



TRACY FINANCE COMMITTEE
REGULAR MEETING AGENDA
Tuesday, March 26, 2024, 7:00 P.M.

Tracy City Hall Chambers, 333 Civic Center Plaza, Tracy
Web Site: www.cityoftracy.org

**THIS MEETING WILL BE OPEN TO THE PUBLIC FOR IN-PERSON AND
REMOTE PARTICIPATION PURSUANT TO GOVERNMENT CODE SECTION
54953(e)**

**MEMBERS OF THE PUBLIC MAY PARTICIPATE REMOTELY IN THE MEETING VIA
THE FOLLOWING METHOD:**

As always, the public may view the Tracy Finance Committee meetings live on the City of Tracy's website at CityofTracy.org or on Comcast Channel 26/AT&T U-verse Channel 99. To view from the City's website, open the "Government" menu at the top of the City's homepage and select "Finance Committee", then select "[View Finance Committee Meetings on YouTube](#)" under the "Boards and Commissions" section.

If you only wish to watch the meeting and do not wish to address the Finance Committee, the City requests that you stream the meeting through the City's website or watch on Channel 26.

Remote Public Comment:

During the upcoming Finance Committee meeting public comment will be accepted via the options listed below. If you would like to comment remotely, please follow the protocols below:

- *Comments via:*
 - **Online by visiting** <https://cityoftracyevents.webex.com> and using the following **Event Number: 2550 555 1555** and **Event Password: Finance**
 - ***If you would like to participate in the public comment anonymously***, you may submit your comment in WebEx by typing "Anonymous" when prompted to provide a First and Last Name and inserting Anonymous@example.com when prompted to provide an email address.
 - **Join by phone by dialing** [+1-408-418-9388](tel:+14084189388), enter [25505551555#3462623#](tel:+14084189388) Press *3 to raise the hand icon to speak on an item.

- *Protocols for commenting via WebEx:*
 - *If you wish to comment on the "Consent Calendar", "Items from the Audience/Public Comment" or "Regular Agenda" portions of the agenda:*
 - *Listen for the Chairperson to open that portion of the agenda for discussion, then raise your hand to speak by clicking on the Hand icon on the Participants panel to the right of your screen.*
 - *If you no longer wish to comment, you may lower your hand by clicking on the Hand icon again.*
 - *Comments for the "Consent Calendar" "Items from the Agenda/Public Comment" or "Regular Agenda" portions of the agenda will be accepted until the public comment for that item is closed.*

Government Code Section 54954.3 states that every public meeting shall provide an opportunity for the public to address the Tracy Finance Committee on any item, before or during consideration of the item, however no action shall be taken on any item not on the agenda.

Full copies of the agenda are available on the City's website: www.cityoftracy.org

CALL TO ORDER
ROLL CALL

1. CONSENT CALENDAR

1.A Adoption of February 27, 2024 Meeting Minutes

2. ITEMS FROM THE AUDIENCE - *In accordance with Council Meeting Protocols and Rules of Procedure*, adopted by Resolution 2019-240, a five-minute maximum time limit per speaker will apply to all individuals speaking during "Items from the Audience/Public Comment". For non-agendized items, Finance Committee members may briefly respond to statements made or questions posed by individuals during public comment; ask questions for clarification; direct the individual to the appropriate staff member; or request that matter be placed on a future agenda or that staff provide additional information to the Finance Committee.

3. REGULAR AGENDA

3.A. Staff recommends that the Tracy Finance Committee make a recommendation that the City Council adopt a Resolution: 1) Authorizing the acceptance of a grant award from the California Department of Health Care Services in partnership with the San Joaquin County Behavioral Health Services and related actions; 2) Appropriating the grant award of \$336,350.00 to the Police Department's operational budget.

3.B. Staff recommends that the Tracy Finance Committee recommend that the City Council adopt a resolution approving the Capital Improvement Projects Prioritization Policy.

3.C. Staff recommends that the Tracy Finance Committee, as a part of the Fiscal Year (FY) 2024-25 budget development process: (A) receive a report on FY 2023-24 departmental and capital project accomplishments, and (B) provide direction regarding anticipated departmental and capital project augmentation requests and funding objectives for the FY 2024-25 Operating and Capital Budget.

3.D. Staff recommends that the Tracy Finance Committee discuss one of four alternative options for funding the purchase of two replacement fire apparatus and recommend one of the options for the City Council to consider and approve, along with other related actions.

4. STAFF ITEMS

5. COMMITTEE ITEMS

6. ADJOURNMENT

Posting Date: March 21, 2024

The City of Tracy is in compliance with the Americans with Disabilities Act and will make all reasonable accommodations for the disabled to participate in employment, programs and facilities. Persons requiring assistance or auxiliary aids in order to participate, should contact the City Manager's Office at (209) 831-6000 at least 24 hours prior to the meeting.

February 27, 2024, 7:00 p.m.

City Hall, 333 Civic Center Plaza, Tracy

Web Site: www.cityoftracy.org

CALL TO ORDER – Chairperson Arriola called the meeting to order at 7:12 p.m.

ROLL CALL – Roll call found Chairperson Arriola and Co-Chairperson Bedolla present.

1. CONSENT CALENDAR – Motion was made by Co-Chairperson Bedolla and seconded by Chairperson Arriola to adopt the Consent Calendar. Roll call found all in favor; passed and so ordered.

- 1.A. Approval of January 23, 2023, special meeting minutes. – **Minutes were approved.**

- 1.B. Staff recommends that the Tracy Finance Committee receive an informational report on the status of the City Council’s FY2023-24 budget.

2. ITEMS FROM THE AUDIENCE – There were no items from the audience.

3. REGULAR AGENDA

- 3A. Staff recommends that the Tracy Finance Committee receive a report on the Five-year forecast for the City’s General Fund and provide direction regarding the City’s preliminary Fiscal Year 2024-25 Operating and Capital Budget.

Sara Cowell, Finance Director, provided the staff report and sought committee feedback.

Committee asked clarifying questions. Chairperson Arriola asked staff to prepare a memorandum or a future item to discuss various revenues that are being spent towards roadways and asked for Co-Chairperson Bedolla’s support on this which was given.

Co-Chairperson Bedolla asked for City staff to consider more money for the Public Works Department for road rehabilitation and have that complement the current pavement management program. He also requested more money for the Parks and Recreation Department for youth sports and more money for Economic Development for large and small business establishment efforts and efforts for water storage.

Chairperson Arriola thanked staff for the budget information and for making sure that we have a balanced budget through 2029.

There was no public comment.

ACTION: Motion was made by Co-Chairperson Bedolla and seconded by Chairperson Arriola that the Tracy Finance Committee recommend that the City Council receive a report on the Five-year forecast for the City's General Fund and provide direction regarding the City's preliminary Fiscal Year 2024-25 Operating and Capital Budget. Roll call found all in favor; passed and so ordered.

4. STAFF ITEMS – None

5. COMMITTEE ITEMS – None

6. ADJOURNMENT – Time: 7:43 p.m.

ACTION: Motion was made by Chairperson Arriola and seconded by Council Member Bedolla to adjourn. Motion found all in favor; passed and so ordered.

The agenda was posted at City Hall on February 22, 2024. The above are action minutes. A recording is available on the City's website.

Chairperson

ATTEST:

Clerk

Agenda Item 3A

RECOMMENDATION

Staff recommends that the Tracy Finance Committee make a recommendation that the City Council adopt a Resolution: 1) Authorizing the acceptance of a grant award from the California Department of Health Care Services in partnership with the San Joaquin County Behavioral Health Services and related actions; 2) Appropriating the grant award of \$336,350.00 to the Police Department's operational budget.

EXECUTIVE SUMMARY

The Police Department (PD), working in partnership with the San Joaquin County Behavioral Health Services (County), has been awarded a third distribution of \$336,350 through the California Department of Health Care, Behavioral Health Justice Intervention Services. The PD is a sub-awardee through this grant and has previously been awarded \$213,000 in 2022 and \$93,000 in 2023 to support the establishment of PD's Familiar Faces Program that assists the homeless population. After a review of the successful performance of the PD's program, the County awarded a third distribution. This item requests that the Finance Committee recommend that the City Council accept the grant and appropriate it to PD's operational budget.

Through future City Council actions, staff will be requesting that the appropriated funds be used to create one new Administrative Assistant position and one new Homeless Outreach Coordinator in PD's Mental Health Mobile Evaluation Team (MET) and the Homeless Outreach Familiar Faces team. The funds would support these positions temporarily, for the limited period of January 1, 2024 to March 31st, 2025.. Any remaining portion of the award will be used to fund continued administrative expenses of the Familiar Faces Program, such as consultant services and operating expenses. The future actions, if approved by the City Council, will explain that additional funding will be needed to support the newly created positions after the first year.

BACKGROUND AND LEGISLATIVE HISTORY

The PD's Community Services Division has previously partnered with San Joaquin County Behavioral Health Services and obtained funding from the California Department of Health Care, Behavioral Health Justice Intervention Services grant. On August 16, 2022, the City Council appropriated the Behavioral Health Justice Intervention Services grant of \$213,000 towards the purchase the initial Familiar Faces Homeless Outreach transportation vehicle, consultation services, and operating expenses. On November 7th, 2023, the City Council appropriated an additional \$93,000 grant award towards the support of the Familiar Faces program and the purchase of a second vehicle. The second award also went towards purchasing office equipment, diversion funding, and staff training in furtherance of the Familiar Faces Program and MET.

ANALYSIS

On January 11th, 2024, the PD received a notice of award of additional funding of \$336,350.00. The PD would fund any expenditures out of the PD operational budget and then submit invoices (i.e., weekly, quarterly) for reimbursements through the County since the PD is a sub-awardee of the grant. The grant will fund future positions to include one Administrative Assistant and one

Homeless Outreach Coordinator for one year, and after one year, the City/Department would have to fund the positions from the PD's operational budget. The total award would be appropriated to the Police Department's operating budget for FY 24/25. Once grant funds are expended in 2025, the future Administrative Assistant and Homeless Outreach Coordinator funding would be appropriated from the City's General Fund. The grant award must be used by March 31, 2025, or it will be forfeited.

Approving this item to enable the funding requires the following actions of City Council:

- 1) Authorizing the acceptance of the grant award from the California Department of Health Care Services in partnership with the San Joaquin County Behavioral Health Services;
- 2) Appropriating the grant award of \$336,350.00 to the Police Department's operational budget;

FISCAL IMPACT

The Tracy Police Department will receive a \$336,350.00 grant award from the California Department of Health Care, Behavioral Health Justice Intervention Services grant. The PD would fund any purchases out of the PD operational budget and then submit invoices (i.e. weekly, quarterly) for reimbursements through the County since PD is a sub awardee of the grant.

The grant will fund future positions for one year and after one year the City/Department would have to fund the positions from the PD's operational budget. The full award would be appropriated to the Police Department's operating budget for FY 24/25. Once grant funds are expended in 2025, the funding for the future Administrative Assistant and Homeless Outreach Coordinator would be appropriated from the City's General Fund.

COORDINATION

The Tracy Police Department has coordinated with San Joaquin County Behavioral Health and the City of Tracy Homeless Services Division.

STRATEGIC PLAN

This agenda item relates to the City of Tracy Council Strategic Priorities for 2024-2025, Quality of Life, Goal #5 continue to implement the adopted Homelessness Strategic plan.

CEQA

The approval of this administrative funding item will not result in a physical change in the environment and therefore is not considered as a project as defined by Section 21065 of the Public Resources Code.

ACTION REQUESTED OF THE CITY OF TRACY FINANCE COMMITTEE

Staff recommends that the Tracy Finance Committee make a recommendation that the City Council adopt a Resolution: 1) Authorizing the acceptance of a grant award from the California Department of Health Care Services in partnership with the San Joaquin County Behavioral Health Services and related actions; and 2) Appropriating the grant award of \$336,350.00 to the Police Department's operational budget

Prepared by: Miguel Contreras, Police Lieutenant

Reviewed by:

Octavio Lopez, Police Captain
Beth Lyons-McCarthy, Police Support Operations Manager
Sekou Millington, Chief of Police
Sara Cowell, Finance Director
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

Attachments:

- Attachment A: Behavioral Health Justice Intervention Services (BHJIS) Notice of Award
- Attachment B: San Joaquin Behavioral Health Services Community Agreement



January 11, 2024

San Joaquin County Behavioral Health Services
Terence Massey
tmassey@sicbhs.org

Re: Behavioral Health Justice Intervention Services (BHJIS) Augmentation #2 Notice of Award

Dear Terence Massey,

Thank you for your proposal to Advocates for Human Potential, Inc. (AHP) and the California Department of Healthcare Services (DHCS) for the BHJIS Augmentation #2.


Congratulations! This letter serves as your Notice of Award.

AHP, on behalf of DHCS, is pleased to announce that the San Joaquin County Behavioral Health Services has been selected to receive additional funding in the amount of \$336,350.00. These funds are to be used to continue work related to the direct services of your BHJIS project. Your award will allow for a modification to your current contract, extending it from January 1, 2024, through March 31, 2025.

In the coming weeks, AHP will draft your agency's revised Statement of Work (SOW) to your existing contract and send out for execution.

If you have any questions, please contact your grantee liaison or the AHP BHJIS team at BHJIS@ahpnet.com.

Sincerely,

DocuSigned by:

C595D8936F1F429...
Marlies Perez
Division Chief
Department of Health Care Services

Cc: Miguel Contreras
Miguel.Contreras@TracyPD.com

A-24-____
**SAN JOAQUIN COUNTY BEHAVIORAL HEALTH SERVICES
 COMMUNITY SERVICE AGREEMENT**

City of Tracy
Tracy Police Department
Behavioral Health Mobile Crisis
 January 1, 2024 – March 31, 2025

This AGREEMENT made and entered into this day _____, 2024 by and between the COUNTY OF SAN JOAQUIN, a political subdivision of the State of California, acting through **BEHAVIORAL HEALTH SERVICES**, (hereinafter “COUNTY”), and, **City of Tracy** (hereinafter “CONTRACTOR”).

1. **Scope of Contractor Services:** The services to be performed by CONTRACTOR under this Agreement shall include, but are not limited to, those items described in the Scope of CONTRACTOR’s Services, set forth in Exhibit A, attached hereto and incorporated herein. COUNTY may in its discretion, upon the request of CONTRACTOR or as a result of changed circumstances, make revisions to Exhibit A upon the written approval of the DIRECTOR and in accordance with the BHS Community Services Agreement Modification policy. CONTRACTOR shall provide the services under the direction of COUNTY’s Director of Behavioral Health Services (DIRECTOR).
2. **Governance:** Services under this contract shall be in accordance with all applicable Federal and state laws and regulations including the Project Number 21-10349 Behavioral Health Mobile Crisis and Non-Crisis Services, Subcontract 7460-CA Mobile Crisis – County of San Joaquin – 01G.

CONTRACTOR agrees to comply with:

- a. Intergovernmental Agreements entered into by and between the Department of Health Care Services and the COUNTY
- b. California Labor Code sections 1101-1102
- c. Deficit Reduction Act of 2005, Section 6032 Trafficking Victims Protection Act of 2000, Section 106(g) of the Trafficking Victims Protection Act of 2000 as amended (22 USC 7104(g) as amended by Section 1702
- d. United States Code Title 31 Section 3730h Whistleblower Act, 41, Public Contracts and 42, The Public Health and Welfare
- e. Title V USC, Sections 1501-1508 Hatch Act
- f. Title 31 Section 1352 Byrd Anti-Lobbying Amendment and 3729-3733 False Claims Act
- g. Title VI, the Civil Rights Act of 1964, USC 42 Section 2000d as amended

- h. Title IX of the Education Amendments of 1972 (education programs and activities)
 - i. Title XIII of the Civil Rights Act of 1968 (42 USC 3601 et seq.)
 - j. Title 40 USC Section 3145 Copeland Act and 3141 Davis-Bacon Act
 - k. The Age Discrimination Act of 1975 as amended, Age Discrimination in Employment Act and the Rehabilitation Act of 1973
 - l. The Americans with Disabilities Act of 1990, as amended
 - m. Section 1557 of the Patient Protection and Affordable Care Act
 - n. Health and Safety Code Sections 11.848.5(a) and (b).
 - o. 2 CFR Part 180, 200.322 and 3000
 - p. 42 CFR 438 including applicable Medicaid laws and regulations, sub-regulatory guidance and contract provisions, beneficiary grievance, appeal, fair hearing procedures and timeframes
 - q. 42 CFR Part 455
 - r. 44 CFR Part 18
 - s. Welfare and Institutions Code Sections 14021.51-14021.53, 14124.20-14124.25 and 14197 as it applies to time and distance standards.
 - t. 42 CFR (Confidentiality, HITECH Act, Prohibited Affiliations, Disclosures on Information and Ownership Control and Managed Care); 45 CFR (Privacy and Security Regulations) and McCain National Defense Authorization Act 2019 Public Law 115-232, Section 889
 - u. California Government Code (Title 2, Division 4, Part 2, Chapter 6), Sections 16645 through Section 16649
 - v. County Procurement Policies
 - w. California Behavioral Health Information Notices
 - x. All other regulations and codes specified in this Agreement and Exhibits.
3. **Term:** The term of this agreement shall be from January 1, 2024 through March 31, 2025. Nothing in this Agreement shall be interpreted as requiring either party to renew or extend this Agreement.
4. **Non-Discrimination Requirements:** Non-discrimination requirements are set forth in Exhibit B and C, attached hereto and incorporated herein. CONTRACTOR shall not discriminate on the basis of race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ethnic group identification, ancestry, mental or physical disability, medical condition, genetic information, military or veteran status, age, pregnancy, denial of medical and family care leave, or pregnancy disability leave (California Government code sections 12940, 12945, 12945.2). CONTRACTOR shall not retaliate against any person for protesting illegal discrimination related to one of these categories, or for reporting patient abuse in tax supported institutions. DIRECTOR may determine patient

eligibility under the Short-Doyle Act, the Medi-Cal Program, the Mental Health Services Act and the non-discrimination requirements.

5. **Patient Rights:** CONTRACTOR shall comply with W&I Code, Division 5, Section 5325; and California Code of Regulations Title 9, Article 6. CONTRACTOR shall observe all beneficiary rights as specified in 42 CFR 438 including the provision of beneficiary handbooks, education materials and notices to beneficiaries in accessible formats. CONTRACTOR will comply with COUNTY's administration of beneficiary problem resolution processes.

6. **Fiscal Provisions:**

- a. COUNTY shall pay CONTRACTOR an amount not to exceed \$336,500 (Three Hundred Thirty Six Thousand Five Hundred Dollars) based on reimbursement of actual costs incurred.

Payment shall be made in accordance with the requirements as set forth in Exhibit A, attached hereto and incorporated herein.

- b. The basis for this agreement shall be COST REIMBURSEMENT as agreed to by both parties and as provided for and governed by policies of the State Department of Health Care Services. Payment shall not exceed CONTRACTOR's actual costs.
- c. CONTRACTOR shall provide COUNTY with monthly invoices for all services no later than fifteen (15) working days after the end of the month in which the costs were incurred.
- d. If equipment is included as a line item in Exhibit A, CONTRACTOR may purchase equipment with the knowledge that Advocates for Human Potential retains ownership of fixed assets over \$5,000.00, and potentially STATE retains ownership based on federal and state funding requirements. CONTRACTOR will maintain an inventory listing all equipment purchased during the agreement period.
- e. CONTRACTOR shall not utilize contract funds for travel outside California or for any costs associated with such out-of-state travel without prior written approval from the DIRECTOR and Advocates for Human Potential, Inc..
- f. CONTRACTOR shall maintain financial records that clearly reflect the cost of each type of service. Appropriate service and financial records must be maintained and retained for at least ten (10) years, or until audit findings are resolved, whichever is later. Any cost apportionment shall be made under generally accepted accounting principles and shall evidence proper audit trails reflecting the true cost of services.

- g. CONTRACTOR agrees to limit indirect cost rates charged to the COUNTY in accordance with the COUNTY's Indirect Rate Guideline.
 - h. CONTRACTOR shall submit to COUNTY an annual program budget proposal on or before June 1st for each successive fiscal year included in a multi-year contract term. At a minimum each budget proposal will consist of an itemized budget and supporting budget narrative.
7. **Funds:** This agreement is contingent upon receiving State or Federal funds for the service described in Exhibit A. If the County does not receive sufficient State or Federal funds for this service described in Exhibit A, this agreement may be modified or terminated. If the State Department of Health Care Services disapproves this agreement, it shall be null and void.
8. **Funding Cycle:** Funding is for services provided by fiscal year, which begins July 1 and ends June 30 of the next calendar year. The maximum financial obligation of the COUNTY under this Agreement is not a guaranteed sum but shall be paid only for services actually rendered.
9. **Recovery of Overpayment to Provider, Liability for Interest:** CONTRACTOR shall promptly report to COUNTY when it has received an overpayment, return the overpayment to COUNTY within sixty (60) calendar days after the date on which the overpayment was identified, and notify COUNTY in writing of the reason for the overpayment.
- a. When an audit or review performed by COUNTY, the State Department of Health Care Services, the State Controller's Office, or any other authorized agency discloses that CONTRACTOR has been overpaid under this Agreement, a disallowance of service is identified, or where the total payments exceed the total liability under this Agreement, CONTRACTOR covenants that any such overpayment or excess payments over liability may be recouped by COUNTY withholding the amount due from future payments, seeking recovery by payment from CONTRACTOR, or a combination of these two methods.
 - b. Overpayments determined as a result of audits of periods prior to the effective date of this Agreement may be recouped by COUNTY withholding the amount due from what would otherwise be COUNTY's liability under this Agreement, seeking recovery by payment from CONTRACTOR, or a combination of those two methods. CONTRACTOR shall promptly report to COUNTY when it has received an overpayment, return the overpayment to COUNTY within sixty (60) calendar days after the date on which the overpayment was identified, and notify COUNTY in writing of the reason for the overpayment.

c. When recoupment or recovery is sought under Section A of this Paragraph CONTRACTOR may appeal according to applicable procedural requirements of the regulations adopted pursuant to Sections 5775, et seq. and 14680, et seq. of the Welfare and Institutions Code, with the following exceptions:

- 1) The recovery or recoupment shall commence sixty (60) calendar days after issuance of account status or demand resulting from an audit or review and shall not be deferred by the filing of a request for an appeal according to the applicable regulations.
- 2) CONTRACTOR's liability to COUNTY for any amount recovered under this Paragraph shall be as provided in Section 5778(h) of the Welfare and Institutions Code and regulations adopted pursuant thereto.

10. **Payment Suspension:** Payment to CONTRACTOR may be temporarily suspended if the State determines there is a credible allegation of fraud for which CONTRACTOR is under investigation by COUNTY, State Department of Health Care Services or any local, state or federal law enforcement agency for fraud and/or abuse (42 CFR, Sections 438.608(a)(8) and 455.23; and W&I Code 14107.11).

11. **Confidentiality:** CONTRACTOR shall comply and require its officers, employees, agents and/or subcontractors to comply with all Health Insurance Portability and Accountability Act (HIPAA) regulations. CONTRACTOR shall adhere to patient confidentiality under California Welfare and Institution Code, Section 5328; Code of Federal Regulations, Title 45, Section 205.50; the Confidentiality of Medical Information Act, California Civil Code section 56, et seq.; and all applicable State and Federal statutes or regulations.

CONTRACTOR agrees to sign and abide by the terms and conditions contained within Attachment A and B Special Terms and Conditions, including the Business Associate Agreement, which is attached hereto and incorporated by reference herein. The provisions of the Attachment and Exhibits shall survive the termination of this agreement.

CONTRACTOR shall comply with the applicable privacy, security, and confidentiality requirements under any Mental Health Plan Agreement contract COUNTY has with the State Department of Health Care Services.

12. **Compliance with Applicable Statutes, Ordinances and Regulations:** CONTRACTOR shall comply with applicable Federal, State, County and local laws in performance of work under this Agreement. COUNTY has the right to monitor the performance of this Agreement to ensure the accuracy of claims for reimbursement and compliance with all applicable laws and

regulations. shall monitor implementation of the corrective action plan as it pertains to services provided pursuant to this Agreement.

Should Federal, State, County, local laws, rules, regulations or guidelines touching upon this Agreement be adopted or revised during the term hereof, CONTRACTOR shall comply with them or notify COUNTY, in writing, that it cannot so comply so that COUNTY may take appropriate action. CONTRACTOR shall perform all services required pursuant to this Agreement in the manner and according to the standards observed by a competent practitioner of the profession in California. CONTRACTOR shall comply with all laws applicable to wages and hours of employment, occupational safety, fire safety, health and sanitation. All products of whatsoever nature, which CONTRACTOR delivers to COUNTY pursuant to this Agreement, shall be prepared in a professional manner and conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession.

- a. If working with children ages 0 to 18, conservatees, or patients in a hospital setting, CONTRACTOR shall comply with all provisions of Welfare & Institutions code 5405, in part, requiring Department of Justice (DOJ) and Federal Bureau of Investigations (FBI) background checks on all employees, contractors, or volunteers who may have contact with patients or residents in the provision of services.
- b. CONTRACTOR and its employees will adhere to the COUNTY's Standards of Conduct for Behavioral Health Services Contractors policy, include submission of the signed policy to BHS. CONTRACTOR and its employees shall not engage in any activities that violate any laws, regulations, or rules, and shall adhere to the highest ethical standards of conduct in all business activities, including integrity, honesty, courtesy, respect and fairness. CONTRACTOR and its employees are expected to promptly report any activities that may be in violation of any COUNTY policies, standards of conduct or any Federal, State or local laws, regulations, rules or guidelines. Any violations or alleged violations may be disclosed anonymously.
- c. Compliance with Immigration Law: CONTRACTOR shall employ only individuals who are in compliance with any and all current laws and regulations of the U.S. Department of Homeland Security, U.S. Citizenship and Immigration Service.
- d. Federal Equal Opportunity Compliance: CONTRACTOR shall individuals in compliance with Equal Opportunity requirements and clauses, Section 503 of the Rehabilitation Act of 1973, and the Vietnam Era Veterans Readjustment Assistance Act of 1974 and Executive Order 11246.

- e. **ADA Compliance:** CONTRACTOR shall comply with the Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability as well as all applicable regulations and guidelines issued pursuant to the ADA. (42 USC Sections 12101 et seq.). This includes, but is not limited to, facilities, parking lots, service counters and spaces, transportation, agendas, flyers, emails, online services, phone calls and group activities.
 - f. **Drug Free Workplace:** CONTRACTOR shall comply with the provisions of Government Code section 8350 et seq., otherwise known as the Drug-Free Workplace Act.
 - g. **Salary:** CONTRACTOR agrees that no part of any federal funds provided under this Agreement shall be used to pay the salary of an individual per fiscal year at a rate in excess of Level 1 of the Executive Schedule at <https://www.opm.gov/> (U.S. Office of Personnel Management), as most recently amended.
 - h. **Licenses and Permits:** CONTRACTOR represents and warrants to COUNTY that CONTRACTOR and its network providers have all licenses, permits, certificates, registrations, and qualifications which are legally required for CONTRACTOR to practice its profession. CONTRACTOR shall ensure that its network providers are credentialed in accordance with COUNTY policy, in good standing with their respective licensing board and their license, waiver, registration and certification is current and valid without limitations.. CONTRACTOR shall maintain current throughout the life of this Agreement, all permits, licenses, certificates and insurances that are necessary for the provision of contracted services.
 - i. **Suspension and Debarment:** By executing this Agreement, CONTRACTOR certifies that CONTRACTOR and its providers are not suspended, debarred, declared ineligible or otherwise excluded from by any Federal Department or Agency. CONTRACTOR acknowledges that this certification of eligibility to receive federal funds is a material term of the Agreement. Federal Financial Participation is not available for any amount furnished to an Excluded individual or entity, or at the direction of a physician during the period of exclusion when the person providing the service knew or had reason to know of the exclusion, or to an individual or entity when the COUNTY failed to suspend payments during an investigation of a credible allegation of fraud [42 U.S.C. section 1396b(i)(2)].
13. **Program and Patient Records:** CONTRACTOR agrees to comply with all applicable Medicaid laws, regulations, and contract provisions, including the terms of the 1915(b) Waiver and any Special Terms and Conditions. CONTRACTOR will maintain program and patient records for a minimum of ten (10) years after the end of the agreement. The State Department of Health Care Services, COUNTY and/or the appropriate audit agency shall have the right to

audit, review and reproduce all records to evaluate the cost, quality, appropriateness and timeliness of services.

Clinical records, treatment and billing documents shall comply with federal and state regulations and County quality and timeliness standards. CONTRACTOR will be required to develop and implement a clinical record system which meets all County, State, and Federal requirements and clearly documents medical necessity for both treatment and billing services. CONTRACTOR will adhere to County policies and procedures for billing and claiming services. CONTRACTOR staff will participate in the COUNTY's training on clinical documentation and all electronic health record systems required for use. CONTRACTOR will participate in the COUNTY's medical records system. Records must be retained for ten (10) years following the discharge of the adult patient; for minor patients, records must be kept ten (10) years after the minor patient's nineteenth (19th) birthday.

14. Program Reports: CONTRACTOR shall provide monthly, bi-monthly or quarterly and annual program progress reports to the COUNTY on a schedule and in the format determined by COUNTY. CONTRACTOR will report progress and achievement on the program goals and measurable activities specified in Exhibit A. CONTRACTOR shall provide a copy to COUNTY of any regulatory citation or audit report received from any entity during the term of this agreement. CONTRACTOR shall maintain accurate and complete records for all activities and achievements reported to the COUNTY. COUNTY will initiate a corrective action plan if deficiencies are identified.

15. Availability, Accessibility and Timeliness of Services: CONTRACTOR shall provide the covered services in a timely manner, pursuant to the requirements and standards established by applicable Federal, State and County laws, ordinances, regulations, resolutions and policies, and pursuant to COUNTY's obligation to County consumers. CONTRACTOR shall maintain continuous availability and accessibility of covered services and facilities, service sites and personnel to provide the covered services as defined by the State and Federal "Access", "Timely Access" and "Timeliness" standards. Such services shall not be limited due to budgetary constraints and will be provided to COUNTY beneficiaries residing in and outside of the COUNTY.

16. Cultural and Linguistic Proficiency:

- a. To ensure equal access to quality care by diverse populations, CONTRACTOR shall adopt the federal Office of Minority Health Culturally and Linguistically Appropriate Service (CLAS) national standards.

- b. When the consumer served by CONTRACTOR is a non-English or limited-English speaking person, CONTRACTOR shall take all steps necessary to develop and maintain an appropriate capability for communicating in that consumer's primary or preferred language to ensure full and effective communication between the consumer and CONTRACTOR staff. CONTRACTOR shall provide immediate translation to non-English or limited-English speaking consumers whose conditions are such that failure to immediately translate would risk serious impairment. CONTRACTOR shall provide notices in prominent places in the facility of the availability of free translation in necessary other languages.
- c. CONTRACTOR shall make available forms, documents and brochures in the San Joaquin County threshold languages of English and Spanish to reflect the cultural needs of the community.
- d. CONTRACTOR is responsible for providing culturally and linguistically appropriate services. Services are to be provided by professional and paraprofessional staff with similar cultural and linguistic backgrounds to the consumers being served.

17. Contractor Staff:

- a. COUNTY may, at any time, request the removal of any CONTRACTOR staff from the program funded by COUNTY through this agreement if COUNTY reasonably determines that said staff is detrimental to the program, the COUNTY or the COUNTY's clients or has acted inappropriately. CONTRACTOR shall remove any staff from the program immediately upon request by COUNTY pursuant to this provision.

CONTRACTOR will notify COUNTY immediately when any CONTRACTOR staff with access to the BHS Portal has been terminated, resigned, or experienced a significant change in job responsibilities that necessitates a change in access to electronic health record systems.

18. Formal Review: CONTRACTOR shall comply with annual BHS staff site reviews of requested fiscal and programmatic documents evidencing work provided. If deficiencies are identified, CONTRACTOR will work with COUNTY to take corrective action.

19. Audit: CONTRACTOR will submit an annual external organizational audit to BHS, including a separate schedule of revenue and expenditures of COUNTY program funds prepared by a Certified Public Accountant. CONTRACTOR's receiving more than \$750,000 annually of Federal funding as part of this COUNTY funded program must provide a single audit, detailing revenue and expenditures of COUNTY program funds and prepared by a Certified Public Accountant. CONTRACTOR's receiving less than \$200,000 annually from COUNTY are not required to obtain an annual external organizational audit, however, at the COUNTY's

discretion, the COUNTY reserves the right to request an external audit for any CONTRACTOR receiving COUNTY funds.

CONTRACTOR will comply with 42 CFR Parts 455. 104, 455.105, 1002.203 and 1002.3, in relation to the provision of information about provider business transactions, ownership and control, prior to entering into a contract and during re-certification and annual review.

Audits in accordance with 42 CFR 439.3(m) must be submitted within the earlier of thirty (30) days after receipt of the Certified Public Accountant's report or six months after the end of the CONTRACTOR's fiscal year period. The Audit Report shall be submitted to:

San Joaquin County Behavioral Health Services
Attn: Contract Management
1212 North California Street
Stockton, CA 95202

- a. CONTRACTOR shall maintain accurate and complete records including a physical inventory of employee payroll timesheets. These records shall be preserved in accordance with recognized commercial accounting practices.

20. Indemnification: CONTRACTOR shall, at its expense, defend, indemnify and hold harmless COUNTY, (defined as the County of San Joaquin and its employees, officers, directors, contractors and agents) from and against any losses, liabilities, damages, penalties, costs, fees, including without limitation reasonable attorneys' fees, and expenses from any claim or action, including without limitation for bodily injury or death, to the extent caused by or arising from the active and/or passive negligence or willful misconduct of CONTRACTOR, its employees, officers, agents or subcontractors.

CONTRACTOR shall hold the COUNTY, its officers and employees, harmless from liability, of any nature or kind on account of use of any copyrighted, or un-copyrighted composition, secret process, patented or un-patented invention articles or appliance furnished or used under this Agreement.

COUNTY shall defend, indemnify, and hold harmless CONTRACTOR, employees, officers, directors, contractors and agents from and against all losses, liabilities, damages, penalties, costs and fees, including reasonable attorneys' fees, arising out of or resulting from the performance of the Agreement, caused in part by the negligent or intentional actions or omissions of COUNTY's employees, officers, directors, contractors and agents.

21. Insurance Requirements: Contractor shall submit proof of insurance with liability limits as set forth below to COUNTY showing COUNTY, its officers, employees and agents named as

Additional Insured. COUNTY insurance requirements must be met prior to starting work with San Joaquin County. CONTRACTOR agrees to be responsible to ensure that the requirements set forth are also to be met by CONTRACTOR's subcontractors. During the term of this Agreement, CONTRACTOR shall maintain and carry in full force insurance of the following types and minimum amounts with a company or companies as are acceptable to COUNTY, insuring CONTRACTOR while CONTRACTOR is performing ongoing operations and duties under this Agreement:

- a. **Workers' Compensation and Employer's Liability:** As required by any applicable State or Federal law or regulation and Section 3700 of the Labor Code that requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that code, CONTRACTOR will comply with a program of Workers' Compensation Insurance or a state-approved self-insurance program.
- b. **Commercial General Liability Insurance:** The policy shall have combined single limits for bodily injury or property damage including personal injury of not less than two million dollars (\$2,000,000), for each occurrence. The aggregate limit shall be \$4,000,000.
- c. **Professional Liability** with \$1,000,000 limit as appropriately relates to services rendered including coverage for medical malpractice, and/or errors and omissions.
- d. **Cyber Liability** with \$2,000,000 per occurrence or claim and \$4,000,000 aggregate. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by Vendor in this agreement and shall include, but not be limited to, claims involving infringement of intellectual property, including but not limited to infringement of copyright, trademark, trade dress, invasion of privacy violations, information theft, damage to or destruction of electronic information, release of private information, alteration of electronic information, extortion and network security. The policy shall provide coverage for breach response costs as well as regulatory fines and penalties as well as credit monitoring expenses with limits sufficient to respond to these obligations.
- e. **Automobile Liability:** CONTRACTOR agrees to hold harmless and indemnify COUNTY for any and all liabilities associated with the use of any automobiles in relation to tasks associated with this Agreement. In addition, if vehicles are used to transport clients, CONTRACTOR shall maintain comprehensive automobile liability, with the following minimum limits:

- f. **Additional Named Insured:** All certificates of insurance except for workers' compensation and professional liability shall contain additional endorsements naming COUNTY and its officers, employees, agents, as additional insured with respect to liabilities arising out of performance of services.
- g. **Policies Primary and Non-Contributory:** All policies required above are to be primary and non-contributory with any self-insurance programs carried or administered by COUNTY.
- h. **Proof of Coverage:** CONTRACTOR shall immediately furnish certificates of insurance to COUNTY department administering the contract evidencing the insurance coverage, including endorsements above required, prior to the commencement of performance of services, which certificates shall provide that such insurance shall not be cancelled, reduced or expire, without thirty (30) day's written notice to COUNTY. CONTRACTOR shall maintain such insurance and furnish to COUNTY certified copies of the certificates and all endorsements from the time CONTRACTOR commences performance of services hereunder until the completion of such services. If COUNTY elects to renew this Agreement, CONTRACTOR shall provide COUNTY with copies of the certificates and all endorsements for each additional term of this Agreement. All insurance shall be in a company or companies authorized by law to transact insurance business in the State of California.
- i. **Liability:** Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve CONTRACTOR from liability in excess of such coverage, nor shall it preclude COUNTY from taking such other actions as are available to it under any other provision of this Agreement or otherwise in law.

22. **Conflict of Interest:** CONTRACTOR has read and is aware of the provisions of Sections 1090 et seq. and 87100 et seq. of the Government Code relating to conflict of interest of public officers and employees and agrees to be bound thereby. CONTRACTOR certifies that it is unaware of any financial or economic interest of any public officer or employee of COUNTY relating to this Agreement. It is further understood and agreed that if such a financial interest does exist at the inception of this Agreement, COUNTY may immediately terminate this agreement by giving written notice thereof.

CONTRACTOR certifies that its employees and officers of its governing body shall avoid any actual or potential conflicts of interest and that no officer or employee who exercises any functions or responsibilities in connection with this Agreement shall have any personal financial interest or benefit which either directly or indirectly arises from this Agreement.

CONTRACTOR shall establish safeguards to prohibit its employees or its officers from using their positions for a purpose that could result in private gain or that gives the appearance of being motivated for private gain for themselves or others, particularly those with whom they have family or business ties.

Further, any member of CONTRACTOR's Board of Directors or officers is prohibited from working for CONTRACTOR except by consent of the DIRECTOR, which consent shall not be unreasonably withheld for exceptional or unusual circumstances.

23. **Nepotism:** Nepotism occurs when relatives are in the same chain-of-command. A management official or supervisor with authority to take personnel management actions may not select a relative for a position anywhere in CONTRACTOR's organization under his or her jurisdiction or control. Such persons having the authority to appoint, employ, promote, or advance person or to recommend such action, may not advocate or recommend a relative for a position in CONTRACTOR's organization. For purposes of this statement, relative is defined as a spouse, parents, children, siblings, aunts or uncles, in-laws or step-parents or step-siblings. Except by consent of DIRECTOR, which consent shall not be unreasonably withheld for exceptional or unusual circumstances, no person shall be employed by CONTRACTOR who is in a direct chain-of-command or supervision with any relative, as defined above.
24. **Adherence to Computer Software Copyright Laws:** CONTRACTOR certifies that it has appropriate systems and controls in place to ensure that state or federal funds available from this Agreement will not be used for the acquisition, operation, or maintenance of computer software in violation of copyright laws.
25. **Charitable Choice:** CONTRACTOR shall not use funds provided through this contract for inherently religious activities, such as sectarian worship, religious instruction, or proselytization. No federal funds shall be used by CONTRACTOR to provide direct, immediate or substantial support to any religious activity. CONTRACTORS that are religious organizations shall establish a referral process to a reasonably accessible program for clients who may object to the religious nature of the CONTRACTOR's program, and CONTRACTOR shall notify clients of their rights to be referred to another program if they object to the religious nature of the program at intake. Referrals made due to the religious nature of the CONTRACTOR's program shall be submitted annually to the COUNTY by June 30.
26. **Domestic Partners Act:** Pursuant to Public Contract Code 10295.3, no state agency may enter into any contract executed or amended after January 1, 2007, for the acquisition of goods or services in the amount of \$100,000 or more with a contractor who, in the provision of benefits, discriminates between employees with spouses and employees with domestic partners, or discriminates between domestic partners and spouses of those employees.

27. **Lobbying and Restrictions:** By signing this Agreement, the CONTRACTOR certifies that no part of any federal funds provided under this Agreement shall be used by the CONTRACTOR to support lobbying activities to influence proposed or pending federal or state legislation for appropriations. This prohibition is related to the use of federal grant funds and is not intended to offset the right, or the right of any other organization, to petition Congress, or any other level of Government, through the use of other resources (31 USC, Section 1352).
28. **Non-Exclusive Rights:** This Agreement does not grant to CONTRACTOR any exclusive privileges or rights to provide services to COUNTY. COUNTY may contract with other counties, private companies, or individuals for similar services.
29. **Governing Law:** The laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and shall also govern the interpretation of this Agreement.
30. **Venue:** Venue for any action arising out of this Agreement shall be the County of San Joaquin, California.
31. **Entire Agreement:** This document contains the entire Agreement between the parties and supersedes oral or written understanding they may have had prior to the execution of this Agreement. If any ambiguity is created between this Agreement and its exhibits and/or attachments, this Agreement shall prevail.
32. **Severability:** Each paragraph and provision of this Agreement is severable, and if one or more paragraphs or provisions are declared invalid, the remaining provisions of this Agreement will remain in full force and effect.
33. **Enforcement of Remedies:** No right or remedy herein conferred on or reserved to COUNTY is exclusive of any other right or remedy herein or by law or equity provided or permitted but each shall be cumulative of every other right or remedy given hereunder or now or hereafter existing by law or in equity or by statute or otherwise, and may be enforced concurrently or from time to time.
34. **Modification, Amendments, and Waiver:** No supplement, modification, or waiver of this Agreement shall be binding unless executed in writing by the party to be bound thereby. No waiver of any of the provisions of this Agreement shall be deemed to or shall constitute a waiver of any other provisions hereof (whether or not similar), nor shall such waiver constitute a continuing waiver unless otherwise expressly provided.

35. **Exhibits to Contract:** Additional provisions shall be attached hereto and incorporated herein as sequentially numbered exhibits and shall have the same force and effect as set forth in the Agreement. The provisions of the Exhibits shall survive the termination of this agreement.
36. **Headings:** Paragraph headings are not to be considered a part of this Agreement and are included solely for convenience of reference and are not intended to be full or accurate description of the contents thereof.
37. **Force Majeure:** Without affecting any right of termination set forth in this Agreement, either party may suspend this Agreement at any time because of strike of its personnel, war, declaration of state of national emergency, acts of God, or other cause beyond the control of the party, by giving the other party written notice of, and reason for, the suspension.
38. **Independent Contractor:** In the performance of work duties, and obligations imposed by this Agreement, CONTRACTOR is at all times acting as an independent contractor practicing his or her own profession and not as an employee of COUNTY. CONTRACTOR shall perform CONTRACTOR's work in strict accordance with approved methods and standards of practice in CONTRACTOR's professional specialty. The sole interest of COUNTY is to assure that CONTRACTOR's services are rendered in a competent and efficient manner in order to maintain the high standards of San Joaquin COUNTY. CONTRACTOR shall not have any claim under this Agreement or otherwise against COUNTY for vacation, sick leave, retirement benefits, social security or worker's compensation benefits. CONTRACTOR acknowledges the fact that it is an independent contractor and is in no way to be construed as an employee of COUNTY, nor are any of the persons employed by CONTRACTOR to be so construed. CONTRACTOR shall furnish all personnel, supplies, equipment, furniture, insurance, utilities, telephone and facilities necessary except as provided in Exhibit A. A copy of the CONTRACTOR's current professional, local, state or other business license required to conduct the services stated herein, will be provided to the COUNTY.
39. **Assignments:** This Agreement is binding upon COUNTY and CONTRACTOR and their successors. Except as otherwise provided herein, neither COUNTY nor CONTRACTOR shall assign, sublet or transfer its interest in this Agreement or any part thereof or delegate its duties hereunder without the prior written consent of the other. Any assignment, transfer, or delegation made without such written consent shall be void and shall be a material breach of this Agreement.
40. **Disputes and Remedies:** Notice of any disputes, claims, or breach raised by CONTRACTOR, arising under this Agreement, must be submitted, in writing, to COUNTY within ninety (90) days of the alleged dispute, claim, or breach. If such issues cannot be resolved within ninety (90) days following written notice, and if the parties mutually agree, the alleged dispute, claim,

or breach may be submitted to arbitration. Arbitration, if expressly agreed upon in writing by COUNTY and CONTRACTOR, shall be pursuant to the provisions of California Code of Civil Procedure Section 1280, et seq.

- a. At the COUNTY's sole discretion, COUNTY may elect to raise a dispute, claim, or breach by submitting it, in writing, to CONTRACTOR. Such dispute, claim, or breach would include conditions and time constraints required of CONTRACTOR to remedy.
- b. Neither the pendency of a dispute, claim, or breach nor its consideration will excuse the parties from full and timely performance in accordance with terms of this Agreement.
- c. Any legal action or proceeding with respect to this Agreement shall be brought in the courts of the State of California for the County of San Joaquin, or the courts of the United States of America for the Eastern District of California, and in no other courts. CONTRACTOR hereby accepts such jurisdiction and venue and generally and unconditionally waives any objection, including, without limitation, any objection to the laying of venue or based on the grounds of forum non conveniens. The provision of this paragraph shall survive expiration or other termination of this Agreement regardless of the cause of such termination.
- d. In any action brought by a party to enforce the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees and costs, including the reasonable value of any services provided by in-house counsel. The reasonable value of services provided by either party's counsel shall be capped at the hourly rate charged by Deputy County Counsel IV attorneys in the office of the County Counsel of San Joaquin County, California.

41. **Green Purchasing Policy:** COUNTY has a Green Purchasing Policy; please go to website to view: [San Joaquin County Green Purchasing Policy](#). COUNTY has adopted an Environmentally Preferable Purchasing (EPP) Policy. EPP refers to the procurement of goods and services that lessen or reduce negative effect on human health and the environment when compared with competing goods and services that serve the same purpose. This comparison takes into consideration such things as: raw materials acquisition; production; manufacturing; packaging; distribution; reuse; disposal; energy efficiency; performance; safety and cost.

A primary goal of this policy is to encourage contractors/suppliers and departments to consider products and services that help minimize environmental impacts with price, performance and aesthetic considerations being equal. Contractors/suppliers are encouraged to offer products and services that meet legitimate "green" standards, e.g. products that

possess independent third-party certifications such as Energy Star, Green Seal, EcoLogo, EPEAT or FEMP (Federal Energy Management Program) standards. The County also encourages offers of products made with minimal virgin materials and maximum use of recycled materials – again, price and performance essentially being equal.

42. **Work Products, Marketing and Branding:** All reports, publications, brochures, letters of interest or other material for distribution to the public, which are produced and/or paid for by COUNTY funds, must be approved by BHS Contracts Management prior to publication and must state in writing that the program is funded by San Joaquin County Behavioral Health Services. In addition to the statement of funding, all proposed publication/media material must include the official San Joaquin County Greatness Grows Here logo or the Behavioral Health Services logo. The COUNTY will provide the official logo(s) to the CONTRACTOR.

CONTRACTOR must submit proposed publication/media material to BHS Contracts Management for review and approval a minimum of twenty (20) days prior to public release of any material. Within ten (10) days of receipt, BHS Contracts Management will provide the CONTRACTOR with written approval, suggested revisions or disapproval to print and/or disburse the publication/media material.

San Joaquin County BHS Contracts Management will review publication/media material for the following:

- a. County and/or BHS logo usage, placement, and funding statement
- b. General user/reader friendliness, including literacy level appropriateness, spelling, and grammar.

43. **Termination:** Either party to this Agreement may for any reason terminate this agreement at any time by giving to the other party thirty (30) days written notice of such termination. Termination shall have no effect upon the rights and obligations of the parties arising out of any transaction occurring prior to the effective date of such termination.

If CONTRACTOR materially breaches the terms of this Agreement, COUNTY shall have the following alternative remedies:

- a. Immediately terminate the Agreement with CONTRACTOR.
- b. Complete the unfinished work, under this Agreement, with a different CONTRACTOR.
- c. All other remedies provided by law.

Upon written notice from State Department of Health Care Services to the COUNTY or CONTRACTOR that CONTRACTOR is not complying with law or regulation, this agreement

shall be terminated immediately. CONTRACTOR is to supply promptly all information necessary for the reimbursement of any outstanding claims.

44. **Notices:** Notices concerning this agreement shall be given by regular mail address as follows:

COUNTY:

San Joaquin County
County Administration Building
44 North San Joaquin Street, Suite 640
Stockton, CA 95202

CONTRACTOR:

City of Tracy
Attn: xxxxxxxxxxx
Tracy Police Department
1000 Civic Center Drive
Tracy, CA 95376

COPY TO:

San Joaquin County
Behavioral Health Services
Attn: Contract Management
1212 North California Street
Stockton, CA 95202

IN WITNESS WHEREOF, the parties have executed this Agreement the date first written above:

ATTEST: RACHÉL DEBORD,
Clerk of the Board of Supervisors
of the County of San Joaquin,
State of California

COUNTY OF SAN JOAQUIN
a political subdivision of the
State of California

By: _____ (seal)
Clerk

By: _____
Miguel A. Villapudua, Chairman
Board of Supervisors

Hereinabove referred to as "COUNTY"

By: _____
Nancy Young, Mayor
City of Tracy

Hereinabove referred to as "CONTRACTOR"

APPROVAL RECOMMENDED:

By: _____
Greg Diederich, Director
Health Care Services

By: _____
Genevieve G. Valentine
Behavioral Health Services

APPROVED AS TO FORM:

Office of the County Counsel

By: _____
Rachael Allgaier,
Deputy County Counsel

Exhibit A
BHJIS Grant Extension and Refunding Request for Jan 2024 – Mar 2025

Background

San Joaquin County Behavioral Health Services (SJCBS), in partnership with Tracy Police Department (TPD), is working to strengthen differential responses by law enforcement for people with behavioral health challenges. Through existing BHJIS grant funds, TPD has expanded its Neighborhood Services Division to include two **police co-response programs** targeting the needs of housed and unhoused people with behavioral health challenges.

The **Familiar Faces Team**, conducts homeless street outreach and engagement while the **Mobile Evaluation Team (MET)**, conducts scheduled assessments and evaluations of people identified as having potentially serious behavioral health challenges. Additionally, MET is tasked with conducting welfare checks and following-up with previously identified individuals and vulnerable families.

Prior BHJIS funding helped launch the two teams, procure necessary equipment and supplies, and develop standard operating procedures. Significant accomplishments include:

- The Familiar Faces and MET teams are in the field five days a week.
- BHS personnel are on site an average of three days a week.
- Duties and responsibilities for responding to people with behavioral health challenges are being normalized for patrol officers who are leaning more significantly into their partnership with the Familiar Faces and MET teams.

According to SJCBS clinicians and Police command staff, the teams are critical in assisting patrol officers in responding to people with behavioral health concerns by facilitating any communications with SJCBS and reducing officer involvement.

Program Description

i. Location and Hours of Operation

Existing coverage is 8 hours, five days a week, and will expand to 10 hours most days with partial weekend coverage within the City of Tracy. Shifts will be staggered to meet the following needs.

- Later hours of availability on Friday nights and weekends
- Earlier hours of availability during school days.
- All team members will work at least one day with every other team member.
- At least two people are on duty most of the time.

ii. Target Population

The target population includes unsheltered homeless individuals and those at imminent risk of homelessness or hospitalization due to unmanaged behavioral health concerns. Clients will be identified through the following means:

- Case managers conduct outreach and engagement with people living in places not meant for human habitation (encampments, tents, vehicles, on the streets, etc.).
- Patrol officers make referrals for people suspected of having an unmanaged behavioral health concern and /or homeless or at risk of homelessness who do not meet criteria for a 5150 hold or crisis response.

- MET team make referrals for people suspected of having a mild to moderate behavioral health concern and/or homeless who are not initially responsive to services.
- SJCBS and Whole Person Care teams make referrals for people who are not initially responsive to services and are thought to have exited a hospital or institution to the City of Tracy.

iii. Estimated Number of People to be Served

In a one-year period the two existing case managers engaged over 175 individuals. An estimated 100+ homeless people currently live in the City of Tracy, a drop of nearly 50% over the past two years - primarily due to better connections and engagements to services. During October there were 134 law enforcement related calls involving the target population. 81% of incidents were resolved without an arrest or citation. Currently, each case manager holds a caseload of about 50-60 people, about twice the number recommended according to best practices. Between 50-60 new clients are identified each quarter due to the transient nature of the population.

The more recently formed MET team is also growing its caseload. In October the team worked intensively with nine clients, including four new referrals. Five of the nine required transport and coordination with crisis services during the month, the remaining four were kept stabilized in the community through regular wellness checks. Already the team is seeing increases in the month of November and anticipates a growth in services as word is spreading among officers and partner programs on the work of the team.

With the addition of another case manager, the goal is to reduce caseloads to an average of 30 clients per case manager, provide weekend coverage, and be more available and responsive to requests for service by patrol officers or the MET team.

iv. Description of Staff to be Funded

Administrative Staffing: one administrative assistant

Under the original solicitation, Tracy Police contracted with a consultant to support implementation, integration, and roll-out of program operations. Moving forward, it is important that TPD absorbs more of the work to (1) coordinate activities between partners and patrol units, (2) upload and validate incident responses into multiple data systems, and (3) track and report program impact. Administrative assistance will deepen operational capacity and further support the integration of the co-responder units within the Department.

Direct Service Personnel: One case manager

SJCBS and the Tracy Police Department are requesting funds for one of three case managers to work within the Department's Neighborhood Services Division. Familiar Faces case managers are professional staff with experience serving people with mental illnesses, substance use disorders, housing instability, and/or justice involvement. Case managers typically have a breadth of experience in engaging and motivating people who have significant barriers to services, including addiction, abuse, trauma, and a distrust of law enforcement or other government employees.

