Board of Public Works Meeting of February 28, 2019

Agenda - AMENDED

A meeting of the Board of Public Works is scheduled for Thursday, February 28, 2019 at 5:30p.m. in the Auditorium at City Hall, 229 Main Street, Nashua, NH 03060.

I. Roll Call

II. Motion: To approve the agenda as amended.

III. Motion: To approve the minutes of the Board of Public Works Meeting of January 31, 2019.

IV. Public Comment

V. Parks & Recreation
   A. Informational: The 2019 proposal to work in conjunction with Nashua Grows to construct Community Gardens at the Tolles Street Park.

VI. Solid Waste
   A. Motion: To approve a contract with Charter Contracting Company, LLC of Boston, MA in the amount of $5,525,525 for the construction of the Phase III Landfill. Funding will be through Department: 168 Solid Waste; Fund: Bond; Activity: Phase III Landfill.
   B. Motion: To approve a contract with Sanborn, Head & Associates, Inc. of Concord, NH in the amount of $255,000 to provide the Solid Waste Department with Construction Quality Assurance (CQA) services for the Phase III Landfill construction. Funding will be through Department: 168 Solid Waste; Fund: Bond; Activity: Phase III Landfill.
   C. Motion: To approve the creation of a part time Licensed Scale Operator position at the Solid Waste Department. Starting salary for this position will be $21.76 per hour. Funding will be through: Department: 168 Solid Waste; Fund: Solid Waste; Account Classification: 51 Salaries & Wages.
   D. Informational: Fee comparison of surrounding communities for electronics recycling

VII. Wastewater
   A. Motion: To approve the User Warrants as presented.
   B. Motion: To approve the contract to Wright Pierce for professional services for the design and bidding phase services for screening upgrade at the Wet Weather Facility in an amount not to exceed $178,000. Funding will be through:
VIII. Engineering
A. Motion: To approve the Residential and Commercial Wastewater Service Permits and Fees as submitted.
B. Motion: To approve the construction contract for the 2019 Paving Program - Arterial Roadways to Brox Industries, of Dracut, MA in the amount of $6,853,472.96. Funding will be through: Department: 160 Admin/Engineering; Fund: Bond and Trust; Activity: Paving.
C. Motion: To approve the construction contract for the 2019 Paving Program - Local and Collector Roadways to Sunshine Paving Corporation of Hudson, NH in the amount of $4,350,642.35. Funding will be through: Department: 160 Admin/Engineering; Fund: Bond and Trust; Activity: Paving.
D. Motion: To approve the award of the 2019 Asphalt Testing contract to S.W. Cole Engineering, Inc., Londonderry, NH in the amount of $48,600. Funding will be through: Department: 160 Admin/Engineering; Fund: Bond; Activity: Paving.
E. Motion: To approve the engineering services contract with Hayner/Swanson. Inc. (HSI) of Nashua, NH in the amount of $462,435 for the management and construction administration of the paving program. Department: 160 Admin/Engineering; Fund: Bond; Activity: Paving.
F. Motion: To approve the award of the construction contract for the 2019 CIPP Lining Project to Kenyon Pipeline Inspection, LLC of Queensbury, New York in the amount of $2,825,135. Funding will be through: Department: 169 Wastewater; Fund: Bond; Activity: Sewer Rehab.
G. Motion: To approve the award of the construction contract for the 2019 Sewer Rehabilitation Project to N. Granese & Sons, Inc. of Salem, MA in the amount of $1,001,888. Funding will be through: Department: 169 Wastewater; Fund: Bond; Activity: Sewer Rehab.
H. Motion: To approve the Fence and Wall Permit Application as presented.

IX. Administration
A. Informational: 2019 Spring Cleanup Schedule
B. Director's Report

X. Commissioner’s Comments

XI. Personnel
A. Motion: To unseal the nonpublic minutes for Personnel from the Board of Public Works Meeting of January 31, 2019.
B. Non-Public Session

XII. Possible Non-Public Session
A meeting of the Board of Public Works was held on Thursday, January 31, 2019, at 5:30 p.m. in the Auditorium at City Hall, 229 Main Street, Nashua, NH 03060.

Mayor Donchess, Chair, declared the meeting to order at 5:30 p.m. and called the roll.

**Members Present:**

Commissioner Joel Ackerman, Vice Chair  
Commissioner Tracy Pappas  
Commissioner Kevin S. Moriarty  
Commissioner G. Frank Teas (Arrived at 5:17 p.m.)

**Also Present:**

Ms. Lisa Fauteux, Director, Division of Public Works  
Mr. Jeffrey Lafleur, Superintendent of Solid Waste  
Mr. Steve Dookran, City Engineer  
Attorney Steven A. Bolton, Corporation Counsel  
Mr. Andy Patrician, Assistant Director, Division of Public Works  
Mr. Jon Ibara, Superintendent of Streets  
Alderman Ernest Jette, Aldermanic Liaison

**MOTION:** Commission Pappas made a motion to approve the agenda as amended.

**MOTION CARRIED:** Unanimously

**Approval of Meeting Minutes – December 20, 2018**

**MOTION:** Commissioner Pappas to approve the minutes from the Board of Public Works Meeting of December 20, 2018.

**MOTION CARRIED:** Unanimously

**Public Comment**

There was none.

**Presentation:** Four Hills Landfill (presented by Eric Steinhauser of Sanborn Head & Associates, Inc.)

Mr. Steinhauser, Engineer, Sanborn Head & Associates, Inc.

Sanborn Head has been working at the Four Hills Landfill site since about 2009 in various design and operations projects.

This evening I will be talking about the upcoming construction that is proposed as well as some future planning.
This is an aerial photograph of the Four Hills Landfill which shows the closed, unlined landfill. There is also an old C&D landfill that is unlined and closed. This area is phase I of the first unit that was built under the current regulations for lined landfills. The city is presently mostly in phase II where the waste is being disposed of and some of it goes into phase I as well. The red lines represent the limit of waste that can be placed in those areas. The red lines represent the limit of waste. There is a 500-foot setback from the residential properties. When the facilities were first permitted and built, the liner system goes beyond those lines and the city has to fill those areas with clean soil and that’s done with a barrier wall so we can get height and optimize the amount of waste that goes into the facility. There is a gas energy facility which is landfill gas that is generated in the landfill and collected and made into electricity. There is a compost area where liquids that come through the landfill are collected and drained to the manhole box and that drains by gravity out to the city sewer system. There is an area where the residents of the city can drop off their recyclables and waste. The operations for the landfill are located in this area and there are six detention basins on the site and the dots represent the ground water monitoring system.

Tonight, I am going to talk mostly about phase III which would be on the south side of the landfill. It will be the next lined area. Phase III was permitted back when phases I and II were but it just hasn’t been built yet. The limits are set so we will not go beyond the permitted limit of waste.

Phase IV would be to find another spot in the Four Hills Landfill where we can develop another lined landfill. This would incorporate overfilling part of phase I and phase II on the south side as well as overfilling on the closed landfill. The access road in the center would also be lined to control the waste disposal. Phase III is an interesting project. It would be your first construction of a lined landfill at the Four Hills Landfill since 2008. Right now, there is a vertical barrier wall that a contractor periodically comes in and builds it for the city so we can keep placing waste. Our design for phase III eliminates the need to build that. Phases I, II & III were originally permitted that the liquids in the landfill would flow through the liner systems and out to the manhole. Back in the 90’s when this was permitted, it was okay by the state rules but that is no longer the case so we have eliminated liner penetrations without design. To do that we have an active pumping system. The leachate goes to a sump and gets pumped out and pumped into the existing system. One of the challenges of this was the ground water because we have to have a separation between the top of the ground water and the bottom of the liner system. Many of the wells that you saw were in place so we can understand where groundwater is and we can design the bottom of the landfill and from that design, figure out how much capacity the life of the landfill will be.

To do all of this work there will be two stages of construction. The first one we would like to do this year and that is to set the major parts of the facility and the second stage, which would be about five years out, would be to build the rest of the infrastructure to maximize the capacity at the landfill.

Phase III is about a 6-acre landfill in total and we would be looking at some significant earth work to build the perimeter berms and get to the grade to build the landfill properly.

One thing to note is that pond six was upgraded to meet the new regulations.

Commissioner Pappas

Regulations changed frequently. What happens if we get approved and we are in the middle and the regulations change?

Mr. Steinhauser

Once you are approved and you have your permit, you fall under those rules. If you want to make a change to the facility, depending on what the change is, if there is a rule change that is associated with that
modification, then you would have to follow the new ones. Because we are sending a different amount of water to the pond, we had to upgrade the regulations.

The red lines here are the leachate collection pipes which is the liquid that comes through the waste will be collected in a pipe network and it will drain to the sump. There is a pumping network that pumps the liquid up through a riser building, which is an actual structure where we will have meters and be able to extract the pumps for maintenance and see how much flow is going through and do sampling if we need to.

The pumping network will pump it all the way up to the top of the hill where we would change from the force main to a gravity main and it will drain back in a pipe back to an area of phase II where there is already plumbing to bring that phase III liquid to the existing system. We are trying to use as much of the existing infrastructure as we can without having to replace a lot more pipe at the landfill.

Commissioner Ackerman

Are we taking rainwater and pumping it out…

Mr. Steinhauser

Any water that comes into contact with waste, by rule, is considered leachate and that has to be handled separately than stormwater.

The next slide has blue lines that indicate the ground water contours and the green lines are computer modeling to see the difference between the top of the ground water and the bottom of the landfill. We have to have a 6-foot separation by rule. It has been a wet year and the ground water table has risen since we did this so one of the conditions of the permit is to monitor ground water and make sure we have the separation. The city has been monitoring that and we have to keep monitoring it through June of 2019 and show the state we have the separation.

Alderman Jette

Can you explain the lines again?

Mr. Steinhauser

The blue lines are like topography lines for ground water. The low of the ground water is down here and that is why we put the sump there. The curved lines are other 10-foot contour lines of the ground water with the highs being off on the edges on either side. The water flows from the edges into the landfill footprint and then downward.

Alderman Jette

Where will phase III be located?

Mr. Steinhauser

Phase III will be located at the bottom, right hand side of the page.

Director Fauteux

It will be right behind phase II where we are currently working.
Alderman Jette

That is not very far from the houses on Pioneer.

Mr. Steinhauser

That’s correct. The red lines for phases I and II represent the 500 feet from those houses. If you were to continue those lines that would set the boundary for phase III which is a state requirement. Phase IV, which is in the middle of the site is well away from the 500-foot setbacks. When it was originally permitted, phases I, II and III were permitted as one package and we are modifying it to adjust for the vertical wall issue as well as for the ground water table.

The construction project is pretty straight-forward, it’s some earth work and then we put down some synthetic materials for barrier layers and drainage layers. It’s multi-layer thick at 2+ feet thick and there will be a perimeter berm around the outside which will be constructed out of soil. Phase III will be built this summer in the 6-acre area which is in the 500-foot setback. There is just over 1 million yards of air space for disposal capacity in that area. Based on your current waste stream coming in and compaction, it’s about 6 ½ years of capacity. We would go to phase II about five after you start filling it. Phase IV will build a more soil berm along the outside and place more liner material so all of the waste would stay inside the limit of waste. We will place the liner such that all of the waste is always staying inside that limit of waste. You will get another 280,000 cubic yards or another 3 ½ years of capacity. The construction of that would be mostly the soil berm and some more liner system but not as extensive as phase III.

Commissioner Ackerman

Why does 1 million cubic yards last 6 ½ years but 280,000 cubic yards only last for 3 ½ years.

Mr. Steinhauser

As you start a new landfill your first lifts are placed loser because you don’t want…we call it select waste, we have to be protective of the liner systems. You don’t get as good of a compaction in the early years because you don’t have the thickness of waste and as we go longer you are getting settlement of the waste. We look at what we call an air space utilization factor. We do math based on the tonnage brought in and the historic placement that we are able to see.

Commissioner Ackerman

Is there an overlap between the phases? Is it contiguous?

Mr. Steinhauser

It is contiguous, correct.

Commissioner Pappas

Are all these phases going to be included in the permit?

Mr. Steinhauser

The original permit included phases I, II and III. When you are ready to build the next phase there is another application for construction, it’s called a Type II Permit. Phases I and II are built and are active. Phase III we did not need yet so you don’t build what you don’t need. Capacity is running out in the landfill so we need to get it built. To get permission for construction there was another permit application to modify the original one
so that is what we did. We showed the state the modifications that we are doing over a year ago. Because we are modifying it, we had to go through alteration of terrain with the Department of Environmental Services and we have all of those permits in hand. We just need the local approvals to go forward.

Director Fauteux

We will also be working on getting the permitting done for phase IV. We only have permits for I, II and III.

Commissioner Pappas

If we get I, II and III, how many years will that buy us?

Mr. Steinhauser

Phase III will get you an additional ten years. If you didn’t do anything you would have four or five years left. You need overlap between the phases because you want to select the waste that goes on the new liner systems. You also want overlap between the phases so you can properly remove machinery and have good operational control.

What is nice about the phase III design is that you build one project now and in five years you build another project and the city doesn’t have to deal with the periodic vertical wall construction which hampers how they can do work.

At the end of the day when phase III is filled it’s going to look like this and just to note there is a lot of grading at the bottom and then it stops. This is the area where clean soil is placed in the liner system and part of the job was to eliminate having to do that. There is earthwork to build a berm around phase III but we are not building the extra liner system because we don’t need to.

Alderman Jette

What is the liner built out of?

Mr. Steinhauser

In New Hampshire the rules are to have a geomembrane material and I have two types to show the Board. One is a 60 mil. thick, high density, polyethylene material which every site in this country and internationally uses. It is textured for slopes stability issues so there is no sliding. There is a primary geomembrane and a secondary geomembrane. When this gets built, they will do earth work to grade the site to where it needs to be and we will place a six-inch-thick layer of a low permeability, very dense material and on top of that we will put the first layer of the plastic material. On top of that will be a drainage material which is kind of like carpet with a drainage net in between. It allows water to move through it so it can be collected in the sumps. On top of that is the primary geomembrane and then another composite for the leachate directly from the landfill and then there is an 18-inch-thick sand layer above that and waste is placed above that. In the sump area there is another material that is called a geosynthetic clay liner. Inside of that textile is a very fine clay called sodium montmorillonite or bentonite and it is placed in the sump as an extra precaution because that is where you have the thickest amount of standing liquid. If there were to be a hole in one of the membranes that would swell up and prevent water from going through.

The construction is a big earth work job with some specialty geosynthetics being placed. We will be writing a pretty thick report that documents all of the stuff that goes in.

Alderman Jette
Is the material a source on containment?

Mr. Steinhauser

No sir. These materials have been used for a long time and they have been tried are true tested. Even the closed landfills have similar materials on them.

Alderman Jette

Is the estimated length the landfill will last based upon how much stuff is put in there?

Mr. Steinhauser

That’s correct, it’s based on your current and projected waste stream. Some of it has to do with types of waste it is and how well you can compact it. There are a number of factors but the tonnage is probably the biggest nut to crack. It is only an estimate.

Commissioner Moriarty

With regard to the pumping station you are planning on building, what does that run on?

Mr. Steinhauser

It runs on electricity. Eversource would have to put some new poles in for overhead and then we would run below grade conduits to the pump house.

Commissioner Moriarty

Is that an automatic on/off system?

Mr. Steinhauser

There is a submersible sump that is put into the bottom. These pumps are specially made for leachate environments. There is a number of sensors associated with the pump that reads the water level so when the water level reaches a certain point the pump kicks on and when it goes down to a certain level, it shuts off. It does not run 24 x 7 and it depends on how much waste there is, how dry the waste is and how much rain has happened. It’s all automated and the operation staff can see the operations of the pump. There is another level that indicates the level is too high and a warning will go off so the staff can repair it.

Alderman Jette

Has any thought been given to producing our own electricity to operate it?

Mr. Steinhauser

We have not for this project but it is a possibility. It is a little bit outside of my expertise but sometimes it’s cheaper to buy it. If it was something the city wanted to look into, we could certainly direct you to people who can do that.

Phase IV would be overlying the large, unlined, closed landfill and that application is in the process of being prepared, including the engineering design, the hydro-geologic environment around it and the stormwater
design that goes along with it. This would be a new landfill so it would be another new permit for that facility and not a modification like phase III was. Our estimates right now of the volume is 3 to 4 million cubic yards which would last an additional 40 to 50 years. One of the goals was to look forward enough so the city has capacity security.

Director Fauteux

We still need to get this permitted and the permitting process could take three to four years.

Mayor Donchess

You are saying if phase IV were to be permitted with the other phases it would add 40 to 50 years.

Mr. Steinhauser

Yes.

Commissioner Pappas

Is it going to be harder to do a brand-new phase IV or will the other phases be more difficult to do as far as the infrastructure we have to put in?

Mr. Steinhauser

Phase IV is not hard to develop. Part of the infrastructure already exists because phases I and II…that liner system meets the current regulations. It’s the places that don’t have a liner in between the two landfills and up on the side slope of the closed landfill will have to have a modified liner system to bring it up to code. The cover system is a less restrictive design than a liner system. There are actually three types of liner systems that need to go in place but it’s not a complicated construction. It will be built in phases because of how big it is. The infrastructure for leachate lines are nearby so we would have another sump and pump system but that is a pretty short run compared to what phase III has. There are some other modifications that have to happen on phases I and II because there is there is gas extraction infrastructure which needs to be modified but it’s not complicated but does need to be permitted and designed. It would be a good idea to get the permit now so it’s done.

Alderman Jette

What happens to the leachate after it gets pumped up to the top of the hill and flows down? Where does it go and what happens to it?

Mr. Steinhauser

All of the leachate from phases I, II and III and also the future phase IV…there is a gravity sewer line on site that leads to a pump station off of West Hollis Street and that goes to the Wastewater Treatment Plant and is treated as sewage.

Director Fauteux

It is pumped through the Trestle Brook pump station to the Wastewater Treatment Plant.
Alderman Jette

Does it get treated on-site?

Director Fauteux

It gets treated at the Wastewater Treatment Plant.

Alderman Jette

It sounds like phases I, II and III are more complicated.

Mr. Steinhauser

There are different complications. Phase III is permitted but we need to go to construction. There are nuances to every project but phase III is not all that complicated. Phase IV has some other infrastructure that needs to be modified for it to be constructed but it is not overly complicated.

Alderman Jette

If phase IV were to be permitted, can we skip phase III?

Mr. Jeffrey Lafleur, Superintendent of Solid Waste

We are at a point where there is not much capacity left in phases I and II. If we wait for phase IV to get permitted, it could take another two years. We still have to do all of these meetings and public hearings. We also have to go through DES to get that done and we just do not have the time to make that happen. Just so you are aware, we are already out to bid for this project and we will be getting the bids back on February 20th and you will see a contractor selected at the next BPW meeting on February 25th.

Director Fauteux

Also, just to add to what Superintendent Lafleur said, phase III will give us some more because we are going to tie it into phase II and it will give us some additional air space.

Mayor Donchess

Are there any other questions or comments? Seeing none, thank you, Mr. Steinhauser.

Engineering Department

A. MOTION (tabled from 10/25/18): To allow a fence located in the right of way at 1 Hutchinson Street to remain in its current location.

Mr. Steve Dookran, City Engineer

Just to review, the fence located at 1 Hutchinson Street has been installed within the city’s public right-of-way. According to the homeowner, they were misled by the fence company as to where the right-of-way line was and thus, we have a fence that is in violation the city ordinance. The ordinance states that if fences or walls will abut a street it has to first come to the City’s Engineering Office for review with regard to lines and grades and that was not done. Secondly, the same ordinance states if there is an obstruction or encroachment within the right-of-way, that has to be approved by the Board of Public Works, but only if safety needs are met. This
situation was brought to our attention by a neighbor of 1 Hutchinson Street who complained about a sight distance problem as a direct result of the installation of the fence being placed too close to the roadway, especially when they try to back out.

