

**TOWN OF PLYMOUTH CAPITAL IMPROVEMENT PLAN REQUEST
FY26 SPRING ANNUAL TOWN MEETING**

Department: Fire 220	Priority #:	1
Project Title and Description: Replace and Equip 2006 Aerial Platform	Total Project Cost:	\$2,283,467.00

Department/Division Head: Chief Neil Foley

Check if project is: New ☒ Resubmitted ☐ **Cost estimate was developed:** Internally ☐ Externally ☒

For project re-submittals, list prior year(s):

List any funding sources and amounts already granted: _____

Basis of Estimated Costs (attach additional information if available)			If project has impact on 5 Year Plan and future operating budgets, insert estimated amounts.		
Capital:	Cost	Comments	Fiscal Year:	Capital	Operations & Maintenance
<i>Planning and Design</i>			FY27		
<i>Labor and Materials</i>			FY28		
<i>Administration</i>			FY29		
<i>Land Acquisition</i>			FY30		
<i>Equipment</i>	\$2,283,467.00		FY31		
<i>Other</i>					
<i>Contingency</i>					
Total Capital					

Project Justification and Objective: Current lead time are approaching 48 months for Aerial Platforms. If ordered today we would not expect delivery until sometime in 2029.

In addition, price increases have maintained a minimum of 7 percent annually, and that trend is expected to continue. This project is in-line with the departments apparatus replacement plan.

For Capital Project Requests:

Will this project be phased over more than one fiscal year? If yes, enter it on the 5 Year Plan Yes ☐ No ☒
Can this project be phased over more than one fiscal year? Yes ☐ No ☒

For Capital Equipment Requests:

☒ Check if equipment requested is replacement and enter the year, make & model, VIN and present condition of existing equipment

2006 Pierce Tower 100ft platform VIN# 4P1CD01H27A006884 Good/Fair condition

What is the expected lifespan of this new/replacement equipment: 15+ years

Attach backup information, estimates, or justification to support this request.



Town of Plymouth
Fire Department
114 Sandwich Street
Plymouth, Massachusetts 02360
508-830-4213
Fax 508-830-4174

Date: October 9, 2024

To: Capital Improvement Committee

Cc: Lynne Barrett, Finance Director
Derek Brindisi, Town Manager
Silvio Genao, Asst. Town Manager
Sandra Strassel, Procurement Officer

From: Neil Foley, Chief of Department

Re: Fire Department Request Replace and Equip 2006 Ladder Tower (\$2,283,467.00)

Tower 1 is a 2006 Pierce Dash Elevated Platform equipped with a 300-gallon water tank and a 1,500-gallon-per-minute fire pump. This apparatus has 74,698 odometer miles and 7,361 engine hours, translating to 257,363.5 road miles. It has a Massachusetts registration of MF 1948 and a VIN of 4P1CD01H27A006884.

Tower 1 has been in service for 18 years and underwent substantial rehabilitation in 2018. It has responded to thousands of emergencies throughout the town and is currently stationed at Fire Headquarters on Sandwich Street.

This specialized firefighting apparatus, often referred to as a ladder tower, has unique capabilities that extend beyond the iconic "bucket" at the end of the ladder. Ladder towers carry additional ground ladders for every conceivable need at a fire scene. They also come equipped with specialized rescue tools, various ladders, and breathing air, making them the "toolbox" of the fireground. The tower can extend up to 100 feet, allowing for rescues from buildings or over hazards when no other paths or ground ladders can reach. It can also deliver a large volume of water to a fire from an elevated position, which helps prevent large fires from spreading to other homes and buildings, reducing additional community risk.

These are just a few examples of their capabilities. Ladder towers often play a crucial role in special rescue scenarios, such as medical emergencies where patient access is limited or unavailable with conventional ladder trucks, enhancing safety for both the patient and the rescuers. The versatility of this specialized equipment is vital to the department's mission. Since we have only one tower ladder and no backup, it is essential that it remains reliable and operational.

The National Fire Protection Agency (NFPA) and the Insurance Service Organization (ISO) stipulate that aerial apparatus (ladders and towers) must be strategically located and able to respond as part of a full alarm assignment within 480 seconds. Given Plymouth's size and road systems, meeting this

standard is already challenging and would be impossible without Tower 1. While life safety and property preservation are our goals, these standards also influence community risk ratings for insurance purposes. Significant past expenditures have improved our ISO rating, which has lowered insurance rates for property owners. If Tower 1 were to go out of service, our ISO rating would decrease, negatively affecting insurance costs.

The department's Chief Master Mechanic has rated Tower 1 in "good" condition but has noted some corrosion of vehicle components and increased maintenance costs and shop hours. While it is currently in good condition, we have been informed that due to manufacturing delays, it would take at least four years to complete the manufacturing of a new tower ladder if ordered today. This is a substantial increase from the three-year delay we experienced just a year ago. This situation and a consistent price increase of about 9% annually have prompted the department to move up the replacement request to this town meeting.

The Director of Finance, Lynne Barrett, agrees with this change in our capital planning due to the extended lead time for delivery and has noted that sufficient debt will fall off when this purchase's financial commitment is realized.

Although the current tower ladder will be approaching 25 years of service by the time the new one is delivered, we hope that the existing Tower will remain a viable spare, ensuring that Plymouth always has a tower ladder available.