Familiar Faces case managers are City of Tracy employees and are required to wear standard attire (khaki pants and t-shirts), identification, and are responsible for developing a client case plan, assisting clients in meeting goals, recording service and case management activities, and conducting coordinated activities with service partners and health professionals to meet client needs. These duties may also

involve transporting clients to behavioral health care appointments or other meetings necessary to obtain identification, public benefits, or procure shelter or housing.

Direct Service Expenses 1: Services and Supplies

Funding is requested to support outreach and operations, including supplies to meet emergency and basic needs including first aid kits, socks, hats, water, snacks, and pet food. Other emergency needs may include motel vouchers for clients if the shelter is full or not suitable due to client mobility or disability concerns.

Direct Service Expense 2: Data and Linkages to Services,

Funds are requested to purchase an additional HMIS license and to update the Department's computer system to (1) add secondary disposition codes for Familiar Faces and MET team referrals, (2) add standardized reports for MET and Familiar Faces teams, and (3) to develop mapping capacity aligned to the secondary disposition codes.

Direct Service Expenses 3: Personnel Equipment

Funding is requested to purchase necessary equipment for one new case manager, including uniforms, one laptop computer, and a cell phone for field operations.

Coaching and Virtual Learning Collaboratives

Funds are requested to continue working with the existing technical assistance provider on a more modest basis. If re-funded under this grant extension the technical assistance provider will work closely with the Tracy Police Department command staff to:

- Develop operational procedures for patrol officers to make referrals to Familiar Faces and MET teams, including standards for filing reports and updating incident logs.
- Complete operational agreements between SJCBS and Tracy Police on coordinated care and responses, including (limited and appropriate) data sharing agreements meeting HIPAA and DOJ requirements for confidentiality.
- Organize officer training in mental health responses in partnership with SJCBS clinicians.
- Convene at least two in-person learning collaboratives for Tracy area homeless service and behavioral health providers on coordinated activities.

Program Budget and Justification

The two co-response teams currently operate Monday through Friday from 8:30 am – 4:30 pm within the City of Tracy. Staffing includes one sergeant, three Neighborhood Resource Officers, two Familiar Faces case managers, and (through BHS) two mental health professionals. Their core purpose is to prevent and avert crisis responses, including arrests and hospitalizations of people with behavioral health challenges and to increase stabilization and wellness through referrals to mental health, housing or shelter programs, medical services, and other interventions as needed. Tracy Police absorbs the cost of two existing case managers, but more support is critical to shore up operations.

SJCBS and the Tracy Police Department are requesting **\$336,350.00** in BHJIS renewal funds to sustain the co-responder units and maintain services as planned and scoped through the original solicitation.

Long Term Sustainability

Over the long-term, Tracy Police Department has identified facility space and prepared a staffing and budget plan for operations. Receipt of renewal funds under BHJIS will provide further proof of concept

to Council on the importance of officers working with behavioral health professionals and case managers to de-escalate situations and help community residents maintain their health and wellbeing.

Budget

Deliverable	Amount	Justification
Administrative Staffing <ul style="list-style-type: none"> ▪ Administrative Assistant 	\$ 140,027	Base Salary, Step C \$ 70,880.00 Bilingual \$ 1,418.00 Deferred Comp \$ 3,544.00 FICA \$ 5,019.00 Medicare \$ 1,174.00 Insurance \$ 36,404.00 Workers Comp \$ 1,829.00 Life Insurance \$ 162.00 PERS (Misc) \$ 7,909.00 PERS (UAL) \$ 11,688.00 \$ 140,027.00
Direct Service Personnel <ul style="list-style-type: none"> ▪ Case Manager 	\$ 151,903	Base Salary, Step C \$ 76,558.00 Bilingual \$ 1,688.00 Deferred Comp \$ 4,220.00 FICA \$ 5,962.00 Medicare \$ 1,394.00 Insurance \$ 36,404.00 Workers Comp \$ 2,178.00 Life Insurance \$ 162.00 PERS (Misc) \$ 9,418.00 PERS (UAL) \$ 13,919.00 \$ 151,903.00
Direct Service Expense	\$ 24,420	<ul style="list-style-type: none"> ▪ \$15,000 or \$1,000 a month for operational supplies over 15 months ▪ \$5,000 for HMIS licenses (\$250 each) and (\$4,500) for the vendor to update reporting software to meet critical operational needs (service flags). ▪ \$4,420 for two each of: computer (\$1,000 x 2), annual cell phone allowance (\$360 x 2) and uniform costs (\$850 x 2 under the City's bargaining agreement).
Coaching and Virtual Learning Collaboratives	\$ 20,000	100 hours of coaching, technical assistance, and training with TPD and partners @\$200 / hr.
Quarterly and Final Reporting	\$ 0.00	Reporting is in-kind through SJCBS and TPD
TOTAL	\$336,350	

San Joaquin County Behavioral Health Services
Exhibit B
Twelfth Edition
Program Integrity Requirements

CONTRACTORS who provide services to San Joaquin County (SJC) Medi-Cal beneficiaries shall comply with the following Program Integrity requirements. The term CONTRACTOR includes the agency and the staff of the agency that enters into contract with San Joaquin County Behavioral Health Services (SJCBS) to provide services to SJC Medi-Cal beneficiaries.

1. Standards Of Conduct

SJCBS is committed to compliance, by letter and spirit, with all applicable federal, state, and local laws and regulations.

CONTRACTOR and its employees shall not engage in any activities that violate any laws, regulations, or rules, and shall adhere to the highest ethical standards of conduct in all business activities, including integrity, honesty, courtesy, respect and fairness.

CONTRACTOR and its employees are expected to promptly report any activities that may be in violation of any SJCBS policies, standards of conduct or any federal, state or local laws, regulations, rules or guidelines. Any violations or alleged violations may be disclosed anonymously.

CONTRACTOR and its employees are responsible for reading, understanding, and adhering to SJCBS policies regarding Program Integrity by signing SJCBS Standards of Conduct for Organizational Providers that will be provided by SJCBS.

2. Compliance Program

2.1 Federal Requirements:

San Joaquin County Behavioral Health Services (SJCBS) has implemented a Compliance Program in compliance with the Code of Federal Regulations (CFR), Title 42, Section 438.608, to guard against fraud, waste or abuse.

CONTRACTOR and its employees are required to comply with applicable state and federal regulations, and with SJCBS policies, procedures and standards, that are designed to detect, respond, prevent, and correct violations of those requirements. SJCBS shall review CONTRACTOR's continued compliance through periodic and/or ad-hoc auditing and monitoring of CONTRACTOR's activities as determined by SJCBS, in addition to site certification reviews conducted at least every three (3) years.

2.2 Consent to Criminal Background Checks:

2.3.1. CONTRACTOR is required to consent to criminal background checks as a condition of enrollment including fingerprinting when required to do so under State law or by the level of screening based on risk of fraud, waste or abuse as determined for that category of provider, per 42 CFR, Section 455.434(a). CONTRACTOR will disclose any managing employee or agent convicted of a crime related to federal health care programs.

San Joaquin County Behavioral Health Services
Exhibit B
Twelfth Edition
Program Integrity Requirements

2.3 Monitoring and Verification of Provider Eligibility (per 42 CFR, Section 455.436)

2.3.1 Compliance Sanction Check and Medi-Cal Certification:

In compliance with Federal and State regulations which prohibit affiliation with individuals or affiliates of individuals debarred, suspended, or otherwise excluded from participating in procurement activities under the Federal Acquisition Regulation or from participating in non-procurement activities, CONTRACTOR identified as a Covered Entity under HIPAA Regulations (Title 45, CFR, Section 160.103), shall conduct sanction checks verifying that new and current employees (prior to hiring and monthly thereafter) are not on the following exclusion databases to ensure CONTRACTOR's eligibility for reimbursement through Medicare and Medi-Cal funds:

- Office of Inspector General (OIG) Exclusion List at <http://exclusions.oig.hhs.gov>
- Medi-Cal List of Suspended or Ineligible Providers at www.medi-cal.ca.gov
- System for Award Management at <https://www.sam.gov>

Should the sanction check result in a positive match at any time, CONTRACTOR shall notify the SJCBS Compliance Officer at (209) 468-8750 no later than the next business day.

2.3.2 Verification of the Social Security Administration's Death Master File: CONTRACTOR is required to verify new and current (prior to hiring) employees are not on the Social Security Administration's Death Master File.

2.4.3 Verification of the National Plan and Provider Enumeration System (NPPES): CONTRACTOR is required to verify the accuracy of new and current (upon enrollment/re-enrollment) employees in the NPPES.

2.4.4. Documented Evidence: CONTRACTOR shall keep documented evidence of all verification activities for SJCBS monitoring.

If any payment was made to CONTRACTOR for services provided by anyone of CONTRACTOR's staff that is on any of the above exclusion databases, that payment shall be subject to recovery and/or the basis for other sanctions by the appropriate authority (per Sections 1128 & 1128A of the Social Security Act; 42 CFR, Sections 438.214 and 438.610; and DMH Letter No. 10-05).

Service Verification:

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In Compliance with Federal and State Requirements in 42 CFR, Sections 455.19a(2) and 455.20(a), regarding the certification of accurate data submitted by CONTRACTOR for reimbursement, CONTRACTOR shall comply with the verification methods as determined by SJCBS.

2.4 Mandatory Trainings:

CONTRACTOR shall ensure that all employees who assist in the performance of functions or activities as part of this agreement, or access or disclose protected health information (PHI), complete privacy and information security training and compliance training within 30 days of hire and at least annually thereafter at CONTRACTOR's expense.

2.5 Documentation:

CONTRACTOR shall comply with SJCBS policies, procedures and standards regarding proper documentation of services and billing, including third-party verification of documentation before claiming. Failure to provide required documentation in a timely manner may result in delayed or withheld payment to CONTRACTOR.

CONTRACTOR shall reimburse SJCBS for any and all internal and external audit disallowances that are the CONTRACTOR's responsibility.

CONTRACTOR shall provide services in compliance with authorization requirements, and shall reimburse SJCBS for unauthorized services, i.e., services that cannot be billed to Medi-Cal because of the lack of a current Client Plan that authorizes those services.

2.6 False Claims:

CONTRACTOR shall be liable for knowingly presenting or causing to be presented, submitting or causing to be presented, a false or fraudulent claim, record or statement for payment (Federal False Claims Act - 31 United States Code, Chapter 37, Sections 3729-3733), and California False Claims Act - Government Code, Sections 12650-12656).

2.6.1 The federal civil penalty for each claim (or service billed) is \$ 5,500 to \$ 11,000 for each false claim, plus 3 times the amount of damages.

2.6.2 The state civil penalty for each claim (or service billed) is up to \$10,000 for each false claim, plus 3 times the amount of damages, and the costs of a civil action brought to recover any of those penalties or damages.

2.6.3 The criminal penalty for willfully making or causing to be made any false statement or representation of a material fact or any benefit or payment under a federal health care program, is a felony, and upon conviction, a

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fine of no more than \$25,000 or imprisonment of no more than 5 years, or both (42 USC, Section 1128B).

2.7 Whistleblower Protections

CONTRACTOR shall not discharge, demote, suspend, threaten, harass, or discriminate against an employee, because of lawful acts done by the employee in cooperating with the False Claims Acts, including investigation for, initiation of, testimony for, or assistance in an action filed or one in the process of being filed (31 USC, Section 3730h).

2.8 Availability and Accessibility of Services

CONTRACTOR who also serves enrollees of commercial health plans (e.g. Health Plan of San Joaquin, Kaiser, Blue Shield, Blue Cross, etc.) is required to offer Medi-Cal beneficiaries at least the same hours of operation and access to services as he/she offers to commercial health plan enrollees.

Practice Guidelines - *CONTRACTOR agrees to follow the clinical practice guidelines set forth by SJCBS (Practice Guidelines).*

Advance Directives - *CONTRACTOR is required to comply with SJCBS policies, procedures and requirements regarding Advance Directives, as set forth in 42 CFR, Sections 489.100 and 422.128.*

2.9 Beneficiary Problem Resolution Process

CONTRACTOR shall comply with applicable regulations and SJCBS policies and procedures regarding the Beneficiary Problem Resolution Process as described below:

2.10 For Mental Health Medi-Cal Providers only:

CONTRACTOR shall comply with SJCBS policies and procedures regarding Beneficiary Problem Resolution Process in accordance with 42 CFR, Part 438, Subpart F, and Title 9, California Code of Regulations (CCR), Sections 1850.205-1850.208, and 1850.305.

The Beneficiary Problem Resolution Process includes processes for grievances, standard appeals and expedited appeals that enable beneficiaries to resolve concerns or grievances about any specialty mental health service-related issue. CONTRACTOR is required to resolve concerns as quickly and simply as possible.

2.11 For Substance Use Disorder Medi-Cal Providers only:

CONTRACTOR shall comply with Title 22, California Code of Regulations (CCR, Section 51314.1(p) by informing beneficiaries of their right to a fair

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hearing related to the denial, involuntary discharge, or reduction in Drug Medi-Cal substance abuse services as it relates to their eligibility or benefits.

CONTRACTOR shall also comply with Title 9, California Code of Regulations (CCR, Section 10420(a) regarding the fair hearing protocol for program termination and notification of right to a fair hearing, and Sections 10906-10910 regarding the development of an informal complaint resolution process and for resolving complaints when a client believes he or she has been subject to discrimination based on ethnic group identification, religion, age, sex, color, or physical or mental disability.

3. Provision of Services

Services, benefits and facilities shall be provided to patients, or clients without regard to their race, color, gender, gender identity, religion, marital status, national origin, age, sexual orientation, mental or physical handicap or disability, pregnancy, or military and/or veteran status, and no one shall be refused services because of the inability to pay for such service.

Nondiscrimination in Services, Benefits and Facilities:

Consistent with the requirements of **applicable** federal law, such as Title 42 Code of Federal Regulations, Part 438.3(d)(3) and (4), and state law, CONTRACTOR and any subcontractor shall not engage in any unlawful discriminatory practices in the admission of beneficiaries, assignments of accommodations, treatment, evaluation, employment of personnel, or in any other respect on the basis of race, color, gender, gender identity, religion, marital status, national origin, age, sexual orientation, mental or physical handicap or disability, pregnancy, or military and/or veteran status.

CONTRACTOR and any subcontractor shall comply with Title VI or the Civil Rights Act of 1964, Title 42 U.S.C., Section 2000d, and the provisions of Section 504 of the Rehabilitation Act of 1973, as amended, pertaining to the prohibition of discrimination against qualified handicapped persons and all federally assisted programs or activities, as detailed in regulations signed by the Secretary of Health and Human Services, effective June 2, 1977, and found in the Federal Register, Volume 42, No. 86, dated May 4, 1977.

For the purpose of this contract, distinctions on the grounds of race color, creed or national origin include but are not limited to the following: denying a participant any service or benefit to a participant which is different, or is provided in a different manner or at a different time from that provided to other participants under this contract; subjecting a participant to segregation or separate treatment in any matter related to his receipt of any service; restricting a participant in any way in the enjoyment of any advantage or privilege enjoyed by others receiving any service or benefit; treating a participant differently from others in determining whether he satisfied any admission,

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enrollment quota, eligibility, membership or the requirement or condition which individuals must meet in order to be provided any service or benefits; the assignment of times or places for the provision of services on the basis of the race, color, creed or national origin or the participant to be served. SJCBS and all subcontractors will take affirmative action to ensure that intended beneficiaries are provided services without regard to their race, color, gender, gender identity, religion, marital status, national origin, age, sexual orientation, mental or physical handicap or disability, pregnancy, or military and/or veteran status.

Procedure for Complaint Process: All complaints alleging discrimination in the delivery of services by SJCBS and/or the subcontractor because of their race, age, color, gender, national origin, religion, sexual orientation, disability status, pregnancy, or military and/or veteran status, may be resolved by the State through the Department of Health Care Services' Affirmative Action Complaint Process.

Notice of Complaint Process: SJCBS and CONTRACTOR shall, subject to the approval of the Department of Health Care Services, establish procedures under which recipients of service are informed of their rights to file a complaint alleging discrimination or a violation of their civil rights with the Department of Health Care Services.

EXHIBIT C – ADDITIONAL FEDERAL GRANT CLAUSES

Subrecipient Name	City of Tracy
Subrecipient Unique Entity Identifier	
Federal Award Identification Number (FAIN)	
Subaward Period of Performance Start and End Date	January 1, 2024 – March 31, 2025
Name of Federal Awarding Agency	SAMSHA Projects for Assistance in Transition from Homelessness (PATH)
Catalog of Federal Domestic Assistance (CFDA) Number and Name; the pass through entity must identify the dollar amount made available under each Federal award and the CFDA number at the time of disbursement	\$336,500
Identification of whether the award is Research and Development	No
Indirect Cost Rate for the Federal Award	Federal negotiated rate or a de minimum indirect cost rate as defined in 45 CFR 75.414(f).

APPENDIX II TO PART 200: CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS

Please review and check the appropriate boxes to determine the applicability of provisions to the federally funded contract or purchase order. In the event of any contradictions or inconsistencies between these provisions and the provisions of the Agreement itself, the terms of this Exhibit Z shall control.

§200.216 PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

(a) Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

- (1) Procure or obtain;
- (2) Extend or renew a contract to procure or obtain; or

(3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

(i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

(ii) Telecommunications or video surveillance services provided by such entities or using such equipment.

(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

(b) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

DEBARMENT AND SUSPENSION – Executive Orders 12549 and 12689

This contract is a covered transaction for purposes of 2 C.F.R. pt. 180.22 and 2 C.F.R. pt. 3000. As such the Contractor is required to verify that none of the Contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

- a. The Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- b. This certification is a material representation of fact relied upon by San Joaquin County. If it is later determined that the Contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the primary recipient and San Joaquin County, the Federal Government may pursue available remedies, including but not

limited to suspension and/or debarment.

- c. The Bidder agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The Bidder further agrees to include a provision requiring such compliance in its lower tier covered transactions.

☒ DISCLOSURE REQUIREMENTS – Title 42, C.F.R. Part 455.104

Contractors and Network Providers of San Joaquin County Behavioral Health Services (SJCBS) are required to submit updated disclosures regarding their ownership and control to SJCBS upon submitting the provider application, before entering into or renewing the network provider's contracts, within 35 days after any change in the contractor/network provider's ownership, annually and upon request from the California State Department of Health Care Services (DHCS) during the re-validation of enrollment process under Title 42, Code of Federal Regulations (CFR) Part 455.104.

SJCBS shall provide DHCS with all disclosures before entering into a network provider contract with the provider and annually thereafter and upon request from DHCS during the re-validation of enrollment process under 42 Code of Federal Regulations, Part 455.104.

Disclosures to be provided:

- a. Name and address of any person (individual or corporation) with an ownership or control interest in the contractor or network provider;
- b. The address for corporate entities shall include, as applicable, a primary business address, every business location, and a P.O. Box address;
- c. Date of birth and Social Security Number (in the case of an individual);
- d. Other tax identification number (in the case of a corporation with an ownership or control interest in the disclosing entity (or fiscal agent or managed care entity) or in any contractor in which the disclosing entity (or fiscal agent or managed care entity) has a five percent (5%) or more interest);
- e. Whether the person (individual or corporation) with an ownership or control interest in the disclosing entity (or fiscal agent or managed care entity) is related to another person with ownership or control interest in the same or any other network provider of SJCBS as a spouse, parent, child, or sibling; or whether the person (individual or corporation) with an ownership or control interest in any contractor in which the disclosing entity (or fiscal agent or SJCBS) has a 5% or more interest is related to another person with ownership or control interest in the disclosing entity as a spouse, parent, child, or sibling;
- f. The name of any other disclosing entity (or fiscal agent or managed care entity) in which SJCBS or contracting network provider has an ownership or control interest; and
- g. The name, address, date of birth, and Social Security Number of any managing employee of the managed care entity.

Disclosures may be submitted to:

San Joaquin County Behavioral Health Services
Attention: Compliance Officer
1212 North California Street
Stockton, CA 95202

§200.322 DOMESTIC PREFERENCES FOR PROCUREMENTS

(a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

(b) For purposes of this section:

(1) “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(2) “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

§200.323 PROCUREMENT OF RECOVERED MATERIALS

- a. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired
 - 1. Competitively within a timeframe providing for compliance with the contract performance schedule;
 - 2. Meeting contract performance requirements; or
 - 3. At a reasonable price.
- b. Information about this requirement, along with the list of EPA- designated items, is available at EPA’s Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.
- c. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.”

EQUAL EMPLOYMENT OPPORTUNITY

- a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take

affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- c. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this Provision, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- e. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- g. The Contractor will include the portion of the sentence immediately preceding paragraph (a) and the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance, provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

DAVIS-BACON ACT. 40 U.S.C. 3141-3148 (Contract > \$100,000)

The Davis-Bacon and Related Acts, apply to contractors and subcontractors performing on federally funded or assisted contracts in excess of \$2,000 for the construction, alteration, or repair (including painting and decorating) of public buildings or public works. Davis-Bacon Act and Related Act contractors and subcontractors must pay their laborers and mechanics employed under the contract no less than the locally prevailing wages and fringe benefits for corresponding work on similar projects in the area. The Davis-Bacon Act directs the Department of Labor to determine such locally prevailing wage rates. The Davis-Bacon Act applies to contractors and subcontractors performing work on federal or District of Columbia contracts. The Davis-Bacon Act prevailing wage provisions apply to the “Related Acts,” under which federal agencies assist construction projects through grants, loans, loan guarantees, and insurance.

For prime contracts in excess of \$100,000, contractors and subcontractors must also, under the provisions of the Contract Work Hours and Safety Standards Act, as amended, pay laborers and mechanics, including guards and watchmen, at least one and one-half times their regular rate of pay for all hours worked over 40 in a workweek. The overtime provisions of the Fair Labor Standards Act may also apply to DBA-covered contracts.

COPELAND “ANTI-KICKBACK” ACT.

- a. Contractor. The Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
- b. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the Federal Emergency Management Agency (“FEMA”) may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- c. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

**BYRD ANTI-LOBBYING AMENDMENT – 31 U.S.C. 1352
includes ATTACHMENT A**

- a. Contractors who apply or bid for an award of \$100,000 or more shall file the required certification, provided in Attachment A. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

☒ CONTRACT WORK HOURS AND SAFETY STANDARDS ACT – 40 U.S.C. 3701-3708

- a. Overtime requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- b. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a) of this Provision, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a) of this Provision, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a) of this Provision.
- c. Withholding for unpaid wages and liquidated damages. San Joaquin County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b) of this Provision.
- d. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a) through (d) of this Provision and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a) through (d) of this Provision.

☒ CLEAN AIR ACT, FEDERAL WATER POLLUTION CONTROL ACT AND REMEDIES (Contract > \$150,000)

- a. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401, et seq.
- b. The Contractor agrees to report each violation to San Joaquin County and understands and agrees that San Joaquin County will, in turn, report each violation as required to assure notification to the primary recipient, FEMA, and the appropriate Environmental Protection Agency Regional Office.

- c. The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.
- d. In the event the Contractor breaches any part of the contract, the County may procure the articles or services from other sources and the Contractor must compensate the County for the difference between the price named in the Bid and actual cost thereof to the County shall be considered the prevailing market price at the time such procurement is made. Such payment may be deducted from any monies due, or that may thereafter become due to the Contractor. The exercise by the County of this remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, in equity, by statute, in any other agreement between the parties or otherwise.

The contract is funded through a FEMA grant or cooperative agreement. If checked, Provisions 1 through 5 apply.

1. Access to Records.

- a. The Contractor agrees to provide the San Joaquin County, the primary recipient of the federal funding, if any, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.
- b. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- c. The Contractor agrees to provide the FEMA Administrator or his authorized representatives' access to construction or other work sites pertaining to the work being completed under the contract.

2. DHS Seal, Logo, and Flags.

The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

3. Compliance with Federal Law, Regulations, and Executive Orders.

This is an acknowledgement that FEMA financial assistance will be used to fund the contract only. The Contractor will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

4. No Obligation by the Federal Government.

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, Contractor, or any other party pertaining to any matter resulting from the contract.

5. Fraud and False or Fraudulent Statements or Related Acts.

The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

ATTACHMENT “A”

Byrd Anti-Lobbying Amendment

APPENDIX A, 44 C.F.R. PART 18- CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements
(To be submitted with each bid or offer exceeding \$100,000)

The undersigned Contractor certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801, *et seq.*, apply to this certification and disclosure, if any.

TRACY CITY COUNCIL

RESOLUTION 2024-_____

(1) AUTHORIZING THE ACCEPTANCE OF A GRANT AWARD FROM THE CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES IN PARTNERSHIP WITH THE SAN JOAQUIN COUNTY BEHAVIORAL HEALTH SERVICES AND RELATED ACTIONS; AND (2) APPROPRIATING THE GRANT AWARD OF \$336,350.00 TO THE POLICE DEPARTMENT'S OPERATIONAL BUDGET

WHEREAS, The Police Department (PD), working in partnership with the San Joaquin County Behavioral Health Services (County), has been awarded a third distribution of \$336,350 through the California Department of Health Care, Behavioral Health Justice Intervention Services; and

WHEREAS, The PD is a sub-awardee through this grant and has previously been awarded \$213,000 in 2022 and \$93,000 in 2023 to support the establishment of PD's Familiar Faces Program that assists the homeless population; and

WHEREAS, Through future City Council actions, staff will be requesting that the appropriated funds be used to create one new Administrative Assistant position and one new Homeless Outreach Coordinator in PD's Mental Health Mobile Evaluation Team (MET) and the Homeless Outreach Familiar Faces team; and

WHEREAS, The grant award must be used by March 31, 2025, or it will be forfeited; and

WHEREAS, Acceptance of the grant requires execution of the San Joaquin Behavioral Health Services Community Agreement, with the County, in the form attached as Attachment A; and now, therefore, be it

RESOLVED: That the City Council of the City of Tracy hereby authorizes the acceptance of a grant award from the California Department of Health Care Services in partnership with the San Joaquin County Behavioral Health Services; and be it

FURTHER RESOLVED: That the City Council authorizes the execution of the San Joaquin Behavioral Health Services Community Agreement, with the County, in the form attached as Attachment A and any other related actions needed to effectuate the receipt of the grant funds; and be it

FURTHER RESOLVED: That the City Council appropriates the grant award of \$336,350.00 to the Police department's operational budget; and be it

FURTHER RESOLVED: That staff will return to the City Council for future actions to create any new positions and authorization for the use of the grant funds towards such actions.

* * * * *

The foregoing Resolution 2024-_____ was adopted by the City Council on the 19th day of March 2024 by the following vote:

AYES:	COUNCILMEMBERS:
NOES:	COUNCILMEMBERS:
ABSENT:	COUNCILMEMBERS:
ABSTENTION:	COUNCILMEMBERS:

NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST: _____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

Agenda Item 3B

RECOMMENDATION

Staff recommends that the Tracy Finance Committee recommend that the City Council adopt a resolution approving the Capital Improvement Projects Prioritization Policy.

EXECUTIVE SUMMARY

The Capital Improvement Plan is the City of Tracy's (City) comprehensive multi-year plan for the funding and implementation of the City's capital facilities and improvements. Annually, Council adopts a Capital Improvement Plan and budget. To aid in the process of reviewing Capital Improvement Project (CIP) requests, staff has prepared a CIP Prioritization Policy for the Finance Committee's review and consideration.

BACKGROUND AND LEGISLATIVE HISTORY

Infrastructure, technology, and major equipment are the physical foundation for providing services to the City. The procurement, design, construction, maintenance, and operation of capital assets are critical activities of the City and require careful planning.

Capital planning is critical to the City's essential services, economic development and strategic plan. Capital facilities and infrastructure are important legacies that serve current and future generations. It is critical for the City to address the current and long-term needs of the community by creating a sound multi-year capital plan that clearly identifies capital needs, funding options and operating budget impacts.

The City's Capital Improvement Plan identifies all the capital maintenance, facilities, major equipment and improvements needed within the next fiscal year. The projects within the plan usually involve a cost of more than \$50,000, take one year or more to complete, and result in the creation or maintenance of a capital asset. While the projects within the plan may take more than one year to complete, the budget is appropriated within the fiscal year in which the project is approved.

Annually, staff prepares the budget for the Capital Improvement Plan for Council review and approval. Staff requests for individual CIPs are prepared in alignment with the City's adopted Strategic Priority work plan. Because projects within the Capital Improvement Plan often have a high cost, there are often competing needs with limited funding available.

At the January 23, 2024 Finance Committee meeting, Chair Arriola requested staff return with a policy for the prioritization of the CIPs in the annual Capital Improvement Plan.

ANALYSIS

A comprehensive, fiscally sustainable capital plan is essential to ensure continued delivery of services to residents and continued fiscal health of the City. Staff has prepared a Capital Improvement Plan Prioritization Policy to formally establish prioritization criteria for the funding

and implementation of the annual Capital Improvement Plan. The City follows the best practices for multi-year capital planning as established by the Government Finance Officers Association (GFOA). Best practices include:

- Identification of needs
- Determination of financial impacts
- Prioritization of capital requests
- Development of a comprehensive financial plan

While projects have been prioritized annually, the creation of a uniform prioritization policy will allow for consistent prioritization that aligns with the City's adopted strategic priorities.

A proposed draft CIP Prioritization Policy is attached as Attachment A. The proposed policy includes a ranked priority list of categories of capital improvement projects and enumerated policy considerations for determining the priority-category for a particular project.

FISCAL IMPACT

Annually, staff prepares a CIP budget for Council review and approval. Creation of a CIP prioritization policy allows the City to create a comprehensive financial plan to ensure effective management of capital assets.

STRATEGIC PLAN

This agenda item supports the Governance strategic priority, goal two, ensure short and long-term fiscal health.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the Tracy Finance Committee recommend that the City Council adopt a resolution approving the Capital Improvement Projects Prioritization Policy.

Prepared by: Sara Cowell, Director of Finance

Reviewed by: Bijal Patel, City Attorney
Karin Schnaider, Assistant City Manager

ATTACHMENTS:

- Attachment A: CIP Prioritization Policy
- Attachment B: CIP Prioritization Policy Power Point Presentation

CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. 2024-

APPROVING THE CAPITAL IMPROVEMENT PROJECTS PRIORITIZATION POLICY

WHEREAS, The City of Tracy (City) annually adopts a comprehensive multi-year capital improvement plan for the funding and implementation of the City's capital facilities and improvements (Capital Improvement Plan); and

WHEREAS, The Capital Improvement Plan identifies all the capital maintenance, facilities, major equipment and improvements needed within the next fiscal year, and

WHEREAS, The projects within the Capital Improvement Plan usually involve a cost of more than \$50,000, take one year or more to complete, and face limited funding, and

WHEREAS, On January 23, 2024, the Tracy Finance Committee made a request for a policy to formally establish prioritization criteria of the Capital Improvement Plan, and

WHEREAS, staff prepared a draft policy for prioritizing Capital Improvement Projects (CIP) in preparation of the Capital Improvement Plan for review and comment from the Tracy Finance Committee on March 26, 2024; the Tracy Finance Committee heard this item, reviewed the proposed policy and recommended approval of the policy attached hereto as Attachment A (CIP Prioritization Policy); and

WHEREAS, the CIP Prioritization Policy follows Government Finance Officers of America (GFOA) best practices for multi-year capital planning, and

WHEREAS, the CIP Prioritization Policy prioritizes projects within priorities one through four; with priority one being imperative, priority 2, essential, priority 3, important, and priority 4, desirable, and

NOW THEREFORE, be it

RESOLVED: That the City Council of the City of Tracy hereby approves the CIP Prioritization Policy attached hereto as Attachment A.

* * * * *

Resolution 2023-
Page 2

The foregoing Resolution 2024-_____ was adopted by the City Council on April 2, 2024, by the following vote:

AYES:	COUNCIL MEMBERS:
NOES:	COUNCIL MEMBERS:
ABSENT:	COUNCIL MEMBERS:
ABSTENTION:	COUNCIL MEMBERS:

NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST: _____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

Attachments:

Attachment A: Capital Improvement Project Prioritization Policy

**CITY OF TRACY
COUNCIL POLICY**

Attachment A

SUBJECT: Council Capital Improvement Project (CIP) Prioritization Policy

DATE ISSUED: April 2, 2024

SECTION 1: PURPOSE

The purpose of this policy is for the City of Tracy to formally establish prioritization criteria for the funding and implementation of the Capital Improvement Plan (CIP). The CIP is a multi-year guide to the construction of community improvements. During the annual budget process, departments may submit requests for the CIP for the upcoming fiscal year. During the Finance Committee and Council workshops, potential projects are discussed, enabling Council to review staff recommended projects and prioritize based upon the criteria established within this policy.

SECTION 2: POLICY

CAPITAL PROJECT EVALUATION AND CONSIDERATIONS

In consideration of the prioritization of capital projects, the following should be taken into account:

Health, Safety, and Welfare Considerations: Projects that provide for health, safety, and welfare of its citizens. The City must provide safe drinking water, safe streets, and safe sidewalks, as well as adequate police and fire protection, solid waste disposal, storm water disposal and treatment of municipal sewage.

Revenue Generating and Cost Avoidance Considerations: Projects that enhance revenues or reduce costs shall be given consideration in order to improve the financial position of the City and enhance the ability to do future projects or deliver high levels of municipal services. New commercial, residential, and industrial development must pay for its infrastructure either by constructing these items or paying impact fees.

Strategic Priority Considerations: Projects that align with the City's adopted Strategic Priority work plan

Level of Service Considerations: Projects that meet or maintain minimum levels of service as established by the Federal, State, local government, or generally accepted engineering standards.

Maintenance Considerations: Projects that require ongoing maintenance after completion. Maintenance, staffing and equipment are critical elements that must be considered, as ongoing funding outside the Capital Improvement Plan will need to be established.

Aesthetic Considerations: Projects that improve or maintain community appearance and aesthetics in conjunction with quality of life in the community.

CITY OF TRACY
COUNCIL POLICY AND PROCEDURES

Leverage and Timing Considerations: Projects that may be funded by entitlement grants or competitive grants from the Federal, State, and local governments should be considered based on the availability of funds and requirements of the granting agency.

CAPITAL PROJECTS PRIORITY RANKING

Proposed Capital Projects shall be prioritized by the criteria established below and in alignment with available funding sources.

PRIORITY 1

Imperative (Must-do) – Projects that cannot be reasonably postponed in order to avoid harmful or otherwise undesirable consequences.

- A. Corrects a condition dangerous to public health or safety
- B. Satisfies a legal obligation
- C. Alleviates an emergency service disruption or deficiency
- D. Prevents irreparable damage to a valuable public facility

PRIORITY 2

Essential (Should-do) – Projects that address clearly demonstrated needs or objectives.

- A. Rehabilitates or replaces an obsolete public facility or attachment
- B. Stimulates economic growth and private capital investment
- C. Reduces future operating and maintenance costs
- D. Leverages available Federal, State or local funding

PRIORITY 3

Important (Could-do) – Projects that benefit the community but may be delayed without detrimental effects to basic services.

- A. Provides a new or expanded level of service
- B. Promotes intergovernmental cooperation
- C. Reduces energy consumption
- D. Enhances cultural or natural resources

PRIORITY 4

Desirable (Other Year) – Projects that are desirable but are not included in the Capital Improvement Plan because of funding limitations.



FINANCE COMMITTEE CIP Prioritization Policy

March 26, 2024

Capital Improvement Plan (CIP)

The Capital Improvement Plan (CIP) is the City of Tracy's (City) comprehensive multi-year plan for the funding and implementation of the City's capital facilities and improvements.

Annually, Council adopts a Capital Improvement Plan budget. To aid in the process of reviewing CIP requests, staff has prepared a CIP Prioritization Policy for the Finance Committee's review and consideration.



Capital Project Evaluation & Considerations

In considering of the prioritization of capital projects, several factors should be considered by staff as project requests are prepared:

- **Health, Safety, and Welfare Considerations**
- **Revenue Generating and Cost Avoidance Considerations**
- **Strategic Priority Considerations**
- **Level of Service Considerations**
- **Maintenance Considerations**
- **Aesthetic Considerations**
- **Leverage and Timing Considerations**





Think Inside the Triangle™

Capital Project Prioritization

The City's CIP identifies all the capital maintenance, facilities, major equipment and improvements needed within the next fiscal year.

The projects within the plan usually involve a cost of more than \$50,000, take one year or more to complete, and result in the creation or maintenance of a capital asset.

Projects in the plan often have a high cost, with limited funding available. Staff has prepared a draft CIP Prioritization Policy.

Projects under consideration by Council for the CIP shall be prioritized according to the criteria established in the draft policy, in alignment with available funding sources.

Priority 1

Imperative (Must-do) – Projects that cannot be reasonably be postponed in order to avoid harmful or otherwise undesirable consequences.

- A. Corrects a condition dangerous to public health or safety
- B. Satisfies a legal obligation
- C. Alleviates an emergency service disruption or deficiency
- D. Prevents irreparable damage to a valuable public facility

Priority 2

Essential (Should-do) – Projects that address clearly demonstrated needs or objectives.

- A. Rehabilitates or replaces an obsolete public facility or attachment
- B. Stimulates economic growth and private capital investment
- C. Reduces future operating and maintenance costs
- D. Leverages available Federal, State or local funding



Priority 3

Important (Could-do) – Projects that benefit the community but may be delayed without detrimental effects to basic services.

- A. Provides a new or expanded level of service
- B. Promotes intergovernmental cooperation
- C. Reduces energy consumption
- D. Enhances cultural or natural resources



Priority 4

Desirable (Other Year) – Projects that are desirable but are not included in the Capital Improvement Plan because of funding limitations.



Discussion



March 26, 2024

AGENDA ITEM 3C

RECOMMENDATION

Staff recommends that the Tracy Finance Committee, as a part of the Fiscal Year (FY) 2024-25 budget development process: (A) receive a report on FY 2023-24 departmental and capital project accomplishments, and (B) provide direction regarding anticipated departmental and capital project augmentation requests and funding objectives for the FY 2024-25 Operating and Capital Budget.

EXECUTIVE SUMMARY

As part of the Fiscal Year (FY) 2024-25 budget development process, staff is facilitating this discussion by presenting an introduction to the City's budget process. In addition, this item will provide a status report from all of the operational departments of the City of Tracy. That report will include each department's accomplishments from prior fiscal year's budget augmentations and their goals for increases being requested for this next budget year. Additionally, the report includes updates on existing and proposed new capital projects for FY2024-25. Staff will be coming back in the fall with a complete 5 Year Capital Improvement Plan update.

In addition to providing the report, staff seeks direction on the anticipated departmental and capital project augmentation requests and funding objectives for the FY 2024-25 Operating and Capital Budget.

BACKGROUND

Annually, staff prepares a presentation on the Capital Improvement Plan, which includes all existing and new capital improvement projects (CIPs). This is presented to review the proposed projects requesting funding for the next fiscal year. This provides an opportunity to receive feedback from the City Council that will be incorporated into the FY 2024-25 Capital Budget. This year the operational funding requests will be included as part of the discussion.

Since the Finance Committee has become a standing committee of the City Council, the report and discussion are first occurring at the Finance Committee. The feedback received at the Finance Committee will be incorporated into the materials that will be presented to the City Council at a budget workshop that is anticipated to occur on April 2, 2024.

ANALYSIS

Budget Process

Base Budget and Augmentations

A base budget is developed for all operating programs and includes staff, contracted services, and commodities accounts. The base is determined by utilizing the historical spending but adjusted for an inflation factor plus the current budget amounts. The budget may also be adjusted for specific one-time items that are not considered to be ongoing.

For purposes of budget preparation and formulation, departmental budget submittals for a program consist of two parts: a base request and augmentation requests to enhance the budget. All augmentation requests shall be accompanied by a narrative explanation of the sources and uses of funds. All requests for additional personnel shall include a narrative explaining the need

for an increase in potential staff and duties for the new employee. Management reviews all augmentation requests to determine priority.

Budget Timeline

The Tracy Municipal Code requires that the City Council adopt a budget by no later than the close of the Fiscal Year (June 30). This annual budget serves as the foundation for the City's financial planning and control. The budget is prepared by fund, by department, and by program. The Finance Department maintains budgetary controls to ensure compliance with legal provisions embodied in the appropriated budget approved by the City Council. The level of budgetary control (the level at which expenditures cannot legally exceed the appropriated amount) is the department level and within a single fund. The City Manager may authorize transfers between administrative control accounts within a department or within a capital project. Supplemental appropriations during the year must be approved by the City Council. Any transfer of appropriations between departments in the operating budget or between capital projects in the capital budget also requires City Council approval.

January - Annually the budget process is kicked off at the beginning of the calendar year in, this starts with meeting with each department to go over the process, expectations, and timelines. Once staff has received all requests these are compiled by funding source and department.

February – Department Head discussions occur to present their requests and prioritize citywide what will be recommended to the City Manager for funding in next year's budget.

March/April – Finance Committee & City Council Budget Workshop to present the proposed augmentations along with updates and requests for Capital Improvement Projects.

May – The proposed FY2024-25 Operating and Capital Budget will be presented to the Finance Committee for recommendation to City Council to adopt.

June – The Proposed FY2024-25 Operating and Capital Budget presented to City Council for adoption.

Operational Departments

This report provides an opportunity for each Department to highlight the accomplishments/results from prior funding received from FY2022 to current fiscal year along with their goals for FY2025 requests. During these past three fiscal years, the City has funded 60 new positions from general and enterprise funds city wide.

For this next budget cycle there will be a realignment of resources to enhance efficiencies, resulting in the dissolution of the Mobility and Housing department, transitioning the Development Services Department to Community and Economic Development, renaming Parks & Recreation to Parks, Recreation, and Community Services Department and Operations & Utilities back to Public Works.

With these realignments, divisions will be reassigned to these updated departments as follows:

<u>Division</u>	<u>Previous Department</u>	<u>New Department</u>
Homeless Services	Mobility and Housing	Parks, Recreation, and Community Services
Economic Development	Mobility and Housing	Community and Economic Development
Transit	Mobility and Housing	Public Works
Airport	Mobility and Housing	Public Works
Engineering	Community and Economic Development	Public Works
Cultural Arts	City Manager's Office	Parks, Recreation, and Community Services

FY2024-25 Budget Augmentation Requests

The table below summarizes the FY2024-25 budget augmentation requests. A detailed listing of prior year budget augmentations and accomplishments is included in attachment A.

Department	Total Request Amount	Other Fund On-Going	Other Fund One-Time	General Fund Ongoing	General Fund One-Time
City Manager's Office	\$ 15,000		\$ 7,500		\$ 7,500
Human Resources	\$ 346,526	\$ 118,263	\$ 55,000	\$ 118,263	\$ 55,000
Innovation & Technology	\$ 206,000	\$ 42,120	\$ 13,500	\$ 113,880	\$ 36,500
Parks, Rec & Comm Services	\$ 2,477,588	\$ 696,988	\$ 180,600	\$ 1,600,000	\$ -
Police Department	\$ 995,843			\$ 638,843	\$ 357,000
Public Works	\$ 3,926,865	\$ 2,568,173	\$ 454,155	\$ 677,689	\$ 226,848
	<u>\$ 7,967,822</u>	<u>\$ 3,425,544</u>	<u>\$ 710,755</u>	<u>\$ 3,148,675</u>	<u>\$ 682,848</u>

**The detailed listing of FY 2024-25 requests is included in attachment C.*

The following requests are included in the summary table but provides more detail as it relates to the justifications and goals for these funding requests.

Human Resources

HR Analyst

Funding Source: General Fund (50%) and Other Funds (50%)

Justification: This request is for an additional position in the Risk Management Division which currently has one dedicated analyst and part of as HR Technician. The Human

Resources Department's Risk Management Division workload has increased significantly in the areas of liability claims and litigation, property claims and contract and insurance review over the last few years. In order to maintain a high level of service related to these critical functions in addition to the other risk related assignments including workers' compensation, reasonable accommodations, subrogation's and ensuring risk management compliance with evolving regulations.

Parks, Recreation & Community Services

Senior Maintenance Worker

Funding Source: CFD

Justification: This position is needed to meet the service level standards as outlined in the specific plan for these developments. The Senior Maintenance Worker position is the advanced journey level maintenance worker needed to perform the most technical and complex maintenance tasks, while exercising technical and functional direction over and providing training to lower-level staff.

The number of parks in the Ellis and Tracy Hills communities is currently 5, growing to 7 at the end of fiscal year 2024. The City is expected to accept 2 additional parks at the on-set of fiscal year 2025, resulting in 9 parks with unique and highly sought after amenities. For example, one of the new parks is a one-of-a-kind dog park with exorbitant amenities. This specialized park will be a first for the City and surrounding neighborhood communities, with use expected to be high and demanding, just as all the other parks are in these developments

Police

Deputy Chief

Funding Source: General Fund

Justification: To reinstatement the Deputy Chief position, it was established in the FY2006/07. The Deputy Chief of Police position is responsible for assisting the Police Chief in the operational planning and management of departmental programs, policies, and actions. The 2005 Productivity and Staffing Analysis performed by Kirchhoff & Associates detailed several recommendations to assist in dealing with the increased need for police services and the increased complexity of managing the Police Department, which are still true today. Assists in providing a high level of leadership over police activities and assists the Police Chief in implementing the recommendations set forth. Advises the Police Chief on all relevant matters and assists in the development and interpretation of policies, rules, and regulations governing police activities. Reporting directly to the Police Chief, the incumbent represents the City and the Police Department in its work with citizen groups and commands the Police Department in the absence of the Police Chief. In addition, the position acts as the Department's management representative in labor negotiations and related activities, as well as manages the development of an effective employer-employee relations strategy. The reinstatement of this position enhances accountability and increases the Department's outreach and service to City residents.

Police Officer – School Resource
Funding Source: General Fund

Justification: The additional police officer to be assigned as a School Resource Officer for Jefferson High School. The additional officer request supports Council Strategic Priority for Public Safety and strengthening community safety through crime prevention, intervention, and enforcement activities. The Jefferson School District has requested to partner with the Tracy Police Department to fund one School Resource Officer position. Most of the Jefferson School District Schools are located within the City of Tracy city limits and have historically been serviced by Tracy PD. Per MOU, Jefferson School District will reimburse the City for 50% cost of the position.

Homeless Outreach Coordinator
Funding Source: Grant (FY2026 General Fund)

Justification: Currently, each case manager holds a caseload of about 50-60 people, about twice the number recommended according to best practices. Between 50-60 new clients are identified each quarter due to the transient nature of the population. The more recently formed MET team is also growing its caseload. In October the team worked intensively with nine clients, including four new referrals. Five of the nine required transport and coordination with crisis services during the month, the remaining four were kept stabilized in the community through regular wellness checks. Already the team is seeing increases in the month of November and anticipates a growth in services as word is spreading among officers and partner programs on the work of the team. Familiar Faces case managers are City of Tracy employees and are required to wear standard attire (khaki pants and t-shirts), identification, and are responsible for developing a client case plan, assisting clients in meeting goals, recording service and case management activities, and conducting coordinated activities with service partners and health professionals to meet client needs. These duties may also involve transporting clients to behavioral health care appointments or other meetings necessary to obtain identification, public benefits, or procure shelter or housing.

Administrative Assistant
Funding Source: Grant (FY2026 General Fund)

Justification: To support the growth of the Familiar Faces Program and provide administrative support including coordinating activities between partners and patrol units, uploading and validating incident responses into multiple data systems, and tracking and reporting program impact. When the department implemented the Familiar Faces Program, administrative support was provided through a consultant and through grant funding. The request for this position, will be funded for 12 months through grant funding, but would need to be supported after year 1 through the department's operational budget. Administrative assistance will deepen operational capacity and further support the integration of the co-responder units within the Department.

Public Works

Building Maintenance Workers (2)

Funding Sources: General Fund (74%) and Other Funds (26%)

Justification: On average 1029 service requests are submitted by City employees & residents with an additional 521 preventative maintenance (PM) requests for 280k square feet. Staff anticipate an additional 78k square feet to be added between FY2024 through FY2026. APWA stated that 50k square feet per one position. The addition of these two positions will ensure that we are meeting APWA standard for current and additional square footage. Staff will monitor the amount of service requests and PM's that are closed annually after positions are filled and trained.

Maintenance Worker

Funding Source: Transit Fund

Justification: Transit Division currently has position allocated for maintenance work over 4 hours each day, which only allows for reactive maintenance tasks and service requests rather than preventative maintenance tasks. By adding this additional position, essential preventative maintenance can be completed at transit locations throughout the city as well as at the Transit Station. Citizens will see a reduction in wait time on request and overall visual improvement in the City with repairs.

Utility Operator

Funding Sources: Wastewater

Justification: Currently the Wastewater Plant operations has one employee working a solo graveyard shift. An additional employee is needed for safety purposes and to be an additional relief person during overtime related work.

Utility Operator

Funding Sources: Water Fund

Justification: Currently the Water Plant operations has one employee working a solo graveyard shift. An additional employee is needed for safety purposes and to be an additional relief person during overtime related work.

Drainage Maintenance (on-going) \$150,000

Funding Source: General Fund

Justification: To clear channel way debris that is not serviceable by the vegetation portion of the landscaping contract. This will also be used to replace worn and damaged parts in various pump stations and drain inlets to prevent system or localized flooding. Staff will report at end of year miles of channel way cleared, pump stations repaired and drain inlets replaced.

CAPITAL IMPROVEMENT PROGRAM

Departments are continuously evaluating capital improvement needs and are incorporated into the FY 2024/25 budget planning. At this time, staff will be solely updating projects and funding for the next fiscal year, FY2024-25. A detailed listing of existing projects and a status update is included as attachment B to this report. Staff will be returning in the fall for a more

comprehensive update of the 5-year plan once all the master plans have been updated so they can be incorporated into the program.

Below is a list of projects proposed for funding from the general fund:

Project	Amount
City of Tracy Apparatus Replacement (SSJCFA)	500,000
Council Dais Extension	350,000
Incentive pilot program - Economic Development	250,000
Security cameras for City Hall and a PA system for the Support Services Building	250,000
Cyber Security Firewalls	460,000
Tracy Sports Complex Maintenance Yard Site Improvements	360,000
Parks (Deferred Maintenance)	5,500,000
Arterial Landscaping, Tree Maintenance & Removal (LMD)	721,500
Pavement Maintenance Management Plan (PMMP)	140,000
Road Improvements (Transfer Existing Operating Budget into Project)	650,000
Trash Capture Devices for Stormwater Conveyance	5,000,000
Road Improvements (Deferred Maintenance)	4,000,000
Total	18,181,500

City of Tracy Apparatus Replacement (SSJCFA) - The City, as a member agency under the SSJCFA joint powers agreement, owns and maintains the fire engines at each of its respective fire stations. On December 21, 2021, the SSJFA board adopted a resolution (2021-034) approving the apparatus replacement plan. This project is to accumulate funding for future replacements.

Council Dais Extension - Extension of current dais to provide a permanent placement for the City Clerk and IT Support personnel at the dais. Remove the two stations positioned below the dais, replace the carpet impacted by the removal of the two stations, replace the facade of the dais, add electronic name plates and electronic voting buttons.

Incentive pilot program - Economic Development - This request is to fund various economic development incentive pilot programs encouraging private investment throughout the city.

Security cameras for City Hall and a PA system for the Support Services Building- The implementation of security cameras at City Hall and a PA system at the Support Services Building

is a strategic investment in the safety, security, and operational efficiency of the facility. These technologies collectively contribute to creating a secure environment for employees, visitors, and public officials, reinforcing City Hall's role as a reliable and well-protected civic institution.

Cyber Security Firewalls- The purchase includes hardware & software. Firewalls are deployed a City Hall, PD, Water/Utility, and Fire Service. Firewalls are deployed in pairs for redundancy. Firewalls are the gateway that allows internet traffic in and out of the organization and have become increasingly important with the deployment of Software as a Service applications and an increase in cyber security threats.

Legacy Fields Office Building & Site Improvements- Purchase and install a new prefabricated office building for Parks Maintenance staff. Building to include private office, workstations, restroom, and conference room. Project will also include demolition, grading, utility connections, asphalt paving, fencing, lighting, and other improvements.

Tracy Sports Complex Maintenance Yard Site Improvements- Expand and enclose an existing maintenance area at the Tracy Sports Complex (TSC). Project includes demolition, grading, installation of 456 linear feet of 10-foot-high slatted fencing, addition of approx. 4,650 square feet of asphalt, installation of two (2) 30x30 enclosed storage sheds, installation of three (3) CMU material bins, walkway extension, electrical work for sheds and lighting & security.

Parks (Deferred Maintenance)- Funding Allocated towards deferred parks maintenance (FY25 & FY26) through the fiscal sustainability policy and will be used for the Multi Gen Rec Center Project.

Arterial Landscaping, Tree Maintenance & Removal (LMD)- Annual Maintenance Project Pursuant to Prop 218, revenue generated from the assessed zones in the LMD should not be utilized to support efforts which are considered a general benefit to the public. Per the Engineer's LMD report, arterial roadways are considered a general benefit to the community as individuals, businesses, and non-profits utilize them for ease of transportation and connectivity throughout the community. This project will be able to address areas of concern with funding one-time, while staff is evaluating the gaps in current funding levels and will return to council later for discussion.

Pavement Maintenance Management Plan (PMMP)- The project will provide the necessary information to evaluate the condition of the existing airport pavement and create the timeline needed for maintenance of pavement to extend the life of the pavement. The funding for the project will be broken down as follows: FAA grant \$126,000, State Matching grant \$6,300, and \$7,700 general fund. The FAA grant will not be provided to the city until August 2024, and the state matching grant will not be awarded until after the FAA grant is received.

Road Improvements (Public Works Maintenance)- With the purchase of the new asphalt grinder, new projects are anticipated to generate an increase in overall supplies used. New asphalt and concrete will be installed more frequently as the year progresses. In the last twelve months, 3,493 service requests have been created, with 2,762 closed, leaving the remaining 731 requests compounding the already extensive backlog of deferred maintenance requests. With new equipment, staffing, and materials recently approved and the Division will be able to perform approximately 2.5-3.5 miles annually with an anticipated size of .35 miles per project. These roadway repairs are to include minor grinding, <1.5" overlays, seal coating, striping, and signage during the individual projects. The existing operating budget will be transferred into this project.

