

A special meeting of the Board of Aldermen was held Monday, May 23, 2022, at 7:00 p.m. in the aldermanic chamber as well as via Zoom teleconference.

President Lori Wilshire presided; Deputy City Clerk Allison Waite recorded.

Prayer was offered by Deputy City Clerk Allison Waite; Alderman Ben Clemons led in the Pledge to the Flag.

To join by Zoom – please refer to the agenda or the website for the meeting link and telephone number.

Let's start the meeting by taking a roll call attendance. When each member states their presence, please indicate if participating via Zoom state why you are not meeting in person and whether there is anyone in the room with you during this meeting which is required under the Right-To-Know Law.

Deputy City Clerk Waite called the roll and asked them to state the reason he or she could not attend, confirmed that they could hear the proceedings, and stated who was present with him or her.

The roll call was taken with 9 members of the Board of Aldermen present: Alderman Sullivan, Alderman Klee, Alderman Lopez (arrived at 7:04), Alderman Jette, Alderman Clemons, Alderwoman Kelly, Alderman Comeau, Alderman Dowd, Alderman Cathey, and Alderwoman Wilshire.

Alderman O'Brien, Alderman Moran, Alderman Gouveia, Alderman Thibeault, and Alderwoman Timmons were recorded absent.

President Wilshire

Alderman O'Brien, Alderman Moran, and Alderman Thibeault that they weren't able to be here this evening and I believe Alderman Timmons is still away. Alderman Gouveia won't be able to make it tonight. Okay.

President Wilshire to turn the meeting over to Chairman of Budget Review Committee Richard A. Dowd.

PUBLIC HEARINGS

R-22-027

AUTHORIZING THE MAYOR AND CITY TREASURER TO ISSUE BONDS NOT TO EXCEED THE AMOUNT OF THREE MILLION SEVEN HUNDRED THOUSAND DOLLARS (\$3,700,000) FOR THE REPLACEMENT AND UPGRADE OF RADIO COMMUNICATIONS EQUIPMENT

Chairman Dowd

Would you like to come up and give an overview?

Bill Mansfield, Radio Systems Manager

Good evening everyone. Thank you for being here this evening and taking the time out of your busy schedules to be here for this. My name is Bill Mansfield. I am the Radio Systems Manager for the City of Nashua.

Most of you know what our radio system is and how it operates, but there are a few of you that I have not met that may not be familiar with this. The Citywide Communications Division or Department (whatever you may want to call it). There are two of us in that Department. We are responsible for maintaining 1,500 mobile and portable radios. Portable radios are what you see up on the counters there. Mobile radios are in the police cruisers, fire trucks, and DPW trucks. They're permanently mounted in there. We maintain three tower sites throughout the City. These tower sites consist of actual radio communications towers, antennas, cabling, HVAC systems, generators, buildings, battery back-ups for each of these sites.

There are also two infrastructure sites, one being located at the Police Department and one being located at the Fire Department. There is radio equipment infrastructure equipment at both those locations as well as antennas and HVAC systems that we're responsible for. There are also two dispatch sites here in the City - one being at the Police Department and one being at the Fire Department. Each dispatch center has three dispatch consoles there that we're responsible for maintaining because of their connection to the radio system itself.

We serve every department in the City - Police, Fire, DPW, schools, Health, Transit, and Community Development. Each of these entities have radios. There are some smaller entities that have a few radios here and there but for the most part, our largest users are Police, Fire, and DPW, especially depending on the time of year. In the winter time, DPW uses it a lot more because of snow plowing. Fire and Police are on the go all the time as well utilizing the system.

The system is a 10-channel, 800 megahertz trunked radio system. It's a three site simulcast system that allows 95% or better coverage in the City. The areas that may have dead spots, we have installed what we call "bi-directional amplifiers" in them to emit RF - radio frequency transmissions out of the buildings and they go through an antenna system that is inside, such as Southern NH Medical Center. There's an antenna on the roof. There's an amplifier in there that amplifies the communications out of there so we can have better communication. There are approximately eight of those installed in the City that we are also responsible for. Any questions on what we do, and what we are responsible for, or anything like that before I move onto anything further?

