South Lake County Fire Protection District
in cooperation with
California Department of Forestry and Fire Protection

P.O. Box 1360 Middletown, CA 95461 - (707) 987-3089

NOTICE OF A BOARD OF DIRECTORS REGULAR MEETING
Tuesday, February 21, 2023, at 7:00 p.m.
Located at the Middletown Fire Station Board Room,
21095 Highway 175, Middletown, CA 95461

Notice is Hereby Given, pursuant to California Government Code Section 54956, that the Chairperson of South Lake County Fire Protection District Board of Directors, State of California has called a regular meeting of said Board of Directors.

This regular meeting is for the purpose of discussing the following items:

1. Call to Order:
2. Pledge of Allegiance:
3. Roll Call:
4. Motion to approve agenda:

   MOVED_____SECONDED_____ YES___NO___ ABSTAIN___
5. Citizens' Input: Any person may speak for three (3) minutes about any subject of concern provided it is within the jurisdiction of the Board of Directors and is not already on the today's agenda. Total period is not to exceed fifteen (15) minutes, unless extended at the discretion of the Board.
6. Communications:

   6.a. Fire Sirens

   6.b. Fire Safe Council

   6.c. Volunteer Association

   6.c.1. Badge Pinning

   6.d. Chief's Report

   6.e. Finance Report

   6.f. Directors' activities report
7. Regular Items:

   7.a. Consideration and approval for the Professional Services Agreement for a Countywide EMS system evaluation between the Lake County Fire Chief's Association and AP Triton, LLC with South Lake County Fire's portion of the cost to be $12,882. Placed on the agenda by Chief Mike Marccuci.

   MOVED_____SECONDED_____ YES___NO___ ABSTAIN___

7.b. Consideration for first responder of life support agreement with Napa County AMR. Placed on the agenda by Chief Mike Marcucci.

MOVED_____SECONDED_____ YES___NO___ ABSTAIN___

7.c. Consideration and approval for Chief or his designee to start process with Pierce Manufacturing for purchase of two engines to replace Engines 6221 and 6321. Placed on the agenda by the Equipment and Facilities Committee.

MOVED_____SECONDED_____ YES___NO___ ABSTAIN___

7.d. Consideration and approval for Chief or his designee to select finance option for purchase of two engines to replace Engines 6221 and 6321. Placed on the agenda by Chief Mike Wink.

MOVED_____SECONDED_____ YES___NO___ ABSTAIN___

7.e. Consideration and approval for disposition of old Snow Cat, to party willing to assume ownership while keeping it in Cobb Mountain area. Placed on the agenda by Chief Paul Duncan.

MOVED_____SECONDED_____ YES___NO___ ABSTAIN___

8. Consent Calendar Items: (Approval of consent calendar items are expected to be routine and non-controversial. They will be acted upon by the Board at one time without discussion. Any Board member may request that an item be removed from the consent calendar for discussion later.)

   8.a. January 17, 2023, Regular Meeting Minutes

   8.b. Warrants - February

   8.c. Budget Transfer

9. Motion to Adjourn Meeting:

Posted February 17, 2023 by DocuSigned by: AA6C7B669C144F1... Gloria Fong, Clerk to the Board of Directors

A request for disability-related modification or accommodation necessary to participate in the Board of Directors' Meeting should be made by emailing boardclerk@southlakecountyfire.org at least 48 hours prior to the meeting.

Please join the meeting from your computer, tablet, or smartphone.
https://us02web.zoom.us/j/83511077871

You can also dial in using your phone: +1 (669) 900-6833 US (San Jose)

Meeting ID: 835 1107 7871

Comments are allowed before any action is taken by the Board on each item. Comments may be made remotely by emailing boardclerk@southlakecountyfire.org, via ZOOM videoconference, or phone application.

South Lake County Fire Prevention District
21095 Hwy 175
Middletown, CA 95461

January 15, 2023

Dear South Lake County Fire Prevention District,

Thank you very much for including our chipping information on your latest mailer. We really appreciate that you have provided this important information to the households in our community.

We all have a common goal to decrease wildfires in our area. Team work is crucial. Thank you for your efforts.

Sincerely,

Julianne Lewis

Julianne Lewis
President

DEFENSIBLE SPACE

BRUSH CHIPPING & DEBRIS REMOVAL PROGRAM

Annual Supporting Memberships in the South Lake Fire Safe Council are available for $30 per calendar year. Supporting Members are entitled to receive up to four hours free chipping per year.

South Lake Fire Safe Council

FOR MORE INFORMATION

http://southlakefiresafecouncil.org/chipping.html

South Lake County Fire
PO Box 1360
Middletown, CA 95461

**********ECRWSS****
Local
Postal Customer

PRSRT STD
ECRWSS
U.S.POSTAGE
PAID
EDDM RETAIL

GET YOUR BURN PERMIT NOW

risk reduction AUTHORITY

South Lake Fire Safe Council

CAL FIRE

APPLY & PAY FOR BURN PERMIT ONLINE

WWW.SOUTHLAKECOUNTYFIRE.ORG

1. Scan Code or Vist
2. Select Permit/Fee Collection
3. Choose what type of permit you need

- Residential Burn Permit
- Agricultural Burn Permit
- Land Development and Lot Clearing Permit

WWW.SOUTHLAKECOUNTYFIRE.ORG

Find us on

SOUTH LAKE FIRE SAFE COUNCIL
January 11, 2023
Meeting Minutes

Call to Order – 2 pm – Lewis, Peek Englander present. Black, Wink and Jessica Lewis via zoom.

Previous Meeting Minutes - Approved

President's Report –

Zoom account has been set-up
Amazon Smile is working
Lewis will now be the contact for Gmail verification

Treasurer's Report

Bank Balance - $8288.96
Expenses – $24.95
Income – $0
Correspondence –
Membership Info – 55

Committee Reports

Chipping – 73 Sites
Web Site –
Facebook – Lewis will contact Valderrama about starting new Facebook group
Publicity – Email
Lake County Risk Reduction Authority –

Vice President – Theresa Peek appointed

Cal Fire Update – Chief Wink being promoted to Pre-Fire Division Chief.

Curtain Burner – Working – debris removal may become a problem. Cobb Area Council is contact for bringing material

Jerusalem Grade- Masticator will go down main road in late February. May include Red Canyon Rd., Raccoon Flat, Bachelor and Burnt Oak.

Website Update – Still adding content – Target launch date –January 29th.

Thank you to SLCFPD for Including Chipping Information on Their Mailer –Send letter

Outreach to HVL Ranchos – Lewis is working with community members and encouraging them to become a Firewise Community

Meeting adjourned.

SOUTH LAKE FIRE SAFE COUNCIL
February 1, 2023
Meeting Agenda

Call to Order – 2 pm

Previous Meeting Minutes

President's Report

Treasurer's Report
- **Bank Balance -**
- **Expenses**
- **Income –**
- **Correspondence** –
- **Membership Info** –

Committee Reports
- **Chipping –**
- **Web Site** –
- **Facebook –**
- **Publicity –**
- **Lake County Risk Reduction Authority –**

Website Launch

Community Updates
- **Anderson Springs**
- **Cobb**
- **HVL**
- **Jerusalem Grade**
- **Middletown Rancheria**
- **Noble Ranch**
- **Cal Fire**
- **CLERC**
- **PG&E**

Agenda Items for Next Meeting

Chief Notes 2/17/2023

North Division Operations:
Fuels work continues with our winter staffing, working on projects throughout the County. These include the Damn Road fuel break, Konocti Interface, and Bottle Rock Corridor.

Winter equipment maintenance is on schedule, with the direction to have 22 engines (Unit-wide) ready for the early hiring of seasonal personnel (potentially early April).

Camp Operations:
We are still holding steady at two crews, with the possibility of a third "short crew" coming on toward early 2023.

Our new Mobile Kitchen Unit (MKU) has arrived in Davis and was taken to the 'MKU Roundup' in Anderson to run through the new systems. More to follow on that topic as we hear more.

South Lake Operations:
We are excited that Karin will make a part-time return to the office. The office workload is significant, and having Karin take some of that off Gloria's desk is positive news.

In other personnel news, Firefighter II Cory Smith has accepted a position with the River Rock Fire Department in Sonoma County, and PCF Robert Lanning has accepted a position with CAL FIRE as a Fire Apparatus Engineer. We wish them well as they progress in their Fire Service careers.

The new E-6011 is at Burton's Fire Equipment for work on the pump, valves, and other miscellaneous parts. No timeframe for completion, but good progress is happening.

I will be asking the Board to 'surplus' the old snowcat. The replacement has been repaired and brings that equipment into the 1990s. The 1960s model has served the District well, and we have located a home for it, where it will remain in the Cobb/Loch Lomond community with the Prather Family.

The Loch Lomond station (64) has been used several times over the last couple of months, with the Loch Lomond Property Owners and Firewise Community utilizing the space for meetings. It is great to see the station being used, and we support the growth of the Firewise Communities in the District.

The grant-funded masticator has been working behind Twin Pines Casino, and is scheduled to start work in the Jeruselum Grade area shortly.

The next round of "Operation Force Multiplier" Handtools and Extinguishers has been ordered. Once they are delivered, we will schedule dates for 2023.

End of Report
Paul

CDF/SLCF INCIDENT TRACKING FORM

Month **Jan 2023**

Station 62

FA = False Alarm
CR = Cancel & Return
UTL = Unable To Locate
AMA = Against Medical Advice
CB = Code Blue (Full Arrest,CPR in Progress)
LA = Lift Assist
NMM = No Medical Merit (AMA not completed)

Comments:
List Number of Patients as Pt x 4
If an IFT, List Destination Here
Any Specific Comments, List Here

CAIRS complete √	Date	Time of Dispatch	Time Committed	Time At Scene	Time Available	Inc. #	Location Street Name	Medical Aid	NMM	MVA	Structure Fire	Vegetation Fire	Vehicle Fire	Smoke Check	Haz-Mat	Public Assist	Other (Describe)	# of Fatalities	Extrication Eqt Used		
	1/1	0958	0959	1009	1110	27	Hwy 175	1													
	1/1	1344	1345	1355	1445	100	Harrington Flat Rd					1									cx
	1/2	1902	1903		1930	124	Hwy 175				1										cx
	1/2	0606	0608	0613	0614	146	Hwy 175				2										cx
	1/4	0742	0744	0755	0756	220	hwy 29				3										cx
	1/4	0800	0801		0802	226	hwy 175				4										cx
	1/4	1716	1720	1720	1725	287	Kahms										1				Cx
	1/4	1727	1727	1730	1734	288	Meadow Drive									1					Cx
	1/4	1922	1924		1932	312	Indian Rock Rd					2									Cx
	1/4	2045	2047	2050	2158	320	Papes Pass									2					Tree Down
	1/4	0420	0422	0430	0450	369	Hwy 175									3					Tree Down
	1/5	0846	0846	0846	0846	384	Brook Drive								1						FA
	1/5	1355	1355	1355	1355	412	Golf x Cobb									4					
	1/5	1604	1604	1604	1604	422	Western Mine Rd	2													1 Pt C2 to AHC
	1/6	1422	1424	1430	1435	487	Bottle Rock Rd									5					UTL
	1/6	1802	1804	1810	2000	505	Fox Drive	3													1 Pt C2 to AHC
	1/6	2035	2037		2045	521	Sunset Ridge (Kelseyville)	4													Cx
	1/6	2111	2113		2115	523	Fairway Drive (Kelseyville)	5													Cx
	1/7	1817	1819	1835	2000	593	Black Oak Drive	6													1 Pt C2 to AHC
	1/7	2213	2215	2225	2230	606	Gifford Springs Rd										2				Lift Assist
	1/8	1624	1626	1645	1800	659	Bottle Rock Rd	7													1 Pt C2 to AHC
	1/9	1124	1126		1207	730	5th St Ext.	8													Cx
	1/10	1049	1051	1056	1203	798	Adam Springs Golf Course	9													1 Pt C2 to AHC
	1/11	0608	0611	0625	0715	853	Manzanita LN											1			Haz, eletrical
	1/11	0846	0848		0857	860	Santa Clara RD	10													diverted
	1/11	0857	0857	0909	1039	861	Hoberg Dr	11													1 PT C2 AHC
	1/12	1349	1351	1405	1418	952	Santa Clara RD	12													PT PRVT TRN
	1/13	1306	1315	1330	1350	1013	sycamore rd			1											NMM
	1/13	1515	1515		1515	1023	Single Springs RD	13													mutual aid to KV-CR
	1/14	0655	0700	0715	0745	1075	Harrington Flat Rd									6					Tree Down
	1/17	1302	1305		1305	1295	Northshore Rd	14													Cx
	1/17	1430	1432		1445	1311	39th Avenue Clearklake	15													Cx
	1/17	1722	1724		1730	1329	Soda Bay Rd					3									Cx

CDF/SLCF INCIDENT TRACKING FORM

Month **Jan 2023**

Station 62

FA = False Alarm
CR = Cancel & Return
UTL = Unable To Locate
AMA = Against Medical Advice
CB = Code Blue (Full Arrest,CPR in Progress)
LA = Lift Assist
NMM = No Medical Merit (AMA not completed)

CAIRS complete √	Date	Time of Dispatch	Time Committed	Time At Scene	Time Available	Inc. #	Location Street Name	Medical Aid	NMM	MVA	Structure Fire	Vegetation Fire	Vehicle Fire	Smoke Check	Haz-Mat	Public Assist	Other (Describe)	# of Fatalities	Extrication Eqt Used		**Comments: List Number of Patients as Pt x 4 If an IFT, List Destination Here Any Specific Comments, List Here**
	1/18	**0325**	**0327**	**0333**	**0415**	**1350**	Putter Rd		16												AMA
	1/18	**1229**	**1229**	**1240**	**1300**	**1374**	Black Oak Drive		17												NMM
	1/18	**2005**	**2005**	**2015**	**2045**	**1402**	Harrington Flat Rd											2			Tree Down
	1/19	**0647**	**0647**	**0658**	**0730**	**1417**	BOTtle Rock Rd @ KHAMS				5										AMA
	1/20	**1405**	**1407**	**1415**	**1545**	**1512**	Regina Way		18												1 Pt C2 AHC
	1/20	**2021**	**2023**	**2028**	**2137**	**1525**	Hwy 29				6										2 Pt C2 to AHC
	1/21	**1620**	**1622**		**1625**	**1566**	Donkey Hill		19												Cx
	1/21	**1825**	**1827**	**1835**	**1945**	**1570**	Bradford Road		20												1 Pt C2 to AHC
	1/22	**1219**	**1221**	**1235**	**1300**	**1604**	Golf Road		21												AMA
	1/22	**0533**	**0535**	**0545**	**0725**	**1656**	Emerford x Venturi									7					
	1/23	**1056**	**1058**	**1101**	**1242**	**1672**	Hwy 175		22												1 PT C2 AHC
	1/23	**1314**	**1316**		**1326**	**1678**	Big Canyon Rd		23												Cx
	1/24	**1525**			**1527**	**1745**	Bryant RD		24												CX
	1/25	**1307**	**1309**	**1316**	**1502**	**1800**	Geysers Gate 2 plant 17				7										1 PT C2 AHC
	1/28	**0737**			**0915**	**1968**	S Hwy 29		25												1 Pt C2 AHC
	1/28	**0925**	**0925**	**0939**	**1030**	**1974**	Sycamore Rd		26												1 Pt C2 AHC
	1/30	**1032**	**1034**	**1045**	**1122**	**2081**	Starview Loop											3			Haz, powerlines down
								TOTALS:	26	1	7	3	0	0	1	7	2	3	0	0	
								PREVIOUS:	0	0	0	0	0	0	0	0	0	0	0	0	
								YEAR TO DATE:	26	1	7	3	0	0	1	7	2	3	0	0	

CDF/SLCF INCIDENT TRACKING FORM

Month **Jan 2023**

Station 63

FA = False Alarm
CR = Cancel & Return
UTL = Unable To Locate
AMA = Against Medical Advice
CB = Code Blue (Full Arrest,CPR in Progress)
LA = Lift Assist
NMM = No Medical Merit (AMA not completed)

Comments:
List Number of Patients as Pt x 4
If an IFT, List Destination Here
Any Specific Comments, List Here

CAIRS complete √	Date	Time of Dispatch	Time Committed	Time At Scene	Time Available	Inc. #	Location Street Name	Medical Aid	NMM	MVA	Structure Fire	Vegetation Fire	Vehicle Fire	Smoke Check	Haz-Mat	Public Assist	Other (Describe)	# of Fatalities	Extrication Eqt Used		
	1/1	2153	2153	2200	2210	66	Calistoga St #B	1													cx
	1/2	0814	0814		0820	83	Stonegate Rd	2													cx
	1/2	1349	1349	1415	1450	100	Harrington Flat Rd					1									
	1/2	1851	1851		1940	123	Hwy 29				1										cx
	1/3	1121			1230	169	Hwy 29	3													1 C2 AHC
	1/3	1233			1315	173	Lake Ridge Cir	4													AMA
	1/4	0715			0743	216	Graham St	5													AMA
	1/4	0743			0805	220	S Hwy 29				2										AMA
	1/4	0809			0845	226	Hwy 175				3										AMA
	1/4	1502	1504	1511	1520	272	Stonegate Rd										1				Lift Assist
	1/4	1717	1719		1745	287	Kahms Ln										2				Cx
	1/4	1922	1925	1932	2000	312	Indian Rock Rd					2									Electrical Failure
	1/4	0115	0118		0120	361	West Road									1					Cx
	1/5	1245	1247	1251	1305	401	Mountain Meadow					3									Faulty Electric Stove Burner
	1/5	1707	1709	1712	1815	430	Coyote Valley Rd	6													1 Pt C2 AHC
	1/5	2319	2322	2329	2345	442	Conestoga Rd										3				Lift Assist
	1/5	0146	0148	0220	0245	449	Hartmann Rd	7													NMM
	1/6	0841	0843		0844	459	S Hwy 29									2					Cx
	1/6	1147	1149	1157	1320	477	Big Canyon Rd	8													1 Pt C2 AHC
	1/6	1426	1428	1432	1600	489	Moon Ridge Rd	9													1 Pt C2 AHC
	1/6	2116	2117	2125	2220	525	Crescent Ct	10													1 Pt C2 AHC
	1/6	2222	2222		2240	526	Hofacker/Hwy 29				4										UTL
	1/7	0230	0230	0250	0300	537	TWIN PINE CASINO	11													CR
	1/8	0153	0153	0201	0300	613	Moon Ridge Rd	12													AMA
	1/8	1058	1058	1101	1120	638	Bunker Rd	13													NMM
	1/9	0807	0807	0815	0915	708	Santa Clara Rd	14													1 Pt C2 AHC
	1/9	2030			2150	767	Jefferson Ct	15													1 Pt C2 AHC
	1/10	1017			1117	795	Mt Meadow N	16													1 Pt C3 AHC
	1/10	1144			1145	803	Bonham Rd	17													Cx
	1/10	1509			1520	822	Fairway Dr	18													Cx
	1/10	0655			0720	854	Jerusalem Grade Rd									3					Tree x Road
	1/11	0807	0810		0825	857	Dallas Ct										4				Cx
	1/11	0825	0827	0830	0930	858	Grange/Hwy 29	19													1 Pt C2 AHC

CDF/SLCF INCIDENT TRACKING FORM

Month **Jan 2023**

Station 63

FA = False Alarm
CR = Cancel & Return
UTL = Unable To Locate
AMA = Against Medical Advice
CB = Code Blue (Full Arrest,CPR in Progress)
LA = Lift Assist
NMM = No Medical Merit (AMA not completed)

Comments:
List Number of Patients as Pt x 4
If an IFT, List Destination Here
Any Specific Comments, List Here

CAIRS complete √	Date	Time of Dispatch	Time Committed	Time At Scene	Time Available	Inc. #	Location Street Name	Medical Aid	NMM	MVA	Structure Fire	Vegetation Fire	Vehicle Fire	Smoke Check	Haz-Mat	Public Assist	Other (Describe)	# of Fatalities	Extrication Eqt Used	
	1/11	1138	1138	1138	1150	876	Meadow View Dr										5			Lift Assist
	1/11	1706	1709	1718	1730	895	S Hwy 29					4								Cx
	1/12	0857	0900	0928	0930	932	Spruce Grove/Hwy 29									4				Cx at Scene
	1/12	1200	1202	1209	1245	941	Wardlaw St	20												NMM
	1/12	1336	1338	1347	1410	947	Roung Hill Ct	21												AMA
	1/12	1410			1600	954	Gooselake Dr	22												1 Pt C2 AHC
	1/12	1825	1827	1850	2000	967	Deputy Dr	23												Hand off to AMR, Reach to St Helena
	1/13	0809	0811	0816	0840	988	Greenridge Rd										6			Lift Assist
	1/13	1356	1358	1402	1410	1016	Fairway Dr										7			Lift Assist
	1/14	0229	0229	0229	0330	1064	Hartmann Rd	24												1 Pt C3 AHC
	1/14	0748	0751	0758	0845	1081	Greenridge Rd	25												1 Pt C2 AHC
	1/15	0059	0102	0111	0135	1150	S Hwy 29	26												NMM
	1/15	2043	2043	2045	2230	1208	Greenridge Rd	27												1 Pt C2 AHC
	1/16	1222	1223	1230	1245	1243	Pin Oak Ct	28												NMM
	1/17	1302	1304		1402	1295	Northshore Dr	29												1 Pt C2 AHC
	1/17	1502	1504		1530	1316	Hwy 175	30												AMA
	1/17	2345	2347		0030	1346	Crescent Ct	31												AMA
	1/18	0724	0726		0755	1353	Deer Hill Rd	32												AMA
	1/18	0902	0904		1019	1359	Knowles Ln #10	33												1 Pt C2 AHC
	1/18	1815	1817		1900	1394	Spyglass Rd	34												1 Pt C2 AHC
	1/18	2245	2247		2335	1407	Spyglass Rd	35												1 Pt C2 AHC
	1/19	0656	0658			1419	Mapes Pass	36												AMA
	1/19	0751	0753			1422	Horseshoe Rd	37												1 Pt C2 AHC
	1/19	1140	1142			1439	Big Canyon Rd					5								FA
	1/19	1637	1639		1710	1460	Hwy 175	38												AMA
	1/19	1746	1748		1930	1465	Greenridge Rd	39												1 PT C3 Airport LZ. Reach to AHSH
	1/19	2120	2122	2124	2130	1473	Knowles Ln #26	40												NMM
	1/20	0244	0246		0420	1482	Fairway PT	41												1 PT C2 AHC
	1/20	1318	1320	1324	1433	1504	Hidden Valley Rd	42												1 PT C2 AHC
	1/20	2026	2029	2037	2100	1525	S Hwy 29				5									AMA
	1/21	0913	0915	1920	1000	1541	Greenridge Rd	43												AMA
	1/21	1054	1057	1103	1230	1546	Glencove Ct #8	44												1 Pt C2 AHC
	1/21	1624	1624	1628	1640	1566	Donkey Hill Rd	45												Lift Assist

CDF/SLCF INCIDENT TRACKING FORM

Month **Jan 2023**

Station 63

FA = False Alarm
CR = Cancel & Return
UTL = Unable To Locate
AMA = Against Medical Advice
CB = Code Blue (Full Arrest,CPR in Progress)
LA = Lift Assist
NMM = No Medical Merit (AMA not completed)

Comments:
List Number of Patients as Pt x 4
If an IFT, List Destination Here
Any Specific Comments, List Here

CAIRS complete √	Date	Time of Dispatch	Time Committed	Time At Scene	Time Available	Inc. #	Location Street Name	Medical Aid	NMM	MVA	Structure Fire	Vegetation Fire	Vehicle Fire	Smoke Check	Haz-Mat	Public Assist	Other (Describe)	# of Fatalities	Extrication Eqt Used	
	1/21	1831	1833	1839	1845	1571	North Shore Dr										8			Tripped Breaker
	1/23	1315	1318		1330	1678	Big Canyon X Ettawa				6									CR
	1/23	1719	1722	1725	1750	1693	Timber Point		46											1144
	1/23	1803	1805		1815	1695	Butts Canyon								1					CR
	1/24	0305	0308	0311	0335	1714	Honey Hill		47											AMA
	1/24	1220	1222	1230	1250	1735	HWY 175		48											AMA
	1/24	1330	1332	1340	1420	1738	Hwy 175		49											1 Pt C2 AHC
	1/24	1920	1922	1928	2032	1755	Conastoga		50											1 Pt C2 AHC
	1/25	0910	0912		1000	1787	Harbin Springs Rd		51											AMA
	1/25	1305	1307			1800	Geysers 17				7									Cx
	1/25	2322	2324		0105	1831	Hwy 29		52											1 Pt C2 AHC
	1/26	0614	0616		0620	1840	Western Mine Rd										9			Cx
	1/26	1257	1259	1305	1400	1858	Oak Grove		53											1 Pt C2 AHC
	1/26	1610	1612	1618	1730	1872	Western Mine Rd		54											1 Pt C2 AHC
	1/27	2112	2114	2125	2230	1953	Eagle Rock		55											1 Ptt C2 AHC
	1/27	0047	0049	0115	0200	1961	Noble Ranch Rd		56											1 Pt C2 AHC
	1/27	0719	0721	0730	0830	1967	Grange Rd		57											1 Pt C3 AHC
	1/28	1641	1643	1655	1700	1992	Fairpoint Drive		58											neg contact
	1/29	0936	0936	0940	0945	2026	Mountain Meadow N											1		Smell of Propane
	1/29	1433	1433	1438	1533	2040	Oak Grove		59											1 Pt C2 AHC
	1/29	1913	1913	1920	2013	2049	Butts Canyon											2		Tree down
	1/30	1647	1647	1652	1731	2104	Hwy 29 X Hofacker				8									3 Pt's AMA
	1/30	2032	2032	2045	2125	2111	Powderhorn Rd		60											1 Pt C2 AHC
	1/30	2229	2229	2235	2350	2112	Foothill Ct		61											1 Pt C2 AHC LZ
	1/31	1032	1034	1045	1115	2142	Big Canyon x Barnes								2					Cx
							TOTALS:		61	0	8	5	0	0	2	4	9	2	0	0	
							PREVIOUS:		0	0	0	0	0	0	0	0	0	0	0	0	
							YEAR TO DATE:		61	0	8	5	0	0	2	4	9	2	0	0	

South Lake County Fire Protection District
in cooperation with
California Department of Forestry and Fire Protection

P.O. Box 1360 Middletown, CA 95461 - (707) 987-3089

DATE: February 17, 2023

TO: Board of Directors

FROM: Gloria Fong
Staff Services Analyst

SUBJECT: Finance Communications

Attached is the budget summary. I had hoped to have estimated actual included. However, there were many payable transactions to key in, 92 to be exact, which is 10 more than the previous month. Luckily with the new permit system put in place a few weeks ago and with Northshore Fire, Lake County Fire and Lakeport Fire receiving their own payments, cash receipt transactions have dropped tremendously.

2022-23 YTD	RECEIPT AMT	# OF RECEIPTED PERMITS	
COUNTS	7,316.00	236	KFD
	3,348.00	108	LCF
	3,069.00	99	LFD
	651.00	21	LPF
	4,092.00	132	NSF
	10,690.00	319	SLCF
	29,166.00	915	

2021-22	RECEIPT AMT	# OF RECEIPTED PERMITS	
COUNTS	11,664.00	392	KFPD
	1,421.00	49	LCF
	3,741.00	129	LFD
	1,802.00	54	LPFPD
	4,497.00	152	NSF
	16,096.00	499	SLCF
	39,221.00	1275	

Please note that the amount captured under revenue for account 466 – other current services has grown tremendously to $1,168,864.86, from $298,801.34 last month. This is due to the collection of the direct assessment (or Measure L). Based on this amount, I suspect actual will be close to budgeted amount of $1,812,161.

NBS hired back in September to audit the direct assessment is awaiting clarification of some items before they provide us with results. We hope to have their results no later than the April meeting.

The fiscal year 2021 and 2022 audit continues. It took some time to prepare the fixed asset list because a lot of the assets have depreciated their full value.

For ambulance billing, January was yet another busy month, with 70 accounts being billed. Attached is Wittman Enterprises billing through October.

For the month of January there were 690.25 worked hours. Breakdown shown in picture on the right. It is up over last month due to new recruit training hours and winter storm station coverage by paid call firefighters.

Total Jobs Summary

Name	Code	Hours
In District Incident	IDI	9.00
Special Assignment	SPEC	397.00
Station Duties	STAD	33.50
Training	TRNG	250.75

South Lake County
Fire Protection District
Cost Accounting Management System
Budget Ledger Report-FYE 06/30/23

Summary Report MTD 2/17/23

Accts Payable	FUND 357 OPERATING	Orig Budget	Adj Budget	Actual	% of Budget
01-11	Salaries & Wages-Permanent	6,000.00	6,000.00	3,900.00	65.0%
01-12	Salaries & Wages-Temporary	110,000.00	110,000.00	76,198.98	69.3%
01-13	Salaries & Wages-Overtime	35,000.00	35,000.00	17,231.81	49.2%
02-21	FICA/Medicare-Emplyr Share	12,000.00	12,000.00	7,629.41	63.6%
03-30	Insurance	33,900.00	33,900.00	12,719.17	37.5%
03-31	Unemployment Insurance	5,000.00	5,000.00	965.13	19.3%
04-00	Workers Compensation	29,620.00	29,620.00	27,196.00	91.8%
09-00	Payroll Clearing	0.00	0.00	13,969.22	100.0%
11-00	Clothing & Personal Supplies	24,000.00	24,000.00	10,211.48	42.5%
12-00	Communications	22,000.00	22,000.00	12,632.45	57.4%
13-00	Food	2,500.00	5,500.00	3,305.22	60.1%
14-00	Household Expense	15,000.00	12,000.00	4,562.89	38.0%
15-10	Insurance-Other	53,000.00	60,000.00	55,654.00	92.8%
17-00	Maintenance-Equipment	38,300.00	76,900.00	63,803.90	83.0%
18-00	Maint-Bldgs & Imprvmts	87,632.00	110,257.00	87,262.33	79.1%
19-40	Medical Expense	46,500.00	46,500.00	32,645.09	70.2%
20-00	Memberships	6,200.00	6,200.00	200.00	3.2%
22-70	Office Supplies	3,000.00	3,900.00	2,854.61	73.2%
22-71	Postage	7,220.00	2,620.00	164.41	6.3%
23-80	Professional, Specialized Svc	4,008,772.00	3,956,672.00	98,063.05	2.5%
24-00	Publications & Legal Ntcs	1,100.00	1,100.00	69.12	6.3%
27-00	Small Tools & Instruments	3,500.00	3,500.00	303.23	8.7%
28-30	Special Dept Supp & Svcs	66,400.00	84,200.00	64,888.88	77.1%
28-48	Special Dept Ambulance Exp	92,000.00	331,951.00	254,776.93	76.8%
29-50	Transportation & Travel	10,000.00	10,000.00	6,747.46	67.5%
30-00	Utilities	75,400.00	75,400.00	49,421.89	65.5%
38-00	Inventory Items	20,000.00	40,000.00	32,301.03	80.8%
48-00	Taxes & Assessments	200.00	200.00	132.69	66.3%
61-60	Bldgs & Imprv	0.00	24,500.00	24,500.00	100.0%
62-72	Autos & Light Trucks	0.00	0.00	0.00	0.0%
62-74	Cap FA-Eqt Other	0.00	369,658.00	156,233.68	42.3%
62-79	Pr Yr	0.00	13,913.00	0.00	0.0%
90-91	Contingencies	366,724.00	62,248.00	0.00	0.0%
		5,180,968.00	5,574,739.00	1,120,544.06	20.1%

Revenue	FUND 357 OPERATING	Orig Budget	Adj Budget	Actual	% of Budget
411	Property Taxes	1,551,905.00	1,551,905.00	941,742.04	60.7%
422	Permits	15,000.00	15,000.00	9,758.00	65.1%
441	Revenue from Use of Money	25,000.00	25,000.00	26,439.89	105.8%
453	State Aid	48,000.00	48,000.00	27,274.64	56.8%
455	Other Federal	0	0	0.00	0.0%
456	Other Government Agencies	74,080.00	443,738.00	228,805.29	51.6%
465	Public Protection	400,000.00	400,000.00	269,373.57	67.3%
466	Other Current Services	1,812,161.00	1,812,161.00	1,168,864.86	64.5%
491	Other	0	0	193,615.98	100.0%
492	Other Revenue	0	0	3,593.08	100.0%
502	Operating Transfers	0	0	13,913.00	100.0%
		3,926,146.00	4,295,804.00	2,883,380.35	67.1%
	Fund Balance (carry over FY beg. 07/01/22)	1,707,299.29	1,707,299.29	1,707,299.29	

	FUND 357 OPERATING	Orig Budget	Adj Budget	Actual
Fund Balance YTD				3,470,135.58
	February payables			94,290.02
	February Cash Receipts (MTD 2/17/23)			77,303.81
Reserves				
391-01-00	General			154,702.00
392-00-00	Unreserved-Designated			3,103,427.00
392-04-00	Equipment Reserve			994,846.00
392-12-00	Medical Insurance Reserve			224,888.00
392-25-00	Medical Svcs & Eqpt Reserve			1,105,740.00
	TOTAL FUND EQUITY (2/17/23)			9,036,752.37

Revenue	FUND 366 FIRE MITIGATION FEE	Orig Budget	Adj Budget	Actual	% of Budget
441	Revenue from Use of Money	0.00	0.00	245.3	100.0%
461	Charges for Services	0.00	0.00	35,422.00	100.0%
502	Operating Transfers	0.00	0.00	-13,913.00	100.0%
		0.00	0.00	21,754.30	100.0%
Fund Balance (carry over FY beg. 07/01/22)				214,324.44	
Fund Balance YTD				236,078.74	
	February Cash Receipts (MTD 2/17/23)			1,709.00	
	TOTAL FUND EQUITY (2/17/23)			237,787.74	

South Lake County Grand Totals

	CHARGES	MCARE WRITE DOWNS	MCAL WRITE DOWNS	OTHER CONTRACTUAL WRITE DOWNS	NET CHARGES	PAYMENTS	REFUNDS	COLL ADJ	NET PAYMENTS	BAD DEBT WRITE OFFS	ADJUSTMENTS	NEW A/R BALANCE
FEBRUARY '22	$ 100,703.00	$ 29,475.45	$ 28,340.27	$ 2,557.72	$ 40,329.56	$ 28,146.82	$ -	$ -	$ 28,146.82	$ 14,685.55	$ -	$ 273,631.28
MARCH '22	$ 86,330.00	$ 29,487.13	$ 17,856.87	$ 1,425.00	$ 37,561.00	$ 40,646.13	$ -	$ -	$ 40,646.13	$ -	$ -	$ 270,546.15
APRIL '22	$ 123,274.00	$ 40,912.03	$ 20,349.40	$ -	$ 62,012.57	$ 18,184.45	$ -	$ -	$ 18,184.45	$ 12,728.61	$ -	$ 301,645.66
MAY '22	$ 139,542.50	$ 57,194.64	$ 34,712.36	$ 1,768.02	$ 45,867.48	$ 29,917.13	$ -	$ -	$ 29,917.13	$ 8,982.62	$ 5.17	$ 308,618.56
JUNE '22	$ 121,029.00	$ 49,504.14	$ 32,039.10	$ -	$ 39,485.76	$ 28,587.87	$ -	$ -	$ 28,587.87	$ (1,584.00)	$ (2,572.00)	$ 318,528.45
JULY '22	$ 215,701.00	$ 67,612.21	$ 49,657.48	$ -	$ 98,431.31	$ 45,470.04	$ -	$ -	$ 45,470.04	$ 21,444.38	$ -	$ 350,045.34
AUGUST '22	$ 111,338.00	$ 36,368.64	$ 28,134.97	$ 22.50	$ 46,811.89	$ 51,469.11	$ -	$ -	$ 51,469.11	$ -	$ -	$ 345,388.12
SEPTEMBER '22	$ 139,781.00	$ 54,531.99	$ 20,853.55	$ -	$ 64,395.46	$ 44,861.83	$ 447.61	$ -	$ 44,414.22	$ 24,332.91	$ 1.64	$ 341,038.09
OCTOBER '22	$ 109,073.50	$ 44,622.78	$ 35,161.64	$ 2,149.02	$ 27,140.06	$ 55,348.65	$ -	$ -	$ 55,348.65	$ 5,016.11	$ (5,941.00)	$ 301,872.38
NOVEMBER '22	$ 173,204.00	$ 77,790.33	$ 26,576.09	$ 2,063.35	$ 66,774.23	$ 39,335.72	$ 3,398.00	$ -	$ 35,937.72	$ 2,452.00	$ 3.02	$ 330,259.91
DECEMBER '22	$ 148,889.50	$ 46,678.16	$ 22,865.94	$ 3,349.10	$ 75,996.30	$ 36,007.32	$ 134.27	$ -	$ 35,873.05	$ 546.80	$ 9.38	$ 369,845.74
JANUARY '23	$ 151,131.00	$ 58,079.27	$ 15,132.68	$ 1,558.97	$ 76,360.08	$ 39,601.19	$ -	$ -	$ 39,601.19	$ 7,391.64	$ (856.83)	$ 398,356.16
YEAR TO DATE TOTALS	$ 1,619,996.50	$ 592,256.77	$ 331,680.35	$ 14,893.68	$ 681,165.70	$ 457,576.26	$ 3,979.88	$ -	$ 453,596.38	$ 95,996.62	$ (9,350.62)	
YTD PERCENTAGE OF REVENUE		36.56%	20.47%	0.92%	42.05%	28.25%	0.25%	0.00%	28.00%	5.93%	-9.74%	
YTD PERCENTAGE OF NET REVENUE									66.59%			
Average Charges per month	**$ 134,999.71**											
Average Payments per month	**$ 38,131.36**											

PROFESSIONAL SERVICES AGREEMENT
AP Triton, LLC

This Agreement, dated as of **AUGUST 20, 2022** is by and between **LAKE COUNTY FIRE CHIEFS ASSOCIATION** ("**CLIENT**"), and AP Triton, LLC ("**CONSULTANT**"), hereinafter collectively referred to as the "Parties." The Agreement will be effective upon final execution by all parties.

1. **HEADINGS**
Headings herein are for convenience of reference only and shall in no way affect interpretation of the Agreement.

2. **ATTACHMENTS**
Attachments 1 and 2 are attached hereto and included by reference.

3. **CONSULTANT'S SCOPE OF SERVICES AND CLIENT RESPONSIBILITIES**
CONSULTANT agrees to perform all services described in Attachment 1, Scope of Work, for payment pursuant to Attachment 2, in accordance with the terms and conditions of this Agreement. CLIENT shall provide complete, accurate, and timely information regarding CLIENT'S requirements and shall designate by name a representative authorized to act on its behalf. CLIENT shall examine documents or other instruments submitted by CONSULTANT and shall promptly render any decisions necessary in order to avoid unreasonable delay. CLIENT shall provide any additional materials, other than those CONSULTANT is responsible to provide, that are reasonably necessary to complete the Scope of Work. CLIENT shall provide reasonable access to any locations under the control of CLIENT required for CONSULTANT to perform the services hereunder. Any additional requirements will be identified in Attachment 1.

4. **TERM**
This Agreement shall terminate upon completion of the Scope of Work as described in Attachment 1, unless extended by mutual Agreement of the Parties in writing or terminated in accordance with Section 16.

5. **PAYMENT**
For all services performed in accordance with the Agreement, payment shall be made to CONSULTANT as provided in Attachment 2.

6. **INDEPENDENT CONTRACTOR**
No relationship of employer and employee is created by this Agreement. It is understood and agreed that CONSULTANT is, at all times, an independent contractor and can perform work for others. CONSULTANT is not the agent or employee of the CLIENT in any capacity whatsoever and CLIENT shall not be liable in any manner for any acts or omissions by CONSULTANT or for any obligations or liabilities incurred by CONSULTANT, its employees, or agents.

CONSULTANT shall have no claim under this Agreement or otherwise, for seniority, vacation time, vacation pay, sick leave, personal lime off, health insurance medical care, hospital care, retirement benefits, social security, disability, workers' compensation, or

unemployment insurance benefits, civil service protection, or employee benefits of any kind.

CONSULTANT shall be solely liable for, and obligated to pay directly, all applicable payroll taxes (including federal and state income taxes) or contributions for unemployment insurance or old age pensions or annuities which are imposed by any governmental entity in connection with the labor used or which are measured by wages, salaries or other remuneration paid to its officers, agents, or employees, and CONSULTANT agrees to indemnify and hold CLIENT harmless from any and all liability which CLIENT may incur because of CONSULTANT's failure to pay such amounts.

In carrying out the work contemplated herein, CONSULTANT shall comply with all applicable federal and state workers' compensation and liability laws and regulations with respect to the officers, agents and/or employees conducting and participating in the work; and agrees that such officers, agents, and/or employees will be considered as independent contractors and shall not be treated or considered in any way as officers, agents and/or employees of CLIENT.

7. INDEMNIFICATION

To the fullest extent permitted by law, each Party shall release, hold harmless, defend and indemnify the other from and against any and all claims, losses, damages, lawsuits, liabilities and expenses, including but not limited to attorneys' fees, including but not limited to those attributable to bodily injury, sickness, disease, death or to injury to or destruction of property, including the loss therefrom, which arises out of or is any way connected with the performance of this Agreement (collectively "Liabilities") to the extent caused by such Party, except where such Liabilities are caused by the sole negligence or willful misconduct of any indemnitee.

8. INSURANCE

CONSULTANT shall maintain at all times during the performance of this Agreement a commercial general liability insurance policy with a minimum occurrence coverage in the amount of $1,000,000; an automobile liability insurance policy in the minimum amount of $500,000; and, if any licensed professional performs services under this contract, a professional liability insurance policy in the minimum amount of $1,000,000 to cover any claims arising out of CONSULTANT's performance of services under this Agreement. If requested by CLIENT, all insurance, except professional liability, shall name the CLIENT as additional insureds and shall provide primary coverage with respect to the CLIENT.

All insurance policies shall: 1) provide that the insurance carrier shall not cancel, terminate, or otherwise modify the terms and conditions of said policies except upon thirty (30) days written notice to the CLIENT'S representative as shown in Section 22 Notices; 2) be evidenced by the Certificate of Insurance; and 3) be approved as to form and sufficiency by the CLIENT.

CONSULTANT shall promptly forward all insurance documents to the CLIENT.

9. CONFORMITY WITH LAW AND SAFETY

In performing services under this Agreement, CONSULTANT shall observe and comply with all applicable laws, ordinances, codes and regulations of governmental agencies, including federal, state, municipal, and local governing bodies, having jurisdiction over the scope of services provided by CONSULTANT.

10. **TRAVEL EXPENSES**
CONSULTANT shall be allowed and compensated for reasonable travel expenses to carry out the work of the CLIENT as approved in advance by the CLIENT in accordance with Attachment 2.

11. **TAXES**
Payment of all applicable federal, state and local taxes shall be the sole responsibility of the CONSULTANT.

12. **ACCESS AND RETENTION OF RECORDS**
CONSULTANT agrees to provide the CLIENT and its designees access to all of the CONSULTANT's records related to this contract and that the CONSULTANT shall maintain its records related to this contract for a period of not less than five (5) years after the final payment to the CONSULTANT is made by the CLIENT.

13. **CONFLICT OF INTEREST**
CONSULTANT covenants that CONSULTANT presently has no interest, and shall not obtain any interest, direct or indirect, which would conflict in any manner with the performance of services required under this Agreement, including but not limited to any provision of services to any federal, state or local regulatory or other public agency which has any interest adverse or potentially adverse to the CLIENT, as determined in the reasonable judgment of the CLIENT. Entering into this agreement does not preclude CONSULTANT from working for others as long as CONSULTANT ensures that such work does not constitute a conflict of interest.

14. **CONFIDENTIALITY**
CONSULTANT agrees that any information, whether proprietary or not, made known to or discovered by CONSULTANT during the performance of or in connection with this Agreement for the CLIENT will be kept confidential and not be disclosed to any other person or entity except as required by law. CONSULTANT agrees to immediately notify the CLIENT if CONSULTANT is requested to disclose to others any information made known to or discovered by CONSULTANT during the performance of or in connection with this Agreement.

15. **USE OF CLIENT PROPERTY**
CONSULTANT shall not use CLIENT property (including equipment, instruments, and supplies) or personnel for any purpose other than in the performance of its obligations under this Agreement.

16. **TERMINATION**
Either party may terminate this Agreement for default upon five (5) days written notice to the other if the other party has substantially failed to fulfill any of its obligations under this Agreement in a timely manner as provided herein. CLIENT has and reserves the right to terminate this Agreement at its convenience and without cause upon thirty (30) days written notice to CONSULTANT. In the event that the CLIENT should terminate this Agreement for its convenience, CONSULTANT shall be entitled to payment for services provided hereunder, as provided in Attachment 2, including for such services performed prior to the effective date of said termination, including travel, accrued as of the date of the termination, which payment shall be per the terms set forth in Attachment 2.

17. **CHOICE OF LAW**

CONSULTANT and CLIENT agree that if a dispute arises in the performance of this agreement the laws of the State of Wyoming will govern.

18. **ENTIRE AGREEMENT**

This Agreement, including all attachments, exhibits, and any other documents specifically incorporated into this Agreement, shall constitute the entire agreement between CLIENT and CONSULTANT relating to the subject matter of this Agreement. As used herein, Agreement refers to and includes any documents incorporated herein by reference and any exhibits or attachments.

This Agreement supersedes and merges all previous understandings, and all other agreements, written or oral, between the Parties and sets forth the entire understanding of the Parties regarding the subject matter thereof. The Agreement may not be modified except by a written document signed by both Parties.

This Agreement and all related obligations and services hereunder are intended for the sole benefit of CLIENT and CONSULTANT and are not intended to create any third-party rights or benefits.

19. **MODIFICATION OF AGREEMENT**

This Agreement may be supplemented, amended, or modified only by the mutual agreement of the Parties. No supplement, amendment, or modification of this Agreement shall be binding unless it is in writing and signed by authorized representatives of both Parties.

20. **SEVERABILITY**

If any part of this Agreement or the application thereof is declared to be invalid for any reason, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision or application, and to this end the provisions of this Agreement are deemed severable.

21. **SUCCESSORS AND ASSIGNS**

This agreement is binding upon and inures to the benefit of the successor, executors, administrators, and assigns of each party to this agreement, provided, however, that CONSULTANT shall not assign or transfer by operation of law or otherwise any or all rights, burdens, duties, or obligations without prior written consent of the CLIENT. Any attempted assignment without such consent shall be invalid.

22. **NOTICES**

All notices, requests, demands, or other communications under this Agreement shall be in writing. Notices shall be given for all purposes as follows:

Personal delivery: When personally delivered to the recipient, notices are effective on delivery.

First Class Mail: When mailed first class to the last address of the recipient known to the party giving notice, notice is effective three (3) mail delivery days after deposit in a United States Postal Service office or mailbox.

Certified Mail: When mailed certified mail, return receipt requested, notice is effective on receipt, if delivery is confirmed by a return receipt.

Overnight Delivery: When delivered by overnight delivery (Federal Express/Airborne/United Parcel Service/DHL Worldwide Express) with charges prepaid or charged to the sender's account, notice is effective on delivery, if delivery is confirmed by the delivery service.

Addresses for purpose of giving notice are as follows:

To: CLIENT: Lake County Fire Chiefs Association
Attn: William Sapeta, President
4020 Main Street
Kelseyville, CA 95451

To: CONSULTANT: AP Triton, LLC
Attn: Kurt P. Henke
1309 Coffeen Avenue, Suite 3178
Sheridan, WY 82801

Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified shall be deemed effective as of the first date that said notice was refused, unclaimed, or deemed undeliverable by the postal authorities, messenger, or overnight delivery service.

Any party may change its address by giving the other party notice of the change in any manner permitted by this Agreement.

23. SIGNATORIES

By signing this agreement, signatories warrant and represent that they have executed this Agreement in their authorized capacity.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year written.

CLIENT **Lake County Fire Chiefs Association**	**CONSULTANT** **AP Triton, LLC**
By: William Sapeta Signature	By: _____ Signature
Name: William Sapeta Title: President Date: 8/15/2022	Name: Kurt P. Henke Title: Principal / Managing Partner Date: _____

ATTACHMENT 1
Scope of Services

CONSULTANT shall provide consulting services to CLIENT as follows:

Section One—Project Initiation & Information Acquisition

Task 1-A: Project Initiation & Development of a Work Plan
Triton will virtually meet with the Lake County Fire Chiefs Association (LCFCA) project team. The purpose will be to develop a complete understanding of the goals, and expectations for the project. Triton's Project Manager will develop and refine a proposed work plan that will guide the Project Team. This work plan will be developed identifying:

- Project team members responsible for each task
- Major tasks to be performed
- Resources to be utilized
- Methods for evaluating study results
- Any potential constraints or issues related to accomplishing specific tasks

The benefits of this process will be to develop working relationships between the Triton project team and LCFCA's project team, determine communications processes, and identify logistical needs for the project.

Task 1-B: Procurement of Information & Data
Triton will request pertinent information and data as necessary. This information is critical and will be used extensively in the various analyses and development of the report. Thoroughly researched and relevant studies will be included during Triton's review. The documents and information relevant to this project will include, but not be limited to, the following:

- Any previous studies
- LCFCA/Lake County census and demographic data
- Current LCFCA fire department organizational charts
- LCFCA/Lake County Standard Operating Guidelines (SOG) and service delivery and deployment practices; including policies regarding EMS quality improvement methods

- Memorandum of Understanding (MOU) between the LCFCA fire departments and IAFF Locals
- Inventory of LCFCA's service area fire stations and any other facilities, including their physical locations
- Inventory of LCFCA service area's apparatus and rescue ambulances and the fire stations to which they are assigned
- Inventory of capital medical equipment (e.g., cardiac monitor/defibrillators; powered stretchers, etc.)
- Historical records management data, including National Fire Incident Reporting System (NFIRS) incident data exported to an Excel spreadsheet format
  - Incident records to include locations by latitude/longitude (if available) and full address, timestamps to allow for calculation of response times, turnout times, call-processing times, and response mode to scene
  - Ambulance transport and hospital turnaround times; including transport mode (lights & siren vs. no lights & siren) to hospital; number of patient refusals; and other data elements which may be requested
  - Patient records (without any identifying information and in accordance with HIPAA) that include EMS provider impression, level of care provided (ALS vs. BLS), and patient outcomes (if available)
  - Any other electronic records that may be useful for this project
  - Computer-Aided Dispatch (CAD) incident records, if necessary
- List of all LCFCA service area fire departments' management positions, administrative support staff positions, operations positions, including ranks and titles (not to include names of individuals)
  - Wages and benefits for each position rank and title (not to include names of individuals)
- List of most common hospitals and tertiary facilities, and their physical locations, to which patients are transported and who provide online medical control
- Local geographic information systems (GIS) data and shapefiles (specific details will be provided)
- LCFCA service area historical financial data, revenue sources, budgets, including debt information, long-range financial plans, and projections

- Historical patient billing and collection records, including payor mix, write-offs, contractual allowances, adjustments, refunds, and annual number of billable patient transports
- Current fee schedule and revenue offset

- Automatic and mutual aid agreements related to patient transport and ambulances
- Any other documents and records necessary for the successful completion of the project

Section Two—System Valuation

Tasks 2-A: Cost/Revenue Analysis and Payor Mix

Conduct cost/revenue analysis, including insured and non-insured payor mix categories, to determine the maximum value of the emergency medical services (EMS) system. The valuation will analyze the federal reimbursement programs available and provide estimates for both Ground Emergency Medical Transport (GEMT) and Intergovernmental Transfer (IGT) programs.

