



Town of Damariscotta Select Board Meeting

May 21, 2025

**Damariscotta Fire Station
27 Massasoit Dr
5:30 PM**

Join Virtually

Meeting: <https://us02web.zoom.us/j/87460382770>

AGENDA

- I. Pledge of Allegiance**

- II. Call Select Board Meeting to Order**
 - 1. Public Forum/Workshop**
 - i. Ladder Truck Inspection and Replacement Presentation
 - 2. Minutes**
 - i. May 7, 2025
 - 3. Financial Reports**
 - i. Payroll Warrants #___
 - ii. Accounts Payable Warrants #___
 - 4. Citizen Comments and General Correspondence**
 - i. Coalition Against Bigger Trucks
 - 5. Town Manager's Report**
 - 6. Official Action Items**
 - i. Approve RFP: Ladder Truck
 - ii. Approve Donation: Fire Dept Equipment Reserve (*Tentative*)
 - iii. Accept Donation: Police Department Reserve
 - iv. Qualified Catering Permit: NCS LLC
 - v. Public Works Committee Appointment
 - 7. Select Board's Discussion Items**
 - 8. Executive Session 1 MRS §405(6)(F): Philbrook Fund Application Review**
 - 9. Possible Action: Philbrook Fund Allocation**

- III. Adjournment**



Town of Damariscotta Select Board Meeting

May 7, 2025

Town Office, 21 School St

5:30 PM

Join Virtually

Meeting: <https://us02web.zoom.us/j/87460382770>

MINUTES

Attendance: Select Board: Daryl Fraser, Tom Anderson, Andrea Keushguerian, Dan Hunter, Josh Pinkham
Other: Andrew Dorr, Town Manager; Micheal Martone, Town Planner; Ernest and Florence Bourgon

- I. **Pledge of Allegiance**
- II. **Call Select Board Meeting to Order**
Fraser called the meeting to order at 5:30 p.m.

3. Citizen Comment

Florence Bourgon addressed the Select Board concerning what she referred to as “Hate Crimes”. Following a lengthy discussion, it was recommended that she file an official complaint with the Town Manager and follow designated procedures.

Update from Town Planner:

Martone updated the Select Board on the status of the intern and next steps for implementation of the State approved Comp Plan. He believes an Implementation Committee should be appointed. Would like the Board to consider what that might look like. Would some representatives from some institutions be included; such as the Hospital or Chamber?

Anderson suggested content experts could be considered on specific goals in the Plan. Dorr added that this was an opportunity to provide a 3- year strategic plan using the Comp Plan as the foundation. Hunter shared that they were all related. Comp Plan, Strategic Planning, the intern and a role of the implementation committee. Dorr hoped that, while ambitious, a strategic plan be in place by September and that the committee be in place prior to the state of the intern. Further discussion included connecting planning to what to do with dollars (budgets), how to measure progress, how to communicate to the public how we are doing. The Strategic Plan will be the operation plan or guiding document to the future budgets. Fraser suggested the Select Board start with a workshop and profession guidance. Dorr is in the process of gathering proposals for facilitating the strategic planning. Martone asked them to think about what the Select Board might want the committee to provide back to the full Board (quarterly meetings, an annual report, a Town Meeting presentation?)

1. Minutes

- i. April 2, 2025
Motion by Anderson to approve the minutes of 4/2/25
Second by Keushguerian
Vote: 5/0/0

- ii. April 16, 2025
Motion by Pinkham to approve the minutes of 4/16/25
Second by Keushguerian
Vote: 3/0/2

2. Financial Reports

- i. Payroll Warrants #____
Motion by Pinkham to approve payroll warrant #51
Second by Fraser
Vote: 5/0/0

- ii. Accounts Payable Warrants #____
Motion by Pinkham to approve accounts payable warrant #52
Second by Anderson
Vote: 5/0/0

3. Citizen Comments and General Correspondence

- i. Midcoast Friends Meeting PILOT
A check in the amount of \$425.00 was received by the Town from Midcost Friends Meeting

4. Town Manager's Report

Dorr distributed a written report. He highlighted information on the Island Fellow position who will be primarily helping to create an implementation strategy for the Comp Plan and integrate that into the board's strategic plan. Chief Roberts coordinated a visit from a structural engineer. Initial observations did not yield any major concerns but will make some suggestions for repairs. The sealing of the bay floor and the roof replacement will continue to proceed. Dorr suggested the next Select Board meeting (May 21) be held at the fire station, so that members could view damages for themselves. Roof replacement needs to go out to bid and will be accompanied by an RFP for insulation work that will utilize the Community Action Grant received last year. The RFP for the Ladder truck replacement is nearly complete. The hope is to lock in a price and get a place hold for completion of the truck given a 2-3 year construction time. The parking lot is nearly complete. Stripers plan to complete this week.

5. Official Action Items

i. MDOT Locally Administered Project Agreement: Castner Creek Culvert

Dorr shared a contract from MaineDOT and shared a few important facts. This was an 80/20 matching grant, so following the process exactly, was extremely important. Dorr currently holds the certification and appropriate qualifications to serve as the Local Project Administration (LPA) as required. The current estimated cost for the project is \$981,000. Dorr shared that there was no guarantee of matching funds, if the project were to go over this amount. Anderson commented that Dorr was doing such a great job managing so many projects.

Motion by Fraser to authorize the Town Manager to sign and implement the State of Maine Department of Transportation Agreement for a Federal-aid Locally Administered Project (Culvert Replacement)

Second by Pinkham

Vote: 5/0/0

ii. Arbor Day Proclamation

Information regarding a community arbor day celebration and tree planting at Round Top Farm May 17, 2025 opened a discussion about becoming recognized as a Tree City USA member. Information regarding the program was reviewed. Hunter asked what it would take to become a tree city? Dorr referred members to a check list of items which include having a tree committee and ordinances among several other requirements. As one of the conditions toward achieving this distinction, a draft Arbor Day Proclamation was included in the packet.

Motion by Fraser to proceed with an Arbor Week Proclamation for the 3rd full week in May, consistent with the Maine Legislature's designation.

Second by Keushguerian

Vote: 5/0/0

6. Select Board's Discussion Items

Keushguerian wondered when the parking stops would be removed in the parking lot. She wanted to again comment on what a good job Crooker did. They were aware of the needs and responded, they communicated well. The general consensus was very positive. Dorr replied that once the lines had been painted, the parking stops would be removed. He also wanted to acknowledge that having an LPR on site day to day for this project was well worth the money.

Pinkham asked if there was further information on the upcoming State project on 1B.

Dorr replied that a project manager had been assigned. Crooker would be doing this project as well. It is scheduled to begin the middle to the end of May. The utilities needed to be moved first.

Hunter commented how proud of Fraser and Dorr he was at the Climate Commission Press conference. They spoke in front of the camera well and put the Town in a good light. Fraser stated it was a nice afternoon, thanks to Dorr.

Hunter asked about the RSU meeting the previous evening. Dorr replied that it was a pretty straight forward meeting, with virtually no questions. There was overwhelming support for breaking away from AOS (56/1 as he recollected).

III. Adjournment

Motion by Pinkham to adjourn at 6:55

Second by Keushguerian

Vote: 5/0/0



Letter Opposing Heavier Trucks

1 message

Brad Roseberry <broseberry@cabt.org>
Reply-To: broseberry@cabt.org
To: Andrew Dorr <adorr@damariscottame.com>

Thu, May 15, 2025 at 12:00 PM

Dear Mr. Dorr,

I'm reaching out to local officials in the Town of Damariscotta area for the [Coalition Against Bigger Trucks](#), a national non-profit that seeks to stop legislation allowing heavier and longer semi-trucks from passing in Congress.

I'm reaching out to you about legislation proposed in Congress that would dramatically increase the weight limit of semi-trucks on our nation's roads. **We're asking for your help to stop this before these heavier trucks are driving on your local roads.**

[Please click this link to add your name to the letter.](#)
You can also simply respond "add my name" to this email if you wish to sign on.

There is a wealth of data showing that bigger trucks are bad policy due to the damage they would cause to local roads and bridges, and the costs they would incur for taxpayers. [A recent study](#) looked at local infrastructure – no truck trip starts and stops on the interstate – and found that 91,000-pound trucks would require \$78.7 billion in local bridge replacements.

For example, in Maine:

Number of local bridges at risk with 91,000-pound trucks: **353**

Cost of replacing at-risk local bridges: **\$950,571,480**

We're working on a group letter from state and local government officials like yourself to be sent to Congress **before these bills come up for a vote**. A [similar letter](#) in 2023 had over 1,500 signers from communities across the country and we're hoping this effort will send a powerful message to Congress that local roads and bridges simply cannot handle heavier trucks.

Please let me know if you have any questions.

Thank you,

Brad Roseberry
President
Coalition Against Bigger Trucks

Brad Roseberry

[109 North Fairfax Street](#), Second Floor, Alexandria, VA 22314

[Unsubscribe](#)



Town Manager's Report

May 16, 2025

Department Updates

- Administration
 - Website - We anticipate the website to launch the last week in May. We are working on getting a new domain name so that we will be compliant with certain agencies/entities. Currently, we have a .com domain and we are planning to switch to a .gov domain. Staff are working to try and update relevant information for the new site and will continue to do so even after the launch.
 - An intern will begin their work in less than two weeks. There is a list of projects that they will be able to work on, including drafting a business licensing program for the board to consider. Other projects are tied to an economic development focus, but could include housing or TIF assessments, depending on their specific interest. This internship is through the Margaret Chase Smith Policy Center and is partially funded via a grant that we received.
 - I'll be travelling to Washington DC early next week to meet with our federal delegation. I was asked if I'd be willing to attend and share a local government perspective of what the proposed budget impacts would mean for us at a local level. The Reconciliation Bill submitted earlier this winter called for significant cuts to agencies and programs that we rely on either directly or indirectly. On May 2nd, the White House presented Chairperson Collins with a discretionary budget for FY 26. As it is proposed, there are some significant reductions or complete elimination of agencies proposed that towns, counties, and states have come to rely on for support or temporary assistance. Most notably, NOAA, EDA, EPA, FEMA, DHHS, and HUD are all being considered for massive reductions by eliminating programs, or in some cases, like EDA, a complete elimination. There is no cost to the town for this visit and I am scheduled to be back in time for the meeting on Wednesday.
- Planning
 - MCF Capacity Building Grant - we did not receive funding from MCF to support the Island Fellow and comp plan implementation. We did budget for the cost to proceed with this effort, but I had hoped the grant would cover some of the cost so we could use

the remaining budgeted funds to hire someone to assist with the strategic plan workshops. I will keep looking at ways to fund that effort as well.

- In your packet is a proposal to contract with Midcoast Council of Governments to assist our Town Planner with the site development review. This work is solely dependent on the applications received, but is a task that can consume up to 8 hours on a larger project. Smaller projects are estimated to utilize 3 or 4 hours of their time and thus leaves many other tasks or goals on hold for that month. The proposal is to cover a full year of review services, overseen by the Town Planner. Any remaining balance at the end of the term can be applied forward, if the contract ends early, we would be refunded the balance.
- I expect a memo for the June meeting highlighting implementation committee guardrails or focus. Once you have that, you can modify or adopt that so we are able to recruit folks to participate in that effort.
- Police
 -
- Fire
 - Out for bid - station lighting improvements, insulation installation, and roof replacement. All three bids are advertised, two of which are partially covered by Community Action Grant funds.
 - Ladder Replacement - an RFP for the ladder replacement is in your packet. The Fire Chief will be giving a demonstration and overview of the current truck and will be able to answer any questions you may have at the beginning of the meeting on Wednesday. The Chief is anticipating an approval of the board to advertise the ladder truck RFP so that we can get bid prices sooner than later. Any acceptance of a bid will of course be contingent upon positive vote from the community at the Annual Town Meeting.
- Public Works
 - We are working to conduct interviews with some applicants. One has been completed already with a possibility of two more. I am hopeful we can make a decision by the end of next week and have a worker before the end of the fiscal year.
 - We are still waiting for the bathroom addition at the Public Works garage. Once complete, the department will have the ability to wash their hands and utilize a functioning toilet. The current outhouse will be repurposed as a utility shed at the Town Office so that we are able to stop using the dumpster. The dumpster continues to be used by others as much as we use it, ultimately costing the tax payers more money than it should.

Capital Project Updates

- **Miles Street** - Asphalt has been applied to the road and sidewalk. The progress looks good. Final work items include removing the erosion control measures, seeding the loamed areas, and completing the lighting. We will work with the hospital to reassess the ability to plant any trees along the south side of the sidewalk once it is complete.

- **Keene Woods** - Crews have graded the road surface and are generally prepared for base paving. Following the base pavement, they will be following up on additional items, like ditching and shoulder work. The surface paving will likely occur by the end of May, weather permitting. Crews should be out of the project area by the end of June.
- **Parking Lot** - The parking lot is basically complete. The remaining items that I am aware of include setting the previously set property pins and the installation of the basin filters. We will continue to monitor the effectiveness of the check valves, but otherwise the project is finished. With the right weather conditions, the park will fill in with grass, until then, it will be patchy. We will keep an eye on the progress and water if necessary.

Upcoming Meetings

- Wednesday, May 21 @ 5:30 PM - Select Board Meeting [Damariscotta Fire Station]
- Monday, May 26 - OFFICE CLOSED - MEMORIAL DAY
- Monday, June 2 @ 6:00 PM - Planning Board [Town Office]
- Wednesday, June 4 @ 5:30 PM - Select Board Meetings [Town Office]
- Thursday, June 5 @ 10:00 AM - Cemetery Trustees [Virtual]
- Tuesday, June 10 @ 8:00 AM - 8:00 PM - Annual Town Meeting Referendum [Town Office]
- Wednesday, June 11 @ 6:00 PM - ANNUAL TOWN MEETING Open Floor Meeting [Skidompha Library]
- Wednesday, June 21 @ 5:30 PM - Select Board Meeting [Town Office]

General Information

The Damariscotta Fire Department is soliciting bids for an aerial quint apparatus which is designed and constructed to withstand the severe and continuous use encountered during emergency fire fighting services. This apparatus shall conform to the requirements of NFPA 1900 – 2024 edition to serve as an aerial quint apparatus.

The preference of the Department is to have an aerial apparatus that is highly mobile and can serve in a rural area. It is critical that the apparatus also be able to serve as a pumper fire apparatus, so all tools and equipment required to meet this definition must be able to fit on the apparatus.

It is important to note that this request for proposals is for a purchase of an apparatus that has not yet been approved by the voters for the Town of Damariscotta. The expected timeline for an award is July of 2025, but is contingent on the approval of a bond to fund the majority of this purchase. This question for the open town meeting for the Town of Damariscotta is scheduled for June 11, 2025.

All bidders are encouraged to contact the Fire Chief via e-mail or phone if they will be interested in providing a bid proposal. This will allow the Chief to contact all interested parties if clarifications to the requirements are deemed necessary.

