Engine Tank 1-28
2001
HME / Central States
19 Years old
Manufacturer is out of business.

Major structural failures of body and sub frame components.
Second failure of body sub-frame in 5 years.
Frame rail rot issues.
Major cracks and failures of body components.
Pump / piping failures.
Valve replacement and pump work needed.

$85,000.00 plus 10K to 15K additional for unforeseen issues.

2016 Strategic Plan noted replacement date of 2019.
*** Vehicle is not capable of any extended service life.***
E.T. 128 is the first due Attack Engine from HQ.

2001 HME/CENTRAL STATES
DETROIT SERIES 60 12.7L (500HP) & ALLISON HD-4060
HALE QMAX 2,000 GPM PUMP
1,000 GALLON TANK
HALE FOAM MASTER A/B 60 GALLON FOAM SYSTEM
150’ 1-3/4” with variable stream nozzle
150’ 1-3/4” with variable stream nozzle
200’ 1-3/4” with smooth bore nozzle 15/16”
200’ 2-1/2” with variable stream nozzle
250’ 2” with variable stream nozzle
300’ 2” with smooth bore nozzle 1-1/8”
200’ 3” stinger
300’ Dead lay with a gated Y for yard lay
1,500” 5” LDH supply hose
8 SCBA
10 Kw Generator diesel
PPV Fan
Electric smoke ejector
Medical response equipment - AED
The sub-structure that hold the water tank and body was replaced due to failure in January 2016 and it has structurally failed again.
1997
LTI Simon Duplex
23 Years Old
Beyond its service life of 20 years.
Rot / frame rail issues have started!
Tubular, mild steel ladder.
Annual pump test failure.
23 year old black iron pump piping.

2016 Strategic Plan noted replacement date of 2017.
Even with a Reserve unit status of 5 years, 2022 would be it’s maximum service life.
LADDER 128
75’ AERIAL TRUCK / QUINT (Ladder Truck with a pump and water tank)
1997 SIMON DUPLEX
ENGINE DETROIT SERIES 60
TRANS. ALLISON HD4060P
SIMON LADDER AH-75
1,500 GPM WATEROUS PUMP
500 GALLON TANK
600” 5” LDH supply hose
400” 3” supply hose
150’ 1-3/4” with variable stream nozzle
200’ 1-3/4” with smooth bore nozzle 15/16”
200’ 2-1/2” with variable stream nozzle

5 SCBA
7.5 Kw generator Diesel
PPV Fan
Electric smoke ejector
(2) Vent saws
(1) Rescue Saw
Ground Ladders
• 24’ 2 fly
• 35’ 2 fly
• 14” roof
• 16” roof
• 10’ Closet
• 12’ Closet
Engine Tank 3-28
1988
Simon Duplex/ Young
32 Years Old
Non NFPA Compliant.
Open Cab
Chassis is no longer OEM supported
Major Pump, Valve and piping failures.
$58,000.00 repairs in 2019.

2016 Strategic Plan noted replacement date of 2008.
***** Reserve unit 5 years 2013 maximum service life. *****
E.T. 328 is the second due engine from Hq.

1988 SIMON DUPLEX / YOUNG

- DETROIT 8V92T / ALLISON HT740
- 1,750 GPM HALE PUMP
- 1,000 GALLON TANK
- 60 GALLON FOAM TANK
- 150’ 1-3/4” with variable stream nozzle
- 150’ 1-3/4” with variable stream nozzle
- 200’ 1-3/4” with smooth bore nozzle 15/16”
- 200’ 2-1/2” with smooth bore nozzle 1-3/8”
- 250’ 2” with variable stream nozzle
- 300’ 2” with smooth bore nozzle 1-1/8”
- 200’ 3” stinger
- 300’ Dead lay with a gated Y for yard lay
- 800” 5” LDH supply hose
- 10 Kw Generator PTO
- PPV Fan
- 5 SCBA
- Medical response equipment
- 2019 Piping / plumbing replacement, valves rebuilt and water tank cradle replaced.
- 2016 Pump Shaft and packing replacement. Front suction rebuild
1987
IH/Middlesex
33 Years old
Annual pump test failure.
Pump / Valve / failures
Water tank Rotted.
01 -2020 work done by fleet to “patch” it together for limited service.