Chairman Dowd

Before that, let the record show that Alderman Lopez showed at the meeting at 7:04. Are there any questions for Mr. Mansfield? Yes, Alderman Sullivan?

Alderman Sullivan

Thank you. The amount that you are requesting is that just for radios or is it also for the infrastructure that you mentioned involving the communication?

Bill Mansfield, Radio Systems Manager

So I'm going to proceed further and explain the principle reason why I am here, which is to request \$3.7 million dollars for portable radios for police and fire and that is for police and fire only but I'll explain that as we go on.

Currently in 2012, 2013 and 2014 the City made some large investments on radio infrastructure here within the City to improve the radio system and to bring it up to current standards of today. There have been every two years we receive an upgrade to the infrastructure of the system. The infrastructure meaning the sites. All the different sites I just mentioned and bringing all the technology up to today's standards. One thing that's not included in these upgrades is the equipment that is used by personnel on the street itself. So in 2012, 2013 and 2014, we made these large purchases. Each firefighter in the City is issued a portable radio. Each police officer in the City is issued a portable radio, as well as non-public safety personnel throughout the City. They are not issued to them personally, but there are caches of radios that at these different facilities throughout the City.

In 2019, Motorola – and that's the vendor that we utilize here in the City - Motorola basically gave us an end-of-service ability and a service life notification for the fire FM radios. FM means "factory mutual". I have to refer to notes because I get a little confused about what this is and hopefully you don't get as confused. So the firefighters when they go into a building, they may come in contact with gases that are in the building that may ignite if there is a spark that occurs. FM radios at that time – factory mutual radios were made to prevent that spark from happening and the radios were certified that they would not do that. They were considered to be intrinsically safe. There was a change in the standard from factory mutual. Fire radios are no longer certified as being Factory Mutual Certified. They're now U/L listed (Underwriters Laboratories). That's a new standard.

As of 2019, Motorola no longer would support the FM radios if we sent them out for repair. So we were sending radios out to repair. We knew this was occurring. We sent radios out to be repaired. They would send us a notice back saying when it was returned to us it was no longer going to be FM safe, which is cause for concern for the firefighters for various reasons mainly that the radio is no longer certified. That's the biggest issue.

So now with the UL listed certification, we don't have a choice but to move and purchase UL listed radios for the fire service. That's one issue. Another issue was in December of 2020, we were notified that at the end of 2021 the police radios were no longer going to be serviceable. The radios have been in service for approximately 8 to 9 years depending on when they were purchased. They have done their job. They're not end-of-life in my view. We can utilize them further within the City. If we proceed and go forward and purchase new radios for fire and police, the radios that we can get returned to us can be utilized by non-public safety users that are out there. There is one radio especially in front of Alderman Sullivan, the one on your left with the broken antenna that was a radio that is no longer serviceable as of 2015. All of the non-public safety users out there today are using those. They may have broken antennas. They may have broken screens. I believe that one, you can't even get the screen to turn on other than it turns green. So you can't read

anything that's on that particular screen. Then we ran into having issues finding batteries for those, but we found some aftermarket batteries recently that we were able to put Band-Aids on and hold those together.

So the main purchase tonight what I'm looking for \$3.7 million dollars is to purchase approximately 400 fire and police radios. The radios that we're looking at purchasing are to our left of Alderman Dowd. There's a black one and a green one there with speaker microphones attached to the top. Those are the latest and newest technology that's out there. They are approximately a year and a half old. Those radios are in test phase right now with police and fire. They seem to be working out very well. The benefits of these particular devices is they have a very large screen on them, especially on the fire side. There's a search feature where they can type in a town and look up whatever that town is when they do mutual aid. We do quite a bit of mutual aid outside the City across the border in Massachusetts and those screens have been very beneficial to the fire fighters so far.

