

Town of Newington, NH
TECHNICAL REVIEW COMMITTEE

Meeting Minutes, Monday, February 1, 2016

Call to Order: Town Planner, Tom Morgan called the February 1, 2016 meeting at 1:00 p.m.

Present: Eric Weinrieb, Consultant with Altus Engineering; John Stowell, Building Inspector; Andrew Head, Fire Chief; Town Planner, Tom Morgan and Jane Kendall, Recorder

Absent: Leonard Thomas, Highway Department; John Tretter, Police Chief; Denis Messier, Waste Water Plant Manager

Public Guests: Jarrad Savinelli; Joe Coronati with Jones and Beach Engineering; Attorney Bernie Pelech; City of Portsmouth Public Works: Brian Goetz, Deputy Director; Terry Desmaris, City Engineer; Raymond Pezzullo, Assistant City Engineer; Ms. Stanton with Weston&Sampson; Richard Sullivan;

1) Proposal by **Jarrad Savinelli and John Newick** for a 7-lot subdivision at 6 and 34 Fabyan Point Road, Tax Map 47, Lots 5, 6 and 7

Town Planner, Tom Morgan said he had invited the City of Portsmouth Water Department to attend the meeting to address questions regarding water supply along Newington Road and for the proposed development. Brian Goetz, Deputy Director of Public Works introduced Ray Pezzullo, Assistant City Engineer who analyzes and coordinates plan sets. He also introduced Leah Stanton, Senior Associate with Weston&Sampson, their engineering consultant who would address water for fire flow and water system improvements for Newington. Mr. Goetz said Public Works had their own Technical Review Committee that would meet the following day.

Mr. Goetz gave a review of the City's water supply, with the biggest resource coming from the Belamy River, operating out of the Madbury treatment facility running along the Spaulding Turnpike and under Great Bay to serve Portsmouth and surrounding communities of Newington, Newcastle, a good portion of Greenland and some of Rye. He said there were three storage sources in Madbury, one in Greenland, two in Portsmouth and three in Pease, including the Haven well from the Haven springs, which was the original water source for Portsmouth and was over 200 years old, but , it was currently off line due to a PFC contamination issue from the former Air Force base, which they were working together to resolve. Mr. Goetz said Public Works analyzed three of the municipal water accounts in 2013 and found there were 254 residential uses, 76 commercial, and 17 industrial, of which Newington Energy was one of the largest consumers.

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Mr. Goetz said Portsmouth Water Department had implemented a master plan for improvements that included a capital improvement plan to identify and implement improvement projects. He said they would be presenting plans for renovations to the Newington booster station sometime in 2016 through 2017.

Mr. Goetz said there were two pressure zones that distributed three to six million gallons on an average day, and there were 111 fire hydrants in Newington alone. Mr. Goetz said they were made aware of water pressure issues when they were approached by Newington regarding the expansion of the Langdon Library. He said they looked at several solutions and it was determined that tapping off the Pease zone would improve the pressure so so the Town would not have to install a booster and storage tank. He said the Town agreed to pay for the piping and Portsmouth Water Department covered the installation in 2013, increasing pressure by 15-20 pounds.

Ms. Stanton with Weston&Sampson showed a map of the hydrants that the Water Department served and said talked about fire flow analysis, regulations and ISO insurance requirements. She said Fabyan Point was near the dead end of a long main and the studies for Fabyan Point varied from 400 to 440 gallons per minute. She said the 750 gallons per minute ISO requirement was for other kinds of buildings, not residential buildings and the water flow and pressure findings affected the Town's insurance rating and increased the cost of insurance. Ms. Stanton said they would never be improve the water flow and pressure with the existing 8" water main unless they did something to fix it with capital improvements like putting in a loop.

Public Works Engineer, Terry Desmaris said ISO findings were consistent because of the length of the water main, but they could provide water and approval of the application would partly depend on the Town's comfort with fire fighting. Mr. Morgan asked Fire Chief, Andy Head what his comfort level was and Chief Head said none of the hydrants in town met ISO requirements to put fires out by themselves. Mr. Goetz said water pressure had gone up so they could do a new study, which would give them an idea of what was going on, but it wouldn't change the current ISO rating. Mr. Desmaris added that an additional leg of the water main was being added from the Department of Transportation project on Shattuck hill.

