



Public Facilities Committee Report

City of Newton **In City Council**

Wednesday, May 27, 2020

Present: Councilors Leary (Chair), Kelley, Crossley, Norton, Laredo, Danberg, Kalis and Gentile

Also Present: Councilor Downs, Albright, Krintzman, Humphrey and Bowman

City Staff Present: Commissioner of Public Works Jim Mcgonagle, Chief of Staff for the Department of Public Works Shawna Sullivan, City Engineer Lou Taverna, Financial Director for the Department of Public Works Jack Cowell, Chief Financial Officer Maureen Lemieux, Director of Environmental Affairs for the Department of Public Works Waneta Trabert, Director of Utilities Ted Jerdee, Deputy Director of Utilities Douglas Valovcin, Customer Service Manager Garret Ross, Commissioner of Public Buildings Josh Morse, Deputy Director of Public Buildings Alex Valcarce, Chief Operating Officer Jonathan Yeo, Deputy Director of Public Buildings Alex Valcarce, Superintendent of Newton Public Schools David Fleishman, Assistant Superintendent Liam Hurley and Principal of Oak Hill Middle School John Harutunuan

Referred to Public Facilities and Finance Committees

#255-20

Transfer \$400,000 to the DPW Roads Program

HER HONOR THE MAYOR requesting authorization to repurpose and transfer the sum of four hundred thousand dollars (\$400,000) from Acct #01C10402-579500 originally set aside for DPW 25% Design of Washington Street to the DPW Roads Program to repair the roadway section of Washington Street between Chestnut Street and Walnut Street.

Action: **Public Facilities Approved 8-0**

Note: Commissioner of Public Works, Jim Mcgonagle presented the request to transfer \$400,000 to the DPW Roads Program that was originally set aside for the 25% design of Washington Street. Commissioner Mcgonagle explained that the department had to make this change due to the COVID-19 pandemic. The portion of Washington Street between Chestnut Street and Walnut Street has been deteriorating after this past winter and needs to be repaired. If the City waits too long to make these repairs then the City will have to perform a full depth reclamation which can be time consuming, expensive, and a destructive process. Additionally, Commissioner Mcgonagle explained that even if the City were to do the pilot program this section of street would still need to be repaired. The City is in the process of coordinating the repairs with National Grid and their gas leak repair schedule. Currently, National Grid is investigating to see what repairs or replacements they need to make at this section of Washington Street.

Commissioner McGonagle explained that the department will return to the pilot program on Washington Street once the City returns to a more normal financial and traffic flow situation.

The Committee asked the following questions:

Q: Is this an opportunity for the City to make inexpensive redesign changes to that area using pavement markings for the safety of all users?

A: Commissioner McGonagle explained that they do plan on bringing this project to the Complete Streets Working Group to see if anything can be done with pavement markings to make this roadway safer.

Q: What approach will the department take to repair the roadway?

A: Commissioner McGonagle explained that the department was looking to perform a hot-in place procedure. This will rejuvenate the material that is already there and place it back down. There will also be an inch and a half of overlay on top of that. Additionally, Commissioner McGonagle explained that this should give the roadway another 10-12 years of useful life.

Q: What parts of the gas main have been replaced in this section of the roadway?

A: Commissioner McGonagle explained that there is new gas main within the limits of the West Newton Project. Additionally, Commissioner McGonagle noted that he will find out if Washington Place was a replacement or if the gas main was relined.

Q: How much existing cast-iron gas main is left between Washington Place and West Newton?

A: Commissioner McGonagle explained that they are waiting to hear back from National Grid on this.

Q: Are there any water or sewer lines in the roadway that need to be repaired?

A: Commissioner McGonagle explained that the department will conduct a utilities investigation.

Q: Where is the City in the timeline for the major roadway changes?

A: Commissioner McGonagle explained that the \$400,000 was initially to construct a pilot either late summer or early fall but that is no longer happening. The department still needs to finish that evaluation and conduct public meetings. Additionally, Commissioner McGonagle explained that to construct the project the department is looking out over five years.

Q: What happens if National Grid does not fix the gas leaks? Does the City have any recourse if National Grid does not?

A: Commissioner McGonagle explained that the City does not but the City does have a good relationship with National Grid. It is in best interest of National Grid to preform the necessary repairs.

Q: How long is the stretch of roadway on Washington Street between Chestnut Street and Walnut Street?

A: City Engineer, Lou Taverna explained that it is 4, 800 ft of roadway and the street is 60 ft wide.

Q: If the City were to preform a full reclamation what would that cost?

A: Commissioner McGonagle explained that this could be up to three times the cost of what the project is costing now.

Q: What kind of work will National Grid be doing on this section of roadway and will they be back there after the City repairs the roadway?

A: Commissioner McGonagle explained that National Grid will be bringing this information back to the department at their next meeting. National Grid does provide a 5-year Capital Plan to the City, but this does change.

Q: Is there any possibility that the Washington Street project could be eligible for Transportation Improvement Program (TIP) funding?

A: Commissioner McGonagle explained he is unsure at this time. Currently, there is uncertainty on where State Aid will be when the department is ready to begin this project.

The Committee made the following comments:

The gas leaks in that area need to be addressed before the City repairs the street.

The disappointment of not moving forward with the 25% design of Washington Street is understood but the Commissioner has done a good job at trying to do more preventative work. The repairs need to be addressed now because the City could be spending a lot more money later if not addressed.

With traffic the way it is now, the City will not get the results they need to get for the 25% design of Washington Street. This preventative work needs to be done now.

The Committee should have been alerted to this ahead of time.

Once the repairs have been made, there is a concern that cars will be traveling at a faster speed. There are students that ride their bikes to school, and this could be a safety concern for them.

The Committee would like to see the recommendations of the Complete Street Working Group for making this roadway safer for all users.

Regarding the previous comments, Commissioner McGonagle explained that he can provide an update on the recommendations of the Complete Street Working Group. Additionally, Commissioner McGonagle explained he can come back to the Council with the information that will be provided by National Grid.

There is a concern that National Grid will have to make repairs a short time after the City repaves the road.

In the future, there should be a discussion on how National Grid makes their decision on when to repair or replace a gas main.

Attached to this report is a memo from the Department of Public Works regarding the outstanding questions.

Councilor Norton motioned to approve which passed unanimously.

#234-20 5-58 for the Oak Hill Middle School at 130 Wheeler Road

DESIGN REVIEW COMMITTEE petition, pursuant to 5-58, for schematic design and site plan approval at 130 Wheeler Road for the construction of three-classroom additions to accommodate a significant and sustained increase in enrollment.

Public Facilities Approved 4-0-4 (Councilors Laredo, Kelley, Crossley and Kalis abstaining) on 05/14/20 and was referred back to the Public Facilities Committee on 05/18/20

Action: Public Facilities Approved 4-0-3 (Councilors Laredo, Kelley and Crossley abstaining and Councilor Norton not voting)

Note: Commissioner of Public Buildings, Josh Morse explained that he appreciates the comments and feedback the City Council has given. It was clear that there was more information that needed to be provided to make a decision. John Harutunuan, Principal of Oak Hill Middle School expressed the importance of this project to the Oak Hill community. Due to the increase enrollment, the three classroom addition will be helpful for Oak Hill. Principal Harutunuan explained that this project has been worked on by a variety of people, including school staff, city staff and the Oak Hill community. This project will also provide two expanded learning spaces, two small office spaces and two gender-neutral bathrooms. If the budget allows, there will also be a multi-purpose space that could be used for kids to have lunch in with the cafeteria being smaller. Principal Harutunuan explained that this design is what the school needs for the increased enrollment that will hit the school in the fall of 2021.

Commissioner Morse explained that they have analyzed three options for adding additional classrooms in the future. Additionally, Commissioner Morse explained that the cheapest option is not going to be to build classrooms above the proposed addition. The School Department is also estimating that enrollment will decrease before the existing modulars reach the end of their useful life. The intention then would be to take those modulars offline.

Dan Bradford, the City's architect from RDA, presented the attached presentation on the 3 options for adding additional classrooms to Oak Hill in the future. This presentation is to analyze and compare the options.

Option 1 is to make the proposed addition ready for the construction of a second floor, if needed, to replace the modulars in the future. Option 2 is to have the addition of 4 classrooms at the rear of the gymnasium. Option 3 is to replace the modulars with a permanent addition in that location. Mr. Bradford further explained the options in the attached presentation. Additionally, a cost comparison of each option is attached to the report. Mr. Bradford explained that they chose the year 2030 for when the additions would be added which means that the cost are an estimate based on that year. This comparison also includes additional costs that need to be considered. Mr. Bradford noted that if option 1 is chosen there is a chance that this addition will not be ready by September 2021 which means there would be a need for temporary swing space for the increased enrollment. Commissioner Morse added that the swing space cost of \$225,000 is based on the actual cost of the modulars that were just installed at Horace Mann.

The Committee asked the following questions:

Q: How is the base construction cost approximately the same for option 1 and 2?

A: Mr. Bradford explained that they perform a selective demolition, which would take away a lot of the site prep that is going into option 2 and 3 away. Additionally, Mr. Bradford explained that the demolition for option 1 would include the roof. Also, around the perimeter there would be a need to catch the existing exterior to extend the walls up and extend up all the surfaces of the existing structure.

Q: Regarding option 1, is the additional \$162,000 for fill because of the amount that will needed to be added if there will be a second story in the future?

A: Mr. Bradford explained that currently there is unsuitable fill in the proposed area and for the one-story addition they were contemplating a partial removal. If there is a two-story addition then they would either need to remove and replace or treat the existing soil.

Q: Why is the removal of unsuitable fill higher for options 2 and 3?

A: Mr. Bradford explained that those estimates have been escalated to what it will cost in 2030. This will also be a full removal instead of a partial removal. They have done test fits as part of the

proposed project for option 2 and 3 and those areas seem to be worse. Commissioner Morse explained that options 2 and 3 could be less expensive but it is better to be conservative in an area that is known to have a lot of unsuitables. There is limited data available for options 2 and 3.

