White Paper

WILLIAMSTOWN CITIZENS FOR INFORMED DECISIONS

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A "WHITE PAPER" ON THE TOWN OF WILLIAMSTOWN WARRANT ARTICLE PROPOSING BORROWING OF $875,000 TO CONSTRUCT A WATER LINE ALONG COLD SPRING ROAD (U.S. ROUTE 7) TO SOUTH WILLIAMSTOWN

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Q: WHY IS THIS BOND ISSUE BEING PROPOSED?

A: This bond issue is being proposed to facilitate two major developments. The first is a new building for the Williamstown Art Conservation Center whose current building will be razed to make room for the expansion of the Clark Art Institute. The second is a 68-unit expansion of the Sweetwood Continuing Care facility.

Neither of these projects conforms to zoning requirements for South Williamstown; however, both have received zoning exemptions. The Clark/conservation lab claims an exemption that is available to all institutions with an educational dimension; Sweetwood received a special permit for its expansion from the Zoning Board. Assuming that the project's initial contract cost is not more than currently estimated, the bond would allow the town to construct a 16-inch water main along U.S. Route 7 (Cold Spring Road). This main would also provide Mount Greylock Regional High School with a new source of water.

Q: WHY ARE WE BEING ASKED TO VOTE ON IT AGAIN?

A: Some Williamstown residents felt that the initial vote rejecting the bond issue was flawed, and they petitioned for a revote, and the Selectmen chose the earliest possible date for this vote. Many concerned citizens have expressed frustration at a lack of clear information about the project, which is why this white paper was written.

Q: I KEEP HEARING THIS PROJECT IS GOING TO BE "FREE." IS THAT TRUE?

A: Unfortunately, it is not true. The most obvious potential cost would be the need to repair or replace the low-volume sewer line along Cold Spring Road. Without strict enforcement of the scheme for a timed discharge into the sewer (at night when the high school is closed), the line could rupture, and the town leadership has promised nothing about contracts with the school district, the Clark, or Sweetwood regarding their liability for a broken sewer. This problem has taken on fresh urgency with the news that the engineering report does not include sewage from a café and Visitor's Center in its calculations or recommendations.

Yet another concern arises from the less-obvious costs whose contours can be seen in the town's published financial forecast for repaying the debt on the waterline. The town anticipates that it will recover the amount of the loan from water receipts from the three institutional users, but the financial forecast published by the town gives little indication of any guarantees from the three institutions or allowances for contingencies. What will happen if the Clark closes its café or Sweetwood builds fewer units? Moreover, the town's figures seem to ignore the fact that it loses water receipts from the conservation lab when it moves from its

current location. So the net gain to water system receipts may be less than the forecast. Certainly the enlarged museum will make up part of the difference, but the town's forecast does little to reassure inquisitive voters that its numbers add up.

But the bigger looming cost lies in the annual deficit that the town's own figures forecast for the waterline. Town leadership has emphasized that both principal and interest on the bond will be covered by "new" water receipts from the institutional users. The waterline has therefore been called "free," and many of its advocates believe the waterline will limit future tax increases. The figures the town itself uses, however, tell a different story. The town's own estimates peg the combined water receipts from the high school, Sweetwood, and the conservation lab at $49,000/year. Meanwhile, the town also estimates that debt service alone on the bond issue will total $ 57,000/year (jumping to $75,000 in Year 5). When the annual cost of labor and services ($17,600 in 2005 rising to $24,900 in 2024) are added, the discrepancy widens. It gets so wide that over the 20-year life of the bond, the shortfall totals $868,000.

This large discrepancy -- that is built into the town's own financial forecast -- must be covered by revenues of the entire water system, not just receipts from the institutional users. Funds that cover the waterline's shortfall are not available to enter either the water system's own Reserve Fund or the town's General Fund (the annual budget). The absence of these funds from the revenue stream of the town has the effect of making an indirect subsidy from Williamstown's water users and its taxpayers to the waterline that totals approximately $25,000/year for four years and $50,000/year thereafter.