Fire Chief Head said he was told there could be breaks in the lines if they used the hydrants. Mr. Goetz said the hydrants were flushed this year so that was probably not accurate. Richard Sullivan of Hodgson Farm Road said lines broke every year on Newington Road. Mr. Goetz said there were a couple of areas that they needed to address, but they were in isolated areas. He said many of the problems dated back to the installation of the lines in the 1950's, but they also had 100 year old water mains in Portsmouth that didn't give them problems. Mr. Desmaris said it was not uncommon for New England towns to have older water mains.

Fire Chief Head said the fire department used tankers so they didn't have to count on the hydrants. Mr. Sullivan said he was concerned that the water pressure would get worse if a new development was added on the line. Chief Head replied that they could also look at other factors like ponds as a water source as well. Town Planner,

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Tom Morgan said will address but will finish City of Portsmouth Water Department water presentation.

Fire Chief Head said it was not fair to say that there was not a problem and that adding developments on a dead end 8" main would not make matters worse. Mr. Goetz, said it was not a problem now, but agreed that there could be a bigger problem if they kept developing.

Mr. Desmaris said a common issue with requests for an "ability to serve" letter saying the Portsmouth Water Department could provide water to individual residents was that they needed to review actual plans and being a part of TRC review would be helpful. He added that there were other things to review like the cost of inspection, installation and the cost of infrastructure. He said the third party inspection between the developer, the City and the engineering service was usually paid for by the developer. He said assets for long term operation and maintenance, including easements would be transferred to the City through a legal document, and the bonding value would be determined on a case by case basis. He said they usually carried a one year maintenance bond, but they would also need a bond in case the project went under.

Mr. Morgan said the Newington Planning Board definitely wanted to engage the Water Department in project review because they didn't want to approve a subdivision and find out later that the Water Department couldn't meet their water needs. He said historically the "ability to serve" letter comes with the set of plans, but the Town would want the City to be part of the TRC process in advance if the plans were incomplete. Eric Weinreib, Town engineering consultant with Altus Engineering said that was why the Water Department had been invited to be a part of the initial conversation because they didn't want to grant Board approval and then find out there had been wholesale plan changes. Mr. Morgan agreed that the Planning Board would want recommendations from the TRC and an "ability to serve" letter from the Water Department before granting an approval.

Mr. Weinreib said there was no fee from the Water Department to provide the letter, but he wondered if there would be a charge for them to attend the TRC and review plans from technical standpoint. Mr. Goetz said they would bring in consultants as needed to review plans and those costs would be passed on the same as they would be passed on to Portsmouth applicants.

Mr. Morgan provided Mr. Pezzullo with the most recent plans and asked if the plans were in sufficient detail to get going. Mr. Coronati said he was learning more about the kinds of details that were required, but they had removed the plan for curbing along Fabyan Point Road to prevent complications.

Mr. Morgan asked if five lots would create a significant demand and Chief Head said it might not, but he wondered about the next five and they would need to consider case by case.

Mr. Weinrieb said asked if their master plan addressed future needs. Mr. Goetz replied that their master plan recommended putting the entire area into Pease pressure zone, which would increase the pressure by 10-15 pounds. Mr. Morgan commented that

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Fabyan Point was out of the area and Mr. Goetz said other upgrades could be done, include upsizing the main or using different loopings.

Chief Head asked if anything specific was planned and Mr. Goetz replied that they had been impacted by the Haven well contamination issue that affected capacity and they had to resolve that issue with the Air Force first because they had to be cognizant of water quality. He said no date had been given as yet.

Mr. Sullivan asked if they could loop the end line back to Pease and Mr. Morgan replied that the line could only go under the runway, which would not be possible. Mr. Weinreib added that there was a lot of wetlands and concrete.

Mr. Desmaris said when it came to fighting a fire in the proposed five lot development, they needed to keep in mind that there would be individual homes and not attached homes, but they still needed to address the water pressure issues before they considered future expansion. Fire Chief Head said they also needed to keep in mind that pressure and flow were two different things.