The Board tabled the discussion at the October meeting to have the opportunity to review it. In the meantime, the division looked to see if there was a compromise that could be done by simply adjusting the fence. We looked at the scenario of being in the driveway trying to back out, focusing on at what point do you start to see an improved sight distance. We determined if the corner of the fence was brought back by 3 feet and angled it, there would be an improved sight distance. It would not be ideal and it would only give that driver backing out the ability to see more. It would not meet engineering standards. For instance, we look at vehicles travelling 20 mph; a vehicle needs 155 feet to stop when there is something that they can collide with, whether it is another vehicle or a pedestrian in the street. According to engineering standards, it takes three seconds to receive and react to the situation and you are still travelling within those three seconds. It then takes a certain amount of time to decelerate and stop. Higher speeds would need more than 155 feet to stop. As it is, it does not meet the 155 feet, even if we were to bring the fence back by 3 feet, however, the situation would be improved.

We approached the owners of 1 Hutchinson Street and asked if they would consider bringing the fence back and either angling it in by 3 feet or moving the whole length by 3 feet. The owners stated they would not be interested in doing so. Our position has not changed with regards to the safety issue, but I feel the decision is up to the Board.

Commissioner Pappas

I was surprised that there is no general “X” number of feet setback throughout the city. Is it different from neighborhood to neighborhood or ward to ward?

Mr. Dookran

The public right-of-way varies throughout the city. The old right-of-way’s that are accepted by the city, sometimes they are in the 36-foot range. Years back we started to standardize it as a 50-foot requirement so all sub-divisions going back from the 70’s or 80’s have the standard 50-foot driveway for a residential street. The street could be located anywhere within that 50-foot requirement. It is common practice for the street to fall directly along the center line and therefore, the distance between the edge of pavement and the right-of-way line is pretty standard but there are some streets that favor toward one side or the other.

Commissioner Pappas

Is there a minimum or maximum range?

Mr. Dookran

If you look at a 50-foot right-of-way, a typical sub-division has a 28-foot wide road and that means the edge of the street is 14 feet from the center line and the remaining distance would be 25 minus 14 which is about 11 feet.

Commissioner Pappas

Does that also apply when people put shrubbery up and the shrubbery grows out?

Mr. Dookran
Typically, no. We allow people to landscape the what is left of the right-of-way as long as they don't impede on the sight distance. We identify locations often that there are overgrown shrubs and we will approach the homeowner to trim the shrubs.

**Director Fauteux**

I think Commissioner Pappas’ question was if there were shrubs in the right-of-way that created a sight distance issue, would the same apply. The answer is yes.

**Commissioner Pappas**

I can think of a few different sight issues with bushes and I really do not like sight distance issues in intersections but sometimes I think a fence is less intrusive than a shrub. Do you know if there were shrubs there prior to the fence?

**Mr. Dookran**

There was overgrown brush there.

**Commissioner Pappas**

But was the overgrowth where the fence was?

**Mr. Dookran**

According to what I saw, there was overgrown vegetation probably in the same location as where the fence is.

**Commissioner Pappas**

So, the neighbors that were there would have had to deal with the sight issue from the vegetation anyway.

**Mr. Dookran**

I would say they might have but we have no way of saying for sure.

**Commissioner Teas**

In the materials that we reviewed there was a reference to, without anyone accepting any wrong-doing, maybe someone being misled from the website. Has that material been updated?

**Mr. Dookran**

I think it has. The material that is put on the website is by the Community Development Division. I think it might have said “no permits required for fences unless it is taller than a 6-foot fence.”

**Commissioner Teas**

Have we communicated with Gate City Fence or will we communicate with Gate City Fence?
Mr. Dookran

We are in the midst of trying to put together better documentation regarding fences and it is part of our plan to reach out to all of the fence companies to make sure they abide by existing and as well as any new rules.

Director Fauteux

Gate City Fence has had to move fences out of the city right-of-way recently so they are well aware of that issue.

Commissioner Teas

If we were to agree to the compromise that you outlined earlier; would we be liable for any accident that may occur?

Attorney Steven A. Bolton, Corporation Counsel

Like a lot of things in the law, the answer is maybe. You are taking a risk. If the automobile is going 60 mph down the street, I don’t think the fact that vision is obscured to the driveway is going to be the big issue. In an appropriate case, however, the city would be liable. I analogize it to we don’t catch every speeder on our roadways. If someone speeds on one of our roadways and we don’t know anything about it, it’s not our fault. If we go out and affirmatively give someone permission to drive down Main Street at 70 mph then it will be on us. The ordinance is quite clear that if you are going to build a fence, a building or plant landscaping that would impact sight distances, you are supposed to consult the engineer and the engineer would identify where the edge of the right-of-way is, the proper grade and other things that may impact sight lines or other issues and the service is done at no charge.

Gate City Fence should have known this. They are the experts in the field. All they had to do was consult with the City Engineer. There is a minimum time that the City Engineer has to respond and it’s fifteen days. They are the people who were hired to apply their expertise to the situation. In my mind, they failed to exercise good professional judgement in that regard and if these homeowners bear any expense because of their failure to do what was right, then that is where their remedy lies, to go after the fence company. I can’t in good conscience, advise you to ignore the law and to put the city treasury at risk.

Commissioner Ackerman

I have in front of me an ordinance named Chapter 285, Streets and Sidewalks. We talk about the editorial by the City Engineer and the mention of right-of-way but I don’t see any mention of that within the ordinance. Am I missing something, Attorney Bolton?

Attorney Bolton

Abutting a public street means the same thing and there is reference to abutting a public street.

Commissioner Ackerman

Where is that information?
Attorney Bolton

In §285-7, “No person shall proceed to erect or make any alteration in the location or grade of any fence, wall, lawn or building, a part of which is to abut a public street.”

Commissioner Ackerman

I had an opportunity to drive by the property and I thought the fence was well constructed and the property looked very good. I thought the homeowner had done a great deal of due diligence. I do agree with you that if we are going hold these “experts” responsible then maybe we ought to look forward to having them go through a permitting process so we don’t have this type of situation ever happen again to a resident of the City of Nashua.

Director Fauteux

We are working on that now.

Commissioner Ackerman

I think we should work a little faster if we could. I still haven’t heard, with regard to 1 Hutchinson Street, what the right-of-way is in terms of distance from the curb to the “thing.” I’ve heard 11 feet, 15 feet and 14 feet. I went out and measured it and it’s 62 ½ inches from the edge of the curb. I rode around the neighborhood and I saw other properties where the fences are right on the street. Granted, they are not 6 feet high, they may have been 3 or 4 feet and a chain link fence. I think we need to do the right thing by the residents of Nashua and I don’t want to make this a hardship case for them but I do agree with your comment. If the people who installed the fence did something inappropriate and the Board doesn’t agree to allow the fence to stay where it is currently then they might have some recourse against Gate City Fence. I thought it looked safe and I thought they did all of their due diligence. I thought the neighbor, as I understood it, was on the property the day of the installation and I thought they were consulted and at that time they didn’t seem to have a problem with the location of the fence.

Attorney Bolton

Commissioner Ackerman, I certainly do not intend to argue anything but I am not so much worried about the neighbor, who may have assumed the risk when they indicated that they had no problem with fence, I am more worried about exposing someone who wasn’t involved at all and happens to be driving down the street and ends up colliding with someone exiting the neighbor’s driveway. If that third person is badly hurt, it is not going to matter if you let this occur, knowing what you know, we are going to get sued. The jury is not going to be very sympathetic with us. Other fences in other places that got done without first coming to the Board, I am not saying we have no risk there but I am saying we have less of a risk. You have more risk when you affirmatively allow something that has been brought to your attention.

Mr. Dookran

To be clear, the fence in about 11 feet from the edge of the street.

Commissioner Ackerman

With regard to the fence that is encroaching on Hughey Street, with the exception of that distance from the edge of the property…the resident there…to the other section beyond the gate, is the rest of the fence in agreement with the right-of-way?
Mr. Dookran

Yes, it’s almost exactly on the right-of-way. That was kind of confusing to us; how could that fence be put where it should be and the rest of it is bumped out into the street.

Commissioner Pappas

Attorney Bolton, you said “fences” but when people have concerns about sites regarding overgrown bushes…I have had many more complaints about that. People don’t go before the Board of Public Works to plant shrubbery. Would the city be liable if we ignored concerns of residents’ that are of a vegetation nature or other things that are in the right-of-way?

Attorney Bolton

If brush grows naturally and then becomes a sight distance obstruction issue and people call it to the attention of the Board of Public Works or the Division of Public Works, a crew will go out and trim it back and make sure it doesn’t present a hazard. If someone intends to plant 8-foot tall arborvitaes within the right-of-way then the same ordinance would require them to go to the City Engineer and get the edge of the right-of-way delineated and it would be the same situation as this fence.

Commissioner Pappas

Usually what happens when we get sight issues is, we usually go to Code Enforcement first and then sometime Code will try to work with people. I want to be sure that we are consistent and fair with fences and brush. I find brush to be more difficult of a sight issue than a fence. It seems that it involves two departments and that is where I have been frustrated in the past.

Director Fauteux

The first thing would be for an engineer to go out and do an inspection to see if there was a sight distance problem. If there is a sight distance problem we would ask if it were bushes that they be trimmed back and if that didn’t happen then we would get Code Enforcement involved and they would go out and try to work with the resident.

Commissioner Pappas

If the sight distance issue persists, where does the resident go?

Director Fauteux

If we have determined that there is a sight distance issue then Code would get involved in the removal at that point.

Attorney Bolton

In this case, you have a fence that is actually in the right-of-way, it’s not on the unencumbered property of the homeowner. In the zoning ordinance, which the Code Enforcement Department enforces, there is a provision for setting back a fence or shrubbery or anything else. The ordinance states that you measure back from the corner of a street by 25 feet in each direction and then draw a line between those two points and within that triangle it has to be free from any sight obstruction.
Mayor Donchess

I think what you are saying is that triangle might not be in the right-of-way.

Attorney Bolton

Exactly. Code Enforcement would probably approach the homeowner and tell them they were in violation and inform them they had to move their fence or cut back their brush. If they don’t comply then we would enforce it with a court action in Superior Court with a mandatory injunction. The homeowner could then plead their case in court or go to the Zoning Board of Adjustment and seek a variance. Public works probably doesn’t get involved in that case at all.

When we have something in the public right-of-way, the division could just go out there and remove the fence and the shrubbery. I think in the interest of harmony in the community that they speak to the property owner first and not just go and bulldoze the fence. However, that is a remedy the city has.

In this particular case, the homeowners are asking who they have to speak to in order to keep the fence where it is.

Commissioner Teas

For clarification, Attorney Bolton, is the fence on the city’s property or in the right-of-way?

Attorney Bolton

This gets complicated and it’s not understood by everyone. In a typical case, and I think this case is typical, what the city owns in our streets is not the feet interest, the total ownership of that property. The city has a type of easement called the right-of-way. The city has the right to maintain this strip of land and construct appropriate facilities on it to allow for vehicular and pedestrian traffic. The actual underlying ownership, like when oil is discovered in that strip, to the center of the right-of-way it belongs to the homeowner on this side of the street and to the center of the right-of-way it belongs to the homeowner on the other side of the street. Even on the edge of the right-of-way and certainly where the fence is now, it’s interfering with pedestrian traffic because the pedestrian traffic is now going to be forced to walk in the area that is designed for vehicular passage. In this case, out to the center line of the right-of-way, which may or may not be the center of the pavement but in most cases it is. Sometimes the pavement is more to one side or more to the other side. The city has the right to keep that space clear. Beyond the right-of-way, the city has only what it can do through zoning and police enforcement.

Commissioner Teas

So, analogizing your example, I put a fence in my yard but I didn’t keep the right setbacks from my neighbor’s yard?

Attorney Bolton

In most cases there is no setback under our zoning for a fence.

Commissioner Teas

But let’s say I put the fence on my neighbor’s yard, I might be forced to move it because it is on the wrong property.
Attorney Bolton

That’s correct.

Commissioner Ackerman

Director Fauteux, as you articulated earlier, there was a dialogue that occurred between the city and the resident at 1 Hutchinson Street and they chose not to go with the compromise, is that correct?

Director Fauteux

That's correct.

Commissioner Ackerman

The compromise was to simply to take the fence and move it back by 3 feet or angle it over by the homeowner’s property, is that what I understood?

Director Fauteux

Yes, Assistant Director Andy Patrician and Lauren Byers met with the homeowners.

Commissioner Ackerman

I think that was a great effort and I appreciate that. By virtue of it now coming before the Board, if we say the fence can’t be where it is then the fence would go back to 11 feet off of the street. Is that an accurate statement?

Mr. Dookran

Yes.

Commissioner Ackerman

Perhaps, knowing there is a liability or possibility from the city for the safety of the greater good of the community, I might recommend that the department go back and ask the residents if that is their final decision on the compromise offer. Either way, I do believe, as pointed out by Attorney Bolton, that the people that put the fence up should have known the rules and regulations as they have been in the city for 50+ years. Ultimately their recourse is going to be against them but it’s either going to be 6 feet or 3 feet so before we vote, my recommendation, if possible, would be to simply ask the homeowner if they are willing to reconsider the compromise before we vote.

Mayor Donchess

How do you want that to be pursued, now or in a period?

Commissioner Ackerman

I would like to move the meeting forward. This is not just a debate, there has been a lot of dialogue by Mr. Dookran and Assistant Director Patrician with the homeowner. I would just like them to open the conversation maybe just once and hear what they have to say.
Ms. Alison Hurd, 1 Hutchinson Street, Homeowner

One of the points we wanted to make was the proposal that was said to have been given to us was to move the fence back by 3 feet or to move the corner of the fence by 3 feet. Both Lou and I were present that day during the conversation and that is not the proposal which was laid out to us. The proposal laid out for us was to move the stretch of the fence back 4 feet.

Mr. Louis Fish, 1 Hutchinson Street, Homeowner

Or to have just the corner moved back by 8 feet.

Ms. Hurd

Also, to clarify as to why our picket fence is different than our 6-foot fence; the reason is because we were enclosing two separate spaces, one was the backyard and one was a garden fence. There was no intention to encroach or get more yard space, we were just trying to enclose the garden which is why it’s in a little bit closer.

Mayor Donchess

I think the point that people are making about the fence company is that it’s pretty hard to believe that they…

Ms. Hurd

It is and I think our concern Mayor is that it wasn’t just Gate City Fence that gave that quote to us. We spoke to three of the most reputable gate companies and they all said the same thing, which was 5 feet and that is why we did not question it further. That and the fact that the town’s website did not lead us to believe anything different.

Mayor Donchess

Just to be clear, no one is suggesting that you should have understood this after talking to the fence company. They are suggesting that the fence company knew all about this and why did they not speak with the City Engineer.

Mr. Hurd

Mr. Dookran actually made a statement that kind of answers that question. He’s aware that these fence companies are not aware of the regulations and hence because of our issue, they have now started going out to fence companies and talking to them about the regulations. As Commissioner Pappas has said, the right-of-way is so arbitrary that no one knows what it is. Mr. Dookran mentioned that the right-of-way, since the 1970’s has been 50 feet. Our neighborhood was built in 1957 and at that point, he himself just said, the right-of-way was 35 – 40 feet. I question where the right-of-way is because he’s using 1970’s standards and we are talking about a neighborhood that was built in 1957.

Mayor Donchess

Mr. Dookran wasn’t saying that he really believes that they don’t understand this, he is just reclarifying with them. This fence company has been required to move other fences because they are in the right-of-way. They know all about this. They have been doing this for over 50 years.
Ms. Hurd

When we spoke with them, they said they recently had to move a few of them that just come up. They said it was not like they had a history of having to move fences for years.

Mayor Donchess

I think you should take that with a grain of salt because I know of other cases. All I am trying to do is make it clear that no one is suggesting that you should have done anything other than rely on them. We are suggesting that the fence company is well aware of these issues.

Mr. Fish

One of the things that Mr. Dookran mentioned was about the 20-mpg speed coming around that corner. That is a 90-degree corner and nobody is coming around that corner at 20 mph. You have to take that corner at 15-mpg or sometimes less.

Ms. Hurd

Neighbors have even asked why we don’t have stop signs at this intersection. Our understanding is that the City of Nashua has said that there really isn’t enough traffic to warrant stop signs. It is not a heavily travelled road at all.

Mr. Fish

In addition to the line of sight issue; we still have the photocopies of the brush and the trees that was there which did encroach into the street by 3 – 4 feet. Our fence is now about 6 feet back from the road so our estimation is that we have actually increased the line of sight for our neighbors by approximately 10 feet. In addition, we talked about the pedestrian travel on the street. If there was brush and trees that encroached into the street by 3 – 4 feet then that means that pedestrians would have to walk in the middle of the street going down Hughey Street. Now, because of where our fence is, and there is grass along the fence line, pedestrians can walk off the street, on our property and not have to worry about the safety issues. We are talking a lot about safety on a tertiary road that we have drastically improved.

Ms. Hurd

If you remember the first time, we were here one of our neighbors, Sadie Belknap, accompanied us and she was speaking to the specific issue that I know is near and dear to your heart, Commissioner Pappas, that she had specifically called the town about the encroaching brush. Many of it had been intentionally planted. She had called the town and said it is a danger and needs to be cut back because I can’t walk my dog. If someone comes down the road, I have no place to jump off with my dog. Nashua did nothing about it and it did not get cleaned up until Lou & I moved in and we took care of all of that.

Mr. Fish

By the way, the city’s website has not been updated. I checked it yesterday and it still says “as of October, the site is under construction.” There has been no action on the city’s part to fix the website and inform residents of the regulations.
Commissioner Teas

Louis and Alison, thank you for coming here this evening. I commend you for what you have done to that property. I think you did a nice job and are good people with good intentions. Before us today is something that impacts you tremendously but it also tremendously impacts 90,000 other people that are not in that neighborhood and we’ve also got to think about all of those folks. We want to resolve this fairly but I think if we were to vote right now it would probably be denied.

**MOTION:** Commissioner Teas made a motion to table the discussion and ask for 60 days for the homeowners to work with the City Engineer and report back to the Board of Public Works at the February meeting and vote at the March meeting

**Discussion:**

Commissioner Teas

I am nervous about the liability that would be imposed upon the city but I am also mindful of the burden on you as well. I want to provide a fair amount of time to get it done.

Ms. Hurd

We appreciate that and just to speak to the liability issue, we actually have two attorneys that we are currently working with and one of them had spoken specifically to the liability issue and said that he was a little bit confused because the neighbor who had called had specifically asked for just a “Blind Driveway” sign and he said if that was what the neighbor was asking for and Nashua erected said sign, they were doing their due diligence and that should absolve any liability and furthermore, everything that this Board does as far as ruling on any sorts of variances and exceptions, would be a liability issue. He was confused as to why this issue was such a hot button topic. He said they rule on all sorts of variances that deal with fences, why all of a sudden is yours, on a back road, when you have pictures of other properties that are in the exact same situation, why is Hutchinson such an issue. We do not object to the sign being erected if that is what the neighbor asked for.

Director Fauteux

This is a huge safety issue for us and that’s one of the things that we are most concerned about in public works. We are always looking out for the safety of all residents. In this instance, it was brought to our attention and that is why we are here. We certainly did not hunt you down, it was brought to our attention that there was a sight distance issue. Your neighbor has expressed concern about being able to back out of their driveway. We are also concerned about other people that might be driving down your street, perhaps your other neighbors that could hit your neighbor as they are trying to back out of their driveway. It is also about treating everyone equitably. We can’t have a situation like this that is brought to our attention and not respond to it. There was an ordinance that was violated and we have to make sure it is safe. I think we have to be very careful about allowing obstructions in the city’s right-of-way that create a liability for the city and a safety concern for our residents.

Mr. Fish

Forgive me for being bold but isn’t that what the city did multiple years ago when they ignored the request to clean the brush prior to us owning the property. They didn’t act then.
Director Fauteux

I am sorry but I don’t have any knowledge of that.