Bid Compliance Instructions

All bids are required to be submitted in full by mid-night on Friday, June 27th, 2025 by one of the following methods: (1) Package mailed to Damariscotta Fire Department; P.O. Box 1206; Damariscotta, ME 04543; or (2) Complete package sent via e-mail to jroberts@damariscottame.com and the Chief contacted at (207)380-6880 to ensure that the package was received. Packages post-marked by June 27th will be accepted as long as they arrive within 3 business days. Late proposals in any form shall not be considered. Bid proposals are expected to be complete. If a bid proposal is not complete, it may be discounted in its entirety. The acceptance of any bid package as complete and compliant shall be completely at the sole discretion of the Damariscotta Fire Department.

As this solicitation is a best-value , a company may choose to submit more than one proposal.

A complete bid proposal includes ALL of the following information:

1. The completed Requirements section of this document indicating which requirements the proposal complies with and which areas the proposal deviates from the requirements. This shall be annotated by a “YES” or “NO” mark in the applicable row of the specification for each requirement. In the event that the bidder fails to make any indication of compliance for any or all provisions it will be assumed that the bidder is taking total exception to the specification and the bid shall be disallowed.
2. Written list of exceptions with explanations. The Damariscotta Fire Department shall be the sole arbiter as to what exceptions may be allowed or disallowed.

3. Drawing showing the four sides of the truck plus the arrangement of the top view of the apparatus, all dimensions noted including the inside dimensions of all compartments, and the center of gravity shown.
4. Proposed price details with no pre-payment discount. Bid must include an option showing pre-payment discount available if paying for \$500,000 upfront, and awarding the contract by July 31, 2025.
5. Complete specification for the apparatus being proposed including make and model of the proposed apparatus.
6. Statement of all warranties.
7. The successful bidder shall assume all liability for the use of any process, device or article forming a part of the apparatus and the responsibility of apparatus and equipment shall remain with the contractor until acceptance by the purchaser. Each bidder shall submit proof of the manufacturer's insurance coverage, including product liability. The minimum total amount of such coverage shall be \$25,000,000.
8. Statement of bidder that the proposed apparatus will be manufactured in the United States of America.
9. Fire apparatus and equipment proposed for meeting these specifications must be products of an established, reputable fire apparatus and/or equipment manufacturer. Details about the Company making the offer and the Manufacturer (if different) shall be provided. This information shall contain satisfactory evidence of the manufacturer's ability to construct, supply service parts and technical assistance for the apparatus specified.
10. Location of the closest factory authorized service provider and its travel distance from Damariscotta, Maine.
11. Terms and conditions associated with the bid proposal.
12. A performance bond shall be required for the prepayment amount of \$500,000. The costs of this bond shall be provided as a separate amount from the purchase price.
13. Bidder shall provide a list of three recent deliveries of similar apparatus, with a preference of deliveries within New England, with contact information for the department that took delivery of each apparatus.
14. Expected delivery timeline if awarded the contract by July 31, 2025.

Award Process

The award of the contract will be based on a best value assessment that will be conducted by the Damariscotta Fire Department and approved by the Town Manager and Select Board. This assessment will consider the overall cost of the apparatus compared to our budget, usable compartment space, proximity of a service center and level of compliance to these specifications as well as other items at the discretion of the Fire Department.

Clarifications

If the bidder requests clarification to any of the requirements, they shall be provided in writing or via e-mail to the Chief with the above contact information. The Department will make it a priority to respond

quickly to any clarification requests. If the clarifications are deemed to impact the specifications enough to warrant alerting all bidders, the Department will attempt to provide the response to all known bidders to allow for a fair competition.

Bid Proposal Contact

The company submitting a bid shall appoint one representative who will act on behalf of the company with all dealings with the Damariscotta Fire Department. This person will also handle the contract if awarded from the bid proposal through the end of delivery, including any modifications identified within 30 days of apparatus receipt.

Best Value Score Criteria

The Damariscotta Fire Department reserves the right to reject any and all bids. This is especially important for many of the performance requirements, or if a bidder provides an alternative product that is not equivalent to these specifications. Some criteria, such as vehicle height, must be met. For some other criteria, an evaluation and scoring methodology will be followed to arrive at the best value proposal. Each category will have a weight assigned and will be scored between 0 and 10, with 10 being the best score.

The following categories and scoring criteria are provided as a guide that will be used in the evaluation process. The department reserves the right to change criteria up to the point of bid opening.

Price (Weight of 20): A Score of 10 = Truck (with discounts) less than or equal to \$1,760,000; 1 point deducted if price is over \$1,760,000 and an additional point for each \$14,000 over this price.

Aerial Reach (Weight of 10): A Score of 10 = Aerial vertical reach and horizontal reach is at least 100'; 1 point deducted if either reach is less than 100' and an additional point for each two feet shorter than this length.

Pump Capacity and Water Tank Capacity (Weight of 10): A Score of 10 = Pump capacity of at least 2,000 gpm and a tank capacity of 500 gallons; 5 points deducted for pump capacity under 2,000 gpm; 1 point deducted for water tank capacity under 500 gallons with an additional point for each 50 gallons below this capacity.

Ground Ladder Capacity (Weight of 10): A Score of 10 = Full specified complement of specified ladders included with number of flies specified (1-35' 2-section extension ladder; 1-28' 2-section extension ladder; 1-20' roof ladder; 2-18' roof ladders; 1-16' roof ladder; 12' fresno closet ladder); 2 points deducted for 3-section 35' extension ladder; 2 points deducted for each ladder that does not conform to the full specified compliment.

Seating Capacity and Cab Layout/Size (Weight of 10): A Score of 10 = Seating room for 6 firefighters, one EMS compartment, A/C, at least a 60" cab, and tool mounting locations provided; 5 points deducted for fewer seating locations; 3 points deducted for no EMS compartment; 2 points deducted for no tool mounting, 3 points deducted for no A/C.

Pre-piped Waterway and Nozzle (Weight of 10): A Score of 10 = 1000 gpm nozzle able to be directed horizontally in either direction and to have a slight upward facing angle, has 1.5" NPSH connection with manual valves to turn be able to turn on-off the master stream as well as the 1.5" connection, master stream nozzle to be controlled at the nozzle and turn-table, waterway able to be pinned at the 3rd or 4th fly; 3 points deducted if side to side motion cannot be obtained; 3 points deducted if nozzle cannot point upward facing angle; 4 points deducted if 1.5" connection is not present; 3 points deducted if waterway cannot be pinned at a second location; 3 points deducted if fog to straight stream not controllable.

Tip Load Capacity and Jack Spread (Weight of 5): A Score of 10 = 500 pound tip load flowing 1,000 gpm at any angle and any extension with 14' or narrower jack spread; 4 points deducted for restrictions on weight with any configuration; 4 points deducted for less than 500 pound dry tip load; 3 points deducted with wider jack spread distance.

Compartment Space (Weight of 5): A Score of 10 = Maximum compartment space, and 1,000' for 5" large-diameter hose capacity; 5 point deduction for less LDH capacity; 5 point deduction if compartment space if less than 145 cubic feet not including ground ladder storage area.

Pump Panel (Weight of 5): A Score of 10 = Low profile panel with speed lays, stokes basket storage and most of the panel protected with a door; 5 point deduction if panel is not contained behind door; 5 point deduction if speed lays are not present.

Repair Center Location (Weight of 10): A Score of 10 = Within 75 miles. A Score of 6 = 75 to 125 miles. A Score of 3 = 125-200 miles. A Score of 0 = greater than 200 miles.

Scene Lighting (Weight of 5): A Score of 10 = Scene lighting provided on all four sides, and at least four light fixtures on tip; 4 points deducted if less than 4 lights at tip; 2 points deducted for each side with insufficient lighting.

Requirements

Requirement	Compliant	
	Yes	No
1. Certification, Testing and Compliance		
1.1. All NFPA 1900, 2024 Edition requirements for testing and certification shall be performed		
1.2. The OEM supplied components of the vehicle shall meet the requirements of NFPA 1900, 2024 edition (ULC as applicable) as an Aerial Quint Apparatus.		
1.3. The chassis shall be certified by the apparatus manufacturer as conforming to all applicable Federal Motor Vehicle Safety Standards in effect at the date of contract. This shall be attested to by the attachment of a FMVSS certifications label on the vehicle by the contractor who shall be recognized as the responsible final manufacturer.		
1.4. ISO Compliance: The manufacturer shall ensure that the construction of the apparatus body shall be in conformance with the established ISO-compliant quality system. All written quality procedures and other procedures referenced within the pages of the manufacturer's Quality Manual, as well as all Work Instructions, Workmanship Standards, and Calibration Administration that directly or indirectly impacts this process shall be strictly adhered to. By virtue of its ISO compliance the manufacturer shall provide an apparatus that is built to exacting standards, meets the customer's expectations, and satisfies the customer's requirements.		
1.5. Pump Certification		
1.5.1. The pump, when dry, shall be capable of taking suction and discharging water in accordance with current NFPA 1900. The pump shall be tested at the manufacturer's facility by an independent, third-party testing service. The conditions of the pump test shall be as outlined in current NFPA 1900.		
1.5.2. The tests shall include, at a minimum, the pump test, the pumping engine overload test, the pressure control system test, the priming device tests, the vacuum test, and the water tank to pump flow test as outlined in current NFPA 1900.		
1.5.3. A piping hydrostatic test shall be performed as outlined in current NFPA 1900.		
1.5.4. The pump shall deliver the percentage of rated capacities at pressures indicated below:		
1.5.4.1. 100% of rated capacity at 150 psi net pump pressure		
1.5.4.2. 100% of rated capacity at 165 psi net pump pressure		
1.5.4.3. 70% of rated capacity at 200 psi net pump pressure		
1.5.4.4. 50% of rated capacity at 250 psi net pump pressure		
1.5.4.5. A test plate, installed at the pump panel, shall provide the rated discharges and pressures together with the speed of the engine as determined by the certification test, and the no-load governed speed of the engine.		

Requirement	Compliant	
	Yes	No
1.5.5. A Certificate of Inspection certifying performance of the pump and all related components shall be provided at time of delivery. Additional certification documents shall include, but not limited to, Certificate of Hydrostatic Test, Electrical System Performance Test, Manufacturer's Record of Pumper Construction, and Certificate of Pump Performance from the pump manufacturer.		
1.6. NFPA Required Testing of Electrical System		
1.6.1. The apparatus shall be electrical tested upon completion of the vehicle and prior to delivery. The electrical testing, certifications, and test results shall be submitted with delivery documentation per requirements of NFPA 1900. The following minimum testing shall be completed by the apparatus manufacturer:		
1.6.1.1. Reserve capacity test: The engine shall be started and kept running until the engine and engine compartment temperatures are stabilized at normal operating temperatures and the battery system is fully charged. The engine shall be shut off and the minimum continuous electrical load shall be activated for ten (10) minutes. All electrical loads shall be turned off prior to attempting to restart the engine. The battery system shall then be capable of restarting the engine. Failure to restart the engine shall be considered a test fail.		
1.6.1.2. Alternator performance test at idle: The minimum continuous electrical load shall be activated with the engine running at idle speed. The engine temperature shall be stabilized at normal operating temperature. The battery system shall be tested to detect the presence of battery discharge current. The detection of battery discharge current shall be considered a test failure.		
1.6.1.3. Alternator performance test at full load: The total continuous electrical load shall be activated with the engine running up to the engine manufacturer's governed speed. The test duration shall be a minimum of two (2) hours. Activation of the load management system shall be permitted during this test. However, an alarm sounded by excessive battery discharge, as detected by the system required in NFPA 1900 Standard, or a system voltage of less than 11.7 volts DC for a 12 volt nominal system, for more than 120 seconds, shall be considered a test failure.		
1.6.1.4. Low voltage alarm test: Following the completion of the above tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm activates. The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of less than 11.7 volts DC for a 12 volt nominal system shall be considered a test failure. The battery system shall then be able to restart the engine. Failure to restart the engine shall be considered a test failure.		
2. Cab and Chassis		

Requirement	Compliant	
	Yes	No
2.1. The cab and chassis shall be a four door chassis with a preference on including as much headroom as possible.		
2.2. The cab and chassis shall be made in the USA.		
2.3. Mirrors: Dual vision with flat and convex glass, motorized mirrors, with chrome finish, will be mounted on each side of the front cab with a folding capability. The flat glass and convex glass will be heated and adjustable with remote control within reach of the driver.		
2.4. The cab shall have seating for six persons, two in the front and four in the rear. Rear facing seats are permissible.		
2.5. The chassis preference is to use a dual rear axle configuration.		
2.6. Quick turn chassis: To provide better vehicle maneuverability, the fire truck configuration shall feature a front wheel axle cut of at least 45 deg.		
2.7. Overall Height Restriction: The apparatus shall have an overall height restriction of 11 feet 10 inches.		
2.8. Overall Length Restriction: The unit shall have an overall length restriction of 43 feet.		
2.9. Tow Points		
2.9.1. Front Tow Eyes: The chassis shall have two (2) forward frame mounted tow eyes to allow towing (not lifting) of the apparatus without damage. The inner and outer edges of the tow eyes shall be radiused.		
2.9.2. Rear Tow Eyes: Two (2) heavy duty tow eyes shall be mounted below the body at the rear of the vehicle to allow towing (not lifting) of the apparatus without damage. The inner and outer edges of the tow eyes shall be radiused.		
2.10. Exhaust Installation		
2.10.1. Exhaust Extension – The chassis exhaust pipe shall be extended to the front of the right rear wheels (officer side).		
2.10.1.1. Bidder will install Nederman exhaust magnet on the apparatus to hook to the Department’s exhaust system. Magnet will be provided by the Department for installation prior to delivery. The installation location is approximately 26” directly above the center of the exhaust pipe. This location cannot rest on a roll-up door.		
2.10.2. Fast Idle System – A fast idle system shall be provided and controlled by a switch in the cab and a switch mounted on the control panel of the aerial device. The system shall increase engine idle speed to a preset RPM for increased alternator output and hydraulic system capacity.		
2.10.3. Master Light Switch – The master light switch shall consist of one (1) illuminated rocker switch wired through a relay to accessory switches to allow pre-selected switches to be turned on or off at one time		
2.10.4. Battery Master Disconnect – A heavy duty on/off single battery master disconnect switch shall be mounted in the cab within easy reach of the driver.		