Mr. Sullivan commented that there were developments going in at the end of Newington Road in Greenland and the Smith Farm that could be still be developed. Mr. Desmaris said they would still need to go before their Town boards and get "ability to Serve" letters for approval as well.

Mr. Weinrieb asked if the lots had residential sprinkler fire suppression. Fire Chief Head said sprinklers would still create a similar demand for water as would hydrants, but many towns didn't have hydrants and they utilized other alternatives like a cistern or a fire pond. Mr. Weinrieb asked what the sprinklers would cost and Fire Chief Head said approximately \$4,000 per house but many owners didn't like them because could cause additional damage during a fire.

Mr. Sullivan asked how the water issue affected homeowners' insurance costs and Fire Chief Head said it affected the tax base, but a new study might help address that issue.

Joe Coronati with Jones and Beach commented that these were two acre lots and asked why wells couldn't be used instead. Mr. Goetz, said he had no purview over wells, but wells wouldn't necessarily address the water flow issue for fires and the PFC contamination issue from Pease had also affected some wells in Newington, which would require costly treatment systems, so he wouldn't recommend it. Mr. Coronati replied that there were two existing homes on on well water on Fabyan Point, but the developer would still have to address fire flow.

Mr. Sullivan asked about using both City water and well water and Mr. Goetz replied that they wouldn't allow both wouldn't allow both. Mr. Weinreib commented that subdivision approval would specify that the two existing homes would stay on wells and stubs would be provided if their well water went bad and Mr. Coronati had suggested doing the same with the new homes. Mr. Sullivan said he thought City water connection was in the regulations Mr. Morgan said another subdivision on Fox Point Road had made a similar request and the Planning Board entertained several debates, so it might be worth discussing again at the next Planning Board review.

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Mr. Weinreib asked Mr. Goetz to explain the change of policy regarding connection to the high pressure main for the Fox Point development. Mr. Goetz, said the previous general foreman had allowed some customers to connect to the 24" high pressure main that ran from Madbury to the Emery Farm in Durham and the Newington booster tank, but it was determined that those connections could compromise the integrity of the main line that brought water from Madbury to Newington. Mr. Desmaris added that the pipe was constructed in layers and Mr. Goetz added that it was an older line with a sixteen week lead time waiting for replacement parts so it was not something that could just be welded. Mr. Morgan added that the sixty year old line that ran under the bay, accounted for two-thirds of the water supply. He said although they were working on contingency plans for other alternatives to hook to new high pressure system eventually, they still needed to protect and preserve this line until that time.

Mr. Morgan asked for about the approval process and the turnover time, noting that the Planning Board would hold off on approval until they received the "ability to serve" letter. Mr. Desmaris and Public Works Assistant Engineer, Ray Pezzullo said they usually waited for the planning review and comments. Mr. Weinreib commented that it might take a couple trips back and forth. Mr. Morgan said the Planning Board was scheduled to meet the following week and wondered when the Water Department would be able to make a determination. Mr. Goetz, said he thought it might not be until some time in March.

Mr. Sullivan asked when the Haven well issue would be squared away. Mr. Goetz, stated that they had reached an initial agreement with the Air Force, and they were working on the next phase to design and construct an upgrade. He said the earliest completion date expected would be two years out.

Mr. Sullivan said he was a building developer himself, but asked how they could guarantee adequate water for this subdivision and prevent Greenland from adding more developments that would impact the water line further. Mr. Morgan said he brought up a good point that the the Planning Board would need to give consideration. Mr. Coronati replied that the domestic water supply was fine, but they would probably have to augment it with fire flow protection, which was not uncommon except when there were hydrants present.

Building Inspector, John Stowell said the last time he spoke with Mr. Desmaris , it was stated that the situation might not be ideal, but it would meet standards, only now he was hearing something different. Fire Chief Head said they would work together to come up with some kind of solution, such as a fire pond or cistern.

Mr. Sullivan said this applicant shouldn't be crucified, but the Water Department needed to be clear going forward that they couldn't supply water for every developer in the area. Fire Chief Head said planners also needed to make sure new developments didn't impact existing customers and remember that improvements would be passed on to rate payers. Mr. Desmaris said they would have to pass on improvement costs to another developer if they received significant requests by another development in the area in the future on that road, that development would have to pay for improvements

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for that development. Mr. Morgan said the Planning Board needs to have that conversation going forward.