Q: What is the total design fee for the proposed project?

A: Mr. Bradford explained that the existing design cost is \$285,000.

Q: Why will it cost another \$200,000 in design costs to have the option of a second story?

A: Mr. Bradford explained that this is for the complete redesign of the project. They will need to go back to the Design Review Team (DRT), the Design Review Committee (DRC) and the City Council to get this approved as a new design. The addition of second floor would not just deal with the footings and the foundation but also the entire layout. Commissioner Morse explained that the overall footprint would need to increase a significant amount. Also, this would have an impact on stormwater, steel, energy performance and exposures. Commissioner Morse explained that they are also looking at the costs from a bidding stand point. Option 2 and 3 would be easier from a bid prospective because they are less complicated projects.

Q: Is it accurate that option 2 has circulation issues?

A: Commissioner Morse explained that there would be an opportunity to move specials into that space and move the standard classrooms back into the core of the building. Additionally, Commissioner Morse noted that this is an opportunity to create a better physical connection through the corridor and the core hallway. Principal Harutunuan explained that this is something the school would need to investigate.

Q: The original cost given to the Committee for making the addition two-story ready was \$250,000. Why has this number increased significantly?

A: Commissioner Morse explained that the \$250,000 accounts for the addition of three classrooms not four. If there will be four classrooms on the second floor, to replace the modulares, then more work will have to be done to prepare the first floor. This includes the steel and foundation cost.

Q: Has Brown Middle School been looked at for an option to expanding past the proposed addition?

A: Commissioner Morse explained that this will be something that will need to be investigated. Currently, this has not been fully looked at as an option.

Q: Was there a discussion on what will be done with the modulares in the future?

A: Commissioner Morse explained that the long-term projections for Oak Hill showed that the modulars would no longer be needed by the time they reach the end of their useful life.

Q: Of the three options that were presented, is there any programmatic difference?

A: Principal Harutunuan explained that the most important part is that there is enough space to maintain class sizes while being able to accommodate the students in the core areas of the school. With the proposed addition, Oak Hill will be able to accommodate the increased enrollment. Additionally, Principal Harutunuan explained that all the options have positives and the school can make each option work.

The Committee made the following comments:

There is no question that this addition needs to be done. The question is whether or not the City does the addition to prepare for a future expansion. It is important to plan for an expansion regardless of which option the City chooses. The modulars can't stay there forever and they seem to already be worn on the exterior.

It does not make sense that it will cost virtually the same to build on top of an existing structure as it does to build a new addition.

Even if the Council voted to approve the proposed plan, it still seems that it would be difficult to finish this project by September 2021.

The process did not start early enough to allow for a thoughtful deliberation.

The numbers that were provided should be scrutinized to make sure this is the right comparison.

With projects like these, the City needs to be planning for the future. Even though there is a concern for the budget, if needed the City should be spending more money now to prepare for the future. Options 2 and 3 are not good options because from an energy point of view it makes more sense to have one two-story addition instead of having two one-story additions.

This comparison is helpful during this discussion. The Committee should trust the numbers that have been provided by the architects and Commissioner Morse.

Commissioner Morse explained that the building code can change within the next ten years, which could cause an addition in 2030 to be more expensive. Mr. Bradford explained that their expert who helped in estimating these numbers has been working in this field for 35 years and has been extremely helpful in projects like Oak Hill in the past.

Since enrollment has been projected to decrease and with the time that there is to complete the project the one-story addition is the best plan. There will be time before this is discussed by the City Council for questions and concerns to be addressed.

The modulars will need to be replaced in the future; this needs to be considered while planning the addition.

Regarding the added cost to making the addition two story ready, Commissioner Morse explained that the total cost would be \$663,840 plus the cost of a swing space if needed.

If enrollment does decrease than all 4 modulars may not have to be replaced which would decrease the amount that would need to be spent now on preparing the first floor to be second floor ready.

Commissioner Morse noted that that this would also decrease options 2 and 3. Option 2 would still be the cheaper option. Mr. Bradford explained it is difficult to make the decision right now to say the fourth classroom would not be needed. Commissioner Morse noted that option 1 is more expensive than previously thought.

If Brown Middle School is used, this could be complicated with splitting up the elementary schools.

The City's short-term solutions should fit into the City's long-term goals. Building a second-story now would be the best option but with the timing and funding issues option 1 aligns best with the long-term goals of the City.

The study that was shown tonight holds many assumptions that were not explained completely. If the City does not build a second-story than this is not planning for the future.

The School Department should have a better idea of where enrollment will be in 10 years. If the Council had more time to deliberate than there could have been time to discuss adding the second floor now.

The City should be able to plan out a school project for more than 10 years in the future. Since the enrollment numbers are unknown the City should plan ahead now for the changes that may happen.

Regarding the previous comment, Superintendent of Newton Public Schools David Fleishman explained that they do expect enrollment to drop 10 years from now.

Ruth Goldman, Chair of the School Committee explained that they investigated a number of different options for this project and time is of the essence. Additionally, Ms. Goldman explained planning for the future is important but they also need to be prepared for September 2021.

Assistant Superintendent for Newton Public Schools, Liam Hurley explained that they have worked on this and tried to have a project that met the needs of students and was cost effective. The Principal of Oak Hill Middle School and the School Department are in favor of the proposed plan. Mr. Hurley explained that with the projected declining enrollment the modulars may not be needed in the future and there are other options then building a second floor on the proposed addition.

Chief Financial Officer, Maureen Lemieux explained that the best project for the school system has been presented due to the unknown unenrollment in the future. This project needs to be moved forward to ensure classroom space for the students coming in September 2020. Additionally, Ms. Lemieux explained that the design of this project was not affected by Covid-19. The proposed project will meet the needs of current and future students.

The Design Review Committee asked the following question:

Q: What is the capacity of the core spaces and what changes would need to be made?

A: Principal Harutunuan explained that part of the project is to address the other needs for students. This can include more space for the cafeteria. The plan is to also have a fitness center that will help with the space in the gym. The corridor space is challenging but the school should be able to find a solution.

The Design Review Committee made the following comments:

There are many moving parts to this project. There is a strict timeline for this addition to be built and to go in a different direction could be difficult. The discussion is around a possible increased enrollment in 2030 and there are other options if this were to happen. Option 2 might be a challenging because of the circulation and there might not be enough room for four classrooms.

The corridor seems to be the biggest problem with adding classrooms to the school. The DRC was persuaded by the need that the proposed addition has to be ready by September 2021 due to increased enrollment. This solution does solve many problems with the existing structure. When looking at the floor plan now, the cafeteria or the auditorium could be expanded into an existing classroom. But then there would be a need for more classroom space. The best plan would be to build a two-story addition right now if the City had the time or resources to do so. When the modulars need to be replaced they could be replaced with a two story addition. But for now, the one-story addition is sufficient for the current needs of the school. If there is a need for more classrooms in the future then a lot more will need to be done to the existing structure, then just another addition.

The enrollment may not increase in the next ten years to warrant the need for another addition to Oak Hill. The Brown School, which is across the street, may be a better place for students to move

to if enrollment increases. Oak Hill was built as an elementary school; which does cause an issue with expanding. The proposed addition fits the current needs of Oak Hill.

An option for a second floor to the addition may be the best option for future needs. This will help with the programing for the school and will still be aesthetically pleasing for the surrounding community. Option 2 could be an issue due to the unknowns of the soil and the location.

The flexibility that Option 1 provides makes it a good investment.

Councilor Kalis motioned to approve which passed 4-0-3 with Councilors Crossley, Laredo and Kelley abstaining and Councilor Norton not voting.

Respectfully Submitted,

Alison M. Leary, Chair

City of Newton



DEPARTMENT OF PUBLIC WORKS

OFFICE OF THE COMMISSIONER

1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Ruthanne Fuller

Mayor

To: Newton City Council

From: James McGonagle – Commissioner DPW

Subject: Responses to Budget Questions

Date: May 29, 2020

Please see the below answers and attached information in response to questions raised during the discussions on the request for funding to pave a section of Washington Street and the Public Works Department's budget on Wednesday, May 27, 2020.

Responses to Questions Raised on the Washington Street Paving Request

- 1) Is National Grid going to address the gas leaks in this section of Washington Street before the City paves it?

National Grid has decided to replace the gas main in Washington Street from Chestnut St to Walnut Street prior to the City paving it. They have identified 9 leaks in their 12" diameter gas main. National Grid is currently evaluating whether it is necessary to increase the size of the gas main.

- 2) How does National Grid determine whether to repair or replace a gas main?

National Grid make the decision on whether to repair vs replace based on the pipe material, age, condition, and number of leaks. They also make their decision based on Newton's road paving program. The City and National Grid meet on a monthly basis on paving projects to coordinate paving projects with repair or replacement of gas infrastructure.

- 3) Did National Grid reline or replace the gas line at Washington Place?

National Grid installed 2 new gas services to the buildings now under construction at Washington Place. They did not repair or replace the existing gas mains in Washington St or Walnut St at this location.

- 4) How is National Grid addressing the ongoing gas leaks at the corner of Lowell Avenue and Commonwealth Avenue?

James McGonagle
Commissioner

Telephone: (617) 796-1009 • Fax: (617) 796-1050 • jmcgonagle@newtonma.gov

National Grid is aware of the ongoing leak at Lowell Avenue at Commonwealth Avenue. Their engineer is evaluating whether to replace this section of gas main and once a decision is made National Grid will let the City know.

Responses to Budget Questions

- 1) How many ADA ramps has the city replaced and/or installed?

Number of ramps installed for the past five years:

FY 20 = 270

FY 17 = 270

FY 19 = 201

FY 16 = 176

FY 18 = 256

FY 15 = 308

- 2) Could you provide the status of the streetlight repair back log?

Please see attached memo regarding the streetlight repair back log.

- 3) Has there been a decision on whether to continue to install kiosks in municipal parking lots?

A request for a discussion on kiosks is being docketed.

- 4) Could you provide an explanation on the increases to the Engineering Division's budget and decreases in the Street Division's budget?

