



**City of Madison  
Proceedings - Final  
BOARD OF WATER  
COMMISSIONERS**

City of Madison  
Madison, WI 53703  
www.cityofmadison.com

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Tuesday, July 31, 2007

4:30 PM

119 E. Olin Avenue

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**SPECIAL MEETING**

**CALL TO ORDER**

**ROLL CALL**

**Present:** Lauren Cnare, Priscilla B. Mather and George E. Meyer

**Excused:** Jonathan H. Standridge, Gregory W. Harrington and Thomas Schlenker

**PUBLIC COMMENT**

**Present:** Lauren Cnare, Priscilla B. Mather, George E. Meyer, Jonathan H. Standridge, Gregory W. Harrington and Thomas Schlenker

**OLD BUSINESS ITEMS**

1. Motion to reconsider the following resolution, File No. 06994.

**George Meyer made a motion to reconsider Resolution No. 06994. Lauren Cnare seconded. Passed.**

2. SUBSTITUTE - Authorizing the Water Utility staff to negotiate and the Mayor and the City Clerk to execute a contract with RepLogix, LLC for the procurement and installation of video surveillance and recording system at the Water Utility's remote facilities authorizing the General Manager to purchase a protection plan, and approving modification of the OJA Homeland Security Grant Agreement with Dane County accordingly.

**Sponsors:** Lauren Cnare

A motion was made by Meyer, seconded by Cnare, to RECOMMEND TO COUNCIL TO ADOPT - REPORT OF OFFICER Everyone received a copy of the revised resolution. Dave said AI is not present as he is on vacation. Assistant City Attorney Lara Mainella has been working with us to put this contract and resolution together. Some additions have been made to the resolution so she is proposing a substitute resolution to clarify some issues.

Lara said the original resolution doesn't name a contractor because, in order to meet the Council deadline for August, at the time it wasn't known who would be providing the service. This substitute resolution is in draft form and fills in the name of the contractor and gives more background information on how they were selected, details of how the proposed contract would be structured, and seeks Council approval to modify the grant slightly because the grant originally had two different projects and the idea now is to use all of the funding toward the video project.

George Meyer said his perspective on this is that if he had been at the previous meeting, he probably wouldn't have voted for it because the amount of information we had at that time was inadequate with just a draft resolution being presented. He understands what Jon Standridge's problem was with regard to that. He knows there's a lot of information involved, even more than we've been given at this meeting. From his perspective, he doesn't need the whole draft but one page of a draft resolution doesn't give me a comfort level. For the future, he does trust the staff in technical evaluations as that is their job and he is not qualified, but it's good to have an explanation of the process and a summary of the assumptions that are going into a project, just two or three pages. He said he called Dave and suggested we have this meeting regarding this issue.

Lauren asked about the problems with bandwidth and said she would like them to tell her that they can deal with the technical limitations that our systems presents. Joe Finn said he wanted to bring in Ralph Vetsch because he did all of the research on the bandwidth. Ralph Vetsch with Longwatch said there is available bandwidth and there is a part left over to do this project. He said you already have a SCADA control system that AI's using to monitor your water levels, etc. That is extremely critical to your system. You are using an active control system. We found that with the data radios you are using, they have an effective bandwidth of 200K bits per second so that tells us how much pipe there is to work with. Subtract from that your SCADA system, which AI estimates at about 50K, and in addition to that you have an active control system that fluctuates in the amount of bandwidth it uses. AI selected or looked at the Longwatch product because we can operate at an extremely low bandwidth. That means for this project, we are guaranteeing that if AI gives us 50K bits per second of the available 200K, we will be able to deliver video from 32 sites, and we put that in writing.