Attorney Bernie Pelech, representing the applicant asked if their comments were based on their 2011 model. Mr. Desmaris said the model was based on actual tests. Mr. Sullivan said ten houses had been built in Newington since then. Mr. Goetz, said they had to be careful with planning for domestic use so water wouldn't sit and turn stagnant in the tanks. Another resident from Fabyan Point Road asked if Greenland and Newington coordinated their development and water plans. Mr. Morgan said State law requires Greenland to notify Newington of development impacts.

Mr. Sullivan asked about booster pumps and Mr. Weinreib said there would be too much pressure on the 50 year old line that could cause leaking.

Mr. Morgan called a brief break at 2:21 p.m. The meeting resumed at 2:29 p.m.

Mr. Morgan asked Fire Chief Head if he had additional thoughts regarding adequate water supply for the proposed development. Chief Head said he didn't agree that there would be adequate PSI, but said fire ponds usually worked. Mr. Morgan asked if they would still work in winter when they froze and Chief Head replied that they would have to cut a hole in the top. He said if there were a fire, they would also call mutual aid and would shuttle water in from tankers once they tapped in to the hydrant.

Mr. Coronati said they had **provided plans to the** Water Department every time, but they were pretty backed up. Mr. Coronati asked if this was always the situation always this way or if it was a recent development. Mr. Weinreib said the Public Works Department had changed since there had been so much development in downtown Portsmouth. Attorney Pelech commented that Portsmouth had a larger planning, legal and department of public works than Manchester and kept hiring more consultants and none of them were New Hampshire residents. Mr. Morgan commented that the process would improve with the members of the Water Department attending the TRC meetings

Discussion ensued regarding the depth and dimensions the pond. Mr. Morgan asked where the fire pond would be located and Mr. Coronati said they proposed placing it in the area that was already wet. He added that building the pond deeper and wider would impact the lot and the pond might not be needed in five years after Portsmouth upgraded the lines and improved the pressure.

Mr. Sullivan commented that the residents of Hodgson Farm Lane would not be happy if the drainage from this Fabyan Point Road ran toward their homes and didn't think both a detention pond and a fire pond should be welcome so he suggested placing the detention on the other side of Fabyan Point Road. Mr. Morgan said the applicant still needed to go before the Planning Board who would determine whether they would approve the ponds or not. Mr. Weinrieb agreed and commented that although there were two abutters present, this was a TRC meeting, not a public hearing.

Mr. Morgan asked Chief Head if he had any alternative suggestions if the Planning Board didn't like the fire pond. Fire Chief Head said they could build a cistern

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instead. Mr. Weinreib said a cistern would be more reliable. Mr. Coronati said a cement cistern would involve more costs, require maintenance and need replacement in 50-70 years. Mr. Weinreib said he hoped they would have a better water supply by then. Mr. Weinreib said they would need documentation because there were no computations that would guarantee the water source would not be compromised in circumstances like a drought. Mr. Coronati said they would need a well and Mr. Savinelli added that they would establish a maintenance plan through the homeowners' association. Attorney Pelech said it had already been written and was with Town counsel for review.

Mr. Morgan said the Planning Board would ask Chief Head for formal recommendations in the coming weeks. Fire Chief Head said he would need gallonage information on the pond and not speculation. Mr. Weinrieb said he would want to know what size cistern would be needed as well and Fire Chief Head said he would need to review it further.

Mr. Morgan asked if there were any comments on Mr. Weinrieb's letter dated January 27, 2016. Mr. Coronati said plans had been reviewed by the assessor and they had received an amended subdivision approval from the State.

Mr. Coronati then went through several items of question with Mr. Weinrieb. He said was that the Planning Board said they didn't want the curbing or a detention pond so they removed the curbing from the proposal. He said the detention pond would not have required an Alteration of Terrain (AOT) permit, but the new proposal would require a different infiltration pond to meet AOT requirements. Mr. Morgan asked what his preference was and Mr. Coronati said AOT provided a list of either gravel basins or wet extended detention ponds but they were all deeper and wider, so their preference was for a wet pond because it was the simplest to build and maintain.

