



TOWN OF TYNGSBOROUGH
Capital Asset Management Committee
25 Bryants Lane
Tyngsborough, MA 01879
Tel: 978 649-2300 Ext. 100 Fax: 978 649-2320

Capital Asset Management Plan **FY2019 through FY2023**

FY19 Capital Asset Management Committee (CAMC). Membership consists of:

Burton Buchman, Finance Committee
Ron Keohane, Board of Selectmen
Robert Mullin, School Committee
Amy Pozerski, School Committee
Hillari Wennerstrom, Board of Selectmen

Angel Wills, Finance Director/Accountant, serves as an ad-hoc member. Justin Sultzbach, Assistant Town Administrator, acts as coordinator for the committee. Departments were asked to submit their requests for capital improvement projects by the first week in January, 2018. The Assistant Town Administrator then reviewed and packaged the FY2019 – FY2023 requests for review by the CAMC.

In an effort to improve on previous years proceedings, the CAMC adopted a Criteria Based Ranking System, a best practice recommended by the Government Finance Officers Association as well as the Division of Local Services. This enabled the Committee to review projects at first pass based on a quantifiable need, rather than affordability. An explanation of the six criteria is attached to this report.

Following this ranking, Finance Director Wills briefed the Committee on our financial outlook to ensure projects would be in harmony with the FY 2019 budget process. The Capital Asset Management Committee concluded its business on March 26th, 2018 by a vote at a joint meeting with the Board of Selectmen.

Meeting Dates: January 30th, 2018
February 20th, 2018
February 28th, 2018
March 14th, 2018
March 26th, 2018 (Joint with Board of Selectmen)

The Committee reviewed the Town's existing debt schedule, available free cash, revolving funds, enterprise funds and other funds available for capital purchases. A summary of these figures can be found in Table 1.

TABLE 1

Source	FY'18	CHANGE+/-	FY'19*	% of Operating
Stabilization	\$1,725,152	\$0	\$1,725,152	4.38%
Capital Asset Stabilization	\$573,264	\$0	\$573,264	1.45%
Compensated Absences	\$190,176	\$0	\$190,176	.48%
Debt & Debt Assessment	\$211,714	(\$105,856)	\$105,858	.27%
Billboard Stabilization	\$20,000	\$0	\$20,000	.05%
			Total	6.63%
			Certified Free Cash	\$748,235

**Figures have not been finalized and are subject to change*

FY19 RECOMMENDATIONS

The Capital Asset Management Committee reviewed each of the proposals submitted for FY19. Due to limited funding, departments were also asked to prioritize their most pressing needs. In making its recommendations, although limited by available funds, the committee also gave full consideration to each capital request with respect to the overall 5-year capital management plan.

FUNDING SOURCES

The CAMC makes the following recommendations regarding all submissions made for the FY19 Annual Town Meeting, along with supporting information (attached) for each item. All capital items for the May 15, 2018 Annual Town Meeting are proposed to be funded through a combination of the following funding sources:

- Capital items \$50,000 and under, as well as Town Hall and Library interior painting and carpet, total \$319,882. It is recommended to be funded from the FY '17 certified free cash, which has a balance of \$618,235.
- It is recommended that the \$25,000 THS Live Meeting Room be funded from the PEG Media Fund, which has a current balance of \$136,860.
- It is recommended that \$200,000 be released from the Overlay Account to offset a portion of the cost of capital items designated for financing.
- It is recommended that the Turf Field be funded with CPA funds to the extent funds are available, recommended by the CPC, and allowable under MGL c44B.
- It is recommended that the remaining capital items which total \$1,207,255, be funded from financing over a 10-year term.

ANNUAL TOWN MEETING - FY19

ITEM #	DEPARTMENT	PROJECT	NOT TO EXCEED	EXPENDED BY
1	Cemetery	1 Ton Pickup Truck	\$50,000	Board of Selectmen
2	Finance	Munis Software	\$294,255	Board of Selectmen
3	Fire	Replace Engine 3	\$600,000	Board of Selectmen
4	Fire	Fire Records Software	\$12,000	Board of Selectmen
5	Highway	Bobcat w/ attachments	\$88,000	Board of Selectmen
6	Highway	Paving Equipment	\$75,000	Board of Selectmen
7	Highway	Dump Truck w/ Plow	\$170,000	Board of Selectmen
8	IT	GIS Implementation	\$22,000	Board of Selectmen
9	IT	Town Hall Public Safety Server Connection	\$22,600	Board of Selectmen
10	Library	Carpeting	\$50,000	Board of Selectmen
11	Media	THS Live Meeting Room	\$25,000	Board of Selectmen
12	Police	Voting Comparator	\$13,398	Board of Selectmen
13	Police/Fire	Fire Alarm Receiver	\$24,772	Board of Selectmen
14	Police	Door Security System	\$26,312	Board of Selectmen
15	School	Turf Field Replacement	\$900,000	Board of Selectmen School Committee
16	School	Multi Function School Activity Bus	\$60,000	School Committee
17	Selectmen/Town Administration	Paint Town Hall Interior Walls	\$65,000	Board of Selectmen
18	Selectmen/Town Administration	Winslow School Hazardous Materials Removal	\$120,000	Board of Selectmen
19	Town Clerk	Voting Equipment	\$33,800	Board of Selectmen
			\$2,652,137	TOTAL

FY19-FY23 Capital Projections

Dept	Description	2019	2020	2021	2022	2023
Fire	Replace Engine 3 (1998)	\$600,000				
Fire	Fire Alarm Receiver	\$24,772				
Fire	Fire Records Software	\$12,000				
Fire	Purchase Small Rescue Boat		\$13,500			
Fire	Purchase Larger Rescue Boat			\$35,000		
Fire	Hydraulic Rescue Tool				\$27,000	
Fire	New Center Fire Station		\$10,000,000			
Fire	Replace Lakeview Ave Station				\$3,000,000	
Total Fire		\$636,772	\$10,013,500	\$35,000	\$3,027,000	\$0
T. Clerk	Voting Machines & Booths	\$33,800				
Total Town Clerk		\$33,800	\$0	\$0	\$0	\$0
Highway	6-wh DT w/Plow & Sander Repl.				\$170,000	
Highway	6-wh DT w/Plow & Sander Repl.		\$170,000			
Highway	6-wh DT w/Plow & Sander Repl.	\$170,000				
Highway	6-wh DT w/Plow & Sander Repl.			\$170,000		
Highway	Bobcat w/ attach Replace	\$88,000				
Highway	6-wh d truck w/Plow and sander					\$170,000
Highway	1-ton utility truck w/Plow				\$60,000	
Highway	Replace 2002 Truck		\$34,000			
Highway	Replace 2002 Truck		\$34,000			
Highway	Replace 2002 Truck			\$34,000		
Highway	Replace 2002 Truck				\$34,000	
Highway	Purchase Asphalt Pave/Grind	\$75,000				
Total Highway		\$333,000	\$238,000	\$204,000	\$264,000	\$170,000
Police	Door Security System	\$26,312				
Police	Voting Comparator	\$13,398				
Police	Motorola Dig. Cruiser Radios		\$11,689			
Police	Motorola Dig. Portable Radios		\$10,000			
Police	Purchase of Tasers				\$10,000	
Police	Building Window Replace		\$25,000			
Police	Building exterior stairs		\$20,000			
Police	Central Air Conditioning		\$30,000			
Police	Parking lot paved		\$35,000			
Police	Paint Exterior Building		\$10,000			
Police	Upgrade to Cell block safety		\$30,000			
Police	Digital Comm. Town-Wide		\$400,000			
Total Police		\$39,710	\$571,689	\$0	\$10,000	\$0
BOS/TA	Data Wiring & Access- TH		\$96,824			
BOS/TA	Access. Parking by Library- TH		\$14,524			
BOS/TA	Code Compl. Signs - TH		\$16,758			
BOS/TA	Addr. Fire Alarm System- TH			\$176,145		
BOS/TA	Repair Masonry Joints- TH				\$19,836	
BOS/TA	Replace Perim. Sealant- TH				\$33,060	

vvvvvvv CONTINUED NEXT PAGE vvvvvvv CONTINUED NEXT PAGE vvvvvvv CONTINUED NEXT PAGE vvvvvvv CONTINUED NEXT PAGE vvvvvvv

BOS/TA	Paint Int - Town Hall / Library	\$65,000				
BOS/TA	Lighting & Fixtures Exterior- TH					
BOS/TA	Install Generator at Town Hall					
BOS/TA	Upgrade Emerg. Lighting- TH					
BOS/TA	Repl. HVAC System- TH					
BOS/TA	Build. Manage. HVAC System- TH					
BOS/TA	Additional Zone Controls- TH					
BOS/TA	Reconfigure Offices - Town Hall					
BOS/TA	Acc. Contr. in Admin Offices- TH					
BOS/TA	OPM/Design for Pub Saf Building		\$900,000			
BOS/TA	Winslow Sch. Asbestos removal	\$120,000				
BOS/TA	Public Safety Building		\$13,500,000			
BOS/TA	Winslow School Rest Phase II		\$4,000,000			
BOS/TA	Winslow School Rest Phase I		\$195,000			
BOS/TA	Building Maintenance			\$75,000		
Total Selectmen/TA		\$185,000	\$18,723,106	\$251,145	\$52,896	\$0
I T	Town Hall Server upgrade		\$33,000			
I T	Town Hall & Pub Safe SAN repl.		\$42,000			
I T	GIS Implementation	\$22,000				
I T	Town Hall / Pub Safe Serv Conn.	\$22,600				
Total Information Technology		\$44,600	\$75,000	\$0	\$0	\$0
Media	THS Live Meeting Room	\$25,000				
Total Media		\$25,000	\$0	\$0	\$0	\$0
Library	Library & Comm. Room Carpet	\$50,000				
Total Library		\$50,000	\$0	\$0	\$0	\$0
Finance	Integrated Financial Software	\$294,255				
Total Finance		\$294,255	\$0	\$0	\$0	\$0
Cem	1-ton Pick-up Truck Replace	\$50,000				
Cem	Road at Memorial Cem. Pave		\$17,500			
Total Cemetery		\$50,000	\$17,500	\$0	\$0	\$0
School	Multi Func. School Activ. Bus	\$60,000				
School	Replace Turf Field	\$900,000				
School	TMS Asbestos Abatement					
School	DW phone system		\$115,000			
School	Paving plan - Norris Road		\$160,000			
School	THS fire plan		\$40,000			
School	Lakeview windows			\$1,102,000		
School	Lakeview HVAC				\$1,119,062	
School	TPS exterior door upgrades					\$75,000
School	THS bleachers					\$265,000
School	THS exterior stairs					\$77,000
School	THS repl. sci. sinks (ADA comp)					\$186,000
Total School		\$960,000	\$315,000	\$1,102,000	\$1,119,062	\$603,000
FY Totals		\$2,652,137	\$29,953,795	\$1,592,145	\$4,472,958	\$773,000
Five Year Total		\$39,444,035				

1



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023**

Part I

Tracking # 000 - 19 - 01 Dept Name Cemetery Contact Person/Tel #978-649-2300 x130
Prepared by Justin Sultzbach Signature *JBACH* Date 1/15/18

Fiscal Year Needed 19 Project Name Replace 1998 Cemetery Truck

Expected Life of Item 20 (Yrs) Is this a replacement Item yes Are Add'l Pages Attached yes

Total Current Estimated Cost \$ 50,000.00 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No
If yes, has this been completed? No (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement? No

Urgent Need? Yes

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

This would be replacing a 20 yr old truck that has reached the end of its usefulness.

Source of estimated cost (include copies of any backup information as appropriate):

State – Hard quote to follow

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced

1998 – 24,000 miles



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2019 to FY 2023

Reference: **Project Name** Replace 1998 Cemetary Truck **Tracking Number** 000-19-01

Purpose of expenditure: (Check as appropriate)

- () **Scheduled Replacement**
- () **Present Equipment Obsolete**
- (X) **Replace Worn Out Equipment**
- () **Reduce Personnel Time (ie, Payroll Savings)**
- () **Expanded Service**
- () **New Operation**
- () **Increased Safety**
- () **Improve Procedures, Records, Etc**
- () **Regulatory Compliance**

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	_____ <u>No</u> _____
Months Use per Year	_____ <u>12</u> _____
Number of Weeks Use per Year	_____ <u>52</u> _____
Average Days per Week Used	_____ <u>7</u> _____
Average Hours per Day Used	_____ <u>8</u> _____
Estimated Useful Life (in Years)	_____ <u>20</u> _____

2



Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023

Part I

Tracking # 145-19-01 Dept. Name: Finance Contact Person/Tel #: Angel Wills, x141

Prepared by Angel Wills Signature _____ Date: _____

Fiscal Year Needed: FY 2019 Project Name: Munis Software Upgrade

Expected Life of Item 20+ (Yrs) Is this a replacement Item YES Are Add'l Pages Attached: Yes

Total Current Estimated Cost: \$294,255.00
 Non-General Fund source: Community Compact Grant (125,740.00)
 Total Estimated Cost to Town: \$168,515.00

Was a Grant applied for in connection with this project?: Yes If yes, submit a copy (attached)

Is a Design, Study, Bid Specification, or Consultant required for this project? No.
 If yes, has this been completed? _____ (If yes, submit details and copies of documents
 Including Consultant's Report)

Is this a Regulatory Compliance Requirement? _____ NO

Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

The finance department is actively seeking to implement a new financial software, MUNIS, that will provide greater efficiency, financial controls, and improved reporting throughout the town's finance department. The project comes on the heels of the discovery of the theft of tax money by a former town employee.

The town currently uses an outdated and inefficient collection software, created and maintained by a single individual. Utilizing a non-standard Caché database and centered around a 22-year old terminal interface, the software has never undergone extensive validation, and as a result serious bugs and security concerns are discovered routinely. Additionally, this software is not integrated with our accounting software, resulting in inefficiencies and errors from duplicate entries and untested software bridges.

Furthermore, the vendor who created the accounting software in place has sold the aging product (twice), and we have confirmed that the support pathway in the future is limited and will likely leave us looking for new software in the next 12-18 months.

The retrospective forensic audit found this separation, along with its lack of strong controls and extensive audit trails, to be the key factors that allowed for undetected theft of tax money. In its 2016 audit of the town, R.E. Brown & Company recommended that: *"the Town should consider obtaining a software system that fully*

integrates with the accounting system. This would allow review capability of transactions by all financial management team members. The software should not allow for the postdating of receipts.” The purchase and implementation of a new financial software will accomplish just this.

We are committed to improving internal controls and correcting software deficiencies. The Finance Committee and Board of Selectmen have voiced repeated support of projects like this software overhaul, but the Town's finances prohibit a project of this scale at this time. A grant award like this will ensure that corners are not cut and the Town benefits from the entire integrated software package. Other benefits include are listed below.

Source of estimated cost (include copies of any backup information as appropriate):

The Finance Department has applied for a Community Compact IT Grant through the Department of Revenue for the Commonwealth. This grant, if awarded, would cover \$125,740.00 which covers nearly all of the Collector's Modules and important bridges to the accounting side. This will significantly reduce the cost of the overall purchase and relieve some of the financial burden on the town.

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If funded, the annual costs to the operating budget would be in the \$40,000 range. This covers licensing and support that would be standard expenses with every software purchase. In terms of savings, the town will save money in terms of efficiency, preventable loss, and increased transparency.

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.

This replaces a significantly outdated collection software. The current software, POINT, was developed during the 1990s and is currently maintained by one man. Any support has to come from this individual and as such, the Collector's Office is often left waiting for critical updates and support. Additionally, utilizing a non-standard Caché database and centered around a 22-year old terminal interface, the software has never undergone extensive validation, and as a result serious bugs and security concerns are discovered routinely. Additionally, this software is not integrated with our accounting software, resulting in inefficiencies and errors from duplicate entries and untested software bridges.

Furthermore, the vendor who created the accounting software in place has sold the aging product (twice), and we have confirmed that the support pathway in the future is limited and will likely leave us looking for new software in the next 12-18 months.



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2019 to FY 2023

Reference: Financial Software Upgrade

Tracking Number: 145-19-01

Purpose of expenditure: (Check as appropriate)

- () Scheduled Replacement
- (x) Present Equipment Obsolete
- () Replace Worn Out Equipment
- () Reduce Personnel Time (ie, Payroll Savings)
- (x) Expanded Service
- () New Operation
- () Increased Safety
- (x) Improve Procedures, Records, Etc
- () Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

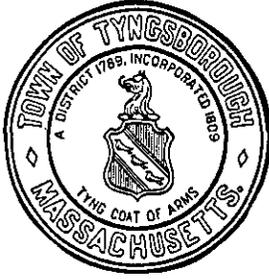
Will this item be used on a seasonal basis only? No.

Months Use per Year 12

Number of Weeks Use per Year 52

Average Days per Week Used 5

Average Hours per Day Used 8



Town of Tyngsborough
Office of the Treasurer/Collector
25 Bryants Lane - Tyngsborough, Massachusetts 01879-1003
Phone: (978) 649-2300, Ext. 128

January 2018

**Community Compact IT Grant
Proposal**

Total Amount Requested: \$125,740.00

I. Purpose

The Town of Tyngsborough is actively seeking to implement a new financial software, MUNIS, that will provide greater efficiency, financial controls, and improved reporting throughout the town's finance department. The project comes on the heels of the discovery of the theft of tax money by a former town employee.