Section Three—Evaluation of EMS Operations

In the following section, Triton will evaluate the various elements related to EMS operations. While the emphasis will be on the delivery of EMS to the LCFCA service area, it will be necessary to analyze the impact of fire suppression and other operations on the EMS system.

Task 3-A: Service Delivery & Performance

To the extent data is available, Triton will review and observe areas affecting service levels and operational performance. These will include but are not limited to:

- EMS Service Demand
  - Analysis and Geographical Information Systems (GIS) display of current service demand by incident type
  - Review of EMS calls dispatched versus patients transported, and hospital destinations
  - Analysis and GIS display of current service demand by temporal variation
  - GIS display of historical incident density locations
  - Projected service demand due to growth
- EMS Resource Distribution
  - Overview of current facility deployment strategies, analyzed through GIS software as appropriate, with identification of service gaps and redundancies

- Analysis of company and staff distribution as related to effective response force (ERF) assembly
- Overview of current deployment strategies, analyzed through GIS software as appropriate, with identification of service gaps and redundancies

- Response Reliability
  - Analysis of current workload, including unit hour utilization and time on task of individual companies (to the extent data is complete)
  - Analysis of call concurrency and the impact on EMS system effectiveness
- Response Performance Analysis
  - Analysis of actual LCFCA rescue ambulance turnout time performance analyzed by individual components (to the extent data is available)
  - Analysis of other components in the response time continuum, including call processing times
  - Patient transport and hospital turnaround times
- Analysis of patient care records, to include levels of acuity, and ratios of Basic Life Support (BLS) versus Advanced Life Support (ALS) cases (if available)
  - Patient outcome results if available

Task 3-B: Capital Equipment
This task will entail a review of current major capital assets (apparatus and equipment). This evaluation will include:

Ambulances—Review the current fleet inventory of LCFCA's service area ambulances, other apparatus as indicated, and relevant equipment. Items to be reviewed include:

- Age, condition, and serviceability
- Distribution and deployment

Capital Medical Equipment—Review the current inventory of capital medical equipment utilized by LCFCA service area on ambulances and other apparatus (e.g., cardiac monitor/defibrillators, patient gurneys, automated external defibrillators, etc.)

Task 3-C: Population Growth Projections & Future Service Demand

- Determine population growth projections for the LCFCA service area/Lake County
- Forecast future service demand (requests for service) on LCFCA service area/Lake County

Task 3-D: Summary of All Findings & Observations

- Develop a summary description of any critical issues, findings, and observations

- Identification of any regulatory or other constraints
- Describe less critical or minor issues that may require attention, but not immediate

Section Four—Recommendations & Strategies for Sustainability
Utilizing the findings and results of the various analyses from the preceding sections described in this proposal, Triton will identify recommended future opportunities and improvement strategies for the EMS delivery system. Depending on the results, Triton may categorize these into short-term, mid-term, and long-term strategies. Recommendations and strategies will consider the following key objectives:

- Excellence in patient care and overall operational effectiveness, with the ability to:
  - Effectively match resource dispatched to resource needed
  - Meet EMS performance goals
- Flexibility to maintain effective service based on current and projected demographics and the ability to adapt to:
  - Changing community demographics and payer mixes
  - Area development and the associated change to population/requests for service
  - Changes in accepted standards of care, levels of service, and expected norms in EMS delivery
  - Changes in technology, medical science, and equipment as it relates to EMS delivery and LCFCA's service area provision of service
- Sustainability—any recommended changes to the current delivery model must provide for long-term sustainability and resiliency, with the ability to:
  - Maintain service through increased budgetary demand and fluctuating availability of personnel, equipment, and resources
  - Maintain service through changes in call volume, call types, population density and age, and billing payer mixes
  - Maintain service, despite impacts of future developments (commercial, residential, and mixed-use)
  - Provide for hiring, retention, training, and succession planning
  - Ensure proper day-to-day staffing
  - Provide for continued excellence in core all-risk duties of LCFCA's service area (i.e., fire suppression and rescue, training, fire prevention, public education, relations, and outreach, and employee development and mentorship)

Task 4-A: EMS Operations

Triton will utilize its comprehensive analyses and observations to evaluate the feasibility of the current LCFCA EMS delivery system and make recommendations accordingly. This will include but not be limited to:

- General EMS delivery and medical first response
- Staffing and deployment modeling
  - Dual role personnel
  - Single role personnel
  - Peak Activity Units
  - Expansion of system deployment
- 911 patient transport
- Interfacility transportation
- Alternative revenue sources and/or methods of cost recovery
- Potential cost-effective, sustainable, and efficient alternative EMS delivery models
  - Any recommendations will be based on clinical effectiveness and the potential for improving patient outcomes
- Any other changes or alternatives to improve EMS delivery, patient care, and patient outcomes

Task 4-B: Mobile Integrated Healthcare Program

Based on the analyses described in the previous sections, Triton will determine the feasibility, necessity, and regulatory ability to establish a Mobile Integrated Healthcare program:

- System design, target markets, benefits, and potential impact on 911 EMS service demand
- Estimated start-up, recurring, and non-recurring costs, including potential short-term and ongoing funding mechanisms

Task 4-C: EMS System Recommendations

- If identified from the evaluations, describe any options or alternatives to improve the administration and management of the LCFCA service area EMS system.

Task 4-D: Implementation Plan

- Recommendations and strategies will be developed into an implementation plan

- Implementation plan will include an estimate of the initial, recurring, and non-recurring costs of any recommendations or proposed strategies, and potential funding sources

Section Five—Development, Review, & Delivery of Final Report

Task 5-A: Development & Review of the Draft Report

Triton will develop and produce an electronic version of the draft written report for technical review by representatives of LCFCA. This feedback is a very important aspect of this project, and Triton will provide adequate opportunities for review and discussion of the draft report prior to finalization. The report will include:

- Clearly designated recommendations
- Detailed narrative analysis of each report element clearly written and presented in sections with explanatory support to ensure an understanding by all readers
- Supportive charts, graphs, GIS maps and analyses, and diagrams, where appropriate

Task 5-B: Publication of the Final Report

Following a final technical review and approval by LCFCA, Triton will provide an electronic version (PDF format) of the report.

Task 5-C: Presentation of the Final Report

Triton will conduct a final virtual presentation of the components of the report to representatives of LCFCA, the County Board of Supervisors/Council, and any other individuals or groups as requested.

Phase Two Scope of Work—Develop a Proposal for EMS and IFT Ambulance Transport

Section One—Develop a Proposal for EMS and IFT Ambulance Transport

Task 1-A: Design and develop a proposal to Lake County for providing Ambulance Transport Services

Provide consulting services and assistance to the Lake County Fire Chiefs Association in the development and presentation to Lake County to provide emergency ambulance transportation and Interfacility Transport (IFT) Services.

Task 1-B: Interview Facilitation

Triton will provide subject matter expertise to guide LCFCA's interview with the County in a manner that best identifies the necessary elements and qualifications to provide emergency ambulance transportation and IFT services in the County's EOA.

Task 1-C: Oral Presentation Preparation
Triton will provide subject matter expertise for the preparation of the oral presentation to the County Supervising Board and invited stakeholders.

Task 1-D: Contract Negotiations
In the event LCFCA's bid is accepted, Triton will provide negotiation assistance and subject matter expertise during the finalization and execution of the awarded contract.

Section Two—Publication of Final Documents

Task 2-A: Publication of the Final Proposal Documents (as required)
Triton will complete any necessary revisions and produce an electronic version in PDF file format.

ATTACHMENT 2
Payment Terms

CLIENT agrees to pay CONSULTANT an amount not to exceed sixty-four thousand four hundred ten dollars ($64,410) for services performed pursuant to the Scope of Services (Attachment 1). Upon execution of the Agreement, the Client agrees to pay 10% ($6,441). Subsequent payments will be based on monthly invoicing as work progresses.

Any alteration or deviation from the described work that involves extra costs will only be performed by Consultant after written request by the Client. The parties must agree in writing upon any extra charges billed at the following rates:

$190/hour for Senior Project Manager
$150/hour for other consultants
Any additional travel expenses

Contact information for billing purposes is as follows:

CLIENT: Lake County Fire Chiefs Association
Attn: William Sapeta, President
4020 Main Street
Kelseyville, CA 95451

Phone: 707.994.2170
Email: fdchf700@yahoo.com

South Lake County Fire Protection District
in cooperation with
California Department of Forestry and Fire Protection

P.O. Box 1360 Middletown, CA 95461 (707) 987-3089

STAFF REPORT

To: South Lake County Fire Protection District Board of Directors **Date:** 02/15/2023

From: Battalion Chief Mike Wink

Re: Updated information about Engine(s) Purchase

EXECUTIVE SUMMARY

Fire Engine E6221
International / E-ONE / Type 2 / 4x4
Cobb Station 62
Lisc #355603
Year 1991
Vin #1HTSENHN8MH359288

Fire Engine E6321
International / E-ONE / Type 2 / 4x4
Hidden Valley Station 63
Lisc #355602
Year 1990
Vin #1HTSENHN6MH359287

The replacement of E6221 and E6321 is an ongoing process. This information is being provided to give guidance on a vendor to choose and to present financing options.

BACKGROUND

South Lake County Fire Policy 3040 (attached to this Staff Report) identifies that primary Fire Engines be in front-line service for 15 years, as a reserve for 10 years then to be removed from service and sold. These Engines at Hidden Valley and Cobb are 31 and 32 years old. They have exceeded their front line and reserve timeframes. We do have other apparatus in the South Lake County Fire Fleet that also exceed these timeframes. This plan is to first replace these front-line Engines with other plans coming in the years to come.

The 2022 Capital Fire Facilities Plan (attached to this Staff Report) identifies these apparatuses for replacement. This plan is a living document. One of the goals of this document is to identify the need and process to spend Mitigation Fee's and Direct Charges. These Engines and other apparatus have been on this living document for 15

plus years. In 2007-08 we purchased a new water tender and a new wildland engine. These purchases were additions to the fleet when the funds were available. This was a few years after Measure H was passed by the voters and we had a Professional Services Agreement with Calpine that were bringing in new funding amounts. These were additions to the fleet, and no replacements were done until the Recuse was replaced in 2009. In that last 13 years, we have seen property tax decline with the 2008 housing market collapse and the Valley Fires destruction of over 2000 structures in 2015. Then there are labor, CPI and COLA increases that have all outpaced our funding mechanisms. In 2019 Measure L was passed to address the ability to fund the Fire District and provide the same level of service. Providing those services includes the replacement of apparatus.

While the Engines have been on the replacement plan for 15+ years the financial ability to do so has been challenging. While the Fleet Team keeps everything in working condition, there are difficulties. We recently had to purchase 18 truck tire rims. This truck tire rims size from 30+ years ago is becoming obsolete. We could no longer purchase 4x4 all terrain tires in that size. We had to purchase 16 rims so we would can purchase 4x4 all terrain tires.

For 8 of the last 9 years we have applied for a $1.2 million-dollar grant from FEMA to help purchase the needed Fire Engines. The Director of FEMA was here at Fire Station 60 after the Valley Fire and did a news conference. We told him we were putting in for the FEMA Grant Grant has been declined each year since. I have attached a copy of the 2021 FEMA Gran. We have had the Senators, Assembly, Congress, Tribal and others write letters of support with no response. This year in 2022 we have hired LEXIPOL a Grant Writing Service to assist with our 2022 – 2023 Fire Engine Grant. We have considered hiring a lobbyist who is in D.C. as well.

ANALYSIS

This section would analyze the situation or issue from the current perspective and may include some or all the following items:

Environmental Impacts – These Fire Engines are currently not California Diesel Engine Emissions' Compliant. We are exempt as emergency apparatus from meeting that standard. If we were in private industry these trucks would not be legal in California. The replacement trucks will meet current California Emission Standards.

Fiscal Impacts – The vendors require 50% payment when you issue the purchase order (or similar) to order the Fire Engine. Then the balance due upon delivery. There do offer a discount of around $17k if you pay the full amount at the time of order.

There are many funding sources to fund this purchase. You can use Contingency's, Reserves, Mitigation Fee's, GEMT/IGT, and Measure L Direct Charges. You can fund it all in house, or we can get a loan.

Attached you will find three financing options presented from earlier this year as examples. We used 100% financing for 10 years as a starting point to get pricing. This can be modified and updated pricing with BOD guidance. We also looked at local banks in Lake County. While the rates are going up, there are many financing/lease options. In the last seven months, we have seen prices go up from $8,000 each to

$125,000 on the Fire Engines. Prices and delivery dates of 700+ days will continue to go up. Whatever we decide to order now, when it shows up in 18 to 24 plus months we will already have saved costs.

Summary of cost from three vendors required by District Policy for the purchase of 2 (quantity two) ICS Type 2 4x4 Fire Engines. This price includes tax and delivery. Whatever vendor we choose there will be finial changes that could add on some costs. The attachments include all of the details.

Rosenbauer
$1,175,373.18

Boise Mobile Equipment (BME)
$1,116,104.40

Pierce
$1,133,243.22 (-$17k for up-front payment reduces the price to $1,1096,432.02)

Pro and Cons

Pros- The sooner we initiate the order process, the sooner we are to locking in a price. All prices continue to rise and there is no expectation the prices will go down.

Pros- If we get the FEMA Grant this year or in the next two years it is likely we will still be in the payment process so the grant funds can be used towards the purchase.

Cons- If we do not plan an order now, this will extend our time in waiting for a Cab and Chassis and manufacturing. Prices went up 7% this year so far. The price could increase an unknown percentage. If it goes up another 7% that would be an apx $79,000 increase.

ALTERNATIVES

1. Wait to see if prices go down.

2. Wait to see if interest rates go down.

3. Place order now to keep price and deliver date reduced.

RECOMMENDATION

- Alternative 3 is recommended by the Chiefs for the low bid Pierce.
- Pierce Fire Engine Builder is the low bid and is recommended by our Fleet Team.
- Delay the full payment up front to maximize any FEMA Grants if they are received.

SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT
Policy Handbook

POLICY TITLE: Apparatus Replacement
POLICY NUMBER: 3040

PURPOSE

The purpose of this policy is to outline the apparatus replacement guidelines for fire, rescue, and emergency medical service (EMS) apparatus and vehicles.

3040.10. Definitions

Equipment and Facilities Committee: Members appointed by the Board of Directors and tasked with, among other duties, the annual inspection and evaluation of apparatus nearing replacement.

Approved Mechanic: A certified Cal Fire Mechanic or certified Emergency Vehicle Technician (EVT).

Heavy Apparatus: Heavy Squad, Engine, Water Tender, Truck/Ladder/Tower, Mini-Pumper, Rescue Engine.

Light Apparatus: Light Squad, Ambulance, Command Vehicles, Quick Response EMS Vehicles, Sedans, Staff Vehicles, Utility, etc.

Specialty Vehicles: Air Compressor Trailer, MCI Trailer, Flat-bed Trailer, etc.

3040.20. To ensure the safest and most efficient use of South Lake County Fire Protection District resources, the following Apparatus Replacement Guidelines shall be the standard practice.

The goal of this policy is to have heavy apparatus replaced between 15-25 years old and light apparatus replaced between 100,000 and 120,000 miles.

Specialty vehicles such as sedans, air/light units, utility vehicles, and MCI trailers etc. shall be evaluated on a case-by-case basis and included in the CIP as necessary. In many cases these vehicles will have low use and low mileage enabling them to be safely utilized well beyond 20 or 25 years.

Factors influencing apparatus replacement is age, mileage, cost per mile, and overall condition of the apparatus; the greatest weight is placed on mileage and age.

3040.30. Heavy Apparatus, Brush Trucks and Light Apparatus

Annually, an approved mechanic shall inspect all apparatus.

The results of the inspection shall be documented in writing and provided to the Equipment and Facilities Committee

3040.40. Specialty Vehicles

A qualified mechanic on a case-by-case basis shall inspect specialty vehicles such as Air Compressor Trailers, MCI trailers, Flat-bed Trailers, etc.

The results of the inspection shall be documented in writing and provided to the Equipment and Facilities Committee

3040.50. All Apparatus

The Equipment and Facilities Committee, based on the inspection reports, will make recommendations for improving the performance or extending the expected life span of the apparatus.

The Equipment and Facilities Committee will also consider the service time lost due to the apparatus being marked as "out-of-service" for mechanical reasons.

A chief officer may request an inspection of any apparatus to be considered for replacement prior to meeting the minimum age or mileage requirement if other factors are influencing the need to replace the apparatus prematurely.

The results of inspections will be evaluated and summarized by the Equipment and Facilities Committee. Recommendations, on which apparatus should be replaced for that year, and reports of apparatus maintenance and operational costs, shall be presented to the Board of Directors as part of the annual Capital Improvement Plan.

Recommended Evaluation Benchmarks

APPARATUS	TYPE	YEARS 1ST LINE	YEARS RESERVE
Engine	Heavy	15	10
Water Tender	Heavy	15	10
Squad, Attack Units	Heavy	15	10
Squad	Light	5 (or 80k mi.)	5
Ambulance (gasoline)	Light	5 (or 80k mi.)	5
Ambulance (diesel)	Light	5 (or 80k mi.)	5
Staff vehicles	Light	5 (or 80k mi.)	*na*
Specialty	All types	10	*na*

***

SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT
RE-ADOPTING / UPDATING CAPITAL FIRE FACILITIES AND EQUIPMENT PLAN

Approved March 15th, 2022 by the Board of Directors of the South Lake County Fire Protection District in Resolution No. 2021-22_20__.

I. Introduction

Like many local agencies, recent fiscal constraints have caused fire departments to reduce staffing and services with no corresponding decrease in demand for services. Recent laws have required fire departments to cease single-person staffing of fire apparatus.

In order to provide stability in the District, the South Lake Fire Protection District (SLCFPD), on June 15, 2000, by Resolution No. 00-08, voted to integrate their services with those of the California Department of Forestry and Fire Protection (CALFIRE) to provide an enhanced level of service at a lesser or an equal cost.

SLCFPD is an independent special district with an elected Board of Directors, which was formed in 1925 as the Middletown Fire Protection District. The Lake County Board of Supervisors appointed the Board of Directors until 1988, when it was changed to an elected board. The District was renamed as the SLCFPD on March 18, 1987.

The south portion of Lake County has experienced rapid growth to meet the housing needs of retired residents, reasonable and affordable housing for people moving here from other areas, geothermal industry employees and a cumulative impact on the District from commuters to larger population centers in Sonoma, Napa and Marin Counties. This area also attracts large numbers of tourists to recreation areas during the summer months.

It is this District's mission to minimize the risks of injuries, fatalities, and property losses through efficient and effective fire protection programs while maintaining a high level of fire suppression of structural, vehicular and wild land fires. Additionally, the mission is to minimize injuries and fatalities related to emergency medical incidents by providing rescue and Advanced Life Support (ALS) ambulance services. However, the demand of rapid growth upon this District has threatened the ability to continue these missions at the current levels.

Because of reduced income to SLCFPD from Proposition 13 in 1978, coupled with the loss of revenue from the Geothermal Industry, SLCFPD cannot provide protection services for the "New Construction" and growth within current fire service operating dollars.

SLCFPD is now approaching a critical point in dealing with impacts of "New Construction." The District cannot continue to absorb new dwellings, businesses, and populations without adding new fire stations, fire apparatus or equipment.

SLCFPD needs New Construction Capital Fire Facilities Mitigation Fees in order to finance protection capital outlay to mitigate the impact of growth and development within the communities of Middletown, Hidden Valley Lake, Anderson Springs, Cobb, Loch Lomond, Jerusalem Valley as well as numerous small developments throughout the District.

This New Construction Capital Fire Facilities and Equipment Plan is formulated to provide the foundation for the enactment of a "New Construction Impact Fee." Government Code 66000 et seq. provides the Lake County Board of Supervisors with the legal authority to enact such a fee for SLCFPD with the procedural steps necessary to meet the local agency requirements. The ten-year plan, originally adopted on January 22, 2001, is being updated to cover the current year and a ten-

year period from July 1, 2022 to June 30, 2032. This plan demonstrates present and future need for fire facilities and equipment to serve increased demand placed on present and future need for fire facilities and equipment to serve increased demand placed on this District by “New Construction.” New Construction Capital Fire Facilities Mitigation Fee benefits will be expended proportionately to the location of new development, a corresponding increase in calls, and the fee realized.

II. Purpose of Development Fees:

The purpose of a New Construction Capital Fire Facilities Mitigation Fee in SLCFPD is to mitigate the financial impact of providing additional stations, expanded facilities, and specialized apparatus, while safeguarding life and property protection needs at an acceptable level of service to the citizens of the District. This fee will be designed to place the funding burden for these additional services on the new growth that causes the requirement of them and will now place an additional burden on the taxpayers that have already paid for the existing level of service.

“New Construction” has placed a rapidly increasing financial and operational burden on the Fire Protection System currently provided and is creating the potential for inadequate or overloaded protection coverage for the present existing communities, as well as the protection for additional “New Construction and Development.”

This “Plan” will demonstrate the need for a Capital Fire Facilities and Equipment Fee is directly related to fire facilities, expanded facilities, and equipment needs created from this rapid growth in population.

III. Guidelines and Justification:

1) Capital Fire Facilities and Equipment Fee will be a charge, per square foot, to be placed on “New Construction” only.

2) “New Construction” defined as the original construction of residential dwellings, commercial or industrial occupancies, or any other non-residential improvement unit or the addition of floor space to such existing units. Residential dwelling units shall include mobile homes and individual apartment units.

3) This “New Construction” requires the construction, remodel or expansion of Fire Protection Facilities and the acquisition/upgrading of fire equipment.

4) If mitigation funding for this expansion or construction of fire facilities and the purchase/upgrading of fire equipment necessitated by “New Construction” are not available, the Fire Protection System in place deteriorates, becoming inadequate to service the increased Fire Protection and Medical Aid needs of both the “New Construction” units and existing communities.

5) This over-burdened Fire Protection System places the citizens of “New Construction” units and existing communities in a condition perilous to their personal health and safety.

6) Financial impact of “New Construction” on existing Fire Protection Facilities and Equipment cannot be alleviated in a timely manner without being mitigated by New Construction Capital Fire Facilities and Equipment Mitigation Fee.

7) SLCFPD does not have existing fire protection facilities and equipment to provide an adequate level of service for further unmitigated growth projected in the numbers of “New Construction” units within the District boundaries.

8) For the above reasons, new methods for financing fire protection facilities and equipment necessitated by “New Construction” are needed in the SLCFPD.

IV. Use of Fire Facilities Fees:

SLCFPD has developed a realistic estimate of needed fire stations and/or expansions and fire equipment needs in which to adequately serve the life and property needs of the existing community, compared with the expected new construction, businesses and increased population in the coming decade.

V. Relationship Between Fees and New Development:

SLCFPD is currently attempting to provide fire protection services for the new millennium at or near 1980 levels. Structure fire suppression standards require four key elements for effectiveness:

1) An adequate water supply

2) A capable engine and pump to deliver the water

3) A sufficient number of personnel, and

4) The appropriate associated equipment

The “New Construction” trends within the District present problems of larger homes and higher valued structures on smaller land areas. These new dwellings will require additional “Fire Flow,” more apparatus and strategically located stations staffed by additional personnel in order to provide adequate service.

In addition to its fire suppression role, the District provides ALS to provide every request for emergency medical assistance along with calls for Automatic Aid and Mutual Aid outside the District. Currently, 75% of the “Call Volume” is to “medical aids.” As demands for service from the impact of population and density increase, response to these types of calls will accelerate the serviceable life of current apparatus and equipment necessitating earlier replacement. (Replacement standards; Re: NFPA/Industry Standard)

Exhibit A: Demonstrates a current building permit rate of 38 per year based upon a ten-year average of residential building permits. Figures provide there are approximately 3484 developable lots in the District. “New Construction” in the ten-year period estimates approximately 894,688 square feet of development that requires fire protection.

Exhibit A also shows the impact that construction will have on the District population. At 2.5 persons per dwelling, an average of 98 new people per year, who will demand “medical aid rescue/public service” and fire calls.

Hidden Valley is also planning expansion of community services, businesses, and shopping complexes to conform to their increased home building.

Outlying areas of Middletown such as Cobb and Loch Lomond have 50% of commercial property vacant, which has a potential for approximately 760,000 square feet of commercial floor space. In the Cobb area 46% of rural lands and almost all public lands are within the primary geothermal resource area.

Exhibit B: A Facilities Purchase/Expansion Plan; and,

Exhibit C: Equipment Upgrade Plan will be maintained for public review and updated annually, prior to the start of each fiscal year, as part of the preliminary budget review process.

Exhibit D: Shows the fee structure calculations. The costs of the necessary new fire facilities (fire stations and fire apparatus/equipment) are divided by the square footage of the expected "New Construction" to be served over the next 10 years. This produces a square footage factor for new facilities to be applied to the new construction expected within the District. This method insures that the impact of new growth in populations and dwelling units is mitigated, as the "= New Development" comes into the District.

Exhibit E: Fire Protection System Study (updated).

The New Construction Capital Fire Facilities Mitigation Fees as they are collected will be placed in a separate fire district budget account and deposited with the Lake County Treasurer under State Health and Safety Code Section 13854, and the Lake County Fire Mitigation Fee.

VI. Summary:

The New Construction Fire Facilities/Expansions needed to continue/improve current fire protection service levels for "New Construction" expected during the next 10 years cannot be met with District operating funds provided by property tax assessments. It would take approximately 25 years to acquire the fire facilities, needed expansions and equipment from the operating funds to meet the needs generated from "New Construction" for the next 8 to 10 years.

Government Code 66000 provides the procedure and the requirements that a fire district must meet in order for the County to be able to exact the fees necessary to mitigate the impact from new development projects. Updated exhibits demonstrate the need for this fee program to provide the means to add fire facilities/expansion and fire equipment to the Fire Protection System so that they are in place at the same pace that growth is taking place.

EXHIBIT A

KNOWN DEVELOPMENTS AND NEW DWELLINGS

Currently, there are approximately 5,145 known single-family dwellings (SFD) within the District.

The September 12, 2015 Valley Fire is reported to have destroyed 1280 SFD. SFD rebuilt were categorized as additions / remodels and are, therefore, not included in below 'new' builds in years 2015 through 2018. To date, it is estimated that half of the destroyed SFD have not rebuilt.

Building Permits:

Lake County Building Department issued 352 residential building permits in a ten-year period.

Expected New Building Construction During the Next 10 Years:

Expected new building construction based upon residential building permits issued during the last ten years:

31	in year 2012
42	in year 2013
30	in year 2014
24	in year 2015
27	in year 2016
27	in year 2017
43	in year 2018
65	in year 2019
37	in year 2020
57	in year 2021
383	total dwellings divided by 10 yrs = 38.3 annual average

Average Dwelling Size:

Average new dwelling based upon residential building permits issued during the last ten years:

2,024	square feet in year 2012
2,374	square feet in year 2013
2,704	square feet in year 2014
2,699	square feet in year 2015
2,531	square feet in year 2016
2,811	square feet in year 2017
2,110	square feet in year 2018
1,876	square feet in year 2019
1,950	square feet in year 2020
2,281	square feet in year 2021
23,361	total square feet divided by 10 = 2,336 average square feet

Population Impact:

Lake County uses a 2.5 residency factor for estimating the population within the Census Tracts that cover the District.

383 new dwellings x 2.5 = 957 new residents by year 2032 ÷10 yrs = 98 new residents per year

EXHIBIT B

FACILITIES EXPANSION/REMODEL

Meeting the demands of continuing service at current levels in most of the present facilities will require future remodels and/or expansions of those facilities to accommodate the increased call volume brought on by an ever-increasing population within the District caused by New Construction. Each of the District's older fire stations (Cobb, Loch Lomond, and Hidden Valley) is anticipated to require differing levels of expansion/remodel.

A mean average cost projection for this @ $400.00/square feet is:

Hidden Valley station remodel / addition of approximately 2,190 square feet = 876,000

TOTAL FACILITIES EXPANSION / REMODEL = 876,000

EXHIBIT C

VEHICLE/EQUIPMENT REPLACEMENT PLAN

Based on the replacement criteria established by the South Lake County Fire Protection District, the following replacement plan may be utilized for budget planning purposes.

FY	Apparatus / Equipment	Expected Costs	Sale Value	Extraordinary Costs (2021 dollars)
2022-23	Amb-6211	270,000	5,000	265,000
2023-24	E-6321	450,000	15,000	425,000
2024-25	E-6011	450,000	15,000	425,000
2025-26	E-6221	450,000	15,000	425,000
2026-27	E-6421	450,000	15,000	425,000
2027-28	WT-6011	200,000	5,000	195,000
2028-29	U-6321	50,000	1,000	49,000
2029-30	U-6022	50,000	1,000	49,000
2030-31	U-6221	50,000	1,000	49,000
	U-6421	50,000	1,000	49,000
2031-32	U-6021	50,000	1,000	49,000
		TOTAL (FY2022-23 TO 2031-32)		**2,405,000**

EXHIBIT D

CALCULATIONS OF CAPITAL FIRE FACILITIES MITIGATION FEES

The formula for the following method for preparing calculations and determining mitigation fees for New Construction:

Square Footage/Costs Calculations:

A.	383 new dwellings x 2336 square feet = (by the year 2032)	894,688	square feet
B.	Existing Facilities Expansion/Remodel = (by the year 2032)	$876,000	
C.	Equipment Upgrade Plan = (by the year 2032)	$2,405,000	
Capital Fire Facilities/Improvements Total Next 10 Years:		**$3,281,000**	

It has been determined that the Fees will be collected as follows:

$3,281,000 / 894,688 sq. ft. = $3.67 per square foot

Ordinance No. 2775, adopted by the County of Lake Board of Supervisors June 6, 2006, establishes the fire mitigation fee ceiling at $1.00 per square foot.

Average square footage of new construction: 2336 x $1.00/sq. ft. = $2,336 average fee

This is a projected schedule of priority expenditures. Under Government Code Section 66002, this plan must be updated on an annual basis.

The New Facilities/Equipment and Facilities Expansion/Remodel costs are estimated on current rates, and specifications of these estimates are subject to change with inflation and the final bidding process.

EXHIBIT E

FIRE PROTECTION SYSTEM STUDY 2000
(Updated March 2022)
STUDY OUTLINE

INTRODUCTION

I. MISSION STATEMENT

II. DUTIES AND SERVICES

III. STANDARDS

A. Response Standard
B. Station Locations Standards
C. Structural Fire Suppression Standards

IV. BACKGROUND

A. History
B. Geographic Profile
C. Wild land/Rural Interface
D. Map 1

V. EXISTING CONDITIONS

A. Call Volume
B. Personnel Requirements
C. Current Facilities and Equipment
D. Population
E. Growth Data

SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT
FIRE PROTECTION SYSTEM STUDY 2000
(Updated March 2022)
INTRODUCTION

I. Mission Statement:

It is the South Lake County Fire Protection District's (SLCFPD) mission to minimize injuries, fatalities, and property losses through efficient and effective fire protection programs while maintaining a high level of fire suppression of structural, vehicular and wild land fires. In addition, minimizing injuries and fatalities related to emergency medical incidents by providing rescue and Advanced Life Support (ALS) ambulance services.

II. Duties And Services:

SLCFPD provides fire menace standby protection, public service assistance, and hazardous materials responses, as well as vegetation management.

Additionally, SLCFPD provides a four-element fire prevention program consisting of engineering, enforcement, education-information and Volunteers in Prevention along with disaster preparedness planning. SLCFPD also provides leadership in emergency incident management, mutual aid and fire safe planning in a cost-effective and innovative manner within the District.

III. Standards:

SLCFPD has adopted the California Department of Forestry and Fire Protection (CALFIRE) Fire Safe Standards as fire protection guidelines for existing structures and new development in areas exposed to wild land interface fires as recommended in the Cobb and Middletown Area Plans of 1989. The basis for fire service standards rely on studies of the District, standards and practices of Fire Officers, LAFCO sphere of influence studies, the Lake County General and Community Plans, the Insurance Services Office standards and testing of the Fire Protection System and the National Fire Protection Association Standards.

Response Standards: The District currently maintains the following response standards:

The District is divided into Fire Management Areas (FMAS):

FMA 1 - those areas within a five-minute travel time of a fire station will be known as the urban/suburban zone.

FMA 2 - include the remainder of the District and will be identified as rural/wild land zone.

Within:

FMA 1 - ALS ambulance unit will arrive at 95% of emergency medical calls within 10 minutes of receipt of call at the fire station.

FMA 1 - The first engine will arrive at the scene of 90% of fire incidents within five minutes of receipt of call at the fire station. The balance of the "first alarm assignments" will arrive within 10 minutes.

FMA 2 - ALS ambulance unit will arrive at 90% of emergency medical calls within 15 minutes of receipt of call at the fire station.

FMA 2 - The first engine will arrive at the scene of 90% of fire incidents within 15 minutes of receipt of the call at the fire station. The balance of resources required for "first alarm assignment" will arrive within 25 minutes.

Station Location Standards: In evaluating proposed station locations and their respective priorities, such factors as call incidence and type, population, fire flow requirements, development density and valuation, land use and planned circulation in the service area should be considered.

Structural Fire Suppression Standards: Standards are contained in Uniform Fire Code, Uniform Building Code and National Fire Protection Association Standards.

IV. Background:

SLCFPD is an independent special district with an elected Board of Directors, which was formed in 1925 as the Middletown Fire Protection District. The Lake County Board of Supervisors appointed the Board of Directors until 1988, when it was changed to an elected board. The District was renamed as the South Lake County Fire Protection District on March 18, 1987.

The South Lake County Fire Volunteer Firefighters Association Inc. consists of 35 volunteers. The District was staffed exclusively with volunteers until the first paid member was employed in 1978. The Fire Sirens is a District auxiliary organization, which was established April 1985 and supports programs for the District's operations. The Fire Sirens have provided significant support to this District by raising funds to purchase equipment for the fire department. They also support personnel during training and emergency incidents by providing food and beverages.

In order to provide stability, SLCFPD on June 15, 2000, voted to integrate their services with those of the CALFIRE effective July 1, 2000.

Due to the loss of geothermal tax revenue, fiscal constraints have encouraged SLCFPD to re-negotiate a three-year contract with Calpine in 2013 to provide Emergency Medical Services (Basic and Advanced Life Support), certifiable training to Calpine employees in Standard Industrial First Aid, First Responder and CPR, as well as Fire Prevention and Control training, along with OSHA compliance training to the Calpine Health and Safety group. SLCFPD will also work with Calpine to coordinate the Geysers' Emergency Preparedness and Response Plans and conduct Emergency Response Drills.

History: SLCFPD serves an area of approximately 285 square miles in the southern portion of Lake County (see Map 1). Napa County bounds the District on the south, Sonoma County on the west, the Kelseyville Fire Protection District on the north and the Lake County Fire Protection District on the north/east.

In 1949, SLCFPD annexed the areas of the geothermal geyser industry. In October of 1989, the District annexed 6,500 acres in the Loch Lomond area. In 2006, the District annexed 17,000 acres in the Jerusalem Valley area. At this time, mutual aid agreements have also been developed with CALFIRE/Napa County for fire protection and emergency medical services on Highway 29 between the Napa County line and the Robert Louis Stevenson Memorial State Park as well as the area of the Lake/Napa County line on Butts Canyon.

Geographic Profile: SLCFPD area includes the communities of Middletown, Hidden Valley, Anderson Springs, Cobb, Loch Lomond, Jerusalem Valley as well as numerous small developments and individual dwellings. The District also serves a portion of the geothermal geyser industry facilities on the western boundary of the District.

SLCFPD contains extensive areas of brush and timber that create high and extreme fire hazards to both urban and rural residential developments in which individual dwellings and small developments have been constructed with concentrations in the central and northern portions of the District. Because of this, the fire district has spearheaded and supported the South Lake Fire Safe Council's Chipper/Abatement Program. Since 2003, the council has funded the completion of over 10 miles of shaded fuel breaks in the communities of Loch Lomond, Pine Summit, Pine Grove, Rancheria, Seigler Canyon, Seigler Springs, the Cobb School, and the Summit Pool.

There are numerous areas within SLCFPD where access for fire fighting apparatus to structures is not available due to inadequate roads or bridges. The load limits on Big Canyon Road bridges prevents access of apparatus and the inability to use this road significantly increases response times from the Middletown and Hidden Valley stations to the Loch Lomond area.

SLCFPD has experienced numerous major fires, documenting the risk of fire within the District. Most of the community of Middletown was destroyed by fire in 1918. Two fires occurred in the 1960's; one burned 52,000 acres and the other burned 15,000 acres. In 1961 the Widow Creek fire destroyed over 10,000 acres, also damaging homes and vehicles. In 1985, the Hidden Valley Lake fire consumed 1,200 acres, destroyed 9 homes, damaged 16 and destroyed 4 vehicles. The Hidden Fire in 2000 consumed 4,000 acres, 1 home and 3 buildings. In September of 2004, the Geysers Fire burned 12,193 acres, destroyed 4 homes, 8 outbuildings and 12 cars, and threatened another 200 homes and 60 outbuildings, costing $4.4 million. In July of 2006, the 29 Fire burned over 600 acres, destroying one mobile home, three sheds and one travel trailer. On September 12, 2015, the Valley Fire burned 76,067 acres, destroying a total of 1958 structures, including 1,280 homes, 27 multi-family structures, 66 commercial properties and 585 other minor structures; damaging 93 structures, including 41 homes, 7 commercial properties, and 45 other minor structures, injuring 4 firefighters and 4 civilian fatalities.

The major contributing factors to possible major fire disasters (fuel density, topography and weather) continue to exist. With continuous development and increased population within SLCFPD, the potential for major fire occurrences will significantly increase unless adequate fire prevention and control programs are maintained/improved.

There is potential for major industrial fire losses at the Geothermal Power Plants. Additionally, emergency medical incidents and vehicle accidents present a major potential for multiple injuries on the roadways within SLCFPD. In 1980, a tractor–trailer hauling waste materials collided with two vans and one passenger vehicle resulting in 8 fatalities and 10 injuries. During the summer months of 2000, there were 12+ fatalities and numerous injuries on the District highways. During the summer of 2005, a duel fuel tanker overturned on Highway 29 activating response from the hazardous material team. From 2005 through 2007, there were 5 fatalities on Highway 29 and 1 in the community of Hidden Valley Lake. During 2008, there were 2 fatalities on Highway 29 and 2 on Highway 175. During 2009, there were 3 fatalities on Highway 29 and 2 on Butts Canyon. Also during 2009, there were 2 fatalities from a mid-air collision between a glider and tow plane. In 2010, there was one fatality on Highway 29.

Wild land and Rural Interface: SLCFPD is predominately wild land/urban interface and is entirely within State Responsibility Area. A vast majority of SLCFPD has been designated by CALFIRE as very high fire hazard area due to the density of vegetation, topography and climatic conditions during the declared fire season.

V. Existing Conditions:

Call Volume:

1994= 406	2004= 1122	2014= 1306
1995= 372	2005= 772	2015= 1415
1996= 425	2006= 787	2016= 1233
1997= 634	2007= 810	2017= 1322
1998= 770	2008= 869	2018= 1643
1999= 752	2009= 876	2019= 1787
2000= 810+	2010= 979	2020= 1484
2001= 960+	2011= 1173	2021= 1677
2002= 989	2012= 1201	
2003= 881	2013= 1423	

Personnel Requirements: Established standards for staffing needs are based upon pump delivery capabilities. NFPA requires four firefighters per each 250 GPM plus one officer. NFPA recommends that 4 volunteers are needed in response.

Each firefighter must be in safety clothing as regulated by OSHA for personal safety. This includes self-contained breathing apparatus and personal alarms. This safety clothing is both legal equipment and a necessity to protect firefighters from costly injury when working in extremely dangerous and hostile environments. In addition to clothing, there are various types of equipment that need to be carried on the fire apparatus so the firefighters can apply water to the fire, gain entry to the structure and a multitude of tasks necessary for proper fire extinguishment and overhaul. NFPA pamphlet #19 is a minimum guide used by many fire departments when selecting the support equipment to be carried on fire apparatus.

Current Facilities and Equipment:

Station 60: 21095 Hwy 175, Middletown, CA (District Headquarters) 11,650 square feet built in 1992

This building is two stories and is owned by the District. The station has a conference room, administrative/personnel office, meeting room/kitchen area, two bathrooms, and four bay sections with drive through opening doors on the first floor. The second floor has living quarters with four sleeping rooms, full kitchen, computer bay and living quarters, two full sized bathrooms each with lockers, change stations and showers. On site is an emergency propane generator.

This building is sprinklered.

The equipment housed at this station is Engine 6011 and 6031, Water Tender 6011, Rescue 6031, Medic 6011 and 6012, OES 359 and staff pickup.

Station 62: 16547 Hwy 175, Cobb, CA 5,520 square feet built in 1972

This building is single story concrete block and is owned by the District. There is no shop area. The station has five apparatus bays consisting of 2,740 square feet, a 740 square feet kitchen area and living/office space with 2-bed dormitory, two 60 square feet bathrooms, a 500-gallon gasoline fuel tank, a 500-gallon diesel tank, and an emergency propane generator.

The addition of a 1,920 modular in fiscal year 2012-13 replaced the inadequate 740 square feet, less than ideal area with no separation between work and living quarters. The addition allows for expansion of staffing levels based on emergency activity or public demand placed on the station by development and growth.

The inadequate area will become the office space, creating a more inviting and profession office environment for the public to conduct business.

This building is not sprinklered.

The equipment housed at this station is Engine 6221 and 6231, Medic 6211, Snow Cat 6201, and Utility 6221.

Station 63: 19287 Hartmann Rd, Hidden Valley Lake, CA 2,740 square feet built in 1980

This building is a two story concrete block and is owned by the District. The lot size is 275,000 square feet and is owned by the District. There is no shop or storage area. The station has three apparatus bays consisting of 1,620 square feet and living quarters with dormitory of 1,120 square feet (720 square feet downstairs and 400 square feet upstairs), and emergency propane generator.

This building is not sprinklered.

The equipment housed at this station is Engine 6321, Medic 6311, and Utility 6321.

Station 64: 10331 Redwood Rd, Loch Lomond, CA, 3,600 square feet built in 1959

This building is a single story frame/concrete block and is owned by the District. The station has four apparatus bays consisting of 2,400 square feet, kitchen area, two bathrooms of 80 square feet, and an emergency propane generator.

This building is not sprinklered.

The equipment housed at this station is Engine 6421, Utility 6421, and Water Tender 6411.

Population: The District has an area of 285 square miles with a current population of approximately 11,000 residents living in 4 distinct communities. The 1998-99 assessed valuation is $893 million. There has been a remarkable increase in the rapid sale of homes throughout the county. Affordable housing has caused an influx of new homeowners and developers. With this huge amount of new construction of homes, brings increased populations that will bring demands for more retail businesses to the area.

Growth Data: Lake County is one of the fastest growing counties in the state. As the population increases, a once adequate rural fire protection system based on fire flow and fire protection capability will no longer be sufficient. In addition to fire protection problems posed by growth, the issues of larger dwelling structures requiring greater fire flow considerations requires a rapid and effective response to every call with adequate equipment and water essential to preventing a catastrophic fire (as experienced in Nevada County in 1988 during the 49er Fire).

Other Known New Construction And Proposed New Development Include:

Kimco Development proposal in the Hidden Valley area includes 380 single family houses, a 50 to 60-unit apartment building, a 50-unit senior apartment complex, a 49-bed assisted care facility, 105,000 to 120,000 square feet of retail space, 15,000 to 20,000 square feet movie theater, 50,000 square feet motel, and 20,000 to 30,000 square feet of general office. In 2021, the 18,000 square feet grocery building is near completion.

Chapter 27 - MITIGATION FEES

ARTICLE I. - FIRE MITIGATION FEES

Sec. 27-1. - Title.

This Article shall be known and be cited as the "Fire Mitigation Fee Ordinance."

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-2. - Purpose of article.

The purpose of this Article is to implement the Lake County General Plan policy providing for the adoption of fire mitigation fees and for the collection of said fees at the time of the issuance of building permits, said fees to be allocated to the affected Fire Agency for the acquisition of capital facilities in order to ensure the provision of the capital facilities necessary to maintain current levels of fire protection services necessitated by new Development.

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-3. - Findings.

The Board of Supervisors of the County of Lake finds and declares as follows:

(a) Adequate fire protection facilities must be available to serve new Development.

(b) New Development requires the construction or expansion of fire protection facilities and the acquisition of equipment.

(c) In many areas of the County, property taxes and fire suppression assessments currently collected by the agencies providing fire protection services are insufficient to provide funds for expansion or construction of fire facilities and purchase of equipment necessitated by new Development resulting in the potential for inadequate fire protection coverage for the new Development and the growing population.

(d) The above conditions place Lake County's growing population in a condition perilous to its health and safety.

(e) The impacts of Development on the existing fire protection facilities and equipment cannot be alleviated without County involvement.

(f) For the above reasons, new methods for financing fire protection facilities and equipment necessitated by Development are needed in Lake County.

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-4. - Prior agreements and dedication.

(a) Any agreement existing prior to the operative date of this Article between an applicant for Development and a Fire Agency pertaining to the dedication of land or payment of fees for fire facilities and equipment to serve the property which is the subject of the application, or any portion thereof, shall satisfy the requirements of this Article.

(b) If land, facilities or equipment has been dedicated or donated to, and accepted by, the Fire Agency as a condition of approval of a discretionary permit, such dedication or donation may be considered by the Board of Supervisors as satisfying the requirements of this Article.

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-5. - Definitions.

Whenever the following words are used in this Article, they shall have the meaning ascribed to them in this section.

(a) "Development" means all construction for which a building permit or other permit is required.

(b) "Board" means the Board of Supervisors of the County of Lake.

(c) "Other permits" means major and minor use permits.

(d) "Clerk" means the Clerk of the Board of Supervisors of the County of Lake.

(e) "Fire Agency" and "Agency" means any special district providing fire protection services within the unincorporated area of the County.

(f) "Facilities and Equipment" means any long-term capital facilities and equipment used by a Fire Agency for fire suppression or emergency medical services including station construction, station expansion and fire or emergency medical apparatus.

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-6. - Exemptions.

(a) There shall be exempt from the requirements of this article, building permits for the following types of development:

(1) Piers which are not covered, ramps, boat lifts, docks, suspended platforms, and pilings;

(2) Agricultural buildings requiring an exempt building permit.

(b) The requirements of this article shall not apply to buildings constructed for governmental uses.

(c) The requirements of this article shall not apply to the replacement on the same parcel by the owner of a dwelling or dwellings destroyed by fire or other calamity or demolished for replacement provided that:

(1) The application for building permit to replace such dwelling is filed with the County Building Official within one (1) year after the destruction or demolition of the dwelling, or within three (3) years of the date a local emergency is declared if the destruction or demolition occurred within the geographical area encompassed by that local emergency declaration and resulted from events giving rise to said declaration;

(2) There is no change in occupancy; and

(3) There is no increase in square footage.

(Ord. No. 2114, § 1, 10-20-92; Ord. No. 2775, § 2, 6-6-2006; Ord. No. 3045, § 1, 8-2-2016 ; Ord. No. 3066, § 1, 8-22-2017)

Sec. 27-7. - Required actions of affected fire service providers.

This Article shall become applicable to Development within the boundaries of a Fire Agency when the following events occur:

(a) The governing body of a Fire Agency adopts a resolution making the following findings:

(1) The Agency does not have existing fire protection facilities and equipment which could be used to provide an adequate level of services to new Development within the district's boundaries.

(2) The Agency does not have sufficient funds available to construct additional facilities from fund balances, capital facility funds, property tax sources, fire suppression assessments, or any other appropriate sources.

(3) The lack of fire protection facilities and equipment to serve new Development would create a situation perilous to the public health and safety if fire mitigation fees are not levied within the district.

(b) The Fire Agency resolves as follows:

(1) The Agency requests that the County impose a specified percentage of the fire mitigation fee ceiling on the Agency's behalf upon applicants for building permits or other permits for Development.

(2) Mitigation fees paid under this Article shall only be used to expand the availability of capital facilities and equipment to serve new Development.

(3) The Agency shall place all funds collected for the County under this Article, and all interest subsequently accrued by the Agency on these funds, in a separate budget accounting category to be known as the "Lake County Fire Mitigation Fee."

(4) The Agency shall expend funds from said "Lake County Fire Mitigation Fee" budget accounting category only for those purposes of providing capital facilities and equipment to serve new Development.

(5) The Agency shall submit a Fire Mitigation Fee Annual Report no later than October 31 of each year to the Clerk. Said report shall include, but not be limited to, the balance in the account at the end of the previous fiscal year, the fee revenue received, the amount and type of expenditures made, and the ending balance in the fund. In addition, the report shall specify the actions the Agency plans to take to alleviate the facility and equipment needs caused by new Development in a capital fire facilities and equipment plan adopted at a noticed public hearing. The Agency shall make available, upon request by the Clerk, a copy of its annual audit report.

(6) The Agency shall make its records available to the public on request which justify the basis for the fee amount.

(7) The Agency shall hold the County harmless for any errors made by the County in collecting or accounting for the fees for each Agency.

(8) The Agency shall make findings, with respect to any portion of the fee remaining unexpended or uncommitted in its account five or more years after deposit of the fee, to identify the purpose to which the fee is to be put and to demonstrate a reasonable relationship between the fee and the purpose for which it was charged. The Agency shall refund to the then current record owner or owners of the Development project or projects on a prorated basis, the unexpended or uncommitted portion of the fee and any interest accrued thereon, for which need cannot be demonstrated.

(c) The governing body of the Fire Agency adopts a capital fire facility and equipment plan in accordance with Government Code Section

66002 at a noticed public hearing.

