

JOINT BUILDING COMMITTEE-MAPLE WOOD PROJECT

Date: January 10, 2019

Time: 4:00 p.m. start

Present: Councilor Marty Pepin, Councilor Marty Dumont, School Board Member Mark Richardson (arrived late), School Board Member Tom McCallion, Asst. Superintendent Lori Lane, Business Administrator Katie Krauss, Devin McNelly, Maple Wood Principal, Karl Ingoldsby, Facilities Director, Cris Solomon, Architect from Samyn-D'Elia Architects, and Brian Gehris, Milestone Construction, Mike Davey from EEI, Chris Clorite from Control Technologies

Pepin called the meeting to order at 4:00 PM. He stated that since we had guests to speak about the HVAC System Upgrade we would start with that agenda item. Solomon stated that at the last meeting we had discussed Performance Contracting. He stated that two options had been proposed having to do with the mechanicals. He stated that the first was to install new unit ventilators. He stated that the other option was rooftop units and providing more traditional ventilation, heating and cooling. He stated the second option was more money so we went with replacing the unit ventilators in the plans. He stated that EEI will come in and define the energy savings that are available by doing the higher efficiency system and will include mechanicals, lighting, boilers and everything that we know that needs to be done. He stated that EEI will run the numbers and do the engineering and define the actual energy savings and guarantee it. He stated that you can then use that energy savings to finance the project at essentially no cost to the district. He stated that they had reviewed this with EEI last week. He stated that it includes an upgraded system with energy savings as well as some other rebates that they will go out and get for the district. He stated that they also extend the term of the bond to pay for the system. He stated that for the next 12 years while you are paying off the bond they will do an energy audit to make sure that you are meeting the savings. Ingoldsby stated that if we do not meet the energy savings they will write a check to cover the difference. Davey stated that he has never written a check on his projects as they do the engineering and try to be conservative and you will save more than we project. He stated that EEI is a NH based company and we work primarily with NH School Districts. He stated they have done all of the Portsmouth elementary schools and we have a bond vote hearing in Greenland tonight. He stated that the reason Performance Contracting exists is primarily for two reasons. He stated that there are buildings that use the traditional building model that end up not being energy efficient. He stated a recent example of this is Pelham High School. He stated that they did a 35-million-dollar renovation and then brought EEI in because their energy bills were through the roof high. He stated that they came in and identified a lot of things that could be done to improve their existing usage and we actually have a bond vote hearing to do energy efficiency on the building they just finished a few years ago that will pay for itself in the next few years. He stated that rather than coming in after a building has been built and then go to voters for additional funds to correct it, a lot of school districts are turning to EEI during construction and renovation to manage the HVAC and stand behind the performance of the system. He stated that in the control system they put analytics that will monitor all of the points, heating, ventilation so that every month you will get a report that compares the school hours and the ventilation. He stated that it gives you the chance to correct how the system is running. He stated that they started doing this at Plymouth High School and the savings has been over \$100,000.00 over the past few years through the analytics and managing the system. He stated that for the City of Manchester they have been averaging \$325,000.00 savings per year. He stated that they did a preliminary matrix of the project at