The town currently uses an outdated and inefficient collection software, created and maintained by a single individual. Utilizing a non-standard Caché database and centered around a 22-year old terminal interface, the software has never undergone extensive validation, and as a result serious bugs and security concerns are discovered routinely. Additionally, this software is not integrated with our accounting software, resulting in inefficiencies and errors from duplicate entries and untested software bridges.

Furthermore, the vendor who created the accounting software in place has sold the aging product (twice), and we have confirmed that the support pathway in the future is limited and will likely leave us looking for new software in the next 12-18 months.

The retrospective forensic audit found this separation, along with its lack of strong controls and extensive audit trails, to be the key factors that allowed for undetected theft of tax money. In its 2016 audit of the town, R.E. Brown & Company recommended that: *"the Town should consider obtaining a software system that fully integrates with the accounting system. This would allow review capability of transactions by all financial management team members. The software should not allow for the postdating of receipts."* The purchase and implementation of a new financial software will accomplish just this.

The Town of Tyngsborough is committed to improving internal controls and correcting software deficiencies. The Finance Committee and Board of Selectmen have voiced repeated support of projects like this software overhaul, but the Town's finances prohibit a project of this scale at this time. A grant award like this will ensure that corners are not cut and the Town benefits from the entire integrated software package. Other benefits include are listed below.

II. Benefits

A new, integrated financial software will benefit the community in many ways. For starters, it will allow the town to better account for revenue and expenditures, provide accurate and concise billing for taxes and utilities, and integrate financial processes between the Treasurer/Collector's Office and the Accountant. Furthermore, it will allow the citizens of Tyngsborough greater and more transparent access to financial records with near-instant recall of invoices, issued checks and associated documents.

One of the greatest benefits will be realized by the Tax Collector's Office and residents paying their tax and utility bills. It will replace an older, outdated program with several deficiencies that make providing accurate information challenging. Furthermore, it will enhance the process of accounting for funds collected by the Collector's office through integration paired with modern control systems. Additionally, the implementation of a new financial management software will improve the efficiency of payroll, purchasing, record keeping, and tax title maintenance among others.

Other benefits include:

- An employee/retiree self service portal to allow users access to records and forms and adjust withholdings
- This financial software encompasses multi-fund budgeting and accounting that meets Governmental Accounting Auditing and Financial Reporting (GAAFR) and Generally Accepted Accounting Principles (GAAP) standards which captures transactions through single entry and which are completely traceable and transparent.
- The Content Manager module automatically links electronic purchase orders, forms and other documents to reduce clerical work and increase accessibility. It also reduces paper usage, storage, printing and postage costs, and would help the town comply nearly instantaneously with with records requests.
- This software will integrate accounting, payroll, human resources, purchasing, fixed assets, revenue collections and cash management. This streamlines processes and eliminates duplicate data entry with automated workflows and role based dashboards.

III. Cost Impact & Sustainability Plan

The project of overhauling the financial software used by the Town will have upfront and annual costs. Upfront costs, which include the purchase of the individual modules, implementation, and contracting fees, will total \$336,922.00. If awarded this grant of \$125,740.00, the town would fund the remaining \$211,182.00 using capital improvement funds. The grant money would be used to purchase the most critical modules of the software, which are listed below:

- Cash Management
- CAMA Bridge

- Motor Vehicle Excise Tax
- General Billing
- Accounts Receivable
- Tax Billing
- MA Tax Title
- Utility Billing

The second aspect of the contract is yearly maintenance fees. These types of fees are standard with all software purchases and include fees for support, maintenance, and general upgrades. These costs would be funded by the town's operating budget yearly.

IV. Measures of Success

We believe that a measurement of success will be for Tyngsborough to have a fully integrated and operational financial software system that encompasses both integrity and reliability as demonstrated by data verification processes, reporting outputs, and multiple levels of security across all platforms. Specifically, the system will not have the option to override procedural controls, and electronic audit tracking will be active and functioning. Major functions across software modules will be automated and no one segment will operate with sole independence of the overall system. Decentralized access will provide for greater transparency and automated reporting functions will provide for more timely and efficient distribution of data.

This project specifically will achieve success when the software is installed and in use. See "Project Timeline" for details on implementation estimates.

V. Project Budget

This project has a total cost of \$336,922.00. The larger portion of the bill will be funded using capital improvement funds that would be approved at Town Meeting. The most critical components of the project (the modules listed under section III), would be funded by the grant in the amount of \$125,740.00. In addition to these start-up costs, the town is prepared to fund in its entirety the annual maintenance costs which would fall in the \$40,000 range. This is a standard aspect of any software investment. See attachment #1 for a total project budget breakdown by module.

VI. Project Timeline

The implementation of a new financial software has been identified as a top priority by finance staff. The Town of Tyngsborough would be prepared to enter into a contract agreement with a software vendor and begin purchasing and installing the financial management modules tied to this grant immediately upon notice of award. These specific modules will be implemented first, and the town-paid-for modules will follow. The vendor in mind is on the state bid list, so there should no delays in procurement should we be awarded the funds. Full integration will be complete in 8-24 months.

**Tyngsborough—Community Compact IT Grant
Proposal
Attachment 1: Budget Breakdown**

Modules Covered by Grant

Module	Cost
Cash Management	\$7,560.00
Accounts Receivable	\$15,560.00
CAMA Bridge	\$4,580.00
Motor Vehicle Excise Tax Billing	\$13,940.00
General Billing	\$7,840.00
Tax Billing	\$37,740.00
MA Tax Title	\$8,240.00
Utility Billing CIS	\$30,280.00
Total	\$125,740.00

Additional Expenses Paid by Town

Item	Cost
Accounting/GL/BG/AP	\$58,960.00
Capital Assets	\$14,820.00
Purchasing	\$21,660.00
Human Resource & Talent Management	\$22,160.00
Payroll with ESS	\$47,100.00
Forms Processing	\$7,500.00
Content Manager SE	\$19,120.00
Analytics & Reporting	\$37,640.00
Subtotal	\$228,960.00
Negotiated Discount	\$60,445.00
Total	\$168,515.00

Module Total: \$354,700.00
 Negotiated Discount: \$60,445.00
Final Module Total: \$294,255.00

Additional Support & Software Cost (by town): \$42,667.00

Total Project Year One Costs: \$336,922.00

3

- useful life of pumper engine?
- pump hours



- annual maint costs
- where purchased?

Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2018 to FY 2022

Part I

Tracking # 220-19-01 Dept. Name Fire Contact Person/Tel # Wes Russell / 978-649-7671

Prepared by Wes Russell Signature Wes Russell Date 5 Jan 2018

Fiscal Year Needed 19 Project Name New Engine / Pumper

Expected Life of Item 20 (Yrs) Is this a replacement Item Y Are Add'l Pages Attached _____

Total Current Estimated Cost \$600,000 Non-General Fund source: _____

Was a Grant applied for in connection with this project? N If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? Bid Spec
If yes, has this been completed? NO (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement? _____

Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

Lease or purchase a new Custom Chasis, Engine/Pumper. 1999 Engine is at end of projected service life. New Pumper will become primary Engine on all calls, a 2006 Engine will be moved to unmanned station for remainder of service life. 2006 Engine has experienced significantly increased maintenance costs over last 2 years. This is consistent with historically projected service life of Engine of 20 years at Tyngsborough Fire; longer than that of other similar departments. Project was pushed from 2018 Capital Plan to 2019.

Source of estimated cost (include copies of any backup information as appropriate):

Experience of neighboring community purchases for similar equipment and rough estimates from distributors.

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

Should reflect reduced maintenance costs due to older Engine going to reserve status, and 15 year Primary Engine going to unmanned station.

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.

Replacing Eng 3, 1999 Engine with well over 100K miles, odometer stopped working 2 years ago. Eng 1, 2006 Engine with 105K miles will go to unmanned station.



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2018 to FY 2022

Reference: Project Name IMC Fire Records Software Suite Tracking Number 220-19-02

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement
- Present Equipment/Method Obsolete
- Replace Worn Out Equipment
- Reduce Personnel Time (ie, Payroll Savings)
- Expanded Service
- New Operation
- Increased Safety
- Improve Procedures, Records, Etc
- Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	<u>No</u>
Months Use per Year	<u>12</u>
Number of Weeks Use per Year	<u>52</u>
Average Days per Week Used	<u>7</u>
Average Hours per Day Used	<u>4-6 as needed</u>
Estimated Useful Life (in Years)	<u>10</u>



Justin Sultzbach <jsultzbach@tyngsboroughma.gov>

Capital Project Questions

3 messages

Justin Sultzbach <jsultzbach@tyngsboroughma.gov>
 To: Wes Russell <wrussell@tyngsboroughma.gov>

Mon, Feb 12, 2018 at 1:29 PM

Good afternoon, Chief.

Members of the CAMC have sent along the following questions regarding some of your requests:

- After 20 years, what is the cost of a state testing of the engine, pump...
- What is the cost of a yearly inspection before 20 years of service
- How many pump hours on 1999 and 2006 engines
- What are the maintenance records of both engines. What were the major problems of the 2006 engine
- What is the long term plan. There was discussion about having 3 engines in the future. Can you discuss current state and then the future plan.

Would you be able to send a response in time for our meeting tomorrow evening at 6pm, or would you like to attend to answer in person? (Sorry for the late notice, I just got back in the office today).

Thank you for your help!

Justin

--

Justin Sultzbach

Assistant Town Administrator
 Town of Tyngsborough, MA
 25 Bryant Lane
 Tyngsborough, MA 01879
 978-649-2300 ex. 100
 jsultzbach@tyngsboroughma.gov
 www.tyngsboroughma.gov



Wes Russell <wrussell@tyngsboroughma.gov>
 To: Justin Sultzbach <jsultzbach@tyngsboroughma.gov>
 Cc: Art Michaud <art.michaud@verizon.net>

Mon, Feb 12, 2018 at 3:13 PM

Answers for CAMC regarding Engine Capital Request

Eng-3, 1999 Spartan Pumper. Mil- odometer stopped working sometime afer 100,000. **Hours: 5,165** as of last service Aug 2017.

- This engine is housed at Sta. 3, Chestnut Rd. where it sees the least use.
- Maintenance costs FY18 **\$4,232**
- This engine would be put out of service, or used as a reserve, while another Engine needs repair.

Eng 1, 2006 Spartan Pumper, Mil- **106,620** Hour- **7360**

- This Engine is the primary response to nearly all calls, with on-duty staff.
- Maintenance costs FY18- **\$27, 224**

- This engine has had major maintenance issues for most of it's service life, and they continue. Main reason we are looking at a different vendor for next engine.

It also has spent many days out of service while needing repair, forcing us to use E-3 in it's place, putting more wear/tear on older engine.

While the 20 year Eng life cycle has worked for Tyngsborough. Eng 1 has clearly not live up to that. I believe most of the issue is with this particular engine; but we may have to consider

shortening our lifespan expectations as the community grows. To help with this, the Ambulance handles many calls without the Engine now, reducing wear & tear on the engine.

Eng 2 & 4, are housed at Sta. 2 on Lakeview ave. They were special ordered to fit into that aging building. None of our other apparatus fit there, preventing us from using E-2 in place of E-1.

Inspection & testing

Annual Mass vehicle safety inspection was \$89/vehicle in 2017.

Annual Pump testing is done to maintain NFPA rating. Cost was \$350/engine in 2017. Cost doesn't change based on age of truck but the repairs needed to be able to pass the test increase with age.

E-1 needed about \$3,000 of pump work to pass this year.

Long Term Plan

Currently we have the 4 Engines, 1 Aerial, 1 Tank (3,000gal), and 1 reserve Engine for structural firefighting.

As the department evolves into a Combination (on duty & call firefighters) from a nearly all Call fire department we can reduce the number of apparatus.

This plan assumes a New Center Fire Station, and eventually a new Lakeview Ave station.

One possibility:

Center Station

- Eng 1, Ladder 1, Amb 1, various other equipment (brush truck, boat, etc)

Lakeview Ave Station

- Eng 2, Amb 2

Chestnut Rd. Station

- Eng 3, Tank 1, Reserve Eng

I hope this answers your questions. I am happy to meet with you to discuss further.

Wes Russell

Fire Chief

Director of Emergency Mgmt

Tyngsborough Fire Dept.

26 Kendall Rd.

Tyngsborough, MA 01879

978-649-7671

[Quoted text hidden]

Justin Sultzbach <jsultzbach@tyngsboroughma.gov>

Mon, Feb 12, 2018 at 3:27 PM

To: Wes Russell <wrussell@tyngsboroughma.gov>

Thanks, Chief.

Your responses should be thorough enough. I will present it to the board for our next meeting. Should they have any follow up questions I will pass them along.

Have a good one,

Justin

[Quoted text hidden]

4

annual maint: training / payroll scheduling maint costs



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2018 to FY 2022**

Part I

Tracking # 220-19-02 Dept. Name Fire Contact Person/Tel # Wes Russell / 978-649-7671

Prepared by Wes Russell Signature *Wes Russell* Date 5 Jan 2018

Fiscal Year Needed 19 Project Name IMC Fire Records Software Suite

Expected Life of Item 10 (Yrs) Is this a replacement Item N Are Add'l Pages Attached _____

Total Current Estimated Cost \$12,000 Non-General Fund source: _____

Was a Grant applied for in connection with this project? N If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? Sole Source
If yes, has this been completed? NO (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement? Documentation of regulated training and apparatus
maintenance/testing.

Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

Software will be critical to better manage many administrative functions- Tracking and documenting firefighter training, tracking and documenting apparatus maintenance, tracking protective clothing issue, etc. All of these are now done on paper, taking a significant amount of time. IMC is the software used by communications center for dispatch records and Fire incident reporting.

Source of estimated cost (include copies of any backup information as appropriate):

Quote received from distributor _____

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

Will promote more efficient operations and reduced administrative man hours. Better liability prospective with electronic records of training, equipment, and apparatus if investigation / audit were necessary.

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2018 to FY 2022

Reference: Project Name Purchase Engine/Pumper Tracking Number 220-19-01

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement**
- Present Equipment Obsolete**
- Replace Worn Out Equipment**
- Reduce Personnel Time (ie, Payroll Savings)**
- Expanded Service**
- New Operation**
- Increased Safety**
- Improve Procedures, Records, Etc**
- Regulatory Compliance**

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	<u>No</u>
Months Use per Year	<u>12</u>
Number of Weeks Use per Year	<u>52</u>
Average Days per Week Used	<u>7</u>
Average Hours per Day Used	<u>3-4 as needed</u>
Estimated Useful Life (in Years)	<u>20</u>

5



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023**

Part I

Tracking # 425-19-2+3 Dept. Name Highway Contact Person/Tel # 649-2310

Prepared by James Hustins Signature *James R. Hustins* Date 3/7/18

Fiscal Year Needed 19 Project Name Bobcat w/ Snow, Bucket, Milling and Mowing Attachments

Expected Life of Item 10 (Yrs) Is this a replacement Item Y Are Add'l Pages Attached

Total Current Estimated Cost \$88,000 Non-General Fund source:

Was a Grant applied for in connection with this project? N If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project?

If yes, has this been completed? (If yes, submit details and copies of documents including Consultant's Report)

Is this a Regulatory Compliance Requirement? N

Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

This vehicle is used on a regular basis year round. Another year of use will render the 1997 Bobcat nearly useless. This vehicle is also used to plow School and Town sidewalks during the winter and moving dirt, mulch, and sand during the remainder of the year. Replacement parts are expensive and difficult to find. The attachments will allow us to bring mowing and small paving projects in house, rather to pay for outside service.

Source of estimated cost (include copies of any backup information as appropriate):

Bobcat of Boston and Bobcat of NH

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

We would see savings for roadside mowing in the summer and some smaller paving projects.

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.