Requirement	Compliant	
	Yes	No
2.10.5. Auxiliary Engine Cooler – As required for pumping applications, an engine cooler shall be installed. The engine cooler shall be required to lower engine water temperature during prolonged pumping operations and shall be controlled at the pump operator’s position.		
2.11. Air System		
2.11.1. Air Inlet		
2.11.1.1. A ¼” male plug air hose inlet shall be connected to the air reservoir tank. A ¼” inline check valve will be installed in the line. Air hose connection will provide the capability of filling the air brake system with air from an outside source.		
2.11.1.2. The air inlet shall be an automatic ejection type which operates when the apparatus is started. It shall be a Kussmaul or equivalent device equipped with a yellow cover.		
2.11.1.3. The air inlet shall be located on the driver’s side and located near the grab bar on driver’s door and adjacent to the electrical shore-line connection		
2.11.1.4. The air inlet shall discharge into the “wet” side of the tank of the brake system.		
2.11.2. Air Dryer: An air dryer with a heater shall be provided.		
2.11.3. A Q-siren mounting location shall be provided and all necessary piping and switches installed. The Q-siren will be provided by the bidder. Foot switch locations shall be on the floor and located by both seated positions. The system shall be interlocked with the Master Lights switch. A brake control for the Q-siren will be provided in the cab with the rest of the siren controls.		
2.11.4. Air Outlet – An air outlet shall be provided in a convenient compartment on the officers side with a shut-off valve accessible within the compartment. This connection is planned to be used for air bag inflating or general purpose air tool use.		
2.11.5. Air Horns		
2.11.5.1. Dual Air Horns shall be Supplied and Installed by the manufacturer in the front bumper		
2.11.5.2. Activation lanyard(s) shall be placed within reach of both the driver and officer seats to activate the air horns from either seat while in a seated position with seat belts fastened.		
2.11.5.3. A pressure protective valve shall be installed in-line to prevent the loss of air in the brake system.		
2.11.6. Air Compressor		
2.11.6.1. The truck’s air compressor shall be sized to be able to handle the continuous volume requirement of the air priming system (minimal 15.6 cfm).		
2.12. Brake System		
2.12.1. The front and rear brakes shall be segregated so that a leak on one line does not deplete the other		
2.13. Rust proofing and Galvanic Protection		

Requirement	Compliant	
	Yes	No
2.13.1. A complete underbody rust proofing and under-coating system shall be applied after assembly and before delivery.		
2.13.2. The frame shall be completely hot-dipped galvanized including the cross members. This process must be fully encompassing the frame.		
2.13.3. All areas with dis-similar metals shall be installed to prevent galvanic corrosion. Dis-similar metals installed in contact with each-other that corrode will be considered a latent defect.		
2.13.4. Any non-stainless steel construction must be protected by a heavy coating system to protect it from corrosion.		
2.13.5. The use of mild steel in areas exposed to road contamination should be avoided. Where it is used, it must be identified in the proposal and coated with a treatment that is expected to last at least 25 years.		
2.14. Wheel Chocks – the apparatus shall have holders near the wheels to store four wheel chocks, two on each side of the apparatus. They should be mounted in a position that does not adversely impact approach and departure angles. Wheel chocks shall be rated for the vehicle weight.		
3. Apparatus Body		
3.1. The apparatus body shall be entirely constructed of high grade aluminum.		
3.2. The body design shall maximize compartment space. As this apparatus is a multi-purpose vehicle, compartment space volume and layout is of upmost importance. The storage shall also accommodate all equipment needed to comply with the NFPA 1900 requirements and all equipment located within this specification.		
3.3. The entire body shall be constructed with aluminum. Body designs that incorporate steel sub-frames connected to aluminum compartments must be completely protected from galvanic corrosion. Dis-similar metals installed in contact with each-other that corrode will be considered a latent defect.		
3.4. Water Tank Mounting System		
3.4.1. The body design shall allow the booster tank to be completely removable without disturbing or dismounting the apparatus body structure. The tank shall be supported to avoid any wear or undue stress. The booster tank mounting system shall utilize a floating design to reduce stress from road travel and vibration.		
3.5. The driver and officer side assemblies shall be constructed entirely of aluminum. The corners and sides shall be welded both internally and externally at each joint using an aluminum alloy welding wire. Both sides of the body shall be completely sanded and de-burred to assure a smooth finish.		
3.6. Wheel Well: The liners shall be bolt-on and shall provide a maintenance-free and damage-resistant surface.		
4. Engine		
4.1. The engine shall be from a commercial manufacturer and have an output rating of at least 450 HP.		

Requirement	Compliant	
	Yes	No
4.2. The engine shall be equipped with a compression brake to automatically slow the vehicle when the accelerator pedal is in the "off" position. This break shall be controlled by switches mounted in the cab in a convenient location for the driver.		
4.3. The engine shall be equipped with an alternator sized to support the current and future electrical needs of the apparatus but no less than 400 Amps.		
5. Drive-train		
5.1. The apparatus shall be equipped with an automatic transmission manufactured by Allison (EVS 4000)		
5.1.1. The transmission shift control shall be located to the right of the driver.		
5.1.2. The shift position indicator shall be equipped for dark operation		
5.2. Axle ratings		
5.2.1. Axle ratings shall exceed the NFPA requirements		
5.2.2. There shall be no instance where the wet loaded weight of the apparatus exceeds recommended weights for the axles.		
5.3. The apparatus shall be equipped with locking differentials in all rear axles.		
5.3.1. Control for the locking rear-end differential(s) shall be from a switch in the cab which is readily accessible to the operator and labeled appropriately. Any cautions about activating the switch shall be clearly labeled in a location adjacent to the switch.		
5.4. The apparatus shall be equipped with an inter-axle differential if equipped with tandem axles.		
5.4.1. Control for the inter-axle differential lock shall be from a switch in the cab which is readily accessible to the operator and labeled appropriately. Any cautions about activating the switch shall be clearly labeled in a location adjacent to the switch.		
5.5. Wheel and Tire Options		
5.5.1. Front Wheel Trim Package: Wheels shall be steel and painted to match the red job color. Tires shall be made in the USA from a reputable manufacturer and all terrain tread.		
5.5.2. Tire Pressure Monitor: The apparatus shall not be provided with tire pressure indicating valve stem caps.		
6. Interior		
6.1. The cab shall be designed in a manner to be consistent with Clean Cab best practices as outlined in NFPA 1900.		
6.2. The interior of the cab shall consist of six seats, an EMS compartment and a center console		
6.2.1. All seats with the exception of the driver's seat shall have SCBA stowage. The air packs will be Scott with 45 minute 4500 psi bottles.		
6.3. Seating Capacity Tag: A tag that is in view of the driver stating seating capacity of six (6) personnel shall be provided.		
6.4. Cab Instrumentation		
6.4.1. Required Gauges visible from the driver's position		
6.4.1.1. Voltmeter		
6.4.1.2. Engine Tachometer (RPM)		

Requirement		Compliant	
		Yes	No
6.4.1.3.	Speedometer (MPH primary)		
6.4.1.4.	Fuel Level		
6.4.1.5.	DEF Fluid Level		
6.4.1.6.	Oil Pressure Gauge (PSI)		
6.4.1.7.	Front Air Pressure (PSI)		
6.4.1.8.	Rear Air Pressure (PSI)		
6.4.1.9.	Transmission Oil Temperature (°F)		
6.4.1.10.	Engine Coolant Temperature Gauge (°F)		
6.4.2.	Control Switches – the following control switches shall be provided immediately adjacent to the cab instrument panel within easy reach of the driver. All switches shall have backlit labels for low light applications.		
6.4.2.1.	Headlight/Parking light switch. Means shall be provided to provide for all driving lights to be turned off, parking lights on, and both parking lights and headlights on.		
6.4.2.2.	Panel light intensity control to change all back lighting in the instrumentation area.		
6.4.2.3.	Ignition switch		
6.4.2.4.	Engine start switch		
6.4.2.5.	Hazard light switch		
6.4.2.6.	Heater/defroster/AC controls		
6.4.2.7.	Turn signal		
6.4.2.8.	Wiper controls		
6.4.2.9.	Hi-beam light controls		
6.4.2.10.	Parking brake control		
6.4.2.11.	Chassis horn control		
6.4.2.12.	Air horn control (accessible by both driver and officer seat)		
6.4.2.13.	High-idle switch		
6.4.2.14.	Emergency Lighting Master Control Switch		
6.4.2.15.	Aerial system controls		
6.4.2.16.	Pump engagement controls		
6.4.2.17.	Front scene light control		
6.4.2.18.	Left scene light control		
6.4.2.19.	Right scene light control		
6.4.2.20.	Rear scene light control		
6.4.2.21.	Compartment light control		
6.4.2.22.	Axle differential lock controls		
6.5.	Inside EMS compartment(s)		
6.5.1.	The cab shall feature a compartment which is designed for housing emergency medical equipment. The compartment shall be located in the rear of the cab and be as large as practical while not impeding cab door access in any way.		
6.5.2.	The EMS compartment shall have an interior roll-up door installed facing the rear of the cab.		

Requirement	Compliant	
	Yes	No
6.5.3. The EMS compartment shall have LED strip lighting that illuminates when the door is opened.		
6.5.4. The EMS compartment shall have a power strip consisting of at least six (6) receptacles tied into the truck's shore line electric system.		
6.6. In Cab Requirements		
6.6.1. There shall be space provided in the cab to mount at least six (6) Vulcan streamlights. A power strip consisting of at least six (6) receptacles tied into the truck's shore line electric system shall be in close proximity to the mounting location.		
6.6.2. The rear of the cab shall have an area prepped for tool mounting.		
6.6.3. The cab shall be equipped with air conditioning for both front and back seats.		
6.6.4. Electronic Siren Control and Radio Location		
6.6.4.1. The electronic siren control shall be located in a position accessible by both the driver and officer seats.		
6.6.4.2. The radio and mic shall be installed in a central position that is accessible by both the driver and officer seats.		
6.6.5. Hazard (Door Ajar) Light		
6.6.5.1. There shall be a 2" red LED hazard light installed as specified.		
6.6.5.2. The light shall be located in a central location.		
7. Aerial Ladder		
7.1. A four-section aerial ladder shall be attached to the apparatus.		
7.1.1. The aerial ladder shall have as long of a horizontal and vertical reach as practical. At a minimum, the vertical reach shall be at least 100 feet.		
7.1.2. The aerial device shall meet all current NFPA standards for an aerial quint apparatus.		
7.1.3. The weight capacity of the ladder shall be made to support at least 500 pounds at the tip when flowing at least 1,000 gallons a minute at all extensions, elevations, and angles in relation to the truck body.		
7.1.4. Manual override controls shall be provided for all aerial and stabilizer functions.		
7.2. Rotation interlock – A system shall be provided that contains the following features:		
7.2.1. Collision avoidance to prevent accidental body damage		
7.2.2. Prevent the aerial from being rotated into an unstable condition		
7.2.3. If the apparatus allows for "short-jacking", the system shall allow for unrestricted use of the aerial on the fully jacked side (where stabilizers have been fully deployed) but shall not allow for the aerial to rotate in the direction of the "short-jacked" side.		
7.3. Pre-piped waterway and monitor		
7.3.1. A pinned pre-piped waterway shall be installed under the aerial ladder. Means shall be provided to pin the nozzle of the waterway to either the third or fourth fly.		

Requirement		Compliant	
		Yes	No
7.3.2.	An adjustable nozzle capable of flowing at least 1,000 gallons per minute shall be equipped. The nozzle shall have two control locations, one set at the turn table control panel, the other controlled on the fly to which the waterway is pinned to operate at.		
7.3.3.	Electrical controls for the nozzle shall include left-right; up-down; straight-fog.		
7.3.4.	The nozzle shall be capable of flowing at an angle above the horizontal, and at an angle of at least 90 degrees below the horizontal.		
7.3.5.	Two manually controlled valves shall be installed at the tip nozzle assembly. One to control the main waterway monitor, and another that is connected to a 1.5" NPSH male fitted connection.		
7.3.6.	The smaller connection is intended to be used for a hose line connection point.		
7.3.7.	An adjustable pressure relief valve will be furnished to protect the aerial waterway from a pressure surge or attempting to retract the aerial device with all control valves closed.		
7.3.8.	A rear inlet with a 4" storz connection shall be provided to the pre-piped waterway.		
7.3.9.	Aerial Waterway Flow Meter - waterway flow, including total water flowed, will be monitored and displayed at the turntable control station.		
7.4.	Aerial Controls		
7.4.1.	There will be one (1) device control station located on the left side of the turntable so the operator may easily observe the ladder tip while operating the controls. All elevation, extension and rotation controls will operate from this location. The controls will permit the operator to regulate the speed of the aerial functions, within the safe limits, as determined by the manufacturer and NFPA standards. Each control will be equipped, with a positive lock to hold the control in a neutral position, preventing accidental activation. In addition to the neutral lock, a console cover will be provided at the turntable control station.		
7.4.2.	The following items will also be provided at the turntable control station, clearly identified, lighted for nighttime operation and conveniently located for ease of operation and viewing: Intercom controls Tip tracking light switch Emergency stop switch Emergency power unit switch Operator's load chart Either control of speed of aerial movements or high-idle selection		
7.4.3.	A lower control station shall be provided at the rear of the apparatus for controlling the outriggers and other methods of controlling all features of the apparatus needed to prepare the aerial device for operation.		
7.4.4.	A system to assist with leveling the aerial platform should be provided.		
7.5.	Aerial lighting		

Requirement		Compliant	
		Yes	No
7.5.1.	Tip lights - There will be four (4) Whelen® Model MP**, 5,695 lumens 12 volt DC LED lights installed at the tip of the aerial device.		
7.5.1.1.	One (1) light on the left side high. The left side tip light to include flood optics.		
7.5.1.2.	One (1) light on the left side low. The left side lower tip light to include flood optics.		
7.5.1.3.	One (1) light on the right side low. The right side lower tip light to include flood optics.		
7.5.1.4.	One (1) light on the right side high. The right side tip light to include flood optics.		
7.5.1.5.	The light(s) to be installed with low profile adjustable pedestal mount(s). The painted parts of this light assembly to be white. The lights will be controlled with the tracking lights.		
7.5.2.	Tracking Lights - There will be two (2) Whelen® MP**, 5,695 lumens 12 volt DC LED lights installed on the base section of the aerial device below the hand rails per the following: One (1) will be located on the left side with left side tracking light to include flood optics. One (1) will be located on the right side with right side tracking light to include flood optics.		
7.5.2.1.	The light(s) to be installed with low profile adjustable pedestal mount(s).		
7.5.2.2.	The painted parts of this light assembly to be white.		
7.5.2.3.	The tracking lights will be controlled by a switch located at the aerial master or with a dedicated switch on the turntable console.		
7.5.3.	Aerial Ladder rung lighting		
7.5.3.1.	LED rung lighting provided on both sides of the aerial ladder base, lower and upper mid, and fly sections. The lighting will be located adjacent to the ladder rungs along the lower rail of the ladder sections and will run the length of the ladder section.		
7.5.3.2.	The color of the sections will be: The base section of the ladder to be blue. The lower mid section of the ladder to be white. The upper mid section of the ladder to be white. The fly section of the ladder to be red.		
7.5.3.3.	The LED rung lighting will be activated when a switch at the turntable operator's panel is activated through the aerial master or a switch at the turntable operator's panel is activated.		
7.6.	Rescue lifting eyes		
7.6.1.	Lifting eyes shall be provided at the tip of the ladder rated for at least 500 lbs. This can be accomplished through the use of fixed lifting eyes or a lifting eye assembly that can be quickly put in place.		
8.	Stabilization		