George said we have 150K left after you take the SCADA out of the existing 200K. What is the variability, the access use, of that 150? Ralph said AI told them that the access control system, when it was operating to five sites, would start to degrade the performance of the SCADA system. One of the reasons AI looked at Longwatch is we have, as an option to the product, something AI elected not to do but the platform that he chose, he can actually incorporate access control. We can take access control and video and deliver that on 50K bits per second. George said your guarantee and one of the assumptions is that the amount of bandwidth used by access control won't take more than 100K of the current amount of bandwidth we have. He asked if that is correct. Ralph said yes, the variables are that the SCADA system could use less than the 50K; it could also use more. The access control could use less bandwidth than the 50K or the 100K, or it could be more. We're trying to take some of the variables out of it

because otherwise we start printing a guarantee with all sorts of stars and asterisks next to it. We're asking for 50K. We have worked with tools that allow us to, in effect, lift the network and let us know how much bandwidth is available and how much is being consumed by each application. We have that as another tool that we can bring on this project so that AI can do a true assessment of how much band width SCADA is using, how much is truly available for the overall band width, how much the active control system is using, and he can use that as a recourse to go back to the access control company and say you are using more than you should.

Joe Finn said one of the things they left out of the guarantee was that we'd be measured against us and the SCADA system being on the wire together. What AI explained there is that we have the ability to let the access control system operate but not eat up any of the band width, so it's operating all of the time, watching for people to scan their badge, but he talked about when he brings them on line, once he gets to five, it starts to degrade the data system. So the guarantee is applied against the access control system not being online. It still works but he's not bringing them online, whatever that means. He doesn't have a technical explanation of what that means. Lauren said it sounds like, if she waved her card it would still work or not work, but it wouldn't be transmitted to somebody so somebody would be watching the system at all times. Is that right? It's not real-time observable; it still works like a key in a lock, but no one knows if a lock has been opened or not, as opposed to recorded.

Percy Mather asked if, when you said Longwatch could provide an access control system, she's assuming that would be an upgrade to the system with a particular price tag. Ralph said your access control system was already in when we started talking to AI. That is an option we have as an added to the proposal you have. Percy asked if they have a ballpark figure as to what we're talking about here. Ralph said your system, what makes the option of access control expensive, is the purchase of readers and the hardware itself. You have that already in place. Now it's just simply obtaining the software to communicate with the reader that you have. For purposes of this project, because we were under time constraints with schedules, we did not focus on the access control system. It is something we didn't incorporate into the proposal. We see it as more of a software issue and not a hardware issue, so the cost is more on the software side. Ralph said if you'd like us to explore that, we can do that but that will probably take about two weeks worth of work. Percy said she wasn't suggesting that we wanted to go that way, but she wanted to follow up on that, saying so that access control system would be provided primarily by modifying the software using the existing hardware. Ralph said that would be their intent.

George asked why doesn't your access system using bandwidth, that our current one does. Ralph said this is an imbedded computer that will have all the data. We have a system where there's a piece of hardware at every remote site. We call that remote video engine. Within that there is an imbedded computer that's going to have all the data of who is allowed, who is not allowed, etc. That system is operated live even though it's not on the radios. When somebody enters and is captured on video whether it's through a motion sensor or opening a door, we capture a video clip and send that across your radios. We're not sending a big hunk of video-we take a 10-second clip and it looks as though it's data coming across. It's very thin and very low bandwidth, but when it comes back to the main computer we re configure it back into a video clip and present it to the operator. Typically within seconds, you will have a video clip of what happened at that site, or you're going to have an acknowledgement of which operator came or left or whatever.

George said it's a snapshot? Ralph said it's not a snapshot; it's a video clip.

Let's say we're watching the front door on one of your wells, the trigger is going to be on the door. Some of those triggers are already in place. What Ralph is going to do is set up the Longwatch video to say I want three seconds before the door opens and seven seconds after the door opens. When the clip comes in, he's seeing first some dead time and once the door swings open, he'll see immediately who opened the door. It is a video clip based on the event that just happened. Meanwhile, he's recording live video to a DVR at the site constantly. He would have live video stored at the site for about 30 days. George said this is a clip, not a continuous ½ hour show? Ralph said it's a clip. George asked what monitor the SCADA operator has. Dave said the SCADA system has multiple monitors. He asked if they have talked to AI about this. George said there aren't 32 monitors though, and Dave said no. Ralph said they would bring up windows based on which site is having activity. There will be room for 32 pop up windows to say what's going on out there. George said there's nothing on until someone triggers it? Ralph said it's on all of the time, recording locally-it's recording locally no matter what, but if something happens, it then sends a clip back to the main system.

