

RECORD OF PROCEEDINGS

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE BACA GRANDE WATER AND SANITATION DISTRICT HELD SEPTEMBER 18, 2015

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 18th day of September , 2015, at 8:00 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
Judy DeLuca

Following discussion, upon motion duly made by Director DeLuca, seconded by Director Macaulay and, upon vote, unanimously carried, the absence of Director Grote was excused.

Also In Attendance Were:

Lisa A. Johnson; Special District Management Services, Inc. (via speakerphone)
Zachary White, Esq.; White Bear Ankele Tanaka & Waldron, (via speakerphone)
JoAnn Slivka; Administrative Services Manager
Justin DeBon; Operations Manager
Brad Simons; TZA Water Engineers, Inc.(via speakerphone for a portion of the meeting)
Marcus Lock, Esq.; Law of the Rockies (for a portion of the meeting)
Barbara Howard; CIA-Leavitt Insurance Agency (for a portion of the meeting)

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DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

Disclosure of Potential Conflicts of Interest: The Board discussed the requirements pursuant to Colorado law to disclose any potential conflicts of 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 DeLuca and, upon vote, unanimously carried, the Agenda was approved, as amended.

Consent Agenda: The Board considered the following actions:

- Approve Minutes from the August 21, 2015 regular meeting
- Review and accept unaudited financial statements for the period ending August 31, 2015 and current schedule of cash position

Following discussion, upon motion duly made by Director DeLuca, seconded by Director Scully 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.

The Board discussed different ways to measure unaccounted for water loss. They determined to continue operations as is through the end of the year and then consider options to assist in understanding and tracking the amount of water lost due to leaks and/or other reasons.

Status of Amended and Restated Intergovernmental Agreement with Town of Crestone: Ms. Johnson updated the Board. She received a formal response from the Town of Crestone regarding the revised sewer rate and request to begin negotiations of an amended and restated intergovernmental agreement. The Town has agreed to the sewer rate and to comply with the District's Rules and Regulations related to sewer service and has requested that negotiations toward an amended and restated intergovernmental agreement be postponed until after their

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elections in April.

The Board agreed with this suggestion and asked Ms. Johnson to communicate this to the Town Manager.

2016 Board of Director Goals: President Reinhardt presented her summary memo regarding 2015 goals discussed at previous meetings and the Board retreat.

The Board discussed the memo and provided comments on the goals. President Reinhardt will incorporate the comments into the memo and present to the entire Board at the October meeting.

PUBLIC COMMENT

There was no public comment received.

OFFICE ADMINISTRATION

Administrative Follow-Ups: Ms. Slivka summarized a recent experience with a customer regarding the re-connection of water service over a weekend to a customer that has had water disconnected due to non-payment. Mr. DeBon informed the Board that the policy is that if a customer contacts the on-call employee regarding re-connection of water due to non-payment, the customer is told they will have to wait for the next business day to have water re-connected.

She also reported that there are 226 delinquent accounts eligible for certification to the Saguache County. The Board will consider approval of the resolution to certify accounts at their meeting in October.

OPERATIONS

Operational Follow-Ups: Mr. DeBon reported that he recently received a letter of resignation from William Baca-Welty. Mr. DeBon has determined not to fill the vacant position at this time.

Mr. DeBon then discussed the continuing success staff is having with locating and repairing system leaks.

On-Call Staff Response Calls: Director Macauley summarized a recent issue with the response of staff to an after-hours emergency call. Mr. DeBon explained the process for responding to after-hours emergency calls. Although there was an issue with responding to the recent call, he feels, overall, the system for responding to calls is working well.

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CAPITAL IMPROVEMENTS

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

Casita Park Interconnect Project: Mr. Simons presented and recommended approval of Pay Application No. 1 received from RMS Utilities in the amount of \$23,533.40.

Following discussion, upon motion duly made by Director Macaulay, seconded by Director DeLuca and, upon vote, unanimously carried, the Board approved Pay Application No. 1 in the amount of \$23,533.40.

Mr. Simons then presented a requested amendment to the current Casita Park Interconnect grant agreement with the Department of Local Affairs (“DOLA”) to include an addition to the initial project. The additional project is the Well 18 Redundant Water Main Stream Crossing and the cost to complete the project is \$39,900. The additional project can be completed by RMS Utilities via a change order to the Casita Park Interconnect Project. The additional amount fits within the approved grant that was awarded to the District by DOLA.

Following discussion, upon motion duly made by Director Macaulay, seconded by Director DeLuca and, upon vote, unanimously carried, the Board authorized staff to request an amendment to the grant agreement with DOLA and approved a change order with RMS Utilities in the amount of \$39,900 subject to approval of the amendment by DOLA.

District Office Capital Improvement Needs and Inspection Report: Director Scully and Mr. DeBon recently met with and attended the inspection of the office building with the consultant. The final report was issued on September 17, 2015, and provided to the Board at the meeting. Mr. DeBon summarized the findings in the report.

The Board appointed a committee to consist of Director Scully, Mr. DeBon and Ms. Slivka to begin a draft design of what would be needed in a new building in order to estimate a cost and/or what the costs would be estimated at to repair the issues identified in the report on the existing building and present the information to the Board at the October meeting. President Reinhardt will attend the committee meeting if she is available.

FINANCIAL MATTERS

Check Register: The Board considered approval of the revised check register through the period ending September 18, 2015, as follows:

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General Fund	\$	12,609.00
Debt Service Fund	\$	-0-
Capital Projects Fund	\$	30,516.18
Enterprise Fund	\$	82,423.63
Total Claims:	\$	125,848.81

Following discussion, upon motion duly made by Director DeLuca, seconded by Director Macaulay and, upon vote, unanimously carried, the Board approved the revised check register for the period ending September 18, 2015.

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

2016 Budget Committee Meetings: Ms. Johnson summarized the activities of the budget committee to date. The committee has met on two occasions and continues to work on a draft of the estimated year end budget as well as a draft 2016 budget.

The Board acknowledged receipt of the preliminary assessed valuation from Saguache County.

The committee and staff will have the draft budget complete for initial presentation to the Board at the October meeting.

OTHER BUSINESS

Health Insurance Renewal Options: Barbara Howard with CIA- Leavitt Insurance Agency, Inc. reviewed with the Board the health insurance renewal options for 2016. The Board discussed the options and determined to gather additional information and continue the discussions at the October meeting.

Ms. Howard left the meeting at this time.

LEGAL MATTERS

Attorney Lock joined the meeting at this time.

Discuss and Consider Approval of Resolution No. 2015-09-01 Implementing a Policy Regarding Water Usage for the Cultivation of Marijuana: Attorney White presented a draft resolution regarding a policy regulating water usage for the cultivation of marijuana. The Board discussed in detail the information and provided comments. Attorney Lock provided additional comments regarding the language included in the resolution.

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Following discussion, upon motion duly made by Director DeLuca, seconded by Director Macaulay and, upon vote, with Directors Reinhardt, Macaulay and DeLuca voting yes, and Director Scully abstaining, the Board approved Resolution No. 2015-09-01, Resolution of the Board of Directors of the Baca Grande Water and Sanitation District Implementing a Policy Regarding Water Usage for the Cultivation of Marijuana.

Well 18 Pump/Motor Failure Demand Letter to Royal Electric: Attorney White recently spoke with the attorney for Royal Electric. The attorney indicated that he had additional questions for Attorney White regarding the matter. Attorney White will wait to receive questions until the end of the day and if nothing is received he will transmit the response letter to the attorney for Royal Electric.

Memorandum Regarding Ex-Parte Communications: Attorney White presented and the Board reviewed his memo regarding ex-parte communications.

EXECUTIVE SESSION

EXECUTIVE SESSION: Pursuant to Sections 24-6-402(4)(b)(e) and (f), C.R.S., upon motion duly made by Director Scully, seconded by Director DeLuca and, upon an affirmative vote of at least two-thirds of the quorum present, the Board convened in executive session at 11:20 a.m. for the purpose of receiving legal advice, as authorized by Sections 24-6-402(4)(b) and (f), C.R.S.

Pursuant to Section 24-6-402(2)(d.5) (II)(B), C.R.S., no record will be kept of the remaining portion of this executive session that, in the opinion of the Board's attorney, constitutes privileged attorney-client communication pursuant to Section 24-6-402(4)(b), C.R.S.

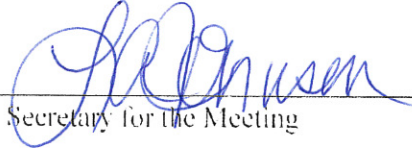
The Board reconvened in regular session at 12:24 p.m.

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

RECORD OF PROCEEDINGS

THESE MINUTES ARE APPROVED AS THE OFFICIAL SEPTEMBER 18, 2015 MINUTES OF THE BACA GRANDE WATER AND SANITATION DISTRICT BY THE BOARD OF DIRECTORS SIGNING BELOW:



Martin Macaulay

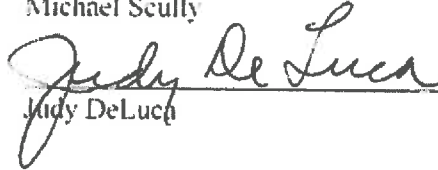


Cindy Reinhardt

Kyle Grote



Michael Scully



Judy DeLuca

**Attorney Statement
Regarding Privileged Attorney-Client Communication**

Pursuant to §24-6-402(2)(d.5)(II)(B), C.R.S., I attest that, in my capacity as the attorney representing the Baca Grande Water and Sanitation District, I attended the executive session on September 18, 2015, for the sole purpose of providing legal advice and developing strategy for negotiations, as authorized by §§24-6-402(4)(b) and (e), C.R.S. I further attest that it is my opinion that a portion of the executive session discussion constituted attorney-client privileged communication as provided by §24-6-402(4)(b), C.R.S., and, based on that opinion, no further record, written or electronic, was kept or required by be kept pursuant to §24-6-402(2)(d.5)(II)(B), C.R.S.