Requirement	Compliant	
	Yes	No
8.1. The apparatus shall be equipped with hydraulic-powered stabilizers. This system will meet or exceed all requirements of the NFPA specifications related to stabilization and setup on sloped surfaces.		
8.2. An auxiliary ground pad will be supplied for each stabilizer to provide additional load distribution on soft surfaces.		
8.3. Stabilizers shall be designed to provide the greatest amount of vertical lift possible to be able to make up for setting on uneven terrain.		
8.4. Each stabilizer shall have a ground indication light that will be illuminated when its respective stabilizer shoe is in the load supporting condition.		
8.5. A camera system shall be installed that shows the position where each stabilizer will sit when in the fully deployed position. The viewing screen will be visible from the driver's position so that the apparatus can be properly positioned before parking and setting up the aerial.		
8.6. A stabilizer deployment audible warning alarm will be provided and activated by the stabilizer movement.		
8.7. A "Stabilizers Not Stowed" indicator will be provided in the driver's compartment. It will illuminate automatically whenever the stabilizers are not fully stowed to prevent damage to the apparatus if moved. The stabilizer system will also be wired to the "Do Not Move Indicator Light", which will flash whenever the apparatus parking brake is not fully engaged and the stabilizers are not fully stowed.		
8.8. Stabilizer Warning Lights		
8.8.1. There will be our (4) Whelen®, Model M6*C, LED flashing warning lights with Whelen, Model M6FC, chrome flanges installed, one (1) on each stabilizer cover panel. The front stabilizer pan lights will be red LED with a clear lens The rear stabilizer pan lights will be red LED with a clear lens		
9. Exterior		
9.1. Covers		
9.1.1. A Hose Bed Cover shall be provided which meets the following requirements:		
9.1.1.1. The rear of the cover shall have an integral flap made of Black 18 oz. PVC vinyl coated polyester that extends down to cover the rear of the hose bed. This flap shall be secured in place with heavy duty nylon straps to comply with the latest edition of NFPA 1900.		
9.1.2. A Vinyl Speedlay Cover shall be provided which meets the following requirements:		
9.1.2.1. A cover constructed of Black 18 oz. PVC vinyl coated polyester shall be installed on the speedlays. The base fabric shall be 1000 x 1300 Denier Polyester with a fabric count of 20 x 20 per square inch.		
9.1.2.2. The sides of the cover shall have integral flaps that extend down to cover the sides of the speedlays. The side flaps shall be secured in place to comply with the latest edition of NFPA 1900.		

Requirement		Compliant	
		Yes	No
9.1.2.3.	If required, a cover shall be installed on top of the body across the speedlays if they are installed at the top of the pump panel. They shall be held in place across the top of the body by chrome snaps.		
9.2.	Equipment Storage		
9.2.1.	Ground Ladder Storage: Suitable storage for the following ground ladders shall be provided, accessible from the ground. The storage area shall have the capacity to store one (1) 35' (preference on 2-section) extension ladder, one (1) 28' 2-section extension ladder, one (1) 20' roof ladder, two (2) 18' roof ladders, 12' Fresno ladder, and a Little Giant ladder.		
9.2.2.	Ground Ladder Storage on Aerial: A bracket to hold one (1) 16' roof ladder (with roof hooks at both ends) shall be mounted on the left side outer base section of the aerial.		
9.2.3.	Pike Pole Storage: tubing provided in the torque box/ladder storage area for a total of six (6) pike poles. If the head of a pike pole can come into contact with a painted surface, a stainless steel scuff plate will be provided. At least two of the tubes shall be capable of holding at least a 12' pike pole.		
9.2.4.	Pike Pole Storage on Aerial: Mounting will be provided near the end of the fly section of the aerial ladder for one (1) pike pole(s). The bracket will be sized to hold a Duo-Safety 10' pike pole with D handle.		
9.2.5.	Axe Storage on Aerial: Brackets will be provided near the end of the fly section of the aerial ladder for mounting a fire axe.		
9.2.6.	Large Diameter Hose Storage: A hose bed shall be provided which provides adequate room for a minimum of 1000' of 5" hose coupled with 4" storz couplings.		
9.3.	SCBA Wheel Well Bottle Storage – Scott 4500 psi bottles		
9.3.1.	The body wheel well area shall store at least six (6) SCBA bottles with a preference on eight (8). The SCBA bottles will be 4500 psi 45 minute Scott bottles. The bottles shall be externally secured in each storage area by a hinged door which shall be secured in the closed position by a push button latch. The doors shall have a brushed stainless steel finish.		
9.3.2.	Each storage area shall provide storage of bottle(s) and shall not allow forward or rearward movement of the bottle. The bottle(s) shall be removable from the storage area without the bottle(s) coming into contact with any surface area of the wheel well (NO EXCEPTIONS).		
9.4.	Handrails and Steps		
9.4.1.	Dual lighted LED folding step with LED lights integral to the step on the top to provide NFPA requirements of 2 FC on the stepping surface. Folding step shall also have a LED light integral to the bottom of the step to meet NFPA requirements of a stepping surface up to 18" below the step. The folding step shall sustain a minimum static load of 500 lbs. The folding step shall also meet NFPA slip resistance qualifications.		
9.4.2.	All steps provided on the apparatus shall comply with this lighted requirement.		

Requirement	Compliant	
	Yes	No
9.4.3. An adequate number of steps shall be provided in all areas requiring access to a higher level of the truck for regular maintenance, operation or equipment access.		
9.5. Hand rails shall be installed in compliance with current NFPA. The hand rail shall be constructed of 6063T5 1.25" OD anodized aluminum tube, with an integral ribbed surface to assure a good grip for personnel safety, mounted between chrome stanchions.		
9.5.1. Access Ladder: At least one ladder shall be provided to access the aerial platform. The ladder shall be constructed from aluminum. The ladder shall be designed with a slight inward taper to facilitate easier climbing and shall be able to reach from the ground. LED lighting shall be provided to illuminate the ladder steps per NFPA.		
9.5.1.1. The ladder(s) shall be located at the rear of body.		
9.6. Body Rubrails: The body shall have rubrails mounted along the sides.		
9.6.1. The rubrail shall be C-channel in design and constructed of 3/16" thick 6463T6 anodized aluminum extrusion. The rubrail shall be 2.75" high x 1.25" deep and shall extend beyond the body width to protect compartment doors and the body side. The rubrail depth shall allow warning lights to be recessed inside for protection.		
9.6.2. The rubrail shall be mounted a minimum of 3/16" off the body with nylon spacers. The ends of each section shall be provided with a finished rounded corner piece.		
9.7. Stay Back 500 Feet Sign: Sign shall be 4" x 30" smooth aluminum plate. Rear facing portion of plate to be covered in white vinyl and shall have black reflective lettering that shall read `STAY BACK 500 FEET`. The sign shall be securely attached to the rear of the apparatus.		
9.8. Diesel Fuel Only Label: Located above each fuel filler housing shall be a metallic label that states: "Diesel Fuel Only". It shall be black with white or equivalent contrasting letters a minimum of 1/2" high.		
9.9. Exterior Paint		
9.9.1. The apparatus body shall be painted Sikkens FLNA3024 Red or an equivalent process matching the color. The paint process shall meet or exceed current state regulations concerning paint operations. Pollution control shall include measures to protect the atmosphere, water, and soil. Contractor shall, upon demand, provide evidence that the manufacturing facility is in compliance with State EPA rules and regulations.		
9.9.2. The top of the apparatus cab shall be painted white to match the current color scheme of the Department's trucks. All painting requirements cited below shall apply to the application of the white paint as well.		
9.9.3. The aluminum body exterior shall have no mounted components prior to painting to assure full coverage of metal treatments and paint to the exterior surfaces of the body. Any vertically or horizontally hinged smooth-plate compartment doors shall be painted separately to assure proper paint coverage on body, door jambs and door edges.		

Requirement		Compliant	
		Yes	No
9.9.4.	Paint process shall feature Sikkens high solid LV products and be performed in the following steps (a four-step equivalent process from another manufacture is acceptable):		
9.9.4.1.	Corrosion Prevention – all aluminum surfaces shall be pre-treated with the Alodine 5700 conversion coating to provide superior corrosion resistance and excellent adhesion of the base coat.		
9.9.4.2.	Sikkens Sealer/Primer LV – acrylic urethane sealer/primer shall be applied to guarantee excellent gloss hold-out, chip resistance and a uniform base color.		
9.9.4.3.	Sikkens High Solid LVBT650 (Base coat) – a lead-free, chromate-free high solid acrylic urethane base coat shall be applied, providing excellent coverage and durability. A minimum of two (2) coats shall be applied.		
9.9.4.4.	Sikkens High Solid LVBT650 (Clear coat) – high solid LV clear coat shall be applied as the final step in order to ensure full gloss and color retention and durability. A minimum of two (2) coats shall be applied.		
9.9.5.	Any location where aluminum is penetrated after painting, for the purpose of mounting steps, hand rails, doors, lights, or other specified components shall be treated at the point of penetration with a corrosion inhibiting pre-treatment (ECK Corrosion Control). The pre-treatment shall be applied to the aluminum sheet metal or aluminum extrusions in all locations where the aluminum has been penetrated. All hardware used in mounting steps, hand rails, doors, lights, or other specified components shall be individually treated with the corrosion inhibiting pre-treatment.		
9.9.6.	After the paint process is complete, the gloss rating of the unit shall be tested with a 20 degree gloss meter. Coating thickness shall be measured with a digital MIL gauge and the orange peel with a digital wave scan device.		
9.10.	Lettering		
9.10.1.	Sign Gold Letter		
9.10.1.1.	Driver’s Side Front Door: “MASSASOIT ENGINE CO.” (4” high Sign Gold letters outlined in black).		
9.10.1.1.1.	A gold leaf maltese cross design shall be included on the door. Dimensions shall be approximately 18” by 18”.		
9.10.1.2.	Officer’s Side Front Door: “MASSASOIT ENGINE CO.” (4” high Sign Gold letters outlined in black).		
9.10.1.2.1.	A gold leaf maltese cross design shall be included on the door. Dimensions shall be approximately 18” by 18”.		
9.10.1.3.	Driver’s Side Rear Door: “DAMARISCOTTA” (4” high Sign Gold letters outlined in black).		
9.10.1.3.1.	“LADDER 4” (4” high Sign Red letters on the retro-reflective white strip).		
9.10.1.4.	Officer’s Side Rear Door: “DAMARISCOTTA” (4” high Sign Gold letters outlined in black).		

Requirement	Compliant	
	Yes	No
9.10.1.4.1. "LADDER 4" (4" high Sign Red letters on the retro-reflective white strip).		
9.10.1.5. Both Rear sides of the apparatus: "Dial 9-1-1" (4" high Sign Red letters on the retro-reflective white strip).		
9.10.1.6. On both sides above the compartment in two lines: "DAMARISCOTTA LADDER 4" (Sign Gold letters outlined in black as large as practicable). This shall have an American Flag on the rear side and the Department Patch on the front side, each sized to match the lettering.		
9.10.1.7. On rear of apparatus: "MASSASOIT L4" in black.		
9.10.1.8. On the front of apparatus "DAMARISCOTTA" (4" high Sign Gold letters outlined in black).		
9.10.1.9. On the front bumper L 4 sized to fit the bumper size in White letters.		
9.10.1.10. Lettering design shall be finalized during contract negotiation.		
9.10.1.11. Bidder shall match existing lettering and graphic design to Department's current apparatus (Engine 1, 3 and current Ladder 4) which includes some other graphics.		
9.11. Striping		
9.11.1. Chassis and Body Stripe		
9.11.1.1. A Z-strip chassis and body Scotchlite triple stripe, 1"-6"-1" minimum in width shall be supplied. The stripe shall be NFPA compliant with the color and location to be specified by the purchaser.		
9.11.1.1.1. Location: low on side of cab and raises as it progressed to the rear side of body.		
9.11.1.1.2. Color: White with retroreflective properties		
9.11.2. Rear Body Scotchlite Striping		
9.11.2.1. Chevron style reflective striping shall be provided on the rear of the apparatus. The stripes shall consist of 6" red/white alternating colors printed in an "A" pattern on reflective material meeting NFPA requirements. The striping shall be located on the rear body platework.		
9.12. Rear Mud Flaps: The rear tires shall have a set of black mud flaps mounted behind the rear chassis wheels. Manufacturer's logo on the mud flaps is acceptable.		
10. Compartments		
10.1. The compartments shall be constructed from formed 3003 H14 1/8" (.125") smooth aluminum plate. The compartments shall be modular in design and shall not be a part of the body support structure. Each compartment seam shall be sealed using a permanent pliable silicone caulk. The walls of each compartment shall be machine-louvered for adequate ventilation.		
10.2. An externally-mounted compartment top shall be provided and constructed of a 1/8" (.125") aluminum tread plate. The compartment top shall be removable for easy access to the main body wiring harness.		
10.3. Compartments shall be installed to maximize the available compartment space on the apparatus.		

Requirement	Compliant	
	Yes	No
10.4. There shall be sufficient compartment space to store all NFPA required tools, air-packs, appliances and all additional equipment listed under this specification under Section 20.		
10.5. Compartment Sizes		
10.5.1. Bids shall include the size (three dimensions) and volume for each compartment. Compartment size is a key component on selecting the winning bid.		
10.6. Compartment Labels		
10.6.1. The compartments shall be numbered with a white 2" number located on each door. The compartments shall be numbered consecutively starting at the most forward upper driver's side compartment (1) and ending with the most forward lower officer's side compartment.		
10.7. Compartment Doors		
10.7.1. Doors installed for the pump module and ground ladder storage area shall be of a roll up style and shall meet the following requirements:		
10.7.1.1. The roll up door(s) shall be fabricated from aluminum extrusions and be manufactured and assembled in the United States.		
10.7.1.2. The exterior surface shall be flat and the interior surface concave to deflect loose equipment to prevent the door from jamming. Each slat shall have interlocking end shoes to prevent the slat from moving side to side resulting in binding of the door. Each slat shall be separated by a co-extruded PVC and rubber inner seal to prevent metal to metal contact and minimize dirt and moisture from entering the compartment. The inner seal shall not be visible from the exterior to maintain a clean appearance of door. The slats shall have interlocking joints with a folding locking flange to provide security and prevent penetration by sharp objects.		
10.7.1.3. The track shall be a one (1) piece aluminum assembly that has an attaching flange and finishing flange incorporated into the design that facilitates installation and provides a finished look to the door without additional trim or caulking. A low profile side seal shall be utilized to maximize usable compartment space.		
10.7.1.4. A drip rail designed to prevent water from dripping into the compartment shall be provided. The drip rail shall have a built in replaceable non-contacting seal to eliminate scratching of the surface of the door.		
10.7.1.5. Bottom rail extrusion must have smooth back to prevent loose equipment from jamming the door and have "V" shaped double seal to prevent water and debris from entering the compartment. The door latch system shall be a full width one (1) piece lift bar that enables the user to operate with one hand.		
10.7.1.6. The roll mechanism shall have a clip system that connects the curtain slats to the operator drum to allow for easy tension adjustment without tools. A four (4) inch diameter counterbalanced operator drum to shall be incorporated to assist in lifting the door.		