(d) The governing body of the Fire Agency shall send a certified copy of the resolution and the capital fire facility and equipment plan to the Clerk. The Clerk shall agendize said resolution and capital fire facilities and equipment plan for the Board's approval at a public hearing noticed in the manner required by Government Code Section 66002(b). At the close of the public hearing thereon, the Board may approve said resolution and capital fire facilities and equipment plan if it finds that said documents meet the requirements of this ordinance, the Lake County General Plan and Government Code Section 66000 et seq. The provisions of this Article shall be applicable to all building permits and other permits issued for new construction within the boundaries of the Fire Agency thirty (30) days after the Board's approval. Each Agency shall notify the County Building Official of the effective date of its mitigation fee.

(e) By March 31 of each year following the year of the original adoption of a resolution and approval by the Board pursuant to this section, the Agency shall submit a copy of a new resolution adopted by the governing body of the Agency making the findings requested by Section 27-6 and setting the percentage of the fire mitigation fee ceiling requested by the Agency. This percentage may be revised in the resolution up to the ceiling amount. If the resolution proposes to increase the fire mitigation fee from that previously approved by the Board, said resolution shall only become effective if approved by the Board in the manner set forth in Section 27-6(d) above. This revision shall be effective the following July 1.

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-8. - Fire Mitigation Fee Ceiling Established.

(a) Based upon the average cost of providing a fully equipped fire station within the County of Lake, in relation to the average number of new structures served by said station, a Fire Mitigation Fee Ceiling of one dollar ($1.00) per square foot of construction for all covered roof area is hereby established.

(b) A developer of a project subject to the above-described fee may apply to the Fire Agency for a reduction or adjustment of said fee based upon the developer's voluntary undertaking of fire mitigation measures in addition to those required by this chapter which the Fire Agency determines will further reduce the need for fire protection services.

(Ord. No. 2114, § 1, 10-20-92; Ord. No. 2775, § 3, 6-6-2006)

Sec. 27-9. - Fee payment.

(a) Prior to the issuance of any building permit or other permit for Development, the applicant shall pay to the County the fees prescribed by the Fire Agency resolution as approved by the Board, or shall present written evidence that the provisions of this Article have otherwise been satisfied with respect to the Development for which permits are sought.

(b) The amount of such fees shall be determined by the Fire Mitigation Fee in effect on the date of the payment of fees for an unexpired plan check.

(c) When application is made for a new building permit following the expiration of a previously issued building permit for which fees were paid, the fee payment shall not be required.

(d) In the event that subsequent Development occurs with respect to property for which fees have been paid, additional fees shall be required only for additional square footage of Development which was not included in computing the prior fee.

(e) For the purpose of payment of the fees to County, the Board delegates to each Agency the responsibility to collect or accept payment of the fees for each respective Agency.

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-10. - Administrative charge.

The County may charge, for its services in administering this Ordinance, an administrative charge of up to two (2) percent of the fees collected under this ordinance.

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-11. - Use of fees.

With the exception of the administrative charge provided for herein, all fees collected pursuant to this Article, including any interest accrued thereon, shall be used by the Agency for the purpose of providing for capital facilities and equipment.

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-12. - Fee fund records and report.

Any Fire Agency receiving funds pursuant to this Article shall maintain a separate budget accounting category for any fees paid. Such category shall be known as the "Lake County Fire Mitigation Fee" account. By October 31 of each year, each Agency receiving funds pursuant to this Article shall file a report with the Clerk on the balance in the account at the end of the previous fiscal year, the fee revenue received, the amount and type of expenditures made, and the ending balance in the fund. In addition, the report shall specify the actions the Agency plans to take to alleviate the facility and equipment needs caused by new Development.

(Ord. No. 2114, § 1, 10-20-92)

Sec. 27-13. - Termination of fee collection.

Fee collection as to any Fire Agency shall terminate as follows:

(a) If, by March 31 of any year following the year of the original adoption of a resolution pursuant to Section 27-6 which was approved by the Board, the Fire Agency has not submitted a copy of a new resolution pursuant to Section 27-6(e), fee collection shall terminate July 1 of said year.

(b) If, at any time, the governing body of a Fire Agency submits a copy of a resolution to the Clerk requesting termination of fee collection, fee collection shall terminate thirty (30) days from the date of receipt by the Clerk.

(c) Each Agency shall notify the County Building Official of the effective date of its termination of fee collection.

(Ord. No. 2114, § 1, 10-20-92)

Meadowwood Subdivision is developing a 46-unit subdivision at Santa Clara Road and Timm Way in Middletown in two phases.

Apartment complexes and cluster homes are currently being built in Middletown and more have been proposed.

Calpine's Geothermal Industry is expanding at the Geysers.

Pinnacle Homes have purchased the Crazy Creek Glider property and propose to build 50 to 300 homes at the 487-acre site at 18896 Grange Road.

Renovation and construction of new facilities is proposed for the resort property historically known "Howard Hot Springs." Avalon Springs plans to serve an anticipated 120 customers per day in 67 guest units. An additional 30 units are also proposed for the housing of approximately 60 on-site employees. The project proposal is broken into three phases: The first phase focuses on the renovation of the existing lodge and renovation of guest units and hot springs facilities. Phase two will further develop the site's meeting capacity, development of additional resort services, employee housing and the development of a new campground facility. The final phase of the project includes the full build-out of the proposed eco-village and development of the Special Events site.

The Old Hoberg Resort was purchased by Golden Leaf Productions with the intent of revitalizing the property and bringing it back as a resort providing conference spaces, guest accommodations, a timeshare component with many other amenities. Movie shots are planned for the property. The project will be completed in phases over the next several years.

Tenant occupancies located within the Coyote Valley Plaza now have new businesses, a pharmacy, restaurant, fitness center, and two other business type establishments have already taken hold with several more spaces left to be filled in 2012.

Seen in Middletown are the re-establishment of the Jolly Cone and other tenant improvements.

The Guenoc Valley Proposed Development Project consists of development of a master planned mixed-use resort and residential community within the 16,000-acre Guenoc Valley Ranch property in southeast Lake County, off-site workforce co-housing located in central Middletown, and a new or improved well and new water supply pipeline.

System for Award Management (SAM.gov) profile

Please identify your organization to be associated with this application.
All organization information in this section will come from the System for Award Management (SAM) profile for that organization.

SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT

Information current from SAM.gov as of:	**02/15/2023**
UEI-EFT:	**P5NMRBY9ZFH3**
DUNS (includes DUNS+4):	**025239646**
Employer Identification Number (EIN):	**942214592**
Organization legal name:	**SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT**
Organization (doing business as) name:	
Mailing address:	**P.O. BOX 1360 MIDDLETOWN, CA 95461-1360**
Physical address:	**21095 STATE HIGHWAY 175 MIDDLETOWN, CA 95461-9692**
Is your organization delinquent on any federal debt?	**N**
SAM.gov registration status:	**Active as of 02/13/2023**

☑ We have reviewed our bank account information on our SAM.gov profile to ensure it is up to date

Applicant information

Please provide the following additional information about the applicant.

Applicant name	**South Lake County Fire Protection District**

Main address of location impacted by this grant

Main address 1	**21095 Hwy 175**
Main address 2	
City	**Middletown**

State/territory	**CA**
Zip code	**95461**
Zip extension	**8008**
In what county/parish is your organization physically located? If you have more than one station, in what county/parish is your main station located?	**Lake County**

Applicant characteristics

The Assistance to Firefighters Grants Program's objective is to provide funding directly to fire departments and nonaffiliated EMS organizations or a State Fire Training Academy for the purpose of protecting the health and safety of the public and first responder personnel against fire and fire-related hazards. Please review the Notice of Funding Opportunity Announcement (NOFO) for information on available program areas and for more information on the evaluation process and conditions of award. Please provide the following additional information about the applicant.

Applicant type:	**Fire Department/Fire District**
Is this grant application a regional request? A regional request provides a direct regional and/or local benefit beyond your organization. You may apply for a regional request on behalf of your organization and any number of other participating eligible organizations within your region.	**No**
What kind of organization do you represent?	**Combination (Majority Paid/Career)**
Does your department identify as a Paid-on-Call/Stipend department?	**Yes**
What is the percentage of career members in your organization?	**60**
How many active firefighters does your department have who perform firefighting duties?	**30**
How many of your active firefighters are trained to the level of Firefighter I or equivalent?	**30**
How many of your active firefighters are trained to the level of Firefighter II or equivalent?	**15**

Are you requesting training funds in this application to bring 100% of your firefighters into compliance with NFPA 1001?	**No**

Which of the following standards does your organization meet regarding physicals? If physicals are not required then do not select any option. (optional)

- [x] Meets NFPA or 1582 standard
- [x] Meets NTSB or DOT standard
- [x] Meets State/Local standard

Please describe in the box below your training program and your plans to bring your membership up to Firefighter II.	**The South Lake County Fire Protection District (SLCFPD) is combination department staffed with a total of 30 members, made up of Full-time and volunteer positions, 30 of whom are trained to the FFI level and 15 who are trained to the FFII level. The SLCFPD has adopted FFII as the minimum training standard and is diligently working to achieve this as budget, training opportunities, and volunteer availability allow.**
How many members in your department are trained to the level of EMR or EMT, Advanced EMT or Paramedic?	**22**
Does your department have a Community Paramedic program?	**No**
How many stations are operated by your department?	**4**
Does your organization protect critical infrastructure of the state?	**Yes**
Please describe the critical infrastructure protected below.	**Within the 293 square miles of area that the South Lake County Fire Protection District (SLCFPD) provides primary coverage, there are numerous critical components of local, regional, and national infrastructure. SLCFPD protects multiple K-12 school campuses spread across the district with thousands of Lake County students. Other critical infrastructure includes public water systems, public power systems, including (22) power plants that supply over (4) million homes, highways, pipelines, US Post Offices, and thousands of acres of forest and food-**

	producing farmland. SCLFPD protects a large Department of Defense manufacturing facility that produces mission critical advanced weaponry components, which houses numerous hazardous substances and explosives. The SLCFPD provides automatic and mutual aid to surrounding jurisdictions. These jurisdictions include Sonoma County, Mendocino County, Napa County, Colusa County, Kelseyville FPD, Lake County FPD, Northern Sonoma County FPD, Lakeport FPD, Napa County FPD, and Northshore FPD. This automatic and mutual aid area includes multiple highways that are major thoroughfares between the San Francisco Bay area and the Napa Valley tourist region, Robert Louis Stevenson State Park, Mt. St. Helena, Railroads, Extended Care & Specialty Care Facilities, Psychiatric Residential Care Facilities, Multiple Medical & Dental Offices. SLCFPD is also part of the State of California Master Mutual Aid Agreement that deploys statewide to protect critical infrastructure during emergencies and wildfires.
Do you currently report to the National Fire Incident Reporting System (NFIRS)? You will be required to report to NFIRS for the entire period of the grant.	**Yes**
Please enter your FDIN/FDID.	**17040**
Do you offer live fire training?	**Yes**
What is the total number of live fire training exercises conducted per year on average?	**5**

Operating budget

What is your organizations operating budget (e.g., personnel, maintenance of apparatus, equipment, facilities, utility costs, purchasing expendable items, etc.) dedicated to expenditures for day-to-day activities for the current (at time of application) fiscal year, as well as the previous two fiscal years?

Current fiscal year: **2023**

Fiscal Year	Operating budget
2023	$4,582,000.00
2022	$3,525,000.00
2021	$3,275,000.00

What percentage of the declared operating budget is dedicated to personnel costs (salary, benefits, overtime costs, etc.)? **85**

Does your department have any rainy day reserves, emergency funds, or capital outlay? **Yes**

What is the total amount currently set aside? **120000.00**

Describe the planned purpose of this fund. **The South Lake County Fire Protection District has a small reserve fund of $120,000 (3.6% of total budget). These funds are set aside for emergency expenditures that result from fire, flood, earthquake, or civil action. They are not used for capital equipment requests, such as apparatus, unless they were lost for a reason listed above.**

What percentage of the declared operating budget is derived from the following	2023	2022	2021
Taxes	**80**	**80**	**80**
Bond issues	**0**	**0**	**0**
EMS billing	**17**	**17**	**17**
Grants	**1**	**1**	**1**
Donations	**1**	**1**	**1**

What percentage of the declared operating budget is derived from the following	2023	2022	2021
Fund drives	**0**	**0**	**0**
Fee for service	**1**	**1**	**1**
Other	**0**	**0**	**0**
Totals	100 %	100 %	100 %

Describe your financial need and how consistent it is with the intent of the AFG Program. Include details describing your organization's financial distress such as summarizing budget constraints, unsuccessful attempts to secure other funding, and proving the financial distress is out of your control.

Over the last three operating budget cycles, South Lake County Fire Protection District relied on and average of $3,266,666 in funding for its full range of operations. Of that total amount, $555,333.22 or 17% was dedicated to personnel expenses. Revenue streams for the department consist of taxes at 80%, EMS billing at 17%, Grants at 1%, and Fees for Service at 1%, and Donations at 1%. The majority of the operating funds are budgeted for insurance, dispatch, maintenance, and fuel. All of these required expenses have increased over the last three years. SLCFPD has identified the cost-share match for this request in the operating budget. The Lake County area is an economic-disadvantaged, low-income area. The median income for a household in the county is $49,627, and the median income for a family was $55,818. The per capita income for the county is $43,825 compared to $57,347 statewide. About 6.9% of families and 4.6% of the population are below the poverty line, including 22.8% of those under age 18 and 7.3% of those age 65 or over. The median home value in Lake County is $314,000, which is significantly below the State of California's $834,000 median. SLCFPD faces a unique challenge as it relates to their financial need. As reported, (80%) of the District's revenue comes from taxes. Their location in Northern California makes them susceptible for wildfires, which can decimate their tax base and, in turn, their funding. This was evident in the 2015 Valley Fire, which burned over (70%) of the District's 293 square miles. It destroyed

(1,304) of the (4,500) homes within the district, leaving a gap in taxable value. This funding request directly provides protection to the District's ongoing financial well-being and stability. Over the past several years, the commerce area of the South Lake County Fire Protection District 293 square miles and surrounding Lake County area has seen a dramatic shuttering of businesses that was recently exacerbated by the ongoing COVID-19 pandemic. Prior to this point, stagnant growth had contributed to what was essentially a flat line of property valuations within the tax base. Now, with this lack of growth sustained and even worsened, the outlook for this majority portion of SLCFPD's revenue (80%) is uncertain. This is insufficient for addressing increasing costs, deteriorating equipment, and ever-changing expectations for the level of services that local fire departments must deliver. After fuel, maintenance, utilities, and other operational costs, there is no funding available for this apparatus. Foreclosures, short sales, and distressed home sales have hurt housing prices causing a reduction in assessed valuation of properties. Utility and fuel costs continue to increase year after year. While we cannot control these costs, we have taken steps to minimize the impact. Overall, slow economic recovery and a limited tax base have created an effect whereby tax revenue and fees collected for service are not keeping pace with growing demands on our department. We have requested additional funding, but officials fear that a meaningful tax increase could impede what little economic progress has been made since the downturn. By securing federal financial assistance we hope to alleviate this looming financial burden. In short, the South Lake County Fire Protection District is operating on a rather stretched budget that must be carefully distributed across a wide range of emergency services critical to sustaining the health and safety of its community. Unpreventable disasters, unmitigated economic downturns, and uncontrollable legislative limitations have placed SLCFPD in a financial position where it is simply impossible to self-fund critical

	equipment needs such as this Vehicle Project. We are prepared to pay the non federal share and any amount about $1,000,000.00.
In cases of demonstrated economic hardship, and upon the request of the grant applicant, the FEMA Administrator may grant an Economic Hardship Waiver. Is it your organization's intent to apply for an Economic Hardship Waiver?	**No**

Other funding sources

This fiscal year, are you receiving Federal funding from any other grant program for the same purpose for which you are applying for this grant?	**No**
This fiscal year, are you receiving Federal funding from any other grant program regardless of purpose?	**No**

Applicant and community trends

Please provide the following additional information about the applicant.

Injuries and fatalities	2022	2021	2020
What is the total number of fire-related civilian fatalities in your jurisdiction over the last three calendar years?	0	1	0
What is the total number of fire-related civilian injuries in your jurisdiction over the last three calendar years?	3	3	2
What is the total number of line of duty member fatalities in your jurisdiction over the last three calendar years?	0	0	0
What is the total number of line of duty member injuries in your jurisdiction over the last three calendar years?	6	5	3
What is the total number of members with self-inflicted fatalities over the last three years?	0	0	0

How many vehicles does your organization have in each of the type or class of vehicle listed below? You must include vehicles that are leased or on long-term loan as well as any vehicles that have been ordered or otherwise currently under contract for purchase or lease by your organization but not yet in your possession.

Seated riding positions
The number of seated riding positions must be equal or greater than the total number of frontline and reserve apparatus. If there are zero frontline and zero reserve apparatus, the number of seated riding positions must be zero..

Type or class of vehicles	Number of frontline apparatus	Number of reserve apparatus	Number of seated riding positions
Engines or pumpers (pumping capacity of 750 gallons per minute (GPM) or greater and water capacity of 300 gallons or more): pumper, pumper/tanker, rescue/pumper, foam pumper, CAFS pumper, type I, type II engine urban interface.	4	0	15
Ambulances for transport and/or emergency response.	2	2	12
Tankers or tenders (water capacity of 1,000 gallons or more).	2	0	4
Aerial apparatus: aerial ladder truck, telescoping, articulating, ladder towers, platform, tiller ladder truck, quint.	0	0	0
Brush/quick attack (pumping capacity of less than 750 GPM and water carrying capacity of at least 300 gallons): brush truck, patrol unit (pickup w/ skid unit), quick attack unit, mini-pumper, type III engine, type IV engine, type V engine, type VI engine, type VII engine.	2	0	10
Rescue vehicles: rescue squad, rescue (light, medium, heavy), technical rescue vehicle, hazardous materials unit.	1	0	2
Additional vehicles: EMS chase vehicle, air/light unit, rehab units, bomb unit, technical support (command, operational support/supply), hose tender, salvage truck, ARFF (aircraft rescue firefighting), command/mobile communications vehicle.	5	0	16

How many ALS Response vehicles are in your fleet?	**4**
Is your department facing a new risk, expanding service to a new area, or experiencing an increased call volume?	**Yes**
Please explain how your department is facing a new risk, expanding service to a new area, or	**The South Lake County Fire Protection District is experiencing an increase in call volume and**

experiencing an increased call volume.	**aging equipment and fleet. Over the past three years, the department has seen a (58%) increase in reported NFIRS “100 series” call types. The department is expecting a dramatic decrease in overall funding as the lasting effects of the Covid-19 Pandemic and resulting economic downturn have led to decreased funding, less disposable income, and a drastic drop in fundraising participation. SLCFPD is in the rural area of Northern California and is primarily agriculture and forest land. This makes the area extremely susceptible to wildfire, which seasonally plague California.**

Community description

Please provide the following additional information about the community your organization serves.

Type of jurisdiction served	**Unincorporated Community**
What type of community does your organization serve?	**Rural**
What is the square mileage of your first due response zone/jurisdiction served?	**293**
What percentage of your primary response area is protected by hydrants?	**15**

What percentage of your primary response area is for the following:	**Percentage (must sum to 100%)**
Agriculture, wildland, open space, or undeveloped properties	65
Commercial and industrial purposes	15
Residential purposes	20
Total	100

What is the permanent resident population of your first due response zone/jurisdiction served?	**12500**
Do you have a seasonal increase in population?	**Yes**

What is your seasonal increase in population (number of people)?	**22500**
Please describe your organization and/or community that you serve.	**South Lake County Fire Protection District is a combination department that serves a first-due population of (12,500) Lake County residents. The SLCFPD membership is made up of (30) Full-time and volunteer fire positions. The primary response area encompasses (293) square miles and is covered by (4) fire stations. SLCFPD responds from (4) strategically located fire stations with (4) front line engines, (2) front line tankers, (2) brush/quick attacks, (1) rescue vehicle, and (5) support vehicles. The area that South Lake County Fire Protection District services is a predominately rural area in Northern California. A large percentage of the area is agriculture (65%), with (20%) being residential and (15%) commercial or industrial. Over the past three years, SLCFPD has responded to an average of (1,288) calls per year. SLCFPD has averaged (167) NFIRS "series 100" type calls over the same period, which include fires. Within the 293 square miles of area that the South Lake County Fire Protection District (SLCFPD) provides primary coverage, there are numerous critical components of local, regional, and national infrastructure. SLCFPD protects multiple K-12 school campuses spread across the district with thousands of Lake County students. Other critical infrastructure includes public water systems, public power systems, including (22) power plants that supply over (4) million homes, highways, pipelines, US Post Offices, and thousands of acres of forest and food-producing farmland. SCLFPD protects a large Department of Defense manufacturing facility that produces mission critical advanced weaponry components, which houses numerous hazardous substances and explosives. The SLCFPD provides automatic and mutual aid to surrounding jurisdictions. These jurisdictions include Sonoma County, Mendocino County, Napa County, Colusa County, Kelseyville FPD, Lake County FPD, Northern Sonoma County FPD, Lakeport FPD,**

Napa County FPD, and Northshore FPD. This automatic and mutual aid area includes multiple highways that are major thoroughfares between the San Francisco Bay area and the Napa Valley tourist region, Robert Louis Stevenson State Park, Mt. St. Helena, Railroads, Extended Care & Specialty Care Facilities, Psychiatric Residential Care Facilities, Multiple Medical & Dental Offices. SLCFPD is also part of the State of California Master Mutual Aid Agreement that responds statewide to protect critical infrastructure during emergencies and wildfires. Though the SLCFPD is a small combination department, the Lake County community expects a professional response to fire, rescue, hazardous materials and disaster incidents by the SLCFPD. In order to accomplish this, the SLCFPD requires adequate equipment for protection of its firefighters, sufficient and reliable equipment for management of incidents within the SLCFPD scope of service, functional fire apparatus, adequate training and sufficient trained firefighting and EMS personnel. Our mutual and automatic aid partner departments would benefit from this vehicle acquisition project when we respond with better outfitted personnel. We would be a more effective suppression force with equipment that kept our firefighters properly protected, and at lower risk of injury. We would be better prepared to take on assignments. Simply put, we would be far better prepared to protect our neighboring department members with adequate apparatus.

Call volume

Summary	2022	2021	2020
Fire - NFIRS Series 100	98	231	135
Overpressure Rupture, Explosion, Overheat (No Fire) - NFIRS Series 200	0	0	0
Rescue & Emergency Medical Service Incident - NFIRS Series 300	855	859	790

Summary	2022	2021	2020
Hazardous Condition (No Fire) - NFIRS Series 400	66	76	55
Service Call - NFIRS Series 500	185	149	172
Good Intent Call - NFIRS Series 600	0	0	0
False Alarm & Falls Call - NFIRS Series 700	0	0	0
Severe Weather & Natural Disaster - NFIRS Series 800	0	0	0
Special Incident Type - NFIRS Series 900	0	0	0
Total	1204	1315	1152

Fire

How many responses per year per category?	2022	2021	2020
"Structure Fire" (Of the NFIRS Series 100 calls, NFIRS Codes 111-120)	11	11	8
"Vehicle Fire" (Of the NFIRS Series 100 calls, NFIRS Codes 130-138)	83	93	106
"Vegetation Fire" (Of the NFIRS Series 100 calls, NFIRS Codes 140-143)	29	20	21
Total	123	124	135

Total acreage per year	2022	2021	2020
Total acreage of all vegetation fires	157	237	8457

Rescue and emergency medical service incidents

How many responses per year per category?	2022	2021	2020
"Motor Vehicle Accidents" (Of the NFIRS Series 300 calls, NFIRS Codes 322-324)	83	126	103

How many responses per year per category?	2022	2021	2020
"Extrications from Vehicles" (Of the NFIRS Series 300 calls, NFIRS Code 352)	32	27	21
"Rescues" (Of the NFIRS Series 300 calls, NFIRS Code 300, 351, 353-381)	10	14	11
EMS-BLS Response Calls	0	0	0
EMS-ALS Response Calls	855	841	687
EMS-BLS Scheduled Transports	0	0	0
EMS-ALS Scheduled Transports	0	0	0
Community Paramedic Response Calls	0	5	7
Total	980	1013	829

Mutual and automatic aid

How many responses per year per category?	2022	2021	2020
Amount of times the organization received Mutual Aid	33	14	9
Amount of times the organization received Automatic Aid	23	27	37
Amount of times the organization provided Mutual Aid	18	13	10
Amount of times the organization provided Automatic Aid	294	323	307
Of the Mutual and Automatic Aid responses, amount that were structure fires	23	22	18
Total	391	399	381

Grant request details

Are you requesting a Micro Grant? A Micro Grant is limited to $50,000 in federal resources. **No**

Grand total: $1,249,340.76

Program area: Vehicle acquisition

▸	**Activity: Vehicle acquisition**	**$1,249,340.76**

Grant request summary

The table below summarizes the number of items and total cost within each activity you have requested funding for. This table will update as you change the items within your grant request details.

Grant request summary

Activity	Number of items	Total cost
Vehicle acquisition	2	$1,249,340.76
Total	2	$1,249,340.76

Is your proposed project limited to one or more of the following activities : Planning and development of policies or processes. Management, administrative, or personnel actions. Classroom-based training. Acquisition of mobile and portable equipment (not involving installation) on or in a building.

No

Please download the EHP Screening form available at https://www.fema.gov/media-library/assets/documents/90195. Once you have been awarded the grant and have accepted the award, please complete and send your screening form and attachments to GPDEHPinfo@fema.dhs.gov.

Filename	Date uploaded	Uploaded by	Label	Description	Action

Budget summary

Budget summary

Object class categories	Total
Personnel	$0.00
Fringe benefits	$0.00
Travel	$0.00
Equipment	$1,249,340.76
Supplies	$0.00
Contractual	$0.00
Construction	$0.00
Other	$0.00
Total direct charges	$1,249,340.76
Indirect charges	$0.00
TOTAL	$1,249,340.76
Non-federal resources	
Applicant	$59,492.42
State	$0.00
Other sources	$0.00
Remarks	
Total Federal and Non-federal resources	
Federal resources	$1,189,848.34
Non-federal resources	$59,492.42
TOTAL	$1,249,340.76
Program income	$0.00

Contact information

Did any individual or organization assist with the development, preparation, or review of the application to include drafting or writing the narrative and budget, whether that person, entity, or agent is compensated or not and whether the assistance took place prior to submitting the application?
Yes

Application participants

Please add all individuals or organizations who assisted with the application.

Include all individuals or organizations who assisted with the development, preparation, or review of the application to include drafting or writing the narrative and budget, whether that person, entity, or agent is compensated or not and whether the assistance took place prior to submitting the application or not.

Fatima Rasul Frasul@lexipol.com	**Primary phone** 4159924251 Mobile **Fax**	**Mailing address** 2477 Gold Meadow way Suite 100 Gold River CA 95670

Secondary point of contact

Please provide a secondary point of contact for this grant.

The Authorized Organization Representative (AOR) who submits the application will be identified as the primary point of contact for the grant. Please provide one secondary point of contact for this grant below. The secondary contact can be members of the fire department or organizations applying for the grant that will see the grant through completion, are familiar with the grant application, and have the authority to make decisions on and to act upon this grant application. The secondary point of contact can also be an individual who assisted with the development, preparation, or review of the application.

MR Paul Duncan Assistant Chief	**Primary phone** 7074812362 Mobile **Fax**	**Additional phones** 7079873089 Work

paul.duncan@fire.ca.g	7079879478	7079942441 Work

Assurance and certifications

OMB number: 4040-0007, Expiration date: 02/28/2022 View burden statement

SF-424B: Assurances - Non-Construction Programs

OMB Number: 4040-0007
Expiration Date: 02/28/2022

Certain of these assurances may not be applicable to your project or program. If you have any questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C.§§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972

(P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
19. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

Certifications regarding lobbying

OMB Number: 4040-0013
Expiration Date: 02/28/2022

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, 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 of Lobbying Activities," 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 section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be

subject to a civil penalty of not less than $10,00 0 and not more than $100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any 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 commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

OMB number: 4040-0013, Expiration date: 02/28/2022 View burden statement

SF-LLL: Disclosure of Lobbying Activities

OMB Number: 4040-0013
Expiration Date: 02/28/2022

Complete only if the applicant is required to do so by 44 C.F.R. part 18. Generally disclosure is required when applying for a grant of more than $100, 000 and 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. Further, the recipient shall file a disclosure form at the end of each calendar quarter in which there occurs any event described in 44 C.F.R. § 18.110(c) that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by the applicant.

The applicant is not currently required to submit the SF-LLL.

Notice of funding opportunity

I certify that the applicant organization has consulted the appropriate Notice of Funding Opportunity and that all requested activities are programmatically allowable, technically feasible, and can be completed within the award's Period of Performance (POP).

Accuracy of application

I certify that I represent the organization applying for this grant and have reviewed and confirmed the accuracy of all application information submitted. Regardless of intent, the submission of

information that is false or misleading may result in actions by FEMA that include, but are not limited to: the submitted application not being considered for award, enforcement actions taken against an existing award pending investigation or review, or referral to the DHS Office of Inspector General.

Authorized Organizational Representative for the grant

By signing this application, I certify that I understand that inputting my password below signifies that I am the identified Authorized Organization Representative for this grant. Further, I understand that this electronic signature shall bind the organization as if the application were physically signed and filed.

Authorization to submit application on behalf of applicant organization

By signing this application, I certify that I am either an employee or official of the applicant organization and am authorized to submit this application on behalf of my organization; or, if I am not an employee or official of the applicant organization, I certify that the applicant organization is aware I am submitting this application on its behalf, that I have written authorization from the applicant organization to submit this application on their behalf, and that I have provided contact information for an employee or official of the applicant organization in addition to my contact information.

October 21, 2022

South Lake County Fire Protection District
21095 State Highway 175
Middletown, CA 95461

Chief Wink

Thank you for the opportunity to propose the following Rosenbauer fire apparatus:

One (1) Type-2 Engine with Commercial Chassis

	Base Price	Pre-pay: Chassis
Body Price	$414,060.00	$414,060.00
Chassis Price	$131,026.00	$126,015.00
Delivery	$5,769.00	$5,769.00
Ca State Sales Tax	$39,518.74	$39,155.44
7.250%	$590,373.74	$584,999.44

Please note: Pre-Con for (2) from Dept. at Factory
No Mid-Point Inspection Required
Final Inspection for (2) from Dept. at Factory
Final Delivery will be made by the Burton's Fire to the Dept.
A Performance Bond has been included.
Quoted Delivery is 755 days after receipt of order
(1) Day of Familiarizaition training by Burton's

Terms:

Final payment due upon delivery.
Pricing as quoted above is valid for 30 days.

Thank you again for this opportunity to work with your department, if you have any questions regarding the above proposal, please contact me at (209) 535-6993 or at Clay@burtonsfire.com

Sincerely,

Clay Hoobler
Burton's Fire Inc.

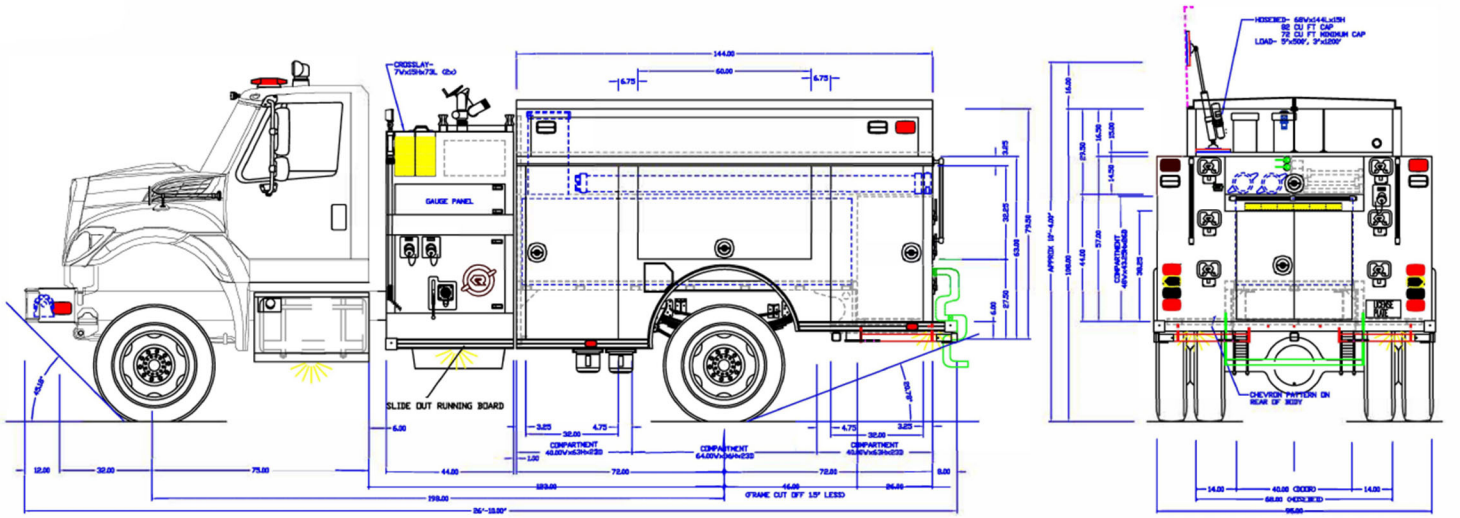
Burton's Fire Inc.
1301 Doker Drive
Modesto, CA 95351
209-544-3161
209-544-1109 Fax
www.burtonsfire.com

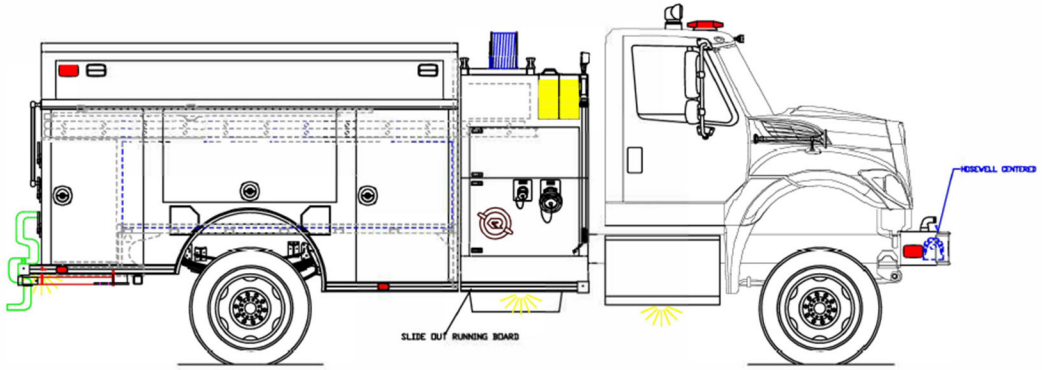
South Dakota Division
100 Third Street
Lyons, SD 57041
605-543-5591
605-543-9701 Fax
E-mail: sales@
rosenbaueramerica.com

Minnesota Division
5181 260th Street
P.O. Box 549
Wyoming, MN 55092
651-462-1000
651-462-1700 Fax
E-mail: sales@
rosenbaueramerica.com

Aerial Division
870 South Broad Street
Fremont, NE 68025
402-721-7622
402-721-7622 Fax
E-mail: sales@
rosenbaueramerica.com

NOTES:
1. OVERALL HEIGHT IS IN LOADED CONDITION. UNLOADED HEIGHTS MAY BE 4" ABOVE HEIGHTS SHOWN.
2. DO NOT SCALE DRAWING.
3. ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO ENGINEERING CHANGES.
4. DRAWING MAY OR MAY NOT SHOW ALL ITEMS AS DESCRIBED IN THE WRITTEN DETAIL SPECIFICATIONS.
5. INCLUSION OF AN ITEM ON THE DRAWING DOES NOT CONSTITUTE INCLUSION OF THAT ITEM WITH THE FINAL DELIVERED UNIT.
6. THE EFFECTIVE DOOR OPENINGS WILL BE APPROX. 2" LESS THAN THE NOTED COMPARTMENT OPENING FOR ROLL UP DOORS AND UP TO APPROX. 4" LESS FOR HINGED DOORS





APPROVED BY:

CHASSIS:	NAVISTAR 2DR 4x4
PUMP:	WATEROUS 1500 GPM
TANK:	POLY/500/10(FOAM)
PANEL MATL:	LINE X
COMP INTERIOR:	DA FINISH
MAXIMUM HEIGHT	10' 6"
MAXIMUM LENGTH	27'
BODY WIDTH	95"

REVISED: - DATE: -
DRAWN: BVZ DATE: 6/5/19

SOUTH LAKE COUNTY FPD, CA

ROSENBAUER FX 1/8"

DRAWING NUMBER: SO LAKE COUNTY,A REV: C-

Prepared For:
South Lake County CA.
Rosenbauer South Dakota LLC
PO Box 57
Lyons, SD 57041-0057
(605)543 - 5591
Reference ID: 14/26 Axles 2dr

Presented By:
CRAWFORD TRKS. & EQUIP.
Brian Brakefield
3601 - 6TH AVE SOUTHEAST
ABERDEEN SD 57401 -
(605)225-6200

Thank you for the opportunity to provide you with the following quotation on a new International truck. I am sure the following detailed specification will meet your operational requirements, and I look forward to serving your business needs.

Model Profile
2024 HV507 SFA (HV507)

AXLE CONFIG:	4X4
APPLICATION:	Fire/Pumper
MISSION:	Requested GVWR: 40000. Calc. GVWR: 40000. Calc. GCWR: 80000 Calc. Start / Grade Ability: 31.33% / 3.33% @ 55 MPH Calc. Geared Speed: 75.6 MPH
DIMENSION:	Wheelbase: 230.00, CA: 155.00, Axle to Frame: 75.00
ENGINE, DIESEL:	{Cummins L9 380} EPA 2021, 380HP @ 2100 RPM, 1150 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 380 Peak HP (Max), (RATED FOR EMERGENCY VEHICLES ONLY)
TRANSMISSION, AUTOMATIC:	{Allison 3000 EVS} 6th Generation Controls, Close Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor
CLUTCH:	Omit Item (Clutch & Control)
AXLE, FRONT DRIVING:	{Meritor MX-14-120 EVO} Single Reduction, 14,000-lb Capacity, with Hub Piloted Wheel Mounting
AXLE, REAR, SINGLE:	{Dana Spicer S26-190D} Single Reduction, 26,000-lb Capacity, Driver Controlled Locking Differential, R Wheel Ends Gear Ratio: 5.57
CAB:	Conventional, Day Cab
TIRE, FRONT:	(2) 12R22.5 Load Range H G622 RSD (GOODYEAR), 482 rev/mile, 75 MPH, Drive
TIRE, REAR:	(4) 12R22.5 Load Range H G622 RSD (GOODYEAR), 482 rev/mile, 75 MPH, Drive
SUSPENSION, REAR, SINGLE:	31,000-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs
PAINT:	Cab schematic 209WK Location 1: 0001, Canyon Black (Std) Location 2: 2484, Red (Custom) Chassis schematic N/A

Description	F/R Wt (lbs)	Tot Wt (lbs)
Base Chassis, Model HV507 SFA with 230.00 Wheelbase, 155.00 CA, and 75.00 Axle to Frame.	5783/3857	9640
AXLE CONFIGURATION		
AXLE CONFIGURATION {Navistar} 4x4	47/-148	-101
Notes : Pricing may change if axle configuration is changed.		
ENGINE		
ENGINE, DIESEL {Cummins L9 380} EPA 2021, 380HP @ 2100 RPM, 1150 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 380 Peak HP (Max), (RATED FOR EMERGENCY VEHICLES ONLY)	561/3	564
CARB EMISSION WARR COMPLIANCE for Cummins L9 Engines	0/0	0
CARB IDLE COMPLIANCE Engine Shutdown System Exempt Vehicles, Complies with California Clean Air Regulations	0/0	0
EMISSION, CALENDAR YEAR {Cummins L9} EPA, OBD and GHG Certified for Calendar Year 2023	0/0	0
RADIATOR Aluminum, Cross Flow, Front to Back System, 1228 SqIn, with 1167 SqIn Charge Air Cooler, Includes In-Tank Oil Cooler	22/-4	18
Includes : DEAERATION SYSTEM with Surge Tank : HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps : RADIATOR HOSES Premium, Rubber		
FAN DRIVE {Horton Drivemaster} Two-Speed Type, Direct Drive, with Residual Torque Device for Disengaged Fan Speed	0/0	0
Includes : FAN Nylon		
AIR CLEANER Single Element	0/0	0
ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection	0/0	0
ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls and Starter Lockout, with Ignition Switch Control, for Cummins B6.7 and L9 Engines	0/0	0
ENGINE WATER COOLER {Sen-Dure} Auxiliary, For Use with Fire Trucks	0/0	0
FAN OVERRIDE Manual; with Electric Switch on Instrument Panel, (Fan On with Switch On)	0/0	0
THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel	0/0	0
TRANSMISSION		
TRANSMISSION, AUTOMATIC {Allison 3000 EVS} 6th Generation Controls, Close Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor	224/59	283
ALLISON SPARE INPUT/OUTPUT for Emergency Vehicle Series (EVS), Fire/Pumper, Tank, Aerial/Ladder, Package Number 198, Includes J1939 Based Auto Neutral	0/0	0
AUTOMATIC NEUTRAL Allison Transmission Shifts to Neutral When Parking Brake is Engaged and Remains in Neutral When Parking Brake is Disengaged, without On/Off Switch	0/0	0
OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil Type	25/0	25
OIL COOLER, TRANSFER CASE with Oil Coolant Lines Routed to Oil Cooler	6/1	7

Description	F/R Wt (lbs)	Tot Wt (lbs)
PROVISION FOR PTO Top Mount; with Allison 3000 Transmission	0/0	0
PTO LOCATION Dual, Customer Intends to Install PTO at Left Side and/or Top of Transmission	0/0	0
SHIFT CONTROL PARAMETERS {Allison} 3000 or 4000 Series Transmissions, Performance Programming	0/0	0
TRANSFER CASE {Meritor MTC-4210} 2-Speed, 10,000 lb-ft Torque Rating, with PTO Provision, Electric Over Air Control, with Lube Pump	436/352	788
TRANSFER CASE LUBE {EmGard 50W} Synthetic; 1 thru 14.99 Pints	0/0	0
TRANSMISSION OIL Synthetic; 29 thru 42 Pints	0/0	0
TRANSMISSION SHIFT CONTROL Column Mounted Stalk Shifter, Not for Use with Allison 1000 & 2000 Series Transmission	1/0	1
CLUTCH		
CLUTCH Omit Item (Clutch & Control)	0/0	0
REAR AXLES, SUSPENSIONS		
AXLE, REAR, SINGLE {Dana Spicer S26-190D} Single Reduction, 26,000-lb Capacity, Driver Controlled Locking Differential, R Wheel Ends . Gear Ratio: 5.57	0/338	338
SUSPENSION, REAR, SINGLE 31,000-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs	0/132	132
SHOCK ABSORBERS, REAR (2)	0/45	45
FRONT AXLES		
AXLE, FRONT DRIVING {Meritor MX-14-120 EVO} Single Reduction, 14,000-lb Capacity, with Hub Piloted Wheel Mounting	737/0	737
Notes : Axle Lead Time is 90 Days		
FRONT SUSPENSIONS		
SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 14,000-lb Capacity, with Shock Absorbers	44/0	44
CABS, COWLS, BODIES		
CAB Conventional, Day Cab	0/0	0
ACCESS, CAB Steel, Driver & Passenger Sides, Two Steps per Door, for use with Day Cab and Extended Cab	0/0	0
AIR CONDITIONER with Integral Heater and Defroster	0/0	0
CAB INTERIOR TRIM Classic, for Day Cab	0/0	0
Includes : CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket; Located Above Driver and Passenger : DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Overhead Console, Center Mounted : SUN VISOR (2) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket Strap		
CAB, INTERIOR TRIM, CLOSEOUT Under IP, Driver Side	0/0	0

Description	F/R Wt (lbs)	Tot Wt (lbs)
CAB REAR SUSPENSION Air Bag Type	0/0	0
GAUGE CLUSTER Base Level; English with English Electronic Speedometer	0/0	0
Includes : GAUGE CLUSTER DISPLAY: Base Level (3" Monochromatic Display), Premium Level (5" LCD Color Display); Odometer, Voltmeter, Diagnostic Messages, Gear Indicator, Trip Odometer, Total Engine Hours, Trip Hours, MPG, Distance to Empty/Refill for : GAUGE CLUSTER Speedometer, Tachometer, Engine Coolant Temp, Fuel Gauge, DEF Gauge, Oil Pressure Gauge, Primary and Secondary Air Pressure : WARNING SYSTEM Low Fuel, Low DEF, Low Oil Pressure, High Engine Coolant Temp, Low Battery Voltage (Visual and Audible), Low Air Pressure (Primary and Secondary)		
GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} with Black Bezel, Mounted in Instrument Panel	2/0	2
GAUGE, OIL TEMP, AUTO TRANS for Allison Transmission	1/0	1
GAUGE, TEMPERATURE, AMBIENT Sensor Wiring with Display Unit Mounted in Cluster	0/0	0
GAUGE, VOLTMETER Auxiliary Gauge, Located in Center Panel. Standard Cluster Also Includes Digital Voltage Readout	0/0	0
GRAB HANDLE, EXTERIOR (2) Chrome, Towel Bar Type, with Anti-Slip Rubber Inserts, for Cab Entry Mounted Left and Right Side at B-Pillar	6/0	6
GRAB HANDLE, CAB INTERIOR (2) Safety Yellow	0/0	0
INSTRUMENT PANEL Flat Panel	0/0	0
IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster	0/0	0
MIRRORS (2) Aero Pedestal, Power Adjust, Heated, Turn Signals, Bright Heads, Black Arms, 6.5" x 14" Flat Glass, Includes 6.5" x 6" Convex Mirrors, for 102" Load Width	0/0	0
Notes : Mirror Dimensions are Rounded to the Nearest 0.5"		
MONITOR, TIRE PRESSURE Omit	-10/-1	-11
SEAT BELT All Red; 1 to 3	0/0	0
SEAT, DRIVER {National 2000} NFPA Compliant, Air Suspension, High Back with Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust	0/0	0
SEAT, TWO-MAN PASSENGER {National} Fixed Back, Integrated Headrest in Both Occupant Positions, Vinyl, with Under Seat Storage Compartment	43/27	70
SEATBELT WARNING PREWIRE Includes Seat Belt Switches and Seat Sensors for all Belted Positions in the Cab and a Harness Routed to the Center of the Dash for the Aftermarket Installation of the Data Recorder and Seatbelt Indicator Systems, for 1 to 3 Seat Belts	0/0	0
WINDOW, MANUAL (2) and Manual Door Locks, Left and Right Doors	0/0	0
FRAMES		
FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.866" x 3.622" x 0.437" (276.0mm x 92.0mm x 11.1mm); 456.0" (11582mm) Maximum OAL	244/509	753
BUMPER, FRONT Contoured, Stainless Steel, Polished	-25/3	-22
TOW HOOK, FRONT (2) Frame Mounted	8/0	8
WHEELBASE RANGE 207" (525cm) Through and Including 254" (645cm)	335/-335	0

Description	F/R Wt (lbs)	Tot Wt (lbs)
BRAKES		
BRAKE SYSTEM, AIR Dual System for Straight Truck Applications	0/0	0
Includes : BRAKE LINES Color and Size Coded Nylon : DRAIN VALVE Twist-Type : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel : PARKING BRAKE VALVE For Truck : QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4 : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6		
BRAKE, PARKING Manual Push-Pull Pneumatic Parking Brake	0/0	0
AIR BRAKE ABS {Bendix AntiLock Brake System} 4-Channel (4 Sensor/4 Modulator) Full Vehicle Wheel Control System	0/0	0
BRAKES, FRONT {Meritor 16.5X5 Q-PLUS CAST} Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 16.5" X 5", 14,700-lb Capacity	-23/0	-23
BRAKE CHAMBERS, FRONT AXLE {MGM} 20 SqIn	-1/0	-1
SLACK ADJUSTERS, FRONT {Haldex} Automatic	14/0	14
DUST SHIELDS, FRONT BRAKE for Air Cam Brakes	10/0	10
BRAKES, REAR {Meritor 16.5X7 P} Air S-Cam Type, Cast Spider, Cast Shoe, Double Anchor Pin, Includes Greaseable and Zinc Coated Anchor Pins, Size 16.5" X 7", 38,000-lb Capacity per Axle	0/106	106
BRAKE CHAMBERS, REAR AXLE {Bendix EverSure} 30/30 SqIn Spring Brake	0/7	7
SLACK ADJUSTERS, REAR {Haldex} Automatic	0/16	16
DUST SHIELDS, REAR BRAKE for Air Cam Brakes	0/10	10
AIR COMPRESSOR {Cummins} 18.7 CFM	0/0	0
AIR DRYER {Bendix AD-9} with Heater	19/9	28
AIR DRYER LOCATION Mounted Inside Left Rail, Behind Transfer Case Mounting	5/5	10
AIR TANK LOCATION (2) : One Mounted Under Each Rail, Front of Rear Suspension, Parallel to Rail	-23/43	20
DRAIN VALVE {Bendix DV-2} Automatic, with Heater, for Air Tank	2/0	2
STEERING		
STEERING GEAR {Sheppard M110} Power	42/-1	41
STEERING COLUMN Tilting	14/1	15
STEERING WHEEL 4-Spoke; 18" Dia., Black	0/0	0
DRIVELINES		
DRIVELINE SYSTEM {Dana Spicer} SPL170 Main Driveline, 1710 Driveline to Transfer Case, SPL140 Driveline to Front Axle, for 4x4	6/32	38
EXHAUST SYSTEMS		
EXHAUST SYSTEM Horizontal Aftertreatment System, Frame Mounted Right Side Under Cab, for Single Short Horizontal Tail Pipe, Frame Mounted Right Side Back of Cab, for All-Wheel Drive	57/-1	56

Description	F/R Wt (lbs)	Tot Wt (lbs)
AFTERTREATMENT COVER Steel, Black	11/2	13
ENGINE EXHAUST BRAKE for Cummins ISB/B6.7/ISL/L9 Engine with Variable Vane Turbo Charger	0/0	0
SWITCH, FOR EXHAUST 3 Position, Momentary, Lighted Momentary, ON/CANCEL, Center Stable, INHIBIT REGEN, Mounted in IP Inhibits Diesel Particulate Filter Regeneration When Switch is Moved to ON While Engine is Running, Resets When Ignition is Turned OFF	2/0	2
ELECTRICAL SYSTEMS		
ELECTRICAL SYSTEM 12-Volt, Standard Equipment	0/0	0
Includes : DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab : HAZARD SWITCH Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever : PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light : STARTER SWITCH Electric, Key Operated : STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector : TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature : WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever : WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted : WIRING, CHASSIS Color Coded and Continuously Numbered		
ALTERNATOR {Leece-Neville BLP4006HN} Brushless, 12 Volt, 325 Amp Capacity, Pad Mount, with Remote Sense	17/0	17
ANTENNA for Increased Roof Clearance Applications	1/0	1
BATTERY BOX Steel, with Aluminum Cover, 14" Wide, 2-3 Battery Capacity, Mounted Left Side Under Cab	-11/5	-6
BATTERY DISCONNECT SWITCH for Cab Power Disconnect Switch, Disconnects Power to Power Distribution Center (PDC) and Body Builder Through Solenoid, Does Not Disconnect Charging Circuits, Locks with Padlock, Cab Mounted	0/0	0
BATTERY SYSTEM {Fleetrite} Maintenance-Free, (3) 12-Volt 1980CCA Total, Top Threaded Stud	31/22	53
BODY BUILDER WIRING To Rear of Frame, with Stop, Tail, Turn, and Marker Lights Circuits, Ignition Controlled Auxiliary Feed and Ground, Less Trailer Socket	2/0	2
CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses	0/0	0
CIGAR LIGHTER Includes Ash Cup	1/0	1
CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade	0/0	0
COURTESY LIGHT (2) Mounted In Front Map Pocket Left and Right Side	1/0	1
DATA RECORDER Includes Display Mounted in Overhead Console	2/0	2
HEADLIGHTS Halogen, with Daytime Running Lights	0/0	0
HORN, AIR Single Trumpet, Black, with Lanyard Pull Cord	3/0	3
HORN, ELECTRIC (2) Disc Style	1/0	1
IGNITION SWITCH Keyless	2/0	2
INDICATOR, BATTERY WARNING Green BATTERY ON Indicator, Mounted on Left Side of Instrument Panel, To be Used with Factory Installed or Customer Mounted Battery Disconnect Switch	1/0	1
INDICATOR, LOW COOLANT LEVEL with Audible Alarm	0/0	0

Description	F/R Wt (lbs)	Tot Wt (lbs)
POWER SOURCE Cigar Type Receptacle without Plug and Cord	1/0	1
POWER SOURCE, ADDITIONAL Auxiliary Power Outlet (APO) with USB Port, Located in the Instrument Panel	1/0	1
RADIO AM/FM/WB/Clock/Bluetooth/USB Input/Auxiliary Input	3/0	3
SPEAKERS (2) 6.5" Dual Cone Mounted in Doors	5/0	5
STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt, Less Thermal Over-Crank Protection	8/1	9
SWITCH, AIR HORN, PASSENGER Fire Truck Application; Momentary Switch Located in Instrument Panel Close to Passenger, Driver Also To Activate Switch with Lanyard	0/0	0
TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender	0/0	0
FRONT END		
FRONT END Tilting, Fiberglass, with Three Piece Construction, for WorkStar/HV	0/0	0
FENDER EXTENSIONS Rubber	6/0	6
GRILLE Stationary, Chrome	0/0	0
GRILLE EMBER SCREEN Mounted to Grille and Cowl Tray to Keep Hot Embers out of Engine and HVAC Air Intake System	3/0	3
LOGOS EXTERIOR Model Badges	0/0	0
LOGOS EXTERIOR, ENGINE Badges	0/0	0
SPEEDOMETER, TOOLS, MISC		
COMMUNICATIONS MODULE Telematics Device with Over the Air Programming; Includes Five Year Data Plan and International 360	1/0	1
KEYS - ALL ALIKE, ID I-1003 Compatible with Z-001	0/0	0
PAINT SCHEMATIC, PT-1 Two Tone, Design 209.	0/0	0
PAINT TYPE Base Coat/Clear Coat, 1-2 Tone	0/0	0
SAFETY TRIANGLES	6/0	6
PAINT CLASS Single Custom Color	0/0	0
FUEL TANKS		
FUEL TANK Top Draw, Non-Polished Aluminum, 24" Dia, 50 US Gal (189L), Mounted Left Side, Under Cab	31/3	34
DEF TANK 5 US Gal (19L) Capacity, Frame Mounted Outside Left Rail, Under Cab	3/14	17
FUEL COOLER Less Thermostat; Mounted in Front of Cooling Module	14/0	14
FUEL/WATER SEPARATOR {Racor 400 Series} with Primer Pump, Includes Water-in-Fuel Sensor, Mounted on Engine	0/0	0
WHEELS, TIRES - FRONT		
WHEELS, FRONT {Alcoa ULT39} DISC; 22.5x8.25 Rims, High Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs	-65/0	-65
(2) TIRE, FRONT 12R22.5 Load Range H G622 RSD (GOODYEAR), 482 rev/mile, 75 MPH, Drive	16/0	16

Description	F/R Wt (lbs)	Tot Wt (lbs)
WHEELS, TIRES - REAR		
WHEELS, REAR {Alcoa ULT39} DUAL DISC; 22.5x8.25 Rims, High Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs	0/-131	-131
(4) TIRE, REAR 12R22.5 Load Range H G622 RSD (GOODYEAR), 482 rev/mile, 75 MPH, Drive	0/32	32
BODY INTEGRATION		
BDY INTG, I/O EXP HARNESS {for Diamond Logic Builder} In-Cab wire harness (DLB) program only, Includes a harness with five blunt cut wires routed on lower left of instrument panel. Two ground active inputs and two (.5Amp) relay drivers outputs are provided	0/0	0
Services Section:		
WARRANTY		
WARRANTY Standard for HV507, HV50B, HV607 Models, Effective with Vehicles Built July 1, 2017 or Later, CTS-2025A	0/0	0
CARB COMPANION PLAN {Navistar} for CARB B6.7 and L9 Engines	0/0	0
Total Component Weight:	**8709/5013**	**13722**

Body/Allied Equipment

Description	F/R Wt	Tot Wt

Goods Purchased

Description	F/R Wt	Tot Wt
DOT Kit	0/0	0
Total Goods Purchased:	**0/0**	**0**

The weight calculations included in this proposal are an estimate of future vehicle weight. The actual weight as manufactured may be different from the estimated weight. Navistar, Inc. shall not be liable for any consequences resulting from any differences between the estimated weight of a vehicle and the actual weight.

