone, Colorado. The meeting was open to the public.

ATTENDANCE

Directors In Attendance Were:

Cindy Reinhardt
Martin Macaulay
Michael Scully
Kyle Grote

Also In Attendance Were:

Lisa A. Johnson and Lindsay Ross (for a portion of the meeting); Special District Management Services, Inc. (via speakerphone)

Zachary P. White, Esq.; White Bear Ankele Tanaka & Waldron, (via speakerphone)

JoAnn Slivka; Administrative Services Manager

Justin DeBon; Operations Manager

Marcus Lock, Esq.; Law of the Rockies (via speakerphone for a portion of the meeting)

Brad Simons; TZA Water Engineers (via speakerphone for a portion of the meeting)

See list for additional attendees

DISCLOSURE OF POTENTIAL

Disclosure of Potential Conflicts of Interest: The Board discussed the requirements pursuant to Colorado law to disclose any potential conflicts of

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CONFLICTS OF INTEREST

interest or potential breaches of fiduciary duty to the Board of Directors and to the Secretary of State. Attorney White noted that conflicts were filed for applicable Directors at least 72-hours prior to the meeting. Director Reinhardt noted that a quorum was present and requested members of the Board to disclose any potential conflicts of interest with regard to any matters scheduled for discussion at this meeting. No new disclosures were made.

ADMINISTRATIVE MATTERS

Agenda: Director Reinhardt reviewed the proposed Agenda for the District's Regular Meeting with the Board.

Following discussion, upon motion duly made by Director Macaulay, seconded by Director Grote and, upon vote, unanimously carried, the Agenda was approved, as amended.

Consent Agenda: The Board considered the following actions:

- Approve Minutes from the November 20, 2015 regular meeting
- Review and accept unaudited financial statements for the period ending December 31, 2015 and current schedule of cash position
- Resolution No. 2016-01-01 Designating the District's 24-Hour Posting Location
- Approval of the 2016 Lease Agreement with Xerox

Following discussion, upon motion duly made by Director Macaulay, seconded by Director Grote and, upon vote, unanimously carried, the Board approved the Consent Agenda.

Board and Staff Reports: The Board reviewed and discussed the staff reports which are attached hereto and incorporated herein by this reference.

Citizen's Advisory Committee: Ms. Johnson began the discussion with a presentation on an idea she had to include in the tasks of a potential Citizen's Advisory Committee the analysis of the administrative review and continued restructure. Director Macaulay would like to keep staff focused on the administrative analysis rather than tasking a committee with the analysis. The Board discussed this idea and determined that Ms. Slivka and Ms. Johnson should continue their efforts to complete the analysis.

Director Macaulay shared his thoughts on forming a Citizen's Advisory Committee. He feels that a committee should be formed after the May Director election. In the meantime, he suggested the Board work with interested citizens

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to discuss and design the structure for such a committee.

The Board then asked the audience what they would like to see a Citizen's Advisory Committee focus on.

Marcia Heusted suggested enhanced communication with the public on important issues facing the District. Ms. Cyriaks agreed and suggested that interested citizens could join a few Board Members to help design a committee and determine the tasks the committee should focus on.

President Reinhardt is hesitant to wait until after the May election to form a committee. She agrees with the idea to form a small group of citizens to participate in discussions regarding the specifics of a committee and the focus.

After much discussion, Director Scully and Lynn Drake volunteered to begin discussions on the options to improve and enhance communications with constituents. Director Scully will research the possibility of a blog and talk with Attorney White regarding the legal aspects.

Mr. Scully then informed the Board and citizens that he plans to offer a monthly opportunity for citizens to interact with him regarding District concerns immediately after the Board meeting each month. He will meet interested citizens at The Desert Sage Restaurant.

The Board determined to continue discussions on the formation of a Citizen's Advisory Committee at their February meeting.

2016 Board of Director Goals: President Reinhardt reminded the Board that they never formally finalized their goals for 2016. She summarized the status of two of the more important goals discussed, the water and sewer rate study and the administrative analysis.

Director Grote emphasized his desire to see back-up power installed at all facilities and more options for disinfection of the water supply. Director Grote will continue his research on disinfection options and present his findings to the Board at a future meeting.

Second Amendment to February 1, 2013 Employee Handbook: Ms. Johnson presented the Second Amendment to February 1, 2013 Employee Handbook regarding a revision to the current PTO accrual policy.

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Following discussion, upon motion duly made by Director Macaulay, seconded by Director Scully and, upon vote, unanimously carried, the Board approved the Second Amendment to February 1, 2013 Employee Handbook.

May 3, 2016 Election Update: Ms. Slivka and Ms. Johnson gave an update on the tasks to date associated with the May 3, 2016 election. Ms. Slivka has drafted the Self-Nomination and Acceptance Form and the Call for Nominations and transmitted to Attorney White for review and approval. Self-Nomination and Acceptance Forms are due by February 26, 2016.

Amended and Restated Resolution Regarding Election: Attorney White presented an Amended and Restated Resolution Regarding Election which authorizes the Designated Election Official to cancel the May 2016 election if warranted.

Following discussion, upon motion duly made by Director Macaulay, seconded by Director Grote and, upon vote, unanimously carried, the Board approved the Amended and Restated Resolution Regarding Election.

PUBLIC COMMENT

Public Comment: Mr. Dunets and Ms. Dokson of the Atlanta Association addressed the Board regarding the inclusion of property into the boundaries of the District. They summarized their efforts to date in meeting with Mr. DeBon.

The Board and Ms. Johnson apologized to Mr. Dunets and Ms. Dokson for the lack of communication and process regarding the inclusion process and committed to schedule a meeting with them and staff as soon as possible to explain the inclusion process in detail and answer any questions.

There were no other public comments.

FINANCIAL MATTERS

Check Register: The Board considered approval of the revised check register through the period ending December 14, 2015, as follows:

General Fund	\$	11,076.42
Debt Service Fund	\$	200.00
Capital Projects Fund	\$	5,559.16
Enterprise Fund	\$	<u>61,928.21</u>
Total Claims:	\$	78,763.79

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Following discussion, upon motion duly made by Director Macaulay, seconded by Director Scully and, upon vote, unanimously carried, the Board approved the revised check register for the period ending December 14, 2015.

Check Register: The Board considered approval of the revised check register through the period ending January 15, 2016, as follows:

General Fund	\$	7,990.92
Debt Service Fund	\$	-0-
Capital Projects Fund	\$	46,041.09
Enterprise Fund	\$	<u>75,327.61</u>
Total Claims:	\$	129,359.62

Following discussion, upon motion duly made by Director Macaulay, seconded by Director Grote and, upon vote, unanimously carried, the Board approved the revised check register for the period ending January 15, 2016.

Financial Summary: Ms. Ross presented areas of interest contained within the December 31, 2015 financial statements.

Review of 2015 Budget Process: The Board discussed and reviewed the 2015 budget process to determine areas for potential improvements.

Ms. Slivka suggested enhancing communications to citizens earlier in the process, possibly in August and September via inserts in the monthly billings statements or special mailings.

Director Scully next suggested that at any point the Board or staff receive information that may have an impact on future revenues; the Board determines how to communicate the information to citizens and solicit their input.

President Reinhardt requested that the draft budget document include any and all options for changes in revenues or expenditures.

OFFICE ADMINISTRATION

Administrative Follow-Ups: Ms. Slivka discussed with the Board moving forward with the Xpress Bill Pay enhancement to offer Online Billing to citizens. The Board briefly discussed the benefits of this service and authorized Ms. Slivka to proceed with implementation.

Director Scully also mentioned that the concrete floor in the administrative offices is in need of a sealant. The Board authorized Director Scully to work with staff to determine if there are funds in the 2016 budget to complete the project

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and if so to proceed. If not, Director Scully was directed to present the costs of the project to the Board for consideration at a future meeting.

OPERATIONS

Operational Follow-Ups: Mr. DeBon informed the Board that he will schedule and complete annual grease trap inspections in the District within the month which will include the inspections associated with the Town of Crestone.

WATER MATTERS

Water Matters: Attorney Lock updated the Board on recent water matters concerning the District.

Mr. Lock informed the Board of the status of the Case No. 15CW3024, which concerns the proposed rules governing the withdrawal of groundwater in Water Division No. 3. The case is not yet at issue, and the State of Colorado intends to circulate a proposed case management order in the coming weeks.

Mr. Lock informed the Board that in December, the United States Department of Justice filed an application for a change of water right seeking to adjudicate a new alternate point of diversion for the District's Well No. 17, which alternate point of diversion conforms to the current physical location of Well No. 17. Mr. Lock recommended that the Board authorize the filing of a "friendly" statement of opposition on behalf of the District as a means of obtaining automatic notice of any filings or other developments in the case.

Following discussion, upon motion duly made by Director Scully, seconded by Director Macaulay and, upon vote, unanimously carried, the Board authorized Attorney Lock to file a "friendly" statement of opposition on behalf of the District as outlined above.

Mr. Lock informed the Board that the District is continuing to cooperate with the United States Fish and Wildlife Department regarding the development of a plan for augmentation to ensure that the District is in compliance with the proposed rules governing the withdrawal of groundwater in Water Division 3, if and when such rules are finally approved and implemented.

CAPITAL IMPROVEMENTS

Engineer's Report: Mr. Simons joined the meeting and the Board reviewed his monthly report.

Director Scully asked for more information regarding the issues contractors have expressed surrounding the current Form of Independent Contractor Agreement

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("ICA"). Staff responded that they have been unable to determine exactly which areas of the ICA contractors have concerns with. Attorney White explained the need for certain language in the ICA including statutory requirements.

At this point and until staff receives comments from future contractors, the Form ICA will remain as is.

Capital Funding Sources and Uses: Ms. Johnson presented and the Board reviewed the Capital Funding Sources and Uses worksheet.

Casita Park Interconnect Project: Mr. DeBon and Mr. Simons gave an update on the status of the Casita Park Interconnect Project.

Change Order No. 3: Mr. Simons presented Change Order No. 3 to the RMS Utilities Agreement in the amount of \$9,499.50

Following discussion, upon motion duly made by Director Macaulay, seconded by Director Scully and, upon vote, unanimously carried, the Board approved Change Order No. 3 to the RMS Utilities Agreement in the amount of \$9,499.50.

Pay Application No. 4: Mr. Simons presented Pay Application No. 4 to the RMS Utilities Agreement in the amount of \$43,528.90.

Following discussion, upon motion duly made by Director Macaulay, seconded by Director Grote and, upon vote, unanimously carried, the Board approved Pay Application No. 4 to the RMS Agreement in the amount of \$43,528.90.

Stables Lift Station Improvements Project: Mr. Simons presented information contained in his Engineer's Report regarding the Stables Lift Station Improvements Project.

Following discussion, upon motion duly made by Director Macaulay, seconded by Director Grote and, upon vote, unanimously carried, the Board approved the revised budget for the project in the amount of \$59,197 and authorized Mr. DeBon to work with vendors identified to order the equipment needed and negotiate, in conjunction with Attorney White, the contracts for installation to complete the project.

2016 Equipment Procurement: Mr. DeBon presented his memo and supplemental information regarding the procurement of a dump truck, trailer and 2 service vehicles.

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The Board authorized Mr. DeBon to work with Attorney White on the lease agreements necessary to procure the equipment.

Following discussion, upon motion duly made by Director Scully, seconded by Director Macaulay and, upon vote, unanimously carried, the Board authorized President Reinhardt to execute lease documents associated with the procurement of equipment outlined above subject to finalization of documents by Attorney White.

LEGAL MATTERS

Status of Finalization of Resolution 2015-11-04 Third Amended and Restated Resolution Establishing Guidelines for Processing and Collection of Delinquent Fees and Charges: Attorney White updated the Board on the staff review and implementation of Resolution 2015-11-04 Third Amended and Restated Resolution Establishing Guidelines for Processing and Collection of Delinquent Fees and Charges.

First Addendum to Independent Contractor Agreement with Lamp Rynearson & Associates for Public Water System Facilities Support Engineering: The Board reviewed and discussed in detail the First Addendum to Independent Contractor Agreement with Lamp Rynearson & Associates for Public Water System Facilities Support Engineering to include an increase in hourly rates.