1997 Bobcat



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2015 to FY 2019

Reference: Project Name Bobcat w/ Snow, Bucket, Milling, and Mowing Attachments
 Tracking Number 425-19-2+3

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement
- Present Equipment Obsolete
- Replace Worn Out Equipment
- Reduce Personnel Time (ie, Payroll Savings)
- Expanded Service
- New Operation
- Increased Safety
- Improve Procedures, Records, Etc
- Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	_____ No _____
Months Use per Year	_____ 12 _____
Number of Weeks Use per Year	_____ 52 _____
Average Days per Week Used	_____ 5 _____
Average Hours per Day Used	_____ 8 _____
Estimated Useful Life (in Years)	_____ 10 _____



Bobcat®

Product Quotation

Quotation Number: 2471E025055

Date: 2018-02-13 13:13:25

Ship to	Bobcat Dealer	Bill To
tyngsboro highway dept tyngs, MA	Bobcat of New Hampshire South, Hudson, NH 2 TRACY LANE HUDSON NH 03051 Phone: (603) 579-9955 Fax: (603) 579-4747 ----- Contact: Dennis Grande Phone: 6035799955 Fax: 6035794747 E Mail: d.grandebobcatnh@outlook.com	tyngsboro highway dept tyngs, MA

Description	Part No	Qty	Price Ea.	Total
S595 T4 Bobcat Skid-Steer Loader 74.0 HP Tier 4 Turbo Diesel Engine 2-Speed Travel Auxiliary Hydraulics: Variable Flow Backup Alarm Bob-Tach Bobcat Interlock Control System (BICS) Controls: Bobcat Standard Cylinder Cushioning - Lift, Tilt Engine/Hydraulic Systems Shutdown Glow Plugs (Automatically Activated) Horn Instrumentation: Engine Temperature & Fuel Gauges, Hourmeter, RPM and Warning Lights	M0247	1	\$44,256.00	\$44,256.00
	Lift Arm Support Lift Path: Vertical Lights, Front & Rear Operator Cab Includes: Adjustable Suspension Seat, Top & Rear Windows, Parking Brake, Seat Bar & 3-Point Seat Belt Roll Over Protective Structure (ROPS) meets SAE-J1040 & ISO 3471 Falling Object Protective Structure (FOPS) meets SAE- J1043 & ISO 3449, Level I; (Level II is available through Bobcat Parts) Spark Arrestor Exhaust System Tires: 31 x 12-16.5, 10 PR, Bobcat Heavy Duty Machine Warranty: 12 Months, unlimited hours Bobcat Engine Warranty: Additional 12 Months or total of 2000 hours after initial 12 month warranty			
A91 Option Package Cab enclosure with Heat and AC High Flow Hydraulics Sound Reduction Hydraulic Bucket Positioning	M0247-P01-A91	1	\$7,549.00	\$7,549.00
	Power Bob-Tach Deluxe Instrument Panel Keyless Start Attachment Control Kit Cab Accessories Package			
Selectable Joystick Controls (SJC)	M0247-R01-C04	1	\$763.00	\$763.00
Telematics US	M0247-R51-C02	1	\$0.00	\$0.00
74" Low Profile Bucket	6731421	1	\$1,129.00	\$1,129.00
--- Bolt-On Cutting Edge, 74"	6718007	1	\$210.00	\$210.00
18" Planer, High Flow	M7018	1	\$13,364.00	\$13,364.00
--- Drum 18 Fastcut	M7018-R01-C10	1	\$3,070.00	\$3,070.00
24" Planer, High Flow	M7017	1	\$16,121.00	\$16,121.00
--- Drum 24 Fastcut	M7017-R01-C04	1	\$4,163.00	\$4,163.00
SB200 Snowblower - 60" Width	M7001	1	\$4,488.00	\$4,488.00
--- 9.6 Hyd Motor Package (25 - 31 gpm)	M7001-R01-C04	1	\$1,171.00	\$1,171.00
Total of Items Quoted				\$96,284.00
Quote Total - US dollars				\$96,284.00

Notes:

6



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023**

Part I

Tracking # 425 - 19 - 04 Dept Name Highway Contact Person/Tel # 649-2310
 Prepared by James Hustins Signature James R. Hustins Date 2/14/18
 Fiscal Year Needed 19 Project Name Paving Equipment – Paver, Roller and Trailer

Expected Life of Item 10 (Yrs) Is this a replacement Item Yes Are Add'l Pages Attached _____

Total Current Estimated Cost \$ 75,000.00 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No

If yes, has this been completed? No (If yes, submit details and copies of documents including Consultant's Report)

Is this a Regulatory Compliance Requirement? No

Urgent Need? Yes

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

This equipment is being requested for use to repair roadways and sidewalks throughout town. It would be used in conjunction with the Bobcat Grinder attachment. This will not take the place of repairing an entire road, it will be used to repair small sections at a time.

Source of estimated cost (include copies of any backup information as appropriate):

Wacker Neuson Equipment and Equipment East Construction Equipment

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

We currently do not have equipment of this type to make small road repairs. Having the ability to make road repairs will provide for better safety and travel throughout the community.

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2019 to FY 2023

Reference: Project Name Paving Equipment – Paver, Roller and Trailer Tracking Number 425-19-04

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement
- Present Equipment Obsolete
- Replace Worn Out Equipment
- Reduce Personnel Time (ie, Payroll Savings)
- Expanded Service
- New Operation
- Increased Safety
- Improve Procedures, Records, Etc
- Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	<u> No </u>
Months Use per Year	<u> 12 </u>
Number of Weeks Use per Year	<u> 52 </u>
Average Days per Week Used	<u> As Needed </u>
Average Hours per Day Used	<u> As Needed </u>
Estimated Useful Life (in Years)	<u> 10 </u>

7



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023**

Part I

Tracking # 425 - 19 - 01 Dept Name Highway Contact Person/Tel # 649-2310
Prepared by James Hustins Signature _____ Date 1/5/18

Fiscal Year Needed 19 Project Name Replace 2007 6 wheel dump truck w/plow and sander (T8)

Expected Life of Item 10 (Yrs) Is this a replacement Item yes Are Add'l Pages Attached _____

Total Current Estimated Cost \$ 170,000.00 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No
If yes, has this been completed? No (If yes, submit details and copies of documents including Consultant's Report)

Is this a Regulatory Compliance Requirement? No

Urgent Need? Yes

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

This vehicle is used on a regular basis, another year of use will make this vehicle nearly useless. This year and model of truck are no longer in production therefore replacement parts are difficult and expensive to find.

Source of estimated cost (include copies of any backup information as appropriate):

Taylor and Lloyd

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

We currently do all the sanding with town equipment only. If any unit is out of service it may be necessary to rent or hire subcontract service to cover equipment needs.

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced

Replacing a 2007 6 wheel dump truck with plow and sander.



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2019 to FY 2023

Reference: **Project Name** Replace dump truck w/plow and sander (T8) **Tracking Number** 425-19-01

Purpose of expenditure: (Check as appropriate)

- () **Scheduled Replacement**
- () **Present Equipment Obsolete**
- (**X**) **Replace Worn Out Equipment**
- () **Reduce Personnel Time (ie, Payroll Savings)**
- () **Expanded Service**
- () **New Operation**
- () **Increased Safety**
- () **Improve Procedures, Records, Etc**
- () **Regulatory Compliance**

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	_____ No _____
Months Use per Year	_____ 12 _____
Number of Weeks Use per Year	_____ 52 _____
Average Days per Week Used	_____ 7 _____
Average Hours per Day Used	_____ 8 _____
Estimated Useful Life (in Years)	_____ 10 _____

Town of Tyngsborough
 Capital Project Departmental Summary
 Five Year Plan - Form 2
 FY19 to FY23

Submitting Dept Highway

Signature *James R. Hueter* Date *2-14-18*

Tracking #	Project Name	FY19	FY20	FY21	FY22	FY23	Total
425-19-01	6 wheel dump truck w/plow and sander (T-8)	\$170,000.00					\$170,000.00
425-19-02	Bobcat (1997) with snow blower, bucket and milling attachments	\$80,000.00					\$80,000.00
425-19-03	Bobcat Roadside Mowing Attachment	\$8,000.00					\$8,000.00
425-19-04	Paving Equipment - Paver, Roller and Trailer	\$75,000.00					\$75,000.00
425-20-01	6 wheel dump truck w/plow and sander (T-3)		\$170,000.00				\$170,000.00
425-21-01	6 wheel dump truck w/plow and sander (T-15)			\$170,000.00			\$170,000.00
425-22-01	6 wheel dump truck w/plow and sander (T-4)				\$170,000.00		\$170,000.00
425-23-01	6 wheel dump truck w/plow and sander (T-17)					\$170,000.00	\$170,000.00
425-23-02	1 ton Utility truck with plow (T-18)					\$60,000.00	\$60,000.00
Total		\$333,000.00	\$170,000.00	\$170,000.00	\$170,000.00	\$230,000.00	\$1,073,000.00

8



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2018 to FY 2022**

Part I

Tracking # 193-19-02 Dept. Name IT Contact Person/Tel # 978-743-5351

Prepared by Jason Bulger Signature _____ Date 1/15/2018

Fiscal Year Needed 19 Project Name GIS Implementation

Expected Life of Item 6 (Yrs) Is this a replacement Item N Are Add'l Pages Attached Y

Total Current Estimated Cost \$22,000 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No
If yes, has this been completed? _____ (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement? _____

Urgent Need? Yes

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

This will provide a publicly accessible, hosted web application featuring CAMA and GIS layer data, which will help planning, zoning, development and provide residents, contractors and potential tenants/residents with information they cannot currently access. It will provide in-house software to input and maintain this data. Public safety agencies will also be able to make use of this data.

Source of estimated cost (include copies of any backup information as appropriate):

Provided by Applied Geographis, ESRI and CDW-G. Purchasing will be done in accordance with Mass. General Law.

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

Many GIS resources are needed to satisfy federal and state laws (like wetland protection), and currently the Town lacks adequate resources to address them. Projects like this will reduce foot traffic to town hall, cut back on phone calls and requests for data, and provide information to spur economic development in town.

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.



**Town of Tyngsborough
 Capital Project Supplemental Information For Equipment Requests
 Five Year Plan – Form 1
 FY 2018 to FY 2022**

Reference:

Project Name GIS Implementation **Tracking Number:** 193-19-02

Purpose of expenditure: (Check as appropriate)

- () Scheduled Replacement
- () Present Equipment Obsolete
- () Replace Worn Out Equipment
- (X) Reduce Personnel Time (ie, Payroll Savings)
- (X) Expanded Service
- () New Operation
- (X) Increased Safety
- (X) Improve Procedures, Records, Etc
- (X) Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	_____ No _____
Months Use per Year	_____ 12 _____
Number of Weeks Use per Year	_____ 52 _____
Average Days per Week Used	_____ 7 _____
Average Hours per Day Used	_____ 24 _____
Estimated Useful Life (in Years)	_____ 7 _____

9



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2018 to FY 2022**

Part I

Tracking # 193-19-01 Dept. Name IT Contact Person/Tel # 978-743-5351

Prepared by Jason Bulger Signature _____ Date 1/15/2018

Fiscal Year Needed 19 Project Name Town Hall and Public Safety Server Connection

Expected Life of Item 6 (Yrs) Is this a replacement Item N Are Add'l Pages Attached Y

Total Current Estimated Cost \$22,600 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No
If yes, has this been completed? _____ (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement? _____

Urgent Need? Yes

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

There is no redundancy for the server setup at the Public Safety building. With the addition of dark fiber between the buildings, we could setup the two server environments to fail over to each other and provide instantaneous continuity. This project will pay for the labor, the licensing and the hardware to make this happen.

Source of estimated cost (include copies of any backup information as appropriate):

Provided by BCPi Computer consulting for the labor and CDW-G for the parts. Purchasing will be done in accordance with Mass. General Law.

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If not funded, equipment is much more likely to fail, resulting in an outage, and a loss of data.

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2018 to FY 2022

Reference:

Project Name Town Hall and Public Safety Server Connection **Tracking Number: 193-19-01**

Purpose of expenditure: (Check as appropriate)

- () **Scheduled Replacement**
- () **Present Equipment Obsolete**
- () **Replace Worn Out Equipment**
- () **Reduce Personnel Time (ie, Payroll Savings)**
- (X) **Expanded Service**
- () **New Operation**
- (X) **Increased Safety**
- (X) **Improve Procedures, Records, Etc**
- (X) **Regulatory Compliance**

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	_____ No _____
Months Use per Year	_____ 12 _____
Number of Weeks Use per Year	_____ 52 _____
Average Days per Week Used	_____ 7 _____
Average Hours per Day Used	_____ 24 _____
Estimated Useful Life (in Years)	_____ 6 _____

10



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023**

Part I

Tracking # 610-19-01 Dept. Name Library Contact Person/Tel # J.Sultzbach x160

Prepared by Justin Sultzbach Signature  Date 1/25/18

Fiscal Year Needed 2019 Project Name Library Carpet

Expected Life of Item 7 (Yrs) Is this a replacement Item Y Are Add'l Pages Attached Y

Total Current Estimated Cost \$45,618.32 Non-General Fund source: TBD

Was a Grant applied for in connection with this project? N If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? Y

If yes, has this been completed? N (If yes, submit details and copies of documents including Consultant's Report)

Is this a Regulatory Compliance Requirement? N

Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

The carpeting in the Library is reaching the end of it's usefull life. Attached photos show wear from foot traffic, stains from water damage and spills, and general wear and tear. By using carpet tiles, we will be able to extend the life of the carpet by swapping out trouble areas, tears, and stains without having to replaced the entire carpet.

Source of estimated cost (include copies of any backup information as appropriate):

Quote attached

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.

20 years old, original to the building



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2019 to FY 2023

Reference: Project Name Library Carpet _____ Tracking Number 610-19-01

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement
- Present Equipment Obsolete
- Replace Worn Out Equipment
- Reduce Personnel Time (ie, Payroll Savings)
- Expanded Service
- New Operation
- Increased Safety
- Improve Procedures, Records, Etc
- Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	_____
Months Use per Year	12 _____
Number of Weeks Use per Year	52 _____
Average Days per Week Used	7 _____
Average Hours per Day Used	10 _____
Estimated Useful Life (in Years)	7 _____

National Carpet & Flooring, Inc

PO Box 550
 1 Pawtucket Blvd
 Tyngsboro, MA 01879

Proposal**Proposal Date:** 1/26/2018**Proposal #:** Q12519**Project:****Bill To:**

Tyngsborough Public Library
 25 Bryant Lane
 Tyngsborough, MA 01879
 Attn: Justin Sultzbach
 978-979-2166

Description	Est. Hours/Qty.	U/M	Rate	Total
Scholarship II Carpet Tiles (any color) Main Library, Childrens Library & Break Room	1,056		22.77	24,045.12T
EnPress Adhesive	12		126.00	1,512.00T
Scholarship II Broadloom (any color) Childrens Library Platforms	54		15.84	855.36T
Take away old carpeting	1,110		1.50	1,665.00
Prevailing Wage Apprentice	144		61.92	8,916.48
Prevailing Wage Journeyman	144		55.44	7,983.36
Adhesive Platforms	2		40.00	80.00T
Cove Base	162		3.00	486.00T
Adhesive Cove Base	1		75.00	75.00T
Note: This quote does not include any moisture testing. Testing for moisture will be done prior to installation. This quote does not include any materials needed if there is moisture present. This quote does not include any abatement needs to resolve moisture or mold if present.				
Tax Exempt			0.00%	0.00

Thank you for the opportunity to provide you with a quote on this project.

Total**\$45,618.32**









1 1



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2018 to FY 2022**

Part I

Tracking # _____ Dept. Name _____ Media _____ Contact Person/Tel # Steve Brogan 978-726-9622

Prepared by Steve Brogan Signature _____ Date 1/5/2018

Fiscal Year Needed 2018/19 Project Name THS LIVE Meeting Room

Expected Life of Item 10 (Yrs) Is this a replacement Item No _____ Are Add'l Pages Attached _____

Total Current Estimated Cost \$25,000 Non-General Fund source: **PEG Funds & School Dept Funds**

Was a Grant applied for in connection with this project? No _____ If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No _____

If yes, has this been completed? _____ (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement? No _____

Urgent Need? Y (N)

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

The studio is a joint project with Tyngsborough PEG and the TPS with costs to be split 50/50 between the two departments. The studio will provide a permanent location for all school meetings to be recorded and broadcast as well as a secondary/overflow site for any other town meetings that must be recorded but were unable to access the two current (Media designated) TV recording rooms. The system will closely mirror the current community room meeting setup with 3 cameras, audio, and LIVE capabilities. Using the same type of equipment will allow for simpler training and coverage of meetings by any trained staff member (PEG or School Dept employee). The project is important due to the fact that currently many school meetings are not recorded or broadcast due to the current media designated rooms being unavailable or unsuitable.

Source of estimated cost (include copies of any backup information as appropriate):

Quote from Access A/V as well as comparison shopping of individual equipment prices on B&H Photo and Amazon.

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

The impact on the PEG and TPS operating budget is a 50% reduction in cost due to both departments splitting the cost to construct the studio.

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.

N/A



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2018 to FY 2022

Reference: Project Name THS LIVE Meeting Studio Tracking Number _____

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement
- Present Equipment Obsolete
- Replace Worn Out Equipment
- Reduce Personnel Time (ie, Payroll Savings)
- (a) Expanded Service
- New Operation
- Increased Safety
- (a) Improve Procedures, Records, Etc
- Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	No _____
Months Use per Year	12 _____
Number of Weeks Use per Year	52 _____
Average Days per Week Used	1 _____
Average Hours per Day Used	3-5 _____
Estimated Useful Life (in Years)	10 _____

12



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023**

Part I

Tracking # 215-19-01 Dept. Name Police Contact Person/Tel # Chief Howe

Prepared by Chief Howe Signature _____ Date _____

Fiscal Year Needed 2019 Project Name Voting Comparator / Gateway

Expected Life of Item 10 (Yrs) Is this a replacement Item YES Are Add'l Pages Attached No

Total Current Estimated Cost \$13,398 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No

If yes, has this been completed? _____ (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement?

Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

Voter Comparator/Gateway: Technology equipment that supports operation of dispatch consoles in communications, failure of this equipment results in failure of dispatch consoles

Source of estimated cost (include copies of any backup information as appropriate):

See Quote provided by Motorola Solutions

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.