	Requirement	Compliant	
		Yes	No
10.7.1.7.	An aluminum drip pan shall be provided on the roll up door.		
10.7.1.8.	Elastic nylon straps shall be provided and installed on each roll up door. The straps shall be secured to the side wall of the interior compartment in a way that will allow the strap to contract automatically and tuck inside the compartment when closed to prevent the strap from dangling and hindering closing of the door. When the door is the open position, the straps shall be installed so that they are fully extended as to not interfere with removing items from the compartment. For the ease of locating, the straps shall be bright orange in color.		
10.7.2.	Compartment doors (other than pump panel and ground ladder storage area)		
10.7.2.1.	Compartment doors shall be full-height where possible and feature double-door construction when compartment width is larger than 24 inches.		
10.7.2.2.	Doors shall be of rugged construction and made of aluminum, painted to match the color scheme of the apparatus. Doors shall be at least 1.5" thick and be fabricated with aluminum that is at least 0.085" or thicker.		
10.7.2.3.	Doors shall provide a closed cell rubber gasket around the surface that laps onto the body. A second heavy-duty automotive rubber molding with a hollow core shall be installed on the door framing that seals onto the interior panel, they system meant to ensure a weather resisting compartment.		
10.7.2.4.	All doors shall have polished stainless steel continuous hinges with a pin diameter of .35" that is bolted or screwed on with stainless steel fasteners. A dielectric substance shall be applied to each hinge fastener.		
10.7.2.5.	All door lock mechanisms shall be fully enclosed within the door panels to prevent fouling of the lock in the event equipment within the compartment shifts.		
10.7.2.6.	Doors shall be latched with recessed, polished stainless steel D ring handles and locks that are Eberhard 106 locks or equivalently suitable locks from another manufacturer.		
10.7.2.7.	Means must be used to prevent dissimilar metal contact with the installation of the compartment door handles. A rubber gasket shall be provided between the D ring handle and the door.		
10.8.	Compartment Shelves		
10.8.1.	There shall be an aluminum adjustable shelf provided for lower compartments.		
10.8.2.	All shelves shall be provided with a hard pad with holes to promote water drainage. The intent is to keep equipment out of standing water and allow wet equipment to dry from all sides.		
10.8.3.	The bidder shall allow for customization of shelves and trays within the compartments, including pull-out drawers for full-depth compartments.		

Requirement	Compliant	
	Yes	No
10.8.4. The shelf shall be constructed of 3/16" (.187") smooth aluminum plate. The shelf shall have a minimum 2" front and rear lips to accommodate optional plastic interlocking compartment tile systems. For additional strength and reinforcement of the shelf a return break shall be provided on the outward lip. The adjustable shelf shall be capable of holding 250 lbs.		
10.8.5. The shelf shall be sized, width and depth, to match the size and location in the compartment.		
10.8.6. Adjustable Tracks: Tracks shall be provided in all lower compartments for use with adjustable shelves and/or trays in deep non-transverse compartments. The tracks shall be vertically mounted and attached to the side and/or rear walls of the compartments.		
10.9. Trays / Toolboards		
10.9.1. Roll-Out Trays: There shall be a floor mounted roll-out tray and mid-level roll-out tray provided in front lower compartment on the driver's side.		
10.9.1.1. The roll-out trays shall be constructed of 3/16" (.187") smooth aluminum plate with a sanded finish and welded corners for increased strength and rigidity. The tray shall be sized in width and depth as applicable.		
10.9.1.2. For greater tray accessibility, the drawer slides shall feature one hundred percent extension. The tray shall utilize a gas spring to secure the tray in the open or closed position.		
10.9.1.3. The trays shall have a total capacity of 500 lbs.		
11. Pump, Pump Module and Plumbing		
11.1. A pump shall be provided meeting the following requirements:		
11.1.1. Pump Rating: The fire pump shall be rated at 2000 GPM.		
11.1.2. The pump shall be a midship-mounted single stage centrifugal pump. The pump shall be mounted on the chassis frame rails and shall be split drive driven.		
11.1.3. Two (2) 6.0" diameter suction ports with 6" NST males threads and removable screens shall be provided, one (1) each side. The ports shall be mounted one (1) on each side of the midship pump and shall extend through the side pump panels. Inlets shall come equipped with long handle chrome caps.		
11.1.4. Zinc Anodes: The zinc anodes help prevent damage caused by galvanic corrosion within the fire pump. The system provides a sacrificial metal which helps to diminish or prevent pump and pump shaft galvanic corrosion. One anode will be located on the suction side and one will be located on the discharge side of the pump.		
11.1.5. Thermal Relief Valve: A thermal relief valve shall be provided.		
11.1.5.1. The valve shall help protect the pump by automatically monitoring pump water temperature. The relief valve shall automatically dump a controlled amount of water to the ground when the pump water exceeds the pre-set temperature of the relief valve.		

Requirement		Compliant	
		Yes	No
11.1.5.2.	A pump panel mounted indicator shall be installed at the pump operator`s panel.		
11.1.6.	Auxiliary Engine Cooler		
11.1.6.1.	An engine cooler used to lower engine water temperature during prolonged pumping operations and controlled at the pump operator`s panel shall be provided.		
11.1.6.2.	The engine cooler shall be installed in the engine coolant system in such a manner as to allow cool pump water to circulate around engine water, thus forming a true heat exchanger action. Cooler inlet and outlet shall be continuous, preventing intermixing of engine coolant and pump water.		
11.1.7.	Pump Pressure Governor		
11.1.7.1.	The apparatus shall be equipped with a "TOTAL PRESSURE GOVERNOR" (TPG) Integrated pump control system. The TPG shall have a weatherproof color display. The TPG will operate as an engine/pump pressure governor/throttle system that is connected directly to the Electronic Control Module (ECM) mounted on the engine. The TPG is to operate as a pressure sensor (regulating) governor (PSG).		
11.1.7.2.	The TPG shall display engine RPM, oil pressure, engine temperature and voltage along with providing critical warnings. The warning levels for oil pressure, high engine temperature, low voltage and high voltage shall be independently programmable.		
11.1.7.3.	The TPG shall have the ability to operate under a pressure mode where pressure is automatically regulated and to operate under a RPM mode where the engine RPM`s are regulated.		
11.2.	A pump module shall be provided which meets the following requirements:		
11.2.1.	Pump module shall be of minimal width to maximize compartment space on the apparatus, without losing required maintenance space around the pump module.		
11.2.2.	Three speed lays shall be provided in the pump module area. Two of these speed lays shall have pull out trays that can hold up to 250` of 1.75" double stacked double-jacketed hose. One of these speed lays shall have a pull out tray that can hold up to 200` of 2.5" double-jacketed hose. The hose connection shall be from the top, with one connection on each side of the apparatus. The shall be removable U-shaped containers with both ends open to allow for pulling out the hose without restriction.		
11.2.2.1.	The front bumper pre-connect shall support hose up to 1.75" in diameter. It shall be capable of storing 100 feet of double-jacketed hose with a 1.5" nozzle attached.		
11.2.2.2.	The first speedlay shall support hose up to 1.75" in diameter configured in a double stack configuration. It shall be capable of storing 250 feet of double-jacketed hose and a 1.5" combination nozzle.		

Requirement		Compliant	
		Yes	No
11.2.2.3.	The second speedlay shall support hose up to 1.75" in diameter configured to hold at least two widths of hose. It shall be capable of storing 250 feet of double-jacketed hose and a 1.5" combination nozzle.		
11.2.2.4.	The third speedlay shall support hose up to 2.5" in diameter and be capable of storing 200 feet of double-jacketed hose and a 2.5" combination nozzle.		
11.2.3.	Rub casters shall be provided on all three surfaces surrounding the cross-lay hose storage area and located on both sides of the pump module.		
11.2.4.	Gauges		
11.2.4.1.	Water Tank Level Gauge		
11.2.4.1.1.	One water tank level gauge shall be located at the pump operator's panel of the apparatus to provide wide angle viewing and a high-visibility display of the water tank level. Four (4) ultra-bright LED's (light emitting diodes) on the display module allow the full, 3/4, 1/2 and refill levels to be easily distinguished at a glance. The gauge shall be calibrated to the tank on delivery.		
11.2.4.1.2.	The long life and extreme durability of LED indicators eliminates light bulb replacement and maintenance. Color coded cover plates shall complete the assembly of the display module.		
11.2.4.1.3.	The display shall also have a programmable night dimming feature.		
11.2.4.2.	Pressure Gauges 4"		
11.2.4.2.1.	A 4" compound vacuum pressure gauge with a range of 30-0-400 shall be installed on the pump panel. The gauge shall be filled with a liquid solution.		
11.2.4.2.2.	Two such gauges shall be provided and installed to monitor pump intake and discharge pressures.		
11.2.4.3.	Pressure Gauges 2.5"		
11.2.4.3.1.	A weatherproof 2-1/2" compound vacuum pressure gauge with a range of 30-0-400 shall be installed on the pump panel. The gauge shall be filled with a liquid solution to assure visual reading to within 1% accuracy.		
11.2.4.3.2.	Gauges shall be provided for the following discharge(s): front preconnect, speedlay preconnects 1, 2, and 3, left side discharge 1, left side discharge 2, right side discharge 1, right side discharge 2, pre-piped waterway.		
11.2.5.	A pump module shall be provided and located forward of the body. The pump module shall be constructed entirely of aluminum extrusions and interlocking aluminum plates. The pump module design and mounting shall be separate from the body to allow the pump module and body to move independently of each other in order to reduce stress from frame twisting and vibration. The exterior surface of the pump module shall have a sanded finish.		

Requirement	Compliant	
	Yes	No
11.2.6. The main pump operator's control panel will be completely enclosed and located in the forward section of the body compartment. There will be a roll up door to protect against road debris and weather elements. This roll-up door compartment will include a drip pan below the roll of the door.		
11.2.7. Side Mount Pump Panels: The driver and officer side pump panels shall be constructed of 14 gauge stainless steel. Each panel shall have the ability to be removed from the module for easier access and for maintenance in the pump area.		
11.2.8. Pump Access Door: The officer side pump module shall include an upper horizontally hinged pump access door.		
11.2.9. Pump Panel Tags: Color coded pump panel labels shall be supplied to be in accordance with NFPA 1900 compliance.		
11.2.10. Pump Compartment Heaters: A minimum of 30,000 BTU of heater(s) shall be installed in the lower pump compartment area. The heater(s) shall be connected to the chassis engine coolant system and shall include 12 volt blowers. The heater(s) shall be controlled at the pump operator's panel.		
11.2.11. Heat Pan: The pump compartment shall have a heat pan installed under the pump area. The heat pan shall be constructed of 1/8" (.125") smooth aluminum plate and shall be easily removable for fair weather operations.		
11.2.11.1. The heat pan shall be four (4) sided with two (2) removable bottoms. The bottoms shall provide access to the lower area of the pump/pump compartment. The bottoms shall include butterfly latches to secure them in the closed position.		
11.2.12. Flex Joint: The area between the pump modules and body shall include a rubber flex joint.		
11.2.13. Two (2) test plugs shall be pump panel-mounted for third party testing of vacuum and pressures of the pump.		
11.3. Plumbing		
11.3.1. Threads		
11.3.1.1. All 1.5" threads on the apparatus shall be NPSH threads		
11.3.1.2. All 2.5" and larger threads on the apparatus shall be NH (NST) threads		
11.3.1.3. All 4" fittings shall be Storz (quick connect sexless) on the apparatus		
11.3.2. Valves		
11.3.2.1. All ball valves shall be Akron 8000 series with a 316 stainless steel ball and dual polymer seats for ease of operation and increased abrasion resistance. The valve shall have a self-locking ball feature using an automatic friction lock design to balance the stainless steel ball when in a throttle position and water is flowing through it.		
11.3.2.2. The valve shall be of the unique Akron swing-out design to allow the valve body to be removed for servicing without disassembling the plumbing.		
11.3.2.3. The valve control shall be located at the pump operator's panel and shall visually indicate the position of the valve at all times.		

Requirement		Compliant	
		Yes	No
11.3.2.4.	All fabricated piping shall be a minimum of Schedule 10 stainless steel in thickness for superior corrosion resistance, and decreased friction loss.		
11.3.3.	Intakes		
11.3.3.1.	Left Intake 2.5 Akron Valve: One (1) 2-1/2" suction inlet with a manually operated 2-1/2" Akron valve shall be provided on the left side pump panel.		
11.3.3.1.1.	The outlet of the valve shall be connected to the suction side of the pump with the valve body located behind the pump panel. The valve shall come equipped with a brass inlet strainer, 2-1/2" NH (NST) female chrome inlet swivel, and shall be equipped with a chrome plated rockerlug plug with a retainer device.		
11.3.3.1.2.	All fabricated piping shall be a minimum of Schedule 10 stainless steel in thickness for superior corrosion resistance, and decreased friction loss.		
11.3.3.1.3.	A 3/4" bleeder valve assembly will be installed on the left side pump panel.		
11.3.3.2.	Intake Relief Valve		
11.3.3.2.1.	The pump shall be equipped with a variable-pressure-setting relief valve on the pump suction side. It shall be designed to operate at a maximum inlet pressure of 250 PSI. The relief valve shall be normally closed and self-resetting. It shall be set to begin opening at 125 PSI in order to limit intake pressures in the pumping system. When the relief valve opens, the overflow water shall be directed through a plumbed outlet to discharge below the body in an area visible to the pump operator. The overflow outlet shall terminate with a male 2-1/2" NH (NST) threaded fitting to allow the overflow water to be directed away from the vehicle with a short hose (supplied by the fire department) during freezing weather or under other conditions where an accumulation of water around the apparatus might be hazardous.		
11.3.3.3.	Tank to Pump Valve: One (1) manually operated 3" Akron valve shall be installed between the pump suction and the booster tank, 4" piping, with flex hose and stainless steel hose clamps connected to the tank. The valve control shall be located at the pump operator's panel and shall visually indicate the position of the valve at all times.		
11.3.3.3.1.	A check valve shall be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank. The valve control shall be located at the pump operator's panel and shall visually indicate the position of the valve at all times.		
11.3.3.3.2.	All fabricated piping shall be a minimum of Schedule 10 stainless steel for superior corrosion resistance, and decreased friction loss.		
11.3.4.	Discharge		

Requirement		Compliant	
		Yes	No
11.3.4.1.	Tank Fill Valve: One (1) 2" pump-to-tank fill line having a 2" manually operated full flow Akron valve. The valve control shall be located at the pump operator's panel and shall visually indicate the position of the valve at all times. The fill line shall be controlled using a chrome handle with an integral tag.		
11.3.4.1.1.	All fabricated piping shall be a minimum of Schedule 10 stainless steel for superior corrosion resistance and decreased friction loss.		
11.3.4.2.	Discharge Manifold		
11.3.4.2.1.	The pump system shall utilize a stainless steel discharge manifold system that allows a direct flow of water to all discharge valves. The manifold and fabricated piping systems shall be constructed of a minimum of Schedule 10 stainless steel to reduce corrosion.		
11.3.4.2.2.	The apparatus manufacturer shall provide a full 10 year stainless steel plumbing components warranty. This warranty shall cover defects in materials or workmanship of apparatus manufacturer designed foam/water plumbing system stainless steel components for 10 years. A copy of the warranty document shall be provided with the proposal.		
11.3.4.3.	Speedlay Valves		
11.3.4.3.1.	Location: Speedlay 1 & 2 and Front Bumper Pre-connect.		
11.3.4.3.2.	Two (2) speedlay discharges shall be provided at the front area of the body. The speedlay shall include one (1) 2" brass swivel with a 1-1/2" hose connection to permit the use of hose from either side of the apparatus. The threads shall be NPSH.		
11.3.4.3.3.	One (1) bumper trashline shall be provided in the front bumper with 1-1/2" hose connection. The threads shall be NPSH.		
11.3.4.3.4.	One (1) 2-1/2" speedlay discharge shall be provided.		
11.3.4.3.5.	The 1-1/2" speedlay hose bed shall each consist of a 2" heavy-duty hose coming from the pump discharge manifold to the 2" swivel. The hose shall be connected to a manually operated 2" Akron valve.		
11.3.4.3.6.	All fabricated piping shall be a minimum of Schedule 10 stainless steel for superior corrosion resistance and decreased friction loss.		
11.3.4.4.	2-1/2" Discharge Outlets		
11.3.4.4.1.	Valves shall have a 2-1/2" discharge outlet with a manually operated Akron valve or use an Akron 9335 electric valve controller. Any electric valve controller(s) provided on the pump operators panel. The electric control(s) must be of a true position feedback design, requiring no clutches in the motor or current limiting. The unit(s) must be completely sealed with momentary open, close as well and an optional one touch full open feature to operate the valve actuator. The controller(s) will provide position indication on a full color, backlit LCD display. They will have manual adjustment of the brightness as well as an auto dimming option.		