Structuring the debt in this manner constitutes a "back door" tax on the water rate payers and even all the taxpayers because the water revenues that might have been used to hire badly needed teachers or make school improvements have instead been siphoned off to support the waterline.

Back-end loading the debt lends credence to the picture of a feasible water project whose primary purpose would be supplying fresh drinking water to the children without burdening the taxpayers. But when examined more closely, the waterline proposal rests on several important financial compromises that drain scarce resources and burden us all for an entire generation.

Among the more sobering potential hidden costs are the ones that are longer term. As a resort community whose attractions include its landscapes and natural vistas, we may find that this waterline eventually kills the goose that lays the golden egg. The economic impact of sprawl development across a landscape is difficult to calculate, but as many a shore and mountain community can attest, sprawl development --that contravenes the vision of our Master Plan -- corrodes a resort town's economy. A close study of the town's zoning map reveals that much of the open space in South Williamstown (easily reached by an extendable water line), including large large sections that enjoy the imposing view of the Hopper, is not under any conservation restriction and could be subject to large development. The resulting economic losses are not sudden and dramatic like closing the Sprague plant or losing General Cable. The economic impact extends over a decade and beyond, a period marked by ongoing bitter quarrels with developers. More sadly, those alterations to the landscape are irreversible, and our children, the principle reason for building a water line in the first place, would have lost one of the more spectacular natural settings in New England.

Q: I KEEP HEARING ABOUT THE WATER AT THE HIGH SCHOOL. WHAT'S WRONG WITH IT?

A: This past spring, the water at the high school was found to contain traces of perchlorate, a man-made substance used in high-performance rocket fuels and fireworks. Perchlorate can also be a by-product of chemical reactions occurring

within water storage systems. While studies show adverse health effects from exposure to extremely high levels of perchlorate, the risks from exposure to very low levels of perchlorate are not known. However even if perchlorate in trace amounts carries lower risk, the school rightly chose to switch to bottled water as soon as any risk was known, **and with the use of pure water from Sands Springs for drinking, the hazard to the students has been eliminated.**

On November 29, 2004 the school released its water testing reports from the last several months, showing that ALL SAMPLES were taken from THE TAP. The data does not indicate whether perchlorate would also be found in the wells themselves, leaving open the question of whether it is in the ground water or instead was generated at some point within the school's water system. A properly conducted investigation would collect samples from various points in the system, including the wells, in order to identify the point of origin of the perchlorate.

Q: ALL I CARE ABOUT IS GETTING CLEAN WATER FOR MGRHS. IS THE WATER MAIN A GOOD WAY TO DO THAT?

A: The water main will cost at least $3.4 million, and town officials say it will not deliver any water for two years. Meanwhile, we already know that there are several less costly and less risky ways to get water to the high school, and all of them qualify for state funding. Senator Nuciforo was helpful in getting FULL funding ($286,000) for the school to connect to the waterline, and Represen-tative Bosley has committed his assistance in seeking 100% state funding for an alternative resolution to the school's water needs. Rep. Bosley explicitly said that MGRHS should apply to the Dept. of Education's emergency funds (the "pothole fund") when we know which alternative we wish to pursue. **With this kind of support from our legislators, and by pulling together with Williamstown's citizens who have already mani-fested their good will for the high school by supporting the waterline, the school can aggressively seek help from many sources. It is important to bear one fact in mind: there is no water emergency at the high school and there is no rush.** A careful analysis of the potential remedies for the school should be undertaken in the coming months - with the assistance from local scientists, technical analysts, and attorneys who have already volun-teered to help -- and work out the best solution. Some of the options worth exploring include:

1) Bottled Water

For the near term, the school is already addressing the issue through the effective solution of providing bottled water from Sand Springs at a cost of about $6,500 per year, which is a fraction of the school's initial estimates of $25,000. The state DEP will allow the school to use this solution for 2-3 years while a more permanent solution is under study. Aside from the $6,500 annual cost, the other burdens described by the school consist of additional custodial effort to manage the bottles, and fewer offerings of soup or pasta. These costs and burdens are easily addressed without the need for a 16-inch water main.