Following discussion, upon motion duly made by Director Macaulay, seconded by Director Grote and, upon vote, unanimously carried, the Board approved First Addendum to Independent Contractor Agreement with Lamp Rynearson & Associates for Public Water System Facilities Support Engineering.

First Addendum to Independent Contractor Agreement with Lamp Rynearson & Associates for Domestic Wastewater Treatment Works Facilities Support Engineering: The Board reviewed and discussed in detail the First Addendum to Independent Contractor Agreement with Lamp Rynearson & Associates for Domestic Wastewater Treatment Works Facilities Support Engineering to include an increase in hourly rates.

Following discussion, upon motion duly made by Director Macaulay, seconded by Director Grote and, upon vote, unanimously carried, the Board approved First Addendum to Independent Contractor Agreement with Lamp Rynearson & Associates for Domestic Wastewater Treatment Works Facilities Support Engineering.

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District Response Procedures when Receiving Information Regarding Cultivation of Marijuana within the District: The Board will review the policy and draft form letter drafted by Attorney White related to cultivating marijuana that could be transmitted to affected citizens and will discuss potential procedures regarding implementation of the policy at the February meeting. Attorney White will provide a recommendation for implementation of the policy at that meeting.


OTHER BUSINESS

Newspaper Article: President Reinhardt will draft an article for inclusion in The Eagle Newspaper. Director Macaulay volunteered to review the article prior to transmitting for publication.


ADJOURNMENT

There being no further business to come before the Board at this time, upon motion duly made, seconded, and upon vote, unanimously carried the meeting was adjourned.


Respectfully submitted,

By  Secretary for the Meeting

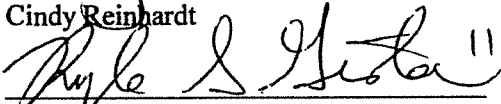
THESE MINUTES ARE APPROVED AS THE OFFICIAL JANUARY 15, 2016 MINUTES OF THE BACA GRANDE WATER AND SANITATION DISTRICT BY THE BOARD OF DIRECTORS SIGNING BELOW:




Martin Macaulay



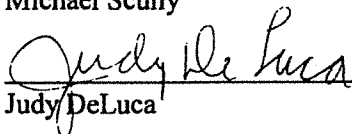
Cindy Reinhardt



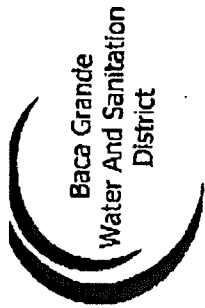
Kyle Grote



Michael Scully



Judy DeLuca



Baca Grande Water and Sanitation District
P.O. Box 520 | 57 Baca Grant Way S
Crestone, CO 81131-0520

January 15, 2016

Board of Directors Sign-in

Cindy Reinhardt	<i>Cindy Reinhardt</i>
Martin Macaulay	<i>Wm.</i>
Kyle Grote	<i>Kyle S Grote II</i>
Michael Scully	<i>Michael Scully</i>
Judy Deluca	



Baca Grande Water and Sanitation District
 P.O. Box 520 | 57 Baca Grant Way S
 Crestone, CO 81131-0520

January 15, 2016

Please print your name, address and contact information along with any issues you are interested in addressing at today's Board Meeting.

Name	Address	Telephone/Email	Would you like Issues to be addressed to speak?
Lizena Miller	191 Cascade Overlook B.D. Box 216	mlentemiller@gmail.com	Y
Lisa Lynaudo	POB 754	lyriack@voda.net	Y
Lynn Drake	POB 621	presilks@Fairpoint.net	
Marcia Heustek	PO Box 475 Crestone, CO 81131	719 256 4475 collcrestone@gmail.com	Not sure.
Johanna Daxson	PO Box 478 Crestone, CO 81131	719 256 4200 contact@Atalanta.org	Atlanta request ✓
FREDERICK D. DUNNETS	PO Box 963 CRESTONE, CO 81131	719 588-0102 fdunets@yahoo.com	" ✓

t: 719-256-4310 | f: 719-256-4309 | www.bacawater.com | info@bacawater.com

Resolution No. 2016-01-01

**RESOLUTION
OF THE BOARD OF DIRECTORS OF THE
BACA GRANDE WATER AND SANITATION DISTRICT**

DESIGNATING THE DISTRICT'S 24-HOUR POSTING LOCATION

WHEREAS, the Baca Grande Water and Sanitation District (the "District") is a quasi-municipal corporation and political subdivision of the State of Colorado; and

WHEREAS, pursuant to § 24-6-402(1)(a), C.R.S., the District is a local public body and subject to the provisions of §§ 24-6-401, *et seq.*, C.R.S.; and

WHEREAS, pursuant to § 32-1-903(2), C.R.S., notice of the time and place for meetings of the Board of Directors of the District (the "Board") is required to be posted in three (3) public locations within the boundaries of the District at least seventy-two (72) hours before any regular or special meeting; and

WHEREAS, § 24-6-402(2)(c), C.R.S., provides that, in addition to any other means of full and timely notice, a local public body shall be deemed to have given full and timely notice if the notice of the meeting is posted in a designated public place within the boundaries of the local public body no less than twenty-four (24) hours prior to the holding of the meeting; and

WHEREAS, pursuant to § 24-6-402(2)(c), C.R.S., the public place or places for posting such notice shall be designated annually at the local public body's first regular meeting of each calendar year; and

WHEREAS, the Board has determined to designate one of the three posting locations used for meeting notices in satisfaction of § 32-1-903(2), C.R.S. as its designated posting location for notices under § 24-6-402(2)(c), C.R.S.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD AS FOLLOWS:

1. Pursuant to § 24-6-402(2)(c), C.R.S., the Board hereby designates the following location for the posting of its twenty-four (24) hour meeting notices:

The District's Shop, located at 57 Grant Way South, Crestone, Colorado.

ADOPTED this 15th day of January, 2016.

BACA GRANDE WATER AND SANITATION
DISTRICT

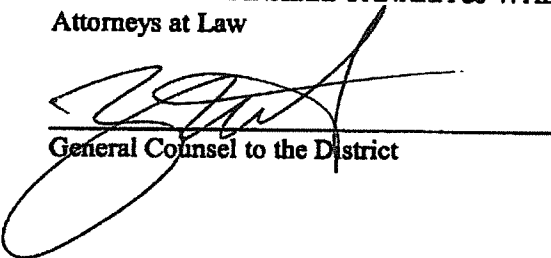

Officer of the District

ATTEST:



APPROVED AS TO FORM:

WHITE BEAR ANKELE TANAKA & WALDRON
Attorneys at Law


General Counsel to the District

[Signature Page to Resolution Designating the 24-Hour Posting Location.]



Baca Grande Water and Sanitation District
P.O. Box 520 | 57 Baca Grant Way S
Crestone, CO 81131-0520

Date: January 7, 2016
To: Baca Grande Water and Sanitation District, Board of Directors
From: Lisa A. Johnson, District Manager
Re: January 15, 2016 District Manager's Report

Agenda Action Items

I.C. Consent Agenda

1. Approve Minutes from the November 20, 2015 Regular Meeting.
2. December 31, 2015 Financial Statements and current Cash Position.
3. Resolution 2016-01-01 Designating the District's 24-Hour Posting Locations.
4. Approve 2016 Lease Agreement with Xerox

I recommend approval of the consent agenda items.

I.G. Second Amendment to Employee Handbook

Based on the recommendation and discussion at the November Board meeting regarding a revision to the employee handbook regarding the accrual and use of Paid Time Off ("PTO"), Attorney Ferguson has drafted an amendment to the employee handbook which is included in your packet.

I recommend approval of the Second Amendment to the Employee Handbook

II.A. December 14, 2015 Check Register

The December 14, 2015 check register is enclosed in the board packet. Ms. Slivka and Mr. DeBon did review and recommended approval of the invoices for December. Checks were signed and distributed during the month.

I recommend ratification of approval of the December 14, 2015 check register.

II.B. January 15, 2016 Check Register

The January 15, 2016 check register will be presented for approval at the board meeting.

Update on Other District Matters not on the Agenda

Administration Analysis

I have a new idea regarding the research and preparation of the administrative analysis that I have shared with President Reinhardt and will share with the entire Board at the meeting.

Annual Performance Evaluations

It is that time of the year for annual staff performance evaluations. Mr. DeBon and Ms. Slivka will evaluate their respective staff members in the next month or so. I am working with the Personnel Committee to determine the process for evaluations of Mr. DeBon and Ms. Slivka and once determined, their evaluations will also be prepared and presented to each of them.



January 2016

OPERATIONS MANAGER REPORT

To: Board of Directors, Baca Grande Water and Sanitation District
From: Justin DeBon
Date: November 11 – January 6, 2016

Casita Park Interconnect: The Casita Park interconnect has been completed, tested and was put into service in the beginning of December. The PRV is working perfectly maintaining an average of 85psi throughout the Casita Park System. The Motel Well and booster pumps have been turned off but the telemetry is still active to allow monitoring of system pressure and high/low pressure alarms.

Main leaks: A leak was repaired at the intersection of Camino Real and Antelope Overlook, a 6” capped cross on the main was leaking, the cross would not be used in the future so it was cut out and a straight pipe was installed in its place. A large leak was repaired on Moonlight Overlook, the 6” main was laying on a rock and cracked the pipe, 12” away from the crack was a service line that was also leaking. The bad section of pipe was removed and new pipe was installed and properly bedded with sand.

Main Line Redundancy: The secondary line crossing the creek near the Well 18/17 complex was completed. RMS quickly installed the new pipe, casing and valves without any interruption in service to customers.

Dream Way Sewer: The water has been turned on to the two sewer flushing connections located next to the Shumei Center and Zen Center. We currently are adding 18 gallons per minute into the sewer to keep flows moving which will prevent the sewer main from freezing.

Staff: The search to replace lost staff was very successful and two stand out candidates were hired. The first person hired was Tad Crawford who brings many skills such as heavy equipment experience and a Class-A CDL. The second person hired was Rebecca Potter who was a past seasonal worker that worked on the Districts valve locating program, she also brings skills in heavy equipment and a strong work ethic. Both employees started January 4th and both have a positive attitude and are ready to do anything asked of them.

2016 Projects: The following is a list of projects that will be worked on in 2016.

1. MHE Lagoon reclamation
2. Screening/Sorting of Aspen spoils area
3. Fire hydrant Maintenance Project
4. Collection System Video Inspection and Cleaning Project
5. Manhole Infiltration Prevention Project
6. Stables Lift Station Upgrade Project
7. Facility Weed Control Project
8. Leak Detection-On going

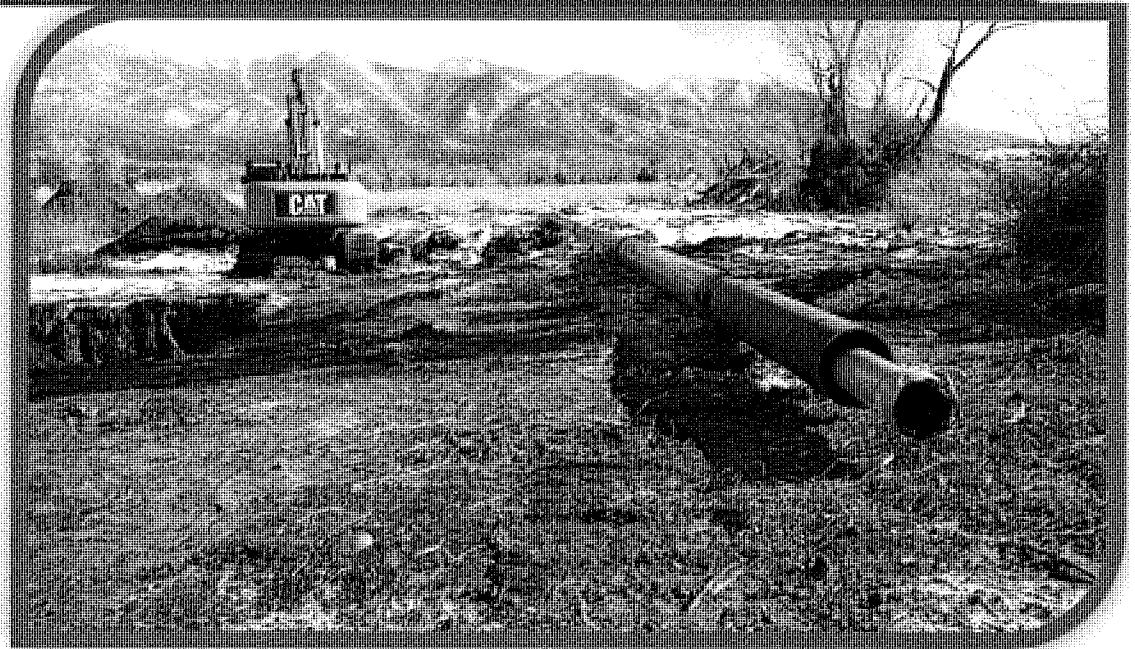
2015 Projects Completed: The following is list of projects that were completed in 2015.