Zachary P. White, Esq.

General Counsel

Baca Grande Water and Sanitation District



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

September 18, 2015

Board of Directors Sign-in

Cindy Reinhardt <i>Cindy Reinhardt</i>	
Martin Macaulay <i>M.</i>	
Kyle Grote	Absent
Michael Scully <i>Michael Scully</i>	
Judy Deluca <i>Judy DeLuca</i>	



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

September 18, 2015

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 to speak?	Issues to be addressed
Bob Howard	100 Premium Way Alamosa, CO 81101	(719) 589-3611	yes	Health Fairs.
Marcus Lott	Sunrise	970-641-1903	yes	water



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

Date: September 11, 2015
To: Baca Grande Water and Sanitation District, Board of Directors
From: Lisa A. Johnson, District Manager
Re: September 18, 2015 District Manager's Report

Agenda Action Items

I.C. Consent Agenda

1. Approve Minutes from the August 21, 2015 Regular Meeting.
2. August 31, 2015 Financial Statements and current Cash Position.

I recommend approval of the consent agenda items.

I.E. Town of Crestone IGA

I received the correspondence included in your packet from the Town of Crestone on August 28, 2015. I have asked Mr. DeBon to schedule a meeting with the Town Manager to review the District's rules and regulations regarding sanitary sewer. I agree with the Town's suggestion to wait until after the April election to pursue negotiations on an amended and restated intergovernmental agreement. The District also holds a director election in May of 2014 and it would make sense to schedule a meeting with Town Board of Trustees once the District Board has been seated.

VI.A. September 18, 2015 Check Register

The September 18, 2015 check register will be distributed at or prior to the board meeting.

VI. C. Budget Committee Meeting

The Budget Committee met on August 27, 2015 at 2 pm. Initial information was exchanged regarding estimated year end expenditures as well as estimated 2016 revenues and expenditures in the General Fund. The committee will refine the information shared at that meeting at their next meeting as well as review the Capital Projects Fund budget for 2016. The committee will meet again on September 16, 2015 at 2 pm.

Updates on Other District Related Items

Personnel Matters

I will update the Board on recent personnel issues in executive session.



SEPTEMBER 2015

OPERATIONS MANAGER REPORT

To: Board of Directors, Baca Grande Water and Sanitation District
From: Justin DeBon
Date: August 21 - September 9, 2015

Fire Hydrant Maintenance: The annual fire hydrant maintenance program started on July 6 and is now 100% complete, all hydrants have been tested and inspected. Staff have been doing follow up repairs on hydrants that were noted as leaking and are repairing leaking caps and seals. Attached is the recommended fire hydrant maintenance SOP and frequency document from the manufacturer.

Collection System Cleaning: Collection system cleaning started on July 6 and is 100% complete. All lift stations and grit collection basins were cleaned as well. The Dharma Ocean private lift station was also cleaned and pumped out.

Sewer Overflow: On August 10th a customer called in to make the District aware of a sewer overflowing near the Wagon Wheel Lift Station. The manhole had overflowed approximately 1000 gallons and once it was pumped out it was found to be blocked with trash and sand. The spill site was disinfected and the spill was reported.

Water Leak Repair: On August 19th a service line was repaired on Graceful Court, saving 20K gallons of water per day. A leaking PRV was replaced on Happy Hallow Way, saving about 35K gallons per day. Three pot holes were dug in the Casita Park pressure zone in areas that have a potential leak, but no leaks have been found yet.

Castia Park Interconnect: RMS started the first stage of work on the Casita Park Interconnect on September 2nd and have completed most of the yard piping at Well 18 and have now moved to Road-T to begin laying pipe.

2015 Projects: The following is list of projects that will be worked on 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. Stables Lift Station Upgrade Project
7. Capital Improvement Projects

Projects In Process:

1. ~~Water Meter MXUM upgrade project and DOLA grant reporting~~
2. Well-18 motor failures and resolution with Royal Electrical Services
3. Wagon Wheel lift station pump repair and failure report and resolution with Royal Electric Services. The pump was originally repaired by Royal Electrical Service. The pump was placed into service for 3 months of operation before the pump failed and was sent to Denver Electric Motor for repair.
4. ~~Yeshi Korlo service line reduction project~~
5. 2015 Capital Improvement projects
6. ~~GIS Facilities Maintenance Project~~



American Flow Control

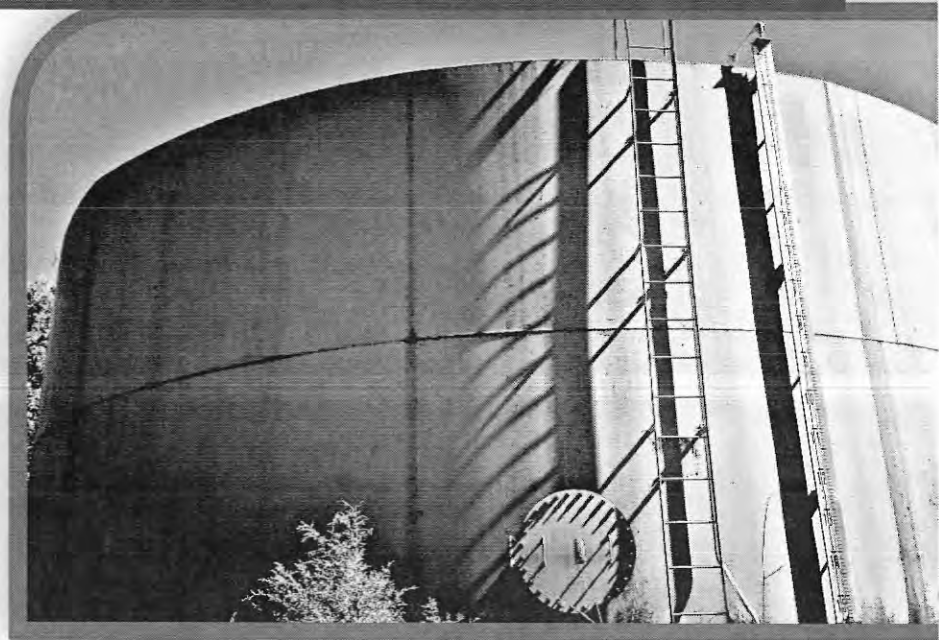
Fire Hydrant Maintenance

1. It is recommended that hydrants be inspected (flushed) twice a year, spring and fall. After each use in extremely cold weather, hydrant should be checked specifically for drainage.
2. External Inspection:
 - a. Check chains, make sure they allow the nozzle cap to turn freely.
 - b. Check all caps, make sure they all can be removed.
 - c. Check paint, remove all loose paint and repaint if necessary.
3. Lubricate Hydrant Prior to Operating Hydrant
 - a. Where oil is specified use white mineral oil USP (Mobile Whiterex 425 or equal). Vegetable oil is not an equal!
 - b. Where grease is specified use Mystik FG-2 Food Machinery Grease.
4. Flushing Fire Hydrant
 - a. Using a **Hydrant Operating Wrench** turn the hydrant in the direction of opening indicated by an arrow cast in the hydrant. A pipe wrench is not the equivalent of a hydrant operating wrench.
 - b. Open hydrant at a moderate pace, typically one turn per second. It is not a race.
 - c. Open hydrant to FULL OPEN, it will come to solid stopping point. DO NOT try and open hydrant past this point. Damage can be done to the internal parts of the hydrant. If hydrant is not fully open water will flow out of drain or weep holes and cause damage to the drain field around the hydrant. Water may come up the sides of the hydrant or nearest valve box.
 - d. Flow hydrant until water becomes clear and no objects are flowing from the hydrant such as rocks. Be sure to control the direction of the flow of the hydrant so that damage is not done to anything in the water's path. Using some type of diffuser is recommended.
 - e. Close hydrant slowly, 1 turn every 1+ seconds so that the hydrant does not close too quickly and create a water hammer that could possibly blow a water main.

- f. When hydrant is closed you should be able to back off the operating nut a quarter to half turn (Sweet Spot) water pressure should hold hydrant valve shut.
 - g. Place hand over nozzle and feel suction.
 - h. Leave nozzle cap off or lose to allow for hydrant to drain. Closing cap tightly before hydrant is drained will cause water to remain in hydrant barrel. In the winter this could freeze and cause the hydrant barrel to split or damaged internal parts of the hydrant. It could even possibly cause the hydrant to open itself up because of the weight of the ice in the barrel.
 - i. When hydrant has drained place small amount of food grade grease on nozzles and put on nozzle caps. Failing to routinely remove and grease nozzles could cause cap to rust to the nozzle and not allow the cap to be removed.
5. If hydrant fails to shut off, DO NOT force hydrant closed. Open hydrant back up and try to flush the obstruction out of the hydrant. It may take 3 to 4 attempts to flush out the obstruction. If this does not work hydrant must be taken apart for main valve and possibly hydrant seat replacement.
6. If hydrant fails to drain, put all caps in place and tighten. Then open the hydrant 2 to 3 turns to attempt to flush out the drains of the hydrant. Let sit in this open position for 5 to 10 minutes. Close hydrant and remove one of the caps to check for drainage. If hydrant still does not drain, it should be pumped after each use.