hand. He stated that on the matrix ECM stands for Energy Conservation Measure. He stated that they looked at high efficiency gas boilers to replace the existing. He stated that next was to put in a Building Automation System with analytics. He stated that the next ECM there were two options. He stated that the base budget was to replace the existing unit ventilators with new unit ventilators. He stated that unit ventilators are reasonable pieces of equipment that are used a lot in schools because they are cheap. He stated that the down side of them is they take up space in the classroom and they are loud. He stated that they find teachers, if they are able to, will shut them off. He stated under the baseline design there would be twenty of those removed with twenty newer ones going in. He stated the new ones are not much better than the older ones, just newer and shinier. He stated that there have not been any great technological advances in unit ventilators except perhaps being a little quieter. He stated that what was looked as an alternate is a rooftop ventilation unit, ducting to the classrooms and putting a heat coil in each of those ducts to heat the classroom and removing the unit ventilator. He stated this would be space gained back in the classroom. He stated that they had done this at every elementary school in Portsmouth and it has been very successful. He stated that the cost to do this is \$540,000.00. He stated that new unit ventilators would be around \$185,000.00. He stated that if you were to do the new unit ventilators we recommend doing them with better controls and demand based ventilation. He stated that rather than a standard thermostat, you would have a thermostat that reads the CO2 so that as people are breathing you would only bring in enough outside air to meet the needs of the people in the space. He stated that the ones that are there now being in the same amount of outside air no matter how many people are in the room. He stated that you are potentially over ventilating or under ventilation and you have no feedback. ECM4 are variable speed pumps. He stated that they will be able to speak to the control system and modulate the drive to regulate the amount of hot water flow in the building. He stated that they have looked at a spray foam insulation to insulate the walls. He stated that if you poke your head up above the ceiling there is quite a bit of air movement and the outside walls are cold. He stated that if you foam that gap you will get a pretty good return on investment and it would be eligible for some rebate money as well. He stated that they would remove the oil tank. He stated that the current lighting system is fluorescent and the average lifespan of those products is about five years. He stated that they can be replaced with LED retrofit products with 28 watts that would give you dimming capabilities. He stated if they did all the energy savings projects and the roof mount ventilation system, the cost would be \$1,262,871.00, you would save \$27,850.00 per year and be eligible for \$57,500.00 in rebates. He stated that if they were to just do the unit ventilation better system with controls it would be \$899,257.00 and the savings and rebates would be less. He stated that the current budget for the HVAC Systems, including the current scopes and systems is \$844,500.00. He stated that if you went without option 3A, the better ventilation system, it would cost an additional \$386,128.42 but it would pay for itself in 13.86 years. He stated that if you did everything else including all new lighting it would be only \$30,514.42 over current budget and would pay for itself in 1 year. He stated that there are a lot of benefits to doing this as a package and that the controls are properly integrated to the HVAC System. He stated that with Performance construction, it is budget neutral and you take something that has a 13-year payback, and finance it over 15 years, the energy savings would be guaranteed to pay for the financing cost. He stated that it can be done as a lease or sometimes it is rolled into the bond. Solomon stated that as far as the working relationship, EEI would guarantee the energy savings. They would perform the engineering and be managed under Milestones contract. Gehris stated that they have the same relationship with the City of Manchester so we do a lot of work as Milestone in charge of the whole building project. Davey stated that the question for the JBC would be if the