This year funding towards our Transportation Network Improvement Program (formally known as Accelerated Roads) was reduced as a direct result of the financial impacts of the COVID-19 crisis. In order to adequately address the needs of city streets and sidewalks within our reduced budget parameters, we shifted \$200,000 from our Streets Operating Budget to our Engineering Operating Budget. The reallocation was necessary in order to fund our engineering service contracts for the Transportation Network Improvement Program, which are managed by the Engineering Division.

Transportation Network Improvement Program Funding		
	FY2020	FY2021
Engineering Operating Budget	\$ 510,000.00	\$ 710,000.00
Streets Operating Budget	\$ 750,000.00	\$ 550,000.00
	\$ 1,260,000.00	\$ 1,260,000.00

How can the City improve street sweeping notification in dense areas of the City?

Public Works is looking at different solutions and will come back to the Public Facilities Committee with a plan.

James McGonagle
Commissioner

Telephone: (617) 796-1009 • Fax: (617) 796-1050 • jmcgonagle@newtonma.gov

City of Newton



DEPARTMENT OF PUBLIC WORKS

Transportation Division

110 Crafts Street
Newton, MA 02460

Ruthanne Fuller

Mayor

To: Public Facilities Committee

From: Jason S. Sobel, P.E., PTOE, Director of Transportation Operations

Subject: Street light repair backlog – status update

Date: May 28, 2020

At the May 27, 2020 Public Facilities meeting, during the DPW operating budget discussion, a City Councilor asked for a status update regarding the street light repair backlog (both street light knockdowns and underground electrical issues) with funds that City Council had previously approved.

The initial focus of addressing the backlog has been replacing street light knockdown locations. In the past 18 months, the following is a list of street light knockdowns that have been replaced:

1. BEAC/839 – 845 Beacon Street
2. LANG/35 – 34 Langley Road
3. COMM/537 – 537 Commonwealth Avenue
4. COMM/1743 – 1750 Commonwealth Avenue
5. WASH/1496 – 1496 Washington Street
6. WASH/1180 – 1180 Washington Street
7. CENT/419 – Washington Street / Center Street (Newton Corner, south of hotel)
8. CENT/425 – Washington Street / Center Street (Newton Corner, south of hotel)
9. COMM/1200 – 1193 Commonwealth Avenue
10. COMM/140 – 140 Commonwealth Avenue
11. WALN/15 – Walnut Street at Crafts Street
12. WASH/1410 – Washington Street, just west of Putnam Street
13. COMM/1223 – Commonwealth Avenue at Wauwinet Road
14. COMM/193 – 194 Commonwealth Avenue
15. PUTN/39 – 39 Putnam Street
16. COMM/1063 – 1063 Commonwealth Avenue
17. HMR/371 – 1000 Commonwealth Avenue
18. Pole #7/12 – 101 ALBAN ROAD
19. WALN/472 – 472 Walnut Street
20. COMM/1700 – 1684 Commonwealth Avenue
21. COMM/1418 – 1418 Commonwealth Avenue
22. WASH/270 – 320 Washington Street
23. WASH/304 – 300 Washington Street
24. WASH/xxx – 337 Washington Street
25. WASH/xxx – 317 Washington Street
26. CENT/1230 – 1221 Centre Street
27. CENT/533 – 543 Centre Street
28. WALN/1138 – Walnut Street at Lake Street

29. WASH/550 – 550 Washington Street
30. CENT/xxx – 288 Centre Street
31. LEWI/10 – 20 Lewis Terrace
32. WASH/1236 – 1236 Washington Street
33. WASH/610 – 612 Washington Street
34. CENT/1200 – 1201-1217 Centre Street
35. LOWELL/367 – 367 Lowell Street

The backlog of street light knockdowns has been completed, and the only remaining street light knockdowns are recent and are currently in the process of being replaced. These current knockdowns include the following locations:

1. GAS/31 – 11 Kenwood (gas lamp knockdown)
2. COMM/1743 – 1750 Commonwealth Avenue
3. COMM/127 – 127 Commonwealth Avenue
4. WASH/680 – 680 Washington Street
5. COMM/1817 – 1807 Commonwealth Avenue
6. COMM/1860 – 1870 Commonwealth Avenue
7. Pole #F35 – Newton Corner, Centre Street SB merge onto Washington Street
8. WASH/533 – Washington Street at Jackson Road
9. WASH/370 – Washington Street, across from Honda Village
10. WASH/1339 – 1339 Washington St (being replaced as part of West Newton Sq project)
11. WASH/1309 – 1309 Washington St (being replaced as part of West Newton Sq project)

In the past year, the following underground electrical issues have also been repaired:

1. LANG/38 – 38 Langley Rd
2. COUN/150 – 130 Countryside Rd
3. BEAC/341 – Beacon St @ Hammond St
4. Pole 746/2 – 7 Hereward Rd
5. CHUR/201 – 200 Church St
6. Pole 681/1 – 59 Allerton Rd
7. WELLS/2 – 2 Wells Ave

The backlog of underground electrical issues has not yet been completed. The remaining backlog of underground electrical issues includes street lights at 41 different locations.

Please let me know if City Council would like any additional details regarding the street light repair work that has been completed or is being planned for the future.

Sincerely,

Jason S. Sobel, P.E., PTOE
Director of Transportation Operations

cc: James McGonagle, Commissioner of Public Works
Shawna Sullivan, DPW Chief of Staff

Cassidy Flynn

From: Brendan Keegan <brendan@bikenewton.org>
Sent: Tuesday, May 26, 2020 11:45 AM
To: Cassidy Flynn
Cc: Ruthanne Fuller
Subject: Public Facilities Meeting 5/27 Agenda Item #255-20

[DO NOT OPEN links/attachments unless you are sure the content is safe.]

Dear Cassidy,

I'm writing on behalf of Bike Newton to express concern over the transfer and repurpose of \$400,000 that was intended to be used for the pilot of a road diet that would inform the 25% design of Washington Street. The redesign of Washington Street is a vital project to improve the safety of this dangerous corridor. Washington St. at Lowell Ave. is in the top 5% for motor vehicle crashes in Newton, according to MassDOT data. Recent speed data collected by the City of Newton shows that the 85th percentile speed on Washington St. at Cross Street is anywhere from 38mph to as high as 52mph.

Washington Street has been studied for the last 10 years by professionals in the field of planning like Peter Furth of Northeastern University and Stephanie Pollack of MassDOT. The city also undertook an effort to imagine the future of Washington Street called Hello Washington!. All of the studies of this corridor have identified the need for safer pedestrian crossings, protected bike facilities, and better access to bus stops. Data from Strava and Lime bike show that Washington Street is a heavily used route for bikes despite having no bike accommodations.

We understand that the city's budget has taken a hit because of the pandemic. This project is an opportunity to improve the safety of Washington Street, not just repave the same dangerous roadway. In order to improve safety the city can re-stripe the lanes to 11 feet, down from the current 13 feet. Wide lanes promote speeding and lead to more crashes and more severe crashes. The city should also install a temporary protected bike lane along the south side of Washington St. from Chestnut to Lowell. This will provide safer facilities for people on bikes and allow more space for people waiting at bus stops on a stretch where there is currently no sidewalk.

We would also like to know how the repurposing of this money would affect the timeline for the reconstruction of Washington Street and what the city's plans are to move forward with the pilot of a road diet and the 25% design for Washington Street. This is a vital corridor as we start to reopen the economy and we have an opportunity to improve Washington Street's safety and commercial viability. Simply repaving the street without any safety enhancements will be an opportunity squandered.

Thank you,
 Brendan Keegan

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Brendan Keegan
President, Bike Newton
www.bikenewton.org
 @bikenewton

Bike Newton, a 501c3 organization promoting bicycling as a viable method of transportation in Newton, MA. Bicycling should be safe and convenient for all. Bike Newton is 1800 members strong.

Cassidy Flynn

From: James McGonagle
Sent: Wednesday, May 27, 2020 3:02 PM
To: Cassidy Flynn
Cc: Shawna Sullivan
Subject: FW: Public Facilities Meeting 5/27 Agenda Item #255-20

Sorry Cassidy, meant to include you on this.

From: James McGonagle
Sent: Wednesday, May 27, 2020 2:59 PM
To: brendan@bikenewton.org
Cc: Alison M. Leary <aleary@newtonma.gov>; Barney Heath <bheath@newtonma.gov>; Jason Sobel <jsobel@newtonma.gov>; Nicole Freedman (nfreedman@newtonma.gov) <nfreedman@newtonma.gov>; Jonathan Yeo (jyeo@newtonma.gov) <jyeo@newtonma.gov>
Subject: FW: Public Facilities Meeting 5/27 Agenda Item #255-20

Dear Mr. Keegan,

Due to the situation we are all facing, the City had to make some extremely difficult budget decisions in a very short period of time. We share the same goals to improve safety along the Washington Street corridor, especially for pedestrians and cyclists. The decision to move this exciting pilot out until we have a true understanding of the impacts to the City budget is disappointing for us all, but it will move forward once funding allows us to do so.

The need to resurface the existing Washington Street is based on the current poor pavement conditions and will help extend the useful life the pavement structure for years to come. Any further deterioration of this section of Washington St will force the City to have perform asphalt reclamation which can be up to three times the cost of a normal paving operation. It is important to act now and avoid these additional costs. This needed maintenance work is not a lost opportunity to redesign the roadway as part of a long-term major construction project. That said, we are always looking to make improvements, and we now develop pavement marking plans for all roadways that are repaved, rather than simply replicating the previous pavement markings. While we won't be able to make any major changes as part of this roadway maintenance, we will bring this topic to our Complete Streets Group to review options prior to any work being performed.