Report On District Operations



South Crestone Tank

Operations Report
Baca Grande Water and Sanitation District
September 2015

Report from: August 3 – September 9

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District Operations

SSO-Sanitary Sewer Overflow	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Near Wagon Wheel LS
Fire Hydrant Maintenance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Hydrant Maintenance is Complete
Water Main Repairs	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	¾" Service Line Repair
Collection System Cleaning	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Collection System Cleaning Complete
GPS/GIS	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	New Valves Added With GPS
Water/Sewer Hookups	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	One new Service Added
Accidents	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Total Water Treated

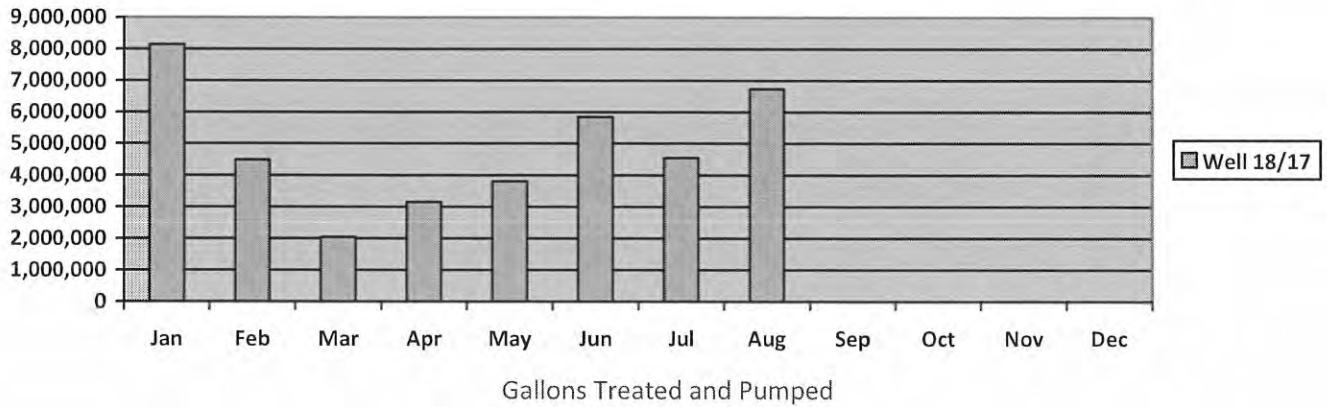
Total Gallons Treated For Month	Finished Water Combined Well-18 & Motel Well	Finished Water Metered Combined Well-18 & Motel Well	Wastewater Treated	Estimated Unaccounted Water
January 2015	9,123,828		2,473,000	6,650,828
February 2015	5,292,000	93% Reading 1,180,000	1,630,000	4,112,000
March 2015	4,631,000	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				
October 2015				
November 2015				
December 2015				
Total Treated 2015	55,577,828	22,023,000	18,265,000	31,081,828

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			



Baca Grande Chalet

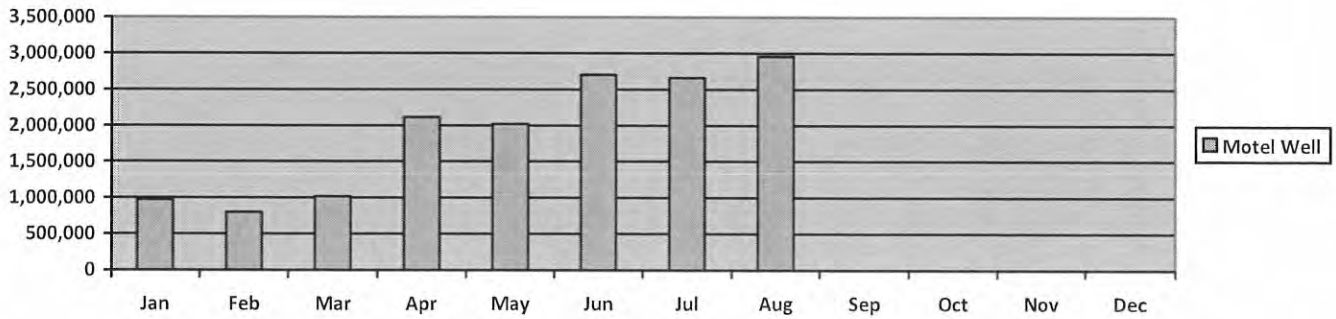


January	February	March	April	May	June
8,146,272	4,490,000	2,040,000	3,156,000	3,797,000	5,850,000

July	August	September	October	November	December
4,547,000	6,734,000				

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				
October				
November				
December				

Casita Park



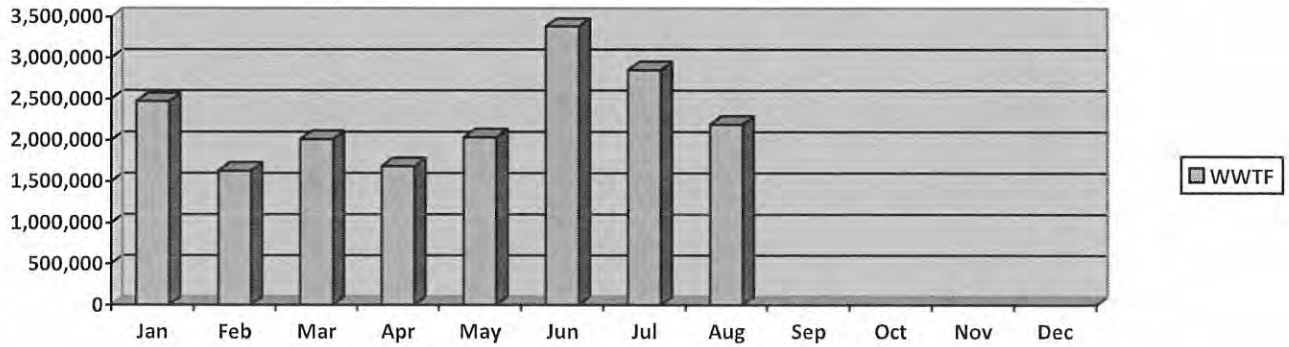
Gallons Treated and Pumped

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				

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			
October			
November			
December			

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				

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%	Yes
September					
October					
November					
December					

Bio Solids	Quantity
Stored Bio Solids – Aspen Storage Lagoon	210,600 Gallons
Bio Solids pumped and applied to land application site. YTD 9/9/15	0 Gallons
Bio Solids pumped into Aspen Storage Lagoon. YTD 9/9/15	57,600 Gallons

Other Reporting

Monthly Safety Meeting	Crew Safety Management
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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 = 517 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.

Operations Team



Justin DeBon
Operations Manager

Class C Water Operator
Class C Wastewater Operator
Class 1 Distributions Operator
Class 1 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

Latasha Ruiz
Operator

In Training



Administrative Report - September 21, 2015

September 9, 2015

To: Baca Grande Water and Sanitation District, Board of Directors

From: JoAnn Slivka, District Administrative Services Manager

STATISTICS

Meter and Billing Activity

- Route 3 currently has 674 meters
 - 672 successful reads (2, non-reads)
 - 99.5% successful read rate for Route 3 accounts
 - Currently 8 accounts remain that are not in route 3:
 - 4 - Known issues (route 2)
 - 1 - unmetered water service (ambulance bay, Route 2)
 - 1 - condemned (White Eagle, Route 2)
 - 1 - special read (Townhouses, Route 2)
- Totals for all metered accounts
 - 682 total metered accounts
 - 672 successful reads
 - 98.5% success rate
- Delinquent account summary:
 - 30 - Delinquent notices mailed - 24 owners, 6 tenants
 - 14 - Paid in full
 - 9 - Paid delinquent balance
 - 1 - Shut off
- Tap Fees: 32 Tap fee agreements remaining
 - 32 - Customers billed = \$1665.35
 - All customers paid
- Payments:
 - ACH: 237 accounts paid \$16,735.45
 - Credit Cards: 106 accounts paid \$13,266.91

Property Activity

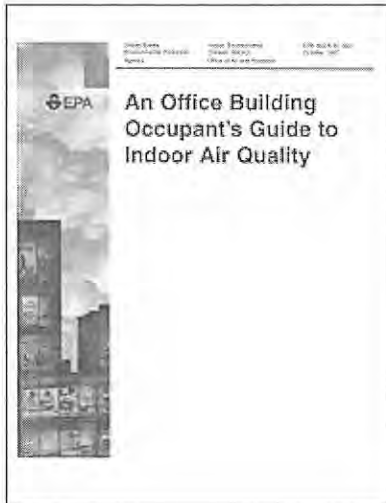
- Transferred Properties
 - 5 lots - Real Estate Closing
 - 1 SFR - Real Estate Closing
 - Saguache County: 3 lots, 2 SFR
 - Saguache County: 3 lots from Treasurer's Deeds
- Consolidations:
 - 0 - New applications
 - 2 - Final applications
- Water/Sewer hookup applications:
 - None