Requirement		Compliant	
		Yes	No
11.3.4.4.2.	All fabricated piping shall be a minimum of Schedule 10 stainless steel for superior corrosion resistance and decreased friction loss.		
11.3.4.4.3.	There shall be three (3) such 2-1/2" discharge valves with two (2) discharges on the pump panel's left (Drivers) side, and one (1) on the pump panel's right side (Officers).		
11.3.4.4.4.	2.5" Discharges shall have 30° chrome plated elbow with threaded cap provided. Caps shall be attached by chain to the body of the apparatus.		
11.3.4.5.	Right Panel 4 Discharge with 4" Akron Valve		
11.3.4.5.1.	One (1) 4" discharge outlet with a minimum size of 4" Akron valve shall be provided at the right side pump panel. The discharge shall consist of a 4" valve connected by piping and terminated with a 30° elbow and 4" Storz connection. The adapter shall protrude through the pump panel. The end of the discharge adapter shall be equipped with a chrome plated, rockerlug cap with a retainer chain. Valve shall be designed to minimize the effects of water hammer by restricting the opening/closing of the valve.		
11.3.4.5.2.	This valve will be controlled with an Akron 9335 electric valve controller. Any electric valve controller(s) provided on the pump operators panel. The electric control(s) must be of a true position feedback design, requiring no clutches in the motor or current limiting. The unit(s) must be completely sealed with momentary open, close as well and an optional one touch full open feature to operate the valve actuator. The controller(s) will provide position indication on a full color, backlit LCD display. They will have manual adjustment of the brightness as well as an auto dimming option.		
11.3.4.5.3.	All fabricated piping shall be a minimum of Schedule 10 stainless steel for superior corrosion resistance and decreased friction loss.		
11.3.4.5.4.	Location: right side discharge 1.		
11.3.4.6.	Waterway Discharge 4" Akron Valve		
11.3.4.6.1.	There will be an Akron 8800 4.00" flat ball valve with 4.00" plumbing terminating with a 4.00" MNST chrome adapter on the right side pump panel. The valve will be controlled with a(n) Akron 9335 with pressure located at the pump operator's panel. The electric valve controller(s) provided on the pump operators panel. The electric control(s) must be of a true position feedback design, requiring no clutches in the motor or current limiting. The unit(s) must be completely sealed with momentary open, close as well and an optional one touch full open feature to operate the valve actuator. The controller(s) will provide position indication on a full color, backlit LCD display. They will have manual adjustment of the brightness as well as an auto dimming option.		
11.3.4.7.	Discharge Controls – Lever Controls		

Requirement		Compliant	
		Yes	No
11.3.4.7.1.	Control handles for tank supply, tank fill and all discharges shall be Push-Pull "T" style controls. The valve control levers shall be a chrome push-pull locking "T" handle located at the pump operator's panel and shall visibly indicate the position of the valves at all times. The control levers shall be located directly adjacent to one another and shall be mounted in line so they are in the same position when shut off. The control lever shall be connected directly to its respective valve by a .718" OD rod to form a direct linkage control system.		
11.3.4.7.2.	The description of the valves' function shall be labeled and color coded to the discharge location.		
11.3.4.8.	Bleeder Drain Valves		
11.3.4.8.1.	A 3/4" bleeder valve shall be provided for the noted discharge(s). The bleeder valve lever shall be stainless steel and shall be a lift style handle for ease of operation. The drain shall be located at the main pump panel.		
11.3.4.8.2.	Bleeders shall be plumbed for use with the all discharges.		
11.3.5.	Master Drain Valve		
11.3.5.1.	A master drain valve shall be installed and operated from the pump operator's panel. The master pump drain assembly shall consist of a Class 1 bronze master drain with a rubber disc seal and turning handle.		
11.3.5.2.	The manual Master Drain Valve shall have at least twelve (12) individually-sealed ports that allow quick and simultaneous draining of multiple intake and discharge lines. It shall be constructed of corrosion-resistant material and be capable of operating at a pressure of up to 600 PSI.		
11.3.5.3.	The master drain shall have a rubber seal to prevent water from running out on the running board.		
11.3.5.4.	The master drain shall provide independent ports for low point drainage of the fire pump and auxiliary devices.		
11.3.5.5.	The master drain shall be connected to provide complete drainage of the piping systems.		
11.3.6.	Priming System		
11.3.6.1.	The priming system shall be air-driven, Trident 3 barrel or equivalent (15.6 cfm air compressor requirement). One (1) priming control, located at the pump operator's position, shall open the priming valve and start the priming action. The primer shall be oil-less type. The priming valve shall be electronically interlocked to the "Park Brake" circuit to allow priming of the pump before the pump is placed in gear.		

Requirement	Compliant	
	Yes	No
11.4. Pump Shift Option 1: Pump will be engaged in not more than two steps, by simply setting the parking brake, which will automatically put the transmission into neutral, and activating a rocker switch in the cab. A switch in the cab will also allow for the water pump to activate the appropriate system to preset parameters.		
11.4.1. Another switch will be located in the pump panel and act in the same manner. The engagement will provide simple two-step operation, enhance reliability, and completely eliminate gear clash. The shift will include the indicator lights as mandated by NFPA. A direct override switch will be located behind a door in the pump operator's panel. The switch will automatically disengage when the door is closed.		
11.4.2. As the parking brake is applied, the pump panel throttle will be activated and deactivate the chassis foot throttle for stationary operation.		
11.5. Pump Shift Option 2: The pump shift shall be pneumatically-controlled using a power shifting cylinder.		
11.5.1. The power shift control valve shall be mounted in the cab and be labeled ``PUMP SHIFT``. The apparatus transmission shift control shall be furnished with a positive lever, preventing accidental shifting of the chassis transmission.		
11.5.2. A green indicator light shall be located in the cab and be labeled ``PUMP ENGAGED``. The light shall not activate until the pump shift has completed its full travel into pump engagement position.		
11.5.3. A second green indicator light shall be located in the cab and be labeled ``OK TO PUMP``. This light shall be energized when both the pump shift has been completed and the chassis automatic transmission has obtained converter lockup (4 th gear lockup).		
11.5.4. One (1) pump panel-mounted ``GREEN`` indicator light shall be positioned above the throttle control on the pump operator`s panel. The light shall be energized when the pump shift has been completed, chassis automatic transmission has obtained converter lockup (4 th gear lockup), and the chassis parking brake is set.		
11.6. Control switches at pump panel. The following controls shall be accessible at the pump panel.		
11.6.1. Electronic pump total pressure governor		
11.6.2. Pump primer		
11.6.3. Left scene lights		
11.6.4. Right scene lights		
11.6.5. Rear scene lights		
11.6.6. Front scene lights		
11.6.7. Air horn control (RED switch)		
11.6.8. Pump compartment heater		
11.6.9. For apparatus with pump shift option 1, switch to activate pump mode.		
11.6.10. Space for a Kenwood remote control radio head and mic		
12. Tank (Water)		
12.1. Water Tank		

Requirement	Compliant	
	Yes	No
12.1.1. A 500 gallon (U.S.) booster tank shall be supplied. The booster tank shall be of a pinned baffle design. The booster tank shall be completely removable without disturbing or dismounting the apparatus body structure.		
12.1.2. The booster tank top, sides, and bottom shall be constructed of black UV-stabilized copolymer polypropylene. The copolymer polypropylene tank material shall be welded together utilizing thermoplastic welding technology. A clean hot air temperature controlled process, shall ensure that each weld reaches its plasticized state without cold or hot spots. The copolymer polypropylene material shall be used for its high strength and corrosion resistance for a prolonged tank life.		
12.1.3. The booster tank shall have a fill tower with a rearward hinged lid. The fill tower shall be centrally located on the tank and shall assist with tank ventilation. The fill tower shall include a removable polypropylene screen.		
12.1.4. The booster tank shall have two (2) tank plumbing openings. One (1) for a tank-to-pump suction line with an anti-swirl plate, and one (1) for a tank fill line. A 3" cleanout plug shall be provided at the bottom of the tank sump.		
12.1.5. The booster tank shall include longitudinal and latitudinal baffles. The baffles shall be interlocking and thermo welded to the shell of the tank to minimize water surge during travel and provide enhanced road handling stability. The baffle design shall allow waterflow in accordance with NFPA during tank filling or pump operations.		
12.1.6. The booster tank shall undergo extensive testing prior to installation in the truck. The testing shall include an electronic spark and tank fill test after both the internal and external tank shell welds are completed.		
12.1.7. A lifetime manufacture's limited warranty shall be included.		
12.1.8. Tank capacity shall be 500 US gallons.		
13. 120VAC Electrical System		
13.1. The apparatus shall accept a standard plug hooked to a shore line receptacle on the apparatus.		
13.2. This receptacle shall receive the female end of an extension cord and have a protective cover that closes when the plug is not inserted.		
13.3. All wiring shall be rated for 20 Amps continuous duty		
13.4. Location shall be next to air hookup		
13.5. Receptacle shall be self-ejecting type which operates when apparatus is started. It shall be a Kussmaul or equivalent device equipped with a yellow cover.		
13.6. Outlets (120V receptacles) shall be provided connected to 120V in two (2) of the compartments, in the EMS compartment(s) and in a couple of locations in the cab.		
13.7. 12VDC Electrical System		

Requirement	Compliant	
	Yes	No
13.7.1. An onboard battery charging system shall be installed and hooked to the shore-power connection to charge and maintain the batteries while the truck is plugged in to station power.		
13.7.2. Spare circuits - There shall be two (2) pair of wires, including a positive and a negative, installed on the apparatus. The wires shall have the following features: <ul style="list-style-type: none"> • The positive wire shall be connected directly to the battery power. • The negative wire shall be connected to ground. • Wires shall be capable of carrying 6 amps. • Power and ground shall terminate in the cab/crew cab TBD. • Termination shall be a Kussmaul part number 091-264 switch panel dual USB-A, 18 watt and USB-C, 45 watt SVR, charger socket. • Wires shall be protected to meet the NFPA Automotive Fire Apparatus standard 		
13.7.3. Spare circuit - There shall be one (1) pair of wires, including a positive and a negative, installed on the apparatus. The wires shall have the following features: <ul style="list-style-type: none"> • The positive wire shall be connected directly to the battery power. • The negative wire shall be connected to ground. • Wires shall be capable of carrying 15 amps. • Power and ground shall terminate in the cab behind officer seat. • Termination shall be with a 10-place bus bar with screws and removable cover. • Wires shall be protected to meet the NFPA Automotive Fire Apparatus standard 		
13.8. Wiring		
13.8.1. All harnessing, wiring and connectors shall be manufactured to the following standards/guidelines. No exceptions.		
13.8.1.1. NFPA 1900-Standard for Automotive Fire Apparatus		
13.8.1.2. SAE J1127 and J1127		
13.8.1.3. IPC/WHMA-A-620 – Requirements and Acceptance for Cable and Wire Harness Assemblies. (Class 3 – High Performance Electronic Products)		
13.8.2. All wiring shall be copper or copper alloys of a gauge rated to carry 125 of the maximum current for which the circuit is protected. Insulated wire and cable 8 gauge and smaller shall be SXL, GXL, or TXL per SAE J1128. Conductors 6 gauge and larger shall be SXL or SGT per SAE J1127.		
13.8.3. All wiring shall be colored coded and imprinted with the circuits function. Minimum height of imprinted characters shall not be less than .082” plus or minus .01”. The imprinted characters shall repeat at a distance not greater than 3”.		
13.8.4. A coil of wire shall be provided behind electrical appliances to allow them to be pulled away from mounting area for inspection and service work.		
13.9. Wiring Protection		
13.9.1. Wiring shall be run in conduit to the maximum extent possible.		
13.9.2. The overall covering of the conductors shall be loom or braid.		