Ms. Hurd

We also have pictures of Meade Street where there is almost an exact same situation. There is a driveway and a 6-foot fence and I don’t think anything has been addressed with that property.

Mr. Fish

It just seems quite unfair that you are drawing a line in the sand and saying from this point forward we are going to do this and we are going to hold residents responsible. Your line in the sand is after we have already put up our fence so why aren’t all of the other residents being held to the same standard.

Director Fauteux

There are three other fences that have been brought to our attention recently and we have requested that both residents move their fences and they did. You are not be singled out. There was also another one on Ferry that we asked the resident to move the fence because it was in the city’s right-of-way and it was a sight distance issue. When they are brought to our attention, we do look at them and we have to make a determination as to whether or not there is a safety issue.

Mr. Fish

That’s fair but as far as the offer that was presented to us, moving that corner back to allow our neighbors three more feet of visibility at an angle to go to the gate that is installed on that same side; that had not been what was proposed to us but that would be an amicable solution provided we can get Gate City Fence to move that corner of the fence.

Mr. Andy Patrician, Assistant Director of Public Works

The original agreement that Lauren and I had talked to them about was to go the half of panel in and to go back two panels. I don’t know if we got confused somehow but that was the original agreement.

Mayor Donchess

What do you mean by panels?

Mr. Patrician

They are fence panels. When we were talking panels at their home, we were thinking it was a 6-foot panel so that is where the 3 feet came in. It would have still had to have gone back two panels in order to cut the corner for the resident to back out.

Mayor Donchess

Two panels in what direction?

Mr. Patrician

Two panels towards the corner.
Mayor Donchess

How much down the driveway?

Mr. Patrician

We are proposing to go half way in the neighbor’s driveway which would be 4 feet.

Mayor Donchess

So, 4 feet down the neighbor’s driveway starting two panels towards Hutchinson Street, angled to 4 feet down the driveway of the neighbor.

Mr. Patrician

That’s correct.

Mayor Donchess

Is that what you understood, Mr. Fish?

Mr. Fish

It wasn’t at the time. I thought they said one full panel in if went to the angle and 4 feet if we went the entire length of Hughey Street. If they are talking about coming in 4 feet along the neighbor’s driveway and 16 feet to the gate, that would be more amicable to us, again, providing that Gate City Fence is willing to do the moving of the fence. Otherwise it is a significant financial burden to us.

Commissioner Pappas

It sounds like both sides really made an effort to work things out but there was a misunderstanding. I think the Board feels very strongly about safety and we also want to be fair to the residents. I think the city staff and the City Attorney has done a yeomen’s service. I think this could be hammered out but I think it should be clear. My sense is that Gate City Fence will move the fence because this is not a great advertisement. I would be stunned if they did not move it for you. I feel like everyone here has been reasonable.

**MOTION:** Commissioner Teas made a motion to table the current request to allow the parties 60 days to find an amicable solution to be presented no later than the March, 2019, Board of Public Works meeting.

**Discussion:**

Commissioner Ackerman

I think the agreement needs to be in writing.

Mayor Donchess

There should also be a very clear drawing so people know and there is no misunderstanding.
Commissioner Ackerman

The resident will be responsible for speaking to the company who erected the fence.

**MOTION CARRIED: 4-1 (Nay – Moriarty)**

B. **MOTION:** Commissioner Pappas to approve the Residential and Commercial Wastewater Service Permits and Fees as submitted.

**MOTION CARRIED: Unanimously**

C. **Informational:** Final FY 2019 (Arterial Roadways) Paving List in Paving Contract

Mr. Dookran

Our paving program this year consists of putting out two contracts, one to address arterial (primary) roadways and the second one for local (residential) streets. The first list is for the arterial roads. We are trying to make a bigger effort this year to address the busier streets. Some of them are deteriorating much more quickly than expected. If we don't get a handle on them, they will fall into a repair category that we simply can’t afford. The streets are:

- Amherst Street
- Canal Street
- East Hollis Street
- Kinsley Street
- Lake Street
- Main Dunstable Road
- Pine Hill Road
- Spit Brook Road
- West Hollis Street

Some of them will need utility work; Liberty Utilities and Pennichuck. Because of this these streets may be delayed until the later part of the year. Like us they have limited budgets and priorities. The condition of the street might be a priority for us but it may not be the utilities highest priority but we will work with them. We are hoping the utilities will be out there this winter to get a head start. The portion of Kinsley Street that we had planned on doing last year got pushed out due to sewer work that is yet to be done. The utilities just told us they have some work they would like to do between Main and Elm Streets, which came as a surprise. Our hope was to get the sewer work done in the winter but Liberty wants to go in and do a section of pipe so that might push the final paving to a little bit later.

D. **Informational:** Final FY 2019 (Local Roadways) Paving List in Paving Contract

We are trying to do eleven miles of the local roads. We haven’t seen any real issues regarding utilities at these locations. I wanted to point out that Pennichuck Water Works had done a lot main and connection replacements in the southern part of the city and they were supposed to reach (inaudible) streets to the extent that it is required by law. We have chosen for some of these streets to be reclaimed and rebuild them in their entirety, from curb to curb. Instead of just having the Pennichuck trench redone and then overlaying the street, we can actually rebuild the street and get a better product that will last longer. Pennichuck has contributed to our paving funds; we got approximately $1.5 million to do the streets. In the end it is in the city’s benefit to do this.

All of these projects are out to bid and we will be bringing them back to the Board for approval in March. Hopefully we can get all 22 miles plus the leftover streets from last year done this year.
Mayor Donchess

How much is left over from last year?

Mr. Dookran

We probably have approximately five miles.

Commissioner Ackerman

That was an excellent report. Is the rating system that the city did six months or one year ago determine whether or not we do a 2-inch mill and overlay or a 3.5 inch?

Mr. Dookran

That is true.

Commissioner Ackerman

Is mill and overlay also affectionately called mill and fill?

Mr. Dookran

That's correct. The only difference between the two is when you mill and fill you don't really mill the entire width of the street, you mill the bad pieces.

Mayor Donchess

Mill and fill is a repair or a patch of a section.

Mr. Dookran

Yes.

Commissioner Pappas

A lot of people are really antsy about Kinsley Street, do you have a timeframe?

Mr. Dookran

We know that. The utilities keep surprising us and you have to wonder how one would say no to a gas leak. Who would say no? Think about Columbia.

Mayor Donchess

Is the gas company finished on Kinsley Street?

Mr. Dookran

Towards the west side; towards the turnpike they are done. We were told they will alter the street altogether.

Mayor Donchess
What about Main Street to…?

Mr. Dookran

That just came up within the last couple of weeks.

Mayor Donchess

Is there another leak over there?

Mr. Dookran

There is a pipe that is leaky. We are pushing to get them in there as early as possible.

Commissioner Pappas

It looks like there is a buckle or a seam on Concord Street, how are we going to follow-up on that?

Mr. Dookran

The paving company, Newport Construction, did the work late in the year. The quality of the work south of Courtland Street is not the best. There are seams and some bumps. They attributed that to the temperature. There is a little bit of a debate going on between us and the contractor. So far, he has said he can do some minor repairs but we are asking for more. We have not yet had the opportunity to sit down and hash it out. I think we need to wait for better weather where we can all go out and walk the street and figure out what is acceptable and what is not. But yes, Commissioner Pappas, you have observed correctly that there are some issues.

Parks & Recreation Department

A. MOTION: Commissioner Ackerman to award the 2019 City 4th of July Fireworks Celebration contract to Atlas PyroVison Entertainment Group of Jaffrey, NH, in an amount not-to-exceed $17,500. Funding will be through Department: 177 Park and Recreation; Fund: General; Account Classification: 55 Other Services.

MOTION CARRIED: Unanimously

B. MOTION: Commissioner Teas to extend the current contract with United Site Services of Haverhill, MA, through December 31, 2019, for the sum of $13,413.94. Funding for the contract will be through Department: 177 Park & Recreation; Fund: General and Trusts; Account Classification: 54 Property Services.

MOTION CARRIED: Unanimously

Solid Waste Department

A. MOTION: Commissioner Pappas to approve Change Order #6 to the contract with Northeast Earth Mechanics, Inc. (NEM) to continue construction of the residential setback barrier wall in the Phase II Landfill in the amount of $165,655. Funding will be through Department: 168 Solid Waste; Fund: Bond; Activity: Soil Wall.

MOTION CARRIED: Unanimously
B. **MOTION:** Commissioner Pappas to approve the engineering services with Sanborn Head and Associates, Inc. in an amount not-to-exceed $28,700 for the 2019 landfill gas system expansion. Funding will be through Department 168 Solid Waste; Fund: Bond; Activity: Landfill Gas Expansion FY19.

**MOTION CARRIED: Unanimously**

**Wastewater Department**

A. **MOTION:** Commissioner Teas to approve the User Warrants as presented.

**MOTION CARRIED: Unanimously**

B. **MOTION:** Commissioner Ackerman to approve the purchase of one 2017 Vac-Con Combination Jet/Vacuum Sewer Cleaner from Atlantic Machinery of Silver Springs, MD, for the contract price of $395,699.63. Pricing for the purchase will be off the Sourcewell Contract: 122017-AMI. Funding will be through Department: 169 Wastewater; Fund: WERF; Account Category 81 - Capital.

**MOTION CARRIED: Unanimously**

**Personnel**

A. **MOTION:** Commissioner Pappas to accept the retirement of Bennie Bausha effective January 4, 2019.

**MOTION CARRIED: Unanimously**

B. **Non-Public Session**

**MOTION:** Commissioner Ackerman moved by roll call that the Board of Public Works go into non-public session pursuant to RSA:91-A (3) §1IB, the hiring of any person as a public employee.

_A Viva Voce Roll Call was taken, which resulted as follows:_

- **Yea:** Mayor Donchess, Commissioner Ackerman, Commissioner Pappas, Commissioner Moriarty & Commissioner Teas 5
- **Nay:** 0

**MOTION CARRIED: Unanimously**

**MOTION:** Commissioner Ackerman to come out of non-public session.

_A Viva Voce Roll Call was taken, which resulted as follows:_

- **Yea:** Mayor Donchess, Commissioner Ackerman, Commissioner Pappas, Commissioner Moriarty & Commissioner Teas 5
- **Nay:** 0

**MOTION CARRIED: Unanimously**
MOTION: Commissioner Ackerman moved by roll call to seal the minutes of the Board of Public Works non-public session of January 31, 2019, until such time as the majority of the Board votes that the purpose of the confidentiality would no longer be served.

A Viva Voce Roll Call was taken, which resulted as follows:

Yea: Mayor Donchess, Commissioner Ackerman, Commissioner Pappas, Commissioner Moriarty & Commissioner Teas

Nay: 0

MOTION CARRIED: Unanimously

Administration

A. Informational: O-10-031 - INCREASING THE PURCHASING THRESHOLD FOR FINANCE COMMITTEE APPROVAL FROM $10,000 TO $25,000

Mayor Donchess

The Board of Aldermen passed amended the ordinance regarding the minimum contract amount that needs to be approved and they increased the amount from $10,000 to $25,000. This past at the last Board of Aldermen meeting. One of the main motivations was to reduce the amount of paperwork that has to be done leading to the approval of the contract. The Purchasing Manager had some statistics but I think by moving the dollar amount from $10,000 to $25,000 it has very little effect on the total dollar amounts because they tend to be smaller contracts. It may be in the single numbers in terms of the total dollar amount that no longer needs approval, but on the other hand, it reduces the paperwork by approximately 33%. It is particularly burdensome for the Department of Public Works because most of the public works contracts are very large and now something in the amount of $15,000 for public works is pretty routine. The Purchasing Manager surveyed other communities and $25,000 is very typical for other communities like Manchester.

Director Fauteux

Manchester doesn’t have any approvals, they just have their budget. As long as they are within their budget, they don’t need any approvals from any Boards.

Mayor Donchess

Some of the communities like Salem do have a threshold and it tends to be $25,000.

Director Fauteux

Yes.

Commissioner Teas

How would this impact us? Would it mean we would have fewer motions?
Mayor Donchess

Yes.

Commissioner Moriarty

For example, Parks & Recreation motions are usually for under $25,000 so we wouldn’t see those.

Commissioner Ackerman

What if it was $14,000 on top of something that was less than $25,000, would it then come before the Board.

Director Fauteux

Yes, it would.

Mayor Donchess

If it were $25,000 on top of something that had already been approved, it will come to you.

Director Fauteux

Yes, if the cumulative total was $25,000 or over it would come to the Board of Public Works. This is going to help us enormously.

Commissioner Moriarty

Is it already in effect?

Director Fauteux

Yes.

Mayor Donchess

The Board is never asked to approve items that are not budgeted for.

B. Director’s Report

Mr. Jon Ibara, Superintendent of Streets

The past few months I have included in the Department of Public Works report for streets what the status is of our brine making construction project. As much as I was hoping to come here tonight and say it was fully operational, we experienced a setback. However, everything is in place. We had an initial start-up date two weeks ago and we had the Henderson representative.

The first slide is the facility looking down on it from the roof of the Street Department. That is what is housing the brine making components. The hopper is outside in between the tank farm, which will be the storage for the product.
On the 16th we had scheduled the Henderson representative to come out and do the initial start-up and do a final walk through and we got to about noon time when we found that the drivers in the control cabinet were not compatible with the motors. We found out that Henderson’s fault. They are giving us an entire new control panel and it was shipped today and the Henderson representative will be back out next week, tentatively on Tuesday, to install the panel at their expense and try again for an initial fire up so we can start making some brine.

This is a slide which shows the extensive plumbing that comes off of the machine. It goes through the building and out to the tank farm. It goes to three independent truck fill stations where the drivers will be able to back up, program the truck code with how many gallons they need and all they will have to do hook the hose onto the saddle tanks and it will automatically send what they need. I would love to give the Board a tour someday.

This slide shows the back side of the hopper which is where they will dump the rock salt in and then you activate the pump, it will circulate the water through the rock salt which will create the brine. It is measured to a 23% solution and then sent out to the tank farm for storage.

This slide shows Eric Gingras, our Wastewater Electrician. We built this whole project with the Streets and Wastewater Departments as well as some of the School Department staff. Gary Connors was kind enough to work with me and supply Lyle Simard who did all of the plumbing for the facility. Dave Boucher, Wastewater Superintendent, was able to part with Eric.

This slide shows the tank farm with the three truck fill stations; one on either end and one in the middle.

I had one other failure when we were circulating water, the stainless box had a few leaks so they are also assuming the expense of a certified welder to come out and make those repairs with some reinforcing gussets. That will all take place shortly.

Commissioner Ackerman

Water freezes so after you have done a storm, does water still stay in the tanks?

Mr. Ibara

It will be brine. It will be mixed at a 23.3% salt solution and there will be circulation going on. It will not freeze. The plumbing is phenomenal. They have blow-offs; the compressor shoots purges of air to blow out any standing water. We had some gravity drains built in so we can drain everything, it’s amazing.

Commissioner Moriarty

It makes me nervous looking at the control panels being exposed 24 x 7, all year long.

Mr. Ibara

I had the same thought. They are weather tight panels but I do plan to enclose them. Fortunately, we have had a slow winter. I probably would have put liquid down during the last event if we had it.

Commissioner Pappas

Usually by March or April we tend to have events where it is more of an icy issue. Do you think we will be able to use it at all this year?
Mr. Ibara

Yes, I am anticipating next week. If we had not had the component failures, we would have been making brine for 2 ½ weeks already.

Commissioner Ackerman

Is Henderson going to extend the warranty on the device?

Mr. Ibara

We have their full support. They are a support network for us. He is programmed into the machine so he can troubleshoot it from Indiana. He said anything that goes wrong with it he will stand behind.

Commissioner Ackerman

Did the device arrive with leaks?

Mr. Ibara

That's correct.

Commissioner Ackerman

And now they are doing a retrofit. Are they going to extend the warranty as a result?

Mr. Ibara

He said he would stand behind it.

Commissioner Ackerman

Stand behind the original warranty or is he going to extend it?

Mr. Ibara

He said he will stand behind his product, period.

Director Fauteux presented the Director’s Report as follows:

- The first picture is a sewer main replacement on Chase Street that was done by Northeast Earth Tech. It was approximately 850 feet of sewer that will be replaced. The original concrete sewer was constructed in 1885.

- This is a new city sidewalk that was installed in December at 35 Canal Street.

- The Mayor announced that we received a transportation alternative program grant for Lock Street. It’s $800,000 and we are going to be adding sidewalks, bike lanes, trees and traffic calming measures. It will also include the possibility of making Lock and Whitney Streets both one-way instead of two-ways. Much of this was driven by safety reasons as we can’t effectively clear these sidewalks rights now because there are so
many obstructions and they are narrow. We hope the improvements will be made by October of 2020.

- Some residents were concerned that Eversource was doing some trimming of trees. One of the residents was from Raymond Street. Kim Kleiner, the Mayor’s Chief of Staff immediately called a meeting with Eversource. We met with them and told them of our concerns and have asked them not to trim any more trees on Raymond, Courtland and Tolle’s Streets for now. One of the trees we just planted ended up being cut down and we were very concerned about that. Eversource was very responsive and to come to their defense, they have a critical network of power lines that they need to keep clear. They are required by the PUC to do that and they also want to prevent any power outages in Nashua. They are required to get homeowner permission, even if a tree is in the city’s right-of-way. The homeowner needs to sign a document giving them permission to trim or cut any trees. Homeowner’s do have a right to say no. We were a little concerned with the form they were asking residents to sign because we thought it was a little ambiguous and it could be a bit confusing. We asked them to clarify the forms that they are asking the residents to sign. We are also going to ask residents if they are going to plant trees near power lines to please plant low growing species.

**Commissioner Pappas**

One of the things about Eversource is that they cut off all of the limbs and leave a horrible looking tree trunk. There is one on Stark Street and one on Lock Street. I think if they are going to cut the should cut the whole tree.

**Director Fauteux**

Absolutely and thank you for letting me know that.

- We have a lot of winter activity continuing in Nashua. On the left is the bridge on Coliseum Avenue entrance and on the right is a picture of sledding at Roby Park.

- We are finally making ice with the colder temperatures. This is the ice rink at Roby Park and skating at the Legacy Playground and North Common.

- Biddy Basketball, which is the largest recreation program in the state has reached its mid-season already.

- This is the overflow bridge in Mine Falls located on the Nashua River near Conway Arena.

- We received our new grader at the Street Department. It will be a very useful tool for both plowing and grading roads or soccer fields that we want to build. That was purchased with part of the $1.3 million that we received from the state.

- We had our first big storm of the season on January 20, 2019. This is operations on Broad and Amherst Streets.

- This is a new grinder that we received from wastewater. This helps us grind up rags, plastics and other things before they make their way through the process. It’s located at the bottom of the digester.
➢ We have been doing all kinds of miscellaneous plumbing repairs at wastewater including new faucets in the laboratory and a new eye wash station in the wet well. It is a very caustic environment so we are constantly having to replace routine things.

➢ On January 24th we had some flooding but our crews did a really good job of trying to keep everything flowing.

➢ Our compactor has new teeth on the wheels.

➢ We have the 2019 Hazardous Waste Collection schedule out and most of them will be at the Street Department this year with the first one starting on April 20th.

➢ The Four Hills Landfill will be closed on Monday, February 18th, in observance of President’s Day. Trash that week will be delayed by one day.

**Commissioner’s Comments**

**Commissioner Teas**

I think the department has done a great job on the social media presence.

**Director Fauteux**

Lauren Byers is doing a great job and we are very lucky to have her.

**Commissioner Teas**

On Henry Bourque Highway, north of the bridge as you head towards Concord Street, on the right side on Cabot Road, there are a bunch of trees that just does not look right. There is a pile of tree stumps and they weren’t even cleanly cut. My concern is that it is getting close to the road.