PROJECTS

Utility Billing	<ul style="list-style-type: none"> ▪ Utility Billing Lockbox: <ul style="list-style-type: none"> ○ The new lockbox went into effect the second week of August. Baca staff continues to work out the bugs with the new lockbox. ▪ ACH file: <ul style="list-style-type: none"> ○ The August ACH file exceeded the maximum daily deposit and needed to be adjusted to allow 2 separate deposit transactions. ○ Received new credit card machine, had to be replaced for compliance reasons. ○ The new rate for the Town of Crestone has been applied.
Rate Study Project	<ul style="list-style-type: none"> ▪ Staff continues to work with TZA Engineers on the rate study project. Our Customer Billing Specialist, Sandy Skibinski has developed a spreadsheet to capture billing trends and will continue to monitor accounts throughout the budget planning season.
Insurance	<ul style="list-style-type: none"> ▪ Continued research into insurance options. We have received a quote from our current broker and are currently working on clarification and schedules for meetings.
2015 Certification of Delinquent Accounts	<ul style="list-style-type: none"> ▪ Staff has prepared the spreadsheet and letters to be mailed out on September 14, 2015. As of this writing there are 228 accounts identified for certification. <ul style="list-style-type: none"> ○ September 14, 2015: Mail certified letters ○ October 16, 2015: Board meeting & hearing ○ November 1, 2015: Certifications must be submitted to the Saguache County Treasurer's office ○ Dec. 9, 2015: Last day we can accept customer payments on certified accounts ○ Dec 10, 2015: Last date to notify the Saguache County Treasurer's office of any changes/updates to our certification list
Office Indoor Air Quality	<ul style="list-style-type: none"> ▪ "An Office Building Occupant's Guide to Indoor Air Quality" Publication from the EPA will be included with this report and can be printed if desired. ▪ A heater and air purifier have been identified for staff is the Board desires ▪ A building inspection is scheduled for Thursday, September 10.
Personnel-Human Resources	<ul style="list-style-type: none"> ▪ Staff has contacted other entities in the Valley to learn about different paid time off policies. Details to follow. ▪ The March 2015 Worker's comp claim has been closed.
Centratel	<ul style="list-style-type: none"> ▪ Admin staff has begun to turn phones over at 8:30 A.M. in an effort to save money on the phone answering service.

"An Office Building Occupant's Guide to Indoor Air Quality"

Office of Air and Radiation (OAR)
Indoor Environments Division (6609J)
Washington, DC 20460
EPA-402-K-97-003, October 1997



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For U.S. EPA Regional Indoor Air contacts, see www.epa.gov/iaq/wherelive.html

A Summary of What You'll Learn...

What You Can Do to Improve the Indoor Air in Your Office:

- Do not block air vents or grilles.
- Comply with the office and building smoking policy.
- Water and maintain office plants properly.
- Dispose of garbage promptly and properly.
- Store food properly.
- Avoid bringing products into the building that could release harmful or bothersome odors or contaminants.
- Notify your building or facility manager immediately if you suspect an indoor air quality problem.

If You Manage an Office:

- Maintain a good working relationship with building management on indoor environmental issues.
- Place office furniture and equipment with air circulation, temperature control, and pollutant removal functions of the heating, ventilating, and air conditioning (HVAC) system in mind.
- Coordinate with building management in instances when responsibility for design, operation, and maintenance of the ventilation system is shared.
- Establish an effective smoking policy that protects nonsmokers from involuntary exposure to secondhand smoke.
- Avoid procedures and products that can cause indoor air quality problems.
- Integrate indoor air quality concerns into your purchasing decisions.
- Work with the building manager to ensure use of only necessary and appropriate pest control practices, and nonchemical methods where possible.
- Work with building management and the contractor before you remodel or renovate to identify ways of keeping building occupant exposure to pollutants to a minimum and to ensure that the air distribution system is not disrupted.
- Encourage building management to develop a preventive indoor air quality management program following guidance issued by EPA and the National Institute for Occupational Safety and Health (NIOSH).

About This Guide

This guide is intended to help people who work in office buildings learn about the factors that contribute to indoor air quality and comfort problems and the roles of building managers and occupants in maintaining a good indoor environment. Because good indoor air quality depends on the actions of everyone in the building, a partnership between building management and occupants is the best way to maintain a healthy and productive work space.

Relationships and procedures between management and occupants will vary from building to building. Some buildings are occupied entirely by the employees of the building owner, and in most of these buildings, the responsibility for indoor air quality management may be handled by a central department or office. In other buildings, where one or more building occupants rent

space under separate leases, building management may have limited control over the day-to-day activities in the leased space. Likewise, the occupants of such buildings may have little control over central building services such as heating and cooling, elevator services, housekeeping, and waste and pest management. For these reasons, occupants and management in leased space buildings will need to closely coordinate their indoor environmental management strategies.

Why is Indoor Air Quality Important?

Indoor air quality is a major concern to businesses, building managers, tenants, and employees because it can impact the health, comfort, well being, and productivity of building occupants.

Most Americans spend up to 90% of their time indoors and many spend most of their working hours in an office environment. Studies conducted by the U.S. Environmental Protection Agency (EPA) and others show that indoor environments sometimes can have levels of pollutants that are actually higher than levels found outside.

Pollutants in our indoor environment can increase the risk of illness. Several studies by EPA, states, and independent scientific panels have consistently ranked indoor air pollution as an important environmental health problem. While most buildings do not have severe indoor air quality problems, even well-run buildings can sometimes experience episodes of poor indoor air quality.

A 1989 EPA Report to Congress concluded that improved indoor air quality can result in higher productivity and fewer lost work days. EPA estimates that poor indoor air may cost the nation tens of billions of dollars each year in lost productivity and medical care.

Factors that Contribute to Indoor Air Quality

Indoor air quality is not a simple, easily defined concept like a desk or a leaky faucet. It is a constantly changing interaction of complex factors that affect the types, levels, and importance of pollutants in indoor environments. These factors include: sources of pollutants or odors; design, maintenance and operation of building ventilation systems; moisture and humidity; and occupant perceptions and susceptibilities. In addition, there are many other factors that affect comfort or perception of indoor air quality.

Controlling indoor air quality involves integrating three main strategies. First, manage the sources of pollutants either by removing them from the building or isolating them from people through physical barriers, air pressure relationships, or by controlling the timing of their use. Second, dilute pollutants and remove them from the building through ventilation. Third, use filtration to clean the air of pollutants.

Management of Pollutant Sources, both Inside and Outside the Building

Pollutants can be generated by outdoor or indoor sources, including building maintenance activities, pest control, housekeeping, renovation or remodeling, new furnishings or finishes, and building occupant activities.

One important goal of an indoor air quality program is to minimize people's exposure to pollutants from these sources. Some of the key pollutant categories include:

Biological contaminants. Excessive concentrations of bacteria, viruses, fungi (including molds), dust mite allergen, animal dander, and pollen may result from inadequate maintenance and housekeeping, water spills, inadequate humidity control, condensation, or may be brought into the building by occupants, infiltration, or ventilation air. Allergic responses to indoor biological pollutant exposures cause symptoms in allergic individuals and also play a key role in triggering asthma episodes for an estimated 15 million Americans.

Chemical pollutants. Sources of chemical pollutants include tobacco smoke, emissions from products used in the building (e.g., office equipment; furniture, wall and floor coverings; and cleaning and consumer products) accidental spill of chemicals, and gases such as carbon monoxide and nitrogen dioxide, which are products of combustion.

Particles. Particles are solid or liquid substances which are light enough to be suspended in the air, the largest of which may be visible in sunbeams streaming into a room. However, smaller particles that you cannot see are likely to be more harmful to health. Particles of dust, dirt, or other substances may be drawn into the building from outside and can also be produced by activities that occur in buildings, like sanding wood or drywall, printing, copying, operating equipment, and smoking.

Type of Pollutant

Many different factors influence how indoor air pollutants impact occupants. Some pollutants, like radon, are of concern because exposure to high levels of the pollutant over long periods of time increases risk of serious, life threatening illnesses, such as lung cancer. Other contaminants, such as carbon monoxide at very high levels, can cause death within minutes. Some pollutants can cause both short and long term health problems. Prolonged exposure to environmental tobacco smoke can cause lung cancer, and short term exposures can result in irritation and significant respiratory problems for some people, particularly young children.

People can react very differently when exposed to the same contaminants at similar concentrations. For example, some people can develop severe allergic reactions to biological contaminants to which other people will not react. Similarly, exposure to very low levels of chemicals may be irritating to some people but not others. For people with asthma and other pre-existing conditions, exposure to irritants like environmental tobacco smoke or gases or particles from various indoor sources may cause more severe reactions than the same exposure would in others.

Moisture and Humidity

It is important to control moisture and relative humidity in occupied spaces. The presence of moisture and dirt can cause molds and other biological contaminants to thrive. Relative humidity

levels that are too high can contribute to the growth and spread of unhealthy biological pollutants, as can failure to dry water-damaged materials promptly (usually within 24 hours) or to properly maintain equipment with water reservoirs or drain pans (e.g., humidifiers, refrigerators, and ventilation equipment). Humidity levels that are too low, however, may contribute to irritated mucous membranes, dry eyes, and sinus discomfort.