Trash Capture Devices for Stormwater Conveyance- The State Regional Water Quality Control Board implemented regulations in 2019 that require NPEDS MS4 storm water permit agencies to begin the implementation of trash capture systems in all storm water conveyance systems. The period to complete the construction of these systems is 10 years, so they must be in place in 2029. The requirement is intended to prevent the flow of any trash particles larger than 5mm into waters of the US. Preliminary Studies are in progress. Funding for construction needs to be accumulated by FY2025/26 for design and construction to meet the regulation deadline.

Road Improvements (Deferred Maintenance)- Funding Allocated towards deferred streets maintenance through the fiscal sustainability policy.

STRATEGIC PLAN

This agenda item supports Governance Strategic Goal 3: Ensure Short and Long-term Financial Sustainability.

ACTION REQUESTED OF THE FINANCE COMMITTEE

Staff recommends that the Tracy Finance Committee, as a part of the Fiscal Year (FY) 2024-25 budget development process: (A) receive a report on FY 2023-24 departmental and capital project accomplishments, and (B) provide direction regarding anticipated departmental and capital project augmentation requests and funding objectives for the FY 2024-25 Operating and Capital Budget.

Prepared by: Felicia Galindo, Budget Officer

Reviewed by: Sara Cowell, Director of Finance
Bijal Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, City Manager

ATTACHMENTS

Attachment A – Department Budget Accomplishments
Attachment B – CIP Updates
Attachment C – FY2024-25 Budget Augmentations
Attachment D – FY2024-25 Presentation

Funding received FY2022 thru FY2024

City Attorney

Fiscal Year	Budget Augmentation	Funding Source	Accomplishments
2024	Legal Services (On-Going) - \$280,000	General Fund (50%), Other funds (50%)	This increase allowed for the handling and overseeing of outside legal services related to ongoing litigation and coverage needed due staffing vacancies in the City Attorney's office.
2024	Paralegal	General Fund (50%), Other funds (50%)	The funding for this position was recently added with the Q2 Budget Update and the recruitment is currently in process.

City Manager

Fiscal Year	Budget Augmentation	Funding Source	Accomplishments
2023	Multimedia Communication Assistant	General Fund (50%), Other funds (50%)	The Multimedia Communications Assistant will provide technical and administrative support to advance the City's comprehensive communication, marketing, and engagement efforts.
2023	Executive Assistant	General Fund (50%), Other funds (50%)	An additional Executive Assistant was hired to support the second Assistant City Manager.

Community and Economic Development

Fiscal Year	Budget Augmentation	Funding Source	Accomplishments
2022	Administrative Technician	ARPA, CDBG & General Fund	This full-time position was filled in 2022. There is now dedicated staff to focus on the administrative roles and responsibilities required of the Community Development Block Grant and HOME Investment Partnership Program.
2022	Economic Development Strategic Plan Update (One-Time)	General Fund	In September of 2023, the City Council adopted the City's Ten-Year Economic Development Strategic Plan (EDSP) to help guide the Division's efforts. Adoption of this plan involved concerted efforts and feedback from the City Council, City staff, community partners, business community, and community members. Further, extensive assessment of the current City landscape, research, and data was compiled to develop the final EDSP.
2023	Real Property Agent	General Fund	This position is currently in the recruitment process.
2023	Associate Planner (Planning Fees)	Planning Fees	This position was requested to assist with the high workload in the Planning Division.
2023	Planning Technician	Planning Fees	The position was requested to assist with Planning review of building permits. The Planning Division is responsible for reviewing approximately 1,000 building permits per year to ensure compliance with the City's Zoning Ordinance and other applicable planning and zoning related regulations.
2024	Assistant Planner	Planning Fees	This position was needed to assist with the high workload in the Planning Division. The addition of this Assistant Planner enables the City to increase our responsiveness on customer service and enable Associate Planners to timely process submitted applications.
2024	Economic Development Analyst	General Fund	The funding for this position was recently added with the Q2 Budget Update and the recruitment process is expected to begin in the next few months.

Finance

Fiscal Year	Budget Augmentation	Funding Source	Accomplishments
2023	Subscription Software (On-Going) \$150,000	General Fund (50%), Other funds (50%)	In FY2024 the Digital Book was launched which increased transparency and accessibility of the City's Operating and Capital Budget. Recently the department has implemented contract management module and continues to on-board these new systems to further streamline financial processes and increase internal controls.

Human Resources

Fiscal Year	Budget Augmentation	Funding Source	Accomplishments
2023	HR Analyst	General Fund (50%), Other funds (50%)	This position was recently filled and there has been an increase in programs and trainings being offered to employees.

Innovation and Technology

Fiscal Year	Budget Augmentation	Funding Source	Accomplishments
2023	IT Equipment Replacement (On-going) \$150,000	General Fund (73%), other funds (27%)	Replaced outdated equipment to ensure maximum productivity of the end users and replace end of life equipment to ensure safe and reliable network operations to support critical City services such as Public Safety and Utilities.
2023	GIS Consulting Services (On-going) \$135,000	General Fund (73%), other funds (27%)	Hired a GIS Technician to support ongoing GIS operations upgrading our GIS platform and accelerating other GIS projects that support Public Safety and homeless services.
2023	IT Security Consulting (On-going) \$187,500	General Fund (73%), other funds (27%)	Utilized the funds by creating a Cybersecurity Officer Position to have an ongoing expertise in Cybersecurity to ensure the safety of the internet.
2023	Chief Innovation Officer	General Fund (73%), other funds (27%)	The addition of IT as a standalone department required the addition of a Department Head. The Chief Innovation Officer was hired in FY2023 and has begun to implement augmented IT services and trainings.
2024	Senior Information Systems Technician	General Fund (73%), other funds (27%)	Provided additional support for the Public Safety technology and technology specific cross training.
2024	GIS Technician	General Fund (73%), other funds (27%)	Supports ongoing GIS operations and expanding GIS services in the future as well as provide resources for upgrading our GIS platform and accelerating other GIS projects that support Public Safety, Community Development and Homeless Services.
2024	Cyber Security Officer	General Fund (73%), other funds (27%)	The position was recently filled and has completed Comprehensive Cyber Security Training for all staff along with deploying a new hire cybersecurity training program.

Parks, Recreation and Community Services

Fiscal Year	Budget Augmentation	Funding Source	Accomplishments
2022	Homeless Services Manager & Administrative Technician (Funded through ARPA 2022-2024, General Fund 2025)	ARPA & General Fund	Working with the County Neighborhood Preservation Unit (CoC Collaborative Applicant) and the City of Stockton to solidify round 5 of HHAP through the regional plan process, and County Medi-Cal Managed Care plans to implement the Cal-Aim State initiative to bring in additional funds and supports to the shelter site. This has led to the pilot with SJ County for an In-Home Supportive Services program at the shelter site to support individuals with higher care needs.
2022	Recreation Program Coordinator	General Fund	Enhanced and increased youth & teen offerings to the community. Staff have expanded programs to include extended care and year-round Mobile Rec. In addition, excursions are now being offered.
2023	Parks Planning Coordinator	Measure V	Coordinates plan review process for land development to increase project output and assist with Capital Improvement Projects.
2023	Maintenance Workers (2)	General Fund	One position was allocated to the Tracy Sports Complex which improved the overall service level at the highly utilized sports complex. Staff have been addressing deferred maintenance concerns which will prolong the assets useful life. The other position was allocated to support General Fund Parks. With an additional staff person, weekend staffing has been provided to support a high service level standard.
2023	Grand Theatre Presenting and Advertising (on-going) \$300,000	General Fund	Additional budget was used to keep up with increased marketing costs and to expand programming to include national touring acts regularly to bring attention to, audiences. The use of additional marketing/advertising funds resulted in increased community outreach, audience numbers, and ticket revenue to contribute to offsetting this added expense.
2024	Maintenance Worker	CFD	An additional maintenance worker was provided to support the Ellis and Citywide CFDs. Additional parks were brought on requiring more staff support. Preventative maintenance is performed in adherence to the respective maintenance manuals.
2024	Senior Maintenance Worker & Maintenance Workers (4)	Measure V	The Senior Maintenance Worker and Maintenance Workers were provided at Legacy Fields to provide maintenance to 72 acres of active recreation. This includes daily field prep of 10 baseball fields, 8 soccer fields, restroom cleanliness, and shrub care throughout the facility, in plazas and parking lots.

Police

Fiscal Year	Budget Augmentation	Funding Source	Accomplishments
2022	Police Officers (3)	Grants and General Fund	These positions were partially funded for 36 months through the US Department of Justice COPS Hiring Grant. Through this grant, specific performance objectives were implemented to include providing a reliable police presence to deter violent crimes and homicide, restructuring beat alignments, and providing police presence and expanded police services in the neighborhoods where the city has experienced growth in residential and business development. These goals have been accomplished.
2023	Police Officers (2)	General Fund	These positions have also been hired and supported the department's continued progress toward providing a more visible police presences, expanding police services, reducing response times, and increasing staffing.
2023	Homeless Outreach Coordinators (2)	General Fund	These positions have been filled and are being utilized as expected. The department has seen many successes with its Familiar Faces Program. In a one-year period the two existing case managers engaged over 175 individuals. An estimated 100+ homeless people currently live in the City of Tracy, a drop of nearly 50% over the past two years - primarily due to better connections and engagements to services. During October there were 134 law enforcement related calls involving the target population. 81% of incidents were resolved without an arrest or citation.
2023	Animal Services Aide	General Fund	The position was filled and has achieved its purpose. With 3 Full Time Shelter Aides, there is ample coverage 7 days a week, and increased proactivity in community education and animal behavior assessments.
2023	Public Safety Dispatcher Supervisor	General Fund	The additional supervisor was hired in November 2022 and has fulfilled the purpose of our request. There is better span of control, more supervisory oversight for 24/7 operation, and the 2nd Supervisor enabled the Communications Center to transition to the 4/11 work schedule to work in cooperation with the department's patrol team.
2024	Police Officers (2) – Traffic Safety	General Fund	The two positions have been added to the department's allocations and have been hired. The department is in progress for its stated goals related to the Traffic Safety Unit and traffic safety.

Public Works

Fiscal Year	Budget Augmentation	Funding Source	Accomplishments
2022	Administrative Technician	Solid Waste	The additional position was able to assist the Management Analyst who oversee Solid Waste and Recycling contracts with outreach for various recycling programs, including the production of the 2024 Solid Waste & Recycling Magazine; increased posts on the City's social media sites; establishes, updates, and maintains a new compliance tracker for businesses with recycling and food waste disposal programs; following up on customer complaints with regards to waste disposal and placement of containers, and performing the accounts payable functions for the Division.
2022	Transit Coordinator	Transit Fund	With the additional position, more focus has been directed to public outreach, marketing, and contractor oversight. Additionally, the new position was instrumental in developing an updated bikeways map for residents and with designing and installing new bike racks for the downtown area.
2022	Construction Inspector - (2)	Engineering Fees	Increasing the construction inspector staff from 4 to 6 inspectors has increased the overall capacity to accommodate the \$680M in city infrastructure projects through land development and capital improvement projects. This increased staffing has allowed staff to focus on compliance with the City Standards and Specifications as well as reduce or eliminate Change Orders for projects completed since the staff addition.
2022	Truck & Thermoplastic Machine (One-Time) \$212,000 and Supplies (On-going) \$230,000	General fund	City staff was contracting out street striping prior to the purchase of this new equipment and materials. On average the City was only completing striping and other painting for approximate 23,000 linear feet. Since the purchase of the equipment and additional material supplies staff is averaging 39,000 linear feet per year with additional repairs including raised pavement markings.
2023	Maintenance Workers (2)	Solid Waste	These positions have been filled for a year; however, CPU services remained the same. Prior coverage was being utilized by the concrete crew.
2023	Asphalt Grinder (One-time) and Supplies (on-going) \$100,000	General fund	Due to supply chain issues, the grinder was not received until June 2023. Staff has only used the machine for approximately four months due to the temperature range required to apply asphalt. They have been able to repair about 300 tons of asphalt.
2023	GIS Mapping (one-time) \$138,000	General fund	Due to limited staff availability no GIS work has been completed. Staff is working on finalization of testing for interference with other communications before installation of antenna.

2023	Storm Drain Pump Repairs and Channel Way Clean Up (one-time) \$180,000	General fund	Staff was able to complete 9-10 major projects compared to 2-3 annually, increase service response time by 50% with both staff and access to material; and reduce outside contractor reliance by approximately 65%.
2023	Maintenance Workers (3)	General fund	Maintenance Workers have been recently hired and assigned to Forestry (1) and Streets (1), and Traffic Signs and Markings (1). The three positions will help clear backlog of requests in each area.
2023	Maintenance Workers (5)	Gas Tax	The City Forestry Crew was a two-person crew that was responsible for service requests while the City contracted out scheduled tree trimming and emergency work. The addition of two the positions were not filled until recently, this has increased the response time of service request. Position was allocated to the Streets crew. With the new seal coat machine and asphalt grinder, more personnel were needed to operate efficiently. Two of the positions were allocated to the newly formed Concrete crew. To allow for a more specialized approach, a concrete crew was necessary to tackle the large work.
2023	Equipment Mechanic	General fund	The was not filled until end of FY2023. However, the position was vacated shortly after this position was filled. The addition of this position helps achieve APWA recommendation of 75:1 piece to mechanics depending on the type of Fleet. Staff is now achieving a 117:1 ratio. Since this position was hired late in FY23 and a new vacancy is still in place, staff is still collecting data on the impacts of a fourth mechanic.
2023	Associate Engineer	Engineering Fees	The addition of an Associate Engineer has allowed the Traffic Engineering Division to adapt to the increased workload and make significant progress on Capital Improvement projects. The division has successfully brought several key projects through critical stages, including advertising the 2nd Diverging Diamond Interchange at I-580/Patterson Pass Road (CIP 73147) for construction, implementation of the Pavement Management Plan to improve citywide infrastructure, and moving forward the Corral Hollow Corridor projects. This increased capacity has allowed the Traffic Engineering team to accommodate the City Council priorities and has reduced timelines for the implementation of projects vital to the community.
2024	Maintenance Worker and Supplies (on-going) \$100,000	General fund	Maintenance Worker helps Electricians with projects that can be done at that level and assists with emergency responses.

2024	Pump Repair, Chanel way Maintenance (one-time) \$300,000	General fund	Staff cleared 7,552 linear feet sedimented build up on the bottom of the channel way. Additional funding was used to clear both encampment debris and overgrowth trees in drainage basin 4 that has deferred maintenance due to encampments. Staff anticipates completing another 10 drain inlets to be replaced and additional.
2024	Senior Maintenance Worker and Maintenance Worker	General fund	Positions were allocated to the newly formed Concrete crew. To allow for a more specialized approach, a concrete crew was necessary to tackle the large workload and liabilities.
2024	Asphalt Supplies (on-going) \$550,000	General fund	The additional funding received this fiscal year has produced and additional 443 tons of emergency asphalt repair, 9 lane miles of crack sealing and 11 lane miles of seal coating. Much of the street repair work is dependent on ambient air temperature. Staff will be able to provide additional statistics after a year's worth of data collected.
2024	Sidewalk Cutting (on-going) \$150,000	General fund	Increase covers the cost of increased materials.
2024	Construction Inspector	Engineering Fees	This position was recently added and in process for recruitment.
2024	Environmental Compliance Technician	Wastewater Fund	This position was recently added and in process for recruitment.

GENERAL GOVERNMENT PUBLIC SAFETY PROJECT BUDGET UPDATE

Attachment B

CIP	Budget	LTD Expenses	% Budget Expended	Planning	Design	Construction	In Progress	Close out	Status Update and Timeline	Est. Competition
71078-Radio Tower @ Fs #96/#92	118,080	116,300	98%							On Hold
71107-Public Facilities Master Plan	500,000	424,563	85%						Pending City Council approval 4/16/24	FY2024
71108-Public Safety Master Plan Update	250,000	212,168	85%						Pending City Council approval 4/16/24	FY2024
71109-Fire Training Tower Site	928,311	261,582	28%							FY2025
71110-Police Department Gun Range	3,715,164	830,687	22%			X				FY2025
71111-Grand Theater Repair	2,991,000	435,830	15%			X				FY2024
71112-Temporary Emergency Housing	20,947,654	4,594,817	22%			X			December 2023 – Completion of Interim Housing Phase IV – opened for 38 occupants. Phase IV accepted with Resolution 2023-249.	TBD
71113-Station 91 Renovations	365,000	97,042	27%							On Hold
71117-Police Headquarters Cooling System Study	80,000	65,480	82%				X			FY2024
71118-Central Garage Carport Enclosure	100,000	807	1%							FY2026
71119-Grand Theater Audio Visual Upgrades	800,000	3,864	0%	X						FY2025
71120-General Plan Update	3,500,000	-	0%							
71121-HVAC Replacement (s) - Citywide Facilities	500,000	654	0%	X						FY2025
71122-Joe Wilson Pool	200,000	-	0%							FY2025
71123-Arterial Landscaping, Tree Maintenance & Removal (LMD)	730,000	212,117	29%				X		All designated arterials have been maintained to Service Level A, which includes: Weekly mowing, Fertilization, Rodent control, Weed abatement, Topdress planting areas. In addition to a higher frequency of service, areas formerly at Service Levels B and C require renovation to the turf and planting areas. This work is being performed as time permits.	FY2024

STREETS AND HIGHWAYS PROJECT BUDGET UPDATE

CIP	Budget	LTD Expenses	% Budget Expensed	Planning	Design	Construction	In Progress	Close out	Status Update and Timeline	Est. Competition
73084-IC Impvts:I205 & Lammers	943,404	1,148,613	122%							On Hold
73103-AWid: CHR, 11th to Schulte	740,829	191,438	26%						Widening not triggered by any traffic studies	On Hold
73109-IC: I205 & Paradise	1,696,290	410,555	24%							FY2025
73144-AW: Cor Hol Rd, Linne to Old Schult	6,111,938	2,022,978	33%						At Risk - Budget constraints for Construction	FY2026
73146-I-205/Mtn House Overcrossing	5,611,631	3,067,252	55%						Requires input from Management	On Hold
73147-I-580/Mtn House Overcrossing	49,377,000	3,761,254	8%			X				FY2026
73148-BW: DMC & Mt House Pkwy	101,205	39,819	39%		X					
73149-BW: DMC & Old Schulte Rd	101,716	10,858	11%							On Hold
73150-BW-DM Canal & Old Schulte	121,547	25,786	21%							On Hold
73161-Widening - Corral Hollow I580/Linne	2,400,000	1,048,507	44%						Construction by Tracy Hills Developer	FY2027
73173-Transportation Master Plan	800,000	685,270	86%						Revisions required	FY2024
73175-Tracy Boulevard Sidewalk	924,581	102,075	11%							FY2024
73178-Street Patch & Overlay Program FY21	4,427,699	300,964	7%			X				FY2024
73184-Slurry Seal FY21-22	600,000	39,355	7%					X	Completed	FY2024
73185-ADA Space Downtown	55,000	16,585	30%						On Hold - Can't be built compliant	On Hold
73186-Annual Pavement Rehabilitation Project	1,959,163	1,615	0%							FY2025
73187-Annual Slurry Seal Project	600,000	-	0%						Priority given to pavement rehabilitation	On Hold
73188-Sidewalk, Curb, and Gutter Repair FY 22-26	100,000	34,614	35%							FY2025
73190-Valpico Road Widening - Tracy Blvd to MacArthur Drive	6,053,140	-	0%						Project hasn't started	FY2025
73191-Grant Line Road Widening Project	-	-	0%							
73192-Reconstruction Bessie Avenue Between Lowell Avenue and Grant Line Road	3,500,000	797,429	23%			X				FY2025
73193-Annual Pavement Rehabilitation Project	1,894,500	74,472	4%							FY2024
73194-Annual Slurry Seal Project	600,000	-	0%						Priority given to pavement rehabilitation	On Hold
73195-Sidewalk, Curb, and Gutter Repair	250,000	-	0%							
73196-Pavement Management Plan (FY2024)	3,700,000	881	0%						Have to decide on the next cycle of pavement projects	FY2025
73197-Design Standards and Specification Updates	50,000	-	0%							TBD

WASTEWATER IMPROVEMENTS PROJECT BUDGET UPDATE

CIP	Budget	LTD Expenses	% Budget Expensed	Planning	Design	Construction	In Progress	Close out	Status Update and Timeline	Est. Competition
74084-WW Lines Upgrade, East Side	756,000	34,987	5%						Development driven project. Upgrades needed to improve capacity and expand for new development in southeast Tracy.	
74107-WWTP Expan Phase II	31,000,000	25,577,859	83%						99% complete Phase II B	FY2024
74159-Wastewater Master Plan	781,200	569,891	73%							FY2025
74162-Lincoln Avenue Sewer Connection	225,300	5,735	3%			X			Contract Awarded, Construction will be complete by end of FY23/24	FY2024
74164-Primary Clarifier Effluent Pumping System	450,000	284,970	63%						95% complete - end of FY23/24 final programming and installation	FY2024
74165-Sewer Capacity Upgrade	3,000,000	156,914	5%							FY2025
74166-Reconstruction Bessie Avenue Between Lowell Avenue and Grant Line Road	1,900,000	448,822	24%			X				FY2025
74167-HACH WIMS eSMT Report Auto Generator	120,000	5,540	5%						50% complete - ongoing upgrades to system with limited staff	FY2026
74168-Recycled Water System Expansion	22,000,000	1,061,148	5%						Construction after Impact Fee allocation upon approve of WMP.	FY2026

WATER IMPROVEMENTS PROJECT BUDGET UPDATE

CIP	Budget	LTD Expenses	% Budget Expensed	Planning	Design	Construction	In Progress	Close out	Status Update and Timeline	Est. Competition
75130-Replace SCADA System - Water Treatment Plant	735,000	551,748	75%						90% complete Complete by end of 23/24	FY2024
75155-Up Flow Clarifier Rehab	500,000	295,101	59%						60% design plans almost complete. Unfunded. Design to be completed FY24/25	FY2025
75156-WTP UV Upgrade	400,000	298,410	75%						90% complete - preparing report for DDW - this was a software upgrade - SYSTEM not construction.	FY2024
75159-Water Master Plan	659,797	487,401	74%							
75160-Water Lines Lammers Rd	6,000,000	289,234	5%						Design complete. Bidding & Construction after Impact Fee allocation upon approve of WMP.	FY2025
75162-Well Improvements	1,604,800	1,530,319	95%						95% complete - end of FY23/24 installed new mixer and ammonia tanks and pumps - functional testing complete.	FY2024
75163-Tracy Hills Zone 5 Water Booster Station	3,800,000	3,411,370	90%						Final punch list and project closeout to be complete by end of FY23/24. Booster station complete but cannot be put into service due to issues with FAA	FY2024
75164-Reconstruction Bessie Avenue Between Lowell Avenue and Grant Line Road	1,750,000	420,880	24%			X				FY2025
75166-Larch Rd 12" Water Line Replacement	250,000	100,823	40%						Design complete FY24, Construction unfunded	
75169-Security System Implementation for City's Water Facilities	100,000	36,667	37%						Design complete FY24, Construction unfunded	
75170-Asset Management - CMMS Program Expansion	200,000	-	0%						To be used for other priority water CIP projects as CMMS is now Citywide project.	
75171-Water Plant HVAC Repair	615,500	226,758	37%			X			Completed HVAC system to electrical blower building. Remaining funding to move to other priority water fund projects.	FY2024
75174-Los Vaqueros Reservoir	300,000	247,800	83%						Agreements for JPA participation. These fees are ongoing and dependent on continued participation in the project. This is only for planning and includes no costs for construction of actual project. Unknown cash call for FY24/25 at this time.	TBD
75175-BF Sisk Dam	300,000	133,751	45%						Agreements for JPA participation. These fees are ongoing and dependent on continued participation in the project. This is only for planning and includes no costs for construction of actual project.	TBD
75176-Filter Valves Replacement at JJWTP	100,000	53,133	53%						Ongoing \$100k per year for valve replacement. No roll over. Five actuators were able to be purchased and four were installed to date.	FY2024

DRAINAGE IMPROVEMENTS PROJECT BUDGET UPDATE

CIP	Budget	LTD Expenses	% Budget Expensed	Planning	Design	Construction	In Progress	Close out	Status Update and Timeline	Est. Competition
76059-Dng Imp: SoMacAr, Ph 2	554,007	53,427	10%						On Hold - Pending Developer to finish upstream improvements	On Hold
76086-Storm Drain Master Plan	903,070	840,266	93%							
76087-Eastside Channel Lining from Grant Line Road to MacArthur	2,500,000	29,689	1%	X						FY2026
76088-Trash Capture devices for storm water conveyance system	500,000	7,259	1%						Technical Memo in progress, complete by the end of FY23/24. Trash Capture must be fully implemented by 2029. Requested augmentation for design and construction of \$5M FY24/25 and \$5M FY25/26	FY2029

AIRPORT TRANSIT PROJECT BUDGET UPDATE

CIP	Budget	LTD Expenses	% Budget Expensed	Planning	Design	Construction	In Progress	Close out	Status Update and Timeline	Est. Competition
77564-Transit Station Security Cameras	140,000	1,754	1%						RFP to be released summer 2024. Working in conjunction with IT and PD to develop scope of work to be used Citywide.	FY2025
77583-Update Airport Master Plan Study	227,937	44,805	20%						In process. Public comment has been conducted. Draft has been submitted to the FAA for review. Waiting for FAA comments.	FY2025
77585-Tracer Bus Stop Improvements	500,000	368,621	74%						Most shelter repairs are complete. Solar lighting upgrades on shelters is currently in process.	FY2025
77586-Transit Maintenance & Storage Yard (Land Acquisition)	1,500,000	176,668	12%						zone property. Consultant working on CEQA analysis in preparation for public comment period required for re-zoning. Anticipate re-zoning to be complete summer 2024, at which time the NEPA process can be completed and submitted to FTA for review and approval to purchase the property.	FY2025
77587-ITS infrastructure Planning & Construction	1,400,000	-	0%						RFP released and contractor selected. Planning on contract award at City Council in May 2024. Anticipated completion by Dec 2024.	FY2025
77588-Master Plan Update for New Jerusalem Airport	250,000	-	0%						Not yet started.	FY2026
77589-Airport Slurry Seal & Pavement Patching Entrance Road and Parking Lot	183,306	-	0%			X				FY2024
77590-Transit Buses	2,250,000	-	0%						Buses ordered. Anticipated delivery of August 2024.	FY2025
77591-Short Range Transit Plan	150,000	-	0%						Contract awarded. Project started. Anticipated completion of December 2024.	FY2025
77592-Transit Station Generator	1,000,000	48,971	5%	X					Project study report complete. Bid documents being prepared. Anticipated out to bid May 2024. Estimated completion by December 2024.	FY2025
77593-Slurry Seal of the Tee Hangar Taxi Lanes	176,418	-	0%			X			Waiting for contract to be signed by City	FY2025

PARKS RECREATION IMPROVEMENTS PROJECT BUDGET UPDATE

CIP	Budget	LTD Expenses	% Budget Expensed	Planning	Design	Construction	In Progress	Close out	Status Update and Timeline	Est. Competition
78054-Aquatics Center	4,992,146	1,522,384	30%	X					Currently in Planning phase. A project management consultant was hired to manage the project. City Council feedback is necessary to confirm scope and budget of project (Targeting April 2024 discussion). No estimated completion date until more direction is given.	TBD
78170-Gretchen Tally Park Phase III	5,591,952	931,065	17%		X				documents complete. Project completion targeted is Summer 2025.	FY2026
78178-Multi-Generational Rec Center	15,500,000	4,891,250	32%						Design Complete. Project completion targeted is Summer 2026.	FY2027
78184-Hoyt Park - Per Capita Improvements	363,956	15,192	4%						Project delayed due to staffing challenges. Reassigning project and scope of work needs to be reevaluated. No target completion date at this time.	TBD
78185-Legacy Field Site Phase 1E	20,000,000	16,782,722	84%					X	being proposed to transfer to new project for new staff office at Legacy Fields as a part of the FY24/25 CIP process.	FY2024
78186-Nature Park Phase 1	1,371,000	-	0%							TBD
78187-Ritter Family Ball Park Renovation	3,000,000	-	0%						No work has been completed on the project due to staffing challenges.	TBD
78188-Florence Stevens Park & Greenway Improvement	550,000	505	0%						No work has been completed on the project due to staffing challenges.	TBD
78189-A.R. Glover Park Improvement	725,000	-	0%						No work has been completed on the project due to staffing challenges.	TBD
78190-BMX Pump Track	1,000,000	17,684	2%	X					Currently in Planning phase. Staff is coordinating with on-call consultants on project delivery method and next steps. No estimated completion date at this time.	TBD
78191-Edgar Thoming Park Improvement	600,000	-	0%						No work has been completed on the project due to staffing challenges.	TBD
78192-Flag Poles City Hall Memorial	150,000	1,251	1%		X				Currently in Design phase nearing completion of 100% construction documents. Project completion targeted is Fall 2024.	FY2025

FY2025-25 Budget Augmentations

Department	Augmentation Title	TYPE	Total Request Amount	Other Fund On-Going	Other Fund One-Time	General Fund Ongoing	General Fund One-Time
City Manager's Office	New Copy Machine	Supplies	\$ 15,000		\$ 7,500		\$ 7,500
Human Resources	(1) HR/Risk Analyst	Personnel	\$ 123,526	\$ 56,763	\$ 5,000	\$ 56,763	\$ 5,000
Human Resources	Labor Negotiations Support	Services	\$ 100,000		\$ 50,000		\$ 50,000
Human Resources	Investigations Support	Services	\$ 50,000	\$ 25,000		\$ 25,000	
Human Resources	Professional Development	Services	\$ 15,000	\$ 7,500		\$ 7,500	
Human Resources	Mayor's Summer Internship Program	Personnel	\$ 53,000	\$ 26,500		\$ 26,500	
Human Resources	Mayor's Summer Internship Program	Services	\$ 5,000	\$ 2,500		\$ 2,500	
Innovation & Technology	Additional Software Licensing	Services	\$ 206,000	\$ 42,120	\$ 13,500	\$ 113,880	\$ 36,500
Parks, Rec & Comm Services (Homeless Services)	Shelter Provider Contract	Services	\$ 1,600,000			\$ 1,600,000	
Parks, Rec & Comm Services (Maintenance)	Storm Drain LMD	Supplies	\$ 20,000	\$ 20,000			
Parks, Rec & Comm Services (Maintenance)	Landscaping New Parks Ellis	Supplies	\$ 137,000	\$ 137,000			
Parks, Rec & Comm Services (Maintenance)	Landscaping New Parks Tracy Hills	Supplies	\$ 369,000	\$ 369,000			
Parks, Rec & Comm Services (Maintenance)	Parks Maintenance Truck	Capital	\$ 45,150		\$ 45,150		
			\$ 45,150		\$ 45,150		
Parks, Rec & Comm Services (Maintenance)	(1) Senior Maintenance Worker	Personnel	\$ 85,494	\$ 85,494			
			\$ 85,494	\$ 85,494			
Parks, Rec & Comm Services (Maintenance)	Parks Maintenance Truck	Capital	\$ 45,150		\$ 45,150		
			\$ 45,150		\$ 45,150		
Police Department	Flock Maintenance	Services	\$ 118,000			\$ 118,000	
Police Department	Cellebrite Maintenance	Services	\$ 75,000			\$ 75,000	
Police Department	Tuition for Academy Recruit	Services	\$ 75,000				\$ 75,000
Police Department	Organizational Development	Services	\$ 25,000				\$ 25,000
Police Department	Ballistic Vest Replacement	Supplies	\$ 22,225			\$ 22,225	
Police Department	WebChameleon	Services	\$ 13,841			\$ 3,841	\$ 10,000

FY2025-25 Budget Augmentations

Department	Augmentation Title	TYPE	Total Request Amount	Other Fund On-Going	Other Fund One-Time	General Fund Ongoing	General Fund One-Time
Police Department	(1) Deputy Chief	Personnel	\$ 301,102			\$ 282,102	\$ 19,000
Police Department	Vehicle - for Deputy Chief	Capital	\$ 101,500			\$ 6,500	\$ 95,000
Police Department	(1) Police Officer SRO for Jefferson SD	Personnel	\$ 162,675			\$ 124,675	\$ 38,000
Police Department	Vehicle - SRO	Capital	\$ 101,500			\$ 6,500	\$ 95,000
Police Department	(1) Police Homeless Outreach Coordinator	Personnel	\$ 157,783			\$ 157,783	
Police Department	(1) Administrative Assistant	Personnel	\$ 152,268			\$ 152,268	
Public Works (Airport)	Weed Abatement	Services	\$ 20,000				\$ 20,000
Public Works (Airport)	Replacement/Retrofit of Airport Signage	Supplies	\$ 47,000				\$ 47,000
Public Works (Transit)	Transit bus camera cloud storage	Services	\$ 32,000	\$ 12,000	\$ 20,000		
Public Works (Transit)	(1) Maintenance Worker II	Personnel	\$ 145,469	\$ 143,969	\$ 1,500		
Public Works (Transit)	(1) Vehicle - Maintenance Worker II	Capital	\$ 68,500	\$ 5,500	\$ 63,000		
Public Works (Utility Line Maintenance)	Drainage Maintenance	Services	\$ 150,000			\$ 150,000	
Public Works (Solid Waste Management)	Battery Box Program	Supplies	\$ 72,000	\$ 72,000			
Public Works (Solid Waste Management)	Annual Booklet Increase	Supplies	\$ 10,000	\$ 10,000			
Public Works (Building Maintenance)	(1) Building Maintenance Worker	Personnel	\$ 175,834	\$ 44,105	\$ 1,612	\$ 125,529	\$ 4,588
Public Works (Building Maintenance)	(1) Building Maintenance Worker	Personnel	\$ 175,834	\$ 44,105	\$ 1,612	\$ 125,529	\$ 4,588
Public Works (Building Maintenance)	Increased Supplies with Increased Staffing	Supplies	\$ 91,479	\$ 23,785		\$ 67,694	
Public Works (Building Maintenance)	(1) F250 Trucks - Building Maintenance	Capital	\$ 108,703	\$ 2,132	\$ 26,131	\$ 6,068	\$ 74,372
Public Works (Building Maintenance)	(1) Econo Van - Building Maintenance	Capital	\$ 83,200	\$ 2,132	\$ 19,500	\$ 6,068	\$ 55,500

FY2025-25 Budget Augmentations

Department	Augmentation Title	TYPE	Total Request Amount	Other Fund On-Going	Other Fund One-Time	General Fund Ongoing	General Fund One-Time
Public Works (Pool Maintenance)	Pool Maintenance Increase Services	Services	\$ 55,000			\$ 40,000	\$ 15,000
Public Works (Pool Maintenance)	Pool Maintenance Increase Supplies	Supplies	\$ 20,000			\$ 20,000	
Public Works (Streets)	Graffiti Removal Increase Supplies	Supplies	\$ 15,000			\$ 15,000	
Public Works (Central Garage)	Increase in fuel costs	Supplies	\$ 150,000	\$ 63,000		\$ 87,000	
Public Works (Central Garage)	Replace Tools & Equipment	Supplies	\$ 20,000	\$ 4,200	\$ 4,200	\$ 5,800	\$ 5,800
Public Works (Central Garage)	Repair Parts	Supplies	\$ 50,000	\$ 21,000		\$ 29,000	
Public Works (Utility Line Maintenance)	Underground Water Distribution Supplies	Supplies	\$ 150,000	\$ 150,000			
Public Works (Utility Line Maintenance)	Underground Collection Supplies	Supplies	\$ 150,000	\$ 150,000			
Public Works (Utility Line Maintenance)	(1) Cat Mini Excavator	Capital	\$ 64,100	\$ 4,100	\$ 60,000		
			\$ 64,100	\$ 4,100	\$ 60,000		
Public Works (Lab)	Increased Testing/Consulant	Services	\$ 20,000	\$ 10,000	\$ 10,000		
Public Works (Lab)	Increased Testing/Consulant	Services	\$ 20,000	\$ 10,000	\$ 10,000		
Public Works (Water Plant)	Increased Water Purchases	Services	\$ 515,314	\$ 515,314			
Public Works (Water Plant)	Increased costs to Chemicals	Supplies	\$ 50,000	\$ 50,000			
Public Works (Water Plant)	Professional Services - EPA Risk Assessment, reporting, updated manual	Services	\$ 250,000	\$ 250,000			
Public Works (Wastewater Plant)	Increase to Chemical Purchases	Supplies	\$ 200,000	\$ 200,000			
Public Works (Wastewater Plant)	Dried Sludge Removal	Services	\$ 350,000	\$ 350,000			

FY2025-25 Budget Augmentations

Department	Augmentation Title	TYPE	Total Request Amount	Other Fund On-Going	Other Fund One-Time	General Fund Ongoing	General Fund One-Time
Public Works (Wastewater Plant)	(1) John Deere Front/Loader Backhoe	Capital	\$ 177,500	\$ 6,500	\$ 171,000		
Public Works (Wastewater Plant)	(1) Utility Operator	Personnel	\$ 234,766	\$ 231,966	\$ 2,800		
Public Works (Water Plant)	(1) Utility Operator	Personnel	\$ 234,766	\$ 231,966	\$ 2,800		
Public Works (Lab)	Re-Allocation of Lab Superintendent to Lab Supervisor	Personnel	\$ (11,142)	\$ (11,142)			
			\$ (11,142)	\$ (11,142)			
Public Works (Wastewater Plant)	Re-Allocation of UT Superintendent to UT Supervisor	Personnel	\$ (10,708)	\$ (10,708)			
			\$ (10,708)	\$ (10,708)			
			<u>\$ 7,967,822</u>	<u>\$ 3,425,544</u>	<u>\$ 710,755</u>	<u>\$ 3,148,675</u>	<u>\$ 682,848</u>



Finance Committee

FY2024/25 Operating & Capital Budget Discussion

March 26, 2024



Presentation Outline

- Annual Budget Process Overview
- By Department, updates on prior years funding requests & requests for FY2024/25
- FY2024/25 Project Requests from General Fund

March 21, 2024

Budget Process Overview





City Attorney

Fiscal Year	Budget Augmentation
2024	Legal Services (On-Going) - \$280,000
2024	Paralegal



City Manager's Office

Fiscal Year	Budget Augmentation
2023	Multimedia Communication Assistant
2023	Executive Assistant



Community and Economic Development

Fiscal Year	Budget Augmentation
2022	Administrative Technician
2022	Economic Development Strategic Plan Update (One-Time)
2023	Real Property Agent
2023	Associate Planner
2023	Planning Technician
2024	Assistant Planner
2024	Economic Development Analyst



Finance

Fiscal Year	Budget Augmentation
2023	Subscription Software (On-Going) \$150,000



Human Resources

Fiscal Year	Budget Augmentation
2023	HR Analyst
2025	HR Analyst



Innovation & Technology

Fiscal Year	Budget Augmentation
2023	IT Equipment Replacement (On-going) \$150,000
2023	GIS Consulting Services (On-going) \$135,000
2023	IT Security Consulting (On-going) \$187,500
2023	Chief Innovation Officer
2024	Senior Information Systems Technician
2024	GIS Technician
2024	Cyber Security Officer



Parks, Recreation & Community Services

Fiscal Year	Budget Augmentation
2022	Homeless Services Manager & Administrative Technician (Funded through ARPA 2022-2024, General Fund 2025)
2022	Recreation Program Coordinator
2023	Parks Planning Coordinator
2023	Maintenance Workers (2)
2023	Grand Theatre Presenting and Advertising (on-going) \$300,000
2024	Maintenance Worker
2024	Senior Maintenance Worker & Maintenance Workers (4)
2025	Senior Maintenance Worker



Police Department

Fiscal Year	Budget Augmentation
2022	Police Officers (3)
2023	Police Officers (2)
2023	Homeless Outreach Coordinators (2)
2023	Animal Services Aide
2023	Public Safety Dispatcher Supervisor
2024	Police Officers (2) – Traffic Safety
2025	Deputy Chief
2025	Police Officer – School Resource
2025	Homeless Outreach Coordinator (Grant funded in FY25, General Fund will fund in future)
2025	Administrative Assistant (Grant funded in FY25, General Fund will fund in future)



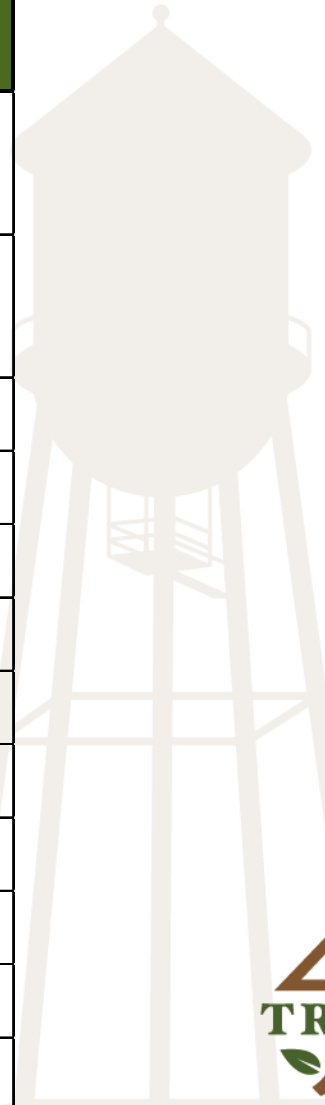
Public Works

Fiscal Year	Budget Augmentation
2022	Administrative Technician
2022	Transit Coordinator
2022	Construction Inspector - (2)
2022	Truck & Thermoplastic Machine (One-Time) \$212,000 and Supplies (On-going) \$230,000
2023	Maintenance Workers (2)
2023	Asphalt Grinder (One-time) and Supplies (on-going) \$100,000
2023	GIS Mapping (one-time) \$138,000
2023	Storm Drain Pump Repairs and Channel Way Clean Up (one-time) \$180,000
2023	Maintenance Workers (3)
2023	Maintenance Workers (5)
2023	Equipment Mechanic
2023	Associate Engineer



Public Works

Fiscal Year	Budget Augmentation
2024	Maintenance Worker and Supplies (on-going) \$100,000
2024	Pump Repair, Chanel way Maintenance (one-time) \$300,000
2024	Senior Maintenance Worker and Maintenance Worker
2024	Asphalt Supplies (on-going) \$550,000
2024	Sidewalk Cutting (on-going) \$150,000
2024	Construction Inspector
2024	Environmental Compliance Technician
2025	Building Maintenance Workers (2)
2025	Maintenance Worker
2025	Utility Operator
2025	Utility Operator
2025	Drainage Maintenance (on-going) \$150,000





Think Inside the Triangle™

General Fund Project Requests

Project	Amount
City of Tracy Apparatus Replacement (SSJCFA)	500,000
Incentive pilot program - Economic Development	250,000
Security cameras for City Hall and a PA system for the Support Services Building	250,000
Cyber Security Firewalls	460,000
Tracy Sports Complex Maintenance Yard Site Improvements	360,000
Parks (Deferred Maintenance)	5,500,000
Arterial Landscaping, Tree Maintenance & Removal (LMD)	721,500
Pavement Maintenance Management Plan (PMMP)	140,000
Road Improvements (Transfer Existing Operating Budget into Project)	650,000
Trash Capture Devices for Stormwater Conveyance	5,000,000
Road Improvements (Deferred Maintenance)	4,000,000

Total 17,831,500



Discussion



Agenda Item 3D

RECOMMENDATION

Staff recommends that the Tracy Finance Committee discuss one of four alternative options for funding the purchase of two replacement fire apparatus and recommend one of the options for the City Council to consider and approve, along with other related actions.

EXECUTIVE SUMMARY

The South San Joaquin County Fire Authority (SSJCFA) is requesting the replacement of two City of Tracy (City) owned fire engines at stations 91 and 97 that are approaching the end of their useful life. Manufacturing times for fire engines require a two-and-a-half-year lead time to build the fire engine. Staff has prepared four options for replacement and requests the Committee recommend one of the options to City Council.

BACKGROUND

The City, as a member agency under the SSJCFA joint powers agreement, owns and maintains the fire engines at each of its respective fire stations. On December 21, 2021, the SSJFA board adopted a resolution (2021-034) approving the apparatus replacement plan. The resolution and replacement plan are included with this document in Attachment A.

Under the replacement plan, engines at stations 91 and 97 are due for replacement in fiscal year (FY) 2026-27, however, manufacturing times for fire engines require a two-and-a-half-year lead time to build the fire engine. The engines at stations 91 and 97 are both 2015 High Tech, Spartan, Type I engines, with a useful life of ten years.

Staff has identified a potential vendor able to provide the replacement engines with two Pierce Manufacturing, Inc. Velocity 1500 GPM type I engines. The specifications of the engines are outlined in Attachment B.

The cost to purchase the two replacement fire engines now is \$1,945,336 and includes a prepayment discount of \$324,711 and a multiple unit discount of \$15,000. The City's fire apparatus replacement fund balance is currently \$925,000. To purchase both engines now would require an appropriation of \$1,020,336 from the General Fund reserves. This price is valid through May 2, 2024 and after that date, a price increase of 1.5% will apply.

ANALYSIS

Staff has prepared several options for funding the replacement of the two fire engines.

Option 1 – Replace both engines now with prepayment

The cost to purchase two replacement fire engines now is \$1,945,336 and includes a multiple unit discount of \$15,000 and a prepayment discount of \$324,711. Because the replacement of the two engines was not anticipated for two more fiscal years, the City's fire apparatus replacement fund balance is currently \$925,000. To purchase both engines now would require an appropriation of \$1,020,336 from the General Fund reserves.

Option 2 – Replace both engines now without prepayment

The cost to enter into a purchase agreement committing to purchase both engines now and make payment upon delivery is \$2,297,696 and includes the multiple unit discount of \$15,000, but not the prepayment discount. Option 2 will cost \$352,360 more than option 1, however, by waiting to make the payment upon delivery, the fire apparatus replacement fund will have sufficient funding accumulated for the purchase.

Option 3 – Replace one engine now and one engine in FY2025-26

The cost to replace one engine now with prepayment is estimated to be \$975,000. With \$925,000 in the fire apparatus replacement fund, an appropriation of \$50,000 from the General Fund reserves would be required. With this option, there would not be a multiple unit discount of \$15,000, but the cost would be spread over two fiscal years instead of one. Separating the purchase of two engines over two fiscal years would also stagger the purchase of replacement engines in future years, allowing for smoothing of the fire apparatus replacement fund. Assuming the current rate of inflation, it is estimated the cost could reach \$995,000 for the second engine purchased in FY2025-26. Waiting one fiscal year to replace the second engine would extend the engine's useful life to (11) eleven years and could potentially result in an increased cost to the City in relation to maintenance and repairs of the engine.

Option 4 – Defer both engine replacements to FY2026-27

The cost of deferring By deferring the purchase of both fire engine replacements to FY2026-27 based upon the current rate of inflation is estimated to be \$2,200,000 with prepayment or \$2,500,000 without prepayment. By deferring the purchase, the fire apparatus replacement fund would have sufficient funding accumulated for the purchase. Delaying the purchase to FY2026-27 would extend the useful life of the engines to thirteen (13) years and could potentially result in an increased cost to the City in relation to maintenance and repairs of the engine.

FISCAL IMPACT

Requests for capital purchases, such as the replacement fire engines, are typically brought to Council during the annual budget process for prioritization and consideration in alignment with the Council's adopted strategic priorities and available funding in the upcoming budget year. This request is being considered outside the annual budget process and if funded in the current fiscal year, will result in an appropriation from the General fund reserves.

The City, as a member of SSJCFA, owns and maintains the Fire engines at each station. Funding has been accumulated each year towards the purchase of replacement engines, with a current balance of \$925,000 in the replacement fund. Any option chosen by the City Council which requires a purchase in the current fiscal year with a cost of more than \$925,000 will result in an appropriation from the City's General fund reserves. The City's General fund provides funding for essential City services and programs, such as public safety, streets, and recreational programs.

STRATEGIC PLAN

This agenda item supports both the City's Governance and Public Safety priorities. This item supports Governance goal 2, enhance short and long-term fiscal sustainability, and Public Safety goal 1, support emergency operations preparedness, response and recovery.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the Tracy Finance Committee discuss one of four alternative options to purchase two replacement fire apparatus and recommend one of the options for the City Council to consider and approve, along with other related actions.

Prepared by: Sara Cowell, Director of Finance

Reviewed by: Bijal Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, City Manager

Attachments:

- Attachment A: SSJCFA board approved apparatus replacement plan
- Attachment B: Apparatus Specifications
- Attachment C: Fire Apparatus Replacement PowerPoint Presentation



South San Joaquin County Fire Authority

835 Central Avenue, Tracy, CA 95376 | Tel: (209)831-6702 Fax: (209)831-6732

STAFF REPORT

TO: Board of Directors MEETING DATE: December 21, 2021

PREPARED BY: Randall Bradley Fire Chief

APPROVED BY: Randall Bradley, Fire Chief

ITEM: ADOPT A RESOLUTION TO APPROVE THE SOUTH SAN JOAQUIN COUNTY FIRE AUTHORITY'S APPARATUS REPLACEMENT PLAN

RECOMMENDATION

Take action to adopt a resolution to approve the South San Joaquin County Fire Authority's Apparatus Replacement Plan.

BACKGROUND

Each member agency owns fire apparatus that are assigned to their fire stations. The Fire Authority has developed an apparatus replacement plan to allow member agencies to plan for the replacement of fire apparatus. The plan provides a recommended annual allocation estimate to fund a portion of apparatus replacement on an annual basis. Prefunding apparatus replacements is a good management practice and serves to limit the fiscal impact on any single fiscal year. Staff vehicles and other capital equipment are not included in this plan. Staff vehicles and other capital equipment are in a separate Equipment Replacement Plan that will be managed by the Fire Authority and funded by the member agencies as part of the annual budget development process.

DISCUSSION

The goal of this plan is to ensure that fire apparatus are replaced when necessary to maintain a safe, reliable, and operationally effective fleet. The plan will be updated annually and will be provided to each member agency as part of the budget development process.

The following replacement schedule was developed based on historical trends, call volumes and national standards:

Type I Engine:	10 years
Type III Engine:	15 years
Water Tender	20 years

Tractor Drawn Aerial 15 years

Actual apparatus replacement will be based on age, unit hours, safety considerations and maintenance records. The plan includes all new equipment for each apparatus. Costs may be reduced by reusing equipment that is attached to the replacement engine. Replaced first-out apparatus will go into reserve status. Reserve apparatus will be analyzed to determine which reserve apparatus should be retired.

A three percent annual escalator was calculated for future apparatus purchases and a three percent annual escalator was used for the recommended annual cost allocation for each member agency. It was assumed that both member agencies would start without a beginning balance and each member agency would begin to fund apparatus replacements in the 2022/23 fiscal year.

The apparatus replacement plan is provided to member agencies to assist in planning for apparatus replacement. It is at the discretion of each member agency on how apparatus replacement is funded. If the Board approves the plan, the plan will be provided to each member agency.

The City of Tracy recently approved the replacement of E-96 and that replacement was captured in the plan. Tracy Rural Fire District is considering apparatus replacement as part of a grant application. If the Tracy Rural Fire District approves the apparatus replacement, the plan will be updated to reflect the purchase.

FISCAL IMPACTS

No fiscal impact to the Fire Authority

ATTACHMENTS

1. Resolution
2. South San Joaquin County Fire Authority Apparatus Replacement Plan

RESOLUTION NO.: 2021-034

**APPROVING THE SOUTH SAN JOAQUIN COUNTY FIRE AUTHORITY'S
APPARATUS REPLACEMENT PLAN**

WHEREAS, the City of Tracy (City) and the Tracy Rural Fire Protection District (District) are member agencies of the South San Joaquin County Fire Authority (SSJCFA), and

WHEREAS, Section 4.2 of the SSJCFA joint powers agreement requires that each member agency lease fire stations, apparatus, and associated equipment to SSJCFA, and

WHEREAS, replacement of aging fire apparatus improves firefighter safety, apparatus reliability and operational effectiveness, and

WHEREAS, planning for the replacement of fire apparatus is a good management practice, and

WHEREAS, each member agency will determine the funding mechanism for apparatus replacement, and

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors hereby approves the South San Joaquin County Fire Authority Fire Apparatus Replacement Plan.

IT IS HEREBY CERTIFIED that the above and foregoing resolution was passed and adopted by the Board of Directors of the South San Joaquin County Fire Authority at its regular meeting held on the 21st day of December, 2021, by the following vote:

AYES: BOARD MEMBERS: REECE, YOUNG, RAMSEY, DAVIS

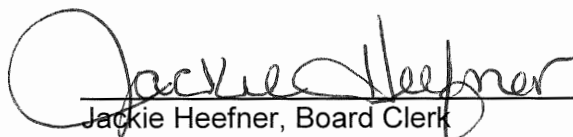
NOES: BOARD MEMBERS: NONE

ABSENT: BOARD MEMBERS: NONE

ABSTAIN: BOARD MEMBERS: NONE

ATTEST:

APPROVED:


Jackie Heefner, Board Clerk


Pete Reece, Chairperson of the Board

South San Joaquin County Fire Authority
Apparatus Replacement Schedule

TRACY RURAL APPARATUS REPLACEMENT																	
Apparatus Description	Unit No.	2021/22		Year Proc.	Life Expct	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	
		Cost	Amt.			2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	
Water Tender 90 (Pierce 3000 Gal)	2180	\$500,000	1	2005	20					\$562,754							
Brush 94 (HME, Type 3)	9020	\$475,000	1	2016	15											\$657,511	
Engine 93 (Spartan, High Tech, Type I)	9018	\$950,000	1	2015	10				\$1,069,233								
Engine 94 (Pierce, Velocity, Type I)	9021	\$950,000	1	2021	10										\$1,276,721		
Engine 95 (Pierce, Velocity, Type I)	7635	\$950,000	1	2021	10										\$1,276,721		
ANNUAL REPLACEMENT COST						\$0	\$0	\$0	\$1,631,988	\$0	\$0	\$0	\$0	\$0	\$0	\$2,553,441	\$657,511
ANNUAL ALLOCATION						\$400,000	\$412,000	\$424,360	\$437,091	\$450,204	\$463,710	\$477,621	\$491,950	\$506,708	\$521,909	\$537,567	
ANNUAL FUND BALANCE						\$400,000	\$812,000	\$1,236,360	\$41,463	\$491,667	\$955,376	\$1,432,997	\$1,924,947	\$2,431,655	\$400,123	\$280,178	
CITY OF TRACY APPARATUS REPLACEMENT																	
Apparatus Description	Unit No.	2021/22		Year Proc.	Life Expct	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	Rplc Year	
		Cost	Amt.			2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	
Engine 96 (Pierce, Velocity, Type I)	2324	\$950,000	1	2022	10												\$1,315,022
Engine 91 (High Tech, Spartan, Type I)	2411	\$950,000	1	2015	10					\$1,101,310							
Engine 97 (High Tech, Spartan Type I)	2412	\$950,000	1	2015	10					\$1,101,310							
Engine 92 (Pierce, Velocity, Type I)	7634	\$950,000	1	2021	10										\$1,276,721		
Truck 91 (Pierce, Velocity, TDA-Tiller)	2503	\$1,280,000	1	2017	15												\$1,771,819
ANNUAL REPLACEMENT COST						\$0	\$0	\$0	\$0	\$2,202,621	\$0	\$0	\$0	\$0	\$1,276,721	\$3,086,842	
ANNUAL ALLOCATION						\$500,000	\$515,000	\$530,450	\$546,364	\$562,754	\$579,637	\$597,026	\$614,937	\$633,385	\$652,387	\$671,958	
ANNUAL FUND BALANCE						\$500,000	\$1,015,000	\$1,545,450	\$2,091,814	\$451,947	\$1,031,584	\$1,628,610	\$2,243,547	\$2,876,932	\$2,252,598	-\$162,285	

ASSUMPTIONS

Tracy Rural Beginning Fund Balance	\$0
Tracy Rural Beginning Annual Allocation	\$400,000
City of Tracy Beginning Fund Balance	\$0
City of Tray Beginning Annual Allocation	\$400,000
Type I Engine Life Expectancy	10 Yrs
Type III Engine Life Expectancy	15 Yrs
TDA Truck Life Expectancy	15 Yrs
Water Tender Life Expectancy	20 Yrs
Annual Apparatus Cost Increase	3 Pct.
Annual Allocation Increase	3 Pct.