Replacing equipment that is 20+ years old



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2019 to FY 2023

Reference: **Project Name** **Voting Comparator/Gateway** **Tracking Number 215-19-01**

Purpose of expenditure: (Check as appropriate)

- () **Scheduled Replacement**
- (**X**) **Present Equipment Obsolete**
- (**X**) **Replace Worn Out Equipment**
- () **Reduce Personnel Time (ie, Payroll Savings)**
- () **Expanded Service**
- () **New Operation**
- () **Increased Safety**
- () **Improve Procedures, Records, Etc**
- () **Regulatory Compliance**

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	<u>no</u>
Months Use per Year	<u>12</u>
Number of Weeks Use per Year	<u>52</u>
Average Days per Week Used	<u>7</u>
Average Hours per Day Used	<u>24</u>
Estimated Useful Life (in Years)	<u>10</u>



Quote Number: QU0000400062
Effective: 19 APR 2017
Effective To: 18 JUN 2017

Bill-To:
TYNGSBOROUGH POLICE DEPT
20 WESTFORD RD
TYNGSBORO, MA 01879
United States

Ultimate Destination:
TYNGSBOROUGH POLICE DEPT
20 WESTFORD RD
TYNGSBORO, MA 01879
United States

Attention:
Name: Deputy Chief Christopher Chronopoulos
Phone: 978-649-7504

Sales Contact:
Name: John DeGenova
Email: jdegenova@cybercomminc.com
Phone: (781) 247-3949

Contract Number: ITT57 MA STATE
Freight terms: FOB Destination
Payment terms: Net 45

Item	Quantity	Nomenclature	Description	List price	Your price	Extended Price
1	5	F2979A	MLC 8000	\$1,600.00	\$1,296.00	\$6,480.00
1a	5	VA00011AA	19INCH RACK MOUNT HARDWARE KIT CABINET OR RACK			
1b	5	VA00012AA	ADD: 120/240VAC TO +12VDC POWER ADAPTER			
1c	5	VA00784AA	ANALOG CONVENTIONAL VOTING COMPARATOR/GATEWAY			
2	3840	SVC03SVC0117D	SYSTEM UPGRADE SERVICES	\$1.00	\$1.00	\$3,840.00

Total Quote in USD

\$10,320.00

PLEASE MAKE PO OUT TO: MOTOROLA SOLUTIONS, INC. 225 CEDAR HILL STREET, SUITE 200 MARLBOROUGH, MA 01752. PLEASE MAIL A COPY TO THIS ADDRESS. PLEASE STATE ON PO, PER ITT57 MA STATE CONTRACT PRICING IS IN ACCORDANCE WITH THE ITT57 COMMONWEALTH OF MASSACHUSETTS CONTRACT. TERMS ARE NET 45 DAYS AFTER INVOICE DATE, ITEMS AS SHIPPED. TO EXPEDITE MATTERS, PLEASE FAX A COPY TO: 781-647-5943, ATTN: JOHN DEGENOVA. THANK YOU.

1. Terms subject to ITT57 as modified by the clarifications and terms/conditions. For a full list of terms/conditions please contact your Motorola representative.

2. PO Issued to Motorola Solutions Inc. must:

- >Be a valid Purchase Order (PO)/Contract/Notice to Proceed on Company Letterhead. Note: Purchase Requisitions cannot be accepted
- >Have a PO Number/Contract Number & Date
- >Identify "Motorola Solutions Inc." as the Vendor
- >Have Payment Terms or Contract Number
- >Be issued in the Legal Entity's Name
- >Include a Bill-To Address with a Contact Name and Phone Number
- >Include a Ship-To Address with a Contact Name and Phone Number
- >Include an Ultimate Address (only if different than the Ship-To)
- >Be Greater than or Equal to the Value of the Order
- >Be in a Non-Editable Format
- >Identify Tax Exemption Status (where applicable)

 4/27/17

13



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023**

Part I

Tracking # 215-19-02 Dept. Name Police Contact Person/Tel # Chief Howe

Prepared by Chief Howe Signature _____ Date _____

Fiscal Year Needed 2019 Project Name Fire Alarm Receiver

Expected Life of Item 10 (Yrs) Is this a replacement Item YES Are Add'l Pages Attached No

Total Current Estimated Cost \$24,722 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No

If yes, has this been completed? _____ (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement?

Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

Fire Alarm Receiver for dispatch with workstation/software and install

Source of estimated cost (include copies of any backup information as appropriate):

See Quote provided by KingFisher Company, inc.

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.

Replacing equipment that is 20+ years old



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2019 to FY 2023

Reference: Project Name Fire Alarm Receiver Tracking Number 215-19-02

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement
- Present Equipment Obsolete
- Replace Worn Out Equipment
- Reduce Personnel Time (ie, Payroll Savings)
- Expanded Service
- New Operation
- Increased Safety
- Improve Procedures, Records, Etc
- Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	<u>no</u>
Months Use per Year	<u>12</u>
Number of Weeks Use per Year	<u>52</u>
Average Days per Week Used	<u>7</u>
Average Hours per Day Used	<u>24</u>
Estimated Useful Life (in Years)	<u>10</u>



Tyngsborough Fire Department
Attn: Chief Wes Russel
26 Kendall Rd
Tyngsborough, MA 01879

Dear Chief Wes Russell,

This is an Evaluation Report for Fire Alarm Radio Receiving equipment in the town of Tyngsborough.

The Town of Tyngsborough currently has two of Kingfisher's "KFRAC" Single Receiver units. One unit is located at the Fire Station and the other at the Police Station. The unit at the Fire station is used as a backup receiver and the KFRAC unit at the Police Station for dispatching. Although the Fire Department's receiver is more than 10 years old, it does seem to be stable. Yet, the (KFRAC) Receiver at the Police station is much older which was installed sometime back in the early 90's. We have been there on numerous occasions over the past year or so to repair this receiver. These fixes were made as a temporary fix to a problem that is only a matter of time before the unit may start to act up again. My concern is that we will not be able to get replacement parts to fix this receiver again due to obsoleted components. Since the Police Station Receiver is the primary receiver I highly recommend upgrading this unit as soon as possible.

As Kingfisher does still support our legacy products and we do our best to maintain these older systems, unfortunately we are not able to manufacture some of the older boards due to obsoleted electronic components. As a result, we were forced to discontinue the KFRAC model. The good news is we have developed a new state of the art Computer Based Receiver Console. The new receiver "MCR2" is a direct replacement for the KFRAC which we recommend installing at the Police Station. Attached is a copy of our data sheets and an estimate for replacing the KFRAC unit at the Police Station with the new MCR2 and user interface Workstation.

Please feel free to contact me with any questions or concerns you may have.

Thank you,

Frank H. Carideo, Jr.

Business Development Manager

*Kingfisher Company, inc.
81 old Ferry Road
Lowell MA 01854
978-596-0214 x110*



Kingfisher Company, inc.

81 Old Ferry Road
 Lowell, MA 01854
 Fax (978) 596-0217

Phone (978) 596-0214 Sales

QUOTATION

Created: 1/24/2018

Updated: 1/24/2018

THIS QUOTE IS F.O.B.: LOWELL, MA
 THIS QUOTE IS VALID FOR SIXTY DAYS

******NOTICE******

Please check against your own takeoff and notify us immediately if you feel any discrepancies exist so that we may revise our quote accordingly.

JOB: Police Department Receiver Upgrade TYNGSBORO LCB 72.64 City TYNGSBORO ST MA, 01879	CUST. P.O. # SHIP VIA	SALESMAN OR.TAKEN
Sale Taxable? Yes	0.5000	

ITEM	QTY	PART #	DESCRIPTION	UNIT	AMOUNT
1	1	99440-s	RECEIVER, MCR2, SINGLE,	14,812.50	14,812.50
2	1	99441	WORKSTATION, MCR2,	3,450.00	3,450.00
3	1	97440	SOFTWARE, MCR2, GUI,	2,500.00	2,500.00
4	1	88440	SURGE SUPPRESSOR, ETHERNET, MCR2	125.00	125.00
5	1	91016-72-64	LIGHTNING ARRESTOR ASSEMBLY, BNC CONNECTOR	59.50	59.50
6	1	17033	BATTERY, 12V, 8 AH,	175.00	175.00
7	3	90003	FIELD SERVICE, U. S.,	1,200.00	3,600.00
8					
9					
10			<i>*Field service includes setup of MCR2 Software/Hardware and a 100% test of all Box Transmitters before and after the new Receiver is Installed!</i>		
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
TOTAL AS QUOTED					24,722.00

14



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023**

Part I

Tracking # 215-19-03 Dept. Name Police Contact Person/Tel # Chief Howe

Prepared by Chief Howe Signature _____ Date _____

Fiscal Year Needed 2019 Project Name Keyless Door security system

Expected Life of Item 20 (Yrs) Is this a replacement Item No Are Add'l Pages Attached No

Total Current Estimated Cost \$ 13,156 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No
If yes, has this been completed? _____ (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement?

Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

Keyless control entry system for all doors, upgraded security including evidence rooms.

Source of estimated cost (include copies of any backup information as appropriate):

American Alarm and Communications, Inc.

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.



**Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests**

**Five Year Plan – Form 1
FY 2019 to FY 2023**

Reference: Project Name Keyless door entry system Tracking Number 215-19-03

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement
- Present Equipment Obsolete
- Replace Worn Out Equipment
- Reduce Personnel Time (ie, Payroll Savings)
- Expanded Service
- New Operation
- Increased Safety
- Improve Procedures, Records, Etc
- Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	<u>no</u>
Months Use per Year	<u>12</u>
Number of Weeks Use per Year	<u>52</u>
Average Days per Week Used	<u>7</u>
Average Hours per Day Used	<u>24</u>
Estimated Useful Life (in Years)	<u>20</u>

Nov. 2015



American Alarm
AND COMMUNICATIONS, INC

297 Broadway
Arlington, Massachusetts 02474
Phone: (781) 641-2000
Toll Free: (800) 792-5142
Fax: (781) 641-2192
www.americanalarm.com

Contract for Construction of Security System and Provision of Related Services (B)

American Alarm agrees to install and/or provide service at (address of protected site):
for the following equipment (attach list if needed) which will become the property of the client:

Contract Date 9/14/2017	Customer P.O.	Sales Rep. Marty Patnaude, CPP	ID No. 88H	Key 51341
Customer Type Existing Client	System Type(s) ACCESS			
SITE LOCATION:		INVOICE TO:		
Town of Tyngsborough 20 Westford Road Tyngsborough MA 01879 Attention Jason Bulger Telephone No. 978-649-2300 x 140		Town of Tyngsborough 25 Bryant Lane Tyngsborough MA 01879-1042 Attention Accounts Payable Telephone No. 978-649-2300		

Scope
EXPAND TOWN DSX FOR POLICE DEPT.
INSTALL ACCESS CONTROL:(3) ADMIN DOORS,(1) EVIDENCE ROOM,(1) FRONT EXT. SIDE DOOR,(1) SALLY PORT, (1) HALL FROM CELL BLOCK,(1)ARMORY,(1) LOWER CAR LOCKER,(1) REAR EXTERIOR,(1) AMMUNITION, AND (1) FRONT LOBBY

Part Number	Qty	Item Description
DSX1048PKG NV	1	DSX 1048 8-DOOR CONTROLLER PACKAGE, NONVOL MEM MSTR BRD
DSX1042PKG NV	1	DSX 1042 2-DOOR CONTROLLER PACKAGE, NONVOL MEM
DSX1042	1	DSX 1042 2-DOOR CONTROLLER EXPANDER
DSXLAN	1	DSX LAN COMMUNICATIONS INTERFACE
DSXSWS150/28	2	DSX POWER SUPPLY 24VAC
HID910P	12	HID PROX ICLASS SE MINI READER R15
IM1270	4	INTERSTATE 12V 7.2AH BATTERY
HID2050PNNMN	100	HID PROX FOBS / KEY ICLASS *
WP182	1,500	CABLE 18/2 STR PLENUM
WPS2265CBOX	1,500	CABLE 22/6 PLENUM SHD
CC-1	30	CONDUIT & CLAMPS
FLYLOCK-10	1	SUBCONTRACTING - LOCK WORK
MC-1	1	MISC HARDWARE
I-36	1	INSTALLATION - PREVAILING WAGE

SPECIAL INSTRUCTIONS:	EQUIPMENT TOTAL	26,312.00
Client to provide 120V power, network drop & static IP & wall space at panel location	3 YEAR CONTRACT	
* FAC code and numbers to match 25 Bryant Ln Tyngsborough location	QUARTERLY IN ADVANCE \$	-
	DEPOSIT \$	13,156.00
One Year Parts & Labor Warranty	BALANCE \$	13,156.00

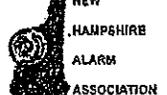
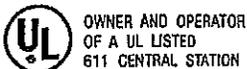
A ninety (90) day repair service policy covering parts and labor is included in the above price (see paragraphs 4 & 5 on reverse).
The above order is subject to the terms and conditions stated on the reverse side which the customer acknowledges have been read.
Order subject to applicable freight charges and permit fees.
CLIENT IS TAX EXEMPT
PRICES VALID FOR THIRTY (30) DAYS

AMERICAN ALARM & COMMUNICATIONS, INC.
M. Patnaude
Sales Representative
Authorized Representative

CLIENT
Town of Tyngsborough
COMPANY NAME
AUTHORIZED SIGNATURE / TITLE / DATE

"NEW ENGLAND'S TRUSTED SECURITY COMPANY"™

Page 1 of 1



MA LIC. 1212C

15



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2018 to FY 2022**

Part I

Tracking # 19-01 Dept. Name School/Town Contact Person/Tel # 649-7488
 Prepared by M. Flanagan Signature [Signature] Date 1/26/18
 Fiscal Year Needed 19 Project Name Turf Field Replacement

Expected Life of Item 10 (Yrs) Is this a replacement Item Y Are Add'l Pages Attached Y
 Total Current Estimated Cost \$900,000 Non-General Fund source: _____
 Was a Grant applied for in connection with this project? No If yes, submit a copy
 Is a Design, Study, Bid Specification, or Consultant required for this project? Yes
 If yes, has this been completed? No (If yes, submit details and copies of documents
 Including Consultant's Report)
 Is this a Regulatory Compliance Requirement? No
 Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

Source of estimated cost (include copies of any backup information as appropriate):

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.

12yo Turf field



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2018 to FY 2022

Reference: Project Name Turf Field Replacement Tracking Number _____

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement
- Present Equipment Obsolete
- Replace Worn Out Equipment
- Reduce Personnel Time (ie, Payroll Savings)
- Expanded Service
- New Operation
- Increased Safety
- Improve Procedures, Records, Etc
- Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	<u>9/12 months (Dec. → Feb. closed)</u>
Months Use per Year	<u>9</u>
Number of Weeks Use per Year	<u>40</u>
Average Days per Week Used	<u>7</u>
Average Hours per Day Used	<u>8-10</u>
Estimated Useful Life (in Years)	<u>10+</u>

Part II - Pierce Field Replacement Project

Need: As you know, Pierce Field opened on the grounds of THS in October, 2006 and was a welcomed addition for the community. Currently it is utilized from March through November by Physical Education classes at both THS and TMS, and then after school hours by all athletic teams at THS and TMS, and many community youth sports groups including Youth Football, soccer, lacrosse, as well as the recreation department's track and field program.

Recent tests of Pierce Field confirm that the GMAX (impact) rating is still in an acceptable range, however, the playability of the field is poor. This means that the artificial grass has split and in many places, coming right out of the base. The result is a compacted turf with little give, thereby causing balls to travel faster and making falls for athletes more impactful.

Budgetary Impact: This capital project would not directly effect our operating budget, however, it is important to recognize the savings it would provide in terms of manual labor to maintain the field. These costs include fertilizer, paint, mowing and general upkeep.

Tyngsborough Stadium Renovation
Synthetic Turf and Running Track Renovation

JJA Sports, LLC
1/10/2016

	Area	Synthetic Turf with Four Lane Track and D-Areas Unit Price Infill Turf SBR with Track with Urethane	Unit Price Infill Turf w/Pad and Rubber Coated Sand	Synthetic Turf with Six Lane Track and D-Areas Unit Price Infill Turf SBR with Track with Urethane	Unit Price Infill Turf w/Pad and Rubber
	SY				
Track 6 Lanes	3511			\$ 458,346.81	\$ 458,346.81
Track 4 Lanes	2411	\$ 314,750.82	\$ 314,750.82		
Track D-Areas (2)	2356	\$ 307,498.49	\$ 307,498.49	\$ 307,498.49	\$ 307,498.49
Synthetic Turf Field	8911	\$ 612,006.20	\$ 886,210.00	\$ 612,006.20	\$ 886,210.00
Net Construction Total		\$ 1,234,255.51	\$ 1,508,459.31	\$ 1,377,851.51	\$ 1,652,055.31

Program for Track: Remove and replace asphalt and existing surface, regrade gravel base, new 3" pavement, trench drain, and 1/2" thick urethane bounded rubber structural spray track Unit Price \$ 130.54

Program for Turf w/ SBR Infill: Remove and replace turf with 2.25" product, remove top 2" of stone, replace and regrade stone, install turf system with SBR rubber and sand infill Unit Price \$ 68.68

Program for Turf w/TPE Infill and Pad: Remove and replace turf with 2.00" product, remove top 2" of stone, replace with 1" stone and regrade stone, install geotech and pad, install turf system with Latex Coated Sand Infill Unit Price \$ 99.45

Notes: Unit prices are based on composite prices and 2016 dollars. The track unit price includes aggregate base, pavement, track surface, jumping event areas, drainage stormwater infiltration in the d-areas, an outer perimeter asphaltic concrete walk, and a section of fencing along the main straight. The synthetic turf unit prices include removal, base renovation, the new turf and the noted turf infill and padding system.