benefit of the roof mounted system is worth the additional \$300,000.00 and get the unit ventilators out of the classroom. He stated that both the unit ventilators and the roof mount system have a life of 15 years. Some equipment may last 40 years. He stated that the benefit of the roof mounted system, if you look at this building as a hundred year building, you have added duct work and infrastructure to your building. He stated that if you go to the ducted system you will just have one piece of equipment on the roof to replace versus twenty unit ventilators. He stated that the life cycle should be thought about. Krauss asked if this work was for the renovations that we are doing or the entire building. Lane stated that this is just for Phase One correct? Davey stated that the only piece that might migrate is the lighting portion. He stated that the majority of the lighting is in these areas. He stated that if they had to back out some of the lighting that would be alright. He stated that the majority of this is in the current scope. McNelly stated that the roof part of the bond is from the multi-purpose room to the rest of the building. He stated that there are no unit ventilators in the kindergarten wing. He stated that there is very little lighting that needs to be replaced so this could all be done another time. Krauss stated that we have been told that we cannot discuss certain things at certain phases. McNelly stated that the majority of the building is under the current JBC group. Lane stated that it also includes the HVAC which is part of the scope. Pepin stated that one issue that came up was the rooftop units that have to be mounted. He asked if they would be straight in or are we ripping ceilings out of every classroom? He asked if you would duct on the roof and drop straight into the classrooms? Davey stated that they have included a budget to deal with any ceiling tiles coming out and going back in. Pepin asked about the cost to remove the old unit ventilators. Davey stated that they were going to be removed anyways. Pepin stated that when the unit ventilators are removed you now have a hole in the floor in the classrooms. Davey stated that there are some ancillary areas like this that we know are coming. Solomon stated that they had not gotten into the fine details of this because they wanted to present it before they got into the engineering. Davey stated that they carry a miscellaneous budget to handle things like that. Pepin stated that he would like to see the unit ventilators removed from the classroom and go in from the top but he does not know where the money will come from. He stated that it is putting them in a spot that they do not know what direction to go in. Lane stated that this was the reason to bring it before the JBC today and see if there was any interest to move forward with it and if not, we will just keep moving forward with some action and go from there. She stated that this bond is the piece whether it is even an option. Gadomski stated that if it is an option that the JBC wants them to explore then he would need to sit with Scott Smith and see what the next step financially would be. He stated that we are \$350,000.00 short. Davey stated that the savings would offset the bond. Krauss stated that they still have to go and ask for the bond. Davey stated that there are many ways the contracts are set up. He stated that they finance these types of projects. He stated that they would finance this over 13 years if you wanted to do that. He stated that it is still a multi-year commitment so would still have to go to the School Board to approve. Davey stated that a lease is also popular. Dumont stated that he has an interest in the lifespan of the equipment. He stated that it will depreciate over a 15 year period. He stated that with all the duct work it creates upkeep and maintenance. Davey stated that there are less moving parts than with the unit ventilators. He stated that each unit ventilator has a hole in the outside wall. He stated that each unit has its own outside damper to bring in the outside air. He stated that each one has its own filter. He stated that now all that would be at the rooftop level. Dumont asked what were the maintenance requirements? Davey stated that they would propose to use the same units that are in the kindergarten wing. He stated that there will be quarterly filter changes. He stated that there will be maintenance savings to the district. Dumont stated what are the warranties? Davey stated that there are

different warranties for different components. He stated from EEI you get a one year parts and labor warranty, the motor and compressor usually have a longer warranty. He stated that he does not like unit ventilators is because they are very susceptible to freeze-ups. Gadomski asked if he had heard that the rooftop units have a life expectancy of 15 years? Davey stated that the IRS would have you depreciate them at this. Ingoldsby stated that at Winnicunnet they had a very aggressive replacement cycle of the filters. Gadomski stated that you have an almost 14 year payoff and you are paying for a rooftop unit that you will be realizing savings for a year. Davey stated that he feels like 20-30 years is a very reasonable expectation for the equipment. Solomon stated that the one-year payoff for the unit ventilators is that the Town is already buying them. He stated that the benefit is that the classroom environment improves as you are getting rid of the large unit, you can monitor air flow better. Dumont stated that without how are we handling the lighting? Solomon stated that it was not a part of the project. Dumont asked if lighting was important or not? Solomon stated that in the terms of energy savings it was. He stated that they had backed themselves into this option. Davey stated that he is within \$30,000.00 of the budget of gaining new lighting throughout the school. He stated that even if you go with EEI and stay with the unit ventilators would stay with the analytics. Gadomski stated that the lighting decision needs to come from the Buildings and Grounds committee because it is out of the JBC's scope as it is for the whole building. Krauss stated that this means that the bond cannot pay for the lighting piece and the district will end up paying for it. Gadomski stated that the Building and Grounds Committee would need to bring it back to the School Board for recommendation and then go to the City Council. Lane asked for the lighting to be broken out of the estimate. Gadomski stated that the lighting in the Phase One portion of the building we are fine with. He stated it is when you branch out to the rest of the building. Solomon stated that it sounds like there needs to be a conversation with the City to see what option they want to pursue. Gadomski stated that it is important for the JBC to make a decision on whether this is something they want to pursue or not, and take it off the table and just move on. He stated if the answer is yes, then I will go and meet with Bob and Scott and have a discussion with them regarding the bond so that there is nothing that will conflict. Krauss stated we need to make a decision because we keep pushing the project out further. Lane stated that we do not have tons of time. Gehris stated that he needs drawings. He stated that they want to get a jump on the start in April and needs to get things pinned down and ordered. Pepin asked Dumont what his feeling was? Dumont stated that he likes all of this stuff. He stated that he thinks the weakness in the schools has been the actual control of the heat and ventilation system so I like what I am hearing. He stated that the only thing he keeps thinking of is that we are doing part of a building and hoping to be able to do more. He stated that putting holes in a roof scares him. He stated that there is no guarantee that everything is going to work right. He stated that the ducts will move from the vibrations. Gehris stated that there is a lot of infrastructure work that goes along with installing the ducts below the roof. He stated that there is an open area below the roofline that you will be able to hit most of the classrooms from. He stated that it is almost like it was designed for this in the future. McCallion stated that every time he has spoken with Belmore regarding the project he says he wants it done right. Pepin asked if the JBC would be comfortable with Gadomski discussing it with Belmore and Smith? He stated that three members of the JBC say to follow up and see where we can go with it. Krauss stated that all of this would have to go through the whole process with School Board and City Council. He stated that it would be about \$380,000.00 additional we are looking at. Gehris stated that Solomon needs to know what direction to head in because he needs to get the engineering design done. He stated that by the time he gets the designs and then bids it out, it could be a month and a half or more. Krauss stated that a bond is going to add to the district's budget. Ingoldsby stated