**Director Fauteux**

I’m was not aware of that but we will take a look at that.

**Commissioner Moriarty**

Just a question on the $800,000 grant that the city will be receiving for the sidewalks, will that final plan come before this Board for approval?

**Director Fauteux**

Yes, it will. One of the concerns that I have is that I don’t want to have these beautiful concrete sidewalks on one side and then have what exists on the other side, which is asphalt, so we are going to try to work that out. We are going to work with the residents of the neighborhood. They are a very dynamic group and are very involved in their neighborhood. It is going to be a fun project.

**Commissioner Pappas**

If that is the case, are you going to try to figure it into the budget this year?
Director Fauteux

We have the grant so we will be using that.

Mayor Donchess

It is going to take a while because the grants don’t come right away. This is the same type of money, called a TAP grant, that built the little pedestrian bridge over the canal at the end of Everett Street into Mine Falls. That took several years after the grant.

Last year we got money to extend the rail trail to the east all the way to Henry Hanger and the design of that will go out for a proposal soon but it takes a while to actually see the end result, but the money is there.

Commissioner Pappas

It’s an area that really needs it.

Director Fauteux

We will be working with the Community Development Department. They applied for the grant and only nine communities received a grant and we were one of them so it was pretty neat.

Adjournment

Commissioner Pappas made a motion to adjourn.

MOTION CARRIED: Unanimously

Meeting adjourned at 7:55 p.m.
Board of Public Works Meeting of February 28, 2019
Parks & Recreation Department

Agenda

A. Informational: The 2019 proposal to work in conjunction with Nashua Grows to construct Community Gardens at the Tolles Street Park.
City of Nashua, Public Works Division

To: Board of Public Works  
Meeting Date: February 28, 2019

From: Nicholas Caggiano - Superintendent  
Parks and Recreation Department

Re: Potential Improvements to the Salem Street/Tolles Street Park.

A. Informational: The 2019 proposal to work in conjunction with Nashua Grows to construct Community Gardens at the Tolles Street Park.

Attachments: Plan and Report

Discussion: We have been working on a plan with Nashua Grows to add Community Gardens to Tolles Street in the French Hill neighborhood. These improvements along with improvements to the Salem Street Park will be funded by CDBG funds as well as escrowed funds.

The idea behind the concept is to create a community space that will improve the overall area by creating a sense of community and also provide residents an opportunity to rent a garden plot to grow produce. The gardens, once constructed, will be maintained and managed through the Nashua Grows program.

We are hoping to have the gardens available for planting and other park improvements ready for the spring of 2020.
Tolles Street Park
Community Garden
Nashua, NH

January 2019

Designed by: DMc Permaculture
In Partnership with: Grow Nashua
**Introduction:**

This report accompanies the concept design drawing for the Tolles Street Park Community Garden. It is meant to annotate the drawing to explain design decisions and present an outline for moving forward with the project.

Presented below are sections on the assessment, a design overview, an explanation of strategies, discussion of elements and a breakdown of tasks needed for the garden installation. Also provided are initial plant and materials lists to aide in the budget process.

This project has not had any community input at this point. This design is intended to show possibilities and act as a starting point for discussion to ensure that the neighbors and people who will use this space have an opportunity to provide feedback and ideas that can be incorporated into the design.

**Vision:**

The Tolles Street Park Community Garden is being designed using permaculture principles and guided by the ethics of Caring for the Earth, Caring for the People and Caring for the Future. Adhering to the first ethic, organic gardening techniques will be promoted and encouraged to help build soil and regenerate the ecosystem. Raised beds, living fences and vertical gardening strategies will be used where appropriate to maximize the growing capacity of the space.

To minimize water usage various approaches will be employed to irrigate efficiently and to retain moisture. Some of these techniques include a wicking watering system, use of ground covers and living mulches. The design will include perennial polycultures including pollinator habitat to encourage natural regeneration and biodiversity.

In alignment with Caring for the People, the space will retain the existing sit spots and also include gathering space which can be used as an outdoor classroom. This will invite and encourage neighbors to spend time in the garden, appreciating the natural beauty of a living space. In support of Caring for the Future, this garden will provide another venue for educational programs provided by Grow Nashua. In addition, it will provide an opportunity for children to connect to the natural world in an urban environment.

**Assessment:**

Tolles Street is a small park in the French Hill neighborhood of Nashua, NH. It is roughly 6800 square feet and connects Tolles St to Salem St at Atwood Court. It appears to be primarily used as a pass thru and dog park. There are a couple of benches available for visitors. There is quite a bit of litter and dog waste is evident all around the park. There is no sign of any wildlife present in the park. The neighbors' fences along the north edge are in some disrepair and during the summer season gets...
covered with volunteer vines & weeds. Some other concerns about this park include a history of vandalism and drug use.

Assessment is an important aspect of design to establish a starting point and identify current conditions, energy flow and resources available. Below is a diagram showing some of the initial assessment data obtained by observing the site.

**Sectors:**

Sectors are used to identify various energies that flow on or through the space being designed. When an energy enters a property, the designer has three choices with what to do with that energy: catch & store it, mitigate it (deflect or absorb) or chose to do nothing. The primary energies are sun, water, wind. The flow of people and animals is also considered an energy as are things such as views, noise and even pollution.

- **Sun and Shade:**

  Southern half of park receives most sun. Northern edge of the park appears to be mostly shaded with the exceptions of the corners which receive partial sun. There will be some shade at the southern most side due to height of neighboring house on the east side of the park during early spring and late fall.
• **Water** :

Currently there is no access to water in the park. There is a waterline that can be extended from across Salem St. The park is mostly flat with the exception of the northeast corner has a slight down slope. There is no sign of any serious erosion. There currently is no opportunity for rainwater catchment.

• **Wind** :

There are no features of this property that raise concerns about exposure to wind. As the park is open on two sides, cross wind would blow freely. The living fence, berry hedges and orchard should protect the garden beds from excessive wind.

• **Flow of People & Animals** :

The Park is a convenient crossing point between Salem and Tolles streets. It is diagonally across Salem Street from a playground. Flow through the park is most likely directly along the path. It is also currently used by dog owners to walk their dogs. Along the west side of the park, cars park right up against the curb.

• **Wild Energies** :

Wild energies refer to of any other energy that flows onto site. Some examples of this could be noise, pollution and snow piles to name a few. This site does have exposure to snow dumps from plows on the Salem St. side of the park. This includes an area in the northwest corner where snow from Atwood Ct appears to be plowed down the path to about the location of the first concrete slab.

**Zones** :

Permaculture uses the concepts of zones to help identify frequency of use. Things or areas used every day are considered zone 1. Used every week is zone 2. Monthly would be zone 3 and seasonably would be zone 4. Areas that are rarely used or considered wild would be zone 5.

Zones are used in design layout to put frequently used elements in frequently used areas to maximize efficiency. Given this is a small park and is used as a pass through and for dog walking, this entire park would be considered zone 1 - used daily.

**Social Assessment** :

No tangible assessment of the social aspect of the community that will use and support this project has been done. Once approval has been given to this project, then the outreach to the community can begin and an assessment done.
Candidates for outreach include immediate neighbors, neighborhood groups, Tolles St. Mission and other faith based groups such as the UU Church or St. Mary & Archangel Michael Cathedral. Paul Shea of Great American Downtown lives in the area and also may be a good person to contact.

**Design Overview:**

The garden at Tolles Street Park is designed to provide space for the neighboring community to gather, learn new skills, grow food and reconnect with nature. It is important that the park continue to serve the functions that the community has come to expect from the space. At the same time, breathing new life into the space and giving the neighborhood a project to come together behind building a more tight knit community.

The garden will consist of a combination of common perennial beds including an orchard, individual family plots, an outdoor classroom, a dog friendly lawn and some utility elements. The existing benches will remain providing space for visitors to sit and enjoy the garden. This design calls for an additional bench to be installed on the concrete slab along the southwest branch of the sidewalk. Each of these benches will be surrounded by garden beds with trellises.

Entering the garden from the east gate on Tolles St. Garden, the raised beds for the family plots will be laid out along the left (south) side. The bed edges follow the curves of the path. Along the edge of southeast corner of the garden, a living fence will be installed. This living fence can be simple posts with cables strung between them with dwarfed fruit trees or grape vines growing on them to create a living barrier between the garden and the outside. A perennial polyculture will be planted along the base of the living fence.

On the right (north) side of the path will be a lawn for dog owners to curb their pets. Near the entrance will be a station to dispense bags for the dog waste to help encourage owners to pick up after their pets. This area will be enclosed by a stone wall along the northeast corner of the garden. The wall will allow the ground to be leveled and provide an opportunity for a border garden consisting of a hedge of blueberry, currant and perhaps elderberry bushes.

In the middle on the north side under the trees will be the outdoor classroom and gathering area. Putting this under the trees will provide shade on hot summer days and utilizes land that is too shady to grow food. This will also be the location of the water tanks and a small shed, maybe 4’ wide x 2’ deep and 5’ high, to house some simple tools and supplies.

In the northwest corner will be a couple of perennial beds. One being an herb spiral and the other being a perennial pollinator bed. These will be teaching tools and also provide habitat and fodder for pollinators and other beneficial insects and birds.
There will also be signage and a trash / recycling / doggie station in the corner. The water spigot to connect to city water will be also be located here. Set back a couple of feet from the property line and about 5’ from the road to protect it from damage by vehicles, plows or snow piles.

Along the west side of the park inside the triangle will be an orchard of a variety of fruit trees to be determined at a later time. Setback three feet from the curb will be a short 2’ stone wall to carve out space for passengers to get in and out of their cars. This will also allow for snow contaminated with road salt and pollutants from being plowed onto the orchard.

The majority of the southern half of the garden will be made up of garden beds as it receives the most sun. As stated the family plots will be along the pathway and the perennial beds will run along the perimeter. As mentioned above, a living fence will be put along the eastern half of the southern edge. Along the western half will be a row of elderberry bushes with a supporting guild of perennials. Another pollinator garden will round out the southern edge of the garden.

The image below shows the efficiency zones of this design. Recall that zone 1 indicates daily visits or attention, zone 2 weekly, zone 3 monthly and zone 4 is seasonally. This diagram shows that most of the park will be visited everyday either by gardeners, dog walkers or other visitors to the park. Some of the perennial beds, the classroom and the compost will be visited weekly. The orchard, the living fence and other hedges are most likely only going to need monthly or seasonal attention.
**Strategies:**

This section of the report will discuss various strategies presented in the design so that they may be better understood.

- **Perennial Polycultures** provide a multi beneficial, more resilient, lower maintenance gardening strategy. Made up of a variety of multi functional plants that each bring something to the guild. Some of the functions provided are ground covers, nitrogen fixers, dynamic accumulators, insectaries, aromatic confusers, pest suppressors. Once established perennial plants require less supplemental watering than annuals.

- **Sheet mulching** is a soil building strategy that comprises of applying layers of cardboard, compost or manure and wood chips or other carbon material. It acts to suppress growth of existing vegetation and decomposes to produce new soil.

- **Composting** is an integral part of organic gardening in that it accelerates the process of breaking down organic matter into soil. A lot of biomass is produced in a garden and having a composting system in place is the most efficient manner in which to absorb that bio mass and return its fertility to the soil.

- **Cover cropping** and **living mulches** are excellent strategies to keep soil covered. There is a saying that bare soil is dead soil. Keeping soil covered is very important in order to retain moisture so that the many, many micro organisms that make up the web of diverse life that exists in soil can survive. If soil dries out and is exposed to wind then it will die and blow away. Cover cropping serves this purpose when a bed is fallow before planting or after harvest. An additional benefit to cover crops and living mulches is that they can be chopped and dropped in the bed so as to cycle nutrients into the soil.

- **Vertical gardening** is usually the best strategy to address maximizing production in a limited growing space. This is often the case in an urban environment and is the case with this project. The use of trellises and other supports allow for the use of the vertical space. These can be constructed or plants can provide support for other plants, e.g. corn or sunflowers.

- **Intercropping** is another strategy that be used to increase production in a limited space. That is planting multiple crops in the same space by choosing plants that won’t compete for resources. Some factors used in deciding on which plants to intercrop would be size, shape or other characteristics of the plants such as how long it takes from seed to harvest. For example radishes are small and mature in about 28 days which make them ideal for planting between other large plants like cabbage or broccoli that take a long time to grow and mature.

- **French intensive** and **square foot** gardening are some additional strategies to maximize growth in limited space by packing plants tightly together.
• A **wicking watering system** will be promoted as an efficient way to manually water the beds with minimal effort. The idea is that a small bucket is buried in the center of each bed and nylon ropes act as wicks and move the water across the bed to the plants.

As there is no access to water on site currently, a hookup to city water will be installed in the northwest corner of the garden as discussed with Parks & Rec. Having a couple of water tanks installed on site will allow for the staging of water. Gardeners will then be able to fill watering cans or buckets for watering of individual beds. The use of ground covers, living mulches and mulches will assist with water conservation by reducing the amount of water lost to evaporation.

• **Social engagement**

An important part of this project is considering the needs of the people who will be using this space. This project intends to meet these needs by creating a public space that can be used as a community center, provide educational opportunities, build relationships among neighbors and creating an opportunity to spend time in a natural setting in the midst of an urban environment.

In order for this garden to be successful it must have active involvement and buy-in from the neighborhood. Educational programs and demonstrations will help to achieve this. They can be a combination of paid and sponsored classes to ensure that all that want to learn can without lack of funds being an obstacle. Volunteer work days can also provide low or no cost education and help with the installation and maintenance of the garden.

An important aspect of this project is the shared community beds which create an opportunity for the community to work together. This will foster better connections and help people learn to cooperate to achieve common goals. The shared beds will be planted and maintained by volunteers and workshop participants and the produce can be shared amongst those engaged with the program and local food pantries to help provide food for those in need.

An important element to engage the public is to have effective and informative signage. The signage should display a description of the project along with messages inviting neighbors to get involved as well as respecting the park & gardens. For instance, encouraging visitors to properly discard of trash and to pick up after their pets. If people have a sense of pride in this project and garden then they will care for it as if it were their own, which it is.
Element descriptions:

- The first decision on garden beds that needs to be made is whether to grow in the ground or in raised beds. Even though the soil tests came back clean for this site, using raised beds will address a couple of other issues. The need to till the existing compacted soil can be avoided with raised beds and they will also help prevent dogs from relieving themselves in the beds. We want this to be a dog friendly garden and not have gardens damaged or contaminated by them.

- This community garden will contain a combination of family plots for individuals or families as well as shared common beds.

The shared common beds will be planted with perennial polycultures to reduce maintenance and maximize food & medicine production as well as provide habitats for native pollinators and other beneficial insects. The regular maintenance and harvesting of these common gardens will be done by volunteers or workshop participants who will share in the harvest.

There are seventeen family plots to be offered to families in the neighborhood interested in participating. In the current design, seven (7) of these beds are 4’ x 12’, seven (7) more are 4’x10’ and there are three (3) smaller 4’x4’ beds. How and who these beds will be assigned to will be determined after further social engagement.

- An herb spiral is a stereo typical permaculture garden element because it demonstrates certain lessons. The first concept that the spiral introduces is the concept of understanding patterns of nature and using them to achieve a particular function in a design. One function of the spiral is to create maximum edge and space. It is a growth pattern. An herb spiral also demonstrates micro climates as there will be a combination of dry, moist, sunny and shay areas in each spiral. It can also be used to teach about perennial polycultures.

- A teaching or demonstration garden will be one component of the outdoor classroom. It can be used to demonstrate certain strategies such as planting guilds and vertical gardening. This can be used by students to practice the skills that are taught in the class.

- Bench trellis beds refer to garden beds installed around the benches that contain trellises. These benches would provide a shaded, sheltered spot to sit and experience the garden. Literally surrounded by nature. They would stand about 5 feet tall and may or may not provide a cover over the bench itself. That is a design detail that can be addressed later.

- Two stone walls are proposed in this design. One along the west side of the park and one around the northeast corner. The wall on the west side is envisioned to be just a couple of feet high to create a break between the orchard and the road.
Given there is no sidewalk, the wall will be set 3 feet from the curb to allow room for passenger’s to enter & exit their cars. The three foot setback will also allow for snow banks during winter months.

The wall surrounding the northeast corner to allow for the area to be leveled off and create a garden bed along that edge of the park. There is no need for a setback on this side as there is sidewalk and no parking on the that side of Tolles Street.

Options for the materials to build these walls include an interlocking pre-fabricated stones, field stones or urbanite (salvaged broken up sidewalks/concrete).

- Installing *owl houses & bat boxes* will provide habitat for important predators and will help achieve the goal of creating a balanced, thriving ecosystem. Owls hunts small rodents while bats feast on mosquitos and other insects. These simply constructed wood boxes will be placed in the trees.

- *Signage* for the park should present the name of the park, welcome visitors, provide information about getting involved. It should also ask people to respect the park and the gardens by disposing of trash and picking up after their pets.

**Timeline:**

This section is intended to provide a basic breakdown of tasks needed to install and create the garden. It also attempts to present an order for the tasks to be done. This list provides a starting point for breaking down the project into phases. In most cases it makes sense to have the phases correspond to growing seasons. The breakdown of tasks has not yet been prioritized nor divided into phases.

- **Preparation**
  - Clean up trash, pick up dog waste
  - Trim back tree limbs to increase solar gain
  - Remove shrubs on south east edge for elderberry guild
  - Extend water line and install water spigot
  - Install trash / recycle / dog stations

- **Garden Installation**
  - Construct south east corner fence to establish solid perimeter
  - Sheet mulch designated areas
  - Perennial bed creation
  - Raised bed construction & filling
  - Cover crop planting
• Install elderberry hedge beds
• Construct stone wall for northeast corner
• Install blueberry hedge beds
• Install water tanks
• Install shed
• Construct & install compost bins
• Orchard installation
  • Construct wall
  • Sheet mulch
  • Plant trees

The following chart represents an initial materials list to be used as a starting point for budgeting.

<table>
<thead>
<tr>
<th>Element</th>
<th>Material</th>
<th>Amount Needed</th>
<th>Unit Cost</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raised beds</td>
<td>Soil</td>
<td></td>
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<tr>
<td></td>
<td>Lumber</td>
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<tr>
<td></td>
<td>Hardware (nails, etc)</td>
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</tr>
<tr>
<td>Mulch</td>
<td>Wood chips</td>
<td></td>
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</tr>
<tr>
<td>Walls</td>
<td>Rocks (pre-fab, fieldstone, urbanite)</td>
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<td></td>
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<tr>
<td>Trellises</td>
<td>Metal posts</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Cable wire</td>
<td></td>
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<tr>
<td></td>
<td>Hardware (clamps)</td>
<td></td>
<td></td>
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<tr>
<td>Water Storage</td>
<td>Tanks (2)</td>
<td></td>
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<tr>
<td></td>
<td>Cinderblocks</td>
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<tr>
<td>Compost Bin</td>
<td>Wood</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Hardware cloth</td>
<td></td>
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<tr>
<td></td>
<td>Hardware (screws, staples)</td>
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<tr>
<td>Trash Station</td>
<td>Trash bin</td>
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<tr>
<td></td>
<td>Recycling bin</td>
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<tr>
<td></td>
<td>Doggy bag dispenser</td>
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<tr>
<td>Owl Houses / Bat Boxes</td>
<td>Lumber</td>
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<tr>
<td></td>
<td>Hardware (nails, etc)</td>
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<tr>
<td>Utility</td>
<td>Shed</td>
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<td></td>
<td>Misc tools (hose, etc)</td>
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## Appendix A - Plant List

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**Appendix A - Plant List (continued)**

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**Appendix B - Beneficial Plant List**

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<th>Common Name</th>
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<td>Purple Coneflower Echinacea Purpurea</td>
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Board of Public Works Meeting of February 28, 2019
Solid Waste Department

Agenda

A. **Motion**: To approve the contract with Charter Contracting Company, LLC of Boston, MA in the amount of $5,525,525 for the construction of the Phase III Landfill. Funding will be through Department: 168 Solid Waste; Fund: Bond; Activity: Phase III Landfill.