ON-SITE TESTING GMAX IMPACT EVALUATION



Project Information

Project Name	Tyngsborough High School- Pierce Football Field ASTM F1936 Gmax Impact Evaluation		
Client Info	Tyngsborough Public Schools 50 Norris Road Tyngsborough, MA 01879	Site Info	Tyngsborough High School 36 Norris Road Tyngsborough, MA 01879
Report Date	3/25/2016	Test Date	3/24/2016
Report Status	Final	Job no.	90848/934s
Prepared by	Kieran O'Donnell Field Operation Manager		
Checked by	Jeffrey Gentile Laboratory Director		

Notes:

1. This report has been prepared by Sports Labs USA with all reasonable skill, care and diligence within the terms of the contract with the Client and within the limitations of the resources devoted to it.
2. This report is confidential to the Client and Sports Labs USA accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.
3. This report shall not be used for engineering or contractual purposes unless signed by the Author and the Checker and unless the report status is "Final."

Summary

Sports Labs USA was commissioned to perform on-site Gmax impact testing per ASTM F1936. A complete test was performed in accordance with the ASTM F1936 Standard. The results have been summarized in the quick reference table below. Complete results and background can be found in the subsequent sections of this report.

Quick Reference Results Summary

	Average	(min)	Range	(max)	Max per ASTM
Gmax (g's)	132	122	to	139	200
Infill Depth (mm)	31	29	to	34	n/a
Head Injury Criteria (HIC)*	396	349	to	430	1,000*

*HIC is included as a reference to account for impact duration and is not a requirement of the ASTM F1936.

INFORMATION, ADVICE & KNOW-HOW: FROM THE SYNTHETIC SPORTS SURFACE EXPERTS



SPORTS LABS USA

Unit #2 • 155 River Road • Bow • New Hampshire • 03304
Telephone: (603) 715-5453 • E-Mail: Info@sportslabsusa.com

March 25, 2016 • Page 1 of 7



ON-SITE TESTING GMAX IMPACT EVALUATION



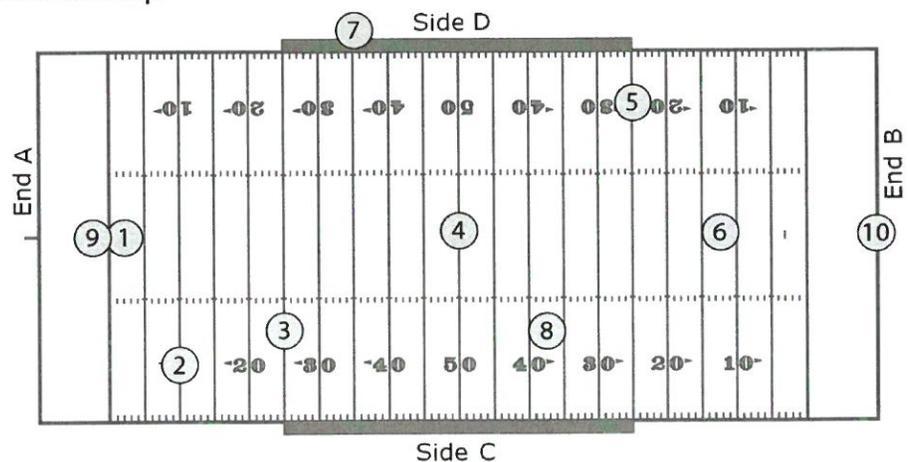
Table Contents

Project Information 1
 Summary 1
 Location Map 2
 Results Table 3
 Results Graphs 4
 Overall Photo 5
 Method Background 6
 End of Report 7

General Information

Testing Device	ASTM F1936 Apparatus TRIAX 2010 Data Acquisition	Test Method	ASTM F1936-10 ASTM F355 Procedure A
Install Date	n/p	Test Date	3/24/2016
Field Orientation	End A = East	Primary Sport	Football
Product Info	n/p	Infill System	SBR Rubber & Sand
Underlayment	None	Air Temp (° F)	40
Humidity %	57	Weather Conditions	Overcast
Misc Field Notes	None		

Location Map



INFORMATION, ADVICE & KNOW-HOW: FROM THE SYNTHETIC SPORTS SURFACE EXPERTS



SPORTS LABS USA

Unit #2 • 155 River Road • Bow • New Hampshire • 03304
 Telephone: (603) 715-5453 • E-Mail: Info@sportslabsusa.com



ON-SITE TESTING GMAX IMPACT EVALUATION



Results Table

Loc #	Drop #	Gmax (g's)	H.I.C	Location Description	Gmax Avg (g's)	Infill Depth (mm)	HIC Avg (HIC)	Surface Temp (°F)
1	1	122	346	Goal Line, End A, field centerline	138	31	421	65
	2	138	423					
	3	137	418					
2	1	105	280	10 Yard Line, End A, 63 ft from field centerline to the Side C	125	34	369	56
	2	122	358					
	3	127	380					
3	1	122	348	25 Yard Line End A, 40 ft from field centerline to Side C	136	29	418	60
	2	135	411					
	3	137	425					
4	1	121	343	field centerline	137	31	423	58
	2	136	418					
	3	138	427					
5	1	104	268	25 Yard Line, East end, 63 ft from field centerline to Side D	126	33	370	61
	2	123	361					
	3	128	379					
6	1	117	314	12 Yard Line, End B, field centerline	139	29	430	60
	2	137	423					
	3	141	437					
7	1	115	320	North Team area, Side D	131	32	398	62
	2	129	390					
	3	133	406					
8	1	107	286	37 Yard Line, End B, 40 ft from the field centerline to Side C	122	34	349	60
	2	119	337					
	3	124	360					
9	1	119	334	6 ft from Goal Line to the back of the End Zone, End A, field centerline	137	30	416	60
	2	135	407					
	3	139	425					
10	1	111	300	6 ft from the back of the End Zone to the Goal Line, End B, field centerline	127	29	363	59
	2	125	359					
	3	129	367					
Averages:					132	31	396	60

INFORMATION, ADVICE & KNOW-HOW: FROM THE SYNTHETIC SPORTS SURFACE EXPERTS



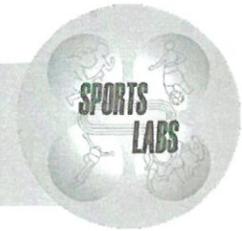
SPORTS LABS USA

Unit #2 • 155 River Road • Bow • New Hampshire • 03304
Telephone: (603) 715-5453 • E-Mail: Info@sportslabsusa.com

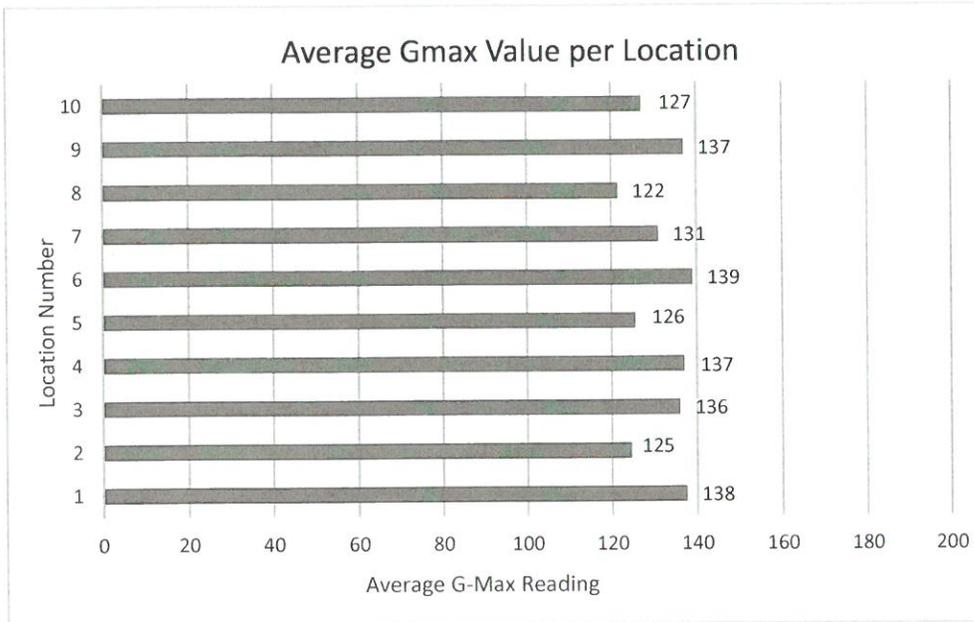
March 25, 2016 • Page 3 of 7



ON-SITE TESTING GMAX IMPACT EVALUATION



Results Graphs



INFORMATION, ADVICE & KNOW-HOW: FROM THE SYNTHETIC SPORTS SURFACE EXPERTS

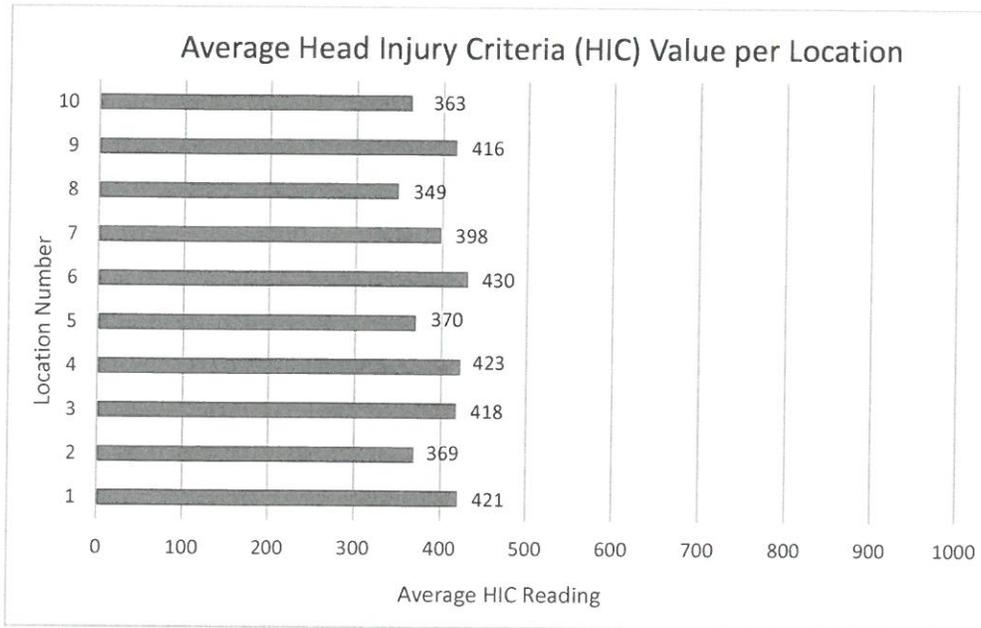


SPORTS LABS USA

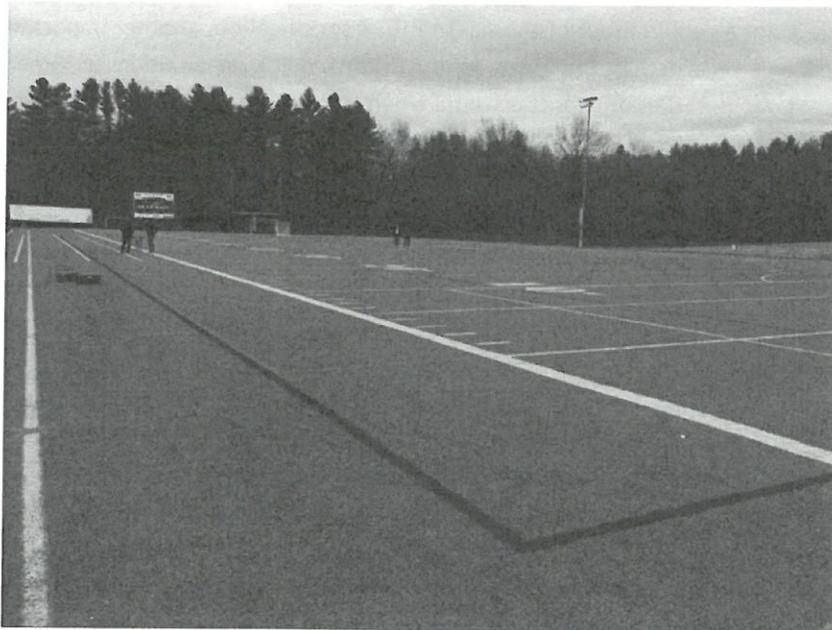
Unit #2 • 155 River Road • Bow • New Hampshire • 03304
Telephone: (603) 715-5453 • E-Mail: Info@sportslabsusa.com



ON-SITE TESTING GMAX IMPACT EVALUATION



Overall Photo



INFORMATION, ADVICE & KNOW-HOW: FROM THE SYNTHETIC SPORTS SURFACE EXPERTS



SPORTS LABS USA

Unit #2 • 155 River Road • Bow • New Hampshire • 03304
Telephone: (603) 715-5453 • E-Mail: Info@sportslabsusa.com

March 25, 2016 • Page 5 of 7



ON-SITE TESTING GMAX IMPACT EVALUATION



Method Background

ASTM F355 Procedure A and ASTM F1936 are test methods used to measure the impact attenuation properties of synthetic turf playing systems. ASTM F355 Procedure A covers the overall test method and ASTM 1936 specifies the method for measurement in the field on an installed synthetic turf playing surface.

The test procedure involves dropping a 20 lb impacting missile three times at each location from a consistent height of 24 inches. The test is typically performed at 10 locations. The locations are based on the primary sport and the discretion of the tester. The first drop conditions / compacts the loose infill. This value is recorded but not included in the location average. The second and third drops are recorded and averaged for the location average. The location averages are used to determine the field average.

The impacting missile contains an accelerometer sensor that measures the magnitude of deceleration (measured in units of gravity or g's) for the duration of impact. The deceleration measured during impact creates a curve. The peak of that curve is referred to as the "Gmax". This is the primary value measured with this test. The maximum allowable Gmax as specified in the current ASTM F1936 test specification is 200 g's.

Although it is not a requirement of the ASTM-F1936 specification, another important value determined and recorded is the Head Injury Criteria (HIC). In addition to Gmax (peak deceleration), the duration of impact is useful when attempting to assess the probability for a potential head injury. HIC takes into account both the deceleration and the duration by using a mathematical interrogation of the impact deceleration curve over a time interval. HIC is typically determined using a hemispherical impacting missile. Research has been performed using a hemispheric impacting missile that related HIC values to the probability at which a head injury will occur as a result of an impact generating fall. This research produced a graphical display of this relationship called the "Expanded Prasad/Mertz Curves". These curves are based on data from cadaver experiments in which the relationship between HIC scores, skull fracture, and brain damage were observed. To reiterate, the HIC head injury probability curves were determined using a hemispherical impacting missile as is used in playground testing. They should be interpreted cautiously but can be very helpful when attempting to understanding the severity of impact values. In reference to the playground standard (ASTM F1292), the maximum recommended value for HIC is 1000. For reference, the head injury probability charts can be found on the following page.

INFORMATION, ADVICE & KNOW-HOW: FROM THE SYNTHETIC SPORTS SURFACE EXPERTS



FanPlay Friendship Forum

SPORTS LABS USA

Unit #2 • 155 River Road • Bow • New Hampshire • 03304
Telephone: (603) 715-5453 • E-Mail: Info@sportslabsusa.com

March 25, 2016 • Page 6 of 7



ON-SITE TESTING GMAX IMPACT EVALUATION



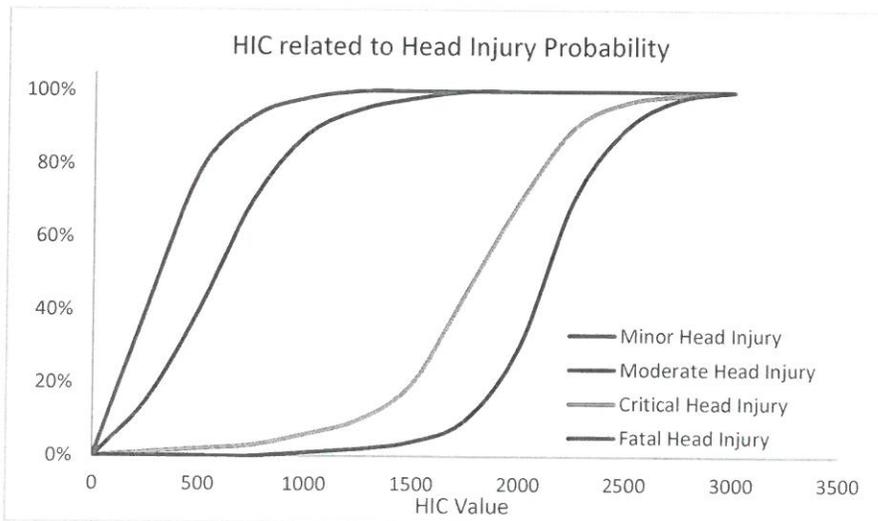
HIC Related to Head Injury Probability

HIC Value	Minor Head Injury	Moderate Head Injury	Critical Head Injury	Fatal Head Injury
0	0%	0%	0%	0%
250	40%	20%	0%	0%
500	80%	40%	2%	0%
750	95%	70%	4%	0%
1000	98%	90%	8%	2%
1250	100%	95%	10%	2%
1500	100%	98%	20%	4%
1750	100%	100%	45%	10%
2000	100%	100%	70%	30%
2250	100%	100%	90%	70%
2500	100%	100%	95%	90%
2750	100%	100%	98%	95%
3000	100%	100%	100%	100%

Minor Head Injury: A skull trauma without loss of consciousness; fracture of nose or teeth; superficial face injuries.

