

CANEBRAKE COUNTY WATER DISTRICT

JANUARY 22, 2020 SPECIAL MEETING

MINUTES

The meeting was called to order approximately 9:15 am by CCWD Board President Jerry Bucheit.

A quorum of board members was present consisting of Bucheit, Bob Mooney and Bruce Woodruff. Water Systems Technician Dean Kuns was present.

Guests included Ron and Bonnie Akey, Bill Fair, Bob Fritz, Jay Price, and Mark Robinson.

The overall purpose of the meeting was to decide specifics about a water line repair.

Agenda topics included:

- Location of the fix
- Selection of 2" or 3" pipe
- Selection of the type of pipe to be used as wells other connections and fittings.
- Type of support to be used for the line
- Determine a Not To Exceed budget.
- Define an approximate timeline.

Location

The Board agreed by consensus that the section between the block tank and where the line goes underground on Carl McKinney's property, a distance of approximately 1600 feet. The majority of the distance will be above ground.

Pipe Size

Woodruff reported that Ferguson Plumbing Supply representatives recommended UV resistant schedule 40 brown pipe with bell fittings. However they do not deliver to the site.

Bucheit reported that Core & Main carries the same pipe and provided free delivery.

Mooney was concerned about the effect of going to 3" pipe from 2" on pressure and inertia, and felt that because 2" pipe worked that should be used. He also suggested that an engineer be contracted to provide assurance 3 inch would work

Bucheit said that an engineer was not needed and that if used would further delay the project.

Bucheit polled the guests for their opinions. Bob Fritz's opinion was that 3" would lower the pressure in the line and would work better than 2". Mark Robinson, previously on the water board, agreed that 3" is preferable. He also mentioned the original CCWD system design was made by an engineer named Case Hewson (sp?). He also said that during his tenure the plan was to replace the line from the metal tank to the underground with 3" pipe.

The consensus decision was made to use 3" pipe.

Service Connections

Robinson remarked that when laying new line a 3" T with a 1" output will be used. If the line is in place a saddle fitting is required to add a service.

There was a discussion concerning meter line sizes. Woodruff wanted to use 1" pipe into the meter. Robinson pointed out that 3/4" is used now.

Woodruff drew a diagram on the chalkboard so all could see the concept.

<DIAGRAM>

From the elevated portion of the line UV resistant 1" service line will be used to the point where the service line goes underground.

Fair asked about the effect 3" line would have on pumping effort. Woodruff responded that because there is lower pressure in the 3" than in the 2" the pumps would actually have to do less work.

Pricing

Bucheit reported that Cone & Main quoted \$4768 plus tax for 1600 feet of schedule 40 belled fitting UV resistant pipe at \$2.98 per foot. That price includes delivery to the site.

Woodruff reported that the Ferguson price was approximately \$5200 without delivery.

A discussion of the use of schedule 80 instead of schedule 40 ensued. The consensus was that schedule 89 should be used if available and affordable as it would last longer.

Above Ground Line Support

A number of ideas were discussed including wood supports, using sand, old tires, and various rebar configurations.

The conclusion was to use 5/8" rebar driven into the ground where possible and embedded in a concrete footer where too rocky. The uprights would be vertical and the support will be field welded to the uprights at the proper level to maintain consistent slope. A U-shaped piece of schedule 40 4 inch pipe would be placed under the 3 inch pipe to prevent abrasion by direct contact with the rebar. The supports are to be placed every 4'.

Budget

The decision to use schedule 80 pipe will require repricing so Bucheit estimated an approximate cost of \$6000 for pipe.

Item	Budget Estimate
Schedule 80 UVR pipe (1600')	\$6000
Service connections, shutoff valves, etc	\$500
Cement	\$500
Rebar	\$500
10% Management Reserve	\$750
Total	\$8250

There was a discussion about unknowns and the need to use a Not to Exceed number that would not be easily changed.

The board consensus was that \$10,000 is the NTE budget for this project.

Tasks and Start Date

The area 3' on either side of the line needs to be cleared. Dean Kuns has done some work and volunteer labor will be called to complete the task.

Bucheit is to call Alexander notifying him of the work on his land and need to clear the area. There is a 2' easement to each side of the line so no push-back is expected.

Bucheit will order the materials this week. Woodruff is to help with bill or materials.

The start date will be the day of material delivery. Woodruff has personal business that require several days' notice before he can assume the role of project leader. Until Woodruff is available Kuns and volunteer labor will clear and prepare the area, and move the pipe along the line for assembly.

Akey will prepare the 4" pipe cushions.

Preparation of the rebar was not assigned.

The times line was estimated at a week to clear the line area, 2 days to expose the buried line, 2 days to assemble the pipe and service connections, and an unknown amount of time to install the rebar supports.

