



VOLUNTEER FIRE
BRIGADES VICTORIA



Appendix

CFA Information Sheets

2024

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Appendix – CFA Information Sheets

All information sheets are also available to download from the CFA website

<https://www.members.cfa.vic.gov.au/programs/vesep>

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Tanker Costs – VESEP 2024



Funding Source	Ultra Light Tanker	Light Tanker Crew Cab	Medium Tanker Replacement	Medium Tanker Addition
Brigade	\$24,167	\$36,667	\$65,000	\$161,666
Grant Contribution	\$140,833	\$288,333	\$420,000	\$323,334
Total	\$165,000	\$325,000	\$485,000	\$485,000

Pricing indicative @ April 2024

Cost escalation to point of build in 2024/35 allow up to 10% increase.
Options available on some appliances at Brigade cost.

Specifications -

Detailed information regarding these appliances is available via Members on line –
<https://www.members.cfa.vic.gov.au/programs/vesep>

Grant Funding Formulas

Ultra Light Tanker

Light Tanker

Medium Tanker (Replacement)

Cab Chassis

- \$2 VESEP to \$1 Brigade

Body

- Funded by grant contribution.

Medium Tanker

(additions to the fleet only)

Body & Cab Chassis

- \$2 VESEP to \$1 Brigade

Overview

The Ultra Light Tanker delivers increased water, enhanced fire suppression capability and ergonomic features. This vehicle is licensed to carry 2 people including the driver. The vehicle has manual transmission and does not require an endorsed licence to drive. The body and cab chassis conform to CFA operational safety standards. These appliances are not designed to have personnel operating from the tray area. The ULT's primary role for wildfire is to perform the first attack on spot sized / remote / difficult to access types of fires where these fires are safe to approach. It is also designed to perform support for back up operations, mopping up and patrolling duties.

Cab Chassis – Toyota Landcruiser 70 Series Workmate 4x4.

- 4.5L V8 Turbo charged diesel engine c/w 5 speed manual transmission.
- Upgraded 3.95 tonne GVNM cab chassis with aftermarket wide alloy wheels, all-terrain tyres and 100 litre fuel tank.
- Aluminium bull bar.
- Air-conditioning, reversing camera, reversing alarm.
- Map light, 2 x fire blankets, 2 x drink bottle holders.
- CFA map book holder, siren and emergency light controller, portable radio charger and CFA radio speakers

Body Features

- Full Aluminium construction, water cooled diesel engine pump (500l/min @ 500 kpa) and rear pump control panel
- Full LED lighting including emergency lights, locker/pump panel lighting and work lights
- 550 litre (nominal) water tank capacity, live hose reel with 30m x 19mm light weight hose and Dial-A-Jet branch, 1 x 65mm delivery, 1 x 20-230 lpm selectable flow nozzle, 1 x air-aspirating foam nozzle, Class A Dosatron foam system (or equivalent), 5.5m permanently connected suction hose.
- Radios (CFA and UHF), emergency response lights and sirens
- Vehicle Livery package

Lockering/tools and equipment

- 4 x aluminium lockers above tray
- Chainsaw and ancillary equipment, 2 x rake hoes, shovel, 2 x drip torches, tool box, emergency Class A foam kit, first aid kit, collapsible knapsack, service hydrant, 4.5kg AB dry chemical extinguisher, Hazmat guidebook, esky



Indicative costs

Indicative prices as at April 2024 (excludes GST)

Cost escalation to point of build in 2024/25 up to 10% increase

Funding Break up

Brigade Contribution	\$24,167
Grant Contribution	\$140,833
Total Project Costs	\$165,000

Important Note – The technical specification is currently under review, subject to finalisation and approval of a revised appliance role statement.



BRIGADE OWNED VEHICLE BUILD-UP
Ultra-Light Tanker
(VESEP 2024/25)

1. CAB CHASSIS

Cab Chassis and associated fitments/equipment – including modifications to conform to CFA’s operational safety standards

DESCRIPTION	
1.1	FORD RANGER XL (or equivalent) cab chassis of 4WD (4x4) configuration and a two (2) person single cabin with 5 Star ANCAP safety rating
1.2	Cab chassis powered by 2.0 Bi turbo diesel engine c/w 10 speed Automatic transmission. (Maximum Power: 154kW @ 3,750 RPM. Maximum Torque: 500Nm @ 1,750-2,000 RPM) compliant with ADR 80/03 (Euro 5) Emission Standards
1.3	Gross vehicle mass rating (GVM) 3,700kg (<i>uprated by Multi Drive</i>)
1.4	Front Axle capacity rating 1,640kg (<i>uprated by Multi Drive</i>)
1.5	Rear Axle capacity rating 2,100kg (<i>uprated by Multi Drive</i>)
1.6	Wheelbase 3,270mm
1.7	Turning circle 12.9m kerb-to-kerb
1.8	10-Speed automatic transmission
1.9	Part-time 4x4 Driveline
1.10	Dynamic Stability Control (DSC) incorporating ABS, Electronic Brakeforce Distribution, Emergency Brake Assist, Hill Start Assist, Load Adaptive Control, Roll Over Mitigation, Traction Control & Trailer Sway Control
1.11	Five (5) 16” x 7” all-terrain tyres (including spare wheel)
1.12	Fuel tank capacity 80 liters (standard)
1.13	Cabin interior including engine immobilizer, adaptive cruise control, idle-up control, steering wheel reach & height adjust, power steering, fully integrated air-conditioning c/w climate control, 3 point lap sash seat belt - all positions, lane keeping aid with road edge detection and driver alert system, airbags x 9 - front, side, knee & full length curtain (driver & passenger) & far side driver front airbag, power windows
1.14	Front seating incorporating: <ul style="list-style-type: none">• Standard bucket style driver’s seat suitable for off-road operation• Standard bucket style passenger seat
1.15	Air cleaner snorkel fitted to the engine air intake and air cleaner fitted with a flameproof air filter element (non-standard)
1.16	12V electrical system c/w 155 ampere alternator
1.17	Bull bar
1.18	Recovery bar
1.19	Vehicle’s exhaust discharges to rear of vehicle on offside
1.20	Includes CFA Ergonomic Vehicle Design Guidelines (in its latest version) applied to equipment designs wherever practical
1.21	Compliance to Australian Design Rules (ADR’s), relevant standards, regulations and Codes of Practice

1. FIRE PUMP & PLUMBING

Fire Pump Set and Associated Equipment

DESCRIPTION	
2.1	GAAM Mk70 / Kubota Z482 (or equivalent) single-stage centrifugal fire pump close coupled to a water-cooled diesel engine, with a minimum closed pump pressure of 900 kPa and a nominal flow rate of 500 litres/min. at 500 kPa – sufficient for two (2) 38mm lines with a 3 meter suction lift
2.2	Pump priming performed by a hand-operated diaphragm pump
2.3	Pump plumbing arrangement (All plumbing manufactured from stainless steel) <ul style="list-style-type: none"> • Delivery manifold consisting of one (1) 65mm Storz coupling outlet • “Tank Fill Line Draughting” plumbing originating from the delivery manifold • Suction Manifold consisting of a separate permanently connected 5.5m x 64mm flexible suction hose with 75mm Storz couplings and suction strainer, and a 64mm water tank inlet • Separate 38mm water “Tank Fill” line fitted with a 38mm external lug coupling • Pump cooling (bleed) line including in-line strainer and check valve
2.4	Pump engine fitted with 12V starter motor, 12V “Energise to Stop” solenoid and controls (powered from cab chassis 12V battery)
2.5	Pump controls and instrument panel mounted at the rear of the vehicle
2.6	Pump engine fuel system supplied from the cab chassis diesel fuel tank via a separate 12V fuel pump, header tank and fuel filter
2.7	Pump engine exhaust system discharges to rear of vehicle on nearside
2.8	Includes CFA Ergonomic Vehicle Design Guidelines (in its latest version) applied to equipment designs wherever practical