*Replacement schedule based on national standards

**Actual replacement decisions based on age, safety considerations, operational effectiveness and maintenance costs

3 **PRODUCT SPECIFICATIONS**

Exhibit "B"



Proposal Details Report

2/13/2024

Customer: South San Joaquin County Fire Authority
Representative: Myers, Rich
Requirements Manager:
Description: Two (2) Velocity Pumpers (Matc
Chassis: Velocity Chassis (Big Block), 2010
Body: Pumper, Medium, Aluminum, 2nd Gen
Bid Number: 947
Job Number:
Organization: Golden State Fire Apparatus, Inc

OptionCode	Type	Option	ProposalText
0766611		Boiler Plates, Pumper	

GSFA is pleased to submit a proposal to the South County Fire Authority for a **Pierce® triple combination pumper** per your request for quotation. The following paragraphs will describe in detail the apparatus, construction methods, and equipment proposed. This proposal will indicate size, type, model and make of components parts and equipment, providing proof of compliance with each and every item (except where noted) in the departments advertised specifications. PIERCE MANUFACTURING was founded in 1913. Since then we have been building bodies with one philosophy, "BUILD THE FINEST". Our skilled craftsmen take pride in their work, which is reflected, in the final product. We have been building fire apparatus since the early "forties" giving Pierce Manufacturing over 75 years of experience in the fire apparatus market. Pierce Manufacturing has built and put into service more than 62,500 apparatus, including more than 33,900 on Pierce custom chassis designed and built specifically for fire and emergency applications. Our Appleton, Wisconsin facility has over 870,000 total square feet of floor space situated on approximately 105 acres of land. Our Bradenton, Florida facility has 300,000 square feet of floor space situated on approximately 38 acres of land.

Our beliefs in high ethical standards are carried through in all of our commitments and to everyone with whom we do business. Honesty, Integrity, Accountability and Citizenship are global tenets by which we all live and work. Consequently, we neither engage in, nor have we ever been convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

Pierce has only one brand of fire apparatus "Pierce", ensuring you are receiving top of the line product that meets your specification.

In accordance with the current edition of applicable NFPA standards, this proposal will specify whether the fire department, manufacturer, or apparatus dealership will provide required loose equipment.

Images and illustrative material in this proposal are as accurate as known at the time of publication, but are subject to change without notice. Images and illustrative material is for reference only, and may include optional equipment and accessories and may not include all standard equipment.

GENERAL DESIGN AND CONSTRUCTION

To control quality, ensure compatibility, and provide a single source for service and warranty, the custom cab, chassis, pump module and body will be entirely designed, assembled/welded and painted in Pierce owned manufacturing facilities. This includes, but not limited to the cab weldment, the pumphouse module assembly, the chassis assembly, the body and the electrical system.

QUALITY AND WORKMANSHIP

Pierce has set the pace for quality and workmanship in the fire apparatus field. Our tradition of building the highest quality units with craftsmen second to none has been the rule right from the beginning and we demonstrate that ongoing commitment by: Ensuring all steel welding follows American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding follows American Welding society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding follows American welding Society B2.1-2000 requirements for structural welding of sheet metal. Our flux core arc welding uses alloy rods, type 7000 and is performed to American Welding Society standards A5.20-E70T1. Furthermore, all employees classified as welders are tested and certified to meet the American Welding Society codes upon hire and every three (3) years thereafter. Pierce also employs an American Welding Society certified welding inspector in plant during working hours to monitor weld quality.

Pierce Manufacturing operates a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International Organization for Standardization (ISO) specify the quality systems that are established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance is included with this proposal. In addition to the Quality Management system, we also employ a Quality Achievement Supplier program to insure the vendors and suppliers that we utilize meet the high standards we demand. That is just part of our overall "Quality at the Source" program at Pierce.

To demonstrate the quality of our products and services, a list of at least twenty five (25) fire departments/municipalities that have purchased vehicles for a second time is provided.

DELIVERY

The apparatus will be delivered under its own power to insure proper break-in of all components while the apparatus is still under warranty. A qualified delivery representative shall deliver the apparatus and remain for a sufficient length of time to instruct personnel in proper operation, care and maintenance of the equipment delivered.

MANUAL AND SERVICE INFORMATION

At time of delivery, complete operation and maintenance manuals covering the apparatus will be provided. A permanent plate will be mounted in the driver's compartment specifying the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

SAFETY VIDEO

At the time of delivery Pierce will also provide one (1) 39-minute, professionally produced apparatus safety video, in DVD format. This video will address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus, including the following: vehicle pre-trip inspection, chassis operation, pump operation, aerial operation, and safety during maintenance.

PERFORMANCE TESTS

A road test will be conducted with the apparatus fully loaded and a continuous run of no less than

ten (10) miles. During that time the apparatus will show no loss of power nor will it overheat. The transmission drive shaft or shafts and the axles will run quietly and be free of abnormal vibration or noise. The apparatus when fully loaded will not have less than 25 percent nor more than 50 percent on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle. The apparatus will meet the current edition of applicable NFPA standards acceleration and braking requirements.

SERVICE AND WARRANTY SUPPORT

Pierce dealership support will be provided by GSEVS by operating a Pierce authorized service center. The service center will have factory-trained mechanics on staff versed in Pierce fire apparatus. The service facility will be located within seventy five (75) miles of the fire department. In addition to the dealership, Pierce has service facilities located in both, Weyauwega, Wisconsin and Bradenton, Florida. Pierce also maintains a dedicated parts facility of over 100,000 square feet in Appleton, Wisconsin. The parts facility stocks in excess of \$5,000,000 in parts dedicated to service and replacement parts. The parts facility employs a staff dedicated solely for the distribution and shipment of service and replacement parts.

Service parts for the apparatus being proposed can be found via Pierceparts.com which, is an interactive online tool that delivers information regarding your specific apparatus as well as the opportunity to register for training classes.

As a Pierce customer you have the ability to view the complete bill of materials for your specific apparatus, including assembly drawings, piece part drawings, and beneficial parts notations. You will also have the ability to search the complete Pierce item master through a parts search function which offers all Pierce SKU's and descriptions offered on all Pierce apparatus. Published component catalogs, which include proprietary systems along with an extensive operators manual library is available for easy reference.

Pierce Manufacturing maintains a dedicated service and warranty staff of over 35 personnel, dedicated to customer support, which also maintains a 24 hour 7 day a week toll free hot line, four (4) on staff EVT's, and offers hands-on repair and maintenance training classes multiple times a year.

LIABILITY

The successful bidder will defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract.

INSURANCE PROVIDED BY BIDDER

COMMERCIAL GENERAL LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

Each Occurrence \$1,000,000

Products/Completed Operations Aggregate \$1,000,000

Personal and Advertising Injury \$1,000,000

General Aggregate \$2,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form and will include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy will include Owner as an additional insured when required by written contract.

COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The successful bidder will, during the performance of the contract, keep in force at least the following minimum limits of commercial automobile liability insurance and coverage will be written on a Commercial Automobile liability form:

Each Accident Combined Single Limit: \$1,000,000

UMBRELLA/EXCESS LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Aggregate: \$3,000,000

Each Occurrence: \$3,000,000

The umbrella policy will be written on an occurrence basis and at a minimum provide excess to the bidder's General Liability and Automobile Liability policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as certificate holder.

INSURANCE PROVIDED BY MANUFACTURER

PRODUCT LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of Product Liability insurance:

Each Occurrence \$1,000,000

Products/Completed Operations Aggregate \$1,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form. The manufacturer's policy will include the owner as additional insured when required by written contract between the Owner and a Pierce authorized dealer.

UMBRELLA/EXCESS LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Each Occurrence: \$25,000,000

Aggregate: \$25,000,000

The umbrella policy will be written on an occurrence basis and provide excess to the manufacturer's General Liability/Products policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best. All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions. Manufacturer agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as the certificate holder.

0661794	Single Source Compliance	<p>SINGLE SOURCE MANUFACTURER Pierce Manufacturing, Inc. provides an integrated approach to the design and manufacture of our products that delivers superior apparatus and a dedicated support team. From our facilities, the chassis, cab weldment, cab, pumphouse (including the sheet metal enclosure, valve controls, piping and operators panel) and body will be entirely designed, tested, and hand assembled to the customer's exact specifications. The electrical system either hardwired or multiplexed, will be both designed and integrated by Pierce Manufacturing. The warranties relative to these major components (excluding component warranties such as engine, transmission, axles, pump, etc.) will be provided by Pierce as a single source manufacturer. Pierce's single source solution adds value by providing a fully engineered product that offers durability, reliability, maintainability, performance, and a high level of quality.</p>
0584456	Manufacture Location, Appleton, Wisconsin	Your apparatus will be manufactured in Appleton, Wisconsin.
0584452	RFP Location: Appleton, Wisconsin	
0588609	Vehicle Destination, US	
0670275	Unit to be Similar in some Aspects, Excluding Pump Panel	<p>SPECIAL INSTRUCTIONS The apparatus being proposed will be designed and built to match the 35130. However, some variation may be necessary due to changes in our manufacturing processes or our product offering. Revisions in NFPA guidelines and/or other regulations may also affect our ability to match the previous unit.</p>
0816491	Comply NFPA 1900 Changes Effective Jan 1, 2024, With Exceptions	<p>NFPA 2024 STANDARDS This unit will comply with the NFPA standards effective January 1, 2024, except for fire department directed exceptions. These exceptions will be set forth in the Statement of Exceptions. Certification of slip resistance of all stepping, standing and walking surfaces will be supplied with delivery of the apparatus. All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points will be identified on the customer approval print and are shown as approximate. Actual location(s) will be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack. A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating. The manufacturer will have programs in place for training, proficiency testing and performance for any staff involved with certifications. An official of the company will designate, in writing, who is qualified to witness and certify test results.</p>
0533347	Pumper/Pumper with Aerial Device Fire Apparatus	
0588611	Vehicle Certification, Pumper	

0661778	Agency, Apparatus Certification, Pumper/Tanker, U.L.	<p>NFPA COMPLIANCY Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Fire department's specifications that differ from NFPA specifications will be indicated in the proposal as "non-NFPA".</p> <p>PUMP TEST Underwriters Laboratory (UL) will test, approved, and certify the pump. The test results and the pump manufacturer's certification of hydrostatic test; the engine manufacturer's certified brake horsepower curve; and the pump manufacturer's record of pump construction details will be forwarded to the Fire Department.</p> <p>GENERATOR TEST If the unit has a generator, Underwriters Laboratory (UL) will test, approved, and certify the generator. The test results will be provided to the Fire Department at the time of delivery.</p> <p>BREATHING AIR TEST If the unit has breathing air, Pierce Manufacturing will draw an air sample from the air system and have the sample certified that the air quality meets the requirements of NFPA 1989, <i>Standard on Breathing Air Quality for Fire and Emergency Services Respiratory Protection</i>.</p>
0816495	Certification, Vehicle Inspection Program, NFPA 1900	<p>VEHICLE INSPECTION PROGRAM CERTIFICATION To assure the vehicle is built to current NFPA 1900 standards, the apparatus, in its entirety, will be third-party, independent, audit-certified through Underwriters Laboratory (UL) that it is built and complies to all applicable standards in the current edition. The certification includes: all design, production, operational, and performance testing of not only the apparatus, but those components that are installed on the apparatus. A placard will be affixed in the driver's side area stating the third party agency, the date, the standard and the certificate number of the whole vehicle audit.</p>
0092138	Highly Customized Product (HCP)	<p>PRODUCT CHANGES AND IMPROVEMENTS Our components and processes, as described in this proposal document, are as accurate as known at the time of bid submission, but are subject to change for the purpose of product or process improvements, or changes in industry standards providing the change does not affect the meaning or definition of the bid specifications.</p>
0766110	Consortium, Sourcewell	
0537375	Unit of Measure, US Gallons	
0030006	Bid Bond Not Requested	<p>BID BOND NOT REQUESTED A bid bond will not be included. If requested, the following will apply: All bidders will provide a bid bond as security for the bid in the form of a 5% bid bond to accompany their bid. This bid bond will be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond will be issued by an authorized representative of the Surety Company and will be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond will include language, which assures that the bidder/principal will give a bond or bonds as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract. Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle will apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle will not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision will prevail.</p>

0816574	Performance Bond, 100% with Warranty Bond, 1 Yr, and Payment Bond, PPI Terms	<p>PERFORMANCE BOND, 1 YEAR</p> <p>The successful bidder will furnish a Performance and Payment bond (Bond) equal to 100 percent of the total contract amount within 30 days of the notice of award. Such Bond will be in a form acceptable to the Owner and issued by a surety company included within the Department of Treasury's Listing of Approved Sureties (Department Circular 570) with a minimum A.M. Best Financial Strength Rating of A and Size Category of XV. In the event of a bond issued by a surety of a lesser Size Category, a minimum Financial Strength rating of A+ is required.</p> <p>Bidder and Bidder's surety agree that the Bond issued hereunder, whether expressly stated or not, also includes the surety's guarantee of the vehicle manufacturer's Basic One (1) Year Limited Warranty period included within this proposal. Owner agrees that the penal amount of this bond will be simultaneously amended to 100 percent of the total contract amount upon satisfactory acceptance and delivery of the vehicle(s) included herein. Notwithstanding anything contained within this contract to the contrary, the surety's liability for any warranties of any type will not exceed one (1) year from the date of such satisfactory acceptance and delivery, or the actual Basic One (1) Year Limited Warranty period, whichever is shorter.</p> <p>Due to global supply chain constraints, any delivery date contained herein is a good faith estimate as of the date of this order/contract, and merely an approximation based on current information. Delivery updates will be made available, and a final firm delivery date will be provided as soon as possible.</p> <p>If the Producer Price Index of Components for Manufacturing [www.bls.gov Series ID: WPUID6112] ("PPI") has increased at a compounded annual growth rate of 5.0% or more between the month Pierce accepts the order ("Order Month") and a month 14 months prior to the then predicted Ready For Pickup date ("Evaluation Month"), then pricing may be updated in an amount equal to the increase in PPI over 5.0% for each year or fractional year between the Order Month and the Evaluation Month.</p> <p>The seller will document any such updated price for the customer's approval before proceeding and provide an option to cancel the order.</p>
0000007	Approval Drawing	<p>APPROVAL DRAWING</p> <p>A drawing of the proposed apparatus will be prepared and provided to the purchaser for approval before construction begins. The Pierce sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc.</p> <p>A "revised" approval drawing of the apparatus will be prepared and submitted by Pierce to the purchaser showing any changes made to the approval drawing.</p>
0002928	Electrical Diagrams	<p>ELECTRICAL WIRING DIAGRAMS</p> <p>Two (2) electrical wiring diagrams, prepared for the model of chassis and body, will be provided.</p>
0564202	Velocity Chassis (Big Block), 2010	<p>VELOCITY CHASSIS</p> <p>The Pierce Velocity® is the custom chassis developed exclusively for the fire service. Chassis provided will be a new, tilt-type custom fire apparatus. The chassis will be manufactured in the apparatus body builder's facility eliminating any split responsibility. The chassis will be designed and manufactured for heavy-duty service, with adequate strength and capacity for the intended load to be sustained and the type of service required. The chassis will be the manufacturer's first line tilt cab.</p>
0000110	Wheelbase	<p>WHEELBASE</p> <p>The wheelbase of the vehicle will be 191.50".</p>
0000070	GVW Rating	<p>GVW RATING</p> <p>The gross vehicle weight rating will be 47,050.</p>
0000203	Frame Rails, 13.38 x 3.50 x .375, Qtm/AXT/Imp/Vel/DCF	<p>FRAME</p> <p>The chassis frame will be built with two (2) steel channels bolted to five (5) cross members or more, depending on other options of the apparatus. The side rails will have a 13.38" tall web over the front and mid sections of the chassis, with a continuous smooth taper to 10.75" over the rear axle. Each rail will have a section modulus of 25.992 cubic inches and a resisting bending moment (rbm) of 3,119,040 in-lb over the critical regions of the frame assembly, with a section modulus of 18.96 cubic inches with an rbm of 2,275,200 in-lb over the rear axle. The frame rails will be constructed of 120,000 psi yield strength heat-treated 0.38" thick steel with 3.50" wide flanges.</p>
0020018	Frame Liner Not Req'd	

0777891	SP Axle, Front, Oshkosh TAK-4, Non Drive, 20,050 lb, Imp/Vel	<p>FRONT NON DRIVE AXLE</p> <p>The Oshkosh TAK-4® front axle will be of the independent suspension design with a ground rating of 20,050 lb.</p> <p>Upper and lower control arms will be used on each side of the axle. Upper control arm castings will be made of 100,000-psi yield strength 8630 steel and the lower control arm casting will be made of 55,000-psi yield ductile iron.</p> <p>The center cross members and side plates will be constructed out of 80,000-psi yield strength steel.</p> <p>Each control arm will be mounted to the center section using elastomer bushings. These rubber bushings will rotate on low friction plain bearings and be lubricated for life. Each bushing will also have a flange end to absorb longitudinal impact loads, reducing noise and vibrations.</p> <p>There will be nine (9) grease fittings supplied, one (1) on each control arm pivot and one (1) on the steering gear extension.</p> <p>The upper control arm will be shorter than the lower arm so that wheel end geometry provides positive camber when deflected below rated load and negative camber above rated load. Camber at load will be 0 degrees for optimum tire life.</p> <p>The ball joint bearing will be of low friction design and be maintenance free.</p> <p>Toe links that are adjustable for alignment of the wheel to the center of the chassis will be provided.</p> <p>The wheel ends will have little to no bump steer when the chassis encounters a hole or obstacle. The steering linkage will provide proper steering angles for the inside and outside wheel, based on the vehicle wheelbase.</p> <p>The axle will have a turning angle of up to 45 degrees.</p>
0010427	Suspension, Front TAK-4, 22,800 lb, Qtm/AXT/Imp/Vel/Enf/SFR	<p>FRONT SUSPENSION</p> <p>Front Oshkosh TAK-4™ independent suspension will be provided with a minimum ground rating of 22,800 lb.</p> <p>The independent suspension system will be designed to provide maximum ride comfort. The design will allow the vehicle to travel at highway speeds over improved road surfaces and at moderate speeds over rough terrain with minimal transfer of road shock and vibration to the vehicle's crew compartment.</p> <p>Each wheel will have torsion bar type spring. In addition, each front wheel end will also have energy absorbing jounce bumpers to prevent bottoming of the suspension.</p> <p>The suspension design will be such that there is at least 10.00" of total wheel travel and a minimum of 3.75" before suspension bottoms.</p> <p>The torsion bar anchor lock system allows for simple lean adjustments, without the use of shims. One can adjust for a lean within 15 minutes per side. Anchor adjustment design is such that it allows for ride height adjustment on each side.</p> <p>The independent suspension was put through a durability test that simulated 140,000 miles of inner city driving.</p>
0087572	Shock Absorbers, KONI, TAK-4, Qtm/AXT/Imp/Vel/DCF/Enf	<p>FRONT SHOCK ABSORBERS</p> <p>KONI heavy-duty telescoping shock absorbers will be provided on the front suspension.</p>
0000322	Oil Seals, Front Axle	<p>FRONT OIL SEALS</p> <p>Oil seals with viewing window will be provided on the front axle.</p>
0802633	Tires, Front, Goodyear, Armor Max MSA, 385/65R22.50, 18 ply, Fire Ser. Load Rtg	<p>FRONT TIRES</p> <p>Front tires will be Goodyear 385/65R22.5 radials, 18 ply Armor Max MSA tread, rated for 20,050 lb maximum axle load and 68 mph maximum speed.</p>
0604672	Wheels, Front, Accuride, 22.50" x 12.25", Steel, Hub Pilot	<p>The tires will be mounted on Accuride® 22.50" x 12.25" steel disc type wheels with a ten (10) stud, 11.25" bolt circle.</p>
0622258	Axle, Rear, Dana S26-190, 27,000 lb, Imp/Vel/Dash CF	<p>REAR AXLE</p> <p>The rear axle will be a Dana, Model S26-190, with a capacity of 27,000 lb.</p>
0544253	Top Speed of Vehicle, 68 MPH /109 KPH	<p>TOP SPEED OF VEHICLE</p> <p>A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 68 mph / 109 kph.</p>
0732334	Suspen, Rear, Reyco, 102AR-HD, Air Ride, 27,000 lb, No Sway Bar	<p>REAR SUSPENSION</p> <p>Rear suspension will be a Reyco Model 102AR-HD, air ride with a ground rating of 27,000 lb. The suspension will have the following features:</p> <ul style="list-style-type: none"> - Outboard vertical mounted heavy-duty shock absorbers - Adjustable torque and track rods - Heavy duty extra strength trailing beam for excellent roll stability - Low rate air spring for excellent ride - Weight control valves to compensate for weight difference
0000485	Oil Seals, Rear Axle	<p>REAR OIL SEALS</p> <p>Oil seals will be provided on the rear axle(s).</p>

0629346	Valves, Dump, Air Ride, Rear Axle, Prk Brk Interlock	<p>REAR AIR RIDE SUSPENSION DUMP VALVES</p> <p>The rear air ride suspension will be supplied with a dump valve system provided by the custom chassis manufacturer.</p> <p>The control will be located inside the cab and at the driver's side rear of body.</p> <p>To prevent accidental activation of the valves, a 5 second timed delay will be built into the control circuit. The chassis back-up alarm will sound when the control is active.</p> <p>The parking brake must be applied before the control will be active. Release of the parking brake will automatically inflate the suspension.</p>
0782552	Tires, Rear, Goodyear, Endurance RSA, 12R22.50, LRH, Single	<p>REAR TIRES</p> <p>Rear tires will be four (4) Goodyear 12R22.50 radials, load range H, Endurance RSA highway tread, rated for 27,120 lb maximum axle load and 75 mph maximum speed.</p>
0654797	Wheels, Rear, Accuride, 22.50" x 9.00", Steel, Hub Pilot, Single	<p>The tires will be mounted on Accuride® 22.50" x 9.00" steel disc type wheels with a ten (10) stud, 11.25" bolt circle.</p>
0568081	Tire Balancing, Counteract Beads	<p>TIRE BALANCE</p> <p>All tires will be balanced with Counteract balancing beads. The beads will be inserted into the tire and eliminate the need for wheel weights.</p>
0819008	No Tire Pressure Indicator, Fire Department Omits, Non-NFPA 2024 Compliant	<p>TIRE PRESSURE INDICATOR</p> <p>NFPA 1900, 2024 edition, section 7.14.6 requires each tire be equipped with a visual indicator or monitoring system that indicates tire pressure.</p> <p>Per Fire Department specification, a tire pressure indicator is not on the apparatus as manufactured. This apparatus will be non-compliant to NFPA 1900 standards effective at time of contract execution.</p>
0801909	Lug Nut, Covers, Chrome	<p>CHROME LUG NUT COVERS</p> <p>Chrome lug nut covers will be supplied on front and rear wheels.</p>
0003245	Axle Hub Covers w/center hole, S/S, Front Axle	<p>FRONT HUB COVERS</p> <p>Stainless steel hub covers will be provided on the front axle. An oil level viewing window will be provided.</p>
0001960	Axle Hub Covers, Rear, S/S, High Hat (Pair)	<p>REAR HUB COVERS</p> <p>A pair of stainless steel high hat hub covers will be provided on rear axle hubs.</p>
0012045	Mud Flap, Rear, Pierce Logo	<p>MUD FLAPS</p> <p>Mud flaps with a Pierce logo will be installed behind the rear wheels.</p>
0617577	Chocks, Wheel, Worden HWG- SB, Super Gripper	<p>WHEEL CHOCKS</p> <p>There will be one (1) pair of Worden Safety Products, Model HWG-SB, wheel chocks provided.</p> <p>Heavy Duty, large molded aluminum wheel chock with solid bottom, natural cast aluminum finish.</p>
0646364	Mounting Brackets, Chocks, Worden Safety, Model U815T	<p>WHEEL CHOCK BRACKETS</p> <p>There will be one (1) pair of Worden Safety model U815T mounting wheel chock brackets provided . The brackets will be mounted Under LS3.</p>

0820509	ESC/ABS/ATC Wabco Brake System, Single Rear Axle, NFPA 1900	<p>ELECTRONIC STABILITY CONTROL A vehicle control system will be provided as an integral part of the ABS brake system from Meritor Wabco.</p> <p>The system will monitor and update the lateral acceleration of the vehicle and compare it to a critical threshold where a side roll event may occur. If the critical threshold is met, the vehicle control system will automatically reduce engine RPM, engage the engine retarder (if equipped), and selectively apply brakes to the individual wheel ends of the front and rear axles to reduce the possibility of a side roll event.</p> <p>The system will monitor directional stability through a lateral accelerometer, steer angle sensor and yaw rate sensor. If spinout or drift out is detected, the vehicle control system will selectively apply brakes to the individual wheel ends of the front and rear axles to bring the vehicle back to its intended direction.</p> <p>ANTI-LOCK BRAKE SYSTEM The vehicle will be equipped with a Wabco 4S4M, anti-lock braking system. The ABS will provide a four (4) channel anti-lock braking control on both the front and rear wheels. A digitally controlled system that utilizes microprocessor technology will control the anti-lock braking system. Each wheel will be monitored by the system. When any wheel begins to lockup, a signal will be sent to the control unit. This control unit will then reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.</p> <p>AUTOMATIC TRACTION CONTROL An anti-slip feature will be included with the ABS. The Automatic Traction Control will be used for traction in poor road and weather conditions. The Automatic Traction Control will act as an electronic differential lock that will not allow a driving wheel to spin, thereby supplying traction at all times. The ABS electronic control unit (ECU) will work with the engine ECU, sharing information concerning wheel slip. Engine ECU will use information to control engine speed, allowing only as much throttle application as required for the available traction, regardless of how much the driver is asking for. An "off road traction" switch will be provided on the instrument panel. Activation of the switch will allow additional tire slip to let the truck climb out and get on top of deep snow or mud.</p>
0030185	Brakes, Knorr/Bendix 17", Disc, Front, TAK-4	<p>BRAKES The service brake system will be full air type. The front brakes will be Knorr/Bendix disc type with a 17.00" ventilated rotor for improved stopping distance. The brake system will be certified, third party inspected, for improved stopping distance.</p>
0627930	Brakes, Bendix, Cam, Rear, 16.50 x 8.63"	<p>The rear brakes will be Bendix™ 16.50" x 8.63" cam operated with automatic slack adjusters.</p>
0735527	Air Compressor, Brake, Wabco 26.8 CI, Paccar	<p>AIR COMPRESSOR, BRAKE SYSTEM The air compressor will be a Wabco single piston compressor with a 26.8 CI displacement.</p>
0000785	Brake Reservoirs, Three	<p>BRAKE SYSTEM The brake system will include: Bendix® dual brake treadle valve Heated automatic moisture ejector on air dryer Total air system capacity of 4,362 cubic inches Two (2) air pressure gauges with a red warning light and an audible alarm, that activates when air pressure falls below 60 psi Spring set parking brake system Parking brake operated by a push-pull style control valve A parking "brake on" indicator light on instrument panel Park brake relay/inversion and anti-compounding valve, in conjunction with a double check valve system, with an automatic spring brake application at 40 psi A pressure protection valve to prevent all air operated accessories from drawing air from the air system when the system pressure drops below 80 psi (550 kPa) 1/4 turn drain valve on each air tank The air tank will be primed and painted to meet a minimum 750 hour salt spray test. The air tanks will be same as frame color . To reduce the effects of corrosion, the air tank will be mounted with stainless steel brackets.</p>
0568012	Air Dryer, Wabco System Saver 1200, Heater, 2010	<p>BRAKE SYSTEM AIR DRYER The air dryer will be WABCO System Saver 1200 with spin-on coalescing filter cartridge and 100 watt heater.</p>
0000790	Brake Lines, Nylon	<p>BRAKE LINES Color-coded nylon brake lines will be provided. The lines will be wrapped in a heat protective loom in the chassis areas that are subject to excessive heat.</p>

0617799	Inlet/Outlet, Air, w/Disconnect Fitting, 1/4 Turn Valve, Location	<p>AIR INLET/OUTLET</p> <p>One (1) air inlet/outlet will be installed with the female coupling located driver step well. This system will tie into the "wet" tank of the brake system and include a check valve in the inlet line and an 85 psi pressure protection valve in the outlet line. The air outlet will be controlled by a 1/4 turn valve.</p> <p>A mating male fitting will be provided with the loose equipment.</p> <p>The air inlet will allow a shoreline air hose to be connected to the vehicle. This will allow station air to be supplied to the brake system of the vehicle to insure constant air pressure.</p>
0660232	Drain, Remote Air Tank, Single Valve, All tanks, Location	<p>REMOTE AIR TANK DRAIN</p> <p>There will be a single remote drain valve provided to drain all air supply reservoirs at the same time. The drain valve will be actuated from the side of the apparatus. The drain valve will be located under LS3. Automatic valves will be provided to isolate the reservoirs from one another when the drain is closed.</p>
0808514	Engine, Paccar MX, 510HP, 1850 lb- ft W/OBD, EPA 2027, Velocity	<p>ENGINE</p> <p>The chassis will be powered by an electronically controlled engine as described below:</p> <p>Make: Paccar Model: MX Power: 510 hp at 1600rpm Torque: 1850 lb-ft at 1000rpm Governed Speed: 1900 rpm Emissions Certification: EPA 2027 Fuel: Diesel Cylinders: Six (6) Displacement: 13.7L Starter: DP60 Fuel Filters: Dual cartridge style with check valve, water separator, and water in fuel sensor The engine will include On-board diagnostics (OBD), which provides self diagnostic and reporting. The system will give the owner or repair technician access to state of health information for various vehicle sub systems. The system will monitor vehicle systems, engine and after treatment. The system will illuminate a malfunction indicator light on the dash console if a problem is detected.</p>
0811409	Not Required, Engine Contingency Adjustment	
0001244	High Idle w/Electronic Engine, Custom	<p>HIGH IDLE</p> <p>A high idle switch will be provided, inside the cab, on the instrument panel, that will automatically maintain a preset engine rpm. A switch will be installed, at the cab instrument panel, for activation/deactivation.</p> <p>The high idle will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided, adjacent to the switch. The light will illuminate when the above conditions are met. The light will be labeled "OK to Engage High Idle."</p>
0735687	Engine Brake, Fully Integrated, Paccar MX13 Engine	<p>ENGINE BRAKE</p> <p>The compression release brake option is a fully integrated MX engine braking system. It utilizes the turbocharger and backpressure valve, but adds in a hydraulically operated compression brake to increase overall retarding power.</p> <p>To maximize the effectiveness of the compression brake the MX engine brake system works in conjunction with the turbocharger and back pressure valve.</p> <p>The driver will be able to turn the engine brake system on/off and have a high, medium and low setting</p>
0733852	Clutch, Fan, Air Actuated, Paccar, VEL	<p>CLUTCH FAN</p> <p>A fan clutch will be provided. The fan clutch will be automatic when the pump transmission is in "Road" position, and constantly engaged when in "Pump" position.</p>
0734434	Air Intake, Water & Ember Screen, Paccar, VEL	<p>ENGINE AIR INTAKE</p> <p>The engine air intake will be located above the engine cooling package. It will draw fresh air from the front of the apparatus through the radiator grille.</p> <p>The ember separator is designed to prevent road dirt and recirculating hot air from entering the engine.</p> <p>The ember separator will be easily accessible by tilting the cab.</p>

0814375	Exhaust System, Horizontal, Right Side	EXHAUST SYSTEM	<p>The exhaust system will be stainless steel from the turbo to the engine's aftertreatment device. The exhaust system will include an aftertreatment device to meet current EPA standards. An insulation wrap will be provided on all exhaust pipe between the turbo and the aftertreatment device to minimize the transfer of heat to the cab.</p> <p>The exhaust will terminate horizontally ahead of the right side rear wheels and will be flush with the body rub rail . The exhaust pipes will be aluminized steel.</p> <p>There will be an aluminized steel exhaust diffuser reduced to 5.00" in the center to accommodate the fire department's air recovery system with a standard straight tip on the end provided to reduce the temperature of the exhaust as it exits. Heat deflector shields will be provided to isolate chassis and body components from the heat of the tailpipe diffuser.</p>
0734440	Radiator, VEL, Paccar	RADIATOR	<p>The radiator and the complete cooling system will meet or exceed the current edition of applicable NFPA and engine manufacturer cooling system standards.</p> <p>For maximum corrosion resistance and cooling performance, the entire radiator core will be constructed using long life aluminum alloy. The radiator core will consist of aluminum fins, having a serpentine design, brazed to aluminum tubes.</p> <p>Supply tank will be made of heavy duty glass-reinforced nylon and the return tank will be made of aluminum. Both tanks will be crimped onto the core assembly using header tabs and a compression gasket to complete the radiator core assembly. There will be a full steel frame around the inserts to enhance cooling system durability and reliability.</p> <p>The radiator will be compatible with commercial antifreeze solutions.</p> <p>The radiator assembly will be isolated from the chassis frame rails with rubber isolators to prevent the development of leaks caused by twisting or straining when the apparatus operates over uneven terrain.</p> <p>The radiator will include a de-aeration/expansion tank. For visual coolant level inspection, the radiator will have a built-in sight glass. The radiator will be equipped with a 15 psi pressure relief cap.</p> <p>A drain port will be located at the lowest point of the cooling system and/or the bottom of the radiator to permit complete flushing of the coolant from the system.</p> <p>Shields or baffles will be provided to prevent recirculation of hot air to the inlet side of the radiator.</p>
0511425	Cooling Hoses, Rubber	COOLANT LINES	<p>Gates, or Goodyear, rubber hose will be used for all engine coolant lines installed by the chassis manufacturer.</p> <p>Hose clamps will be stainless steel "constant torque type" to prevent coolant leakage. They will react to temperature changes in the cooling system and expand or contract accordingly while maintaining a constant clamping pressure on the hose.</p>
0818487	SP Fuel Tank, 50 Gallon, Left Side Fill, Common Door, w/ Air Suspension	FUEL TANK	<p>A 50 gallon fuel tank will be provided and mounted at the rear of the chassis. The tank will be constructed of 12-gauge, hot rolled steel. It will be equipped with swash partitions and a vent. To eliminate the effects of corrosion, the fuel tank will be mounted with stainless steel straps (no exception).</p> <p>A 0.75" drain plug will be provided in a low point of the tank for drainage.</p> <p>A fill inlet will be located on the left hand side of the body and be covered with a hinged, spring loaded, stainless steel door that is marked "Ultra Low Sulfur - Diesel Fuel Only."</p> <p>A 0.50" diameter vent will be provided running from top of tank to just below fuel fill inlet.</p> <p>The tank will meet all FHWA 393.67 requirements including a fill capacity of 95 percent of tank volume.</p>
0001129	Lines, Fuel		All fuel lines will be provided as recommended by the engine manufacturer.
0733463	SP DEF Tank, 6.0 Gallon, LS Fill, Rear of Axle, Common Door, Paccar	DIESEL EXHAUST FLUID TANK	<p>A 6.0 gallon diesel exhaust fluid (DEF) tank will be provided and mounted in the driver's side body rearward of the rear axle.</p> <p>A fill inlet will be provided and marked "Diesel Exhaust Fluid Only". The fill inlet will be located adjacent to the engine fuel inlet behind a common hinged, spring loaded, painted door on the driver side of the vehicle.</p> <p>The selector flap within the common area for the fuel and DEF fills will have a flush lift & turn latch. The latch will be provided so that the selector flap will be latched when the flap is in the position over the DEF fill.</p> <p>The tank will meet the engine manufacturers requirement for 10 percent expansion space in the event of tank freezing.</p> <p>The tank will include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.</p>
0552793	Not Required, Fuel Priming Pump		
0552567	Shutoff Valve, Fuel Line @ Fuel Tank	FUEL SHUTOFF	A shutoff valve will be installed in the fuel line, at the fuel tank.

0699437	Cooler, Chassis Fuel, Not Req'd.	
0690880	No Selection Required From This Category	
0887546	Trans, Allison 6th Gen, 4000 EVS P, w/Prognostics, Imp/Vel/SFR/Enf	<p>TRANSMISSION An Allison 6th generation, Model EVS 4000P, electronic, torque converting, automatic transmission will be provided. The transmission will be equipped with prognostics to monitor oil life, filter life, and transmission health. A wrench icon on the shift selector's digital display will indicate when service is due. Two (2) PTO openings will be located on left side and top of converter housing (positions 8 o'clock and 1 o'clock). A transmission temperature gauge with an amber light and buzzer will be installed on the cab instrument panel.</p>
0625331	Transmission, Shifter, 6-Spd, Push Button, 4000 EVS	<p>TRANSMISSION SHIFTER A six (6)-speed push button shift module will be mounted to right of driver on console. Shift position indicator will be indirectly lit for after dark operation. The transmission ratio will be: 1st 3.51 to 1.00 2nd 1.91 to 1.00 3rd 1.43 to 1.00 4th 1.00 to 1.00 5th 0.75 to 1.00 6th 0.64 to 1.00 R 4.80 to 1.00</p>
0684459	Transmission Oil Cooler, Modine, External	<p>TRANSMISSION COOLER A Modine plate and fin transmission oil cooler will be provided using engine coolant to control the transmission oil temperature.</p>
0801876	Fluid, 4000 Series Trans, Allison Approved TES-668 Synthetic, IPOS, Custom	<p>TRANSMISSION FLUID The transmission will be provided with TranSynd, or other Allison approved TES-668 heavy duty synthetic transmission fluid.</p>
0001375	Driveline, Spicer 1810	<p>DRIVELINE Drivelines will be a heavy-duty metal tube and be equipped with Spicer® 1810 universal joints. The shafts will be dynamically balanced before installation. A splined slip joint will be provided in each driveshaft where the driveline design requires it. The slip joint will be coated with Glidecoat® or equivalent.</p>
0734211	Steering, Sheppard M110 w/Tilt, TAK-4, Paccar Pump, w/Cooler, Paccar	<p>STEERING Dual Sheppard, Model M110, steering gears, with integral heavy-duty power steering, will be provided. For reduced system temperatures, the power steering will incorporate an air to oil cooler and Paccar hydraulic pump with integral pressure and flow control. All power steering lines will have wire braded lines with crimped fittings. A tilt and telescopic steering column will be provided to improve fit for a broader range of driver configurations.</p>
0001544	Not Required, Steering Assist Cylinder on Front Axle	
0509230	Steering Wheel, 4 Spoke without Controls	<p>STEERING WHEEL The steering wheel will be 18.00" in diameter, have tilting and telescoping capabilities, and a 4-spoke design.</p>
0690274	Logo/Emblem, on Dash	<p>LOGO AND CUSTOMER DESIGNATION ON DASH The dash panel will have an emblem containing the Pierce logo and customer name. The emblem will have three (3) rows of text for the customer's department name. There will be a maximum of eight (8) characters in the first row, 11 characters in the second row and 11 characters in the third row. The first row of text will be: SOUTH The second row of text will be: COUNTY The third row of text will be: FIRE</p>

0819338	SP Bumper, 13" Extended, Steel Painted, 12" High, Imp/Vel	<p>BUMPER A 1-piece bumper manufactured from 0.25" formed steel with a 0.38" bend radius will be provided. The bumper will be a minimum of 12.00" high with a 1.50" top and bottom flange, and will extend 16.00" from the face of the cab. The bumper will be 102.00" wide with 45 degree corners and side plates. The bumper will be metal finished and painted job color. To provide adequate support strength, the bumper will be mounted directly to the front of the C channel frame. The frame will be a bolted modular extension frame constructed of 50,000 psi tensile steel.</p> <p>GRAVEL PAN A gravel pan, constructed of bright aluminum treadplate, will be furnished between the bumper and the cab face. The pan will be properly supported from the underside to prevent flexing and vibration. Documentation will be provided, upon request to show that the options selected have been engineered for fit up and approval for this modular bumper extension. A chart will be provided to indicate the option locations and will include but not be limited to the following options: air horns, mechanical sirens, speakers, hose trays with hose capacities, winches, lights, discharge and suction connections.</p>
0616511	Tray, Hose, Center, 13" Bumper, Outside Air Horns, Imp/Vel	<p>CENTER HOSE TRAY A hose tray, constructed of aluminum, will be placed in the center of the bumper extension. The tray will have a capacity of 100' of 1.50" double jacket cotton-polyester hose. Black rubber grating will be provided at the bottom of the tray. Drain holes are also provided.</p>
0630809	Cover, Aluminum Treadplate, One (1) D-Ring Latch, Hose Tray, Notched	<p>Center Hose Tray Cover A bright aluminum treadplate cover will be provided over the center hose tray. The cover will be "notched" allowing the hose to be pre connected to hose connection. The cover will be attached with a stainless steel hinge. A D-ring latch will secure the cover in the closed position and a pneumatic stay arm will hold the cover in the open position. The arm will be LS.</p>
0510226	Lift & Tow Package, Imp/Vel, AXT, Dash CF	<p>LIFT AND TOW MOUNTS Mounted to the frame extension will be lift and tow mounts. The lift and tow mounts will be designed and positioned to adapt to certain tow truck lift systems. The lift and tow mounts with eyes will be painted the same color as the frame.</p>
0032932	Tow Eyes, Painted, Extended Out Front of Bumper	<p>TOW EYES Two (2) tow eyes will be mounted through the front face of the bumper. The inner and outer edges of the tow eyes will have a .25" radius. The tow eyes will be mounted directly to the bumper frame. Cutouts will be provided in the front face of the stainless steel bumper to allow the tow eyes to extend out the front. The tow eyes will be designed and positioned to allow up to a 9,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow eyes will not be used for lifting of the apparatus. The tow eyes will be painted job color.</p>
0532853	Recess, Side Zone Warning Light, In Side of Extended Bumper	<p>SIDE ZONE LIGHT MOUNTING The front lower warning lights on each side will be recessed into the side of the bumper extension to protect the light from damage. The recessed bracket will be made of painted smooth aluminum.</p>
0692444	Recess, Front/Side Warning Light, In Angled Corner of Extended Bumper	<p>SIDE ZONE LIGHT MOUNTING The front warning lights on each side will be recessed into the angled portion of the bumper extension to protect the light from damage. The recessed bracket will be made of painted smooth aluminum.</p>
0645453	Travel Stop, Front Outlet Swivel, Location	<p>SWIVEL STOP Installed on the front bumper extension will be a stainless steel rod to limit the travel of the front outlet swivel. The travel stop will be installed to keep it from hitting the R/S top of bumper. One (1) stainless steel rod will be threaded into the bumper deck.</p>
0660435	Coating, Top Flange, Front Bumper, Outside Exterior, Rhino Lining, Black	<p>RHINO COATING - FRONT BUMPER Protective black Rhino Linings® coating will be provided on the outside exterior of the top front bumper flange. It will not be sprayed on the underside of the flange. The lining will be properly installed by an authorized Rhino Linings® dealer.</p>

CAB

The Velocity cab will be designed specifically for the fire service and will be manufactured by Pierce Manufacturing.

To provide quality at the source and single source customer support, the cab will be built by the apparatus manufacturer in a facility located on the manufacturer's premises.

For reasons of structural integrity and enhanced occupant protection, the cab will be of heavy duty design, constructed to the following minimal standards.

The cab will have 12 main vertical structural members located in the A-pillar (front cab corner posts), B-pillar (side center posts), C-pillar (rear corner posts) and rear wall areas. The A-pillar will be constructed of 0.25" heavy wall extrusions joined by a solid A356-T6 aluminum joint casting. The B-pillar and C-pillar will also be constructed from 0.25" heavy wall extrusions. The rear wall will be constructed of two (2) 4.00" x 2.00" outer aluminum extrusions and two (2) 3.00" x 2.00" inner aluminum extrusions. All main vertical structural members will run from the floor to 7.50" x 3.50" x 0.125" thick roof extrusions to provide a cage-like structure with the A-pillar and roof extrusions being welded into a 0.75" thick corner casting at each of the front corners of the roof assembly.

The front of the cab will be constructed of a 0.25" thick firewall, covered with a 0.125" front skin (for a total thickness of 0.38"), and reinforced with 24.50" wide x 10.00" deep x 0.50" thick supports on each side of the engine tunnel. The cross-cab support will be welded to the A-pillar, 0.25" firewall, and engine tunnel, on the left and right sides.

The cab floors will be constructed of 0.1875" thick aluminum plate and reinforced at the firewall with an additional 0.25" thick cross-floor support providing a total thickness of 0.44" of structural material at the front floor area. The front floor area will also be supported with three (3) 0.50" plates bolted together that also provides the mounting point for the cab lift. This tubing will run from the front of the cab to the 0.1875" thick engine tunnel, creating the structure to support the forces created when lifting the cab.

The cab will be a full-tilt style. A 3-point cab mount system with rubber isolators will improve ride quality by isolating chassis vibrations from the cab.

The crew cab will be a totally enclosed design with the interior area completely open to improve visibility and verbal communication between the occupants.

The centerline of front axle to the rear of the cab will be 70.00" long.

The overall height (from the cab roof to the ground) will be approximately 102.00". The overall height listed will be calculated based on a truck configuration with the lowest suspension weight ratings, the smallest diameter tires for the suspension, no water weight, no loose equipment weight, and no personnel weight. Larger tires, wheels, and suspension will increase the overall height listed.

The cab will have an interior width of not less than 93.50". The driver and passenger seating positions will have a minimum 24.00" clear width at knee level.

To reduce injuries to occupants in the seated positions, proper head clearance will be provided. The floor-to-ceiling height inside the forward cab will be no less than 60.25". The floor-to-ceiling height inside the crew cab will be no less than 52.95" in the center position and 58.75" in the outboard positions.

The crew cab will measure a minimum of 57.50" from the rear wall to the backside of the engine tunnel (knee level) for optimal occupant legroom.

FENDER LINERS

Full-circular, aluminum inner fender liners in the wheel wells will be provided.

PANORAMIC WINDSHIELD

A one (1)-piece, safety glass windshield with more than 2,802 square inches of clear viewing area will be provided. The windshield will be full width and will provide the occupants with a panoramic view. The windshield will consist of three (3) layers: the outer light, the middle safety laminate, and the inner light. The 0.114" thick outer light layer will provide superior chip resistance. The middle safety laminate layer will prevent the windshield glass pieces from detaching in the event of breakage. The inner light will provide yet another chip resistant layer. The cab windshield will be bonded to the aluminum windshield frame using a urethane adhesive. A custom frit pattern will be applied on the outside perimeter of the windshield for a finished automotive appearance.

WINDSHIELD WIPERS

Three (3) electric windshield wipers with a washer, in conformance with FMVSS and SAE requirements, will be provided. The wiper blades will be 21.65" long and together will clear a minimum of 1,783 square inches of the windshield for maximum visibility in inclement weather. The windshield washer fluid reservoir will be located at the front of the vehicle and be accessible through the access hood for simple maintenance.

FAST SERVICE ACCESS FRONT TILT HOOD

A full-width access hood will be provided for convenient access to engine coolant, steering fluid, wiper fluid, cab lift controls, headlight power modules, and ember separator. The hood will also provide complete access to the windshield wiper motor and components. The hood will be contoured to provide a sleek, automotive appearance. The hood will be constructed of two (2) fiberglass panels bonded together and will include reinforcing ribs for structural integrity. The hood will include air cylinders to hold the hood in open and closed positions, and a heavy duty latch system that will meet FMVSS 113 (Hood Latch System). The spring-loaded hood latch will be located at the center of the hood with a double-action release lever located behind the Pierce logo. The two (2)-step release requires the lever first be pulled to the driver side until the hood releases from the first latch (primary latch) then to the passenger side to fully release the hood (secondary latch).

ENGINE TUNNEL

To provide structural strength, the engine tunnel sidewalls will be constructed of 0.50" aluminum plate that is welded to both the 0.25" firewall and 0.38" heavy wall extrusion under the crew cab floor. To maximize occupant space, the top edges will be tapered.

The engine tunnel will be insulated for protection from heat and sound. Perforated foil faced insulation will be over a 1.00" thick closed cell foam affixed with pressure sensitive adhesive and further secured with mechanical fasteners. Thermal rating for this insulation will be -40 degrees Fahrenheit to 300 degrees Fahrenheit. The noise insulation keeps the dBA level within the limits stated in the current edition of applicable NFPA standards.