B. **Motion**: To approve the contract with Sanborn, Head & Associates, Inc. of Concord, NH in the amount of $255,000 to provide the Solid Waste Department with Construction Quality Assurance (CQA) services for the Phase III Landfill construction. Funding will be through Department: 168 Solid Waste; Fund: Bond; Activity: Phase III Landfill.

C. **Motion**: To approve the creation of a part time Licensed Scale Operator position at the Solid Waste Department. Starting salary for this position will be $21.76 per hour. Funding will be through: Department: 168 Solid Waste; Fund: Solid Waste; Account Classification: 51 Salaries & Wages.

D. **Informational**: Fee comparison of surrounding communities for electronics recycling
City of Nashua, Public Works Division

To: Board of Public Works
Meeting Date: February 28, 2019

From: Jeff Lafleur, Superintendent
Solid Waste Department

Re: Phase III Landfill Construction

A. Motion: To approve the contract with Charter Contracting Company, LLC of Boston, MA in the amount of $5,525,525 for the construction of the Phase III Landfill. Funding will be through Department: 168 Solid Waste; Fund: Bond; Activity: Phase III Landfill.

Discussion: On January 18th 2019 the Solid Waste Department put out a request for bid to construct the Phase III Landfill. Seven contractors attended the mandatory pre-bid meeting on January 23rd. All contractors were to submit bids on February 20, 2019 and Charter Contracting Company, LLC of Boston, MA was the only company to submit a bid in the amount of $5,525,525. The amount of the bid is in line with the pre-bid estimate of cost.

The timely completion of the Phase III Landfill is crucial to the continuing operations at the City of Nashua, Four Hills Landfill. Superintendent Jeff Lafleur and Environmental Engineer Kerry Converse recommend awarding the Phase III construction contract to Charter Contracting Company, LLC.
City of Nashua, Public Works Division

To: Board of Public Works 
From: Jeff Lafleur, Superintendent 
Re: Phase III Landfill Construction Quality Assurance Services

B. Motion: To approve a contract with Sanborn, Head & Associates, Inc. of Concord, NH in the amount of $255,000 to provide the Solid Waste Department with Construction Quality Assurance (CQA) services for the Phase III Landfill construction. Funding will be through Department: 168 Solid Waste; Fund: Bond; Activity: Phase III Landfill.

Discussion: On February 18, 2019 Sanborn, Head & Associates, Inc. (Sanborn Head) submitted a proposal to provide the Solid Waste Department with Construction Quality Assurance (CQA) services for the construction of the Phase III landfill. The cost of this service will be covered under the Phase III Landfill construction bond.

The CQA services Sanborn, Head & Associates will provide will include but not be limited to: on-site monitoring and oversite to ensure contractor work conforms with project plans and specifications, reviewing contractor submittals and payment requisitions, materials testing, and preparing progress and final CQA reports documenting construction activities. The final report will be submitted to NHDES as required by the Solid Waste Rules.

Sanborn Head designed the Phase III Landfill and has provided valuable engineering service and expertise to the Solid Waste Department which makes them the best company to provide these services.

Superintendent Jeff Lafleur recommends awarding the Phase III Landfill CQA contract to Sanborn, Head & Associates.
Mr. Kerry Converse  
Environmental Engineer  
Nashua Division of Public Works, Solid Waste Department  
840 West Hollis Street  
Nashua, NH 03062

Re: Proposal for Construction Quality Assurance Services  
Phase III Construction Project  
Four Hills Landfill  
Nashua, New Hampshire

Dear Kerry:

Sanborn, Head & Associates, Inc. (Sanborn Head) is pleased to provide the City of Nashua (City) with this proposal to provide construction quality assurance (CQA) services associated with the construction of Phase III (Project) at the Four Hills Landfill in Nashua, New Hampshire. We understand the Project involves: (i) modifying and improving site drainage and stormwater treatment features; (ii) excavating on-site soils to create the proposed Phase III base grades; (iii) placing and compacting soil fill to achieve the Phase III sideslope subgrade; (iv) processing, placing, and compacting on-site low-permeable soil within the Phase III area; (v) constructing the Phase III primary and secondary liner and leachate collection systems; (vi) constructing the Phase III Sump Riser Building and leachate conveyance piping; and (v) making associated connections to the Phase II leachate and liner systems.

SCOPE OF SERVICES

Task 1 CQA Services

Sanborn Head will provide on-site CQA personnel consisting of a Site Manager and Monitors to perform the specific monitoring and documentation services defined in the Project's CQA Plan. Sanborn Head's CQA Managing Engineer, a Professional Engineer licensed in the State of New Hampshire, will be responsible for the implementation of the CQA services and will oversee the on-site CQA personnel. The CQA Team will monitor the contractor's work for conformance with the construction documents (e.g., drawings and specifications), track the progress of the Project, and be available to address contractor questions during the Project.

The specific services to be performed by Sanborn Head's CQA team includes: (i) reviewing and commenting on contractor's submittals; (ii) documenting materials quantities installed or items constructed by the contractor; and (iii) reviewing and commenting on contractor's requisitions for payment prior to submittal to the City for final approval. Sanborn Head's CQA Managing Engineer will visit the site regularly (typically once per week) during construction.
Sanborn Head's CQA Team also will monitor the following construction activities:

- Excavation of Phase III (on a limited basis only);
- Placement and compaction of soil fill in the Phase III area;
- Modification of existing Detention Pond #6 and the associated site drainage improvements;
- Decommissioning of piezometers, monitoring wells, stormwater pipes, and leachate collection pipes;
- Installation of leachate collection and forcemain/gravity main piping outside the limit of waste;
- Installation of the Phase III liner and leachate collection systems;
- Construction of the Sump Riser Building and associated components; and
- Installation of the perimeter road and supporting infrastructure.

The CQA Team will monitor the installation of the various components of the Phase III liner and leachate collection systems. The components of the liner and leachate collection systems include, listed from top to bottom:

- An 18-inch thick layer of drainage sand;
- A multi-linear drainage geocomposite or a geonet drainage geocomposite;
- A 60-mil thick textured high-density polyethylene (HDPE) geomembrane;
- A geosynthetic clay liner (GCL) (sump area);
- A 12-inch thick layer of drainage sand (base area only);
- A multi-linear drainage geocomposite or a geonet drainage geocomposite (the type of geocomposite will be dependent on contractor pricing);
- A 60-mil thick textured HDPE geomembrane; and
- A 6-inch thick layer of Screened Till.

During earthwork construction, the CQA Team will: (i) monitor excavation activities and review survey data documenting that the subgrade elevations are achieved; (ii) monitor the placement of earth materials; and (iii) test the in-place moisture content and density of compacted materials. Field moisture/density testing, as required, will be performed using a nuclear density gauge in accordance with current ASTM standards.

The CQA Team will observe and document the construction of the new site drainage components, the leachate management system modifications, and the Sump Riser Building. Allowed variances from the construction documents will be noted and photographed.

Sanborn Head will review manufacturers' data regarding the quality of resins used in the production of the geomembranes and manufacturers' certifications for the geosynthetic components of the liner system against the Project specifications. Only geosynthetic
materials that have the proper manufacturer documentation will be accepted for use in construction. Conformance samples of the accepted geosynthetics will be obtained either at the manufacturer’s facility or from material delivered to the Project site. Sanborn Head will select the rolls to be sampled for testing at a laboratory experienced in geosynthetic testing. Conformance test results will be reviewed before approval is given for deployment of the geomembrane and/or geocomposite.

During construction, Sanborn Head will:

- Provide up to two Monitors to document activities. For budgeting purposes, we assume that one Monitor will be needed throughout construction and one additional Monitor will be needed for 4 weeks during the liner system installation;
- Collect samples for conformance testing from the geomembrane and geocomposite;
- Observe and document the geosynthetic installation contractor's work and quality control procedures;
- Obtain samples of earth materials including Structural Fill, Drainage Sand, Screened Till, and roadway soils for testing at a subcontracted geotechnical laboratory;
- Perform field moisture/density tests on compacted Structural Fill, Screened Till, and roadway materials;
- Collect samples of welded geomembrane seams and forward them to a subcontracted geosynthetics laboratory for destructive testing; and
- Prepare Daily Field Reports to document the day-to-day construction activities.

**Task 2  Construction Meetings/Documentation**

Sanborn Head's CQA Managing Engineer and/or Site Manager will attend weekly construction progress meetings with the contractor and the City. Construction progress meetings are anticipated to be held weekly at the site and will include discussions about the current work progress, planned activities for the upcoming week, and new business or revisions to the Project. Sanborn Head will take minutes of the meetings, which will be issued to the City, the contractor, and the NHDES. Sanborn Head will also prepare bi-weekly summaries of the construction progress for the City's use in submitting bi-weekly progress updates to the NHDES Solid Waste Bureau as required by the Solid Waste Rules.

**Task 3  CQA Report**

Sanborn Head will prepare a CQA Report that documents the observations made during construction and includes copies of submittal review forms, geotechnical and geosynthetic laboratory test results, pipe pressure test results, geosynthetic installation documentation and Record Drawings. The Record Drawings will be based on the Construction Drawings and will show the surveyed as-built locations and elevations of the Project components as provided by the contractor. As appropriate, design details will be modified to depict the actual installations. The CQA Report will be prepared under the direction of a Professional Engineer licensed in the State of New Hampshire and submitted to the NHDES following review by the City.
ASSUMPTIONS

Based on our experience and our understanding of the Project components, we assume the following:

- Construction will take approximately 16 weeks, including about 4 weeks for geosynthetic installation. We expect that each week will consist of approximately 5 work days that are 10 hours in duration (7 am to 5 pm Monday thru Friday) and one work day that is approximately 5 hours in duration (8 am to 1 pm Saturday).
- Construction meetings will occur weekly during construction and will be no longer than one hour in length.
- There will be one material source for each type of earthwork material.
- The contractor will be responsible for surveying geosynthetics and will provide the data to Sanborn Head personnel for use in Record Drawings.
- We anticipate providing the City with a draft of the CQA Report for review about four weeks after the Project is substantially complete. The final report will be completed and submitted to the NHDES about two weeks following receipt of the City’s comments to the draft report.

BUDGET ESTIMATE AND BASIS OF BILLINGS

The estimated budget costs for Sanborn Head to complete the scope of services described above is $255,000. A breakdown of cost is presented below. Billings for our services will be based on actual accrued labor and expenses in accordance with the enclosed fee schedule. We will not invoice in excess of the budgeted amount without your approval.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CQA Services</td>
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<tr>
<td>2</td>
<td>Construction Meetings/Documentation</td>
<td>$17,500</td>
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<td>3</td>
<td>CQA Report</td>
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<tr>
<td></td>
<td><strong>Total Estimated Cost</strong></td>
<td><strong>$255,000</strong></td>
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SCHEDULE

Sanborn Head is available to begin working on this Project following written authorization to proceed from the City. We expect that services under this scope of work will commence in May 2019.

ACCEPTANCE AND TERMS OF ENGAGEMENT

We understand that the City will issue a new Contract for Professional Services and a Purchase Order to Sanborn Head for the scope of services and budget estimate described herein.
Thank you for the opportunity to submit our proposal for CQA services. We look forward to working with you on this Project. Please do not hesitate to call us should you require additional information.

Very truly yours,
SANBORN, HEAD & ASSOCIATES, INC.

Edward A. Galvin, P.E.  
Project Manager

Brian J. Beaudoin  
Vice President

TLP/EAG/ESS/BJB:let

Enclosure:  Schedule of Fees
SANBORN, HEAD & ASSOCIATES, INC.
Schedule of Fees for Fiscal Year Ending 2019
City of Nashua

Senior Vice President $208
Vice President $198
Project Director $186
Senior Project Manager $159
Project Manager $148
Senior Project Engineer/Geologist $130
Project Engineer/Geologist $122
Engineer/Geologist $111
Supervising Technician $99
Senior Engineering Technician $90
Engineering Technician $83
Support Staff $72

Subcontractors and Outside Services Cost plus 10%
Other Direct Expenses Cost plus 10%

Hourly rates will be charged for time worked on the project and for the time required for travel between the office and the meeting or project site. Local travel will be at IRS allowed rates.

Overtime hours will be charged using the hourly rates listed above.

Hourly rates for expert witness testimony, including preparation time, and other special services such as corporate acquisition due diligence studies that generally require a dedicated commitment of senior staff, will be provided upon request.

This fee schedule applies for the City of Nashua fiscal year ending 2019 (from July 1, 2018 to June 30, 2019).
To: Board of Public Works                Meeting Date: February 28, 2019
From: Jeff Lafleur, Superintendent
       Solid Waste Department
Re: To approve the creation of a part time Licensed Scale Operator position.

C. Motion: To approve the creation of a part time Scale Operator position at the Solid Waste Department. Starting salary for this position will be $21.76 per hour. Funding will be through: Department: 168 Solid Waste; Fund: Disposal; Account Classification: 51 Salaries & Wages.

Discussion: The Solid Waste Department is proposing the creation of a new, part time Licensed Scale Operator position. This person would assist the Landfill Scale Operator in checking and selling residential and commercial permits, weighing customers in and out, assisting residents and commercial customers with questions and other duties as assigned.

The person hired for this position would work a maximum of 29 hours per week for a yearly salary not to exceed $38,814.08.
City of Nashua, Public Works Division

To: Board of Public Works  Meeting Date: February 28, 2019

From: Jeff Lafleur, Superintendent  
Solid Waste Department

Re: Electronic Recycling Fees

D. Informational: Fee comparison of surrounding communities for electronics recycling

Attachments: Table of fees charged by Nashua and other communities for electronics recycling.

Discussion:
<table>
<thead>
<tr>
<th>Item</th>
<th>Fee</th>
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<tbody>
<tr>
<td>100 lb.</td>
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</tr>
<tr>
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<td>$0.60 per lb.</td>
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<tr>
<td>100 lb.</td>
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<td>100 lb. plus</td>
<td>$1.00 per lb.</td>
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</table>

**Residential Electronics Recycling Fees**

- Dover
- Keene
- Rochester
- Portsmouth
- Goffstown
- Concord
- Pelham
- Bedford
- Merrimack
- Manchester
- Nashua

Additional fees for:
- TV or Monitor
- $5.00 per item
- $7.50 per item
- Additional fee from each item
- Free Items
Board of Public Works Meeting of February 28, 2019
Wastewater Department

Agenda

A. **Motion**: To Approve the User Warrants as presented

B. **Motion**: To approve the contract to Wright Pierce for professional services for the design and bidding phase services for screening upgrade at the Wet Weather Facility in an amount not to exceed $178,000. Funding will be through: Department: 169 - Wastewater; Fund: Wastewater; Activity: Wet Weather Upgrade.
City of Nashua, Public Works Division

To: Board of Public Works
    Meeting Date: February 28, 2019

From: David L. Boucher, Superintendent
       Wastewater Department

Re: Wet Weather Facility Screening Upgrade – Design and Bidding Phase

B. Motion: To approve the contract with Wright Pierce for professional design and bidding phase services for the Wet Weather Facility Screening Upgrade in an amount not to exceed $178,000. Funding will be through: Department: 169 - Wastewater; Fund: Wastewater; Activity: Wet Weather Upgrade.

Attachments: Wright Pierce Proposal

Discussion: The Wet Weather Facility located at 2 Sawmill Road in Nashua is designed to treat flows at the wastewater facility above 50 million gallons per day. Over the years, the facility has experience issues with its two influent screens. Parts of the screen fields have become bowed allowing large material to pass through and clog pumps within the Wet Weather Facility. Another issue is that the rake mechanisms do not remove debris properly from the screen field allowing flow to back-up into the interceptor creating other issues and causing the Wet Weather Facility to be ineffective. Several interim solutions have been tried to correct the issues with little success.

Wright Pierce was hired to do a preliminary investigation of the Wet Weather screening area and determined new screens are needed. We are ready to proceed with the design phase of this project and have asked Wright Pierce to continue with this effort.

Wright Pierce has done a number of projects at the wastewater facility since 2012 in a satisfactory manner. The cost of $178,000 is reasonable for the scope of work involved. The construction cost to upgrade the screens will be determined by Wright Pierce, but are estimated to cost around 2.2 million dollars. Their cost is less than 10% of the estimated construction cost; which is very reasonable for design and bidding services.
Exhibit A: Scope of Work

I. Prepare Preliminary Design Report for Screening Upgrade at Wet Weather Flows Facility

A. Preliminary workshop. ENGINEER shall attend a preliminary workshop with OWNER to review the work plan for the upgrade project, and solicit input on key issues, ancillary improvements, and potential site visits to inspect existing installations. Brainstorm on options, and identify the preferred alternatives for detailed evaluation.

B. Develop base plans and collect site data. ENGINEER shall develop base plans for construction documents using existing record drawing information supplemented by detailed field measurements. This will primarily focus on the depth and dimensions of the wet weather diversion structure, influent channels, and influent wet well. Assume 1 site visit for field measurements by ENGINEER with 2-person team.

C. Prepare and Issue Technical Memorandum (TM)

1. Evaluate design requirements for screens, including modifications to existing influent channel and first floor level. Evaluate suitable manufacturers and secure initial budgetary quotes.
   a. Arrange and attend up to 1 days of field trips with OWNER staff to comparable installations. Budget for up to 1 OWNER staff and 1 ENGINEER staff for flight and overnight accommodations related to site visits. ENGINEER shall prepare TM summarizing findings of site visit(s).

2. Evaluate modifications to existing wash press installation to account for new screens and improve overall reliability.

3. Evaluate modifications to monorail system to account for new screens.

4. Evaluate options to improve access to influent channel level from first floor including ladders, safety davit crane for personnel removal, and supplemental ventilation.

5. Each of the ENGINEER’s building design disciplines shall inspect existing facilities and prepare TM’s summarizing the anticipated improvements as follows:
   a. Architectural issues will be limited to requirements for allowing the screens to be installed through roof either through temporary opening and repair to roofing or through new permanent hatch. Summarize findings in draft TM.
b. ENGINEER’s structural division shall evaluate the necessary concrete modifications to allow installation of new screen in existing influent channels. Summarize findings in draft TM.

c. ENGINEER’s instrumentation division shall summarize the existing control system and recommended modifications associated with new screen installation in draft TM.

d. ENGINEER’s electrical division will summarize the existing electrical gear and recommended modifications associated with new screen installation in draft TM.

e. ENGINEER does not expect there to be a need for Civil or Mechanical division specific TMs. Minor upgrades associated with these divisions shall be included in other TMs within the PDR.

6. ENGINEER will hold two progress meetings to discuss draft TM and site visits. Input from meetings shall be incorporated into updated TM’s.

7. ENGINEER shall finalize TM’s based upon input from the City and include in the Preliminary Design Report.

D. Prepare draft Preliminary Design Report (PDR) and drawings.

1. Prepare draft Preliminary Design Report (PDR) that includes all technical memorandums, final design criteria, preliminary drawings and outline specifications.

2. Advise OWNER if additional reports, data or other information or services are necessary and assist OWNER in obtaining such reports, data or other information and services.

E. Prepare preliminary construction cost estimate

1. Based on the information contained in the Preliminary Design documents, submit to OWNER a Construction Cost Estimate.

F. Finalize Preliminary Design Report (PDR)

1. Submit a draft of the Preliminary Design document to, and meet to review with OWNER.

2. Receive OWNER comments and provide written response to all comments to satisfaction of OWNER. Submit final Preliminary Design documents to DIVISION for review.

3. The draft preliminary design report shall be completed within 75 days of receiving authorization to proceed.
II. Final Design for Primary Tank Upgrade

A. Permitting, Codes, Regulatory Buy-in. Discuss and obtain permissions from DIVISION for any sole-sourcing of equipment on the project.