Lauren said we're in the midst of a new SCADA system so how do you guarantee that whatever we install now will be compatible with the new system, or do we simply need to build the new system around the video surveillance. Ralph said the Longwatch video works with anyone's data system. The ones that he knows the City of Madison is looking for is compatible with our system. It's an active object that drops into the SCADA system and it shows the video; it's pretty much that simple. We will currently support any of the three systems they are looking at.

George asked if this is scalable to cover additional sites. Ralph said yes, it is.

Lauren said all of us received an email last night from someone who is engaged in the Well No. 3 replacement issue, saying there are more companies out there than had been culled down by AI's process. Did anyone look at those and see if there is a value in looking further? Dave said he noticed that one of the companies on her list is Longwatch. Another one he looked at was a wireless system, and we cannot do a wireless system. We discussed this with City IS and we cannot do this on a basis of a wireless system. Dave said we contacted the companies that we were aware of that could provide this type of service with the system we have. We got three companies to come in and demonstrate whether they could do it, and Longwatch was the only one that could demonstrate they could work on our system. Dave said he's never been involved in any purchasing system where it's the requirement of the agency to locate every possible vendor that might be available. Generally you try to get a competitive process going and get as many vendors as possible to bid on the project. You try to get at least three and we did get three who participated but two of the three could not prove to us they could provide a system that would work with ours. Longwatch was the only one who could.

Joe Finn said he could give an explanation as to why that is. The difference is, if he puts one camera out at the site and brings it through your radio, he can do it today with anyone's camera system and give you streaming video and it will work wonderfully. This is what AI understood about the radios and that is why the Longwatch system was chosen. None of the cameras have the ability to do clips like Longwatch does; they can only do streaming video. They are much like TV systems that you see around large office buildings and places like that-for that type of place it works great. But once you have remotes, when you do streaming video I can get one in that bandwidth and might be able to get two in there if I tweak it and bring down the quality. The Longwatch technology took two years to develop by a guy who he puts in the genius category. He said his point is, there

are a lot of camera systems out there, but they do streaming video but nobody will be able to do 32 sites of multiple cameras and get you the videos when you truly need it.

Dave said every year we put out a major materials bid where we go out for pipes and different things, and we do that the same way we did this one. We send out letters to companies that we know provide this service. It's not that unusual to only get a single bid on a particular material that meets our specifications. We will bring that to the board and we will say this is the only bid we got on this particular material. The Board will ask our professional judgment if this is a reasonable price and if we do, they'll go with that. There have been a couple of occasions where we've put out a bid for materials and only got one bid back and didn't feel comfortable with the price given as we felt it wasn't a reasonable price for that material and we put the bid out again. Dave said it is not unusual to have a situation like this. He said he's heard a lot of people talking about the single bid thing, and Jon was concerned about the single bid process. He hasn't heard anyone say that they think what Longwatch is proposing for the price quoted is unreasonable, and we don't think it's unreasonable.

Lauren said she thinks what is here is not an issue of the Longwatch people, it's about the way we went about it. She asked about a sealed bid where they put it online for a number of weeks and see what happens. We don't usually do it as a water utility and maybe you could us why we do it one way but others in the city do it another way. They do the field bid for anything over \$25,000. She'd like more information on this and she thinks as a board, we should talk about what methods we want to use so we don't have to have meetings to talk about process but meetings that get us to the business at hand. Dave said as long as he's been here, and he understands that for decades, the Water Utility has handled it's own purchasing. We have these major material bids every year and they do not go through a city purchasing process. That has not been the system established for the Water Utility. Everyone in the city and the Comptroller's Office know that it is done this way. He thinks it was set up that way because the Water Utility was an enterprise fund and it had the Water Board, a quasi-independent board, and was responsible for the day to day operations. Dave said if the board would like the utility to do all its purchasing through the city that's fine, tell us and that's what we'll do. Dave thinks from the ordinance Attorney May has proposed, under that ordinance which is going through the process right now, he believes if that gets approved as written, we would be going through the city purchasing process. That may determine how we do it in the future. If the board would like us to start that now, we can do that. This is just the way its always been done.

