

CITY OF LEWISTON
PLANNING BOARD MEETING
Monday, February 10, 2020 – 5:30 P.M.
City Council Chambers – First Floor
Lewiston City Building
27 Pine Street, Lewiston, ME

AGENDA

1. ROLL CALL

2. ADJUSTMENTS TO THE AGENDA

3. CORRESPONDENCE

4. PUBLIC HEARINGS:

- a. Planning Board discussion and recommendation to the City Council by the Planning Board on the FY21 LCIP (tabled from the January 27th meeting).

5. OTHER BUSINESS:

- a. Request for the disposition 1028 Sabattus Street.
- b. Request for the disposition of 49 Beech Street.
- c. Planning Board discussion and action on 2020 Policies and Procedure (tabled from the January 27th meeting).

6. READING OF THE MINUTES: Motion to adopt the January 27, 2020 draft minutes

7. ADJOURNMENT

The next scheduled Planning Board meeting is February 24, 2020



CITY OF LEWISTON

Department of Planning & Code Enforcement

TO: Lewiston Planning Board
FROM: Douglas Greene, AICP, RLA; Deputy Director/City Planner
DATE: February 6, 2020
RE: FY 21 LCIP Questions and Answers

At their January 27, 2020 meeting, the Planning Board discussed the FY 21 Lewiston Capital Improvement Plan. The following questions were sent to the respective department or agency directors for more information.

Lewiston Auburn Airport Response from Rick Lanham, Director Lewiston Auburn Airport (see attachment 1)

- Ask for more information from the airport. (pg. 13) (see attachment 1, pgs. 1-2)
- Fund snow removal equipment in FY 22. (pg. 14) (see attachment 1, pg. 2)
- Ask the airport manager if he would be willing to use Engine # 1 as opposed to the Pickup Mounted Fire Fighting Foam Generator. (pg. 16) (see attachment 1, pg. 3)
- The Planning Board wants to know how Auburn would account for a donation of Engine #1 by the city of Lewiston. (pg. 16) (see attachment 1, pg. 3)

Assessing

- Revisit and fund the entire revaluation if funding is available. (pg. 28)
Answer: "The estimated cost for a revaluation is \$575,000. That includes a public relations program, physical inspections, creation of valuation models, upgrades to our assessing computer programs, review, value notification mailers, and hearings. I estimate it would take 2 years to complete the project. My past experience has been that it is extremely difficult to get full funding for a revaluation in an annual budget. Other municipalities I've worked in had a reserve account the was funded annually. I was trying to get LCIP Funding over 5 years (\$115,000 each year) so I could have the money available to start the project in year 5." (William Healey, Chief Assessor)

Community Development

- The Board recommended combining the Simard Payne Park improvements with the canal maintenance and improvement project. They suggested a revised price was \$270,000 for both. (pgs. 29, 30)
Answer: "We continue to tell developers in this area the City is invested and moving forward with these improvements. To take a step back may send the wrong message regarding our commitment to the area." (Misty Parker, Economic Development Manager)

Answer: The following is some of the reasoning behind the recommendations as drafted. "I understand the desire to combine work to improve the canals with improvements needed in Simard Payne Park. They dovetail and complement each other. However, each has distinct needs. For the park to be better-utilized, improvements need to be made on the south end of the park, improving pedestrian ways and parking between the new Beech Street vehicle bridge and pedestrian bridge. Improvements will be needed for 35 Beech Street and the future home of Museum LA to be redeveloped. Discussions have begun between the city and the owners of those two mills as to improvements needed for egress and vehicle/ bus parking and vehicle movement. The park is increasingly being used for large scale events such as the Dempsey Challenge and Great Falls Brewfest. Utility and other infrastructure improvements are needed.

The canals have not been maintained for years. They have become unkempt and overgrown. Improvements are planned to remove overgrowth, change fencing, and other initiatives to make them more accessible and visibly attractive. A pilot improvement project is planned for next year in the area on the lower canal, north of the new Beech Street Bridge and a portion of Cross Canal #1. New equipment is needed to maintain the canals. Additional improvements will be phased in over the coming years." (Lincoln Jeffers, Director, Economic Development)

"I could not agree more. We could technically defer some of these. But there is a cost to potential redevelopment in this blossoming area. We have heard from the owners of the Continental Mill that this area affects their ascetics and security. The Pump House/ Lower Bates developer will likely see things the same way. Given the complexities of removing the two dilapidated bridges, the collapsed Logout House, Ice deflectors, transformers, and power lines it is likely that more funding will be needed in the future. The connection of the trail between Beach Street Bridge and the Trestle is also an important element that we need to infill, that is in the design phase currently." (Dale Doughty, Director of Public Works)



Recent clearing of City-Owned Canals

- A question was asked about using the National Guard for the Oxford St. surface parking lot project. (pg. 32)

Answer: "Getting in their que may be difficult, there is specialty work such as paving that will be needed. I am not sure that this is the best project for them if space is needed." (Dale Doughty, Director of Public Works)

- A number of attendees wanted more information regarding the proposed 80 space surface parking lot on Oxford Street and what would happen if that was not built? (pg. 32) Note: The Planning Board tentatively voted to remove the Oxford Street parking lot by 6-1 vote. Answer: *“Tough question trying to predict what Tom Platz would do... Yes, this project will count toward any parking needed for Bates Mill 5 but the immediate need and why this is being proposed this year is because of the existing increased number of tenants in the Mill complex. Grand Rounds is expanding into Mill 1 this month and have started work on the 5th floor of Mill 1 for the next expansion. Starting this month they are adding 30 new employees and predict 100 new employees by year end. While there is capacity in the Canal Street garage and Chestnut Street garage, it is mostly on the top decks, which only becomes an issue when it snows. We have just enough parking utilization to accommodate new users in good weather, however, balancing those who use the garages for parking bans, with tenants in the mill complex, and timing that public works is able to clean the top decks has created a significant pressure point during storms. We learned our lesson last year, and this year got lucky with the weather, I’m not sure how flexible the businesses in the Mill complex will be if we don’t respond with something to assist this issue. Oxford Street will act as an overflow parking area during these storms. Additionally, with Grand Rounds vacating their space in Mill 6, Platz is already speaking with potential tenants regarding the availability of that space. If he moves a new tenant in by Spring, we will benefit greatly from the additional space.” (Misty Parker, Economic Development Manager)*

Answer: “The Oxford Street parking lot is planned to meet near term needs of increased tenancy in the Bates Mill. Grand Rounds is relocating and expanding from Mill #6 into Mill #1. Employment will increase from approximately 200 to 400 employees. New lease commitments have been made on other portions of the mill. A new parking garage is needed, but the time to deliver a garage from the time notice is given to start design takes 2 years or more. Additional parking is needed sooner than that. The surface lot can also provide parking for Simard Payne Park and the redevelopment of 35 Beech Street and Museum LA. It will provide auxiliary parking when the top decks of the garages are unavailable during snow events. The Riverfront Island Master Plan called for this area to be redeveloped with mixed-use buildings. In time, that may be a reality, but there are 600,000 s.f. of mills located nearby that need to be redeveloped before there will be demand. Also, surface parking costs an estimated \$2,000 per space, vs. \$26,000 per space in decked parking.” (Lincoln Jeffers, Director, Economic Development)

Answer: Misty hit it on the head. Another demand for this space is the winter parking during bans. If we do not take advantage of this parking opportunity at the Oxford Street location, what are the options to accommodate the increased parking needs in a timely fashion?” (Dale Doughty, Director of Public Works)

- Canal Street Parking Garage repairs. The Planning Board mentioned the garage and surrounding area needed more pedestrian lighting. (pg. 50) Answer: *“The LCIP description lighting upgrades are mentioned in the FY24 phase of work. Repairing spalling concrete in parking and walking areas is a priority but It would be reasonable to incorporate lighting upgrades into an earlier phase of the work. Lighting upgrades will resolve safety, usability and maintenance issues.” (Dale Doughty, Director of Public Works)*

MIS Department

- Clarification is needed on “end of life” versus “15 years end of life versus “obsolete” with respect to technology upgrades.