B. 90% Completion Plans, Contract Documents and Cost Estimates. Based on an agreed upon preliminary design documents for the screen upgrade and appurtenances, ENGINEER shall proceed with the 90% design plans, specifications, and bidding documents as well as to prepare an updated estimate of construction cost. Submit two (2) full-size copies of these plans, specifications and bidding documents to OWNER for review and comment, plus one (1) 11x17 and an electronic PDF copy of all documents. Advise OWNER of any adjustments to the Construction Cost Estimate as a result of changes in scope of the Project. Hold a review meeting to discuss issues requiring OWNER input.

C. 95% Completion Plans, Contract Documents and Cost Estimates. Following the review meeting, ENGINEER shall proceed with the 95% design plans, specifications, and bidding documents. Submit two (2) full-size copies of these plans, specifications and bidding documents to OWNER (plus reduced size (11x17) plans and an electronic PDF copy of all documents) and one (1) full-size copy to the DIVISION for their review. Advise OWNER of any adjustments to the Construction Cost Estimate as a result of changes in scope of the Project.

1. All written comments from DIVISION shall be incorporated into the documents with a written response on how it was addressed.
2. Meet with OWNER to discuss OWNER and DIVISION comments on 95% documents and provide written response to all comments received to the satisfaction of the OWNER.
3. The 95% documents shall be submitted to the OWNER within 150 days of the OWNER’s approval of the Preliminary Design Report.

D. Final Plans, Contract Documents and Cost Estimates

Upon the OWNER’s and DIVISION’s acceptance of the 95% plans and contract documents as adequately completed, the ENGINEER shall proceed with the final, bid-ready design plans, specifications and estimates for construction costs, revised to address the comments from the draft reviews. The submittal shall be ready to be advertised for construction bidding and shall include a schedule for the bidding and construction process.
III. Bidding Phase Services

Assistance in securing construction bids, preparing bid tabulation and analysis of bids, and recommendation regarding award of contract. A copy of the bid analysis will be furnished to the DIVISION.

1. Make such revisions to the construction Contract Documents as may be necessary to comply with Federal, State or OWNER requirements.

2. Assume OWNER to be responsible for advertising for bids for the construction contract in appropriate newspapers and with the usual construction industry bidding information services.

3. Print and provide bidding documents to the OWNER. Assume three (3) full-size copies of the Contract Documents and the plans shall be provided, plus one reduced size (11x17) set. An electronic PDF version of all documents shall also be submitted to OWNER.

4. Provide electronic plan room for distribution of bidding documents in electronic PDF format to interested contractors and suppliers.

5. Respond to bidders’ questions.


8. Review all bids and prepare bid tabulation.

9. Review the qualifications of the apparent low bidder(s) and compliance with other contract requirements. Report on the results of the reviews and issue a Recommendation for Award.

10. The length of the Bidding Phase is assumed to be 28 days.
### Exhibit B-1 - Fee Schedule

**COST OR PRICE SUMMARY FORMAT FOR SUBAGREEMENTS UNDER THE STATE REVOLVING FUND PROGRAM**

**PART I - GENERAL**

<table>
<thead>
<tr>
<th>1. APPLICANT - City of Nashua</th>
<th>2. GRANT/LOAN NO. CWSAE-</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. NAME OF CONTRACTOR OR SUBCONTRACTOR - Wright-Pierce</td>
<td>4. FEIN</td>
</tr>
<tr>
<td>5. DATE OF PROPOSAL 2/14/2019</td>
<td></td>
</tr>
<tr>
<td>6. ADDRESS OF CONTRACTOR OR SUBCONTRACTOR (Include ZIP) 230 Commercial Way, Suite 302, Portsmouth, NH 03801</td>
<td>7. TYPE OF SERVICE TO BE FURNISHED Nashua WWTF - Screening Upgrade for Wet Weather Facility - Preliminary and Final Design and Bidding</td>
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</table>

**PART II - COST SUMMARY**

#### 7. DIRECT LABOR (Specify labor categories)

<table>
<thead>
<tr>
<th>Principal-in-Charge</th>
<th>HOURS</th>
<th>HOURLY RATE</th>
<th>ESTIMATED COST</th>
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<tbody>
<tr>
<td></td>
<td>11</td>
<td>$62.00</td>
<td>$682.00</td>
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<tr>
<td>Project Manage</td>
<td>82</td>
<td>$58.00</td>
<td>$4,756.00</td>
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<tr>
<td>Sr. Technical Advisor</td>
<td>18</td>
<td>$51.00</td>
<td>$918.00</td>
</tr>
<tr>
<td>Sr. Project Engineer</td>
<td>202</td>
<td>$42.00</td>
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<td>Sr. Project Engineer - Civil</td>
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**DIRECT LABOR TOTAL:** 15,360 $57,272.00

#### 8. INDIRECT COSTS (Specify indirect cost pools)

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<tr>
<th>RATE</th>
<th>x BASE = ESTIMATED COST</th>
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<tbody>
<tr>
<td>167.97%</td>
<td>57,272.00 $36,199.78</td>
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**INDIRECT COSTS TOTAL:** $36,199.78

#### 9. OTHER DIRECT COSTS

- **a. TRAVEL**
  - ESTIMATED COST $7,108.83

- **b. EQUIPMENT, MATERIALS, SUPPLIES**
  - (Specify categories)
    - **Printing and postage**
      - QTY | COST | ESTIMATED COST |
      - 0   | $2,072.42 |

  **EQUIPMENT SUBTOTAL:** $2,072.42

- **c. SUBCONTRACTS**
  - Thickness Testing Equipment
    - QTY | COST | ESTIMATED COST |
    - 0   | $0.00 |

  **SUBCONTRACTS SUBTOTAL:** $0.00

- **d. OTHER (Specify categories)**
  - QTY | COST | ESTIMATED COST |

  **OTHER SUBTOTAL:** $0.00

- **e. OTHER DIRECT COSTS TOTAL:** $9,181.05

#### 10. TOTAL ESTIMATED COST $162,652.83

#### 11. PROFIT $15,347.18

#### 12. TOTAL PRICE $178,000.00
### PART III - PRICE SUMMARY

13. COMPETITOR’S CATALOG LISTINGS, IN-HOUSE ESTIMATES, PRIOR QUOTES
   (Indicate basis for price comparison)

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<th>Work Category</th>
<th>Task</th>
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<td>$4,980.00</td>
</tr>
<tr>
<td>24</td>
<td>$40.00</td>
<td>$960.00</td>
</tr>
<tr>
<td>80</td>
<td>$43.00</td>
<td>$3,440.00</td>
</tr>
<tr>
<td>76</td>
<td>$60.00</td>
<td>$4,560.00</td>
</tr>
<tr>
<td>430</td>
<td>$28.00</td>
<td>$12,040.00</td>
</tr>
<tr>
<td>64</td>
<td>$22.00</td>
<td>$1,408.00</td>
</tr>
<tr>
<td>1536</td>
<td></td>
<td>$57,272.00</td>
</tr>
</tbody>
</table>

### PART IV - DIRECT LABOR BY CATEGORY

14. INSERT THE APPROPRIATE WORK CATEGORY IN THE TABLE BELOW. WORK CATEGORIES WOULD INCLUDE BUT NOT BE LIMITED TO THOSE CATEGORIES SHOWN IN THE CONTRACT DOCUMENTS SUCH AS DESIGN, SURVEY, SUBSURFACE, CADAstral, O&M MANUAL, ADMINISTRATION, INSPECTION, RECORD DWGS., START-UP, SPECIAL SERVICES, ETC.
Board of Public Works Meeting of February 28, 2019
Engineering Department

Agenda

A. **Motion:** To approve the Residential and Commercial Wastewater Service Permits and Fees as submitted.

B. **Motion:** To approve the construction contract for the 2019 Paving Program - Arterial Roadways to Brox Industries, of Dracut, MA in the amount of $6,853,472.96. Funding will be through: Department: 160 Admin/Engineering; Fund: Bond and Trust; Activity: Paving.

C. **Motion:** To approve the construction contract for the 2019 Paving Program - Local and Collector Roadways to Sunshine Paving Corporation of Hudson, NH in the amount of $4,350,642.35. Funding will be through: Department: 160 Admin/Engineering; Fund: Bond and Trust; Activity: Paving.

D. **Motion:** To approve the award of the 2019 Asphalt Testing contract to S.W. Cole Engineering, Inc., Londonderry, NH in the amount of $48,600. Funding will be through: Department: 160 Admin/Engineering; Fund: Bond; Activity: Paving.

E. **Motion:** To approve the engineering services contract with Hayner/Swanson. Inc. (HSI) of Nashua, NH in the amount of $462,435 for the management and construction administration of the paving program. Department: 160 Admin/Engineering; Fund: Bond; Activity: Paving.

F. **Motion:** To approve the award of the construction contract for the 2019 CIPP Lining Project to Kenyon Pipeline Inspection, LLC of Queensbury, New York in the amount of $2,825,135. Funding will be through: Department: 169 Wastewater; Fund: Bond; Activity: Sewer Rehab.

G. **Motion:** To approve the award of the construction contract for the 2019 Sewer Rehabilitation Project to N. Granese & Sons, Inc. of Salem, MA in the amount of $1,001,888. Funding will be through: Department: 169 Wastewater; Fund: Bond; Activity: Sewer Rehab.

H. **Motion:** To approve the Fence and Wall Permit Application as presented.
City of Nashua, Public Works Division

To: Board of Public Works                                           Meeting Date: February 28, 2019

From: Stephen Dookran, P.E., City Engineer
       Engineering Department

Re: Residential and Commercial Wastewater Service Permits

A. Motion: To approve the Residential and Commercial Wastewater Service Permits and Fees as submitted.

Discussion: Below is a list of Residential and Commercial Wastewater Service Permits issued for the period January 1 to January 31.

<table>
<thead>
<tr>
<th>Date</th>
<th>Permit #</th>
<th>Location Address</th>
<th>Resident Name/ Company Name</th>
<th>Comments (Residential or Commercial)</th>
<th>Fees</th>
<th>Repair</th>
<th>Entrance</th>
<th>Connection</th>
<th>Betterment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/3/2019</td>
<td>23929</td>
<td>136 Shore Dr</td>
<td>Etchstone Properties</td>
<td>Residential New Connection</td>
<td>$295.00</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4/2019</td>
<td>23934</td>
<td>11 Sherwood Dr</td>
<td>Etchstone Properties</td>
<td>Residential New Connection</td>
<td>$295.00</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/11/2019</td>
<td>23935</td>
<td>32 Raleigh Dr</td>
<td>Robert P &amp; Stephanie L Labrie</td>
<td>Residential Replacement</td>
<td>$0.00 (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/28/2019</td>
<td>23937</td>
<td>266 Daniel Webster Hwy (256-268 DWH)</td>
<td>NorthPoint Construction Management</td>
<td>Commercial Increase Use</td>
<td>$1,475.00</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL $2,065.00

(1) Resident replaced sewer service connection to property line due to excessive roots. Upon inspection, the portion of the sewer service connection located in the ROW was determined to be in good condition. Therefore, no fee was charged.
City of Nashua, Public Works Division

To: Board of Public Works  Meeting Date: February 28, 2019
From: Stephen Dookran, P.E., City Engineer
       Engineering Department
Re: 2019 Paving Program – Arterial Roadways
     Construction

B. Motion: To approve the construction contract for the 2019 Paving Program - Arterial Roadways to Brox Industries, of Dracut, MA in the amount of $6,853,472.96. Funding will be through: Department: 160 Admin/Engineering; Fund: Bond and Trust; Activity: Paving.

Attachment: 2019 Paving Program – Arterial Roadways Paving List

Discussion: The 2019 Paving Program has been divided into two sections:

- Arterial Roadways
- Local and Collector Roadways

The paving program was divided to attract bids from a broader range of paving contractors since the scope of the work is different for the two types of roadways. It has also been divided to hopefully have two separate contractors to share the 23 miles of work.

The 2019 Paving Contract for Arterial Roadways is expected to pave approximately 11.6 miles of streets. The contract uses repair methods such as shim, overlay, milling and reclamation. It also includes replacing obsolete and broken drainage and sewer castings.

The contract was advertised on January 17, 2019. Three contractors attended the mandatory pre-bid meeting and they submitted bids on February 12, 2019 and are listed below:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brox Industries, Inc. of Dracut, MA</td>
<td>$6,853,472.96</td>
</tr>
<tr>
<td>Newport Construction Corporation of Nashua, NH</td>
<td>$7,685,165.20</td>
</tr>
<tr>
<td>Continental Paving Inc., Londonderry, NH</td>
<td>$7,995,896.45</td>
</tr>
</tbody>
</table>

Brox Industries, Inc. of Dracut, MA at a bid price of $6,853,472.96 is the qualified low bidder. Brox has completed many years of annual paving for the City, and has done many large projects for the NHDOT. Brox is capable of completing this project to our satisfaction.
<table>
<thead>
<tr>
<th>Street Name</th>
<th>From</th>
<th>To</th>
<th>Road Length</th>
<th>Deferred Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allds Street</td>
<td>Main St</td>
<td>East Hollis St</td>
<td>5,084</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>Amherst Street-1</td>
<td>Somerset Pkwy</td>
<td>Deerwood Dr</td>
<td>4,129</td>
<td></td>
</tr>
<tr>
<td>Amherst Street-2</td>
<td>Deerwood Dr</td>
<td>400'S of Cellu</td>
<td>3,063</td>
<td>June 1, 2019</td>
</tr>
<tr>
<td>Amherst Street-3</td>
<td>400'S of Cellu</td>
<td>City Line</td>
<td>2,980</td>
<td></td>
</tr>
<tr>
<td>Canal Street-1</td>
<td>Main St</td>
<td>Orange St</td>
<td>452</td>
<td></td>
</tr>
<tr>
<td>Canal Street-2</td>
<td>Orange St</td>
<td>Howard Ct</td>
<td>890</td>
<td></td>
</tr>
<tr>
<td>Canal Street-3</td>
<td>Howard Ct</td>
<td>Amory St</td>
<td>1,893</td>
<td>May 15, 2019</td>
</tr>
<tr>
<td>East Hollis Street (EB)-6</td>
<td>East Hollis</td>
<td>Bridge St EB</td>
<td>460</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>East Hollis Street (WB)-7</td>
<td>Bridge Street WB</td>
<td>E. Hollis</td>
<td>702</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>East Hollis Street-2</td>
<td>Marshall St</td>
<td>Allds St</td>
<td>1,143</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>East Hollis Street-3</td>
<td>Allds St</td>
<td>Temple St</td>
<td>802</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>East Hollis Street-4</td>
<td>Temple St</td>
<td>East Hollis EB</td>
<td>841</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>East Hollis Street-5</td>
<td>East Hollis EB</td>
<td>Crown St</td>
<td>896</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>Kinsley Street-1</td>
<td>Main Dunstable Rd</td>
<td>Ritter St</td>
<td>5,363</td>
<td>June 15, 2019</td>
</tr>
<tr>
<td>Kinsley Street-2</td>
<td>Ritter St</td>
<td>Hanover St</td>
<td>527</td>
<td>June 15, 2019</td>
</tr>
<tr>
<td>Lake Street-2</td>
<td>Almont St</td>
<td>Linwood St</td>
<td>597</td>
<td></td>
</tr>
<tr>
<td>Lake Street-3</td>
<td>Linwood St</td>
<td>Pine St</td>
<td>1,835</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>Lake Street-4</td>
<td>Pine St</td>
<td>Vine St</td>
<td>915</td>
<td></td>
</tr>
<tr>
<td>Lake Street-5</td>
<td>Vine St</td>
<td>Main St</td>
<td>1,401</td>
<td></td>
</tr>
<tr>
<td>Main Dunstable Road 2</td>
<td>FE Everett Turnpike</td>
<td>Kinsley St</td>
<td>1,433</td>
<td></td>
</tr>
<tr>
<td>Main Dunstable Road 3A (NB)</td>
<td>West Hollis St</td>
<td>Main Dunstable Rd 3B (548'S of West Hollis St)</td>
<td>776</td>
<td></td>
</tr>
<tr>
<td>Main Dunstable Road 3A (SB)</td>
<td>West Hollis St</td>
<td>Main Dunstable Rd 3B (548'S of West Hollis St)</td>
<td>548</td>
<td></td>
</tr>
<tr>
<td>Main Dunstable Road 4</td>
<td>Conant Rd</td>
<td>Main Dunstable Rd 3B</td>
<td>3,042</td>
<td></td>
</tr>
<tr>
<td>Main Dunstable Road 5</td>
<td>Gregg Rd</td>
<td>Whitford Rd</td>
<td>6,168</td>
<td></td>
</tr>
<tr>
<td>Pine Hill Road-1</td>
<td>Indian Rock Rd</td>
<td>Blue Hill Ave</td>
<td>6,460</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>Spit Brook Road-1</td>
<td>EB Tara Blvd</td>
<td>Newcastle Dr</td>
<td>1,295</td>
<td></td>
</tr>
<tr>
<td>Spit Brook Road-2</td>
<td>WB Tara Blvd</td>
<td>Newcastle Dr</td>
<td>1,293</td>
<td></td>
</tr>
<tr>
<td>Spit Brook Road-3</td>
<td>Newcastle Dr</td>
<td>175'E of Whitegate</td>
<td>1,042</td>
<td></td>
</tr>
<tr>
<td>Spit Brook Road-4</td>
<td>175'E of Whitegate</td>
<td>D.W. Highway</td>
<td>668</td>
<td></td>
</tr>
<tr>
<td>West Hollis St - 2B(East of Turnpike)</td>
<td>Simon St</td>
<td>Dead End (House #385)</td>
<td>1,143</td>
<td></td>
</tr>
<tr>
<td>West Hollis St - 3 (West of Turnpike)*</td>
<td>Simon Street</td>
<td>Panther Drive</td>
<td>3,500</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

* Limits of West Hollis St 3 has been revised. The new limits are Simon Street to Panther Drive (3,500ft)

**Deferred Streets**

Select arterial streets have been deferred (to corresponding date shown in the table) due to underground utilities conflict. These streets will be available to the contractor once the underground utility concerns have been addressed.
To: Board of Public Works
Meeting Date: February 28, 2019

From: Stephen Dookran, P.E., City Engineer
Engineering Department

Re: 2019 Paving Program – Local & Collector Roadways
Construction

C. Motion: To approve the construction contract for the 2019 Paving Program – Local and Collector Roadways to Sunshine Paving Corporation of Hudson, NH in the amount of $4,350,642.35. Funding will be through: Department: Department: 160 Admin/Engineering; Funds: Bond and Trust; Activity: Paving.

Attachment: 2019 Paving Program – Local & Collector Roadways Paving List

Discussion: The 2019 Paving Program has been divided into two sections:
1. Arterial Roadways
2. Local and Collector Roadways
The paving program was divided to attract bids from a broader range of paving contractors since the scope of the work is different for the two types of roadways. It has also been divided to hopefully have two separate contractors to share the 23 miles of work.

The 2019 Paving Contract (Local & Collector Roadways) is expected to pave approximately 11.4 miles of City streets. The contract uses repair methods such as shim, overlay, milling and reclamation. It also includes replacing obsolete and broken drainage and sewer castings.

