

SPECIAL COMMITTEE ON SOLID WASTE ACTIVITIES

April 4, 2022 at 5:00 PM

Chairman Stewart called the meeting to order.

The Clerk called the roll.

Present: Aldermen Stewart, Cavanaugh, Sharonov, E. Sapienza

Absent: Alderman Fajardo

Messrs.: C. Newton

1. Communication from Chaz Newton, Solid Waste and Environmental Programs Manager, regarding the following:

- Elm Street Trash Receptacles
- Public Education - Welcome Brochure
- Workers' Compensation Savings
- Textile Recycling
- Waste Management Contract

(Note: For informational purposes only; no action is required.)

Chairman Stewart stated I see we have all these items under one item so I thought perhaps we could go through them one by one and at the conclusion of each one we can stop and see if the committee members have any questions or comments before receiving the next item.

Chaz Newton, Solid Waste and Environmental Programs Manager, stated to give a little history on downtown trash collection, we operate a special team that is designated to Elm Street and the surrounding alleys and streets for trash and recycling collection. That is comprised of trash and recycling being picked up seven days each per week. Trash is picked up Tuesdays, Thursdays and Saturdays. Recycling is collected on Mondays, Wednesday and Fridays. Trash receptacles are collected six times per week by our downtown crew. Dozens of concrete receptacles are located throughout Elm Street primarily between Granite and Bridge Street; there are 25 total receptacles. If you are familiar with the concrete receptacles, they are quite outdated and can cause some safety issues in terms of how to collect and empty the bins. The concrete receptacles are free of cover, meaning they are open to all elements. Precipitation then causes what we call garbage juice which is overall smelly and gross.

Chairman Stewart asked Chaz if that was the technical term.

Mr. Newton replied that is a term used throughout the waste industry and it's something you definitely want to avoid. The team is made up of two employees that have to visually check every single receptacle not knowing if it is full, half full, or empty. By that point, they are already there so most likely they will empty it regardless of how full it is. We did a case study in November of 2021 and observed that 85% of the receptacles were less than 50% full on day of pick up. Multiple blocks throughout Elm Street contain

more than one receptacle, sometimes four, while other blocks don't have any. The method to empty these bins is old fashioned and can be a safety hazard. They have to pick it up out of the concrete receptacle and then lift it into the back of the truck. Many of the barrels during this case study did contain that garbage juice making them a lot heavier. Needing an immediate fix, the Public Works Department ordered Glasdon Bins. These are primarily staged at bus stops and some parks. They are the more aesthetically pleasing black bins that say either trash or recycling on them. We ordered these in November of 2021. In March, we received our order and replaced the concrete bins located throughout Elm Street. We strategically placed these bins where the concrete bins were because those needed to go.

Chairman Stewart interjected I know you talked about the manual issues having to empty these. Can you speak a little bit about potential for workers' comp claims and why it was important to replace those?

Mr. Newton replied I will get into the workers' comp information a little later on. Just from a management perspective, when an employee lifts a bin that is 75+ pounds when it consists of the precipitation, it can cause a lot of strain on that body. Ergonomically speaking, we want to bend at the knees and they are already at shoulder height or maybe a little bit below shoulder height. Ergonomically, they are at a disadvantage. Then in order to take it out of the concrete receptacle, they need to lift it essentially above their head which is below the power zone of their waist and chest. I should say chest and mid-thigh. We have had multiple injuries in the past no matter if it is downtown or on a regular route. We have since made changes such as making city approved trash carts mandatory for residential pickups. We saw great benefit from that and I will dive into that in a little bit. As I mentioned, previously downtown has been left to utilize these receptacles that are not beneficial for an employee's health. During the Glasdon project, we also commenced a pilot program with a vendor for what they call smart bins called BigBelly in January. What is BigBelly? BigBelly is a smart, solar powered self-compacting waste or recycling bin. It holds 5-10 times the capacity of an average traditional waste bin. It is equipped with sensors to detect fullness levels and collection activities. It communicates with the software that we have in the office right now. It is very impressive. We initially installed these outside of City Hall, however there was little to no volume. It was eye opening in the sense that we recognized that we didn't have to go to every single receptacle six days a week. We will not have to collect and empty it as frequently. We moved it to outside of Ben and Jerry's, which I am sure you are all aware produces a lot of volume. Receptacles are constantly overflowing then it becomes an environmental issue at that point. Since then, the trash receptacle as of this morning has been opened 610 times and has compacted 25 times. We have only had to empty it three times since February 17th. The recycling bin, however, has been open 250 times with two compactations and one collection. Overall, we see a significant reduction in the number of times we have to empty these receptacles. During this pilot program, we have observed four key components – 1) Worker Safety, as that remains the 6th most dangerous job in the United States; 2) Improved downtown aesthetics as BigBelly offers a completely enclosed receptacle and is very similar to a post office drop bin; 3) Operational efficiency gains; there were two bins out in front of Ben and Jerry's and each receptacle would have been emptied 36 times during this the same time period if it wasn't for BigBelly; and 4) Environmental

Protection as the precipitation can create some pretty nasty stuff like garbage juice. A few metrics we are looking at include frequency of container fill levels, number of collections and general overflow. As I mentioned before, we have been monitoring Elm Street very diligently ever since I came on board. Overflow is going to happen so with these BigBelly systems what we do is set the threshold to 60%. You can set it at whatever you want in increments of 20 so that it never gets to 100% full. That pilot program is running until April 17th and at that point we will have the option to purchase these receptacles.