Moderate Head Injury: A skull trauma with or without dislocated skull fracture and brief loss of consciousness. Fracture of facial bones, without dislocation; deep wound(s).

Critical Injury: A skull trauma with loss of consciousness for 12 hrs and having permanent brain damage.



Example of the "Expanded Prasad-Mertz Curve"

End of Report

INFORMATION, ADVICE & KNOW-HOW: FROM THE SYNTHETIC SPORTS SURFACE EXPERTS



SPORTS LABS USA

Unit #2 • 155 River Road • Bow • New Hampshire • 03304
Telephone: (603) 715-5453 • E-Mail: Info@sportslabsusa.com

March 25, 2016 • Page 7 of 7



16



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2018 to FY 2022**

Part I

Tracking # 19-01 Dept. Name School Contact Person/Tel # 649-7488
 Prepared by M. Flanagan Signature [Signature] Date 1/26/18
 Fiscal Year Needed 19 Project Name Multi Function School Activity Bus

Expected Life of Item 7 (Yrs) Is this a replacement Item No Are Add'l Pages Attached Yes

Total Current Estimated Cost \$60,000 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? No
 If yes, has this been completed? _____ (If yes, submit details and copies of documents including Consultant's Report)

Is this a Regulatory Compliance Requirement? No

Urgent Need? Y (N)

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

Source of estimated cost (include copies of any backup information as appropriate):

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2018 to FY 2022

Reference: Project Name Multi Function School Activity Bus Tracking Number 19-01

Purpose of expenditure: (Check as appropriate)

- () Scheduled Replacement
- () Present Equipment Obsolete
- () Replace Worn Out Equipment
- () Reduce Personnel Time (ie, Payroll Savings)
- (✓) Expanded Service
- (✓) New Operation
- () Increased Safety
- () Improve Procedures, Records, Etc
- () Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	<u>No</u>
Months Use per Year	<u>12</u>
Number of Weeks Use per Year	<u>52</u>
Average Days per Week Used	<u>3-4</u>
Average Hours per Day Used	<u>4</u>
Estimated Useful Life (in Years)	<u>7-10</u>

Part II - Multi Function School Activity Bus

Need: The top request for the school department this year is a Multi Function School Activity Bus. This bus/van will be able to transport up to 15 students to activities including conferences, athletic events, and other school related activities as identified in student IEP's. Our recent bus contract has made it cost prohibitive for small groups to travel, thereby limiting our ability to provide a comprehensive educational experience. Currently, all of our travel occurs on typical sized school busses as contracted through Dee Bus. Owning a district MFSAB would enable us to expand programming and opportunities in a fiscally responsible manner.

Budgetary Impact: In a recent study of bus bills, we identified over \$21,000 of spending on busses that were mostly empty carrying as many as 13 students and as few as 6. Purchase of a MFSAB would prove to be a savings to the district and would be recognized in approximately three years. Though other costs would be associated with a MFSAB, gas, insurance, driver stipend (details to be determined), we are confident that the long term benefit of the MFSAB will increase opportunities for students and provide a cost savings.

Upon approval, the school district would begin the process of identifying drivers and creating a working policy for the MFSAB that ensures compliance with all statutory regulations.

From: **Jim Borsari** jimborsari@alliancebusgroup.com
Subject: Re: DRW - 14 passenger
Date: January 9, 2018 at 12:43 PM
To: **Michael Flanagan** michael.flanagan@tyngsboroughps.org

Mike,

2019 14 passenger DRW MFSAB delivered price would be \$60,000.00. I have attached a picture. Please let me know if I could help with anything else.

Sincerely

Jim Borsari

Alliance Bus Group Inc.
National Accounts Manager
Direct 603.402.7025
E-Fax 201.636.8392
JimBorsari@AllianceBusGroup.com

Along for the Whole Ride

GA | NY/NJ | TX | FL | LA | MS | New England



Built on the most impressive drive train available, the Collins Transport gives you greater efficiency with less fuel. The bus' narrow body maneuvers easily, even on the tightest roads. Superior front-end visibility improves safety for drivers and up to 18⁺ passengers. Delivering all that, covered by the best warranty in the business.

Buy Smart, Drive Smart.

▶ Narrow body design that offers easy vehicle maneuverability

- ▶ Large view-out window reduces blind-spots and enhances visibility
- ▶ Innovative structural design provides unparalleled safety and features an exclusive one-piece tubular roof bow design
- ▶ Industry leading external storage compartment
- ▶ Attoona tested simulating seven years and 200,000 miles of wear
- ▶ 5-Year body warranty and limited lifetime paint warranty

*Washes based on your state and the options selected. (Photo shown with optional equipment.)



On Jan 9, 2018, at 12:33 PM, Michael Flanagan <michael.flanagan@tyngsboroughps.org> wrote:

Jim,
I am requesting a quote for a 14 passenger MFSAB that meets non cdl requirements.
Thanks,
Mike

Michael Flanagan, Ed.D.
Superintendent of Schools
Tyngsborough Public Schools
50 Norris Road
Tyngsborough, MA 01879

--- NOTICE ---

This message is for the designated recipient only and may contain confidential, privileged or proprietary information. If you have received it in error, please notify the sender immediately and delete the original and any copy or printout. Unintended recipients are prohibited from making any other use of this e-mail.

Be advised that the Attorney General has ruled that communication by e-mail in the public domain is not confidential. In compliance with Federal Rules of Civil Procedure (FRCP) all email communication will be archived and retained for at least three years.

The Tyngsborough Public Schools does not discriminate against students, parents, employees or the general public on the basis of race, color, national origin, sex, sexual orientation, gender identity, disability, religion, or age.

17



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2019 to FY 2023

Reference: Project Name Interior Paint – Town Hall and Library Tracking Number 123-19-01

Purpose of expenditure: (Check as appropriate)

- () Scheduled Replacement
- () Present Equipment Obsolete
- () Replace Worn Out Equipment
- () Reduce Personnel Time (ie, Payroll Savings)
- () Expanded Service
- () New Operation
- () Increased Safety
- () Improve Procedures, Records, Etc
- () Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	N
Months Use per Year	12
Number of Weeks Use per Year	52
Average Days per Week Used	7
Average Hours per Day Used	24
Estimated Useful Life (in Years)	5



81 Front Street
 Merrimack, NH 03053
 P: 978-398-5774
 Fastpropainters@hotmail.com

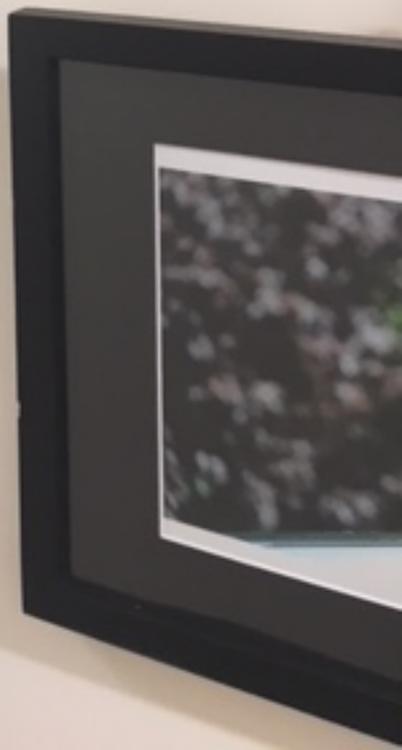
Estimate

FastPro

For: Justin Sultzbach
 jsultzbach@tyngsboroughma.gov

Estimate No: 57
 Date: 01/26/2018

Description	Quantity	Rate	Amount
Tyngsboro City hall Interior painting project Scope of work : make room to work (move cabinet files and furniters) preparation : patch any holes in walls , calk any cracks , sand all walls abd trim finish painting : paint all walls and trim 2 coats Roughly estimated	1	\$65,000.00	\$65,000.00
		Subtotal	\$65,000.00
		TAX 0%	\$0.00
		Total	\$65,000.00
Total			\$65,000.00













18



**Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2019 to FY 2023**

Part I

Tracking # 000 - 19 - 01 Dept Name Selectmen/TA Contact Person/Tel #978-649-2300 x100
Prepared by Justin Sultzbach Signature *JBACH* Date 1/15/18

Fiscal Year Needed 19 Project Name Winslow School Asbestos Hazardous Materials Abatement

Expected Life of Item 0 (Yrs) Is this a replacement Item no Are Add'l Pages Attached yes

Total Current Estimated Cost \$ 120,000.00 Non-General Fund source: _____

Was a Grant applied for in connection with this project? No If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? Yes
If yes, has this been completed? Yes (If yes, submit details and copies of documents
Including Consultant's Report)

Is this a Regulatory Compliance Requirement? No

Urgent Need? Yes

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

No matter what decision is made regarding the Winslow Schools, the hazardous materials will have to be removed. This can either make demo easier later, make it easier for the town to renovate later, or make it more appealing to a private developer seeking to save the structure.

Source of estimated cost (include copies of any backup information as appropriate):

Asbestos Environmental Consultants (see attached report)

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2019 to FY 2023

Reference:Project Name Winslow School Asbestos Hazardous Materials Abatement **Tracking Number**
000-19-01

Purpose of expenditure: (Check as appropriate)

- () **Scheduled Replacement**
- () **Present Equipment Obsolete**
- () **Replace Worn Out Equipment**
- () **Reduce Personnel Time (ie, Payroll Savings)**
- () **Expanded Service**
- () **New Operation**
- (x) **Increased Safety**
- () **Improve Procedures, Records, Etc**
- () **Regulatory Compliance**

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?	_____ No _____
Months Use per Year	_____ 0 _____
Number of Weeks Use per Year	0 _____
Average Days per Week Used	_____ 0 _____
Average Hours per Day Used	_____ 0 _____
Estimated Useful Life (in Years)	_____ 0 _____



Asbestos Environmental Consultants
PO Box 1193
Lowell, MA 01853
Phone: (617) 922-3203 Fax: (978) 455-8883

**HAZARDOUS MATERIALS
INSPECTION
REPORT**

For

**Winslow School
Mr. Justin Sultzbach
250 Middlesex St.
Tyngsborough, MA 01879**

INSPECTION DATES:

January 23, 2018

INSPECTION CONDUCTED BY:

**ASBESTOS ENVIRONMENTAL CONSULTANTS
PO BOX 1193
LOWELL, MA. 01853**



1.0 INTRODUCTION:

Asbestos Environmental Consultants (AEC) was contracted by the Winslow School, Mr. Justin Sultzbach to conduct a hazardous materials inspection for Asbestos Containing Building Materials (ACBM) at 250 Middlesex St., Tyngsborough, MA 01879.

The scope of work included the inspection of accessible and inaccessible Suspected ACBM in a representative of the property. Within the interior of structure, spaces were thoroughly inspected and bulk samples were collected from materials suspected to contain asbestos. The ACBM was categorized by type, location and quantity. Recommendations for remediation were developed and the costs for removal and disposal of the ACBM were estimated.

All suspect asbestos materials were grouped into homogenous areas. By definition a homogenous area is one in which the materials are evenly mixed and similar in appearance and texture throughout.

The asbestos inspection was conducted in accordance with Massachusetts' regulations 453 CMR 6.00 and NESHAP regulations 29 CFR 1926.

Other potentially hazardous materials such as light ballasts, florescent light, were inspected.

2.0 FINDINGS:

One Hundred and fourteen samples were analyzed and the results are in Appendix "A". Ten different materials were found to be Asbestos containing building materials "ACBM" and seven materials were assumed to be asbestos containing building materials "ACBM".

All paints are assumed to be lead containing paint due to age of the property.

Asbestos:

A. Number of Samples Collected

One Hundred and Fourteen samples were collected at various locations from homogenous building materials suspected of containing asbestos, including:

- Window glazing
- Ceiling Plaster
- Black board glue daub
- Wall plaster
- 9"X9" brown tile with small stripes



Asbestos Environmental Consultants
 PO Box 1193
 Lowell, MA 01853
 Phone: (617) 922-3203 Fax: (978) 455-8883

- Black mastic Under 9"X9" brown tiles with stripes
- Black paper under wood flooring
- Black paper under fiber board
- Green slate board
- Glue behind green slate board
- Ceiling joint compound
- Attic insulation
- Black paper under roof shingles
- Black roof shingles
- Basement rusted pipe insulation
- Basement pipe insulation
- Basement boiler insulation
- Glue on board in basement classroom
- Basement elbow insulation
- Basement green 9"X9" tiles
- Basement black 9"X9" tiles
- Basement black mastic under 9"X9" tiles Green and black
- Basement ceiling plaster on exposed beam
- Attic black wires

B. Sample Results

The following suspect materials were found to be ACM:

<i>Type of Material</i>	<i>Result</i>
• Window glazing	2% Chrysotile
• Mezzanine 9"X9" brown tiles with stripes	2% Chrysotile
• Black mastic under 9"X9" brown tiles with stripes	10% Chrysotile
• Basement white pipe insulation	20% Chrysotile
• Boiler insulation	10% Amosite & 20% Chrysotile
• Basement's classroom glue behind board	5% Chrysotile
• Basement elbow insulation	10% Amosite & 20% Chrysotile
• Basement green 9"X9" tiles	5% Chrysotile
• Black mastic behind green and black tiles	10% Chrysotile
• Basement black 9"X9" tiles	5% Chrysotile

The following items were assumed to be ACM:

<i>Type of Material</i>	<i>Result</i>
• Black paper behind wood siding	
• Flashing	
• Window & brick metal flashing	



- Paper between chimney and building
- 4 sinks
- 10 black boards (slates)
- 200' City water pipes

Sample results are included in Appendix A.

C. Observations and Recommendations

The regulations for asbestos inspection are based on representative sampling. It would be impractical and costly to sample all materials in all areas. Therefore, representative samples of each homogenous area were collected and analyzed.

A homogeneous area shall be determined to contain asbestos based on findings that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1 percent.

Based on the above, we have the following recommendations:

Prior to the renovation or demolition of the building, each ACM and ACBM listed above must be removed and disposed by a Massachusetts licensed asbestos abatement contractor.

D. Summary of Data and Cost Estimates

The data on ACBM is summarized in the following table. The cost estimates are for removal and disposal. Other hazardous materials are also listed with estimated costs for removal and disposal.

TABLE OF ACBM

ACBM Location	Type of Material	Approximate Quantity	Cost Estimate (\$)
Windows	Glazing	3000 LF	\$ 9,000.00
1 st floor	9"X9" brown tiles	2100 SF	\$ 6,300.00
1 st floor	Black mastic under 9"X9" tiles	2100 SF	\$ 4,200.00
1 st floor and basement	Black slate boards	10 each	\$ 1,500.00
Basement	White pipe insulation	350 LF	\$ 7,000.00
Basement	Boiler Insulation	400 SF	\$ 8,000.00



Asbestos Environmental Consultants
 PO Box 1193
 Lowell, MA 01853
 Phone: (617) 922-3203 Fax: (978) 455-8883

Basement	Boiler Breach	80 SF	\$ 1,600.00
Basement	Glue behind board	550 SF	\$ 1,100.00
Basement	Elbow Insulation	105 SF	\$ 2,625.00
Basement	Green & black 9"X9" tiles	500 SF	\$ 1,500.00
Basement	Black mastic under green & black tiles	500 SF	\$ 1,000.00
TOTAL:			\$ 43,825.00

TABLE OF ASSUMED ACBM

ACBM Location	Type of Material	Approximate Quantity	Cost Estimate (\$)
Behind Wood siding	Black paper	11150 SF	\$ 33,450.00
Roof	Flashing	800 LF	\$ 6,400.00
Chimney & building	Black paper	60 SF	\$ 180.00
Window & brick	Metal flashing	600 LF	\$ 1,800.00
1 st floor	Sinks	2 Each	\$ 90.00
Basement	Sinks	2 Each	\$ 90.00
Basement	Black board	10 Each	\$ 1,500.00
Basement	Boiler brick base	200 CF	\$ 3,000.00
Underground	City water pipes	200 LF	\$ 5,000.00
TOTAL:			\$ 51,510.00

Lead:

All paint are assumed to be lead containing paints due to age of the property.

Other Hazardous Materials:

210 Fluorescent lights 4', 40 Fluorescent lights 8' and 195 Ballasts and 12 Thermostats. Interior wall and window paint assumed to be lead contained.