Mr. Coronati stated that they removed the curbing at the Planning Board's recommendation. Mr. Savinelli said that the biggest concern with the curbing was in regards to the depth of the detention pond. Mr. Sullivan said the curbing would cause more water to flow in.

Mr. Weinreib said the Planning Board was concerned with a 14' deep pond and now they were 20' deep with a steep slope and 17' below the finished grade of the road that would warrant fence; but as previously mentioned, even then it could be tempting for kids in a residential area to climb over. Mr. Coronati stated that the forebay went up and then down into pond. Mr. Weinreib replied that the forebay would be at 14'. Mr. Weinrieb also noted that they would need a waiver from the subdivision regulations if the slope of the road steepened, but he would not necessarily be opposed to that. Mr. Morgan said it was up to the applicant to revise the plan accordingly or write letter requesting the waiver with reasons for the request.

Another abutter from Hodgson Farm Road asked if it would be possible to drive into the pond. Mr. Savinelli replied that there would be too much buffer coming down Fabyan Point Road.

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Mr. Morgan commented that Mr. John Newick had changed his driveway cut. Mr. Coronati replied that because the road had been redesigned away from his house by 50' it should not be an issue. Mr. Morgan said his existing two curb cuts were grandfathered, but both would not be returned if he changed them. Mr. Coronati responded that he would then need to extend his existing curb cut.

Mr. Weinrieb went on to comment that clarification was needed regarding the relocation of the stone walls if possible so there would be no misunderstandings during inspection. Mr. Coronati said they might need to move a small amount of stone along the Newington Road entrance. Mr. Weinrieb suggested they consider wrapping the stone around the corner.

Mr. Morgan asked Mr. Coronati if he agreed with Mr. Weinrieb's comments regarding stormwater controls and Mr. Coronati replied that he expected to receive comments from AOT in 3-4 weeks. Mr. Morgan said they probably wouldn't have revised plans by the following Monday, but the Planning Board would want a current plan before recommending the AOT plan. Mr. Weinrieb advised Mr. Coronati to return the note on the detail if the site conditions required underdrains to be installed.

Mr. Sullivan said he hadn't "Shanghaied" neighbors, but they had all expressed concern with the pond and asked why they couldn't put it on the other side of road. Mr. Savinelli replied that water couldn't flow uphill and Mr. Sullivan suggested they dig a deeper pond or put construct a cistern because no one could guarantee it wouldn't overflow in heavy rains.

Mr. Savinelli asked about the private pond on Hodgson Farm Lane. Mr. Sullivan replied that overflow had always been a problem and this additional pond could contribute further to the water problem. He said he was sure he would not want a pond beside his house. The other Hodgson Farm lane resident asked why they needed ponds instead of letting the water drain as it had. Mr. Coronati said the State and the Town required some kind of mechanism drainage solution to slow down the stormwater runoff from the road. He said they were widening and paving Fabyan Point Road, adding five homes, with driveways which would add to impervious surfaces so they were recommending two ponds and five rain gardens. He said currently the field has been mowed, but future owners might not want to mow all 80,000 square feet.

Mr. Weinrieb commented that there might be other opportunities to configure the pond or site the pond on the north side of the road, but there were other issues that wouldn't deal with the south side of the roadway. He said the State would require that they mimic preexisting drainage conditions or improve them.

Mr. Morgan asked the applicant if they were prepared to address all of Mr. Weinrieb's comments when they appeared before the Planning Board, and if they were not, he recommended presenting a letter stating which items still needed to be addressed to minimize the number of technical issues before the Board, such as whether to put a fence around the pond or not. Mr. Coronati replied that the plans might not be ready, but agreed to present a letter informing the Board on how the issues would be addressed. Mr. Morgan encouraged Mr. Coronati to work with Mr. Weinrieb

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so that they could go before the Planning Board with as few issues as possible. Mr. Weinrieb asked if he would need to attend the Board meeting and Mr. Morgan replied that he would send an email to the Chair to make the call.

Adjournment: The meeting *adjourned at 3:20 p.m.*

Next Meeting: TBD

**Respectfully
Submitted by:** Jane K. Kendall, Recording Secretary