Answer: “Sure anything that states a date such as 12 to 15 YO means that that hardware is now that age and needs to be replaced. It is End of life and no longer maintained by the manufacturer and is obsolete as parts aren’t necessarily available for repairs. It should be replaced at a maximum age of 10 years and based on standard practice typically 7 years. I think that is where the confusion was. EOL or end of life is when a piece of hardware is no longer supported by the manufacturer. We are not allowed to maintain the end of life hardware on our network as it is part of a CJIS (Criminal Justice Information System). Computer equipment is recommended to be replaced at a 7-year interval. Anything listed as obsolete is exactly that. Replacement parts aren’t available and the hardware can no longer serve it’s intended purpose.” (Craig Starr, Information Technology Manager)

Police Station

- The PB supported the \$280,000 for a Police Department Facility needs assessment was important. (pg. 38) *No comment from Chief O’Malley.*

Fire Department (see attachment 2 for the response from Fire Chief Brian Stockdale)

- The PB wanted to know how old was Ladder truck # 1? What happens if the repairs are not made? How much would this cost next year? The PB discussed cutting this item and deferring it to next year. (pg. 39) (see attachment 2)
- There was an assumption that the preliminary costs could be lower by using the plans from the most recent fire station at North Temple Road. The Planning Board discussed lowering the design and engineering fees down to \$350,000. (pg. 40) (see attachment 2)

Additional response from Chief Stockdale “One additional piece to add in reference to the station cost. The savings initially estimated by the architect was approximately 10%. Mr. Barrett and I think they can do better but some talks need to be had. I do not want to get into an underfunded situation. We ran into this with the initial project so it seems more prudent to keep the budget as is until we can get a better sense of where things are going.”

Public Works-Municipal Garage

- Requested an updated priority list with respect to vehicle and equipment replacement. (pg. 77 and 78).

Answer: “Unfortunately this task has become more complicated, as we have had a key sanding vehicle become disabled by a fuel system failure and body corrosion. It will cost over \$20,000 to repair. This is a 2008 truck with extensive corrosion. Replacement of that truck was added to the list as #1 and increased the published LCIP request by \$140,000.00 bringing the total from \$1,231,700.00 to \$1,371,700.00. Per your request, we revisited our rankings. If cuts must be made they should be made from the bottom up. Please be aware that postponement of the replacement plan will put us further behind and similar failures are more likely in the future. (See revised Five Year Replacement Schedule below, for pg. 78)

FIVE YEAR REPLACEMENT SCHEDULE (Year 2021 in priority order) W/ addition of Item #1 FY21

Priority	Description	Cost	Explanation
1	6 Wheeled Sand truck (added)	\$140,000.00	Unit 121 (2008) GMC 6 wheeled truck W/ sander only. The unit has over 89,000 miles and is being replaced due to age and condition. This unit has incurred over \$80,000.00 in repairs over the last five years. This unit presently needs over \$20,000. in repairs if it is not replaced this year. This unit is one of two units that are small enough to fit into the alleys and sections of town where the roads are so small they are plowed with pickup trucks and 1-ton dump trucks.

I know the Planning Board will make the best recommendation they can give to the City Council.” (Dale Doughty, Director of Public Works)

Additional Responses to City Council or Finance Committee Questions:

Lewiston Auburn Airport Response to LICP Questions from Councilor Khalid

- “I never heard about L/A owning an “Airport” until recently. What revenues does the city receive from the Airport and does the revenue outweigh the expenses the city pays for the “Airport”? (see attachment 2 pg. 1)
- Is the city buying new snow removal equipment? If yes, why can’t our public works combined with Auburn’s be used? Let’s find a way to cut these expenses. (see attachment 2 pg. 1 and 2)
- How often is a fire fighting foam generator used? Can’t we borrow it from other cities? (see attachment 2, pg. 2)

LATC (City Link Bus Service)

- Response to Councilor Clement’s LCIP questions regarding Bus/LATC grant funding
Answer: “The short answer is yes, local match funds need to be in place in order to apply for federal funds. Part of the application requires a letter of commitment stating that the local funds are in place.

“The timing of federal funds for large capital purchases is unpredictable. FTA will release discretionary grant opportunities throughout the year. FTA does not provide a calendar of when various grant opportunities will be announced. Once a grant opportunity is announced, an agency has two to three months to prepare and submit the application. A letter committing a local match must be part of the application. These grant opportunities are competitive so there is no guarantee that an agency will receive funding.” (Marsha Bennett, Transit Coordinator)



Auburn Lewiston Municipal Airport

80 Airport Drive, Auburn, ME 04210
(207) 786 0631 FAX: (207) 782 3024
www.flytomaine.com

To: Planning Board, City of Lewiston

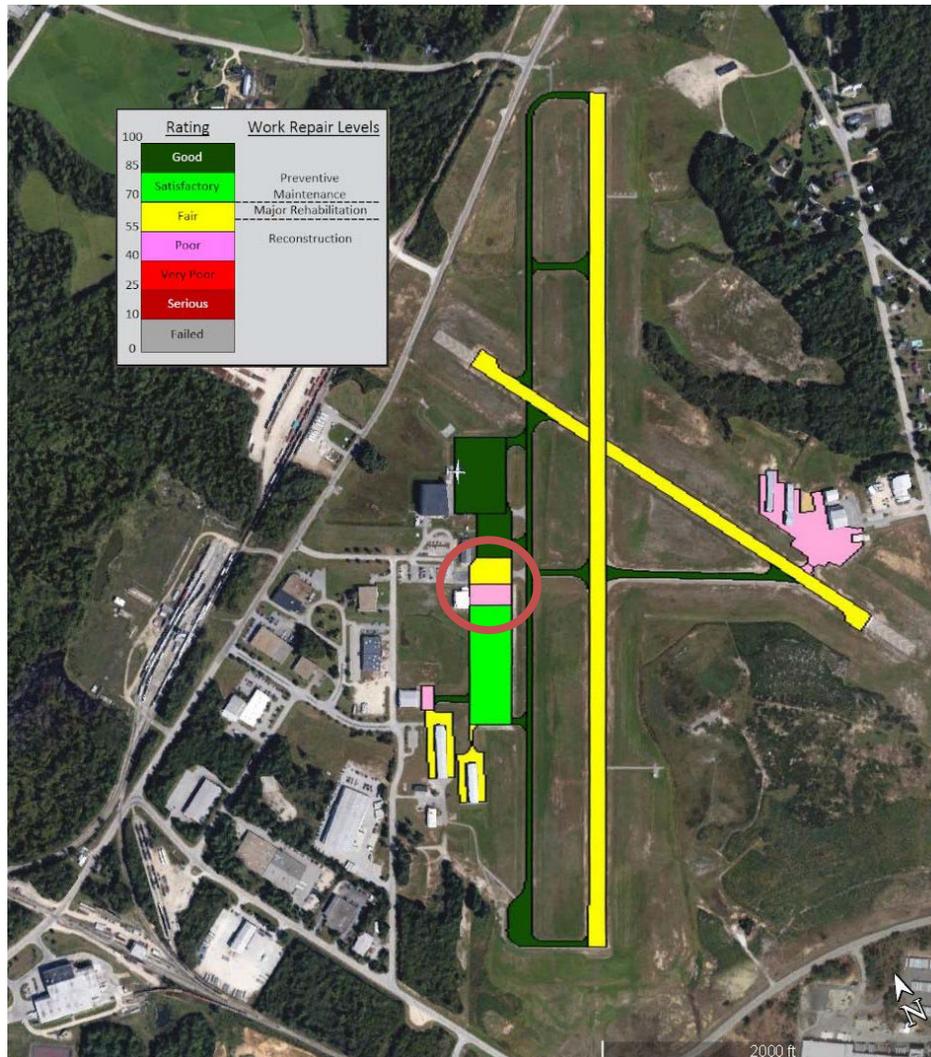
Re: Responses to LCIP questions – Planning Board

Question 1 - Ask for more information from the airport. (pg. 13)

On 9 April 2021, the 12,000-gallon Underground Storage Tanks (UST) that are currently used to store retail aircraft fuel are required to be decommissioned by EPA Regulations (40 CFR Part 280), after 30 years of continuous use. The airport's tanks have been in service since April 1991. Instead continuing with expensive-to-maintain UST's and simply replacing the current tanks, the airport will be building (the RFP is currently available on our web site) an above ground fuel storage system that will reduce our fuel storage environmental and maintenance expenses by at least half in the future. The best way (meaning least impactful in the future) to decommission those UST is bring them above ground and have them disposed of properly. In doing this, there will be also be electrical wire and other unnecessary items that will also require removal. This removal will leave a big hole (approximately 60 feet by 50 feet across and 10 feet deep) where those UST were.



As you can see in the included picture the pavement that is near this future hole is original runway pavement and is near being beyond its useful life (see included Maine DOT pavement study on next page). We felt it would be pragmatic to reconstruct the entire ramp instead of just covering the hole.



