

Exhibit No.: \_\_\_\_\_  
Issue: Flexible Piping for  
Connecting the Water Main  
to Customer Service Lines on  
Big Island  
  
Witness: James T. Crowder  
Sponsoring Party: Folsom Ridge LLC and Big  
Island Homeowners Water  
and Sewer Association, Inc.  
  
Case No.: Case No. WO-2007-0277  
**Joined for hearing with  
Case No. WC-2006-0082**

FOLSOM RIDGE LLC  
AND BIG ISLAND HOMEOWNERS WATER AND SEWER ASSOCIATION, INC.

Case No. WO-2007-0277  
**Joined for hearing with  
Case No. WC-2006-0082**

SURREBUTTAL TESTIMONY

OF

JAMES T. CROWDER

Longmont, Colorado  
March, 2007

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

In the matter of the Application of )  
Folsom Ridge LLC and Big Island )  
Homeowners Water and Sewer Association, )  
Inc. for an order authorizing the transfer )  
and Assignment of Certain Water and )  
Sewer Assets to Big Island Water )  
Company and Big Island Sewer )  
Company, and in connection therewith )  
certain other related transactions. )

Case No. WO-2007-0277

AFFIDAVIT OF JAMES T. CROWDER

STATE OF MISSOURI )  
 ) ss.  
COUNTY OF CAMDEN )

I, James T. Crowder, of lawful age, and being duly sworn, do hereby depose and state:

1. My name is James T. Crowder. I am presently property and construction manager for Diamond G Enterprises.
2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my personal knowledge, information and belief.

  
James T. Crowder

Subscribed and sworn to before me, a Notary Public, this 26 day of March, 2007.

  
Notary Public

TARA GARCIA  
NOTARY PUBLIC  
STATE OF COLORADO

My Commission Expires 07/17/2010



1 might be better to refer to the flexible piping as a “service connection” between the water  
2 main and the customer’s “service line.”  
3

4 **Q. One page 3 of his rebuttal Mr. Pugh questions whether bedding was placed under**  
5 **the flexible pipe. Ms. Orler also asks questions about the bedding on page 10 of her**  
6 **rebuttal. As part of the process of applying cover for the flexible blue piping, did**  
7 **the contractor provide bedding as well?**

8 A. Yes, the bedding was applied as part of the overall cover for the line. There were  
9 different kinds of bedding or cover depending upon how level the flexible blue piping  
10 laid in an excavation, and I must correct my earlier testimony on this matter. For  
11 installations of the flexible pipe that were on relatively level grades, the bedding and  
12 cover were the limestone dust I referred to in my direct testimony. A workman would be  
13 positioned in the excavation and the pipe was raised so that the limestone dust could be  
14 laid underneath the pipe. Then the workman would lower the pipe into the limestone  
15 dust. After that, the blue pipe was covered with the limestone dust. For the lines that  
16 “went up a hill” the bedding used was ¾ inch limestone base rock. This size of  
17 aggregate is widely accepted for underground pipeline backfill. The base rock was used  
18 for compaction and for stability. The issue on an incline, like the one on Exhibit 63, is  
19 erosion around the excavation. The base rock bedding was selected to stabilize the site  
20 and minimize the effects of rainfall. This type of backfill will also keep the flexible pipe  
21 from moving. This difference in the cover or backfill used was not clear in my direct  
22 testimony.  
23

1    **Q.     On page 4, Mr. Pugh discusses what appears to be rock under the flexible piping on**  
2           **one of the pages of Exhibit 63. After the excavation for the service connection lines**  
3           **was backfilled, was any part of the lines resting on bare rock.**

4    A.    No, for a piece of flexible piping going “up a hill” the pipe would rest not on the rough  
5           excavation but on the  $\frac{3}{4}$  inch base rock backfill I described above. The limestone dust  
6           separated the other flexible pipe service connection lines from any rock at the bottom of  
7           the rough excavation.

8  
9    **Q.     On page 2 of his rebuttal, Mr. Pugh testifies that the location of the flexible blue**  
10          **piping is directly above the wastewater main and he again addresses adding a sleeve**  
11          **to the water service connection line. On the causeway, do you know the depth at**  
12          **which the wastewater main has been installed?**

13   A.    Yes, the line was installed at a depth of at least four feet. There is more than enough  
14          separation between the water service connection lines and the wastewater main to avoid  
15          contamination.

16

17   **Q.     Does this conclude your surrebuttal testimony?**

18   A.    Yes.