Financial Summary
2024 HV507 SFA (HV507)

(US DOLLAR)

Description	Price
Net Sales Price:	$119,300.00

Please feel free to contact me regarding these specifications should your interests or needs change. I am confident you will be pleased with the quality and service of an International vehicle.

Approved by Seller:

Official Title and Date

Authorized Signature

This proposal is not binding upon the seller without Seller's Authorized Signature

Accepted by Purchaser:

Firm or Business Name

Authorized Signature and Date

Official Title and Date

The TOPS FET calculation is an estimate for reference purposes only. The seller or retailer is responsible for calculating and reporting/paying appropriate FET to the IRS.

The limited warranties applicable to the vehicles described herein are Navistar, Inc.'s standard printed warranties which are incorporated herein by reference and to which you have been provided a copy and hereby agree to their terms and conditions.

GOLDEN STATE
FIRE APPARATUS

www.goldenstatefire.com
7400 Reese Road
Sacramento, CA 95828
Office 916.330.1638
Fax 916.330.1649

SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT

Golden State Fire Apparatus/ Pierce Manufacturing Quote Information

October 21, 2022

The following quote is for:

- One (1) BME Big Horn Type 2 Engine
- Two Options:
  - Option A – 100% Pre-Payment At Time Of Order
  - Option B – Payment At Time Of Completion

The following quote includes the following:

- Third party surety performance bond.
- One virtual pre-construction conference.
- One factory final inspection trip for two (2) customer representatives.
- Delivery of vehicle from the factory to dealership. Pre-delivery inspection at the dealership.
- Final delivery to customer location.
- DMV registration.
- State sales tax.
- California tire fee.
- Current day, vehicle completion is approximately 205 to 385 days after receipt of chassis at the BME factory.

GOLDEN STATE
FIRE APPARATUS

www.goldenstatefire.com
7400 Reese Road
Sacramento, CA 95828
Office 916.330.1638
Fax 916.330.1649

OPTION "A"
100% PRE-PAYMENT OPTION
PAYMENT DUE WITHIN FIFTEEN (15) DAYS AFTER RECIEPT OF ORDER

#	Description	Unit Price
A	BME IHC Type 2 Engine	$520,318.60
B	Discount For 100% Pre-Payment	($14,077.60)
	7.25% State Sales Tax	$36,702.47
	California Tire Fee	$10.50
	GRAND TOTAL	**$542,953.97**

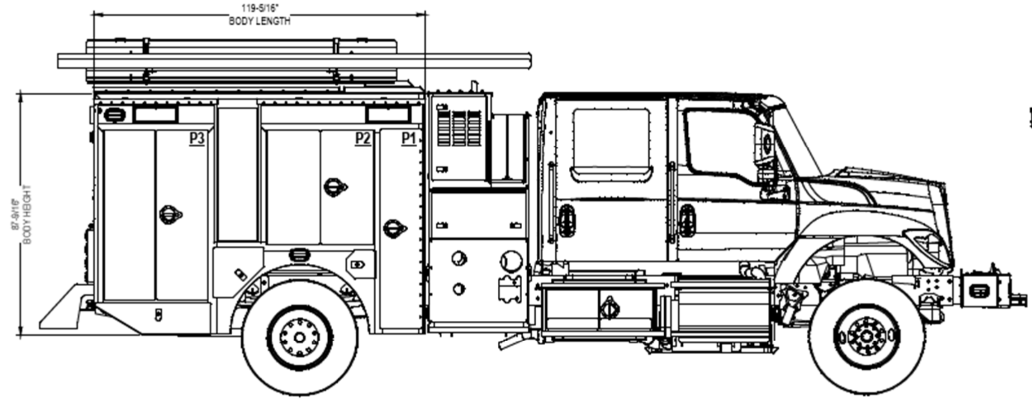
OPTION "B"
PAYMENT DUE AT TIME OF COMPLETION
PAYMENT DUE WITHIN FIFTEEN (15) DAYS OF FINAL INSPECTION AND PRIOR TO SHIPMENT

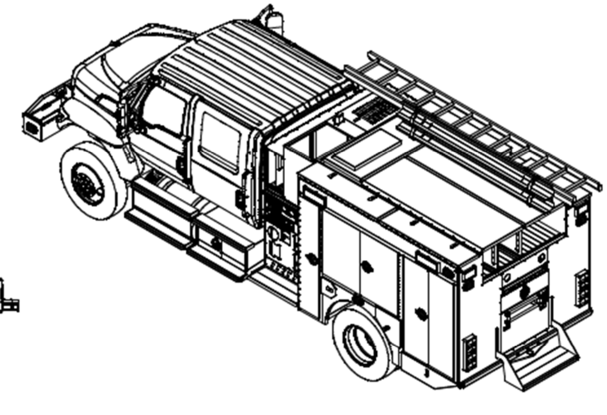
#	Description	Unit Price
A	BME IHC Type 2 Engine	$520,318.60
	7.25% State Sales Tax	$37,723.10
	California Tire Fee	$10.50
	GRAND TOTAL	**$558,052.20**

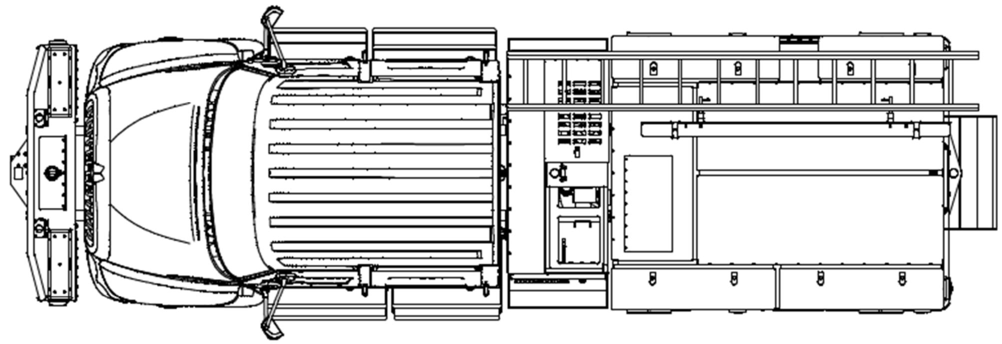
NOTE: Quote is valid for 15 days from date of issuance and is subject to change based on final specification option content

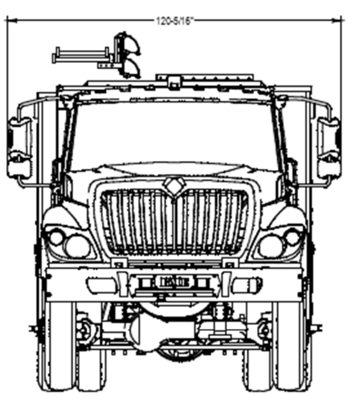
DRIVER'S STORAGE COMPARTMENTS				
LETTER	WIDTH (W)	HEIGHT (H)	DEPTH (D)	CAPACITY
D1	11.00	68.00	14.00/24.00	9.09
D2	53.00	38.00	14.75	19.25
D3	34.00	58.00	14.75/24.00	29.82
				0.00
TOTAL (CUBIC FEET)				58.16

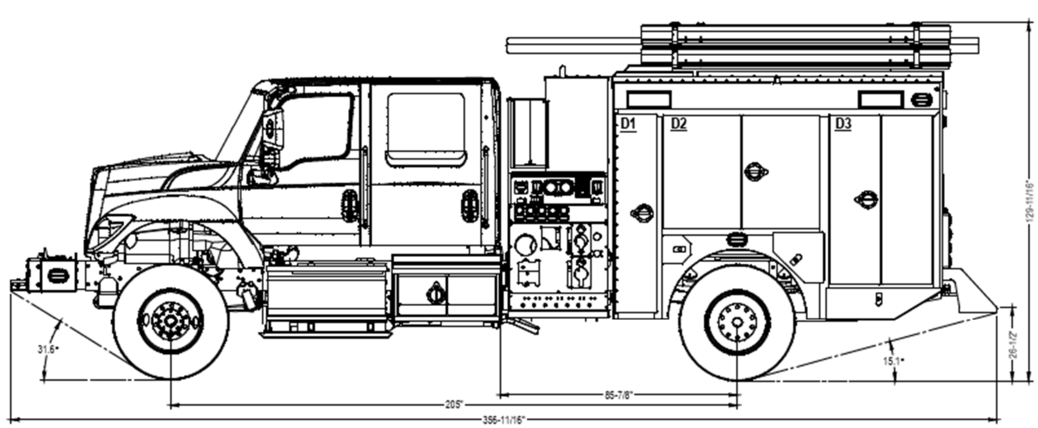
PASSENGER'S STORAGE COMPARTMENTS				
LETTER	WIDTH (W)	HEIGHT (H)	DEPTH (D)	CAPACITY
P1	11.00	68.00	14.00/24.00	9.09
P2	35.00	38.00	14.75	13.30
P3	34.00	58.00	14.75/24.00	29.82
				0.00
TOTAL (CUBIC FEET)				52.21

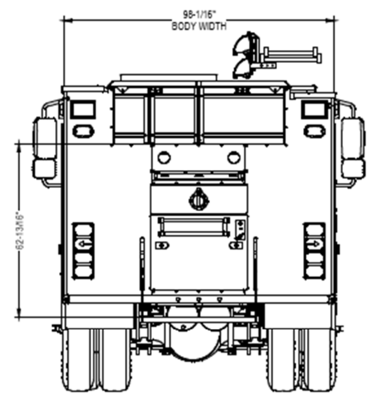












BME FIRE TRUCKS
4900 S. APPLE ST, BOISE, ID 83716

STD TYPE 2 - IHUI BIG HORN TOP LEVEL

WEIGHT: 91767.83

DO NOT SCALE DRAWING

PART NO: AP-00-014177

SHEET 1 OF 1

REV: A

BME Fire Trucks LLC

FIRE TRUCKS

for

SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT

INTERNATIONAL CHASSIS TYPE 2 "BIG HORN"

BME Fire Trucks LLC

DETERMINATION OF APPARATUS WEIGHT

BME Fire Trucks, LLC. shall submit estimated "in-service" weight analysis required by applicable NFPA standards. This Excel computer weight analysis shall break down all major components of the apparatus and shall show the impact on percentage-of-load on the front and rear axles, total weight, and weight on each tire set.

The analysis shall evenly distribute the NFPA required minimum payload allowance or estimated equipment payload as provided by the purchaser into the specified compartments. The allowance for personnel, hose loads, water and foam fluids, and required NFPA equipment shall be outlined individually in the analysis and placed on the apparatus in its specific intended position.

CENTER-OF-GRAVITY ANALYSIS

BME Fire Trucks, LLC. shall perform an estimated center of gravity calculation as required by the applicable section of NFPA standards. This calculation shall include tilt angles, the estimated right to left load distribution, and load on each axle, including all specified major components.

LOW VOLTAGE TEST REQUIRMENTS

The fire apparatus low voltage electrical system shall be tested as required by this section and the test results shall be certified by the apparatus manufacturer. The certification shall be delivered to the purchaser with the documentation for the completed apparatus. The tests shall be performed when the air temperature is between 0 degrees Fahrenheit and 110 degrees Fahrenheit.

TEST SEQUENCE

The three tests defined below shall be performed in the order in which they appear. Before each test, the chassis batteries shall be fully charged until the voltage stabilizes at the voltage regulator set point and the lowest charge current is maintained for 10 minutes. The failure of any of these tests shall require a repeat of the test sequence.

RESERVE CAPACITY TEST

The chassis engine shall be started and kept running until the chassis engine and engine compartment temperatures are stabilized at normal operating temperatures and the chassis battery system is fully charged. The chassis engine shall be shut off and the minimum continuous electrical load shall be applied for 10 minutes. All electrical loads shall be turned off prior to attempting to restart the chassis engine. The chassis battery system shall then be capable of restarting the chassis engine. The failure to restart the chassis engine shall be considered a failure of this test.

ALTERNATOR PERFORMANCE TEST AT IDLE

The minimum continuous electrical load shall be applied with the chassis engine running at idle speed. The chassis engine temperature shall be stabilized at normal operating temperature. The chassis battery system shall be tested to detect the presence of a chassis battery current discharge. The detection of chassis battery current discharge shall be considered a failure of this test.

ALTERNATOR PERFORMANCE TEST AT FULL LOAD

The total continuous electrical load shall be applied with the chassis engine running up to the engine manufacturer's governed speed. The test duration shall be a minimum of two hours. The activation of the electrical system load management system shall be permitted during this test. The activation of an alarm due to excessive chassis battery discharge, as detected by the system required by NFPA (current edition), or an electrical system voltage of less than 11.8 volts direct current for a 12 volt direct current nominal system, for more than 120 seconds, shall be considered a failure of this test.

LOW VOLTAGE ALARM TEST

Following the completion of the tests described above, the chassis engine shall be turned off. With the chassis engine turned off, the total continuous electrical load shall be applied and shall continue to be applied until the excessive battery discharge alarm activates. The chassis battery voltage shall be measured at the battery terminals.

The test shall be considered to be a failure if the low voltage alarm has not yet sounded 140 seconds after the voltage drops to 11.70 volts direct current for a 12 volt direct current nominal system. The chassis battery system shall then be able to restart the chassis engine. The failure of the chassis battery system to restart the chassis engine shall be considered a failure of this test.

The completed fire apparatus shall undergo a complete 12 volt electrical load and performance testing per applicable sections of NFPA standards with inspection and test sheets included in delivery documentation.

DOCUMENTATION

The apparatus manufacturer shall provide the results of the low-voltage electrical system performance test, certified in writing, with the documentation provided to the purchaser at the time of delivery of the completed apparatus.

The test results shall consist of the following documents:

(1) Documentation of the electrical system performance tests.
(2) A written electrical load analysis, including the following:

- (a) The nameplate rating of the alternator.
- (b) The alternator rating under the conditions specified in NFPA 1906 (current edition).
- (c) Each of the component loads specified that make up the minimum continuous electrical load.

- (d) Additional electrical loads that, when added to the minimum continuous electrical load, determine the total continuous electrical load.
- (e) Each individual intermittent electrical load.

TEST RESULTS

BME Fire Trucks LLC. shall provide results of the apparatus testing and shall certify the following:

The weight of the completed apparatus, when loaded to it's estimated in service weight, does not exceed the GVWR and GAWR of the chassis.

The complete unit, when loaded to its estimated in service weight, meets the weight distribution and vehicle stability requirements, as defined in the current NFPA guidelines.

The unit meets all required federal standards pertaining to the manufacturer and completion of the apparatus and a label tag has been affixed to the apparatus by the manufacturer stating same.

BME Fire Trucks LLC. shall provide all testing results, including engine, speed, acceleration, road ability, braking, and auxiliary braking to the Purchaser at the time of delivery.

DELIVERY REQUIREMENTS

The bidder shall not be responsible for delays in delivery due to strikes, acts of God, failure of suppliers to deliver, chassis shortage and other reasons beyond the reasonable control of the builder. Should BME Fire Trucks, LLC. be unable to comply with the proposed delivery date, we shall immediately contact the purchaser regarding delay information and actions to be taken by the company.

This vehicle shall be F.O.B. the BME Fire Trucks facility in Boise Idaho. Dealer shall be responsible for arrangement of delivery from factory.

GENERAL WARRANTY PROVISIONS

All materials and workmanship herein specified, including all equipment furnished, shall be guaranteed for a period of one (1) year after the acceptance date of the apparatus, unless otherwise noted, with the exception of any normal maintenance services or adjustments which shall be required. Under this warranty, BME Fire Trucks, LLC. shall be responsible for the costs of repairs to the apparatus that have been caused by defective workmanship or materials during this period.

This warranty shall not apply to the following:

- Any component parts or trade accessories such as chassis, engines, tires, pumps, valves, signaling devices, batteries, electric lights, bulbs, alternators, and all other installed equipment and accessories, in

as much as they are usually warranted separately by their respective manufacturers, or are subject to normal wear and tear.

- Failures resulting from the apparatus being operated in a manner or for a purpose not recommended by the apparatus manufacturer.
- Loss of time or use of the apparatus, inconvenience or other incidental expenses.
- Any apparatus which has been repaired or altered without written consent or outside of the apparatus manufacturer's factory and or authorized service center in any way that affects its stability, or which has been subject to misuse, negligence, or accident.
- Delivery of the apparatus to repair site.

DISCLAIMER

NO WARRANTIES ARE GIVEN BEYOND THOSE DESCRIBED HEREIN. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. THE COMPANY SPECIFICALLY DISCLAIMS WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OTHER REPRESENTATIONS TO THE USER/PURCHASER AND ALL OTHER OBLIGATIONS OR LIABILITIES. FURTHER, THE COMPANY EXCLUDES LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES, ON THE PART OF THE COMPANY OR SELLER. No person is authorized to give any other warranties or to assume any liabilities on the Company's behalf unless made or assumed in writing by the seller; and no other person is authorized to give any warranties or to assume any liabilities on the seller's behalf unless made or assumed in writing by the seller.

OBTAINING SERVICE

Return the vehicle to any BME Fire Trucks, LLC. dealer/authorized service center; Return the vehicle to BME Fire Trucks, LLC. or contact BME Fire Trucks, LLC.. BME Fire Trucks, LLC. shall be solely responsible for determining the extent of repair under the terms of the warranty. Transportation costs shall be the responsibility of the purchaser.

MATERIAL AND WORKMANSHIP

All equipment provided shall be guaranteed to be new and of current manufacture, and unless specified otherwise, shall meet all requirements of these specifications and prevailing NFPA documents and be in condition at time of delivery for use as specified for this type of apparatus.

All workmanship shall be of the highest quality and accomplished in a professional manner so as to insure a functional apparatus with a high quality aesthetic appearance.

The construction shall be rugged and ample safety factors shall be provided to carry the loads specified to meet both on and off road requirements.

The apparatus shall be designed and the equipment mounted with due consideration to the distribution of load between the front and rear axles, so all specified equipment, with a full complement of personnel, can be carried without damage to the apparatus.

BODY AND STRUCTURAL WARRANTY

BME Fire Trucks, LLC. shall warrant each new apparatus body, if used in a normal and reasonable manner, against structural defects caused by defects in material, design or workmanship for a period of ten (10) years, covering parts & labor to the original purchaser which shall start on day of acceptance.

This warranty shall not apply to:

- Normal maintenance services or adjustments
- To any vehicle which will have been repaired or altered outside of our factory in any way so as, in the judgment of BME Fire Trucks, LLC., to affect it's stability, nor which has been subject to misuse, negligence, or accident, nor to any vehicle made by us which will have been operated to a speed exceeding the factory rated speed, or loaded beyond the factory rated load capacity.
- Commercial chassis and associated equipment furnished with chassis, signaling devices, generators, batteries, or other trade accessories as they are usually warranted separately by their respective manufacturers.
- Shipping costs of parts or apparatus for purposes of repair or replacement of parts. This warranty is in lieu of all other warranties, expressed or implied. All other representations as to the original purchaser and all other obligations or liabilities, including for incidental or consequential damage on the company's behalf unless made in writing by the company.

DARLEY FIRE PUMP WARRANTY

A three (3) year warranty on the Darley fire pump shall be provided. The provisions of this warranty shall be described in the completed apparatus documentation.

PLUMBING WARRANTY

The stainless steel fire pump plumbing shall carry a ten (10) year parts and labor warranty against defects in

workmanship and perforation corrosion.

AKRON VALVE WARRANTY

The Akron valves shall carry a ten (10) year parts and labor manufacturer's warranty. Provisions of this warranty shall be provided with the completed apparatus documentation.

FOAM TANK WARRANTY

The foam tank shall carry a "lifetime" warranty against defects in workmanship and perforation corrosion. The provisions of this warranty shall be provided in the delivery documentation. The tank manufacturer shall repair, at no cost to the purchaser, any problems caused by defective materials and/or workmanship. The warranty shall cover the reasonable costs of removing the water tank from the apparatus and reinstalling it after the completion of the covered warranty repairs, but shall not cover any liability for the loss of service or downtime costs of the apparatus.

WATER TANK WARRANTY

The polypropylene water tank that is specified to be supplied with this apparatus shall be warranted by the water tank manufacturer for a "lifetime" period from the date that the apparatus is put into service. The tank manufacturer shall repair, at no cost to the purchaser, any problems caused by defective materials and/or workmanship. The warranty shall cover the reasonable costs of removing the water tank from the apparatus and reinstalling it after the completion of the covered warranty repairs, but shall not cover any liability for the loss of service or downtime costs of the apparatus.

PAINT WARRANTY

BME Fire Trucks, LLC. shall provide a seven (7) year paint warranty which shall cover peeling and/or de-lamination of the top coat and other layers of paint, cracking or checking, loss of gloss caused by cracking, checking or chalking, and any paint failure caused by defective paint materials covered by the paint manufacturer's material warranty.

CHASSIS WARRANTY

The specified chassis shall be provided with the chassis manufacturer's warranty. The exact provisions of this warranty shall be supplied with the completed apparatus documentation.

APPARATUS OPERATION MANUAL(S)

BME Fire Trucks, LLC. shall provide (2) electronic apparatus operational manual(s) on a USB thumb drive.

BME Fire Trucks LLC

CHASSIS SPECIFICATIONS

Base Chassis, Model HV507 SFA with 205.00 Wheelbase, 86.10 CA, and 83.00 Axle to Frame.

TOW HOOK, FRONT (2) Frame Mounted

AXLE CONFIGURATION {Navistar} 4x4

FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.125" x 3.580" x 0.312" (257.2mm x 90.9mm x 8.0mm); 480.0" (12192) Maximum OAL

FRAME REINFORCEMENT Full Outer C-Channel, Heat Treated Alloy Steel (120,000 PSI Yield), 10.813" x 3.892" x 0.312" (274.6mm x 98.8mm x 7.9mm), 480.0" (12192mm) OAL

BUMPER, FRONT Swept Back 15-Degrees, Steel, for use with Front Frame Extensions, Heavy Duty

FRAME, SPECIAL EFFECTS Dimple on Left and Right Top Flange of Frame Rail to Reference Rear Axle Centerline

FRAME EXTENSION, FRONT Integral; 20" In Front of Grille

WHEELBASE RANGE 181" (460cm) Through and Including 205" (520cm)

AXLE, FRONT DRIVING {Meritor MX-12-120 EVO} Single Reduction, 12,000-lb Capacity, with Hub Piloted Wheel Mounting

AXLE, FRONT DRIVING, LUBE {EmGard FE-75W-90} Synthetic Oil; 1 thru 29.99 Pints

SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 12,000-lb Capacity, with Shock Absorbers

BRAKE SYSTEM, AIR Dual System for Straight Truck Applications

Includes

: BRAKE LINES Color and Size Coded Nylon

: DRAIN VALVE Twist-Type

: GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster

: PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel

: PARKING BRAKE VALVE For Truck

: QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4

: SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6

BME Fire Trucks LLC

AIR BRAKE ABS {Bendix AntiLock Brake System} 4-Channel (4 Sensor/4 Modulator) Full Vehicle Wheel Control System

AIR DRYER {Bendix AD-IP} with Heater

BRAKE CHAMBERS, FRONT AXLE {MGM} 20 SqIn

BRAKE CHAMBERS, REAR AXLE {Bendix EverSure} 36/36 SqIn Spring Brake

SLACK ADJUSTERS, FRONT {Haldex} Automatic

SLACK ADJUSTERS, REAR {Haldex} Automatic

AIR COMPRESSOR {Cummins} 18.7 CFM

AIR DRYER LOCATION Mounted Inside Left Rail, Behind Transfer Case Mounting

AIR TANK LOCATION (2) Mounted Under Battery Box, Outside Left Rail, Back of Cab, Perpendicular to Rail

DUST SHIELDS, FRONT BRAKE for Air Cam Brakes

DRAIN VALVE (3) Petcocks, for Air Tanks

DUST SHIELDS, REAR BRAKE for Air Cam Brakes

BRAKES, REAR {Meritor 16.5X7 P} Air S-Cam Type, Cast Spider, Cast Shoe, Double Anchor Pin, Includes Greaseable and Zinc Coated Anchor Pins, Size 16.5" X 7", 38,000-lb Capacity per Axle

BRAKES, FRONT {Meritor 16.5X5 Q-PLUS CAST} Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 16.5" X 5", 14,700-lb Capacity

STEERING COLUMN Tilting

STEERING WHEEL 4-Spoke; 18" Dia., Black

STEERING GEAR {Sheppard M100} Power

DRIVELINE SYSTEM {Dana Spicer} SPL170 Main Driveline, 1710 Driveline to Transfer Case, SPL140 Driveline to Front Axle, for 4x4

AFTERTREATMENT COVER Polished Aluminum

EXHAUST SYSTEM Horizontal Aftertreatment System, Frame Mounted Right Side Under Cab, for Single Short Horizontal Tail Pipe, Frame Mounted Right Side Back of Cab, for All-Wheel Drive

ENGINE COMPRESSION BRAKE {Jacobs} for Cummins ISL/L9 Engines; with Selector Switch and On/Off Switch

BME Fire Trucks LLC

SWITCH, FOR EXHAUST 3 Position, Momentary, Lighted Momentary, ON/CANCEL, Center Stable, INHIBIT

REGEN, Mounted in IP Inhibits Diesel Particulate Filter Regeneration When Switch is Moved to ON While

Engine is Running, Resets When Ignition is Turned OFF

ELECTRICAL SYSTEM 12-Volt, Standard Equipment

Includes

: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab

: HAZARD SWITCH Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel

: HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever

: PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light

: STARTER SWITCH Electric, Key Operated

: STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector

: TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change

Feature

: WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever

: WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted

: WIRING, CHASSIS Color Coded and Continuously Numbered

CIGAR LIGHTER Includes Ash Cup

HORN, ELECTRIC (2) Disc Style

FOG LIGHTS Prewire; Includes Auxiliary Switch and Wiring to Front Bumper, for Driving Lights or Fog Lights Mounted by Customer

POWER SOURCE Cigar Type Receptacle without Plug and Cord

ALTERNATOR {Leece-Neville BLP4006HN} Brushless, 12 Volt, 325 Amp Capacity, Pad Mount, with Remote Sense

BODY BUILDER WIRING Rear of Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/ Accessory Power/Ground and Sealed Connector for Stop/Turn

BME Fire Trucks LLC

BATTERY SYSTEM {Fleetrite} Maintenance-Free, (3) 12-Volt 2850CCA Total, Top Threaded Stud

SPEAKERS (2) 6.5" Dual Cone Mounted in Both Doors, (2) 5.25" Dual Cone Mounted in Both B-Pillars

ANTENNA for Increased Roof Clearance Applications

RADIO AM/FM/WB/Clock/Bluetooth/USB Input/Auxiliary Input

BATTERY CABLES with 36" of Extra Length Coiled and Strapped Near Battery Box

DATA RECORDER Includes Display Mounted in Overhead Console

STOP-LIGHT WIRING MODIFIED Stop-Lights Turned on When Engine Compression Brake, Exhaust Brake or Retarder is Activated

JUMP START STUD Remote Mounted

WINDSHIELD WIPER SPD CONTROL Force Wipers to Slowest Intermittent Speed When Park Brake Set and Wipers Left on for a Predetermined Time

BATTERY BOX Steel, with Fiberglass Cover, 2-4 Battery Capacity, Mounted Left Side Perpendicular to Frame Rail, 53" Back of Cab

CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade

TEST EXTERIOR LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back-up Lights

HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on

STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt, Less Thermal Over-Crank Protection

COURTESY LIGHT (4) Mounted In Front & Rear Map Pocket Left and Right Side

INDICATOR, LOW COOLANT LEVEL with Audible Alarm

ALARM, PARKING BRAKE Electric Horn Sounds in Repetitive Manner When Vehicle Park Brake is "NOT" Set, with Ignition "OFF" and any Door Opened

INDICATOR, BATTERY WARNING Green BATTERY ON Indicator, Mounted on Left Side of Instrument Panel, To be Used with Factory Installed or Customer Mounted Battery Disconnect Switch

CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses

SWITCH, AUXILIARY Switch 40 amp Circuit for Customer Use; Includes Wiring Connection at Power Distribution Center (PDC) and Control in Cab

TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender

BME Fire Trucks LLC

BATTERY DISCONNECT SWITCH 300 Amp, Disconnects Charging Circuits, Locks with Padlock, Cab Mounted

HORN, AIR Single Trumpet, Black, with Lanyard Pull Cord

HEADLIGHTS Halogen, with Daytime Running Lights

FENDER EXTENSIONS Omit

LOGOS EXTERIOR Model Badges, Shipped Loose, Located in Cab

LOGOS EXTERIOR, ENGINE Badge Shipped Loose

INSULATION, UNDER HOOD for Sound Abatement

GRILLE Stationary, Chrome

INSULATION, SPLASH PANELS for Sound Abatement

BUG SCREEN Mounted Behind Grille

FRONT END Tilting, Fiberglass, with Three Piece Construction, for WorkStar/HV

GRILLE EMBER SCREEN Mounted to Grille and Cowl Tray to Keep Hot Embers out of Engine and HVAC Air Intake System

PAINT SCHEMATIC, PT-1 Single Color, Design 100

Includes

: PAINT SCHEMATIC ID LETTERS "WK"

TOOL KIT Rim Wrench and Handle Only

PAINT IDENTITY, PT-2 Single Color, Instruction No. 936. Frame/Running Gear, Less Fuel Tanks

Includes

: NOTE: Battery Box, Air Tanks, Fuel Tanks, Steps and Straps NOT Painted

PAINT TYPE Base Coat/Clear Coat, 1-2 Tone

PAINT CLASS Single Custom Color

COMMUNICATIONS MODULE Telematics Device with Over the Air Programming; Includes Five Year Data Plan and International 360

PROMOTIONAL PACKAGE Government Silver Package

BME Fire Trucks LLC

KEYS - ALL ALIKE, ID I-1003 Compatible with Z-001

CLUTCH Omit Item (Clutch & Control)

ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection

BLOCK HEATER, ENGINE 120V/1000W, for Cummins ISB/B6.7/ISL/L9 Engines Includes

: BLOCK HEATER SOCKET Receptacle Type; Mounted below Drivers Door

ENGINE, DIESEL {Cummins L9 350} EPA 2021, 350HP @ 2200 RPM, 1050 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 350 Peak HP (Max)

FAN DRIVE {Horton Drivemaster} Two-Speed Type, Direct Drive, with Residual Torque Device for Disengaged Fan Speed

Includes

: FAN Nylon

RADIATOR Aluminum, Cross Flow, Front to Back System, 1228 SqIn, with 1167 SqIn Charge Air Cooler, Includes In-Tank Oil Cooler

Includes

: DEAERATION SYSTEM with Surge Tank

: HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps

: RADIATOR HOSES Premium, Rubber

AIR CLEANER Dual Element

EMISSION, CALENDAR YEAR {Cummins L9} EPA, OBD and GHG Certified for Calendar Year 2022

THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel

FAN OVERRIDE Manual; with Electric Switch on Instrument Panel, (Fan On with Switch On)

ENGINE WATER COOLER {Sen-Dure} Auxiliary, For Use with Fire Trucks

CARB IDLE COMPLIANCE Engine Shutdown System Exempt Vehicles, Complies with California Clean Air Regulations

CARB EMISSION WARR COMPLIANCE for Cummins L9 Engines

BME Fire Trucks LLC

ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls and Starter Lockout, with Ignition Switch Control, for Cummins B6.7 and L9 Engines

TRANSMISSION, AUTOMATIC {Allison 3000 EVS} 5th Generation Controls, Close Ratio, 5-Speed with Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor, Max, GVW N/A

TRANSFER CASE {Meritor MTC-4210} 2-Speed, 10,000 lb-ft Torque Rating, with PTO Provision, Electric Over Air Control, with Lube Pump

OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil Type

TRANSFER CASE LUBE {EmGard 50W} Synthetic; 1 thru 14.99 Pints

TRANSMISSION SHIFT CONTROL Column Mounted Stalk Shifter, Not for Use with Allison 1000 & 2000 Series Transmission

OIL COOLER, TRANSFER CASE with Oil Coolant Lines Routed to Oil Cooler

TRANSMISSION OIL Synthetic; 29 thru 42 Pints

ALLISON SPARE INPUT/OUTPUT for Emergency Vehicle Series (EVS), Fire/Pumper, Tank, Aerial/Ladder, Package Number 198

SHIFT CONTROL PARAMETERS {Allison} 3000 or 4000 Series Transmissions, Performance Programming

PTO LOCATION Dual, Customer Intends to Install PTO at Left and/or Right Side of Transmission

AXLE, REAR, SINGLE {Meritor RS-30-185} Single Reduction, Narrow Track, 30,000-lb Capacity, T Wheel Ends . Gear Ratio: 4.89

SUSPENSION, REAR, SINGLE 31,000-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Multileaf Springs

SHOCK ABSORBERS, REAR (2)

AXLE, REAR, LUBE {EmGard FE-75W-90} Synthetic Oil; 40 thru 49.99 Pints

DEF TANK 9.5 US Gal (36L) Capacity, Frame Mounted Outside Left Rail, Under Cab

FUEL/WATER SEPARATOR {Racor 400 Series} 12 VDC Electric Heater, Includes Pre-Heater, with Primer Pump, Includes Water-in-Fuel Sensor, Mounted on Engine

FUEL TANK Top Draw, Non-Polished Aluminum, 26" Dia, 70 US Gal (265L), Mounted Left Side, Under Cab

FUEL COOLER Less Thermostat; Mounted in Front of Cooling Module

AUXILIARY FUEL DRAW TUBE Located at Auxiliary Port on Fuel Tank

BME Fire Trucks LLC

CAB Conventional 6-Man Crew Cab

AIR CONDITIONER with Integral Heater and Defroster

GAUGE CLUSTER Base Level; English with English Electronic Speedometer

Includes

: GAUGE CLUSTER DISPLAY: Base Level (3" Monochromatic Display), Premium Level (5" LCD Color Display); Odometer, Voltmeter, Diagnostic Messages, Gear Indicator, Trip Odometer, Total Engine Hours, Trip Hours, MPG, Distance to Empty/Refill for

: GAUGE CLUSTER Speedometer, Tachometer, Engine Coolant Temp, Fuel Gauge, DEF Gauge, Oil Pressure Gauge, Primary and Secondary Air Pressure

: WARNING SYSTEM Low Fuel, Low DEF, Low Oil Pressure, High Engine Coolant Temp, Low Battery Voltage (Visual and Audible), Low Air Pressure (Primary and Secondary)

SEATBELT WARNING PREWIRE Includes Seat Belt Switches and Seat Sensors for all Belted Positions in the Cab and a Harness Routed to the Center of the Dash for the Aftermarket Installation of the Data Recorder and Seatbelt Indicator Systems, for 4 to 6 Seat Belts

GAUGE, OIL TEMP, AUTO TRANS for Allison Transmission

GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} with Black Bezel, Mounted in Instrument Panel

IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster

SEAT, DRIVER {H.O. Bostrom Sierra Air 100} NFPA Compliant, Air Suspension, High Back, Vinyl with Covered Back and International Logo on Headrest, for Fire Truck

SEAT, PASSENGER {H.O. Bostrom Sierra Air 100} NFPA Compliant, Air Suspension, High Back, Vinyl with Covered Back, International Logo on Headrest, for Fire Truck

GRAB HANDLE, EXTERIOR (2) Chrome, Towel Bar Type, with Anti-Slip Rubber Inserts, for Cab Entry Mounted Left and Right Side at B-Pillar

GRAB HANDLE, ADDITIONAL EXT (2) Chrome, Towel Bar Type, with Anti-Slip Rubber Inserts, Mounted Left and Right Side, Rear of Rear Doors, for Crew Cab

SEAT, REAR {National} BENCH; Full Width; Vinyl, with Fixed Back and Two Integral Outboard Headrests

MIRRORS (2) C-Loop, Power Adjust, Heated, LED Clearance Lights, Bright Heads and Arms, 7.5" x 14" Flat Glass, Includes 7.5" x 7" Convex Mirrors, for 102" Load Width

SEAT BELT All Red; 4 to 6

CAB INTERIOR TRIM Classic, for Crew Cab

Includes

: CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket; Located Above Driver and Passenger

: DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Overhead Console, Center Mounted

: SUN VISOR (2) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket Strap

CAB SOUND INSULATION Includes Dash Insulator and Engine Cover Insulator

HOURMETER, PTO for Customer Provided PTO; with Indicator Light and Hourmeter in Gauge Cluster Includes Return Wire for PTO Feedback Switch

CAB REAR SUSPENSION Air Bag Type

WINDOW, MANUAL (4) and Manual Door Locks, Front and Rear Doors, Left and Right

INSTRUMENT PANEL Flat Panel

ACCESS, CAB Steel, Driver & Passenger Sides, Two Steps per Door, for use with Crew Cab

STEP, STANDARD, OMIT Driver & Passenger Sides, Omit Rear Steps for use with Crew Cab

WHEELS, FRONT {Accuride 41730} DISC; 22.5x9.00 Rims, Standard Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs

WHEELS, REAR {Accuride 41730} DUAL DISC; 22.5x9.00 Rims, Standard Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs

(2) TIRE, FRONT 315/80R22.5 Load Range J REGIONAL RHDII HCT (GOODYEAR), 483 rev/mile, 75 MPH, Drive

(4) TIRE, REAR 315/80R22.5 Load Range J REGIONAL RHDII HCT (GOODYEAR), 483 rev/mile, 75 MPH, Drive

CAB SEATING AND WEIGHT ALLOWANCE

A warning label shall be installed in the cab to indicate seating positions for five (5) people. A weight allowance of 250 pounds shall be calculated for each person.

LABELS, STANDARD PACKAGE SET

A standard set of labels shall be provided and installed on the inside of chassis cab area. The labels shall contain the required information based on the applicable components for the apparatus.

DATA PLAQUE

A data plaque shall be provided and installed on the inside of the driver's door. The data plaque shall contain the required information based on the applicable components for the apparatus:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Drive axle lubricant
- Power steering fluid
- Pump, generator, or other component lubrications
- Other NFPA applicable fluid levels or data as required
- Paint manufacturer, type, and color number
- Tire Speed Ratings

Location shall be in the driver's compartment or on the driver's door.

WARNING LABEL -- NO RIDING ON REAR

A warning label stating: "WARNING: DO NOT RIDE ON REAR STEP WHILE VEHICLE IS IN MOTION. DEATH OR SERIOUS INJURY MAY RESULT" shall be installed on the rear of the apparatus. The label shall be applied to the vehicle at the rear step area. The label shall warn personnel that riding in or on these areas, while the vehicle is in motion, is prohibited.

WARNING LABEL -- SEAT BELT USAGE

A warning label, stating: "WARNING CRASH HAZARD OCCUPANTS MUST BE SEATED AND BELTED WHEN VEHICLE IS IN MOTION…" shall be provided in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.

LOUD NOISE WARNING LABEL

A final stage manufacturer shall install "hearing loss" potential warning labels on the vehicle in any areas or fixed equipment that produces excessive noise levels. (Exhaust outlet, sirens and air horns shall not be required for such equipment.)

AIR FILTER EMBER PROTECTION SCREEN WARNING LABEL

A warning label, stating: “THIS VEHICLE HAS AN AIR INTAKE EMBER SCREEN WHICH REQUIRES

PERIODIC INSPECTION & CLEANING" shall be provided and installed in the apparatus cab interior.

FRESH AIR EMBER SEPARATOR WARNING LABEL

A warning label, stating: "THIS APPARATUS IS EQUIPPED WITH A CAB FRESH AIR INTAKE EMBER PROTECTION SCREEN. ROUTINE INSPECTION IS REQUIRED." shall be provided and installed in the apparatus cab interior.

WARNING LABEL -- DO NOT WEAR HELMET

A warning label, stating: "CAUTION: DO NOT WEAR HELMET WHILE SEATED" shall be provided in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.

MANUFACTURER LOGO

The apparatus shall include a BME logo plaque which shall be affixed at the rear of the apparatus.

The BME plaque shall feature white reflective material on the outside of the Maltese cross and red reflective material in the middle.

FRONT TOW PLATE

A horizontal full frame width, ¾-inch thick steel plate, center pull, front tow eye shall be furnished and installed through or below the front bumper. The tow eye plate shall be triangle shaped extended 6 inches beyond the front bumper with a 3-inch X 4-inch rectangle tow eye.

The tow eye shall be braced and gusseted to prevent frame rail or bumper damage and bolted to the front frame rail web with eight (8) Grade 8 frame bolts and lock nuts.

The tow plate shall to be sprayed with black durabak.

FRONT RECEIVER

There shall be one bolted 2" receiver hitch on the front of the apparatus. The receiver shall be mounted off set as to prevent towing use.

REAR BUSTLE

A single, frame mounted, 3-inch diameter, rear towing eye shall be provided. It shall be manufactured from 1/2-inch thick steel plate and bolted between the rear frame rail webs with a minimum of eight (8), four (4) on each side, SAE Grade 8 frame bolts and lock nuts.

The tow eye shall be braced and gusseted to prevent damage to the frame rails, bumper or apparatus body while being towed from various angles, and shall be designed as to not interfere with angle of departure.

The tow eye shall incorporate mounting for a rub rail style rear bumper.

FRONT FRAME EXTENSION

The front frame rails shall be extended 16" ahead of the cab grill or fender area.

BUMPER PLATFORM

The front bumper extended frame rails shall feature an overlay constructed of .125 inch, 5052 grade, aluminum deck bright which shall offer space for mounting components necessary to the apparatus. The bumper extension shall measure approximately sixteen (16) inches from the cab to the front face of the extension and shall be approximately eight (8) inches in height.

DRIVERS SIDE -- FRONT BUMPER COMPARTMENT

One (1) recessed hose storage compartment shall be installed in the drivers side of the bumper. The compartment shall be constructed of smooth aluminum. The floor of the compartment shall have drain holes provided.

BUMPER COMPARTMENT NYLON HOLD DOWN STRAP

One (1) nylon strap with a buckle shall be installed on the specified front bumper compartment. The nylon strap shall act as a hold down mechanism for the hose in the compartment.

The straps shall be black in color.

BUMPER COMPARTMENT GRATING

The specified bumper compartment shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

CENTER -- FRONT BUMPER COMPARTMENT

One (1) recessed hose storage compartment shall be installed in the center front bumper. The compartment shall be constructed of smooth aluminum. The floor of the compartment shall have drain holes provided.

BUMPER COMPARTMENT DOOR

An aluminum tread plate door shall be installed on the specified front bumper compartment. The non-skid surface door shall have a stainless steel hinge at the rear, latch, and hold open device installed.

The specified door(s) shall have a Polished stainless-steel D-ring door handle.

BUMPER COMPARTMENT GRATING

The specified bumper compartment shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

PASSENGER SIDE -- FRONT BUMPER COMPARTMENT

One (1) recessed hose storage compartment shall be installed in the passenger side of the bumper. The compartment shall be constructed from smooth aluminum. The floor of the compartment shall have drain holes provided.

BUMPER COMPARTMENT NYLON HOLD DOWN STRAP

One (1) nylon strap with a buckle shall be installed on the specified front bumper compartment. The nylon strap shall act as a hold down mechanism for the hose in the compartment.

The straps shall be black in color.

BUMPER COMPARTMENT GRATING

The specified bumper compartment shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

BUMPER

There shall be an International 15 degree bumper installed on the apparatus.

FRONT BUMPER COLOR

The front bumper shall be painted job color.

BUMPER DISCHARGE SWIVEL STOPPER

There shall be a swivel elbow stopper installed just behind the front discharge(s).

BUMPER SIDE WINGS

The bumper shall have steel side wings.

FRONT BUMPER WINGS COLOR

The front bumper wings shall be painted job color.

AIR HORN

One (1) Buell brand, Model #1063 15" air horn shall be provided and mounted on the frame rail of the passenger's side frame, behind the bumper.

AIR HORN FOOT SWITCH

One (1) foot switch shall be provided and installed. The foot switch shall be located on the driver's side of the floor and shall activate the air horn system.

AIR HORN PUSH BUTTON SWITCH

One (1) push button switch shall be provided on the pump panel. The switch shall activate the air horn system.

EXHAUST HEAT SHIELD

The underside of the apparatus shall be provided with a heat shield. The heat shield shall be installed under the body in the areas where the exhaust system is routed.

EXHAUST HEAT WRAP

The exhaust pipe shall be wrapped with heat wrap from the diesel particulate filter to just shy of the end of the tailpipe.

BUMPER BOX PROTECTIVE FLAP

The protective flap shall be a cut down mud flap installed on the rear edge of the front bumper to eliminate debris from being deposited on the top of the front bumper and in the hose boxes.