Normally, commercially used aircraft parking ramp is not eligible for FAA funding. So, as indicated in the picture above we're looking to reconstruct the pink pavement on the right through FAA Funds and this smaller commercially used area in the red circle locally. We are already funded to reconstruct and resurface the runways (in yellow) and that work is underway now.

Question 2 - Fund snow removal equipment in FY 22. (pg. 14)

We waited until the need occurred to request this equipment replacement. The wheel loader does perform more than one snow duty, it serves as a deicing materials loader (we use a couple of tons per snow event) and snow pusher. With over 850,000 square feet (140 nautical miles) of aircraft parking ramp that needs snow pushed off, we need a bigger one. However, this is not just a snow removal piece, this vehicle is also used as a heavy (bulk) lift, eliminating the need for a forklift. It is used to pick up materials and haul them from point to point. We have also used the wheeled load as an aircraft recovery vehicle when minor mishaps occur and we need to lift an aircraft on to a wheel dolly to get into maintenance. Our current machine is undersized for the work we are using it for. We waited two years after completing an additional ramp space project so that we could determine exactly what we needed before requesting the new piece of equipment.

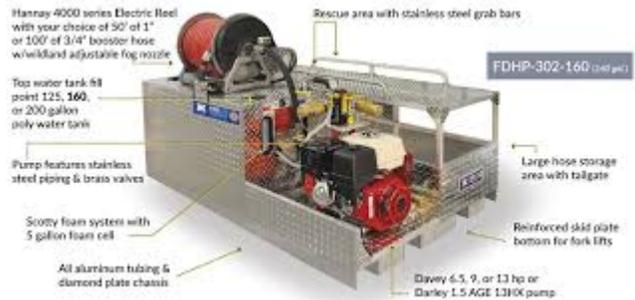


Question 3 - Ask the airport manager if he would be willing to use Engine # 1 as opposed to the Pickup Mounted Fire Fighting Foam Generator. (pg. 16) The Planning Board wants to know how Auburn would account for a donation of Engine #1 by the city of Lewiston. (pg. 16).

The request for the foam generating pickup skid was in response to Fire Chief Chase in Auburn being rightfully concerned with the impacts of PFAS/PFOS use in the city and at the airport. As a 50% owner of the airport, Lewiston is affected by this as the airport strives to maintain FAA standards we're required statutorily, through grant assurances, to maintain. We are required to use a certain foam type on aircraft fires by FAA standard. This is because the metals used in aircraft construction burn and are not normally able to be extinguished with water. Smothering the flame is required, ergo the foam. Foam also works better on fuel and other petroleum products as it smothers the fire without spreading the fuel. The city's fire apparatus can carry other, less problematic foams, unless that apparatus would respond for the airport.

The idea was to continue meeting standards for Aqueous Fire Fighting Form (AFFF) but remove the problematic substance from the city's apparatus. This small 250-gallon foam generator, in the back of a pickup would allow continued compliance at the airport and more environmentally friendly city fire apparatus on city streets, in both cities.

Assigning Lewiston FD Engine 1 would add a significant amount of cost to the airport's operational budget and we would have to find and maintain trained staff to operate the equipment once it was housed here. While having the Engine on the airport would be nice the expense would be significant.





FIRE DEPARTMENT

Brian D. Stockdale, Fire Chief

2/7/2020

LCIP Questions:

**To: Councilor Clement (W-6)
Planning Board**

11. LADDER 1 REFURB: I can support the ladder refurbishment but would like to see further documentation demonstrating the need for this project before I can commit.

- a. Over the past several years there have been increasing issues relating to the maintenance of L-1:
 - a. Corrosion
 - i. Torque Box
 - ii. Outriggers
 - iii. Aerial (Paint flaking allowing corrosion to set in)
 - iv. Frame Rails
 - v. Electrical and Hydraulic Hoses with corrosion issues due to increased use of salt/slurry utilized for road de-icing.
 - b. Electrical/Lighting Issues
 - i. L-1 has been out of service this week due to electrical module issues due to corrosion.

The corrosion issues noted above are by far the most concerning. The department has implemented differing cleaning approaches to slow the corrosion as well as undertaken some spot fixes, but the corrosion will continue to worsen.

These issues are caused by age, as well as the salt/slurry that is being used on the roads for de-icing.

The corrosion issues directly effect the certification of the ladder yearly. Over the past 2 years we have had to fix rust/corrosion issues for the apparatus to pass its yearly certification. We are now at a tipping point where we are not confident small fixes will work. The corrosion continues to worsen and we can only address the corrosion that is observed.

L-1 has failed the UL annual certification for the last 2 years. We have undertaken fixes that allowed it to ultimately pass each year after retesting. We are only providing spot fixes when the whole issue needs to be addressed. There will come a time in the near future where spot fixes will no longer work and the cost to address the issue will be much higher.

The corrosion/delamination of the steel on the ladder torque box has caused the steel to thin.

In 2018 Pierce Manufacturing visited the department and evaluated L-1 for refurbishment. They then submitted an estimated proposal based on their visual inspection.

Ultimately after receiving the proposal there were 2 options

1. Complete Refurb
2. Partial Refurb

Based on discussions with the department maintenance officer and Vehicle technician it was decided that a partial refurb was the best option for the following reasons.

The cost of a complete refurbishment is approximately \$550,000. That is based on an estimate done by visual inspection. The general consensus is that an additional 10% should be added for unforeseen issues that arise when the aerial is taken apart and areas inspected that could not be seen.

The full refurbishment would only increase the life span of the apparatus by 5-8 years at most, but there is no way to really tell. A new Ladder costs around \$1,000,000.

At this time the cost/benefit of a full refurb was not there. It did not seem prudent to spend more than 50% of the total cost of a new truck for repairs that would not significantly extend the life of the apparatus.

A partial refurb at \$250,000 addressing the major issues which will allow us to keep on the current replacement plan for 2027. Again, this is all contingent upon what is found when the apparatus begins its repairs. Pierce could not give an estimate on what the potential costs could be. They did note that the longer we wait the more costly the repairs will be.

Ultimately, L-1 needs service. It is no longer prudent to patch fix areas. The corrosion should be addressed. Not addressing these issues now will affect the ability to certify the apparatus annually and certainly increase the maintenance costs moving forward. I would not recommend putting this off any longer.

12. **FIRE SUBSTATIONS:** Main Street Fire Station is a priority, but I question the amount requested. My understanding, if correct, would be that this cost should be less than the Sabattus Street project as we own the “cookie cutter “design and I’m not aware if there is any land acquisition cost involved. Perhaps we should take a look at a creative use of the Martel School property. If the city decides a certain proposal for redevelopment of this property could lead to a cooperative agreement whereby the city could use a portion of the lot for the Lisbon Street sub-station. Given that the current site for this station most likely will NOT accommodate its replacement, and land acquisition could be expensive we may be able to accomplish a number of positive things here.
 - a. The amount requested does include the land acquisition. The decrease in cost for the cookie cutter type has been somewhat of a moving target. At this point it is 10% - 20% of total cost. The caveat to this is the land. For the cookie cutter to work we need at least 2 acres of land. So, based on the size of the lot ultimately purchased we may need to modify the building which adds to the cost, as well as land prices may vary widely. This will eat up any savings attributed to the engineering and design cost. Keeping the estimated costs as is will defray some of these unknown costs moving forward.

b. Utilization of the Martel School Area:

a. With current information at hand I would not recommend utilizing this land for E-3 station placement for the following reasons

i. Response time:

1. Our current station locations are optimal as is based on station/resource studies conducted in 2009 & 2016.
2. Moving the station 0.5 miles closer to down town may not seem like much, but it causes an increase in response time to areas of the city (Pinewoods Rd, Cotton Rd, Old Webster Rd, Gayton Rd, Ferry Rd) by 2-4 minutes based on traffic. These drive time results are based on GIS drive time analysis.
3. The movement of the station also affects response to other districts such as district 4. There would be areas in district 4 that would see only 1 truck on seen for an additional 2-4 minutes. Even a half mile move would have a cascade effect on the responses for every district.

ii. Traffic:

1. The traffic pattern in the area is not conducive to fire trucks entering and exiting.

I am aware that land in this area is limited and expensive. Before the any commitment to utilizing the Martel School area is made I would recommend that Traffic studies be conducted, a more in depth station location analysis be completed, as well as an analysis of how the change affects department response and resource allocation.

Respectfully Submitted,

Brian D. Stockdale, Fire Chief

Lewiston Fire Department

Lewiston, Maine

Proposal for Refurbishment of:

**One (1) – Pierce 2007 105-foot Aerial Ladder
“18845TR”**

Date: April 16, 2018

Quote is good for 90 days

Prepared by: Don Daemmrich



PIERCE MANUFACTURING, INC.