Sincerely,

Jim

James McGonagle
Commissioner of Public Works
City of Newton, MA
617-796-1015
jmcgonagle@newtonma.gov

Boston University

Department of Earth and Environment
685 Commonwealth Avenue
Boston, Massachusetts 02215-1401



May 26, 2020

The Honorable Ruthanne Fuller
Mayor, City of Newton
1000 Commonwealth Ave.
Newton Centre, MA 02459

Dear Mayor Fuller,

We are writing to express concern about your proposal in the [Supplemental Capital Improvement Plan FY2021-FY2025](#) to transfer \$400,000 from the fund for a 25% conceptual design for the Washington St. Corridor, for “immediate road repairs” on Washington Street between Chestnut Street and Walnut Street.

Our concern stems from our [research](#) and [advocacy](#) on gas leaks in Newton and greater Boston over the last several years. In 2019, the Gas Leak Allies, convened by Mothers Out Front and including Dr. Phillips, published [Rolling the Dice](#), a report on the safety of gas pipelines in Massachusetts.

It is our informed opinion that public safety and best use of scarce resources requires repairing the leaking gas pipelines before paving the road. There are two leak prone gas mains underneath Washington Street. National Grid reports eight unrepaired gas leaks along this portion of Washington Street, and a leak survey Dr. Phillips conducted with Gas Safety USA over the last two weeks of May, 2020 found nine leaks.

For your review we created this [google slide deck](#) that summarizes results from our gas leak survey and other information about the presence and condition of leaking gas pipelines underneath Washington Street. We will be happy to walk you and other stakeholders through these slides.

Leaks only grow over time, and no leak can be considered indefinitely “safe.” Moreover, gas leaks degrade air quality. And, our recent survey found gas concentrations in the root zones of dead and dying trees on this portion of Washington Street.

National Grid needs to first repair the leaks to avoid future repairs that will puncture new pavement and seed potholes.

Requiring National Grid to repair the gas leaks prior to paving will cost Massachusetts ratepayers around \$50-\$100k, compared to replacing 0.9 miles of two pipelines, which may cost

Boston University

Department of Earth and Environment

ratepayers about \$2M-\$3.5M¹. Triaging the leaking pipes by patching them extends the useful life of the old pipes and the road surface while avoiding locking-in fossil fuel infrastructure that is inconsistent with Newton's Climate Action Plan. Therefore we recommend pipeline repair rather than replacement.

Thank you for your attention to this issue.

Sincerely,



Nathan Phillips

Professor

Department of Earth and Environment

Boston University

Rachel Adler-Golden

Cindy Calloway

Ellie Goldberg

Elaine Landes

Melanie Renaud

Karen Slote

on behalf of Mothers Out Front Newton



¹[Rolling the Dice](#), p. 55

Cc:

Councilor Alison M. Leary, Chair

Public Facilities Committee

Newton City Council

Councilor Rebecca Walker Grossman, Chair

Finance Committee

Newton City Council

David Olson, Clerk

Newton City Council

City of Newton



DEPARTMENT OF PUBLIC WORKS

OFFICE OF THE COMMISSIONER

1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Ruthanne Fuller
Mayor

May 27, 2020

Nathan Phillips
Professor
Department of Earth and Environment
Boston University

And

Representatives of Mothers Out Front

Dear Mr. Phillips and Representatives of Mothers Out Front:

I am writing in response to your letter expressing concern regarding reallocating \$400,000 originally allocated for a 25% conceptual design of Washington Street from Chestnut Street and Lowell Avenue. The proposal is to reallocate these funds to pave this section of Washington Street, which is in danger of failing.

We are currently working with National Grid to coordinate the paving of this section of Washington Street with the repair of the gas main in this section of the street. Our Associate City Engineer John Daghlion is in contact with his counterpart at National Grid to ensure that these leaks are addressed before paving. National Grid is in the process of evaluating the main and developing a plan to address the leaks.

The Department of Public Works continues to hold a monthly meeting with National Grid to ensure that both parties are aware of respective projects within the City of Newton. These meetings enable the City and National Grid to work efficiently to replace mains and/or address leaks before paving roadways.

Please let me know if you have any further concerns or questions.

Sincerely,

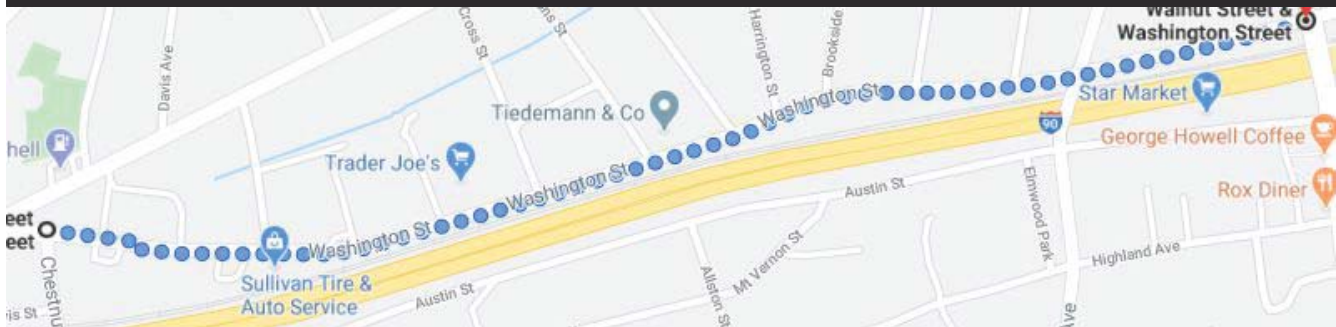
James McGonagle

James McGonagle
Commissioner

Telephone: (617) 796-1009 • Fax: (617) 796-1050 • jmcgonagle@newtonma.gov

Washington St., Newton Gas Leaks: May, 2020

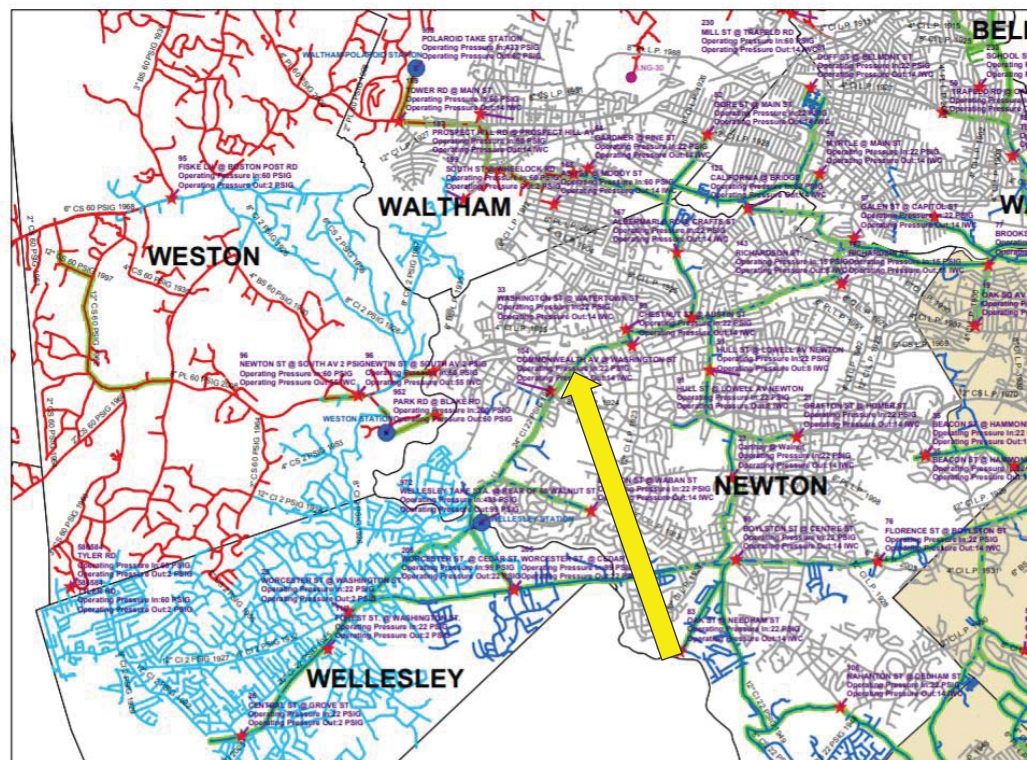
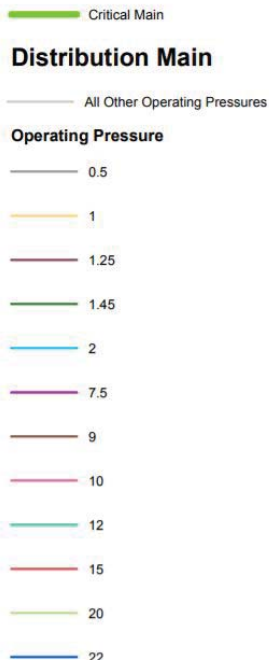
255-20