Chairman Stewart asked are there any questions from the committee.

Alderman Sharonov asked are there any maintenance costs associated with the BigBelly. I understand they are solar powered but you still have to maintain something that is so automated.

Mr. Newton stated BigBelly gave us some self-care instructions for preventive maintenance and some services that may be required as you mentioned. Typically, it wouldn't be the solar panel but it would be more so about the battery within having to be replaced. That is the largest service issue that I am familiar with.

Alderman Sharonov asked do we have price options for when the pilot program ends.

Mr. Newton stated we do not have to purchase them; it is just an option. When they are brand-new they are pretty expensive due to their technology. A high capacity one, which are the ones with the compactor, can be approximately \$5,000. This one was used so if we moved forward with it, it would not be that expensive.

Alderman Cavanaugh stated I think it's great but there is something I am worried about. I can see not picking up in January and February but would you want to do that in July and August? Wouldn't there be an odor if it is in there for that many weeks?

Mr. Newton asked could you repeat the question.

Alderman Cavanaugh stated you said there was like a six-week span where they didn't have to empty that receptacle. That is good for January and February but what happens when you get into June, July and August when it's hotter? If the garbage is sitting there for that amount of time, won't there will be an odor coming from that? Did you look at that at all?

Mr. Newton stated the odor would not go outside of the receptacle itself because it is totally enclosed. They describe it as an odor sensing diversion. It will definitely smell inside when you do open it, however, you won't be able to smell anything from just standing outside.

Chairman Stewart stated I know you stated they are more expensive then what we have now. Are there any cost estimates on when or what is the return of investment or how long may in take to recoup the costs?

Mr. Newton stated BigBelly does assist in producing some return on investment numbers. This is something we are currently working on and at the end of this pilot program I will have some more numbers on that. We are currently collecting that information. Moving onto the next item, the Welcome Brochure. Public education is paramount to a municipality to achieve success. We recognize that and speak of it internally all the time. There are operational benefits, environmental benefits and overall community engagement and awareness. What is the Welcome Brochure? The Welcome Brochure is a creative method that we created at the DPW of communication to residents surrounding waste collection and other DPW services. The first phase of this Welcome Brochure will be sent out to all existing home owners within Manchester. We will also be putting them in local convenience stores in the densely populated areas so that renters will have access to these. When it comes to DPW services, communicating with this group of people is the most difficult so we are trying to get creative and it is imperative to our success. The second phase is sending it out to every new homeowner on a month-to-month basis. We will team up with the Assessor's Office who will then send us a report of all new home purchases within the past month. Following that, we will send these out by mail or have a compliance officer deliver these to the new homeowners. This enables communication with all homeowners and communicates recreational activities, and best practices for consistent and high level services. It will also provide information on upcoming improvements such as the paving plan or where to view it. As you can see, we also have a great QR code so that the community can get involved with See Click Fix.

Chairman Stewart asked for questions stating this is an excellent step to help get the word out. It won't solve all the issues but at least it will be a good start.

Mr. Newton stated we are looking forward to that for sure. The third item on the agenda is Worker's Compensation savings. Since the inception of automated collection in September of 2018, our Solid Waste Program has observed 41% fewer injuries in the workforce, a 40% reduction in claims and in 2021 had an 85% decrease in the dollar amount in paid claims versus 2018. More specifically, 2018 had \$271,137.00 in paid claims versus \$47,805.00 in 2021. To your point Alderman Stewart regarding worker's compensation savings and making the overall environment/operation safer for our employees, automated collection was the first step in really moving forward with that process. These figures represent fewer injuries and less severe injuries in the workforce. We want to carry that over to as many tasks as possible not only within the solid waste program but all throughout the DPW.

Chairman Stewart stated to clarify Chaz, the automated collection has the mechanical arm on the truck and it picks up the toter and empties it as opposed to having workers on the back of the truck who are doing it by hand. Is that correct?

Mr. Newton replied correct. The way trash cans used to be emptied in Manchester is solely by hand and lifting it up into the back of the truck. When we came forward with automated collection, we rolled out five trucks that can move through the city and collect those receptacles. Not only the automated collection trucks, but having the tippers on the back of the trucks as well. For the trucks that are rear-load packers, those individuals still need that bar that you will see on the front of the barrel to hook up to the

truck. Even though you may see two guys on the back of the truck, they are not actually lifting the bins.