MIDWEST REGIONAL SERVICE CENTER

816 COMMERCIAL AVENUE * WEYAUWEGA, WI 54983 * (920) 867-2142

Pierce Manufacturing, Inc. is pleased to submit to the **Lewiston Fire Department** a proposal for the refurbishment of your **2007 Pierce Aerial 105-foot Ladder 18845TR**. The following paragraphs will describe in detail the apparatus additions and modifications proposed.

QUALIFICATIONS

PIERCE MANUFACTURING was incorporated in 1917. Since then we have been building bodies with one philosophy, "**BUILD THE FINEST**". Our skilled craftsmen take pride in their work, which is reflected, in the final product. We have been building fire apparatus since the early "forties" giving Pierce Manufacturing over 50 years of experience in the fire apparatus market. Our plant is located in Appleton, Wisconsin with over 474,000 total square feet of floor space situated on approximately 93 acres of land. A multi-million dollar inventory of parts is available to keep your unit in service long after it has left the factory.

The Pierce Refurbishment Center has achieved the very same reputation for fire apparatus repair and refurbishing. Located just 30 miles west of Appleton in Weyauwega, Wisconsin, the Pierce Refurbishment Center facility is dedicated exclusively to the refurbishing and repairs of all makes and models of fire apparatus and emergency vehicles. Pierce Manufacturing has produced fire apparatus for over 55 years and has been refurbishing apparatus for more than 35 years.

The 40,000 square foot Refurbishment Center has 16 well-equipped bays staffed by 52 certified, highly skilled mechanics. Fabrication and refinishing is done at the main manufacturing facilities to assure our customers the same fine quality that new Pierce apparatus is famous for.

ISO COMPLIANCE

The manufacturer will operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that will be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance will be included with the bid.

SINGLE SOURCE MANUFACTURER

Pierce Manufacturing is a single source apparatus manufacturer. The definition of single source is a manufacturer that designs and manufactures their products using an integrated approach, including the chassis, cab and body being fabricated and assembled on the bidders premises. The warranties relative to the chassis and body design (excluding component warranties such as engine, transmission, axles, pump, etc.) will be from a single source manufacturer and not split between manufacturer (i.e. body and chassis).

WARRANTY

A separate warranty page detailing the warranty coverage will be provided with the proposal.

WELDING REQUIREMENTS

Pierce Manufacturing follows American Welding Society D1.1-96 standards for structural steel welding. All aluminum welding will be done to American Welding Society and ANSI D1.2-96 requirements for structural welding of aluminum. Flux core arc welding will use alloy rods, type 7000, American Welding Society standards A5.20-E70T1.

PAYMENT TERMS

Payment is to be made to Pierce Manufacturing, in full, within 30 days after completion and final acceptance.

SHIPPING PRECAUTIONS

The following shipping precautions must be completed before transportation of the fire department's apparatus to Pierce Manufacturing for refurbishment or repair. ***Failure to complete the listed items below may result in additional costs to the fire department.***

1. All water tanks, foam tanks, pumps, all inlets and discharge plumbing, all drains, and any other plumbing are to be completely drained prior to being driven or flat-bedded.
2. Strip down all loose equipment unless arranged with Pierce prior to shipping in order to make the repair process easier and to eliminate the potential for lost equipment while the unit is being refurbished or repaired.
3. All loose or potentially loose items should be taped or strapped to ensure they do not come loose during transit.

INCOMING EMERGENCY PARKING BRAKE TEST

The following inspection will be performed by a qualified Pierce technician to insure this apparatus is safe to drive and perform work on. Should any defects be found that are not already addressed in the proposed work, an itemized list of the defects, along with the costs to repair any additional items, will be provided to the fire department for review.

Repair of any defects will be "open", pending approval and additional costs. No additional work will be performed without prior approval from the fire department.

INCOMING BATTERY LOAD TEST

All truck starting system batteries and battery cables will be visually inspected for cracks, acid leaks, corrosion and overall condition. Along with the visual inspection a load test will be performed to verify the batteries cold cranking amps, voltage and shorted cells. Should any defects be found that are not already addressed in the proposed work, an itemized list of the defects, along with the costs to repair any additional items, will be provided to the fire department for review. ***Repair of any defects will be "open", pending approval and additional costs. No additional work will be performed without prior approval from the fire department.***

INCOMING VEHICLE INSPECTION

The following inspections will be performed by a qualified Pierce technician(s) before any work begins. Inspections are to verify working components before disassembly, and to determine the overall condition of the truck.

- **Incoming Electrical inspection**
- **Incoming Chassis Inspection and Road test**
- **Incoming Pump Test**
- **Incoming Body Inspection**
- **3rd Party UL Aerial Incoming Test**

Should any defects be found that are not already addressed in the proposed work, an itemized list of the defects, along with the costs to repair any additional items, will be provided to the fire department for review. *Repair of any defects will be “open”, pending approval and additional costs. No additional work will be performed without prior approval from the fire department.*

CHASSIS FRAME, TORQUE BOX and REAR BODY WALL CORROSION

FRAME and TORQUE BOX CORROSION

- Remove the rear axle assembly to include suspension and wheels allow for clean-up of minor frame and torque box corrosion in this area, reinstalled with new mounting hardware.
- Remove all heavy corrosion on the chassis frame and torque box from the rear outriggers back.
- Needle scale all areas of corrosion on the chassis frame and torque box in these areas.
- Coat needled / sandblasted area with rust inhibitor “POR - 15” or SPEC 222, prime and finish paint frame rails and frame components.
- Under coat the repaired area.
- Replace the rear bumper substructure due to heavy corrosion.
- Replace the rear bumper treadplate.
- Replace the rear body wall structure.
- Replace the rear body treadplate wall due to corrosion.

- Replace the rear lower DOT lighting as follows:

REAR FMVSS LIGHTING

The rear stop/tail and directional LED lighting will consist of the following:

- Two (2) Whelen model 60R00XRR red LED stop/tail lights.
- Two (2) Whelen model 60A00TAR amber LED arrow turn lights.
- Two (2) Whelen, Model: 60J000CU backup lights will be provided.

Four (4) red reflectors will be provided.

LIGHTING BEZEL

Two (2) Whelen, model CAST4V, four (4) light aluminum housings will be provided for the rear stop/tail, directional, scene lights and warning.

Replace the rear switch assembly and plate for the outrigger controls due to corrosion.

AERIAL

LOWER AERIAL HYDRAULIC HOSES

All hydraulic lower aerial hoses will be replaced with new, this is to include the outriggers, outrigger control valves and rear hose assemblies below the rear torque box.

Fittings in this area and outriggers will be replaced with new.

All hose assemblies will be assembled and crimped by the hose manufactures certified technician.

All manufacturing employees responsible for the installation of hydraulic components will be properly trained. Training will include: proper handling, installation, torque requirements, cleanliness and quality control procedures for hydraulic components.

Hoses used in the aerial hydraulic system will be of a premium quality hose with a high abrasion resistant cover. All pressure hoses will have a working pressure of 3000 psi. with a burst pressure rating of 9,000 psi., and one-half the required SAE bend radius.

TURNTABLE CORROSION

The aerial ladder will be unpinned at the turntable and set aside for corrosion repair to the turntable only.

The turntable will be disassembled and sandblasted to raw metal.

The turntable will be repainted white #252 and the top walking area will be recovered with non-slip crete to match existing.

The turntable will be reassembled and reinstall on the existing aerial rotation bearing using new mounting hardware. All bearing bolts will be checked by UL Underwriters Laboratory for proper torque values.

The aerial ladder sections will be repined to the turn table.

All aerial operations for timing and function will be checked and the main bearing will be greased.

FINALIZATION and DETAILING

Prior to delivery, the entire vehicle will be washed to include the interior and exterior.

All fluid levels will be checked on topped off if needed.

The vehicle will be fully fueled.

BUDGET ITEMS FOR APPROXIMATELY FIVE (5) YEARS LATER

AERIAL DEVICE OVERHAUL, 105 Foot LADDER

The device once received will be cleaned and inspected by a qualified Pierce aerial technician to assure the device is serviceable and / or repairable.