Woodruff estimated two weeks for the "plumbing" part of the project.

Bucheit composed a motion to define the project.

Replace the 1600 feet of line from the block tank to the existing 3" line with 3" schedule 80 UV resistant belled brown PVC, service lines, and necessary valves, at a cost Not to Exceed \$10,000.

Woodruff made the motion as defined and Mooney seconded it. This was sufficient for the motion to carry.

Comments after the motion

Robinson said he preferred flanged shutoff valves for easier replacement when they fail. Woodruff said that any mechanism that did not require cutting was desirable.

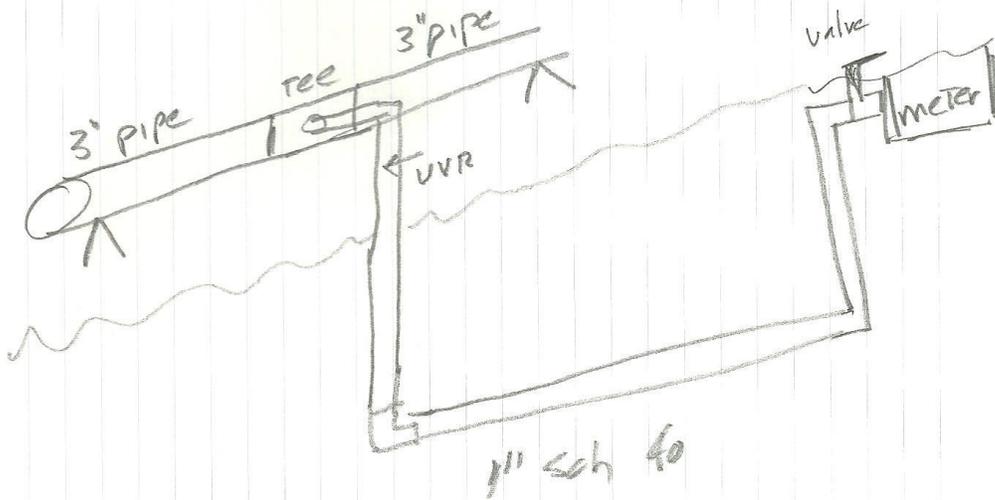
Woodruff said UV resistant paint is available and should be a project for future years. Woodruff also wants to replace all meters as they fail with smart meters that make meter reading automated. Beginning cost of smart meters is approximately \$300.

The portion of the replaced area that is underground should be remeasured so less expensive PVC pipe can be ordered for that section.

The meeting adjourned approximately 10:45 am.

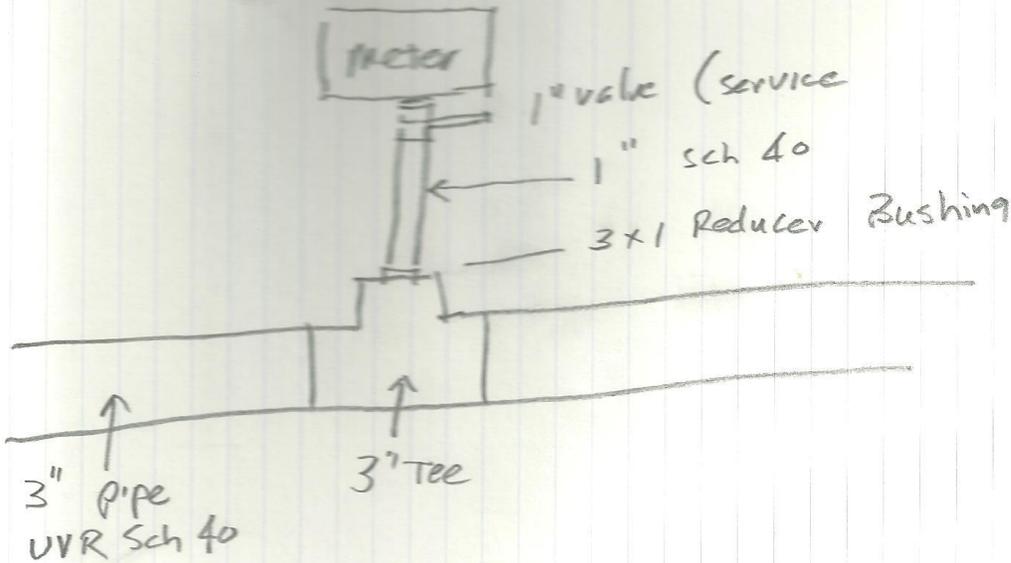
Meeting minutes done by Bob Fritz.

ELEVATION VIEW



NORTHROP GRUMMAN

PLAN VIEW



NORTHROP GRUMMAN