Nathan Phillips, Boston University
Bob Ackley, Gas Safety USA

Washington St: “critical main” 255-20

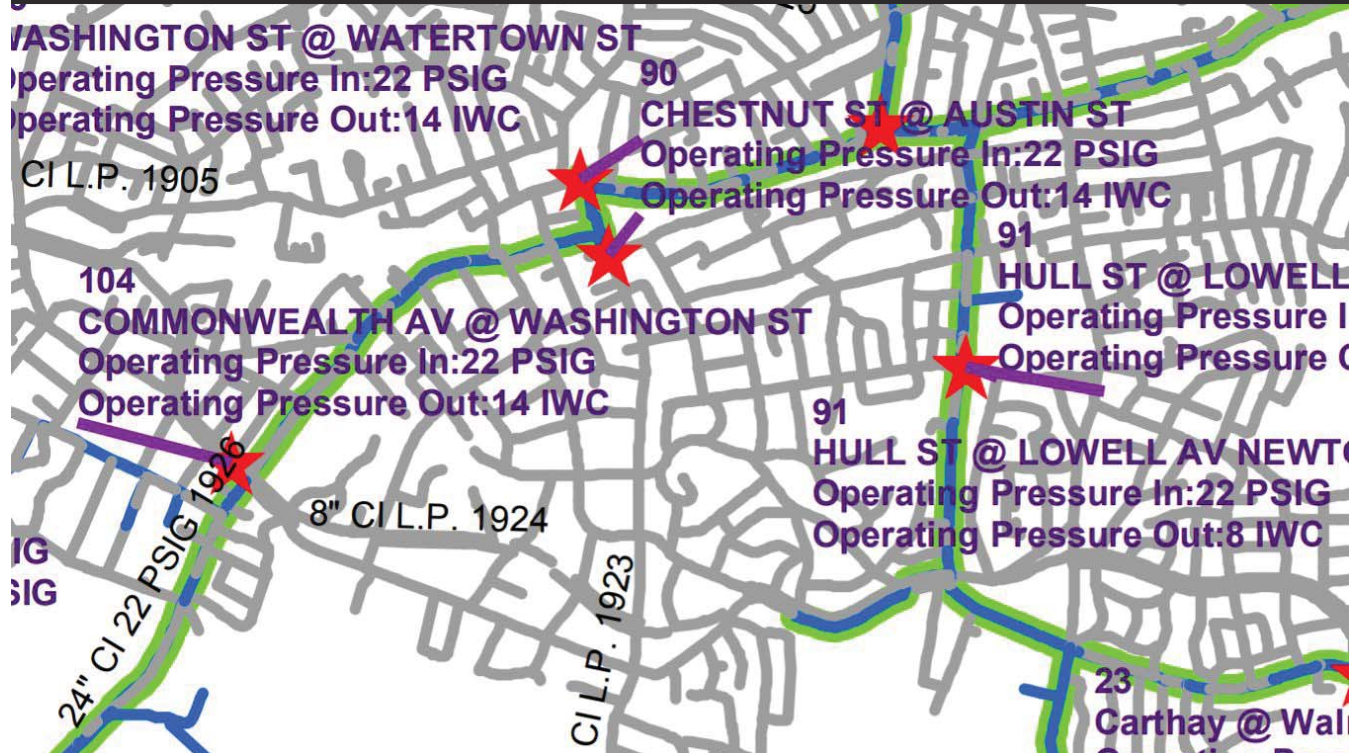
LEGEND



Leak-prone Gas Infrastructure

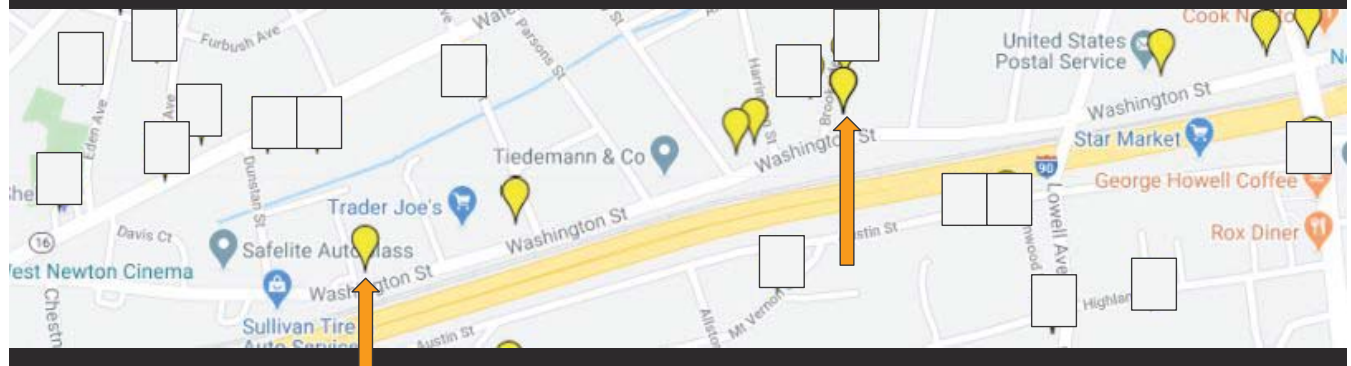
255-20

- One 24" Cast Iron "critical main", 22 psi main, 1926
- One 10" Cast Iron, 0.5 psi main, age unknown



8 utility-reported unrepaired leaks between Chestnut & Walnut

255-20



-Six leaks on Washington St.;
two leaks at cross-street
corners (Eddy, Harrington)

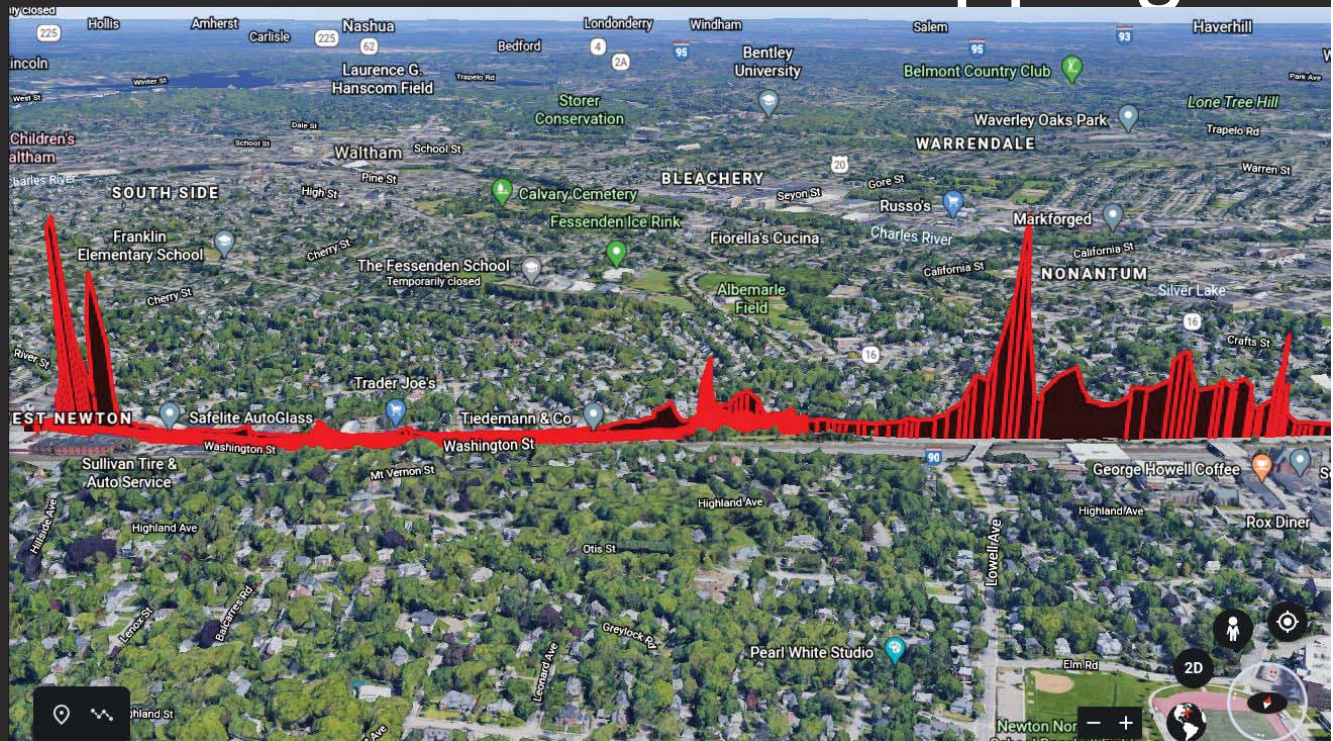
-Two leaks listed as "Grade 2"

- Six leaks listed as "Grade 3"

National Grid leak grade definitions:

- Grade 1:** Leaks must be responded to immediately, and we do not leave the scene until they are repaired.
- Grade 2:** Leaks are non-hazardous and must be monitored every six months and scheduled for repair within a year.
- Grade 3:** Leaks are non-hazardous at the time of detection and rechecked periodically and there is no requirement to repair them outside of Gas Main replacements.

Car-based leak mapping²⁵⁵⁻²⁰



May 13, 2020, peaks exceed 5X background methane

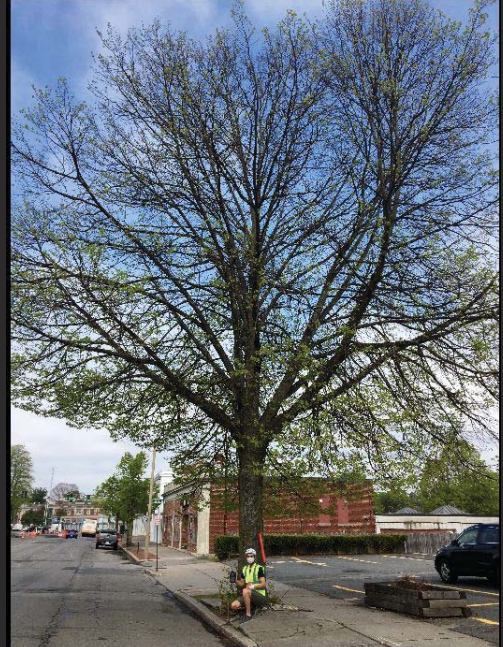
Another view

255-20



Tree damage found

255-20



1 of 2 recently planted Larches (both dead, gas in root zones).

Mature Linden (dying, 25% gas in root zone)

255-20

Takeaways:

- We detected 9 leaks on Washington St. between Chestnut St. & Walnut St.; NGrid reports 8 leaks.
 - Tree damage associated with gas in soil
 - There is no such thing as a “safe” gas leak.
 - Gas leaks only grow larger over time.