Requirement	Compliant	
	Yes	No
13.9.3. Braid style wiring covers shall be constructed using a woven PVC-coated nylon multifilament braiding yarn. The yarn shall have a diameter of no less than .04" and a tensile strength of 22 lbs. The yarn shall have a service temperature rating of -65 F to 194 F. The braid shall consist of 24 strands of yarn with 21 black and 3 yellow. The yellow shall be oriented the same and be next to each other.		
13.9.4. Wiring loom shall be flame retardant black nylon. The loom shall have a service temperature of -40 F to 300 F and be secured to the wire bundle with adhesive-backed vinyl tape.		
13.10. Wiring Connectors		
13.10.1. All connectors shall be Deutsch series unless a different series of connector is needed to mate to a supplier's component. The connectors and terminals shall be assembled per the connector/terminal manufacturer's specification. Crimble/Solderless terminals shall be acceptable. Heat shrink style shall be utilized unless used within the confines of the cab.		
13.11. Electronic Siren		
13.11.1. A Federal PA300 siren model 690010 solid state electronic siren with attached noise-canceling microphone shall be installed. The unit shall be capable of driving a single high power speaker up to 200 watts to achieve a sound output level that meets Class "A" requirements.		
13.11.2. Operating modes shall include Hi-Lo, yelp, wail, P.A., air horn and radio re-broadcast.		
13.11.3. The siren controller shall be recessed mounted in the cab.		
13.11.4. Speaker		
13.11.4.1. One (1) Federal model ES100 Dynamax 100 watt speaker shall be mounted Officer's side. Shall project through factory bumper cut-out. The speaker shall meet current NFPA 1900 and SAE requirements.		
13.11.4.2. Speaker dimensions shall be: 5.5 in. high x 5.9 in. wide x 2.5 in. deep. Weight = 5.5 lbs.		
13.12. Vehicle Data Recorder		
13.12.1. A vehicle data recorder system shall be provided to comply with NFPA 1900, 2024 edition. The following data shall be monitored:		
13.12.1.1. Vehicle speed MPH		
13.12.1.2. Acceleration (from speedometer) MPH/Sec.		
13.12.1.3. Deceleration (from speedometer) MPH/Sec.		
13.12.1.4. Engine speed RPM		
13.12.1.5. Engine throttle position % of full throttle		
13.12.1.6. ABS Event On/Off		
13.12.1.7. Seat occupied status Occupied Yes/No by position		
13.12.1.8. Seat belt status Buckled Yes/No by position		
13.12.1.9. Master Optical Warning Device Switch On/Off		
13.12.1.10. Time 24 hour time		
13.12.1.11. Date Year/Month/Day		
13.13. Occupant Detection System		

Requirement	Compliant	
	Yes	No
13.13.1. There shall be a visual and audible warning system installed in the cab that indicates the occupant buckle status of all cab seating positions that are designed to be occupied during vehicle movement.		
13.13.2. The audible warning shall activate when the vehicle's park brake is released and a seat position is not in a valid state. A valid state is defined as a seat that is unoccupied and the seat belt is unbuckled, or one that has the seat belt buckled after the seat has been occupied.		
13.13.3. The visual warning shall consist of a graphical display that will continuously indicate the validity of each seat position.		
13.13.4. The system shall include a display panel with LED back-lit ISO indicators for each seating position, seat sensor and safety belt latch switch for each cab seating position, audible alarm and braided wiring harness.		
13.13.5. The display panel shall be located cab dash above transmission shift panel.		
13.14. Battery Charging Connector		
13.14.1. A 12 volt battery charging connector shall be installed on the apparatus. The connector shall be an Anderson model SB175 with mechanically keyed housing and weatherproof cover. A mating connector shall be shipped loose for connection to the fire department's station mounted battery charger.		
13.14.2. The connector shall be installed in the driver's door step area.		
13.15. Back-Up Alarm		
13.15.1. An electronic back-up alarm shall be supplied. The 97 dB alarm shall be wired into the chassis back-up lights to signal when the vehicle is in reverse gear.		
13.16. Mobile Radio		
13.16.1. The cab shall come pre-wired with an antenna and power to support a mobile radio to be installed in the dash. A second head will be installed in the pump compartment that runs the same base unit at the head installed on the dash in the cab (Department provided radio, bidder responsible for providing mounting locations for base and heads).		
14. Lights		
14.1. Light Switch Controls		
14.1.1. An Master Emergency Light Switch shall be provided		
14.1.1.1. This switch shall allow control over all emergency/warning lights through one operator action		
14.1.1.2. This switch shall also disable the Q-siren and Tomar strobe when in the OFF position		
14.1.1.3. Switch shall include an integral light which is illuminated when the switch is in the ON position		
14.1.2. The upper level warning lights and light bar shall be controlled by a switch which is illuminated when the switch is in the ON position and located adjacent to the Master Emergency Light switch.		

Requirement	Compliant	
	Yes	No
14.1.3. The lower level warning lights shall be controlled by a switch which is illuminated when the switch is in the ON position and located adjacent to the upper level warning light switch.		
14.2. Emergency Lights		
14.2.1. All emergency lights shall be provided by Whelen unless otherwise specified.		
14.3. Light Bars		
14.3.1. Two (2) LED light bars shall be installed as part of the front zone upper warning lights at least 20" in width. The light bars shall contain all red modules, including end caps and corners, with the exception of three areas.		
14.3.1.1. Two white forward facing balanced on each side of the light bar, which are disabled when the parking brake is set.		
14.3.1.2. One Traffic Light Control opticom shall be installed integral to the lightbar. The traffic emitter shall be wired thru the parking brake to deactivate when the park brake is set. It shall be controlled through its own switch and controlled by the Master Emergency Light switch.		
14.3.2. The light bars shall be installed in the following location: On the front cab roof on either side of the ladder.		
14.4. Lower Level Warning Light Package		
14.4.1. Lower Warning Lights shall all be of a red color and have chrome trim. All lights shall make use of stationary LED lights. There shall be a minimum of ten (10) lower warning lights.		
14.4.2. The light heads shall be mounted as close to the corner points of the apparatus (as is practical) as follows:		
14.4.2.1. Two (2) light heads on the front of the apparatus facing forward.		
14.4.2.2. Two (2) light heads on the rear lower part of the apparatus facing rearward.		
14.4.2.3. One (1) light head each side of the apparatus, one (1) each side at the forward most point, likely on the corner of the front bumper.		
14.4.2.4. One (1) light head shall be mounted one (1) each side just above the rear wheel well offset to the rear.		
14.4.2.5. One (1) light on each side shall be mounted as far to the rear as possible within the rub rail area.		
14.4.3. The side facing lights shall be located at forward most position and in rear wheel well offset to rear.		
14.4.4. All warning devices shall be surface mounted in compliance with NFPA standards.		
14.5. Upper Rear Warning Lights		
14.5.1. Upper Warning Lights shall all be of a red color with the exception of one amber colored light on the left rear. All lights shall make use of stationary LED lights.		
14.5.2. The lights shall be located rear upper body on aerial style brackets to meet upper Zone C requirements		
14.5.3. A minimum of six (6) upper warning lights shall be installed as follows:		

Requirement	Compliant	
	Yes	No
14.5.3.1. One (1) on each side on the upper rear of apparatus body.		
14.5.3.2. One (1) on each side on the upper front of apparatus body.		
14.5.3.3. Two (2) on the rear portion of the body mounted higher up on the truck, in a location that will not be struck will paying out large diameter hose.		
14.5.4. Traffic Directing Light		
14.5.4.1. There shall be one (1) Whelen®, Model TAL65, 36.00" long x 2.87" high x 2.25" deep, amber LED traffic directing light installed at the rear of the apparatus. The Whelen, Model TACTL5, control head shall be included with this installation. The controller shall be energized when the battery switch is on. The auxiliary flash not activated. This traffic directing light shall be mounted on top of the body below the turntable with a treadplate box at the rear of the apparatus. The traffic directing light control head shall be located in the driver side overhead switch panel in the right panel position.		
14.6. DOT Lighting		
14.6.1. License Plate Light		
14.6.1.1. One (1) Truck-Lite model 15905 white LED license plate light mounted in a Truck-Lite model 15732 chrome plated plastic license plate housing shall be mounted at the rear of the body.		
14.6.2. Tail Lights		
14.6.2.1. Tail lights for DOT requirements shall be LED (Light Emitting Diode) lights shall be installed each side at the rear of the apparatus.		
14.6.2.2. Light functions shall be as follows:		
14.6.2.2.1. LED red stop/tail light in upper position		
14.6.2.2.2. LED amber turn signal middle position		
14.6.2.2.3. LED clear back-up light in lower position.		
14.6.2.3. The lights shall be in resilient shock absorbent mount for improved life.		
14.6.2.4. The wiring connections shall be made with a weather resistant plug-in style connector.		
14.6.3. Body Marker Lights		
14.6.3.1. TecNiq ¾" LED grommet clearance lights shall be installed as specified on the Lower Body:		
14.6.3.1.1. Three (3) red LED clearance lights centered at rear.		
14.6.3.1.2. One (1) red LED clearance light each side at the trailing edge on either side of the apparatus body.		
14.6.3.1.3. One (1) amber LED clearance / auxiliary turn light each side front of body.		
14.7. Light Shield: There shall be a shield mounted over the electrical items at the center upper rear of the apparatus to protect them from damage. The shield shall be constructed from .125" aluminum diamond plate.		
14.8. Compartment Lights		

Requirement	Compliant	
	Yes	No
14.8.1. Compartment light strips shall be mounted in each body compartment greater than 3.5 cu. Ft.		
14.8.1.1. Two (2) vertically mounted LED strip lights shall be installed inside the compartment. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat build up and each light shall be approximately 48" in length.		
14.8.1.2. Compartment lights shall be wired to a master on/off rocker switch on the cab switch panel.		
14.8.1.3. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.		
14.8.1.4. The wiring connection for the compartment lights shall be made with a weather-resistant plug in style connector. A single water and corrosion-resistant switch with a polycarbonate actuator and sealed contacts shall control each compartment light. The switch shall allow the light to illuminate if the compartment door is open.		
14.9. Ground Lights		
14.9.1. The apparatus shall be equipped with a sufficient quantity of lights to properly illuminate the ground areas around the apparatus in accordance with current NFPA requirements. The lights shall be EON LED (Light Emitting Diode) with clear lenses. The wiring connections shall be made with a weather resistant plug in style connector.		
14.9.1.1. One (1) light shall be supplied to illuminate the ground below each cab door. Lights in areas under the driver and crew area exits shall be activated automatically when the exit doors are opened.		
14.9.1.2. One (1) ground light shall be supplied under each side of the pump panel area (if equipped).		
14.9.1.3. One (1) ground light shall be installed below each side body staircase (if equipped).		
14.9.1.4. Three (3) ground lights shall be supplied under the rear of the apparatus.		
14.9.1.5. Ground area lights shall be switched from the cab dash with the work light switch.		
14.10. Cab Step Lights		
14.10.1. The apparatus shall be equipped with four (4) lights located two (2) each side to properly illuminate the cab steps in accordance with current NFPA requirements. The lights shall be EON LED (Light Emitting Diode) with clear lenses. The wiring connections shall be made with a weather resistant plug in style connector.		
14.10.2. The step lights shall be controlled by the work light switch in cab that is accessible by the driver.		
14.11. Deck Lights		
14.11.1. Hose Bed Light		

Requirement	Compliant	
	Yes	No
14.11.1.1. Hose bed lighting shall be installed to adequately light up the rear hose bed during hose packing operations. The lights shall be white LEDs and mounted in such a way that they are not subject to physical damage while packing the hose and lifting the hosebed cover. The hose bed light shall be switched with the work light switch in the cab.		
14.11.2. Speedlay Light		
14.11.2.1. Speedlay areas shall be illuminated with white LED lighting. The crosslay light shall be switched with the work light switch in the cab.		
14.12. Scene Lights		
14.12.1. Six (6) LED scene lights shall be provided for the sides and rear. Each light shall have a minimum of 7,000 lumen output with internal light deflecting optics.		
14.12.2. Scene lights shall be controlled from two locations: in the pump operator area and from the cab.		
14.12.3. Lights shall be located as follows:		
14.12.3.1. One (1) each side of the body up high offset forward		
14.12.3.2. One (1) each side of the body up high offset rearward		
14.12.3.3. Two (2) at the rear of the apparatus up high		
14.12.3.3.1. Rear scene lights shall come on automatically when the apparatus is placed in reverse.		
14.12.4. One (1) LED scene light shall be provided for the front of the apparatus. It shall have a minimum of 20,000 lumen output with internal light deflecting optics. If necessary, this light requirement may be met by two LEDs wired to operate with one control, to allow for better illumination when the aerial device is in the bed position.		
14.12.5. The lights shall be controlled in the cab by four switches accessible by the driver. The lights shall be wired as front scene, left scene, right scene and rear scene so they can be controlled individually.		
14.13. Non-warning Lights		
14.13.1. Engine Compartment Light		
14.13.1.1. There shall be lighting provided in compliance with NFPA to illuminate the engine compartment area.		
14.13.2. Pump Panel Light Package		
14.13.2.1. Six (6) LED pump panel lights shall be provided. The lights shall be located three (3) each side under a light shield directly above the left and right side pump panels. The lights shall be white LED with polished stainless steel housings. The light shields shall be formed from 14 gauge brushed finish stainless steel. The work light switch in the cab shall activate the lights when the park brake is set.		
14.13.3. Pump Compartment Light		
14.13.3.1. An LED light shall be provided in the pump compartment area for NFPA compliance. The light shall be white LED with polished stainless steel housing. The light shall be wired to the work light switch.		
15. Documentation		
15.1. NFPA Required Documentation		

Requirement	Compliant	
	Yes	No
15.1.1. The following documentation shall be provided on delivery of the apparatus:		
15.1.1.1. Documentation of the electrical system performance tests required above.		
15.1.1.2. A written load analysis, including:		
15.1.1.2.1. The nameplate rating of the alternator.		
15.1.1.2.2. The alternator rating under the conditions.		
15.1.1.2.3. Each specified component load.		
15.1.1.2.4. Individual intermittent loads.		
15.2. The successful bidder shall be responsible for preparing and maintaining a record file of parts and assemblies used to manufacture the apparatus. These records shall be maintained in the factory of the bidder for a minimum of twenty (20) years. The file shall contain copies of any and all reported deficiencies, all replacement parts required to maintain the apparatus, and original purchase documents including specifications, contract, invoice, incomplete chassis certificates, quality control reports and final delivery acceptance documents. The Damariscotta Fire Department and Town of Damariscotta shall have access to any and all documents contained in this file upon request.		
15.3. Detail drawings and schematics		
15.3.1. All detailed drawings and schematics shall be provided after contract award and shall be approved by the Department prior to performing the work to ensure all requirements are met and the apparatus will meet the expectations of the Department.		
15.4. Training Documentation		
15.4.1. A comprehensive training presentation shall be provided on CD, DVD or a USB thumb drive.		
15.4.2. The presentation shall be provided in Power Point format		
15.4.3. Presentation shall cover the following:		
15.4.3.1. Basic operation of the apparatus		
15.4.3.2. How to pump the apparatus		
15.4.3.3. Overview of all of the major systems		
15.4.3.4. Detailed descriptions of all operator controls in the cab including any warnings associated with their use		
15.4.3.5. Shows where the major pieces of equipment (hose, ladders, pike poles, etc) are stored and how to access them (i.e. how and where to control the dump tank holder)		
15.4.3.6. Vehicle size and weight along with restrictions		
15.4.3.7. Regular station maintenance requirements		
15.5. Electronic Manuals		
15.5.1. Two (2) copies of all operator, service, and parts manuals MUST be supplied at the time of delivery in electronic format (Digital Disk or USB flash drives) –NO EXCEPTIONS! The electronic manuals shall include the following information:		