that it will be offset by the energy savings. Krauss asked if it would be equal? Ingoldsby stated yes, it's guaranteed. Krauss stated that we just had to add a bond of \$30,000 for the roof. Pepin stated that the JBC is telling you to look into it and that is as far as we can go with it at this point. Solomon stated that they can move ahead with the main entry and the boilers. He stated that if the State approves the other piece of the project, we would not be doing it until July 1st anyways. Gehris stated that there needs to be a way to package the drawings so that he can bid out the front lobby as one. He stated that he does not want to link the two because one will slow the other down. Davey asked if the timeline was to be 100% complete by the start of school in September? Solomon stated the main entry yes. Gehris stated that you will have the front entry and office area done for the start of school.

Lane distributed copies of the contract that Frank Lemay had sent to her. Solomon stated that this is an industry wide contract that details the relationship between you and Milestone. He stated that his contract also references this. Gehris stated that this is a standard template which has a line to the left side to signify that you have modified something. He stated that had filled in everything that was known to date and then wanted review of it. He stated that there will be an exhibit A, that once you pin down a guaranteed maximum price, the date and all the stuff that goes with the contract. He stated this is the general agreement to come into a project together. Gadomski stated that on the first page, the Middle School needs to be removed. Solomon stated you can always attach an amendment. Krauss stated that she cannot have any billing for the Middle School with the bond. Lane pointed out that it states this is for SAU 56 and she stated that it needs to be changed to Somersworth School District. Gehris stated that it could be reviewed and marked up with the changes and then fax it back to Milestone to make the changes. Gadomski asked that when it comes time to sign off on the contract who gets to approve it? He asked if it was the JBC or does it have to go back to the City Council? Lane stated that it is the JBC. Lane stated that they will have the attorney review the contract as well. Gehris stated that this contract is the initial thing to get Milestone on board. Gadomski stated to get the final markups to he and Lane and then we can get it to Milestone for the changes. He stated that as soon as they receive the revised contract we will get it to legal. Gehris stated that the JBC could make their markups and then send to legal for any changes they want prior to sending it to Milestone. He stated that the last two pages list all of the modifications to the contract. He stated that it is the AIA Program and there are limited the spots that we can modify. He stated that the GMP will be finalized in Exhibit A at a later date. He stated that right now you are just agreeing to work together and it locks in the fees and the other contingent items. He stated that they need to get the drawing design and price it out. McCallion asked who would sign off on change orders? Gehris stated it was the JBC. Krauss stated that it is usually the Chair of the JBC who signs change orders after getting approval of the JBC. Gehris stated the same process applies for requisitions. Lane stated that the dispute resolution on the last page is probably the typical litigation process. Dumont made a motion seconded by McCallion to accept the pending contract after changes and review by the attorney. VOTE: motion passed, unanimously.