1. ~~Completion of Facility Maintenance GIS Layer Project~~
2. ~~Completion of Water Meter Upgrade Project~~
3. ~~Fire Hydrant Maintenance Project~~
4. ~~Collection System Cleaning Project~~
5. ~~Manhole Infiltration Prevention Project on Cotton Wood Creek~~
6. ~~Capital Improvement Projects~~
7. ~~Water Meter MXUM upgrade project and DOLA grant reporting~~
8. ~~Yeshi Korlo service line reduction project~~
9. ~~GIS Facilities Maintenance Project~~
10. ~~Virture Way Manhole Repair~~



Baca Grande
Water And Sanitation
District

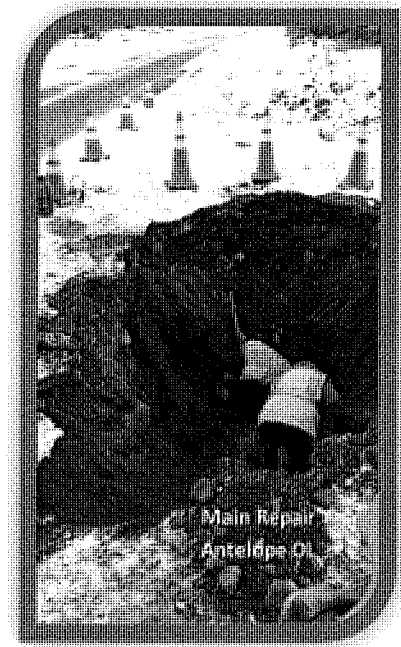
Report On District Operations



Creek Crossing Pipe – Ready to be installed
Dec 2015

Operations Report
Baca Grande Water and Sanitation District
January 2016

Report from: November 11- January 6



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District Operations

SSO-Sanitary Sewer Overflow	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Fire Hydrant Maintenance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Drained non draining hydrants for winter time
Water Main Repairs	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	6" Main Antelope OL, 6" Main Canyon OL
Collection System Cleaning	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Collection System Cleaning Complete for 2015
GPS/GIS	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Added 8 new valves
Water/Sewer Hookups	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	6 new hookups in 2015
Accidents	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

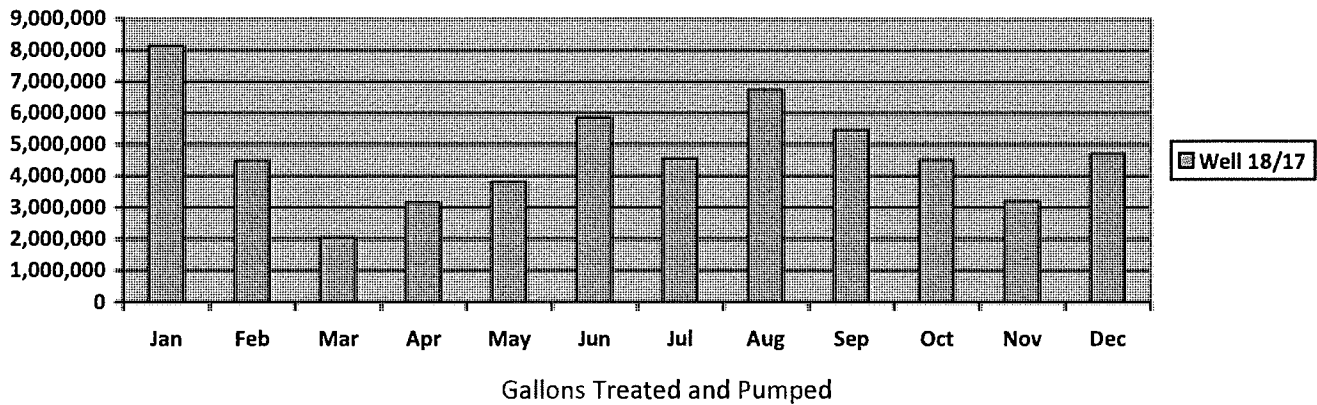
Total Water Treated

Total Gallons Treated For Month	Finished Water Combined Well-18 & Motel Well	Finished Water Metered Combined Well-18 & Motel Well	Wastewater Treated	Estimated Unaccounted Water
January 2015	9,123,828		2,473,000	6,650,828
February 2015	5,292,000	93% Reading 1,180,000	1,630,000	4,112,000
March 2015	4,631,000	93% Reading 1,310,000	2,014,000	3,321,000
April 2015	5,270,000	95% Reading 2,651,000	1,685,000	2,619,000
May 2015	5,815,000	95% Reading 2,949,000	2,036,000	2,866,000
June 2015	8,550,000	97% Reading 3,823,000	3,381,000	4,727,000
July 2015	7,207,000	98% Reading 5,216,000	2,853,000	1,991,000
August 2015	9,689,000	98% Reading 4,894,000	2,193,000	4,795,000
September 2015	8,077,000	99% Reading 4,502,000	1,379,000	3,575,000
October 2015	5,975,000	99% Reading 3,811,000	1,892,000	2,164,000
November 2015	3,891,000	99% Reading 1,397,000	1,674,000	2,494,000
December 2015	4,766,000	99% Reading 1,712,000	1,881,000	2,854,000
Total Treated 2015	78,286,828	33,445,000	25,091,000	42,168,828

Golf Course Well

April 2015	May 2015	June 2015	July 2015	August 2015	September 2015	October 2015
6,517,028	6,517,028	9,123,828	8,797,988	8,472,137	8,797,988	6,191,177

Baca Grande Chalet

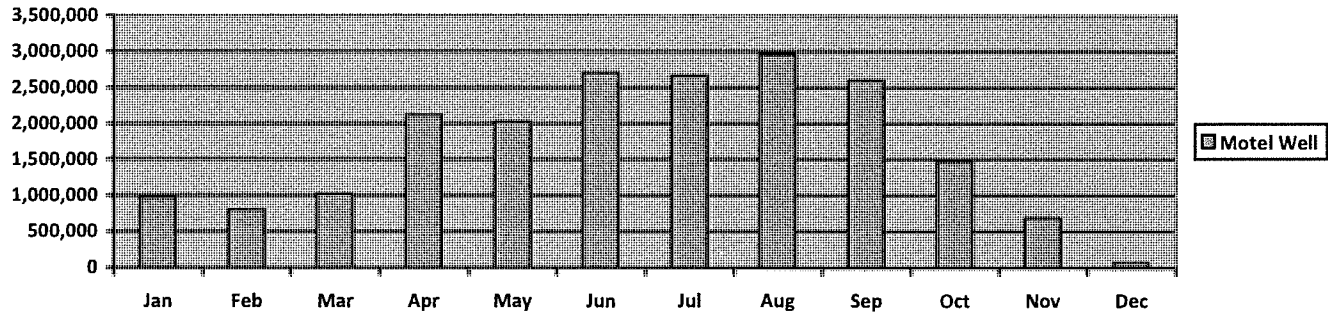


January	February	March	April	May	June
8,146,272	4,490,000	2,040,000	3,156,000	3,797,000	5,850,000

July	August	September	October	November	December
4,547,000	6,734,000	5,474,000	4,505,000	3,202,000	4,702,000

Month	Chlorine Residual	Total Coliform E. Coli Result	Compliant	Well Water Level
January	0.30	Absent	Yes	35'
February	0.25	Absent	Yes	36'
March	0.26	Absent	Yes	35'
April	0.19	Absent	Yes	35'
May	0.19	Absent	Yes	35'
June	0.14	Absent	Yes	36'
July	0.29	Absent	Yes	36'
August	0.10	Absent	Yes	39'
September	0.19	Absent	Yes	39'
October	0.10	Absent	Yes	38'
November	0.32	Absent	Yes	38'
December	0.20	Absent	Yes	38'

Casita Park



Gallons Treated and Pumped

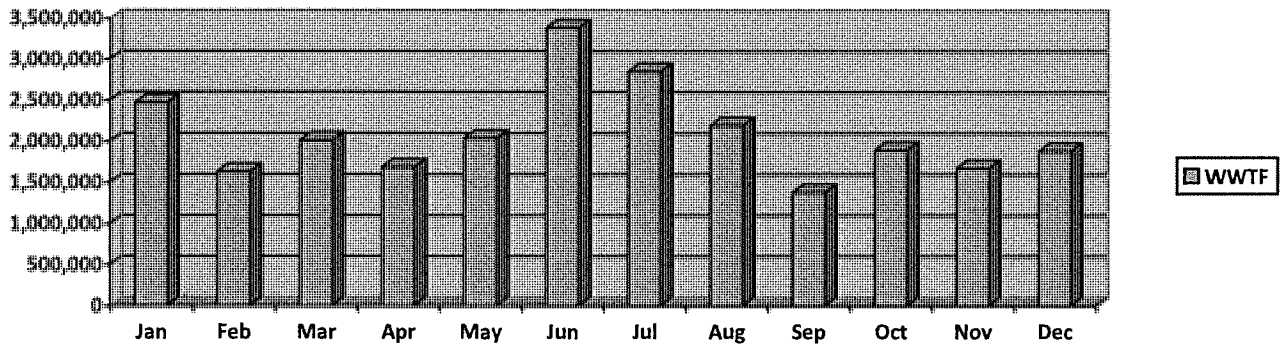
January	February	March	April	May	June
977,553	802,000	1,018,000	2,114,000	2,018,000	2,700,000

July	August	September	October	November	December
2,660,000	2,955,000	2,603,000	1,470,000	689,000	64,000

Motel Well turned off in December and is now part of Well 18/17 Chalet System

Month	Chlorine Residual	Total Coliform E. Coli Result	Compliant
January	0.31	Absent	Yes
February	0.28	Absent	Yes
March	0.29	Absent	Yes
April	0.26	Absent	Yes
May	0.28	Absent	Yes
June	0.28	Absent	Yes
July	0.26	Absent	Yes
August	0.22	Absent	Yes
September	0.31	Absent	Yes
October	0.30	Absent	Yes
November	0.31	Absent	Yes
December	0.20	Absent	Yes

Aspen Wastewater Treatment Facility



Wastewater Treated in Gallons

January	February	March	April	May	June
2,473,000	1,630,000	2,014,000	1,685,000	2,036,000	3,381,000

July	August	September	October	November	December
2,853,000	2,193,000	1,379,000	1,892,000	1,674,000	1,881,000

Month	Total Ammonia Result	E. Coli Result	Effluent BOD5 Result	Total BOD5 Removal Result	Compliant for Month
January	2.80 mg/L	2/100	5.02 mg/L	94.3%	Yes
February	0.81 mg/L	2/100	24.9 mg/L	89.0%	Yes
March	0.86 mg/L	2/100	3.6 mg/L	97.8%	Yes
April	0.68 mg/L	23/100	3.6 mg/L	98.0%	Yes
May	0.72 mg/L	2/100	3.07 mg/L	97.8%	Yes
June	0.77 mg/L	2/100	3.00 mg/L	97.4%	Yes
July	1.10 mg/L	2/100	1.51 mg/L	89.0%	Yes
August	1.90 mg/L	2/100	26.8 mg/L	90.0%	Yes
September	1.60 mg/L	2/100	13.1 mg/L	92.5%	Yes
October	1.12 mg/L	2/100	5.7 mg/L	95.6%	Yes
November	1.20 mg/L	2/100	2.4 mg/L	98.5%	Yes
December	1.50 mg/L	2/100	2.7 mg/L	98.8%	Yes