Costs*:

0.9 Mile pipeline replacement x 2 mains ~ \$2M to \$3.5M
(ratepayers)

Repairing 9 leaks x \$5k-\$10k/leak ~ \$50-\$100k
(ratepayers)

*[Rolling The Dice](#), p. 55



Extra slides follow:

Gas Safety Incorporated 16 Brook Lane Southborough, Massachusetts 01772 774-922-4626		Gas Safety Incorporated 16 Brook Lane Southborough, Massachusetts 01772 774-922-4626		Gas Safety Incorporated 16 Brook Lane Southborough, Massachusetts 01772 774-922-4626		Gas Safety Incorporated 16 Brook Lane Southborough, Massachusetts 01772 774-922-4626	
Date: <u>5-28-20</u> Survey Type: <u>Grade</u> Address: <u>WASHINGTON STREET</u> <u>100-100-100-100</u> City/Town: <u>NEEDHAM</u> Sketch: Comments: Surveyed By: <u>B. Bailey</u>	Date: <u>5-28-20</u> Survey Type: <u>Grade</u> Address: <u>WASHINGTON STREET</u> <u>100-100-100-100</u> City/Town: <u>NEEDHAM</u> Sketch: Comments: Surveyed By: <u>B. Bailey</u>	Date: <u>5-28-20</u> Survey Type: <u>Grade</u> Address: <u>WASHINGTON STREET</u> <u>100-100-100-100</u> City/Town: <u>NEEDHAM</u> Sketch: Comments: Surveyed By: <u>B. Bailey</u>	Date: <u>5-28-20</u> Survey Type: <u>Grade</u> Address: <u>WASHINGTON STREET</u> <u>100-100-100-100</u> City/Town: <u>NEEDHAM</u> Sketch: Comments: Surveyed By: <u>B. Bailey</u>				
Date: <u>5-28-20</u> Survey Type: <u>Grade</u> Address: <u>WASHINGTON STREET</u> <u>100-100-100-100</u> City/Town: <u>NEEDHAM</u> Sketch: Comments: Surveyed By: <u>B. Bailey</u>	Date: <u>5-28-20</u> Survey Type: <u>Grade</u> Address: <u>WASHINGTON STREET</u> <u>100-100-100-100</u> City/Town: <u>NEEDHAM</u> Sketch: Comments: Surveyed By: <u>B. Bailey</u>	Date: <u>5-28-20</u> Survey Type: <u>Grade</u> Address: <u>WASHINGTON STREET</u> <u>100-100-100-100</u> City/Town: <u>NEEDHAM</u> Sketch: Comments: Surveyed By: <u>B. Bailey</u>	Date: <u>5-28-20</u> Survey Type: <u>Grade</u> Address: <u>WASHINGTON STREET</u> <u>100-100-100-100</u> City/Town: <u>NEEDHAM</u> Sketch: Comments: Surveyed By: <u>B. Bailey</u>				

Extra slide: the receipts (leak reports)

Gas mains aren't always straight



The 24" critical main shifts over here from south to the north side of the street

OAK HILL MIDDLE SCHOOL

Modular Classroom Replacement Options – Description, Comments and Considerations

Option 1



In 2030, construct 4 new second floor classrooms on top of the classroom addition that will be constructed in 2021

- Design and construct the 2021 3-classroom addition with a flat roof 'ready' to receive a second floor, 4-classroom addition
- To accommodate a possible second floor addition in 2030, it is required that the footings and foundation be designed to carry two floors, that the steel roof framing be designed to carry a heavier future second floor and that a concrete deck be poured on the roof (second floor) which normally would not be required if it were a roof, as part of the Phase 1, 2021 addition.

Option 2



In 2030, construct a 1-story, 4 new classroom addition attached to the north side of the gymnasium with a connector link that adjoins the existing school at the cafeteria

- Construct an attached single story, 4-classroom addition to the north side of the gymnasium
- The location of the 2030 classroom addition is disconnected from the existing classroom wing and will require interior construction and space repurpose at the north end of the cafeteria to link the addition to the educational corridor. Communication and visual contact from a security standpoint should be considered.
- A service or emergency access road to the rear of the building should be considered

Option 3



In 2030, construct a 1-story, 4 new classroom addition to replace the existing 4 modular classrooms in the same location where the existing modular classrooms are located

- Construct a single story, 4-classroom addition that replaces the existing single story, modular classrooms in the same location
- The 2030 connection to the main classroom core will be through a connecting corridor similar to the existing one that connects the modular classrooms to the main existing building
- In order to perform this project, the existing Modular Classrooms must be demolished at the onset. Therefore, 4 swing space classrooms will be required for the duration of the construction phase of the project

OAK HILL MIDDLE SCHOOL

Modular Classroom Replacement Options – Description, Comments and Considerations

Option 1	Option 2	Option 3
• The possible 2030 addition will require increased HVAC capacity to be installed during Phase 1 that can handle the 2030 future expansion as well. • When the work is performed in 2030, the classrooms at the first floor must not be occupied. Therefore, 3 swing space classrooms will be required • Phased construction results in an increased carbon footprint. The inefficiencies of “doing things twice” as a result of separated phasing results in an increase to the carbon footprint for this project. Additionally, when the second floor addition is constructed, the entire roofing assembly installed at the second floor level, including the membrane and the insulation will be removed and disposed long before its expected life expectancy expires • The softball field will be decommissioned for the Phase 2 construction period and will need to be replicated. • When phasing spans a decade, it is highly possible there will be changes to the governing building codes that could impact whether assumed systems or designs are code compliant. Recently, weather incidents and climate changes have resulted code changes that affect building envelop and thermal insulation design.	• Construction vehicle access will need to be addressed and the softball field will need to be taken out of commission for the duration of the construction process. • If there are considerations for future expansion of the core facilities, including the gymnasium and cafeteria, this addition could be a factor when considering options. • The location of this addition relative to the existing building plan, will allow very positive separation between the construction site and the active school building.	• Although the addition is not within the immediate corridor circulation route, it is directly connected to the classroom corridor through a corridor extension.

OAK HILL MIDDLE SCHOOL

Modular Classroom Replacement Options – Cost Estimates and Considerations

	Option 1		Option 2		Option 3
Base Construction	\$1,846,800		\$1,834,553		\$2,142,713
Demolition	\$15,000		\$15,000		\$15,000
Special Construction	\$50,000		\$0		\$0
Sitework	\$70,000		\$84,250		\$90,750
Design and Pricing Contingency	\$198,180		\$193,380		\$224,846
General Requirements	\$600,000		\$600,000		\$600,000
Bonds/Insurance	\$54,500		\$53,180		\$61,833
OH+P	\$141,724		\$139,018		\$156,757
Escalation	\$1,645,750		\$1,614,328		\$1,820,319
Phasing Premium	\$75,000		\$75,000		\$75,000
Subtotal in 2030	\$4,696,954		\$4,608,709		\$5,187,218
ADDITIONAL COSTS TO BE CONSIDERED:					
Temporary Swing Space (2030 \$\$\$\$)	\$698,836	Paved Access from Parking (2030 \$\$\$\$)	\$77,650	Removal of empty modulars (2030 \$\$\$)	\$30,000
		Unsuitable Fill Replacement (2030 \$\$\$\$)	\$ 252, 350	Temporary Swing Space (2030 \$\$\$\$)	\$931,782
				Unsuitable Fill Replacement (2030 \$\$\$\$)	\$ 252, 350
Total Comparative Costs	\$5,395,790		\$4,938,709		\$6,401,350
Additional 2020 costs to make the proposed addition ready to receive a future second floor addition:					
Cost to prep single story (2020 \$\$\$\$)	\$301,340				
Design fee to redesign (2020 \$\$\$\$)	\$200,000				
Unsuitable Fill Replacement (2020 \$\$\$\$)	\$162,500				
Total Additional 2020 costs	\$663,840				
Potential temporary swing space if redesign is required	\$225,000				



Ruthanne Fuller, Mayor
Josh Morse
Building Commissioner

CITY OF NEWTON, MASSACHUSETTS

PUBLIC BUILDINGS DEPARTMENT

52 ELLIOT STREET, NEWTON HIGHLANDS, MA 02461

Telephone (617) 796-1600
Facsimile (617) 796-1601
TDD/tty # (617) 796-1608

5/18/20

Re: Oak Hill Middle School Classroom Addition Project

The Oak Hill Middle School Classroom Addition Project started in the spring of 2019. Over the past year, Newton Public Schools, the School Committee, and the Public Buildings Department have presented this project as a 3-classroom addition multiple times to the City Council as follows:

6/13/19: Newton Public Schools and School Committee present their long-range facilities report and school enrollment report to the City Council. The Oak Hill project was discussed and described as a “3 classroom permanent exterior addition.”

10/7/19: Newton School Committee votes to approve the Oak Hill Classroom Addition Project as a “3 classroom permanent exterior addition.”

11/4/19: Newton School Committee votes to approve the CIP with specific discussion regarding the Oak Hill Project, confirming a “3 classroom permanent exterior addition.”

11/20/19: Newton Public Schools and the Public Buildings Department provided an update on the Oak Hill Middle School Classroom Addition Project to the Public Facilities Committee. This discussion included enrollment forecasting, discussion of development impacts, and confirmation of the project approach being appropriate based on the projected and future enrollment.

1/15/20: Newton Public Schools and School Committee present their long-range facilities report and school enrollment report to the City Council. The Oak Hill project was discussed and described as a “3 classroom permanent exterior addition.”

1/22/20: The Public Buildings Department presented an update on the Oak Hill Classroom Addition Project to the Public Facilities Committee as a “3 classroom permanent exterior addition.” This presentation included the site plan and schematic drawings.

At the request of the Design Review Committee, the Public Buildings Department evaluated the cost implications of making the single-story addition ready and capable of handling a second story in the future should the need arise. The estimated cost increase to make the structure capable of supporting a second-floor future addition was professionally estimated at \$251,340.

Ultimately, the School Committee, School Department, Public Buildings Department, and Administration did not, and do not, recommend making this additional investment for the following reasons:

1. Enrollment projections do not show a need for this investment.
2. Even if future Oak Hill enrollment increased beyond the capacity of the 3-classroom addition, Brown, Bigelow, and Day project a total enrollment decline of 215 students, or

9.14%, over the next 4 years. Therefore, future Oak Hill enrollment increases beyond current projections, would not be solved by adding more classrooms to Oak Hill, but rather through use of buffer zones and redistricting.