The contract was advertised on January 23, 2019. Four contractors attended the mandatory prebid meeting. Three contractors submitted bids on February 13, 2018 and are listed below:

- Sunshine Paving of Hudson, NH $4,350,642.35
- Brox Industries, Inc. of Dracut, MA $4,793,285.25
- Newport Construction Corporation of Nashua, NH $4,969,669.69
- Continental Paving, Inc. of Londonderry, NH $5,543,957.00

Sunshine Paving of Hudson, NH at a bid price of $4,350,642.35 is the qualified low bidder. Sunshine Paving has completed two previous annual paving contracts for the City. References were checked for more recent work in other communities and good responses were received.
<table>
<thead>
<tr>
<th>Street Name</th>
<th>From</th>
<th>To</th>
<th>Road Length</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almont Street - 2</td>
<td>Nowell St</td>
<td>Lund Rd</td>
<td>1,953</td>
<td>3&quot; M&amp;OL</td>
</tr>
<tr>
<td>Ashland Street</td>
<td>Edgewood Ave</td>
<td>Manchester St</td>
<td>2,507</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Barnsdale Road</td>
<td>Lancaster Dr</td>
<td>Harris Rd</td>
<td>1,217</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Beaver Street</td>
<td>Carmine Rd</td>
<td>Marie Ave</td>
<td>1,185</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Bedford Street</td>
<td>Broad St</td>
<td>Cul-De-Sac</td>
<td>1,465</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Bloomingdale Drive</td>
<td>Saint Laurent St</td>
<td>Hideaway Rd</td>
<td>973</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Cambridge Road</td>
<td>Conant Rd</td>
<td>Pittsburgh Dr</td>
<td>2,171</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Cannon Drive</td>
<td>Woodfield St</td>
<td>Taschereau Blvd</td>
<td>2,084</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Coburn Avenue</td>
<td>Hampton Dr</td>
<td>Broad St</td>
<td>2,485</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Ducas Avenue</td>
<td>Broad St</td>
<td>End (Asphalt Change w/ Hollis Line)</td>
<td>1,228</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Fairhaven Road</td>
<td>Eastbrook Dr</td>
<td>Farmington Rd</td>
<td>1,583</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Farmount Street - 1</td>
<td>Amberst St</td>
<td>Charles St</td>
<td>750</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Farmount Street - 2</td>
<td>150'E of Hutchinson St</td>
<td>End (House # 65)</td>
<td>3,120</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Fowell Ave</td>
<td>Main St</td>
<td>dead end</td>
<td>902</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Gillis Street</td>
<td>Arlington St</td>
<td>Allis St</td>
<td>1,100</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Gillis Street - 1</td>
<td>Allis St</td>
<td>Arlington St</td>
<td>1,100</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Gillis Street - 2</td>
<td>Arlington St</td>
<td>Haines St</td>
<td>2,128</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Gilman St</td>
<td>Woodward Ave</td>
<td>Sawyer St</td>
<td>875</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Hazel Avenue</td>
<td>Joliot Ln</td>
<td>Gosselin Rd</td>
<td>1,490</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Lincoln Ave</td>
<td>Main St</td>
<td>Fifield St</td>
<td>804</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Massasot Road</td>
<td>Indian Rock Rd</td>
<td>End (3'/W of CBs)</td>
<td>1,504</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Norwich Road</td>
<td>Newburgh Rd</td>
<td>Westwood Dr</td>
<td>2,234</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Park Ave</td>
<td>Main St</td>
<td>dead end</td>
<td>926</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Parker Drive</td>
<td>Ridge Rd</td>
<td>Elmer Dr</td>
<td>1,386</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Peele Road</td>
<td>Shelley Dr</td>
<td>Spencer Dr</td>
<td>1,080</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Pitarys Drive</td>
<td>West Hollis St</td>
<td>End (House # 27)</td>
<td>1,011</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Pratt St</td>
<td>Lavndale Ave</td>
<td>Main St</td>
<td>692</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Robinhood Road - 1</td>
<td>Nottingham Dr</td>
<td>Fountain Ln</td>
<td>1,825</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Shadowbrook Drive</td>
<td>Byron Dr</td>
<td>Spindlewick Dr</td>
<td>1,111</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Spencer Drive</td>
<td>Thoreau Dr</td>
<td>Whitman Rd</td>
<td>1,440</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Stevens St</td>
<td>Main St</td>
<td>dead end</td>
<td>976</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Taylor St</td>
<td>Main St</td>
<td>Fifield St</td>
<td>779</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Taylor St</td>
<td>Fifield St</td>
<td>Carolina Dr</td>
<td>1,639</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Tenby Drive - 1</td>
<td>215'S of Westwood Dr</td>
<td>Westwood Dr</td>
<td>2,640</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Thoreau Drive</td>
<td>Browning Ave</td>
<td>Whitman Rd</td>
<td>1,922</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Twilight Drive</td>
<td>Teak Drive Connector</td>
<td>Michael Ave</td>
<td>1,946</td>
<td>Reclaim (10&quot;)</td>
</tr>
<tr>
<td>Wingate Crossing</td>
<td>West Hollis St</td>
<td>Main Dunstable Rd</td>
<td>5,784</td>
<td>2&quot; M&amp;OL</td>
</tr>
<tr>
<td>Zellwood St</td>
<td>Pratt St</td>
<td>Fowell Ave</td>
<td>335</td>
<td>Reclaim (10&quot;)</td>
</tr>
</tbody>
</table>

**Total Length**: 11.43 miles
City of Nashua, Public Works Division

To: Board of Public Works

Meeting Date: February 28, 2019

From: Stephen Dookran, P.E., City Engineer
Engineering Department

Re: 2019 Asphalt Testing – Arterial Roadways; Local & Collector Roadways Construction

D. Motion: To approve the award of the 2019 Asphalt Testing contract to S.W. Cole Engineering, Inc., Londonderry, NH in the amount of $48,600. Funding will be through: Department: 161 Street; Fund: General; Activity: Paving; Department: 160 Admin/Engineering; Fund: Bond; Activity: Paving.

Discussion: The 2019 Paving Contract (Arterial Roadways Contract; Local & Collector Roadways Contract) is expected to pave approximately 23 miles of City streets. The paving project includes the placement of approximately 84,072 tons of hot mix asphalt and 4,650 tons of high strength hot mix asphalt. The purpose of the 2019 Asphalt Testing contract is to test the asphalt used during 2019 Paving Program.

The testing company will perform testing at the asphalt plant and on the roads during all paving operations. In addition to performing testing, the technician assigned to plant inspections shall observe all materials and observe the hot-mix batching process. The testing is being conducted to ensure compliance with contract specifications for compaction, liquid asphalt content, pavement thickness, and aggregate gradation.

The contract was advertised on January 30, 2019. Three contractors attended the non-mandatory pre-bid meeting. The contractors submitted bids on February 20, 2019 and are listed below:

- S.W. Cole Engineering, Inc. of Londonderry, NH $48,600.00
- Terracon Consulting Engineers & Scientist of Manchester, NH $54,350.00
- John Turner Consulting, Inc. of Dover, NH $62,950.00

S.W. Cole Engineering, Inc. of Londonderry, NH at a bid price of $48,600.00 is the qualified low bidder. S.W. Cole Engineering, Inc. has satisfactorily performed similar work for past paving projects in the City.
<table>
<thead>
<tr>
<th>Street Name</th>
<th>From</th>
<th>To</th>
<th>Road Length</th>
<th>Tonnage</th>
<th>No. of Cores needed (tonnage/750 tons)</th>
<th>No. of Cores collected (rounded off)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allds Street</td>
<td>Main St</td>
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<td>5,084</td>
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<td>instable Rd 3B</td>
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<td>Conant Rd</td>
<td>Main Dunstable Rd 3B</td>
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<td>3,077</td>
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<td>5.00</td>
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<td>Main Dunstable Road 5</td>
<td>Gregg Rd</td>
<td>Whitford Rd</td>
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<td>D.W. Highway</td>
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**LENGTH** 11.76 51,623.39

No. of Cores needed— 85

Assume 100 cores are needed— 100
## 2019 PAVING LIST (Asphalt testing Locations)

<table>
<thead>
<tr>
<th>Street Name</th>
<th>From</th>
<th>To</th>
<th>Road Length</th>
<th>Tonnage</th>
<th>No. of Cores needed (tonnage/750 tons)</th>
<th>No. of Cores collected (rounded off)</th>
</tr>
</thead>
<tbody>
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<td>Lund Rd</td>
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<td>Edgewood Ave</td>
<td>Manchester St</td>
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<td>Lancaster Dr</td>
<td>Harris Rd</td>
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<td>Beaver Street</td>
<td>Carmine Rd</td>
<td>Marie Ave</td>
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<td>Broad St</td>
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<td>Saint Laurent St</td>
<td>Hideaway Rd</td>
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<td>Pittsburgh Dr</td>
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<td>Woodfield St</td>
<td>Tashereau Blvd</td>
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<td>Coburn Avenue</td>
<td>Hampton Dr</td>
<td>Broad St</td>
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<td>(Asphalt Change @ Hollis Ln)</td>
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<td>Alls St</td>
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<td>Newburgh Rd</td>
<td>Westwood Dr</td>
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<td>Park Ave</td>
<td>Main St</td>
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</tbody>
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| No. of Cores needed | 57 |
| assume 60 cores are needed | 60 |
City of Nashua, Public Works Division

To: Board of Public Works  
Meeting Date: February 28, 2019

From: Stephen Dookran, P.E., City Engineer  
Engineering Department

Re: Pavement Management Engineering Services – Hayner/Swanson, Inc.

E. Motion: To approve the engineering services contract with Hayner/Swanson, Inc. (HSI) of Nashua, NH in the amount of $462,435 for the management and construction administration of the paving program. Department: 160 Admin/Engineering; Fund: Bond; Activity: Paving.

Attachment: HSI Proposal (dated February 12, 2019)

Discussion: This year, Public Works has taken on a very extensive paving program which includes a $6.85 Million contract with Brox Industries to pave Major and Arterial Roads, and a $4.35 Million contract with Sunshine Paving to pave Local and Collector Roads. In addition to the new contracts there are the carry over streets from the 2018 paving program and a significant portion of the $4.4 Million federally funded paving contract. Amherst Street, Somerset Parkway, Broad Street, and Kinsley Street still need to be completed under the federally funded paving contract with Newport Construction.

A professional services contract with HSI is necessary to assist City Engineering staff with the overall management, coordination, construction administration and observation. The effort in construction coordination is significant given that there will be multiple contracts with several contractors throughout the City at the same time.

The term of this proposed contract will be from March 15, 2019 through December 1, 2019. More details of HSI’s services are in their proposal (attached). The services to be provided on the paving program will be varied and HSI’s responsibilities may be adjusted by the City based upon the specific needs and workload of the City staff. DPW continues to recommend HSI for these types of services because of their experience, their attention to cost control and their responsiveness to the City’s needs.
February 12, 2019

Ms. Lisa Fauteux
Director of Public Works
9 Riverside Street
Nashua, NH 03062

Dear Ms. Fauteux:

Hayner/Swanson, Inc. (HSI) is pleased to submit this proposal to provide professional services in support of the City of Nashua’s paving program. Consistent with the services we have provided in an earlier contract, this work will be performed as an extension of the City Engineering Department.

We note that in total the paving program for 2019 is significantly greater than past years. With separate contracts to pave arterial roadways and local roadways, as well as a significant portion of the federally funded paving contract remaining to be completed, the construction administration effort will be greater as well.

The term of this proposed contract will be from March 15, 2019 through December 1, 2019. It is anticipated that the extent to which support will be needed during winter 2019/2020 will be assessed in November 2019.

In this highly integrated effort, coordination and construction administration will be staffed by both City staff and HSI personnel.

We understand that the services to be provided on the paving program will be varied and will include management, administration, and construction observation. At times, we will be directly responsible for tasks. At other times, we will work in direct support of City staff. Our commitment to flexibility and to consistent and clear communication with the City will continue to be a key element in this program.

We understand that our responsibilities may be adjusted by the City based upon the specific needs and workload of the City staff. We anticipate that tasks which we may be called upon to undertake include:
• Overall coordination related to programming and scheduling project work
• Coordination with Stantec as they work to update their pavement condition database
• Coordination with privately owned utilities in advance of and during construction
• Review of existing conditions to identify issues such as existing driveway or walk puddles, and utility concerns
• Assistance during construction start-up including kick-off meetings and establishment of working and reporting practices with contractors
• Construction observation including measuring and tracking quantities, as well as preparation of comprehensive daily reports
• Supervision of the construction observation effort, whether performed by HSI or by City staff
• Compilation of project records
• Administration and support of construction contract closeout process
• Additional oversight, recordkeeping and coordination with NHDOT/FHWA as required for the Federally funded contract

In performing these services, we understand that our efforts will always be as directed by the City Engineer. At times, we may perform services which the City’s standard General Conditions for construction contracts assign to the “Engineer”. We note that performing these duties will not bestow upon us the role and responsibilities of “Engineer” as may be defined in contracts with construction contractors.

HSI will not be given the authority to stop the Contractor’s work, nor to order the Contractor to perform work beyond contract limits. If so directed by the City Engineer, we will deliver such orders on the Engineer’s behalf.

On occasions when City staff may be working under the direct supervision of HSI, we understand that the City staff will perform work with a standard of care equal to or exceeding the standard we require of our own staff. City staff working under our supervision on construction sites will be expected to always wear appropriate safety equipment and maintain detailed records.

We understand that it is the City’s desire to establish a budget for HSI’s services which will be performed as directed by the City Engineer. On a monthly basis, we will prepare a report on the status of our overall budget and submit the report with our invoice. We anticipate that as work progresses, the specific tasks we work on will vary dependent upon the workload of City staff, as well as the budget remaining for our support.

We anticipate that our work will fall under four categories:

1. **Principal Level**: Work under this category will be administrative and supervisory support. We anticipate that these services will primarily be provided by John Vancor, P.E. and Paul Hayner, P.E.
2. **Engineering and Construction Manager:** Work under this category will include utility coordination, review of technical concerns, review of payment requisitions, resolution of disputes and preparation of possible change order documentation, preparation of bid documents and contract coordination with contractors. We anticipate that these services will primarily be provided by Scott Murphy, P.E. and Ray Gelinas.

3. **Construction Observation and Technical Support:** Work under this category will include field and office work directly associated with construction observation, as well as plan preparation. We will assign Ethan Holmes and Denis Hayner to the field effort and will supplement Ethan and Denis's services with other staff as workload demands.

4. **Administrative Support:** Work under this category includes administrative efforts including compilation of records and preparation of documents. This work will be performed by Karen Blake.

As a basis for establishing the budget for the 2019 construction season, we have estimated an annual work effort by each category.

**Principal Level**

- Estimate 12 hours/week for 37 weeks = 444 hours
- 444 hours x $170/hour = $75,480

**Engineering and Construction Manager**

- Estimate 15 hours/week for 37 weeks = 555 hours
- 350 hours x $130*/hour = $72,150
*Composite rate used

**Construction Observation Support/Coordination**

- Estimate 100 hours/week for 33 weeks = 3,300 hours
- Estimate 40 hours/week for 4 weeks = 160 hours
- 3,460 hours x $90*/hour = $311,400
*Composite rate used

**Administrative Support**

- Estimate 1 hours/week for 37 weeks = 37 hours
- 37 hours x $65/hour = $2,405

**Total Labor Budget**

= $461,435

**Allowance for Expenses**

= $1,000

**Program Budget**

= $462,435

We understand that the actual work performed will be as directed and that the split of work between categories may vary significantly. We also understand that actual work performed will be only as directed and may be less than the budget presented.
We propose to provide the services described herein in accordance with the same terms and conditions used in our current contract to provide similar services.

If you have any questions or comments regarding this proposal, please contact me.

Sincerely,

John C. Vancor, P.E.
Vice President/Principal Engineer
City of Nashua, Public Works Division

To: Board of Public Works

Meeting Date: February 28, 2019

From: Stephen Dookran, P.E., City Engineer
Engineering Department

Re: 2019 CIPP Lining Project

F. Motion: To approve the award of the construction contract for the 2019 CIPP Lining Project to Kenyon Pipeline Inspection, LLC of Queensbury, New York in the amount of $2,825,135. Funding will be through: Department: 169 Wastewater; Fund: Wastewater; Activity: Sewer Rehab

Discussion: The 2019 CIPP Lining Project is focused on lining approximately 22,325 linear feet (4.2 miles) of aging and deteriorating sewer mains. At some locations, preparation of the sewer main for lining will include point repairs to the pipe and construction of access manholes. Approximately 23 point repairs will be required and approximately 10 manholes are estimated to be constructed. Lining of approximately 100 deteriorated manholes is also included in the work.

Seven contractors attended the mandatory pre-bid meeting on January 23rd. Of these, four bids were received on February 13th as follows:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Bid Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenyon Pipeline Inspection, LLC</td>
<td>$2,825,135.00</td>
</tr>
<tr>
<td>Instituform Technologies, LLC</td>
<td>$2,977,167.00</td>
</tr>
<tr>
<td>Green Mountain Pipeline Services, LLC</td>
<td>$3,067,454.50</td>
</tr>
<tr>
<td>Granite Inline, LLC</td>
<td>$3,087,092.00</td>
</tr>
</tbody>
</table>

The low bid was reviewed and found to be acceptable. It was determined from checking references that Kenyon Pipe Inspection, LLC has performed satisfactorily on other sewer projects of this capacity. Work is expected to begin in April.
City of Nashua, Public Works Division

To: Board of Public Works

From: Stephen Dookran, P.E., City Engineer
      Engineering Department

Re: 2019 Sewer Replacement
     Construction

G. Motion: To approve the award of the construction contract for the 2019 Sewer Rehabilitation Project to N. Granese & Sons, Inc. of Salem, MA in the amount of $1,001,888. Funding will be through: Department: 169 Wastewater; Fund: Bond; Activity: Sewer Rehab.

Discussion: The annual sewer program addresses failing, aged sewers and associated structures and piping. This 2019 Sewer Rehabilitation project is expected to replace approximately 1,305 linear feet of sewer mains along with connecting drainage basins and pipes. The streets included in this contract are:

- Ash Street (35 Ash St to Central St)
- C Street
- Charles Street (Auburn St to Franklin St)

Some of the locations will require the commitment of the utility companies for timely construction.

Seven contractors attended the mandatory pre-bid meeting on January 30th. Three bids were received on February 14th as follows:

- N. Granese & Sons, Inc. of Salem, MA
  - $1,001,888.00
- Defelice Corporation of Dracut, MA
  - $1,097,810.00
- Albanese D&S, Inc. of Dracut, MA
  - $1,247,400.00

The low bid was reviewed and found to be acceptable. N. Granese & Sons, Inc. has performed satisfactorily on other sewer projects with other public works entities in New Hampshire from review of previous projects and references. Work is expected to start as early as April to address significant pipe issues.
To:    Board of Public Works  
       Meeting Date:  February 28, 2019  
From:  Stephen Dookran, P.E., City Engineer  
       Engineering Department  
Re:    Division of Public Works Fence and Wall Permit Application  

**H. Motion:** To approve the Fence and Wall Permit Application as presented.  

**Attachment:** Fence and Wall Permit Application  

**Discussion:**
# Fence and Wall Permit Application

(3) days required for approval upon receipt of complete application

<table>
<thead>
<tr>
<th>(for internal use only)</th>
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<tbody>
<tr>
<td>Date: _______________________________</td>
<td></td>
</tr>
<tr>
<td>Application #: _______________________________</td>
<td></td>
</tr>
</tbody>
</table>

**City of Nashua**
Division of Public Works
Engineering Department
9 Riverside Street • Nashua, NH 03062
Tel: (603) 589-3120 • Fax: (603) 589-3169
DPWpermits@nashuanh.gov

☐ **RESIDENTIAL** ☐ **COMMERCIAL**

<table>
<thead>
<tr>
<th>NAME OF APPLICANT:</th>
<th>COMPANY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS:</td>
<td>CITY:</td>
</tr>
<tr>
<td>STATE:</td>
<td>ZIP CODE:</td>
</tr>
<tr>
<td>PHONE NUMBER:</td>
<td>EMAIL:</td>
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</tbody>
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<table>
<thead>
<tr>
<th>WORK TO BE COMPLETED BY:</th>
<th>☐ OWNER</th>
<th>☐ CONTRACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPANY NAME:</td>
<td>CONTACT NAME:</td>
<td></td>
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<td>PHONE NUMBER:</td>
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<table>
<thead>
<tr>
<th>ADDRESS OF FENCE/WALL:</th>
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<tbody>
<tr>
<td>PROPOSED WORK:</td>
<td>☐ NEW FENCE</td>
</tr>
<tr>
<td>PROPOSED FENCE LOCATION:</td>
<td>☐ WITHIN 20 FEET OF ROAD EDGE</td>
</tr>
<tr>
<td>FENCE/WALL PROPERTIES:</td>
<td>MATERIAL: __________</td>
</tr>
<tr>
<td>START DATE:</td>
<td>END DATE:</td>
</tr>
</tbody>
</table>

| BRIEF DESCRIPTION OF WORK: | |

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
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<tr>
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IS THE PROPOSED FENCE HEIGHT OVER 6 FEET?