Bio Solids	Quantity
Stored Bio Solids – Aspen Storage Lagoon	190,600 Gallons
Bio Solids pumped and applied to land application site. YTD 1/6/16	20,000 Gallons *Not Final
Bio Solids pumped into Aspen Storage Lagoon. YTD 1/6/16	57,600 Gallons

Other Reporting

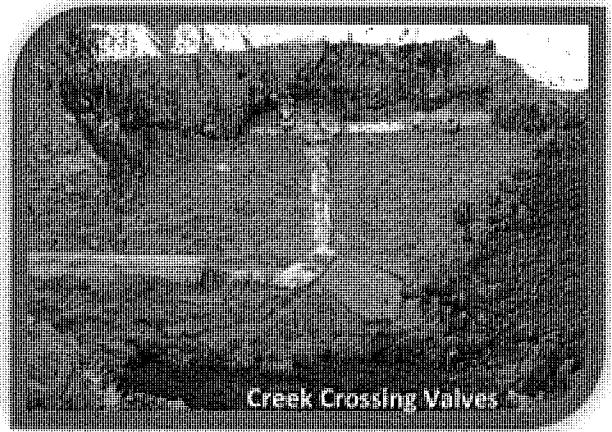
Monthly Safety Meeting	Trench Safety
------------------------	---------------

Infrastructure Fixed Assets

Transfer Stations	Booster Stations
Fallen Tree – Operational	Pine Cone Booster – Operational
Ridgeview Transfer Station – Operational	Shumei Booster Station – Operational
Moonlight Transfer Station – Operational	Motel Well Booster Station – Operational

Drinking Water Distribution System	Wastewater Collection System
Water Mains = 64 Miles	Sewer Mains = 45 Miles
Gate Valves = 528 Units	Manholes = 798
Service Accounts = 695	
Curb Stops = 695	Lift Stations = 5
Fire Hydrants = 278	MHE LS – Operational
Well 17/18 Water Treatment Plant- Facility Fully Operational.	Stables LS – Operational
MHE Motel Well Water Treatment Facility- Facility Fully Operational.	Wagon Wheel LS – Operational
Water Transfer Stations = 3	Dharma Ocean LS – Operational
Booster Stations = 3	Aspen LS – Operational
	Aspen WWTF – Facility Fully Operational. Operating at 33% Capacity

Operations Team



Justin DeBon
Operations Manager

Class C Water Operator
Class C Wastewater Operator
Class I Distributions Operator
Class I Collections Operator
Nationally Certified Heavy Equipment Operator
OSHA Trained in Construction Standards for Excavation

Chad Tate
Operator

Class S Water Operator
Class S Wastewater Operator

Tim Allen
Operator

Class S Water Operator
Class S Wastewater Operator

Rebecca Potter
Operator

New Utility Maintenance
Worker - In Training

Tad Crawford
Operator

New Utility Maintenance
Worker - In Training



Administrative Report - January 15, 2016

To: Baca Grande Water and Sanitation District Board of Directors

From: JoAnn Slivka, Administrative Services Manager

December 2015 Activities

Billing	<ul style="list-style-type: none">• Delinquent account summary:<ul style="list-style-type: none">○ 22 delinquent accounts:<ul style="list-style-type: none">▪ 29 - Delinquent notices mailed – 22 owners, 7 tenants▪ 10 - Paid in full▪ 12 - Paid delinquent balance▪ 0 - Shut off• Tap Fees:<ul style="list-style-type: none">▪ 2 Tap fee agreements remain (\$967.75 remaining in payments)▪ 18 tap fee agreements paid in full▪ 25 accounts billed \$1233.51• Billing:<ul style="list-style-type: none">▪ ACH: 173 accounts paid \$9248.30▪ Transfer fees: 14▪ Late fee accounts: 42▪ On/off fees: 2
Property Activity	<ul style="list-style-type: none">• Transferred Properties<ul style="list-style-type: none">▪ 9 Lots▪ 4 SFR's• Consolidations:<ul style="list-style-type: none">▪ 0- New applications▪ 5 - Final applications• Water/Sewer hookup applications:<ul style="list-style-type: none">▪ Total new applications: 0▪ Withdrawn application for hookup: 1

2016 PROJECTS

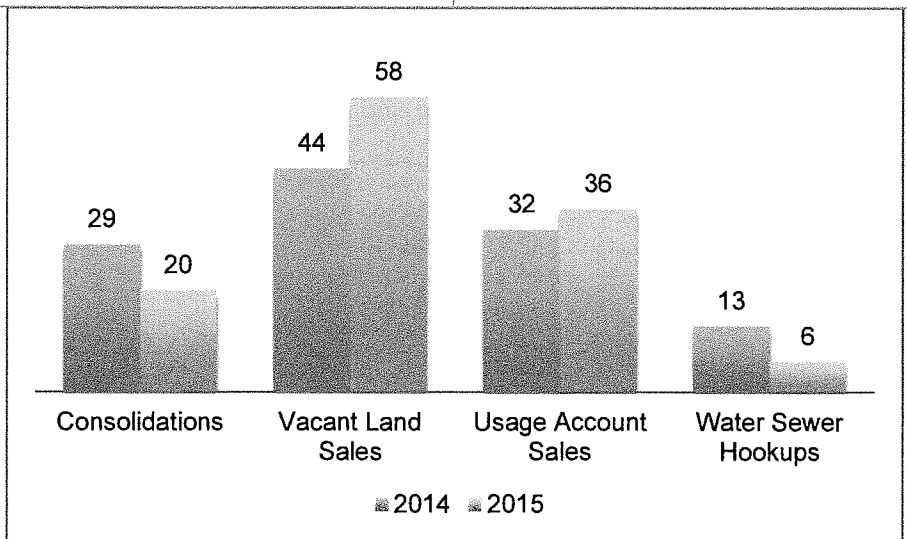
<p>Rate Study Project</p>	<ul style="list-style-type: none"> • Staff continues to work with TZA Engineers on the rate study project capturing billing trends throughout the winter season.
<p>Administrative Analysis</p>	<ul style="list-style-type: none"> • Staff has begun to identify administrative tasks performed by the management company that could potentially be brought in house.
<p>Town of Crestone</p>	<ul style="list-style-type: none"> • I have been in touch with the Town of Crestone since the resignation of Town Manager, Akia Tanara. I spoke with Acting Clerk, Allyson Ransom as well as Treasurer, Gwynn Busby regarding the District's relationship with the town. We discussed the pending grease trap inspection as well as the need to meet this year after the elections to review the IGA between the District and the Town of Crestone for sewer services. They will keep us updated on any changes that may affect the District. We have been in contact a number of times since, assisting town staff with supporting documents related to the increase in sewer maintenance fees. We are all looking forward to continue working together!
<p>Xpress Bill Pay</p>	<ul style="list-style-type: none"> • Admin staff is very excited to begin implementing an on-line bill pay system for customers. Documents have been received for the set-up of the Xpress Bill Pay account. Once the paperwork is complete we will schedule the implementation which will involve an onsite specialist who will provide training and assist with the setup.
<p>New Utility Rates</p>	<ul style="list-style-type: none"> • District staff received comments from approximately 8 constituents regarding the 2016 Budget, increase in water/sewer usage fees and the mill levy. The Board of Directors, management staff, and legal counsel worked together to respond as needed. • Admin staff is in the process of updating the rates in the billing software for implementation beginning with the February billing statements (for January usage).
<p>2016 Elections</p>	<ul style="list-style-type: none"> • Notice by publication of a call for nominations for the election will be submitted to the Crestone Eagle and Saguache Crescent. • Staff will begin training for the election.

2015 Year to Date Property Activity

Consolidations	<ul style="list-style-type: none"> • 20 Total consolidation applications submitted • 19 Lots with full AOS & 1 lot with no AOS were terminated by the completed consolidations. This represents \$1,609.49 less revenue from AOS fees.
Property Sales	<ul style="list-style-type: none"> • Vacant Lots: 58 • Usage Accounts: 36 • Treasurer's Deed Sales: <ul style="list-style-type: none"> ○ Total # of lots sold: 73 ○ 71 of these lots went back to Saguache County. This represents a loss of \$8,175.00/yr. in AOS fees. • Total property transfers: 167
Water-Sewer Hookups	<ul style="list-style-type: none"> • Completed hookups: 6

2014 Year to Date Property Activity

Consolidations	<ul style="list-style-type: none"> • 29 Total consolidation applications submitted • 19 Lots with full AOS were terminated. This represents 2,850.00/year less AOS fee revenue. • 10 lots with no AOS were terminated.
Property Sales	<ul style="list-style-type: none"> • Vacant Lots: 44 • Usage Accounts: 32 • Total property transfers: 76
Water-Sewer Hookups	<ul style="list-style-type: none"> • Completed hookups: 13 • Total Applications: 13



**BACA GRANDE WATER AND SANITATION DISTRICT
ENGINEER'S REPORT
January 6, 2016**

ADMINISTRATIVE MATTERS

Funding Opportunities – District staff and consultants are researching a variety of funding sources for possible support on a variety of projects.

- A Small Communities Water and Wastewater Grant Application was submitted on November 16, 2015. We are targeting these monies to support the proposed Flow Equalization Basin, including a dedicated headworks (screening and grit removal), at the Aspen Institute Wastewater Treatment Facility. The Small Community Water and Wastewater grants assist small communities with costs associated with the planning, design, and construction of projects for both drinking water and wastewater projects. Grants are available to communities with populations under 5,000 and are necessary for the protection of public health and water quality. Awards will be announced on the Water Quality Control Division's webpage in February of 2016.
- TZA Water Engineers has initiated research into the SEARCH (Special Evaluation Assistance for Rural Communities and Households) Grants and the Predevelopment Planning Grants available from the USDA's Rural Development for the biosolids management needs of the District. Attached is USDA's Application for Federal Assistance for informational purposes.
- Finally, TZA has initiated research into the Colorado Water Conservation Board's funding opportunities and determined the Water Efficiency Grant program may be the most applicable to the District's current water conservation efforts. Specifically, this program may support a water loss control audit. I have a message into this agency's designated representative and will update the District Manager with more information as it becomes available.

Water and Wastewater Rates – On May 15, 2015, I presented the results of this year's rate study to the Board. At the meeting, the Board directed staff and consultants to track the current rate structure against the proposed rate structure to evaluate overall revenue impacts. I reviewed the June, July, August, September, and October reports prepared by Sandy and the results are tabulated below.

	Current Rates			Proposed Rates		
	Water	Sewer	Total	Water	Sewer	Total
June	\$23,988.30	\$19,266.00	\$43,254.30	\$29,010.00	\$13,927.00	\$42,937.00
July	\$27,301.40	\$19,266.00	\$46,567.40	\$32,052.00	\$13,927.00	\$45,979.00
August	\$26,430.34	\$19,292.00	\$45,722.34	\$31,161.00	\$13,946.00	\$45,107.00
September	\$25,634.27	\$19,084.00	\$44,718.27	\$30,048.00	\$13,946.00	\$43,994.00
October	\$23,448.09	\$19,084.00	\$42,532.09	\$27,804.00	\$13,946.00	\$41,750.00

LAMP RYNEARSON COMPANIES



The slight reduction in the Proposed Rate totals for each month can be attributed to the fact that each account is currently assumed to use only the minimum amount of water and therefore only being charged the base rate. However, there are accounts that exceed the base usage allowances and would end up paying more for their sewer usage. Accordingly, in November Sandy and I began a review of the monthly water usage for each of the metered accounts. I received the December water usage data on January 6 and will supplement my Engineer's Report in advance of the Board meeting.