3. Oak Hill was designed as an elementary school. The gym, cafeteria, auditorium, library, and all support spaces are not large enough to support further increases in enrollment, nor the addition of future classrooms.
4. Adding a second floor above the 3-classroom addition in the future would not be possible with staff or students in the classrooms below.
5. The 4 modular classrooms were designed and constructed of materials designed to last much longer than the other modulares in Newton. These were constructed in 2010, and have at least 10 years left, but the manufacturer projects these units to last 30 years or more.
6. Our goal for Oak Hill would be to take the modular classrooms offline in the future to alleviate the pressure that the enrollment will have on the rest of the support spaces in the school. Although enrollment is expected to remain stable around 700 students for the next 10 years, it is forecasted that a slow decline will occur at or around the end of that time period. This would allow for a slow withdrawal from the modular classroom use at Oak Hill.
7. We do not have the \$251,340 available for this investment.
8. If we had the \$251,340 available, this would not be the highest and best use of those funds.
9. It is not clear that this would be the least costly way to add future classrooms to Oak Hill, even if they were needed. We would need to modify the heating, cooling, ventilation, plumbing, roof membrane, insulation, stormwater, lighting protection, and many other systems prior to erecting the second story in the future. Then there is the cost to construct a second story as opposed to working at grade. We have not performed a full cost analysis, as there is no projected demand for a second story, but even if there was, another single-story addition in the future may very well be less costly than building on top of a then occupied first floor. In short, there's a real good chance that if we were to spend this money, we may never build on top of the 3-classroom addition regardless of whether a future addition occurs or not.
- 10. To change course this late in the design, we would not be able to meet the already aggressive project schedule, and the classrooms would not be ready for the students set to arrive in 15 months.**

Sincerely,



Josh Morse
Public Buildings Commissioner



Business, Finance and Planning

TO: Public Facilities Committee

FROM: Liam Hurley, Assistant Superintendent/Chief Financial & Administrative Officer
 Stephanie Gilman, Director of Planning and Sustainability
 Josh Morse, Public Building Commissioner
 John Harutunian, Principal, Oak Hill
 Katy Hogue, Director of Data Analysis and Enrollment Planning

DATE: May 27, 2020

RE: Oak Hill Three Classroom Addition

Oak Hill Background and Context

This memo provides context, background and clarification on the recommendation to proceed with a single-story three classroom addition at Oak Hill. Similar to all projects, the school and city worked in close collaboration in analyzing enrollment, timing, project funding/budget, as well as school and community impact before recommendations were made. Through the city's rigorous process and feasibility study, we analyzed numerous design options and made modifications as appropriate. We understand the commitment from the Design Review Committee (DRC) and City Council to take a long-term view of the Oak Hill addition and the request to consider making the project "second floor ready." This option has been thoroughly explored, and we continue to believe that our current proposal is the most optimal one. We look forward to more discussion this Wednesday night and will be ready to answer further questions.

The Oak Hill discussion began internally with enrollment projections in fall/winter 2018 and a spring 2019 presentation to the Mayor and her team about the need for additional classrooms at Oak Hill. Enrollment projections show an increase in students in the coming years that would significantly challenge the building given its current size and limitations. This is primarily due to the large enrollment growth at Zervas. Zervas is currently enrolled at 434 students and is projected to grow to 523 students by FY25. Although the other two feeder schools to Oak Hill (Memorial-Spaulding and Bowen) have projected enrollment declines, this is offset by Zervas' projected growth.

Oak Hill is currently enrolled at 632 students; it is projected to enroll around 700 students beginning in FY22 and then start to decline in FY26. The table below displays the current 10 year projection for Oak Hill:

<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>	<u>FY26</u>	<u>FY27</u>	<u>FY28</u>	<u>FY29</u>	<u>FY30</u>
632	674	695	705	711	710	692	687	685	677	667

Please note that we typically do not publish 10 year projections, given the larger variability associated with projections further in the future, due to the possibility of shifts in birth rates, enrollment decisions, and mobility patterns, among other factors that may occur in future years and are not yet captured in our enrollment projection methodology.

Oak Hill Progress to Date

Project design began in December of 2019 when Raymond Design Associates, Newton Public Schools and the Public Buildings Department started with the feasibility phase. We evaluated the program, challenged assumptions, asked about long-term needs, and ultimately settled on a 3-classroom single story permanent addition as the most appropriate and cost-effective means to meet the short-term and long-term needs of Oak Hill. From January to April 2020, several members of the working group presented to the Public Facilities Committee, Design Review Committee, mailed out 200 letters to abutters, and presented to the Oak Hill neighborhood, staff, and parent community via a Zoom meeting.

In March 2020, the Design Review Committee had questions regarding enrollment projections and potential future needs, and asked that we determine the cost implications of making the proposed addition capable of handling a future second floor addition. On April 6, the DRC approved the proposed site plan as part of the 5-58 process, but also recommended that consideration be given to making the project ready to accept a future second floor addition, in case the space was needed in the future to replace the existing 10 year old modular classrooms with permanent construction.

At the May 14th Public Facilities Committee 5-58 Site Plan Public hearing, Newton Public Schools and the Project Team presented the site plan and explained the rationale for the project approach and why we felt the added investment to make the addition capable of supporting a future second floor addition was not appropriate. The committee expressed overall support for the current plan but also recommended consideration of making the project second floor ready. The item passed 4-0-4 and was sent to the full City Council. On May 19, the City Council voted to send the project back to the Public Facilities Committee to get more information and to clarify and confirm the best path forward.

To summarize, after careful review of enrollment projections, site options, school programmatic needs, project timing and estimated costs, the determination was made to recommend proceeding with the one-story 3 classroom addition as the best path forward to meet the program and long term needs for the following reasons:

1. Oak Hill enrollment projections show an increase in enrollment at or slightly over 700 students for 6-7 years before beginning to decline.
2. The existing 4 modular classrooms are in very good condition and are likely to last 15-20 years, which coincides with the anticipated decline in enrollment at the school.
3. Permanent construction is preferable to modular construction and the proposed addition ties in and flows well from the existing building.
4. It does not make sense to spend more money to build more space than what is currently needed or known to be needed in the future.

Implications of Making the Project “Second Floor Ready”

The School and City analyzed these implications as described below.

Cost Impact

First, the costs to make the Oak Hill addition “second floor ready” are considerable and estimated to be an additional \$250,000 - \$500,000. The project team can speak in further detail on these estimates, but they can be broken down into the following areas: earth work, foundation, concrete, drainage, roof, structural steel, mechanical, electrical, plumbing, and fire protection, as well as additional soft costs for the architect and

engineer for the additional design and engineering work. This increase would put the project over the current budget. The project team has worked incredibly hard to stay within budget and to build the most cost effective and appropriate addition as possible, especially now, given the City's current uncertain financial situation.

Second, the current project envisions a few programmatic improvements, interior moves and renovations as "add/alternates" to create a flexible multipurpose room off of the existing cafeteria, to provide a larger fitness room off of the existing gym, and to create improved PE storage and office space. In summary, the currently designed project is already pushing the project budget to the limit. Given the current financial situation, we are incredibly mindful of the city budget.

Lastly, Josh and Alex have done some analysis and confirmed that if additional classrooms are required in the future, it would likely be more cost effective and less disruptive to build elsewhere on the site rather than adding a second floor. The attached documents from the Public Buildings Department provide additional detail and cost comparisons related to potential future construction.

Timing Impact

The timing of the project would also be delayed to make the space "second floor ready." The project is planned for a September 2021 completion, which is already an aggressive timeline. Making a substantial change to the plans now will undoubtedly delay the project by several months causing a significant challenge to the school to manage enrollment/class size in fall 2021. This delay would be due to the time required to make changes to the design documents and to go through the necessary City approval process for design, planning and funding approvals for the revised project design.

School Impact

Perhaps the single biggest concern for the Principal and School Department is the practical impact of building a second floor above three occupied classrooms. We would anticipate construction to be 15 to 18 months. It would not be feasible or safe to keep the staff and students in the three classrooms below during this construction window. Simply put, we would need to find an alternative solution or suitable location for these staff and students, which could mean additional modular or other temporary measures and the associated costs.

Long Range Enrollment Projection and District Plans:

As shown above, the long range enrollment projections show quick growth at Oak Hill followed by a decline. Although projections after the 5 year mark are more variable, as described previously, current demographic trends including birth rates and enrollment in public and private schools continue to show overall declines compared to prior years. Future projections at the middle and high school levels also tend to be more accurate than at the elementary levels, as they are based on students currently enrolled in our schools. The largest variability in our projections is in kindergarten, although the use of demographic trends helps stabilize this projection where available (for example, birth rate data for future years is not yet available but can be projected based on current trends).

Collectively, the School Department annually reviews our enrollment trends and updates our projections, and has used buffer zones to help balance enrollment and minimize overcrowding. We have used this process successfully and are committed to this process. We actively expanded Zervas' buffer zones this year (with the goal of balancing incoming Zervas students) and will look at other possible solutions in the future to balance enrollment at all of our schools. The use of the buffer zones for the feeder schools to Oak Hill is a strategy to slowly reduce the Oak Hill population and shift students to other middle schools as appropriate. Note that buffer zones are only utilized when students first enroll in the Newton Public Schools. Once enrolled, students follow the feeder pattern for their school; therefore, the use of buffer zones at the elementary level can result in changes in enrollment in future years at middle schools, but is not an immediate shift.