BME Fire Trucks LLC

REAR MUD FLAPS

The chassis shall be supplied with mud flaps with BME's logo. The mud flaps shall be installed behind the rear wheels.

DRIVER SIDE CAB STEP

The apparatus shall be equipped with a chassis fuel tank and step area. The fuel tank and step area shall be located on the drivers side of the commercial chassis. The fuel tank shall be covered with aluminum tread plate.

DRIVER'S SIDE UNDER CAB COMPARTMENT

The apparatus shall be equipped with an enclosed stainless steel compartment located under the crew door on the drivers side of the cab. The compartment shall measure approximately 36" wide x 18" high x 21" deep with a hinged aluminum door and a D-ring style latch.

The doors shall be painted job color.

COMPARTMENT LIGHTING

One (1) Code 3 800 Series Corner LED lights shall be installed in the specified compartment(s).

COMPARTMENT LIGHT / DOOR SWITCH

The interior compartment light shall be automatically controlled by a door activated "On-Off" switch. The switch shall be tied to the door ajar system also.

PASSENGER'S SIDE UNDER CAB COMPARTMENT

The apparatus shall be equipped with an enclosed stainless steel compartment located under the crew door on the passenger side of the cab. The compartment shall measure approximately 37" wide x 13" high x 22" deep with double hinged aluminum doors.
The doors shall be painted job color.

SLIDE TRAY

A 250# capacity slide tray shall be installed in the specified under cab compartment.

COMPARTMENT LIGHTING

One (1) Code 3 800 Series Corner LED lights shall be installed in the specified compartment(s).

COMPARTMENT LIGHT / DOOR SWITCH

The interior compartment light shall be automatically controlled by a door activated "On-Off" switch. The switch shall be tied to the door ajar system also.

CAB STEPS

Aggressive, extruded aluminum surfaces shall be installed on each of the cab steps areas. The outside edges of the specified step shall be provided with 2" x 1.5" x .250" extruded and knurled aluminum rub rails.

Specified part shall include White reflective striping.

CAB DOOR REFLECTIVE PANELS

The cab doors shall include reflective trim installed inside each door.

Specified part shall include Red and White DOT approved reflective striping.

AIR TANK RELOCATION

The air tanks shall be relocated to the rear of the truck between the frame rails.

BATTERY RELOCATION

The chassis batteries are to be relocated to the passenger side of the chassis, below the rear cab door in a custom made under cab box.

UNDERHOOD LIGHTS

There shall be two (2) Tecniq LED light(s) installed under the hood of the chassis. Lights shall have local switching on the driver side under the hood.

LED HEADLIGHTS REPLACEMENT

The factory halogen headlights shall be replaced with LED headlights. The headlights shall be Truck Lite #27270C 7" LED.

AIR FILTER EMBER PROTECTION SCREEN AND WARNING LABEL

The chassis air intake shall be protected by an ember guard of 18 Mesh, 0.017-inch wire diameter, and a maximum mesh opening of 0.039 inches. The ember guard shall be sized to fit and located at the intake opening. The screen shall be readily accessible for inspection and maintenance. The ember guard shall maintain a

minimum ½ inch separation from the air filter.

EMBER SEPARATOR -- FRESH AIR INTAKE TO CAB

The cabin air filter shall be protected by an ember guard with a maximum mesh opening of 0.039 inches.

EMBER SEPARATOR

The final stage manufacturer shall install a stainless steel ember separator within the fire pump engine air intake system.

FUEL TANK SKID PLATE

A heavy duty removable skid plate shall be fastened to the bottom side of the fuel tank. The skid plate shall have the front and rear sides turned up to prevent digging into the ground when the apparatus is in off road conditions.

EXTERIOR CAB TRIM

A rubber debris skirt will be installed to prevent debris and embers from entering between the cab and frame. The debris skirt will be attached with a 12 gauge stainless steel trim piece the full length along the lower cab seam below the cab doors. The trim shall be fastened to the body seam with evenly spaced 10/32 stainless steel Phillips head machine screws and nylock nuts.

TIRE PRESSURE INDICATOR SYSTEM

There shall be a tire pressure indicator at each road tire's valve stem on the vehicle. The idicators shall provide LED indication if there is insufficient pressure in the specific tire.

FIRE PUMP SPECIFICATIONS

A Darley model PSPH, 1000 GPM PTO driven fire pump shall be installed. The pump shall be mid ship mounted and designed to operate through a PTO shaft from the transmission. The engine, transmission and driveline components shall provide sufficient horsepower and RPM to enable the pump to meet and exceed its rated performance.

The pump shall contain a cored heating jacket feature that can be connected into the vehicle antifreeze system to protect the pump from freezing in cold climates, and to help reject engine heat from engine coolant, providing longer life for the engine.

The pump shaft shall be precision ground stainless steel with long wearing Chromium Oxide hard coating under the packing glands with a hardness level of #RC72. The shaft shall be splined to receive broached impeller hubs, for greater resistance to wear, torsional vibration, and torque imposed by engine, as well as ease of maintenance

and repair.

The bearings provided shall be heavy duty, deep groove, radial type ball bearings. Sleeve bearings on any portion of the pump or transmission shall be prohibited due to wear, deflection, and alignment concerns. The bearings shall be protected at all openings from road dirt and water splash with oil seals and water slingers.

The impeller shall be a high strength bronze alloy of mixed flow design, splined to the pump shaft for precision fit, durability, and ease of maintenance. Impeller shall be vacuum cast designed for maximum lift and highest capacity. The seal rings shall be renewable, double labyrinth, wrap around bronze type.

Impeller shaft oil seals shall be constructed to be free from steel components except for the internal lip spring.

The transmission case shall be heavy duty cast iron. A magnetic drain plug shall be provided. Transmission case shall include a dip stick for checking oil level. Transmission case interior shall be powder coated to reduce oil contamination. Transmission case shall be equipped with a removable plate for quick inspection of gears, shafts, and bearings inside the transmission.

The pump drive shaft shall be precision ground, heat treated alloy steel. Gears shall be helical design, and shall be precision ground for quiet operation and extended life. The gears shall be manufactured from alloy steel and carburized for surface hardness and strength.

Two (2) manuals covering the fire pump transmission and fire pump shall be provided with the apparatus.

MECHANICAL SEAL

The mechanical seal shall use silicon carbide mechanical seals with welded springs. The stationary face of our mechanical seals shall be made from silicon carbide, an extremely hard and heat dissipative material, which resists wear and dry running damage.

FIRE PUMP ANODE SYSTEM

The fire pump plumbing system shall be provided with anode system to reduce corrosion within the piping. The anode shall be bolt-in or screw-in type and easily replaceable.

ELECTRIC PRIMER SPECIFICATIONS

A 12 volt electrically driven positive displacement fire pump primer system shall be installed. The priming pump shall be constructed of heat treated aluminum and hard coat anodized and shall not use oil in the operation. The system shall perform in compliance to applicable NFPA standards. A single, push-pull control shall be located on the pump operator's panel with a "Pull to Prime - Push to Close" label.

THIRD PARTY FIRE PUMP TEST

The pump shall undergo an Underwriters Laboratories Incorporated witnessed and certified test per applicable sections of NFPA 1901 standards, prior to delivery of the completed apparatus. The UL acceptance certificate shall be furnished with the apparatus on delivery. No exceptions to UL testing, no other third party agency shall be acceptable.

FIRE PUMP PTO AND DRIVELINES

A transmission power take-off (PTO) unit shall be provided and installed on the chassis automatic transmission to drive the fire fighting water pump. The PTO shall be a 10-bolt type, with a minimum torque rating of 300 lb. ft. (duty), and an engine speed ratio that provides the required pump performance.

BYPASS FIRE PUMP COOLER

The fire pump shall be equipped with 3/8" cooling line from the pump to the water tank. This re-circulation line shall be controlled by a pump panel control valve with nameplate label noting it as the "fire pump bypass cooler".

MASTER PUMP DRAIN

One (1) Trident, multiple-port drain valve, fabricated from bronze, shall be provided and controlled at the pump operator's control panel. The valve shall be opened by turning a rotary hand wheel. The valve shall be plumbed to drain both the discharge and intake sides of the pump, the relief valve and other plumbing components as required.

The valve shall be placed as low as possible to provide proper drainage of the components plumbed to it. The valve shall be rated to 600 PSI minimum and suitable for daily valve actuation.

PLUMBING

The plumbing system shall utilize stainless steel piping incorporating hosing to allow for flex. The piping shall utilize TIG welding to provide a complete seal. Hard angles shall be avoided when possible to improve water flow characteristics. The piping shall utilize Victaulic couplers whenever possible to allow flex as the body module flexes.
Threaded sections of piping shall be avoided to reduce the leak potential of the system. Victaulic couplers shall be used in place of threading to reduce leak potential. Schedule 10 stainless steel piping shall be used for transport type piping. Schedule 40 stainless steel shall be used for areas requiring threading to provide a stable threading base. Brackets shall be Uni-Strut clamp type with rubber flex inserts installed to support threading locations thereby reducing the potential for leaks.

All hoses shall be connected directly to the tank. Any front discharges, any rear discharges, and all cross lays shall use hose to reach the actual discharge. The use of hose shall be utilized due to the difference in flex or

movement between the discharge location and the pump connection. Drain lines shall be provided at the lowest points in the plumbing system to allow for complete drainage.

The main suction and discharge plumbing shall be welded stainless steel pipe or high pressure flexible hose. The flexible hose shall be designed to withstand the normal operating pressures of the pump. All high pressure hose shall be installed with a swivel or Victaulic coupling on at least one end of the hose.

The plumbing shall be unpainted.

6" UNGATED INTAKE -- LEFT SIDE

One (1) 6" ungated suction intake shall be installed on the left side pump panel to supply the fire pump from an external water supply. The threads shall be 6" NH male and equipped with a removable screen.

One (1) chrome brass 6" NH long handle cap shall be installed on the intake.

PORTABLE PUMP

A Darley 1-1/2AGE 24K portable pump shall be provided on the apparatus. The unit shall have a liquid cooled, 24 HP, Kubota D902 diesel engine equipped with an electric start.

Pump Performance
- 20 gpm @ 310 psi
- 140 gpm @ 145 psi
- 180 gpm @ 80 psi

Diesel Engine
Kubota, D902 Diesel, water-cooled, 24 hp.

Fuel Supply
The engine shall be piped to the chassis fuel system with provisions to prevent fuel drain back to the tank when the engine is shutdown.

Fuel Prime
A fuel re-prime pump shall be provided to assist in fuel delivery to the diesel engine from the chassis tank.

Lubrication
Pressure feed with spin-on filter.

Starter
12-volt electric wired into the chassis battery system

Exhaust
A spark arrestor shall be provided on the engine exhaust system.

Air Intake
An air cleaner shall be provided with easy access to remove the element.
An ember screen shall be provided on the inlet to the air cleaner.

DUAL DARLEY DELUXE PANELS

The auxiliary pump shall be controlled by a dual Darley, Deluxe panel set up. One panel shall be located on the pump panel and one panel shall be located in the cab console.

AUXILIARY PUMP PLUMBING

The auxiliary fire pump plumbing system shall utilize stainless steel piping incorporating hosing to allow for flex. The piping shall utilize TIG welding to provide a complete seal. Hard angles shall be avoided when possible to improve water flow characteristics. The piping shall utilize Victaulic couplers whenever possible to allow flex as the body module flexes.

Threaded sections of piping shall be avoided to reduce the leak potential of the system. Victaulic couplers shall be used in place of threading to reduce leak potential. Schedule 10 stainless steel piping shall be used for transport type piping. Schedule 40 stainless steel shall be used for areas requiring threading to provide a stable threading base. Brackets shall be installed to support threading locations thereby reducing the potential for leaks.

All hoses shall be connected directly to the tank due to the different flex ratios of the tank to body. Any front discharges, any rear discharges, and all cross lays shall use hose to reach the actual discharge. The use of hose shall be utilized due to the difference in flex or movement between the discharge location and the pump connection.

AUXILIARY PUMP EXHAUST SYSTEM

The auxiliary fire pump and engine assembly shall have a muffler and exhaust pipe. The exhaust pipe shall be directed out of the compartment and away from the pump operator. An additional guard shall be installed where the pipe is exposed to touch by an operator.

PRIMER ASSEMBLY

The auxiliary pump shall use the main pump primer to prime the pump. Primer control shall be located on the Darley aux pump control panel and shall utilize one primer for both pumps.

LOW PRESSURE PUMP SHUT-DOWN

If the fire pump runs out of water and the pressure decreases below 20 PSI, an automatic pressure switch shall detect the condition, and turn off the fire pump operation.

LOW OIL PRESSURE / HIGH TEMPERATURE PUMP SHUT-DOWN

If the fire pump has low oil pressure or high engine temperature, automatic pressure switches shall detect the condition, and the device shall turn off the fire pump operation. There shall be an override switch provided and installed on the operators pump panel to allow the system to be disabled when required.

AUXILIARY FUEL SYSTEM

The fuel system for the auxiliary fire pump shall be plumbed to the chassis fuel system. There shall be a separate fuel pickup tube mounted in the chassis fuel tank specifically for a separate engine driven pump assembly. There shall be an electric fuel pump with regulator and fuel hose furnished between the chassis fuel tank and the auxiliary pump.

AUXILIARY FIRE PUMP ELECTRIC START WIRING TO CHASSIS

Properly sized 12 volt positive and negative cables shall be provided from the chassis battery to the auxiliary fire pump.

AUXILIARY AND MAIN PUMP PLUMBING

The auxiliary fire pump shall be plumbed to the main pump discharge.

AUXILIARY PUMP OIL DRAIN EXTENSION

There shall be an oil drain extension installed on the auxiliary pump. This will allow for the engine oil to be drained without removing the auxiliary engine.

AUXILIARY PUMP COVER

A louvered hinged cover with suitable latches shall be provided over the pump and power unit assembly. The area around the assembly shall remain open for maintenance and air circulation and the radiator shall be located behind ventilated side sheet.

LIGHTING

The specified compartment shall have no compartment lighting.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

6" UNGATED INTAKE -- LEFT SIDE

One (1) 6" ungated suction intake shall be installed on the left side pump panel to supply the fire pump from an external water supply. The threads shall be 6" NH male and equipped with a removable screen.

One (1) chrome brass 6" NH long handle cap shall be installed on the intake.

2-1/2" GATED INTAKE -- LEFT SIDE

One (1) 2-1/2" gated suction intake shall be recessed mounted on the left side pump panel to supply the fire pump from an external water supply. The valve shall be a quarter-turn ball valve with the appropriate handle and shall have 2-1/2" NH female thread.

The intake shall be equipped with a South Park Corp. 3/4" Push-pull type drain valve mounted to the bottom of the valve.

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome brass 2-1/2" NH rocker lug plug with a securing chain or cable shall be installed on the intake.

6" UNGATED INTAKE -- RIGHT SIDE

One (1) 6" un-gated suction intake shall be installed on the right side pump panel to supply the fire pump from an external water supply. The threads shall be 6" NH male and equipped with a removable screen.

One (1) chrome brass 6" NH long handle cap shall be installed on the intake.

2-1/2" GATED INTAKE -- RIGHT SIDE

One (1) 2-1/2" gated suction intake shall be recess mounted on the right side pump panel to supply the fire pump from an external water supply. The valve shall be a quarter-turn ball valve with the appropriate handle and shall have 2-1/2" NH female thread.

The intake shall be equipped with a South Park Corp. 3/4" Push-pull type drain valve mounted to the bottom of the valve.

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome brass 2-1/2" NH rocker lug plug with a securing chain or cable shall be installed on the intake.

WATER TANK SUPPLY LINE TO FIRE PUMP

One (1) 4" water tank to pump line shall be installed with a 4" full flow quarter turn ball valve and 4" piping. The line shall be equipped with a hump hose with stainless steel hose clamps and a 4" full flow check valve to prevent pressurization of the water tank.

One (1) Akron 8840 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The 4" valve shall be equipped with an Akron electric motor valve actuator, with a Navigator Pro 2.0 9333 controller.

PUMP TO TANK

One (1) 2" pump to tank line shall be installed with a 2" full flow quarter turn electronically controlled ball valve and 2" piping.

One (1) Akron 8620 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The 2" valve shall be equipped with an Akron electric motor valve actuator, with a Navigator Pro 2.0 9333 controller.

2-1/2" DISCHARGE LEFT SIDE -- REARWARD PUMP PANEL

(2) 2-1/2" discharge shall be installed on the left side rearward pump panel area with controlled by a quarter turn ball valve. The discharge shall have 2-1/2" NH male hose threads and label adjacent the control handle.

The discharge outlet shall be equipped with an Innovative Controls 3/4" bleeder assembly with side stem lever control.

Two (2) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to

operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

(2) chrome plated brass 30 degree elbow with 2.5" swivel female NH x 2.5" male NH thread with rocker lugs shall be provided on the discharge.

Two (2) chrome brass 2.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

The line discharge water pressure gauge(s) shall be Innovative Controls model# 3010353-40003. The gauges shall have a 2" diameter face with a graduated output scale of 0-600 PSI. The gauge shall be mounted within 6" of the control device with a name plate label.

The specified gauge shall feature a drain located at the gauge inlet to help prevent freezing. The drain shall be a twist open and close type.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

2-1/2" DISCHARGE RIGHT SIDE --REARWARD PUMP PANEL

One (1) 2-1/2" discharge shall be installed on the right side rearward pump panel area with controlled by a quarter turn ball valve. The discharge shall have 2-1/2" NH male hose threads and label adjacent the control handle.

The discharge outlet shall be equipped with an Innovative Controls 3/4" bleeder assembly with side stem lever control.

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label.

(1) 2-1/2" IC discharge pressure gauges (0-600 PSI) shall be provided. The face of the gauge shall be a white dial with black letters. The gauges will be located on the pump instrument panel.

The specified gauge shall feature a drain located at the gauge inlet to help prevent freezing. The drain shall be a twist open and close type.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

(1) chrome plated brass 30 degree elbow with 2.5" swivel female NH x 2.5" male NH thread with rocker lugs shall be provided on the discharge.

One (1) chrome brass 2.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

4" DISCHARGE RIGHT SIDE -- FORWARD PUMP PANEL

One (1) 4" discharge shall be installed on the right side forward pump panel area with controlled by a slow close 4" quarter turn ball valve. The discharge shall have 4" NH male hose threads and label adjacent the control handle.

The discharge outlet shall be equipped with an Innovative Controls 3/4" bleeder assembly with side stem lever control.

One (1) Akron 8840 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The 4" valve shall be equipped with an Akron electric motor valve actuator, with a Navigator Pro 2.0 9333 controller.

One (1) chrome plated brass 30 degree elbow with 4" swivel female NH x 4" male NH thread with rocker lugs shall be provided on the discharge.

One (1) chrome plated brass 4" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

The line discharge water pressure gauge(s) shall be Innovative Controls model# 3010353-40003. The gauges shall have a 2" diameter face with a graduated output scale of 0-600 PSI. The gauge shall be mounted within 6" of the control device with a name plate label.

The specified gauge shall feature a drain located at the gauge inlet to help prevent freezing. The drain shall be a twist open and close type.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

2.5" DISCHARGE -- REAR RIGHT

One (1) 2.5" discharge shall be installed on the rear right panel with controlled by a quarter turn ball valve. The discharge shall have 2.5" NH male hose threads and nameplate label adjacent the control handle.

The discharge outlet shall be equipped with an Innovative Controls 3/4" bleeder assembly with side stem lever control.

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label.

(1) 2-1/2" IC discharge pressure gauges (0-600 PSI) shall be provided. The face of the gauge shall be a white dial with black letters. The gauges will be located on the pump instrument panel.

The specified gauge shall feature a drain located at the gauge inlet to help prevent freezing. The drain shall be a twist open and close type.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

(1) chrome plated brass 30 degree elbow with 2.5" swivel female NH x 2.5" male NH thread with rocker lugs shall be provided on the discharge.

One (1) chrome brass 2.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

1-1/2" CROSSLAY DISCHARGE

There shall be two (2) pre-connect 1-1/2" hose cross lays installed over pump enclosure. The cross lays shall be equipped with quarter turn 1-1/2" diameter quarter turn ball valves. The outlets shall be equipped with a 1-1/2" NPT female chicksan swivel x 1-1/2" male NH hose threads. The hose bed decking shall be constructed with a removable slatted material. The bed shall be approximately 8" wide, 14" deep, and 72" right to left over the pump enclosure area. The hose beds shall provide a minimum capacity of 200 feet of 1-3/4" diameter double jacket hose with nozzle provided by fire department.

Two (2) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label.

(2) 2-1/2" IC discharge pressure gauges (0-600 PSI) shall be provided. The face of the gauge shall be a white dial with black letters. The gauges will be located on the pump instrument panel.

The specified gauge shall feature a drain located at the gauge inlet to help prevent freezing. The drain shall be a twist open and close type.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

The crosslay hosebed shall be equipped with a hypalon vinyl cover with a nylon strap enclosures on each side, installed in compliance with applicable NFPA #1901 standards.

The specified crosslay flaps shall be black.

CROSSLAY EDGES

The crosslay side sheets shall be rolled on each side to act as a guide for the hose to come out of the tray.

1-1/2" BUMPER AREA DISCHARGE (LEFT SIDE)

One (1) 2" discharge shall be provided at the driver's side of the front bumper extension. The discharge shall be plumbed with 2" flexible high pressure hose with reusable fittings or welded stainless steel pipe. The front bumper discharge shall be equipped with a 2" quarter turn ball valve. The discharge shall have a 90 degree full swivel elbow, terminating in 1-1/2" NST male threads, to allow the hose to be pulled in any direction without kinking.

One (1) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome plated brass 1.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

1-1/2" BUMPER AREA DISCHARGE (RIGHT SIDE)

One (1) 2" discharge, shall be provided at the passenger's side of the front bumper extension. The discharge shall be plumbed with 2" flexible high pressure hose with reusable fittings or welded stainless steel pipe. The front bumper discharge shall be equipped with a 2" quarter turn ball valve. The discharge shall have a 90 degree full swivel elbow, terminating in 1-1/2" NST male threads, to allow the hose to be pulled in any direction without kinking.

One (1) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome plated brass 1.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

2" ISOLATION VALVE

One (1) 2" inline valve, labeled, shall be provided to isolate the front bumper extension discharge piping in the case of a hose or piping failure. This valve shall normally be left in the open position. Control for this valve shall be through the use of a R1 handle, painted red, located at the valve.

One (1) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

HOSE REEL

One (1) Hannay aluminum hose reel shall be installed. The reel shall have leak proof ball bearing swing joint, adjustable friction brake, electric 12 volt rewind and manual crank rewind provisions. The reel shall be plumbed with wire reinforced, high-pressure hose coupled with brass fittings. The reel shall be designed to hold 125% of the specified hose capacity.

The reel shall be provided with a 12 volt electric motor of appropriate size for rewinding. The hose reel shall have provisions for being rewound manually. The pinion shaft for the manual rewind gear shall be equipped with an adjustable tension brake, controlled at the hose reel.

HOSE REEL DISCHARGE

One (1) 1" discharge shall be piped from the fire pump to the hose reel with flexible high pressure hose.

One (1) Akron 8810 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with

recessed color-coded label.

(1) 2-1/2" IC discharge pressure gauges (0-600 PSI) shall be provided. The face of the gauge shall be a white dial with black letters. The gauges will be located on the pump instrument panel.

The specified gauge shall feature a drain located at the gauge inlet to help prevent freezing. The drain shall be a twist open and close type.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

MONITOR DISCHARGE

One (1) 3" monitor discharge shall be installed over the pump enclosure. The discharge shall be controlled by a slow close 3" quarter turn ball valve. The discharge shall terminated with 3" hose threads or Victaulic coupling.

The discharge outlet shall be equipped with an Innovative Controls 3/4" bleeder assembly with side stem lever control.

One (1) Akron 8630 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The 3" valve shall be equipped with an Akron electric motor valve actuator, with a Navigator Pro 2.0 9333 controller.

The line discharge water pressure gauge(s) shall be Innovative Controls model# 3010353-40003. The gauges shall have a 2" diameter face with a graduated output scale of 0-600 PSI. The gauge shall be mounted within 6" of the control device with a name plate label.

The specified gauge shall feature a drain located at the gauge inlet to help prevent freezing. The drain shall be a twist open and close type.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

PORTABLE MONITOR

One (1) Task Force Tips Crossfire model # XFC-62 portable lightweight monitor kit shall be provided and installed. The monitor kit shall consist of monitor, Safe-Tak base, Extend-A-Gun, quad stack tips, stream straightener, halo ring master stream nozzle, installation bracket and portable base storage bracket. Task Force Tips Crossfire portable monitor shall have a top only portion with quick release swivel joint shall be designed for use on truck mounted risers and TFT Safe-Tak portable bases. The monitor shall include safety devices that include a locking button which locks the monitor to the base while under pressure. A 1/4 turn rotational lever lock shall secure the horizontal rotation angle and shall provide a visual indication that the monitor rotation is locked. The monitor shall be constructed from hardcoat anodized aluminum with a red powder coat interior and exterior finish.

The monitor shall have a 3-1/4" waterway for delivery of up to 1250 GPM with low friction loss. Vertical elevation shall be controlled through use of a handwheel controlled stainless steel worm gear which allows full travel to the safety stop point of 35 degrees above horizontal with seven rotations of the wheel. When positioned on a truck mounted riser the monitor shall be able to be used below the 35 degree stop point through release of the spring loaded safety pin.

An automatic drain to remove remaining water and avoid freezing shall be included. Integral stainless steel stream straightener and pressure gauge shall be included. The monitor shall have a laser engraved serial number.

Task Force Tips Safe-Tak 1250 portable monitor base shall be provided. The monitor shall include a Safe-Tak, spring loaded butterfly valve designed to rapidly reduce the water flow area by 90 percent in the event that the monitor leaves the ground. The device shall include an integral carrying handle, four stainless steel folding legs with replaceable tungsten carbide spikes and an anchoring strap attached to a protective cap that may be stored inside the waterway. The butterfly valve shall have a reset handle located near the inlet to allow the water flow to be reestablished once the base is properly stabilized.

The base shall be constructed from hardcoat anodized aluminum and have a red powder coat interior and exterior finish.

TELESCOPING MONITOR PIPE

Task Force Tips manually telescoping waterway shall be provided. The waterway shall be capable of being lowered to deck level (or into a monitor well) for storage and transportation and shall be capable of being raised to an extended height of 12" or 18" by lifting a quick release latch located at the base of the extension tube. This latching device shall be capable of locking the waterway in either the raised or lowered position while maintaining the ability to horizontally rotate the monitor device 360 degrees.

A sensor shall be located on the waterway that signals a 12 volt indicator light installed in the cab. The aluminum riser shall have a 3" waterway; hardcoat anodized finish and be furnished with a Task Force Tips Crossfire outlet coupling.

MASTER STREAM NOZZLE AND TIPS

Task Force Tips master stream nozzle shall be provided. For corrosion resistance the nozzle shall be constructed for lightweight hardcoat anodized aluminum.

The nozzle shall have a fixed, selectable or automatic gallonage rating. A UV resistant rubber bumper with integral teeth designed to produce a finger free fog pattern shall be included. A halo ring shall be included to assist with stream shape control. The nozzle shall be suitable for foam solution application and designed to accept the Task Force Tips FJ-LX-M low expansion air aspirating attachment.

Task Force Tips model # MST-4NJ smooth bore stacked tip set shall be provided. For corrosion resistance the tip set shall be constructed from hardcoat anodized aluminum alloy. The set shall consist of four (4) tips with the base tip having a 2-1/2" female NH swivel inlet and 2" outlet. The other tip orifice sizes shall be 1-3/4", 1-1/2" and 1-3/8". Each tip shall be laser engraved with a flow/pressure chart, orifice size, and thread size.

Task Force Tips stream straightener shall be supplied. The straightener shall be constructed from extruded aluminum with internal vanes designed to reduce turbulence and increase the reach of smooth bore water streams and shall be available in 5” or 10” length.

MONITOR STORAGE BRACKET

Task Force Tips model #XF-B storage bracket and mounting screws shall be supplied. The bracket shall be constructed from aluminum, include a quick release retention strap and be designed for horizontal or vertical installation. Task Force Tips Extend-A-Gun mounting bracket set shall be provided.

FOAM SYSTEM

A FoamPro #2001 electronic foam system shall be provided. The system shall be designed for use with Class A foam concentrate. The foam proportioning operation shall be designed for direct measurement of water flows and shall remain consistent within the specified flows and pressures. The system shall be capable of accurately delivering foam solution as required by applicable sections of the NFPA standards.

The system shall be equipped with a control module suitable for installation on the pump panel. There shall be a microprocessor incorporated within the motor driver that shall receive input from the system's flow meter, while also monitoring the foam concentrate pump output. The microprocessor shall compare the values to ensure that the desired amount of foam concentrate is injected onto the discharge side of the fire pump. A "foam capable" paddlewheel-type flow meter shall be installed in the discharge side of the piping system.

The control module shall enable the pump operator to:

1. Activate the foam proportioning system
2. Select the proportioning rates from 0.1% to 3.0%

3. Display a "Lo Con" warning when the foam tank level becomes low and in two (2) minutes, if the foam concentrate has not been added to the tank, the foam concentrate pump shall be capable of shutting down.
4. Display the current flow rate of water or foam solution per minute.
5. Display the total amount of water or foam pumped (resetable).
6. Display the foam concentrate injection rate setting.

A 12 volt electric motor driven positive displacement plunger pump shall be provided. The pump capacity range shall be 0.1 to 2.6 GPM at 150 PSI with a maximum operating pressure up to 400 PSI. The system shall draw a maximum of 40 amps at 12 volts. The motor shall be controlled by the microprocessor which shall be mounted to the base of the pump. It shall receive signals from the control module and power the 1/2 horsepower electric motor in a variable speed duty cycle to ensure that the correct proportion of concentrate is injected into the water stream.

A full flow check valve shall be provided in the discharge piping to prevent foam contamination of the fire pump and water tank. A minimum 11 PSI opening pressure check valve shall be provided in concentrate line.

Components of the complete proportioning system as described above shall include:

1. Operator control module
2. Paddlewheel flow meter
3. Pump and electric motor/motor driver
4. Wiring harnesses
5. Low level tank switch
6. Foam injection check valve
7. Main waterway check valve
8. Flow meter with paddle wheel

The foam system shall be installed and calibrated to manufacturer's requirements. In addition the system shall be tested and certified by the apparatus manufacturer to meet applicable NFPA standards.

The foam system design shall be tested and pass environmental testing in accordance to SAE standards.

An installation and operation manual shall be provided for the unit.

The FoamPro 2001 Series foam system shall be provided with a FoamPro control cable from the controller to the foam pump assembly. The FoamPro 2001 Series foam system shall be provided with a standard pump panel mounted FoamPro control head.

The flow meter shall be installed in the "foam capable" discharge piping.

The foam system shall have a pump operator’s panel-mounted digital control module that shall provide a constant readout of GPM of water, foam solution, concentrate rate and totals of quantities being discharged at

any time during operation. The total readable figure shall be 99,999 gallons. The foam system shall be capable of being calibrated from the pump operator's panel. Diagnostic testing shall be provided in the readout from the instruments on the pump operator's panel.

A FoamPro foam system schematic label shall be installed on the pump panel near foam controls. The label shall be a diagram of the FoamPro 2001 foam system layout and shall meet applicable sections of the NFPA standards.

Foam concentrate shall be provided from the onboard foam concentrate storage tank. The system shall be compatible with nozzle aspirating systems, where nozzle flow volumes must be adjustable on demand, while maintaining a constant quality foam solution.

FOAM SYSTEM OUTLETS

The following discharges shall have foam distributed to them.

Front bumper discharges
Front bumper monitor (If applicable)
Booster hose reel
1-1/2" Cross lays
Rear 2-1/2" discharge
Right side 2-1/2" discharge

FOAM UPLOAD SYSTEM

There shall be a Hale EZ Foam upfill system supplied and installed on the apparatus.

PUMP ENCLOSURE

The mid-ship fire pump enclosure shall be a separate unit from the body unit and shall be attached and supported at the chassis frame rails. This module shall for allow independent flexing of the pump enclosure from the body, chassis, tank, and shall permit quick removal. The module shall have plastic or rubber mounting pads and shall be attached to the frame rails with spring mountings. The support structure shall be constructed of #6061 aluminum channel, tubing and angle.

The "module" enclosure shall allow for removal of valves, piping, and fire pump in a single unit, with a minimum number of components to be disassembled. The right and left side panels, front panel, and floor above the plumbing system shall be bolted and easily removable.

The pump enclosure shall be approximately 36" front to rear, 72" right to left, and 70" high with a left side mounted pump panel.

PUMP ENCLOSURE RUNNING BOARD

Both the drivers and passenger side shall be equipped with a side running board a minimum of 12" deep. The running board shall extend along the width of the pump enclosure from the forward end of the body module to behind the chassis cab. The exterior edge of the running board shall be constructed of a non-slip aggressive surface, supported by the pump enclosure framework, and bolted in place with stainless steel fasteners. The outside edges of the specified step shall be provided with 2" x 1.5" x .250" extruded and knurled aluminum rub rails.

Specified part shall include White reflective striping.

PUMP ACCESS SERVICE DOOR -- UPPER LEFT SIDE

The upper left side of the side mount pump enclosure shall be provided with a pump service access door. The hinged door shall be constructed of stainless steel and will be powder coated satin black.

The specified hinged door(s) shall be equipped with (2), black lever latch(es). Latch(es) shall be non-locking style.

PUMP ACCESS SERVICE DOOR -- UPPER RIGHT SIDE

The upper right side of the side mount pump enclosure shall be provided with a pump service access door. The hinged door shall be constructed of stainless steel and will be powder coated satin black.

The specified hinged door(s) shall be equipped with (2), black lever latch(es). Latch(es) shall be non-locking style.

PUMP PANEL-LEFT SIDE

The pump panel shall be constructed of stainless steel, and bolted to the pump enclosure with stainless steel fasteners. Discharges and intakes shall feature a bezel to aid in removal of panel for maintenance and repairs. The panel shall be powdercoated satin black.

PUMP PANEL-RIGHT SIDE

The pump panel shall be constructed of stainless steel, and bolted to the pump enclosure with stainless steel fasteners. Discharges and intakes shall feature a bezel to aid in removal of panel for maintenance and repairs. The panel shall be powdercoated satin black.

MASTER PRESSURE CENTER - GAUGE SET

One (1) master pressure gauge set (discharge pressure and intake gauge), with labels shall be provided on the pump instrument panel. The set shall be an Innovative Controls Master Pressure Center and shall incorporate one

(1) 4" master intake pressure gauge, one (1) 4" master discharge pressure gauge, an audible alarm, and one (1) set of vacuum/pressure test taps into an integrated, bezeled platform.

The specified gauge shall feature a drain located at the gauge inlet to help prevent freezing. The drain shall be a twist open and close type.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

PRESSURE GOVERNOR and ENGINE MONITORING DISPLAY

Fire Research PumpBoss series PBA401-D00 pressure governor and monitoring display kit shall be installed. The kit shall include a control module, intake pressure sensor, discharge pressure sensor, and cables. The control module case shall be waterproof and have dimensions not to exceed 6 3/4" high by 4 5/8". The control knob shall be 2" in diameter with no mechanical stops, have a serrated grip, and a red idle push button in the center. It shall not extend more than 1 3/4" from the front of the control module. Inputs for monitored engine information and outputs for engine control shall be on the J1939 databus. Inputs from the pump discharge and intake pressure sensors shall be electrical.

The following continuous displays shall be provided:

- Engine RPM; shown with four daylight bright LED digits more than 1/2" high
- Check engine and stop engine warning LEDs
- Engine oil pressure; shown on a dual color (green/red) LED bar graph display
- Engine coolant temperature; shown on a dual color (green/red) LED bar graph display
- Transmission Temperature: shown on a dual color (green/red) LED bar graph display
- Battery voltage; shown on a dual color (green/red) LED bar graph display
- Pressure and RPM operating mode LEDs
- Pressure / RPM setting; shown on a dot matrix message display
- Throttle ready LED.

The dot-matrix message display shall show diagnostic and warning messages as they occur. It shall show monitored apparatus information, stored data, and program options when selected by the operator. All LED intensity shall be automatically adjusted for day and night time operation.
The program shall store the accumulated operating hours for the pump and engine to be displayed with the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions:

- High Battery Voltage
- Low Battery Voltage (Engine Off)
- Low Battery Voltage (Engine Running)
- High Transmission Temperature
- Low Engine Oil Pressure

High Engine Coolant Temperature
Out of Water (visual alarm only)
No Engine Response (visual alarm only).

The program features shall be accessed via push buttons located on the front of the control module. There shall be a USB port located at the rear of the control module to upload future firmware enhancements.

The governor shall operate in two control modes, pressure and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes. A throttle ready LED shall light when the interlock signal is recognized. The governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the governor shall automatically regulate the discharge pressure at the level set by the operator. In RPM mode the governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The governor shall limit a discharge pressure increase in RPM mode to a maximum of 30 psi. Other safety features shall include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.

The pressure governor and display shall be programmed to interface with a Cummins engine.

WATER TANK GAUGE

IC Soft-Glo Tank Level Monitor System Innovative Controls Soft-Glo Series Tank Level Monitors shall be installed. The system shall be CAN Bus capable and include a variety of electronic display modules and CAN extension cables. The display modules are divided into 4 distinct sections that show the volume of (Water or Class A Foam or Class B Foam) in the tank using multi-color and programmable superbright LEDs. Tank level indication is enhanced by the use 180° wide-angle diffusion lenses in front of the LEDs. The LEDS are diffused by a proprietary method that creates an illumination effect that remains bright but eliminates the typical irritation to an operator's eyes traditionally caused by bright LEDs.

The specified tank level gauge shall feature a blue bezel.

The specified level gauge shall be active anytime the chassis battery switch is turned on.

FOAM TANK GAUGE

IC Soft-Glo Tank Level Monitor System Innovative Controls Soft-Glo Series Tank Level Monitors shall be installed. The system shall be CAN Bus capable and include a variety of electronic display modules and CAN extension cables. The display modules are divided into 4 distinct sections that show the volume of (Water or Class A Foam or Class B Foam) in the tank using multi-color and programmable superbright LEDs. Tank level indication is enhanced by the use 180° wide-angle diffusion lenses in front of the LEDs. The LEDS are diffused

by a proprietary method that creates an illumination effect that remains bright but eliminates the typical irritation to an operator's eyes traditionally caused by bright LEDs.

The specified tank level gauge shall feature a green bezel.

The specified level gauge shall be active anytime the chassis battery switch is turned on.

NOMENCLATURE PLATES

The apparatus shall be equipped with color coded labels. The labels shall be furnished for discharges, intakes, and for other controls and indicators. All labels shall be in English format.

MIDSHIP PUMP PANEL LIGHTS -- DRIVERS SIDE

There shall be three Tecniq brand LED lights installed under a stainless steel light shield mounted above the pump panel. The two outer lights shall be operated by a panel mounted switch, while the middle light will only be activated upon pump engagement.

One (1) of the pump panel lights shall illuminate at the time the fire pump is engaged.

MIDSHIP PUMP PANEL LIGHTS -- PASSENGER SIDE

There shall be three Tecniq brand LED lights installed under a stainless steel light shield mounted above the pump panel. The two outer lights shall be operated by a panel mounted switch, while the middle light will only be activated upon pump engagement.

One (1) of the pump panel lights shall illuminate at the time the fire pump is engaged.

DESIGN AND SCOPE OF PUMPER BODY

The body shall be designed and constructed of commonly available structural components for ease of repair and maintenance. The body shall be of a modular design with the body structure independent of the chassis frame rails. The body module shall be mounted to the chassis frame rails utilizing a unique double spring mounting system for flexibility and durability over the lifetime of the apparatus. The fabrication of the body shall be of welded construction to withstand the rigors of fire service use.

The body shall be designed to incorporate and support the tank, hose bed, compartments, and all other equipment intended to be stored in or mounted to the body module. The body skeleton and compartment framework shall be designed of tubular members for increased strength and stress resistance. There shall be no sheet metal or extrusions utilized in the foundation or structural components of the body module due to their critical role in assuring lifetime durability, functionality and usability.

BODY FRAMEWORK

The entire body framework shall be fabricated of 6061-T6 aluminum architectural style tubing. The body framework shall be a completely welded unit, forming a connected, stable frame for strength, longevity and providing the skeleton of the body module. The internal upright members of the framework shall act as support for the top layer of the body module. The external upright members shall act as an exoskeleton providing form and support for compartments while acting as the external surfaces of the module. The framework shall define the compartment openings and provide a rigid mounting location for all compartments and doors.

The foundation cross-members shall be placed perpendicular to the chassis frame rails in the wheel well area extending the full width of the body and shall be constructed of 3 inch high x 2 inch wide x .250 inch tubing. The foundation members parallel to the chassis frame rails shall be constructed of 3 inch square x .250 inch tubing and shall connect the foundation cross members and extend the full length of the body.

All tank support cross members shall be placed to support the water tank as per the tank manufacture's recommendation. These supports shall be constructed of 3 inch high x 2 inch wide x .250 inch aluminum tubing. The tank support angles shall be constructed of 4 inch x 4 inch x .250 inch thick angles and shall be placed at the tank sides parallel to the chassis frame rails to provide lateral support for the tank and protection from debris from the wheels.

The internal upright supports for any ceiling and top component shall be placed to provide support for all components and shall be constructed of aluminum tubing measuring 2 inch square x .250 inch wall thickness. All front to rear connecting members shall be 3 inches high x 2 inches wide x .125 inch wall thickness and shall be placed in between the interior upright support members to provide rigidity, stability and support to all top layer components. All gussets shall be constructed of 2 inches high x 3 inches wide x .250 inch thick plate which shall be placed on the top and bottom of the foundation cross members where they intersect with the exterior members.

BODY MOUNTING SYSTEM

The mounting assembly shall be designed to isolate and protect the body module from vibration and twisting stresses imparted by the flexing of the chassis frame rails. The body module shall employ spring loaded body mounting assemblies. Each two piece mounting assembly shall be designed to positively position the body on the frame rails while preventing lateral and forward or aft movement. Mounting assemblies shall be placed forward and rearward of the rear axle as necessary to provide a strong and stable mounting of the body module.

Each mounting assembly shall consist of a "male" upper mounting bracket and a "female" lower mounting bracket. The upper mounting brackets shall be fabricated from .250 inch thickness aluminum plate, with .250 inch painted steel lower mounting brackets. The upper mounting brackets shall be welded directly to the foundation connecting members. The lower mounting brackets shall be bolted to the exterior side facing surface of the chassis frame rails.

The mounting brackets shall be aligned and connected by two (2) 5/8 inch diameter grade 8 bolts equipped with compression springs. The springs shall be of the appropriate tension rating for the weight requirements of the body module. The mounting assembly shall be designed to completely eliminate sheering forces on the mounting bolts.

The foundation connecting members shall be placed on top of the chassis frame rails for added strength and stability. The foundation members shall be isolated from the steel chassis frame rails by .25 inch thickness aluminum plates which have .5 inch thick 80 durometer rubber pads vulcanized to the bottom surface of each plate. The steel plates shall be welded to the bottom of the foundation, doubling as additional gussets at foundation cross member joints.

BODY MATERIAL

All materials utilized shall be of the correct type, alloy, and thickness to withstand the intended usage and provide protection against cracking, corrosion or metal fatigue. The body compartments shall be fabricated using .125 inch 5052-H32 aluminum for most compartments unless otherwise stated. Any use of proprietary parts or materials in the construction of the body shall be unacceptable, due to potential delays or difficulties in an event of future repairs or when service becomes necessary.

All external upright supports for integral compartments shall incorporate a second set of upright supports constructed of 3 inch wide x 2 inch deep x .250 inch wall thickness and shall be located outboard of the internal upright supports to provide a rigid structure for the compartments to be mounted to. The compartment openings shall be constructed of 3 inch high x 2 inch wide x .125 inch wall thickness cross members and shall be placed in between the external upright supports to define the openings of all enclosed body compartments again, providing a rigid mounting location for compartments.

COMPARTMENT FLOOR-SWEEP OUT STYLE

Each compartment shall feature a raised floor sufficient enough so the lip of the compartment shall clear the frame rail of the body module to allow debris to be removed easily from the compartment. A hat shaped support shall be placed under the floor to improve stability and prevent bowing of the floor with use and age.

COMPARTMENTATION

All compartments shall be constructed of smooth aluminum and welded for strength and shall be sealed from the elements. The compartments shall be attached to the aluminum superstructure only, in order to maintain a truly modular design. Each compartment shall include ventilation louvers which shall be provided on each side panel of the compartment to maximize moisture evacuation for the protection of the equipment and the compartment itself. Louvers shall be placed in the ventilation holes to prevent debris transfer to and from the inside of the body module. Each compartment shall feature a smooth edges and surfaces from the walls to each weld without sharp edges in the material.

DRIVER SIDE COMPARTMENT D1

The driver's side forward full compartment shall be ahead of the rear axle. The compartments approximate "clear door opening" is 11" wide by 68" high with a variable depth of 14"/24".

COMPARTMENT VENTILATION

A minimum 2-inch single "Weber" style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

COMPARTMENT GRATING

The compartments shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

COMPARTMENT LIGHTING

The specified compartment shall have two (2) vertical Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

DRIVER SIDE COMPARTMENT D2

The drivers side upper compartment shall be above the rear wheel well. The compartments approximate "clear door opening" is 53" wide by 38" high with a depth of 14.75".

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

ADJUSTABLE SHELF

There shall be (1) adjustable shelf installed; and the shelf shall be constructed of .125" thick smooth aluminum plate and be mounted in the specified compartment with double bolt aluminum shelf brackets. The shelf shall have a broken front edge, and a broken rear edge for added strength and reinforcement.

COMPARTMENT SHELF GRATING

The specified compartment shelf shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

The compartment shelf and or shelves shall have reflective striping added to the outside lip. The stripe shall be a 1-1/2" minimum in width.

Specified part shall include Red and White DOT approved reflective striping.

COMPARTMENT GRATING

The compartments shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

COMPARTMENT LIGHTING

The specified compartment shall have two (2) vertical and one (1) horizontal Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

DRIVER SIDE COMPARTMENT D3

The driver’s side rear full compartment shall be aft of the rear wheel well. The compartments approximate "clear door opening" is 34" wide by 58" high with a variable depth of 14.75"/24".

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

ADJUSTABLE SHELF

There shall be (1) adjustable shelf installed; and the shelf shall be constructed of .125" thick smooth aluminum plate and be mounted in the specified compartment with double bolt aluminum shelf brackets. The shelf shall have a broken front edge, and a broken rear edge for added strength and reinforcement.

COMPARTMENT SHELF GRATING

The specified compartment shelf shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

The compartment shelf and or shelves shall have reflective striping added to the outside lip. The stripe shall be a 1-1/2" minimum in width.

Specified part shall include Red and White DOT approved reflective striping.

COMPARTMENT GRATING

The compartments shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

COMPARTMENT LIGHTING

The specified compartment shall have two (2) vertical and one (1) horizontal Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

PASSENGER SIDE COMPARTMENT P1

The passenger side forward full compartment shall be ahead of the rear axle. The compartments approximate "clear door opening" is 11" wide by 68" high with a variable depth of 14"/24".

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

PASSENGER SIDE COMPARTMENT P2

The passenger side upper compartment shall be above the rear wheel well. The compartments approximate "clear door opening" is 35" wide by 38" high with a depth of 14.75".

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

ADJUSTABLE SHELF

There shall be (1) adjustable shelf installed; and the shelf shall be constructed of .125" thick smooth aluminum plate and be mounted in the specified compartment with double bolt aluminum shelf brackets. The shelf shall have a broken front edge, and a broken rear edge for added strength and reinforcement.

COMPARTMENT SHELF GRATING

The specified compartment shelf shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

The compartment shelf and or shelves shall have reflective striping added to the outside lip. The stripe shall be a 1-1/2" minimum in width.

Specified part shall include Red and White DOT approved reflective striping.

COMPARTMENT GRATING

The compartments shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

COMPARTMENT LIGHTING

The specified compartment shall have two (2) vertical and one (1) horizontal Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

PASSENGER SIDE COMPARTMENT P3

The passenger side rear full compartment shall be aft of the rear wheel well. The compartments approximate "clear door opening" is 34" wide by 58" high with a variable depth of 14.75"/24".

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

ADJUSTABLE SHELF

There shall be (1) adjustable shelf installed; and the shelf shall be constructed of .125" thick smooth aluminum plate and be mounted in the specified compartment with double bolt aluminum shelf brackets. The shelf shall have a broken front edge, and a broken rear edge for added strength and reinforcement.

COMPARTMENT SHELF GRATING

The specified compartment shelf shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

The compartment shelf and or shelves shall have reflective striping added to the outside lip. The stripe shall be a 1-1/2" minimum in width.

Specified part shall include Red and White DOT approved reflective striping.

COMPARTMENT GRATING

The compartments shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

COMPARTMENT LIGHTING

The specified compartment shall have two (2) vertical and one (1) horizontal Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

DRIVERS SIDE TOP COMPARTMENT TD1

The driver's side top compartment shall be located at the top outer edge of the body; above the driver's side compartments towards the front of the body. The compartment shall measure approximately 56"L x 11"D x 12"W.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

This compartment shall feature a 14 GA EG steel lid, the lid shall be coated in black Dura-Bak.

DOOR LATCH

The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.

COMPARTMENT LIGHTING

The specified compartment shall have two (2) Tecniq E10 light(s) installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

DRIVERS SIDE TOP COMPARTMENT TD2

The driver's side top compartment shall be located at the top outer edge of the body; above the driver's side compartments towards the rear of the body. The compartment shall approximately 56"L x 11"D x 12"W.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

This compartment shall feature a 14 GA EG steel lid, the lid shall be coated in black Dura-Bak.

DOOR LATCH

The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.

COMPARTMENT LIGHTING

The specified compartment shall have two (2) Tecniq E10 light(s) installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

PASSENGER SIDE TOP COMPARTMENT TP1

The passenger side top compartment shall be located at the top outer edge of the body; above the passenger side compartments towards the front of the body. The compartment shall measure approximately 58"L x 11"D x 12"W.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

This compartment shall feature a 14 GA EG steel lid, the lid shall be coated in black Dura-Bak.

DOOR LATCH

The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.

COMPARTMENT LIGHTING

The specified compartment shall have two (2) Tecniq E10 light(s) installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

PASSENGER SIDE TOP COMPARTMENT TP2

The passenger side top compartment shall be located at the top outer edge of the body; above the passenger side compartments towards the rear of the body. The compartment shall measure approximately 41"L x 11"D x 12"W.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

This compartment shall feature a 14 GA EG steel lid, the lid shall be coated in black Dura-Bak.