Design, Maintenance and Operation of Building Ventilation Systems

Maintaining good indoor air quality requires attention to the building's heating, ventilation, and air conditioning (HVAC) system; the design and layout of the space; and pollutant source management. HVAC systems include all of the equipment used to ventilate, heat, and cool the building; to move the air around the building (ductwork); and to filter and clean the air. These systems can have a significant impact on how pollutants are distributed and removed. HVAC systems can even act as sources of pollutants in some cases, such as when ventilation air filters become contaminated with dirt and/or moisture and when microbial growth results from stagnant water in drip pans or from uncontrolled moisture inside of air ducts. Because of the HVAC system's importance, good indoor air quality management includes attention to:

Ventilation system design. The air delivery capacity of an HVAC system is based in part on the projected number of people and amount of equipment in a building. When areas in a building are used differently than their original purpose, the HVAC system may require modification to accommodate these changes. For example, if a storage area is converted into space occupied by people, the HVAC system may require alteration to deliver enough conditioned air to the space.

Outside air supply. Adequate supply of outside air, typically delivered through the HVAC system, is necessary in any office environment to dilute pollutants that are released by equipment, building materials, furnishings, products, and people. Distribution of ventilation air to occupied spaces is essential for comfort.

Outdoor air quality. When present, outdoor air pollutants such as carbon monoxide, pollen, and dust may affect indoor conditions when outside air is taken into the building's ventilation system. Properly installed and maintained filters can trap many of the particles in this outdoor supply air. Controlling gaseous or chemical pollutants may require more specialized filtration equipment.

Space planning. The use and placement of furniture and equipment may affect the delivery of air to an occupied space. For instance, the placement of heat generating equipment, like a computer, directly under an HVAC control device such as a thermostat may cause the HVAC system to deliver too much cool air, because the thermostat senses that the area is too warm. Furniture or partitions that block supply or return air registers can affect IAQ as well, and need to be positioned with attention to air flow.

Equipment maintenance. Diligent maintenance of HVAC equipment is essential for the adequate delivery and quality of building air. All well-run buildings have preventive maintenance programs that help ensure the proper functioning of HVAC systems.

Controlling other pollutant pathways. Pollutants can spread throughout a building by moving through stairwells, elevator shafts, wall spaces, and utility chases. Special ventilation or other control measures may be needed for some sources.

Factors that Affect Occupant Comfort and Productivity

Besides the factors that *directly impact the levels of pollutants* to which people are exposed, a number of environmental and personal factors can affect how people *perceive* air quality. Some of these factors affect both the levels of pollutants *and* perceptions of air quality.

- Odors
- Temperature -- too hot or cold
- Air velocity and movement -- too drafty or stuffy
- Heat or glare from sunlight
- Glare from ceiling lights, especially on monitor screens
- Furniture crowding
- Stress in the workplace or home
- Feelings about physical aspects of the workplace: location, work environment, availability of natural light, and the aesthetics of office design, such as color and style.
- Work space ergonomics, including height and location of computer, and adjustability of keyboards and desk chairs
- Noise and vibration levels
- Selection, location, and use of office equipment

Ask your supervisor or office manager who to talk with if you have a concern about any of these factors.

Indoor Air Quality is a Shared Responsibility

Some of the factors that contribute to poor indoor air quality may originate from inadequate HVAC design. Some may be solely in the control of the building management, such as maintenance of the HVAC system and the amount of outside air being mechanically brought into the building. Others are largely in the control of building tenants and occupants, such as materials used in renovations and products and furnishings brought into or used in the building by occupants. Some, like cleanliness and general housekeeping of the building, require the cooperation of both the building management as well as all of the individuals who work in the building. For these reasons, indoor air quality is a shared responsibility.

Good indoor air quality management practices can make a big difference. However, some factors, like reactions to indoor air contaminants among highly susceptible individuals, or the quality of the outside air, may not be within anyone's immediate control. It is also important to remember that any building, no matter how well operated, may experience periods of unacceptable indoor air quality due to equipment breakdown, inadequate maintenance, or in some cases, the actions of building occupants.

It is also important to keep in mind that many perceived indoor air quality problems are often comfort problems, such as temperature, humidity, or air movement in the space being too low or too high. In addition, many symptoms, such as headaches, can have causes that are not related to factors in the building.

The Good News...

Even though the factors that affect the quality of the indoor environment are numerous, the good news is that most indoor environmental problems can be prevented or corrected easily and inexpensively through the application of common sense and vigilance on the part of everyone in the building. Success depends on cooperative actions taken by building management and occupants to improve and maintain indoor air quality. By becoming knowledgeable about indoor air quality, tenants and occupants are in a good position to help building managers maintain a comfortable and healthy building environment. Work with management any time you:

- Identify or suspect an indoor air problem
- Need cleaning and maintenance service
- Plan to install new office equipment
- Plan for renovations and/or remodeling with a professional interior designer and/or an architect
- Experience leaks, spills, or accidents

Things *Everyone* in the Building Can Do

All of the occupants of a building can have a great influence on indoor air quality. Everyday activities like heating food in a microwave and using the photocopier can generate odors and pollutants. By being aware of indoor air issues, occupants can help prevent problems. Here are some things you can do:

Do not block air vents or grilles. Keep supply vents or return air grilles unblocked, so you won't unbalance the HVAC system or affect the ventilation of a neighboring office. Furniture, boxes or other materials near supply vents or return air grilles may also affect air flow. Follow your office's procedures to notify building management if your space is too hot, too cold, stuffy or drafty.

Comply with the office and building smoking policy. Smoke in designated areas only.

Clean up all water spills promptly, water and maintain office plants properly and report water leaks right away. Water creates a hospitable environment for the growth of microorganisms such as molds or fungi. Some of these microbes, if they become airborne, can cause health problems.

Dispose of garbage promptly and properly. Dispose of garbage in appropriate containers that are emptied daily to prevent odors and biological contamination.

Store food properly. Food attracts pests. Some foods, if left unrefrigerated, can spoil and generate unpleasant odors. Never store perishable food products in your desk or on shelves. Refrigerators should be cleaned on a regular basis to prevent odors. Keep kitchens and dining areas clean and sanitize as necessary to prevent pests and maintain hygiene.

Notify your building or facility manager immediately if you suspect an IAQ problem. This helps management determine the cause of the problem quickly so that a timely solution can be reached.

What the Office Manager/Tenant Can Do

In leased space, the office manager or other person responsible for office policies and/or relations with the property owner is often in a position to directly and significantly impact indoor air quality in the space. For some businesses, responsibility for dealing with air quality issues may involve more than one person. The office manager should follow the business's internal procedures in dealing with the building management. Some of the things this person can do to improve indoor air quality include:

Maintain a good working relationship with building management on indoor environmental issues. Cooperative efforts are the best way to solve many indoor air quality problems. Follow your internal guidelines to ensure that building facility management is informed of, and involved in, all indoor air quality issues. Be as knowledgeable as possible when dealing with building management on indoor air issues.

Place office furniture, partitions, and equipment with air circulation, temperature control, and pollutant removal functions of the HVAC system in mind. Make sure air supply vents and return grilles are not blocked by furniture or equipment. Computers and other heat-producing equipment placed near or under an HVAC sensor device system can trigger cooling, even if the actual temperature for occupants is cool. Place such equipment away from HVAC sensors to avoid this kind of situation.

Coordinate with building management in instances when responsibility for design, operation, and maintenance of the HVAC system is shared. Sometimes the portion of the HVAC system servicing a leased space is the responsibility of the tenant. In such cases, work closely with building management to ensure that all parts of the building are receiving optimal service from the system. Ensure that filters in window air conditioners and perimeter heating and cooling units are changed frequently.

Establish an effective smoking policy. Most of us today are aware of the health risks of smoking, not only to smokers, but to those who are exposed to secondhand smoke. In addition, environmental tobacco smoke in a building can increase costs for maintaining the ventilation system and for cleaning and replacing smoke-soiled furnishings and materials. Establish a smoke-free policy in the space under your control or work with building management to design properly ventilated smoking rooms that don't allow smoke to circulate through the central ventilation system or to adjoining spaces.

Avoid procedures and products that can cause problems. Many common products used in offices, like solvents, adhesives, cleaners, and pesticides can give off pollutants and odors, as can office equipment such as copiers, printers, and fax machines. If any of these items are used in the office environment, adequate and sometimes separate ventilation should be provided. If your organization engages in activities that may generate pollutants, such as photographic or printing processes, exhaust ventilation will be especially important. Pollutants and odors (which may or may not indicate a health concern) generated in your space may not only bother those in

the immediate area, but may enter the building ventilation system and cause problems for other tenants in other parts of the building.

Integrate indoor air quality concerns into your purchasing decisions. Take steps to reduce exposures to contaminants from cleaning products, and from new furnishings and building materials, when odors and chemical emissions are usually highest. Ask the designers, suppliers, and manufacturers to provide information on chemical emissions from products and any potential associated respiratory hazards. While emissions information may not yet be available for many products, many product manufacturers are starting to do emissions testing. The more consumers request such information, the sooner it will become widely available.

Work with the building owner or manager to ensure use of only necessary and appropriate pest control practices, and non-chemical methods where possible. Pesticides can contribute to poor indoor air quality and can cause serious health effects when used improperly. Unacceptable levels of pest activity and damage should be prevented by the most economical means and with the least possible hazard to people, property, and the environment. For example, if roaches are a problem, seal their entry points and properly store and dispose of food as part of a long term control strategy. If a chemical pesticide is selected, it should be used in strict accordance with label directions. To reduce airborne exposure to pesticides, consider using baits to kill pests instead of spraying. Work with building management to select the most appropriate pesticide to achieve your purpose, and do not purchase or use more than needed.