0887600	Cab Insulation, Impel/Velocity FR	<p>INTERIOR CAB INSULATION The cab will include 1.50" insulation in the ceiling, 3.00" insulation in the side walls, and 2.00" insulation in the rear wall to maximize acoustic absorption and thermal insulation.</p>
0677478	Rear Wall, Exterior, Cab, Aluminum Treadplate	<p>CAB REAR WALL EXTERIOR COVERING The exterior surface of the rear wall of the cab will be overlaid with bright aluminum treadplate except for areas that are not typically visible when the cab is lowered.</p>
0122466	Cab Lift, Elec/Hyd, w/Manual Override, Imp/Vel	<p>CAB LIFT A hydraulic cab lift system will be provided, consisting of an electric-powered hydraulic pump, fluid reservoir, dual lift cylinders, remote cab lift controls and all necessary hoses and valves. The hydraulic pump will have a backup manual override, for use in the event of an electrical failure. The cab lift controls will be located at the driver side front of the cab, easily accessible under the full width front access hood. The controls will include a permanently mounted raise/lower switch. For enhanced visibility during cab tilt operations, a remote control tether with on/off switch will be supplied on a coiled cord that will extend from 2.00' (coiled) to 6.00' (extended). The cab will be capable of tilting 42 degrees and 80 degrees with crane assist to accommodate engine maintenance and removal. The cab pivots will be located 46.00" apart to provide stability while tilting the cab. The rear of the cab will be locked down by a two (2)-point, automatic, hydraulic, double hook mechanism that fully engages after the cab has been lowered (self-locking). The dual 2.25" diameter hydraulic cylinders will be equipped with a velocity fuse that protects the cab from accidentally descending when the cab is in the tilt position. For increased safety, a redundant mechanical stay arm will be provided that must be manually put in place on the driver side between the chassis and cab frame when cab is in the raised position. This device will be manually stowed to its original position before the cab can be lowered. Cab Lift Interlock The cab lift safety system will be interlocked to the parking brake. The cab tilt mechanism will be active only when the parking brake is set and the ignition switch is in the on position. If the parking brake is released, the cab tilt mechanism will be disabled.</p>
0550343	Special Circuit, Cab Tilt w/o Ignition Switch	<p>CAB TILT CIRCUIT The cab tilt mechanism will be operational with the battery switch on and with parking brake set.</p>
0751126	Grille, Bright Finished, Painted Mesh Screen, Front of Cab, Impel/Velocity	<p>GRILLE An aluminum mesh grille screen, inserted behind a formed bright finished grille surround, will be provided on the front center of the cab, and will serve as an air intake to the radiator. The mesh screen will be painted black #101.</p>
0527032	Trim, S/S Band, Across Cab Face, Rect Lights, Velocity	<p>FRONT CAB TRIM A band of 22 gauge brushed stainless steel trim will be installed across the front of the cab, from door hinge to door hinge. The trim band will be centered on the head lights and applied with two (2)-sided tape. A 0.625" self adhesive trim strip will be applied around the perimeter of the trim band. There will be brushed stainless steel corner covers provided over the painted cab corner where the cab turn signals are located.</p>
0015440	No Chrome Molding, On side of cab	
0569263	Mirrors, Retrac, West Coast Style, Remote, w/Remote Convex	<p>MIRRORS A Retrac Aerodynamic, Model 613295, dual vision, motorized, west coast style mirror with chrome finish will be mounted on each side of the front cab door with spring loaded retractable arms. The flat glass and convex glass will be adjustable with a remote control within reach of the driver.</p>

0651313	Door, Half-Height, Velocity FR 4-Door Cab, Level Roof	<p>CAB DOORS</p> <p>The forward cab and crew cab doors will be the half-height style door. To enhance entry and egress to the cab, the forward cab doors will be a minimum of 43.59" wide x 64.71" high. The crew cab doors will measure a minimum of 37.87" wide x 64.71" high.</p> <p>The forward cab and crew cab doors will be constructed of extruded aluminum with a nominal material thickness of 0.125". The exterior door skins will be constructed from 0.090" aluminum. The forward cab door windows will include a 7.50" high x 10.00" wide drop area at the front to enhance visibility.</p> <p>A customized, vertical, pull-down type door handle will be provided on the exterior of each cab door. The finish of the door handle will be chrome/black. The exterior handle will be designed specifically for the fire service to prevent accidental activation, and will provide 4.00" wide x 2.00" deep hand clearance for ease of use with heavy gloved hands.</p> <p>Each door will also be provided with an interior flush, open style paddle handle that will be readily operable from fore and aft positions, and be designed to prevent accidental activation. The interior handles will provide 4.00" wide x 1.25" deep hand clearance for ease of use with heavy gloved hands.</p> <p>The cab doors will be provided with both interior (rotary knob) and exterior (keyed) locks exceeding FMVSS standards. The keys will be Model 751. The locks will be capable of activating when the doors are open or closed. The doors will remain locked if locks are activated when the doors are opened, then closed.</p> <p>A full length, heavy duty, stainless steel, piano-type hinge with a 0.38" pin and 11 gauge leaf will be provided on all cab doors. There will be double automotive-type rubber seals around the perimeter of the door framing and door edges to ensure a weather-tight fit.</p> <p>A chrome grab handle will be provided on the inside of each cab and crew cab door.</p> <p>A red webbed grab handle will be installed on the crew cab door stop strap. The grab handles will be securely mounted.</p> <p>The cab steps at each cab door location will be located below the cab doors and will be exposed to the exterior of the cab.</p>
0655511	Door Panel, Brushed Stainless Steel, Impel/Velocity 4-Door Cab	<p>Door Panels</p> <p>The inner cab door panels will be constructed out of brushed stainless steel. The cab door panels will be removable.</p>
0648267	Face Plate/s, Blank, Lower Instrument Panel, Imp/Vel, Dash CF	<p>BLANK FACE PLATE</p> <p>Blank face plate/s will be provided, in place of standard storage pockets, in all available locations on the lower instrument panel console.</p>
0667902	Controls, Electric Windows, All Cab Doors, Impel/Velocity FR	<p>ELECTRIC WINDOW CONTROLS</p> <p>Each cab entry door will be equipped with an electrically operated tempered glass window. A window control panel will be located on the door panel within easy reach of the respective occupant. Each switch will allow intermittent or auto down operation for ease of use. Auto down operation will be actuated by holding the window down switch for approximately 1 second. The driver control panel will contain a control switch for each cab door's window. All other door control panels will contain a single switch to operate the window within that door.</p> <p>The window switches will be connected directly to the battery power. This allows the windows to be raised and lowered when the battery switch is in the off position.</p>
0555485	Steps, 4-Door Full Tilt Cab, Imp/Vel	<p>CAB STEPS</p> <p>The forward cab and crew cab access steps will be a full size two (2) step design to provide largest possible stepping surfaces for safe ingress and egress. The bottom steps will be designed with a grip pattern punched into bright aluminum treadplate material to provide support, slip resistance, and drainage. The bottom steps will be a bolt-in design to minimize repair costs should they need to be replaced. The forward cab steps will be a minimum 31.00" wide, and the crew cab steps will be 24.25" wide with an 8.00" minimum depth. The inside cab steps will not exceed 18.00" in height and be limited to two (2) steps.</p>
0770200	Handrail, Exterior, Hansen, Knurled, Alum, LED Backlit, 4-Door Cab	<p>CAB EXTERIOR HANDRAILS</p> <p>A Hansen knurled aluminum handrail will be provided adjacent to each cab and crew cab door opening to assist during cab ingress and egress. Each handrail will be provided with blue LED lights. The lights will be activated when the parking light switch is activated and the parking brake is applied. The LED lights may be load managed.</p>
0892637	Lights, Cab & Crw Cab Acs Stps, P25, LED w/Bezel, 1Lt Per Step	<p>STEP LIGHTS</p> <p>There will be four (4) white P25 LED step lights provided. The lights will be installed at each cab and crew cab door, one (1) per step. The lights will be located in the driver side front doorstep, driver side crew cab doorstep, passenger side front doorstep and passenger side crew cab doorstep.</p> <p>In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15.00" x 15.00" square placed 10.00" below the light and a minimum of 1.5 fc covering an entire 30.00" x 30.00" square at the same 10.00" distance below the light.</p> <p>The light(s) will have a chrome housing.</p> <p>The lights will be activated when the adjacent door is opened.</p>
0002140	Fenders, S/S on Cab	<p>FENDER CROWNS</p> <p>Stainless steel fender crowns will be installed at the cab wheel openings.</p>

0630056	SP	Window, Side of C/C, Fixed, 10.25" H, Above EMS, Imp/Vel	<p>CREW CAB WINDOWS One (1) fixed window with tinted glass will be provided on each side of the cab, to the rear of the front cab door. The windows will be sized to enhance light penetration into the cab interior. The windows will measure approximately 21.00" wide x 10.25" high.</p>
0566382		Not Required, Trim, Cab Side Windows, Velocity	
0509286		Not Required, Windows Rear of Crew Cab, Imp/Vel	
0558334		Not Required, Trim, Cab Rear Windows, No Rear Windows	
0786279		Window Tint, Crew Cab Door, Right Side, Privacy Dark Gray	<p>RIGHT SIDE ROLLUP CREW CAB DOOR WINDOW TINT The rollup window in the right side crew cab door will be tinted privacy dark gray.</p>
0786290		Window Tint, Crew Cab Door, Left Side, Privacy Dark Gray	<p>LEFT SIDE ROLLUP CREW CAB DOOR WINDOW TINT The rollup window in the left side crew cab door will be tinted privacy dark gray.</p>
0721071		Compt, Storage, 10.71 W x 30 H x 14 D, (1) Ea Side C/C, Sgl Pan, Imp/Vel	<p>STORAGE COMPARTMENTS Provided on each side of the cab, to the rear of the crew cab access doors, will be a storage compartment. The compartments will be 10.71" wide x 30.00" high x 14.00" deep. There will be two (2) single pan doors painted to match the cab exterior with a locking D-ring latch with #751 key, one (1) on each side of the cab. A pneumatic stay arm for each exterior door will be provided as a door stop. The compartment interior will be painted to match the cab interior. Compartment Light There will be two (2) white LED strip lights provided, one (1) horizontally above each compartment door opening.</p>
0123686		Drip Rail, Cab Roof, Impel/Velocity/Velocit SLT	<p>CAB ROOF DRIP RAIL For enhanced protection from inclement weather, a drip rail will be furnished on the sides of the cab. The drip rail will be constructed of bright polished extruded aluminum, and be bonded to the sides of the cab. The drip rail will extend the full length of the cab roof.</p>
0199285		Visor, Exterior, Vel/Imp	<p>EXTERIOR VISOR The exterior sun visor will be a painted composite to match the job color. The five (5) forward facing marker lights will be mounted to the visor.</p>
0622531		Mounting Provisions, 3/16" Alum, Full Engine Tunnel, Color, Vel/Imp	<p>MOUNTING PLATE ON ENGINE TUNNEL Equipment installation provisions will be installed on the engine tunnel. A .188" smooth aluminum plate will be bolted to the top surface of the engine tunnel. The plate will be located to the left of the officer and on the rear of the tunnel. It will follow the contour of the engine tunnel and will run the entire length of the engine tunnel. The plate will be spaced off the engine tunnel .75" to allow for wire routing below the plate. The mounting surface will be fire smoke gray, vinyl texture paint.</p>
0657250		Tray, Slideout, Alum, Sides, MDT Bracket, Recessed Dash, Officer	<p>COMPUTER MOUNTING TRAY There will be one (1) sliding aluminum tray located forward of the officer. The tray will be as wide as possible in the dash panel recess. The tray will be painted to match the cab interior.</p>

0748680	Cab Interior, Vinyl, Painted Walls, Imp/Vel FR, CARE	<p>CAB INTERIOR</p> <p>With safety as the primary objective, the wrap-around style cab instrument panel will be designed with unobstructed visibility to instrumentation. The dash layout will provide the driver with a quick reference to gauges that allows more time to focus on the road.</p> <p>The center console will be a high impact ABS polymer and will be easily removable.</p> <p>The passenger side dashboard will be constructed of painted aluminum for durability and low maintenance. For enhanced versatility, the passenger side dash will include a flat working surface.</p> <p>To provide optional (service friendly) control panels, switches and storage modules, a painted aluminum overhead console will also be provided.</p> <p>To complete the cab front interior design, painted aluminum modesty panels will be provided under the dash on both sides of the cab. The driver side modesty panel will provide mounting for the battery switch and diagnostic connectors, while the passenger side modesty panel provides a glove box, and ground access to the main electrical distribution panel via quick quarter turn fasteners.</p> <p>To provide a deluxe automotive interior, the engine tunnel will be covered by leather grain vinyl that is resistant to oil, grease, and mildew. For durability and ease of maintenance, the cab interior side walls will be painted aluminum. The rear wall will be painted aluminum.</p> <p>The headliner will be installed in both forward and rear cab sections. The headliner panel will be a composition of an aluminum panel covered with a sound barrier and upholstery.</p> <p>The cab structure will include designated raceways for electrical harness routing from the front of the cab to the rear upper portion of the cab. Raceways will be extruded in the forward door frame, floor, walls and overhead in the area where the walls meet the ceiling. The raceways located in the floor will be covered by aluminum extrusion, while the vertical and overhead raceways will be covered by painted aluminum covers. The raceways will improve harness integrity by providing a continuous harness path that eliminates wire chafing and abrasion associated with exposed wiring or routing through drilled metal holes. Harnesses will be laid in place.</p> <p>CAB INTERIOR UPHOLSTERY</p> <p>The cab interior upholstery will be 36 oz dark silver gray vinyl. All cab interior materials will meet FMVSS 302 (flammability of interior materials).</p>
0667943	Cab Interior, Paint Color, Impel/Velocity FR	<p>CAB INTERIOR PAINT</p> <p>The following metal surfaces will be painted black, vinyl textured paint:</p> <ul style="list-style-type: none"> Modesty panel in front of driver Vertical surface of dash in front of the officer (not applicable for recessed dash) Glove box in front of the officer (if applicable) Power distribution in front of the officer Rear heater vent panels <p>The remaining cab interior metal surfaces will be painted fire smoke gray, vinyl texture paint.</p>
0509532	Floor, Rubber Padded Cab & Crew Cab, Imp/Vel, Dash CF	<p>CAB FLOOR</p> <p>The cab and crew cab floor areas will be covered with Polydamp™ acoustical floor mat consisting of a black pyramid rubber facing and closed cell foam decoupler.</p> <p>The top surface of the material has a series of raised pyramid shapes evenly spaced, which offer a superior grip surface. Additionally, the material has a 0.25" thick closed cell foam (no water absorption) which offers a sound dampening material for reducing sound levels.</p>

DEFROST/AIR CONDITIONING SYSTEM

A ceiling mounted combination heater, defroster and air conditioning system will be installed in the cab above the engine tunnel area.

Cab Defroster

A 54,000 BTU heater-defroster unit with 690 SCFM of air flow will be provided inside the cab. The heater-defrost will be installed in the forward portion of the cab ceiling. Air outlets will be strategically located in the cab header extrusion per the following:

One (1) adjustable will be directed towards the left side cab window

One (1) adjustable will be directed towards the right side cab window

Six (6) fixed outlets will be directed at the windshield

The defroster will be capable of clearing 98 percent of the windshield and side glass when tested under conditions where the cab has been cold soaked at 0 degrees Fahrenheit for 10 hours, and a 2 ounce per square inch layer of frost/ice has been able to build up on the exterior windshield. The defroster system will meet or exceed SAE J382 requirements.

Cab/Crew Auxiliary Heater

There will be one (1) 31,000 BTU auxiliary heater with 560 SCFM of air flow provided in the left side rear facing seat riser with a dual scroll blower. An aluminum plenum incorporated into the cab structure used to transfer heat to the forward left side position.

Air Conditioning

A 13.10 cubic inch compressor will be installed on the engine.

A roof-mounted condenser with a 78,000 BTU output at 2,400 SCFM that meets and exceeds the performance specification will be installed on the cab roof. The condenser cover to be painted to match the cab roof.

The air conditioning system will be capable of cooling the average cab temperature from 100 degrees Fahrenheit to 75 degrees Fahrenheit at 50 percent relative humidity within 30 minutes. The cooling performance test will be run only after the cab has been heat soaked at 100 degrees Fahrenheit for a minimum of 4 hours.

The evaporator unit will be installed in the rear portion of the cab ceiling over the engine tunnel. The evaporator will include one (1) high performance heating core, one (1) high performance cooling core with (1) plenum directed to the front and one (1) plenum directed to the rear of the cab.

The evaporator unit will have a 52,000 BTU at 690 SCFM rating that meets and exceeds the performance specifications.

Adjustable air outlets will be strategically located on the forward plenum cover per the following:

Four (4) will be directed towards the seating position on the left side of the cab

Four (4) will be directed towards the seating position on the right side of the cab

Adjustable air outlets will be strategically located on the evaporator cover per the following:

Five (5) will be directed towards crew cab area

A high efficiency particulate air (HEPA) filter will be included for the system. Access to the filter cover will be hinged with two (2) thumb latches.

The air conditioner refrigerant will be R-134A and will be installed by a certified technician.

Climate Control

An automotive style controller will be provided to control the heat and air conditioning system within the cab. The controller will have three (3) functional knobs for fan speed, temperature, and air flow distribution (front to rear) control.

The system will control the temperature of the cab and crew cab automatically by pushing the center of the fan speed control knob. Rotate the center temperature control knob to set the cab and crew cab temperature.

The AC system will be manually activated by pushing the center of the temperature control knob. Pushing the center of the air flow distribution knob will engage the AC for max defrost, setting the fan speeds to 100 percent and directing all air flow to the overhead forward position.

Gravity Drain Tubes

Two (2) condensate drain tubes will be provided for the air conditioning evaporator. The drip pan will have two (2) drain tubes plumbed separately to allow for the condensate to exit the drip pan. No pumps will be provided.

The drain tubes will terminate under the cab, on the inboard side of the front wheelwells.

0639675

Sun Visor, Smoked Lexan, AXT,
Imp/Vel, Saber FR/Enforcer**SUN VISORS**

Two (2) smoked Lexan™ sun visors will be provided. The sun visors will be located above the windshield with one (1) mounted on each side of the cab.

There will be a black plastic thumb latch provided to help secure each sun visor in the stowed position.

0548173

Grab Handles, Driver and Passenger
Door Post, Imp/Vel**GRAB HANDLE**

A black rubber covered grab handle will be mounted on the door post of the driver side and passenger side cab door to assist in entering the cab. The grab handle will be securely mounted to the post area between the door and windshield.

0583938

Lights, Engine Compmt, Custom, Auto
Sw, W/in 3SC0CDCR, 3" LED, Trim**ENGINE COMPARTMENT LIGHTS**

There will be two (2) Whelen, Model 3SC0CDCR, 12 volt DC, 3.00" white LED light(s) with Whelen, Model 3FLANGEC, chrome flange kit(s) installed under the cab to be used as engine compartment illumination.

These light(s) will be activated automatically when the cab is raised.

0122516	Fluid Check Access, Imp/Vel	<p>ACCESS TO ENGINE DIPSTICKS</p> <p>For access to the engine oil and transmission fluid dipsticks, there will be a door on the engine tunnel, inside the crew cab. The door will be on the rear wall of the engine tunnel, on the vertical surface. The door will be flush with the wall of the engine tunnel.</p> <p>The engine oil dipstick will allow for checking only. The transmission dipstick will allow for both checking and filling. An additional port will be provided for filling the engine oil.</p> <p>The door will have a rubber seal for thermal and acoustic insulation. One (1) flush lift and turn latch will be provided on the access door.</p>
0583042	Side Roll and Frontal Impact Protection	<p>CAB SAFETY SYSTEM</p> <p>The cab will be provided with a safety system designed to protect occupants in the event of a side roll or frontal impact, and will include the following:</p> <p>A supplemental restraint system (SRS) sensor will be installed on a structural cab member behind the instrument panel. The SRS sensor will perform real time diagnostics of all critical subsystems and will record sensory inputs immediately before and during a side roll or frontal impact event.</p> <p>A slave SRS sensor will be installed in the cab to provide capacity for eight (8) crew cab seating positions.</p> <p>A fault-indicating light will be provided on the vehicle's instrument panel allowing the driver to monitor the operational status of the SRS system.</p> <p>A driver side front air bag will be mounted in the steering wheel and will be designed to protect the head and upper torso of the occupant, when used in combination with the 3-point seat belt.</p> <p>A passenger side knee bolster air bag will be mounted in the modesty panel below the dash panel and will be designed to protect the legs of the occupant, when used in combination with the 3-point seat belt.</p> <p>Air curtains will be provided in the outboard bolster of outboard seat backs to provide a cushion between occupant and the cab wall.</p> <p>Suspension seats will be provided with devices to retract them to the lowest travel position during a side roll or frontal impact event.</p> <p>Seat belts will be provided with pre-tensioners to remove slack from the seat belt during a side roll or frontal impact event.</p> <p>Frontal Impact Protection</p> <p>The SRS system will provide protection during a frontal or oblique impact event. The system will activate when the vehicle decelerates at a predetermined G force known to cause injury to the occupants. The cab and chassis will have been subjected, via third party test facility, to a crash impact during frontal and oblique impact testing. Testing included all major chassis and cab components such as mounting straps for fuel and air tanks, suspension mounts, front suspension components, rear suspensions components, frame rail cross members, engine and transmission and their mounts, pump house and mounts, frame extensions and body mounts. The testing provided configuration specific information used to optimize the timing for firing the safety restraint system. The sensor will activate the pyrotechnic devices when the correct crash algorithm, wave form, is detected.</p> <p>The SRS system will deploy the following components in the event of a frontal or oblique impact event:</p> <ul style="list-style-type: none"> Driver side front air bag Passenger side knee bolster air bag Air curtains mounted in the outboard bolster of outboard seat backs Suspension seats will be retracted to the lowest travel position Seat belts will be pre-tensioned to firmly hold the occupant in place <p>Side Roll Protection</p> <p>The SRS system will provide protection during a fast or slow 90 degree roll to the side, in which the vehicle comes to rest on its side. The system will analyze the vehicle's angle and rate of roll to determine the optimal activation of the advanced occupant restraints.</p> <p>The SRS system will deploy the following components in the event of a side roll:</p> <ul style="list-style-type: none"> Air curtains mounted in the outboard bolster of outboard seat backs Suspension seats will be retracted to the lowest travel position Seat belts will be pre-tensioned to firmly hold the occupant in place
0622619	Seating Capacity, 4 Seats	<p>SEATING CAPACITY</p> <p>The seating capacity of the vehicle (including tiller cab and belted seat positions in the rescue body) will be four (4).</p>
0697005	Seat, Driver, Pierce PS6, Premium, Air Ride, High Back, Safety, PRIMARY	<p>DRIVER SEAT</p> <p>A Pierce PS6® seat will be provided in the cab for the driver. The seat design will be a cam action type with air suspension. For increased convenience, the seat will include electric controls to adjust the rake (15 degrees), height (1.75" travel) and horizontal (7.00" travel) position. Electric controls will be located below the forward part of the seat cushion. To provide flexibility for multiple driver configurations, the seat will have a reclining back, adjustable from 20 degrees back to 45 degrees forward. Providing for maximum comfort, the seat back will be a high back style with manual lumbar adjustment lever, for lower back support, and will include minimum 7.50" deep side bolster pads for maximum support. The lumbar adjustment lever will be easily located at the lower outboard position of the seat cushion. For optimal comfort, the seat will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control).</p> <p>The seat will include the following features incorporated into the side roll protection system:</p> <ul style="list-style-type: none"> Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position. A suspension seat safety system will be included. When activated in the event of a side roll, this system will pretension the seat belt and retract the seat to its lowest travel position. <p>The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.</p>

0696996	Seat, Officer, Pierce PS6, Premium, Air Ride, High Back, Safety, PRIMARY	<p>OFFICER SEAT A Pierce PS6® seat will be provided in the cab for the officer. The seat will be a cam action type, with air suspension. For increased convenience, the seat will include a manual control to adjust the horizontal position (6.00" travel). The manual horizontal control will be a towel-bar style located below the forward part of the seat cushion. To provide flexibility for multiple passenger configurations, the seat will have a reclining back adjustable from 20 degrees back to 0 degrees forward. The seat back will be a high back style with manual lumbar adjustment lever, and will include minimum 7.50" deep side bolster pads for maximum support. For optimal comfort, the seat will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control). To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not buckled.</p> <p>The seat will include the following features incorporated into the side roll protection system: Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.</p> <p>A suspension seat safety system will be included. When activated this system will pretension the seat belt and retract the seat to its lowest travel position.</p> <p>The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.</p>
0002517	Not Required, Radio Compartment	
0771832	Cabinet, Rear Facing, LS, 24 W x 28 H x 24 D, Ext Acc Only, Sp Mtg, Imp/Vel	<p>REAR FACING LEFT SIDE CABINET A rear facing cabinet will be provided in the crew cab at the left side outboard position. The cabinet will be mounted off the edge of the seat riser so that it is even with the crew cab door frame.</p> <p>The cabinet will be 24.00" wide x 28.00" high x 24.00" deep.</p> <p>The cabinet will include no adjustable shelves or trays in the cabinet interior.</p> <p>The cabinet will include no louvers.</p> <p>The cabinet will provide access from outside the cab only with one (1) reverse hinged double pan door painted to match the cab exterior with a non-locking D-ring latch. The clear door opening will be 19.75" wide x 26.00" high. The door will be located on the side of the cab over the wheelwell and include a pneumatic stay arm as a door stop.</p> <p>The exterior access will be provided with a brushed stainless steel scuffplate on the lower door frame.</p> <p>The cabinet will be constructed of smooth aluminum, and painted to match the cab interior.</p> <p>Cabinet Light There will be one (1) white LED strip light installed on the right side of the exterior cabinet door opening. The lights will be controlled by an automatic door switch.</p>
0102783	Not Required, Seat, Rr Facing C/C, Center	
0775121	Cabinet, Rear Facing, RS, 26.50 W x 28 H x 21.50 D, Ext Acc Only, Imp/Vel	<p>REAR FACING RIGHT SIDE CABINET A rear facing cabinet will be provided in the crew cab at the right side outboard position. The cabinet will be 26.50" wide x 28.00" high x 21.50" deep.</p> <p>The cabinet will provide access from outside the cab only with one (1) reverse hinged double pan door painted to match the cab exterior with a non-locking D-ring latch. The clear door opening will be 16.00" wide x 26.25" high. The door will be located on the side of the cab over the wheelwell and include a pneumatic stay arm as a door stop.</p> <p>The cabinet will include no adjustable shelves or trays in the cabinet interior.</p> <p>The cabinet will include no louvers.</p> <p>The exterior access will be provided with a brushed stainless steel scuffplate on the lower door frame.</p> <p>The cabinet will be constructed of smooth aluminum, and painted to match the cab interior.</p> <p>Cabinet Light There will be one (1) white LED strip light installed on the left side of the exterior cabinet door opening. The lights will be controlled by an automatic door switch.</p>
0628561	Seat, Fwd Fcng C/C, LS Otbrd, PS6, 9 Deg Hi-Back, Foldup, 17" Btm, Safety, SECONDARY	<p>FORWARD FACING DRIVER SIDE OUTBOARD SEAT There will be one (1) forward facing, foldup seat provided at the driver side outboard position in the crew cab. The seat back will be a high back style. To provide improved ride comfort, and maximize accessibility to the crew cab, the seat will be provided with 17.00" deep foam cushions, and the seat back will be provided with 9 degree fixed recline angle. To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle, that will activate an alarm indicating a seat is occupied but not buckled.</p> <p>The seat will include the following features incorporated into the side roll protection system: Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.</p> <p>A seat safety system will be included. When activated, this system will pretension the seat belt around the occupant to firmly hold them in place in the event of a side roll.</p> <p>The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.</p>

0783729	Cabinet, Forward Facing, Center, 42 W x 36 H x 24 D, Web, Imp/Vel	<p>FORWARD FACING CENTER CABINET</p> <p>A forward facing cabinet will be provided in the crew cab at the center position. The cabinet will be 42.00" wide x 36.00" high x 24.00" deep. The cabinet will be provided with no false floor. The interior door will be web netting. The netting will be made with 1.00" wide nylon material with 2.00" openings. The nylon webbing will be permanently fastened at the bottom side of the cabinet and have 1.00" side release fasteners on the opposite side to secure it. The clear door opening of the cabinet will be 39.50" wide x 33.00" high.</p> <p>The cabinet will include one (1) infinitely adjustable shelf with a 0.75" up-turned lipped to match the cab interior.</p> <p>The cabinet will include no louvers.</p> <p>The cabinet will be constructed of smooth aluminum and painted to match the cab interior.</p> <p>Cabinet Light</p> <p>There will be one (1) white LED strip light installed on the right side of the interior cabinet door opening and one (1) white LED strip light installed on the left side of the interior cabinet door opening. The lighting will be controlled by a rocker switch on the front of the cabinet.</p>
0628563	Seat, Fwd Fcng C/C, RS Otbrd, PS6, 9 Deg Hi-Back, Foldup, 17" Btm, Safety, SECONDARY	<p>FORWARD FACING PASSENGER SIDE OUTBOARD SEAT</p> <p>There will be one (1) forward facing, foldup seat provided at the passenger side outboard position in the crew cab. The seat back will be a high back style. To provide improved ride comfort, and maximize accessibility to the crew cab, the seat will be provided with 17.00" deep foam cushions, and the seat back will be provided with 9 degree fixed recline angle. To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle, that will activate an alarm indicating a seat is occupied but not buckled.</p> <p>The seat will include the following features incorporated into the side roll protection system: Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.</p> <p>A seat safety system will be included. When activated, this system will pretension the seat belt around the occupant to firmly hold them in place in the event of a side roll.</p> <p>The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.</p>
0766467	Upholstery, Seats In Cab, All Vinyl, Seats Inc, CARE	<p>SEAT UPHOLSTERY</p> <p>All seat upholstery will be leather grain 36 oz dark silver gray vinyl resistant to oil, grease and mildew. The cab will have four (4) seating positions.</p>
0511471	No SCBA Brackets Required In Cab Seats, Imp/Vel, AXT 2010, Qtm 2010, Saber FR/Enf	
0735335	Door, Access, Front, (1) Rear Facing Seat Risers, No Heater	<p>ACCESS DOOR</p> <p>An access door will be provided in the front edge of the right side rear facing seat riser with a drop down door. The drop down door will be provided with a Southco C2 black powder coated raised trigger locking latch and painted black. There will be no louvers.</p>
0603867	Seat Belt, ReadyReach	<p>SEAT BELTS</p> <p>All seating positions in the cab, crew cab and tiller cab (if applicable) will have red seat belts. To provide quick, easy use for occupants wearing bunker gear, the female buckle and seat belt webbing length will meet or exceed the current edition of applicable NFPA and CAN/ULC - S515 standards.</p> <p>The 3-point shoulder type seat belts will also include the ReadyReach D-loop assembly to the shoulder belt system. The ReadyReach feature adds an extender arm to the D-loop location placing the D-loop in a closer, easier to reach location.</p> <p>Any flip up seats will include a 3-point shoulder type belts only.</p>
0604867	Seat Belt Height Adjustment, 4 Seats, Imp/Vel, Dash CF	<p>SHOULDER HARNESS HEIGHT ADJUSTMENT</p> <p>All seating positions furnished with 3-point shoulder type seat belts will include a height adjustment. This adjustment will optimize the belts effectiveness and comfort for the seated firefighter.</p> <p>A total of four (4) seating positions will have the adjustable shoulder harness.</p>
0817557	Helmet Storage, Provided by Fire Department, NFPA 2024	<p>HELMET STORAGE PROVIDED BY FIRE DEPARTMENT</p> <p>NFPA 1900, 2024 edition, section 11.1.8.4.1 requires a location for helmet storage be provided. There is no helmet storage on the apparatus as manufactured. The fire department will provide a location for storage of helmets.</p>
0647647	Lights, Dome, FRP Dual LED 4 Lts	<p>CAB DOME LIGHTS</p> <p>There will be four (4) dual LED dome lights with black bezels provided. Two (2) lights will be mounted above the inside shoulder of the driver and officer and two (2) lights will be installed and located, one (1) on each side of the crew cab.</p> <p>The color of the LED's will be red and white.</p> <p>The white LED's will be controlled by the door switches and the lens switch.</p> <p>The color LED's will be controlled by the lens switch.</p> <p>In order to ensure exceptional illumination, each white LED dome light will provide a minimum of 10.1 foot-candles (fc) covering an entire 20.00" x 20.00" square seating position when mounted 40.00" above the seat.</p>

0896451	Enhanced Software for Cab and Crew Cab Dome Lts	<p>ENHANCED SOFTWARE FOR CAB AND CREW CAB DOME LIGHTS The cab and crew cab dome lights will remain on for 10 seconds for improved visibility after the doors are closed. The dome lights will dim after 10 seconds or immediately if the vehicle's transmission is put into gear.</p>
0631776	Not Required, Overhead Map Lights	
0816997	Portable Hand Light, Provided by Fire Dept, NFPA 2024	<p>PORTABLE HAND LIGHTS PROVIDED BY FIRE DEPARTMENT The hand lights are not on the apparatus as manufactured. The fire department will provide and mount these hand lights.</p>
0613339	SP Handlight, Koehler, BrightStar, Lighthawk II, 07670, Orange Lt, 12vdc Direct Wire	<p>HAND HELD SPOTLIGHT There will be three (3) Koehler BrightStar™ LED GEN II, Model 07670, hand light(s) and 12V DC charger(s) mounted EACH CREW CAB EMAS COMPARTMENT, AND ON TOP OF THE FORWARD FACING EMS COMPARTMENT, EXACT LOCATION TO BE MOUNTED AT FINAL. The color will be orange with a shoulder strap provided with each light. The hand light(s) will be connected to the chassis battery system.</p>
0568369	Cab Instruments, Ivory Gauges, Chrome Bezels, Impel/Velocity 2010	<p>CAB INSTRUMENTATION The cab instrument panel will consist of gauges, an LCD display, telltale indicator lights, alarms, control switches, and a diagnostic panel. The function of instrument panel controls and switches will be identified by a label adjacent to each item. Actuation of the headlight switch will illuminate the labels in low light conditions. Telltale indicator lamps will not be illuminated unless necessary. The cab instruments and controls will be conveniently located within the forward cab section directly forward of the driver. Gauge and switch panels will be designed to be removable for ease of service and low cost of ownership.</p> <p>Gauges The gauge panel will include the following ten (10) ivory gauges with chrome bezels to monitor vehicle performance: Voltmeter gauge (Volts) Low volts (11.8 VDC) Amber indicator on gauge assembly with alarm High volts (15 VDC) Amber indicator on gauge assembly with alarm Very low volts (11.3 VDC) Amber indicator on gauge assembly with alarm Very high volts (16 VDC) Amber indicator on gauge assembly with alarm Tachometer (RPM) Speedometer (Primary (outside) MPH, Secondary (inside) Km/H) Fuel level gauge (Empty - Full in fractions) Low fuel (1/8 full) Amber indicator on gauge assembly with alarm Very low fuel (1/32) fuel Amber indicator on gauge assembly with alarm Engine oil pressure gauge (PSI) Low oil pressure to activate engine warning lights and alarms Red indicator on gauge assembly with alarm Front air pressure gauge (PSI) Low air pressure to activate warning lights and alarm Red indicator on gauge assembly with alarm Rear air pressure gauge (PSI) Low air pressure to activate warning lights and alarm Red indicator on gauge assembly with alarm Transmission oil temperature gauge (Fahrenheit) High transmission oil temperature activates warning lights and alarm Amber indicator on gauge assembly with alarm Engine coolant temperature gauge (Fahrenheit) High engine temperature activates an engine warning light and alarm Red indicator on gauge assembly with alarm Diesel Exhaust Fluid Level Gauge (Empty - Full in fractions) Low fluid (1/8 full) Amber indicator on gauge assembly with alarm All gauges and gauge indicators will perform prove out at initial power-up to ensure proper performance.</p> <p>Indicator Lamps To promote safety, the following telltale indicator lamps will be integral to the gauge assembly and are located above and below the center gauges. The indicator lamps will be "dead-front" design that is only visible when active. The colored indicator lights will have descriptive text or symbols. The following amber telltale lamps will be present: Low coolant Trac cntl (traction control) (where applicable) Check engine Check trans (check transmission) Aux brake overheat (Auxiliary brake overheat) Air rest (air restriction) Caution (triangle symbol) Water in fuel</p>

DPF (engine diesel particulate filter regeneration)
Trailer ABS (where applicable)
Wait to start (where applicable)
HET (engine high exhaust temperature) (where applicable)
ABS (antilock brake system)
MIL (engine emissions system malfunction indicator lamp) (where applicable)
SRS (supplemental restraint system) fault (where applicable)
DEF (low diesel exhaust fluid level)

The following red telltale lamps will be present:
Warning (stop sign symbol)

Seat belt
Parking brake
Stop engine
Rack down

The following green telltale lamps will be provided:

Left turn
Right turn
Battery on

The following blue telltale lamp will be provided:

High beam

Alarms

Audible steady tone warning alarm: A steady audible tone alarm will be provided whenever a warning message is present.

Audible pulsing tone caution alarm: A pulsing audible tone alarm (chime/chirp) will be provided whenever a caution message is present without a warning message being present.

Alarm silence: Any active audible alarm will be able to be silenced by holding the ignition switch at the top position for 3 to 5 seconds. For improved safety, silenced audible alarms will intermittently chirp every 30 seconds until the alarm condition no longer exists. The intermittent chirp will act as a reminder to the operator that a caution or warning condition still exists. Any new warning or caution condition will enable the steady or pulsing tones respectively.

Indicator Lamp and Alarm Prove-Out

Telltale indicators and alarms will perform prove-out at initial power-up to ensure proper performance.

Control Switches

For ease of use, the following controls will be provided immediately adjacent to the cab instrument panel within easy reach of the driver.

Emergency master switch: A molded plastic push button switch with integral indicator lamp will be provided. Pressing the switch will activate emergency response lights and siren control. A green lamp on the switch provides indication that the emergency master mode is active. Pressing the switch again disables the emergency master mode.

Headlight / Parking light switch: A three (3)-position maintained rocker switch will be provided. The first switch position will deactivate all parking lights and the headlights. The second switch position will activate the parking lights. The third switch position will activate the headlights.

Panel backlighting intensity control switch: A three (3)-position momentary rocker switch will be provided. The first switch position decreases the panel backlighting intensity to a minimum level as the switch is held. The second switch position is the default position that does not affect the backlighting intensity. The third switch position increases the panel backlighting intensity to a maximum level as the switch is held.

The following standard controls will be integral to the gauge assembly and are located below the right hand gauges. All switches have backlit labels for low light applications.

High idle engagement switch: A two (2)-position momentary rocker switch with integral indicator lamp will be provided. The first switch position is the default switch position.

The second switch position will activate and deactivate the high idle function when pressed and released. The "Ok To Engage High Idle" indicator lamp must be active for the high idle function to engage. A green indicator lamp integral to the high idle engagement switch will indicate when the high idle function is engaged.

"Ok To Engage High Idle" indicator lamp: A green indicator light will be provided next to the high idle activation switch to indicate that the interlocks have been met to allow high idle engagement.

The following standard controls will be provided adjacent to the cab gauge assembly within easy reach of the driver. All switches will have backlit labels for low light applications.

Ignition switch: A three (3)-position maintained/momentary rocker switch will be provided. The first switch position will deactivate vehicle ignition. The second switch position will activate vehicle ignition. The third momentary position will disable the Command Zone audible alarm if held for 3 to 5 seconds. A green indicator lamp will be activated with vehicle ignition.

Engine start switch: A two (2)-position momentary rocker switch will be provided. The first switch position is the default switch position. The second switch position will activate the vehicle's engine. The switch actuator is designed to prevent accidental activation.

4-way hazard switch: A two (2)-position maintained rocker switch will be provided. The first switch position will deactivate the 4-way hazard switch function. The second switch position will activate the 4-way hazard function. The switch actuator will be red and includes the international 4-way hazard symbol.

Heater, defroster, and air conditioning control panel.

Turn signal arm: A self-canceling turn signal with high beam headlight and windshield wiper/washer controls will be provided. The windshield wiper control will have high, low, and intermittent modes.

Parking brake control: An air actuated push/pull park brake control valve will be provided.

Chassis horn control: Activation of the chassis horn control will be provided through the center of the steering wheel.

Custom Switch Panels

The design of cab instrumentation will allow for emergency lighting and other switches to be placed within easy reach of the operator thus improving safety. There will be positions for up to four (4) switch panels in the overhead console on the driver's side, up to four (4)

switch panels in the engine tunnel console facing the driver, up to four (4) switch panels in the overhead console on the officer's side and up to two (2) switch panels in the engine tunnel console facing the officer. All switches will have backlit labels for low light applications.

Diagnostic Panel

A diagnostic panel will be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel will allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches will allow ABS systems to provide blink codes should a problem exist.

The diagnostic panel will include the following:

Engine diagnostic port

Transmission diagnostic port

ABS diagnostic port

SRS diagnostic port (where applicable)

Command Zone USB diagnostic port

ABS diagnostic switch (blink codes flashed on ABS telltale indicator)

Diesel particulate filter regeneration switch (where applicable)

Diesel particulate filter regeneration inhibit switch (where applicable)

Cab LCD Display

A digital four (4)-row by 20-character dot matrix display will be integral to the gauge panel.

The display will be capable of showing simple graphical images as well as text. The display will be split into three (3) sections. Each section will have a dedicated function.

The upper left section will display the outside ambient temperature.

The upper right section will display, along with other configuration specific information:

Odometer

Trip mileage

PTO hours

Fuel consumption

Engine hours

The bottom section will display INFO, CAUTION, and WARNING messages. Text messages will automatically activate to describe the cause of an audible caution or warning alarm.

The LCD will be capable of displaying multiple text messages should more than one caution or warning condition exist.

0509511	Air Restriction Indicator, Imp/Vel, AXT, Dash CF, Enf MUX	AIR RESTRICTION INDICATOR A high air restriction warning indicator light LCD message with amber warning indicator and audible alarm will be provided.
0032602	Speedometer, Class 1 w/LED, Officer Overhead	OVERHEAD SPEEDOMETER A Class I digital display speedometer will be provided on the officer side overhead position.
0673123	Light, Do Not Move Apparatus, W/in 3SR00FRR LED	"DO NOT MOVE APPARATUS" INDICATOR A Whelen Model 3SR00FRR flashing red LED indicator light with a Whelen, Model 3FLANGEC chrome surface mount flange located in the driving compartment, will be illuminated automatically per the current NFPA requirements. The light will be labeled "Do Not Move Apparatus If Light Is On". The same circuit that activates the Do Not Move Apparatus indicator will activate a pulsing alarm when the parking brake is released.
0509042	Messages, Open Dr/DNMT, Color Dsply,	DO NOT MOVE TRUCK MESSAGES Messages will be displayed on the Command Zone™, color display located within sight of the driver whenever the Do Not Move Truck light is active. The messages will designate the item or items not in the stowed for vehicle travel position (parking brake disengaged). The following messages will be displayed (where applicable): Do Not Move Truck DS Cab Door Open (Driver Side Cab Door Open) PS Cab Door Open (Passenger's Side Cab Door Open) DS Crew Cab Door Open (Driver Side Crew Cab Door Open) PS Crew Cab Door Open (Passenger's Side Crew Cab Door Open) DS Body Door Open (Driver Side Body Door Open) PS Body Door Open (Passenger's Side Body Door Open) Rear Body Door Open DS Ladder Rack Down (Driver Side Ladder Rack Down) PS Ladder Rack Down (Passenger Side Ladder Rack Down) Deck Gun Not Stowed Lt Tower Not Stowed (Light Tower Not Stowed) Fold Tank Not Stowed (Fold-A-Tank Not Stowed) Aerial Not Stowed (Aerial Device Not Stowed) Stabilizer Not Stowed Steps Not Stowed Handrail Not Stowed Any other device that is opened, extended, or deployed that creates a hazard or is likely to cause major damage to the apparatus if the apparatus is moved will be displayed as a caution message after the parking brake is disengaged.

0590486	SP Switching, Cab, Membrane, Impel/Velocity/Quantum, AXT MUX, Lower Switch Panel	<p>SWITCH PANELS</p> <p>The emergency light switch panel will have a master switch for ease of use plus individual switches for selective control. Each switch panel will contain eight (8) membrane-type switches each rated for one million (1,000,000) cycles. Panels containing less than eight (8) switch assignments will include non-functioning black appliques. Documentation will be provided by the manufacturer indicating the rated cycle life of the switches. The switch panel(s) will be located in a lower switch panel location on the engine tunnel to allow for easy access.</p> <p>The switches will be membrane-type and also act as an integral indicator light. For quick, visual indication the entire surface of the switch will be illuminated white whenever backlighting is activated and illuminated red whenever the switch is active. For ease of use, a 2-ply, scratch resistant laser engraved Gravoply label indicating the use of each switch will be placed in the center of the switch. The label will allow light to pass through the letters for ease of use in low light conditions.</p>
0555915	Wiper Control, 2-Speed with Intermittent, MUX, Impel/Velocity	<p>WIPER CONTROL</p> <p>For simple operation and easy reach, the windshield wiper control will be an integral part of the directional light lever located on the steering column. The wiper control will include high and low wiper speed settings, a one (1)-speed intermittent wiper control and windshield washer switch. The control will have a "return to park" provision, which allows the wipers to return to the stored position when the wipers are not in use.</p>
0820897	Wiring, Spare, 15 A 12V DC, Batt Dir, 2nd NFPA1900	<p>SPARE CIRCUIT</p> <p>There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus. The above wires will have the following features: The positive wire will be connected directly to the battery power The negative wire will be connected to ground Wires will be protected to 15 amps at 12 volts DC Power and ground will terminate ONTOP OF THE RS OFFICER DASH AND EMS COMPARTMENT, JUST BELOW THE SIDE WINDOW Termination will be with heat shrinkable butt splicing Wires will be sized to 125 percent of the protection Battery direct loads cannot be Load Managed</p>
0820922	Wiring, Spare, 4.8 A 12V DC, USB Term Blue Sea 1045, Batt Dir, 2nd NFPA1900	<p>SPARE CIRCUIT</p> <p>There will be one (1) dual USB fast charge socket mounts installed on the apparatus. The above wires will have the following features: The positive wire will be connected directly to the battery power. The negative wire will be connected to ground. Wires will be protected to 4.8 amps at 12 volts DC. The USB socket mount will be officer side dash. Termination will be a Blue Sea Systems part number 1045 dual USB charger socket. Wires will be sized to 125% of the protection. Battery direct loads cannot be Load Managed</p>
0821236	Wiring, Spare, 20 A 12V DC, 6 Ckt FB, Blue Sea 5025 Batt Dir 1st NFPA1900	<p>SPARE CIRCUIT</p> <p>There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus. The above wires will have the following features: The positive wire will be connected directly to the battery power. The negative wire will be connected to ground. Wires will be protected to 20 amps at 12 volts DC. Power and ground will terminate LS1 LOOSE W/ A 6' COIL, one loose with 6' coil under the engine tunnel plate, one in RS1, loose with a 6' coil, stage in upper forward corner, RS3, leave loose in the upper section with a 6' coil. Termination will be to a Blue Sea System, Model 5025, 6 circuit with negative bus bar. The terminal block will include a cover with circuit labels. Wires will be sized to 125% of the protection. Battery direct loads cannot be Load Managed</p>
0821580	Wiring, Spare, 7.5A 12V DC 1st NFPA1900	<p>SPARE CIRCUIT</p> <p>There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus. The above wires will have the following features: The positive wire will be connected directly to the battery switched power. The negative wire will be connected to ground. Wires will be protected to 7.5 amps at 12 volts DC. Power and ground will terminate driver side and officer side x 2 per switch layout, two crew cab ports in painted metal boxes, 3.00" from the crew cab floor, at one the forward lower edge of the front facing cabinet. Exact location will be determined at final. Termination will be with 15 amp, power point plug with rubber cover. Wires will be sized to 125% of the protection. This circuit(s) may be load managed when the parking brake is set.</p>

0764088	Wiring, Spare, 47.5 A 12V DC, Cust Install Radio, 40A Bat Dir, 7.5A Sw & Grnd	CUSTOMER SUPPLIED RADIO WIRING There will be one (1) 12 volt combination wiring leads of which each will include one (1) direct battery, one (1) master battery switched and one (1) negative for use with radio equipment. Each lead will be 18.00" long and be provided behind officer seat. The leads will be clearly marked in a coil and terminate with butt splices. A breaker rated for 40 amps will be provided for circuit protection of the direct battery lead with a minimum of 8 gauge wire. A breaker rated for 7.5 amps will be provided for circuit protection of the master battery switched lead. The wires will be colored coded as follows: red for direct battery yellow for master battery switched black for ground
0556749	Programming, Membrane Switches, Max % Light Intensity, Loc, MUX	DIMMER SWITCH The dimming control switch will be standard, but the brightness of the backlighting switches located SWITCH PANELS 1,7,8 will have limited switch panel illumination that will max out at 70%%. All other switches will have standard illumination intensity of a 100%.
0566101	Recess, Dash Panel, Officer Side, Vel/Imp	DASH PANEL RECESS The dash panel across from the officer will be recessed to accommodate the mounting of miscellaneous items. The recess will be 7.25" down x 7.81" back and 20.88" wide.
0693193	SP Disable, E-M Switch, Vel/Imp	DISABLE E-M SWITCH The E-M switch on the cab instrument panel will be disabled. The label for the switch will be blacked out.
0819994	Radio, Jensen, AM/FM/WB, Bluetooth	STEREO RADIO There will be one heavy duty AM/FM / Weatherband / Bluetooth stereo radio. The radio will be installed per switch panel layout. There will be 5.25" speakers installed one (1) pair of 5.25" speakers in the cab and one (1) pair of 5.25" speakers in the crew cab. The antenna will be a roof-mounted rubber antenna located in an open space, on the cab roof. The following Jensen features will be included: - 180 watts max power (45W x 4); 100 watts RMS (25W x 4) - Bluetooth® streaming audio (A2DP/AVRCP) - Weatherband - AM/FM tuner with 30 presets - Audio settings (volume/bass/treble/balance/fade) - Toggle switch between day and night display - Daylight-readable, segmented LCD - Two-wire power with non-volatile memory and clock support - Low battery alert
0679284	Switch, 12V (Inst Pnl), AM/FM Radio, Off Switch, Auto On	SWITCH, MASTER, AM/FM RADIO There will be a remote switch provided inside the cab to control the AM/FM radio. The switch will be installed OFFICER SIDE OVERHEAD, PER SWITCH PANEL LAYOUT. The radio will automatically turn on with when the battery switch is turned on.
0814201	Vehicle Information Center, 7" Color Display, Touchscreen, MUX, CL714	INFORMATION CENTER An information center employing a 7.00" diagonal touch screen color LCD display will be encased in an ABS plastic housing. The information center will have the following specifications: Operate in temperatures from -40 to 158 degrees Fahrenheit LCD optically bonded to hardened AR glass lens Five weather resistant user interface switches Grey with black accents Sunlight Readable Linux operating system Minimum of 1000nits rated display Display can be changed to an available foreign language A LCD display integral to the cab gauge panel will be included as outlined in the cab instrumentation area. Programmed to read US Customary General Screen Design Where possible, background colors will be used to provide "At a Glance" vehicle information. If information provided on a screen is within acceptable limits, a green background will be used. If a caution or warning situation arises the following will occur: An amber background/text color will indicate a caution condition A red background/text color will indicate a warning condition The information center will utilize an "Alert Center" to display text messages for audible alarm tones. The text messages will be written to identify the item(s) causing the audible alarm to sound. If more than one (1) text message occurs, the messages will cycle every second until the problem(s) have been resolved. The background color for the "Alert Center" will change to indicate the severity of the "warning" message. If a warning and a caution condition occur simultaneously, the red background color will be shown for all alert center messages. A label for each button will exist. The label will indicate the function for each active button for each screen. Buttons that are not utilized on specific screens will have a button label with no text

or symbol.

Home/Transit Screen

This screen will display the following:

Vehicle Mitigation (if equipped)

Water Level (if the water level system includes compatible communications to the information center)

Foam Level (if the foam level system includes compatible communications to the information center)

Seat Belt Monitoring Screen

Tire Pressure Monitoring (if equipped)

Digital Speedometer

Active Alarms

On Scene Screen

This screen will display the following and will be auto activated with pump engaged (if equipped):

Battery Voltage

Fuel

Oil Pressure

Coolant Temperature

RPM

Water Level (if equipped)

Foam Level (if equipped)

Foam Concentration (if equipped)

Water Flow Rate (if equipped)

Water Used (if equipped)

Active Alarms

Virtual Buttons

There will be four (4) virtual switch panel screens that match the overhead and lower lighting and HVAC switch panels.

Page Screen

The page screen will display the following and allow the user to progress into other screens for further functionality:

Diagnostics

Faults

Listed by order of occurrence

Allows to sort by system

Interlock

Throttle Interlocks

Pump Interlocks (if equipped)

Aerial Interlocks (if equipped)

PTO Interlocks (if equipped)

Load Manager

A list of items to be load managed will be provided. The list will provide a description of the load. The lower the priority numbers the earlier the device will be shed should a low voltage condition occur.

The screen will indicate if a load has been shed (disabled) or not shed.

"At a glance" color features are utilized on this screen.

Systems

Command Zone

Module type and ID number

Module Version

Input or output number

Circuit number connected to that input or output

Status of the input or output

Power and Constant Current module diagnostic information

Foam (if equipped)

Pressure Controller (if equipped)

Generator Frequency (if equipped)

Live Data

General Truck Data

Maintenance

Engine oil and filter

Transmission oil and filter

Pump oil (if equipped)

Foam (if equipped)

Aerial (if equipped)

Setup

Clock Setup

Date & Time

12 or 24 hour format

Set time and date

Backlight

Daytime

Night time

Sensitivity

Unit Selection

Home Screen

Virtual Button Setup

On Scene Screen Setup

Configure Video Mode

Set Video Contrast

Set Video Color

Set Video Tint

Do Not Move

The screen will indicate the approximate location and type of item that is open or is not stowed for travel. The actual status of the following devices will be indicated

Driver Side Cab Door

Passenger's Side Cab Door

Driver Side Crew Cab Door

Passenger's Side Crew Cab Door
 Driver Side Body Doors
 Passenger's Side Body Doors
 Rear Body Door(s)
 Ladder Rack (if applicable)
 Deck Gun (if applicable)
 Light Tower (if applicable)
 Hatch Door (if applicable)
 Stabilizers (if applicable)
 Steps (if applicable)
 Notifications
 View Active Alarms
 Shows a list of all active alarms including date and time of the occurrence is shown with each alarm
 Silence Alarms - All alarms are silenced
 Timer Screen
 HVAC (if equipped)
 Tire Information (if equipped)
 Ascendant Set Up Confirmation (if equipped)
 Button functions and button labels may change with each screen.

0816633 Collision Mitigation, HAAS Alert (R2V), HA7

COLLISION MITIGATION

There will be a HAAS Alert®, Model HA7 Responder-to-Vehicle (R2V) collision avoidance system provided on the apparatus. The HA7 cellular transponder module will be installed behind the cab windshield, as high and near to the center as practical, to allow clear visibility to the sky. The module dimensions are 5.40" long x 2.70" wide x 1.30" high, and operating temperature range is -40 degree C to 85 degree C.
 The transponder will be connected to the vehicle's emergency master circuit and battery direct power and ground.
 While responding with emergency lights on, the HA7 transponder sends alert messages via cellular network to motorists in the vicinity of the responding truck that are equipped with the WAZE app.
 While on scene with emergency lights on, the HA7 transponder sends road hazard alerts to motorists in the vicinity of the truck that are equipped with the WAZE app.
 The HA7 Responder-to-Vehicle (R2V) collision avoidance system will include the transponder and a 5 year cellular plan subscription.
 Activation of the HAAS Alert system requires a representative of the customer to accept the End User License Agreement (EULA) via an on-line portal.

0776356 Maintenance Reminder Message, Cab Decon, CARE

Maintenance Reminder Message

The Command Zone™ touchscreen will include a 30 day "Cab Decon" pop-up reminder. This reminder will be part of the prognostics database. This reminder will need to be reset using a password as configured by the department.

0606248 Vehicle Data Recorder w/CZ Display Seat Belt Monitor, Unique Alarm

VEHICLE DATA RECORDER

There will be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.
 The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR will be available to download on-line.
 The vehicle data recorder will be capable of recording the following data via hardwired and/or CAN inputs:
 Vehicle Speed - MPH
 Acceleration - MPH/sec
 Deceleration - MPH/sec
 Engine Speed - RPM
 Engine Throttle Position - % of Full Throttle
 ABS Event - On/Off
 Seat Occupied Status - Yes/No by Position
 Seat Belt Buckled Status - Yes/No by Position
 Master Optical Warning Device Switch - On/Off
 Internal clock syncs the time and date when a laptop is connected

Seat Belt Monitoring System

A seat belt monitoring system (SBMS) will be provided on the Command Zone™ color display. The SBMS will be capable of monitoring up to 10 seating positions indicating the status of each seat position per the following:
 Seat Occupied & Buckled = Green LED indicator illuminated
 Seat Occupied & Unbuckled = Red LED indicator with audible alarm
 No Occupant & Buckled = Red LED indicator with audible alarm
 No Occupant & Unbuckled = No indicator and no alarm
 The seat belt monitoring screen will become active on the Command Zone color display when:
 The home screen is active:
 and there is any occupant seated but not buckled or any belt buckled with an occupant.
 and there are no other Do Not Move Apparatus conditions present. As soon as all Do Not Move Apparatus conditions are cleared, the SBMS will be activated.
 The SBMS will include an audible alarm that will warn that an unbuckled occupant condition exists and the parking brake is released, or the transmission is not in park. The alarm will have a unique sound that will be different than all other alarm sounds on the vehicle. A "Seat Belt Alarm" label will be provided above this buzzer.