TABLE OF OTHER HAZARDOUS MATERIAL

Material Location	Type of Material	Approximate Quantity	Cost Estimate (\$)
Building lights	Fluorescent light	250 Each	\$ 300.00



Asbestos Environmental Consultants
 PO Box 1193
 Lowell, MA 01853
 Phone: (617) 922-3203 Fax: (978) 455-8883

Inside building	Ballasts	195 Each	\$ 975.00
Inside building	Thermostats	12 Each	\$ 540.00
Basement	Boiler Demolition Only	1 Each	\$ 3,000.00
TOTAL:			\$ 4,815.00

3.0 DESCRIPTION OF SURVEY METHODS AND LABORATORY ANALYSES:

Asbestos:

Bulk material samples were taken from various locations throughout the building. Bulk material samples were analyzed using Polarized Light Microscopy and dispersion staining techniques with EPA method 600/R-93/116.

Lead:

N/A

Report prepared by:

Barry Safarpour
 Asbestos Inspector License #AI 61435



Asbestos Environmental Consultants
PO Box 1193
Lowell, MA 01853
Phone: (617) 922-3203 Fax: (978) 455-8883

Appendix "A"



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131800496

Customer ID: ASEC78

Customer PO:

Project ID:

Attention: Barry Safarpour
Asbestos Environmental Consultants
PO Box 1193
Lowell, MA 01853

Phone: (617) 922-3203

Fax: (978) 455-8883

Received Date: 01/24/2018 1:45 PM

Analysis Date: 01/25/2018

Collected Date: 01/23/2018

Project: 250 Middlesex Rd., Tyngsborough, MA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
0123-06-A1A <small>131800496-0001</small>	Window #1 - Glazing	Gray/White Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
0123-06-A1B <small>131800496-0002</small>	Window #3 - Glazing				Positive Stop (Not Analyzed)
0123-06-A1C <small>131800496-0003</small>	Window #4 - Glazing				Positive Stop (Not Analyzed)
0123-06-A1D <small>131800496-0004</small>	Window #6 - Glazing				Positive Stop (Not Analyzed)
0123-06-A1E <small>131800496-0005</small>	Window #10 - Glazing				Positive Stop (Not Analyzed)
0123-06-A1F <small>131800496-0006</small>	Window #13 - Glazing				Positive Stop (Not Analyzed)
0123-06-A1G <small>131800496-0007</small>	Window #20 - Glazing				Positive Stop (Not Analyzed)
0123-06-A2A <small>131800496-0008</small>	Classroom #1 - Ceiling Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A2B <small>131800496-0009</small>	Classroom #2 - Ceiling Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A2C <small>131800496-0010</small>	Classroom #3 - Ceiling Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A2D <small>131800496-0011</small>	Classroom #4 - Ceiling Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A2E <small>131800496-0012</small>	Classroom #5 - Ceiling Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A2F <small>131800496-0013</small>	Classroom #6 - Ceiling Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A2G <small>131800496-0014</small>	Classroom #7 - Ceiling Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A3A <small>131800496-0015</small>	Black Board Classroom #1 - Glue Daub	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A3B <small>131800496-0016</small>	Black Board Classroom #3 - Glue Daub	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/25/2018 13:22:43



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com/bostonlab@emsl.com>

EMSL Order: 131800496
Customer ID: ASEC78
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
0123-06-A3C <small>131800496-0017</small>	Black Board Classroom #8 - Glue Daub	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A4A <small>131800496-0018</small>	Classroom #1 - Wall Plaster	Gray Non-Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A4B <small>131800496-0019</small>	Classroom #2 - Wall Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A4C <small>131800496-0020</small>	Classroom #3 - Wall Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A4D <small>131800496-0021</small>	Classroom #4 - Wall Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A4E <small>131800496-0022</small>	Classroom #5 - Wall Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A4F <small>131800496-0023</small>	Classroom #6 - Wall Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A4G <small>131800496-0024</small>	Classroom #7 - Wall Plaster	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
0123-06-A5A <small>131800496-0025</small>	Mezzanine #1 - 9"x9" Brown Tiles w/Stripes	Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
0123-06-A5B <small>131800496-0026</small>	Hallway by Stair #1 - 9"x9" Brown Tiles w/Stripes				Positive Stop (Not Analyzed)
0123-06-A5C <small>131800496-0027</small>	Hallway by Stair #2 - 9"x9" Brown Tiles w/Stripes				Positive Stop (Not Analyzed)
0123-06-A5D <small>131800496-0028</small>	Hallway by Classroom #7 - 9"x9" Brown Tiles w/Stripes				Positive Stop (Not Analyzed)
0123-06-A5E <small>131800496-0029</small>	Hallway by Stair #4 - 9"x9" Brown Tiles w/Stripes				Positive Stop (Not Analyzed)
0123-06-A6A <small>131800496-0030</small>	Mez. #1 - Black Mastic Under 9"x9" Brown Tile	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A6B <small>131800496-0031</small>	Hallway by Stair #1 - Black Mastic Under 9"x9" Brown Tile	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A6C <small>131800496-0032</small>	Hallway by Stair #2 - Black Mastic Under 9"x9" Brown Tile	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A6D <small>131800496-0033</small>	Hallway by Classroom #7 - Black Mastic Under 9"x9" Brown Tile	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A6E <small>131800496-0034</small>	Hallway by Stair #4 - Black Mastic Under 9"x9" Brown Tile	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
0123-06-A7A <small>131800496-0035</small>	Class #7 LS - Black Paper Under Wood Flooring	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

Initial report from: 01/25/2018 13:22:43



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com/bostonlab@emsl.com>

EMSL Order: 131800496
Customer ID: ASEC78
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
0123-06-A7B <small>131800496-0036</small>	Class #7 RS - Black Paper Under Wood Flooring	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
0123-06-A7C <small>131800496-0037</small>	Class #8 LS - Black Paper Under Wood Flooring	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
0123-06-A7D <small>131800496-0038</small>	Class #8 in Middle - Black Paper Under Wood Flooring	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
0123-06-A7E <small>131800496-0039</small>	Class #8 RS - Black Paper Under Wood Flooring	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
0123-06-A8A <small>131800496-0040</small>	Classroom #1 - Black Paper Under Fiberboard	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
0123-06-A8B <small>131800496-0041</small>	Classroom #3 - Black Paper Under Fiberboard	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
0123-06-A8C <small>131800496-0042</small>	Classroom #4 - Black Paper Under Fiberboard	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
0123-06-A8D <small>131800496-0043</small>	Classroom #5 - Black Paper Under Fiberboard	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
0123-06-A8E <small>131800496-0044</small>	Classroom #6 - Black Paper Under Fiberboard	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
0123-06-A9A <small>131800496-0045</small>	Classroom #1 - Slate Green Board	Gray/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A9B <small>131800496-0046</small>	Classroom #2 - Slate Green Board	Gray/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A9C <small>131800496-0047</small>	Classroom #3 - Slate Green Board	Gray/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A9D <small>131800496-0048</small>	Classroom #4 - Slate Green Board	Gray/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A9E <small>131800496-0049</small>	Classroom #5 - Slate Green Board	Gray/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A9F <small>131800496-0050</small>	Classroom #6 - Slate Green Board	Gray/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A9G <small>131800496-0051</small>	Classroom #7 - Slate Green Board	Gray/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A10A <small>131800496-0052</small>	Classroom #2 - Glue Behind Slate Board	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A10B <small>131800496-0053</small>	Classroom #5 - Glue Behind Slate Board	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A10C <small>131800496-0054</small>	Classroom #8 - Glue Behind Slate Board	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/25/2018 13:22:43



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131800496

Customer ID: ASEC78

Customer PO:

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
0123-06-A11A 131800496-0055	Hallway by Stairs #1 - Ceiling Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A11B 131800496-0056	Hallway in Middle - Ceiling Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A11C 131800496-0057	Hallway by Stairs #4 - Ceiling Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0123-06-A12A 131800496-0058	Attic RSF - Insulation	Tan Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
0123-06-A12B 131800496-0059	Attic RSM - Insulation	Tan Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
0123-06-A12C 131800496-0060	Attic RSB - Insulation	Tan Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
0123-06-A12D 131800496-0061	Attic BS - Insulation	Tan Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
0123-06-A12E 131800496-0062	Attic LSB - Insulation	Tan Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
0123-06-A12F 131800496-0063	Attic LSM - Insulation	Tan Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
0123-06-A12G 131800496-0064	Attic LSF - Insulation	Tan Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
0123-06-A12H 131800496-0065	Attic Middle - Insulation	Tan Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
0123-06-A12I 131800496-0066	Attic FS (Stairs #1) - Insulation	Tan Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
0123-06-A13A 131800496-0067	Roof Front Side by Stair #1 - Black Paper Under Shingle	Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
0123-06-A13B 131800496-0068	Roof L Side - Black Paper Under Shingle	Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
0123-06-A13C 131800496-0069	Roof B Side - Black Paper Under Shingle	Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
0123-06-A13D 131800496-0070	Roof R Side - Black Paper Under Shingle	Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
0123-06-A13E 131800496-0071	Roof Middle - Black Paper Under Shingle	Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
0123-06-A14A 131800496-0072	Roof Front Side by Stair #1 - Black Shingle (Roof)	Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
0123-06-A14B 131800496-0073	Roof L Side - Black Shingle (Roof)	Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected

Initial report from: 01/25/2018 13:22:43



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131800496
Customer ID: ASEC78
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
0123-06-A14C <small>131800496-0074</small>	Roof B Side - Black Shingle (Roof)	Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
0123-06-A14D <small>131800496-0075</small>	Roof R Side - Black Shingle (Roof)	Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
0123-06-A14E <small>131800496-0076</small>	Roof Middle - Black Shingle (Roof)	Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
0123-06-A15A <small>131800496-0077</small>	Basement by Stairs FS - Rusted Pipe Insulation	Brown/White Fibrous Homogeneous	80% Cellulose 10% Synthetic	10% Non-fibrous (Other)	None Detected
0123-06-A15B <small>131800496-0078</small>	Basement by Stairs Middle - Rusted Pipe Insulation	Brown/White Fibrous Homogeneous	80% Cellulose 10% Synthetic	10% Non-fibrous (Other)	None Detected
0123-06-A15C <small>131800496-0079</small>	Basement by Stairs BS - Rusted Pipe Insulation	Brown/White Fibrous Homogeneous	90% Cellulose 10% Synthetic		None Detected
0123-06-A16A <small>131800496-0080</small>	Basement by Stairs FS - White Pipe Insulation	White Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
0123-06-A16B <small>131800496-0081</small>	Basement by Boiler LS - White Pipe Insulation				Positive Stop (Not Analyzed)
0123-06-A16C <small>131800496-0082</small>	Basement by Boiler RS - White Pipe Insulation				Positive Stop (Not Analyzed)
0123-06-A16D <small>131800496-0083</small>	Basement Last Room RS - White Pipe Insulation				Positive Stop (Not Analyzed)
0123-06-A16E <small>131800496-0084</small>	Basement Last Room LS - White Pipe Insulation				Positive Stop (Not Analyzed)
0123-06-A17A <small>131800496-0085</small>	Basement Boiler Area LS - Boiler Insulation	White Fibrous Homogeneous		70% Non-fibrous (Other)	10% Amosite 20% Chrysotile
0123-06-A17B <small>131800496-0086</small>	Basement Top of Boiler - Boiler Insulation				Positive Stop (Not Analyzed)
0123-06-A17C <small>131800496-0087</small>	Breach on LS - Boiler Insulation				Positive Stop (Not Analyzed)
0123-06-A18A <small>131800496-0088</small>	Basement Class LS - Glue on Board	Gray Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
0123-06-A18B <small>131800496-0089</small>	Basement Class RS - Glue on Board				Positive Stop (Not Analyzed)
0123-06-A18C <small>131800496-0090</small>	Basement Class BS - Glue on Board				Positive Stop (Not Analyzed)
0123-06-A19A <small>131800496-0091</small>	Basement 1st Elbow by Boiler - Elbow Insulation	White Fibrous Homogeneous		70% Non-fibrous (Other)	10% Amosite 20% Chrysotile
0123-06-A19B <small>131800496-0092</small>	Basement 2nd Elbow by Boiler - Elbow Insulation				Positive Stop (Not Analyzed)

Initial report from: 01/25/2018 13:22:43



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131800496
Customer ID: ASEC78
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
0123-06-A19C <small>131800496-0093</small>	Basement 3rd Elbow by Boiler - Elbow Insulation				Positive Stop (Not Analyzed)
0123-06-A19D <small>131800496-0094</small>	Basement 4th Elbow by Boiler - Elbow Insulation				Positive Stop (Not Analyzed)
0123-06-A19E <small>131800496-0095</small>	Basement 5th Elbow by Boiler - Elbow Insulation				Positive Stop (Not Analyzed)
0123-06-A19F <small>131800496-0096</small>	Basement 6th Elbow by Boiler - Elbow Insulation				Positive Stop (Not Analyzed)
0123-06-A19G <small>131800496-0097</small>	Basement 7th Elbow by Boiler - Elbow Insulation				Positive Stop (Not Analyzed)
0123-06-A19H <small>131800496-0098</small>	Basement 8th Elbow by Boiler - Elbow Insulation				Positive Stop (Not Analyzed)
0123-06-A19I <small>131800496-0099</small>	Basement 9th Elbow by Boiler - Elbow Insulation				Positive Stop (Not Analyzed)
0123-06-A20A <small>131800496-0100</small>	Basement LS - Green 9"x9" Tile	Green Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
0123-06-A20B <small>131800496-0101</small>	Basement Middle - Green 9"x9" Tile				Positive Stop (Not Analyzed)
0123-06-A20C <small>131800496-0102</small>	Basement RS - Green 9"x9" Tile				Positive Stop (Not Analyzed)
0123-06-A21A <small>131800496-0103</small>	Basement LS - Black Mastic Behind 9"x9" Green Tile	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
0123-06-A21B <small>131800496-0104</small>	Basement Middle - Black Mastic Behind 9"x9" Green Tile				Positive Stop (Not Analyzed)
0123-06-A21C <small>131800496-0105</small>	Basement RS - Black Mastic Behind 9"x9" Green Tile				Positive Stop (Not Analyzed)
0123-06-A22A <small>131800496-0106</small>	Basement LS - Black 9"x9" Tile	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
0123-06-A22B <small>131800496-0107</small>	Basement Middle - Black 9"x9" Tile				Positive Stop (Not Analyzed)
0123-06-A22C <small>131800496-0108</small>	Basement RS - Black 9"x9" Tile				Positive Stop (Not Analyzed)
0123-06-A23A <small>131800496-0109</small>	Basement Exposed Beam FS - Ceiling Plaster Insulation	Gray/White Fibrous Homogeneous	<1% Hair	100% Non-fibrous (Other)	None Detected
0123-06-A23B <small>131800496-0110</small>	Basement Exposed Beam Middle - Ceiling Plaster Insulation	Gray/White Fibrous Homogeneous	<1% Hair	100% Non-fibrous (Other)	None Detected
0123-06-A23C <small>131800496-0111</small>	Basement Exposed Beam BS - Ceiling Plaster Insulation	Gray/White Non-Fibrous Homogeneous	<1% Hair	100% Non-fibrous (Other)	None Detected

Initial report from: 01/25/2018 13:22:43



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131800496
Customer ID: ASEC78
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
0123-06-A24A <small>131800496-0112</small>	Attic FS - Black Wires	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
0123-06-A24B <small>131800496-0113</small>	Attic Middle - Black Wires	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
0123-06-A24C <small>131800496-0114</small>	Attic BS - Black Wires	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected

Analyst(s)

Elizabeth Stutts (41)

Kevin Pine (41)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, Maine Bulk Asbestos LB-0039

Initial report from: 01/25/2018 13:22:43



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

131800496

EMSL ANALYTICAL, INC.
5 CONSTITUTION WAY,
UNIT A
WOBURN, MA 01801
PHONE: (781) 933-8411
FAX: (781) 933-8412

Company : Asbestos Environmental Consultants [ASEC78]		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: PO Box 1193		<i>Third Party Billing requires written authorization from third party</i>	
City: Lowell	State/Province: MA	Zip/Postal Code: 01853	Country: USA
Report To (Name): Barry Safarpoor		Telephone #: 617-922-3203	
Email Address: aec.barry@comcast.net		Fax #: 978-455-8883	Purchase Order:
Project Name/Number: 250 Middlesex Rd., Tyngsborough		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken: MA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	
Turnaround Time (TAT) Options* – Please Check			
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input checked="" type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week
<small>*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.</small>			
PLM - Bulk (reporting limit)		TEM - Bulk	
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)		<input type="checkbox"/> TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1	
<input type="checkbox"/> PLM EPA NOB (<1%)		<input type="checkbox"/> NY ELAP Method 198.4 (TEM)	
Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)		<input type="checkbox"/> Chatfield Protocol (semi-quantitative)	
Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)		<input type="checkbox"/> TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2	
<input type="checkbox"/> NIOSH 9002 (<1%)		<input type="checkbox"/> TEM Qualitative via Filtration Prep Technique	
<input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)		<input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique	
<input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)		Other	
<input type="checkbox"/> OSHA ID-191 Modified		<input type="checkbox"/>	
<input type="checkbox"/> Standard Addition Method			
<input checked="" type="checkbox"/> Check For Positive Stop – Clearly Identify Homogenous Group		Date Sampled:	
Samplers Name: <i>B. Safarpoor</i>		Samplers Signature: <i>[Signature]</i>	
Sample #	HA #	Sample Location	Material Description
0123-06-A1a		Window #1	Clazing
0123-06-A1b		Window #3	"
0123-06-A1c		" #4	"
0123-06-A1d		" #6	"
0123-06-A1e		" #10	"
0123-06-A1f		" #13	"
0123-06-A1g		" #20	"
0123-06-A2a		classroom #1	Ceiling plaster
0123-06-A2b		" #2	
0123-06-A2c		" #3	
Client Sample # (s): 0123-06-A1a		- 0123-06-A24c	Total # of Samples: 114
Relinquished (Client): <i>[Signature]</i>		Date: 1/24/18	Time:
Received (Lab):		Date:	Time:
Comments/Special Instructions: <i>Charge es.</i>			