Right now the firefighters, there's another green radio up there which is a thinner green radio to the right of the other two. That is the current firefighter radio that is out there. It's a single band radio, which means it is 800 megahertz. Nashua and Manchester are the only departments that have 800 megahertz radio systems. So our radios are not compatible with anybody else around us unless we have multi-band radios. So the proposal would be to have multi-band radios for both police and fire. They would have VHF. All the surrounding communities around us have VHF radio frequencies. When you cross the border into Massachusetts, they have UHF radio frequencies, which is another frequency band that is not compatible with any of them.

So the proposal is to buy 400 of those radios. Also along with that, there's a safety software that we have not purchased that we would like to purchase to go along with the radios and that's called "Accountability Software". That software is mainly for the Fire Department. Whenever the firefighters are sent to a fire scene, they go into a building, after a certain amount of time they need to do a roll call of every firefighter that's out there. Right now the way they do the roll call is they key up the radio and call every firefighter one at a time. This Accountability Software that can be installed on the infrastructure as well as the firefighter radios will allow for a tone to be sent across for they call it a "par tone". Basically it's a roll call. The firefighter would learn what that tone is and all he would have to do is once he hears the tone is key up and it would come up on the screen saying that he's checked in. So that screen would be monitored by the fire commander on the scene of the fire as well as the dispatchers in the dispatch center itself over on Lake Street. So that's one of the big safety features that the Fire Department is looking for in these particular radios.

So overall, this would be a large upgrade to the latest and greatest technology. It would allow additional safety features in the radios. On the police side, we're looking at a safety feature for a GPS, automatic vehicle locator GPS. Basically it's a location so that if a police officer pushes his panic button, it should immediately pop up on a map and they would know where the police officer is. A lot of times a police officer pulls up to a scene, he may get out of the car, he may not have time to call out before he gets out of the car, so they don't know exactly where he is. If we have that GPS feature, he could push the panic button and again on a map it would show up in the dispatch center telling the dispatchers where the police officer is so they can send units. I have personally been in instances in my previous job, my previous life as a police officer, where officers have been out there. Again, they weren't able to get call out of service somewhere, no location, and all of a sudden panic button is off. Dispatch is calling, no response. Dispatch is calling, no response. They call and all of a sudden you hear a civilian, somebody of the street, hello, hello your police officer is in a fight right now, hello. We don't even know who the police officer is. You're trying to get the information out of the civilian who doesn't even know how to talk on the radio to tell you where he is. It's a scary situation and it's a dangerous situation. It doesn't happen that often, but I think once you hear that you don't ever want to hear it again. Like I said, it's a very scary situation.

So the radios that we have up here like I said with those safety enhancements that are in them giving them the ability to search for different channels. Right now, those radios are programmed with over 200 channels from throughout the area. It has the whole state of New Hampshire in there for every radio frequency that is out there, plus there is quite a few from Massachusetts. In these radios, we currently have and we will still have what we call an "interoperability bank". When I saw we do mutual aid, we send officers down to Boston for the Boston Marathon. When they go to Boston for that mutual aid, they end up utilizing these same radios. They turn to the channel that is already preprogrammed in those radios and they can talk to everybody on the scene down there. Hampton Beach incident on the weekend, we have officers that responded over there. They were able to go on those radios, turn on the channel, and talk to everybody that was there. These are a lifeline for the police officer probably the most important thing that they carry on them because that's where their back up is.

The radios cost approximately \$9,000 to \$10,000 a piece depending on what they are going to have programmed in them. They'll still have the encryption in them for police. They'll have the extra software in

them that will be set up in the two dispatch centers. I'll take a breath and breather and look and see if there's are any questions at this point in time.

Chairman Dowd

Okay did that answer your question originally?

Alderman Sullivan

I think so. So basically the \$3.7 million is only to replace 400 radios at an average cost of \$9,250?

Bill Mansfield, Radio Systems Manager

Correct.

Chairman Dowd

Any further questions?

Alderman Comeau

Yes, thank you. You mentioned the current radios – I think you used the phrase that they had more than done their jobs. They've outlived their expected lifespan. What is the expected lifespan of the new radios that you're looking to purchase?

Bill Mansfield, Radio Systems Manager

Seven to eight years.

Alderman Comeau

Okay, thank you.

Chairman Dowd

Any other questions? Alderman Lopez?