OPERATIONAL MATTERS

Biosolids Removal - Justin DeBon has been managing the biosolids at the Aspen Institute Wastewater Treatment Facility with the existing ponds. RMS mobilized to the ponds the week of November 2, 2015 to remove product for land application. Justin will have to provide the Board with an update of the biosolids efforts, but it is my understanding RMS is unable to remove product from the ponds largely due to weed accumulation in the basins. I would also be interested in Justin's efforts to reach out to Mr. Gaines regarding the details of a pilot program.

TZA has initiated research into the solids management practices of other Fluidyne ISAM facilities of comparable capacity and will develop a white paper on biosolids management options. We recently learned about a simplified single-step process to dewater sludge and have contacted the company and its Colorado-based vendor to obtain more information on the technology and its installations.

Well 18 Booster Pump Station Problems - Activities associated with this topic will be addressed separately due to attorney-client privileges, but an assessment of the 2014 and 2015 operations should be documented by operations staff.

Nutrients Management Control Regulation (Regulation No. 85) - Justin DeBon is managing the 2015 sampling efforts and should identify any 2016 requirements.

CAPITAL PROJECTS

Capital Project Summary Sheets – No additional activity since November of 2015.

Casita Park Water Line Interconnect – The line connecting the Well 18 yard piping to Mobile Home Estates was put into service on November 30, 2015. The redundant stream crossing was completed by RMS on December 18, 2015. Change Order No. Three and Application for Payment No. 4 will be included in the January Board meeting packet. Barring any unforeseen issues, the District should be able to authorize the final payment at the February Board meeting and close out the contract with DOLA in accordance with the grant agreement by the March 31, 2016 deadline.

Compliance Evaluation Inspection (Dharma Ocean and Stables Lift Station) – The Water Quality Control Division issued site location approvals for the Dharma Ocean and Stables lift stations on April 23, 2015. The Water Quality Control Division issued design approvals for these lift stations on September 1, 2015, which is good news and saved us from having to restate all of the information generated and communicated during the site location approval efforts. Five things need to happen to satisfy the conditions of approval for the designs:

- 1) Install manual transfer switch and receptacle for the emergency portable generator at Dharma Ocean.
- 2) Once manual transfer switch and receptacle are installed at Dharma Ocean, submit the required certification to the Division.
- 3) Construct pumping improvements (pumps, motors, drives, controls) at Stables.
- 4) Install manual transfer switch and receptacle for the emergency portable generator at Stables.
- 5) Once the improvements are installed at Stables, submit the required certification to the Division.

I have worked with Justin on items 1 and 4 under the premise we want the receptacles to match up with the portable generator at the Aspen Institute Wastewater Treatment Facility. Justin and I have discussed using Valley Electric for the electrical installation services for the project, but Valley Electric is not willing to enter into the District's Independent Contractor Agreement. Justin is now researching Alpine Electric's interests in supporting the District's needs.

TZA has also worked with Denver Industrial Pump and Timber Line Electric and Control Corporation to price out the pumps, motors, drives, controls, and telemetry modifications for item 3. The ultimate goal will be to have the Stables Lift Station operate similar to the Dharma Ocean Lift Station, and to have the ability to remotely monitor and control the station similarly as well. Attached is a draft Design Memorandum prepared by Chad Weaver to memorialize the Stables Lift Station Improvements and the anticipated project costs.

I can address items 2 and 5 once the improvements are complete at each lift station.

2014 Water Distribution System Improvement Project - The warranty inspection with RMS Utilities had been tentatively set for December 1, 2015. Justin prepared a summary of staff's recent inspection of the vaults and did not identify any post-construction problems to be addressed by RMS under warranty. Attached is the Warranty Inspection letter I prepared for the District in December of 2015.

Water Meter Transmitter Replacement Project - TZA has asked Justin DeBon to review the meter reading results with pump station metering reports in an effort to assess pressure zones that should be the focus of any future leak detection activities. This information may benefit an application to the Water Efficiency Grant program discussed above under "Funding Opportunities".

Flow Equalization Basin - TZA Water Engineers will coordinate the geotechnical investigation and foundation recommendation for the proposed structure, possibly including a headworks (screening and grit removal) component, pending determination of the Small Communities Water and Wastewater Grant discussed above. Justin has identified an alternative configuration for the structure based upon his knowledge of the Aspen Institute Wastewater Treatment Facility and its uses.

OTHER ACTIVITIES

Storage Tank Rule – The Water Quality Control Division has adopted a new version of the Colorado Primary Drinking Water Regulations (Regulation 11). Effective April 1, 2016, the District will be required to develop a written plan for finished water storage tank inspections. In addition to quarterly periodic (visual) inspections, the District will need comprehensive inspections to be scheduled at least every five years.

New Chlorine Residual Requirements – The Water Quality Control Division has adopted a new version of the Colorado Primary Drinking Water Regulations (Regulation 11). Effective April 1, 2016, the District will be required to maintain a minimum of 0.2 milligrams per liter chlorine residual throughout the distribution system. Justin DeBon has indicated this is an achievable standard based upon his assessments in the latter months of 2015.

**APPLICATION FOR
FEDERAL ASSISTANCE**

Version 7/03

1. TYPE OF SUBMISSION: Application <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction		Pre-application <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	2. DATE SUBMITTED	Applicant Identifier
			3. DATE RECEIVED BY STATE	State Application Identifier
			4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier
5. APPLICANT INFORMATION				
Legal Name:		Organizational Unit: Department:		
Organizational DUNS:		Division:		
Address: Street:		Name and telephone number of person to be contacted on matters involving this application (give area code) Prefix: First Name:		
City:		Middle Name		
County:		Last Name		
State:	Zip Code	Suffix:		
Country:		Email:		
6. EMPLOYER IDENTIFICATION NUMBER (EIN): □□-□□□□□□□□		Phone Number (give area code)	Fax Number (give area code)	
8. TYPE OF APPLICATION: <input type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es) (See back of form for description of letters.) Other (specify) <input type="checkbox"/> <input type="checkbox"/>		7. TYPE OF APPLICANT: (See back of form for Application Types) Other (specify)		
10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: TITLE (Name of Program): □□-□□□□		9. NAME OF FEDERAL AGENCY:		
12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.):		11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:		
13. PROPOSED PROJECT Start Date: Ending Date:		14. CONGRESSIONAL DISTRICTS OF: a. Applicant b. Project		
15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?		
a. Federal	\$.00	a. Yes. <input type="checkbox"/> THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON		
b. Applicant	\$.00	DATE:		
c. State	\$.00	b. No. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E. O. 12372		
d. Local	\$.00	<input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW		
e. Other	\$.00	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?		
f. Program Income	\$.00	<input type="checkbox"/> Yes If "Yes" attach an explanation. <input type="checkbox"/> No		
g. TOTAL	\$.00			
18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT. THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.				
a. Authorized Representative				
Prefix	First Name	Middle Name		
Last Name		Suffix		
b. Title		c. Telephone Number (give area code)		
d. Signature of Authorized Representative		e. Date Signed		

INSTRUCTIONS FOR THE SF-424

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0043), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

This is a standard form used by applicants as a required face sheet for pre-applications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

Item:	Entry:	Item:	Entry:																
1.	Select Type of Submission.	11.	Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project.																
2.	Date application submitted to Federal agency (or State if applicable) and applicant's control number (if applicable).	12.	List only the largest political entities affected (e.g., State, counties, cities).																
3.	State use only (if applicable).	13.	Enter the proposed start date and end date of the project.																
4.	Enter Date Received by Federal Agency Federal identifier number: If this application is a continuation or revision to an existing award, enter the present Federal Identifier number. If for a new project, leave blank.	14.	List the applicant's Congressional District and any District(s) affected by the program or project																
5.	Enter legal name of applicant, name of primary organizational unit (including division, if applicable), which will undertake the assistance activity, enter the organization's DUNS number (received from Dun and Bradstreet), enter the complete address of the applicant (including country), and name, telephone number, e-mail and fax of the person to contact on matters related to this application.	15.	Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15.																
6.	Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service.	16.	Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process.																
7.	Select the appropriate letter in the space provided. <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">A. State</td> <td style="width: 50%;">I. State Controlled Institution of Higher Learning</td> </tr> <tr> <td>B. County</td> <td>J. Private University</td> </tr> <tr> <td>C. Municipal</td> <td>K. Indian Tribe</td> </tr> <tr> <td>D. Township</td> <td>L. Individual</td> </tr> <tr> <td>E. Interstate</td> <td>M. Profit Organization</td> </tr> <tr> <td>F. Intermunicipal</td> <td>N. Other (Specify)</td> </tr> <tr> <td>G. Special District</td> <td>O. Not for Profit Organization</td> </tr> <tr> <td>H. Independent School District</td> <td></td> </tr> </table>	A. State	I. State Controlled Institution of Higher Learning	B. County	J. Private University	C. Municipal	K. Indian Tribe	D. Township	L. Individual	E. Interstate	M. Profit Organization	F. Intermunicipal	N. Other (Specify)	G. Special District	O. Not for Profit Organization	H. Independent School District		17.	This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes.
A. State	I. State Controlled Institution of Higher Learning																		
B. County	J. Private University																		
C. Municipal	K. Indian Tribe																		
D. Township	L. Individual																		
E. Interstate	M. Profit Organization																		
F. Intermunicipal	N. Other (Specify)																		
G. Special District	O. Not for Profit Organization																		
H. Independent School District																			
8.	Select the type from the following list: <ul style="list-style-type: none"> • "New" means a new assistance award. • "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date. • "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation. If a revision enter the appropriate letter: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">A. Increase Award</td> <td style="width: 50%;">B. Decrease Award</td> </tr> <tr> <td>C. Increase Duration</td> <td>D. Decrease Duration</td> </tr> </table> 	A. Increase Award	B. Decrease Award	C. Increase Duration	D. Decrease Duration	18.	To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)												
A. Increase Award	B. Decrease Award																		
C. Increase Duration	D. Decrease Duration																		
9.	Name of Federal agency from which assistance is being requested with this application.																		
10.	Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested.																		

DESIGN MEMORANDUM

To: Lisa Johnson, District Manager
From: Brad Simons, P.E.
Date: December 16, 2015
Re: Stables Lift Station Upgrade
Project No.: 0414607.01
Enclosures: (1) Final Design Approval Letter
(2) Site Location Application Approval Letter
(3) TST Tech Memo Stables LS
cc: Justin DeBon, Operations Manager

The following memo is intended to provide information and cost estimates associated with the Stables Lift Station Upgrade project.

Project Need

The Baca Grande Water and Sanitation District (BGWSD) operates and maintains the Stables Lift Station (Stables) which supports all wastewater collection south of Rendezvous Way and Badger Road. The Dharma Ocean and Wagon Wheel Lift Stations are part of this service. The Stables pumps are incorrectly sized for the current application and are therefore not as effective as they could be. In addition, the BGWSD Aspen Institute Wastewater Treatment Plant's (WWTP) planning includes constructing a dedicated headworks and flow equalization basin. The proposed equalization capacity will allow the Stables Lift Station to pump wastewater at a much higher rate much more efficiently. Due to the limited wet well capacity of the current influent pump station located adjacent to the WWTP, Stables will be limited to 180 gallons per minute (gpm) until the proposed equalization basin is constructed. Stables is currently controlled solely via a Programmable Logic Controller (PLC) and has no redundant float switch backup. Stables is also currently unable to be controlled remotely and has no infrastructure to be operated on emergency generator power.

Stables Lift Station Setup

Stables currently utilizes two 460 volt 3-phase Barnes 1D4NONCLOG-1800 size 4SE7534L pumps, each equipped with a 7.5 horsepower motor and mounted to a Barnes BAF-4x4 guide rail system. 200 amp service is available at the mechanical building. The precast concrete wet well is approximately 12 feet deep and 5 feet in diameter. The 6-inch sewer force main runs uphill in a north-westerly direction along the Spanish Creek Trail Road for approximately 5,500 feet where it empties into a six foot deep manhole. From there it gravity flows to the WWTP influent pump station. The elevation difference between the Stables Lift Station and the receiving manhole is approximately 35 feet. Refer to Figure 1 and Figure 2 for site layout. BGWSD observed through pump tests that the current system operates at 26 pounds per square inch (psi). At this pressure, the pump curve yields a flow of 135 gallons per minute (gpm). This results in a 1.53 feet per second (fps) velocity which does not meet the minimum standard of 2 fps. 177 gpm is calculated to be the minimum requirement to achieve 2 fps in a 6-inch diameter force main. This number is rounded up to 180 gpm.