Work with building management and contractors before you conduct remodeling or renovation activities to identify ways of keeping exposure to pollutants to a minimum. Properly isolating the area to be remodeled or renovated from other spaces and the HVAC systems, and scheduling these activities for evenings and weekends if possible, can go a long way toward minimizing potential occupant problems. If the renovation work is contracted through you, ensure that the architect or interior designer and contractor are made aware, in advance, of the practices and procedures to be used during construction activities. If possible, try to arrange for plastic wrappings to be removed from partitions, carpet rolls, and other new materials before they are brought into the space. Ask to have the materials aired out in a clean, dry location outside the building for a few days before installation. This can significantly reduce chemical emissions and odors inside the building.

Encourage building management to obtain and use the joint EPA/NIOSH guidance document entitled: *Building Air Quality: A Guide for Building Owners and Facility Managers*. EPA and the National Institute for Occupational Safety and Health (NIOSH) have published comprehensive guidance for building owners and managers to help them prevent and solve indoor air quality problems. Ensuring that your building management is knowledgeable about and committed to management of indoor air quality issues is an essential first step in preventing and fixing indoor air problems.

What Building Facility Managers Can Do to Promote Good Indoor Air Quality

As an occupant of an office building, understanding the role of the building management in maintaining a healthy and comfortable indoor environment is an important step in understanding how you can fit into the picture. EPA and NIOSH recommend that every building manager obtain and use the *Building Air Quality* guidance (see page 18) to:

Designate an Indoor Air Quality Representative, who serves as the contact for indoor environment issues. The IAQ representative should be accountable for the quality of the indoor environment and should have the authority, knowledge, and training to oversee or carry out the following steps in a good indoor air quality management plan:

Assess the current condition of the indoor air in the building by:

- identifying and reviewing records pertaining to the HVAC design and operation
- developing an indoor air profile of the building, identifying potential pollutant sources, if feasible

Address any existing and potential indoor air quality problems.

Educate building staff about indoor air quality management by:

- providing training opportunities
- establishing clear pollutant source management policies

Operate and maintain the building and ventilation system for good indoor air by:

- establishing or reinforcing standard operating and maintenance procedures
- responding quickly to leaks, floods, and other accidents that occur in buildings to prevent indoor air quality problems from developing

Manage potential pollutant sources such as:

- smoking
- remodeling and renovation materials and furnishings
- housekeeping and pest control products
- exhaust fumes from loading docks or garages

Communicate with tenants and occupants about their roles in maintaining good indoor air quality.

Establish clear procedures for responding to indoor air-related complaints.

Keep a record of reported health complaints to aid in solving indoor air-related problems. This will help improve the chances of correctly diagnosing and then fixing problems, especially if a pattern in complaints can be detected.

If You Think Your Building Has an Indoor Air Quality Problem...

If you or others at your office are experiencing health or comfort problems that you suspect may be caused by indoor pollution, you can:

Inform the building management of your concerns through your usual and proper channels.

Talk with your doctor or other health care provider, and report your problems to the company physician, nurse, or health and safety officer. Ask that person if you should call your state or local health department to discuss your symptoms and possible causes.

Cooperate with management during any indoor air quality investigation to aid the sometimes difficult process of identifying and solving problems.

For More Information...

There are many sources of additional information on indoor air quality in offices, homes, and schools and what people can do to ensure that their indoor environment is a healthy one. To obtain a list of available publications, see www.epa.gov/iaq/pubs/index.html.

IAQ Building Education and Assessment Model (I-BEAM)

EPA's I-BEAM software program is the newest and most advanced IAQ guidance for building professionals. IAQ-Building Education and Assessment Model (I-BEAM) is packed with up to date information, text modules, animations and graphic displays of air and pollution flows, checklists, forms, search capabilities, web links, and budget assessment tools. It updates and expands EPA's original BAQ guidance.

Building Air Quality: A Guide for Building Owners and Facility Managers is available from:
Superintendent of Documents

PO Box 371954

Pittsburgh, PA 15250-7954

Order #: S/N 055-000-00390-4; Price \$24.

- The Building Air Quality Guide is also available on the web as a series of PDF files. Go to the Table of Contents and select a specific section or form, or
 - download a "zipped" file containing all of the PDF files.
 - The BAQ Action Plan is also available on this web site.]
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**BACA GRANDE WATER AND SANITATION DISTRICT
ENGINEER'S REPORT
September 9, 2015**

ADMINISTRATIVE MATTERS

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

TZA Water Engineers is currently researching the Small Community Water and Wastewater grants opportunity to support the proposed Flow Equalization Basin at the Aspen Institute Wastewater Treatment Facility. The 2016 request for applications for this program is expected to be released October 1, 2015 by the Water Quality Control Division. I intend to participate in a pre-application webinar scheduled for October 8, 2015 at 10:00 a.m. The Small Community Water and Wastewater grants assist small communities with costs associated with design and construction of projects that protect public health and water quality. Grants are available to communities with populations under 5,000 that are able to get a certificate of financial need from the Division of Local Government. Generally, communities with incomes and house values below the state median with system user charges and debt per household above state averages and a low ratio of reserves to a project's required cost will be determined to have financial need.

District staff is researching other funding programs, including the Department of Local Affairs, to address aging equipment and infrastructure needs, as well as office renovation/property acquisition possibilities.

TZA Water Engineers is also researching a SEARCH (Special Evaluation Assistance for Rural Communities and Households) grant from the USDA's Rural Utilities Service for the biosolids management needs of the District.

Finally, TZA will research the Colorado Water Conservation Board's funding opportunities and determine any viable District projects.

Water Billing Registers – TZA has not received any monthly water billing registers and meter proof reports since April (i.e. March billings) as part of the Rate Study, but we are not recording any time to this activity. Our review of these items was intended to provide insight into meter reading issues, if any, and to document water usage trends to benefit future water planning activities and rate studies.

LAMP RYNEARSON COMPANIES



Water and Wastewater Rates – It is my understanding the Town of Crestone has accepted the basis for the revised rates for sewer charges (\$5.26 per 1,000 gallons).

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 have reviewed the June and July 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

The slight reduction in the Proposed Rate totals can be attributed to the fact that each account is assumed to only use the minimum amount of water and therefore only being charged the base rate, but we know there are accounts that exceed the base usage amounts and would end up paying more for their sewer usage.

I have not received the August reports, but upon receipt I will update the table above. Sandy will forward the August reports to me upon preparation.

OPERATIONAL MATTERS

Biosolids Removal - Justin DeBon has been managing the biosolids at the Aspen Institute Wastewater Treatment Facility with the existing ponds and has received a proposal from RMS to remove product in 2015. Justin is completing the sampling and analysis on the sludge that is required to allow RMS to haul and land apply the product. Justin continues 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.

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.

CAPITAL PROJECTS

2014 Water Distribution System Improvement Project - The warranty inspection with RMS Utilities has been tentatively set for December 1, 2015. This item will remain on the Engineer's Report until the inspection has been completed.

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.

Flow Equalization Basin - TZA Water Engineers will coordinate the geotechnical investigation and foundation recommendation for the proposed structure, but I wanted to learn more about the Small Community Water and Wastewater grants program before initiating the investigation. Justin has identified an alternative configuration for the structure based upon his knowledge of the Aspen Institute Wastewater Treatment Facility and its uses. Once a geotechnical investigation and foundation recommendation is complete, TZA will prepare a site application amendment and accompanying engineering report that will be reviewed by the Water Quality Control Division.

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 Dharma Ocean.
- 5) Once the improvements are installed at Stables, submit the required certification to the Division.

I am working 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.

I have Lauren working with Denver Industrial Pump to price out the pumps (Homa or Barnes), motors, drives, and controls for item 3.

Justin and I will discuss using TLECC for the installation and confirm the electrical requirements for the new set-up. On September 1, I spoke with “Mary” of SLVREC and she indicated the existing service to meter 5517 is 3-phase, 277 volts, and rated to 200 amps.

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

Casita Park Water Line Interconnect – Attached are the minutes from the September 9, 2015 construction progress meeting. The project is proceeding smoothly.

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 0.20 milligrams per liter chlorine residual throughout the distribution system. As discussed at the July Board retreat, the District should evaluate the chlorine residuals at the extents of the distribution system in advance of the December 31, 2015 deadline for requesting an extension for complying with the treatment techniques requirements.

CONSTRUCTION PROGRESS MEETING MINUTES

PROJECT NAME: Baca Grande Water and Sanitation District
Casita Park Interconnect – Water Line Improvements
TZA JOB NO: 0414607.01-002-206
DATE: September 9, 2015 at 10:45 a.m.

Attendance - record of attendees attached

Submittals:

- 001 received on August 7, 2015 and returned August 13, 2015.
- 002 received on August 19, 2015 and returned August 20, 2015.
- 003 received on August 24, 2015 and returned August 25, 2015.
- No outstanding submittal items.

Saguache County Permit to Construct in ROW:

- Received August 20, 2015.
- Brad noted that Road T shoulders are currently unimproved (i.e. no gravel). He has photos from today's site visit.

Traffic Control Plan: First draft received on August 24, 2015; Revised plan received August 24, 2015 addressing TZA comments.