2. **BODYWORK**

Bodywork Build-up Arrangement

DESCRIPTION	
3.1	Aluminium tray frame
3.2	Front of the tray frame fitted with an aluminium light mounting frame (headboard)
3.3	Rear of the tray frame
3.4	Two (2) aluminium stowage lockers (NS1 & NS2, including stowage brackets and listed stowage equipment) located above tray on the nearside front of the body
3.5	Two (2) aluminium stowage locker (OS1 & OS2, including stowage brackets and listed stowage equipment) located above tray on the offside front of the body
3.6	One (1) aluminum stowage locker (Suction Hose locker, including stowage brackets and listed stowage equipment) located below tray on the offside rear of the body
3.7	One (1) 550 litre nominal capacity fabricated aluminium water tank complete with one (1) sight level gauge, centrally located on the tray frame
3.10	One (1) live hose reel c/w 30m x 19mm lightweight Neidner hose and 1 x blackout F/D20 nozzle c/w 38mm external lug coupling (on live hose reel)
3.11	Live hose reel fitted with a Dosatron Foam System c/w “Off/Water/Foam” 3-way selector valve
3.12	Rear wheels fitted with aluminium mudguards
3.13	CFA radio c/w handheld control head and ignition relay
3.14	CFA portable radio charger (supplied with a CFA portable radio, if vehicle is additional to fleet)
3.15	External rear speaker for CFA radio (mounted on front light mounting frame)
3.16	GME XRS-370C UHF CB radio
3.17	Live wide angle rear view camera in-dash display
3.18	Reversing buzzer
DESCRIPTION	

3.19 Hazard Systems CS202 Hand-Held Siren/Light Controller (or equivalent) with control pad mounted on cabin dash and 100W speaker mounted on bull bar
3.20 Flashing headlights (alternate flashing)
3.21 Four (4) red and blue LED hazard lights (2 at front and 2 at rear of appliance)
3.22 One (1) red and blue LED mini light bar (mounted on front light mounting frame)
3.23 Two (2) LED scene lights (mounted on front light mounting frame)
3.24 One (1) Pump Bay LED scene light
3.25 One (1) Rear LED scene light
3.26 Two (2) LED combination rear tail/stop/indicator/reversing lamps (on rear bumper bar)
3.27 One (1) LED reversing lights angled at 45° (c/w separate switch)
3.28 LED locker lights
3.29 LED flexible arm map light in cabin
3.30 CFA reflective Red/Yellow chequer striping, reflective yellow striping at rear and outline profile of body and cabin, CFA logos, "FIRE" , "Emergency 000" and "Brigade Name" decals and "Aerial ID" number
3.31 Cabin engraved nameplates and decals
3.32 Weighbridge certificate of completed appliance (<u>typical</u>)
3.33 Registration
3.34 Operating instructions
3.35 Stowage supplied as per Section 4
3.36 Includes CFA Ergonomic Vehicle Design Guidelines (in its latest version) applied to equipment designs wherever practical
3.37 Compliance to Australian Design Rules (ADR's), relevant standards, regulations and Codes of Practice

3. **BURNOVER CREW PROTECTION SYSTEM**

Approved Burnover Crew Protection System encompassing the following elements.

DESCRIPTION
4.1 Cabin internally mounted radiant heat curtains for deployment to all expose glassed surfaces (2 x side windows + 1 x front windscreen)
4.2 Compressed Air Foam (CAF) based external deluge system covering all external cabin glassed window and 4 x wheels
4.3 Cabin accessed fire blankets (x2)
4.4 Critical vehicle external plastic elements replaced with metal equivalents
4.5 System controls and alarming: <ul style="list-style-type: none"> • Cabin activation and warnings • Tank low level alarming

4. **STOWAGE - CFA-approved Stowage equipment supplied as follows:**

Description	Contractor and/or CFA F&PE to Supply	CFA Brigade to Supply (see Note)
Cabin Stowage		
2 x 600ml drink bottles		✓
CFA Map book(s)		✓
2 x Crew		✓
1 x CFA Portable Radio (either supplied by CFA after delivery if vehicle is <u>additional</u> to fleet, or supplied by Brigade after delivery if a <u>replacement</u> vehicle)	✓	✓
2 x All-weather rubber floor mats	✓	
1 x Cab Chassis Jack, Jack handle, Spare Wheel Winch Handle and Tools	✓	
1 x Cab Chassis Operating Manual	✓	
1 x Pump Operating Manual	✓	
1 x CFA Vehicle & Pump Log Book	✓	
1 x CFA Radio Operating Manual	✓	
1 x Tanker Operating and Spare Parts Manual	✓	
1 x <i>Dosatron</i> Foam System Operating Manual	✓	
2 x Crew protection blankets – 1.8m x 2m - Red (<i>CFA Part No. BLANKET</i>)	✓	
1 x “ <i>SAA/ANZ HB 76:2010 Dangerous Goods – Initial Emergency Response Guide</i> ” book	✓	
Front Nearside (PPE) Locker - NS1		15kg max. capacity
2 x Crew turn out bags		✓
Rear Nearside (Hose) Locker - (NS2)		
1 x 30 metre x 38mm synthetic delivery hoses with 38mm external lug couplings (<i>CFA Part No. HOSETW38CP30M</i>)	✓	
1 x 30 metre x 25mm synthetic delivery hoses with 38mm external lug couplings (<i>CFA Part No. HOSETW25CP30M</i>)	✓	
1 x 3 metre x 38mm <i>Duraline</i> delivery hose with 38mm external lug couplings	✓	
1 x 65mm Storz to 64mm x 3TPI female loose nut adaptor	✓	
1 x 65mm Storz to 64mm x 3TPI male adaptor	✓	
1 x 65mm Storz to 75mm Storz adaptor	✓	
1 x <i>TFT DQ-ECF-BD Quadrafog</i> 20-230 litres/min. 500kPa selectable flow nozzle with <i>TFT D75DP-BD</i> ball valve, blue bale arm, blue pistol grip and 38mm external lug coupling	✓	
1 x <i>Scotty 4080</i> pistol grip bale shut-off fitted with <i>Scotty 4020</i> air aspirating foam nozzle and 38mm external lug coupling	✓	
1 x “ <i>OneKey</i> ” spanners (<i>CFA Part No. SSONEKEY</i>)	✓	
Front Offside (Welfare) Locker - (OS1)		20kg max. capacity
1 x Drink cooler (“Eskey”)	✓	
600ml drink bottles (quantity to suit drink cooler)		✓
1 x Defibrillator	✓	
1 x CFA First Aid Kit (<i>CFA Part No. F2CFA</i>)	✓	
Rear Offside (Chainsaw) Locker - (OS2)		
1 x <i>Stihl MS311 FarmBoss</i> chainsaw c/w 45-50cm bar and drip tray (Option – Stihl 300C battery operated chainsaw 45-50cm + 2x 2 battery/charger, station charging)	✓	
1 x Chainsaw helmet (<i>CFA Part No. HELMCS</i>)	✓	

1 x Earmuffs (pair) (CFA Part No. HELMCSEMUFF)	✓	
1 x Visor (CFA Part No. HELMCSEVISOR)	✓	
1 x Chainsaw chaps - Medium (100cm) (CFA Part No. CHAPSCSM)	✓	
1 x Stihl 3/8" chainsaw chain sharpening kit (to suit the Stihl MS311 chainsaw)	✓	
1 x Scepter 03615 combination chainsaw fuel (6 litre) and chain / bar oil (2.25 litre) canister c/w (CFA Part No. FUELSTROKE50) and (CFA Part No. FUELCHAIN) identification tags	✓	
1 x 5 litre fire lighter / drip torch metal fuel container c/w identification tag	✓	

The technical specification is currently under review, subject to finalisation and approval of a revised appliance roll statement.