Alderman Lopez

Do we use encryption on our radios and if we do and we switch over to mutual aid is there a benefit of using these versus what we use now?

Bill Mansfield, Radio Systems Manager

So in mutual aid circumstances, we don't use encryption and that's because we can't. There's different encryptions and key codes that go in each different system that's out there. Currently, we have an encryption that's called "DVPXL". We will be changing that encryption to "AES" which is more the national standard. Manchester has AES encryption. For mutual aid purposes, we would have their key in our radios and would be able to talk to them and vice versa. They could come down here and talk to us. The radios the way we have them set up today on 800 megahertz, there's one channel called "TAC3". That channel is clear. So it's non-encrypted and that's for mutual aid purposes. Manchester they have their channel set-up as dispatch 3 which is clear and unencrypted. Eventually Merrimack is going to moving over to 800 megahertz as well and we have already programmed their radios so that their channel 3 is also non-encrypted. Again, from 800 megahertz mutual aid.

All the other channels that are in those radios are non-encrypted. So whenever we go to a scene or another community, they have to either shut off their encryption or they have to utilize a different channel that's a basic interoperability channel. There's a bank in each one of these radios and it's in every radio in the State. It's called an "HBank". Every radio is programmed the same, so no matter where you go in the State if you hit that HBank and you have the right channel, you're going to be able to talk to whoever is on the scene at that location. Like I said, every single radio in the State is programmed with an HBank on VHF. Long answer to it.

Alderman Clemons

Are there any warranties or anything like that with these or if we get them one day two and they break we're on the hook?

Bill Mansfield, Radio Systems Manager

So there's a one year warranty that comes with these. Motorola offers an additional warranty of up to three years. The cost of it is not cost effective. From my experience with dealing with the radios for the past 20 years, it is not cost effective for us. Usually it's a flat fee to \$600 to \$700 to fix a radio. That's a lot of radios to fix when you're being charged \$40 to \$50 per radio for a 3 year period.

Alderman Clemons

Okay. Thank you.

Alderman Klee

Thank you Mr. Chairman. Just a quick question. I know that we do this for everything, but have we looked at grants and so on to kind of help with this? I know we want to get the money down and so on but would we continue to look for grants? I know the City's got a Grant Writer. The police have one and so on. I don't even know if there are grants for something like this, but where it has to be such a big change I didn't know if there was some kind of public safety type grant out there?

Bill Mansfield, Radio Systems Manager

So there are public safety grants out there. I actually spoke with the grant person from the State last week. I had a meeting with her. The State has moved away from funding radios for grants because they had done that for about ten years and they spent millions and millions of dollars with everybody. We have 70 radios that are in our cache – I shouldn't say in the cache. They're on the street right now. We have 70 radios for police officers. They are dual-ban radios and have been in service since 2012. Those particular radios were on a grant, but they're moving away from basically funding radios for grants.

Alderman Klee

So those 70 that you talked about, those will be put into service elsewhere within the City if they still have a decent life left on them?

Bill Mansfield, Radio Systems Manager

Yes.

Alderman Klee

Thank you.

Alderman Sullivan

I have a few questions here. The first is are we buying these directly through Motorola or through a distributor of Motorola?

Bill Mansfield, Radio Systems Manager

They are being bought directly through Motorola.

Alderman Sullivan

Okay. You mentioned software. Since I'm in the software business, does a seat of software come with the radio for life of the radio or is it an annual subscription?

Bill Mansfield, Radio Systems Manager

I am an anti-annual subscription person. So the new radios that are here are not going to have any type of subscription in them. They're capable of that, but I'm not a fan of that. So it's about \$70,000 per year if we keep that subscription up.

Alderman Sullivan

So if we could go back to the software that comes with the radio that is not the software that you're speaking of. There is additional software you can get on top of it.

Bill Mansfield, Radio Systems Manager

Correct.

Alderman Sullivan

That software that comes with the radio that is not the software you're talking about?

Bill Mansfield, Radio Systems Manager

So the software I'm talking about – so there is no subscription software going to be assigned or put on these radios. So all the software that's in there and there's probably licenses for – I'm going to ballpark – probably 13 different pieces of software that are going to be used in those radios. That is a one-time fee.