Current Construction Schedule:

- PRV Vault placed: September 1 - complete
- Well 18 Yard Piping installed and bedded on low pressure side of PRV vault: September 2 and September 3 - complete
- Well 18 Yard Piping connections/thrust blocks on low pressure side of PRV vault: September 3 - complete
- Well 18 Yard Piping backfill and compaction on low pressure side of PRV vault: September 4 - complete
- Install pipe along north ROW of County Road T: September 8 to September 11.
- Bore County Road T Crossing: September 14 to September 18 (tentative). May set up pits for bore on September 11.
- Install PRV and complete Well 18 Yard Piping on high pressure side of PRV vault: October 5 to October 7.

Change Orders:

- No. One, resulting in an increase of \$5,115.00 and a total contract amount of \$72,198.00, is to relocate an existing blow off assembly to County Road T to facilitate future O&M and is recommended for approval by the District. A fully-executed electronic copy was distributed to all parties on August 24, 2015.
- A redundant creek crossing of the primary water transmission line is being evaluated due to excess project funds. Review preliminary plan. Details discussed under "Additional Contractor Questions".

Anticipated Contractor Payment Application Dates:

- Application for Payment No. 1 – Approximately September 6, 2015. Bryan may submit a pay application the afternoon of September 9.
- Application for Payment No. 2 – Approximately October 6, 2015.
- Application for Payment No. 3 (Final) – Approximately November 6, 2015.

Stored materials and Bedding materials – Materials are to be stored at the Aspen Institute Wastewater Treatment Plant or Well 18 Site. District is to provide bedding sand at Well 18 site and along Road T for RMS to use as pipe bedding.

Contractor personnel authorized to execute payment applications, change orders, substantial completion and final pay applications – Bryan Malouff is to be the only authorized personnel; Only board members are authorized to sign off on change orders; Brad will make recommendations for payment to the Board.
Testing responsibilities – Initial compaction testing is to be paid by the District; If the compaction test fails, it will be the responsibility of RMS to pay for the retest. Justin has not required any testing to date and will continue to monitor RMS’s performance.
Additional Contractor Questions: <ul style="list-style-type: none"> A. Administrative – Bryan requested clarity on the blow off to be relocated from Well 18 Site to Road T piping. Brad requested special attention to the DR ratings of the PVC pipe on the plans. B. Technical – Bryan, Justin, and Brad reviewed and discussed the “Well 18 Redundant Water Main Stream Crossing” plans (attached for reference). Bryan to develop a cost proposal to perform the work, but the work is not authorized until a formal change order is processed by all parties.
Final Review & Processing of Final Payment – A final walk through will be completed after the project is complete.
Other comments – The District will update the Department of Local Affairs on the status of the project based upon this progress meeting and the project schedule.

Notes:

Meeting adjourned at 11:15 a.m.



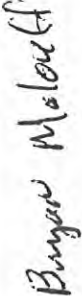
Miguel and crew on-site at ~10:30 a.m., working on piping north of Road T. Traffic control devices in place, including “Men Working Ahead” signs and barricades.

Equipment on-site: Cat 315D track type hoe, Deere 310SG loader/backhoe, Wacker RT sheepfoot compactor.

Weather conditions: 10:00 a.m. = 65 degrees, slight haze, dry, calm; 10:45 a.m. = 68 degrees, slight haze, dry, calm.

PRECONSTRUCTION CONFERENCE SIGN IN

PROJECT NAME: Baca Grande Water and Sanitation District
 Casita Park Interconnect – Water Line Improvements
 TZA JOB NO: 0414607.01-002-206
 DATE: September 9, 2015 at 10:00 a.m.

Name	Company	Office Phone	Mobile Phone
 Brad Simons, PE, Project Manager	TZA Water Engineers bsimons@tza4water.com	303-971-0030, x 4	720-234-8398
 Justin DeBar Project Manager	Baca Water	719 256 4310	719 585 2170
 Bryan Melouff	Raas Utilities	719 588 4263	

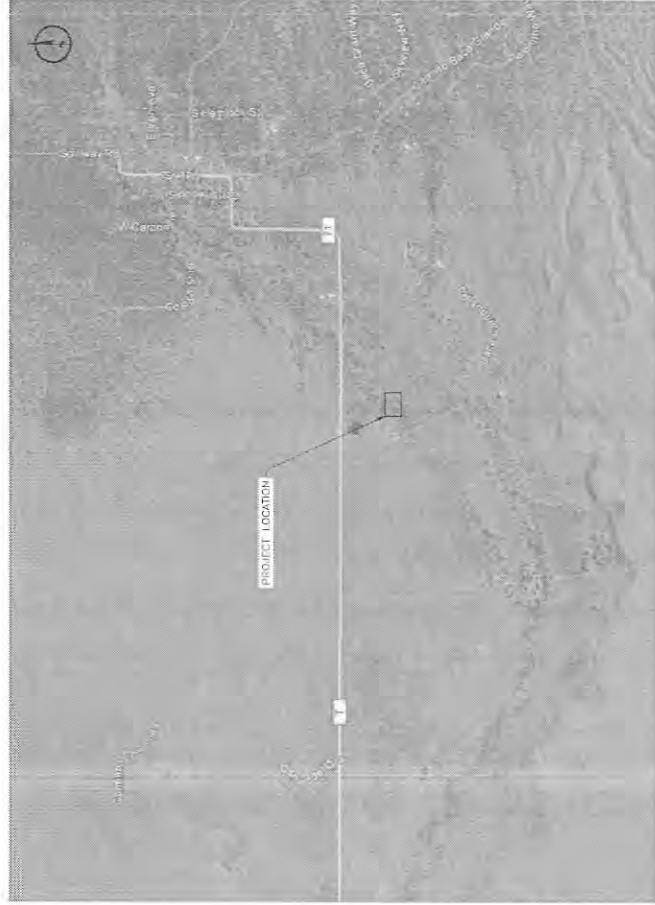
BACA GRANDE WATER AND SANITATION DISTRICT

SAGUACHE COUNTY, COLORADO

WELL 18 REDUNDANT WATER MAIN STREAM CROSSING

OWNER
 BACA GRANDE WATER AND SANITATION DISTRICT
 12500 W. 17th WATER ENGINEERS
 LAKWOOD, COLORADO 80228
 PHONE: 303.971.0030

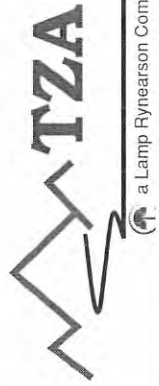
ENGINEER
 TZA WATER ENGINEERS
 12500 W. 17th WATER ENGINEERS
 LAKWOOD, COLORADO 80228
 PHONE: 303.971.0030



LOCATION MAP

12596 West Bayaud Avenue, Suite 330
 Lakewood, Colorado 80228
 LRA-Inc.com / tza4water.com

303.971.0030 | P
 303.971.0077 | F



a Lamp Rynearson Company

APPROXIMATE QUANTITIES

ITEM NO.	BSI ITEM DESCRIPTION	AQ	UNIT	FORM QUANTITY	UNIT
1.	INSTALL 6" M.S. STEEL TO TRANSDUCER	2	EA		EA
2.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
3.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
4.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
5.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
6.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
7.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
8.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
9.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
10.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
11.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
12.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
13.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
14.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA
15.	INSTALL 6" PVC TO TRANSDUCER	2	EA		EA

GENERAL NOTES

- ALL SITE WORK SHALL BE IN ACCORDANCE WITH THE PROJECT MANUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND UTILITIES LOCATIONS SHALL BE PROVIDED TO THE CONTRACTOR BY THE DISTRICT.
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SHEET NUMBER	INDEX OF SHEETS	SHEET TITLE
0	1	1
1	2	2
2	3	3
3	4	4

OTHER CONTACTS

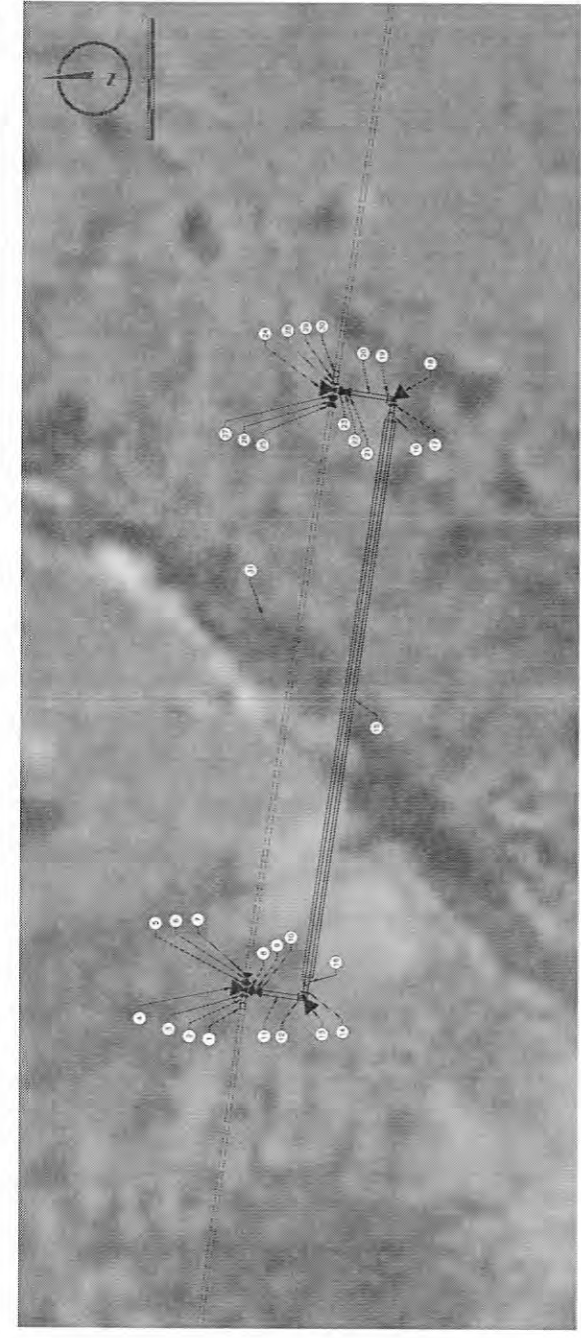
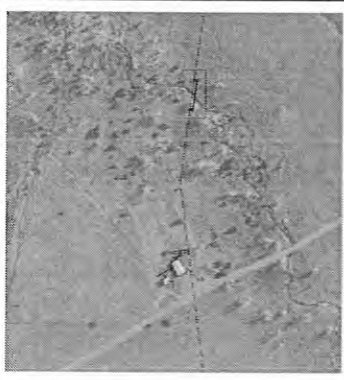
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
 4300 CHERRY CREEK DRIVE SOUTH
 DENVER, COLORADO 80231
 PHONE: 303.862.2000
 WEBSITE: WWW.CO.PH.EDU/COLCOGUS