Note: Additional stowage items are not approved

Description	Contractor and/or CFA F&PE to Supply	CFA Brigade to Supply (see Note)
1 x small tool bag c/w basic tool assortment	✓	
1 x Plastic funnel (to suit chainsaw & drip torch)	✓	
1 x Short handle bolt cutters	✓	
1 x Emergency "A" Class foam kit	✓	
1 x Suction hose float c/w chain and "D" shackle	✓	
1 x Angus STRBASK75 (Hoenig) stainless steel wire mesh basket strainer	✓	
1 x 10 metre x 12mm synthetic rope	✓	
1 x 4.5kg ABE dry chemical fire extinguisher	✓	
Rear Offside Under-Tray (Suction Hose) Locker		
1 x 5.5 metre x 65mm (pre-connected) flexible suction hose c/w 75mm Storz couplings & 1 x 250mm long stainless-steel suction strainer c/w 75mm Storz coupling	✓	
Tray Stowage		
1 x CFA-approved aluminum long barrel service hydrant / standpipe c/w 65mm Storz couplings and 1 x blank cap with chain (CFA Part No. HYDALTWLST)	✓	
1 x Standpipe key holder c/w 1 x "OneKey" spanner (CFA Part No. SSONEKEY)	✓	
1 x 4 liter Firebug fixed wand fire lighters / drip torches	✓	
1 x 30 metre x 19mm lightweight Neidner (or equivalent) delivery hose c/w 38mm external lug coupling and 1 x blackout F/D20 nozzle c/w 38mm external lug coupling (on live hose reel)	✓	
1 x 65mm Storz to 38mm external lug adaptor (CFA Part No. ST6538ULC)	✓	
1 x Live hose reel rewind handle	✓	
Below-Tray Stowage		
2 x Rake hoes (CFA Part No. RAKEHOEM)	✓	
1 x 20 litre Phoscheck WD881 Class 'A' foam drum (CFA Part No. FOAMAC20L)	✓	
2 x Wheel chocks	✓	
1 x Spare wheel and tyre	✓	
Between Cabin and Tray Stowage		
1 x Long handle post hole(square end) shovel	✓	
1 x Axe	✓	
Water Tank		
1 x Removable strainer (in overhead water tank filler)	✓	

Signed by CFA Fire Brigade

Date: / /

Summary Specification Prepared By:
CFA Fleet and Protective Equipment

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VESEP

Light Tanker



Overview

The crew cab light tanker has a nominal 2,000 litre tank which will include a new body and a new diesel-powered pump. The body is mounted on an Isuzu NPS 75-155 4x4 crew cab chassis. The body and cab chassis conform to CFA operational safety standards. The vehicle is designed to carry four personnel including the driver.

The specification is subject to the results of performance trials and statewide tour of the prototype Next Generation Light Tanker.

Cab Chassis

Isuzu NPS 75-155 cab chassis of 4WD (4x4) crew cab configuration and (uprated) 8.0T GVM, powered by a turbocharged diesel engine with nominal maximum power output: 114 kW @ 2,600 RPM and nominal maximum torque output: 419 Nm @ 1,600 – 2,600 RPM with a five speed AMT gearbox and two speed transfer case.

Body

The body is fitted with a fabricated aluminium tray frame and roll-over protection frame. The specifications include a (nominal) 2,000 litre fabricated polypropylene water tank with baffles for surge protection, an electric start water-cooled Kubota D902 diesel powered GAAM Mk150 pump capable of delivering 450 lpm @ 700 kPa. The body has a roll-over protection bar, crew protection system including electrically activated crew protection sprays, cabin mounted radiant heat shielding curtains, a low-level water warning alert system, pump controls at rear, on deck and in cabin, permanently coupled suction hose, UHPS hose reel, drink cooler, double width stowage locker (nearside) and large slide-out locker (offside).

Visual Example



Indicative Cost

Indicative price is at April 2024 (excludes GST)

Cost escalation to point of build in 2024/25 allow up to 10% increase

Cab Chassis Costs Funding By Brigade & VESEP \$110,000

Funding Break up

Brigade Contribution \$36,667

Total Grant Contribution \$288,333

Total Project Costs \$325,000



BRIGADE OWNED VEHICLE BUILD-UP
Light Tanker Crew Cab
(VESEP 2024/25)

5. CAB CHASSIS

Cab Chassis and associated fittings/equipment – including modifications to conform to CFA’s operational safety standards.

DESCRIPTION
1.1 MY21 Isuzu NPS 75-155 4x4 Crew (or equivalent) cab chassis incorporating a forward control four (4) person crew cabin
1.2 Cab chassis powered by a direct injection turbo charged diesel engine. (Maximum Power: DINNet – 114 kW @ 2,600 rpm. Maximum Torque: DIN-Net – 419 Nm @ 1,600-2,600 rpm) compliant with ADR 80/03 (Euro 5) Emission standards
1.3 Manufacturer’s allowable G.V.M. 8,000kg (Uprated)
1.4 Front Axle capacity rating 3,100kg
1.5 Rear Axle capacity rating 6,000kg
1.6 Wheelbase 3,395mm
1.7 Turning circle 14 metres, kerb-to-kerb
1.8 Automated Manual Transmission (AMT)
1.9 Limited slip differential fitted to the rear axle
1.10 Vacuum/hydraulic service brakes
1.11 Exhaust brake fitted with automatic disengagement whilst the vehicle is in “neutral”
1.12 Drum parking brake on transmission output shaft
1.13 Tyres – Steel-belted tubeless traction radial off road pattern
1.14 Fuel tank capacity 140 litres
1.15 Cabin Interior including manufacturer’s standard fully integrated air-conditioning, driver and front outboard passenger air bags, electric windows and central locking with remote keyless entry
1.16 Seating incorporating: <ul style="list-style-type: none">• Driver’s adjustable spring suspension seat suitable for off-road operation (non-standard)• Front passenger bench seat (with centre seat replaced by document stowage console) • 2 x Rear bucket seats with lap-sash seat belts (non-standard)
1.17 Heated and powered exterior main mirrors and independently adjustable convex “spot” mirrors
1.18 24V electrical system c/w 90 ampere alternator.
1.19 Polished aluminum bull bar fitted with centrally mounted tow pin
1.20 Two (2) Hella fog lights fitted in bull bar
1.21 Approved metal case Oblan pre-cleaner fitted to the air intake tube
1.22 Vehicle’s exhaust discharges horizontally to offside of vehicle
1.23 Steel encircling loops fitted around each driveshaft
1.24 All brake and fuel lines constructed from approved fire-resistant material
1.25 50 mm wide “Yellow” step rings fitted to front wheels
1.26 Metal exterior door handles and surrounds (<i>non-standard</i>)
1.27 Crew cabin fitted with “B” Post stiffener (<i>non-standard</i>)
1.28 Crew cabin fitted with electro-hydraulic cab tilt (<i>non-standard</i>)
1.29 Red-painted cabin
1.30 Includes CFA Ergonomic Vehicle Design Guidelines (in its latest version) applied to equipment designs wherever practical

1.31 Compliance to Australian Design Rules (ADR's), relevant standards, regulations and Codes of Practice

6. FIRE PUMP & PLUMBING

Fire Pump Set and Associated Equipment

DESCRIPTION	
2.1	GAAM Mk 150 / Kubota D902 (or equivalent) single-stage centrifugal fire pump close coupled to a water-cooled diesel engine with a minimum closed pump pressure of 1,150 kPa and a nominal flow rate of 450 litres/min. at 700 kPa – sufficient for two (2) 38mm lines or one (1) 64mm line with a 3-metre suction lift.
2.2	GAAM 20L/min at 100bar ultra high-pressure pump (UHPS) suitable for blacking out and washaway.
2.3	Pump priming performed by a hand-operated diaphragm pump
2.4	Pump plumbing arrangement (All plumbing manufactured from stainless steel) <ul style="list-style-type: none"> • Delivery manifold consisting of one (1) 38mm external lug coupling outlets and one (1) 65mm Storz outlet • “Tank Fill Line Draughting” plumbing originating from the delivery manifold • Front delivery plumbing consisting of two (2) 38mm external lug coupling outlets above tray at front of body • Suction Manifold consisting of a separate permanently connected 8 metre x 75mm flexible suction hose, 65mm Storz “Hydrant Boost” inlet and 64mm water tank inlet • Separate 50mm water “Tank Fill” line fitted with a 65mm Storz coupling located on nearside of body • Front bull bar mounted tyre sprays plumbing originating from the nearside under-tray delivery plumbing c/w in-cabin mounted operating valve • Forward facing spray nozzle on drivers side c/w in-cabin mounted operating valve • Pump cooling (bleed) line including in-line strainer and check valve
2.5	Pump engine fitted with 24V starter motor and controls (powered from cab chassis 24V battery)
2.6	Pump controls and instrument panel mounted on the rear of the vehicle with additional controls mounted off the roll-over protection bar for the deck and in the cabin control screen
2.7	Pump engine fuel system integrated with the cab chassis diesel fuel system
2.8	Pump engine exhaust system discharges vertically at offside rear of body
2.9	Pump engine fitted with Oblan C-021ES combination air filter/pre-cleaner c/w flameproof air filter element
2.10	Class “A” Foam - GAAM Quenchmaster Foam System, including one (1) 20 litre freshwater tank, one (1) foam drum rack, one (1) 20 litre drum of Phoscheck WD881 Class “A” foam, one (1) foam kit and one (1) foam expansion branch.
2.11	Includes CFA Ergonomic Vehicle Design Guidelines (in its latest version) applied to equipment designs wherever practical

