

Water & Sewer lines
together in same trench
North side of causeway
home

June 6, 2000

Service Lines to new home
Wastewater & water

FILED²

APR 02 2007

Missouri Public
Service Commission

Pugh Exhibit No. 63
Case No(s) WC 2005-0080-24 91
Date 2-28-07 Rptr xf

Big Island Causeway

The causeway created some major problems for the reinstallation/separation of the water line from the sewer line. There were service lines in the original installation which were installed in the same trench as shown in the picture above. According to the DNR, service lines should come under the jurisdiction of National codes. The waterline has been removed from the upper road and reinstalled in the lower main road. The new water line is suppose to be relocated a minimum of 10 horizontal feet from the sewer line, which satisfies the codes for the DNR. Unfortunately the newly installed water lines are at the lowest level of the complete system. In case of a system sewer leak the contaminated sewer water could by gravity end up surrounding the 4" drinking water line.

The service lines with the blue extensions pass perpendicularly over the sewer line without a sleeving as required for the mains. Contamination can occur from leaking service lines as well as leaking mains. Health risk issues should always be a consideration.

What logical explanation could be given that this is a safe installation?

June 14, 2005
Causeway service line

Blue
To new watermain at asphalt road

Fitting directly over 4" sewer main
No protective sleeving over
1" water service line