DOOR LATCH

The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.

COMPARTMENT LIGHTING

The specified compartment shall have two (2) Tecniq E10 light(s) installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

BACK COMPARTMENT B1

The apparatus shall feature a back compartment which shall be located centered at the back of the apparatus. The compartments approximate "clear door opening" is 30" wide by 32" high with a depth of 23".

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

COMPARTMENT GRATING

The compartments shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

COMPARTMENT LIGHTING

The specified compartment shall have two vertical Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

DRIVERS SIDE -- LOWER HOSE STORAGE

The shall be a small hose storage compartment located at the rear of the apparatus below the D3 compartment. The compartment shall have internal measurements of approximately 19"W x 25"D x 9"H.

STAINLESS STEEL DOOR

The specified compartment shall have a drop down stainless steel door painted job color.

DOOR LATCH

The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

PASSENGERS SIDE -- LOWER HOSE STORAGE

The shall be a small hose storage compartment located at the rear of the apparatus below the P3 compartment. The compartment shall have internal measurements of approximately 19"W x 25"D x 9"H.

STAINLESS STEEL DOOR

The specified compartment shall have a drop down stainless steel door painted job color.

DOOR LATCH

The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

WHEEL WELL PANEL CONSTRUCTION

The outer wheel well panel shall be an integral part of the overall body design and constructed of aluminum

(same thickness as compartment construction). The exterior wheel well area shall be painted to match the body.

WHEEL WELL LINERS

Wheel well liners designed to protect the body from impact resulting from road debris thrown by the tires shall be installed. The removable liners shall be constructed from UHMW material to encompass the entire inner wheel well area. The liners shall be secured with stainless steel threaded fasteners.

REAR WHEEL FENDERETTES

Polished stainless steel fenderettes shall be installed at each rear wheel opening. The fenderettes shall be positioned outside of the wheel well panel to cover the tire area that extends past the body. The fenderettes shall be secured with stainless steel threaded fasteners.

DRIVERS SIDE BODY -- SCBA CYLINDER STORAGE PROVISIONS

A storage area for an SCBA cylinder shall be provided in the forward area of the driver's side wheel well. Dimensions shall be 8" diameter x 26" deep.

The SCBA door shall be made from stainless steel and painted job color.

The SCBA door shall have a non-locking lever latch.

The SCBA cylinder storage tube shall be made from aluminum. There shall be rubber matting to cusion the bottle glued into the tube.

SCBA CYLINDER STRAPS

There shall be a 1" nylon tether installed to secure the bottle in the storage tube.

DRIVERS SIDE BODY FULL SCBA STORAGE

A compartment for the storage of one (1) full SCBA pack with mask shall be provided in the rearward area of the drivers side wheel well.

The SCBA door shall be made from stainless steel and painted job color.

The SCBA door shall have a non-locking lever latch.

PASSENGER SIDE BODY -- SCBA CYLINDER STORAGE PROVISIONS

A storage area for an SCBA cylinder shall be provided in the forward area of the passenger's side wheel well. Dimensions shall be 8" diameter x 26" deep.

The SCBA door shall be made from stainless steel and painted job color.

The SCBA door shall have a non-locking lever latch.

The SCBA cylinder storage tube shall be made from aluminum. There shall be rubber matting to cusion the bottle glued into the tube.

SCBA CYLINDER STRAPS

There shall be a 1" nylon tether installed to secure the bottle in the storage tube.

PASSENGER SIDE BODY FULL SCBA STORAGE

A compartment for the storage of one (1) full SCBA pack with mask {will/shall} be provided in the rearward area of the passenger's side wheel well.

The SCBA door shall be made from stainless steel and painted job color.

The SCBA door shall have a non-locking lever latch.

RUB RAILS, CLEARANCE LIGHTS, AND REFLECTIVE TAPE

The sides of the lower body area fore and aft of the wheel well area shall be provided with 2" x 1.25" x .250" extruded aluminum rub rails, with end caps or angled corners.

Specified part shall include White reflective striping.

FRONT OF BODY -- PROTECTIVE SURFACE

The front of the apparatus body shall include a protective surface, constructed of aluminum tread plate material, which shall cover the outboard portion of each side of the body.

FRONT CORNERS OF BODY -- PROTECTIVE SURFACES

The front corners of the apparatus body shall include a protective surface installed. The surface shall be constructed of polished stainless steel material.

REAR BODY PANELS

The rear tail panels of the apparatus body shall be painted, to accommodate chevron striping.

OUTER REAR BODY PANELS -- PROTECTIVE COVERING

The rear outer panels of the body shall have protective surfaces installed on the corners. The protective covering shall be constructed of polished stainless steel material.

ANODIZED ALUMINUM DRIP RAIL

All enclosed compartment doors shall be provided with an aluminum drip rail above the doors.

ALUMININUM – COMPARTMENT DOOR, HINGED OVERLAP

Two (2) single, vertically hinged door shall be provide and fabricated from aluminum. The frame of the door shall be constructed of 1.75” x 1.75” x .125” aluminum tubing to prevent corrosion and provide structural support. The spacing created by the frame tubing shall filled with Styrofoam for added support, dent resistance, insulation and noise reduction. The exterior surface shall be .125” aluminum for durability. The interior surface shall be .080” aluminum. There shall be no mechanical fasteners, such as bolt heads or rivets on the inside or outside of the doors.

The exterior of the door shall overlap the opening of the compartment. A .75” lip shall be constructed around the opening of the compartment and the exterior of the door. A rubber seal shall be installed on the .75” lip on both the compartment and the door to provide for a double seal against water and dust. A rain gutter shall be mounted above the door creating a third layer of water protection.

The door shall be designed utilizing a D-ring style latch system. A 6” stainless steel D-ring latch, large enough to accommodate a gloved hand, shall be mounted on the exterior of the door. A stainless steel bezel shall be installed to house and protect the D-ring locking mechanism. The easily serviced bezel shall be mounted utilizing stainless steel screws. The D-ring locking mechanism shall be a double catch design. The first catch shall engage to secure the door in the event of improper closure. The second catch shall seal the door from water and other elements once the door has been properly closed.

The door shall be mounted using a stainless steel piano style hinge and a .25” diameter hinge pin for stability. The vertical hinge shall be mounted to the body frame with threaded inserts and stainless steel screws to preserve functionality and ease of maintenance in the event of damage.

Gas struts shall be utilized to hold the door in the open position and to prevent the door from slamming during closing. The gas struts shall be mounted directly to the door with a stainless steel bracket assembly for stability and ease of maintenance. The gas struts shall be mounted to the interior of the compartment with a fully adjustable assembly.

The exterior of the compartment doors and the door frames shall be painted to match the body in quality and tone. The interior surface shall not be painted, it shall be sanded utilizing a dual orbital technique.

The specified door(s) shall have a Polished stainless-steel D-ring door handle.

The specified door(s) D-ring handles shall be equipped with manual key door locks keyed to use the 1250 key.

COMPARTMENT DOOR EDGE STRIPING

The hinged compartment doors shall have reflective striping applied on the edges. The stripe shall be a 1-1/2" minimum in width.

Specified part shall include Red and White DOT approved reflective striping.

ALUMININUM – COMPARTMENT DOOR, HINGED OVERLAP

There shall be four (4) double, vertically hinged sets of doors fabricated from aluminum and installed on the apparatus body. Each door shall feature exterior surfaces which overlaps the opening of the compartment. The exterior surface shall be .125” aluminum for durability and damage resistance. The interior surface shall be .080” aluminum for structural support and overall appealing appearance of the compartment. The frame of the doors shall be constructed of 1.75” x 1.75” x .125” aluminum tubing to prevent corrosion and provide structural support. The spacing created by the frame tubing shall be filled with Styrofoam for added support and dent resistance, temperature insulation, and noise reduction.

A .75” lip shall be constructed around the opening of the compartment and the exterior of the door. A rubber seal shall be installed on the .75” lip of both the compartment and the door to provide for a double seal against water and dust. A rain gutter shall be mounted above the latch type door for an added third layer of water protection.

The doors shall be designed utilizing a D-ring latch system. A 6 inch stainless steel D-ring latch, large enough to accommodate a gloved hand, shall be mounted on the exterior of the door to allow the door to seal and fasten in the closed position. A stainless steel bezel shall be installed to house and protect the D-ring locking mechanism. The easily serviced bezel shall be mounted utilizing stainless steel screws for added stability of the mechanism and ease of maintenance in the event of damage. The D-ring locking mechanism shall be of a double catch design. The first catch shall engage to secure the door in the event of improper closure. The second catch will seal the door to water and other elements once the doors has been properly closed.

The doors shall be mounted with a stainless steel hinges with .25” diameter hinge pin for stability. The vertical hinges shall be mounted to the body frame with threaded inserts and stainless steel screws to preserve functionality with use or age and ease of maintenance in the event of damage.

Gas struts shall be utilized to hold the door in the open position and to prevent the door from slamming during closing. The gas struts are mounted directly to the door with a stainless steel bracket assembly for stability and ease of maintenance. The gas struts shall be mounted to the interior of the compartment with fully adjustable assembly for ease of adjustment and maintenance while increasing stability.

A polished stainless steel scuff guard shall be installed on the bottom of the compartment opening to prevent damage and wear to the paint and finish of the body module due to the removal and storage to equipment in the compartment.

The exterior of the compartment doors and the door jambs shall be painted to match the body in quality and tone. The interior of the door shall not be painted due to lack of exposure and inherent resistance to corrosion. The interior of the door shall be sanded utilizing a dual orbital technique. The sanding shall provide for a smooth, regular, scratch free surface on the interior of the door. The exterior skin to door frame joining seam shall be caulked and painted to provide a moisture proof seal.

The specified door(s) shall have a Polished stainless-steel D-ring door handle.

The specified door(s) D-ring handles shall be equipped with manual key door locks keyed to use the 1250 key.

COMPARTMENT DOOR EDGE STRIPING

The hinged compartment doors shall have reflective striping applied on the edges. The stripe shall be a 1-1/2" minimum in width.

Specified part shall include Red and White DOT approved reflective striping.

ALUMININUM – COMPARTMENT DOOR, LIFT UP HINGED OVERLAP

There shall be one (1), horizontally hinged lift up door shall be fabricated of aluminum. The door shall feature an exterior surface which overlaps the opening of the compartment. The exterior surface shall be .125” aluminum for durability and damage resistance. The interior surface shall be .080” aluminum for structural support and overall appealing appearance of the compartment. The frame of the door shall be constructed of 1.75” x 1.75” x .125” aluminum tubing to prevent corrosion and provide structural support. The spacing created by the frame tubing shall be filled with Styrofoam for added support and dent resistance, temperature insulation, and noise reduction.

A .75” lip shall be constructed around the opening of the compartment and the exterior of the door. A rubber seal shall be installed on the .75” lip of both the compartment and the door to provide for a double seal against water and dust. A rain gutter shall be mounted above the latch type door for an added third layer of water protection.

The door shall be designed utilizing a D-ring latch system. A 6 inch stainless steel D-ring latch, large enough to accomodate a gloved hand, shall be mounted on the exterior of the door to allow the door to seal and fasten in the closed position. A stainless steel bezel shall be installed to house and protect the D-ring locking mechanism. The easily serviced bezel shall be mounted utilizing stainless steel screws for added stability of the mechanism and ease of maintenance in the event of damage. The D-ring locking mechanism shall be of a double catch design. The first catch shall engage to secure the door in the event of improper closure. The second catch will seal the door to water and other elements once the door has been properly closed.

The door shall be mounted with a stainless steel hinge with .25” diameter hinge pin for stability. The horizontal hinge shall be mounted to the body frame with threaded inserts and stainless steel screws to preserve functionality with use or age and ease of maintenance in the event of damage.

Gas struts shall be utilized to hold the door in the open position and to prevent the door from slamming during closing. The gas struts are mounted directly to the door with a stainless steel bracket assembly for stability and ease of maintenance. The gas struts shall be mounted to the interior of the compartment with fully adjustable assembly for ease of adjustment and maintenance while increasing stability.

A polished stainless steel scuff guard shall be installed on the bottom of the compartment opening to prevent damage and wear to the paint and finish of the body module due to the removal and storage to equipment in the compartment.

The exterior of the compartment doors and the door jambs shall be painted to match the body in quality and tone. The interior of the door shall not be painted due to lack of exposure and inherent resistance to corrosion. The interior of the door shall be sanded utilizing a dual orbital technique. The sanding shall provide for a smooth, regular, scratch free surface on the interior of the door. The exterior skin to door frame joining seam shall be caulked and painted to provide a moisture proof seal.

The specified door(s) shall have a Polished stainless-steel D-ring door handle.

The specified door(s) D-ring handles shall be equipped with manual key door locks keyed to use the 1250 key.

COMPARTMENT DOOR EDGE STRIPING

The hinged compartment doors shall have reflective striping applied on the edges. The stripe shall be a 1-1/2" minimum in width.

Specified part shall include Red and White DOT approved reflective striping.

REAR DROP DOWN STEP

There shall be a rear drop down step, that when down shall be approx. 24" off the ground. The step shall fold up flush with the rear tail panel when not in use to aid in increased angle of departure. The stepping surface shall be extruded aluminum diamond back material.

FOLDING STEP -- DRIVERS SIDE FRONT

Four (4) 8" square folding step of die cast aluminum with stainless steel springs shall be provided. The step shall be installed on the front drivers side of the body.

The folding step shall have a chrome plated backing plate with built in LED light.

HANDRAILS

One (1) knurled type non-slip handrail, approximately 60” in length, shall be horizontally installed.

ROOF ACCESS LADDER

A Ziamatic model number 3096 Quic-Ladder, swing out and down ladder shall be installed on the drivers side of the rear body panel for access to the roof. The ladder shall be designed to store parallel to the body when not in use. A handle shall be provided to unlock the ladder from the travel position to allow the ladder to be pulled out to a comfortable climbing angle.

Release of the handle allows the ladder to latch automatically and it will not retract until the scissor lock is raised. The ladder shall have a two-rung fold-down section and a six-rung main ladder section and be equipped with cast aluminum rungs having flat, non-skid surfaces to provide traction and safety.

Each step shall be 3" deep x 15-1/2" wide. The handrails shall be fabricated from 1-1/4" heavy-walled aluminum tubing and covered between rungs by ribbed black neoprene tubing, to provide a firm gripping surface.

LADDER LIGHTING

There shall be (2) Whelen 0S series part# 0AC0EDCR 45 degree angled light(s) installed to adequately illuminate the rear ladder.

HOSE BODY CONSTRUCTION SPECIFICATIONS

The hose bed side sheets and floor shall be constructed from aluminum material The hose bed floor shall not directly rest on the top of the polypropylene booster tank and be removable for tank access. The hose body shall be free of sharp corners, bolts, or other obstructions that may catch hose and other equipment.

HOSE BED DIVIDER

One (1) adjustable width hose bed divider constructed from no less than .250 (1/4") aluminum material shall be installed. The divider shall be secured to the hose bed by utilizing adjustable track type channels and fasteners. The divider shall be full length and depth of the hose bed.

HOSE BED CENTER DIVIDER

An adjustable width hose bed divider constructed from no less than .250 (1/4") aluminum material shall be installed. The divider shall be the center support for the hosebed doors and feature a top C channel with rubber material attached.

ALUMINUM HOSEBED GRATING

The hose bed compartment deck shall be constructed entirely from maintenance-free, extruded aluminum slats. The slats shall feature an anodized, contoured, ribbed top surface. The slats shall be of widths approximately 3/4" high x 4.5" wide and shall be welded into a one-piece grid system to prevent the accumulation of water and allow ventilation to assist in drying hose.

ALUMINUM HOSEBED COVER

The hose bed shall be equipped with reinforced hinged aluminum diamond plate double doors with a rear enclosure for positive security. The walking surface on the cover shall provide a non-slip, secure surface. Positive hold-open devices shall be provided to hold the door in the open position.

HANDRAILS

Two (2) knurled type non-slip handrail, approximately 18” in length, shall be vertically installed.

HOSEBED REAR ENCLOSURE

The hose bed shall include flaps and straps at the rear of the apparatus. The straps shall utilize a cinch buckle with hook and footman loop to keep the flaps secured.

The flaps shall be black in color.

HOSEBED -- AREA LIGHTS

(4) Tecniq E10 lights shall be provided and installed on hosebed door(s).

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

HOSEBED COVER- FILL TOWER ACCESS

The front fill tower section of the hosebed shall be walled off and feature a lift up aluminum diamond plate door. The door shall feature a small access door to access the fill towers.

LIGHTING

The specified compartment shall have no compartment lighting.

DOOR AJAR SENSOR

The Specified door(s) shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

WATER TANK SPECIFICATIONS

The water tank shall have a capacity of 750 gallons.

The water tank shall be constructed of polypropylene, nitrogen-welded and tested inside and out. The tank manufacturer shall define the floor, top, sides, ends, and baffles material thicknesses. The tank shall carry a lifetime warranty.

The transverse and longitudinal swash partitions shall be interlocked and welded to each other as well as to the walls of the tank. The partitions shall be designed and equipped with vent holes to permit air and liquid movement between compartments. The cover shall be recessed .375" from the top of the side walls. Hold down dowels shall extend through and be welded to both the covers and the transverse partitions, providing rigidity during fast fill operations. Drilled and tapped holes for lifting eyes shall be provided in the top area of the water tank.

The water tank manufacturer shall certify the capacity of the water tank prior to delivery of the apparatus. This capacity shall be recorded on the manufacturer's record of construction and the certification shall be provided to the purchaser when the apparatus is delivered. Tank construction shall conform to applicable NFPA standards.

NFPA COMPLIANCE

The water tank construction shall conform to applicable NFPA standards.

TANK FILL PROVISIONS

A 10” square x 10” high fill tower shall be equipped with a hinged, watertight cover and a removable screen to catch debris. A color-coded label or visible permanent marking that reads "WATER TANK FILL" shall be placed at or near the water tank fill opening. The fill tower shall be centrally located at the front area of the tank.

VENT AND OVERFLOW

The fill tower shall incorporate a vent and overflow system shall be designed into the water tank. The system shall include a 3" diameter PVC pipe that functions both as an air vent while emptying the tank and as an overflow when filling the tank. The overflow shall discharge excess water below the frame rails of the vehicle.

WATER TANK SLEEVE

A 4" outside diameter sleeve {will/shall} be incorporated into the fabrication of the water tank. The horizontal sleeve {will/shall} allow 3-1/2" piping to pass through the tank.

CLASS A FOAM TANK SPECIFICATIONS

The Class A foam tank shall have a capacity of 20 gallons.

FOAM TANK FILL AND VENTING PROVISIONS

The foam concentrate tank shall be provided with a fill pipe having a volume of not less than 2 percent of the total tank volume. The filler opening shall be capped with a sealed air-tight threaded cover. The fill opening shall be designed to incorporate a removable screen and shall be located so that foam concentrate from a five (5) gallon container can be dumped into the tank.

The foam tank filler shall be equipped with a pressure/vacuum vent that enables the tank to compensate for changes in pressure or vacuum when filling or withdrawing foam concentrate from the tank. The pressure/vacuum vent shall not allow atmospheric air to enter the foam tank except during operation or to compensate for thermal fluctuations. The vent shall be protected to prevent foam concentrate from escaping or directly contacting the vent at any time. The vent shall be of sufficient size to prevent tank damage during filling or foam withdrawal.

A color coded label or visible permanent marking that reads "CLASS A -- FOAM TANK FILL" shall be placed at or near the foam concentrate tank fill opening. An additional label shall be placed at or near any foam concentrate tank fill opening stating the type of foam concentrate the system is designed to use.

Any restrictions on the types of foam concentrate that can be used with the system shall also be stated, along with a warning message that states "WARNING: DO NOT MIX BRANDS AND TYPES OF FOAM."

A 3/4" diameter connection, piping, and gate type valve shall be installed for the foam tank for draining purposes.

DIRECT TANK FILL - REAR DRIVERS SIDE

A valve for direct filling of the tank shall be supplied. The 1/4 turn valve shall be configured with 2-1/2" NH female threads, debris screen, threaded plug with retention chain and lever handle. The valve shall be located on the drivers side rear of the apparatus.

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome brass 2-1/2" NH rocker lug plug with a securing chain or cable shall be installed on the intake.

(1) chrome plated brass 30 degree elbow with 2.5" swivel female NH x 2.5" male NH thread with rocker lugs shall be provided on the direct tank fill.

BACK PACK FILL SYSTEM

There shall be one (1) back pack fill system provided and installed on the left lower area of the pump panel. The valve plumbing shall be 3/4" I.D. hose.

12 VOLT ELECTRICAL SPECIFICATIONS

The following describes the low voltage electrical system on the apparatus including all panels, electrical components, switches and relays, wiring harnesses and other electrical components. The apparatus manufacturer shall conform to the latest Federal DOT standards, current automotive electrical system standards, and the applicable requirements of the NFPA 1906.

Wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the circuit is protected. Voltage drops shall not exceed 10 percent in all wiring from the power source to the using device. The wiring and wiring harness and insulation shall be in conformance to applicable SAE and NFPA standards. The wiring harness shall conform to SAE J-1128 with GXL temperature properties. Exposed wiring shall be run in a loom with a 290 degree Fahrenheit rating. Wiring looms shall be properly supported and attached to body members. Electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

All wiring connections and terminations shall provide positive mechanical and electrical connections and be installed in accordance with the device manufacturer's instructions. When wiring passes through metal panels, electrical connections shall be with mechanical type fasteners and rubber/plastic grommets.

Wiring between cab and body shall be split using Deutsch type connectors or enclosed in a terminal junction panel allowing body removal with minimal impact on the apparatus electrical system. Connections shall be

insulated with heat shrink crimp-type tubing to resist moisture and foreign debris such as grease and road grime. Weather resistant connectors shall be provided throughout the system.

Electrical junction or terminal boxes shall be weather resistant and located away from water spray conditions. When required, automatic reset breakers and relays shall be housed in the main body junction panel.

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless enclosed in an electrical junction box or covered with a removable electrical panel. Wiring shall be secured in place and protected against heat, liquid contaminants and damage and shall be uniquely identified at least every six inches (6") by color coding or permanent marking with a circuit function code and identified on a reference chart or electrical wiring schematic per requirements of applicable NFPA 1906 standards.

Low voltage protective devices shall be provided for the electrical circuits. The devices shall be accessible and located in required terminal connection locations or weather resistant enclosures. Over current protection devices shall be automatic reset type suitable for electrical equipment and meet SAE standards. All electrical equipment, switches, relays, terminals, and connectors shall have a direct current rating of 125 percent of maximum current for which the circuit is protected. Electro-magnetic interference suppression shall be provided in the system as required in applicable SAE standards.

The electrical system shall include the following:

Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied. All terminal plugs located outside of the cab or body shall be treated with a corrosion preventative compound.

All electrical wiring shall be placed in a protective loom or be harnessed.

Exposed connections shall be protected by heat shrink material and sealed connectors.

Large fender washers shall be used when fastening equipment to the underside of the cab roof and all holes made in the roof shall be caulked with silicone.

Electrical components installed in exposed areas shall be mounted in a manner that will not allow moisture to accumulate inside.

A service loop shall be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work.

Upon completion of the vehicle and prior to delivery, the apparatus shall be electrically tested and the electrical testing, certifications, and test results shall be submitted with delivery documentation per requirements of NFPA 1906.

ELECTRICAL WIRING HARNESS

The electrical system shall be divided into separate harnesses. The individual harness shall be connected with Deutsch type quick connectors. The wiring and appliances shall be protected by automatic reset type circuit breakers.

CUSTOM FABRICATED CONSOLE OPTION 3

A custom fabricated electrical console and enclosure shall be located between the driver's and the officer's seating positions. The flat console lid shall feature two side-by-side rows of plate mountings that are similar in size and style to Havis brand plates.

The final console layout shall be approved by the customer.

CONSOLE MAP BOX

There shall be a map box attached to the rear of the console. The map box shall be painted to match the console.

BATTERY SWITCH - MASTER DISCONNECT

A battery cutoff switch shall be provided in the cab within easy reach of the driver; by the chassis manufacturer. There shall be a 200amp continuous rated solenoid installed and switched by the OEM battery master switch.

BATTERY CHARGER

A Kussmaul Autocharge 1000 PLC, model #091-215-12, automatic battery charger shall be provided. The battery charger shall be wired to the 12 volt battery system. The unit shall be mounted in a clean, dry area accessible for service and/or maintenance. It shall be wired to the specified shore power receptacle. Included in the package is a Kussmaul Super 20 Auto Eject Deluxe with built in bar graph display. Mounting location shall be determined in pre-con

The specified auto eject cover shall be yellow.

IDENTIFICATION LIGHTS

All LED identification lights shall be installed on the vehicle as required by applicable highway regulations.

LICENSE PLATE MOUNTING

A front, predrilled license plate position shall be installed in the front bumper if permissible to the design. Passenger side.

LICENSE PLATE MOUNTING AND LIGHT

A predrilled backing plate and LED light shall be installed on the rear for mounting of the license plate.

Stop, Tail, Turn Lights, Whelen M Series, Package

STOP AND TAIL LIGHTS

Two (2) Whelen Model #M6BTT, 4" x 6" LED stop and tail lights with red lenses shall be provided. The light shall be furnished with a optic polycarbonate lens for maximum light spread and furnished with a 6" wire pigtail.

TURN SIGNALS

Two (2) Whelen M6T light heads shall be installed on the apparatus. The light heads shall feature an amber lens with sequential chevron arrow, with multi flash pattern.

BACK-UP LIGHTS

Two (2) Whelen M-Series, 4" x 6" rear LED back-up lights shall be installed.

TAILLIGHT BEZELS

Two chrome (2) Whelen M Series housings shall be installed at the rear of the apparatus for four (4) Whelen M-Series stop-tail-turn-backup and warning lights.

ZONE C- LOWER REAR

Two (2) Whelen M6 Series Model # M6RC warning light shall be provided. The warning light shall incorporate Linear Super-LED® and Smart LED® technology. The M6RC configuration shall consist of 18 red Super-LEDs and a clear optic polycarbonate lens.

The lens/reflector assembly shall be sealed and resistant to water, moisture, dust, and other environmental conditions. The hard coated lens shall provide extended life/luster protection against UV and chemical stresses.

FRONT BUMPER -- GROUND LIGHTS

There shall be two (2) Tecniq E10, LED ground light(s) installed under the front bumper.

CAB GROUND LIGHTS

There shall be four (4) Tecniq E10, LED ground lights installed under the cab door(s).

GROUND LIGHTS - PUMP PANEL

There shall be two (2) Tecniq E10, LED ground lights installed under the pump panel running board(s).

GROUND LIGHTS - MID BODY

There shall be two (2) Tecniq E10, LED ground lights installed under the mid-body compartment(s).

GROUND LIGHTS - UNDER REAR SIDE COMPARTMENT

There shall be two (2) Tecniq E10, LED ground lights installed under the rear side body compartment(s).

GROUND LIGHTS - UNDER REAR STEP

There shall be two (2) Tecniq E10, LED ground lights installed under the rear step area.

PIONEER MICRO

There shall be two (2) Whelen Pioneer Micro lights provided and installed on the apparatus. They shall be located in the center section of the front bumper in provided cutouts. The lights shall be controlled by a button labeled "Scene Front" on the whelen siren controller.

FRONT BUMPER BEZEL

The center of the front bumper shall feature a bezel, the bezel shall trim out around the front tow plate and front Whelen Micro Pioneer lights and have an BME logo. The BME logo shall have reflective material behind it.

REFLECTIVE BACKGROUND

Part shall feature a Red reflective background.

PIONEER FLOOD/SPOT SURFACE MOUNT LIGHTHEAD

Six (6) Whelen Pioneer Plus™ Model # PCPSM1C shall be provided and installed on the apparatus. The light head shall have a chrome housing.

The scene lights shall be activated by individual buttons or switches on the cab center console. Left, right, and rear scene light controls.

DOOR OPEN WARNING LIGHT

A door open warning light shall be installed on cab dash. The light shall be a flashing LED light with a red lens. The light shall include a label, “Do Not Move Apparatus When Light is ON”.

"DOOR OPEN" AND EQUIPMENT OPERATION ALARM

A buzzer or alarm shall be installed in cab to indicate "doors open" or equipment operation on the apparatus. The buzzer shall operate when parking brake is released. The light shall include a label, “Do Not Move Apparatus When Light is ON”.

RADIO PRE-WIRE

There shall be a radio pre-wire provided in the cab center console. The prewire shall consist of a battery hot, battery switched, and a ground source.

RADIO ANTENNA INSTALLATION

There shall be one (1) radio antenna installed on the apparatus and routed to the cab center console.

BACK UP ALARM

One (1) solid state back up alarm shall be provided at the rear of the apparatus. The back up alarm shall be wired to the reverse circuit of the transmission, and shall provide an audible alarm to the rear of the apparatus when reverse gear is selected. The alarm shall have a volume of 87 to 112 db while in operation.

130° CAMERA WITH 18 INFRARED ILLUMINATORS & 7” DIGITAL MONITOR

A Fire Research inView™ TrueSight™ model BCA111-A00 kit shall include: (1) one 130° camera with 18 infrared illuminators and (1) one 7” digital monitor.

The 130° Camera shall include the following features: ⅓” SONY® Color CCD Sensor, 250,000 pixels for Picture Elements and Gamma Correction with R=0.45 to 1.0. Camera shall have Mirror Image capability. (1) One 66 ft. Extension Cable shall be included for the camera. (1) One Screw Kit shall be provided for camera installation. The camera shall have a built-in high gain microphone. The Image Sensor shall provide 600 TV Lines PAL: 500(H) *582(V), NTSC: 510(H) *492(V). The 2.1MM Lens shall have a 130° Viewing Angle. The Waterproof rating shall be IP69K. The 130° Camera shall include an Internal Synchronization Sync System. Infrared Distance shall be 50 Ft. (18 Infrared IR). The Usable Illumination shall be 0 Lux (with IR ON). The Power Source shall be DC 12V (+/-10%). Signal-to-Noise ratio (S/N Ratio) shall be rated for higher than 48DB. The Electronic Iris rating shall be 1/50, 1/60-1/100,000 seconds. Video Output rating shall be 1VP.P 75 Ω. The IR Switch Control shall have a CDS Automatic Control. Vibration and Impact Rating shall be 20G/100G. The Operating and Storage Temperature ratings both shall be -40°F ~ +176°F / RH 95% Max.

The model BCA111-A00 kit shall also include (1) one **7" TFT LCD Digital Color Monitor**.
The specifications shall be as follows for the monitor:

- Dot Resolution: 800 x 3 (RGB) x 480
- Display Format/Contrast: 16:9 / 500:1
- Display Brightness: 400 CD/m^2
- Viewing Angle: U:50° D:60° L/R:70°
- 3 Channel Video Input
- 1 VP-P, 75Ω
- Power Supply – DC 12V-24V (+/-10%)
- Power Consumption – 5W
- Operating Temperature: -22°F ~ +176°F
- Video System: Auto NTSC/PAL
- Overall Dimensions: 7" (L) x 5" (H) x 1" (D)
- Weight: 400G
- Vibration Rating: 5G
- Dot Pitch: 0.192 (H) x 0.1805 (V)
- Internal Sync System

HEADLIGHT FLASHER

The wig wag feature shall be programmed through the chassis supplied Diamond Logic system.

ELECTRONIC SIREN

A Whelen CenCom Core C399 electric siren and lighting control module shall be installed.

WHELEN CORE CONTROL HEAD

There shall be a Whelen model CCTL6 control head supplied with the Cencom Core system. It features a 3 section control head, with 8 push buttons, 4- position slide switch with a 7 position rotary knob. A manual siren and air horn button, and 3 traffic advisor control buttons.

WHELEN CORE WECANX TRAFFIC ADVISOR MODULE

There shall be a Whelen model CTA Traffic Advisor module interfaced with the Cencom Core system.

SIREN SPEAKER

One (1) Whelen Model #SA315P siren speaker shall be provided. The 100 watt siren speaker shall be designed in a black nylon composite housing with 123 decibel rating.

ZONE A FRONT UPPER -- LIGHTBAR

One (1) Whelen Model # TY0RRRR Cenator series light bar shall be installed on the apparatus. The lightbar shall feature the following:

- Six forward facing red LED lights.
- Two forward facing white LED lights.
- Two forward facing LED take down lights.
- A left and right facing LED take down light.
- Two rear facing LED take down lights.
- Four corner red LED lights.
- Two rear facing amber LED lights.
- Two rear facing white LED lights.

ZONE A -- LOWER FRONT WARNING LIGHTS

Two (2) Whelen M6 Series Model # M6RC warning light shall be provided. The warning light shall incorporate Linear Super-LED® and Smart LED® technology. The M6RC configuration shall consist of 18 red Super-LEDs and a clear optic polycarbonate lens.
The lens/reflector assembly shall be sealed and resistant to water, moisture, dust, and other environmental conditions. The hard coated lens shall provide extended life/luster protection against UV and chemical stresses.

The specified Whelen M6 lights shall be equipped with chrome plastic flange type light bezel mountings.

ZONE B AND D-- FRONT INTERSECTION

Two (2) Whelen M6 Series Model # M6RC warning light shall be provided. The warning light shall incorporate Linear Super-LED® and Smart LED® technology. The M6RC configuration shall consist of 18 red Super-LEDs and a clear optic polycarbonate lens.

The lens/reflector assembly shall be sealed and resistant to water, moisture, dust, and other environmental conditions. The hard coated lens shall provide extended life/luster protection against UV and chemical stresses.

The specified Whelen M6 lights shall be equipped with chrome plastic flange type light bezel mountings.

ZONE B AND D-- LOWER MID BODY

Two (2) Whelen M6 Series Model # M6RC warning light shall be provided. The warning light shall incorporate Linear Super-LED® and Smart LED® technology. The M6RC configuration shall consist of 18 red Super-LEDs and a clear optic polycarbonate lens.
The lens/reflector assembly shall be sealed and resistant to water, moisture, dust, and other environmental conditions. The hard coated lens shall provide extended life/luster protection against UV and chemical stresses.

The specified Whelen M6 lights shall be equipped with chrome plastic flange type light bezel mountings.

ZONE B AND D-- UPPER SIDE FRONT

Two (2) Whelen M6 Series Model # M6RC warning light shall be provided. The warning light shall incorporate Linear Super-LED® and Smart LED® technology. The M6RC configuration shall consist of 18 red Super-LEDs and a clear optic polycarbonate lens.

The lens/reflector assembly shall be sealed and resistant to water, moisture, dust, and other environmental conditions. The hard coated lens shall provide extended life/luster protection against UV and chemical stresses.

The specified Whelen M6 lights shall be equipped with chrome plastic flange type light bezel mountings.

ZONE B AND D-- UPPER REAR CORNER

Two (2) Whelen M6 Series Model # M6RC warning light shall be provided. The warning light shall incorporate Linear Super-LED® and Smart LED® technology. The M6RC configuration shall consist of 18 red Super-LEDs and a clear optic polycarbonate lens.

The lens/reflector assembly shall be sealed and resistant to water, moisture, dust, and other environmental conditions. The hard coated lens shall provide extended life/luster protection against UV and chemical stresses.

The specified Whelen M6 lights shall be equipped with chrome plastic flange type light bezel mountings.

ZONE C UPPER REAR

Two (2) Whelen M6 Series Model # M6RC warning light shall be provided. The warning light shall incorporate Linear Super-LED® and Smart LED® technology. The M6RC configuration shall consist of 18 red Super-LEDs and a clear optic polycarbonate lens.

The lens/reflector assembly shall be sealed and resistant to water, moisture, dust, and other environmental conditions. The hard coated lens shall provide extended life/luster protection against UV and chemical stresses.

The specified Whelen M6 lights shall be equipped with chrome plastic flange type light bezel mountings.

TRAFFIC ADVISOR

A Whelen Traffic Advisor™ model # TAM83 shall be provided. The traffic advisor shall incorporate a rectangular extruded black powder coated aluminum chassis with eight amber TIR3™ Super-LED® lights with waterproof connectors. The TIR3 lights shall be installed in a clear optic hard coated polycarbonate lens. The

TIR3 lights shall incorporate three amber Super-LEDs, a clear horizontal optic hard coated polycarbonate lens, and utilize a TIR reflector for maximum output. The hard coated lens housing shall provide extended life/luster protection against UV and chemical stresses. The TIR3 lens/reflector assembly and conformal coated PC board shall provide additional protection against environmental elements. The TIR3 lights are installed with waterproof connectors.

BODY PAINTING SPECIFICATIONS

All exposed surfaces shall be prepared and painted using a multi-step process to ensure a blemish-free, protective coating for the base metal materials.

All removable items, such as brackets and compartment doors, shall be removed and painted separately to insure finish paint behind them after they are reinstalled.

Due to its modular design, the apparatus body shall be completely finish painted prior to its installation on the chassis.

The body shall be sanded, and cleaned. Any imperfections or defects in the metal shall be corrected with premium body filler and then sanded smooth.

An epoxy primer shall be utilized on all painted and coated surfaces and shall prepare the metal for the final paint. The direct-to-metal primer shall be used to create a first level seal allowing secure adhesion between the base metal and the subsequent substrates.

All body and components shall then be primed, thoroughly sanded, and meticulously inspected for any imperfections; which shall be properly corrected..

All surfaces shall then be painted with a base coat of premium paint following the guidelines as established by the paint manufacturer. The body shall be painted using a single color to match the cab primary color, and then shall be buffed to a high gloss finish.

INTERIOR COMPARTMENT FINISH

The interior wall, floor and ceiling surfaces of compartments shall be finished with Rust-Oleum brand Multispec color flecked paint. The final color combination shall be determined in pre-con.

The specified compartment(s) shall be coated with Gray Stone colored Multi-Spec paint.

TOUCH-UP PAINT

Touch-up paint shall be furnished with the completed truck at final delivery.

VALVE PAINTING

All exposed valves shall be painted to match the color of the exterior body.

CAB AND BODY STRIPING

The cab and body shall have a straight Scotchlite reflective stripe applied horizontally. The stripe shall be a 4" minimum in width and be applied horizontally around the cab and body in accordance with NFPA standards.

CHEVRON STRIPING

The rear panels of the body shall have 3M brand, 6” wide, reflective striping installed in the available area. The Chevron style stripes shall be applied at a 45-degree angle, pointing towards the center upper portion of the rear panel. The Chevron striping shall cover the entire rear of the apparatus.

CHEVRON COLORS

The specified chevron colors shall be red and yellow.

LADDER MOUNTING SYSTEM

A hydraulic powered center mount ladder bracket system shall be provided on the apparatus. The installation shall comply with all applicable NFPA #1901 provisions.

OPTIONAL STOPS

The optional stop kit provides solid "lock up" of the HSLA system against the apparatus body.

HARD SUCTION MOUNTING TRAY

There shall two (2) hard suction hose trays mounted to the hydraulic ladder rack lift. The suction trays shall feature two (2) Velcro straps to keep them in place.

WHEEL CHOCKS

Two (2) Worden brand, Model #HWC-7WH wheel chocks shall be provided.

5# DRY CHEMICAL FIRE EXTINGUISHER

One (1) 5# ABC dry chemical fire extinguisher and mounting bracket shall be provided on the apparatus. The

extinguisher shall have a pressure gauge and shall be filled with a dry chemical extinguishing agent.

HYDRAULIC JACK

One (1) hydraulic jack shall be provided. The jack shall be designed for lifting capacity of twelve (12) tons.

LUG WRENCH

There shall be one (1) lug wrench provided and shipped loose with the completed apparatus.

REFLECTOR

A set of three (3) triangular reflectors shall be provided.

GOLDEN STATE
FIRE APPARATUS

www.goldenstatefire.com
7400 Reese Road
Sacramento, CA 95828
Office 916.330.1638
Fax 916.330.1649

SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT

Golden State Fire Apparatus/ Pierce Manufacturing Quote Information

October 21, 2022

The following quote is for:

- One (1) Pierce/ IHC Type 2 Engine
- Two Options:
  - Option A – 100% Pre-Payment At Time Of Order
  - Option B – Payment At Time Of Completion

The following quote includes the following:

- Third party surety performance bond.
- One virtual pre-construction conference.
- One factory final inspection trip for two (2) customer representatives.
- Delivery of vehicle from the factory to dealership. Pre-delivery inspection at the dealership.
- Final delivery to customer location.
- DMV registration.
- State sales tax.
- California tire fee.
- Current day, vehicle completion is approximately 720 to 780 days after receipt of order.

GOLDEN STATE
FIRE APPARATUS

www.goldenstatefire.com
7400 Reese Road
Sacramento, CA 95828
Office 916.330.1638
Fax 916.330.1649

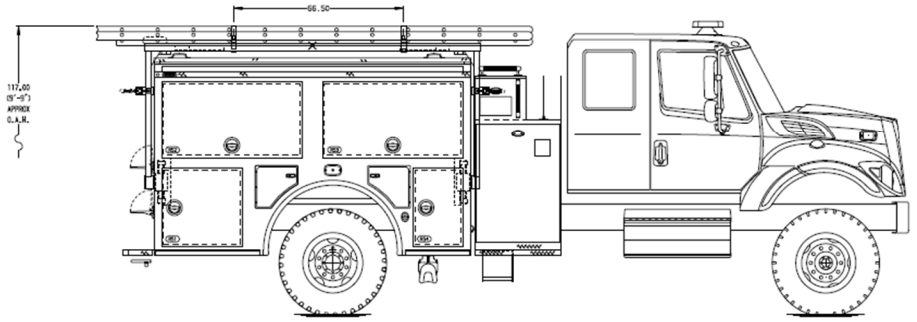
OPTION "A"
100% PRE-PAYMENT OPTION
PAYMENT DUE WITHIN FIFTEEN (15) DAYS AFTER RECIEPT OF ORDER

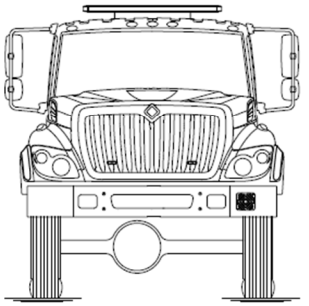
#	Description	Unit Price
A	Pierce IHC Type 2 Engine	$528,308.72
B	Discount For 100% Pre-Payment	($17,161.39)
	7.25% State Sales Tax	$37,058.18
	California Tire Fee	$10.50
	GRAND TOTAL	**$548,216.01**

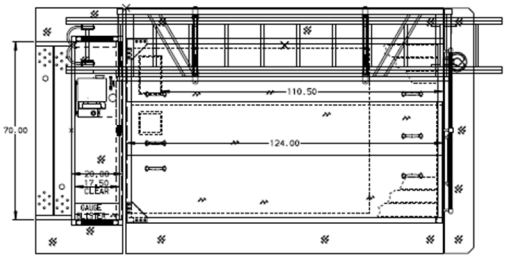
OPTION "B"
PAYMENT DUE AT TIME OF COMPLETION
PAYMENT DUE WITHIN FIFTEEN (15) DAYS OF FINAL INSPECTION AND PRIOR TO SHIPMENT

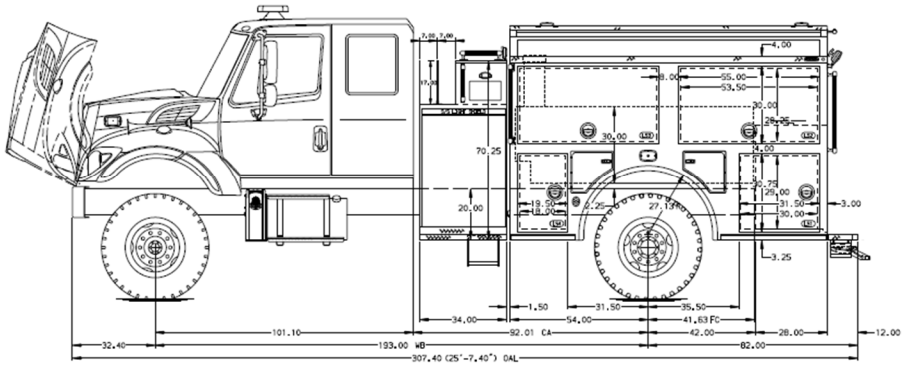
#	Description	Unit Price
A	Pierce IHC Type 2 Engine	$528,308.72
	7.25% State Sales Tax	$38,302.38
	California Tire Fee	$10.50
	GRAND TOTAL	**$566,621.61**

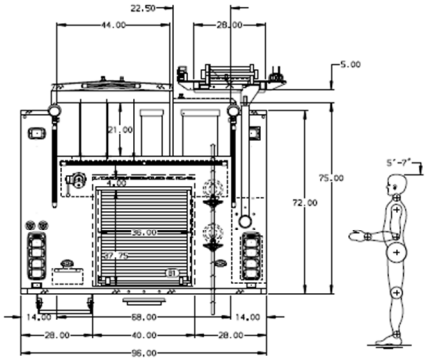
NOTE: Quote is valid for 15 days from date of issuance and is subject to change based on final specification option content











NOTE

DIMENSIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MINOR DEVIATIONS AS MAY OCCUR OR BE NECESSARY IN CONSTRUCTION.
MINOR DETAILS NOT SHOWN.

REV.	DATE	BY	CHK'D
▽	-	-	-

CHASSIS DATA
CHASSIS: IHC
MODEL: HVS07 4X4

Pierce MANUFACTURING INC.

TITLE: 1000-D-480P 20 FOAM,124"BODY,LS&RS FULL HEIGHT 34"SIDE CONTROL,(2)1.5"CROSSLAYS
FOR: SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT/CALFIRE GOLDEN STATE FIRE APPARATUS,INC JON BAUER,BID#915
DRWG. NO.: 04-9013

JOB NO.	PRELIM
DATE	SCALE: 1:24
08JUN21	DRAWN BY: JLA
-	CHK'D BY: -
SHEET NO.: 1 OF 1	SHEET SIZE: D

Your apparatus will be manufactured in Bradenton, Florida.

NFPA 2016 STANDARDS

This apparatus specification includes a commercial chassis that has not been certified to meet the requirements of NFPA 1901 by the chassis manufacturer. Although this chassis may comply with certain aspects of the standard, Pierce has not received certification from this chassis manufacturer that all criteria have been met. The body as built by the manufacturer must comply with the NFPA standards effective January of 2016.

Certification of slip resistance of all stepping, standing and walking surfaces must 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.

NFPA COMPLIANCY

Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in the 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."

PUMP TEST

The rated water pump will be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results, along with the pump manufacturer's certification of hydrostatic test, the engine manufacturer's certified brake horsepower curve, and the manufacturer's record of pump construction details will be forwarded to the Fire Department.

PRE-CONSTRUCTION, CUSTOMER LOCATION

A virtual pre-construction meeting will be conducted at customer location.The intent of this meeting is to review and finalize, in detail, the specifications prior to the start of production. The pre-construction meeting will have a duration of one (1) day and be scheduled at times mutually agreed upon between Golden State Fire Apparatus and the Customer.

FINAL INSPECTION FACTORY TRIP

A final inspection trip to the manufacturing facility will be provided for two (2) Customer representative(s). The intent of this trip is to ensure that the apparatus is built to specification and to detect any deficiencies that require correction. The final inspection trip will have a duration of four (4) days and three (3) nights and be scheduled at times mutually agreed upon between Golden State Fire Apparatus (GSFA). and the Customer. Costs for airfare, lodging, meals and ground transportation while at the manufacturers location will be the responsibility of GSFA. Air travel will be from one of the following airports: Sacramento, San Francisco or San Jose.

Costs such as Customer ground transportation in California, Customer airport parking, Customer luggage fees and Customer incidentals while traveling to the factory will be the responsibility of the Customer. Flight reservations are non-refundable and in the event of a cancellation after booking, the Customer will be responsible for all costs associated with this cancellation, which may include not only the original ticket cost but also any change or cancellation fees imposed by the airline and/ or travel agency. Flight reservations are also non-transferable.

PERFORMANCE BOND, 1 YEAR

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.

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 25 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.

APPROVAL DRAWING

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.

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.

ELECTRICAL WIRING DIAGRAMS
Two (2) electrical wiring diagrams, prepared for the body as it interfaces with the commercial chassis, will be provided.

CHASSIS
The chassis will be an International HV (Heavy Vocational) supplied with the following equipment:

MAXIMUM OVERALL LENGTH
The maximum overall length of the apparatus will be 27' - 0.00".

TARGET OVERALL HEIGHT
The target overall height of the apparatus will be 124.00".

WHEELBASE
The wheelbase of the vehicle will be 193.00".

GVW RATING
The gross vehicle weight rating will be 37,500 lbs..

FRAME
The frame rails will be formed from 120,000 psi yield, heat treated alloy steel.

FRONT AXLE
The front drive axle will have a ground rating capacity of 14,000 lb.

TRANSFER CASE
The transfer case will be a two (2) speed with high and low range.

PTO provision will be included.

Electric over air shift controls will be provided.

FRONT SUSPENSION
Spring mounted: Parabolic, Taper Leaf

Capacity at ground: 14,000 lb

Shock absorbers will be provided on the front axle.

FRONT BRAKES
The front brakes will be S-Cam, 16.50" x 5.00". The front brakes will be provided with automatic slack adjusters.

TIRE BRAND
The default brand of tire for the commercial chassis manufacturer for this apparatus is Michelin.

However, the commercial chassis manufacturer reserves the right to substitute brands and models of tire as may be available at the factory on the date of manufacture. They will provide the proper tread style and weight rating for the position in which the tire is installed.

Pierce Manufacturing and the chassis manufacturer are working to provide the brand of tire specified. However, due to shortages (and even model changes by the tire manufacturers), if the chassis manufacturer substitutes other tires, they will not be changed by Pierce.

TIRES, FRONT
Front tires will be 22.50, radial tires with a traction tread pattern suitable for the steering axle position on a front driving axle. The capacity of the tires will meet or exceed the rating of the axle and/or suspension and a maximum top speed per the requirements described elsewhere in this proposal, up to 75 MPH.

WHEELS, FRONT
Wheels for the front axle will be 22.50" aluminum disc, properly sized for the provided tires.

REAR AXLE
The rear axle will have a ground rating capacity of 23,000 lb.

The brake chambers will be forward mounted.

PARKING BRAKE
The parking brake will be spring set and located on the rear axle service brake.

Rear axle brakes will be 16.50" x 7.00", S-Cam drum type brakes. Automatic slack adjusters will be provided.

REAR AXLE RATIO
A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 68 MPH.

REAR SUSPENSION
The rear suspension will be Vari-Rate multi-leaf spring suspension with a capacity at ground of 23,500 lb.

Auxiliary rubber spring suspension with a capacity of 4500 lb will be included.

DUST SHIELDS
The front and rear brakes will be provided with dust shields.