7. BODYWORK

Bodywork Build-up Arrangement

DESCRIPTION	
3.1	Aluminum tray frame
3.2	Tray frame fitted with aluminum chequer plate floor panels in the crew and walkway areas
3.3	Front of the tray frame fitted with an aluminum Roll-Over Protection Bar

3.4	Each side of the body fitted with a crew access step, access door and continuous handrailing
3.5	Crew Protection features, including: <ul style="list-style-type: none"> • “Drop-down” radiant heat protection curtains fitted to cabin windscreen and side windows • Fold Out radiant Heat Protection awning on rear deck area

DESCRIPTION	
	<ul style="list-style-type: none"> • Electrically actuated crew spray protection system sprays fitted to cabin, tyres, pump and rear pump control panel • Cabin rear window replaced with aluminum panel • Sides and rear of the body enclosed with aluminum heat shielding panels • Aluminum infill panels between the cabin and body
3.6	Digital crew communication intercom system between cabin and deck area c/w flashing Magenta “Call Cabin” LED light in deck area
3.7	Top of the aluminum heat shielding panels on the offside and nearside front of the body fitted with safety yellow handrailing
3.8	Aluminum double-width stowage locker NS1 (including stowage brackets and listed stowage equipment) located on the nearside of the body
3.9	Aluminum blanket locker (including listed stowage items) located on top of the water tank accessible from the deck central to the body
3.10	Aluminum slide-out locker OS1 (including stowage brackets and listed stowage equipment) located on the offside of the body
3.11	Supply and fitment of stowage brackets and listed stowage equipment for the tray area
3.12	Rear view Camera and forward-facing deck camera (integrated with 11” touch screen in-cabin display)
3.13	2,000 litre (<u>nominal</u>) fabricated HDPE water tank complete with baffles and three (3) sight level gauges, centrally located on the tray frame
3.14	One (1) live hose reel fitted with 60m of 12mm High pressure hose
3.15	Rear bumper bar complete with two (2) recovery eyes and combination LED rear tail lamps
3.16	Rear wheels fitted with aluminum mudguards
3.17	A two (2) battery roll-out battery carrier, complete with radiant heat shielding (on nearside)
3.18	Battery Guard battery management system with Reset button located on cabin dash
3.19	Two (2) 24V jump-start/battery charger plugs (one located each side of body)
3.20	Two (2) red/blue alternating LED mini light bars on cabin roof (blanked off to rear)
3.21	Four (4) red/blue alternating LED hazard lights (2 at front and 2 at rear of appliance)
3.22	Alternate flashing headlight system
3.23	Siren System
3.24	Low water level indication system
3.25	CFA mobile radio system c/w ignition relay and rear speaker
3.26	GME XRS-370C UHF CB radio
3.27	CFA portable radio charger (and CFA portable radio, if vehicle is additional to fleet)
3.28	Four (4) flexible arm-type LED map reading lights in cabin (one for each seating position)
3.29	Stowage lockers illuminated with internal LED lighting
3.30	Tray access steps and under-tray plumbing illuminated with LED lighting
3.31	Crew area LED lighting installed in the walkway and pump bay areas of the body
3.32	Two (2) handheld LED battery torches with mounted in the crew area with additional stowage and charging docks in NS locker
3.33	Alley lights fitted to sides of cabin
3.34	One (1) CFA-approved 560mm (minimum length) LED driving light bar (on bullbar)
3.35	Two (2) small Green slow burn LED lights (mounted above vehicle front and rear registration plates, visible to “Road Safety” cameras)

3.36 CFA reflective Red/Yellow chequer striping, reflective yellow striping at rear and outline profile of body and cabin, CFA logos, "FIRE" , "Emergency 000" and "Brigade Name" decals and "Aerial ID" number
3.37 Engraved nameplates and decals
3.38 Stowage equipment supplied as per Section 4
3.39 Includes CFA Ergonomic Vehicle Design Guidelines (in its latest version) applied to equipment designs wherever practical
DESCRIPTION
3.40 Compliance to Australian Design Rules (ADR's), relevant standards, regulations and Codes of Practice

8. STOWAGE

CFA-approved Stowage equipment is supplied as follows:

Description	Contractor and/or CFA F&PE to Supply	CFA Brigade to Supply (see Note)
Nearside Locker (NS1) (Double width)		
1 x CFA First Aid Kit (<i>CFA Part No. F2CFA</i>)	✓	
1 x Emergency "A" Class foam kit	✓	
2 x Pistol grip 5 bar 20-230 l/m select flow branch c/w 38mm external lug coupling and removable tip	✓	
2 x 12mm smooth bore tips for 5 bar branches	✓	
1 x 64mm x 3TPI female loose nut – 75mm Storz adaptor	✓	
1 x 65mm Storz – 75mm Storz adaptor	✓	
1 x 65mm Storz – 64mm x 3TPI male adaptor	✓	
1 x 65mm Storz to 38mm external lug adaptor (<i>CFA Part No. ST6538ULC</i>)	✓	
1 x 4.5kg ABE Dry Chemical Fire Extinguisher	✓	
2 x "OneKey" spanners (<i>CFA Part No. SSONEKEY</i>)	✓	
1 x Combined live/dead hose reel handle	✓	
6 x 38mm external lug coupling washers	✓	
1 x 64mm x 3TPI female-coupling washers	✓	
2 x 65mm Storz coupling (delivery) washers	✓	
1 x 15 metre x 64mm Duraline delivery hose c/w 65mm Storz couplings	✓	
1 x 15 metre x 38mm Duraline delivery hose c/w 38mm external lug couplings	✓	
4 x 30 metre x 38mm Synthetic delivery hoses c/w 38mm external lug couplings	✓	
2 x 30 metre x 25mm Synthetic delivery hoses c/w 38mm external lug couplings	✓	
1 x Stihl MS200 battery chainsaw c/w 40cm bar and drip tray	✓	
1 x Chainsaw helmet (<i>CFA Part No. HELMCS</i>)	✓	
1 x Earmuffs (pair) (<i>CFA Part No. HELMCSEMUFF</i>)	✓	
1 x Visor (<i>CFA Part No. HELMCVISOR</i>)	✓	
1 x Chainsaw chaps - Medium (100cm) (<i>CFA Part No. CHAPSCSM</i>)	✓	
1 x Stihl 3/8" chainsaw chain sharpening kit (to suit the Stihl MS200 chainsaw)	✓	
1 x chain / bar oil (2.25 litre) canister c/w (<i>CFA Part No. FUELCHAIN</i>) identification tags	✓	
1 x 5 litre fire lighter / drip torch metal fuel container c/w identification tag	✓	
1 x Plastic fuel funnel (to suit chainsaw and drip torch)	✓	
1 x CFA Hazardous Tree Kit	✓	