0735006	Intercom, David Clark, 4-Pos, 2-Radio, (D,O,RPTT), 2obC, U3805	<p>INTERCOM SYSTEM</p> <p>There will be a four (4) position David Clark, Model U3800, intercom system with single radio interface capability at the driver and officer positions and remote radio push to talk buttons located per the switch panel layout. Two (2) crew cab outboard seats will have intercom only capability.</p> <p>The following components will be provided:</p> <ul style="list-style-type: none"> One (1) U3805 Radio Cord Junction Module Two (2) U3815 Radio interface modules (Driver, Officer) Two (2) Remote Push To Talk Button Kits One (1) U3800 Master station (1 Crew) One (1) U3801 Remote headset intercom station (1 Crew) One (1) C3820 Power cord <p>All necessary station cables and connectors</p>
0637058	David Clark Universal Radio Interfaces Included with Single/Dual System	<p>RADIO / INTERCOM INTERFACE INCLUDED</p> <p>All radio interfaced stations will have universal radio interfaces installed. The interface wiring will be routed within the cab to behind officer seat .</p>
0589947	Headset, David Clark, H3432 Over The Head, Flex Mic, Push On Push Off	<p>OVER THE HEAD HEADSET</p> <p>There will be four (4) over the head, headset(s) provided for driver, officer and two (2) crew. Each David Clark, Model H3432, headset will feature:</p> <ul style="list-style-type: none"> 5' Coiled cord Noise cancelling electric microphone Flexible microphone boom rotates 200 degrees for left or right dress Microphone on/off button Comfort Gel Earseals 23 dB noise reduction
0819255	Hangers For Headsets, NFPA Each, 1900	<p>HEADSET HANGERS</p> <p>There will be four (4) headset hanger(s) installed driver's seat, officer's seat, driver's side outboard forward facing seat and passenger's side outboard forward facing seat. The hanger(s) will meet the current edition of applicable NFPA standards for equipment mounting.</p>
0698805	Bracket, Johnny Ray, Heavy Duty Swivel, 14 lb. Rating	<p>BRACKET, JOHNNY RAY</p> <p>A Johnny Ray, Model JR-207, radio swivel bracket rated for 14 lbs. will be provided and installed ship loose.</p>
0687904	Antenna Mount, Custom Chassis, Cable Routed to Behind Officer Seat	<p>RADIO ANTENNA MOUNT</p> <p>There will be three (3) standard 1.125", 18 thread antenna-mounting base(s) installed best available on the cab roof with high efficiency, low loss, coaxial cable(s) routed to behind the officer seat. A weatherproof cap will be installed on the mount.</p>
0653519	Camera, Pierce, LS Mux, RS, LS, R, Cameras	<p>VEHICLE CAMERA SYSTEM</p> <p>There will be a color vehicle camera system provided with the following:</p> <ul style="list-style-type: none"> One (1) camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse. One (1) camera located on the right side of the apparatus, pointing rearward, displayed automatically with the right side turn signal. One (1) camera located on the left side of the apparatus, pointing rearward, displayed automatically with the left side turn signal. <p>The camera images will be displayed on the left side vehicle information center display. Audio from the microphone on the rear camera will be emitted by an amplified speaker with volume control located behind the driver seat.</p> <p>The following components will be included:</p> <ul style="list-style-type: none"> One (1) SV-CW134639CAI Rear Camera Two (2) CS134404CI Side Cameras <p>All necessary cables</p>
0814861	Camera, Switcher, Pierce, 4 channel, AHD, CVBS	<p>CAMERA SWITCHER</p> <p>There will be one (1), HMU318 HD Image Processor multiplexer, 4 channel camera video switcher with remote control provided to allow Single, dual, triplex, quad, trefoil, Y split and PIP view display modes on the vehicle information center display provided. The switcher will have one (1) CVBS, Composite Video Blanking and Sync, standard Definition video output and one (1) AHD, Analog High Definition video output for High Definition cameras.</p>
0511071	Guard, 4-Way, Rear Vision Camera	<p>VEHICLE CAMERA GUARD</p> <p>There will be one (1) aluminum treadplate guard(s) fastened over the vehicle camera(s) located just above the traffic advisor above B1 .</p>
0896458	Pierce Command Zone, Advanced Electronics & Control System, Vel WiFi CZT	<p>ELECTRICAL POWER CONTROL SYSTEM</p> <p>The primary power distribution will be located forward of the officer's seating position and be easily accessible while standing on the ground for simplified maintenance and troubleshooting. Additional electrical distribution centers will be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components. The electrical distribution</p>

centers will be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers will be easily accessible. All distribution centers containing fuses, circuit breakers and/or relays will be easily accessible. Distribution centers located throughout the vehicle will contain battery powered studs for supplying customer installed equipment thus providing a lower cost of ownership. Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload. General protection circuit breakers will be Type-I automatic reset (continuously resetting). When required, automotive type fuses will be utilized to protect electronic equipment. Control relays and solenoid will have a direct current rating of 125 percent of the maximum current for which the circuit is protected per NFPA.

Solid-State Control System

A solid-state electronics based control system will be utilized to achieve advanced operation and control of the vehicle components. A fully computerized vehicle network will consist of electronic modules, electronic control modules to include black housings, a power indicator and status indicator located near their point of use to reduce harness lengths and improve reliability. The control system will comply with SAE J1939-11 recommended practices.

The control system will operate as a master-slave system whereas the main control module instructs all other system components. The system will contain patented Mission Critical software that maintains critical vehicle operations in the unlikely event of a main controller error. The system will utilize a Real Time Operating System (RTOS) fully compliant with OSEK/VDX™ specifications providing a lower cost of ownership.

For increased reliability and simplified use the control system modules will include the following attributes:

Green LED indicator light for module power

Red LED indicator light for network communication stability status

Control system self test at activation and continually throughout vehicle operation

No moving parts due to transistor logic

Software logic control for NFPA mandated safety interlocks and indicators

Integrated electrical system load management without additional components

Integrated electrical load sequencing system without additional components

Customized control software to the vehicle's configuration

Factory and field programmable to accommodate changes to the vehicle's operating parameters

To assure long life and operation in a broad range of environmental conditions, the solid-state control system modules will meet the following specifications:

Module circuit board will meet SAE J771 specifications

Operating temperature from -40C to +70C

Storage temperature from -40C to +70C

Vibration to 50g

IP67 rated enclosure (Totally protected against dust and also protected against the effect of temporary immersion between 15 centimeters and one (1) meter)

Operating voltage from eight (8) volts to 32 volts DC

The main controller will activate status indicators and audible alarms designed to provide warning of problems before they become critical.

Circuit Protection and Control Diagram

Copies of all job-specific, computer network input and output (I/O) connections will be provided with each chassis. The sheets will indicate the function of each module connection point, circuit protection information (where applicable), wire numbers, wire colors and load management information.

On-Board Electrical System Diagnostics

The on-board information center will include the following diagnostic information:

Text description of active warning or caution alarms

Simplified warning indicators

Amber caution indication with intermittent alarm

Red warning indication with steady tone alarm

Advanced diagnostic feature will be provided in this control system. From the Command Zone display or connected wireless device, these features allow the user to monitor the real-time status of every input or output on the vehicle. It also allows users logged in as an administrator to force on inputs or outputs to assist the troubleshooting process.

TCU Module with WiFi

An in cab module will provide WiFi wireless interface and data logging capability. The WiFi interface will comply with IEEE 802.11 b/g/n capabilities while communicating at 2.4 Gigahertz. The module will communicate through a black WiFi antenna allowing a line of site communication range of up to 300 feet with a roof mounted antenna.

The module will transmit a password protected web page to a WiFi enabled device (i.e. most smart phones, tablets or laptops) allowing two levels of user interaction. The firefighter level will allow vehicle monitoring of the vehicle and firefighting systems on the apparatus. The technician level will allow diagnostic access to inputs and outputs installed on the Command Zone™, control and information system.

The TCU capability will record faults from the engine, transmission, ABS and Command Zone™, control and information systems as they occur. No other data will be recorded at the time the fault occurs. The data TCU will provide up to 2 Gigabytes of data storage.

The TCU will provide a means to download the TCU information and update software in the device.

Indicator Light and Alarm Prove-Out System

A system will be provided which automatically tests basic indicator lights and alarms located on the cab instrument panel.

Voltage Monitor System

A voltage monitoring system will be provided to indicate the status of the battery system connected to the vehicle's electrical load. The system will provide visual and audible warning when the system voltage is below or above optimum levels.

The alarm will activate if the system falls below 11.8 volts DC for more than two (2) minutes.

Dedicated Radio Equipment Connection Points

There will be three (3) studs provided in the primary power distribution center located in front of the officer for two-way radio equipment. The studs will consist of the following:

12-volt 40-amp battery switched power

12-volt 60-amp ignition switched power

12-volt 60-amp direct battery power
There will also be a 12-volt 100-amp ground stud located in or adjacent to the power distribution center.

EMI/RFI Protection

To prevent erroneous signals from crosstalk contamination and interference, the electrical system will meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic and radio frequency emissions. An advanced electrical system will be used to ensure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.

The apparatus will have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The electrical system will meet, without exceptions, electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter. The vehicle OEM, upon request, will provide EMC testing reports from testing conducted on an entire apparatus and will certify that the vehicle meets SAE J551/2 and SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter requirements. Component and partial (incomplete) vehicle testing is not adequate as overall vehicle design can impact test results and thus is not acceptable by itself.

EMI/RFI susceptibility will be controlled by applying appropriate circuit designs and shielding. The electrical system will be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing will be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

0896456 Prognostics, Electrical System

ELECTRICAL SYSTEM PROGNOSTICS

There will be a software based vehicle tool provided to predict remaining life of the vehicles critical fluid and events.

The system will send automatic indications to the Command Zone™ information center and/or wireless enabled devices to proactively alert of upcoming service intervals.

Prognostics will include the following:

- Engine oil and filter
- Transmission oil and filter

0730603 Electrical System, Velocity ESP, Cummins, Paccar

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All wiring will be high temperature crosslink type. Wiring will be run, in loom or conduit, where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers will be provided which conform to SAE Standards. Wiring will be color, function and number coded. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.

Electrical wiring and equipment will be installed utilizing the following guidelines:

All holes made in the roof will be caulked with silicon. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.

Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.

Electrical components designed to be removed for maintenance will not be fastened with nuts and bolts. Metal screws will be used in mounting these devices. Also a coil of wire will be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.

Corrosion preventative compound will be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation (of the plug).

All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.

All electrical terminals in exposed areas will have silicon applied completely over the metal portion of the terminal.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, will be furnished. Rear identification lights will be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads will be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the tests will be recorded and provided to the purchaser at time of delivery.

0079211 Batteries, (6) Stryten/Exide Grp 31, 950 CCA each, Threaded Stud

BATTERY SYSTEM

There will be six (6) 12 volt Stryten/Exide®, Model 31S950X3W, batteries that include the following features will be provided:

950 CCA, cold cranking amps

190 amp reserve capacity

High cycle

Group 31

Rating of 5700 CCA at 0 degrees Fahrenheit

1140 minutes of reserve capacity

Threaded stainless steel studs

Each battery case will be a black polypropylene material with a vertically ribbed container for increased vibration resistance. The cover will be manifold vented with a central venting location to allow a 45 degree tilt capacity.

The inside of each battery will consist of a "maintenance free" grid construction with poly wrapped separators and a flooded epoxy bottom anchoring for maximum vibration resistance.

0008621	Battery System, Single Start, All Custom Chassis	<p>BATTERY SYSTEM There will be a single starting system with an ignition switch and starter button provided and located on the cab instrument panel.</p> <p>MASTER BATTERY SWITCH There will be a master battery switch provided within the cab within easy reach of the driver to activate the battery system. An indicator light will be provided on the instrument panel to notify the driver of the status of the battery system.</p>
0123174	Battery Compartment, Imp/Vel	<p>BATTERY COMPARTMENTS The batteries will be stored in well-ventilated compartments that are located under the cab and bolted directly to the chassis frame. The battery compartments will be constructed of 3/16" steel plate and be designed to accommodate a maximum of three (3) group 31 batteries in each compartment. The compartments will include formed fit heavy-duty roto-molded polyethylene battery tray inserts with drains on each side of the frame rails. The batteries will be mounted inside of the roto-molded trays.</p> <p>JUMPER STUDS One (1) set of battery jumper studs with plastic color-coded covers will be installed on the battery box on the driver's side. This will allow enough room for easy jumper cable access.</p>
0812586	Charger, Sngl Sys, Kussmaul, Chief 091-266-12-60, 60 Amp	<p>BATTERY CHARGER There will be a Kussmaul™, Chief Series Smart Charger 6012, product code 091-266-12-60, 60 amp battery charger with build-in touch screen display provided. The battery charger will be wired to the AC shoreline inlet through a junction box located near the battery charger.</p>
0814935	Location, Cab, Charger, EMS Compt, Vertical Wall, LS	Battery charger will be located in the cab, on the vertical wall of the left side EMS compartment.
0811943	Panel, Remote Control, Kussmaul, Chief 091-266-RCP	<p>REMOTE CONTROL PANEL - BATTERY CHARGER There will be a Kussmaul™, Chief Series Smart Charger remote control panel, product code 091-266-RCP included.</p>
0814942	Location, Cab, Ind/Remote, Driver's Seat with Bracket	The battery charger indicator will be located near the driver's seat riser with special bracketry.
0542439	Shoreline, 20A 120V, Straight Blade, NEMA 5-20, Red Cover	<p>SHORELINE There will be a 20 amp 120 volt AC straight blade shoreline inlet provided to operate the dedicated 120 volt AC circuits on the apparatus without the use of the generator. The shoreline inlet will include a red flip up cover. The shoreline(s) will be connected to battery charger. There will be a mating connector body supplied with the loose equipment. There will be a label installed near the inlet(s) that state the following: Line Voltage Current Rating (amps) Phase Frequency</p>
0026800	Shoreline Location	The shoreline receptacle will be located on the driver side of cab, to the front of cab door.
0077215	Cover, Protective Stainless, Louvered, Over Battery Charger	<p>BATTERY CHARGER COVER A cover with louvers will be fabricated of stainless steel and installed over the battery charger for protection.</p>
0647729	Alternator, 320 amp, Delco Remy 40SI	<p>ALTERNATOR A Delco Remy®, Model 40SI, alternator will be provided. It will have a rated output current of 320 amps, as measured by SAE method J56. The alternator will feature an integral regulator and rectifier system that has been tested and qualified to an ambient temperature of 257 degrees Fahrenheit (125 degrees Celsius). The alternator will be connected to the power and ground distribution system with heavy-duty cables sized to carry the full rated alternator output.</p>

ELECTRONIC LOAD MANAGER

An electronic load management (ELM) system will be provided that monitors the vehicles 12-volt electrical system, automatically reducing the electrical load in the event of a low voltage condition, and automatically restoring the shed electrical loads when a low voltage condition expires. This ensures the integrity of the electrical system.

For improved reliability and ease of use, the load manager system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load management tasks. Load management systems which require additional components will not be allowed.

The system will include the following features:

System voltage monitoring.

A shed load will remain inactive for a minimum of five minutes to prevent the load from cycling on and off.

Sixteen available electronic load shedding levels.

Priority levels can be set for individual outputs.

High Idle to activate before any electric loads are shed and deactivate with the service brake.

If enabled:

"Load Man Hi-Idle On" will display on the information center.

Hi-Idle will not activate until 30 seconds after engine start up.

Individual switch "on" indicator to flash when the particular load has been shed.

The information center indicates system voltage.

The information center, where applicable, includes a "Load Manager" screen indicating the following:

Load managed items list, with priority levels and item condition.

Individual load managed item condition:

ON = not shed

SHED = shed

SEQUENCER

A sequencer will be provided that automatically activates and deactivates vehicle loads in a preset sequence thereby protecting the alternator from power surges. This sequencer operation will allow a gradual increase or decrease in alternator output, rather than loading or dumping the entire 12 volt load to prolong the life of the alternator.

For improved reliability and ease of use, the load sequencing system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load sequencing tasks. Load sequencing systems which require additional components will not be allowed.

Emergency light sequencing will operate in conjunction with the emergency master light switch.

When the emergency master switch is activated, the emergency lights will be activated one by one at half-second intervals. Sequenced emergency light switch indicators will flash while waiting for activation.

When the emergency master switch is deactivated, the sequencer will deactivate the warning light loads in the reverse order.

Sequencing of the following items will also occur, in conjunction with the ignition switch, at half-second intervals:

Cab Heater and Air Conditioning

Crew Cab Heater (if applicable)

Crew Cab Air Conditioning (if applicable)

Exhaust Fans (if applicable)

Third Evaporator (if applicable)

0783153

Headlights, Rect LED, JW Spkr Evo 2, AXT/DCF/Enf/Imp/Sab/Vel

HEADLIGHTS

There will be four (4) JW Speaker®, Model 8800, 4" x 6" rectangular LED lights mounted in the front quad style, chrome housing on each side of the cab grille:

the outside light on each side will contain a part number 055***1 low beam module

the inside light on each side will contain a part number 055***1 high beam module

the headlights to include chrome bezels

The low beam lights will be activated when the headlight switch is on.

The high beam and low beam lights will be activated when the headlight switch and the high beam switch is activated.

0648425

Light, Directional, Wln 600 Cmb, Cab Crn, Imp/Vel/AXT/Qtm/DCF

DIRECTIONAL LIGHTS

There will be two (2) Whelen 600® series, LED combination directional/marker lights provided.

The lights will be located on the outside cab corners, next to the headlights.

The color of the lenses will be clear.

0620054

Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED 2lts

INTERMEDIATE LIGHT

There will be two (2) Weldon, Model 9186-8580-29, amber LED turn signal marker lights furnished, one (1) each side, in the rear fender panel. The light will double as a turn signal and marker light.

0648074

Lights, Clearance/Marker/ID, Front, P25 LED 7 Lts

CAB CLEARANCE/MARKER/ID LIGHTS

There will be seven (7) amber LED lights provided to indicate the presence and overall width of the vehicle in the following locations:

Three (3) amber LED identification lights will be installed in the center of the cab above the windshield.

Two (2) amber LED clearance lights will be installed, one (1) on each outboard side of the cab above the windshield.

Two (2) amber LED marker lights will be installed, one (1) on each side above the cab doors.

0563675	Lights, Clearance/Marker/ID, Rear, Truck-Lite 33050R LED 7Lts	<p>REAR CLEARANCE/MARKER/ID LIGHTING</p> <p>There will be three (3) Truck-Lite®, Model 33050R, LED lights used as identification lights recessed and located at the rear of the apparatus per the following: As close as practical to the vertical centerline Centers spaced not less than 6.00" or more than 12.00" apart Red in color All at the same height</p> <p>There will be two (2) Truck-Lite, Model 33050R, LED lights recessed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following: To indicate the overall width of the vehicle One (1) each side of the vertical centerline As near the top as practical Red in color To be visible from the rear All at the same height</p> <p>There will be two (2) Truck-Lite, Model 33050R, LED lights recessed on the side of the apparatus as marker lights as close to the rear as practical per the following: To indicate the overall length of the vehicle One (1) each side of the vertical centerline As near the top as practical Red in color To be visible from the side All at the same height</p> <p>There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.</p> <p>There will be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.</p> <p>Per FMVSS 108 and CMVSS 108 requirements.</p>
0804514	Lights, Tail, WIn M62BTT* Red Stop/Tail & M62T* Amber Dir Arw For Hsg	<p>REAR FMVSS LIGHTING</p> <p>The rear stop/tail and directional lighting included in the rear tail light housing will include the following: Two (2) Whelen®, Model M62BTT, 4.30" high x 6.70" wide x 1.40" deep brake/tail lights with red LEDs Two (2) Whelen, Model M62T, 4.30" high x 6.70" wide x 1.40" deep directional lights with amber LEDs. The directional lights will be set to Steady On (Arrow) flash pattern. The lens color(s) to be clear.</p>
0806466	Lights, Backup, WIn M62BU, LED, For Tail Lt Housing	<p>There will be two (2) Whelen Model M62BU, LED backup lights provided in the tail light housing.</p>
0889577	Bracket, License Plate & Light, P25 LED, Stainless Brkt	<p>LICENSE PLATE BRACKET</p> <p>One (1) license plate bracket constructed of stainless steel will be provided at the rear of the apparatus. One (1) white LED light with chrome housing will be provided to illuminate the license plate. A stainless steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.</p>
0556842	Bezels, WIn, (2) M6 Chrome Pierce, For mtg (4) WIn M6 lights	<p>LIGHTING BEZEL</p> <p>There will be two (2) Whelen, Model M6FCV4P, four (4) place chromed ABS housings with Pierce logos provided for the rear M6 series stop/tail, directional, back up, scene lights or warning lights.</p>
0589905	Alarm, Back-up Warning, PRECO 1040	<p>BACK-UP ALARM</p> <p>A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.</p>
0648630	Lights, Perimeter Cab, TecNiq E10-WS00-1 LED 4Dr, Angled Brkt	<p>CAB PERIMETER SCENE LIGHTS</p> <p>There will be four (4) TecNiq Model E10-WS00-1, 6.44" long x 1.38" high x 1.00" deep 12 volt DC weatherproof LED lights with a fabricated aluminum 45 degree brackets provided under the cab and crew cab access areas: One (1) for the driver's access. One (1) for the passenger's side front cab access door. One (1) for the passenger's side crew cab access door. One (1) for the driver's side crew cab access door. These lights will be activated automatically when the battery switch is on and the adjacent doors are opened or by the same means as the body perimeter lights.</p>
0617901	Lights, Perimeter Pump House, TecNiq T10-LC00-1 15" LED 2lts	<p>PUMP HOUSE PERIMETER LIGHTS</p> <p>There will be two (2) TecNiq, Model T10-LC00-1, 15.00" white 12 volt DC LED weatherproof strip lights provided under the pump panel running boards, one (1) each side. The lights will be controlled by the same means as the body perimeter lights.</p>

0626579	Lights, Perimeter Body, TecNiq T10-LC00-1 15" LED 2lts, Rear Step	<p>BODY PERIMETER SCENE LIGHTS</p> <p>There will be two (2) TecNiq, Model T10-LC00-1, 15.00" 12 volt DC LED strip lights provided at the rear step area of the body, one (1) each side shining to the rear.</p> <p>The perimeter scene lights will be activated when a switch within reach of the driver is activated and the parking brake is applied.</p>
0896454	Enhanced Software for Perimeter Lts	<p>ENHANCED SOFTWARE FOR PERIMETER LIGHTS</p> <p>All perimeter lights will be deactivated when the parking brake is released unless alternate control is selected.</p> <p>The cab and crew cab perimeter lights will remain on for ten (10) seconds for improved visibility after the doors closed.</p>
0556360	Lights, Step, P25 LED 4lts, Pump Pnl Sw	<p>STEP LIGHTS</p> <p>Four (4) white LED step lights will be provided. One (1) step light will be provided on each side, on the front compartment face and two (2) step lights at the rear to illuminate the tailboard. In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15.00" x 15.00" square placed 10.00" below the light and a minimum of 1.5 fc covering an entire 30.00" x 30.00" square at the same 10.00" distance below the light.</p> <p>These step lights will be actuated with the pump panel light switch.</p> <p>All other steps on the apparatus will be illuminated per the current edition of applicable NFPA standards.</p>
0618256	Light, Visor, FRC, 12V SPA851-A28-*, LED MAX-S 1st	<p>12 VOLT LIGHTING</p> <p>There will be one (1) Fire Research Spectra MAX-S, Model SPA851-A28-*, 12 volt DC LED combination spot/flood light(s) provided on the front visor, centered.</p> <p>The housing(s) painted parts of this light assembly to be black with a black bezel.</p> <p>The light(s) will be steady burning with the selected switch features.</p> <p>The light(s) will be controlled by the following:</p> <ul style="list-style-type: none"> a switch at the driver's side switch panel and a switch at the passenger's side switch panel a switch at the pump operator's panel no additional switch location no additional switch location <p>These light(s) may be load managed when the parking brake is applied.</p>
0807372	Lights, FRC, SPA260-Q20, 1st	<p>12 VOLT LIGHTING</p> <p>There will be one (1) Fire Research Model SPA260-Q20, Spectra Max 20,000 lumens 12 volt DC LED surface mount scene light(s) with black housings located on the cab, LS upper crew cab behind the door, as high as possible.</p> <p>The lights will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.</p> <p>The light(s) may be load managed when the parking brake is applied.</p>
0807374	Lights, FRC, SPA260-Q20, 2nd	<p>12 VOLT LIGHTING</p> <p>There will be one (1) Fire Research Model SPA260-Q20, Spectra Max 20,000 lumens 12 volt DC LED surface mount scene light(s) with black housings located on the cab, RS upper crew cab behind the door, as high as possible.</p> <p>The lights will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.</p> <p>The light(s) may be load managed when the parking brake is applied.</p>
0532358	Not Required, Deck Lights, Other Hose Bed & Rear Lighting	
0768474	Lights, Hose Bed, Below Alum Cvr, Amdor AY-LB-12HW040, 40" LED 4lts	<p>LIGHTS BELOW HOSE BED COVER</p> <p>There will be four (4) Amdor Model AY-LB-12HW040, 700 lumens, 40.00" white LED lights provided to illuminate the hose bed area.</p> <p>Two (2) LED light strips will be installed on the driver's side hose bed cover 30.00" from the front and rear of the hose bed, as close to the hinge as practical.</p> <p>Two (2) LED light strips will be installed on the passenger's side hose bed cover 30.00" from the front and rear of the hose bed, as close to the hinge as practical.</p> <p>The lights will be activated when the battery switch is on, and when the hosebed cover is raised.</p>
0645864	Lights, Rear Scene, FRC, SPA900-Q70	<p>REAR SCENE LIGHTS</p> <p>There will be two (2) Fire Research, Model SPA900-Q70, LED scene lights with 15 degree optics from vertical, installed at the rear of the apparatus, upper rear bulkhead, as high as possible, one per side.</p> <p>The lights will be controlled by a switch at the driver's side switch panel, by a switch at the passenger's side switch panel, by a switch at the driver's side pump panel and by a cup switch at the driver's side rear bulkhead.</p>

0762420	SP	Lights, Walk Surf, Amdor AY-LB-12HW0** LED, and P25 LED	<p>WALKING SURFACE LIGHTS</p> <p>There will be an Amdor®, Model AY-LB-12HW0**, white 12 volt DC LED light strip provided to illuminate the cargo area.</p> <p>The light will be activated when the body step lights are on.</p> <p>There will be Model P25 LED lights to illuminate the top of the hose bed cover.</p> <p>The lights will be activated when the body step lights are on.</p>
0060115		Pumper, Medium, Aluminum, 2nd Gen	
0554271		Body Skirt Height, 20"	
0028245		Tank, Water, 750 Gallon, Poly, Med	<p>WATER TANK</p> <p>Booster tank will have a capacity of 750 gallons and be constructed of polypropylene plastic by United Plastic Fabricating, Incorporated.</p> <p>Tank joints and seams will be nitrogen welded inside and out.</p> <p>Tank will be baffled in accordance with the current edition of applicable NFPA standards.</p> <p>Baffles will have vent openings at both the top and bottom to permit movement of air and water between compartments.</p> <p>Longitudinal partitions will be constructed of .38" polypropylene plastic and will extend from the bottom of the tank through the top cover to allow for positive welding.</p> <p>Transverse partitions will extend from 4.00" off the bottom of the tank to the underside of the top cover.</p> <p>All partitions will interlock and will be welded to the tank bottom and sides.</p> <p>Tank top will be constructed of .50" polypropylene. It will be recessed .38" and will be welded to the tank sides and the longitudinal partitions.</p> <p>Tank top will be sufficiently supported to keep it rigid during fast filling conditions.</p> <p>Construction will include 2.00" polypropylene dowels spaced no more than 30.00" apart and welded to the transverse partitions. Two (2) of the dowels will be drilled and tapped (.50" diameter, 13.00" deep) to accommodate lifting eyes.</p> <p>A sump that will be sized dependent on the tank to pump plumbing will be provided at the bottom of the water tank.</p> <p>Sump will include a drain plug and the tank outlet.</p> <p>Tank will be installed in a fabricated cradle assembly constructed of structural steel.</p> <p>Sufficient crossmembers will be provided to properly support bottom of tank. Crossmembers will be constructed of steel bar channel or rectangular tubing.</p> <p>Tank will "float" in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, will be placed on all horizontal surfaces that the tank rests on.</p> <p>Stops or other provision will be provided to prevent an empty tank from bouncing excessively while moving vehicle.</p> <p>Mounting system will be approved by the tank manufacturer.</p>
0003405		Overflow, 4.00" Water Tank, Poly	<p>Fill tower will be constructed of .50" polypropylene and will be a minimum of 8.00" wide x 14.00" long.</p> <p>Fill tower will be furnished with a .25" thick polypropylene screen and a hinged cover.</p> <p>An overflow pipe, constructed of 4.00" schedule 40 polypropylene, will be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.</p>
0028104		Foam Cell Required	
0084432		Modified Poly Tank, Ext'd Over Rear Compt	The water tank will be extended to the rear of the truck, over the rear compartment.
0553729		Not Required, Restraint, Water Tank, Heavy Duty	
0003429		Not Required, Direct Tank Fill	
0003424		Not Required, Dump Valve	
0048710		Not Required, Jet Assist	
0030007		Not Required, Dump Valve Chute	
0514778		Not Required, Switch, Tank Dump Master	

0126633	Hose Bed, Aluminum, Pumper	<p>HOSE BED</p> <p>The hose bed will be fabricated of .125"-5052 aluminum with a nominal 38,000 psi tensile strength.</p> <p>Upper and rear edges of side panels will have a double break for rigidity.</p> <p>The upper inside area of the beavertails will be covered with brushed stainless steel to prevent damage to painted surface when hose is removed.</p> <p>Flooring of the hose bed will be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats will be a minimum of 0.50" x 4.50" with spacing between slats for hose ventilation.</p>
0723549	Painted Hose Bed	The hose bed interior walls will be painted to match the lower body color.
0003481	Hose Bed Capacity, Special	Hose bed will accommodate Left to Right- Bed # 1- 250' of 1.75" DJ Hose SINGLE STACKED Bed # 2- 800' of 2.50" DJ hose Bed # 3- 800' of 4.00" DJ LDH Bed # 4- 1.75" Hose packs laid flat.
0003488	Divider, Hose Bed, Unpainted	<p>HOSE BED DIVIDER</p> <p>Two (2) hosebed dividers will be furnished for separating hose.</p> <p>Each divider will be constructed of a .125" brushed aluminum sheet fitted and fastened into a slotted, 1.50" diameter radiused extrusion along the top, bottom, and rear edge.</p> <p>Divider will be fully adjustable by sliding in tracks, located at the front and rear of the hose bed.</p> <p>Divider will be held in place by tightening bolts, at each end.</p> <p>Acorn nuts will be installed on all bolts in the hose bed which have exposed threads.</p>
0821844	Cover, Hose Bed, Alum Treadplate, Bolted T-Bar, Electric Actuated	<p>HOSE BED COVER ELECTRIC ACTUATOR</p> <p>A two (2) section hose bed cover, constructed of .125" bright aluminum treadplate will be furnished. The cover will be hinged with full length stainless steel piano hinge. The sides will be slanted down with the center of the cover supported by a modular stationary bridgework support. The covers will not over lap.</p> <p>The cover will be reinforced so that it can support the weight of a man walking on the cover.</p> <p>A pneumatic gas spring assist will be installed at the front of the covers to help support and stabilize the cover throughout its range of motion.</p> <p>If access to water tank fill tower is blocked by the hose bed cover, then a hinged door will be provided in it so that tank may be filled without raising cover doors.</p> <p>Chrome grab handles and two (2) (one (1) each side) electric linear actuator with brake cylinders will be provided to assist in opening and closing the cover. A rubber-covered momentary toggle switch will be provided for each actuator that controls the opening and closing of the covers. Each switch will be located at the rear body of the body at the left side. Additional locks on top of the cover are not required to secure the cover in the nested position.</p> <p>A cross divider will be provided directly behind the actuators, at the front of the hose bed, to support the actuators and provide a clean appearance.</p> <p>A handrail will be provided at the rear, in the center of the support, to assist in climbing up the back of the truck.</p> <p>The hose bed cover will be connected to the Do Not Move Truck indicator. The light will be activated if the cover is not in the stowed position and the parking brake is released.</p>
0807411	Hose Restraint, Hose Bed, Vinyl, Rear, Separate From Top, Seat Belt	<p>At the rear of the hose bed, a black vinyl flap will be provided with seat belt buckles at the top.</p> <p>The seat belt buckles will be provided with no tether release. fixed style seat belt buckle will be provided at the bottom of the cover. The bottom of the flap will be not weighted.</p> <p>If a strap is provided, the color of the strap will be N/A.</p>
0010133	Cross-Divider, Hose Bed	A cross-divider will be provided just behind the fill tower. The divider will be bolted to the side sheet.
0581892	Divider, .25", Unpainted, Permanent	<p>There will be one (1) additional hose bed dividers furnished.</p> <p>Each divider will be constructed of a .25" brushed aluminum sheet.</p> <p>Partition will be permanently installed and located centered above the inner edge of the ladder storage box.</p> <p>Acorn nuts will be installed on all bolts in the hose bed which have exposed threads.</p> <p>Flat surfaces will be sanded for uniform appearance or constructed of brushed aluminum.</p>
0058033	Shelf, Hinged, In Hose Bed, Between Side Sheet	<p>SHELF, HINGED IN HOSE BED</p> <p>There will be one (1) hinged shelves, constructed of aluminum grating, provided for hose or equipment storage inside the hose bed located in between the permanent HB divider and the RS side sheet. Locate 8.00" clear from the hose bed grating on the right side. The shelf will be attached to the hose bed side sheet.</p>

0695401	Running Boards, 14.75" Deep, Rear 45 Degree Corner	<p>RUNNING BOARDS Running boards will be fabricated of .125" bright aluminum treadplate. Each running board will be supported by a welded 2.00" square tubing and channel assembly, which will be bolted to the pump compartment substructure. Running boards will be 14.75" deep and spaced .50" away from the pump panel. The rear outside corner of the running board will be finished with a 45 degree corner where it lines up with the body. A splash guard will be provided above the running board treadplate.</p>
0689497	Tailboard, 24" & 8" Deep, T-Shaped, Angled Corners	<p>TAILBOARD The tailboard will also be constructed of .125" bright aluminum treadplate and spaced .50" from the body, as well as supported by a structural steel assembly. The tailboard area will be 24.00" deep in the center area and 8.00" deep to the rear of the side compartments. The tailboard will be T-shaped. The outboard sides of the tailboard will be angled at 45 degrees beginning at the point where the body meets the tailboard at the outboard edge angling rearward to the rear edge of the tailboard. The exterior side will be flanged down and in for increased rigidity of tailboard structure.</p>
0690037	Wall, Rear, Smooth Aluminum/Body Material	<p>REAR WALL, SMOOTH ALUMINUM/BODY MATERIAL The rear facing surfaces of the center rear wall will be smooth aluminum. The bulkheads, the surface to the rear of the side body compartments, will be smooth and the same material as the body. Any inboard facing surfaces below the height of the hosebed will be aluminum diamondplate.</p>
0889214	Tow Eyes, w/Tow Bar, 2G Pumper	<p>REAR TOW EYES Two (2) tow eyes, which are an integral part of the body mounting substructure, will be installed below the rear of the truck. The tow eyes will be of adequate strength to allow the truck to be pulled from the eyes.</p> <p>REAR TOW BAR One (1) tow bar will be installed under the tailboard. The tow bar assembly will be designed and positioned to allow up to a 30-degree upward angled pull of 17,000 lb, or a 20,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow bar design will have been tested and evaluated using finite element analysis techniques.</p>
0590920	Hose Restraint, Running Board, Aluminum Treadplate Cover	<p>RUNNING BOARD HOSE RESTRAINT A hinged, bright aluminum treadplate cover will be provided over each hose tray. The cover will have a D-ring latch in the center. The latch will secure the cover in the closed position and a no stay arm device will hold the cover in the open position. There will be Two (2) hose trays located one (1) in each side running board.</p>
0695615	Tray, Hose, Running Board, Free Floating, Tapered Both Corners, 20' of 5"	<p>HOSE TRAY Two (2) hose trays will be made free floating one (1) in each side running board. The tray(s) will be flanged and drop in from the top. The ends will be tapered at the front and rear towards the center. No fasteners will be used to secure the tray(s). Capacity of the tray will be 20.00' of 5.00" soft suction hose. Rubber matting will be installed on the floor of the tray to provide proper ventilation. Drain holes will be provided.</p>

COMPARTMENTATION

Body and compartments will be fabricated of 0.125", 5052-H32 aluminum.

Side compartments will be an integral assembly with the rear fenders.

Circular fender liners will be provided for prevention of rust pockets and ease of maintenance.

Side compartment flooring will be of the sweep out design with the floor higher than the compartment door lip.

The side compartment door opening will be framed by flanging the edges in 1.75" and bending out again 0.75" to form an angle.

Drip protection will be provided above the doors by means of bright aluminum extrusion, formed bright aluminum treadplate or polished stainless steel.

The top of the compartment will be covered with bright aluminum treadplate rolled over the edges on the front, rear and outward side. These covers will have the corners welded.

Side compartment covers will be separate from the compartment tops.

Front facing compartment walls will be covered with bright aluminum treadplate.

All screws and bolts which protrude into a compartment will have acorn nuts on the ends to prevent injury.

UNDERBODY SUPPORT SYSTEM

Due to the severe loading requirements of this pumper a method of body and compartment support suitable for the intended load will be provided.

The backbone of the support system will be the chassis frame rails which is the strongest component of the chassis and is designed for sustaining maximum loads.

Forward to the rear axle, the support system will include "L"-shaped support members bolted to the chassis frame rails. These welded support members will include vertical formed channels, horizontal structural channels, and support gussets. These parts extend from the chassis frame outward underneath the body.

Rearward to the rear axle, the body support system will include two rearward facing "L"-shaped support members bolted to the chassis frame rails. These support members will be connected to the two body supporting crossmembers forming a boxed foundation for the rear body support system.

Steel upper platform decks will be mounted on the top of these support members to create a floating substructure which will result in a 500 lb equipment support rating per lower compartment.

All structural components of this system will be made from high strength 50K steel plate material or structural steel componentry. The steel frames as well as the steel vertical angles will be treated with an epoxy E-coat to provide resistance to corrosion and chemicals as standard.

The floating substructure will be separated from the horizontal members with neoprene elastomer isolators. These isolators will reduce the natural flex stress of the chassis from being transmitted to the body.

Isolators will have a broad load range, proven viability in vehicular applications, be of a fail-safe design and allow for all necessary movement in three (3) transitional and rotational modes.

The neoprene isolators will be installed in a pattern which assimilates a three (3)-point mounting pattern to reduce the natural flex of the chassis being transmitted to the body.

A design with body compartments hanging on the chassis in an unsupported fashion will not be acceptable.

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards.

LOUVERS

Louvers will be stamped into compartment walls to provide the proper airflow inside the body compartments and to prevent water from dripping into the compartment. Where these louvers are provided, they will be formed into the metal and not added to the compartment as a separate plate.

TESTING OF BODY DESIGN

Body structural analysis will be fully tested. Proven engineering and test techniques such as finite element analysis, strain gauging, and model analysis will be performed with special attention given to fatigue, life and structural integrity of the body and substructure.

Body will be tested while loaded to its greatest in-service weight.

The criteria used during the testing procedure will include:

Raising opposite corners of the vehicle tires 9.00" to simulate the twisting a truck may experience when driving over a curb.

Making a 90 degree turn, while driving at 20 mph to simulate aggressive driving conditions.

Driving the vehicle at 35 mph on a washboard road.

Driving the vehicle at 55 mph on a smooth road.

Accelerating the vehicle fully, until reaching the approximate speed of 45 mph on rough pavement.

Evidence of actual testing techniques will be made available upon request.

0063610	LS 152" Lap, Full Height Front & Rear, FDLER	<p>LEFT SIDE COMPARTMENTATION</p> <p>The left side compartmentation will consist of three lap door compartments.</p> <p>A full height, vertically hinged, single door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 34.50" wide x 66.63" high x 25.88" deep in the lower 25.00" of the compartment and 12.00" deep in the remaining upper portion. The clear door opening will be a minimum of 28.63" wide x 61.88" high.</p> <p>A horizontally hinged, single lift-up door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 66.50" wide x 32.88" high x 12.00" deep. The clear door opening will be a minimum of 59.25" wide x 27.00" high.</p> <p>A full height, vertically hinged, double door compartment behind the rear wheels will be provided. The interior dimensions of this compartment will be 47.75" wide x 67.63" high x 25.88" deep in the lower 26.00" of the compartment and 12.00" deep in the remaining upper portion. The clear door opening will be a minimum of 43.50" wide x 62.88" high. The interior height of the compartments will be measured from the compartment floor to the ceiling. The depth of the compartments will be measured from the back wall to the inside of the door frame.</p> <p>Closing of the doors will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.</p> <p>The vertically hinged doors will be furnished with a positive door holder.</p> <p>The lift-up door will be furnished with two gas-charged cylinders to assist in the opening of the door and to maintain the door in an open position. There will be a field adjustable, three-position bracket mounted on the vertical side door opening that will allow the door to be held open at 87°, 90°, or 93°.</p>
0063624	RS 152" Lap, Full Height Front & Rear, FDLER	<p>RIGHT SIDE COMPARTMENTATION</p> <p>The right side compartmentation will consist of three lap door compartments.</p> <p>A full height, vertically hinged, single door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 34.50" wide x 66.63" high x 25.88" deep in the lower 25.00" of the compartment and 12.00" deep in the remaining upper portion. The clear door opening will be a minimum of 28.63" wide x 61.88" high.</p> <p>A horizontally hinged, single lift-up door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 66.50" wide x 32.88" high x 12.00" deep. The clear door opening will be a minimum of 59.25" wide x 27.00" high.</p> <p>A full height, vertically hinged, double door compartment behind the rear wheels will be provided. The interior dimensions of this compartment will be 47.75" wide x 67.63" high x 25.88" deep in the lower 26.00" of the compartment and 12.00" deep in the remaining upper portion. The clear door opening will be a minimum of 43.50" wide x 62.88" high. The interior height of the compartments will be measured from the compartment floor to the ceiling. The depth of the compartments will be measured from the back wall to the inside of the door frame.</p> <p>Closing of the doors will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.</p> <p>The vertically hinged doors will be furnished with a positive door holder.</p> <p>The lift-up door will be furnished with two gas-charged cylinders to assist in the opening of the door and to maintain the door in an open position. There will be a field adjustable, three-position bracket mounted on the vertical side door opening that will allow the door to be held open at 87°, 90°, or 93°.</p>
0063911	Doors, Lap w/ "D" Handles - Side Compartments	<p>SIDE COMPARTMENT DOORS</p> <p>All hinged compartment doors will be lap style with double panel construction and will be a minimum of 1.50" thick. The doors will be made out of the same material as the body. To provide additional door strength a "C" section reinforcement will be installed between the outer and interior panels.</p> <p>Doors will be provided with a closed cell rubber gasket around the surface that laps onto the body. A second heavy-duty automotive rubber molding with a hollow core will be installed on the door framing that seals onto the interior panel, to ensure a weather resisting compartment.</p> <p>All compartment doors will have polished stainless steel continuous hinge with a pin diameter of .25" that is bolted or screwed on with stainless steel fasteners. (Hinges which are welded on will not be acceptable.)</p> <p>All door locking mechanisms will be fully enclosed within the door panels to prevent fouling of the lock in the event equipment inside shifts into the lock area.</p> <p>Doors will be latched with recessed, polished stainless steel "D" ring handles and FMVSS approved door locking mechanisms.</p> <p>To prevent corrosion caused by dissimilar metals, compartment door handles will not be attached to outer door panel with screws. A rubber gasket will be provided between the "D" ring handle and the door.</p>
0083700	Compt, Rear, Rollup, 37.75" FF, 25.88" D	<p>REAR COMPARTMENTATION</p> <p>A roll-up door compartment above the rear tailboard will be provided.</p> <p>The interior dimensions of this compartment will be 40.00" wide x 40.63" high x 25.88" deep. The spool of the rollup door at the top of the compartment takes up some usable space. The depth of the compartment will be calculated with the compartment door closed.</p> <p>A louvered, removable access panel will be furnished on the back wall of the compartment.</p> <p>The rear compartment will be open into the rear side compartments.</p> <p>The clear door opening of this compartment will be a minimum of 33.25" wide x 30.88" high.</p> <p>Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.</p>

0692746	Door, Gortite, Rollup, Rear Compartment	<p>ROLLUP REAR COMPARTMENT DOOR</p> <p>There will be a rear rollup door. The door will be double faced aluminum construction, an anodized satin finish and manufactured by Gortite®.</p> <p>Lath sections will be an interlocking rib design and will be individually replaceable without complete disassembly of door.</p> <p>Between each slat at the pivoting joint will be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals will allow door to operate in extreme temperatures ranging from 180 to -40 degrees Fahrenheit. Side, top and bottom seals will be provided to resist ingress of dirt and weather and be made of Santoprene.</p> <p>All hinges, barrel clips and end pieces will be nylon 66. All nylon components will withstand temperatures from 300 to -40 degrees Fahrenheit.</p> <p>A polished stainless steel lift bar to be provided for each roll-up door. Lift bar will be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge will be supplied over lift bar for additional area to aid in closing the door.</p> <p>Door will be constructed from an aluminum box section. The exterior surface of each slat will be flat. The interior surface will be concave to provide strength and prevent loose equipment from jamming the door from inside.</p> <p>To conserve space in the compartments, the spring roller assembly will not exceed 3.00" in diameter.</p> <p>The header for the rollup door assembly will not exceed 4.00".</p> <p>A heavy-duty magnetic switch will be used for control of open compartment door warning lights.</p>
0808925	Body Modification, 4" Reduced Depth Rear Compt, Air Ride	<p>BODY MODIFICATION FROM STANDARD</p> <p>The following body modifications will be required for the installation of a single axle air ride suspension:</p> <ul style="list-style-type: none"> - Rear compartment will be 4.00" shorter in depth. - Special water tank mounting required if applicable.
0625184	Guard, Drip Pan, S/S, Rollup Door, Pumper	<p>DOOR GUARD</p> <p>There will be one (1) compartment door that will include a guard/drip pan designed to protect the rollup door from damage when in the retracted position and contain any water spray. The guard will be fabricated from stainless steel and installed rear compartment.</p>
0003919	Reverse Hinge Compartment Door	<p>REVERSE HINGED DOOR</p> <p>The one (1) compartment door, located LS3, will have the hinge at the rear of the door.</p>
0616670	Lights, Compt, Pierce LED, Dual Light Strips, Each Side of Door, Pumper/Tanker	<p>COMPARTMENT LIGHTING</p> <p>There will be seven (7) compartment(s) with two (2) white 12 volt DC LED compartment light strips. The dual light strips will be centered vertically along each side of the door framing. There will be two (2) light strips per compartment. The dual light strips will be in all body compartment (s).</p> <p>Any remaining compartments without light strips will have a 6.00" diameter Truck-Lite, Model: 79384 light. Each light will have a number 1076 one filament, two wire bulb.</p> <p>Opening the compartment door will automatically turn the compartment lighting on.</p>
0562348	Fasteners, Mechanical, Strip Lighting In Compartments	<p>COMPARTMENT LIGHTING</p> <p>Metal clamps will be used to retain the strip lighting in all body compartments.</p>
0687146	Shelf Tracks, Painted	<p>MOUNTING TRACKS</p> <p>There will be five (5) sets of tracks for mounting shelf(s) in LS1, upper portion of LS3, RS1, RS3 and B1. These tracks will be installed vertically to support the adjustable shelf(s). The tracks will be painted to match the compartment interior.</p>
0600350	Shelves, Adj, 500 lb Capacity, Full Width/Depth, Predefined Locations	<p>ADJUSTABLE SHELVES</p> <p>There will be 12 shelves with a capacity of 500 lb provided.</p> <p>The shelf construction will consist of .188" aluminum painted spatter gray with 2.00" sides. Each shelf will be infinitely adjustable by means of a threaded fastener, which slides in a track. The shelves will be held in place by .12" thick stamped plated brackets and bolts.</p> <p>The location(s) will be in LS1 at the depth transition point to the left of the partition, in RS1 at the transition point, in RS3 at the transition point, in RS1 in the lower third, in RS3 in the lower third, in RS1 in the upper third, in RS1 in the upper third, in LS3 in the upper third, in LS3 in the upper third, in LS1 in the upper third to the left of the partition, in LS3 at the depth transition point and in B1 in the upper third.</p>

0725642	Cabinet, Drawer Assembly, CTECH, Three Drawers, Up To 36" Wide	<p>DRAWER ASSEMBLY A slide-out drawer assembly will be installed LS3 Lower. The clear dimensions of the first drawer starting at the top will be 3.00" with a face plate that is 4.00" high x 21.00" deep. The clear dimensions of the second drawer will be 7.75" with a face plate that is 8.00" high x 21.00" deep. The clear dimensions of the third drawer will be 7.75" with a face plate that is 8.00" high x 21.00" deep. Each drawer will be the same width and not exceed 36.00".</p> <p>The drawers will have a capacity of 250 pounds.</p> <p>The drawers will be mounted in a cabinet housing constructed of light gray powder coated aluminum with anodized aluminum frames. The housing will be 24.00" deep, and completely enclose the drawer.</p> <p>A full-length aluminum extruded rail will be provided at the top edge of each drawer. This rail will act as the latching mechanism as well as the handle for each drawer.</p> <p>There will be a total of one (1) provided.</p>
0726441	Partition, Trans Rear Compt	<p>PARTITION, TRANSVERSE REAR COMPARTMENT Two (2) partitions will be bolted in place to separate the left and right side rear compartments from the rear tailboard compartment. The partition will be body material painted spatter gray.</p>
0726457	Partition, Vertical Compt, Predefined Locations	<p>VERTICAL COMPARTMENT PARTITION One (1) partition will be provided. The partition construction will consist of body material painted spatter gray. Each partition will be the full vertical height of the compartment. The location(s) will be in LS1, 32.00" from the forward door frame.</p>
0659383	Matting, Turtle Tile w/Ramp, Compartment Floors	<p>MATTING, COMPARTMENT FLOOR Turtle Tile compartment matting will be provided in six (6) compartments on the compartment floor. The locations are, LS1, LS2, B1, RS1, RS2, RS3. The Turtle Tile will be black and the leading edge of the matting will include the beveled edge. The beveled edge will be black .</p>
0028026	Matting, Turtle Tile, Compartment Shelving Only	<p>MATTING, COMPARTMENT SHELIVING Turtle Tile compartment matting will be provided in 12 shelves. The locations are, each shelf. The color of the Turtle Tile will be black.</p>
0062238	Pegboard, Side Wall Mounted, 3/16" Alum	<p>PEGBOARD There will be 3/16" thick aluminum pegboard installed on the one (1) side wall(s) of compartments LS1 on the right side wall, match 35130 . The pegboard will be mounted using two (2) horizontal tracks. Retainers will be used to mount the pegboard to the tracks. The holes will be .281" diameter, punched 1.00" on center. The pegboard will be spatter gray painted. The pegboard will be mounted vertically within the compartment(s).</p>
0755527	Pegboard, Back Wall Mounted, 3/16" Alum, Standard Depth Upper	<p>PEGBOARD There will be 3/16" thick aluminum pegboard spatter gray painted will be installed on the back wall of one (1) compartments. It will be mounted using two (2) horizontal tracks. Retainers will be used to mount the pegboard to the tracks. The pegboard(s) installed will be on the upper standard depth section of the compartment. The holes will be .281" diameter, punched 1.00" on center. Pegboard will be provided in the following compartments: RS2.</p>
0027090	Tracks, Equipment Mounting, Horizontal	<p>MOUNTING TRACKS There will be two (2) sets of tracks for mounting equipment. These tracks will be installed horizontally on the back wall of the compartment(s). The compartment(s) with mounting tracks will be LS2, RS3 on back wall spaced out to store customer supplied ULLH SCBA brackets.</p>
0004016	Rub Rail, Aluminum Extruded, Side of Body	<p>RUB RAIL Bottom edge of the side compartments will be trimmed with a bright aluminum extruded rub rail. Trim will be 2.12" high with 1.38" flanges turned outward for rigidity. The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.</p>
0784811	Fender Crowns, Rear, Stainless, w/Removable Liner	<p>BODY FENDER CROWNS Polished stainless steel fender crowns will be provided around the rear wheel openings with a dielectric barrier will be provided between the fender crown and the fender sheet metal to prevent corrosion.</p> <p>The fender crowns will be held in place with stainless steel screws that thread directly into a composite nut and not directly into the parent body sheet metal to eliminate dissimilar metals contact and greatly reduce the chance for corrosion. Rubber welting will be provided between the body and crown.</p> <p>BODY FENDER LINER A painted black 101 fender liner will be provided. The liners will be removable to aid in the maintenance of rear suspension components.</p>

0816944	Hose, Hard Suction, Provided by Fire Department, NFPA 2024	HARD SUCTION HOSE Hose is not on the apparatus as manufactured. The fire department will provide suction or supply hose. There will be Two (2) lengths of 10' long x 6.00" diameter hose provided and equipped with rocker lug couplings provided on the ends.
0612955	Trough, HSH, (1), Compartment Top Mount	HOSE TROUGH A quantity of two (2) hard suction hose trough(s) will be compartment top mounted on a bracket, located one (1) on the left side and one (1) on the right side. Trough(s) will be constructed of aluminum painted job color. The hose(s) will be held in place by chrome plated, quarter turn, spring loaded clamps.
0621021	Handrails, Side Pump Panels, Per Print, Hansen Knurled Alum Tubing, LED Backlit	HANDRAILS The handrails will be Hansen LED backlit knurled aluminum. The handrails will be lit with a blue LED light. The handrails will be activated by the same means as the cab handrail light controls. Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces. Drain holes will be provided in the bottom of all vertically mounted handrails. Handrails will be provided to meet current edition of applicable NFPA standards. The handrails will be installed as noted on the sales drawing.
0625975	Handrails, Beavertail, Hansen Tubing, Knurled Aluminum, LED Backlit	HANDRAILS One (1) Hansen LED lit knurled aluminum vertical handrail will be located on each rear beavertail. The handrail will be lit with a blue LED light. The hand rail will be activated by the same means as the cab handrail light controls.
0763247	Handrail, Rear, Below Hose Bed, Hansen, Knurled Aluminum LED Backlit	One (1) horizontal handrail will be provided below the hose bed at the rear of the apparatus. The handrail will be Hansen LED backlit knurled aluminum. The handrail will be lit with a blue LED light. The handrail will be activated by the same means as the cab handrail light controls.
0609286	Handrail, Extra - 15-20" Long, Hansen Tubing, Knurled Aluminum LED Backlit	ADDITIONAL HANDRAIL Two (2) handrails, will be mounted On the front of the hose bed covers to match 35130. The handrails will be Hansen LED backlit knurled aluminum. The handrails will be lit with a blue LED light. The handrails will be activated by the same means as the cab handrail light controls. Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces. Drain holes will be provided in the bottom of all vertically mounted handrails.
0622393	Compt, Air Pack Fender Panel	AIR PACK STORAGE A total of one (1) air pack compartment(s) will be provided and located RS forward of the rear wheels. The air pack compartment(s) will be tapered to match the profile of the space available in the fender. The compartment(s) will be approximately 15.50" wide at the top and 5.00" wide at the bottom for the wheel cutout. The compartment(s) will be 15.50" tall at the body side compartment and 6.00" tall at the wheel cutout. The compartment(s) will be 26.00" deep and have a drain hole. Inside the compartment, black Dura-Surf friction reducing material will be provided. A painted stainless steel hinged door with a Southco raised trigger C2 black lever latch will be provided to contain the air pack. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.
0732151	SP Compt, Air Bottle, Fender Panel, (3) "D" Size Bottles, (1) Std Size Air Bottle	AIR BOTTLE STORAGE A quantity of one (1) air bottle compartment designed to hold (3) "D" size air bottles, 5.00" in diameter, and (1) air bottle, 7.25" in diameter, x 26.00" deep will be provided on the right side rearward of the rear wheels. A painted stainless steel door with a Southco raised trigger C2 black lever latch will be provided to contain the air bottle. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal. Inside the compartment, black Dura-Surf friction reducing material will be provided. AIR BOTTLE COMPARTMENT STRAP A strap will be provided in the air bottle compartment(s) to help contain the air bottles when the vehicle is parked on an incline. The strap will wrap around the neck and attach to the wall of the compartment.
0657522	Compt, Air Bottle, Triple, Fender Panel	AIR BOTTLE STORAGE (Triple) A quantity of one (1) air bottle compartment designed to hold (3) air bottles up to 7.25" in diameter x 26.00" deep will be provided on the left side forward of the rear wheels. A painted stainless steel door with a Southco raised trigger C2 black lever latch will be provided to contain the air bottle. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal. Inside the compartment, black Dura-Surf friction reducing material will be provided. AIR BOTTLE COMPARTMENT STRAP A strap will be provided in the air bottle compartment(s) to help contain the air bottles when the vehicle is parked on an incline. The strap will wrap around the neck and attach to the wall of the compartment.