Chairman Stewart stated correct me if I am wrong but didn't this start out as a pilot project. I seem to recall it was done in certain parts of the city but not feasible in other more compact parts of the city. Do we see the possibility to expand this at all?

Mr. Newton replied great question. We are looking internally to see if we can possibly get six automated trucks out per day. Right now we have five automated trucks on Monday, Wednesday, and Friday. Tuesdays we have four because we are in the densely populated areas. We have been looking to expand our automated collection, however, there is nothing set in stone at the moment. With the automated collection, there are a lot of factors that go into it. We need space for starters. In the alleys, we pick up both sides at once. We are very unique compared to other municipalities with the alleys. Nashua, as you are aware, has zero alleys. That is a constant battle where we will definitely have to always have a few rear-load trucks unless we were to tell everyone they could not put trash in the alleys. The fourth item on the agenda is textile recycling. Landfill availability is slowly diminishing within NH. We currently utilize the biggest one in Rochester, which is called the Turnkey landfill. This landfill will expire at some point and soon enough it will no longer be an option. We need to eventually look at other options. For the time being, textile recycling is a method to divert material that is easily moved. Public Works will be offering curbside collection through a partnership with Waste Zero and Helpsy. According to the EPA, 6% of our waste is textiles. In Manchester that equates to approximately 2,730 tons annually. The partnership will allow textiles to be conveniently recycled, save the city in disposable costs, reduce landfill usage and provide an additional service at no cost to our residents. The textiles can be diverted in any condition as long as they are dry. This could include clothing, footwear, accessories such as scarves and bags, bedding, towels, kitchen linens, and stuffed animals. Helpsy is the largest clothing collection company on the east coast out of Medford, MA. They are the only certified B Corp company in the industry meeting specific requirements. Last year, they recycled 30 million pounds of clothes from South Carolina to Massachusetts. We will be presenting this on our website primarily. This will be on the same link where residents can see their collection schedules. Residents will now see a tab that says textile recycling. It will redirect them to the Helpsy website and they can schedule a day that is convenient to them. Residents will be contacted before collection to make sure it is a smooth pickup. Again, this is at no cost so we are looking forward to that.

Alderman Cavanaugh stated if they are coming in at no cost they must be a for profit business correct.

Mr. Newton replied yes they are.

Alderman Cavanaugh stated so we are allowing them to come in.

Mr. Newton interjected sorry did you say for profit. They are not for profit. To clarify, Waste Zero is non-profit and Helpsy is not. We are working with Waste Zero and they deal with Helpsy.

Chairman Stewart asked what is Waste Zero's part in all of this.

Mr. Newton stated I guess I am not sure what you mean.

Chairman Stewart stated you said Helpsy will be the one doing the pickup. What is Waste Zero doing?

Mr. Newton replied Waste Zero is essentially the middleman. I am assuming what happens is Helpsy reaches out to Waste Zero letting them know they are looking for partners and Waste Zero will then reach out to us and establish a relationship.

Chairman Stewart asked will folks will need a new type of bin or something like that.

Mr. Newton replied no. They can simply put it in a trash bag if they like.

Chairman Stewart asked when this service will be starting.

Mr. Newton replied we are working to get this on the website as soon as possible. My guess is by the end of April we will have this live. The last item on my agenda is the Waste Management contract. The last time we met, the premise of the conversation was the contract going into arbitration. The arbitration was regarding the final term of our contract or the third and final amendment. Waste Management motioned a summary judgement based on that final term. The arbitrator denied Waste Management's motion for summary judgement on February 21st granting summary judgment to the City. Our per ton disposal fee remains at \$69.28 for fiscal year 2022 versus the proposed amount by Waste Management of \$75.00 per ton. That is a cost savings based on 38,500 tons, which is what we did last year, equaling \$220,000. It is a total cost savings from FY22 to FY26 for curbside services of approximately \$1.4 million and \$650,000 at the drop off facility.

Chairman Stewart stated so saving us \$2 million. That is great news for taxpayers and the City. In FY27 the prices will go up, but for now this is great news.

Mr. Newton stated we never know what will happen in five years. There may be another landfill or there may be a new method to dispose of our waste. We do know that the market rates are significantly higher than what we are paying.

Chairman Stewart stated great work to you and the team at DPW. I am sure the City Solicitor's Office was involved and whoever else was part of this, great work.

Alderman Sharonov stated I am very pleased the arbitrator ruled in our favor. I remember when I first got elected this was my first committee meeting and we discussed going into arbitration and I supported that. I think if I remember correctly it was the last time we could renew the contract through FY2026 so we should be set for about four years.

*There being no further business, on motion of **Alderman Cavanaugh**, duly seconded by Alderman **Sharonov**, it was voted to adjourn.*

A True Record. Attest.

A handwritten signature in black ink, appearing to read "Matthew Normand". The signature is fluid and cursive, with a long horizontal stroke at the end.

Clerk of Committee