2016 Strategic Plan noted replacement date of 2007. Reserve unit 5 years 2012 maximum service life. Vehicle to be replace with a large capacity tanker.
H.T. 128 HOSE TENDER / PUMPER
Rural Water Supply Engine
1987 I.H.C. MODEL 1854 4X4

DT 466 ENGINE / MT643 TRANS
1,250 DARLEY PUMP / 500 GALLON TANK
2,100 FT 5” HOSE ON REEL

150’ 1-3/4” with variable stream nozzle
200’ 1-3/4” with smooth bore nozzle 15/16
Engine Tank 4-28
1982
American La France
38 Years Old
Open Cab – Beyond Refurb
Non NFPA Compliant.
Chassis is no longer OEM supported
Pump / Valve / piping failures. $6,000.00 in repairs in 2020

2016 Strategic Plan noted replacement date of 2002.
**** Reserve unit 5 years 2007 maximum service life ****
• E.T. 428 (reserve) ATTACK ENGINE
• 1982 OPEN CAB
• AMERICAN LAFRANCE, CENTURY
  • DETROIT 8V71 / ALLISON HT 740
  • 1,250 GPM PUMP
  • 1,000 GAL TANK
  • 150’ 1-3/4” with variable stream nozzle
  • 200’ 1-3/4” with smooth bore nozzle 15/16”
  • 200’ 2-1/2” with smooth bore nozzle 1-3/8”
  • 250’ 2” with variable stream nozzle
  • 300’ 2” with smooth bore nozzle 1-1/8”
  • 200’ 3” stinger
  • 300’ Dead lay with a gated Y for yard lay
  • 1,500” 5” LDH supply hose
  • 7.5 Kw generator  Gas
  • Electric smoke ejector
  • 3 SCBA
The average age of these (5) front line pieces of apparatus protecting Colchester is 28.83 years old.
Also in service with a
Average Age of 14.3 Years

Engine Tank 2-28
2010
Marion/Spartan/
Gladiator
9 Years Old
Company Two
Westchester