2) Utilizing Wells Already Drilled on School Property by the Clark

When the Clark first proposed the Phelps Knoll project last year, it decided that the best way to obtain water was by digging new wells on the Mt. Greylock property and utilizing that water for its own project, Sweetwood, and the school. The Clark dug three test wells (one on its own parcel and two on high school property). **Surprisingly, a list of water supply options recently put together by the high school administration failed to make any mention of these wells.** A common misunderstanding was that these wells were dry. That is not the case.

The three test wells did not provide sufficient water to meet the needs of all *three* institutions, which were estimated to require a total of 50,000 - 60,000 gallons per day. However, the adequacy of one or more of these wells for the high school alone (which according to the DEP requires 10,000 gallons per day) was not explored. The Well Completion Reports

filed by Gould drillers found that, based on very preliminary flow data, the two wells on Mt. Greylock property yielded 3 (Well No. 1) and 35 (Well No. 2) gallons per minute, and the well on the Clark parcel (Well No. 3) yielded 5 gpm. The field pump tests indicated that the 35 gpm rate of Well No. 2 dropped off within 2 hours. However, no formal pump test has been done to see whether this well could provide some or all of the school's needs (estimated at 30 gallons per minute), or whether its sustained yield could be increased by hydrofracturing (a method that crumbles below-surface rock in order to produce a greater volume of water from a well).

On November 29, 2004, Gould drillers indicated that at a depth of 693 feet in Well No. 2, it encountered a flow of water so abundant that it interfered with the operation of their air hammer. A field pump test conducted at only 300 feet showed that flow from the well was likely in the range of10 to 15 gpm. No pump test was performed at a lower depth because a larger pump would have been necessary; none was available, and so testing was not pursued further. Well No. 2 is located in the woods about fifteen hundred feet west of the school's current two wells, which are adjacent to the school, and were drilled to depths of only 180 and 380 feet 40 years ago. Thus, Well No. 2 is much deeper, and much further from the school than are the existing wells.

In the over 15 months since Well No. 2 was dug on high school property, neither the school nor the town has done further testing to determine whether this well would meet the school's needs. This should be done promptly. If this well does not yield sufficient water, one or more new wells on school property could be drilled. The school has quoted an estimate of $70,000 to $100,000 per well for drilling and testing. Other well-drilling experts put the base cost at as little as $20,000. These costs need careful, critical examination.

3) Filter the Water

Many public water supplies – including Williamstown's – treat or filter their water to make it safe for drinking. Filtration technology exists that can remove perchlorate. Since the high school's administration never fully explored this option -- despite repeated requests, the administration as of last week had not sent water samples to companies that supply the technology -- the exact cost of such a system remains unknown. (The school has now promised to do this, but has made no results available.) However, reliable estimates put the cost of filtration units at between $15-30,000 per system. At the November Town Meeting the school quoted an annual maintenance figure of $72,760 for two filtration systems (one for each well). The school has now provided a more reasonable range starting at about 1/3 that amount. The school also maintains that two filtration systems are required. The analysis of the filtration option should analyze the feasibility and effectiveness of purchasing only one filtration system and retrofitting interior pipes to connect both wells to that system or, alternatively, drawing all drinking water from one well. After the initial re-piping, all of the school's estimates would be cut at least in half.

Also, the school's assertions that there is "no guarantee that current technology can meet required standards" are mistaken. At least two vendors have stated that there are guarantees available, with the usual caveat that the system would be maintained properly. This work can be done for the school on a contract basis.

4) Other Water Sources

South Williamstown is an area rich in underground reservoirs, natural springs, and abundant well water. In addition to the Sweetwood water supply, both Waubeeka Springs and Cricket Creek Farm also have abundant, clean, and safe water. The Waubeeka system -- the largest public spring in Massachusetts -- has served the Five Corners neighborhood for many years, producing what many claim to be among the finest water in the area. Each of these sources has more than adequate supplies of water for the conservation lab, the school, and Sweetwood.