Dumont stated that he wanted to suggest that the Clerk of the works would not be a full time position. He stated that having a Clerk of the Works helps and who the person is is a very important issue. He stated that this process turns into interviews again. He stated that if you do not have a Clerk of the Works, in the chain of liability, there is a break there. He stated that if the JBC circumvents what most would do because of the expense we are accepting some risk. He stated that he strongly supports having a Clerk of the Works and that we should put out an RFP. He stated that when we get their information we can review their resumes and then let

Lane know who we want to talk to. McCallion agreed that a Clerk of the Works is needed. He stated that Ingoldsby is great but he does not want to put that pressure on him. He stated that he agrees they would only need someone part time and if there were to be a problem, hopefully we would not have to deal with as much as we are now at the CTC. Pepin asked Solomon for his opinion as to needing or not needing a Clerk of the Works. Solomon stated that having another set of eyes is always important. He stated that since the trend has been towards Construction Management the Clerk of the Works is a dying breed. He stated that due to the sophistication that Construction Managers have a Clerk of the Works is not needed. He stated with a job this size a Clerk of the Works is not required but an extra set of eyes is beneficial. He stated that it is great to have another person to discuss things and use as a sounding board for ideas. Krauss asked if the cost of a Clerk of the Works will cause us to reduce something somewhere else? Solomon stated that a Clerk of the Works is definitely more money. He stated that it is another layer of management that you are adding so it will cost. Pepin asked what Solomon thought we were looking at as a price? Solomon stated that you probably do not need him to start now while we are going through drawings. Gehris stated they usually kick in when they are doing the final buy-out. He stated that he has never had a Clerk who was involved in the bidding or budget selection. He stated that in the past 15 years he has not worked with a Clerk but he has had owner's representatives. He stated that they would have full testing on this project which is all required. He stated that he has seen Clerk's that were a waste of money and I have seen clerks that have been part of the team and beneficial. He said he would work with anyone that the JBC chooses. He stated that any person needs to have a competency that when they walk on the project they know what they are looking at. He stated that they now have third party inspectors that do all the testing for them. Solomon stated that a Clerk could help with the legal and the oversight. Gadomski asked what would be a ballpark price on this knowing in the scheme of things it is not a huge project and the timeframe is pretty condensed. Lane stated that they had earmarked \$30,000 for the CTC renovations. Solomon stated that project was double in size. Gadomski stated that Krauss is correct that something would be given up to pay for the Clerk. Dumont stated that we need a person who has the ability to be worth the money that we are paying them. Gerhis stated that Clerks tend to be more technical people and OPM, the Owners Project Manager, you are working on behalf of the owner. Dumont stated that the ones that apply, if they are weak in the interviews he is not willing to fill the position. He stated that if you get someone who has the skills, then you have a valuable asset. Solomon stated that at \$16.00 an hour, 20 weeks on the project you would be looking at around \$14,000.00. Dumont stated he is in favor of soliciting for a Clerk of the works. McCallion stated he is in favor of soliciting for a Clerk. Pepin stated that he is not in favor. Lane stated that they did a full RFP last time. Dumont stated that it had to have a list of qualifications. Pepin asked Richardson, who had walked in, what his opinion was of a Clerk of the Works? Richardson stated that he would like to see a Clerk of the Works. He stated that he had leaned towards a Clerk due to past experiences.