Tanker 1-28
1992
4 Guys/ Kenworth
28 Years Old
Re-furbished in 2018

Rescue 1-28
2014
Spartan/Marion
6 Years Old
So where are we today?
<table>
<thead>
<tr>
<th>Make/Model</th>
<th>Year</th>
<th>Age (years)</th>
<th>ID</th>
<th>Suggested Replace Yr.</th>
<th>2016 Strategic Plan Comments</th>
<th>2019 / 20 Condition / Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>American La France</td>
<td>1982</td>
<td>38</td>
<td>ET 428</td>
<td>2002</td>
<td>Open Cab – Beyond Refurb</td>
<td>Non NFPA Compliant. Pump / Valve / piping failures. <strong>$6,000.00 in repairs in 2020</strong></td>
</tr>
<tr>
<td>Simon Duplex/Young</td>
<td>1988</td>
<td>32</td>
<td>ET 328</td>
<td>2008</td>
<td>Open Cab – refurb and move to reserve</td>
<td>Non NFPA Compliant. Chassis is no longer OEM supported Major Pump, Valve and piping failures. <strong>$58,000.00 repairs in 2019.</strong></td>
</tr>
<tr>
<td>4 Guys/ Kenworth</td>
<td>1992</td>
<td>28</td>
<td>T 128</td>
<td>2028</td>
<td>Refurb and Relocate to Co. 2</td>
<td>Vehicle overhaul completed, “refurb” new pump, piping and upgrades done. <strong>$48,000.00 in 2018 (New service life noted)</strong></td>
</tr>
<tr>
<td>LTI Simon Duplex</td>
<td>1997</td>
<td>23</td>
<td>L 128</td>
<td>2017</td>
<td>Include in 5 year capital plan</td>
<td>Reached its service life. Rot / frame rail issues have started!</td>
</tr>
<tr>
<td>HME / Central States</td>
<td>2001</td>
<td>19</td>
<td>ET 128</td>
<td>2019</td>
<td>Include in 5 year capital plan</td>
<td>Major structural failures of body and sub frame components. Frame rail rot issues Pump / piping failure. <strong>$85,000.00 plus 10K to 15K additional for unforeseen issues.</strong></td>
</tr>
<tr>
<td>Marion/Spartan/Gladiator</td>
<td>2010</td>
<td>10</td>
<td>ET 228</td>
<td>2030</td>
<td>Maintain</td>
<td>Pump and valve work 01/2020</td>
</tr>
<tr>
<td>Spartan/Marion</td>
<td>2014</td>
<td>6</td>
<td>R 128</td>
<td>2034</td>
<td>Maintain</td>
<td></td>
</tr>
<tr>
<td>IH Horton Ambulance</td>
<td>2007</td>
<td>13</td>
<td>A 628</td>
<td>2017</td>
<td>Beyond service life</td>
<td></td>
</tr>
<tr>
<td>Ford Lifeline Ambulance</td>
<td>2018</td>
<td>2</td>
<td>A 528</td>
<td>2028</td>
<td>CIP</td>
<td></td>
</tr>
<tr>
<td>Make/Model</td>
<td>Year</td>
<td>Age (years)</td>
<td>ID</td>
<td>Status as of 02/19/2020</td>
<td>Suggested action</td>
<td>If Action taken Replace Yr.</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------</td>
<td>-------------</td>
<td>------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>American La France</td>
<td>1982</td>
<td>38</td>
<td>ET 428</td>
<td>In service as reserve covering O.O.S. apparatus</td>
<td>Sell 1982 engine upon receipt of new engine.</td>
<td>2030</td>
</tr>
<tr>
<td>IH/Middlesex</td>
<td>1987</td>
<td>33</td>
<td>HT 128</td>
<td>Limited duty due to many failures (limited pumping only)</td>
<td>Remove from service. Replace with 2,000 gallon Tanker</td>
<td>2040</td>
</tr>
<tr>
<td>Simon Duplex/ Young</td>
<td>1988</td>
<td>32</td>
<td>ET 328</td>
<td>In service as 2nd due engine</td>
<td>Sell, upon receipt of replacement engine.</td>
<td>2045</td>
</tr>
<tr>
<td>4 Guys/ Kenworth</td>
<td>1992</td>
<td>28</td>
<td>T 128</td>
<td>In service at HQ</td>
<td>Move to Co #2 replacing the Hose Tender. Upon receipt of new tanker.</td>
<td>2028</td>
</tr>
<tr>
<td>LTI Simon Duplex</td>
<td>1997</td>
<td>23</td>
<td>L 128</td>
<td>In service at HQ. In need of pump repair.</td>
<td>Discussion Needed</td>
<td>2017</td>
</tr>
<tr>
<td>HME / Central States</td>
<td>2001</td>
<td>19</td>
<td>ET 128</td>
<td>Short term replacement Town of Clinton Engine</td>
<td>Was to become reserve Engine 4-28 replacing 1982 Engine! NOT NOW DUE TO FAILURES</td>
<td>2045</td>
</tr>
<tr>
<td>HME / Central States</td>
<td>2001</td>
<td>19</td>
<td>ET 128</td>
<td>Out of Service Major Failures</td>
<td>Short term repairs? $$55</td>
<td>2045</td>
</tr>
<tr>
<td>Marion/Spartan/ Gladiator</td>
<td>2010</td>
<td>10</td>
<td>ET 228</td>
<td>In service at Co #2</td>
<td>Remain in Service Co # 2 Westchester</td>
<td>2030</td>
</tr>
<tr>
<td>Spartan/Marion</td>
<td>2014</td>
<td>6</td>
<td>R 128</td>
<td>In service at HQ</td>
<td>In Service at HQ.</td>
<td>2034</td>
</tr>
<tr>
<td>IH Horton Ambulance</td>
<td>2007</td>
<td>13</td>
<td>A 628</td>
<td>In service at HQ</td>
<td>Sell, upon receipt of replacement ambulance 2020</td>
<td>2030</td>
</tr>
<tr>
<td>Ford F550 / Lifeline Ambulance</td>
<td>2018</td>
<td>2</td>
<td>A 528</td>
<td>In service at HQ</td>
<td>Remain in Service at HQ.</td>
<td>2028 ?</td>
</tr>
</tbody>
</table>
Options and Cost
<table>
<thead>
<tr>
<th>Apparatus</th>
<th>Year Make</th>
<th>20 years</th>
<th>+5 years reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Tank 1</td>
<td>2001 HME Central states</td>
<td>2021</td>
<td>Failure</td>
</tr>
<tr>
<td>Engine Tank 2</td>
<td>2010 Spartan Marion</td>
<td>2030</td>
<td>2035</td>
</tr>
<tr>
<td>Engine Tank 3</td>
<td>1988 Duplex Young</td>
<td>2008</td>
<td>2013</td>
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<tr>
<td>Hose Tender</td>
<td>1987 INT Middlesex</td>
<td>2007</td>
<td>2012</td>
</tr>
<tr>
<td>Engine Tank 4</td>
<td>1982 American LaFrance</td>
<td>2002</td>
<td>2017</td>
</tr>
<tr>
<td>Ambulance</td>
<td>2007 INT Horton</td>
<td>10 year replacement 2017</td>
<td>No reserve</td>
</tr>
<tr>
<td>Ladder 128</td>
<td>1997 Duplex LTI</td>
<td>2017</td>
<td>No reserve</td>
</tr>
</tbody>
</table>
Option 1
(1) Engine / (1) Tanker (HT replacement)
(1) Ambulance
EST. Cost $1,385,000