Rather than wait for negotiations between these private parties and the Clark or the town to be resolved, the school could be proactive in working with the private partners to achieve a creative solution at a much lower price than the multi-million dollar water line. Paying for the pipe to the school from one of these private water sources -- whose owners have stated publicly they will supply water to the school for free -- will require negotiation and collaboration. By re-applying for the state grant and by treating its neighbors as willing partners, the school has excellent prospects for finding an amicable and practical answer to the water question.

Q: WHAT ABOUT FIRE SUPPRESSION?

A: There is no new issue regarding fire suppression at Mount Greylock, and the waterline would not change that for two years or longer. But this subject has become prominent in this debate, so it is important to understand just what it *does* and *does not* mean. It *does* mean that, at some point in the future, when the school significantly renovates a building, or undertakes to construct an entirely new building, it will have to install sprinklers as part of that overall building plan.

However, a project of this magnitude would only be done with a major share of state funding, and the remaining costs would be divided proportionately between Williamstown and Lanesboro. **There are currently no plans to build a new school at that site or to undertake a major renovation as might trigger the need for sprinklers.**

The School Committee is very candid about the fact that it has not conducted a feasibility study or even convened a school building committee to begin planning for new school construction or extensive retrofitting. This process will likely take years. As part of that process, a careful analysis of the costs and specifications of a fire suppression system appropriate for that facility will be done.

The School Committee has discussed the renovations that are planned over the next 5-year period. They are outlined in the school's August 2002 Facility Audit, and they include improving indoor air quality, upgrading air conditioning, installing new boilers, and similar building repairs. **These plans do not include sprinklers, and they are not the type of improvements that trigger a sprinkler requirement. So, for at least the next several years, there is no "fire suppression problem".**

On November 29, 2004, the school superintendent issued a press release listing many anticipated renovations, which he asserts would trigger the sprinkler requirement as "substantial renovations." However, these plans have neither been endorsed by the School Committee nor reflected in any formal feasibility study. Moreover, the school has yet to establish a building committee that would serve as the place where such plans could be fully discussed in consultation with the relevant experts and the community at large. Determining when the sprinkler requirement would be applicable should be made as the long range building plans are developed.

And as always, with or without sprinklers (which are designed to protect property, not people), in the event of a fire all students will safely and quickly exit the building through its many exterior doors. There is no fire safety problem at the school, nor has there been one at any time over the last 42 years.

Another, distinctly remote, possibility is that in 5-10 years, the Mt. Greylock Regional School District might be undone, and Williamstown would construct its own separate high school closer to town. This option has been discussed within the community over the last few years. Its relevance for the water main is that without the high school on its 113-acre parcel, the presence of a 16-inch water main could make this land into a prime location for explosive development.

The manifest needs of the school have been used to motivate voters to support the water main and to deflect attention from legitimate concerns over the development pressures it would bring. But a sober analysis of the school's real

needs and options shows that there is no emergency and no rush. The school can engage in a more careful analysis - with assistance from local experts - over the coming months as it works out the best solution with its supporting communities.

Q: WHAT IS THE SPECIFIC ECONOMIC BENEFIT OF SLOWING DEVELOPMENT?

A: All recent land use plans for Williamstown have endorsed the importance of **smart growth** to protect the town's character as well as its appeal as a tourist destination. The Master Plan (2002) and the Open Space Plan (2004) recommend placing new development in downtown areas that are already developed and already served by water and sewer. The plans state that this strategy makes economic sense on two fronts: it revitalizes the downtown, which helps maintain the town center as a viable commercial zone. And second, by protecting the rural outlying areas of town from development, Williamstown will preserve what it is known for: scenic, rural beauty.