AERIAL INSPECTION and OVERHAUL

Prior to disassembly, a 3rd party testing company, UL Underwriters Laboratory will perform an operational test and inspection on the aerial device to the current standards of the NFPA 1911. All timings will be tested to NFPA 1911, A.19.8.8.2. The test results will be evaluated and forwarded to the fire department. If any defects are found, that are not already detailed in these specifications for repair or replacement, or it is determined that any of the major components require reconstruction or replacement rather than rebuilding or resealing as detailed in these specifications, the fire department will be advised immediately. **A parts and labor estimate for the repair of the defects will be submitted for approval prior to proceeding.**

The aerial device will be disassembled for repairs. The upper aerial assembly and turntable will be removed from the rotation bearing at the torque box. The ladder sections will then be removed from the turntable and separated.

While the aerial device is disassembled, the ladder sections will be media blasted. At this time the complete aerial device will go through a 3rd party UL Underwriters Laboratory visually inspection to include nondestructive magnetic particle testing of all welds. All steel structural weldments will be inspected for compliance with the American Welding Society (AWS) standard D1.1, "Structural Welding Code-Steel".

All aluminum structural weldments will be inspected for compliance with AWS standard D1.2 “Structural Welding Code-Aluminum”. Any weld discontinuities will be corrected and repaired.

All welding of aerial components, including the aerial ladder sections, turntable, platform basket, and outriggers, will be in compliance with the American Welding Society standards. All welding personnel will be certified, as qualified under AWS welding codes.

Any discontinuities will be corrected and repaired prior to repaint.

Cylinders

All hydraulic cylinders will be removed from the outriggers and aerial device to include the extension cylinders, lift cylinders and all outrigger cylinders. The cylinders will be disassembled and rebuilt to include re-chroming the rods and honing the cylinder walls if scored or pitted. New seals will also be installed. Defective head glands will be replaced. Holding valves will be tested for proper operation. **If new holding valves and / or cylinder rods due to bent rods are required a labor and material cost will be forward to the fire department for approval.**

Hydraulic hoses

All hydraulic hoses will be replaced with new, this is to include the aerial device, turntable and outriggers. Fittings for the aerial device and outriggers will be **inspected and replaced with new only if necessary.**

All hose assemblies will be assembled and crimped by the hose manufactures certified technician.

All manufacturing employees responsible for the installation of hydraulic components will be properly trained. Training will include: proper handling, installation, torque requirements, cleanliness and quality control procedures for hydraulic components.

Hoses used in the aerial hydraulic system will be of a premium quality hose with a high abrasion resistant cover. All pressure hoses will have a working pressure of 3000 psi. with a burst pressure rating of 9,000 psi., and one-half the required SAE bend radius.

Hydraulic pump

A new hydraulic pump and hot-shift PTO will be provided and installed.

The hydraulic system will be supplied by a variable displacement, load and pressure compensating piston pump. The pump will meet the demands of all three (3) simultaneous aerial functions. The pump will provide proper flow for a single aerial function with the engine at idle speed. A switch will be provided on the control console to increase the engine speed for multiple function operation.

The hydraulic system will be protected from possible hydraulic pump malfunctions by a

relief valve, which will route the excess oil into the oil tank, when the pressure in the hydraulic system exceeds 3,150 pounds per square inch.

An amber indicator light will be installed, on the cab instrument panel, to notify the operator that the power takeoff is engaged.

An interlock will be provided that allows operation of the aerial power takeoff, only after the chassis spring brake has been set and the chassis transmission has either been placed in the neutral position or the transmission is in drive position with the driveline to the rear axle disengaged.

Oil tank and filters

The hydraulic oil tank will be drained, cleaned, new filters and hydraulic oil installed.

The hydraulic oil will be a premium Multi-Vis product having a leading edge additive package, provide oxidation stability, be extremely shear stable and maximum anti-wear properties. All oil delivered to the manufacturing site will have a minimum ISO cleanliness level of 18/15/13.

Each aerial will be evaluated as to the region and climate where it will be used to determine the optimum viscosity and proper oil grade. Oil viscosity will be based on an optimum range of 80 to 1000 SUS during normal aerial use. Before shipment of the unit, an oil sample will be taken and analyzed to confirm the oil is within the allowable ISO grade tolerance.

High pressure filter

The pressure filter will be rated for 6,000 psi working pressure. A 90 psi bypass spring will be included to protect the element and hydraulic system during lower than normal system operating temperatures.

The 5Q filter element will be constructed of a micro glass medium, which has the highest capture efficiency, dirt holding capacity and life expectancy over other media such as cellulose and synthetic. The nominal rating will be 5 micron and have an efficiency rating of 99.3 % for 5 micron sized particles. The element will have a dirt holding capacity of not less than 35 grams.

Return filter

The return filter will be rated for 800 psi working pressure. A 25 psi bypass spring will be included to protect the element and hydraulic system during lower than normal system operating temperatures. The 5Q filter element will be constructed of a micro glass medium, which has the highest capture efficiency, dirt holding capacity and life expectancy over other media such as cellulose and synthetic. The nominal rating will be 5 microns and have an efficiency rating of 99.6% for 5 micron sized particles. The element will have a dirt holding capacity of not less than 40 grams.

Controls

All lower controls will be replaced with equivalent controls this is to include new outrigger control valves and new diverter valve interlock.

To aid in leveling the unit, two new bubble type angle indicators will be located near the stabilizer controls. One indicator will show the angle of the truck from the front to rear and the other will show the side to side angle of the truck. The indicators will be color coded green to show when the truck has been properly leveled allowing the aerial device to be operated at full capacity.

The upper PQ controls will be replaced with new, updated controls similar to that used on current production aerial apparatus.

Console

A new turntable console will be provided for all new updated upper aerial function controls. The console will be lighted for nighttime operation with one (1) work light activated by the aerial master switch. A fuse panel will be located in the turntable console.

Stabilizer beam warning lights

Two (2) new 4.00" diameter red LED flashing lights will be mounted under each stabilizer, one (1) facing forward and one (1) facing rearward. The lights will be Grote Supernova 40 series LED lights. These warning lights will be activated with the aerial master switch.

Electrical system

All electrical wiring for the aerial device, turntable, console and outriggers will be replaced.

The aerial electrical system will be designed and manufactured in such a way that the power and signal protection and control compartments will contain circuit protection devices and power control devices. The power and signal protection and control components will be protected against corrosion, excessive heat, excessive vibration, physical damage, and water spray.

The aerial electrical system will be designed and manufactured to allow the following:

- All of the serviceable components will be readily accessible.
- Circuit protection devices will be utilized to protect each circuit.
- All circuit protection devices will be sized to prevent wire and component damage when subjected to extreme current overload.
- General protection circuit breakers will be Type-I automatic reset (continuously resetting) or Type-II (manual resetting) and conform to SAE requirements. When

required, automotive type fuses conforming to SAE requirements will be utilized to protect electronic equipment.

- Power control relays and solenoids, when utilized, will have a direct current (dc) rating of 125% of the maximum current for which the circuit is protected.

- Toggle switches will be utilized that are certified for the outside conditions that fire apparatus experience.

- All wiring will be protected through conduit or loom.

- All wiring harnesses will be properly supported to eliminate harness damage through rubbing.

Hydraulic swivel

The aerial will be equipped with a new high pressure hydraulic swivel which will connect the hydraulic lines from the hydraulic pump and reservoir, through the rotation point, to the aerial control bank. The hydraulic swivel will allow for 360-degree continuous rotation of the aerial.

Electric swivel

The aerial will be equipped with an electric swivel to allow 360-degree rotation of the aerial while maintaining connections in all electrical circuits through the rotation point. A minimum of 28 collector rings that are capable of supplying 30-amp continuous service will be provided. All collector rings will be enclosed and protected against condensation and corrosion.

Emergency power unit

A new extended run Emergency Power Unit (EPU) will be installed. The pump will be capable of running for 30 minutes for limited aerial functions to stow the unit in case of a main pump or truck system failure. A momentary switch will be located at the stabilizer and aerial control locations to activate the emergency pump.

Rotation drive motor

The hydraulic rotation drive motor will be replaced with new.

Rotation gear

The rotation gear will be inspected for defects, proper tolerance, and proper operation: **repairs will be open, subject to approval by the fire department.**

The turntable will be bolted to the bearing using new, SAE Grade 8, .875" diameter bolts. To secure the bearing to the torque box, using new, Grade 8, .875" diameter bolts. All bearing bolts will be checked by UL Underwriters Laboratory for proper torque values.

Vapor Sealant

VpCI-329 Multi-metal corrosion inhibitor will be applied to all ladder sections. VpCI-329 is a vapor sealant that is applied to the interior of the aerial ladder sections to aid in preventing corrosion from forming on the inside of all sections.

Steel cables

All extension/retraction cables will be replaced with new.