Alderman Sullivan

Okay. My last question is these radios sound incredible. Do you just give it to the officer or fireman or is there training included on how to use it?

Bill Mansfield, Radio Systems Manager

There is. Every officer, every new officer - so the Police Department is hiring seven new officers this week. Next Tuesday, they're going to be trained on every single firefighter and every single police officer is trained on the radio. When it comes to the new radios, that training is going to be a longer period of time because it's a total different type of radio.

Alderman Sullivan

And that's included in the contract?

Bill Mansfield, Radio Systems Manager

We train them ourselves. We do our own training. We do our own programming. We do our own training. So in-house.

Chairman Dowd

Any other questions? Seeing none. Thank you Mr. Mansfield.

Bill Mansfield, Radio Systems Manager

Thank you very much everyone for your attention.

Chairman Dowd

I will now open up the public hearing to testimony in favor of R-22-027.

TESTIMONY IN FAVOR - None

TESTIMONY IN OPPOSITION - None

TESTIMONY IN FAVOR - None

TESTIMONY IN OPPOSITION - None

Chairman Dowd closed the public hearing on Resolution R-22-027 at 7:28 p.m.

Chairman Dowd opened the public hearing on Resolution R-22-029 at 7:28 p.m.

R-22-029

AUTHORIZING THE MAYOR AND CITY TREASURER TO BORROW AN AMOUNT NOT TO EXCEED SIX MILLION NINE HUNDRED THOUSAND DOLLARS (\$6,900,000) THROUGH THE ISSUANCE OF BONDS AND/OR A LOAN THROUGH THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES STATE REVOLVING LOAN FUND FOR THE WASTEWATER TREATMENT PLANT DRY WELL VALVE REPLACEMENT PROJECT

Chairman Dowd

I believe someone's here from DPW to give an overview. Mr. Boucher.

Dave Boucher, Superintendent of Wastewater

Yes thank you and thanks for having this meeting. Dave Boucher, Wastewater Superintendent. I'll give you a brief overview of the project. This is the drywell pipe and valve replacement project that's for the wastewater facility. The wastewater facility has 36" steel pipes with associates valves in two lower levels of our main building that were installed in 1972. These pipes handle flows from 12 million gallons a day to 50 million gallons a day. Recently, we had a 20 year facility plan project and in that project we did some pipe thickness testing and the pipe had showed significant wear. The valves no longer hold back so we have to fix a pump. The valves they're having problems holding back the water so we can remove pumps.

So this project involves a set-up of a temporary bypass so that we can replace the pipe in the two stories below ground. This money would also cover the preliminary engineering of the project, final drawings, bid documentation, and project oversight, and construction. I'd be happy to take any questions.

Chairman Dowd

Are there any questions? Alderman Clemons?

Alderman Clemons

Thank you. So forgive the simplicity of this but the bypass that you're talking about is that something that's there that's going to be constructed permanently so that in the future when we have to do this again I don't know 50 years from now, they can be utilized again or is that truly temporary and will be gone?

Dave Boucher, Superintendent of Wastewater

Unfortunately, truly temporarily it will be gone. We'd have to pull it and put it above ground just because of the amount of room where the existing piping is. We looked at putting in a bypass, a permanent bypass. It wasn't feasible to do so. So this one would have to be external and temporary.

Alderman Clemons

Okay, thank you.

Chairman Dowd

Any other questions? Alright, thank you.

TESTIMONY IN FAVOR – None

TESTIMONY IN OPPOSITION - None

TESTIMONY IN FAVOR - None

TESTIMONY IN OPPOSITION - None

Chairman Dowd closed the public hearing on Resolution R-22-029 at 7:32 p.m.

ADJOURNMENT

**MOTION BY ALDERMAN CATHEY THAT THE MAY 23, 2022, SPECIAL MEETING OF THE BOARD OF ALDERMEN BE ADJOURNED
MOTION CARRIED**

The meeting was declared adjourned at 7:32 p.m.

Attest: Allison Waite, Deputy City Clerk