TIRES, REAR, 4X4
Rear tires will be 22.50, radial tires with a traction tread pattern suitable for the rear axle position on an all-wheel-drive vehicle. The tire capacity will meet or exceed the capacity of the axle and/or suspension. Tires will be rated for a maximum top speed per the requirements described elsewhere in this proposal, up to 75 MPH

Due to ratio matching requirements of an all-wheel-drive vehicle, the front and rear tire sizes will be the same. The size of the tires provided will be at least the minimum size required to meet the GAWR rating of both axles.

WHEELS, REAR
The rear wheels will be aluminum 22.50" disc, properly sized for the tires provided.

TIRE PRESSURE MANAGEMENT
There will be a RealWheels LED AirSecure™ tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.

Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.

CHROME LUG NUT COVERS
Chrome lug nut covers will be supplied on front and rear wheels.

WHEEL CHOCKS
There will be one (1) pair of Worden Safety Products, Model HWG-SB, wheel chocks provided.

Heavy Duty, large molded aluminum wheel chock with solid bottom, natural cast aluminum finish.

WHEEL CHOCK BRACKETS
There will be one (1) pair of Worden Safety model U815T mounting wheel chock brackets provided . The brackets will be mounted under LS1, as far forward as possible.

ANTI-LOCK BRAKE SYSTEM
The vehicle will be equipped with an anti-lock braking system. The ABS will provide anti-lock braking control on both the front and rear wheels. It will be a digitally controlled system that utilizes microprocessor technology to control the anti-lock braking system. Each wheel will be monitored by the system. When any particular wheel begins to lockup, a signal will be sent to the control unit. This control unit then will 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.

AIR COMPRESSOR, BRAKE SYSTEM
The air compressor will have an output of 18.7 cubic feet per minute.

AIR DRYER

An air dryer with a heater will be provided. Other features of this air dryer include:

- Desiccant style filter

- In-line filtration system

- Automatic purge valve

AIR INLET

A single air inlet with male coupling will be provided. It will allow station air to be supplied to the apparatus brake system through a shoreline hose. The inlet will be located on the driver side pump panel. A check valve will be provided to prevent reverse flow of air. The inlet will discharge into the "wet" tank of the brake system. A mating female coupling will also be provided with the loose equipment.

ENGINE

- Model: Electronic Cummins L9-380
- Number of Cylinders: Six (6)
- Displacement: 8.9 L
- Rated Brake Horsepower: 380 at 2200 rpm
- Peak Torque: 1150 at 1200 rpm
- Governed rpm: 2200
- VGT Turbocharger
- Fuel System: High pressure common rail (HPCR)

ENGINE ACCESSORIES

- Fan Clutch: Electric 2-speed with nylon fan
- Air Cleaner: Dry type, with restriction indicator in cab
- In-Tank oil cooler
- Oil Fill and Level Gauge
- Starting Motor: 12-volt

RADIATOR

- Pressurized System, Tube and Fin
- Deaeration Tank
- Anti-Freeze Protection -40 Degrees Fahrenheit

HIGH IDLE

A high idle switch will be provided on the instrument panel inside the cab. Activating the switch will cause the vehicle to automatically maintain a preset engine rpm.

The high idle switch 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 be labeled "OK To Engage High Idle."

ENGINE BRAKE

An engine compression brake is to be installed with the controls located within easy reach of the driver. The driver will be able to turn the brake system "On" or "Off" and have at least a "High & Low" setting.

When the engine brake is engaged it will activate the brake lights.

ELECTRONIC CRUISE CONTROL

The chassis will be provided with OEM factory installed electronic cruise control.

ENGINE HEATER

A 120-volt, 1000 watt engine block heater will be provided..

HEATED FUEL/WATER SEPARATOR

A Racor 400 series fuel/water separator will be provided on the chassis. It will have a 12 VDC electric heater, and include a primer pump, pre-heater and a water-in-fuel sensor.

AIR INTAKE, W/EMBER SEPARATOR

The air inlet will be equipped with a stainless steel mesh to separate water and burning embers from the air intake system such that particulate matter larger than 0.039" (1.0 mm) in diameter cannot reach the air filter element.

This will comply with NFPA 1901 and 1906 standards.

EXHAUST SYSTEM

The exhaust system will include a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) device to meet current EPA standards. The DPF and SCR will be mounted horizontally outside of the frame rails in the right side front step area.

EXHAUST MODIFICATIONS

The exhaust will terminate with a horizontal tailpipe and diffuser ahead of the right side rear wheels.

A heat deflector shield will be provided where the tail pipe is routed under any side compartmentation.

All modifications will be approved by the chassis engine manufacturer and/or the chassis OEM. Exhaust treatment devices will not be altered.

COOLANT LINES

Premium rubber hose will be used for all engine coolant lines installed by Pierce Manufacturing.

Hose clamps will be the constant torque type to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.

FUEL TANK

A 50 gallon fuel tank will be provided and mounted at the left-hand cab step. The tank will be constructed of aluminum.

DIESEL EXHAUST FLUID TANK

A diesel exhaust fluid (DEF) tank will be provided and mounted on the left side, below the cab.

The tank will be sized by the chassis manufacturer based on the engine provided. It will include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.

FUEL PRIMING PUMP

A Cummins automatic electronic fuel priming pump will be integrated as part of the engine.

COOLER, CHASSIS FUEL

A fuel cooler will be provided by the chassis manufacturer.

TRANSMISSION

An Allison, model 3000 EVS, electronic torque converting automatic transmission will be provided. To qualify for the EVS rating, the transmission will be filled with synthetic transmission fluid.

Two (2) PTO openings will be located on left and right side of the converter housing (positions 8 o'clock and 4 o'clock).

A transmission temperature gauge or warning light will be installed on cab instrument panel.

TRANSMISSION SHIFT CONTROL

A column mounted stalk shifter will be provided. It will electronically control the gear selection in either a manual or automatic mode.

The transmission will be a five (5)-speed.

TRANSMISSION COOLER
A transmission oil cooler will be provided in a tank of the radiator.

TRANSFER CASE OIL COOLER
The 4x4 transfer case will have an oil cooler specifically designed and installed for the application.

DRIVELINE
Drivelines will be a heavy duty metal tube equipped with universal joints properly sized for the application. A splined slip joint will be provided in each driveshaft.

STEERING
Steering will consist of an hydraulically driven power steering system with a capacity designed for the axle rating.

For additional comfort, the steering wheel column will have a tilt feature.

BUMPER
A full-width polished stainless steel bumper, with swept back ends, will be attached to the front of the chassis frame.

TOW HOOKS
Two (2) painted, forged steel tow hooks will be provided. The tow hooks will be designed and positioned to allow up to a 6,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow hooks will not be used for lifting of the apparatus.

HOOD
The hood will be a three-piece Fiberglass construction. It will tilt forward and include splash panel and under hood insulation for sound abatement. Rubber fender extensions will be installed on the wheel openings.

CAB
Type: Conventional (engine forward)

Construction: Welded Steel and Fiberglass

Accessories:

- Tinted Glass in all Windows

- Black Rubber Floormats

- Dual Sun-visors

- 18.00" Cab Entrance Handrails - 1.28" diameter extruded aluminum with rubber inserts, one (1) each side

- Dome Light with Map Light

- Fresh Air Heater and Defroster

- Painted Hood Mounted Grille

- 26.00" Cab Extension With Matching Headliner

CAB INTERIOR, IHC, GRAY
Gray Vinyl Upholstery

CAB GRILLE - STATIONARY
The cab grille will be a chrome plated high impact plastic with a vertical channel design, and will include chrome headlight bezels. The grille will be attached to the radiator core support structure and will not tilt with the hood.

MIRRORS
Mirrors with 14.10" x 7.55" flat rear view with integral convex mirrors will be provided on both sides of the cab. The mirror housings will have a bright finish with integral LED clearance lights. Both sides will be remote controlled with thermostatically controlled heated glass.

CAB ACCESS STEPS
The cab steps will be provided by the chassis manufacturer and will meet NFPA step requirements.

Bright aluminum treadplate trim between the steps will be provided by the apparatus manufacturer. A bright aluminum overlay will be placed over the fuel tank, under the mounting bands. Access to the chassis batteries will be provided if batteries are located under the cab.

COMPARTMENT, STORAGE
A storage compartment will be provided under the extended cab in the left side step area. The compartment will be approximately 20.00" in depth, front to back. An aluminum treadplate drop-down door with rubber seal will be provided on the compartment. The door will be single pan construction.

COMPARTMENT, STORAGE
A storage compartment will be provided under the extended cab in the right side step area. The compartment will be approximately 20.00" in depth, front to back. A aluminum treadplate drop-down door with rubber seal will be provided on the compartment. The door will be single pan construction.

STEP LIGHTS
There will be four (4) white LED step lights provided. There will be one (1) light installed at each cab door, one (1) light per doorstep.

In order to ensure exceptional illumination, each 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 lights will be activated when the adjacent door is opened.

AIR CONDITIONING
An air conditioner will be provided that is integral with heater and defroster system.

AIR CONDITIONING EMBER FILTER
An ember filter will be provided by the commercial chassis OEM to keep embers out of the HVAC filter element.

ENGINE COMPARTMENT LIGHTS
Two (2) engine compartment lights will be installed under the engine hood, of which the switches are an integral part.

CAB CONSOLE
There will be a console located between the front seats with room for radio installation, the electrical and emergency switches and a siren.Auxiliary pump controls (if the truck is so equipped) will also be positioned on the console. The area for the siren, radio and electrical/ emergency switches will be located toward the front of the console, and the top/rear will have a storage tray for miscellaneous items or equipment.

The console will be constructed of smooth aluminum and painted black.

SEATING CAPACITY
The seating capacity in the cab will be three (3).

SEATING
Seating inside the cab will consist of a high back air-suspension driver seat and a high back non-suspension officer seat.

SEATING (EXTENDED CAB)
A bench seat with shoulder belts on the outside seat positions will be provided.

SEAT BELT WEB LENGTH
The chassis seat belt web length as supplied by the commercial chassis manufacturer will be compliant to NFPA 14.1.3.2 and 14.1.3.3.

SEAT BELTS

All seating positions in the cab and crew cab (if applicable) will have red seat belts.

HELMET STORAGE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 14.1.7.4.1 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.

PORTABLE HAND LIGHTS, PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires two portable hand lights mounted in brackets fastened to the apparatus.

The hand lights are not on the apparatus as manufactured. The fire department will provide and mount these hand lights.

CAB INSTRUMENTS

- Engine Temperature Gauge and Warning Buzzer

- Engine Oil Pressure Gauge and Warning Buzzer

- Speedometer with Odometer

- Engine Tachometer

- Engine Hourmeter

- Fuel Level Gauge

- DEF Level Gauge and Warning Lamp

- Voltmeter: Low voltage red warning light and audible alarm

- Air Brake Pressure Gauge

- Air Restriction Indicator

- Circuit Breakers: For overload protection of electric circuits

- Ignition Switch: Keyless type

EMERGENCY SWITCH PANEL

The emergency switch panel will be provided in the cab, located on the floor mounted console.

"DO NOT MOVE APPARATUS" INDICATOR

A flashing red indicator light (located in the driving compartment) will be illuminated automatically per the current edition of NFPA. 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 steady tone alarm when the parking brake is released.

OPEN DOOR INDICATOR LIGHT

A red "open door" indicator light will be provided inside the cab, in clear view of the driver, to warn of an open compartment door.

WIPER CONTROL

Wiper control will include an intermittent feature and windshield washer controls.

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
- Time - 24 Hour Time
- Date - Year/Month/Day

The system will also be capable of no additional functionality required.

An additional input will be included with this system. When the VDR is active, this input will not be required.

SEAT BELT MONITORING SYSTEM

A seat belt monitoring system (SBMS) will be provided. The SBMS will be capable of monitoring up to six (6) 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 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.

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:

(1) All holes made in the roof will be caulked with silicon, rope caulk is not acceptable. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.

(2) 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.

(3) 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.

(4) 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).

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

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

(7) All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, will be furnished.

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.

BATTERY SYSTEM

A single starting battery system will be provided consisting of three (3) 12 volt, 660 CCA, maintenance-free, group 31 batteries.

The batteries system will have a total of 1980 CCA with a minimum reserve capacity of 540 minutes.

BATTERY LOCATION - EXTENDED CAB COMPARTMENT

The batteries will be relocated by the apparatus manufacturer. They will be installed in the left side extended cab step compartment. That compartment is defined elsewhere in this specification.

No other electrical components are to be installed in this same compartment due to potential explosive fumes from the batteries.

MASTER BATTERY SWITCH

A master battery switch, to activate the battery system, will be provided inside the cab within easy reach of the driver.

The master battery disconnect switch will be wired between the starter solenoid and the remainder of the electrical loads on the apparatus.

A green "battery on" indicator light, visible from the driver's position, will be provided.

BATTERY CHARGER

There will be an IOTA, Model DSL 45, 45 amp battery charger provided.

The battery charger will be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger.

A Kussmaul remote indicator, #091-94-12, will be included.

The battery charger will be located in the left body compartment mounted on the left wall as high as possible.

The battery charger indicator will be located adjacent to the driver's seat riser. The indicator will be enclosed to protect it from damage.

KUSSMAUL AUTO EJECT FOR SHORELINE

There will be one (1) Kussmaul Model 091-55-15-120, 15 amp 120 volt AC shoreline inlet(s) provided to operate the dedicated 120 volt AC circuits on the apparatus without the use of the generator.

The shoreline inlet(s) will include red weatherproof flip up cover(s).

There will be a release solenoid wired to the vehicle's starter to eject the AC connector when the engine is starting.

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 Ratting (amps)
- Phase
- Frequency

The shoreline receptacle will be located on the driver side of pump panel.

JUMPER STUDS

One (1) set of battery jumper studs will be located under the engine hood.

ALTERNATOR

The alternator will be a 12V, 325 Amp, Leece Neville pad mount alternator.

ELECTRONIC LOAD MANAGEMENT

A Kussmaul Load Manager 2 will be provided on the apparatus. The device is an electronic load management (ELM) system that monitors the vehicles 12-volt electrical system, and automatically reduces the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.

The ELM will monitor the vehicle's voltage while at the scene (parking brake applied). It will sequentially shut down individual electrical loads when the system voltage drops below a preset value. Two (2) separate electrical loads will be controlled by the load manager. The ELM will sequentially re-energize electrical loads as the system voltage recovers.

HEADLIGHTS, HALOGEN

The headlights will be a halogen style of lamp. There will be a high beam/low beam set for each side as provided by the chassis manufacturer.

The lights will comply to all FMVSS requirements.

EXTERIOR LIGHTING

Exterior lighting will meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at time of proposal.

Front headlights will be halogen type and comply to all FMVSS requirements.

Five (5) LED clearance and marker lights will be installed across the leading edge of the cab.

TURN SIGNALS, FRONT

LED turn signals which include LED side marker lights will be mounted on the fender.

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.

REAR CLEARANCE/MARKER/ID LIGHTING

There will be a three (3) LED light bar used as identification lights 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

There will be two (2) LED lights installed 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

There will be two (2) LED lights installed on the side of the apparatus used 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

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.

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.

Per FMVSS 108 and CMVSS 108 requirements.

REAR FMVSS LIGHTING

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 the same as the LEDs.

There will be two (2) Whelen Model M62BU, LED backup lights provided in the tail light housing.

LICENSE PLATE BRACKET

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.

LIGHTING BEZEL

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.

BACK-UP ALARM

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.

CAB PERIMETER SCENE LIGHTS

There will be two (2) Amdor LumaBar H2O, Model AY-9500-012, 12.00" white LED strip lights provided, one (1) for each cab door.

These lights will be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.

PUMP HOUSE PERIMETER LIGHTS

There will be two (2) Amdor, Model AY-LB-12HW020, 350 lumens each, 20.00" LED weatherproof strip lights with brackets provided under the pump panel running boards, one (1) each side.

If the combination of options in the vehicle does not permit clearance for a 20.00" light, a 12.00" version of the Amdor light will be installed.

The lights will be controlled by the same means as the body perimeter lights.

BODY PERIMETER SCENE LIGHTS

There will be two (2) Amdor Model AY-LB-12HW020, 350 lumens, 20.00" LED lights provided at the rear step area of the body, one (1) each side shining to the rear.

The perimeter scene lights will be activated when the battery switch is on, and the parking brake is applied.

STEP LIGHTS

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.

These step lights will be actuated with the pump panel light switch.

All other steps on the apparatus will be illuminated per the current edition of NFPA 1901.

DECK LIGHTS

There will be two (2) Whelen, Model PFBP12C, 12 volt DC LED floodlights with swivel mount provided at the rear of the hose bed, one (1) each side.

The lights will be activated by a control from a switch at the rear of the truck.

HOSE BED LIGHTS

There will be white 12 volt DC LED light strips with stainless steel protective cover, provided to light the hose bed area. Hose Bed lights will meet the photometric levels listed in NFPA 1901 for Hose Bed lighting requirements.

- Light strip(s) will be installed along the upper edge of the left side of the hose bed.
- Light strip(s) will be installed along the upper edge of the right side of the hose bed.

The lights will be activated by a cup switch at the rear of the apparatus no more than 72.00" from the ground.

WALKING SURFACE LIGHT

There will be Model FRP, 4" round black 12 volt DC LED floodlight(s) with bolt mount provided to illuminate the entire designated walking surface on top of the body.

The light(s) will be activated when the body step lights are on.

WATER TANK

Booster tank will have a capacity of 500 gallons and be constructed of polypropylene plastic by United Plastic Fabricating, Incorporated.

Tank joints and seams will be nitrogen welded inside and out.

Tank will be baffled in accordance with NFPA bulletin 1901 requirements.

Baffles will have vent openings at both the top and bottom to permit movement of air and water between compartments.

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.

Transverse partitions will extend from 4.00" off the bottom of the tank to the underside of the top cover.

All partitions will interlock and will be welded to the tank bottom and sides.

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.

Tank top will be sufficiently supported to keep it rigid during fast filling conditions.

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.

A sump that will be sized dependent on the tank to pump plumbing will be provided at the bottom of the water tank.

Sump will include a drain plug and the tank outlet.

Tank will be installed in a fabricated cradle assembly constructed of structural steel.

Sufficient crossmembers will be provided to properly support bottom of tank. Crossmembers will be constructed of steel bar channel or rectangular tubing.

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.

Stops or other provision will be provided to prevent an empty tank from bouncing excessively while moving vehicle.

Mounting system will be approved by the tank manufacturer.

Fill tower will be constructed of .50" polypropylene and will be a minimum of 8.00" wide x 14.00" long.

Fill tower will be furnished with a .25" thick polypropylene screen and a hinged cover.

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.

The water tank fill dome will be located 3.00" inboard from the passenger side hosebed (hosebed #2) side sheet and as far forward as possible.

The water tank will be extended to the rear of the truck, over the rear compartment.

SLEEVE, PLUMBING, THROUGH TANK

One (1) sleeve will be provided in the water tank for a 3.00" pipe to the rear.

WATER TANK RESTRAINT

A heavy-duty water tank restraint will be provided.

DIRECT TANK FILL

There will be one (1) - 2.50" gated external tank fill(s) installed and properly labeled at the rear of the water tank, located left side, with the valve installed as low as practical for easy hose connection.

Piping, for the fill, will be routed through the rear wall of the tank and include a flow deflector to break up the stream of water entering the water tank.

A 2.50" full flow ball valve with 2.50" piping and a 2.50" (F)NST chrome swivel will be located at the inlet.

A 2.50" chrome plated 30 degree elbow and plug with VLH automatic pressure relieving thread technology will be provided for the tank fill.

HOSE BED

The hose bed will be fabricated of .125"-5052 aluminum with a nominal 38,000 psi tensile strength.

Upper and rear edges of side panels will have a double break for rigidity.

The upper inside area of the beavertails will be covered with brushed stainless steel to prevent damage to painted surface when hose is removed.

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.

The inside of the hose bed will be unpainted and have a DA sanded finish . The inside of the cargo area will be unpainted with a DA sanded finish .

Hose bed will accommodate to be determined.

HOSE BED DIVIDER

Three (3) hosebed dividers will be furnished for separating hose.

Each divider will be constructed of a .25" brushed aluminum sheet. Flat surfaces will be sanded for uniform appearance, or constructed of brushed aluminum.

Divider will be fully adjustable by sliding in tracks, located at the front and rear of the hose bed.

Divider will be held in place by tightening bolts, at each end.

Acorn nuts will be installed on all bolts in the hose bed which have exposed threads.

The right side body side sheet will be lowered to clear the special height ladder rack. The front body sheet will be notched to clear the ladder rack.

HOSE BED COVER

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. The cover will be from the left side hosebed side sheet up to the ladder rack on the right side. The cover will not extend under the ladder rack.

The cover will be reinforced so that it can support the weight of a man walking on the cover.

Chrome grab handles and four (4) gas filled cylinders will be provided to assist in opening and closing the cover. A handrail is provided at the rear, in the center of the support, to assist in opening the cover.

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.

HOSE BED COVER - UNDER LADDER RACK

A one (1) section hose bed cover, constructed of .125" bright aluminum treadplate will be furnished.

This section will only cover the area below the hydraulic ladder rack on the right side of the hose bed. The rack will need to be moved out of its nested position in order to open this cover.

The cover will be hinged with full length stainless steel piano hinge. The inside will be supported by a permanent hose bed divider defined elsewhere in this proposal.

When in the closed position, the cover will be flat across the top to allow the ladder rack to nest in the lowest practical position and height.

The cover will be reinforced so that it can support the weight of a person walking on the cover.

A chrome grab handle and gas filled cylinder will be provided to assist in opening and closing the cover.

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.

HOSEBED END FLAP

A three piece black vinyl flap assembly will be installed on the rear, with a split in two locations, one flap for each of the aluminum treadplate hose bed covers. Those two splits will be located to allow for access into the different portions of the hosebed separately.

Each vinyl flap will have up to three (3) nylon tie down straps, if and where needed, with quick release thumb spring buckles. Fasnap model 207668 stainless steel buckles will be attached to the flaps. These vinyl end skirts will be installed directly to the hosebed frame.

Rubber coated hooks and stainless steel footman loops will secure the end skirts/bed covers to the main body.

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 12.75" deep and spaced .50" away from the pump panel.

A splash guard will be provided above the running board treadplate.

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 12.00" deep and full width of the body. 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.

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.

TOW BAR

A tow bar will be installed under the tailboard at center of truck.

Tow bar will be fabricated of 1.00" CRS bar rolled into a 3.00" radius.

Tow bar assembly will be constructed of .38" structural angle. When force is applied to the bar, it will be transmitted to the frame rail.

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.

Tow bar design will have been fully tested and evaluated using strain gauge testing and finite element analysis techniques.

COMPARTMENTATION

Body and compartments will be fabricated of .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 .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.

The support system will include .375" thick steel vertical angle supports bolted to the chassis frame rails with .625" diameter bolts.

Attached to the bottom of the steel vertical angles will be horizontal angles, with gussets welded to the vertical members, which extend to the outside edge of the body.

A steel frame will be mounted on the top of these supports to create a floating substructure which will result in a 500 lb equipment support rating per lower compartment.

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 modified V three (3)-point mounting pattern to reduce the natural flex of the chassis being transmitted to the body.

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 has been fully tested. Proven engineering and test techniques such as finite element analysis, stress coating and strain gauging have been performed with special attention given to fatigue, life and structural integrity of the cab, 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.

LEFT SIDE COMPARTMENTATION

The left side compartmentation will consist of four lap door compartments.

A vertically hinged, single door compartment in the lower area ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 22.50" wide x 33.63" 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 16.63" wide x 27.88" high.

A horizontally hinged, single lift-up door compartment in the upper area, ahead of the rear wheels, will be provided. The interior dimensions of this compartment will be 58.00" wide x 32.88" high x 12.00" deep. The clear door opening of this compartment will be a minimum of 53.25" wide x 27.00" high.

A horizontally hinged, single lift-up door compartment in the upper area, behind the rear wheels, will be provided. The interior dimensions of this compartment will be 62.88" wide x 32.88" high x 12.00" deep. The clear door opening of this compartment will be a minimum of 53.25" wide x 27.00" high.

A vertically hinged, single door compartment in the lower area behind the rear wheels will be provided. The interior dimensions of this compartment will be 31.75" wide x 34.63" 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 28.63" wide x 28.88" 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.

Closing of the doors will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

The vertically hinged doors will be furnished with a positive door holder.

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°.

RIGHT SIDE COMPARTMENTATION

The right side compartmentation will consist of four lap door compartments.

A vertically hinged, single door compartment in the lower area ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 22.50" wide x 33.63" 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 16.63" wide x 27.88" high.

A horizontally hinged, single lift-up door compartment in the upper area, ahead of the rear wheels, will be provided. The interior dimensions of this compartment will be 58.00" wide x 32.88" high x 12.00" deep. The clear door opening of this compartment will be a minimum of 53.25" wide x 27.00" high.

A horizontally hinged, single lift-up door compartment in the upper area, behind the rear wheels, will be provided. The interior dimensions of this compartment will be 62.88" wide x 32.88" high x 12.00" deep. The clear door opening of this compartment will be a minimum of 53.25" wide x 27.00" high.

A vertically hinged, single door compartment in the lower area behind the rear wheels will be provided. The interior dimensions of this compartment will be 31.75" wide x 34.63" 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 28.63" wide x 28.88" 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.

Closing of the doors will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

The vertically hinged doors will be furnished with a positive door holder.

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°.

SIDE COMPARTMENT DOORS

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.

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.

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.)

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.

Doors will be latched with recessed, polished stainless steel "D" ring handles and FMVSS approved door locking mechanisms.

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.

REAR COMPARTMENTATION

A roll-up door compartment above the rear tailboard will be provided**.**

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.

A louvered, removable access panel will be furnished on the back wall of the compartment.

The rear compartment will be open into the rear side compartments.

The clear door opening of this compartment will be a minimum of 33.25" wide x 30.88" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

ROLLUP REAR COMPARTMENT DOOR

There will be a rear rollup door. The door will be double faced aluminum construction, an anodized satin finish and manufactured by Gortite®.

Lath sections will be an interlocking rib design and will be individually replaceable without complete disassembly of door.

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.

All hinges, barrel clips and end pieces will be nylon 66. All nylon components will withstand temperatures from 300 to -40 degrees Fahrenheit.

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.

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.

To conserve space in the compartments, the spring roller assembly will not exceed 3.00" in diameter.

The header for the rollup door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

COMPARTMENT LIGHTING

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).

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.

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

MOUNTING TRACKS

There will be two (2) sets of tracks for mounting shelf(s) in LS2 and RS2. These tracks will be installed vertically to support the adjustable shelf(s). The tracks will be painted to match the compartment interior.

ADJUSTABLE SHELVES

There will be two (2) shelves with a capacity of 500 lb provided.

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.

The location(s) will be determined at a later date.

SLIDE-OUT FLOOR MOUNTED TRAY

There will be one (1) floor mounted slide-out tray(s) provided.

Each tray will have 2.00" high sides and a minimum capacity rating of 500 lb in the extended position.

Each tray will be constructed of aluminum painted spatter gray

There will be two undermount-roller bearing type slides rated at 250lb each provided. The pair of slides will have a safety factor rating of 2.

To ensure years of dependable service, the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.

To ensure years of easy operation, the slides will require no more than a 50lb force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance will be provided upon request.

Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for the locks will be located at the front of the tray for ease of use with a gloved hand.

The location(s) will be B1.

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.

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.These fender crowns must be wide enough to prevent splashing onto the body from the specified tires.

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.

BODY FENDER LINER
A painted to match the lower body color fender liner will be provided. The liners will be removable to aid in the maintenance of rear suspension components.

HARD SUCTION HOSE
Hard suction hose will not be required.

HANDRAILS
The handrails will be 1.25" diameter knurled aluminum to provide a positive gripping surface.

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 NFPA 1901 section 15.8 requirements. The handrails will be installed as noted on the sales drawing.

HANDRAILS
One (1) vertical handrail will be located on each rear beavertail.

HANDRAIL
One (1) full width horizontal handrail will be provided below the hose bed at the rear of the apparatus.

AIR BOTTLE STORAGE (TRIPLE)
A quantity of four (4) air bottle compartments 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, on the left side rearward of the rear wheels, on the right side forward of the rear wheels and on the right side rearward of the rear wheels. A brushed stainless steel door with a Southco raised trigger C2 chrome 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 rubber matting 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.

EXTENSION LADDER
There will be a 24' two-section aluminum Duo-Safety Series 900-A extension ladder provided.

ADDED EXTENSION LADDER

There will be one (1) 35', three (3) section, aluminum, Duo-Safety Series 1225-A extension ladder provided.

ROOF LADDER

There will be a 14' aluminum Duo-Safety Series 775-A roof ladder provided.

HYDRAULIC LADDER RACK

Ground ladders will be mounted above the right side of the hose body in a specially designed swing-down cradle. This cradle will be electric/hydraulic operated. The system design will have been life cycle tested for dependable service.

An independent hydraulic pump powered by a 12-volt electric motor will operate the hydraulics. The hydraulic pump and reservoir will be accessible from the ground through a stainless steel inspection door.

The ladder rack will incorporate two hydraulic rotary actuators, one each located inside the front compartment and the rear compartment. The actuators will be completely enclosed within each compartment to eliminate any pinch points while operating the ladder rack. Lifting arms will be attached outside the compartment body to the front and rear actuator.

The rack can be designed in certain situations to provide lifting capabilities up to 500 lb.

The maximum height of the rack from the ground in the lowered position will be no more than 47.00".

The electric control panel will have a master switch on/off switch, an actuation switch, an operation indicator light and operation instructions. The electric controls will be located at the pump panel adjacent to the ladder rack in such a manner to allow the operator full view of the area into which the ladders will be lowered.

Two (2) safety locks will be furnished to securely maintain the ladder rack assembly in the travel position. For ease of use, the safety locks will be located above the front and rear bulkheads and be operational while standing on the ground.

Ladders will be secured to the cradle with a quadruple locking system. Two (2) locks will secure the first ladder which in turn assists in securing the second and third ladders. The third independent lock will secure the second roof ladder during the installation/removal of the first ladder. The fourth independent lock will secure the extension ladder during the installation/removal of the second ladder.

LADDER RACK INTERLOCK AND NOT STOWED INDICATOR LIGHT

An interlock will be provided to prevent operation of the ladder rack unless the apparatus parking brake has been activated.

A steady red indicator light will be located on the cab instrument panel and illuminated when the hydraulic ladder rack is not in the stowed position. The light will be labeled "Ladder Rack". In addition,

the "Do Not Move Apparatus" light located in the cab will be activated when the hydraulic ladder rack is not in the stowed position.

HYDRAULIC LADDER RACK DEPLOYED LIGHTS

There will be two (2) Truck-Lite catalog number 15***, 1.20" high x 2.49" wide x 0.94" deep lights with chrome trim, red flashing LEDs and provided per the following:

- One (1) light installed on the front of the hydraulic ladder rack
- One (1) light installed on the rear of the hydraulic ladder rack
- The warning light lens color(s) to be clear

The lights will be activated when the battery switch is on and the hydraulic ladder rack is not in the stowed position.

FOLDING LADDER

One (1) 10.00' aluminum, Series 585-A, Duo-Safety folding ladder will be installed in a U-shaped trough inside the ladder storage compartment .

PIKE POLE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) 8 ft or longer pike pole mounted in a bracket fastened to the apparatus.

The pike pole is not on the apparatus as manufactured. The fire department will provide and mount the pike pole.

The pike pole(s) will be a Duo-Safety 10' pike pole.

6' PIKE POLE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) 6' pike pole or plaster hook mounted in a bracket fastened to the apparatus.

The pike pole is not on the apparatus as manufactured. The fire department will provide and mount the pike pole.

The pike pole(s) will be a Duo-Safety 6' pike pole.

PIKE POLE STORAGE

There will be One (1) pike pole 6' pike pole(s) with a .75" standard notch stored in painted aluminum tube(s) located on the hydraulic ladder rack.

REAR FOLDING STEPS

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. The steps can be used as a hand hold with two openings wide enough for a gloved hand.

STEP, PULL-OUT/DROP DOWN & STIRRUP STYLE

A camper style step will be provided below the rear tailboard. The step will be 20.00" wide and will pull out and drop down to provide easy access.

Hinged, swing style stirrup steps will be provided on each side at the running board.

I-ZONE BRACKETS - WILDLAND STYLE

A pair of I-Zone brackets will be provided and mounted at the rear of the apparatus, one (1) each side. 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.

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.

AUXILIARY PUMP

A hydraulic driven Darley 1.5AGH centrifugal pump will be provided for pump and roll operations. The pump will have a 2.00" suction inlet and a 2.00" discharge port. The pump will have a gear type hydraulic motor. The pump case will be vertically split for removal and service of the impeller. A Viton, carbon/ceramic shaft seal will be provided. The pump shaft and wear ring will be stainless steel.

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).

An auxiliary pump drain will be supplied.

AUXILIARY PUMP PERFORMANCE

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.

- 150 gpm @ 80psi

- 100 gpm @ 200psi

- 35 gpm @ 300psi

This pump will also meet NFPA 1901 section 16.2.2 for pump and roll performance/requirements. It will deliver at least 20 gpm @ 80 psi while moving at 2 mph or less.

NFPA COMPLIANCY

NFPA 1901, 2016 edition, section 17.2.3 - Normal Pressure Auxiliary Pumps - requires specific gpm and psi test parameters. This pump may not meet all the parameters as required and is considered non-NFPA compliant.

Per fire department specification and request of this option, this apparatus will be non-compliant to NFPA 1901, 2016 edition, Chapter 17 standards effective at time of contract execution.

AUXILIARY PUMP INSTALLATION

The auxiliary pump will be installed and located within the main pump module.

AUXILIARY PUMP DISCHARGE CONNECTIONS

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

Check valve(s) will be provided to prevent backflows between the main pump and the auxiliary pump.

AUXILIARY PUMP -TANK TO PUMP CONNECTION

An independent 2.00" tank to pump piping with a 2.00" 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.

AUXILIARY PUMP PRIMING

The auxiliary pump will be installed in such a manner that an additional primer or priming valve is not required. The pump will prime by gravity flow of water from the tank.

AUXILIARY PUMP GAUGES AND CONTROLS

There will be PTO switch(s) and indicator light(s) provided in the cab near the driver's position 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 postion .

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.

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.

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 of steel 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.

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.

PUMP CONTROL PANELS (SIDE CONTROL)

All pump controls and gauges will be located at the left side of the apparatus and properly marked.

The pump panel on the right side will be removable with lift and turn type fasteners. The left side will be fastened with screws.

The control panels will be 34.00" wide.

The gauge and control panels will be two (2) separate panels for ease of maintenance.

Polished stainless steel trim collars will be installed around all inlets and outlets.

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.

All line pressure gauges will be mounted in individual chrome plated castings with the identification tag recessed in the casting below the gauge. All remaining identification tags will be mounted on the pump

panel in chrome plated bezels. Mounting of the castings and identification bezels will be done with a threaded peg cast on the back side of the bezel or screws.

PUMP

Pump will be a Waterous CXPA, 1000 gpm, single (1) stage, power take off (PTO) driven 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 casting will be a two (2) piece, vertically split design and will be constructed of high tensile, close grain gray iron.

Impeller shaft will be stainless steel, heat treated, accurately ground to size, and polished under the shaft seal. It will be supported by oil lubricated ball bearings.

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.

MECHANICAL SEAL ON PUMP

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.

PUMP TRANSMISSION

Pump transmission will be made of light weight aluminum casing. Power transfer to pump will be through a pressure lubricated, Morse HY-VO drive chain.

Drive shafts will be a minimum of 1.50" diameter hardened and ground alloy steel. All shafts will be ball bearing supported. The case will be designed as to eliminate the need for water cooling.

The water pump will be driven by a ten (10)-bolt hot shift PTO will be located on the left side of the chassis transmission.

PUMPING MODE

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 and the truck to be in motion while pumping.

A digital pump pressure gauge will be supplied in the cab.

PUMP SHIFT

A pump shift will be provided within easy reach of the driver for engagement of the PTO driven pump. The shift will include the indicator lights as mandated by NFPA. The pump shift control will be illuminated to meet NFPA requirements.

AUXILIARY COOLING SYSTEM

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.

INTAKE RELIEF VALVE - PUMP

There will be One (1) Elkhart Style 40 relief valve(s) installed on the suction side of the pump preset at 125 psig.

The relief valve(s) will have a working range of 75 psi to 250 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.

The relief valve pressure control will be located behind behind the right side pump panel with a stainless steel access door .

PRESSURE CONTROLLER

A Pierce Pump Boss Model PBA300 pressure governor will be provided.

A pressure transducer will be installed in the water discharge manifold on the pump.

The display panel will be located at the pump operator's panel.

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 NFPA 1901.

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.

PUMP MANUALS

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.

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.

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.

MAIN PUMP INLETS

A 5.00" 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.

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.

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.

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.

Inlet valve location will be outside the pump panel.

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.

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.

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.

INLET BLEEDER VALVE

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.

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.

The water discharged by the bleeders will be routed below the chassis frame rails.

No snubber bleeder valves are acceptable.

TANK TO PUMP

The booster tank will be connected to the intake side of the pump with heavy duty 4.00" piping and a quarter turn 3.00" valve with the control remotely located at the operator's panel. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing.

The control on the pump panel will be "in" when the valve is open and "out" when the valve is closed.

A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.

TANK REFILL

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.

DISCHARGE OUTLET CONTROLS

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.

If a handwheel control valve is used, the control will be a minimum of a 3.9" diameter stainless steel handwheel with a dial position indicator built in to the center of the handwheel.

Any 3.00 inch or larger discharge valve will be a slow-operating valve in accordance with NFPA 16.7.5.3.

LEFT SIDE DISCHARGE OUTLETS

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.

LEFT SIDE OUTLET ELBOWS

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.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

RIGHT SIDE DISCHARGE OUTLETS

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.

RIGHT SIDE OUTLET ELBOWS

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.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

REAR DISCHARGE OUTLET

There will be One (1) discharge outlet 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.

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.

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.

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.

No snubber drain valves are acceptable.

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 16.7.5.3.

TELESCOPIC PIPING

The deluge riser piping will include a 18.00" Task Force Model XGA38 electric 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.

MONITOR

A Task Force Hurricane, model XFIH-E remote controlled monitor will be properly installed on the deluge riser. This monitor will include the Task Force Tips Primary Monitor Operator Station, mounted at the pump operator's panel. The monitor will have manual override handwheels in the event of an electrical system malfunction.

The monitor will be painted as provided by monitor manufacturer.

NOZZLE

A Task Force Tips Master Stream Series M-ER nozzle will be provided. The nozzle will have a range of 250 to 1250 GPM, and electric pattern control.

The deluge riser Extend-a-Gun will have a provisions for direct mounting a Task Force Hurricane monitor.

CROSSLAY HOSE BEDS

Two (2) crosslays with 1.50" outlets will be provided. Each bed to be capable of carrying 200' of 1.75" double jacketed hose 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 0.25" 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.

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 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.

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.

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 reduce the capacity of the water tank. The foam cell will have a screen in the fill dome and a breather in the lid.

FOAM TANK DRAIN

The foam tank drain will be a 1.00" quarter turn drain valve located inside the pump/plumbing compartment.

PUMP PANEL CONFIGURATION

The pump panel configuration will be neat and orderly.

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.

PUMP ACCESS

Right Side Panel

The right side upper pump panel will be removable.

Panel Fastener

The removable panels will be secured with black swell latch .

The left side pump panels will be attached with screws.

The right side lower pump panel (drain bank) will be attached with screws.

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.

There will be a switch accessible through a door on the pump panel included with this installation.

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

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.

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.

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 4.00" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#.

Gauge construction will include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.

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 non-corrosive polished stainless steel or brass plugs. They will be marked with a label.

This gauge will include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.

PRESSURE GAUGES

The individual "line" pressure gauges for the discharges will be Class 1© interlube filled.

They will be a minimum of 2.00" in diameter and have white faces with black lettering.

Gauge construction will include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.

Gauges will have a pressure range of 30"-0-400#.

The individual pressure gauge will be installed as close to the outlet control as practical.

This gauge will include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.

WATER LEVEL GAUGE

There will be an electronic water level gauge provided on the operator's panel that registers water level by means of five (5) colored LED lights. The lights will be durable, ultra-bright five (5) LED design viewable through 180 degrees. The water level indicators will be as follows:

- 100 percent = Green
- 75 percent = Yellow
- 50 percent = Yellow
- 25 percent = Yellow
- Refill = Red

The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the water tank is empty.

The level measurement will be based on the sensing of head pressure of the fluid in the tank.

The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from water and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The field calibratable display measures head pressure to accurately show the tank level.

FOAM LEVEL GAUGE

An electronic foam level gauge will be provided on the operator's panel that registers foam level by means of five (5) colored LED lights. The lights will be durable, ultra-bright five (5) LED design viewable through 180 degrees. The foam level indicators will be as follows:

- 100 percent = Green
- 75 percent = Yellow
- 50 percent = Yellow
- 25 percent = Yellow
- Refill = Red

The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the foam tank is empty.

The level measurement will be based on the sensing of head pressure of the fluid in the tank.

The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from foam and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The display will be able to be calibrated in the field and will measure head pressure to accurately show the tank level.

LIGHT SHIELD

There will be a polished, 16 gauge stainless steel light shield installed over the pump operator's panel.

- There will be 12 volt DC white LED lights installed under the stainless steel light shield 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.
- One (1) pump panel light will come on when the pump is in ok to pump mode.

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.

AIR HORN SYSTEM

One (1) Hadley round air horn with 6.00" bell will be provided and installed on the right side side of the engine hood. 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.

Air Horn(s) Location

The air horn(s) location will be on the side of the engine hood.

Air Horn Control

The air horns will be actuated by a chrome push button located on the officer's side of the engine tunnel and by the horn button in the steering wheel. The driver will have the option to control the air horns or the chassis horns from the horn button by means of a selector switch located on the instrument panel.

ELECTRONIC SIREN

A Whelen®, Model 295SLSA1, electronic 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.

Siren head will be located in the center console.

The electronic siren will be controlled on the siren head only. No horn button or foot switches will be provided.

SPEAKER

There will be one (1) Whelen®, Model SA315P, black nylon composite, 100-watt, speaker with through bumper mounting brackets and polished stainless steel grille provided. The speaker will be connected to the siren amplifier.

The speaker will be recessed in the OEM non-extended front bumper on the driver's side.

CAB ROOF LIGHTBAR

There will be one (1) 56.00" Whelen®, Justice® LED lightbar mounted on the cab roof.

This lightbar will include the following:

- Four (4) red flashing LED modules facing forward.
- Two (2) red steady burn LED modules facing forward.
- Two (2) red flashing corner LED modules, one (1) in each front corner.
- Two (2) red flashing corner LED modules, one (1) in each rear corner.

The lens color will be clear.

The lightbar will be controlled by one (1) switch located on a switch panel in the cab.

WARNING LIGHTS

A pair of surface mounted Whelen model RSR02ZCR, LIN3 Super LED flashing lights will be provided on the grille.

The color of these lights will be red.

A switch will be provided inside the cab on the switch panel for actuation.

These lights will be installed with a plastic, chrome-plated flange.

SIDE ZONE LOWER LIGHTING

There will be four (4) Whelen®, Model M6*C, flashing LED warning lights with chrome trim installed per the following:

- Two (2) lights, one (1) each side on the bumper extension. The side front lights to be red.
- Two (2) lights, one (1) each side above rear wheels. The side rear lights to be red.
- The lights will include a clear lenses.

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

REAR ZONE LOWER LIGHTING

There will be two (2) Whelen®, Model M6*C, LED flashing warning lights located at the rear of the apparatus.

- The driver's side rear light to be red
- The passenger's side rear light to be red

Both lights will include a lens that is clear.

There will be a switch located in the cab on the switch panel to control the lights.

WARNING LIGHTS (REAR AND SIDE UPPER ZONES)

There will be four (4) Whelen®, Model M6**, 5.31" high x 6.75" wide x 1.37" deep flashing LED warning lights with chrome trim provided at the rear of the apparatus per the following:

- The side upper rear light on the left side to include red flashing LEDs

- The rear upper light on the left side to include red flashing LEDs
- The rear upper light on the right side to include red flashing LEDs
- The side upper rear light on the right side to include red flashing LEDs
- The warning light lens color(s) to be clear

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

The rear warning lights will be mounted on [Material, Bracket] brackets with all wiring totally enclosed. These brackets will also support the clearance/marker lights.

LOOSE EQUIPMENT

The following equipment will be furnished with the completed unit:

- One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.

NFPA REQUIRED LOOSE EQUIPMENT PROVIDED BY FIRE DEPARTMENT

The following loose equipment as outlined in NFPA 1901, 2016 edition, section 5.9.3 and 5.9.4 will be provided by the fire department.

- 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) smoothbore of combination nozzle with 2.50" shutoff that flows a minimum of 250 gpm.
- One (1) SCBA complying with NFPA 1981 for each assigned seating position, but not fewer than four (4), mounted in brackets fastened to the apparatus or stored in containers supplied by the SCBA manufacturer.
- One (1) spare SCBA cylinder for each SCBA carried, each mounted in a bracket fastened to the apparatus or stored in a specially designed storage space(s).
- 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 threads.
- One (1) double male 2.50" (65 mm) adapter with National Hose threads.
- One (1) rubber mallet, for use on suction hose connections.
- Two (2) salvage covers each a minimum size of 12 ft x 14 ft (3.7 m x 4.3 m).
- One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, *Standard for High Visibility Public Safety Vests*, 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.
- One (1) automatic external defibrillator (AED).
- Four (4) ladder belts meeting the requirements of NFPA 1983, *Standard on Fire Service Life Safety Rope and System Components* (if equipped with an aerial device).
- If the supply hose carried does not use sexless couplings, an additional double female adapter and double male adapter, sized to fit the supply hose carried, will be carried mounted in brackets fastened to the apparatus.
- If none of the pump intakes are valved, a hose appliance that is equipped with one or more gated intakes with female swivel connection(s) compatible with the supply hose used on one side and a swivel connection with pump intake threads on the other side will be carried. Any intake connection larger than 3.00" (75 mm) will include a pressure relief device that meets the requirements of 16.6.6.
- If the apparatus does not have a 2.50" National Hose (NH) intake, an adapter from 2.50" NH female to a pump intake will be carried, mounted in a bracket fastened to the apparatus if not already mounted directly to the intake.
- If the supply hose carried has other than 2.50" National Hose (NH) threads, adapters will be carried to allow feeding the supply hose from a 2.50" NH thread male discharge and to allow the hose to connect to a 2.50" NH female intake, mounted in brackets fastened to the apparatus if not already mounted directly to the discharge or intake.

SOFT SUCTION HOSE

There will be a 15 foot length of 5.00" soft suction hose provided with a 5.00" long handle swivel coupling on one (1) end and a 4.50" long handle swivel coupling on the other.

DRY CHEMICAL EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires one (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

WATER EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires one (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

FLATHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) flathead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PICKHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) pickhead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PAINT PROCESS

The exterior custom cab and/or body painting procedure will consist of a seven (7) step finishing process. A commercial chassis paint process will follow similar processes as determined by the chassis manufacturer. The following procedure will be used by Pierce:

1. 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.
2. 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. A final pure water rinse will be applied to all metal surfaces.
3. Surfacer Primer - The Surfacer Primer will be applied to a chemically treated metal surface to provide a strong corrosion protective base coat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a critical aesthetic finish. The surfacer primer will be a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded.
4. 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.
5. Sealer Primer - The sealer primer is applied prior to the base coat 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 top coated.
6. Base coat Paint - Two coats of a high performance, two component high solids polyurethane base coat will be applied. The Base coat will be applied to a thickness that will achieve the proper color match. The Base coat will be used in conjunction with a urethane clear coat to provide protection from the environment.

7. Clear Coat - Two (2) coats of clear coat will be applied over the base coat color. The clear coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style 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.

Our specifications are written to define cyclic corrosion testing, physical strengths, durability and minimum appearance requirements must be met in order for an exterior paint finish to be considered acceptable as a quality finish.

Each batch of base coat color will be checked for a proper match before painting of the cab and the body. After the cab and body are painted, the color is verified again 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 are 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 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.

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 will be 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. Pierce will, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with the state EPA rules and regulations.

PAINT

The chassis will be painted by the chassis manufacturer, and will remain the commercial grade finish as provided. The body will be painted the matching color by Pierce.

To ensure a good color match between the body and chassis, Pierce has a mutually pre-approved paint color program with the chassis manufacturer. The apparatus will be painted Pierce #90 candy apple red .

COMMERCIAL CHASSIS PAINT

The chassis will be painted by the chassis manufacturer. It will remain the color and commercial quality finish as provided. The primary color will be Pierce #90 candy apple red .

PAINT CHASSIS FRAME ASSEMBLY

The chassis frame assembly will be painted black by the chassis manufacturer. It will remain the commercial grade finish as provided.

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.

REFLECTIVE BAND

A 6.00" white reflective band will be provided across the front of the vehicle and along the sides of the body.

REFLECTIVE VINYL ON FRONT BUMPER

There will be a reflective vinyl band provided across the front bumper.

REAR CHEVRON STRIPING

There will be alternating chevron striping located on the rear-facing vertical surface of the apparatus. The rear surface, excluding the rear compartment door, will be covered.

The colors will be red and fluorescent yellow green diamond grade.

Each stripe will be 6.00" in width.

This will meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface will be covered with chevron striping.

REFLECTIVE STRIPE, CAB DOORS

A black reflective stripe will be provided on the interior of each cab door.

This stripe will be a minimum of 96.00 square inches and will meet the NFPA 1901 requirement.

LETTERING

The lettering will be totally encapsulated between two (2) layers of clear vinyl.

LETTERING
Forty-one (41) to sixty (60) printed effect gold leaf lettering, 3.00" high, with outline and shade will be provided.

MANUAL, BODY PARTS ONLY
A custom parts manual for the Pierce® installed parts only will be provided in USB flash drive format with the completed unit.

The manual 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

The manual will be specifically written for the body model being purchased. It will not be a generic manual for a multitude of different bodies.

SERVICE PARTS INTERNET SITE
The service parts information included in this manual 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.

MANUALS, SERVICE
A USB flash drive format service manual supplement containing parts and service information on Pierce® installed components will be provided with the completed unit.

The manual will be specifically written for the unit being purchased. It will not be a generic manual for a multitude of different units.

MANUAL, CHASSIS OPERATION
One (1) chassis operation manual will be provided with the completed unit.

ONE (1) YEAR MATERIAL AND WORKMANSHIP
Each new piece of apparatus will be provided with a minimum one (1) year basic apparatus material and workmanship limited warranty. The warranty will cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service.

A copy of the warranty certificate will be submitted with the bid package.