COLORADO DEPARTMENT OF TRANSPORTATION
 1400 SOUTH WASHINGTON AVENUE
 DENVER, COLORADO 80202
 PHONE: 303.733.8628

WATER MAIN NOTES

- ALL PIPE SHALL BE RESTRICTED TO MECHANICAL JOINTS WITH METAL MECHANICAL JOINTS.
- ALL EXISTING PIPE SHALL BE PRESERVED UNLESS OTHERWISE NOTED.
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GEOTECHNICAL REPORT - COMPACTION REQUIREMENTS	
FILL AREA	MIN. COMPACTION
BELOW FOUNDATIONS	95% (ASTM D998)
BELOW FLOOR SLABS	95% (ASTM D998)
ASPHALT	95% (ASTM D998)
LANDSCAPE	95% (ASTM D998)

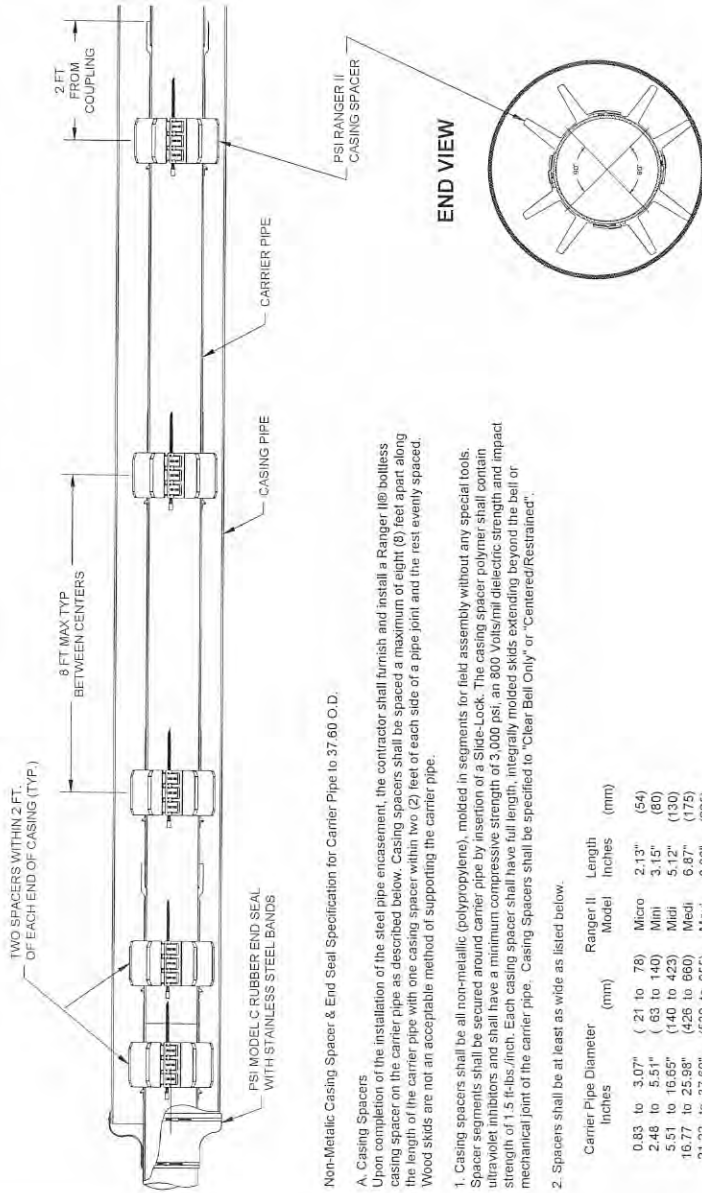


PLAN VIEW

WATER MAINS

1. INSTALL 16" M4 SOLID BELLEVUE TO TRANSFER FROM 8" C-500 (DR14) PVC TO CONNECT TO EXISTING 8" C-300 PVC.
2. INSTALL MEGALUG FOR 8" C-500 (DR14) PVC.
3. CONSTRUCT 10" DIA. RIGID IRON MECHANICAL JOINT 500 PSI PRESSURE CLASS TIE ASSEMBLY WITH THROST BLOCK.
4. CONSTRUCT 10" DIA. RIGID IRON MECHANICAL JOINT 500 PSI PRESSURE CLASS TIE ASSEMBLY WITH THROST BLOCK.
5. INSTALL 8" GATE VALVE AND BOX INSTALL RIBBED FIBROD 1-HAL. BLUE MARKING POST WITH "MARKING WATER VALVE" DECAL WITH BLUE LETTERS.
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CASING SPACER DETAIL



Non-Metallic Casing Spacer & End Seal Specification for Carrier Pipe to 37.60 O.D.

A. Casing Spacers

Upon completion of the installation of the steel pipe encasement, the contractor shall furnish and install a Ranger II® bollless casing spacer on the carrier pipe as described below. Casing spacers shall be spaced a maximum of eight (8) feet apart along the length of the carrier pipe with one casing spacer within two (2) feet of each side of a pipe joint and the rest evenly spaced. Wood skids are not an acceptable method of supporting the carrier pipe.

1. Casing spacers shall be all non-metallic (polypropylene), molded in segments for field assembly without any special tools. Spacer segments shall be secured around carrier pipe by insertion of a Slide-Lock. The casing spacer polymer shall contain ultraviolet inhibitors and shall have a minimum compressive strength of 3,000 psi, an 800 Volts/mil dielectric strength and impact strength of 1.5 ft-lbs./inch. Each casing spacer shall have full length, integrally molded skids extending beyond the bell or mechanical joint of the carrier pipe. Casing Spacers shall be specified to "Clear Bell Only" or "Centered/Restrained".

2. Spacers shall be at least as wide as listed below.

Carrier Pipe Diameter Inches	Ranger II Model	Length Inches	mm
0.83 to 3.07"	(21 to 78)	Micro	2.13" (54)
2.48 to 5.51"	(63 to 140)	Mini	3.15" (80)
5.51 to 16.65"	(140 to 423)	Mid	5.12" (130)
16.77 to 25.98"	(425 to 660)	Med	6.87" (175)
21.22 to 37.60"	(539 to 955)	Maxi	8.86" (225)

3. The casing spacers shall be the PSI Ranger II® Casing Spacers as manufactured by Pipeline Seal and Insulator, Inc., Houston, Texas.

B. End Seals

After insertion of the carrier pipe into the casing, the ends of the casing shall be closed by installing 1/8" thick synthetic rubber end seals equal to the PSI Model "C" end seal as manufactured by Pipeline Seal and Insulator, Inc., Houston, Texas.

ISO 9000 Registration

Each casing spacer and end seal shall be manufactured at a facility that has a Registered ISO 9001:2000 Quality Management System. Copy of current ISO 9001:2000 Registration shall be provided with material submittal.

PSI PIPELINE SEAL & INSULATOR

PROJECT NO.	18 REDUNDANT WATER MAIN STREAM CROSSING
LOCATION	BACA GRANDE WATER AND SANITATION DISTRICT, CRESTONE, COLORADO
DATE	02/20/15
SCALE	AS SHOWN
DESIGNED BY	J. L. RYAN
CHECKED BY	J. L. RYAN
DATE	02/20/15
PROJECT NO.	18 REDUNDANT WATER MAIN STREAM CROSSING
LOCATION	BACA GRANDE WATER AND SANITATION DISTRICT, CRESTONE, COLORADO
DATE	02/20/15
SCALE	AS SHOWN
DESIGNED BY	J. L. RYAN
CHECKED BY	J. L. RYAN
DATE	02/20/15

PI-511-0205 TYP. CASING & CARRIER

NOTES AND DETAILS

Job Number: 18-001
 18-001-001-206
 Book Page
 Date: 02-20-2015
 Sheet 3 of 3

12555 West Bayard Avenue, Suite 330, 80527-1000
 Lakewood, Colorado 80226
 303.971.0000
 TZA Water Engineers
 1844-2007 / tzaengineers.com

Drawn By: JLR
 Checked By: JLR
 Date: 02/20/15
 Title: PIPELINE SEAL & INSULATOR