The reeling of the cable will be such as to provide synchronized, simultaneous movement of all sections to full extension. The extension/retraction cables will be: 7-flex galvanized wire rope with stainless steel threaded ends.

All cable sheaves will be inspected and replaced only if necessary.

Pins and bushings

All pins and bushings for the aerial ladder device will be **inspected for tolerance as required by OEM specification. New pins and/or bushing will be provided only if required.**

Wear pads

All extension wear pads on the aerial ladder will be replaced with new.

Wear pads that are made of polymer material will be used between the telescoping sections for maximum weight distribution, strength and smoothness of operation.

Rung covers

Each rung will be covered with a secure, heavy-duty, fiberglass pultrusion that incorporates an aggressive, no-slip coating. The rung covers will be glued to each rung, and will be easily replaceable should the rung cover become damaged. Each rung cover edge will have 2.00" of photo-luminescent, aggressive, no-slip coating to assist in providing a light source for each rung during low light conditions. The photo-luminescent coating will remain visible for up to 20 hours after exposure to light.

The rung covers will have a 10-year, limited warranty.

Waterway

The waterway system will be hydrostatically tested and the waterway pipes inspected for corrosion. New seals will be installed throughout the waterway including the victaulics, chicksan, and dresser coupling seals. The waterway seals will be of type-B PolyPak design, composed of nitroxile seal and a nitrile wiper, which together offer maximum stability and extrusion resistance on the waterway.

The waterway seals will have automatic centering guides constructed of synthetic thermalpolymer. The guides will provide positive centering of the extendible sections within each other and the base section to insure longer service life and smoother operation.

The waterway pipe fittings will be inspected for corrosion after disassembly. **The Fire Department will be notified if repair or replacement of any waterway fittings is recommended.**

Intercom

The existing intercom will be removed and replaced with a new two (2) station Atkinson intercom system one (1) at the turntable console and the other at the aerial tip.

Aerial device paint

All aerial device structural components above the rotation point that are not chrome plated or stainless steel will be repainted.

The ladder sections and all painted surfaces on the turntable and hydraulic cylinders will be repainted to match the original color.

All areas to be repainted will be sanded to remove any metal flakes and smooth any rough surfaces.

The components will be primed with an epoxy primer and finished painted with a durable, high gloss polyurethane paint.

All buy out components, such as monitor, nozzle, gauges, etc. will be supplied as received from the vendor and not repainted.

All the hydraulic hoses, wiring and non-ferrous metals will be masked off before painting.

A yellow reflective stripe will be provided on the vertical and horizontal members of the stabilizers.

Any graphics removed from the ladder to repaint will be installed after repaint.

Paint color #

The aerial, turntable and console will be repainted Pierce **White # 252**

The stabilizers will be repainted **Black # 101.**

Ground pads

The existing aluminum ground pads will be replaced with new lightweight composite pads.

An auxiliary ground pad will be supplied for each stabilizer. The pads will be 24.00" square and made from a lightweight composite material. The ground pressure will not exceed 75 pounds per square inch when the ground pads are used and the apparatus is fully loaded and the aerial device is carrying its rated capacity in any position.

Aerial certification

After all repairs and modifications are completed, the aerial device will be reassembled. The complete device will be lubricated, adjusted and tested for proper operation. The unit will then be fully tested by a 3rd party testing company, UL Underwriters Laboratory to the current standards of the NFPA 1911. All timings will be tested to NFPA 1911 table A.19.8.8.2.

COMPLETE REPAINT CAB and BODY

CORROSION and SMALL DENTS

Metal finish and repair all minor body and cab corrosion and any small dents prior to repainting the complete exterior of the apparatus body and cab. **Additional major corrosion and / or accident damage repair costs will be open: subject to inspection and written approval by the fire department.**

CAB REPAINT – Two-Tone

The cab will be metal finished and repainted two-tone with the upper section painted **White # 252** and the lower portion painted **Lime Yellow # 40**. The two-tone will match the existing break line and shield.

BODY REPAINT COLOR

The body will be metal finished and repainted **Lime Yellow # 40**

PAINT, COMPARTMENT INTERIOR

The compartment interior will be repainted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.

PAINT - BODY and CAB

The exterior custom cab and body painting procedure will consist of a seven (7) step finishing process as follows:

1. Manual Surface Preparation - All exposed metal surfaces on the custom body will be thoroughly cleaned and prepared for painting. Surfaces that will not be painted include all chrome plated, polished stainless steel, anodized aluminum and bright aluminum treadplate. Each imperfection on the exterior metal surface will be removed or filled and then sanded smooth for a smooth appearance. All seams will be sealed before painting.
2. Chemical Cleaning and Treatment - The aluminum surfaces will be properly cleaned using a 4-phase, high pressure and high temperature acid etching system. All steel surfaces will be properly treated using a 3-phase, high temperature, cleaning/phosphatizing system. Surfaces are chemically cleaned to remove all dirt, oil, grease and metal oxides to ensure the subsequent coatings bond well. An ultra pure water final rinse of 25 parts per million solids or less, will be applied to final rinse all metal surfaces at the conclusion of the metal treatment process. This final rinse ensures all chemical residues are removed and that no minerals, (salts), from the water dry onto the

metal surface and remain under the primers and topcoats. These salts can lead to blistering and under film corrosion.

3. Primer/Surfacer Coats - A minimum of two (2) mil dry, (.002), of two component urethane primer/surfacer will be hand applied to the chemically treated metal surfaces to provide a strong corrosion protective base coat and to smooth out the surface. The primer is a high solids and low VOC paint.

4. Hand Sanding to Ultra Fine Finish The primer/surfacer coat is lightly sanded with mild abrasive paper to an ultra smooth finish. This hand finish process is critical to produce the smooth mirror like finish in the topcoat.

5. Sealer Primer Coat A two- (2) component sealer primer coat is applied over the sanded primer to again build toward the final smooth finish. This layer of primer sealer also gives additional corrosion protection.

6. Topcoat Paint Two (2) coats of an automotive grade, two component acrylic urethane paint are applied to provide the lasting beauty and durability. The acrylic urethane topcoat contains a clear coat resin chemistry that creates the high gloss and depth of image. This type of topcoat provides the best resistance against acid rain and other more common chemicals.

7. Clearcoat - Two (2) coats of an automotive grade two (2) component urethane will be applied. Lap style doors will be clear coated to match the body. Roll-up doors will not be clear coated and the standard roll-up door warranty will apply.

A cyclic corrosion test, (General Motors test GM-9540), of 40 cycles will be required before making changes to the exterior coating process. Exterior coating systems, (excluding the undercarriage components), must achieve a 1/16 or less maximum creep from the scribe for aluminum and an 1/8 or less maximum creep from the scribe for galvanneal after 40 cycles in the General Motors GM-9540 test.

Each batch of color topcoat, together with the finish painted vehicle, is tested for precise color match. Visual color match will be checked following ASTM D-1729, (American Standard Testing Methods), procedures using CIE, (International Commission on Illumination), D75 Northern Daylight light source. Instrumental color match will follow ASMT D-2244 procedures with a maximum delta E of 1.0 for whites, 1.4 for yellows, blues, greens and 1.5 for reds.

All removable items such as brackets, compartment doors, door hinges, trim, etc. will be removed and painted separately to insure paint behind all mounted items. Body assemblies that can not be finish painted after assembly will be finish painted before assembly.

PAINT - ENVIRONMENTAL IMPACT

Contractor will meet or exceed all current State (his) regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

- Topcoats and primers will be chrome and lead free.

- Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.
- Particulate emission collection from sanding operations must have a 99.99% efficiency factor.
- Particulate emissions from painting operations will be collected by a dry filter or water wash process. If the dry filter means is used, it must have an efficiency rating of 98.00%. Water wash systems will be 99.97% efficient.
- Water from water wash booths will be reused. Solids will be removed mechanically on a continual basis to keep the water clean.
- Paint wastes are disposed of in an environmentally safe manner. They are used as fuel in kilns used in the cement manufacturing process - thereby extracting energy from a waste material.
- Empty metal paint containers will be cleaned, crushed and recycled to recover the metal.
- Solvents used in clean-up operations will be collected, recycled on-site, or sent off-site for distillation and returned for reuse. Residue from the distillation operation will be used as fuel in off-site cement kilns.