LAMP RYNEARSON COMPANIES



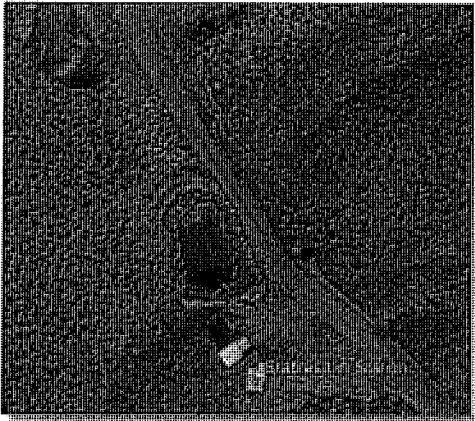


Figure 1 - Stables Lift Station Aerial View

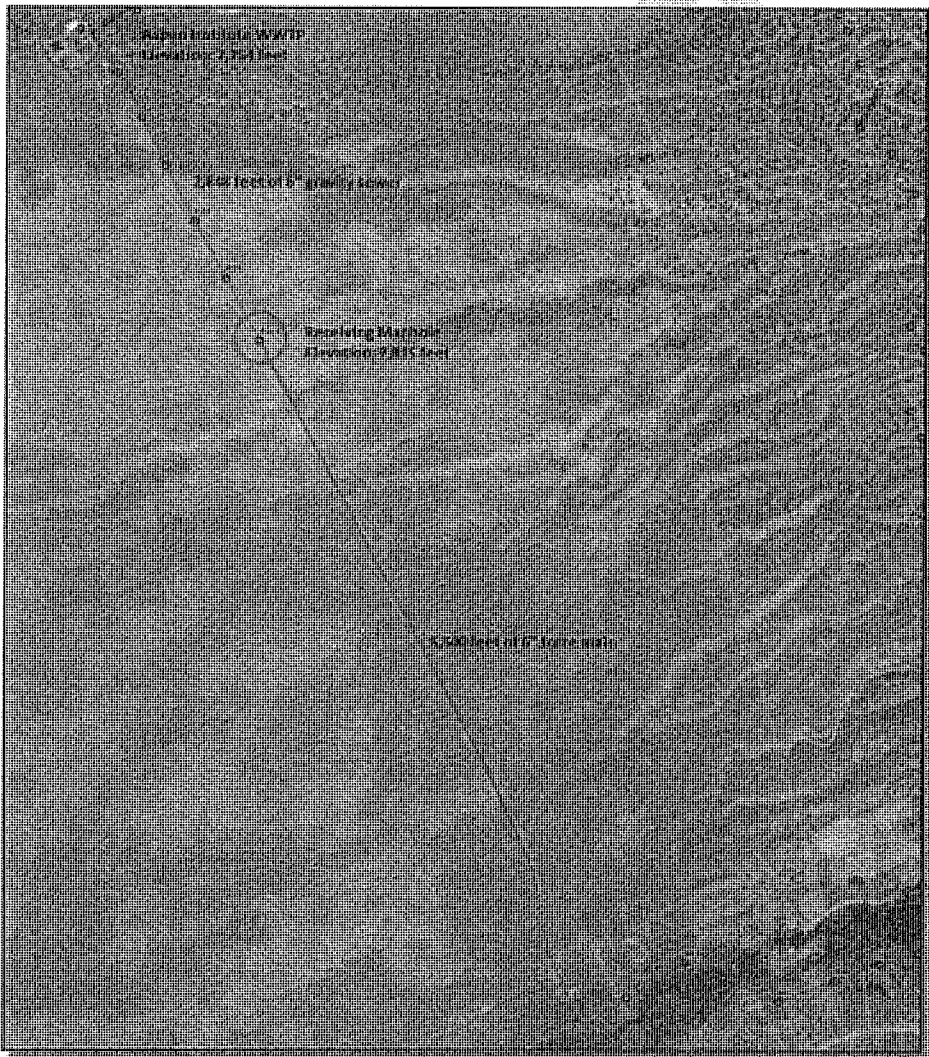


Figure 2 - Stables Lift Station Pipeline

There are no float switches located within the existing lift station. The pumping is controlled by a 0-10 volt level sensor installed by Electric Power and Process, Inc. The manufacturer is KPSI. There are two control systems within the Stables mechanical building; a Siemens Logo!12/24 RC and an Allen Bradley Micrologix 1100. The

Siemens PLC is reading the lift station water level and controlling the lift station pumps. The Allen Bradley PLC does not appear to be controlling anything but does use telemetry to report alarm conditions via the FactoryTalk software platform located at the BGWSD main office. The telemetry transceiver is a FreeWave Technologies HTP-900RE. An N-Tron 104TX Ethernet switch connects the Allen Bradely PLC to the transceiver.

A lined overflow storage pond exists approximately 50 feet north of the lift station mechanical building. The mechanical building is approximately 20 feet northwest of the lift station wet well.

On April 23, 2015, the Water Quality Control Division approved a retro-active site application with a hydraulic design capacity of 99,107 gpd (maximum month daily average flow) and a peak hydraulic capacity of 180 gpm (single pump capacity). The site location approval will expire on October 23, 2016, therefore construction must be started on or before this date. See Enclosures (1) and (2).

Design Data

TST Consulting Engineers Technical Memorandum, dated February 21, 2014, recommended an ultimate pumping capacity of 250 gpm at 69 feet (30 psi) of total dynamic head (TDH). This is based on pressure and flow testing conducted by District staff and in consideration of the ultimate capacity of upstream and downstream lift stations. See Enclosure (3). At 180 gpm, it is estimated that the TDH is approximately 59 feet (26 psi).

Proposed Equipment Upgrade

Figure 3 depicts the electrical and equipment layout of the Stables lift station. The upgrade will replace both lift station pumps, provide variable frequency drives (VFD's), provide pump moisture and thermal monitors, add four float switches (high water alarm, lead, lag and low), utilize the existing Micrologix 1100 PLC to monitor and control the pumps and water level, remove the Siemens PLC from service, and add a 100 amp emergency generator hookup and 200 amp manual transfer switch.

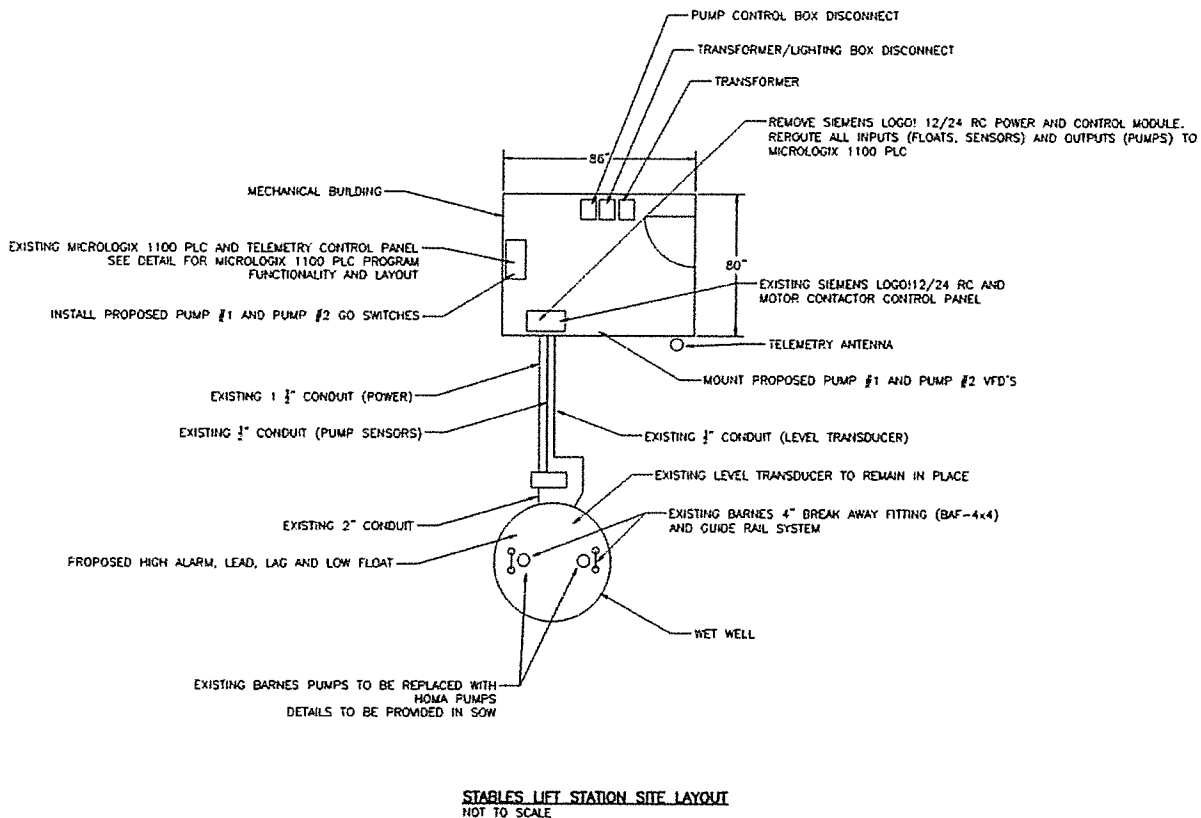


Figure 3 - Existing Conditions and Equipment Upgrade Proposal

- Pumps and Variable Frequency Drives

QTY: 2 – Homa Pump Model AMS434-230/10.4T/C

QTY: 2 – Baldor VFD Model ACB530-U1-0234-A, 15 HP, 3/60/460, Nema 1 Enclosure

QTY: 2 – Homa GS1050 GO Switch

Notes:

The Homa Pump 4" ANSI Flange will mate up to the existing Barnes BAF-4x4 Guide Rail Assembly.

To achieve 180 gpm at 59.3 feet of TDH run VFD unit at 53 Hz.

To achieve 250 gpm at 67 feet of TDH run VFD unit at 58 Hz.

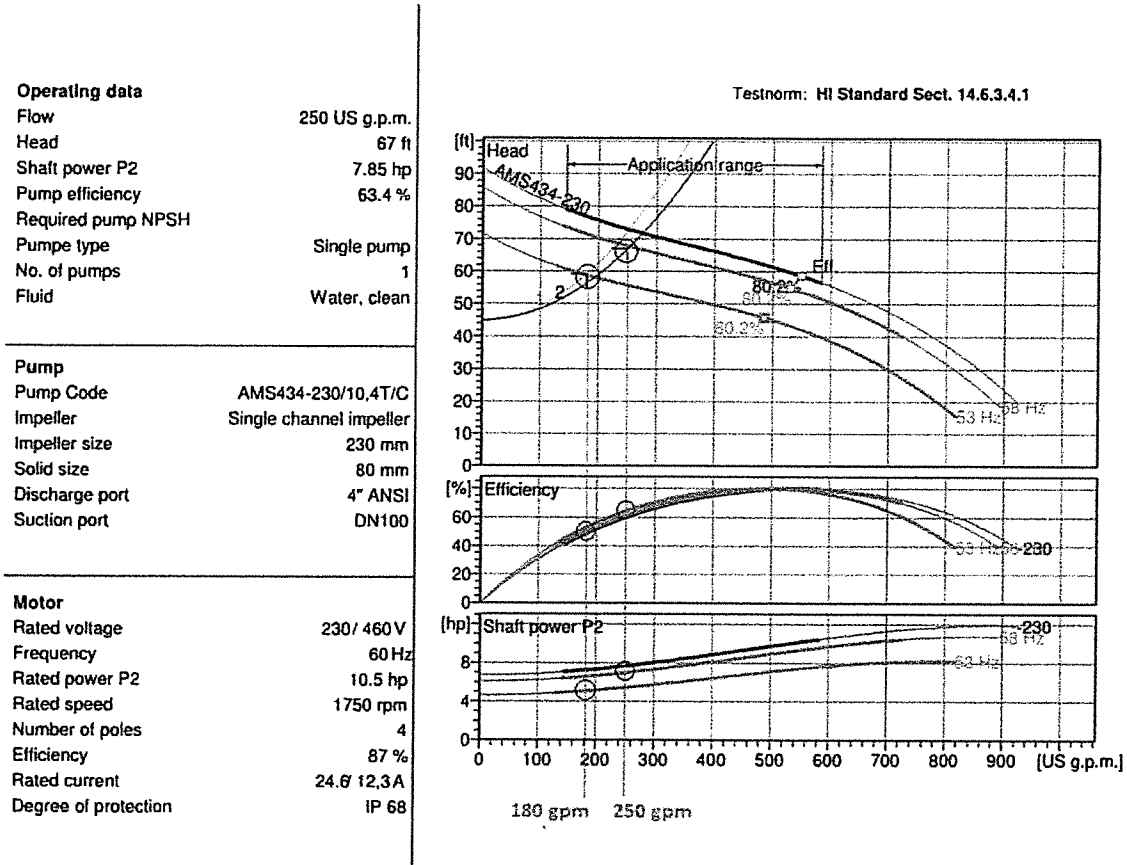


Figure 4 – Selected Homa Pump Curve for 53, 58 and 60 Hz.