<table>
<thead>
<tr>
<th>Apparatus</th>
<th>Year Make</th>
<th>20 years</th>
<th>+5 years reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Tank 1</td>
<td>2020 Engine (NEW)</td>
<td>2040</td>
<td>2045</td>
</tr>
<tr>
<td></td>
<td>Delivery in spring 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine Tank 2</td>
<td>2010 Spartan Marion</td>
<td>2030</td>
<td>2035</td>
</tr>
<tr>
<td>Engine Tank 3</td>
<td>1988 Duplex Young</td>
<td>2008</td>
<td>2013</td>
</tr>
<tr>
<td>New Tanker</td>
<td>2020 Tanker (NEW)</td>
<td>2040</td>
<td>2045</td>
</tr>
<tr>
<td></td>
<td>Delivery in spring 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine Tank 4</td>
<td>1982 American LaFrance</td>
<td>2002</td>
<td>2017</td>
</tr>
<tr>
<td>Ambulance</td>
<td>2020 Ambulance (NEW)</td>
<td>2030</td>
<td>No reserve</td>
</tr>
<tr>
<td></td>
<td>Delivery in spring 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ladder 128</td>
<td>1997 Duplex LTI</td>
<td>2017</td>
<td>No reserve</td>
</tr>
</tbody>
</table>
### Option 2
(2) Engines / (1) Tanker (HT replacement)
(1) Ambulance
EST. Cost $2,120,000

<table>
<thead>
<tr>
<th>Apparatus</th>
<th>Year</th>
<th>Make</th>
<th>20 years</th>
<th>+5 years reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Tank 1</td>
<td>2020</td>
<td>Engine (NEW) Delivery in spring 2021</td>
<td>2040</td>
<td>2045</td>
</tr>
<tr>
<td>Engine Tank 2</td>
<td>2010</td>
<td>Spartan Marion</td>
<td>2030</td>
<td>2035</td>
</tr>
<tr>
<td>Engine Tank 3</td>
<td>1988</td>
<td>Duplex Young</td>
<td>2008</td>
<td>2013</td>
</tr>
<tr>
<td>New Tanker</td>
<td>2020</td>
<td>Tanker (NEW) Delivery in spring 2021</td>
<td>2040</td>
<td>2045</td>
</tr>
<tr>
<td>Engine Tank 4</td>
<td>2020</td>
<td>Engine (NEW) Delivery in Fall 2021</td>
<td>2040</td>
<td>2045</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Apparatus</th>
<th>Year</th>
<th>Make</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance</td>
<td>2020</td>
<td>Ambulance (NEW) Delivery in spring 2021</td>
<td>2030</td>
<td>No reserve</td>
</tr>
<tr>
<td>Ladder 128</td>
<td>1997</td>
<td>Duplex LTI</td>
<td>2017</td>
<td>No reserve</td>
</tr>
</tbody>
</table>
**Option 3**

(3) Engines / (1) Tanker (HT replacement)
(1) Ambulance

EST. Cost $2,855,000

<table>
<thead>
<tr>
<th>Apparatus</th>
<th>Year</th>
<th>Make</th>
<th>20 years</th>
<th>+5 years reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Tank 1</td>
<td>2020 Engine (NEW)</td>
<td>Delivery in spring 2021</td>
<td>2040</td>
<td>2045</td>
</tr>
<tr>
<td>Engine Tank 2</td>
<td>2010 Spartan Marion</td>
<td></td>
<td>2030</td>
<td>2035</td>
</tr>
<tr>
<td>Engine Tank 3</td>
<td>2021 Engine (NEW)</td>
<td>Delivery in Fall 2021</td>
<td>2040</td>
<td>2045</td>
</tr>
<tr>
<td>New Tanker</td>
<td>2020 Tanker (NEW)</td>
<td>Delivery in spring 2021</td>
<td>2040</td>
<td>2045</td>
</tr>
<tr>
<td>Engine Tank 4</td>
<td>2021 Engine (NEW)</td>
<td>Delivery in Fall 2021</td>
<td>2040</td>
<td>2045</td>
</tr>
<tr>
<td>Ambulance</td>
<td>2020 Ambulance (NEW)</td>
<td>Delivery in spring 2021</td>
<td>2030</td>
<td>No reserve</td>
</tr>
<tr>
<td>Ladder 128</td>
<td>1997 Duplex LTI</td>
<td></td>
<td>2017</td>
<td>No reserve</td>
</tr>
</tbody>
</table>

Both cost and operational benefits to a fleet purchase of Engines. Staggered Delivery
None of the options presented, address the ladder truck replacement issue.

<table>
<thead>
<tr>
<th>Apparatus</th>
<th>Year MFG</th>
<th>Replacement 20 years</th>
<th>Reserve status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladder 128</td>
<td>1997 Duplex LTI</td>
<td>2017</td>
<td>No reserve</td>
</tr>
</tbody>
</table>

Estimated replacement Cost $1,350,000.00