Solomon stated that they had made some plan adjustments. He stated that as you walk up the walkway from the parking lot, you have your two existing exit doors which will be locked. He stated that they have now pulled one door slightly forward so people will know that is the door you go to when coming to the school. He stated that they have squared off the vestibule which is where people can wait. He stated that you have your reception window. McNelly stated that he wanted a bank teller type window to talk through with a slot at the bottom. He stated that he does not want a window that opens. Solomon stated that low tech is less expensive and less complicated. Gadomski asked if we need that big of a waiting area or can we make it smaller and have additional office space? He stated that there would not be a lot of people at one time

waiting. Solomon stated that the window in that area is so the secretary has a visual out to see who is coming up the walkway. He stated that the bench would be wrapped around under the window. He stated that there is an existing column holding up the roof there. Gehris stated that this column may hinder making the office bigger. He stated that sometimes you need the space for the doors to swing open and be able to go around the doors. He stated that you could bump the reception window out and give the secretary some additional space there. Solomon stated that there will be a canopy over the entrance so that from a maintenance standpoint we will have exterior walk off mats, internal walk off mats and then the mats that you put out in the hall. He stated there will be a locked door into the reception area and you will be buzzed in. In the office area you will have a set of monitors. He stated that the principal's office will have full sight into the reception area. He stated there will be two work station areas for students. He stated you walk in further and you have the Assistant Principal's Office, the Guidance Office and the Conference Room and an office for the Literacy Leader. Ingoldsby asked if McNelly wanted a second exit out of his office? McNelly stated no. He stated that he is in a lot of crisis circumstances where it is good that they cannot take off. Solomon stated that the hallway at the back of the principal's office is strictly for egress purposes. Lane asked how big the conference room was in comparison to the SAU Conference Room. Gehris stated it was about the same. Solomon stated that in the conference room there will be some built in casework and white boards or tack board and a TV. He stated that this is the Administrative Suite. He stated that you then have the teacher's room and they will have access to it from the hall so as not to disturb the workings of the administration. He stated that in the back there will be two faculty bathrooms and a washer and dryer. He stated that the counters will be 30" deep so that you can fit a laminator on them and there will be lots of storage up above. Gadomski asked if they could have the washer/dryer open into the nurse's room? Solomon stated that we cannot due to the State and that the funding is not to do with the nurse's office. Solomon stated that at the entrance there will be some brick work to lighten things up. He stated that there will columns with the canopy above. He stated that there will be some skylights dumping light into the entranceway. Solomon stated that if the dollars allow, perhaps some skylights in the office area can be installed. He stated that they are planning on having their Design Drawings sent out next week so we can get some pricing. He stated then the Construction Designs when we will be sitting with Milestone to figure out the details. Ingoldsby stated that schools are not going with glass doors in the front anymore. He stated that they are half glass, half aluminum or hollow metal. Solomon stated that right now they are all glass but we can look at doing them with some aluminum. He stated they will need crash bars so there will be a center rail for durability as well. Gehris stated that the doors inside could be half glass, half aluminum and keep the glass doors at the front. He stated the second doors are another layer of security. Ingoldsby stated that perhaps you want to put another column in the front to prevent a car driving up the walkway and into the building. Solomon stated that what they do sometimes is more with the landscape or a big granite block in between. McNelly stated that the real stop gap is that now there will be a person who sees the entrance. McNelly stated that the first set of doors you come in are not your security stop. Gadomski stated that you have the sight lines that you don't have right now. He stated that the vestibule is your security.

Pepin stated if there was nothing else he would accept a motion to adjourn. McCallion made a motion seconded by Richardson to adjourn. VOTE: motion passed, unanimously. Meeting adjourned at 5:55 PM

Melinda Sullivan
JBC Recording Secretary