Awning/Blanket Locker (On top of NS1)		
3 x Crew protection blankets – 1.8m x 2m - Red (CFA Part No. <i>BLANKET</i>) 1 x Crew Deck Awning	✓	
Offside Slide-Out Locker (OS1)		
1 x Vehicle jack	✓	
1 x Jack handle	✓	
1 x Wheel nut spanner	✓	
1 x Spare wheel winch handle	✓	
Description	Contractor and/or CFA F&PE to Supply	CFA Brigade to Supply (see Note)
1 x Tool Roll c/w basic tool assortment	✓	
1 x Warning triangle set	✓	
1 x 20 metre x 12mm synthetic rope	✓	
1 x Polaski	✓	
1 x Bolt Cutter		
1 x <i>Phoenix R200</i> Low expansion Class “A” foam branch c/w 38mm external lug coupling	✓	
On and Around the Crew Work Platform Area		
2 x Handheld LED spotlight c/w flexible cord (located on roll-over protection bar at front of body)	✓	
2 x Handheld LED torch (located on roll-over protection bar at front of body with charging dock in NS Locker)		
1 x 4 litre “ <i>Firebug</i> ” fixed wand firelighter	✓	
1 x Tank strainer (in water tank fill point)	✓	
2 x 2.5 metre x 38mm <i>Duraline</i> delivery hoses c/w 38mm external lug couplings and 2 x pistol grip 5bar 20-230 l/m select flow branch	✓	
1 x 60 metre x 12mm Ultra High-Pressure delivery hose c/w Ultra High Pressure Fog/Jet nozzle (on live hose reel)	✓	
Below Tray		
1 x 20 litre <i>Phoscheck WD881</i> Class ‘A’ foam drum (CFA Part No. <i>FOAMAC20L</i>) (on slide-out rack located offside) (If foam system optioned)	✓	
2 x Rake hoes (CFA Part No. <i>RAKEHOEM</i>)	✓	
1 x CFA-approved aluminum long barrel service hydrant / standpipe c/w 65mm Storz couplings and 1 x blank cap with chain (CFA Part No. <i>HYDALTWLST</i>) (located in nearside rear under-tray locker)	✓	
1 x 25 litre drink cooler (located in nearside under-tray slide-out carrier)	✓	
600ml drink bottles (quantity to suit drink cooler)		✓
2 x Wheel chocks (one located on mudguard each side)		
Suction Hose Locker		
1 x 8 metre x 75mm (pre-connected) flexible suction hose c/w 75mm Storz couplings & 300mm long stainless-steel suction strainer with 75mm Storz coupling	✓	
1 x Suction hose float c/w chain and “D” shackle	✓	
1 x <i>Angus STRBASK75 (Hoenig)</i> stainless steel wire mesh basket strainer	✓	
In the Cabin		
5 x Crew protection blankets – 1.8m x 2m - Red (CFA Part No. <i>BLANKET</i>)	✓	
1 x Vehicle Operating manual	✓	

1 x Cab Chassis Owner's Manual	✓	
1 x CFA Vehicle & Pump log book	✓	
1 x CFA portable radio (either supplied by CFA after delivery if additional to fleet, or supplied by Brigade after delivery if a replacement appliance)	✓	✓
1 x CFA Map book		✓
5 x Wildfire helmets		✓

Note: Additional stowage items are not approved

CFA specifications are general in nature and are subject to change without notice during tender and manufacturing.

Optional Extras Fully Funded by Brigade

Description	Estimated Brigade Cost exc GST per unit	Please (✓) if required
Live Hose Reel and delivery plumbing with 20 metres of 25mm Red "ORTAC" delivery hose (c/w 38mm external lug couplings) and one (1) Quell TPB15-38mm brass fog nozzle (c/w 38mm external lug coupling) tray mounted on the left-hand side rear of the vehicle <i>(in lieu of Item No. 3.13 – Dead Hose Reel)</i>	\$1,850	
Class "A" Foam - GAAM Quenchmaster Foam System (including one (1) 20 litre freshwater tank, one (1) foam drum rack, one (1) 20 litre drum of Phoscheck WD881 Class "A" foam, one (1) foam kit and two (2) Angus foam expansion branches)	\$6,000	
Total Brigade Cost	\$	

Signed by CFA Fire Brigade

Name & Position of Brigade Representative:

Signature: _____

Date: / /

Summary Specification Prepared By:

CFA Fleet & Protective Equipment Issue 10 April 2024

CFA specifications are general in nature and are subject to change without notice during tender and manufacturing.



Overview

Each Medium Tanker project includes a cab chassis and body with a diesel-powered pump. The body is mounted on a Hino GT 500 1528 or equivalent. The body and cab chassis are to conform to CFA operational standards. The vehicle is licensed to carry five personnel including the driver and is designed primarily for a wildfire role.

Cab Chassis

Hino GT 500 1528 cab chassis of 4WD (4x4) turbo charged diesel engine with six speed (5 forward & 1 reverse) automatic transmission and two speed transfer case (4x4). Incorporates five (5) person crew – two in the front and 3 in rear. All seats fitted with lap/sash seatbelts. The cab is fitted with an internal “B” pillar intermediate support bar. Radiant heat protection curtains are fitted to all cabin windows and the vehicle is fitted with a spray protection system with switch activation from cabin and crew tray area.

Body

Polyethylene water tank, 2,500 litres capacity including 650 litres of vehicle/crew spray protection water.

Fabricated steel/aluminium tray frame and external roll over protection bar.

Class A Foam around-the pump proportioning system c/w 2 x 20 litre carboys.

2 staged fire fighting pump with diesel engine. Nominal output 900l/min @ 700kpa

Diesel driven Ultra High Pressure System (UHPS) (nom. 25 l/min @100 bar) connected to 1 x Ø12mm 60m electric rewind live hose reel mounted above tray OS rear and fitted with aspirating fog gun nozzle.

1 x electric bull bar mounted monitor fitted with adjustable nozzle (100-450 l/min) c/w in cabin joystick controller.

Rear deliveries – 2 x Ø65mm Storz.

1 x electric rewind live hose reel c/w 20m of Ø25mm hose mounted above tray NS rear.

Aluminium fabricated above tray locker/stowage including multi-function ladder and chainsaw

Dead hose reel near side rear under tray

Electric priming pump

Tray mounted crew protection drop down awning

BA Bracket (optional item at Brigade cost)



Indicative Costs

Indicative price is at April 2024 (excludes GST)

Cost escalation to point of build in 2024/25 allow up to 10% increase

Additional Tanker	Funding	Replacement Tanker	Funding
Brigade Contribution	\$195,000	Brigade Contribution	\$65,000
Total Grant Contribution	\$280,000	Total Grant Contribution	\$420,000
Total Project Cost	\$485,000	Total Project Cost	\$485,000

Options (Brigade Cost)

BA Bracket	\$3,250
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MEDIUM TANKER – 2024/25

9. OVERALL SPECIFICATIONS

- ❑ GVM: 14.5T ☐ Overall Length: 7.35 m
- ❑ Crew: 5 ☐ Overall Height: 3.05 m
- ❑ Operating Weight: 11.8T (with 5 crew) ☐ Turning Circle: 17.0 m (nom.)
- ❑ Exit Angle: 24°

10. CREW CAB CHASSIS (4x4)

- ❑ **Hino GT Series 500 1528** (or equivalent) 4x4 Crew Cab Chassis
- ❑ Engine – 206 kW (280 HP) turbo-charged, intercooled, 6-cylinder diesel engine
- ❑ Six (6) speed (5 forward & 1 reverse) automatic transmission
- ❑ Seating for five (5) crew – 2 in the front & 3 in the rear (*all seats fitted with lap/sash seatbelts*) ☐ 200L fuel tank
- ❑ 11R22.5" **Bridgestone M857** tubeless tyres
- ❑ Air conditioning, electric windows, fog lights, rear view camera
- ❑ Air over hydraulic braking system (*incl. ABS*)
- ❑ Aluminum bull bar & electric cab tilt
- ❑ Cabin internal support bar (*B post stiffener*)
- ❑ CFA approved radiant heat protection curtains fitted to all cabin windows
- ❑ Vehicle/crew spray protection system (with 2 position switch activation – cabin and ROPS)

FIREFIGHTING BODY and PLUMBING

- ❑ Welded polyethylene water tank – 2,500 litres capacity (including 650 litres for a vehicle/crew spray protection system) c/w baffles for surge protection.
- ❑ Fabricated steel/aluminum tray frame & external roll over protection bar
- ❑ 2 Staged **GAAM Mk 300D** pump with diesel engine (**900 l/min @ 700 kPa Nominal**)
- ❑ Electric priming pump
- ❑ Diesel driven Ultra High-Pressure System (UHPS) (**nom. 25l/min @ 100 bar**) connected to 1 x Ø12mm 60m electric rewind hose reel fitted with aspirating fog gun nozzle.