Summary:

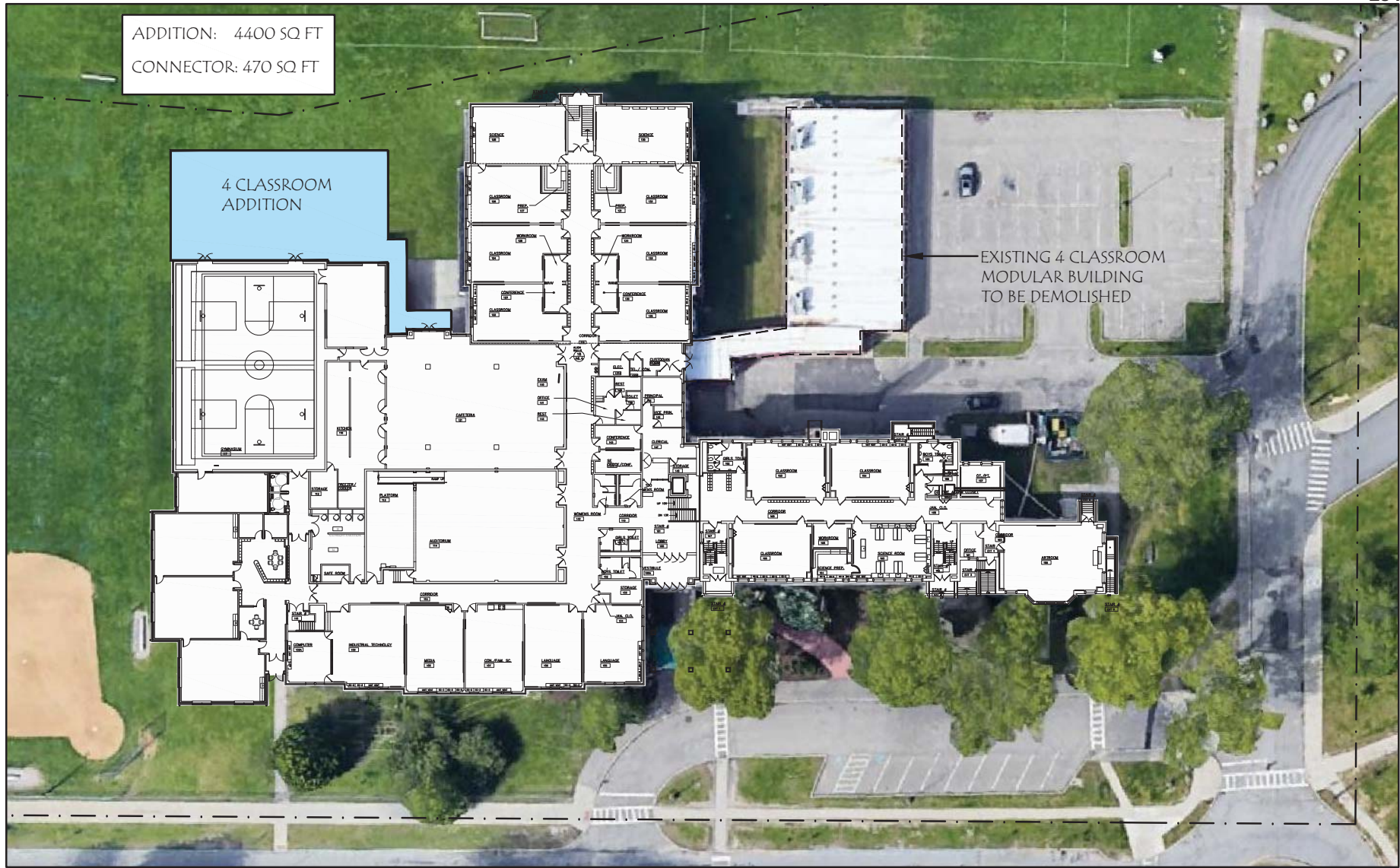
The Design Review Committee and the City Council are spot on when it comes to questioning the long-range plan at Oak Hill. We have analyzed the option of making the addition “second floor ready” and do not believe it is needed or the best approach given the implications stated above. In closing, we don’t have a current or projected need for the second floor, but even if our projections are not correct and someday we do need to either replace the modular classrooms or add more capacity, placing these classrooms above the proposed addition will not be the optimal solution financially or logistically.

We look forward to the discussion.



OAK HILL MIDDLE SCHOOL MODULAR REPLACEMENT OPTIONS

May 20, 2020



FIRST FLOOR PLAN
SCALE: 1" = 40'-0"

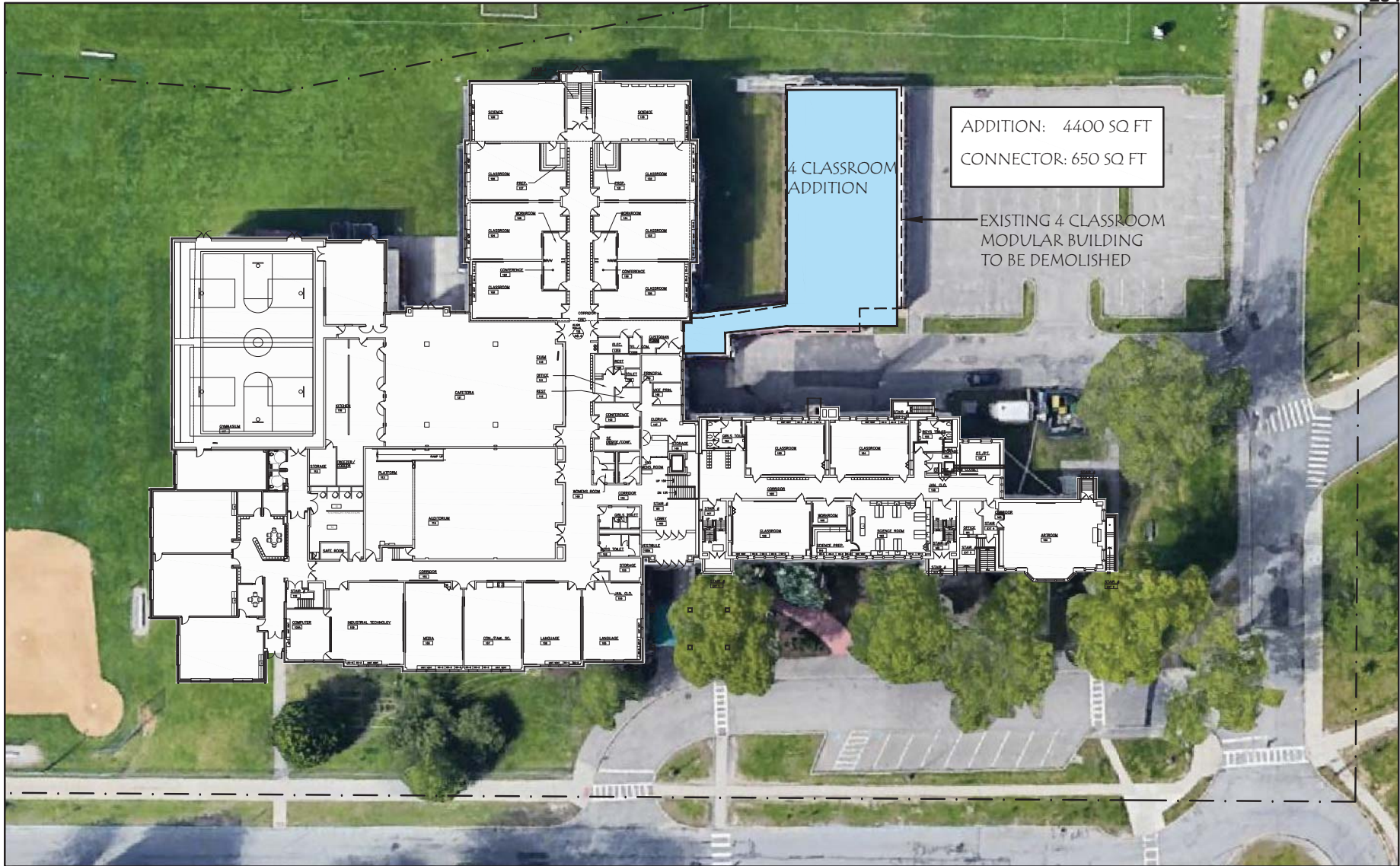
0 20' 40' 80'



1 or 2 STORY
4 CLASSROOM ADDITION

OAK HILL MIDDLE SCHOOL
MODULAR REPLACEMENT OPTIONS

May 20, 2020



FIRST FLOOR PLAN

SCALE: 1" = 40'-0"

0' 20' 40' 80'



1 OR 2 STORY
4 CLASSROOM ADDITION

OAK HILL MIDDLE SCHOOL
MODULAR REPLACEMENT OPTIONS

May 20, 2020



Raymond Design
Associates, Inc.
Architects & Planners
60 Ledgewood Place
Rockland, MA 02370

	Option 1 - 5,000 sf over exist Single Story	Option 2 - NW 4,870 sf Single Story	Option 3 - NE 5,050 SF Single Story
Base Construction	\$1,846,800.00	\$1,834,553.00	\$2,142,713.00
Demolition	\$15,000.00	\$15,000.00	\$15,000.00
Special Construction	\$50,000.00	\$0.00	\$0.00
Sitework	\$70,000.00	\$84,250.00	\$90,750.00
Design and Pricing Contingency	\$198,180.00	\$193,380.00	\$224,846.00
General Requirements	\$600,000.00	\$600,000.00	\$600,000.00
Bonds/Insurance	\$54,500.00	\$53,180.00	\$61,833.00
OH+P	\$141,724.00	\$139,018.00	\$156,757.00
Escalation	\$1,645,750.00	\$1,614,328.00	\$1,820,319.00
Phasing Premium	\$75,000.00	\$75,000.00	\$75,000.00
Subtotal in 2030	\$4,696,954.00	\$4,608,709.00	\$5,187,218.00
	Additional Costs to be Considered:	Additional Costs to be Considered:	Additional Costs to be Considered:
	Temp swing space (2030\$) \$698,836.00	Paved access from parking (2030\$) \$77,650.00	Removal of empty modulars (2030\$) \$30,000.00
		Unsuitable Replacement (2030\$) \$252,350.00	Temp swing space (\$2030) \$931,782.00
			Unsuitable Replacement (\$2030) \$252,350.00
Total Comparative Costs	\$5,395,790.00	\$4,938,709.00	\$6,401,350.00

Additional 2020 Costs to make the proposes addition ready
to receive a future second floor addition:

Cost to prep single story (2020\$)	\$301,340.00	To install an oversized RTU to handle 8 CR's (+ \$50K)
Design fee cost to redesign (2020\$)	\$200,000.00	
Unsuitable Replacement (2020\$)	\$162,500.00	

Total Additional 2020 Costs **\$663,840.00**

Potential temp swing space if
redesign is needed \$225,000.00