Requirement	Compliant	
	Yes	No
15.5.1.1. Operating Instructions, descriptions, specifications, and ratings of the cab, chassis, body, installed components, and auxiliary systems.		
15.5.1.2. Warnings and cautions pertaining to the operation and maintenance of the fire apparatus and fire fighting systems.		
15.5.1.3. Charts, tables, checklists, and illustrations relating to lubrication, cleaning, troubleshooting, diagnostics, and inspections.		
15.5.1.4. Instructions regarding the frequency and procedure for recommended maintenance.		
15.5.1.5. Maintenance instructions for the repair and replacement of installed components.		
15.5.1.6. Parts listing with descriptions and illustrations for identification.		
15.5.1.7. Warranty descriptions and coverage.		
15.5.2. The electronic media shall incorporate a navigation page with electronic links to the operators manual, service manual, parts manual, and warranty information, as well as instructions on how to use the manual. Each copy shall include a table of contents with links to the specified documents or illustrations.		
15.5.3. The electronic media must be formatted in such a manner as to allow not only the printing of the entire manual, but to also the cutting, pasting, or copying of individual documents to other electronic media, such as electronic mail, memos, and the like.		
15.5.4. A find feature shall be included to allow for searches by text or by part number.		
15.5.5. These electronic manuals shall be accessible from any computer operating system capable of supporting portable document format (PDF). Permanent copies of all pertinent data shall be kept file at both the local dealership and at the manufacturer's location.		
16. Warranty		
16.1. Standard 1 Year Warranty		
16.1.1. The apparatus manufacturer shall provide a full 1-year standard warranty. All components manufactured by the apparatus manufacturer shall be covered against defects in materials or workmanship for a 1-year period. All components covered by separate suppliers such as engines, transmissions, tires, and batteries shall maintain the warranty as provided by the component supplier. A copy of the warranty document shall be provided with the proposal.		
16.2. Engine and Drivetrain Warranty		
16.2.1. The apparatus shall come with a comprehensive Engine and Drivetrain warranty for at least 5 years and 50,000 miles		
16.3. 10 Year 100,000 Mile Structural Warranty		

Requirement	Compliant	
	Yes	No
16.3.1. The apparatus manufacturer shall provide a comprehensive 10 year/100,000 mile structural warranty. This warranty shall cover all structural components of the cab and/or body manufactured by the apparatus manufacturer against defects in materials or workmanship for 10 years or 100,000 miles, whichever occurs first. Excluded from this warranty are all hardware, mechanical items, electrical items, or paint finishes. A copy of the warranty document shall be provided with the proposal.		
16.4. 10 Year Stainless Steel Plumbing Warranty		
16.4.1. The apparatus manufacturer shall provide a full 10-year stainless steel plumbing components warranty. This warranty shall cover defects in materials or workmanship of apparatus manufacturer designed foam/water plumbing system stainless steel components for 10 years. A copy of the warranty document shall be provided with the proposal.		
17. Training		
17.1. At time of delivery, a knowledgeable representative from the manufacturer shall come to provide training to the Department.		
17.1.1. One training session shall be given on a Tuesday night starting at 1800 hours to cover the basic operation and driving of the apparatus. This session shall be up to four hours.		
17.1.2. One training session shall be given to a smaller group to cover all of the maintenance and in depth details about the apparatus from bumper to bumper. This would include filters and their locations, the pump plumbing and valves, how to check all fluids, cover all lubrication points, etc. This training is expected to cover at least one full day.		
18. Delivery and Apparatus Inspection and Post-Delivery Service		
18.1. The apparatus shall be delivered to the Fire Department in Damariscotta Maine.		
18.2. The Department will be allowed for a 30 day window to inspect the apparatus and ensure all requirements of this specification have been met. All non-conformances with this specification will be corrected as identified in this 30 day window. The non-conformances will be corrected at no-cost to the Department.		
18.3. Pre-construction / Final Inspection		
18.3.1. The company shall send a representative to the Damariscotta Fire Station for pre-construction/blueprint review.		
18.3.2. A tele-conference with any necessary vendor representatives will be held at the Damariscotta Fire Station to conduct the pre-construction review with representatives at the production facility.		
18.3.3. Final inspection upon completion		
18.3.3.1. Final inspection will occur at the vendor's production facility. All noted deficiencies to these specifications shall be corrected by the manufacturer.		
18.3.3.2. Bidder shall provide travel and accommodations for three members of the fire department to participate in the final inspection.		

Requirement	Compliant	
	Yes	No
18.4. Regional Service Center		
18.4.1. A regional service center shall be located and maintained within 150 miles of the Town of Damariscotta, Maine. The center shall be authorized to conduct all levels of repair and service by the manufacturer for all major components on the apparatus.		
19. Miscellaneous		
19.1. Back-Up Camera		
19.1.1. A Safety Vision back-up camera with a color monitor shall be installed. The monitor shall be installed on the front console area visible at night and in bright sunlight to the driver. The camera shall be mounted up high at the rear of the vehicle to provide a wide angle rear view with audio. The system shall include a cable with metallic waterproof threaded o-ring seal connectors to ensure positive connection between video cable and camera to prevent unplugging due to vibration resulting in video loss to vehicle operator.		
19.2. DOT Required Drive Away Kit		
19.2.1. Three (3) triangular warning reflectors with carrying case shall be supplied to satisfy the DOT requirement.		
20. Equipment – All equipment shall be provided by the Department with the exception of ground ladders which are to be included as part of the bid package.		
20.1. The apparatus shall have enough room to store the following equipment.		
20.2. Tools		
20.2.1. Halligan Tools (QTY 3)		
20.2.2. Flathead axe (6lb) – Fiberglass handle (QTY 3)		
20.2.3. Pickhead axe (6lb) – Fiberglass handle (QTY 3)		
20.2.4. Closet Hook (QTY 3)		
20.2.5. 3 foot pike pole – Fiberglass handle (QTY 3)		
20.2.6. 6 foot pike pole – Fiberglass handle (QTY 2)		
20.2.7. 8 foot pike pole – Fiberglass handle (QTY 2)		
20.2.8. 12 foot pike pole – Fiberglass handle		
20.3. Rescue Equipment		
20.3.1. Two (2) Stokes Baskets		
20.3.2. 6 bags of 200' rope bags		
20.3.3. 6 high-angle rescue harnesses		
20.3.4. Miscellaneous high and low-angle rescue gear		
20.4. Dry Chemical Extinguisher (minimum rating of 80 B-C)		
20.5. Water Extinguisher (at least 2.5 gallon)		
20.6. First Aid Kit		
20.7. Spanner wrench (QTY 6) with brackets		
20.8. Hydrant Wrench (QTY 2) integrated into two spanner wrench brackets		
20.9. Rubber Mallet (QTY 2)		
20.10. Wheel Chocks (QTY 4) in holders		
20.11. Automatic External Defibrillator (AED)		

Requirement	Compliant	
	Yes	No
20.12. Fittings, Reducers and Adapters		
20.12.1. 2.5" Double Male with NH threads (QTY 2)		
20.12.2. 2.5" Double Female with NH threads (QTY 2)		
20.12.3. 1.5" Double Male with NPSH threads (QTY 2)		
20.12.4. 1.5" Double Female with NPSH threads (QTY 2)		
20.12.5. 2.5" Female NH thread by 1.5" Male NPSH thread (QTY 2)		
20.12.6. 2.5" Female NH thread by 4" Storz (30°) (QTY 1)		
20.12.7. 2.5" Female to 2 – 1.5" Gated Y (QTY 1)		
20.12.8. 2.5" Female to 2 – 2.5" Gated Y (QTY 1)		
20.12.9. 1.5" Female to 2 – 1.5" Gated Y (QTY 1)		
20.12.10. 2.5" Gate Valve NH threads (QTY 2)		
20.12.11. 4.5" Female to 4" Storz with long grab handles (QTY 1)		
20.12.12. 6" Jet siphon (water witch) with 1.5" Female NPSH threads (QTY 1)		
20.12.13. 6" to 4.5" Double Female (QTY 1)		
20.13. Hose		
20.13.1. 100 foot length of 4" Hose with 5" Storz fittings (QTY 10 – 1000 feet total)		
20.13.2. 25 foot length of 4" Hose with Storz fittings (QTY 1)		
20.13.3. 50 foot length of 1.5" double jacketed hose with NPSH threads Blue Color (QTY 5 – 250 feet total)		
20.13.4. 50 foot length of 1.5" double jacketed hose with NPSH threads Orange Color (QTY 5 – 250 feet total)		
20.13.5. 50 foot length of 2.5" double jacketed hose with NH threads Green Color (QTY 10 – 500 feet total)		
20.14. Nozzles		
20.14.1. 1.5" Nozzle Combination Type (QTY 4)		
20.14.2. 2.5" Nozzle Combination Type (QTY 2)		
20.15. Ladders (to be provided by bidder)		
20.15.1. One (1) 35' (preference on 2-section) extension ladder		
20.15.2. One (1) 28' 2-section extension ladder		
20.15.3. One (1) 20' roof ladder		
20.15.4. Two (2) 18' roof ladders		
20.15.5. One (1) 12' Fresno ladder		
20.15.6. Little Giant ladder		
20.16.5 Scott 4.5 self contained breathing apparatus – QTY 5		
20.17.5 Scott 4.5 SCBA bottles (45 minute) – minimum QTY 6		
20.18.8 tarps (salvage covers) nominal size of 16' X 16'		
20.19.2 Barn shovels		
20.20.2 100' Extension Cords		
20.21.6 Vulcan streamlights in charging base (located in cab)		
20.22. Electric positive pressure fan		
20.23. Chimney bucket with metal chain at least 50 feet in length		



Drone Donation

Jason Warlick <jwarlick@damariscottame.com>
To: Andrew Dorr <adorr@damariscottame.com>

Tue, May 13, 2025 at 11:57 AM

I have spoken to Chief Bryant from CLC Ambulance service and he recommended going through North American Rescue for our med kit needs. That is who they use and they give discounts to government agencies.

The kits I want to buy are called "Range Trauma Aid Kit". They are \$639.99 retail and will cost us \$458.00 each. They have multiple items necessary to help the officer if they are shot or stabbed. The kit is kept in a hard case that is water and crush proof which is helpful as they are stored in the back of a truck bed. The kits are robust and versatile to assist with multiple emergencies that we come across.

I suggest purchasing 4 kits. 1 for each patrol vehicle and one for the department. In the event we need to use one of the kits for life saving measures on the road we would have a back up kit to be placed back into service. If there was any type of mass shooting or large scale multi vehicle crash we would have the extra kit at our disposal. With all of our parades, festivals, demonstrations ect, it is always better to be prepared versus wishing we had more. Below is the link to the requested items.

<https://www.narescue.com/kit-range-trauma-hard-case-org.htm>

[Quoted text hidden]





Application Copy

File Number: 71169

Job Type: New Application

LICENSE TYPE / EVENT TYPE Qualified Catering Permit Special Event	APPLICATION DATE RECEIVED 2025-05-12
LICENSEE NCS LLC	LICENSEE TYPE Corporation

PARENT LICENSE(S)

LICENSE

License QCS-13-102179 (Active) - On-Premises: Beer, Wine & Spirits
SEACOAST CATERING & LOBSTER BAKES (NCS LLC)

MANAGED BY AGENT No	
LOCATION CLC YMCA	EVENT DATE(S) August 16, 2025
NUMBER OF EVENT DAYS 1	EVENT HOURS OF OPERATION 5:00 pm to 7:00 PM

EVENT CONTACT INFORMATION

Georgia Ahlers
207-563-9622

EVENT ADDRESS

525 Main Street Damariscotta ME 04543

Municipality Damariscotta	County Lincoln
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QUESTIONS

Qualified Catering Permit

1. Do you allow dancing or entertainment on the licensed premises?
If so, You need to have a a license from the Maine State Fire Marshal.
See <https://www.maine.gov/dps/fmo/plans-review/applications> for more information.

No

2. What is the purpose of the event?

Fund raiser

3. Is the event open to the public?

Yes

4. Will the event be outdoors?

No

5. How many people are expected at the event?

75

6. Please provide the following details about the person or entity requesting your contracted services.

Entity Name if business or non-profit:

Contact Name:

Address:

Town/City:

State:

Zip Code:

Telephone Number:

Email address:

Georgia Ahlers

525 Main Street

Damariscotta Maine 04543

207-563-9622

Gahlers@clcymca.org

DOCUMENTS

TYPE	FILE NAME	DESCRIPTION
Event Area Description and Diagram	image.jpg	Beverage Station in front of kitchen in the lobby

APPLICANT

Lurie Palino

DECLARATION

- I certify that I am the applicant as described in this application, or that I am duly authorized to submit this application on the applicant's behalf.

All information provided in this application is accurate and correct. I understand that false statements made on this application are punishable by law. Knowingly supplying false information on this application is a Class D Offense under Maine's Criminal Code, punishable by confinement of up to one year, or by monetary fine of up to \$2,000 or by both.

Section III: For use by Municipal Officers and County Commissioners only

The undersigned hereby certifies that we have complied with the process outlined in 28-A M.R.S. §653 and approve this on-premises liquor license application.

Dated: _____

Who is approving this application? Municipal Officers of _____

County Commissioners of _____ County

- Please Note:** The Municipal Officers or County Commissioners must confirm that the records of Local Option Votes have been verified that allows this type of establishment to be licensed by the Bureau for the type of alcohol to be sold for the appropriate days of the week. Please check this box to indicate this verification was completed.

Signature of Officials	Printed Name and Title

This Application will Expire 60 Days from the date of Municipal or County Approval unless submitted to the Bureau

Included below is the section of Maine’s liquor laws regarding the approval process by the municipalities or the county commissioners. This is provided as a courtesy only and may not reflect the law in effect at the time of application. Please see <http://www.mainelegislature.org/legis/statutes/28-A/title28-Asec653.html>

§653. Hearings; bureau review; appeal

1. Hearings. The municipal officers or, in the case of unincorporated places, the county commissioners of the county in which the unincorporated place is located, may hold a public hearing for the consideration of applications for new on-premises licenses and applications for transfer of location of existing on-premises licenses. The municipal officers or county commissioners may hold a public hearing for the consideration of requests for renewal of licenses, except that when an applicant has held a license for the prior 5 years and a complaint has not been filed against the applicant within that time, the applicant may request a waiver of the hearing.

A. The bureau shall prepare and supply application forms.



Town of Damariscotta
21 School St
Damariscotta, ME 04543
(207) 563-5168 | (207) 563-6862 Fax
damariscottame.com

MEMO

To: Select Board
From: Andrew Dorr, Town Manager
Date: May 16, 2025
Re: Joint Public Works Department Review

Following up on the Joint Workshop with Newcastle, the board should look to take formal action to establish the joint working group and appoint representatives to this group.

The link to the [presentation](#) includes notes collected during the workshop and here are [minutes](#). The takeaway from the discussion was that

- Yes, the Boards want to pursue this effort, and
- That a joint working group be formed with two members of each Select Board and the two town managers.

With the ASK grant award, Paul Brown, Road Ranger for the Maine Department of Transportation would serve as our outside consultant to assist with the development of scope, staffing needs, operations, etc. The working group would also invite content experts (professional or locals) as needed when specific questions arise.

Possible motion: To establish an ad hoc joint working group with Newcastle to consider and draft a plan to create a joint Public Works Department. And to appoint _____, _____, and Andrew Dorr, Town Manager to serve on the working group.