Note: UHPS nearside rear mounted on a slide out frame (*for maintenance access*) UHPS fitted with stand-alone inductive foam system ☐ Major plumbing including:

- 1 x electric bull bar mounted monitor fitted with adjustable nozzle (*nom. min. 100-450 l/min capacity*) c/w remote "in cabin" joystick controller
- Rear deliveries - 2 x Ø65mm (*Storz*)
- NS/OS forward below tray deliveries (*per side*) - 1 x Ø38mm (*external lug*)
- 1 x electric rewind live hose reel c/w 20m Ø25mm hose (*mounted above tray NS rear*)
- Rear below tray hydrant boost – 1 x Ø65mm (*Storz*)
- Hard suction c/w permanently connected 9m of Ø75mm "wire whipped" suction hose fitted in OS rear undertray locker (*OS deployed*) • NS undertray Ø65mm tank fill (*Storz*) ☐ Vehicle control system including:
 - CANBUS multiplexing
 - Cabin forward console – pump & emergency response system control
 - Deck console – pump control
 - Rear console – pump controls and tank/pump indication
- ❑ ROPS mounted "Crew Protection Drop Down Awning" with CFA approved radiant heat protection curtain
- ❑ **Quenchmaster CF700CFA** (or equivalent) inductive Class "A" foam system c/w slide-out drum rack for 2 x 20 litre Carboys (*NS undertray*) feeding all deliveries, hose reels and monitor. **Note:** UHPS Class "A" foam capable via dedicated inductive system
- ❑ Aluminium fabricated above tray lockering/stowage (*comparable to 2.4C*) including:
 - **NS1** - optional BA – gas strut top hinged
 - **NS2** - hose, adaptors, chainsaw – gas strut top hinged
 - **OS1** - salvage gear – gas strut top hinged
 - **NS Cabin/Body** – PPE/Miscellaneous gear
 - Capacity to stow 4 x Ø64mm & 5 x Ø38mm hose (*incl. dead hose reel*)
- ❑ **Little Giant 10103 MT22** multi-function ladder (*min. 5.8m extended length*) OS mounted between the cabin and body on a slide out frame
- ❑ Dead hose reel. (*NS rear undertray*)
- ❑ 20L freshwater tank
- ❑ NS undertray welfare locker c/w 25L removable esky

Optional Extras
Fully Funded by Brigade

Description	Estimated Brigade Cost exc GST per unit	Please (✓) if required
BA Pantograph Bracket (manually operated) plus stowage bracketry for 2 x spare cylinders and BA control board. <i>Fitted to the nearside</i>	\$3,250	
Total Brigade Cost	\$	

Signed by CFA Fire Brigade

Name & Position of Brigade Representative:

Signature: _____

Date: / /

Summary Specification Prepared By:
CFA Fleet and Protective Equipment

Issue 13 April 2024

CFA specifications are general in nature and are subject to change without notice during tender and manufacturing.



Photos indicative only

Definition & Requirements of a Field Command Vehicle

Overview

- A FCV is a four wheel drive off road vehicle of an appropriate size to operate in the bush.
- The FCV delivers enhanced incident management capability and ergonomic features. This vehicle is licensed to carry 5 people including the driver.
- The vehicle has an automatic transmission and does not require an endorsed license to drive.
- The FCV is used in a range of incident management roles including; incident control in a level 1 fire, Operations Officer, Sector Commander, Strike Team Leader, Ground Observer or Staging Area activities for level 2 or 3 incidents.

Cab Chassis – Ford Ranger XL Five Star ANCAP Rating

- 2.0L Bi-Turbo Charged Diesel Engine
- Automatic Transmission
- Dual batteries, and reversing alarm
- Bulbar (Poly), snorkel and tinted windows
- Bluetooth
- AUX/USB/iPod integration
- Cruise control with steering wheel mounted buttons
- eLocking Rear Differential
- Dynamic Stability Control (DSC)
- Emergency Brake Assist
- Rubber dish style floor mats
- Heavy Duty canvas seat covers
- Towbar with flat pin wiring plug
- All-terrain tyres
- Two CFA Tait radios
- LED Driving Lights (RF Comms Safe Compatible)
- Reverse Camera
- GVM 3230kg
- Pre-Collision Assist (AEB with Pedestrian Detection)
- Lane Keeping Aid with Driver Alert System
- Automatic High Beam
- Vinyl Floor Covering
- Manual Single Zone Climate Control



Image- XLT Model Ford Ranger



Option – Ford Ranger XLT 4x4 Utility (White) - Standard Differences are:

- Colour touch screen with Satellite Navigation and Apple Car Play & Android Auto
- Carpet Floor Covering
- GVM- 3280 kg
- Alloy wheels, Side Steps, Adaptive Cruise, Tyre Pressure Monitoring
- LED Headlights, LED Daytime running lights, fog lights, Rain sensing wipers
- Disc brakes

CFA specifications are general in nature and are subject to change without notice during tender and manufacturing

Emergency Warning Systems & Livery

(These items are funded separately)

- Light Bar Multi Colour 360 Degree Red/Blue Alternating.
- Grill lights Multi Colour Red/Blue Alternating
- Siren System 100w with siren/lights integrated controller
- Standard CFA Livery
- Flashing headlights

Body

- Purpose built service body with lift up doors. Transferable between cab chassis
- Full aluminium construction
- Roll out under tray rear drawer
- Rubber matting
- Tie down points
- 12v to 240v Invertor
- Under tray lockers
- LED internal locker lights main compartment
- LED work lights
- Central locking of all above tray locker doors wired to Ford remote



Equipment

- 4.5kg AB dry chemical extinguisher
- One Tait Portable Radio Charger- rear cabin
- Six USB charging points (4 inside cabin, 2 inside body)
- Adjustable shelves
- Bushman's Stand-up Fridge – 65Ltr
- VASS Certification
- One UHF radio (GME- 80 Chanel)
- Rear seat map light
- Whiteboards
- Available Payload- approx. 180kg (incl. 5 crew- nominal)



Body Layout





Other Information

- These vehicles are fully project managed by CFA Headquarters and delivered to the local District Office when completed. **This vehicle is a standard design therefore additional items or design changes will not be accommodated.**
- There will be no requirement for Brigades/Groups to obtain specific quotes for any components.
- GVM upgrades will **not** be considered for any FCV vehicle.
- Light bar, siren, livery and radios are funded separately and do not require a brigade contribution.
- All additional items to be stowed will require District approval and are not cause the GVM of the vehicle to be exceeded

Grant Formula

Equipment grants are funded by VESEP & Brigade, \$2 VESEP to \$1 Brigade with a maximum VESEP contribution of \$150,000.

Indicative Costs - ex GST

XL Cab Chassis

Brigade Contribution	\$31,333
Grant Contribution	\$62,667
Total Project Costs	\$94,000

Indicative Costs - ex GST

XLT Cab Chassis

Brigade Contribution	\$35,500
Grant Contribution	\$71,000
Total Project Costs	\$106,500

Indicative prices as of April 2024 (excludes GST)

Cost escalation to point of build in 2024/25 up to 10% increase



Overview

The BA Support concept vehicle has been developed to support in field BA operations and training activities through the provision of BA cylinders, BA facemask cleaning and basic rehab for firefighters.

Cab Chassis – Ford Ranger XL 4x4 Utility (Extra Cab)

- 4x4, 3230kg GVM
- Seating for a crew of 2
- Turbocharged Diesel Engine (Bi Turbo 2.0Ltr)- 10 speed automatic transmission.
- Vehicle can be driven on a standard driver's license
- 80 litre fuel tank capacity.

Body Construction

- Purpose built painted body – Transferable between cab chassis
- Full aluminium construction
- 3 Lift-up doors
- Dual batteries
- Reversing alarm and camera
- Driving lights- 7" LED
- Spartan Smart Bar (Poly) Bull Bar
- Snorkel
- Towbar with flat pin wiring plug
- Central locking to all above tray lockers
- Full LED locker and scene lighting
- Standard CFA Livery
- 12 V accessories plugs
- Map light

- **BA Cylinders will be provided to additional vehicles, replacements will transfer cylinders from outgoing vehicle. Note: BA Cylinders will form part of the swap and go....**

- **Equipment includes:**
 - 1x CFA Radio
 - Portable Radio Charger
 - 2x 70 L Poly-Under Body Water Tanks
 - 4.5 kg Dry Chemical Extinguisher
 - Capacity for 24 BA Cylinders
 - 12 V Water Pump (7 L/m)
 - 2 Foldable Trestle Tables
 - 2 BA Staging Area Mats
 - 4 Cooler Chairs
 - Whiteboards
 - Defibrillator
 - First Aid Kit
 - Wash Tubs, Hoses Fittings etc



Nearside Locker



Offside Locker

Rear locker with work bench storage for 24 cylinders



Indicative Costs

Funding Break up

Brigade Contribution	\$34,667
Grant Contribution	\$69,333

Total Project Costs \$104,000

Indicative prices as at April 2024 (excludes GST)
 Cost escalation to point of build in 2024/25 up to 10% increase



Body Layout



Overview

The Big Fill incorporates an aluminium body and a new water-cooled diesel engine powered pump on a single cab chassis 4x4. These vehicles will be licensed to carry 2 people including the driver. The body and cab chassis conform to CFA operational safety standards.

