MARCH 30, 2016 MENDON WATER BOARD MEETING

In attendance:

Water Board – Allan Kent, Chairman and Dean D'Alessandro with Pat Vandenberg acting as Secretary; Dwight Watson was unable to attend. Tim Watson, water operator for Mendon and superintendent of the Hopedale water department, was also in attendance.

Selectmen – Mark Reil, Chairman, Rich Schofield; Diane Willoughby, Secretary for the board of selectmen; selectman Chris Burke was unavailable.

Kim Newman, Town Administrator was also in attendance.

Fin Com - Lawney Tinio was the Fin Com's representative.

Kevin Ruddin, Alan Tetrault from the Highway Department and a number of other people were also present.

[additional information has been supplied after the meeting by Allan Kent and is noted in square brackets. It is not part of the minutes.]

7:05PM – Meeting called to order. Meeting was being filmed (video taped) as it followed the earlier Selectmen's Meeting.

In line with the Water Board agenda Allan Kent presented, he suggested that item 1, purchase of water, be taken up last as it was probably going to take the longest.

+ 2 Cape Rd fire hydrant +

Allan called Dick Skinner to the table to explain his problems with the hydrant in front of his home.

Dick Skinner talked about the fire hydrant at 2 Cape Road which has been out of service for some time. The Hopedale (Mendon?) Fire Department took the hydrant out of service as all of the bolts and nuts that hold down the cap are corroded. Dick brought pictures of the fire hydrant showing its current state and a close-up of the cap showing the corrosion overlaying the nuts and bolts. Rick Schofield asked about the 1999 date on the pictures; it was a problem Dick had with the camera. Dick is willing to buy the nuts and bolts and install them himself so the hydrant can be put back into service. There was a short discussion about who is responsible for the Mendon fire hydrants. Dick Skinner had been told it is Hopedale; which is why he called them about the missing nuts and bolts. Tim Watson, who came up to the table, said that it is the Mendon Fire Department and the Water Department who are in charge of the Mendon hydrants. Tim said that he had operated the hydrant on several occasions and that the particular hydrant is operational even though its nuts and bolts for the cap are corroded. According to Tim Watson the corroded nuts and bolts have no effect on the operation of the hydrant; they just protect the cover. (Mr. Tinio arrived to represent the Fin Com.) After some discussion between Dick Skinner and Tim Watson, Tim agreed to get the necessary nuts and bolts and place them on the hydrant. The Out-of-service plastic sheeting cover will be removed.

+ Approve previous minutes +

Dean D'Alessandro made a motion to accept the December 22^{nd,} 2015, meeting notes as previously, to this meeting, read. Approved unanimously.

+ 21 Cape Rd service +

Next up was a representative of the owners at 21 Cape Road ("Glen of Barrows Contracting") who came to discuss the water service to a proposed auto garage with car wash on that parcel. There is one accepted service and meter that is located on the 21 Cape Road parcel whose water bills have been continuously paid even though there are no permanent building on that lot at present (there is a mobile business office trailer [removed before 5 April 2016]). [The next parcel, number 23 on Cape Rd is shown on tax maps 13 and 14 (as of 1/12/2011) and is the private roadways of which the paved eastwest roadway (Whitten St or William Way) has several fire hydrants along it and the water main feed to Talbot Farm Rd; it has no water service customer along it. The paved north-south roadway (Nathan Dr or Terry Lane) is also part of parcel 23. The next parcel south on Cape Rd is shown as parcel 25 on the tax map but has a postal address of 23 Cape Rd; it also has Mendon water service. All three parcels extend to the eastern lot lines of 12 and 14 Talbott Farm Rd.] Tim Watson said that 21 is an approved lot, by Hopedale's Water Board, that has a meter. If this is a request to get the service split, they will have to go to the Hopedale Water Board and then to Hopedale's town meeting to get approval to split the service for the property. This can only be done after Mendon gives its approval to the proposed business. (It wasn't clear here whether or not such approval has already been received from Mendon.) The Owners want to bring the existing service to all the new buildings being erected on lot 21. For comparison, the property at the SW corner of Hartford Avenue East and Cape Road has 4 businesses on it, all on 1 service meter; both it and the proposed business lot at 21 are each only 1 very large lot. Tim Watson and Rich Schofield both suggested that water usage for the auto repair shop and car wash may fall under forbidden uses in the Hopedale contract. However, Allan Kent pointed out that there are actually 3 contracts with Hopedale; one for the Cape Road area, one for Main Street and one for Dudley Road which are all slightly different as they allow for the different business and residential needs of the areas.