Dave said there has been discussion as to why wasn't an RFP issued. An RFP is a request for proposals which is a system you use for professional services agreements and contracts. The EMA contract was that of a professional services contract, a consulting contract. Dave said this is not a professional services situation; this is a bid for services and equipment and is more like our major materials type of thing. We did have a competitive process. In this case, because of the technical issues involved, we wanted to take one additional step before that and we said before you submit a bid, you had better come and demonstrate that your system is going to work on our system.

George said he had some process problems from when he first got the materials. He felt comfortable with the competitiveness side of this. Three of them obviously thought they could do this.

Joe Finn said the EPA actually went through a very similar process for video for the Water Sentinel project and chose Longwatch, so the process was very similar to what Madison did. Dave said he didn't know that but it's a good recommendation. George asked about the timing on this grant, asking if it would

have been avoidable if we'd had a special meeting. Dave said there was only one Common Council meeting scheduled in August, and we needed to get it to the August 7 meeting agenda. The earliest then that Council could approve it was September 4 and that would not have given us time to get the project done by the deadline for using the grant of October 31. Assistant City Attorney Lara Mainella said there were two things she was initially asked about with respect to our grant agreement with Dane County for getting the money. She said these issues were actually secondary when AI first came to her. Does anyone know when the concept was completed? Her first question to AI was if there needed to be Common Council approval for this. The Council had already approved the county grant so that wasn't an issue. She told AI because of the tight time line, you're going to have to at least get yourself on the calendar for the Council. We came up with the idea to introduce a resolution that didn't name the contractor, just so we could get into the flow and because there was only one Council meeting in August.

George asked about the October 31 deadline and what has to be delivered by that date. Dave said he understands the money has to be spent. George said you have to be comfortable that it's up and running and works. He asked what happens October 31, and what the penalties and the requirements are. Attorney Mainella said with something like this, you usually write into the scope of services an implementation and acceptance phase, and we don't pay the last installment until we've signed off after it has been inspected. Joe Finn said that is correct. George asked if it's possible that we pay out three installments of up to \$100,000 and then it doesn't work by October 31 and we can't get the grant. Attorney Mainella said she doesn't think it means that we can't get the grant. She thinks we'd have to explain to the county that we need two more weeks to work out some bugs. The county would go to the state and asked if we can give them two more week; it goes like that. Joe Finn said he thinks it will be granted as long as you are showing progress; you could probably get an extension. Attorney Mainella said if the contract is approved, we will write it in a way that protects us and we get the products we pay for.

Percy said we've received the additional information from AI that the board needed. Jon's concern with this is that it suddenly appeared with no real time to look at it, and we have now received more information. The other issue is the RFP versus the process used to select this particular company. Another issue is the timing with the grant and why we are on a time line. She said she thinks AI wanted a special meeting before he went on vacation to address issue with this. Percy said she likes the fact that the resolution does underscore and explain the RFP issue.

George Meyer made a motion to recommend adoption of the substitute resolution regarding expenditures for the homeland security grant. Lauren Cnare seconded; unanimously passed. George said he wanted to emphasize that next time, we need more material ahead of time. Percy said it serves the public well to have a summary of what exactly was looked at. George said if a board member wants to come in and look at it, the material is here.

The motion passed by acclamation.

## ADJOURNMENT

George Meyer made a motion to adjourn the meeting. Lauren Cnare seconded; unanimously passed. Meeting adjourned at 5:28 p.m.