WARRANTY - PAINT AND CORROSION

Limited Warranty

Except as provided below, and provided the vehicle has been placed in service within 60 days after delivery to the original purchaser as established by our original invoice, for a period of **one (1) year** after. Pierce Manufacturing Inc. ("Pierce") warrants to the user that its cab and body are free of blistering, peeling, bubbling, or any other adhesion defect caused by defective manufacturing methods or paint material selection for exterior surfaces of the cab and body of the vehicle. This limited warranty will apply only if the vehicle is properly maintained and used in service which is normal to the particular vehicle. Normal service means service which does not subject the vehicle to stresses or impacts greater than normally result from the careful use of the vehicle or chassis. If the buyer discovers a defect or nonconformity it must notify Pierce in writing within 30 days after the date of discovery. This limited warranty is not transferable by the first user, and is applicable to the vehicle in the following percentage costs of warranty repair, if any:

<u>Months</u>	<u>Adhesion</u>	<u>Blistering</u>	<u>Bubbling</u>	<u>Corrosion</u>	<u>Cracking</u>	<u>Gloss</u>	<u>Color Retention</u>
0 to 12	100%	100%	100%	100%	100%	100%	100%

This limited warranty applies only to cab and body exterior paint

REFLECTIVE BAND, LETTERING and GRAPHICS

All graphics, lettering and reflective bands are to match the existing scheme and color.

CHEVRON/INVERTED "V" STRIPING ON REAR WALL DIAMOND GRADE

All vertical surfaces of the rear aluminum treadplate will be replaced with smooth aluminum sheet and covered with chevron stripping.

There will be alternating inverted "V" chevron striping located on the rear wall of the apparatus to include the rear bulkheads.

The striping will consist of the following colors:

The first color will be Diamond grade RED

The second color will be Diamond grade YELLOW

The size of the striping will be 6".

ALL EMERGENCY WARNING AND DOT LIGHTS WILL BE UPDATED TO LED LIGHTS AS FOLLOWS:

DIRECTIONAL (Front)

Front turn signals to be Whelen M6 series LED full populated amber lamps housed in chrome bezels. The turn signals will be housed in the same common bezel as the front warning light and be located above the headlights.

In addition to the front facing directional, a Weldon, Model: 9186-8560-20, marker/turn indicator will be provided on each side of the cab.

LIGHTS, FRONT ZONE LOWER

One (1) pair of Whelen model M6 flashing LED lights will be installed on the cab face above the headlights, in a common bezel with the directional lights.

The color of these lights will be red LED/red lens.

These lights will meet or exceed NFPA front lower zone requirements.

Per NFPA, these lights will be activated by a switch in the cab.

STEP LIGHTS

All cab and body step lights will be changed to LED, step lights.

The new LED step lights on the apparatus will be illuminated per the current edition of NFPA 1901.

PERIMETER SCENE LIGHTS, CAB

There will be a Truck-lite, model 44042C, 4.00", LED, grommet mount weatherproof light provided for each cab and crew cab door. Lighting will be activated automatically when the exit doors are opened, by the door jamb switch and by the same means as the body perimeter lights.

The lighting will be capable of providing illumination at a minimum level of two (2) foot-candles on ground areas within 30.00" of the edge of the apparatus in areas which personnel climb in or out of the apparatus or descend from the apparatus to the ground level.

PERIMETER SCENE LIGHTS, BODY

There will be a total of six (6) Truck-Lite, Model 44042C, LED lights provided on the apparatus. Each light will consist of a 4.00" weatherproof LED light, rubber mount, and pigtail kit.

The lighting will be capable of providing illumination at a minimum level of two (2) foot-candles on ground areas within 30.00" of the edge of the apparatus in areas designed for personnel to climb onto the apparatus or descend from the apparatus to the ground level.

The lights will be activated by a switch on the instrument panel.

REAR FMVSS LIGHTING

Four (4) red reflectors will be provided.

A Weldon, Model 23882-2600-00, license plate bracket will be mounted on the driver's side above the warning lights. A Weldon, Model 9186-23882-30, step lamp will illuminate the license plate.

The three (3) identification lights located at the rear will be installed per the following:

Truck-Lite, Model 35, LED
As close as practical to the vertical centerline.
Centers spaced not less than six (6) inches or more than twelve (12) inches apart.
Red in color.
All at the same height.

The four (4) clearance lights located at the rear will be installed per the following:

Truck-Lite, Model 35, LED
To indicate the overall width of the vehicle.
One (1) each side of the vertical centerline.
All at the same height.
As near the top as practical.
To be visible from the rear and the side.
One (1) each side, facing the side.
One (1) each side, facing the rear.

MARKER LIGHTS

There will be One (1) pair of LED amber and LED red marker lights with rubber arm, located at rear of apparatus each side. The amber lens will face the front and the red lens will face the rear of the truck.

These lights will be activated with the running lights of the vehicle.

WARNING LIGHT (Cab Roof)

There will be two (2) 21.50" Whelen Freedom IV LED light bars mounted on the cab roof, one (1) on each side, above the driver's and passenger's door at an angle to match existing.

The driver's side light bar will include the following:

- One (1) red flashing LED module in the outside end position.
- One (1) red flashing LED module in the outside front corner position.
- One (1) red flashing LED module in the outside front position.
- One (1) red flashing LED module in the inside front position.
- One (1) red flashing LED module in the inside front corner position.

The passenger's side light bar will include the following:

- One (1) red flashing LED module in the inside front corner position.
- One (1) red flashing LED module in the inside front position.
- One (1) red flashing LED module in the outside front position.
- One (1) red flashing LED module in the outside front corner position.
- One (1) red flashing LED module in the outside end position.

There will be clear lenses included on the light bar.

There will be a switch in the cab on the switch panel to control the light bars.

WARNING LIGHT (Crew Cab Roof) ADDITIONAL

There will be two (2) 21.50" Whelen Freedom IV LED lightbars mounted on the cab roof, one (1) on each side, above the driver's and passenger's crew cab door.

Each light bar will include the following:

- One (1) red flashing LED module in the outside end position.
- One (1) red flashing LED module in the outside front corner position.
- One (1) red flashing LED module in the outside front position.
- One (1) red flashing LED module in the inside front position.

- One (1) red flashing LED module in the inside front corner position.

There will be clear lenses included on the light bar.

There will be a switch in the cab on the switch panel to control the light bars.

These lights may be load managed when the parking brake is applied.

SIDE ZONE LOWER LIGHTING

Six (6) Whelen M6 series LED™, lights will be located at the following positions:

Two (2) model M6 red LED/red lens flashing warning lights.

The location of these lights will be one each side on the bumper extension.

Two (2) model M6 red LED/red lens flashing warning lights.

The location of these lights will be one each side of cab

Two (2) model M6 red LED/red lens flashing warning lights.

The location of these lights will be one each side of the body rear fender panel.

One (1) switch located in the cab on the switch panel will control these lights.

These lights will be installed with a chrome plated ABS plastic flange

WARNING LIGHTS (Rear)

One (1) pair of Whelen amber M6 LED/amber lens 60*02F*R flashing LED lights will be provided.

These lights will be located at the rear of the body above the taillights, and activated with parking brake engaged and rear upper switch.

These lights will be installed with a flange.

WARNING LIGHTS (Rear of Hose Bed)

Two (2) Whelen L31H*FN LED warning beacons will be provided at the rear of the truck, located one (1) each side. These lights will be activated by a lighted switch on the instrument panel.

The color of the lights will be red LEDs with both domes red.

STABILIZER WARNING LIGHTS

Four (4) Whelen model M6, flashing LED warning light will be mounted on the stabilizer cover panel, one (1) for each panel.

Front stabilizer LEDs to be red LED/red lens each side.

Rear stabilizer LEDs to be red LED/red lens each side

These warning lights will be activated by the NFPA side zone switch.

These lights will be provided with a flange

STABILIZER BEAM WARNING LIGHTS

Two (2) 4.00" diameter red LED flashing lights will be mounted on each stabilizer, one (1) facing forward and one (1) facing rearward. The lights will be Grote Supernova 40 series LED lights. These warning lights will be activated with the aerial master switch.

REAR BODY DECK LIGHTS

Remove the existing two (2) Unity deck lights on the rear body upper deck plate and replace with two (2), 12-volt, Whelen MPBW, MICRO LED lights:

COMPARTMENT LIGHTING

Remove all existing compartment lights and mounting brackets and replace all body compartment lights with Pierce, LED strip lights.

The strips will be centered vertically along each side of the door framing.

Opening the compartment door will automatically turn the compartment lighting on.

END.



Attachment 3



Auburn Lewiston Municipal Airport

80 Airport Drive, Auburn, ME 04210
(207) 786 0631 FAX: (207) 782 3024
www.flytomaine.com

5 February 2020

To: Councilor Khalid, City of Lewiston

Re: Responses to LCIP questions – Councilor Khalid

Airport-

Question 1 - I never heard about L/A owning an "Airport" until recently. What revenues does the city receive from the Airport and does the revenue outweighs the expenses the city pays for the "Airport"?