It was decided that the Mendon Water Board needs a letter from the owners of lot 21 that states what the use of the property will be and how much water usage is estimated to be needed (per day, per week, per month, per quarter?). [Allan Kent, later, forwarded a list of typical parameters to be supplied by the customer to be forwarded to the applicant.] The Mendon Water Board has an upcoming meeting with the Hopedale Water Board. Mendon has to prove that this is one large lot and review the Cape Rd contract to make sure that the proposed use is allowable under the terms of the contract. Mr Tim Watson (?) was directed to have the owners write a letter to the Mendon Water Board containing the above information and have it to them before the 14th of April.

Rich Schofield suggested that the Mendon Water Board needs a plot plan of Lot 21 and the areas around it on Cape Road so they can see what the Planning Board is proposing as usages in that area of Mendon. Kevin Rudden stated that the Planning Board has a current plot plan of this lot and, if Allan Kent asks, the Planning Board should give him a copy.

While discussing water usage, it was stated that the belief was that the car wash has to have some kind of recycling system. There is a soccer field going in up the street (south of 25 Cape Rd). Kevin Rudden said that the soccer field (tax map parcel 9 on Bates Street which touches no street) has no requests for water use of any kind. Next to the new soccer field there is going to be a separate garage being built with toilet facilities in it. (ask Kevin Rudden for more details at some point.) [The house at 35 Cape Rd, at the east end of the soccer field, presently has water service.]

+ Meeting with the Hopedale Water Board +

Hopedale has requested that Mendon join them in a meeting of their Water Board on the 14th of April in the Draper Room of the Hopedale Town Hall. It is to discuss interpretations of the contracts. Rick Schofield indicated that he would like to attend and that the Board of Selectmen did get a copy of Hopedale's letter. Tim Watson said that Mendon and Hopedale usually have an annual meeting to iron out non-specific issues that aren't spelled out in the contracts. This year they want to discuss the overall picture of what changes are happening in Mendon and Hopedale. Hopedale has stated that it does not have additional water for Mendon's use. They want to address this before it gets 'out-of-hand.' If we have to purchase more water it will be even more expensive than it already is. Dean D'Alissandro suggested we approach the Planning Board to find out what they are expecting to see as far as increases in business.

+ Unaccounted for water +

We buy water at roughly \$6 per hundred cubic feet and charge Mendon's customers at \$9 per hundred cubic feet. [One cubic foot is 7.48 gallons; the meters are all calibrated in cubic feet.] The Cape Road subsystem has lost as much as 60% in Q1CY15 but mostly, on average, 30% of the water we buy from Hopedale is unaccounted for (either not registered by customer meters, taken from fire hydrants, or lost from leaking pipes and joints). Tim Watson has been replacing meters at about 10 per year; this was the first year. An article Allan Kent found in a water industry trade magazine shows that in one New Jersey town which tested all of its old water meters, one third of the meters, which were 25 years old, didn't register more than 50% of actual water usage passing through those meters. Since most of our meters are old, Mendon may be 'losing' most of the missing water through old meters not reporting correctly. Allan's gross estimate was \$50K to replace all of the old meters.

We may also have leaks in water mains as they are fairly old. Tim Watson had a leak on Bates Street fixed last year when it became obvious that there was a major leak. It cost about \$10k to have a contractor fix the leak; a failed coupling between two pipes.

It is also possible that individuals may be using the hydrants even through they are not supposed to. We could put frangible indicator strips that could be checked to see if the hydrant has been tampered with or locks which only the Mendon Fire Department and the Mendon Highway Department has keys to. [This might present a problem in the case of a large fire during which mutual aid was received.]

The group finally asked: Where should we spend the money first? Once we decide this we will then have to go to town meeting and get the money approved.

Rick Schofield suggested we needed to be able to read all the customers' meters in one day. Tim Watson does do this, however, he hasn't been able to do it until a few days after Hopedale had read their water supply meters. Rick Schofield would like to see the reading done on the same day as Hopedale reads their water meters so input and output can be compared more closely. New meters with drive-by reading capabilities would facilitate this.