A corollary to smart growth is the recognition by many economic surveys and studies that farms and open land, far from draining local taxes, actually subsidize local government by generating far more in property taxes than they demand in services. Growth and development do not generally lower property tax bills. Numerous studies have shown that residential land is the most expensive for local government to support: it costs the public more money than it pays in taxes and charges. It is more expensive to serve residential areas than commercial, industrial, farm or open land. Large housing developments are the most costly type of land use for towns.

Protecting the sweeping views in the gateway to town is one vital link in protecting the town's economic value: a 1992 planning study of the Cold Spring Road corridor states that "Cold Spring Road is an enormous economic asset that needs to be protected. It is conceivable that with existing zoning is may someday be pressured into more office/corporate uses or more tourist usesÉthe economic value of the corridor's natural setting...is one of the major supports for the local economy. Controlling growth on the corridor is, therefore, a positive economic development strategy" (Connery Associates 1992).

Q: I KEEP HEARING THAT THIS PROJECT THREATENS THE CHARACTER OF OUR TOWN. CAN'T WE USE ZONING TO PROTECT THE SCENIC ROUTE 7 CORRIDOR?

A: With a large-capacity, extendable waterline in place, that may prove very difficult. Currently most of the Route 7 corridor is zoned for 2.5-acre lots. The Massachusetts Supreme Judicial Court has not upheld 2.5 acre zoning as constitutionally permissible if the large lot zoning requirement is in place *only* to preserve land in its natural state or maintain the town's bucolic character, **especially if town water and sewer are in place.** Williamstown places itself in jeopardy of losing its 2.5 acre zoning if it installs the 16-inch water main.

Zoning cases are exceedingly fact specific, but the Massachusetts appellate courts have applied this analysis consistently, and they have a record of being very protective of the constitutional prohibition against the taking of private property without just compensation. Absent some extremely special condition, large lot zoning (one, two or more acres) is upheld where there is NO public water and sewer in the zone affected. <u>BUT, large lot zoning can be, and has been, invalidated when water and sewer is installed.</u>

Q: WHAT ABOUT THE SEWER LINE? I'VE HEARD THAT IT RANGES FROM 2.5 INCHES TO SIX INCHES IN DIAMETER. HOW WILL IT HANDLE WATER FROM A 16-INCH MAIN?

A: A little history is needed here. Back in the 1970s, several of the same actors

involved in these water main discussions were the reason for proposing a large gravity sewer line along Cold Spring Road to address pollution problems in two of Williamstown's streams. Following considerable discussion, the voters of Williamstown opted instead for an alternative small-diameter, pressurized line that would solve the existing problems, but not allow additional growth that could not be met by on-site waste disposal. This decision has clearly worked to prevent large scale development along the Route 7 corridor while allowing small scale additions of new homes. In short, the strategy worked, and Williamstown received over $1 million in federal funds for its innovative approach.

If the mammoth scale of this proposed waterline becomes a fact, the question arises as to whether there is sufficient capacity in the sewer line to hold the waste that would be generated. The only study that has been done on the subject suggests that the estimated 20,000 gallons per day that might be released by the Clark Art Institute could only be accommodated by releasing it only during slack times between 11 PM and 5 AM.

Unfortunately, there is nothing in the engineering report that analyzes the impact of future growth of Clark usage or any of the additional flows that might arise from the expansion at Sweetwood or the hundred or more additional houses, businesses or other structures that might be built to use the available water. For example, **according to the chief engineer at Camp, Dresser, McKee (CDM), his engineering report based its calculations for the sewer on 10-20 employees at the conservation lab, and his calculations include neither the sewage volume from a cafe nor from a Visitor's Center.** His calculations for Sweetwood were based on 100 bedrooms (Sweetwood has announced it would build 60+ units but the number of bedrooms per unit is not known at this time.) Without legally enforceable agreements with the Clark, with Sweetwood, or with any future developers, both the town's sewer and the town's pocketbook face a large risk because if the zoning restrictions ! along Route 7 turn out to be as vulnerable as we believe they are, then the sewer is the weakest link in a very fragile chain.