IS THE PROPOSED WALL HEIGHT OVER 4 FEET?

If the answer is yes to either of these questions, a fence and/or wall permit must be obtained from the Building Department. 603-589-3080.
A SKETCH OR PLAN MUST BE SUBMITTED WITH YOUR APPLICATION

The plan must include the following:
1. Fence/Wall height and dimensions in all locations
2. Labelled distances from edge of street to fence
3. All property lines
4. All streets (labelled) and sidewalks adjacent to property
5. Outline of all buildings and driveways on property
6. Easements

By signing this application, the applicant certifies that the information provided herein is accurate. The applicant further certifies that he/she is authorized to apply for the permit and that there are no covenants, conditions or restrictions that may limit or prohibit the proposed fence or wall. The applicant bears responsibility for identifying property lines. The applicant further certifies that the fence or wall will conform to the Standards of Nashua City Ordinances and the Division of Public Works Fence and Wall Permit Rules and Regulations. Non-compliance with these regulations may require the removal of the fence, wall, structure, etc.

Applicant’s Signature: _______________________________ Date: __________________________

DIVISION OF PUBLIC WORKS FENCE AND WALL PERMIT RULES AND REGULATIONS

1. All applicants must furnish evidence of general liability insurance in the amount of $1,000,000/$2,000,000 aggregate. The City of Nashua will be the certificate holder and named as additional insured.
2. The permit holder must have a valid DIG SAFE prior to excavation.
3. The Division of Public Works may include additional requirements or revoke this permit at any time.
4. Fences and walls are not allowed in the City Right of Way or City Easements.
5. Fences/walls may not create site distance issues.
Board of Public Works Meeting of February 28, 2019
Administration

Agenda

A. **Informational:** 2019 Spring Cleanup Schedule
B. **Directors Report**
City of Nashua, Public Works Division

To: Board of Public Works
From: Lisa Fauteux, Director Public Works
Re: 2019 Spring Cleanup Schedule

A. Informational: 2019 Spring Cleanup Schedule

Attachment: 2019 Spring Cleanup Press Release

Discussion:
PRESS RELEASE

2019 SPRING CLEANUP SCHEDULE

The Nashua Division of Public Works announces their guidelines for the annual spring cleanup. This year, special pickups for the cleanup will take place from April 8th through April 19th. Special pickups will be made by appointment only by calling the Street Department at 589-4750 from March 29th through April 11th. Please call no later than April 11th. Residents can put out one truckload of material at the curbside for removal.

**Acceptable items:**

- Brush: cut end toward the street (no larger than 4” diameter, no longer than 8’)
- Shrubs: must be cleaned of sand and soil
- Picnic tables: wood only
- Doors: glass must be secure and nails removed
- Wood posts: without concrete

**Unacceptable items:**

- Metal goods: call solid waste for pickup (589-3410)
- Household hazardous waste (watch for details on collection dates)

Residents with a 2019 landfill permit may also take spring cleanup items to the Four Hills Landfill at 840 West Hollis Street for no additional cost. Permits can be purchased at the landfill for $5. The landfill is open Monday through Friday from 8:00 a.m. to 4:00 p.m. and on Saturdays from 8:00 a.m. to 1:00 p.m. Please note that the scale closes at 3:45 p.m. on weekdays and 12:45 p.m. on Saturdays. For details on soft yard waste and oversized item pickups and details on Household Hazardous Waste visit [www.gonashua.com](http://www.gonashua.com).
Board of Public Works Meeting of February 28, 2019
Department Report

Engineering Department

- **2018 Sewer Rehabilitation – Kinsley St.** Work remains to be done by Newport Construction on Kinsley St between Walnut St and Elm St. Portions of this main will be replaced, along with catch basins and storm drain laterals. This work is expected to take place in late winter and the spring.

- **2018 Sewer Rehabilitation.** Sewer reconstruction on Chase St is ongoing and is expected to continue through February. The Harvard St work is waiting for Pennichuck to perform water line work and is expected to be done in 2019.

- **2019 Sewer Rehabilitation – Lining.** Hayner/Swanson, acting as our consultant, has prepared a contract which includes approximately 22,325 linear feet of cured-in-place pipe (CIPP) lining, associated sewer manhole rehabilitation, and new sewer manhole installation. Bids were received February 12, with the apparent low bidder being Kenyon Pipeline Services with a bid of $2,825,135. Scheduled for BPW approval in the February 28 session.

- **2019 Sewer Rehabilitation.** Hayner/Swanson has also prepared a contract which includes approximately 1,300 linear feet of sewer line replacement, 270 linear feet of drain lateral replacement, as well as the replacement of sewer service connections, sewer manholes and catch basins. Bids were received February 14 with the apparent low bidder being N. Granese & Sons with a bid of $1,001,888. Scheduled for BPW approval in the February 28 session.

- **18 King Street Sewer Service Issue.** The Engineering Department has finalized their review of the video and maintenance invoices received from the nephew of the homeowner concerning repeated root issues in the sewer service connection. The City has agreed to replace the sewer pipe in the right-of-way once the fee is paid and a permit issued, with the stipulation that the property owner must first replace the section that is located on their private property. This will ensure that no openings are left in any stretch of the sewer pipe for roots to enter again.

- **MS4 Stormwater Permit.** A meeting was held with the combined Nashua and Manchester Stormwater Coalitions to discuss contents of the first annual report due under this permit cycle. The City is required to have an Illicit Discharge Detection and Elimination manual and a Stormwater Management Plan prepared by July 1.

- **Monica Drive Drainage Improvement.** A section of street is currently being affected by icing during winter season due to high groundwater and the high groundwater and the discharge of private sump pumps into the street and private development in recent years that has interrupted the natural flow of surface and ground water. The Engineering Department is currently developing plans to install new underdrain pipe along the street, the new drain pipe will be connected to an existing drainage system located approximately 400 ft away. Also, the affected section of pavement will have to be replaced due to deterioration.

- **Wastewater Connection Fees.** The Engineering Department continues moving forward on developing suggestions to change existing fees to new proposed sewer and drain fees. Our final goal is to simplify fees and the process. A workshop is being scheduled for more information on the topic.
• **Federal Aid Paving Project.** In the fall 2018, milling and binder paving of Somerset Parkway and Amherst Street was completed. In Spring/Summer 2019, Newport plans on raising/adjusting structures and putting the top course on Amherst Street and Somerset Parkway. In addition, Newport will start paving operations on Broad Street and Kinsley Street. Engineering is currently scheduling a meeting with Newport Construction to discuss the paving schedule.

• **2018 Paving Program.** Engineering is meeting with Newport to discuss the paving schedule for carry-over streets that could not be paved in 2018 due to unforeseen weather conditions, utility conflicts and new site development conflicts. A change order will be needed to complete this work. Staff continues to oversee punch list items and address phone calls/emails from residences and businesses.

• **2019 Paving Program (Arterial/Major Roads).** Bids were received on February 12, 2019 with the lowest bidder being Brox Industries at $6,853,472.96. The City has requested Liberty Utilities and Pennichuck to expedite capital projects so that the streets can be paved in a timely manner.

• **2019 Paving Program (Local/Residential Roads).** Bids were received to pave approximately 11 miles of local roads on February 13, 2019 with the lowest bidder being Sunshine Paving at $4,350,642.35.

• **2019 Asphalt Testing.** The 2019 Paving Program involves asphalt testing to ensure compliance with contract specifications for compaction, liquid asphalt content, pavement thickness, and aggregate gradation. This testing is also necessary so that the testing of the hot mix can be done at the plant in accordance with NHDOT sampling and testing specifications. The bids were advertised in January 2019 and are due on February 20, 2019.

• **2019 Castings (Paving Program).** The 2019 Paving includes the work of replacing all broken and obsolete manhole (sewer and drain) and catch basin castings. The quantities are being estimated for this quote.

• **2019 Preservation Program.** The 2019 Preservation Program is expected to crack seal the streets that need preservation. It helps prevent water penetration which can accelerate the deterioration of the pavement and result in potholes, subsurface and base failures. Final preservation/crack sealing list is being finalized by DPW. In addition, an estimate of quantities is being generated to put the contract out to bid in February 2019.

• **Pavement Degradation Fees.** A weighted road construction cost is being evaluated and reviewed for the base of the degradation fee. Additional information is needed to verify the finding in the initial degradation report prepared by Stantec. A coring plan is being proposed to select test locations to verify the in-place materials of existing patches.

• **2019 Sidewalk Build/Repair Program.** Engineering is reviewing cost estimates for various sidewalk repairs throughout the City. Cost estimates are being prepared for sidewalk sections that have been chosen. It is also being determined if the work will be done in-house or by a contractor. There are two sidewalks that are planned to be built on Broad Street and East Dunstable Road.

• **FHWA – Every Day Counts.** Engineering is working with NHDOT to apply for a Federal Highway grant to implement safer pedestrian travel counter measures. The project will focus on safety and connectivity in the greater downtown area. A cost estimate and concepts are being developed.
• **Charlotte Ave Elementary School SRTS.** Preliminary engineering plans have been submitted to NHDOT. NHDOT has requested additional documents such as Traffic Control, Utility and Railroad Certificate, and supplemental documents for PS&E Study.

• **Greeley Park Boat Ramp.** Engineering is part of the project team being led by Community Development with Stantec performing the design of the boat ramp and parking area. Engineering is designing the access road to the boat ramp. The consultant is proceeding with obtaining approvals.

• **Mine Falls DES Wetland Permit.** Engineering is working with the Parks Department to obtain a DES Wetland Permit for the installation of a seasonal dock in Mine Falls Adjacent to the existing boat ramp. The dock is planned to be installed in April/May.

• **Private Development Projects.** Engineering has reviewed the following Site Development and Subdivision plans: 90 Northwest Blvd, L Chautauqua Ave, 38 Prescott St, 49 Harbor Ave, 75 Hills Ferry Rd, 58 Linton St, 200 Innovative Way, and 476 Amherst St.

• **Construction Inspection.** Co-ordinate construction issues at Riverfront Landing and Rivier University. Multiple smaller projects are in construction and being inspected.

• **Survey Work.** Survey of Franklin Street for sewer as built information, Ferryalls Street for sewer replacement project, West Glenwood for replacement of trench drain at South Main Street, Salvail Court for right of way for paving project, Hobbs Ave. for parking in the right of way, Levee survey for update to the Army Corps of Engineers and Temple Street for as built information.

• **Permit Software.** Meetings are being held with the IT department, software developer, Engineering, and DPW Director to go over proposed permit form, application, routing and training. Administration is taking the lead revising the permit forms that will match the format of the software and create routing groups for internal and external permits.

• **Street Opening Permits.** Engineering issued 14 Street Opening Permits and 13 Permits to Encumber in the month of January 2019.

• **Sewer Permits.** Four sewer permits were issued and $2,065 was collected from January 1 through January 31, 2019.

### Parks & Recreation Department

• **Holman Stadium.** We are currently working on the interior maintenance list for winter. The Silver Knights scheduled has been released for the 2019 season.

• **Stellos Stadium.** We have been working on interior maintenance, in addition, we have removed snow off the field once so far this season. Protective netting has been ordered for the scoreboards. Spring sports are scheduled to begin on March 18th.

• **Summerfun.** The 2019 fundraising campaign has started. We have currently secured $12,500 in commitments. We have a goal of raising $20,000. Opening Day / Public Works Day is scheduled for June 3rd.

• **Winter League Meetings.** Meetings have occurred with youth baseball, softball, soccer and lacrosse as well as adult softball and cricket. Field allocations were given out and a list of spring field work was developed.

• **Downtown.** The crews have been cleaning the beds and the Rail Trail as the weather permits.

• **Biddy Basketball.** The 2018 / 2019 season has reached the playoffs. The season should be wrapped up the week of 2/18 with the All Star Games being held the week of March 4th.
• **Spring Projects.** We are looking to start work in the spring at the following locations:
  - Thornton Road playground
  - Replacing the planters on Factory and Pearl Streets
  - Jewel Lane field development
  - The Mine Falls Park boat dock
  - Crown Hill Pool resurfacing

• **Trips.** The Bruins and Celtics trips are scheduled for February 26th and 27th. There are still a few Bruins tickets left. The Celtic trip is sold out. Details will follow at the March BPW.

• **Winter Storms.** The crews have continued to work the storms throughout this winter. We are hoping for an early spring.

• **Winter Activities.** The very cold temperatures have made for ideal ice making conditions. The rinks at The Jeff Morin Fields at Roby Park, and North Common are in very good condition. The sledding hill at Roby Park is also in very good shape after the snow storm. Our snow shoe walking program is off and running.

• **Spring Planning.** We are beginning the planning of our summer camp programs, aquatics program and Summerfun program for 2019.

• **Summer Help.** The ads are posted for Summer Laborers and Pool Positions.

**Wastewater Department**

• **Operations:** The Operations department continues daily operations of the facility as well as monthly inspections and checks maintaining proper operation of the facility. The operators opened up the hydo-cyclones in the wet weather facility to inspect. They successfully ran a large rain event early in the month. Operators also worked with the mechanics trouble shooting one of our press polymer pumps.

• **Maintenance:** Maintenance has continued preventative maintenance at the Treatment plant and the 13 outlying Pump stations. The mechanics replaced a submersible pump at our Watson street pump station. We started replacing the overhead primary sludge valves in the thickening room. The mechanics trouble shot and repaired one of our screw press polymer pumps. They are rebuilding our 3 thickened primary piston pumps. The electricians are still working closely with the SCADA contractor to smoothly integrate the new SCADA system. Electricians also did work on the control boxes at our Newton drive and Fulton street pump stations

• **Collections:** The collection crews have completed all monthly checks of our CSO’s and siphon stations, as well as assisting Maintenance in pump station inspections. An extensive CCTV inspection is being done on Taylor Street by the Collection System Technician. CCTV work was also performed on Elm, Garden, Church and Main street. The Collection System Operators were busy dealing with street flooding issues due to rain and snow melt. They have also responded to back-ups and other sewer related issues this month.

• **Laboratory:** The Laboratory continues daily analyses for permit compliance and process control. The monthly QC conducted in January is acceptable and results are on file. The Annual 503 Biosolids Report was submitted to EPA on February 4, 2019. The Annual 807 SQC Report was submitted to DES by Casella Organics. The Annual CSO Report was
submitted to EPA on January 11, 2019. A SQC sample was collected on January 2, 2019 and sent out to Eastern Analytical for testing, results are acceptable and on file.

- **Energy Recovery Generator Upgrades**: Awaiting final signed copy of the contract. The construction start and preconstruction meeting is expected to occur in late in February.

- **SCADA Contractor EII** has completed most of the wiring and control upgrades at all locations except for the pump and dechlorination buildings. They are confirming proper SCADA operation and testing/validating the software at other locations. Substantial completion is scheduled for the end of February.

- **HVAC Upgrades**: The City is still waiting for contractor to perform an air flow balance, provide the O&M manuals, training, and record drawings.

- **Water Booster Station Upgrades**: A preconstruction meeting was held on January 24th. The contractor, TBuck, is preparing shop drawings for review by consultant Woodard and Curran.

- **Primary Tank Upgrades**: We are awaiting final approval from NHDES to award construction. Methuen Construction is the low bid contractor and a preconstruction meeting will be scheduled upon receiving the final approval.

- **Pump Station Upgrades**: Only two bids were received with DeFelice Construction the low bid contractor. Costs were significantly higher than were expected and exceeds funding available in the SRF loan. The project will be divided into 2 smaller projects and rebid. The first project is for 6 of the most critical pump stations. The project is scheduled to go to bid on February 21st, pending approval from the NHDES. A second project for the remaining 7 pumps stations will go out to bid upon determination of the remaining SRF funding left upon receiving bids from the first project.

- **Wet Weather Gate repairs**: NH Hydraulics is in ordering a cylinder for the main gate to the main gate to the Wet Weather Facility. The cylinder is scheduled to arrive on March 6th. They will be upgrading the hydraulic power units for the main gate and rakes for the screens in the coming weeks.

- **Gas Tank Evaluation**: Proposals were requested from contractors that could either evaluate the gas tank diaphragm and/or purge the inside of the tank of any remaining digester gas. It was difficult to find contractors qualified for either of these tasks since not many contractors service digester gas tanks. ACVEnviro will do the cleaning and gas purging of the tank. They also are doing other jobs at the plant such as disposing waste oil barrels and other waste chemicals. NEESCO will evaluate the inside of the gas tank once it is made safe to enter by ACVEnviro. NEESCO has assisted with other areas of the digester gas system such as testing the gas vents and replacing flame arrestors.
Street Department

- **Completed tasks.**
  - 1 catch basins was repaired
  - 1 manhole was repaired.
  - 1 sinkhole had a temporary repair to be fixed in the spring
  - We had two plowable storms Jayden on 1/29/19 and Maya 2/12/19.
  - We conducted pretreating operations 2/06/19, 2/18/19.

- **Asphalt Repairs**
  - Street department crews continue to fill pot holes city wide as the weather permits.

- **Brine Making**
  - The brine shed, tank farm and truck fill stations are now operational and both pre wet salt and liquid have been applied with positive results.
  - The brine making units factory warranty went into effect 2/08/19 when the unit became operational.

- **Traffic**
  - 7 traffic signal problems were responded to and fixed.
  - Numerous electrical issues involving street lights have been addressed.
  - 8 street signs were replaced or repaired.
  - Crews are working to make temporary repairs to mailboxes damaged during snow operations.

- **Fleet**
  - Preventative maintenance and repair of the fleet is ongoing daily.
  - Solid Waste equipment and vehicles are repaired daily.
  - Pre-wet brine system installations on trucks has been completed.
  - The 4 anti-ice systems are in the installation process.
  - Spreaders are having repairs made after the first couple of snow events found the weaknesses.
  - Street Dept. has taken delivery of both of the new six wheeler plow trucks and are expecting the ten wheeler by the end of month.
  - Street Dept. has taken delivery of 1 of the new six wheeler plow trucks and are expecting another by the end of month.

- **Weld shop**
  - Plows and plow frames are being repaired as needed.
Solid Waste Department

- **Solid Waste Department:**
  - Repairs to the recycling area fences were completed.
  - 53 vehicles were towed to the landfill during 2 snow emergencies.

- **Recyclables Shipped in January 2018:**
  - 502 tons of single stream recycled materials.
  - 18 tons of electronic waste.
  - 369 tons of scrap metal sold.
  - 27.2 tons textiles, tires and books.
  - 768 fluorescent bulbs and ballasts.
  - 850 gallons of waste oil.
  - 226 appliances evacuated of CFC's.
  - 3 boxes rechargeable batteries.
  - The charge for single stream recycling for December is $73.27 / ton, which cost ~ $46,519.38 including the shipping cost for 35 loads of recyclables in the month.

- **Recycling/Trash Bins & Carts:**
  - 68 recycling carts were sold in January.
  - 18 recycling bins were given to 5 existing residents.
  - 20 Trash carts distributed.
  - 30 Trash carts repaired.

- **Permits Sold for 2019:**
  - 6571 Residential Permits.
  - 331 Commercial Permits.

- **Curbside Collection:**
  - 1757 tons MSW.
  - 345 tons Recycling
Board of Public Works Meeting of February 28, 2019
Personnel

Agenda

A. **Motion**: To unseal the nonpublic minutes for Personnel from the Board of Public Works Meeting of January 31, 2019.

B. **Non-Public Session**