0004225	Ladder, 24' Duo-Safety 900A 2-Section	EXTENSION LADDER There will be a 24' two-section aluminum Duo-Safety Series 900-A extension ladder provided.
0004230	Ladder, 14' Duo-Safety 775A Roof	ROOF LADDER There will be a 14' aluminum Duo-Safety Series 775-A roof ladder provided.
0787027	Ladders Btwn Tank & S.Sht, RS, Extended Rear, Enclosed, RPH, Special Mounting	LADDER STORAGE The ladders will be stored between the water tank and the right side compartments. The ladders will extend into the pump compartment just to the rear of the water pump discharges. The ladder storage area will be enclosed as practical by means of sheet metal to protect the ladders from road dirt. The ladders that extend into the pump house will also be enclosed. A black rubber boot will be provided to enclosed the ladders in the gap between the pump house and the body. Each ladder will be stored vertically in a separate stainless steel storage trough. Each stainless steel trough will be lined with Dura-Surf nylon slides. If the apparatus does not have a flush rear wall, an aluminum enclosure will be provided at the rear of the body to properly contain the ladders. This enclosure will extend to the rear of the side body compartments. The ladders will be stored FLY INBOARD. The enclosure will also include a vertically hinged aluminum treadplate door with a D-handle latch to access the ladders.
0733387	Ladder, 10' Duo-Safety Folding 585A	FOLDING LADDER One (1) 10.00' aluminum, Series 585-A, Duo-Safety folding ladder will be installed.
0733796	Trough, Folding Ladder, Ladder Storage Btwn Tank & S.Sht	FOLDING LADDER STORAGE There will be storage designated right side for folding ladders stored between the side sheet in a stainless steel trough in the ladder storage compartment.
0725371	Compt w/Door, Backboard, Over Pump	BACKBOARD STORAGE A transverse area over the pump and forward of the crosslays will hold two (2) storage troughs. A blister will be supplied at each side to enclose the backboards due to their length. The backboards will be accessible from either side of the vehicle through the aluminum treadplate door(s) with a pair of flush lift and turn latches. The door(s) will be hinged along the forward edge. The size of the backboard(s) to be stored will be 72.00" long x 18.00" wide x 2.00" high.
0750927	SP Pike Pole, Provided by Dealer or Fire Department	PIKE POLE, PROVIDED BY DEALER OR FIRE DEPARTMENT One (1) pike pole will be provided by the dealer or the fire department. The make and model will be FHU 8' drywall.
0567897	Pike Pole, 8' Fire Hooks Unlimited, New York Roof Hook, Steel, Pry End, RH-8	8' PIKE POLE There will be one (1) Fire Hooks Unlimited, New York Hook , 8' long roof hook with steel shaft and chisel (pry) end provided pike pole tube in long tool storage.
0552649	Pike Pole, 6' Fire Hooks Unlimited, New York Roof Hook, Steel, Pry End, RH-6	6 FT PIKE POLE There will be one (1) Fire Hooks Unlimited NY roof hook RH-6, 6 foot pike pole(s) with steel handles and pry end provided pike pole tube in long tool storage.
0537952	SP Compt, (2) NY Roof Hook, (1) Dry Wall Hook, Below Tee, Stainless Steel Door, LS	PIKE POLE, DRY WALL HOOK A compartment will be provided, recessed below the water tank tee in the rear of body, on the left side. The compartment will be equipped with to hold two (2) New York Roof Hooks and one (1) dry wall hook. The brand and size of the dry wall hook will be FHU 8' drywall (CTF), 8' NY roof hook and 6' NY roof hook. A stainless steel door with latch will be provided to access the items in this compartment.
0004361	Tubes, Alum, Pike Pole Storage	PIKE POLE STORAGE Aluminum tubing will be used for the storage of three (3) pike poles and will be located in the left side long tool storage compartment. If the head of a pike pole can come in contact with a painted surface, a stainless steel scuffplate will be provided.

0785102	Steps, Folding, Front of Body, Cargo Bed Access, w/LED, Trident	<p>FOLDING STEPS FRONT OF BODY</p> <p>Folding steps will be provided full height on the left side and right side body compartments to provide access to the cargo bed. Steps will be spaced evenly on the sales drawing. Actual quantity may vary due to pump panel interferences but will meet the NFPA required maximum stepping height.</p> <p>The Trident steps will be bright finished, non-skid with a black tread coating on the stepping surface.</p> <p>The step will incorporate an LED light to illuminate the stepping surface.</p> <p>The steps can be used as a hand hold with two openings wide enough for a gloved hand.</p>
0592994	Steps, Folding, Rear of Body, w/LED, Trident	<p>REAR FOLDING STEPS</p> <p>Bright finished, non-skid folding steps with a black tread coating on the stepping surface will be provided at the rear. Each step will incorporate an LED light to illuminate the stepping surface.</p> <p>The steps can be used as a hand hold with two openings wide enough for a gloved hand.</p>
0650260	I Zone Bracket, Pair, Wildland Style	<p>I-ZONE BRACKETS - WILDLAND STYLE</p> <p>A pair of I-Zone brackets will be provided and mounted at the rear of the apparatus. On each rear bulkhead, place no higher than 69.00" from ground. The brackets will be designed with adequate reinforcement to eliminate flexing of the body (oil canning) and not interfere with rear facing lights while carrying hose.</p> <p>The design of these I-Zone brackets will have a 45 degree receiver and a removable extension piece that fits into the brackets for carrying hose.</p>
0820361	Pump, Auxiliary, Waterous, CPK-2, Hyd PTO Drive, 300 GPM, 2024 NFPA 1900	<p>AUXILIARY PUMP</p> <p>A hydraulic driven 3.00" suction, 2.00" discharge Waterous CPK-2 centrifugal pump will be provided for pump and roll operations. The pump will have a gear type hydraulic motor. The pump will have a high tensile gray iron case. Bronze double hubbed impeller mechanically and hydraulically balanced will be installed on a heat treated and ground stainless steel shaft. Impeller shaft will be supported by oil lubricated ball bearings. Pump gear case will have silent running helical gears fully supported by ball bearings.</p> <p>A variable displacement piston type hydraulic pump supplying the hydraulic motor on the water pump will be supplied. The displacement of the hydraulic pump will be controlled by a fixed orifice type, load sensing, hydraulic circuit. The hydraulic system will have a properly sized reservoir, cooler, filter and accessory components. The components will be mounted in the vehicle body to facilitate routine maintenance operations. The hydraulic drive design will be certified by manufacturer of the primary hydraulic components as suitable for the intended use and duty. All components of the water pump and drive system will be readily available on the domestic hydraulic market (USA).</p> <p>An auxiliary main pump drain will be supplied.</p> <p>PUMP PERFORMANCE</p> <p>The pump will be rated by the pump manufacturer on bench testing to the deliver the following performance at 1000 engine rpm. These numbers will be reduced when installed on the apparatus due to plumbing restrictions and/or the location of this water pump.</p> <ul style="list-style-type: none"> - 300 gpm @ 150psi - 300 gpm @ 165psi - 210 gpm @ 200psi - 150 gpm @ 250psi <p>This pump will also meet NFPA 1900 section 13.2.2 for pump and roll performance/requirements. It will deliver at least 20 gpm @ 80 psi while moving at 2 mph or less.</p>
0626923	Installation Location, Aux Pump, Inside Pump house Area	<p>AUXILIARY PUMP INSTALLATION</p> <p>The auxiliary pump will be installed and located within the main pump module.</p>
0788341	Not Required, Fuel Supply, (Hydraulic Drive Pump)	
0626844	Not Required, Exhaust Routing, Aux Pump	
0787477	Discharge Connections, Aux Pump, Standard, w/Foam System	<p>AUXILIARY PUMP DISCHARGE CONNECTIONS</p> <p>A discharge manifold will be supplied as required to allow plumbing of the required discharges. This pump will supply water to all foam capable discharge outlets</p> <p>Check valve(s) will be provided to prevent backflows between the main pump and the auxiliary pump.</p>

0626917	Tank to Pump Line, Hyd Aux Pump, 2.50", Separate Tank to Pump Line	<p>AUXILIARY PUMP -TANK TO PUMP CONNECTION An independent 2.50" tank to pump piping with a 2.50" valve will be provided for the auxiliary pump. It will not be part of the main pump's tank to pump line nor draw water through the main pump. The design will include a method for anti-swirl protection and prevent pump cavitation. The tank to pump line will run from the pump into the front face of the water tank. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing. A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank. This tank to pump connection will have an electric valve that will open when the Pierce hydraulic pressure controller(s) "ON" switch is activated. The valve will close when the "OFF" switch is activated. The electric tank to pump valve will not be gateable.</p>
0787464	Primer, Aux Pump, Trident, Air Prime, Air Operated	<p>AUXILIARY PUMP PRIME, TRIDENT PRIMING PUMP The priming pump will be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of applicable NFPA standards. All wetted metallic parts of the priming system are to be of brass and stainless steel construction. One (1) priming control will open the priming valve and start the pump primer.</p>
0788354	Controls, Hydraulic Aux Pump, Pierce, Dual	<p>AUXILIARY PUMP GAUGES AND CONTROLS There will be PTO switch(s) and indicator light(s) provided in the cab near the driver's position and on left pump operator's panel for engaging the water pump PTO. To control the pump pressure and activate the water pump, a Pierce electronic water pressure controller(s) will be provided in the cab near the driver's position and on left pump operator's panel. The electronic water pressure controller(s) will mounted on an integrated panel and contain a digital pressure gauge along with pump and system status indicators and a pump pressure adjustment knob.</p>
0626933	Line, Recirculating, Aux Pump, 499gpm and less, 0.375", Automatic	<p>AUXILIARY PUMP AUTOMATIC RECIRCULATING LINE The auxiliary pump will be furnished with a 0.375" automatic pump recirculating line with a check valve. The line will be routed from the discharge side of the auxiliary pump to the water tank. This line will be designed to circulate water continuously from the auxiliary pump back to the tank to help maintain the water pump temperature at a safe level. The recirculating line will be plumbed into the water tank dome. It will include a check valve to facilitate priming and prevent water backflow. The check valve will be installed as close as possible to the water tank dome.</p>
0777558	ENGINEERING REVIEW REQUIRED - Auxiliary Pump	

0007590	Pump House, Side Control, 52", Control Zone	<p>PUMP COMPARTMENT The pump compartment will be separate from the hose body and compartments so that each may flex independently of the other. It will be a fabricated assembly made of the same material as the rear body using tubing, angles and channels which supports both the fire pump and the side running boards. The pump compartment will be mounted on the chassis frame rails with rubber biscuits in a four point pattern to allow for chassis frame twist. Pump compartment, pump, plumbing and gauge panels will be removable from the chassis in a single assembly.</p> <p>PUMP MOUNTING Pump will be mounted to a substructure which will be mounted to the chassis frame rail using rubber isolators. The mounting will allow chassis frame rails to flex independently without damage to the fire pump.</p> <p>LEFT SIDE PUMP CONTROL PANELS All pump controls and gauges will be located at the left side of the apparatus and properly identified. Layout of the pump control panel will be ergonomically efficient and systematically organized. The pump operator's control panel will be removable in two (2) main sections for ease of maintenance: The upper section will contain sub panels for the mounting of the pump pressure control device, engine monitoring gauges, electrical switches, and foam controls (if applicable). Sub panels will be removable from the face of the pump panel for ease of maintenance. Below the sub panels will be located all valve controls and line pressure gauges. The lower section of the panel will contain all inlets, outlets, and drains. All push/pull valve controls will have 1/4 turn locking control rods with polished chrome plated zinc tee handles. Guides for the push/pull control rods will be chrome plated zinc castings securely mounted to the pump panel. Push/pull valve controls will be capable of locking in any position. The control rods will pull straight out of the panel and will be equipped with universal joints to eliminate binding.</p> <p>IDENTIFICATION TAGS The identification tag for each valve control will be recessed in the face of the tee handle. All discharge outlets will have color coded identification tags, with each discharge having its own unique color. Color coding will include the labeling of the outlet and the drain for each corresponding discharge. All line pressure gauges will be mounted directly above the corresponding discharge control tee handles and recessed within the same chrome plated casting as the rod guide for quick identification. The gauge and rod guide casting will be removable from the face of the pump panel for ease of maintenance. The casting will be color coded to correspond with the discharge identification tag. All remaining identification tags will be mounted on the pump panel in chrome plated bezels. The pump panel on the right side will be removable with lift and turn type fasteners. Trim rings will be installed around all inlets and outlets.</p>
0037731	Pump House Structure, Raised, Included with Ladder Storage	
0004425	Pump, Waterous, CSU, 1500 GPM, Single Stage	<p>PUMP Pump will be a Waterous CSU, 1500 gpm single (1) stage midship mounted centrifugal type. Pump will be the class "A" type. Pump will deliver the percentage of rated discharge at pressures indicated below: - 100% of rated capacity at 150 psi net pump pressure. - 70% of rated capacity at 200 psi net pump pressure. - 50% of rated capacity at 250 psi net pump pressure. Pump body will be close-grained gray iron, bronze fitted, and horizontally split in two (2) sections for easy removal of the entire impeller shaft assembly (including wear rings). Pump will be designed for complete servicing from the bottom of the truck, without disturbing the pump setting or apparatus piping. Pump case halves will be bolted together on a single horizontal face to minimize chance of leakage and facilitate ease of reassembly. No end flanges will be used. Discharge manifold of the pump will be cast as an integral part of the pump body assembly and will provide a minimum of three (3) 3.50" openings for flexibility in providing various discharge outlets for maximum efficiency. The three (3) 3.50" openings will be located as follows: one (1) outlet to the right of the pump, one (1) outlet to the left of the pump, and one (1) outlet directly on top of the discharge manifold. Impeller shaft will be stainless steel, accurately ground to size. It will be supported at each end by sealed, anti-friction ball bearings for rigid precise support. Impeller will have flame plated hubs assuring maximum pump life and efficiency despite any presence of abrasive matter in the water supply. Bearings will be protected from water and sediment by suitable stuffing boxes, flinger rings, and oil seals. No special or sleeve type bearings will be used.</p>
0004482	Seal, Mechanical, Waterous	<p>Pump will be equipped with a self-adjusting, maintenance-free, mechanical shaft seal. The mechanical seal will consist of a flat, highly polished, spring fed carbon ring that rotates with the impeller shaft. The carbon ring will press against a highly polished stainless steel stationary ring that is sealed within the pump body. In addition, a throttling ring will be pressed into the steel chamber cover, providing a very small clearance around the rotating shaft in the event of a mechanical seal failure. The pump performance will not deteriorate, nor will the pump lose prime, while drafting if the seal fails during pump operation. Wear rings will be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.</p>

0816447	Trans, Pump, Waterous C22 Series	<p>PUMP TRANSMISSION</p> <p>The pump transmission will be made of a three (3) piece, aluminum, horizontally split casing. Power transfer to pump will be through a high strength Morse HY-VO silent drive chain. By the use of a chain rather than gears, 50% of the sprocket will be accepting or transmitting torque, compared to two (2) or three (3) teeth doing all the work. Drive shafts will be 2.35" diameter hardened and ground alloy steel and supported by ball bearings. The case will be designed to eliminate the need for water cooling.</p>
0635600	Pumping Mode, Stationary Only	<p>PUMPING MODE</p> <p>An interlock system will be provided to ensure that the pump drive system components are properly engaged so that the apparatus can be safely operated. The interlock system will be designed to allow stationary pumping only.</p>
0605126	Pump Shift, Air Mnl Override, Split Shaft, Interlocked, Waterous	<p>AIR PUMP SHIFT</p> <p>Pump shift engagement will be made by a two (2) position sliding collar, actuated pneumatically (by air pressure), with a three (3) position air control switch located in the cab. A manual back-up shift control will also be located on the left side pump panel. Two (2) indicator lights will be provided adjacent to the pump shift inside the cab. One (1) green light will indicate the pump shift has been completed and be labeled "pump engaged". The second green light will indicate when the pump has been engaged, and that the chassis transmission is in pump gear. This indicator light will be labeled "OK to pump". The pump shift will be interlocked to prevent the pump from being shifted out of gear when the chassis transmission is in gear to meet NFPA requirements. The pump shift control in the cab will be illuminated to meet NFPA requirements.</p>
0003148	Transmission Lock-up, EVS	<p>TRANSMISSION LOCK-UP</p> <p>The direct gear transmission lock-up for the fire pump operation will engage automatically when the pump shift control in the cab is activated.</p>
0004547	Auxiliary Cooling System	<p>AUXILIARY COOLING SYSTEM</p> <p>A supplementary heat exchange cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the engine water. The heat exchanger will be a separate unit. It will be installed in the pump or engine compartment with the control located on the pump operator's control panel. The exchanger will be plumbed to the master drain valve.</p>
0014486	Not Required, Transfer Valve, Single Stage Pump	
0746508	Valve(s), Relief Intake, Trident Air Max, Control Location	<p>INTAKE RELIEF VALVE</p> <p>One (1) Trident Air Max intake relief valve(s) will be installed on the suction side of the pump preset at 125 psig. The relief valve will have a working range of 50 PSI to 350 PSI. The outlet will terminate below the frame rails with a 2.50" National Standard hose thread adapter and will have a "do not cap" warning tag. One (1) adjustable air regulator and pressure indicating gauge will be located on a common bezel behind the right side pump panel with a stainless steel access door to control the intake valve(s).</p>

0721609	Controller, Pressure, Pierce LCD, Custom Chassis	<p>PIERCE PRESSURE CONTROLLER</p> <p>A Pierce electronic pressure controller will be provided.</p> <p>A pressure transducer will be installed in the discharge side of the water pump. The transducer continuously monitors pump pressure sending a signal to the electronic pressure controller.</p> <p>The pressure controller can be used in two (2) modes of operation, RPM mode and pressure modes. The controller will be programmed to turn on/default to No Mode/Default Press Setting mode.</p> <p>In the RPM mode, the controller can be activated after vehicle parking brake has been set. When in this mode, the controller will maintain the set engine speed, regardless of engine load (within engine operation capabilities).</p> <p>In the pressure mode, the controller can be activated after vehicle parking brake has been set. When in this mode, the controller will automatically maintain the discharge pressure set by the operator (within the discharge capabilities of the pump and water supply) regardless of flow.</p> <p>A 2.00" diameter throttle control knob with no mechanical stops, a serrated grip, and a red idle push button in the center will be a integrated/part of the pressure controller. The throttle control knob will be programmed for Clockwise rotation to increase engine speed.</p> <p>Individual LED indicators for ok to pump, throttle ready, pressure mode and rpm mode will be located on the pressure controller for easy viewing.</p> <p>A pump cavitation protection feature will also provided which will return the engine to idle should the pump cavitate. Cavitation is sensed by the combination of pump pressure below 30 psi and engine speed above 2000 rpm for more than five (5) seconds.</p> <p>Other safety features include recognition of low water and no water conditions with an automatic programmed response and a push button to return the engine to idle.</p> <p>The pressure controller LCD screen will be 4.20" in size with a minimum brightness of 750 nits. The LCD screen and LED intensity will be automatically adjust for day and nighttime operation. The LCD screen intensity can also be manually adjusted if needed.</p> <p>The following information will be provided/displayed on the LCD screen -</p> <p>Engine RPM</p> <p>Check engine and stop engine warning indicators</p> <p>Engine oil pressure</p> <p>Engine coolant temperature</p> <p>Water pump transmission temperature</p> <p>Fuel Level</p> <p>Water tank level</p> <p>Battery voltage</p> <p>Operating mode (RPM or pressure)</p> <p>Pressure or RPM setting</p> <p>On screen messaging show diagnostic and warning messages as they occur. It will show apparatus information, stored data, and program options when selected by the operator. It will monitor inputs outputs and support audible and visual warning alarms for the following conditions -</p> <p>High battery voltage</p> <p>Low battery voltage/engine off</p> <p>Low battery voltage/engine running</p> <p>High water pump temperature</p> <p>Low fuel</p> <p>Low engine oil pressure</p> <p>High engine coolant temperature</p> <p>Water tank out of water (visual alarm only)</p> <p>No engine response (visual alarm only)</p> <p>The pressure controller will store the accumulated operating hours for the pump and engine. These items are to be displayed within the pressure controller menu.</p> <p>The pressure controller will include a USB port on the back of the controller for easy software upgrades if needed.</p>
0072153	Primer, Trident, Air Prime, Air Operated	<p>PRIMING PUMP</p> <p>The priming pump will be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of applicable NFPA standards.</p> <p>All wetted metallic parts of the priming system are to be of brass and stainless steel construction.</p> <p>One (1) priming control will open the priming valve and start the pump primer.</p>
0044552	Line, 0.50" Recirculating w/Check Valve	<p>RECIRCULATING LINE WITH CHECK VALVE</p> <p>A 0.50" diameter recirculating line, from the pump to the water tank, will be furnished with a control installed at the pump operator's control panel. A check valve will be provided in this line to prevent the back flow of water from the tank to the pump if the valve is left in the open position.</p>
0780364	Manuals, Pump, (2) Total, Electronic Copies	<p>PUMP MANUALS</p> <p>There will be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals will be provided by the pump manufacturer in the form of two (2) electronic copies. Each manual will cover pump operation, maintenance, and parts.</p>

0602512	Plumbing, Stainless Steel and Hose, Single Stage Pump, Control Zone	PLUMBING, STAINLESS STEEL AND HOSE All inlet and outlet lines will be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's will be equipped with brass or stainless steel couplings. All stainless steel hard plumbing will be a minimum of a schedule 10 wall thickness. Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping will be equipped with victaulic or rubber couplings. Plumbing manifold bodies will be ductile cast iron or stainless steel. All piping lines are to be drained through a master drain valve or will be equipped with individual drain valves. All drain lines will be extended with a hose to drain below the chassis frame. All water carrying gauge lines will be of flexible polypropylene tubing. All piping, hose and fittings will have a minimum of a 500 PSI hydrodynamic pressure rating.
0795135	Plumbing, Stainless Steel, w/Foam System	FOAM SYSTEM PLUMBING All piping that is in contact with the foam concentrate or foam/water solution will be stainless steel. The fittings will be stainless steel or brass. Cast iron pump manifolds will be allowed.
0004645	Inlets, 6.00" - 1250 GPM or Larger Pump	MAIN PUMP INLETS A 6.00" pump manifold inlet will be provided on each side of the vehicle. The suction inlets will include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.
0014650	Pump Suction Tube(s), Short, All	SHORT SUCTION TUBE(S) The suction tube(s) on the water pump will have short suction tube(s) installed to allow for installation of adapters, elbows or intake valves without excessive overhang.
0004646	Cap, Main Pump Inlet, Long Handle, NST, VLH	MAIN PUMP INLET CAP The main pump inlets will have National Standard Threads with a long handle chrome cap. The cap will be the Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.
0084610	Valves, Akron 8000 series- All	VALVES All ball valves will be Akron® Brass. The Akron valves will be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve. Valves will have a ten (10) year warranty.
0016158	Valve, Inlet(s) Recessed, Side Cntrl, "Control Zone"	The location of the valve for the two (2) inlets will be recessed behind the pump panel.
0004700	Control, Inlet, at Valve	INLET CONTROL The side auxiliary inlet(s) will incorporate a quarter-turn ball valve with the control located at the inlet valve. The valve operating mechanism will indicate the position of the valve.
0004660	Inlet (1), Left Side, 2.50"	LEFT SIDE INLET There will be one (1) auxiliary inlet with a 2.50" valve at the left side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter. The auxiliary inlet will be provided with a strainer, chrome swivel and plug.
0004680	Inlet, Right Side, 2.50"	RIGHT SIDE INLET There will be one (1) auxiliary inlet with a 2.50" valve at the right side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter. The auxiliary inlet will be provided with a strainer, chrome swivel and plug.
0034720	Anode, Zinc, Pair, Pump Inlets	ANODE, INLET A pair of sacrificial zinc anodes will be provided in the water pump inlets to protect the pump from corrosion.
0092569	No Rear Inlet (Large Dia) Requested	
0064116	No Rear Inlet Actuation Required	
0092696	Not Required, Cap, Rear Inlet	
0009648	No Rear Intake Relief Valve Required on Rear Inlet	

0092568	No Rear Auxiliary Inlet Requested	
0723049	Valve, .75" Bleeder, Aux. Side Inlet, "T" Swing Handle	<p>INLET BLEEDER VALVE</p> <p>A 0.75" bleeder valve will be provided for each side gated inlet. The valves will be located behind the panel with a "T" swing style handle control extended to the outside of the panel.</p> <p>The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage.</p> <p>The water discharged by the bleeders will be routed below the chassis frame rails.</p>
0014751	Tank to Pump, (1) 3.00" Valve, 3.00" Plumbing, Reverse Linkage	<p>TANK TO PUMP</p> <p>The booster tank will be connected to the intake side of the pump with heavy duty piping and a quarter turn 3.00" full flow line valve with the control remotely located at the operator's panel. The tank to pump line will run straight (no elbows) from the pump into the front face of the water tank and down into the tank sump. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing.</p> <p>The control on the pump panel will be "in" when the valve is open and "out" when the valve is closed.</p> <p>A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.</p>
0004905	Outlet, Tank Fill, 1.50"	<p>TANK REFILL</p> <p>A 1.50" combination tank refill and pump re-circulation line will be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.</p>
0652656	Control, Outlets, Electric, Akron Electric Valve Controller	<p>DISCHARGE OUTLET CONTROLS</p> <p>The discharge outlets will incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism will indicate the position of the valve or an indicator will be provided to show when the valve is closed.</p> <p>There will be One (1) discharge outlet that have Akron electric valve controllers provided. These outlets will be located deluge outlet. The controller unit will be of true position feedback design, requiring no clutches in the motor or current limiting. The controller will be completely sealed with two (2) button open and close valve position capability and a full color LCD display with backlight.</p>
0004940	Outlet, Left Side, 2.50"	<p>LEFT SIDE DISCHARGE OUTLETS</p> <p>There will be Two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.</p>
0005091	Elbow, Left Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	<p>LEFT SIDE OUTLET ELBOWS</p> <p>The 2.50" discharge outlets located on the left side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.</p> <p>The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.</p>
0092570	Not Required, Outlets, Left Side Additional	
0035094	Not Required, Elbow, Left Side Outlets, Additional	
0004945	Outlet, Right Side, 2.50"	<p>RIGHT SIDE DISCHARGE OUTLETS</p> <p>There will be One (1) discharge outlet with a 2.50" valve on the right side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.</p>
0025091	Elbow, Right Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	<p>RIGHT SIDE OUTLET ELBOWS</p> <p>The 2.50" discharge outlets located on the right side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.</p> <p>The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.</p>
0011668	Outlet, Right Side, 3" w/3" Plumbing, Handwheel Control, (added)	<p>There will be One (1) discharge outlet with a 3.00" valve on the right side of the apparatus, terminating with a 3.00" (M) National Standard hose thread adapter.</p> <p>The outlet will be controlled by a handwheel control located at the pump operator's panel. An indicator will be provided to show the position of the valve.</p>

0732577	SP	Elbow, Right Side Outlets, 30 Deg, 3" FNST x 4.5" MNST, Hard Coat Alum, Addtl	ADDITIONAL RIGHT SIDE OUTLET ELBOWS The 3.00" discharge outlets, located on the right side pump panel, will be furnished with a 3.00" (F) National Standard hose thread x 4.50" (M) National Standard hose thread, hard coated aluminum, 30 degree elbow. A cap with chain will be provided.
0029137		Not Required, Outlet, Large Diameter	
0007308		Not Required, Elbow, Large Diameter Outlet	
0649939		Outlet, Front, 1.50" w/2" Plumbing	FRONT DISCHARGE OUTLET There will be one (1) 1.50" discharge outlet piped to the front of the apparatus and located on the top of the right side of the front bumper. Plumbing will consist of 2.00" piping and flexible hose with a 2.00" ball valve with control at the pump operator's panel. A fabricated weldment made of stainless steel pipe will be used in the plumbing where appropriate. The piping will terminate with a 1.50" NST with 90 degree stainless steel swivel. There will be T swing handle drains provided at all low points of the piping.
0649318		Reverse Linkage, Front Outlet	REVERSE LINKAGE ON FRONT OUTLET(S) The valve control for the front outlet(s) on the pump panel will be "in" when the valve is open and "out" when the valve is closed. The reverse linkage will be provided for one (1) front outlet(s) located R/S upper front bumper.
0647702		Additional Valve, Front Outlet, 2"	FRONT OUTLET ADDITIONAL VALVE A second 2.00" full flow ball valve will be provided at the front bumper extension. The valve will have an integral chrome swing style handle.
0004995		Outlet, Rear, 2.50"	REAR DISCHARGE OUTLET There will be Two (2) discharge outlets piped to the rear of the hose bed, left side, installed so proper clearance is provided for spanner wrenches or adapters. Plumbing will consist of 2.50" piping along with a 2.50" full flow ball valve with the control from the pump operator's panel.
0045091		Elbow, Rear Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	REAR OUTLET ELBOWS The 2.50" discharge outlets located at the rear of the apparatus will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow. The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.
0092574		Not Required, Outlet, Rear, Additional	
0085695		Not Required, Elbow, Rear Outlets, Large, Additional	
0092573		Not Required, Outlet, Hose Bed/Running Board Tray	
0752097		Caps/Plugs for 1.00" to 3.00" Discharges/Inlets, Chain	DISCHARGE CAPS/ INLET PLUGS Chrome plated, rocker lug, caps with chain will be furnished for all discharge outlets 1.00" thru 3.00" in size, besides the pre-connected hose outlets. Chrome plated, rocker lug, plugs with chain will be furnished for all auxiliary inlets 1.00" thru 3.00" in size. The caps and plugs will incorporate a thread design to automatically relieve stored pressure in the line when disconnected.
0723042		Valve, 0.75" Bleeder, Discharges, "T" Swing Handle	OUTLET BLEEDER VALVE A 0.75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application. The valves will be located behind the panel with a T swing style handle control extended to the outside of the side pump panel. The handles will be chrome plated and provide a visual indication of valve position. The T swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders will be located at the bottom of the pump panel. They will be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders will be routed below the chassis frame rails.

0820311	Outlet, 3.00" Deluge w/TFT Extend-a-Gun XG18	DELUGE RISER A 3.00" deluge riser will be installed above the pump in such a manner that a monitor can be mounted and used effectively. Piping will be rigidly braced and installed securely so no movement develops when the line is charged. The riser will be gated and controlled at the pump operator's panel. Any 3.00 inch or larger discharge valve will be a slow-operating valve in accordance with NFPA 13.7.5.3. TELESCOPIC PIPING The deluge riser piping will include an 18.00" Task Force Model XG18 Extend-A-Gun extension. This extension will be telescopic to allow the deluge gun to be raised 18.00" increasing the range of operation. A position sensor will be provided on the telescopic piping that will activate the "do not move vehicle" light inside the cab when the monitor is in the raised position.
0770359	No Monitor Requested, Customer/Dealer Furnished and Installed	MONITOR A customer/dealer supplied and installed make and model TFT Crossfire XFT-NJ monitor will be properly installed on the deluge riser.
0029304	No Nozzle Req'd	
0046857	Deluge Mount, For TFT Crossfire Monitor, TFT Manual Extend-A-Gun Only	The deluge riser Extend-a-Gun will have provisions for direct mounting a Task Force Tips CrossFire monitor.
0723726	Speedlay Module Not Required	
0722432	Hose Restraint Not Required, No Speedlay Module	
0723395	Speedlays, Not Required	
0723394	Speedlays, Not Required	
0029210	Crosslays Sngl Sheet, (2+) 1.50", Spl. Cap/Arrangement	CROSSLAY HOSE BEDS, 1.50" Two (2) crosslays with 1.50" outlets will be provided. Each bed to be capable of carrying standard capacity for hose but wider opening and will be plumbed with 2.00" i.d. pipe and gated with a 2.00" quarter turn ball valve. Outlets to be equipped with a 1.50" National Standard hose thread 90 degree swivel located in the hose bed so that hose may be removed from either side of apparatus. The crosslay controls will be at the pump operator's panel. The center crosslay dividers will be fabricated of .25" aluminum and will provide adjustment from side to side. The divider will be unpainted with a brushed finish. Vertical scuffplates, constructed of stainless steel, will be provided at the front and rear ends of the bed on each side of vehicle. Crosslay bed flooring will consist of removable perforated brushed aluminum.
0029196	Not Required, 2.50" Crosslay	
0763535	SP Hose Restraint, Crosslay, Vinyl, Shock Cord, Each, Dual Bungee Pull-Tabs	CROSSLAY HOSE RESTRAINT To secure the hose within the crosslay beds during travel vinyl end skirts, with footman loops and a shock cords, will be provided on the end of each transverse crosslay hose bed. Each flap will be secured with shock cords on the bottom corners. The permanent mounted footman's loops will be fastened to the crosslay cover. The color of the vinyl skirts will be black. A quantity of two (2) crosslay bed(s) will require these end skirts.
0029260	Not Required, Speedlays	
0750536	Hose Restr, Spdly, Not Required, No Spdly	
0615255	Cover, Crosslay, 3/16" Alum Treadplate, Front Hinge	CROSSLAY COVER A hinged .19" aluminum treadplate cover will be installed over the crosslay hose beds. It will include a latch at each end of the cover to hold it securely in place, a chrome grab handle at each end for opening and closing the cover and a foam rubber gasket where the cover comes into contact to a painted surface. The cover will be provided with rubber latch hold open device. The hinge will be to the front of the hose beds.

0019853		Crosslays, 8.00" Lower Than Standard - Control Zone w/9.00" Raised PH	CROSSLAY 8.00" LOWER THAN STANDARD The crosslays will be lowered 8.00" from standard.
0009257		Cutout, Handhold, Crosslay Divider	CUTOUT, HANDHOLD, CROSSLAY DIVIDER There will be a radiused corner hand hold cut-out each side of the one (1) crosslay divider(s).
0015216		Reel, Booster, Aluminum - Over Pump, Right Side	BOOSTER HOSE REEL A Hannay electric rewind booster hose reel will be installed over the pump in a recessed open compartment on the right side of the apparatus. The reel will be fabricated of aluminum and have highly polished end discs. A polished stainless steel roller and guide assembly will be mounted on the reel side of the apparatus. Discharge control will be provided at the pump operator's panel. Plumbing to the reel will consist of 1.50" Aeroquip hose and a 1.50" valve.
0896538	SP	Switch, (2) Reel Rewind - Special Location, Rocker Switch	Reel motor will be protected from overload with a sized automatic reset circuit breaker. Two (2) Electric rewind controls will be momentary rocker switches installed on One on DS pump panel to match 35130 and one on PS cargo side sheet under the reel opening to the rear.
0045300		Hose, Booster - 200' of 1.00"/800 PSI	Booster hose, 1.00" diameter and 200 feet, with chrome plated Barway, or equal couplings will be provided. Working pressure of the booster hose will be a minimum of 800 psi.
0005244		Capacity, Hose Reel 200' of 1"	Capacity of the hose reel will be 200 feet of 1.00" booster hose.
0007428		Nozzle for Booster Reel Not Req'd	
0021954		Cutout for Reel Access, One, w/ S/S Trim	HOSEREEL ACCESS A cutout will be provided in the side sheet next to the booster hose reel. This cutout will allow access to the hose and provide a window to view the reel. Stainless steel trim will be mounted horizontally and vertically around the cutout.
0046560		Manual, Override, Hose Reel	A manual rewind will be provided for the booster hose reel.
0014047		Linkage, Reverse, Hose Reel	The control on the pump panel will be "in" when the valve is open and "out" when the valve is closed. This style control will be provided on one (1) hose reel(s).
0622237		Roller Assembly, Additional	There will be one (1) additional polished stainless steel roller and guide assembly mounted D/S top pump house full width.

HUSKY 3 FOAM PROPORTIONER

A Pierce Husky® 3 foam proportioning system will be provided. The Husky 3 is an on demand, automatic proportioning, single point, direct injection system suitable for all types of Class A and B foam concentrates, including the high viscosity (6000 cps), alcohol resistant Class B foams. Operation will be based on direct measurement of water flow, and remain consistent within the specified flows and pressures. The system will automatically proportion foam solution at rates from .1 percent to 3 percent regardless of variations in water pressure and flow, up to the maximum rated capacity of the foam concentrate pump.

The design of the system will allow operation from draft, hydrant, or relay operation.

System Capacity

The system will have the ability to deliver the following minimum foam solution flow rates at accuracies that meet or exceed NFPA requirements at a pump rating of 150 psi.

100 gpm @ 3 percent

300 gpm @ 1 percent

600 gpm @ 0.5 percent

Class A foam setting in .1 percent increments from .1 percent to 1 percent. Typical settings of 1 percent, .5 percent and .3 percent (maximum capacity will be limited to the plumbing and water pump capacity).

Control System

The system will be equipped with a digital electronic control display located on the pump operators panel. Push button controls will be integrated into the panel to turn the system on/off, control the foam percentage, and to set the operation modes.

The percent of injection will have a preset. This preset can be changed at the fire department as desired. The percent of injection will be able to be easily changed at the scene to adjust to changing demands.

Three (3) .50 tall LEDs will display the foam percentage in numeric characters. Three (3) indicator LEDs will also be included, one (1) green, one (1) red, and one (1) yellow. The LEDs will indicate various system operation or error states.

The indications will be:

Solid Green - System On

Solid Red - Valve Position Error

Solid Yellow - Priming System

Flashing Green - Injecting Foam

Flashing Red - Low Tank Level

Flashing Yellow - Refilling Tank

The control display will house a microprocessor, which receives input from the systems water flow meter while also monitoring the position of the foam concentrate pump. The microprocessor will compare the values of the water flow versus the position/rate of the foam pump, to ensure the proportion rate is accurate. One (1) check valve will be installed in the plumbing to prevent foam from contaminating the water pump.

Hydraulic Drive System

The foam concentrate pump will be powered by an electric over hydraulic drive system. The hydraulic system and motor will be integrated into one (1) unit.

Foam Concentrate Pump

The foam concentrate pump will be of positive displacement, self-priming; linear actuated design, driven by the hydraulic system. The pump will be constructed of brass body; chrome plated stainless steel shaft, with a stainless steel piston. In order to increase longevity of the pump, no aluminum will be present in its construction.

A relief system will be provided which is designed to protect the drive system components and prevent over pressuring the foam concentrate pump

The foam concentrate pump will have minimum capacity for 3 gpm with all types of foam concentrates with a viscosity at or below 6000 cps including protein, fluoroprotein, AFFF, FFFP, or AR-AFFF. The system will deliver only the amount of foam concentrate flow required, without recirculating foam back to the storage tank. Recirculating foam concentrate back to the storage tank can cause agitation and premature foaming of the concentrate, which can result in system failure. The foam concentrate pump will be self-priming and have the ability to draw foam concentrate from external supplies such as drums or pails.

External Foam Concentrate Connection

An external foam pick-up will be provided to enable use of a foam agent that is not stored on the vehicle. The external foam pick-up will be designed to allow continued operation after the on-board foam tank is empty, or the use of foam different than the foam in the foam tank.

Panel Mounted External Pick-Up Connection / Valve

A bronze three (3)-way valve will be provided. The unit will be mounted to the pump panel. The valve unit will function as the foam system tank to pump valve and external suction valve. The external foam pick-up will be one (1) 0.75" male connection GHT (garden hose thread) with a cap.

Pick-Up Hose

A 0.75" flexible hose with an end for insertion into foam containers will be provided. The hose will be supplied with a 0.75" female swivel GHT (garden hose thread) swivel connector. The hose will be shipped loose.

Discharges

The foam system will be plumbed to the right side of front bumper, hose reel in right side of dunnage area, left rear outlet, front crosslay and rear crosslay.

System Electrical Load

The maximum current draw of the electric motor and system will be no more than 55 amperes at 12 VDC.

0592527	Refill, Foam Tank, Integral, Husky 3	SINGLE FOAM TANK REFILL The foam system's proportioning pump will be used to fill the foam tank. This will allow use of the auxiliary foam pick-up to pump the foam from pails or a drum on the ground into the foam tank. A foam shut-off switch will be installed in the fill dome of the tank to shut the system down when the tank is full. The fill operation will be controlled by a mode in the foam system controller. While the proportioner pump is filling the tank, the controller will display a flashing yellow LED to indicate that the tank is filling. When the tank is full, as determined by the float switch in the tank dome, the pump will stop and the controller will shut the yellow LED off. If it attempted to use tank fill and the refill valve and suction valve are in the wrong position(s), then a red LED will illuminate to indicate the improper valve position(s). When the valves are positioned properly, then filling will commence.
0031896	Demonstration, Foam System, Dealer Provided	
0005446	Foam Cell, 20 Gallon, Not Reduce Water	FOAM TANK The foam tank will be an integral portion of the polypropylene water tank. The cell will have a capacity of 20 gallons of foam with the intended use of Class A foam. The foam cell will not reduce the capacity of the water tank. The foam cell will have a screen in the fill dome and a breather in the lid.
0891420	Drain, 1.00", Foam Tank #1, Husky 3 Foam System, "T" Swing Handle	FOAM TANK DRAIN The foam tank drain will be a 0.75" "T" swing handle drain valve with 1.00" fittings located inside the pump/plumbing compartment.
0091079	Not Required, Foam Tank #2	
0091112	Not Required, Foam Tank #2 Drain	
0738072	Approval Dwg, Pump Panel(s), Not Required	
0032479	Pump Panel Configuration, Control Zone	PUMP PANEL CONFIGURATION The pump panel configuration will be arranged and installed in an organized manner that will provide user-friendly operation.
0629252	Material, Pump Panels, Side Control Black Vinyl	PUMP AND GAUGE PANEL The pump and gauge panels will be constructed of aluminum with a black vinyl finish. A polished aluminum trim molding will be provided around each panel.
0721772	Panel, Pump Access - Right Side, Front, Side Control	PUMP ACCESS Right Side Panel The right side pump panel will be removable. Panel Fastener The right side removable panel will be secured using a black lift and turn latch . The left side pump panels will be attached with screws. The right side lower panel (drain bank) will be secured using screws. Front Pump House Access The front of the pump house structure will have provisions for access to the pump.
0583824	Light, Pump Compt, WIn 3SC0CDCR LED White	PUMP COMPARTMENT LIGHT There will be one (1) Whelen®, Model 3SC0CDCR, 3.00" white 12 volt DC LED light(s) with Whelen, Model 3FLANGEC, flange(s) installed in the pump compartment.
0586382	Gauges, Engine, Included With Pressure Controller	Engine monitoring graduated LED indicators will be incorporated with the pressure controller. Also provided at the pump panel will be the following: - Master Pump Drain Control
0005601	Throttle, Engine, Incl'd w/Press Controller	
0739224	Indicator Light @ Pump Panel, Throttle Ready, Incl w/Pressure Gov/Throttle,Green	THROTTLE READY GREEN INDICATOR LIGHT There will be a green indicator light integrated with the pressure governor and/or engine throttle installed on the pump operators panel that is activated when the pump is in throttle ready mode.
0549333	Indicators, Engine, Included with Pressure Controller	

0745568	Indicator Light, Pump Panel, Ok To Pump, Green	<p>OK TO PUMP INDICATOR LIGHT There will be a green indicator light installed on the pump operators panel that is activated when the pump is in Ok To Pump mode.</p>
0005690	Gauges, 6.00" Master, Class 1, 30"-0-600psi	<p>VACUUM AND PRESSURE GAUGES The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1 Incorporated ©. The gauges will be a minimum of 6.00" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#. The pump pressure and vacuum gauges will be installed adjacent to each other at the pump operator's control panel. Test port connections will be provided at the pump operator's panel. One will be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They will have 0.25 in. standard pipe thread connections and polished stainless steel plugs. They will be marked with a label.</p>
0005714	Gauge, 2.50" Pressure, Class 1, 0-400psi	<p>PRESSURE GAUGES The individual "line" pressure gauges for the discharges will be Class 1© interlube filled. They will be 2.50" in diameter and have white faces with black lettering. Gauges will have a pressure range of 0-400#. The individual pressure gauge will be installed as close to the outlet control as practical.</p>
0739749	Gauge, Water Level, Pierce, In pressure Controller, w/Mini Slave, Lt Driver	<p>WATER LEVEL GAUGE An electric water level gauge will be incorporated in the pressure controller that registers water level by means of nine (9) LEDs. They will be at 1/8 level increments with a tank empty LED. The LEDs will be a bright type that is readable in sunlight, and have a full 180-degree of clear viewing. To further alert the pump operator, the gauge will have a warning flash when the tank volume is less than 25 percent. The gauge will have down chasing LEDs when the tank is almost empty. The level measurement will be ascertained by sensing the head pressure of the fluid in the tank or cell.</p> <p>MINI SLAVE UNIT An electric water level gauge will be provided in the cab that registers water level by means of five (5) LEDs. They will be at 1/4 level increments with a tank empty LED. The LEDs will be a bright type that are readable in sunlight and have a full 180-degree of clear viewing. The water level gauge in the cab will be activated when the pump is in gear.</p>
0084763	Gauge, Ernst Sight Water Level, w/Red Ball, IATS	<p>WATER LEVEL GAUGE, ADDITIONAL An additional water level gauge will be provided. An Ernst sight tube water level indicator with a floating red ball will be mounted on the gauge panel with an unrestricted view for the operator.</p>
0604028	Water Level Gauge, FRC, MaxVision WLA280-A00 Programmable Remote Display	<p>ADDITIONAL WATER LEVEL GAUGE There will be two (2) additional Fire Research MaxVision model WLA280-A00 water tank remote indicators provided and installed each side of the upper crew cab, just below the scene lights. The indicators will show the volume of water in the tank on Ninety six (96) easy to see super bright Tri-color LEDs. The indicator case will be waterproof, manufactured of Polycarbonate material with an integrated lens. The remote indicator will indicate the level as a single color in Red for 25% or less, Amber color for up to 50% volume, Blue color for up to 75% volume and Green color for up to 100% volume. When the level reaches 25%, the red LEDs will begin flashing. When the level is empty, the red LEDs will scroll in a down-chasing motion and then flash three times. The flash rate will be determined by the main water tank sensor. It will have the program capability to adjust the brightness level for day time and night time viewing. The LEDs can also be programmed for different colors. This module will be activated when the pump is in gear.</p>
0604354	Gauge, Foam Level, FRC, Tank Vision Pro, WLA 360-A00, Class "A"	<p>CLASS "A" FOAM LEVEL GAUGE A Fire Research TankVision Pro model WLA360-A00 cell/tank level indicator kit will be installed on the pump operators panel. The kit will include an electronic indicator module, a pressure sensor, a 10' sensor cable and a tank vent. The indicator will show the volume of Class "A" foam concentrate in the cell/tank on nine (9) easy to see super bright RGB LEDs. A wide view lens over the LEDs will provide for a viewing angle of 180 degrees. The indicator case will be waterproof, manufactured of Polycarbonate/Nylon material and have a distinctive green label. The program features will be accessed from the front of the indicator module. The program will support self-diagnostics capabilities, self-calibration, six (6) programmable colored light patterns to display cell/tank volume, adjustable brightness control levels and a data link to connect remote indicators. Low foam level warnings will include flashing LEDs at 1/4 cell/tank and down chasing LEDs when the cell/tank is almost empty. The indicator will receive an input signal from an electronic pressure sensor. The sensor will be mounted from the outside of the foam cell/tank near the bottom. No probe will be placed on the interior of the cell/tank. Wiring will be weather resistant and have automotive type plug-in connectors.</p>

0665336	Light Shield/Step 8", 4-FRC Firefly LED115-Q01, P25 LED Step Lt	<p>STEP/LIGHT SHIELD</p> <p>There will be an aluminum treadplate stepping surface no less than 8.00" deep and properly reinforced to support a man's weight, installed over the pump operators panel.</p> <p>There will be four (4) Fire Research Firefly, part number LED115-Q01, 12 volt DC LED lights installed under the step to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights will be activated by the pump panel light switch. Additional lights will be included every 18.00" depending on the size of the pump house.</p> <p>One (1) pump panel light will come on when the pump is in ok to pump mode.</p> <p>There will be a light activated above the pump panel light switch when the parking brake is set. This is to afford the operator some illumination when first approaching the control panel.</p> <p>There will be one (1) white LED step light provided above this step. In order to ensure exceptional illumination, each step light will provide a minimum of 25 foot-candles (fc) covering an entire 15.00" x 15.00" square placed 10.00" below the light and a minimum of 1.5 fc covering an entire 30.00" x 30.00" square at the same 10.00" distance below the light. The step light will be activated by the pump panel light switch.</p>
0665286	Light Shield/Step 8", PS, 3-FRC Firefly LED115-Q01, P25 LED Stp Lt	<p>ADDITIONAL STEP/LIGHT SHIELD</p> <p>There will be an additional aluminum treadplate stepping surface no less than 8.00" deep and properly reinforced to support a man's weight, installed over the passenger's side pump panel.</p> <p>There will be three (3) Fire Research Firefly, part number LED115-Q01, 12 volt DC white LED lights installed under the step to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights will be activated by a switch on the pump panel.</p> <p>There will be one (1) white LED, step light provided above the step. In order to ensure exceptional illumination, each step light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light. The step light will be activated by the pump panel light switch.</p>
0508020	Air Horn, (1) Hadley, 6" Round, eTone, In Bumper	<p>AIR HORN SYSTEM</p> <p>One (1) Hadley round air horn with 6.00" bell will be recessed in the front bumper. The air horn system will be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve will be installed to prevent the loss of air in the brake system.</p>
0606839	Location, Air Horn, Bumper, Left Side, Outside Frame, Inboard (Pos #6)	<p>Air Horn Location</p> <p>The air horn will be located on the left side of the bumper, just outside of the frame rail.</p>
0757092	Control, Air Horn, Multi Select	<p>Air Horn Control</p> <p>The air horn(s) will be activated by the following:</p>
0743360	Control, Air Horn, Ft Sw, LS, Location Fet	Left side foot switch will bement at pickup.
0743678	Control, Air Horn, Ft Sw, RS, Location Fet	Right side foot switch will bement at pickup.
0819024	Siren, WIn 295HFS2 Remote, Single Amp, Other Speaker, Non-NFPA 2024	<p>ELECTRONIC SIREN</p> <p>A Whelen 295HFS2, electronic remote siren with noise canceling microphone will be provided. This siren to be active when the battery switch is on and that emergency master switch is on. NFPA 1900, 2024 edition, Section 10.8.1.1 requires the siren manufacturer to certify the siren as meeting the requirements of SAE J1849, <i>Emergency Vehicle Sirens</i>.</p> <p>Per the fire department specification, the siren and siren speaker come from separate manufacturers and a certification is therefore not valid. The apparatus will be non compliant to NFPA 1900 standards at time of contract execution.</p>
0060875	Location, Electronic Siren, Remote Head Only, Recessed In Console	Siren head will be located in the console located per layout.
0076156	Control, Elec Siren, Head Only	The electronic siren will be controlled on the siren head only. No horn button or foot switches will be provided.
0601330	Speaker, (1) Federal, ES100C w/ESFMT-EF Recess Mnt & S/S Grille	<p>SPEAKER</p> <p>There will be one (1) Federal Signal DynaMax®, Model ES100, 100 watt speaker provided. The speaker will use a Federal Signal, Model ESFMT-EF, recess mount with stainless steel grille. The speaker will be connected to the siren amplifier.</p>
0601551	Location, Speaker, Frt Bumper, Recessed, Right Side, Outside Frame,Outbrd(Pos 1)	The speaker will be recessed in the right side of the front bumper, towards the outside.