Flow (gpm)	Velocity (fps)	VFD Frequency (Hz)	TDH (feet)	Efficiency (%)	Shaft Power (HP)
180	2.04	53	59.3	50	5
250	2.84	58	67	63.4	7.85

Table 1 - Pumping Characteristics

Figure 4 and Table 1 shows a peak efficiency of 63.4% at 58 Hz for the future target of 250 gpm. For a wastewater lift station pump this efficiency is a very acceptable number. In comparison, the performance curve generated at 135 gpm with the current Barnes pumps yields an efficiency of 39% at 4.48 pump horsepower (HP).

The Homa GO Switches will monitor thermal and moisture alarms built inside the Homa pumps. These alarms will be wired into the Micrologix PLC to issue alarms and stop a pump from running until the alarm clears.

- Float Switches

QTY: 4 – Float switch, 30 feet Cord Length, Normally open contacts

Notes:

Currently the lift station operates solely on the level sensor. Should the level sensor fail or provide inaccurate data, there is no redundancy to provide an alternate means of operation. These proposed float switches will be wired into the Micrologix PLC for additional water level monitoring and pump control.

- Micrologix PLC Setup

Rewire and reprogram the Allen Bradley to monitor and control the Stables lift station. The bottom screen on Figure 5 shows the existing Dharma Ocean lift station control screen. The human machine interface (HMI) for the Stables upgrade will be almost identical to the Dharma Ocean lift station HMI with the addition of pump moisture and thermal alarms and the ability to switch to float switch control.

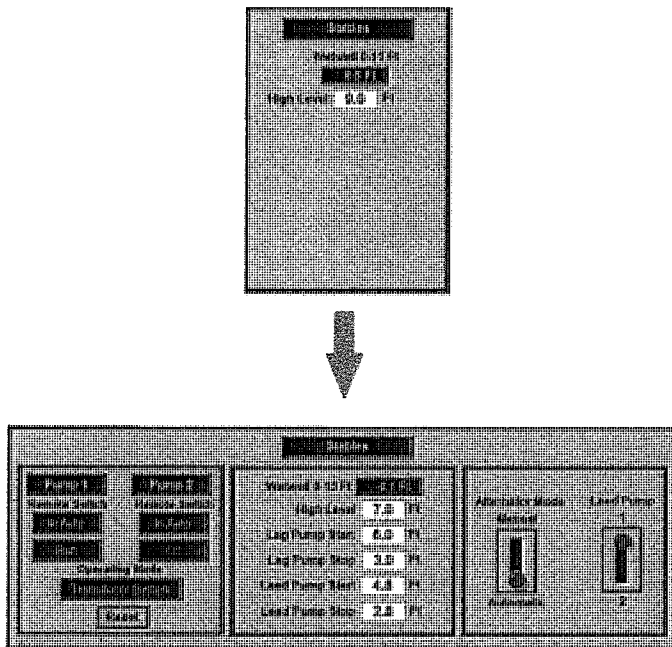


Figure 5 - Conceptual HMI Screen for Stable Lift Station

- Emergency Generator

QTY: 1 – Appleton 100 Amp Receptacle, 4 PSI

QTY: 1 – 200 Amp Square-D Double Pole / Double Throw Manual Transfer Switch Nema 3R

Notes:

The Aspen WWTP currently uses an Appleton 100 Amp Receptacle, 4 PSI to connect to the BGWSD mobile generator. Providing the same setup for Stables will allow the BGWSD to utilize the existing portable generator to power Stables for any duration of time in the event of a power outage. An electrical permit will be required to perform the work. The manual transfer switch must be sized to the existing 200 amp service available to match lug sizes.

Costs and Lead Times

Equipment Cost			
Item	QTY	Unit Price	Estimated Cost
Homa Pump Model AMS434-230/10.4T/C <i>Factory can ship in 6-8 weeks</i>	2	\$5,604	\$11,208
Baldor VFD Model ACB530-U1-0234-A, 15 HP, 3/60/460, Nema 1 Enclosure, Input Filter, 30 A Breaker <i>Factory can ship in 1-2 weeks</i>	2	\$1,946	\$3,892

Homa GS1050 GO Switch Factory can ship in 6-8 weeks	2	\$461	\$922
125153-30 Float Switch (QTY: 4) <i>Factory can ship in 1 week</i>	1	\$232	\$232
Appleton 100 Amp Receptacle, 4 PSI <i>Factory can ship in 10 days</i>	1	\$4,230	\$4,230
200 Amp Manual Transfer Switch, DTU363RB, Square-D Double Pole / Double Throw Unit, Nema 3R <i>Factory can ship in 10 days</i>	1		
Total			\$20,484.00

Electrical Installation Cost	
Scope of Work	Estimated Cost
Timber Line Electric & Control Corporation (TLECC) to supply Crestone Stables Lift Station starter panel as well as conduit wire and programming from the new Lift Station control panel to the existing RTU. Programming to control the lift station via existing level transmitter with floats as a backup system. Install two VFD's. <i>TLECC can mobilize within 4 weeks after manual transfer switch installation</i>	\$14,750
Install and permit emergency power transfer switch and receptacle.	* \$5,225
Total	\$19,975.00

* Estimated labor and permitting fee cost. This cost is expected to be lower if a local electrician is used.

Engineering Cost	
Scope of Work	Estimated Cost
Lift station flow analysis, pump selection, design memo	\$4,000.00

Total Estimated Project Cost	
	\$44,823.00
10% contingency (Equipment, Electrical and Engineering Cost)	\$4,482.00
	\$49,305.00

Total Estimated Cost of Upgrade: \$49,305.00

Installation Notes:

The manual transfer switch and receptacle should be installed first because an electrical permit must be obtained for the work. Once the inspection is complete, the remaining work can be completed without an additional inspection. This will allow the existing wiring to remain as is as it is currently not up to electrical code.

Once the emergency power system has been installed, it is expected that the BGWSD staff will remove the old pumps and install the two pumps and four floats within the lift station. The electrical conductors and control wiring will be brought through the 2-inch conduit and left unterminated at the adjacent junction box.

BGWSD staff must work closely with the electrical contractor to minimize pump downtime.

Summary

We are confident that the equipment and services identified in this memo are of the best value to the BGWSD and will provide long term reliability, performance and cost effectiveness.



September 1, 2015

Justin DeBon
Baca Grande Water and Sanitation District
P.O. Box 520
Crestone, CO 81131-0520

Subject: Final Plans and Specifications for Construction Approval
Site Location Approval No. ES.12.45140
Baca Grande Water and Sanitation District, Stables Lift Station
Associated WWTF Colorado Discharge Permit System (CDPS) No. CO-0046914
Saguache County
ES.14.DWPDR.00959

Dear Mr. DeBon:

The Water Quality Control Division (Division), Engineering Section has received and reviewed the Basis of Design Report (BDR) and plans and specifications for the Baca Grande Water and Sanitation District's Stables Lift Station. The BDR, plans and specifications, as reviewed, meets the requirements of the *State of Colorado Design Criteria for Domestic Wastewater Treatment Works* (Design Criteria) and is hereby approved as listed below. **The approved maximum hydraulic capacity of the lift station is 180 gpm (0.26 MGD), which is the capacity of one pump (firm pumping capacity).**

This approval addresses the following:

- Acceptance of the BDR, which includes sizing of the pumps, flow rates, and pumping and emergency storage calculations.
 - Calculations based upon the projected flows from all upstream service areas (Dharma Ocean, Wagon Wheel, and Stables) at a maximum month daily average flow of 99,107 gpd (533 accounts * 124 ADF gpd/account * 1.5 PDF MMADF/ADF), of which 45,928 gpd is contributed from the Stables service area. The projected peak hour flow from all upstream service areas (Dharma Ocean, Wagon Wheel, and Stables) is 227,974 gpd, of which 107,165 gpd is contributed from the Stables service area.
 - Calculations also consider the 180 gpm firm pumping capacity of the Wagon Wheel Lift Station, which is located prior to the Stables Lift Station, and is responsible for conveying flows from the Wagon Wheel lift station service area and the flows contributed from the Dharma Ocean lift station pumps.
 - This approval is retroactive. The wet well and lift station were constructed in 2005.
- Five-foot diameter wet well (design basis: below grade concrete manhole).
 - Active working volume is approximately 367 gallons (2.5 vertical feet) between the HWL alarm and the pump shut-off.
- Two lift station pumps in a 1 duty + 1 standby pumping configuration (design basis: submersible non-clog, 250 gpm, limited to 180 gpm output, controlled by a variable frequency drive).
 - Pumps installed with guide rails and lifting cable for removal and maintenance.
 - Level indication/elements control the pumping operations. High and low water set-points turn on and off each pump. A high-water level alarm will notify staff when a critical wet well volume is reached.



- The lift station discharges to a collection system that conveys the wastewater to the Aspen Institute Wastewater Treatment Facility for treatment (Associated WWTF Colorado Discharge Permit System (CDPS) No. CO-0046914).
- Emergency Response/Overflow Protection:
 - Emergency storage volume is primarily provided by a geosynthetic lined lagoon, formerly used for treatment at the Stables WWTP. Overflow volume is approximately 80,500 gallons, which equates to approximately 18 hours of storage at peak hour flow. Flow can be conveyed back to the lift station wet well using a portable pump.
 - An additional storage volume in the wet well of approximately 587 gallons (4.0 vertical feet) is provided between the HWL alarm and the invert of the lowest incoming pipe. The storage volume equates to approximately 7 minutes of storage at the peak hour flow.
 - Emergency storage does not include the volume from the incoming pipe invert to the first manhole rim elevation, which was also indicated to be available without back-up issues. This volume equates to an additional approximately 1,837 gallons (11 minutes).
 - Emergency portable generator available (design basis: trailer mounted, diesel powered, 75 kW with a 300 gallon fuel tank). The lift station control panel equipped with a quick connect to allow easy hook-up.
 - The District also has a vac-truck capable of hauling 2,000 gallons in the event of an emergency.
 - Auto dialer programmed into the lift station's control panel to notify ORC in the event of a malfunction.
- Approximately 2,600 feet of 6-inch PVC Force Main conveying flow from the Stables Lift Station to the Aspen Institute WWTF influent wet well (design basis: velocity of 2.04 fps).
- Installation includes associated piping, valves, electrical, and instrumentation.