CHASSIS WARRANTY
The basis chassis warranty will be for a total of **one (1) year exclusive of miles/kilometers.**

PAINT WARRANTY
The commercial chassis manufacturer's paint warranty will apply to the paint on the chassis only.

COMPARTMENT LIGHT WARRANTY
The Pierce 12 volt DC LED strip lights limited warranty certificate, WA0203, is included with this proposal.

TRANSMISSION WARRANTY
The transmission will have a **five (5) year/unlimited mileage** warranty covering 100 percent parts and labor. The warranty to be provided by Allison Transmission and not apparatus builder.

WATER TANK WARRANTY
A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.

TEN (10) YEAR STRUCTURAL INTEGRITY
The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.

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.

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).

TEN (10) YEAR PUMP PLUMBING WARRANTY
The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.

FOAM SYSTEM WARRANTY
The Husky 3 foam system limited warranty certificate, WA0231, is included with this proposal.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION
A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.

THREE (3) YEAR MATERIAL AND WORKMANSHIP
The Pierce Goldstar gold leaf lamination limited warranty limited warranty certificate, WA0018, is included with this proposal.

VEHICLE STABILITY CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification will be provided at the time of bid.

CAB INTEGRITY

The cab has been tested to and passed the following standards:

- ECE Regulation No.29

- SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks.

AMP DRAW REPORT

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.

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 applicable NFPA 1901 or 1906 (Current Edition).

COMMUNITY LEASING PARTNERS

Phone: 888.777.7850
Fax: 888.777.7875
Cell: 785.313.3154
215 S. Seth Child Road
Manhattan, KS 66502
www.clpusa.net

January 13, 2023

Customer Name: **South Lake County FPD, CA**
Mike Wink

Equipment: Two Pierce Pumpers
Sales Representative: Jon Bauer @ Golden State Fire Apparatus
Delivery: Estimated 760 days

Community Leasing Partners, a Division of *Community First National Bank*, is pleased to present the following financing options for your review and consideration.

Option 1

Total Cost:	$	1,200,000.00	Payment Frequency:	Annual
Down Payment:	$	-	First Payment:	August 1, 2024
Prepayment Discount:	$	-		
Amount Financed:	**$**	**1,200,000.00**		

Term in Years:	10
Payment:	$155,064.85
Factor:	0.129221
Interest Rate:	4.48%

- **THERE ARE NO DOCUMENTATION OR CLOSING FEES ASSOCIATED WITH THIS PROPOSAL.**
- Fixed interest rate for the terms provided unless otherwise stated.
- The quoted interest rate is valid for 10-days from the date of the proposal. To lock in the interest rate, a credit submission would be required, and a credit approval attained within the same 10-day period. This financing is to be executed and funded within 30 days of the date of the proposal, or Lessor reserves the right to adjust the interest rate. The proposal is subject to credit review and approval of mutually acceptable documentation.
- This proposal has been prepared assuming the lessee is bank qualified and that the proposed lease qualifies for Federal Income Tax Exempt Status for the Lessor under Section 103 of the IRS Code.

Thank you for allowing Community Leasing Partners the opportunity to provide this proposal. If you have any questions regarding the options presented, need additional options, or would like to proceed with a financing, please contact me at 1-888-777-7850.

Respectively,

Blake J. Kaus
Vice President & Director of Leasing
blakekaus@clpusa.net

Wink, Mike@CALFIRE

From: Jason Ehn <JEhn@redwoodcu.org>
Sent: Monday, January 23, 2023 9:37 PM
To: Becky Perez; Wink, Mike@CALFIRE
Cc: Duncan, Paul@CALFIRE; Fong, Gloria@CALFIRE; Adam Baughman
Subject: RE: South Lake County Fire - Auto Loan

Thanks Becky!

Mike – Great to hear from you! Here are some basic loan parameters for the board to consider:

- Loan Amount: 75% maximum loan to value ratio. On a $600,000 purchase price, our maximum loan amount would be $450,000 for each truck.
- Rate: Our rate is based overall credit and cash flow qualifications, but we would likely offer a rate of Prime + 1.00% fixed for the life of the loan. Prime is currently 7.50%, so if approved today, the rate would be 8.50%.
- Term: 10 years, fully amortized.
- Fees: 0.50% of the loan amount + a $250 documentation fee for each loan.
- Collateral: Truck and equipment to be financed.

Please let us know if you require any further details for your board, or if you have any questions. If you would like to move forward, let us know and we can send you the application and checklist. Have a great evening!

Sincerely,

Jason Ehn
SBA/Commercial Lending Manager
Redwood Credit Union
3033 Cleveland Ave., Suite 100
Santa Rosa, CA 95403
office: (707) 576-5439
fax: (707) 568-0790
www.redwoodcu.org

From: Becky Perez <BPerez@redwoodcu.org>
Sent: Monday, January 23, 2023 12:36 PM
To: Wink, Mike@CALFIRE <Mike.Wink@fire.ca.gov>
Cc: Duncan, Paul@CALFIRE <Paul.Duncan@fire.ca.gov>; Fong, Gloria@CALFIRE <Gloria.Fong@fire.ca.gov>; Jason Ehn <JEhn@redwoodcu.org>
Subject: RE: South Lake County Fire - Auto Loan

Hello Mike!

Thank you for reaching our and giving Redwood Credit Union a chance to work with you.

I have included Jason Ehn who is one of our Business Services Lending Manager, he is going to work on getting a proposal together for you. In the mean time if you have any questions you can reach out to him at 707-576-5439 or email.

Jason – Mike's cell is 707-889-4225 if you have any questions as well.

Thank you

~Becky

Becky Perez
Branch Experience Manager
707.545.4000 Ext 82401

From: Wink, Mike@CALFIRE <Mike.Wink@fire.ca.gov>
Sent: Saturday, January 21, 2023 11:31 AM
To: Becky Perez <BPerez@redwoodcu.org>
Cc: Duncan, Paul@CALFIRE <Paul.Duncan@fire.ca.gov>; Fong, Gloria@CALFIRE <Gloria.Fong@fire.ca.gov>
Subject: [EXT] South Lake County Fire - Auto Loan

Greetings Rebecca (Redwood Credit Union), this is a follow up from our recent communication. The local Fire District is gathering finance options (3 or 4) to present to the Board of Directors on a vehicle purchase. Below is what we are asking for:

Vehicle Loan
Two Fire Engines (not a water tender or a truck)
Total Loan amount $1.2 million
The Fire Engines are $600,000.00 each
10 year term

South Lake County Fire Protection District
21095 Hwy 175
Box 1360
Middletown, Ca. 95461
www.souke thlakecountyfire.org

The last three years of monthly minutes, finances and budgets are all online and are in the Meeting Minutes in the link below. You are welcome to gather any financial informaiton you would like from them about the Fire District. Please do not include CAL FIRE in any of this communication. While I am a CAL FIRE employee, this financing is 100% the local Fire District and has nothing to do with CAL FIRE.

Sincerely, Mike

https://www.southlakecountyfire.org/agendas/

BOARD MEETING AGENDAS - South Lake County Fire

MEETING. December 20, 2022. November 15, 2022. October 18, 2022. September 20, 2022. August 16, 2022. July 19, 2022. June 21, 2022. May 17, 2022. April 19, 2022

www.southlakecountyfire.org

Mike Wink

Division Chief–Sonoma Lake Napa Unit

Pre Fire / Inspections / PIO / Fuels

1199 Big Tree Road, St. Helena Ca. 94574

(707) 967-1400 Office

(707) 889-4225 Mobile

tri counties bank
Service With Solutions™

Chris Cappeto
Tri Counties Bank
Snr Commercial Relationship Manager

January 27, 2023

South Lake County Fire Protection District
21095 Highway 175
Box 1360
Middletown, CA 95461

Dear Chief Wink:

We are pleased to express our interest in considering your application for credit based on the terms and conditions set forth below. The sole purpose of this letter is to discuss your application for credit; it is not intended to constitute a commitment or an offer to lend on the part of Tri Counties Bank (the "Bank"). Instead, it is intended to be used as the basis for continued discussions of your credit request(s) which we are willing to consider on the following terms and conditions:

	Credit Request 1
1. Borrower:	South Lake County Fire Protection District
2. Type of Credit:	12-month Equipment Line of Credit converting to a 10 year Equipment Term Loan
3. Purpose:	Finance the purchase of two (2) new fire engines
4. Principal or Commitment Amount:	$1,200,000
5. Application Fee: (If the requested credit is approved and the loan closes by the date set forth below, the Application Fee will be credited toward the Commitment or Loan fee, otherwise it is non-refundable)	$0
6. Commitment Fee/Loan Fee: (Due at Loan Closing)	.25% / $3,000.00
7. Appraisal Fee and Other Costs: (To cover the cost of appraisal, environmental report, or any other required valuations or closing costs)	N/A
8. Initial Interest Rate:	Equipment Line: Prime (currently 7.50%) + .25% or 7.75% FLOATING Equipment Loan: Prime (currently 7.50%) + .25% or 7.75% FIXED
9. Repricing Period:	N/A

tri counties bank
Service With Solutions™

	Credit Request 1
10. Amortization Period:	120 months / 10 years
11. Index and Spread at Repricing:	N/A
12. Interest Rate Floor:	7.75%
13. Prepayment Fee:	5% year one, 4% year two, 3% year three, 2% year four, 1% year five, none thereafter, up to 20% can be prepaid annually without penalty
14. Maturity Date:	10 years from the date of the loan
15. Collateral Description:	Two, brand new fire engines, specific details to follow
16. Priority on the Collateral:	First lien
17. Collateral Value based on:	Purchase Order
18. Maximum Loan to Value or Borrowing Base:	100%
19. Minimum Debt Service Coverage:	1.35X
20. Guaranties:	N/A
21. Subordinations:	N/A
22. Financial Reporting Requirements:	Annual approved budget Annual audited budget when available
23. Other Covenants:	None
24. Additional Conditions:	Receipt of full financial package prior to and in order to fully underwrite the requested loan to include, but not limited to: Audited Financials: FYE 2020 FYE 2021 FYE 2022
25. No Material Change:	There will not be a material adverse change in the Borrower's or a Guarantor's financial position or in the Collateral that will secure the credit prior to the close and funding of the transaction.

As stated above, this letter is only an expression of interest. It is not intended as a commitment to make any financial accommodations available to you at this time. Rather, it is intended to be used as the basis for further discussions of your credit needs and it should not be released to or discussed with any third party without the Bank's express prior written consent. Any financial accommodations extended to you by the Bank will be subject to the Bank's receipt of your application for credit, the submission of all necessary documentation required to underwrite your request, and the Bank's underwriting standards and no binding agreement will be reached until a credit approval has been obtained and the loan documents have been executed by both you and the Bank.

tri counties bank
Service With Solutions™

Based on the foregoing and, assuming you want to complete the credit review and approval process, we expect to engage in further discussions with you and obtain additional information before deciding whether a commitment to lend will be issued and under what terms and conditions any such commitment will be made.

If this is something you would like to continue pursuing please sign in the space provided below and return this expression of interest to us at the return address below with the Application Fee N/A by N/A, otherwise we will consider your interest in pursuing the financing discussed above withdrawn.

In the event this letter is signed and returned to us with the Application Fee N/A by N/A, and we do not close and fund a loan offered by us on similar terms by N/A, then the Application Fee will be considered earned for services rendered and any such offer to lend shall be cancelled.

Please call us with any comments and questions you may have. We look forward to discussing this matter with you further.

Sincerely,

Tri Counties Bank

_____
Chris Cappeto
Senior Commercial Relationship Manager

Return Address:
814 4th Street
Santa Rosa, CA

THE UNDERSIGNED HEREBY EXPRESSES ITS INTEREST AND DESIRE TO MAKE AN APPLICATION FOR CREDIT AND CONTINUE PURSUING THE CREDIT DESCRIBED IN THIS EXPRESSION OF INTEREST.

Dated: _____

South Lake County Fire Protection District

By:_____

Its: _____

South Lake County Fire Protection District
in cooperation with
California Department of Forestry and Fire Protection

P.O. Box 1360 Middletown, CA 95461 - (707) 987-3089

BOARD OF DIRECTORS REGULAR MEETING MINUTES

Tuesday, January 17, 2023, at 7:00 p.m.
Located at the Middletown Fire Station Board Room,
21095 Highway 175, Middletown, CA 95461

1. *Vice President Bostock called the meeting to order at 7:00 p.m.*
2. *Chief Duncan led pledge of allegiance.*
3. *Present: Directors Matthew Stephenson, Jim Comisky, Madelyn Martinelli, Stephanie Cline and Vice President Rob Bostock. Also present: Unit Chief Mike Marcucci, Chief Paul Duncan, and Board Clerk Gloria Fong.*
4. *Board Clerk Fong administered Oath of Office to Stephanie Marienne Cline, who was appointed in lieu of November 8, 2022, election to office of the Director of the South Lake County Fire Protection District 4-year term, expiring December 2026.*

   CLINE/COMISKY MOTION** to approve agenda. AYES: Martinelli, Cline, Stephenson, Comisky, Bostock. NOES: None. **MOTION CARRIED.
5. Consideration of approval of videoconference option under AB 361. Board will consider approval of findings that there remains a State proclaimed COVID 19 health emergency and local officials continue to impose or recommend measures to promote social distancing.

   COMISKY/CLINE MOTION** to accept item 6. AYES: Martinelli, Cline, Comisky, Stephenson, Bostock. NOES: None. **MOTION CARRIED.
6. Citizens' Input: Any person may speak for three (3) minutes about any subject of concern provided it is within the jurisdiction of the Board of Directors and is not already on the today's agenda. Total period is not to exceed fifteen (15) minutes, unless extended at the discretion of the Board.

   None.
7. Communications:

   7.a. Fire Sirens: *No report.*

   7.b. Fire Safe Council: *Only report item attached to packet.*

   7.c. Volunteer Association

   On behalf of the Association, Robert Lanning reports the four new recruits have started, been equipped with gear, got Target Solutions logons and so far everything is progressing very well.

   7.d. Chief's Report

Unit Chief Marcucci wanted for renewal of contract, direction from Board whether they want it on agenda for next month, an ad hoc or potentially a workshop to start moving forward with contract, assuming Board would like it renewed, and to have completed by April or May with June 30th as drop-dead date, although service would not stop if not received by then. This is where the Board provides direction on where we're going. He and Chief Duncan have a concept of what they'd like to see as a department. There will be some mandates coming from the department along with contractual changes with labor group that need to be addressed. Director Comisky recommends a special Board meeting to go over contract and nuances because we have two new directors and suggests a doodle pole, which is when every member of the group receives an email of their available dates.

Chief Duncan answered Director Martinelli's question about the position Mike accepted, which is position in pre-fire division at St. Helena Headquarters, working for Unit Chief Marcucci directly. He is an assistant chief, same rank as Paul, overseeing all activities done before fuel management and modifications, defensible space inspection program, fire prevention specialist, as well as information officer for all six counties in the unit. They are working on flying position for replacement of Battalion Chief position in next 45 days.

7.e. Finance Report: *There is nothing to add to attachment in packet.*

7.f. Directors' activities report

Director Martinelli has no activity to report.

Director Comisky reports Fire District Association of California educational sessions have concluded, conference in Napa coming up March 14 through 17, and 2-day certificate of achievement later in the Spring. He'll be in meeting next month with new Office of Emergency Service Director, whom he has never met. Last thing he's putting on radar especially for Unit Chief Marcucci is at some point the fire district will need to renegotiation contract with Napa County Fire and negotiate first responder of life support (FROLS) agreement with Napa County AMR. He looks forward to working with chiefs, as it is gifting of public funds for doing what the fire district does by sending equipment to calls over the County line. On top of this Napa County AMR with contract they got has to negotiate with any paramedic authority that stops the clock or else fines occur, which they've done with 2 ALS Napa County providers, American Canyon and Napa City Fire but have never negotiated with South Lake. When South Lake responds over Robert Lewis Stevenson and over Butts Canyon area, it stops the clock for them, keeping them from being fined, with our district suffering because ambulance is out of service responding in place of AMR, a private business that we are augmenting.

Unit Chief Marcucci has a relationship through LEMSA and this is where process lies with AMR for FROLS or fees like for City of Napa, Napa County Fire receives for providing service when AMR doesn't have ambulances and because we have paramedics stopping that clock Napa County requires them to have with a paramedic at scene depending upon location. By Unit Chief Marcucci wearing both hats, he can talk with LEMSA director creating that conversation.

Director Cline has no activity to report other than not making last meeting, and before that she went to retirement party for Captain Dave Miinch that was very was sweet where Cal Fire cooked and attended holiday party.

Director Stephenson has no activity to report.

Director Bostock has no activity to report.

8. Regular Items:

8.a. Consideration for Zoll 10-year lease agreement to replace three monitors/defibrillators in amount of $4,807.37 per month (excluding taxes) and authorization for Chief to execute lease agreement. Placed on the agenda by Chief Paul Duncan.

Chief Duncan reports monitors are timing out since last ones from five years ago. He's electing lease because in it we will get full replacement in five years. With monitors we have now we will keep a couple for fire line assignments. There is fire line we can participate with the gear we have. Lifepaks that we have now are about eight pounds heavier. With Zoll we gain weight, technology, and maintenance. There is also another brand, Physio. With lease it helps to standardize the equipment. Delivery time is about two months.

CLINE/STEPHENSON MOTION** to approve 9a, consideration for Zoll 10-year lease agreement to replace three monitors/defbrillator in amount of $4,807.37 per month excluding taxes and authorization for Chief to execute lease agreement. AYES: Martinelli, Comisky, Stephenson, Cline, Bostock. NOES: None. **MOTION CARRIED.

8.b. Consideration for Resolution No. 2022-23-17, A Resolution Appropriating Contingencies for Intergovernmental Transfer of Public Funds Program for the January 1, 2021 through December 31, 2021 Service Period. Placed on the agenda by Staff Services Analyst Gloria Fong.

Contributions depend upon how many participants are in the program. Without contributing we will not receive any return.

COMISKY/CLINE MOTION** to approve 9b**.** AYES: Stephenson, Martinelli, Cline, Comisky, Bostock. NOES: None. **MOTION CARRIED

8.c. Election of President of the Board of Directors, Vice President of the Board of Directors, Secretary and / or Clerk to the Board of Directors for calendar year 2023. Placed on the agenda in accordance with Fire District Bylaws. (Outgoing President conducts election and adjourns tonight meeting)

Director Martinelli nominates Director Bostock as President, Director Cline nominates Director Comisky as Vice President, Director Bostock nominates Gloria Fong as Secretary / Clerk. Nominations are closed and all members are in favor of nominations.

9. Consent Calendar Items: (Approval of consent calendar items are expected to be routine and non-controversial. They will be acted upon by the Board at one time without discussion. Any Board member may request that an item be removed from the consent calendar for discussion later.)

9.a. December 20, 2022, Regular Meeting Minutes

9.b. Warrants - January

9.c. Budget Transfer

Warrant list is corrected with two additions of #10860 in amount $356.87 to AT&T and #10861 in amount of $1,500 to Jene Anderton, for new grand total of $315,004.70.

CLINE/MARTINELLI MOTION *to approve consent calendar with corrections noted. AYES: Cline, Comisky, Stephenson, Martinelli, Bostock. NOES: None.* ***MOTION CARRIED***

10. ***COMISKY/MARTINELLI MOTION*** *to adjourn meeting at 7:47 p.m. All in attendance are in favor of motion.*

Respectfully submitted by
Gloria Fong, Clerk to Board of Directors:

READ AND APPROVED BY
ROB BOSTOCK, President – Board of Directors:

South Lake County
Fire Protection District
Cost Accounting Management System
Invoice Audit Trail

Detail Report by Vendor, Invoice
Run Date: 02/17/2023 05:44:14pm By: GF

Selection Criteria:
Include Inv Batch No: 02/21/23

Report Template:
AP Invoice Report Board Warrant List
\\Southlake\Lsladmin\Wincams\Lslfiles\Report\Criteria\AP Invoice Report Board Warrant List.rst

Invoice	Voucher No	Vendor Name	Invoice Description	Line Item Description	Object	Sub	Line Net Amt	Req No / Descr 2
3	10879	JENE MARIE ANDERTON	EMS CONSULTANT	DRIVE TIME TO STA 60 (4HR)	23-80	SP	300.00	
	10879	JENE MARIE ANDERTON	EMS CONSULTANT	IN CLASS INSTRUCTION @ STA 60 (4HR)	23-80	SP	300.00	
	10879	JENE MARIE ANDERTON	EMS CONSULTANT	QA/QI, DEVELOP CURRICULUM, ETC (12H	23-80	SP	900.00	
8518MAR2023	10865	ARBA	GROUP LIFE FOR PCFS	ATKINS	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	COLLETT	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	COLLINS	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	COSTA	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	DANIELS	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	DELONG	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	DUNCAN, H	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	EMERSON	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	FANUCCHI	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	FENK, H	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	FENK, T	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	FRAYER	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	HESS	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	LANNING	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	LEUZINGER	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	LOPEZ	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	MIINCH	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	MYERS	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	NEWSOM	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	SCALFARO	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	SMITH, C	03-30	G	8.32	
	10865	ARBA	GROUP LIFE FOR PCFS	SMITH, N	03-30	G	8.32	
19503363	10866	AT&T	TELEPHONE CHGS ME 02/13/23	STA 64 TELEPHONE CHGS	30-00	T4	27.11	
	10866	AT&T	TELEPHONE CHGS ME 02/13/23	STA 62 TELEPHONE CHGS	30-00	T2	58.27	
	10866	AT&T	TELEPHONE CHGS ME 02/13/23	STA 63 TELEPHONE CHGS	30-00	T3	57.35	
	10866	AT&T	TELEPHONE CHGS ME 02/13/23	STA 60 TELEPHONE CHGS	30-00	T0	191.35	
	10866	AT&T	TELEPHONE CHGS ME 02/13/23	FS TELEPHONE CHGS	30-00	TF	25.43	
80 013023	10868	CALLAYOMI CO WATER DISTRICT	WATER USAGE	STA 60 (6030)	30-00	W0	391.20	
81 013023	10868	CALLAYOMI CO WATER DISTRICT	WATER USAGE	FS (1377)	30-00	WF	41.03	

Invoice	Voucher No	Vendor Name	Invoice Description	Line Item Description	Object	Sub	Line Net Amt	Req No / Descr 2
04-00542022	10870	COUNTY OF LAKE SOLID WASTE	GARBAGE DISPOSAL	FS (1180lb)	30-00	GF	39.54	
	10870	COUNTY OF LAKE SOLID WASTE	GARBAGE DISPOSAL	60 (1180lb)	30-00	G0	39.54	
04-00544664	10870	COUNTY OF LAKE SOLID WASTE	GARBAGE DISPOSAL	FS (2400lb)	30-00	GF	80.42	
167433	10872	DEPARTMENT OF FORESTRY AND FIRE PRO	Q1 (AMADOR) FY 2022-23	PERSONNEL SERVICES	23-80	CF	605.25	
	10872	DEPARTMENT OF FORESTRY AND FIRE PRO	Q1 (AMADOR) FY 2022-23	BENEFITS	23-80	CF	8.78	
	10872	DEPARTMENT OF FORESTRY AND FIRE PRO	Q1 (AMADOR) FY 2022-23	ADMINISTRATION	23-80	CF	43.10	
	10872	DEPARTMENT OF FORESTRY AND FIRE PRO	Q1 (AMADOR) FY 2022-23	STATEWIDE PRO RATA	23-80	CF	30.65	
GEM05236P81	10873	DEPARTMENT OF HEALTH CARE SERVICES	GEMT QAF 2022 Q1	MEDI-CAL MANAGED CARE (23)	28-48	GE	782.46	
	10873	DEPARTMENT OF HEALTH CARE SERVICES	GEMT QAF 2022 Q1	MEDICARE (59)	28-48	GE	2,007.18	
	10873	DEPARTMENT OF HEALTH CARE SERVICES	GEMT QAF 2022 Q1	OTHER (42)	28-48	GE	1,428.84	
	10873	DEPARTMENT OF HEALTH CARE SERVICES	GEMT QAF 2022 Q1	DUAL MEDICARE/ MEDI-CAL (16)	28-48	GE	544.32	
CLEAN011623	10890	TANYA M DREW	STATION CLEANING	STA 60 CLEANING	18-00	60	250.00	
CLEAN021323	10890	TANYA M DREW	STATION CLEANING	STA 60 CLEANING	18-00	60	250.00	
SLCFCPR123	10875	EMERGENCY CARE TRAINING & SUPPLY	CPR TRAINING	(10) INCLUDES CERT CARD, SUPPLIES &	28-30	T	150.00	
FARRES20230121	10874	DUSTIN FARRES	REIMB UNIFORM APPAREL	FARRES WILDLAND TACTICAL PANTS	11-00	U	284.00	
234290	10876	FISHER WIRELESS SERVICES INC	REPEATER ADJUSTMENT	TWIN PINE CASINO CDF TAC2 TO RED TO	17-00	60	600.00	
GASS20230123	10889	STEPHEN W GASS JR	REIMB UNIFORM APPAREL	GASS WILDLAND TACTICAL PANTS	11-00	U	284.00	
10817REISSUE	10877	GRIFFIN DIESEL REPAIR	REMOTE CONTROL NOZZLE SYSTEM	WT6211 ENHANCEMENT	17-00	62	5,164.58	
HEAGNEY20230124	10869	CODY HEAGNEY	REIMB UNIFORM APPAREL	HEAGNEY WILDLAND TACTICAL PANTS	11-00	U	284.00	
10818REISSUE	10878	HEART CONSCIOUSNESS CHURCH	PURCHASE OLD MVFD ENGINE	PURCHASE OLD MVFD ENGINE	38-00	60	2,500.00	
HORSTFEB2023	10867	BARBARA HORST	OPEB REIMBURSEMENT	HEALTH/DENTAL/VISION	03-30	R	579.23	
18611	10880	JERI-CO GARAGE DOORS & OPERATIONS	BAY DOOR REPAIR	STA 60 PREV MAINT-SEMIANNUAL	18-00	60	250.00	
	10880	JERI-CO GARAGE DOORS & OPERATIONS	BAY DOOR REPAIR	STA 60 DOOR 1 FIX CHAIN, DOOR 2 SEN	18-00	60	175.00	
18612	10880	JERI-CO GARAGE DOORS & OPERATIONS	BAY DOOR REPAIR	STA 64 KEYLESS ENTRY PROGRAMMED	18-00	64	110.00	
FY22/23	10881	LAKE COUNTY FIRE CHIEFS ASSOCIATION	ANNUAL DUES	FY 22/23 DUES	20-00	L	1,500.00	
	10881	LAKE COUNTY FIRE CHIEFS ASSOCIATION	ANNUAL DUES	NARCOTICS	19-40	MS	500.00	
	10881	LAKE COUNTY FIRE CHIEFS ASSOCIATION	ANNUAL DUES	NORTHSHORE SUPPORT TEAM	23-80	SP	100.00	
	10881	LAKE COUNTY FIRE CHIEFS ASSOCIATION	ANNUAL DUES	COUNTY OF LAKE ANNUAL FEE	23-80	SP	3,720.00	

Invoice	Voucher No	Vendor Name	Invoice Description	Line Item Description	Object	Sub	Line Net Amt	Req No / Descr 2
11/08/22ELECTION	10882	LAKE COUNTY REGISTRAR OF VOTERS	DIRECTOR ELECTION EXPENSE	11/08/22 FORMS,PUBLICATIONS	23-80	SP	50.25	
INV122022	10887	ROBERT LANNING	EXCAVATOR FUEL REDUCTION	CAL TRANS HWY 29 @ BRADFORD (16HR)	62-74	60	768.00	
	10887	ROBERT LANNING	EXCAVATOR FUEL REDUCTION	CAL TRANS HWY 29 @ HILDERBRAD (16HR	62-74	60	768.00	
	10887	ROBERT LANNING	EXCAVATOR FUEL REDUCTION	CAL TRANS HWY 29 @ MIRABEL (6HR)	62-74	60	288.00	
INV122023	10887	ROBERT LANNING	FUEL REDUCTION-DEC 2022	MIDDLETOWN RANCHERIA-DEC (49HR)	28-30	60	2,352.00	
	10887	ROBERT LANNING	FUEL REDUCTION-DEC 2022	EXCAVATOR MAINTENANCE-DEC (11HR)	28-30	60	528.00	
INV122024	10887	ROBERT LANNING	FUEL REDUCTION-JAN 2023	MIDDLETOWN RANCHERIA-JAN (48HR)	28-30	60	2,304.00	
	10887	ROBERT LANNING	FUEL REDUCTION-JAN 2023	EXCAVATOR MAINTENANCE-JAN (6HR)	28-30	60	288.00	
	10887	ROBERT LANNING	FUEL REDUCTION-JAN 2023	KONOCTI-JAN (16HR)	28-30	60	768.00	
95461FPD 013123	10883	LIFE ASSIST INC	EMS SUPPLIES	ORDER 62224760-1	19-40	MS	232.95	
	10883	LIFE ASSIST INC	EMS SUPPLIES	ORDER 62224370-2	19-40	MS	53.84	
	10883	LIFE ASSIST INC	EMS SUPPLIES	ORDER 51234420-1	19-40	MS	2,078.49	
	10883	LIFE ASSIST INC	EMS SUPPLIES	ORDER 51234420-2	19-40	MS	43.01	
138	10871	DENNIS DAVID MAHONEY	LANDSCAPE MAINTENANCE	STA 60 01/19/23 MAINTENANCE	18-00	60	80.00	
01/01-06/30/2022	10884	NORTH COAST EMS	IMAGETREND ACCESS	01/01/22 - 06/30/22 (QTY223)	28-48	NC	223.00	
23-06FC	10885	NORTHSHORE FIRE PROTECTION DISTRICT	EVACUATION ROUTE WORK	LABOR-10 PERSON CREW (400HR)	62-74	60	11,444.00	RES 2022-23-06 5GG20109
	10885	NORTHSHORE FIRE PROTECTION DISTRICT	EVACUATION ROUTE WORK	LABOR-CAPTAIN (40HR)	62-74	60	1,844.00	RES 2022-23-06 5GG20109
	10885	NORTHSHORE FIRE PROTECTION DISTRICT	EVACUATION ROUTE WORK	CREW UTILITY VEHICLES (22.5HR)	62-74	60	462.83	RES 2022-23-06 5GG20109
	10885	NORTHSHORE FIRE PROTECTION DISTRICT	EVACUATION ROUTE WORK	CHAINSAW 20" BAR (22HR)	62-74	60	42.68	RES 2022-23-06 5GG20109
	10885	NORTHSHORE FIRE PROTECTION DISTRICT	EVACUATION ROUTE WORK	CHAINSAW 25" BAR (2 @ 20HR EA)	62-74	60	181.60	RES 2022-23-06 5GG20109
	10885	NORTHSHORE FIRE PROTECTION DISTRICT	EVACUATION ROUTE WORK	POLE SAW (10HR)	62-74	60	100.10	RES 2022-23-06 5GG20109
	10885	NORTHSHORE FIRE PROTECTION DISTRICT	EVACUATION ROUTE WORK	CHIPPER (20HR)	62-74	60	645.20	RES 2022-23-06 5GG20109
699137074150122	10886	PG&E	ELECTRIC CHGS	STA 60 (3326.4000KWH)	30-00	E0	1,153.46	
	10886	PG&E	ELECTRIC CHGS	STA 62 (4709.1274KWH)	30-00	E2	1,460.11	
	10886	PG&E	ELECTRIC CHGS	STA 63 (2857.1910KWH)	30-00	E3	890.42	
	10886	PG&E	ELECTRIC CHGS	STA 64 (686.8065KWH)	30-00	E4	237.85	
	10886	PG&E	ELECTRIC CHGS	FS (640.1150KWH)	30-00	EF	222.97	
PPE103122	10888	SOUTH LAKE COUNTY FIRE PROTECTION D	PAYROLL	PAYROLL	09-00	00	8,033.30	
8690837252304	10891	UNCLE BUDDYS PUMPS	FUEL FOR EX6021	EX6021 12/29/22 (250-8.63 FED TAX E	62-74	60	241.37	
	10891	UNCLE BUDDYS PUMPS	FUEL FOR EX6021	EX6021 01/20/23 (200-7.52 FED TAX E	62-74	60	192.48	
2212043	10892		AMBULANCE BILLING DEC 2022	AMBULANCE BILLING SVC	23-80	AB	2,116.51	
2301043	10892		AMBULANCE BILLING JAN 2023	AMBULANCE BILLING SVC	23-80	AB	2,336.47	
1187	10893	US BANK	VARIOUS (SEE ATTACHED)	VARIOUS (SEE ATTACHED)			2,124.08	

Invoice	Voucher No	Vendor Name	Invoice Description	Line Item Description	Object	Sub	Line Net Amt	Req No / Descr 2
02-116796 013123	10894	U.S.BANK	VARIOUS (SEE ATTACHED)		VARIOUS (SEE ATTACHED)		24,949.38	
						TOTAL	94,290.02	

Invoice	Voucher No	Merchant Vendor Name	Invoice Description	Line Item Description	Object	Sub	Line Net Amt	Req No / Descr 2
1187	10893	SAFEWAY	CONTINUED PROFESSIONAL TRNG	FOIL & SALAD	28-30	TB	60.02	CAL FIRE TRAINING BUREAU
12013	10893	COSTCO WHOLESALE SANTA ROSA	CONTINUED PROFESSIONAL TRNG	GROCERIES FOR BBQ	28-30	TB	286.81	CAL FIRE TRAINING BUREAU
12467	10893	SMART & FINAL	CONTINUED PROFESSIONAL TRNG	GROCERIES	28-30	TB	154.43	CAL FIRE TRAINING BUREAU
148	10893	COSTCO WHOLESALE SANTA ROSA	CONTINUED PROFESSIONAL TRNG	GROCERIES	28-30	TB	610.05	CAL FIRE TRAINING BUREAU
239441	10893	LUCKY	CONTINUED PROFESSIONAL TRNG	COFFEE	28-30	TB	119.13	CAL FIRE TRAINING BUREAU
2531	10893	PAK N MAIL	TAX FILING SUPPLIES	1099 FORMS	22-70	60	22.84	
470700014	10893	RALEYS	CONTINUED PROFESSIONAL TRNG	BREAKFAST	28-30	TB	40.79	CAL FIRE TRAINING BUREAU
7189843	10893	AMAZON	TRAINING GROUNDS & MEETING ITEM	COFFEE PERCOLATOR (2)	28-30	TB	301.70	CAL FIRE TRAINING BUREAU
8717	10893	COSTCO WHOLESALE UKIAH	CHRISTMAS DECORATION	STA 64 SNOWMAN	18-00	64	283.06	
97316	10893	SAFEWAY	CONTINUED PROFESSIONAL TRNG	DELI CONDIMENT	28-30	TB	59.97	CAL FIRE TRAINING BUREAU
97606	10893	SAFEWAY	CONTINUED PROFESSIONAL TRNG	DRINKS,SALAD,DELI CONDIMENT TRAY	28-30	TB	165.29	CAL FIRE TRAINING BUREAU
MXQ204BE	10893	ADOBE SYSTEMS INC	ADOBE TRIAL MB 01/28/23	ACROBAT PRO	28-30	60	19.99	
						SUBTOTAL	2,124.08	
02-116796 013123	10894	SOUTH LAKE REFUSE	REFUSE/RECYCLE COLLECTION	STA 62 REFUSE/RECYCLE COLL	30-00	G2	75.92	
02-152940 013123	10894	SOUTH LAKE REFUSE	REFUSE/RECYCLE COLLECTION	STA 60 REFUSE/RECYCLE COLL	30-00	G0	165.62	
02-601722 013123	10894	SOUTH LAKE REFUSE	REFUSE/RECYCLE COLLECTION	STA 63 REFUSE/RECYCLE COLL	30-00	G3	66.25	
10331	10894	BOBS VACUUM	CLEANING SUPPLIES	STA 60 AIR FRESH CAN	14-00	60	4.02	
	10894	BOBS VACUUM	CLEANING SUPPLIES	STA 60 SINGLE FOLD TOWELS (CASE)	14-00	60	34.27	
	10894	BOBS VACUUM	CLEANING SUPPLIES	STA 60 TOILET PAPER (CASE)	14-00	60	119.05	
	10894	BOBS VACUUM	CLEANING SUPPLIES	STA 60 FOIL 18x500	14-00	60	52.55	
	10894	BOBS VACUUM	CLEANING SUPPLIES	STA 60 BLEACH FREE (GAL)	14-00	60	17.10	
1123255527	10894	TRACTOR SUPPLY CO	FUEL TANK,PUMP TO FUEL ONSITE	EX6021 55 GAL STEEL TANK	62-74	60	1,340.97	RES 2022-23-06 5GG20109
	10894	TRACTOR SUPPLY CO	FUEL TANK,PUMP TO FUEL ONSITE	EX6021 55 GPM FUEL TRNSF PUMP	62-74	60	618.00	RES 2022-23-06 5GG20109
12299 013123	10894	MATHESON TRI-GAS INC	MEDICAL OXYGEN	TANK (4) RENTAL ME 01/31/23	19-40	O	136.38	
16444	10894	SAFEWAY	CONTINUED PROFESSIONAL TRNG	CONDIMENT TRAY, POTATO SALAD	28-30	TB	69.97	CAL FIRE TRAINING BUREAU
191590 013123	10894	HARDESTERS	ME 01/31/23	STA 60 CLEANING SUPPLIES	14-00	60	256.67	
	10894	HARDESTERS	ME 01/31/23	STA 60 LEAF RAKE	14-00	60	24.66	
	10894	HARDESTERS	ME 01/31/23	STA 60 STORM CVG MEALS (2DAYS,3PEOP	13-00	60	71.68	
	10894	HARDESTERS	ME 01/31/23	STA 60 STORM CVG MEALS (2)	13-00	60	24.74	
	10894	HARDESTERS	ME 01/31/23	STA 60 STORM CVG MEALS (2DAYS,3PEOP	13-00	60	70.30	
	10894	HARDESTERS	ME 01/31/23	STA 60 FRONT OFC DOOR PUSH,PULL SIG	18-00	60	5.13	
	10894	HARDESTERS	ME 01/31/23	STA 60 TRASH CANS (2) REPL ONES W-H	14-00	60	128.68	
	10894	HARDESTERS	ME 01/31/23	STA 63 CLEANING SUPPLIES	14-00	63	11.13	
	10894	HARDESTERS	ME 01/31/23	STA 60 DOOR LOCK	18-00	60	44.07	
	10894	HARDESTERS	ME 01/31/23	STA 60 DOOR LOCK RETURN (DIFF IS BA	18-00	60	-43.95	
	10894	HARDESTERS	ME 01/31/23	STA 63 AUTO DETAILING SUPPLIES	17-00	63	68.17	

Invoice	Voucher No	Merchant Vendor Name	Invoice Description	Line Item Description	Object	Sub	Line Net Amt	Req No / Descr 2
	10894	HARDESTERS	ME 01/31/23	EX6021 MAINTENANCE SUPPLIES	17-00	60	33.66	
	10894	HARDESTERS	ME 01/31/23	FS BREEZEWAY PAINT SUPPLIES	18-00	FS	70.96	
	10894	HARDESTERS	ME 01/31/23	M6311 LIGHT MOUNT SUPPLIES	17-00	63	13.93	
	10894	HARDESTERS	ME 01/31/23	STA 62 COOKING SUPPLIES	14-00	62	21.40	
	10894	HARDESTERS	ME 01/31/23	EX6021 MASTICATOR HEAD LIFT SUPPLIE	17-00	60	71.76	
	10894	HARDESTERS	ME 01/31/23	STA 62 COOKING SUPPLIES	14-00	62	14.78	
1933016	10894	AMAZON	MCI EMS BAG ID TAGS	2-1/2x4-1/4 SLOTTED TAGS W/6" LOOP	19-40	MS	31.48	
196636	10894	DC CUSTOMS, INC	BACKUP CAMERA/MONITOR & INSTL	WT6211 MONITOR,CAMERA,ELECTRICAL KI	17-00	62	465.64	
	10894	DC CUSTOMS, INC	BACKUP CAMERA/MONITOR & INSTL	WT6211 LABOR (4.5 HR)	17-00	62	585.00	
200001521	10894	FDAC	FDAC CONFERENCE 03/14-17/23	DUNCAN 03/14-17/23	28-30	T	450.00	
200001523	10894	FDAC	FDAC PRE CONF 03/14/23	CLINE 03/14/23	28-30	T	105.00	
20230206	10894	SANTA ROSA UNIFORM & CAREER APPAREL	UNIFORM APPAREL	NOMEX PANT - GASS	11-00	U	210.85	
227551	10894	LUCKY	CONTINUED PROFESSIONAL TRNG	RESTOCK FOR BBQ	28-30	TB	22.35	CAL FIRE TRAINING BUREAU
23747 011323	10894	MALLORY SAFETY AND SUPPLY LLC	BADGES / COLLAR BRASS	EMS (4 BADGES/10 & 20 COLLAR)	11-00	U	985.90	
	10894	MALLORY SAFETY AND SUPPLY LLC	BADGES / COLLAR BRASS	ENGINEER (5 BADGES/10 COLLAR)	11-00	U	766.14	
	10894	MALLORY SAFETY AND SUPPLY LLC	BADGES / COLLAR BRASS	FIREFIGHTER (10 BADGES/40 COLLAR)	11-00	U	1,892.43	
	10894	MALLORY SAFETY AND SUPPLY LLC	BADGES / COLLAR BRASS	COUNSEL/ATTY/OT/OM BADGES/4 & 2 COL	11-00	U	825.85	
2864	10894	JL MECHANICAL	REPAIR CRACKED MASTICATOR HEAD	EX6021 WELD & SUPPLIES	17-00	60	570.00	
292	10894	US POSTAL SERVICE	MAILING SUPPLIES	POSTAGE (100)	22-71	60	63.00	
29559	10894	MIDDLETOWN MAIL & MORE	BURN PERMIT/CHIPPING MAILERS	SHIPPING (5423)	28-30	PE	1,735.36	
	10894	MIDDLETOWN MAIL & MORE	BURN PERMIT/CHIPPING MAILERS	PRINTING (5423)	28-30	PE	1,861.17	
	10894	MIDDLETOWN MAIL & MORE	BURN PERMIT/CHIPPING MAILERS	LABOR (3)	28-30	PE	75.00	
3006362879	10894	STERICYCLE INC	MEDICAL WASTE MB 02/01/23	MONTHLY CHARGE	19-40	MW	99.21	
30128147 021623	10894	MEDIACOM	INTERNET SVC	STA 63 INTERNET SVC	30-00	I3	90.99	
30165883 022623	10894	MEDIACOM	INTERNET SVC	STA 62 INTERNET SVC	30-00	I2	91.93	
30173705 022623	10894	MEDIACOM	INTERNET SVC	STA 60 INTERNET SVC	30-00	I0	77.99	
30620	10894	MIDDLETOWN MAIL & MORE	SHIPPING CHARGES	RETURN TIRE CHAINES	22-71	60	584.09	
30784269	10894	QUILL LLC	PLOTTER SUPPLIES	HP MATTE PHOTO 36"x100'	22-70	60	234.71	
30792158	10894	QUILL LLC	WRITE,PRINT,MAIL & PLOTTER SUPPLIES	PENS,ERASER REFILL	22-70	60	55.93	
	10894	QUILL LLC	WRITE,PRINT,MAIL & PLOTTER SUPPLIES	PAPER,STENO PADS	22-70	60	117.32	
	10894	QUILL LLC	WRITE,PRINT,MAIL & PLOTTER SUPPLIES	ENVELOPES	22-70	60	89.23	
40219	10894	SAFEWAY	CONTINUED PROFESSIONAL TRNG	CONDIMENT TRAY, POTATO SALAD	28-30	TB	113.91	CAL FIRE TRAINING BUREAU
50050000 013123	10894	HIDDEN VALLEY LAKE CSD	WATER/SEWER	STA 63 WATER (699)	30-00	W3	86.80	
	10894	HIDDEN VALLEY LAKE CSD	WATER/SEWER	STA 63 SEWER	30-00	W3	109.14	
5007541314	10894	FERRELLGAS	PROPANE FILL	STA 60 01/23/23 (347.70GAL)	30-00	P0	976.65	
	10894	FERRELLGAS	PROPANE FILL	STA 62 01/18/23 (305.70GAL)	30-00	P2	866.15	
	10894	FERRELLGAS	PROPANE FILL	STA 64 TANK RENTAL YB 01/26/23	30-00	P4	50.00	

Invoice	Voucher No	Merchant Vendor Name	Invoice Description	Line Item Description	Object	Sub	Line Net Amt	Req No / Descr 2
523844	10894	LEES SPORTING GOODS	DIRECTOR NAME PLATE	STEPHENSON	22-70	60	19.58	
558142	10894	LEES SPORTING GOODS	UNIFORM APPAREL FOR REP	PRATT LADIES POLO	11-00	U	39.13	
	10894	LEES SPORTING GOODS	UNIFORM APPAREL FOR REP	PRATT NAVY JACKET	11-00	U	57.61	
56928	10894	LUCKY	CONTINUED PROFESSIONAL TRNG	COFFEE	28-30	TB	101.40	CAL FIRE TRAINING BUREAU
6142	10894	WALMART	CLEANING & COOKING SUPPLIES	CLEANING & COOKING SUPPLIES	14-00	63	293.26	
6228	10894	COSTCO WHOLESALE SANTA ROSA	CONTINUED PROFESSIONAL TRNG	GROCERIES FOR BBQ & BREAKFAST	28-30	TB	521.09	CAL FIRE TRAINING BUREAU
7562	10894	SMART AND FINAL	CONTINUED PROFESSIONAL TRNG	CREAMER,CHIPS,WATER	28-30	TB	148.23	CAL FIRE TRAINING BUREAU
81209	10894	ARMED FORCE PEST CONTROL	PEST CONTROL	STA 60 GENERAL PEST (SEMI-ANNUAL)	18-00	60	125.00	
81409	10894	ARMED FORCE PEST CONTROL	PEST CONTROL	STA 63 EXTERIOR RODENT BAIT STATION	18-00	63	20.00	
81529	10894	ARMED FORCE PEST CONTROL	PEST CONTROL	STA 62 GENERAL PEST & RODENT BAITIN	18-00	62	80.00	
91231149772	10894	PERFORMANCE MECHANICAL	HVAC REPAIR	STA 62 REPL THERMOSTAT	18-00	62	409.00	
91276403	10894	CALIFORNIA SURVEYING & DRAFTING SUP	PLOTTER SERVICE & REPAIR	STA 60 PLOTTER	17-00	60	530.00	
9586	10894	COSTCO WHOLESALE SANTA ROSA	CONTINUED PROFESSIONAL TRNG	GROCERIES RESTOCK BBQ & BREAKFAST	28-30	TB	202.25	CAL FIRE TRAINING BUREAU
96830	10894	ICE WATER CO	HYDRATION FOR STATIONS	STA 60 5 GAL (2)-01/05	13-00	60	14.52	
	10894	ICE WATER CO	HYDRATION FOR STATIONS	STA 62 5 GAL (2)-01/05	13-00	62	14.52	
	10894	ICE WATER CO	HYDRATION FOR STATIONS	STA 63 5 GAL (3)-01/05	13-00	63	21.77	
	10894	ICE WATER CO	HYDRATION FOR STATIONS	STA 60 5 GAL (2)-01/18	13-00	60	14.50	
	10894	ICE WATER CO	HYDRATION FOR STATIONS	STA 62 5 GAL (2)-01/18	13-00	62	14.52	
	10894	ICE WATER CO	HYDRATION FOR STATIONS	STA 63 5 GAL (2)-01/18	13-00	63	14.52	
9926324520	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	M6012 BOOSTER EXTENDER	12-00	60	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	M6211 BOOSTER EXTENDER	12-00	62	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	M6311 BOOSTER EXTENDER	12-00	63	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	SPARE CELL PHONE	12-00	60	38.03	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	M6211 TABLET	12-00	62	48.41	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	M6311 TABLET	12-00	63	48.41	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	E6031 TABLET	12-00	60	48.41	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	E6231 TABLET	12-00	62	48.41	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	M6012 SPARE TABLET	12-00	60	48.41	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	D1403 TABLET	12-00	A	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	B1418 TABLET	12-00	A	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	B1417 TABLET	12-00	A	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	DIRECTOR TABLET	12-00	60	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	DIRECTOR TABLET	12-00	60	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	DIRECTOR TABLET	12-00	60	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	DIRECTOR TABLET	12-00	60	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	DIRECTOR TABLET	12-00	60	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	OFFICE TABLET	12-00	60	38.01	
	10894	VERIZON WIRELESS	CELLULAR SVC ME 02/26/22	OFFICE TABLET	12-00	60	38.01	
INV188247538	10894	ZOOM VIDEO COMMUNICATIONS INC	BOARD MTG REMOTE ACS ME 03/10/23	STANDARD PRO	23-80	SP	14.99	
INV666832	10894	LN CURTIS & SONS	SAFETY PPE	STRUCTURAL PANT 40x30	11-00	P	1,642.19	
INVPRA114195	10894	LEXIPOL	GRANT REVIEW EXPANDED SERVICES	AFG FY22 VEHICLE ADD'L REVIEW,NARRA	23-80	SP	2,000.00	
						SUBTOTAL	24,949.38	

COUNTY OF LAKE
OFFICE OF THE AUDITOR-CONTROLLER

COUNTY OF LAKE

BUDGET TRANSFER

Fiscal Year: 2022-23

Budget Title: South Lake County Fire Protection District .	***Budget Transfer #B*** _____ (Auditor's Office Completes this section)

TRANSFER FROM:

From: Fund 357 (000) Dept 9557 (0000)

Account (000.00-00)	Account Title	Amount
795.23-80	Professional,Specialized Svc	$4100 .
795.22-71	Postage	$3700
795.22-71	Postage	$900
795.18-00	Maintenance-Bldgs & Imprv	$5100
795.18-00	Maintenance-Bldgs & Imprv	$5200
		$
		$

TRANSFER TO:

To: Fund 357 (000) Dept 9557 (0000)

Account (000.00-00)	Account Title	Amount
795.28-30	Spec Dept Supp & Svc	$ 4100
795.28-30	Spec Dept Supp & Svc	$ 3700
795.22-70	Office Supplies	$ 900
795.17-00	Maintenance - Eqt	$ 5100
795.17-00	Maintenance - Eqt	$ 5200
		$
		$

Department's justification & explanation of why transfer is necessary:

Cover unanticipated expenses

Authorized Department Signature: _____ Date: _____

☐ APPROVED ☐ DENIED

_____
CHAIRPERSON, DISTRICT DATE

Auditor-Controller Use Only

Date _____ JE# _____ By: _____