On Nov. 23, town officials told the Selectmen there is a plan to require the two proposed developments to store sewage in holding takes during the day and pump it through the small-diameter sewer line at night. It is far from clear at this juncture how this policy will be applied in a binding manner on the beneficiaries of the waterline.

The April 23, 2003 report of CDM to Timothy Kaiser, Williamstown Director of Public Works, states that their study concerns: "The Clark Art Institute proposes to discharge 20,000 gallons per day into the 2.5-inch diameter force main that presently serves only Mt. Greylock Regional High School." The "Clark" would be required to hold sewage in tanks and then be allowed to pump 55 gallons per minute for 6 hours during off-peak hours of 11 p.m. to 5 a.m. While no mention is made of additional sewage from proposed Sweetwood expansion, the Director of Public Works informed Hank Art on Nov. 22, 2004 that the 20,000 gpd is actually 10,000 gallons per day from the Williamstown Art Conservation Center and 10,000 gallons per day expected from new Sweetwood expansion. Presumably, that 10,000 gpd figure for the Clark does not include flow from its café or Visitor's Center.

Q: I'VE HEARD A LOT ABOUT THE POSSIBILITY OF UNANTICIPATED COSTS ASSOCIATED WITH THE WATER LINE. WHAT COULD THOSE BE?

A: The claim that this water line will be built at no cost to taxpayers is based on many theoretical assumptions, several of which, may rest on sand. Examples of possible costs that the town has not anticipated or budgeted for include:

1) Cost overruns while the project is underway

2) Unanticipated land-takings by eminent domain

3) Engineering errors in estimating impact on the 2.5 to 6-inch pressur-ized sewer line along Cold Spring Road, causing that line to fail and have to be replaced. In parti-cular, the absence of any figures of sewage from a café and Visitor's Center at the conservation lab casts a troub-ling new light on all the calculations and forecasts in the CDM engineering report.

4) Maintenance of pumps to move the water uphill to Phelps Knoll (the Knoll is perilously close to an elevation where the Stone Hill tank cannot maintain sufficient pressure in the line).

5) Underestimating financing cost of $875,000 bond issue.

6) Discrepancy between actual cost of debt service and projected water receipts.

7) Problems with ledge and stream crossings along the proposed route.

8) Litigation associated with this project and, after it is done, legal challenges to our zoning code.

9) Loss of business for establishments along Cold Spring Road.

10) Loss of tourist revenue from ugly development in the town's scenic gateway

There are also real, but intangible costs which should be weighed as well by the voters as they approach this very important vote about the town's future.

1) Traffic delays and safety issues on Rte. 7 and Rte. 43 due to line construction.

2) Loss of scenic landscape due to development of South Williamstown corridor

3) Safety concerns with additional traffic (and an additional curb cut on Rte. 7 adjacent to the high school entrance) utilizing the conservation lab.

Q: WHY HAVE A DOZEN OR MORE CITIZENS SPENT SO MUCH TIME RESEARCHING THIS PAPER AND PRESENTING IT TO THE PUBLIC? AFTER ALL, THIS IS JUST A WATER LINE!

A: The vote on this bond issue is not just about whether the town should install new infrastructure. It is a vote about altering the character of our town, which generations of Williamstown residents before us have fought hard to preserve. The repercussions of this vote will be felt by our children and by their children.

A water line of this magnitude will not, in the long-run, make our lives easier. Instead, it will provoke a chain of controversies over development and land-use with people whose investment strategies attach little value to the landscape we prize. Towns like Williamstown do not just happen; they are shaped by decisions like this one. When making this choice, it is important to consider what each of us wants our town's future to look like.

On Nov. 9, some townspeople voted for this bond issue believing it was only about delivering safe, abundant water to Mount Greylock Regional High School, or about providing a new educational experience in the arts for them. While the Clark has always been a good neighbor - and undoubtedly would be a good neighbor to the high school - this bond issue, and the major infrastructure project it sets in motion, may not be a win-win for the town. When weighing its potential positive effect on the high school, it is also important to consider the waterline's potentially negative ramifications.