Conditions of Approval:

1. Upon completion of construction and prior to commencement of operation, a written certification must be submitted to the Division stating that the project facilities were built in accordance with the approved plans, specifications, and change orders. The certification must be signed by the applicant's registered engineer.
2. Any change orders or addenda that change facility capacity, water quality, or processes, must be submitted to this office for review and approval.
3. Please note that during construction and operation activities, the provisions specified in the Design Criteria, Sections 2.2.0, 2.3.17 and 2.3.18, must be implemented and followed. This review does not relieve the owner from compliance with all Federal, State, and local regulations and requirements prior to construction nor from responsibility for proper engineering, construction, and operation of the facility.
4. No point source discharges of water and/or contaminants from this facility to the waters of the state are authorized during construction unless a permit for such discharges has been issued by the Division. If you have any questions regarding permit issues or requirements, please contact the Permits Section at 303-692-3510.
5. The approval of this project is based on the above referenced conditions and upon the engineering design submitted to the Division for pumping wastewater to the Aspen Institute WWTF (Colorado Discharge Permit System (CDPS) No. CO-0046914).

Documents reviewed:

- Site Application Engineering Report/ Process Design Report for the Baca Grande WSD Lift Station Permitting Stables Lift Station, dated December 17, 2012, submitted by Olsson Associates.
- Supplemental Correspondence from Olsson Associates, May 8, 2013, for Pump Drawdown Test for Dharma Lift Station, Wagon Wheel Lift Station, Stables Lift Station, Mobile Home Estates, and Aspen Lift Station.
- Response to CDPHE Request for Information No. 1, dated May 22, 2014, prepared by TST Consulting Engineers for Baca Grande WSD.
- Supplemental Correspondence re: Wet Well Volumes, Elevations and Float Settings, dated June 2013, prepared by TST Consulting Engineers for Baca Grande WSD.
- Response to CDPHE Request for Information No. 2, dated January 14, 2015, prepared by TZA Water Engineers for Baca Grande WSD.
- Updated Response to Request for Information No. 2, dated March 19, 2015, prepared by TZA Water Engineers for Baca Grande WSD.
- CDPHE Site Location Approval No. ES.12. 45140, dated April 23, 2015.
- Miscellaneous correspondence.

In accordance with the current Operators Certification Board Regulations, the Baca Grande WSD collection system is a Class 1 collection system.

The Engineering Section is interested in gaining feedback about your experience during the engineering review process. We would appreciate your time to complete a Quality-of-Service Survey regarding your experience during the engineering review process leading up to issuance of this decision letter. The Engineering Section will use your responses and comments to identify strengths, target areas for improvement, and evaluate process improvements to better serve your needs. Please take a moment to fill out our survey at the following website: <http://fs8.formsite.com/cohealth/form627710151/index.html>.

If you should have any questions please contact Jeffrey Hlad by phone at 303-692-6276 or by electronic mail at jeffrey.hlad@state.co.us.

Sincerely,

Jeffrey Hlad, P.E.
Senior Review Engineer
Engineering Section
Water Quality Control Division
Colorado Department of Public Health and Environment

cc: Wendi Maez, Land Use Director Saguache County Public Health
Brad Simons, P.E., TZA Water Engineers
Laure Goecke, TZA Water Engineers
Doug Camrud, WQCD ES Unit Manager
Site Application ES.12.45140 | Associated WWTF Colorado Discharge Permit System (CDPS) No. CO-0046914



April 23, 2015

Justin DeBon
Baca Grande Water and Sanitation District
P.O. Box 520
Crestone, CO 81131-0520

Subject: Site Location Application: #ES.12.45140
Baca Grande Water and Sanitation District, Stables Lift Station
Associated WWTF Site Location Approval: #4687
Associated WWTF Colorado Discharge Permit System (CDPS) No. CO-0046914
Saguache County

Dear Mr. DeBon:

The Water Quality Control Division (Division) has reviewed and evaluated the site location application package for the retro-active approval of the Baca Grande Water and Sanitation District's Stables Ocean Lift Station. The facility is to be located as follows: approximately one quarter mile northwest of Wagon Wheel Road and Spanish Creek Road, in the northeast 1/4 of the Luis Maria Sacs Grant No. 4, in Saguache County. The lift station will discharge to a collection system that conveys the wastewater from the Stables LS to the Aspen Institute Wastewater Treatment Facility for treatment.

The site location application has been found to be in conformance with the Water Quality Control Commission's *Site Location and Design Approval Regulations For Domestic Wastewater Treatment Works, 5 CCR 1002-22* (Regulation No. 22) and is approved. This site location approval addresses the following summary of the proposed design:

1. Based upon application information, the lift station design will be for:
 - Hydraulic Design Capacity - 99,107 gpd (maximum month daily average flow)
 - Peak Hydraulic Capacity - 180 gpm (firm pumping capacity)

The design includes:

- A new duplex lift station and associated, approximate 2,600 linear feet of 6-inch Force Main

This site location approval does not constitute design approval for construction. In accordance with Regulation No. 22, Section 22.11(1), in addition to approval of the site location application, the applicant must obtain approval of the design of the treatment works from the Division prior to beginning construction.

This site location approval will expire on **October 23, 2016**. If construction has not commenced by this date, the approval will expire and a new application for site location approval may be required. Construction is defined as entering into a contract for, or for in-house work forces, initiation of any action towards the erection or physical placement of materials, equipment, piping, earthwork or buildings which are to be a part of a domestic wastewater treatment works.

In accordance with Regulation No. 22, Section 22.3(15), this site location approval is subject to appeal pursuant to the State Administrative Procedures Act.



Justin DeBon, Baca Grande Water and Sanitation District
Baca Grande Water and Sanitation District, Stables Lift Station
SA #ES.12.45140
Page 2 of 2

This approval does not relieve the owner from compliance with all local, state, and federal regulations prior to construction nor from responsibility for proper engineering, construction and operation of the facility.

The Engineering Section is interested in gaining feedback about your experience during the engineering review process. We would appreciate your time to complete a Quality-of-Service Survey regarding your experience during the engineering review process leading up to issuance of this decision letter. The Engineering Section will use your responses and comments to identify strengths, target areas for improvement, and evaluate process improvements to better serve your needs. Please take a moment to fill out our survey at the following website:
<http://fs8.formsite.com/cohealth/form627710151/index.html>.

If you should have any questions, please contact Jeffrey Hlad by phone at 303-692-6276 or via electronic mail at jeffrey.hlad@state.co.us .

Sincerely,

Bret Icenogle, P.E.
Engineering Section Manager
Water Quality Control Division
Colorado Department of Public Health and Environment

cc: Wendi Maez, Land Use Director Saguache County Public Health
Brad Simons, P.E., TZA Water Engineers
Laure Goecke, TZA Water Engineers
Lisa Johnson, SDMSI
Doug Camrud, WQCD ES Engineering Unit Manager
Jeffrey Hlad, WQCD ES Senior Review Engineer
Associated WWTF Colorado Discharge Permit System (CDPS) No. CO-0046914
Associated WWTF Site Location Approval: #4687

TECHNICAL MEMORANDUM

TO: Steven Harrell, General Manager

FROM: Brad Simons

CC: AJ Beckman, District Manager

RE: Stables Lift Station

DATE: February 21, 2014

TST PROJECT NO.: 0146001.06

Based upon information obtained and reviewed in the last two weeks, following is my recommendation for replacement pumps for the Stables Lift Station.

Pressure Testing

On February 12, 2014, a pressure test was conducted by District staff. The results of the testing are tabulated below.

	Duration (minutes)	Static Pressure (psi)	Pump 1 Running (psi)	Pump 2 Running (psi)
Trial 1a	1	15	15	
Trial 1b	1	15		29
Trial 2a	1	15	16	
Trial 2b	1	15		29
Trial 3a	1	14	16	
Trial 3b	1	14		26

The static pressure readings made sense based upon the apparent topography, but the difference in pumping pressures was puzzling.

Subsequently, additional pressure testing was conducted by District staff on February 19, 2014. The results of that testing are tabulated below.



CONSULTING ENGINEERS

T.M. to Steven Harrell
 February 21, 2014
 Page Two

	Duration (minutes)	Static Pressure (psi)	Pump 1 Running (psi)	Pump 2 Running (psi)
Trial 1a	Unknown	12	12	
Trial 1b	Unknown	12		20
Trial 2a	Unknown	12	12	
Trial 2b	Unknown	12		20
Trial 3a	Unknown	12	12	
Trial 3b	Unknown	12		22
Trial 4a*	Unknown	12	12	
Trial 4b*	Unknown	12		20

* Electrical leads swapped from Pump 1 to Pump 2

Flow Testing

	Pump 1	Pump 2
Start Level (inches from lid)	142	142
Stop Level (inches from lid)	142	169.5
Duration (minutes)	5	3
Wet Well Diameter (feet)	5	5
Volume Displaced (gallons)	0	336
Rate (gpm)	0	112

Based upon the pressure and flow testing, it was determined Pump 1 was operating but not pumping likely due to plugging or bridging.

The represented firm pumping capacity of the other lift stations in the District are tabulated below.

Lift Station	Firm Pumping Capacity (gpm)*
Casita Park	75
Dharma Ocean	180
Wagon Wheel	220
Aspen Institute	400

* Firm pumping capacity is the pumping rate with one pump out of service.



CONSULTING ENGINEERS

T.M. to Steven Harrell

February 21, 2014

Page Three

Based upon the pressure and flow testing, and in consideration of the firm pumping capacity of the upstream and downstream lift stations, I recommend a firm design condition of 250 gallons per minute at 69 feet of total dynamic head.

The 69 feet to total dynamic head is based upon the additional friction losses expected at the higher pumping rate (112 gpm to 250 gpm). For 5,500 feet of six-inch PVC forcemain (120 design coefficient), a flow rate of 250 gpm will result in a head loss of 16 psi. The 16 psi, in addition to the static pressure of 14 psi, will result in a total dynamic pressure of 30 psi.

Accordingly, I have asked Denver Industrial Pumps to quote two (2) new pumps/motors, including thermal and moisture sensor relays, and three (3) new float switches, including four (4) cord weights. The pumps are proposed to be Homa submersible units with vortex impellers similar to the pumps recently installed at the Dharma Ocean Lift Station. Attached is the quotation received.

Before issuing a purchase order for the equipment:

- I recommend the District secure a proposal from Timber Line Electric and Control Corporation for the lift station control panel based upon Denver Industrial Pumps' quotation.
- I recommend the District evaluate any other site work (i.e. conduits and pull boxes) needed for the installation.
- I would like to discuss the represented firm pumping capacity of the other lift stations in the District. Please contact me at your convenience.

Should you have any comments or questions, please contact me.

December 4, 2015



12596 W. Bayaud Ave., Ste. 330
Lakewood, Colorado 80228
[P] 303.971.0030
tza4water.com

Ms. Lisa Johnson, District Manager
Baca Grande Water and Sanitation District
%Special District Management Services, Inc.
141 Union Boulevard, Suite 150
Lakewood, Colorado 80228

Re: Warranty Inspection – 2014 Distribution System Improvements
TZA Project No. 0414018.01

Dear Ms. Johnson:

In accordance with TTG Engineers' Final Completion letter, dated December 1, 2014, the work associated with the 2014 Distribution System Improvements performed by RMS Utilities has been inspected by the District's Operations Manager, Justin DeBon. Mr. DeBon indicates all vaults, PRVs, and the surrounding work site were recently inspected, and there are no items requiring warranty repairs. Mr. DeBon, in an e-mail to me this morning, indicates:

- All of the concrete vaults are in great condition with no cracking or leaking,
- All PRV connections are tight with no leaks,
- Valve boxes are plumb and clean inside,
- No settling was observed around the vaults, and
- The street crossings look good with no evidence of settling.

Accordingly, a project walk-through with RMS Utilities is not necessary

Should you have any questions, please contact me at 303-971-0030, Extension 1505.

Sincerely,

TZA WATER ENGINEERS

A handwritten signature in black ink, appearing to read "Bradley A. Simons".

Bradley A. Simons, P.E.

cc: Zachary White, Esq. (via e-mail)
Bryan Malouff, RMS Utilities, Inc. (via e-mail)

LAMP RYNEARSON COMPANIES