0895310	Siren, Federal Q2B	<p>AUXILIARY MECHANICAL SIREN</p> <p>There will be a Federal Signal Model Q2B mechanical siren furnished and installed in the front of the apparatus.</p> <p>The Q2B will be chrome finish.</p> <p>The siren will have a 2-gauge cable connected to a power solenoid that is connected by a 2-gauge cable ran battery direct to the primary chassis batteries and will be labeled Q2B+ at the battery. The power solenoid will only be enabled when the emergency master switch is on.</p> <p>The siren will have a 2-gauge ground wire connected to the chassis battery stud. The cable will be labeled Q2B- at the battery.</p>
0020914	Siren, Mechanical, Recessed In Bumper, Special Recessing Depth	The mechanical siren will be recessed in the front bumper on the left side. The siren will be supported by the bumper framework. Only the end of the sirens front grille will protrude from the front bumper.
0748305	Control, Mech Siren, Multi Select	<p>MECHANICAL SIREN CONTROL</p> <p>The mechanical siren will be activated by the following:</p>
0748281	Control Mech Siren, Ft Sw RS	Right side foot switch.
0748282	Control Mech Siren, Ft Sw LS	Left side foot switch.
0897453	Sw, Siren Brake, Mom Rocker/Membrane, Red Outline, RS Overhead Sw Pnl, Mux	<p>A momentary switch will be included in the right side overhead switch panel to activate the siren brake.</p> <p>There will be a red outline decal around the switch.</p>
0897454	Sw, Siren Brake, Mom Rocker/Membrane, Red Outline, LS Overhead Sw Pnl, Mux	<p>A momentary switch will be included in the left side overhead switch panel to activate the siren brake.</p> <p>There will be a red outline decal around the switch.</p>
0746353	Not Required, Warning Lights Intensity	
0604784	Lightbar, WIn, Freedom IV-Q, 81", RRRRWRSrROptRsrRWRRRR	<p>FRONT ZONE UPPER WARNING LIGHTS</p> <p>There will be one (1) 81.00" Whelen® Freedom IV™ lightbar mounted on the cab roof. The lightbar will include the following:</p> <p>One (1) red flashing LED module in the driver's side end position.</p> <p>One (1) red flashing LED module in the driver's side front corner position.</p> <p>One (1) red flashing LED module in the driver's side first front position.</p> <p>One (1) red flashing LED module in the driver's side second front position.</p> <p>One (1) white flashing LED module in the driver's side third front position.</p> <p>One (1) red flashing LED module in the driver's side fourth front position.</p> <p>One (1) red steady burning LED module in the driver's side fifth front position.</p> <p>One (1) red flashing LED module in the driver's side sixth front position.</p> <p>One (1) 795 LED traffic light controller set to national standard high priority in the center positions.</p> <p>One (1) red flashing LED module in the passenger's side sixth front position.</p> <p>One (1) red steady burning LED module in the passenger's side fifth front position.</p> <p>One (1) red flashing LED module in the passenger's side fourth front position.</p> <p>One (1) white flashing LED module in the passenger's side third front position.</p> <p>One (1) red flashing LED module in the passenger's side second front position.</p> <p>One (1) red flashing LED module in the passenger's side first front position.</p> <p>One (1) red flashing LED module in the passenger's side front corner position.</p> <p>One (1) red flashing LED module in the passenger's side end position.</p> <p>There will be clear lenses included on the lightbar.</p> <p>The following switches may be installed in the cab on the switch panel to control the lightbar:</p> <p>a switch to control the flashing LED modules.</p> <p>the traffic light controller by a cab switch with emergency master control.</p> <p>a driver's side momentary cab switch and a passenger's side momentary cab switch with no emergency master control to activate the traffic light controller.</p> <p>The white flashing LED modules and the traffic light controller will be disabled when the parking brake is applied.</p> <p>The eight (8) red flashing LED modules in the front positions may be load managed when the parking brake is applied.</p>

0898734	Light, Front Zone, Wln M6** M6** M6** M6** Q Bzl	<p>CAB FACE WARNING LIGHTS There will be four (4) Whelen®, Model M6**, 4.31" high x 6.75" wide x 1.37" deep flashing LED warning lights installed on the cab face, above the headlights in a housing that matches the headlights per the following: The left side outside warning light to include red LEDs. The left side inside warning light to include red LEDs. The right side inside warning light to include red LEDs. The right side outside warning light to include red LEDs. The warning light lens color(s) to be clear. The housing to be polished and the trim shall be chrome. The lights will be controlled per the following: A switch in the cab, on the switch panel will control the lights. White LEDs will be deactivated when the parking brake is applied. Amber LEDs will be deactivated when the parking brake is released. Amber, blue, green or red LEDs in the inside positions may be load managed when the parking brake is applied.</p>
0554452	Light, Front, Wln M6*C LED, Clear Lens 1st	<p>FRONT WARNING LIGHT There will be two (2) Whelen, Model M6*, LED flashing light(s) with chrome trim provided at each end of the angled portion of the front bumper. The color of the light(s) will be red. The color of the lens will be clear. The light(s) will be activated with the front warning switch. These light may be load managed if colored or disabled if white when the parking brake is applied. Any white light will be disabled and any amber light activated when the parking brake is applied.</p>
0653937	Flasher, Headlight Alternating	<p>HEADLIGHT FLASHER The high beam headlights will flash alternately between the left and right side. There will be a switch installed in the cab on the switch panel to control the high beam flash. This switch will be live when the battery switch and the emergency master switches are on. The flashing will automatically cancel when the hi-beam headlight switch is activated or when the parking brake is set.</p>
0729102	SP Lights, Side Zone Lower, Wln M6**, M6**, M6**, 6Lts, PB Int, Non-NFPA	<p>SIDE ZONE LOWER LIGHTING There will be six (6) Whelen®, Model M6**, 4.31" high x 6.75" long x 1.37" deep flashing LED warning lights with chrome trim installed per the following: Two (2) lights located, one (1) each side on the bumper extension. The driver's side, side front light to include red warning LEDs and the passenger's side, side front light to include red warning LEDs. Two (2) lights located, one (1) each side of cab rearward of crew cab doors. The driver's side, side middle light to include red warning LEDs and the passenger's side, side middle light to include red warning LEDs. These lights will be de-activated, if on, when the park brake is set. Two (2) lights located, one (1) each side, centered above rear wheels. The driver's side, side rear light to include red warning LEDs and the passenger's side, side rear light to include red warning LEDs. These lights will be de-activated, if on, when the park brake is set. The warning light lens color(s) to be clear. The middle and rearward warning lights will be de-activated, if on, when the park brake is set. There will be a switch in the cab on the switch panel to control the lights.</p>
0896616	Lights, Door Interior Flash, 4 Dr Cab, Weldon 8401-0000-20 Strip Light	<p>INTERIOR CAB DOOR WARNING LIGHTS There will be four (4) Weldon, Model 8401-0000-20, 16" long x 3/4" High x 5/8" deep amber 12 volt DC LED flashing strip lights provided. One (1) light on the left side cab door. One (1) light on the right side cab door. One (1) light on the right side crew cab door. One (1) light on the left side crew cab door. Each light will be located over the door window.. Each light will be activated when the battery switch is on, respective door is opened and the park brake is on. Each light will be installed so the flash pattern directs traffic away from the doors.</p>
0815847	Connectors, Door Interior Flash, All Cabs, Weatherproof	<p>ELECTRICAL CONNECTORS FOR WARNING LIGHTS The lights shall be installed with a weatherproof insulated crimped connectors in order to provide ease of connection/disconnection of the circuit applied to.</p>
0750408	Lights, Side, Wln PS*01FCR LED 1st	<p>SIDE WARNING LIGHTS There will be four (4) Whelen® Model PS*01FCR, 1.68" high x 11.11" wide x 0.52" deep flashing LED warning light(s) with black trim and clear lenses provided on the side of the apparatus, centered in the rub rail under LS1, LS3, RS1, RS3. The light(s) to include amber flashing LEDs. These lights will be controlled by the side zone lower switch in the cab. White LEDs will be deactivated when the parking brake is applied. Amber, blue, green and red LEDs may be load manages when the parking brake is applied.</p>

0564655	Lights, Rear Zn Lwr, WIn M6*C LED, Clear Lens, For Tail Lt Housing	<p>REAR ZONE LOWER LIGHTING</p> <p>There will be two (2) Whelen®, Model M6*C, LED flashing warning lights located at the rear of the apparatus.</p> <p>The driver's side rear light to be red</p> <p>The passenger's side rear light to be red</p> <p>Both lights will include a lens that is clear.</p> <p>There will be a switch located in the cab on the switch panel to control the lights.</p>
0686562	Light, Rear Zone Up, WIn MCFLED2* LED	<p>REAR UPPER ZONE WARNING LIGHTS</p> <p>There will be two (2) Whelen, Model MCFLED2* LED warning beacons provided at the rear of the truck, one (1) each side.</p> <p>The color of the lights will be:</p> <p>The rear upper light(s) on the driver's side to be red.</p> <p>The rear upper light(s) on the passenger's side to be red.</p> <p>All lenses will be clear.</p> <p>There will be a switch located in the cab on the switch panel to control the beacons.</p>
0006551	Not Required, Lights, Rear Upper Zone Blocking	
0006615	Mounting, Rear Warn Lights, On Top of Compartment	The rear warning lights will be mounted on top of the compartmentation with all wiring totally enclosed. The rear deck lights will be mounted on the beavertails as high as possible.
0791493	Light, Traffic Directing, WIn TAM65 36" Long LED	<p>TRAFFIC DIRECTING LIGHT</p> <p>There will be one (1) Whelen® Model TAM65, 36.00" long x 2.87" high x 2.25" deep, amber LED traffic directing light installed at the rear of the apparatus.</p> <p>The Whelen Model TACTL5 control head will be included with this installation.</p> <p>The control head will be energized when the battery switch is on.</p> <p>The auxiliary flash not activated.</p>
0586458	Location, TDL, Surface Mounted with Painted Box	This traffic directing light will be surface mounted with a smooth aluminum box, painted to match the surface that it is being mounted on, at the rear of the apparatus as high as practical.
0530280	Location, Traf Dir Lt Controller, Overhead Switch Panel DS Center	The traffic directing light control head will be located in the driver side overhead switch panel in the center panel position.
0519934	Not Required, Brand, Hydraulic Tool System	
0649753	Not Required, PTO Driven Hydraulic Tool System	
0007150	Bag of Nuts and Bolts	<p>LOOSE EQUIPMENT</p> <p>The following equipment will be furnished with the completed unit:</p> <p>One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.</p>

0816508	NFFA Required Loose Equipment, Pumper, NFFA 2024, Provided by Fire Department	<p>NFFA LOOSE EQUIPMENT NFFA Required Loose Equipment Provided by Fire Department The following loose equipment as outlined in NFFA 1900, 2024 edition, table 8.1 will be provided by the fire department: One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, <i>Standard for High Visibility Public Safety Vests</i>, and have a five-point breakaway feature that includes two (2) at the shoulders, two (2) at the sides, and one (1) at the front. Five (5) fluorescent orange traffic cones not less than 28.00" (711 mm) in height, each equipped with a 6.00" (152 mm) retro-reflective white band no more than 4.00" (152 mm) from the top of the cone, and an additional 4.00" (102 mm) retro-reflective white band 2.00" (51 mm) below the 6.00" (152 mm) band. Five (5) illuminated warning devices such as highway flares, unless the five (5) fluorescent orange traffic cones have illuminating capabilities. NFFA Loose Equipment That Shall be Considered: The following loose equipment as outlined in NFFA 1900, 2024 edition, appendix table A.8.4 (a) should be considered: 800 ft (60 m) of 2.50" (65 mm) or larger fire hose. 400 ft (120 m) of 1.50" (38 mm), 1.75" (45 mm), or 2.00" (52 mm) fire hose. One (1) handline nozzle, 200 gpm (750 L/min) minimum. Two (2) handline nozzles, 95 gpm (360 L/min) minimum. One (1) smooth bore or combination nozzle with shutoff and with 2.50" (65 mm) inlet that flows a minimum of 250 gpm (950 L/min). Four (4) SCBA apparatus Four (4) SCBA spare cylinders One (1) first aid kit. Four (4) combination spanner wrenches. Two (2) hydrant wrenches. One (1) double female 2.50" (65 mm) adapter with national hose (NH) threads. One (1) double male 2.50" (65 mm) adapter with national hose (NH) threads. One (1) rubber mallet, for use on suction hose connections. Two (2) salvage covers each a minimum size of 12 ft x 18 ft (3.7 m x 5.5 m). One (1) automatic external defibrillator (AED).</p>
0820489	Not Required, Soft Suction Hose, Fire Department Omits, NFFA 2024	<p>SOFT SUCTION HOSE There will be no soft suction hose provided.</p>
0027023	No Strainer Required	
0816939	Extinguisher, Dry Chemical, NFFA 2024, Provided by Fire Department	<p>DRY CHEMICAL EXTINGUISHER PROVIDED BY FIRE DEPARTMENT The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.</p>
0816937	Extinguisher, 2.5 Gal. Pressurized Water, NFFA 2024, Provided by Fire Department	<p>WATER EXTINGUISHER PROVIDED BY FIRE DEPARTMENT The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.</p>
0816998	Axe, Flathead, Provided by Fire Department	<p>FLATHEAD AXE PROVIDED BY FIRE DEPARTMENT The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.</p>
0817000	Axe, Pickhead, Provided by Fire Department	<p>PICKHEAD AXE PROVIDED BY FIRE DEPARTMENT The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.</p>

PAINT PROCESS

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

Manual Surface Preparation - All exposed metal surfaces on the custom cab and body will be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces will be removed and sanded to a smooth finish. Exterior seams will be sealed before painting. Exterior surfaces that will not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum treadplate.

Chemical Cleaning and Pretreatment - All surfaces will be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces will be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces will be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment converts the metal surface to a passive condition to help prevent corrosion.

Surfacer Primer - The Surfacer Primer will be applied to a chemically treated metal surface to provide a strong corrosion protective basecoat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a Critical aesthetic finish. The Surfacer Primer is a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded.

Finish Sanding - The Surfacer Primer will be sanded with a fine grit abrasive to achieve an ultra-smooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat.

Sealer Primer - The Sealer Primer is applied prior to the Basecoat in all areas that have not been previously primed with the Surfacer Primer. The Sealer Primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when topcoated.

Basecoat Paint - Two coats of a high performance, two component high solids polyurethane basecoat will be applied. The Basecoat will be applied to a thickness that will achieve the proper color match. The Basecoat will be used in conjunction with a urethane clear coat to provide protection from the environment.

Clear Coat - Two (2) coats of Clear Coat will be applied over the Basecoat color. The Clear Coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style and roll-up doors will be Clear Coated to match the body. Paint warranty for the roll-up doors will be provided by the roll-up door manufacturer.

After the cab and body are painted, the color will be verified to make sure that it matches the color standard. Electronic color measuring equipment will be used to compare the color sample to the color standard entered into the computer. Color specifications will be used to determine the color match. A Delta E reading will be used to determine a good color match within each family color.

All removable items such as brackets, compartment doors, door hinges, and trim will be removed and painted separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly.

The paint finish quality levels for critical areas of the apparatus (cab front and sides, body sides and doors, and boom lettering panels) are to meet or exceed Cadillac/General Motors GMW15777 global paint requirements. Orange peel levels are to meet or exceed the #6 A.C.T. standard in critical areas. The manufacture's written paint standards will be available upon request.

Environmental Impact

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

Topcoats and primers will be chrome and lead free.

Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.

Particulate emission collection from sanding operations will have a 99.99 percent efficiency factor.

Particulate emissions from painting operations will be collected by a dry filter or water wash process. If the dry filter is used, it will have an efficiency rating of 98 percent. Water wash systems will be 99.97 percent efficient

Water from water wash booths will be reused. Solids will be removed on a continual basis to keep the water clean.

Paint wastes are disposed of in an environmentally safe manner.

Empty metal paint containers will be recycled to recover the metal.

Solvents used in clean-up operations will be recycled on-site or sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus will not be manufactured with or contain products that have ozone depleting substances. Contractor will, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with his state EPA rules and regulations.

0709846

Paint, Two-Tone Color, Velocity/Impel

CAB TWO-TONE PAINT

The cab will be painted two-tone, with the upper section painted Gray # 479 Just the cab roof and the upper side sheets of the body above the catwalk, also include the hard suction troughs on both sides and the lower section painted RED262. There will be a special two-tone cab paint break at the roof line provided.

There will be no cab shield provided.

0709833

Paint, Two-Tone Color, Body

TWO-TONE BODY PAINT

The body will be painted two-tone with the upper section painted metallic to match the upper section of the cab and the lower section painted to match the lower section of the cab. The body paint break will be at the seam between the body and hatch compartment or catwalk on each side.

0646897		Paint Chassis Frame Assy, E-Coat, Standard	<p>PAINT CHASSIS FRAME ASSEMBLY The chassis frame assembly will be finished with a single system black top coat before the installation of the cab and body, and before installation of the engine and transmission assembly, air brake lines, electrical wire harnesses, etc. Components treated with epoxy E-coat protection prior to paint: Two (2) C-channel frame rails Components that are included with the chassis frame assembly that will be painted not e-coated are: Cross members Axles Suspensions Steering gear Battery boxes Bumper extension weldment Frame extensions Body mounting angles Rear Body support substructure (front and rear) Pump house substructure Steel fuel tank Castings Individual piece parts used in chassis and body assembly The E-coat process will meet the technical properties shown.</p>
0693798		Paint, Front Wheels	<p>PAINT, FRONT WHEELS All wheel surfaces, inside and outside, will be provided with powder coat paint #101 black.</p>
0693793		Paint, Rear Wheels, Single Axle	<p>PAINT, REAR WHEELS All wheel surfaces, inside and outside, will be provided with powder coat paint #101 black.</p>
0733739		Paint, Axle Hubs	<p>AXLE HUB PAINT All axle hubs will be painted black #101.</p>
0638530	SP	Paint, Drip Rail, Above Exterior Access EMS, Match Exterior Cab Color	<p>PAINTED RAIN DRIP The exterior access rain drip will be painted to match the cab paint color.</p>
0581434		Transit Coating, Carwell, Corrosion Protection, Including Underside	<p>TRANSIT COATING All non-painted metal surfaces on the exterior of the vehicle will be sprayed with a corrosion protective coating provided by Carwell. The coating can be removed with soap and water. The coating is made of a linseed oil base and is biodegradable. The underside non-painted metal surfaces will also be coated with a corrosion protective coating.</p>
0007230		Compartment, Painted, Spatter Gray	<p>COMPARTMENT INTERIOR PAINT The interior of all compartments will be painted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.</p>
0612909	SP	Reflective Band, 2" Vinyl- 6" Reflective, w/1.0" Gap	<p>VINYL & REFLECTIVE STRIPES Two (2) stripes will be provided across the front of the vehicle and along the sides of the body. The band will consist of a 2.00" Dark Charcoal Metallic vinyl stripe at the top, with a 1" gap, then a 6.00" Black reflective stripe on the bottom.</p>
0510041		Reflective across Cab Face, Imp/Vel	<p>The reflective band provided on the cab face will be below the headlights on the fiberglass.</p>
0725397	SP	Stripe, Chevron, Rear, Diamond Grade, Non-NFPA Coverage, Rear Wall, Pumper	<p>CHEVRON STRIPING, REAR There will be chevron striping located on the rear-facing vertical surface of the apparatus. The color will be red and Fluorescent Yellow-Green 983-23 diamond grade. NFPA 1901 15.9.3.2 requires that 50% of the rear surface will be covered with chevron striping. This fire apparatus does not meet the minimum coverage specified and is not compliant to NFPA 1901 standards in this regard. NFPA 1901 15.9.3.2.1 requires each stripe in the chevron to be a single color alternating between red and either yellow, fluorescent yellow, or fluorescent yellow green. Use of the red and yellow color is endorsed by the International Association of Fire Chiefs. The fire apparatus purchaser will realize that by requesting an exception to this aspect of NFPA 1901, this fire apparatus will not contribute to the national standardization initiative. Per the purchaser's specification, this apparatus will not be compliant to NFPA 1901 standards in this regard.</p>
0544966		Stripe, Chevron, Diamond Grade, Rear Compartment, Rollup, Pumpers	<p>CHEVRON STRIPING ON REAR ROLLUP COMPARTMENT There will be alternating chevron striping located on the rear rollup door. The colors will be red and fluorescent yellow green diamond grade. Each stripe will be 6.00" in width.</p>

0065687	Stripe, Reflective, Cab Doors Interior	CAB DOOR REFLECTIVE STRIPE A 6.00" x 16.00" black reflective stripe will be provided across the interior of each cab door. The stripe will be located approximately 1.00" up from the bottom, on the door panel. This stripe will meet the NFPA 1901 requirement.
0679788	Stripe, Vinyl, Cab Sides, IPO Chrome Molding	CAB STRIPE There will be a vinyl stripe provided on both sides of the cab in place of the chrome molding.
0033179	Lettering Specifications, Reflective	
0684075	Lettering, Vinyl, 3.00", (21-40)	LETTERING Twenty-one (21) to forty (40) non-reflective vinyl lettering, 3.00" high, with outline and shade will be provided.
0684004	Lettering, Vinyl, 12.00", Each	LETTERING There will be non-reflective vinyl lettering, 12.00" high, with outline and shade provided. There will be one (1) letter provided.
0684022	Lettering, Vinyl, 8.00", Each	LETTERING There will be non-reflective vinyl lettering, 8.00" high, with outline and shade provided. There will be eight (8) letters provided.
0684031	Lettering, Vinyl, 6.00", Each	LETTERING There will be non-reflective vinyl lettering, 6.00" high, with outline and shade provided. There will be five (5) letters provided.
0684036	Lettering, Vinyl, 5.00", Each	LETTERING There will be non-reflective vinyl lettering, 5.00" high, with outline and shade provided. There will be six (6) letters provided.
0685978	Lettering, Reflective, 18.00", Each	LETTERING There will be reflective lettering, 18.00" high, with no outline or shade provided. There will be five (5) letters provided.
0037227	Lettering, Reflective, Reverse Cut Into Reflective Band	REFLECTIVE LETTERING 18 letters, 4.00" high will be cut into the reflective stripe to allow the painted surface to form the letter. The letters will be Located on the D1 & P1 lap doors in the SCL/S..
0655896	Sign Kit, Painted, Holder and Insert, Each	SIGN KIT FOR LETTERING/NUMERALS four (4) painted stainless steel plate(s) and holder(s) will be provided for department lettering. They will be mounted 10"H and 12"W in size.
0510655	SP Maltese Cross, Vinyl, 16", Pair	MALTESE CROSS INSTALLATION There will be one (1) pair of vinyl maltese crosses provided and installed cab doors, match 31043. They will be 16.00" x 16.00".
0772003	Manual, Fire Apparatus Parts, USB Flash Drive, Custom	FIRE APPARATUS PARTS MANUAL There will be one (1) custom parts manual(s) in USB flash drive format for the complete fire apparatus provided. The manual(s) will contain the following: Job number Part numbers with full descriptions Table of contents Parts section sorted in functional groups reflecting a major system, component, or assembly Parts section sorted in alphabetical order Instructions on how to locate parts Each manual will be specifically written for the chassis and body model being purchased. It will not be a generic manual for a multitude of different chassis and bodies. Service Parts Internet Site The service parts information included in these manuals are also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.

0772037	Manual, Chassis Service, USB Flash Drive, Custom	<p>CHASSIS SERVICE MANUALS There will be one (1) chassis service manuals on USB flash drives containing parts and service information on major components provided with the completed unit. The manual will contain the following sections: Job number Table of contents Troubleshooting Front Axle/Suspension Brakes Engine Tires Wheels Cab Electrical, DC Air Systems Plumbing Appendix The manual will be specifically written for the chassis model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.</p>
0773381	Manual, Chassis Operation, (1) USB Flash Drive, Custom	<p>CHASSIS OPERATION MANUAL The chassis operation manual will be provided on one (1) USB flash drive.</p>
0030008	Warranty, Basic, 1 Year, Apparatus, WA0008	<p>ONE (1) YEAR MATERIAL AND WORKMANSHIP A Pierce basic apparatus limited warranty certificate, WA0008, is included with this proposal.</p>
0611136	Warranty, Chassis, 3 Year, Velocity/Impel, WA0284	<p>THREE (3) YEAR MATERIAL AND WORKMANSHIP The Pierce custom chassis limited warranty certificate, WA0284, is included with this proposal.</p>
0735523	Warranty, Engine, Paccar MX13, 5 Year	<p>ENGINE WARRANTY A Paccar five (5) year limited engine warranty will be provided. A limited warranty certificate, XX, is included with this proposal.</p>
0684953	Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	<p>STEERING GEAR WARRANTY A Sheppard three (3) year limited steering gear warranty will be provided. A copy of the warranty certificate will be submitted with the bid package.</p>
0595767	Warranty, Frame, 50 Year, Velocity/Impel, WA0038	<p>FIFTY (50) YEAR STRUCTURAL INTEGRITY The Pierce custom chassis frame and crossmembers limited warranty certificate, WA0038, is included with this proposal.</p>
0595698	Warranty, Axle, 3 Year, TAK-4, WA0050	<p>FRONT AXLE THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY The Pierce TAK-4 suspension limited warranty certificate, WA0050, is included with this proposal.</p>
0610485	Warranty, Axle, Eaton/Dana, 5 Year/100,000 Mile, Parts and Labor	<p>REAR AXLE WARRANTY A Eaton five (5)-year/100,000 mile parts and labor warranty will be provided.</p>
0652758	Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	<p>ABS BRAKE SYSTEM THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY A Meritor Wabco™ ABS brake system limited warranty certificate, WA0232, is included with this proposal.</p>
0019914	Warranty, Structure, 10 Year, Custom Cab, WA0012	<p>TEN (10) YEAR STRUCTURAL INTEGRITY The Pierce custom cab limited warranty certificate, WA0012, is included with this proposal.</p>
0744240	Warranty, Paint, 10 Year, Cab, Pro-Rate, WA0055	<p>TEN (10) YEAR PRO-RATED PAINT AND CORROSION A Pierce cab limited pro-rated paint warranty certificate, WA0055, is included with this proposal.</p>
0524627	Warranty, Electronics, 5 Year, MUX, WA0014	<p>FIVE (5) YEAR MATERIAL AND WORKMANSHIP The Pierce Command Zone electronics limited warranty certificate, WA0014, is included with this proposal.</p>
0695416	Warranty, Pierce Camera System, WA0188	<p>CAMERA SYSTEM WARRANTY A Pierce fifty four (54) month warranty will be provided for the camera system.</p>

0647720	Warranty, Pierce LED Strip Lights, WA0203	COMPARTMENT LIGHT WARRANTY The Pierce 12 volt DC LED strip lights limited warranty certificate, WA0203, is included with this proposal.
0046369	Warranty, 5-year EVS Transmission, Standard Custom, WA0187	TRANSMISSION WARRANTY The transmission will have a five (5) year/unlimited mileage warranty covering 100 percent parts and labor. The warranty will be provided by Allison Transmission. Note: The transmission cooler is not covered under any extended warranty you may be getting on your Allison Transmission. Please review your Allison Transmission warranty for coverage limitations.
0685945	Warranty, Transmission Cooler, WA0216	TRANSMISSION COOLER WARRANTY The transmission cooler will carry a five (5) year parts and labor warranty (exclusive to the transmission cooler). In addition, a collateral damage warranty will also be in effect for the first three (3) years of the warranty coverage and will not exceed \$10,000 per occurrence. A copy of the warranty certificate will be submitted with the bid package.
0688798	Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	WATER TANK WARRANTY A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.
0596025	Warranty, Structure, 10 Year, Body, WA0009	TEN (10) YEAR STRUCTURAL INTEGRITY The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.
0693127	Warranty, Gortite, Roll-up Door, 6 Year, WA0190	ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY A Gortite roll-up door limited warranty will be provided. The mechanical components of the roll-up door will be warranted against defects in material and workmanship for the lifetime of the vehicle. A six (6) year limited warranty will be provided on painted and satin roll up doors. The limited warranty certificate, WA0190, is included with this proposal.
0734463	Warranty, Pump, Waterous, 7 Year Parts, WA0382	PUMP WARRANTY The Waterous pump will be provided with a Seven (7) year material and workmanship limited warranty . A copy of the warranty certificate will be submitted with the bid package (no exception).
0648675	Warranty, 10 Year S/S Pumping, WA0035	TEN (10) YEAR PUMP PLUMBING WARRANTY The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.
0657990	Warranty, Foam System, Husky 3, WA0231	FOAM SYSTEM WARRANTY The Husky 3 foam system limited warranty certificate, WA0231, is included with this proposal.
0595820	Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	TEN (10) YEAR PRO-RATED PAINT AND CORROSION A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.
0595412	Warranty, Graphics Lamination, 1 Year, Apparatus, WA0168	ONE (1) YEAR MATERIAL AND WORKMANSHIP The Pierce graphics fading and deterioration limited warranty limited warranty certificate, WA0168, is included with this proposal.
0819254	Certification, Vehicle Stability, CD0196	VEHICLE STABILITY CERTIFICATION The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1900, current edition, section 7.14, Vehicle Stability. The certification will be provided at the time of bid.
0808574	Certification, Engine Installation, VEL, Paccar MX, 2027	ENGINE INSTALLATION CERTIFICATION The fire apparatus manufacturer will provide a certification, along with a letter from the engine manufacturer stating they approve of the engine installation in the bidder's chassis. The certification will be provided at the time of delivery.
0686786	Certification, Power Steering, CD0098	POWER STEERING CERTIFICATION The fire apparatus manufacturer will provide a certification stating the power steering system as installed meets the requirements of the component supplier. The certification will be provided at the time of bid.

0892701	Certification, Cab Integrity, Impel/Velocity FR, CD0190	<p>CAB INTEGRITY CERTIFICATION The fire apparatus manufacturer will provide a cab crash test certification with this proposal. The certification will state that a specimen representing the substantial structural configuration of the cab has been tested and certified by an independent third party test facility. Testing events will be documented with photographs, real-time and high-speed video, vehicle accelerometers, cart accelerometers, and a laser speed trap. The fire apparatus manufacturer will provide a state licensed professional engineer to witness and certify all testing events. Testing will meet or exceed the requirements below: SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks. European Occupant Protection Standard ECE Regulation No.29. SAE J2420 COE Frontal Strength Evaluation - Dynamic Loading Heavy Trucks.</p> <p>Side Impact The cab will be subjected to dynamic preload where a 14,320-lbs moving barrier is slammed into the side of the cab at 5.50 mph, striking with an impact of 13,000 ft-lbs of force. This test is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a rollover incident.</p> <p>Roof Crush The same cab will be subjected to a roof crush force of 22,050 lbs. This value meets the ECE 29 criteria, and is equivalent to the front axle rating up to a maximum of ten (10) metric tons.</p> <p>Additional Roof Crush The same cab will be subjected to a roof crush force of 100,000 lbs. (Four and a half times the load criteria of ECE 29)</p> <p>Frontal Impact The same cab will withstand a frontal impact of 32,600 ft-lb of force using a moving barrier in accordance with SAE J2420.</p> <p>Additional Frontal Impact The same cab will withstand a frontal impact of 65,200 ft-lb of force using a moving barrier. (Twice the force required by SAE J2420) The same cab will withstand all tests without any measurable intrusion into the survival space of the occupant area. There will be no exception to any portion of the cab integrity certification. Nonconformance will lead to immediate rejection of bid.</p>
0548950	Certification, Cab Door Durability, Velocity/Impel, CD0001	<p>CAB DOOR DURABILITY CERTIFICATION Robust cab doors help protect occupants. Cab doors will survive a 200,000 cycle door slam test where the slamming force exceeds 20 G's of deceleration. The bidder will certify that the sample doors similar to those provided on the apparatus have been tested and have met these criteria without structural damage, latch malfunction, or significant component wear.</p>
0548967	Certification, Windshield Wiper Durability, Impel/Velocity, CD0005	<p>WINDSHIELD WIPER DURABILITY CERTIFICATION Visibility during inclement weather is essential to safe apparatus performance. Windshield wipers will survive a 3 million cycle durability test in accordance with section 6.2 of SAE J198 <i>Windshield Wiper Systems - Trucks, Buses and Multipurpose Vehicles</i>. The bidder will certify that the wiper system design has been tested and that the wiper system has met these criteria.</p>
0667411	Certification, Electric Window Durability, Velocity/Impel FR, CD0004	<p>ELECTRIC WINDOW DURABILITY CERTIFICATION Cab window roll-up systems can cause maintenance problems if not designed for long service life. The window regulator design will complete 30,000 complete up-down cycles and still function normally when finished. The bidder will certify that sample doors and windows similar to those provided on the apparatus have been tested and have met these criteria without malfunction or significant component wear.</p>
0549273	Certification, Seat Belt Anchors and Mounting, Imp/Vel/Vel SLT, CD0018	<p>SEAT BELT ANCHOR STRENGTH Seat belt attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat belt anchor design will withstand 3000 lb of pull on both the lap and shoulder belt in accordance with FMVSS 571.210 Seat Belt Assembly Anchorages. The bidder will certify that each anchor design was pull tested to the required force and met the appropriate criteria.</p> <p>SEAT MOUNTING STRENGTH Seat attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat mounting design will be tested to withstand 20 G's of force in accordance with FMVSS 571.207 Seating Systems. The bidder will certify that each seat mount and cab structure design was pull tested to the required force and met the appropriate criteria.</p>

0735950	Certification, Cab HVAC System Perf, Vel/Imp FR, CD0166/CD0168/CD0176/CD0177	<p>PERFORMANCE CERTIFICATIONS</p> <p>Cab Air Conditioning Good cab air conditioning temperature and air flow performance keeps occupants comfortable, reduces humidity, and provides a climate for recuperation while at the scene. The cab air conditioning system will cool the cab from a heat-soaked condition at 100 degrees Fahrenheit to an average of 78 degrees Fahrenheit in 30 minutes. The bidder will certify that a substantially similar cab has been tested and has met these criteria.</p> <p>Cab Defroster Visibility during inclement weather is essential to safe apparatus performance. The defroster system will clear the required windshield zones in accordance with SAE J381 Windshield Defrosting Systems Test Procedure And Performance Requirements - Trucks, Buses, And Multipurpose Vehicles. <i>The bidder will certify that the defrost system design has been tested in a cold chamber and passes the SAE J381 criteria.</i></p> <p>Cab Auxiliary Heater <i>Good cab heat performance and regulation provides a more effective working environment for personnel, whether in-transit, or at a scene. An auxiliary cab heater will warm the cab 77 degrees Fahrenheit from a cold-soak, within 30 minutes when tested using the coolant supply methods found in SAE J381. The bidder will certify, at time of delivery, that a substantially similar cab has been tested and has met these criteria.</i></p>
0545073	Amp Draw Report, NFPA Current Edition	<p>AMP DRAW REPORT</p> <p>The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.</p> <p>The manufacturer of the apparatus will provide the following: Documentation of the electrical system performance tests. A written load analysis, which will include the following: The nameplate rating of the alternator. The alternator rating under the conditions specified per: Applicable NFPA 1901 or 1906 (Current Edition). The minimum continuous load of each component that is specified per: Applicable NFPA 1901 or 1906 (Current Edition). Additional loads that, when added to the minimum continuous load, determine the total connected load. Each individual intermittent load. All of the above listed items will be provided by the bidder per the current edition of applicable NFPA standards.</p>
0002758	Amp Draw, NFPA/ULC Radio Allowance	
0799248	Appleton/Florida BTO	
0000018	PUMPER, 2ND GEN	
0000012	PIERCE CHASSIS	
0735525	PACCAR MX13 ENGINE	
0046396	EVS 4000 Series TRANSMISSION	
0020011	WATEROUS PUMP	
0020009	POLY TANK	
0028048	FOAM SYSTEM	
0020006	SIDE CONTROL	
0020007	AKRON VALVES	
0020015	ABS SYSTEM	
0658751	PUMPER BASE	



Electrical Analysis

2/13/2024

Bid #: 947
Desc: Two (2) Velocity Pumpers (Match 38351)
Customer: South San Joaquin County Fire Authority
Option: Pierce Command Zone, Advanced Electronics & Control System, Vel WiFi CZT

Job #:
Sales Rep: Myers, Rich
Organization: Golden State Fire Apparatus, Inc
Type: Multiplexed

Option	Description	Type*	Minimum Load	Intermittent Load	Total Connected
0001244	High Idle w/Electronic Engine, Custom		0.00	1.20	0.00
0015216	Reel, Booster, Aluminum - Over Pump, Right Side		0.00	36.00	0.00
0032602	Speedometer, Class 1 w/LED, Officer Overhead		0.00	0.00	0.16
0072153	Primer, Trident, Air Prime, Air Operated		0.00	0.00	0.00
0079211	Batteries, (6) Stryten/Exide Grp 31, 950 CCA each, Threaded Stud		0.00	3.00	0.00
0122466	Cab Lift, Elec/Hyd, w/Manual Override, Imp/Vel		0.00	180.00	0.00
0549333	Indicators, Engine, Included with Pressure Controller		0.00	0.35	0.00
0554452	Light, Front, WIn M6*C LED, Clear Lens 1st		0.00	2.70	1.80
0556749	Programming, Membrane Switches, Max % Light Intensity, Loc,		0.00	1.00	0.00
0583824	Light, Pump Compt, WIn 3SC0CDCR LED White		0.00	0.36	0.00
0583938	Lights, Engine Compt, Custom, Auto Sw, WIn 3SC0CDCR, 3"		0.00	0.60	0.00
0589905	Alarm, Back-up Warning, PRECO 1040		0.00	0.50	0.00
0604028	Water Level Gauge, FRC, MaxVision WLA280-A00 Programmable		0.00	0.00	0.00
0604354	Gauge, Foam Level, FRC, Tank Vision Pro, WLA 360-A00, Class		0.00	0.00	1.23
0613339	Handlight, Koehler, BrightStar, Lighthawk II, 07670, Orange		0.00	0.00	1.50
0618256	Light, Visor, FRC, 12V SPA851-A28-*, LED MAX-S 1st		0.00	0.00	20.80
0624939	Foam Sys, Husky 3, Single Agent, Multi Select Feature		0.00	55.00	0.00
0653519	Camera, Pierce, LS Mux, RS, LS, R, Cameras		0.00	1.20	0.00
0667902	Controls, Electric Windows, All Cab Doors, Impel/Velociry FR		0.00	26.00	0.00
0673123	Light, Do Not Move Apparatus, WIn 3SR00FRR LED		0.00	0.30	0.00
0679284	Switch, 12V (Inst Pnl), AM/FM Radio, Off Switch, Auto On		0.00	0.00	1.00
0698805	Bracket, Johnny Ray, Heavy Duty Swivel, 14 lb. Rating		0.00	0.00	0.00
0721071	Compt, Storage, 10.71 W x 30 H x 14 D, (1) Ea Side C/C, Sgl		0.00	0.00	0.00
0735006	Intercom, David Clark, 4-Pos, 2-Radio, (D,O,RPTT), 2obC, U3805		0.00	0.00	0.50
0735687	Engine Brake, Fully Integrated, Paccar MX13 Engine		0.00	0.42	0.00
0750408	Lights, Side, WIn PS*01FCR LED 1st		0.00	1.92	1.28
0762420	Lights, Walk Surf, Amdor AY-LB-12HW0** LED, and P25 LED		0.00	0.00	0.00
0806466	Lights, Backup, WIn M62BU, LED, For Tail Lt Housing		0.00	3.20	0.00
0807372	Lights, FRC, SPA260-Q20, 1st		0.00	0.00	13.80
0807374	Lights, FRC, SPA260-Q20, 2nd		0.00	0.00	13.80
0819994	Radio, Jensen, AM/FM/WB, Bluetooth		0.00	0.00	2.00
0820509	ESC/ABS/ATC Wabco Brake System, Single Rear Axle, NFPA		0.00	6.00	0.00
0820897	Wiring, Spare, 15 A 12V DC, Batt Dir, 2nd NFPA1900		0.00	0.00	15.00
0820922	Wiring, Spare, 4.8 A 12V DC, USB Term Blue Sea 1045, Batt Dir,		0.00	0.00	4.80
0821580	Wiring, Spare, 7.5A 12V DC 1st NFPA1900		0.00	0.00	7.50
0895310	Siren, Federal Q2B		0.00	100.00	0.00
0896616	Lights, Door Interior Flash, 4 Dr Cab, Weldon 8401-0000-20 Strip		0.00	0.64	0.00
0821236	Wiring, Spare, 20 A 12V DC, 6 Ckt FB, Blue Sea 5025 Batt Dir 1st	Load Managed	0.00	0.00	20.00
0894651	HVAC, Heavy-Duty, Velocity FR, w/PACCAR, CARE	Load Managed	0.00	0.00	136.00
0002758	Amp Draw, NFPA/ULC Radio Allowance	NFPA	5.00	0.00	0.00
0063610	LS 152" Lap, Full Height Front & Rear, FDLER	NFPA	4.50	0.00	4.50
0063624	RS 152" Lap, Full Height Front & Rear, FDLER	NFPA	4.50	0.00	4.50
0083700	Compt, Rear, Rollup, 37.75" FF, 25.88" D	NFPA	0.90	0.00	0.90
0092582	Load Manager/Sequencer, MUX	NFPA	0.56	0.56	0.00
0555915	Wiper Control, 2-Speed with Intermittent, MUX, Impel/Velociry	NFPA	2.10	8.40	0.00
0556360	Lights, Step, P25 LED 4lts, Pump Pnl Sw	NFPA	1.00	0.00	0.00
0563675	Lights, Clearance/Marker/ID, Rear, Truck-Lite 33050R LED 7Lts	NFPA	0.35	0.00	0.00

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply



Electrical Analysis

2/13/2024

Bid #: 947
Desc: Two (2) Velocity Pumpers (Match 38351)
Customer: South San Joaquin County Fire Authority
Option: Pierce Command Zone, Advanced Electronics & Control System, Vel WiFi CZT

Job #:
Sales Rep: Myers, Rich
Organization: Golden State Fire Apparatus, Inc
Type: Multiplexed

Option	Description	Type*	Minimum Load	Intermittent Load	Total Connected
0564655	Lights, Rear Zn Lwr, WIn M6*C LED, Clear Lens, For Tail Lt	NFPA	1.80	2.70	0.00
0568012	Air Dryer, Wabco System Saver 1200, Heater, 2010	NFPA	7.81	0.00	0.00
0568369	Cab Instruments, Ivory Gauges, Chrome Bezels, Impel/Veloc	NFPA	1.26	0.00	0.00
0586382	Gauges, Engine, Included With Pressure Controller	NFPA	0.30	0.00	0.00
0604784	Lightbar, WIn, Freedom IV-Q, 81", RRRRWRsrROptRsrWRRRRR	NFPA	8.96	2.68	9.92
0605126	Pump Shift, Air Mnl Override, Split Shaft, Interlocked, Waterous	NFPA	1.00	0.00	0.00
0617901	Lights, Perimeter Pump House, TecNiq T10-LC00-1 15" LED 2lts	NFPA	0.80	0.00	0.00
0620054	Light, Directional/Marker, Intermediate, Weldon 9186-8580-29	NFPA	0.10	0.90	0.00
0625975	Handrails, Beavertail, Hansen Tubing, Knurled Aluminum, LED	NFPA	1.00	1.00	2.00
0626579	Lights, Perimeter Body, TecNiq T10-LC00-1 15" LED 2lts, Rear	NFPA	0.80	0.00	0.00
0645864	Lights, Rear Scene, FRC, SPA900-Q70	NFPA	12.00	0.00	0.00
0647647	Lights, Dome, FRP Dual LED 4 Lts	NFPA	0.80	0.80	0.00
0648074	Lights, Clearance/Marker/ID, Front, P25 LED 7 Lts	NFPA	0.49	0.00	0.00
0648425	Light, Directional, WIn 600 Cmb, Cab Crn, Imp/Vel/AXT/Qtm/DCF	NFPA	0.70	0.70	0.00
0648630	Lights, Perimeter Cab, TecNiq E10-WS00-1 LED 4Dr, Angled Brkt	NFPA	3.00	0.00	0.00
0651334	Cab, Velocity FR, 7000	NFPA	6.80	10.20	0.00
0653937	Flasher, Headlight Alternating	NFPA	0.08	0.00	0.00
0665286	Light Shield/Step 8", PS, 3-FRC Firefly LED115-Q01, P25 LED	NFPA	4.00	0.00	0.00
0665336	Light Shield/Step 8", 4-FRC Firefly LED115-Q01, P25 LED Step Lt	NFPA	5.00	0.00	0.00
0686562	Light, Rear Zone Up, WIn MCFLED2* LED	NFPA	3.00	0.00	0.00
0721609	Controller, Pressure, Pierce LCD, Custom Chassis	NFPA	1.70	0.00	0.00
0729102	Lights, Side Zone Lower, WIn M6**, M6**, M6**, 6Lts, PB Int, Non-	NFPA	5.40	8.10	0.00
0733463	DEF Tank, 6.0 Gallon, LS Fill, Rear of Axle, Common Door,	NFPA	0.60	11.40	0.00
0739224	Indicator Light @ Pump Panel, Throttle Ready, Incl w/Pressure	NFPA	0.10	0.00	0.00
0739749	Gauge, Water Level, Pierce, In pressure Controller, w/Mini Slave,	NFPA	1.23	0.00	0.00
0745568	Indicator Light, Pump Panel, Ok To Pump, Green	NFPA	0.10	0.00	0.00
0763247	Handrail, Rear, Below Hose Bed, Hansen, Knurled Aluminum LED	NFPA	0.50	0.50	1.00
0764088	Wiring, Spare, 47.5 A 12V DC, Cust Install Radio, 40A Bat Dir,	NFPA	40.00	0.00	7.50
0768474	Lights, Hose Bed, Below Alum Cvr, Amdor AY-LB-12HW040, 40"	NFPA	2.40	0.00	0.00
0770200	Handrail, Exterior, Hansen, Knurled, Alum, LED Backlit, 4-Door	NFPA	0.80	0.00	0.00
0771832	Cabinet, Rear Facing, LS, 24 W x 28 H x 24 D, Ext Acc Only, Sp	NFPA	0.28	0.28	0.00
0775121	Cabinet, Rear Facing, RS, 26.50 W x 28 H x 21.50 D, Ext Acc	NFPA	0.28	0.28	0.00
0783153	Headlights, Rect LED, JW Spkr Evo 2, AXT/DCF/Enf/Imp/Sab/Vel	NFPA	4.20	4.20	0.00
0783729	Cabinet, Forward Facing, Center, 42 W x 36 H x 24 D, Web,	NFPA	0.36	0.36	0.00
0791493	Light, Traffic Directing, WIn TAM65 36" Long LED	NFPA	1.26	2.52	0.00
0804514	Lights, Tail, WIn M62BTT* Red Stop/Tail & M62T* Amber Dir Arw	NFPA	0.83	2.49	0.00
0808514	Engine, Paccar MX, 510HP, 1850 lb-ft W/OBD, EPA 2027,	NFPA	6.00	0.00	0.00
0814201	Vehicle Information Center, 7" Color Display, Touchscreen, MUX,	NFPA	1.20	0.00	0.00
0819024	Siren, WIn 295HFS2 Remote, Single Amp, Other Speaker, Non-	NFPA	1.40	12.60	0.00
0887546	Trans, Allison 6th Gen, 4000 EVS P, w/Prognostics,	NFPA	2.00	2.00	0.00
0889577	Bracket, License Plate & Light, P25 LED, Stainless Brkt	NFPA	0.07	0.00	0.00
0892637	Lights, Cab & Crw Cab Acs Stps, P25, LED w/Bezel, 1Lt Per Step	NFPA	1.00	0.00	0.00
0898734	Light, Front Zone, WIn M6** M6** M6** M6** Q Bzl	NFPA	1.80	5.40	1.80
0647729	Alternator, 320 amp, Delco Remy 40SI	S	0.00	0.00	0.00
Load Totals:			152.12	498.46	273.29

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply



Electrical Analysis

2/13/2024

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Customer: South San Joaquin County Fire Authority
Option: Pierce Command Zone, Advanced Electronics & Control System, Vel WiFi CZT

Job #:
Sales Rep: Myers, Rich
Organization: Golden State Fire Apparatus, Inc
Type: Multiplexed

Note: Minimum Continuous Load is in "Blocking Right of Way" mode.(Reference current edition of NFPA 1901)
 Note: Intermittent Load items are not factored in on any alternator load comparisons. These items are included on the report for reference only and should be looked at as amp draw exclusion items. (Reference current edition of NFPA 1901)
 Note: Total Connected Load "Demand" represents Total Connected Load minus any Load Managed items

Alternator Output at Idle: 210.00

Minimum Continuous Load	
Supply:	210.00
Demand:	152.12
Variance:	57.88

Alternator Output at Governed Speed: 288.00

Total Connected Load	
Supply:	288.00
Demand:	269.41
Variance:	18.59

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply



Turning Performance Analysis

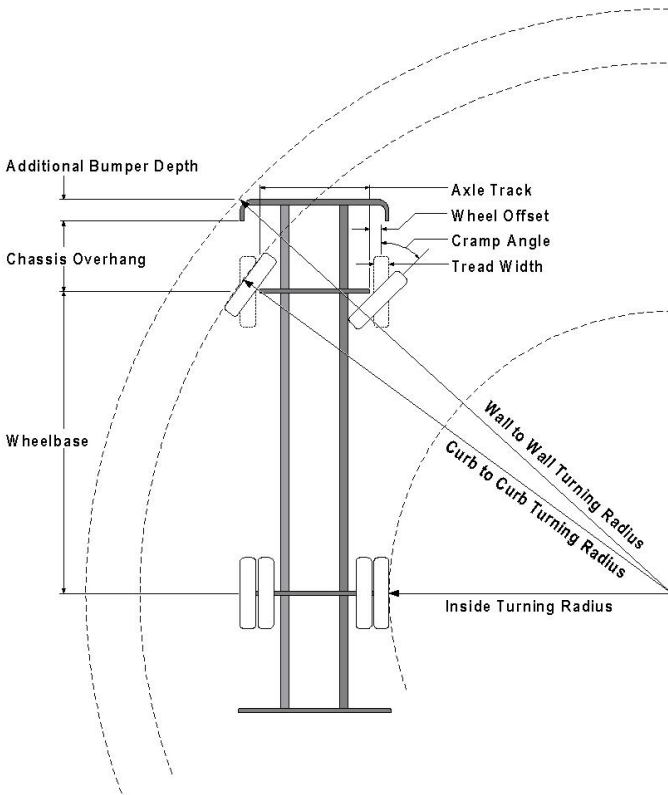
02/13/2024

Bid Number: 947

Chassis: Velocity Chassis (Big Block), 2010

Department: South San Joaquin County Fire Authority

Body: Pumper, Medium, Aluminum, 2nd Gen



Parameters:

*Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	5.25 in.
Tread Width:	15.9 in.
Chassis Overhang:	78 in.
Additional Bumper Depth:	0.00 in.
Front Overhang:	78 in.
Wheelbase:	191.5 in.

Calculated Turning Radii:

Inside Turn:	14 ft. 10 in.
Curb to curb:	28 ft. 0 in.
Wall to wall:	32 ft. 10 in.

Category	Option	Description
Axle, Front, Custom	0777891	Axle, Front, Oshkosh TAK-4, Non Drive, 20,050 lb, Imp/Vel
Tires, Front	0802633	Tires, Front, Goodyear, Armor Max MSA, 385/65R22.50, 18 ply, Fire Ser. Load Rtg
Bumpers	0819338	Bumper, 13" Extended, Steel Painted, 12" High, Imp/Vel
Wheels, Front	0604672	Wheels, Front, Accuride, 22.50" x 12.25", Steel, Hub Pilot

Notes:

*Actual Inside cramp angle may be less than shown.

Curb to Curb turning radius calculated for 9.00 inch curb.

Definitions:

Inside CrampAngle	Maximum turning angle of the front inside fire.
Axle Track	King-pin to King-pin distance of front axle.
Wheel Offset	Offset from the center line of the wheel to the King-pin.
Tread Width	Width of the tire tread.
Chassis Overhang	Distance of the center line of the front axle to the front edge of the cab. This does not include the bumper depth.
Additional Bumper Wheel	Depth that the bumper assembly adds to the front overhang.
Wheelbase	Distance between the center lines of the vehicles front and rear axles.
Inside Turning Radius	Radius of the smallest circle around which the vehicle can turn.
Curb to Curb Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures assumes a curb height of 9 inches.
Wall to Wall Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures takes into account any front overhang due to chassis , bumper extensions and or aerial devices.



FINANCE COMMITTEE FIRE APPARATUS REPLACEMENT

March 26, 2024

Fire Apparatus Replacement

The City of Tracy, as a member of the South San Joaquin Fire Authority (SSJCFA) owns and maintains the fire engines at its respective stations.

Engines 91 and 97 are due for replacement in FY2026-27, however, manufacturing times are expected to be 2 ½ years.

SSJCFA has provided a quote for the replacement of the two engines through the use of a cooperative purchasing agreement.



Golden State Fire Apparatus Proposal

The cost to purchase the two Type 1 replacement fire engines now is \$1,945,336 and includes a prepayment discount of \$324,711 and a multiple unit discount of \$15,000.

The City's fire apparatus replacement fund balance is currently \$925,000. To purchase both engines now would require an appropriation of \$1,020,336 from the General Fund reserves.

This price is valid through May 2, 2024, and after that date, a price increase of 1.5% will apply



Option 1

Purchase both replacement engines now.

Cost: **\$1,945,336**

Replacement Fund Balance: **\$925,000**

**General Fund Reserve
Appropriation Required:** **\$1,020,336**



Think Inside the 'Triangle'

Option 2

Replace both engines now with no prepayment

Cost: **\$2,297,696**

**Replacement Fund Balance
(payment at time of delivery):** **\$2,425,000**

**General Fund Reserve
Appropriation Required:** **\$0**



Option 3

Replace one engine now and one engine in FY24-25

	<u>FY2023-24</u>
Cost:	\$975,000
Replacement Fund Balance:	<u>\$925,000</u>
General Fund Reserve Appropriation Required:	\$50,000
	<u>FY2024-25</u>
Cost (estimated):	\$995,000
Replacement Fund Balance:	<u>\$0</u>
Appropriation through Annual Budget Process:	\$995,000



Option 4

Delay replacements to FY26-27

Cost with prepayment(estimated): **\$2,200,000**

Replacement Fund Balance: **\$2,425,000**

**General Fund Reserve
Appropriation Required:** **\$0**



Fiscal Impact

Requests for capital purchases, such as the replacement fire engines, are typically brought to Council during the annual budget process for prioritization and consideration in alignment with the Council's adopted strategic priorities and available funding in the upcoming budget year.

This request is being considered outside the annual budget process and if funded in the current fiscal year, will result in an appropriation from the General fund reserves.



Discussion