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

131800496

EMSL ANALYTICAL, INC.
5 CONSTITUTION WAY, UNIT A
WOBURN, MA 01801

PHONE: (781) 933-8411
FAX: (781) 933-8412

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
0123-06-A2d		classroom # 4	ceiling plaster
0123-06-A2e		↳ # 5	↳
0123-06-A2f		↳ # 6	↳
0123-06-A2g		↳ # 7	↳
0123-06-A3a		black board classroom # 1	blue Duro
0123-06-A3b		↳ # 3	↳
0123-06-A3c		↳ # 8	↳
0123-06-A4a		classroom # 1	wall plaster
0123-06-A4b		↳ # 2	↳
0123-06-A4c		↳ # 3	↳
0123-06-A4d		↳ # 4	↳
0123-06-A4e		↳ # 5	↳
0123-06-A4f		↳ # 6	↳
0123-06-A4g		↳ # 7	↳
0123-06-A5a		mar. # 1	9"x9" brown tiles w/ stripes
0123-06-A5b		hallway by stair # 1	↳
0123-06-A5c		hallway by stair # 2	↳
0123-06-A5d		↳ classroom # 7	↳
0123-06-A5e		↳ stair # 4	↳
0123-06-A6a		mar. # 1	black mastic under 9"x9" brown tiles
0123-06-A6b		hallway by stair # 1	↳
0123-06-A6c		↳ # 2	↳
0123-06-A6d		↳ classroom # 7	↳
0123-06-A6e		↳ stair # 4	↳
*Comments/Special Instructions:			

Page 2 of 6 pages



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

131800496

EMSL ANALYTICAL, INC.
5 CONSTITUTION WAY, UNIT A
WOBURN, MA 01801

PHONE: (781) 933-8411
FAX: (781) 933-8412

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
0123-06- A7a		Steel class # 7 LS	Black paper under window
0123-06- A7b		" " # 7 RS	"
0123-06- A7c		" " # 8 LS	"
0123-06- A7d		" " # 8 in middle	"
0123-06- A7e		" " # 8 RS	"
0123-06- A8a		classroom # 1	Black paper under fiberboard
0123-06- A8b		" " # 3	" "
0123-06- A8c		" " # 4	" "
0123-06- A8d		" " # 5	" "
0123-06- A8e		" " # 6	" "
0123-06- A9a		classroom # 1	slate green board
0123-06- A9b		" " # 2	"
0123-06- A9c		" " # 3	"
0123-06- A9d		" " # 4	"
0123-06- A9e		" " # 5	"
0123-06- A9f		" " # 6	"
0123-06- A9g		" " # 7	"
0123-06- A10a		Blackboard classroom # 2	blue behind slateboard
0123-06- A10b		" " # 5	"
0123-06- A10c		" " # 8	"
0123-06- A11a		Hallway by stairs # 1	Ceiling joint compound
0123-06- A11b		" " in middle	"
0123-06- A11c		" " by stairs # 4	"
0123-06- A12a		Attic RSF	Insulation

*Comments/Special Instructions:

Page 3 of 6 pages

REC'D 13:45 EDS
EMSL-BOSTON JAN 24 2018



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

131800496

EMSL ANALYTICAL, INC.
5 CONSTITUTION WAY, UNIT A
WOBURN, MA 01801

PHONE: (781) 933-8411
FAX: (781) 933-8412

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
0123-06-A12b		Attic R Sm	Insulation
0123-06-A12c		" R S B	"
0123-06-A12d		" B S	"
0123-06-A12e		" L S B	"
0123-06-A12f		" L S m	"
0123-06-A12g		" L S f	"
0123-06-A12h		" middle	"
0123-06-A12i		" FS (stairs #1)	"
0123-06-A13a		Roof Front side by stairs #1	Black paper under shingle
0123-06-A13b		Roof L side	"
0123-06-A13c		Roof B side	"
0123-06-A13d		Roof R side	"
0123-06-A13e		Roof middle	"
0123-06-A14a		Roof front side by stairs #1	Black shingle (roof)
0123-06-A14b		" L side	"
0123-06-A14c		" B side	"
0123-06-A14d		" R side	"
0123-06-A14e		" middle	"
0123-06-A15a		Basement by stairs FS	Rusted P.R. Insulation
0123-06-A15b		" middle	"
0123-06-A15c		" B S	"
0123-06-A16a		Basement by stairs FS	white P.R. Insulation
0123-06-A16b		" by boiler L S	"
0123-06-A16c		" " R S	"

*Comments/Special Instructions:

Page 4 of 6 pages

REC'D 13:45EJ
EMSL-BOSTON JAN 24 2018



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

131800496

EMSL ANALYTICAL, INC.
5 CONSTITUTION WAY, UNIT A
WOBURN, MA 01801
PHONE: (781) 933-8411
FAX: (781) 933-8412

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
0123-06-A16d		Basement last room RS	white pipe insulation
0123-06-A16e		Basement " LS	" "
0123-06-A17a		Basement Boiler area LS	Boiler Insulation
0123-06-A17b		" Top of Boiler	"
0123-06-A17c		Break on LS	"
0123-06-A18a		Basement class LS	Glue on board
0123-06-A18b		" " RS	"
0123-06-A18c		" " RS	"
0123-06-A19a		Basement 1 st elbow by boiler	Elbow Insulation
0123-06-A19b		" 2 nd "	"
0123-06-A19c		" 3 rd "	"
0123-06-A19d		" 4 th "	"
0123-06-A19e		" 5 th "	"
0123-06-A19f		" 6 th "	"
0123-06-A19g		" 7 th "	"
0123-06-A19h		" 8 th "	"
0123-06-A19i		" 9 th "	"
0123-06-A20a		Basement LS	Green 9"x9" tile
0123-06-A20b		" middle	"
0123-06-A20c		" RS	"
0123-06-A21a		Basement LS	Black mastic behind 9"x9" Green Tile
0123-06-A21b		" middle	"
0123-06-A21c		" RS	"
0123-06-A22a		Basement LS	Black 9"x9" tile
*Comments/Special Instructions:			



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

11/09/17

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Circle Business Ins. Agcy, Inc 247 Newbury Street Danvers, MA 01923	CONTACT NAME: Lori A. Cote PHONE (A/C, No, Ext): 978-777-5619 E-MAIL ADDRESS: lcote@circleinsurance.net		FAX (A/C, No): 978-777-4898
	INSURER(S) AFFORDING COVERAGE		NAIC #
INSURED Asbestos Environmental Consult Barry Safarpoomonfared PO Box 1193 Lowell, MA 01853	INSURER A: Admiral Insurance		
	INSURER B:		
	INSURER C:		
	INSURER D:		
	INSURER E:		
	INSURER F:		

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			FEIECC1063204	10/17/17	10/17/18	EACH OCCURRENCE	\$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 50,000
	<input checked="" type="checkbox"/> Pollution Liability						MED EXP (Any one person)	\$ 5,000
	<input checked="" type="checkbox"/> Professional Liab						PERSONAL & ADV INJURY	\$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE
	<input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			PRODUCTS - COMP/OP AGG	\$ 2,000,000		\$	
	OTHER:						\$	
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$
	<input type="checkbox"/> ANY AUTO						BODILY INJURY (Per person)	\$
	<input type="checkbox"/> OWNED AUTOS ONLY	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident)	\$
	<input type="checkbox"/> HIRED AUTOS ONLY	<input type="checkbox"/> NON-OWNED AUTOS ONLY					PROPERTY DAMAGE (Per accident)	\$
								\$
	UMBRELLA LIAB						EACH OCCURRENCE	\$
	<input type="checkbox"/> OCCUR						AGGREGATE	\$
	EXCESS LIAB							\$
	<input type="checkbox"/> CLAIMS-MADE							\$
	DED							\$
	RETENTION \$							\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE	OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y / N					E.L. EACH ACCIDENT	\$
	If yes, describe under DESCRIPTION OF OPERATIONS below	<input type="checkbox"/> N / A					E.L. DISEASE - EA EMPLOYEE	\$
							E.L. DISEASE - POLICY LIMIT	\$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

Proof Of Insurance:
 Asbestos Environmental Consultants
 PO Box 1193
 Lowell, MA 01853

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Maria R. Castaldi

Asbestos Project Monitor

BAHRAM SAFARPOORMONFA

Eff. Date 01/23/17

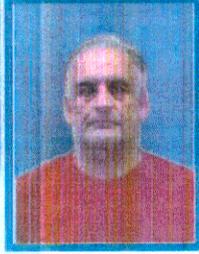
Exp. Date 01/23/18

AM061113

Member of C.O.N.E.S.

BOSR BOS-RENEW

18



Asbestos Designer

BAHRAM SAFARPOORMONFA

Eff. Date 08/21/17

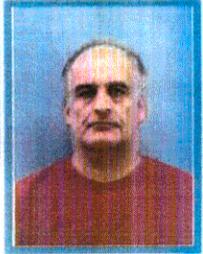
Exp. Date 08/21/18

AD900336

Member of C.O.N.E.S.

BOSR BOS-RENEW

18



Asbestos Management Planner

BAHRAM SAFARPOORMONFA

Eff. Date 08/21/17

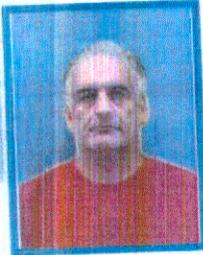
Exp. Date 08/21/18

AP000072

Member of C.O.N.E.S.

BOSR BOS-RENEW

18



Asbestos Inspector

BAHRAM SAFARPOORMONFA

Eff. Date 08/21/17

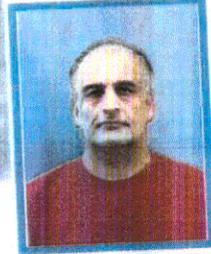
Exp. Date 08/21/18

AI061435

Member of C.O.N.E.S.

BOSR BOS-RENEW

18



19



Town of Tyngsborough
Capital Project Item Justification Request
Five Year Plan - Form 1
FY 2018 to FY 2022

Part I

Tracking # 162 1901 Dept. Name Elections Contact Person/Tel # JShifras

Prepared by JShifras Signature JShifras Date 1/10/17

Fiscal Year Needed 2019 Project Name VOTING MACHINES
 *and booths (\$8,500)

Expected Life of Item 20 (Yrs) Is this a replacement Item X Are Add'l Pages Attached —

Total Current Estimated Cost \$33,800 Non-General Fund source: —

Was a Grant applied for in connection with this project? — If yes, submit a copy

Is a Design, Study, Bid Specification, or Consultant required for this project? NO
 If yes, has this been completed? — (If yes, submit details and copies of documents including Consultant's Report)

Is this a Regulatory Compliance Requirement? —

Urgent Need? Y N

Part II

Detailed description to include explanation of need, general specifications, with explanation of significance and reason for timing:

REPLACEMENT OF CURRENT VOTING MACHINES

Source of estimated cost (include copies of any backup information as appropriate):

VENDOR - LHS

Detailed explanation of impact on operating budget (Include impact if funded, ie savings etc, and also if NOT funded):

If item is replacing a like item (including vehicles or equipment), list age, condition, mileage etc of equipment to be replaced.

CURRENT MACHINES ACQUIRED 1996



Town of Tyngsborough
Capital Project Supplemental Information For Equipment Requests
Five Year Plan – Form 1
FY 2018 to FY 2022

Reference: Project Name VOTING MACHINES Tracking Number 1621901

Purpose of expenditure: (Check as appropriate)

- Scheduled Replacement
- Present Equipment Obsolete
- Replace Worn Out Equipment
- Reduce Personnel Time (ie, Payroll Savings)
- Expanded Service
- New Operation
- Increased Safety
- Improve Procedures, Records, Etc
- Regulatory Compliance

Usage: (Answer as appropriate)

Estimated Usage of Requested Item:

Will this item be used on a seasonal basis only?

Every election

Months Use per Year

—

Number of Weeks Use per Year

—

Average Days per Week Used

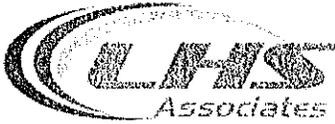
1 to 4 times/yr

Average Hours per Day Used

13⁺

Estimated Useful Life (in Years)

20



10 Manor Parkway Unit B Salem, NH 03079
Toll Free: 888-547-8683 Fax: 603-212-0028 www.lhsassociates.com

December 1, 2017

Ms. Joanne Shifres
Town Clerk
Town of Tyngsborough
25 Bryants Lane
Tyngsborough, MA 01879
978-649-2300

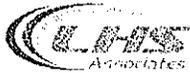
Ms. Shifres,
Thank you for allowing LHS Associates, Inc. the opportunity to provide you with a quote for new Electronic Vote Tabulators. I am pleased to present the following quote for the purchase of:

Five (5) ImageCast Precinct Bundles

If you have any further questions please contact me directly.

Sincerely,

Paul Balukonis
Customer Relations Manager
LHS Associates, Inc.



Town of Tyngsborough, Massachusetts
Purchase Proposal Quote
 Submitted by LHS Associates, Inc.
 December 1, 2017



<u>Quantity</u>	<u>Description</u>	<u>Price</u>
HARDWARE		
	ICP Tabulator Bundle includes:	
4	<ul style="list-style-type: none"> ✓ One (1) Tabulator with a padded carrying case, two (2) memory cards, one (1) power cord, one (1) key set, two (2) thermal paper rolls, one (1) dozen marking pens, six (6) security seals and an internal battery back up. ✓ One (1) plastic ballot box with three (3) compartments, casters and a built in power supply. Ballot boxes are able to nest for ease of storage. 	\$22,800.00
	Spare ICP Tabulator includes:	
1	<ul style="list-style-type: none"> ✓ One (1) Tabulator with a padded carrying case, two (2) memory cards, one (1) power cord, one (1) key set, two (2) thermal paper rolls, one (1) dozen marking pens, six (6) security seals and an internal battery back up. 	\$4,500.00
SERVICES		
	Two Year Hardware & Software Warranty:	Included
	<ul style="list-style-type: none"> ✓ All parts, labor, travel and shipping costs included. ✓ Unlimited access to the LHS Help Desk for Pre-Election, Election Day and Post Election questions. ✓ An annual maintenance visit to the Town of Tyngsborough to inspect, calibrate and service all equipment. ✓ Any necessary repairs will take place in the Town of Tyngsborough. If onsite repair is not possible loaner equipment will be left in the customer's possession until all equipment can be repaired and returned. ✓ An employee of LHS, not a subcontractor, will conduct all maintenance work. ✓ A locally based service center with parts and technicians trained in repairing and servicing voting equipment. 	
	Documentation, including but not limited to:	Included
	<ul style="list-style-type: none"> ✓ One (1) Pre Election Testing Guide, Four (4) Poll Worker Training Guides, One (1) Voter Tutorial Video and One (1) Instructions to Voter Poster. 	
	Two Training sessions exclusively for the Town of Tyngsborough.	Included
	<ul style="list-style-type: none"> ✓ Two hours of training for the Town Clerk and office staff. This training will cover basic use of the machine, pre-election testing and Election Day procedures. ✓ Two hours of training for Poll Workers. This training will cover Election day procedures and basic troubleshooting. ✓ Both trainings will be conducted in the Town of Tyngsborough and scheduled by the Town Clerk. 	
	Onsite coverage by an employee of LHS for the first election.	Included
	<ul style="list-style-type: none"> ✓ A member of the LHS team will work with the Town Clerk from one (1) hour prior to opening the polls until two (2) hours after the polls close on Election Day. ✓ The representative will NOT be a subcontracted employee from another company. 	
	Onsite acceptance testing of all equipment.	Included
SHIPPING & DISCOUNTS		
	Shipping & Handling	Included
	Tabulator Trade-In Credit	-\$2,000.00
		TOTAL PURCHASE
		\$25,300.00
POST WARRANTY FEES		
5	Annual Post Warranty Maintenance Fee	\$1,000.00
	<ul style="list-style-type: none"> ✓ LHS Top Tier Coverage (Annual Maintenance Plan) 	
5	Annual Post Warranty Firmware License	Included
	<ul style="list-style-type: none"> ✓ Tabulator Firmware License 	
		TOTAL POST WARRANTY FEES
		\$1,000.00

- This quote is an estimate and is subject to final approval by LHS and the Customer
- Rate valid for 90 days and thereafter may change
- This quote does not include coding or ballot printing charges

4 machines & spare
4 boxes