Cab Chassis – Single Cab 4x4 hi/low range (FORD RANGER XL or equivalent)

- Diesel powered engine c/w automatic (preferred) or manual transmission
- GVM: <4.495T cab chassis with all-terrain tyres.
- Bull bar and rear recovery bar
- Air-conditioning, reversing camera, reversing alarm
- CFA map book holder, siren and emergency light controller, portable radio charger and CFA radio speakers.

Big Fill Body (typical)

- Aluminium tray and lockers
- Decals, emergency lights, sirens, radios, scene lights, spot light, reversing beeper, reversing camera and green "Quickfill" lights
- Water-cooled diesel engine powered centrifugal pump (1,800 l/min @ 700 kPa)
- Pelican remote area lighting system c/w tripod and in-vehicle charger
- 4 x Ø2.4m clear "Heliflex" suction hoses, suction strainer, Hoenig wire basket strainer, float and rope
- 2 x Ø100mm/Ø65mm Storz spanners
- 4 x 30m x Ø64mm delivery hoses
- 2 x 15m x Ø64mm delivery hoses
- 2 x 30m x Ø38mm delivery hoses
- Aluminium service hydrant
- Selection of hose adaptors
- 2 x witches hats
- 1 x rake hoe
- 2 x portable green flashing lights
- Tow strap
- Shovel and axe
- First aid kit
- 2 x Woollen fire blankets
- Drinking water cooler
- Tool box (c/w pliers, adjustable spanner, screwdrivers)
- 4.5kg ABE dry chemical fire extinguisher & bracket
- Provision for limited Brigade stowage items. Maximum 50kg (excepting crews)
- Operating Manuals



Indicative Cost

Indicative price is at April 2024 (excludes GST)

Cost escalation to point of build in 2024/25 allow up to 10% increase

Funding Break up

Brigade Contribution	\$ 24,167
Grant Contribution	\$145,833
Total Project Costs	\$170,000

Important Note:

The technical specification is currently under review, subject to WOG approval and revised roll of statement



BRIGADE OWNED VEHICLE BUILD-UP
Big Fill
(VESEP 2024/25)

1. CAB CHASSIS (VESEP/Brigade Cost)

Cab Chassis and associated fitments/equipment – including modifications to conform to CFA’s operational safety standards

DESCRIPTION	
1.1	FORD RANGER XL (or equivalent) cab chassis of 4WD (4x4) configuration and a two (2) person single cabin with 5 Star ANCAP safety rating
1.2	Cab chassis powered by 2.0 Bi turbo diesel engine c/w 10 speed Automatic transmission. (Maximum Power: 154kW @ 3,750 RPM. Maximum Torque: 500Nm @ 1,750-2,000 RPM) compliant with ADR 80/03 (Euro 5) Emission Standards
1.3	Gross vehicle mass rating (GVM) 3,700kg (<i>uprated by Multi Drive</i>)
1.4	Front Axle capacity rating 1,640kg (<i>uprated by Multi Drive</i>)
1.5	Rear Axle capacity rating 2,100kg (<i>uprated by Multi Drive</i>)
1.6	Wheelbase 3,270mm
1.7	Turning circle 12.9m kerb-to-kerb
1.8	10-Speed automatic transmission
1.9	Part-time 4x4 Driveline
1.10	Dynamic Stability Control (DSC) incorporating ABS, Electronic Brakeforce Distribution, Emergency Brake Assist, Hill Start Assist, Load Adaptive Control, Roll Over Mitigation, Traction Control & Trailer Sway Control
1.11	Five (5) 16" x 7" all-terrain tyres (including spare wheel)
1.12	Fuel tank capacity 80 liters (standard)
1.13	Cabin interior including engine immobilizer, adaptive cruise control, idle-up control, steering wheel reach & height adjust, power steering, fully integrated air-conditioning c/w climate control, 3 point lap sash seat belt - all positions, lane keeping aid with road edge detection and driver alert system, airbags x 9 - front, side, knee & full length curtain (driver & passenger) & far side driver front airbag, power windows
1.14	Front seating incorporating: <ul style="list-style-type: none">• Standard bucket style driver’s seat suitable for off-road operation• Standard bucket style passenger seat
1.15	Air cleaner snorkel fitted to the engine air intake and air cleaner fitted with a flameproof air filter element (non-standard)
1.16	12V electrical system c/w 155 ampere alternator
1.17	Bull bar
1.18	Recovery bar
1.19	Vehicle’s exhaust discharges to rear of vehicle on offside
1.20	Includes CFA Ergonomic Vehicle Design Guidelines (in its latest version) applied to equipment designs wherever practical
1.21	Compliance to Australian Design Rules (ADR’s), relevant standards, regulations and Codes of Practice

2. PUMP & PLUMBING (VESEP Cost)

Pump Set and Associated Equipment

DESCRIPTION	
2.1	GAAM Mk500 / Isuzu 4LE2 water-cooled diesel engine powered single stage centrifugal water pump (Nominal flow rate: 1,900 litres/min. at 700kPa) mounted at offside rear of body
2.2	Pump priming performed by 12V electric priming pump
2.3	Pump plumbing arrangement (all plumbing manufactured from stainless steel) <ul style="list-style-type: none"> • Delivery consisting of two (2) 65mm Storz ball valve-controlled outlets angled downwards at 30° above tray-level at rear • Suction consisting of a 100mm Storz inlet angled downwards at 15° above tray-level at rear
2.4	Pump engine fitted with 12V starter motor and controls (powered from cab chassis 12V battery)
2.5	Pump controls and instrument panel mounted at rear offside of body
2.6	Pump engine fuel system including 12V pump and header tank integrated with the cab chassis diesel fuel system
2.7	Pump engine exhaust system discharges vertically at offside of body
2.8	Includes CFA Ergonomic Vehicle Design Guidelines (in its latest version) applied to equipment designs wherever practical

3. **BODYWORK** (VESEP Cost)

Bodywork Build-up Arrangement

DESCRIPTION	
3.1	Aluminium tray frame
3.2	Front and rear of the tray frame fitted with aluminium light mounting frames
3.3	Offside of the tray fitted with an access step and handrailing (for pump maintenance only)
3.4	Two (2) white painted aluminium stowage lockers (NS1 & NS2) located above tray on the <u>nearside</u> of the body
3.5	One (1) white painted aluminium stowage locker (OS1) located above tray on the <u>offside front</u> of the body
3.6	One (1) chequer plate aluminium stowage locker located below tray on the <u>offside rear</u> of the body
3.7	One (1) chequer plate aluminium stowage locker located below tray on the <u>nearside rear</u> of the body
3.8	One (1) aluminium suction hose stowage locker located below tray at <u>rear</u> of the body
3.9	Rear wheels fitted with aluminium mudguards
3.10	CFA radio c/w hand held control head and ignition relay
3.11	External rear speaker for CFA radio (mounted on front light mounting frame)
3.12	CFA portable radio charger (and CFA portable radio, if vehicle is additional to fleet)
3.13	Hazard Systems CS202 Hand-Held Siren/Light Controller (or equivalent) with control pad mounted on cabin dash and 100W speaker mounted on bull bar
3.14	Flashing headlights (alternate flashing)
3.15	Four (4) red and blue LED hazard lights (2 at front and 2 at rear of appliance)
3.16	Two (2) red and blue LED mini light bars (mounted on front light mounting frame)