Big Island Causeway

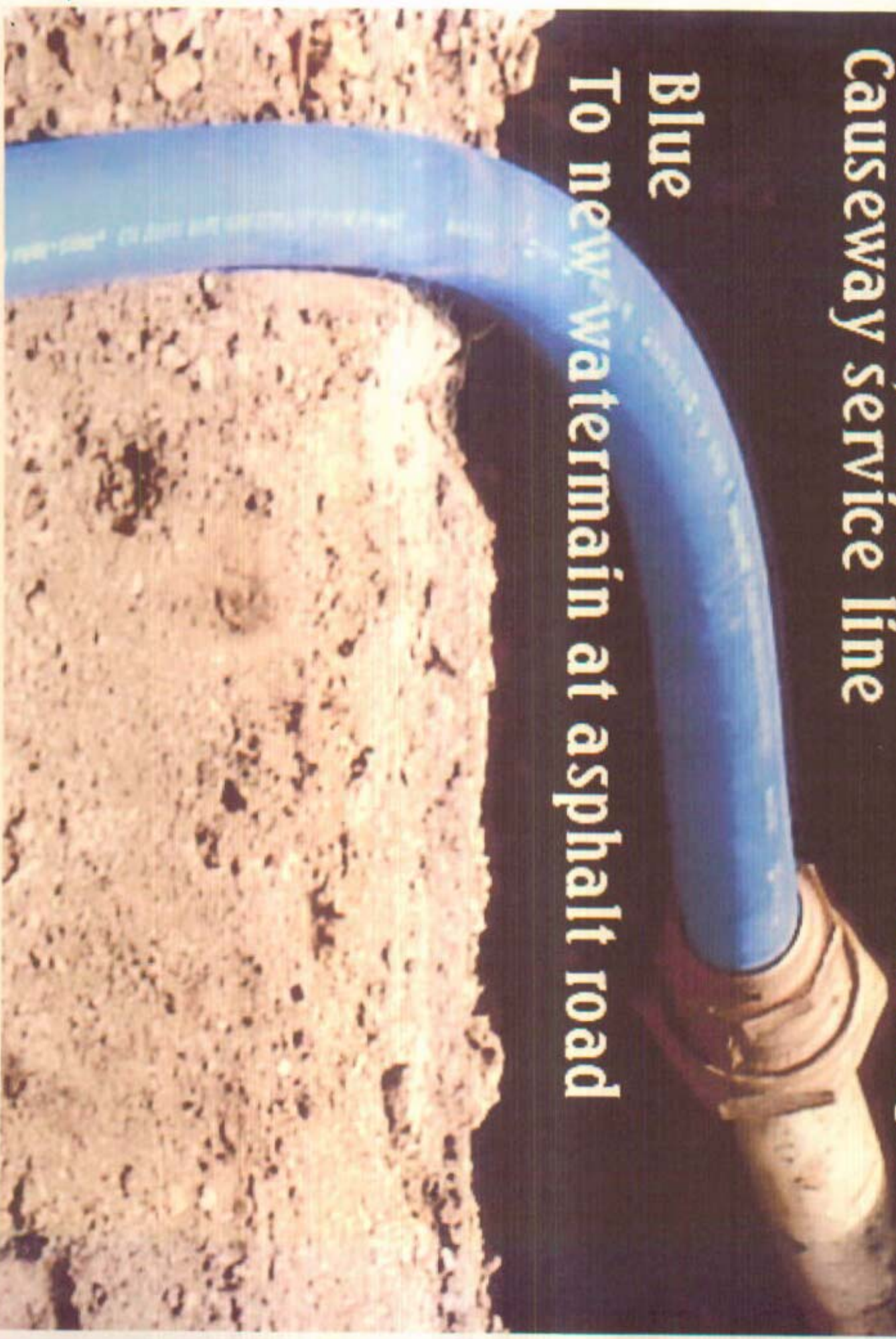
4" sewer main at the
higher level road

New 4" re-installed
water main on lower road

June 14, 2005
Causeway service line

**Water service line connection
directly over the Sewer main
No sleeving**

Blue
To new watermain at asphalt road





CAUSEWAY

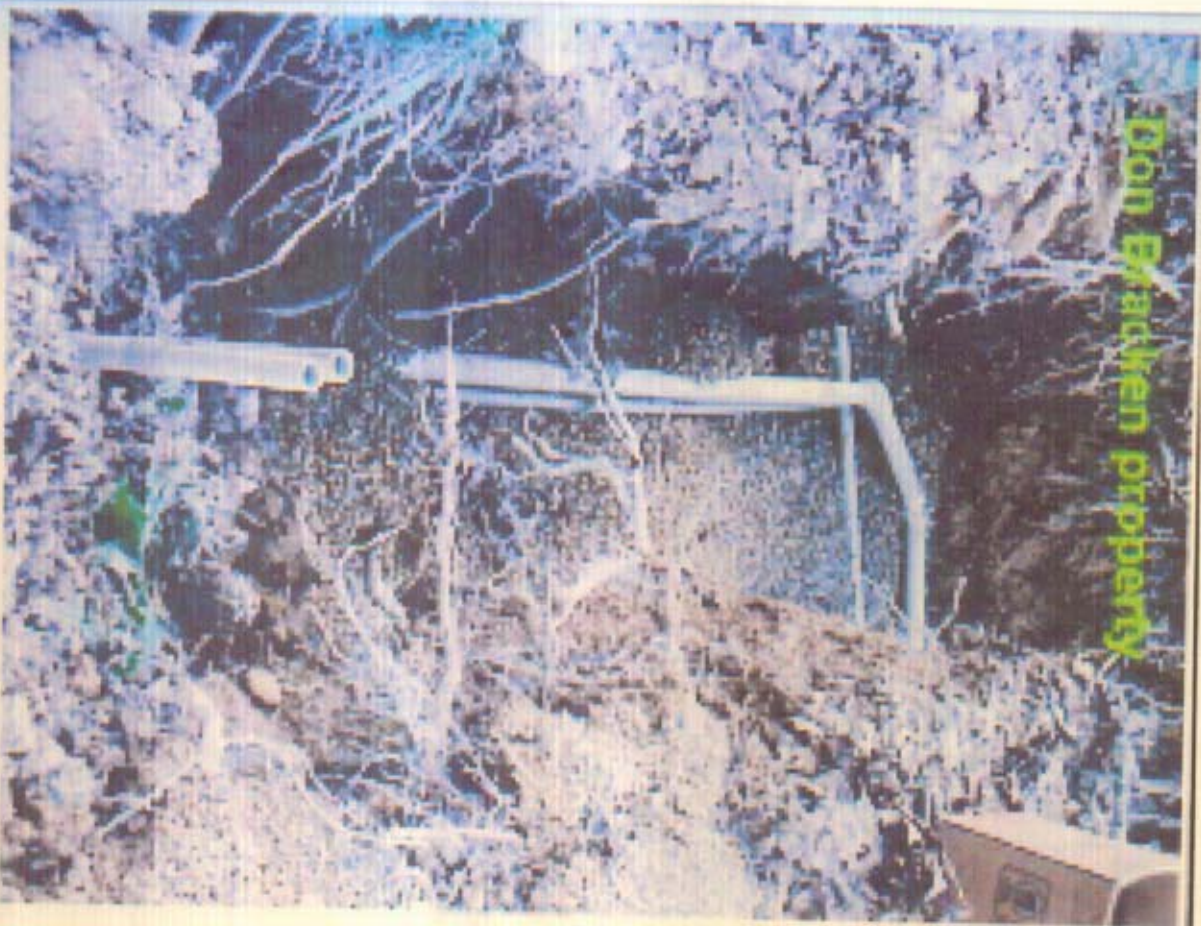
WATER SERVICE LINE
CONNECTION DIRECTLY
ABOVE SEWER MAIN

REINSTALLED WATER MAIN
AT LOWER ROAD LEVEL

1536 Big Island Drive
Sewer and Water valve in same upright



Don Bracken property



Large home next to log home

After March property separated from the main to give the property a full private property area with big open together and center it on top of a hill.

Bracken property