The airport provides Economic Benefit to the cities, more accurately the region, through several different general activities. The measurement of this economic benefit is accomplished normally by Maine DOT through an Airport System Plan. The current plan is 10 years old and shows our airport as providing \$24,627,700 in economic benefit to the region with a total annual payroll of \$8,152,500. These numbers include businesses located on airport property. However, by Federal Statute all revenues produced by the airport stay at the airport for its uses towards being financially self-sufficient. Our dependence on the cities is currently about 20% of the total annual cost of the airport operation. The airport is one of the busier airports for operations (not passengers) in the State of Maine but is underdeveloped for infrastructure. There are a lot of reasons for the current state of the airport but instead of bemoaning the situation, the Airport Board of Directors and airport staff work hard to move the airport forward towards the overarching goal of being operationally self-sufficient.

Question 2 - Is the city buying new snow removal equipment? If yes, why can't our public works combined with Auburn's be used? Let's find a way to cut these expenses...

When possible and when we have matching needs, the airport does cooperate with various departments of both cities with the goal of finding the least costly result. When the airport's needs vary from those of the city's, we do it ourselves to obtain the better fit for our needs.

We waited until the need occurred to request this equipment replacement. The wheel loader does perform more than one snow duty, it serves as a deicing materials loader (we use a couple of tons per snow event) and snow pusher. With over 850,000 square feet (140 nautical miles) of aircraft parking ramp that needs snow pushed off, we need a bigger one. However, this is not just a snow removal piece, this vehicle is also used as a heavy (bulk) lift, eliminating the need for a forklift. It is used to pick up materials and haul them from point to point. We have also used the wheeled load as an aircraft recovery vehicle when minor mishaps occur and we need to lift an aircraft on to a wheel dolly to get into maintenance. Our current machine is undersized for the work we are using it for. We waited two years after completing an additional ramp space project so that we could determine exactly what we needed before requesting the new piece of equipment.

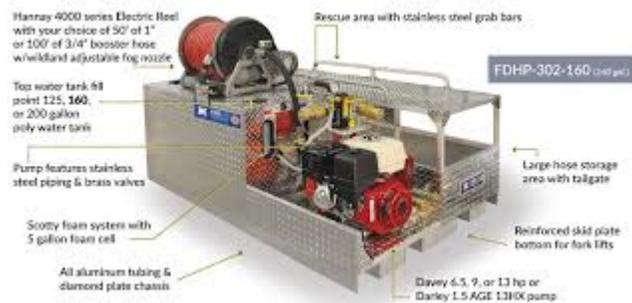


Question 3 - Also, how often does a fire fighting foam generator used? Can't we borrow it from other cities.

We hope to NEVER use the Aqueous Fire Fighting Form (AFFF) but are required to have it available in case the need arises.

The request for the foam generating pickup skid was in response to Fire Chief Chase in Auburn being rightfully concerned with the impacts of PFAS/PFOS use in his city and at the airport. As a 50% owner of the airport, Lewiston is affected by this as the airport strives to maintain FAA standards we're required statutorily to maintain through grant assurances. We are required to use a certain foam type on aircraft fires by FAA standard. This is because the metals used in aircraft construction burns and are not normally able to be extinguished with water. Smothering the flame is required, ergo the foam. Foam also works better on fuel and other petroleum products as it smothers the fire without spreading the fuel.

The idea was to continue meeting standards for Aqueous Fire Fighting Form (AFFF) but remove the problematic substance from the city's apparatus. The city's fire apparatus can carry other, less problematic foams, unless that apparatus would respond for the airport. This small 250-gallon foam generator, in the back of a pickup would allow continued compliance at the airport and more environmentally friendly city fire apparatus on city streets, in both cities.





CITY OF LEWISTON

Department of Planning & Code Enforcement

TO: Planning Board
FROM: David Hediger, Director of Planning and Code Enforcement
DATE: February 6, 2020
RE: February 10, 2020 Planning Board Agenda Item: Disposition of 1028 Sabattus Street

Pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code, the Board shall review and make a recommendation to the City Council with regard to the acquisition and disposition of all public ways, lands, buildings and other municipal facilities.

The Board is being asked to provide a favorable recommendation to the City Council on the disposition of 1028 Sabattus Street.

1028 Sabattus Street

- Map/Lot: 90-168
- Zoning: Highway Business District (HB)
- Parcel Size: .524 acres; 100' frontage on Sabattus Street
- Assessed Value: \$17,760 land, \$43,980 building
- City taxes owed: \$4,858.17 plus \$210.71 in water/sewer was due.
- Current Use: Legally non-conforming single-family dwelling (single-family dwellings are not permitted in the HB district).
- Property was condemned January 3, 2018 and confirmed vacant May 2018.

The structure may be salvageable; however, it remains in severe disrepair and will likely be demolished. The City Council is expected to vote in February to formally tax acquire the property. Upon a favorable action, the City will be looking to to dispose of the property through a formalized bid process (Property Disposition option 5.3) by sealed bids to abutters and other interest parties.

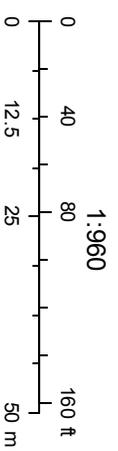
ACTIONS NECESSARY:

Make a motion pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code to send a favorable recommendation to the City Council for the disposition of 1028 Sabattus Street (including, if any, specific conditions raised by the Planning Board or staff) contingent upon a favorable vote of the City Council to tax acquire the property.

1028 Sabattus Street



February 6, 2020



Lewiston, Maine
Lewiston, Maine

City of Lewiston



↑ No units! ↑



CITY OF LEWISTON

Department of Planning & Code Enforcement

TO: Planning Board
FROM: David Hediger, Director of Planning and Code Enforcement
DATE: February 6, 2020
RE: February 10, 2020 Planning Board Agenda Item: Disposition of 49 Beech Street

Pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code, the Board shall review and make a recommendation to the City Council with regard to the acquisition and disposition of all public ways, lands, buildings and other municipal facilities.

The Board is being asked to provide a favorable recommendation to the City Council on the disposition of 49 Beech Street.

49 Beech Street

- Map/Lot: 208-6
- Zoning: Riverfront District (RF). Also subject to shoreland zoning and 100-year flood zone.
- Parcel Size: 1.1 acres
- Assessed Value: \$16,000 land, \$57,450 building
- Current Use: vacant hydro-facility for the Continental Mill. Referred to as the “pump house” or Continental Control House as referred to in the Lewiston Canal Water Power Historic District.
- Active 48” concrete city sewer line crosses the property.
- Acquired by the City March 23, 2018 as part of the canal system acquisition from Brookfield Renewable Partners.

A qualified developer has approached the City about redeveloping the pump house. Uses being considered include a coffee shop/café, restaurant, and possibly assembly space that may be available for community use. These uses are consistent with the City’s Riverfront Island Master Plan and Comprehensive Plan. The developer has requested to remain anonymous at this time, preserving their rights to negotiate the sale of the property subject to City Council approval. Therefore, Administration is recommending disposition of the property through direct negotiation with the developer (Property Disposition option 5.5). The disposition of the property will be subject to many details as the City wants to make sure access and easements remain in place for utilities, bicycle and pedestrian access along the canal and river, and maintenance of the canal and associated infrastructure. The potential developer has also indicated a strong interest in coordinating this project with Museum LA at 1 Beech Street and the redevelopment of the Pamco building at 35 Beech Street.

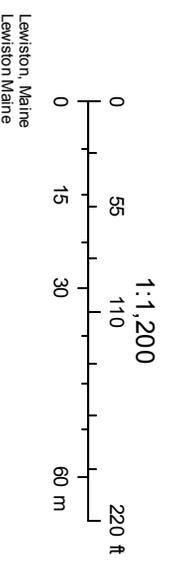
ACTIONS NECESSARY:

Make a motion pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code to send a favorable recommendation to the City Council for the disposition of 49 Beech Street (including, if any, specific conditions raised by the Planning Board or staff).

49 Beech Street



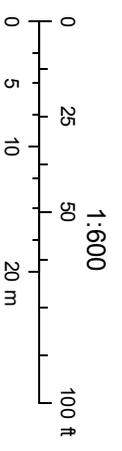
February 6, 2020



49 Beech Street



February 6, 2020



Lewiston Maine, Dept of PW
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