In 2015, when Allan went through all the meters readings (source and customer for each quarter), an average of 35% of the water was unaccounted for. 3 to 17 gallons/minute on average is what we appear to be losing (not accounting for) on the Cape Rd subsystem. [0.1 to 0.5 gallons/minute on the Dudley Rd subsystem.] Compared to what Hopedale charges us, the difference is enormous. 32%, over 5 million gallons (700,000 cu ft), is missing in the 2015 year alone. The State of Massachusetts wants to see 10% or less discrepancy, though there was some difference of opinion on whether this criteria applies to Mendon since its systems are so small..

Each of the contracted areas of water service buys water at somewhat different amounts per 100 cubic feet from Hopedale. Main Street subsystem customers pay the maximum amount and are billed directly by Hopedale; Dudley Road subsystem customer's water is purchased from Hopedale at the same rate as a Hopedale resident would pay. The Cape Road subsystem purchases water at a rate somewhere in between.

Tim Watson believes that we can rule out stolen water or major usage that can't be tracked. He tracks large usage, like from a hydrant, and can identify which hydrant has been used. New Hopedale meters catch short term peaks ("stress"). Kevin Rudden had to replace his meter for about \$235 when it got broken. He suggested that everyone's meter get changed and the customers be charged for the new meter. He also suggested we do the 'sniffer' [leak detection] for leaks.

Rick Schofield said he had a problem accepting that the loss spike is due only to old meters. Kevin Rudden stated that he has seen people take water but he isn't sure it was from Mendon's hydrants.

Tim Watson says that the leak on Bates Street was massive and wasn't really noticeable until it was massive. He doesn't feel any water taken from hydrants could possibly

account for as much water as the leak did. Average cost of 'large' requests from the hydrants is about \$40 [240 cu ft or 1800 gallons assuming \$6/100 cu ft].

Tim Watson's estimate is \$1200 for the system for having a company locate leaks (using an acoustic 'sniffer'). He feels there should be no problem using the sniffer with most of the sections except for the Bellingham town line to Cape Road on Hartford Ave East; Bates Road to the end; and 1 other site. These parts of the system have Transite (type AC), non-iron, pipe which is very difficult to be 'sniffed'. He does think the \$1200 however is a good deal. Hopedale does this every year.

Tim Watson said that the balance of meters' replacement cost is estimated at \$34K. Five years is the breakpoint for new or updated meters. Only 12 meters have been replaced so far and it is believed that these would be the only ones to be updated, rather than replaced. The new meters will allow us to be able to drive by and take the meter readings almost instantaneously. Some meters are 2", Tim Watson thinks there are 3 of them, rest are ³/₄". Tim Watson suggested people with 2" meters pay the difference in installation cost.

Kevin Rudden pointed out that those people who have wells will not be willing to pay for water meters they do not need. Rich Schofield agreed with Lawney Tinio that we should use budgeted money. Kim Newman was checking figures as people talked and came up with \$96K in Free Cash and \$660K(?) in the Stabilization Account that could be available to fund the three efforts. People suggested taking the needed monies out of Free Cash. Kevin Rudden also pointed out that we need to have 'talking' points to offset the people arguing about wells vs. town water.

Rich Schofield asked Kim Newman if there was enough money left in the Water Board budget to fund any of the 3 initiatives. She said that there is currently, until the next water bill comes in, enough money in the Water budget to fund the leakage detection.

Dean D'Alessandro made the motion (that passed unanimously) that we go ahead and fund the leakage detection and take the money out of the existing water budget. Kim Newman also stated that she is adding the \$1200 per year to the Water Maintenance Budget request for the next fiscal year. Tim was authorized to contact the leak detection company which Hopedale uses.

Tim Watson said that the replacement/updating of the meters would be done within a year but would take close to the year as there is only Tim and one helper. Kim Newman also suggested doing the money request for the meter replacement as a Special Article so the money runs from one fiscal year to another. What she is putting in currently will be a 'Placeholder' until Tim Watson gets the actual cost and sends the figure to Kim. The request for the meter funds should be on the warrant for the annual town May meeting. As Kim pointed out, however, we also have the special June and August town meetings if we can't get amounts in May.

Dean D'Alessandro suggested we use a security tag on the hydrants as he doesn't like locks. It was agreed that hydrant security didn't need to be considered until after leak detection and meter replacement if they haven't reduced the 'lost' water amount enough.

Meeting adjourned at 8:15 pm.

Minutes by: Pat Vandenberg