DESCRIPTION	
3.17	Green ("Quickfill") LED beacon (mounted on front light mounting frame between red and blue LED mini light bars)
3.18	Two (2) LED scene lights (mounted on front light mounting frame)
3.19	Rear LED scene light (mounted on rear light mounting frame)
3.20	LED pump bay light (mounted on rear light mounting frame)
3.21	High level LED brake light (mounted on rear light mounting frame)
3.22	Two (2) LED combination rear tail/stop/indicator/reversing lamps (on rear bumper bar)
3.23	Two (2) LED reversing lights angled at 45° (c/w separate switch)
3.24	LED under tray step light
3.25	LED locker lights
3.26	LED flexible arm map light on cabin dash
3.27	Reversing buzzer
3.28	Reversing camera c/w in-dash display
3.29	Intellitec Battery Guard battery management system with Reset switch on cabin dash
3.30	CFA reflective Red/Yellow chequer striping, reflective yellow striping at rear and outline profile of body and cabin, CFA logos, "FIRE" , "Emergency 000" and "Brigade Name" decals and "Aerial ID" number
3.31	Cabin engraved nameplates and decals
3.32	Weighbridge certificate of completed appliance (<u>Typical</u>)
3.33	Registration
3.34	Operating instructions
3.35	Stowage supplied as per Section 4
3.36	Includes CFA Ergonomic Vehicle Design Guidelines (in its latest version) applied to equipment designs wherever practical
3.37	Compliance to Australian Design Rules (ADR's), relevant standards, regulations and Codes of Practice

3. STOWAGE (VESEP / **Brigade Cost**)

CFA-approved Stowage equipment is supplied as follows:

Item	Contractor and/or CFA F&PE to Supply	CFA Brigade to Supply (see Note)
Nearside Front Locker NS1 (Front)		
1 x Remote Area Lighting System - YELLOW – <i>Pelican Cat. No. 9430</i>	✓	
1 x 12/24V Vehicle Charger - <i>Pelican Cat. No. 9436</i>	✓	
1 x Tripod - <i>Pelican Cat. No. 9430TP</i>	✓	
1 x GREEN LED flashing light - <i>Lightman VSC14000</i> with GREEN lens	✓	
1 x Roadside GREEN flashing light - <i>E-Flare 700-EF510(G)</i> with GREEN lens	✓	
Nearside Front Locker NS1 (Rear)		
2 x Delivery hose - <i>Duraline</i> - 64mm x 15 metre c/w 65mm Storz couplings (<i>CFA Part No. HDURALINE64CST15M</i>)	✓	
2 x Delivery hose - <i>Duraline</i> - 64mm x 30 metre c/w 65mm Storz couplings	✓	
2 x Delivery hose - canvas – 64mm x 30 metre c/w 65mm Storz couplings	✓	
2 x Delivery hose - canvas - 38mm x 30 metre c/w 38mm external lug couplings	✓	
Nearside Rear Locker NS2		
2 x <i>Quell TPB15-38mm</i> brass fog nozzles c/w 38mm external lug couplings	✓	
2 x 65mm Storz to 38mm external lug adaptor (<i>CFA Part No. ST6538ULC</i>)	✓	
1 x Adaptor – 65mm Storz - 64mm x 5TPI female loose nut	✓	
1 x Adaptor – 65mm Storz - 64mm x 3TPI female loose nut	✓	
2 x Adaptor – 65mm Storz - 64mm x 3TPI male	✓	
1 x Adaptor – 65mm Storz – 50mm female camlock	✓	
1 x Adaptor – 65mm Storz – 75mm female camlock	✓	
1 x Adaptor – 65mm Storz – 75mm male camlock	✓	
1 x Blank cap – 65mm Storz	✓	
1 x <i>Hoening</i> basket strainer	✓	
1 x Float (polystyrene or plastic) with long chain	✓	
1 x Rope (synthetic) – 10mm x 10m long	✓	
2 x “ <i>OneKey</i> ” spanners (<i>CFA Part No. SSONEKEY</i>)	✓	
2 x Storz suction/delivery washer – 100mm	✓	
4 x Storz delivery washer – 65mm	✓	
4 x Rubber washer – 64mm	✓	
6 x Rubber washer – 38mm	✓	
1 x Tool kit (c/w assorted tools)	✓	
1 x Tow strap (4,000kg minimum) – 50mm x 6m long	✓	
Offside Front Locker OS1		

Item	Contractor and/or CFA F&PE to Supply	CFA Brigade to Supply (see Note)
1 x CFA First Aid Kit (<i>CFA Part No. F2CFA</i>)	✓	
1 x Axe	✓	
1 x Drink Cooler (e.g. <i>"Esky"</i> 20-26 litre, or equivalent)	✓	
20 x Drinking water - 600ml bottle		✓
2 x Personal PPE		✓
2 x Crew protection blankets – 1.8m x 2m - Red (<i>CFA Part No. BLANKET</i>)		✓
2 x Camp chair		✓
4 x Tent pole		✓
1 x Insect repellent		✓
2 x Ear plugs (packet of disposable plugs)		✓
4 x Goggles (spare pairs)		✓
4 x Leather gloves (spare pairs)		✓
1 x Rubberised gloves (spare pair)		✓
2 x Tarpaulin – 3m x 6m		✓
4 x Tent rope		✓
4 x Tent peg		✓
Rear Suction Hose Locker		
3 x Suction hose - 100mm x 2.4m long CLEAR <i>Heliflex</i> c/w 100mm Storz swivel couplings	✓	
1 x Suction hose - 100mm x 2.1m long CLEAR <i>Heliflex</i> c/w 100mm Storz swivel couplings and 300mm long Suction Strainer fitted with 100 Storz coupling	✓	
Tray		
2 x Witches hat	✓	
1 x Fire extinguisher – 4.5kg Dry Chemical (AB)	✓	
2 x Rake hoes (<i>CFA Part No. RAKEHOEM</i>)	✓	
Undertray		
2 x Wheel chock (one each side)	✓	
1 x Towbar gooseneck and tow ball	✓	
1 x Shovel – long handle (located nearside front of tray)	✓	
Nearside Undertray Locker		
1 x CFA-approved aluminium long barrel service hydrant / standpipe c/w 65mm Storz couplings and 1 x blank cap with chain (<i>CFA Part No. HYDALTWLST</i>)	✓	
Offside Undertray Locker		
1 x Collector – 100mm Storz swivel coupling – 65mm Storz couplings (x2) c/w flap valves	✓	

Item	Contractor and/or CFA F&PE to Supply	CFA Brigade to Supply (see Note)
1 x "Y" breach – 65mm Storz coupling – 65mm Storz couplings (x2) gated outlets	✓	
In-Cabin		
1 x CFA Radio Operating Manual	✓	
1 x CFA Vehicle and Pump log book	✓	
1 x Cab Chassis Operating Manual	✓	
1 x Cab Chassis Jack and Tools	✓	
1 x CFA Portable Radio (supplied by CFA after delivery – if appliance is additional to fleet, or, supplied by Brigade after delivery – if appliance is a replacement)	✓	✓
1 x Appliance Operating Manual	✓	
1 x Pump Operating Manual	✓	
2 x Crew (2 @ 100kg each)		✓
1 x Melways		✓
1 x Map book		✓
1 x Note pad and pens		✓
1 x Fuel card		✓
1 x Torch		✓

Note: Discretionary Brigade-supplied items (except crew, as shown) – **50kg maximum allowance**

The technical specification is currently under review, subject to finalisation and approval of a revised appliance roll statement.

Prepared By:

CFA Fleet & Protective Equipment

Issue 17

March 2024

Signed by CFA Fire Brigade

Date: / /

(Brigade Representative, Name & Position)

Approval by District Headquarters

Date: / /

(Assistant Chief Fire Officer)

Overview

The Rehabilitation Unit supports the health & wellbeing of members at prolonged incidents or where members are working in hot or strenuous conditions. The body and cab chassis conforms with CFA operational safety standards. This vehicle can be driven on a standard car driving license.

Cab Chassis – Isuzu NNR 45-150 (or equivalent)

- 4x2, 4.5 Tonne GVM c/w Automated Manual Transmission (AMT)
- Seating for a crew of 4
- 3,500 kg towbar
- Vehicle can be driven on a standard car driving license

Body Construction

- Aluminium lock tube framing clad with white aluminium sheeting
- 2 x side roller shutters, 1 x rear lift up door
- 1 x manually operated pneumatic light mast with 4 LED lights
- Scene lighting, reverse camera
- Emergency response controls
- 100L non potable water tank
- CFA standard livery



- Stowage for brigade supplied equipment (e.g. portable generators/tables/chairs/marquee/esky) estimated 620kg
 - Front through locker volume 3.1m³ Nominal
 - Rear locker volume 2.2m³ Nominal
- Brigade funded options available:
 - 3m manually operated awning (each side), Thule Omnistor 4900 or an equivalent.
 - Ventilated fuel locker, mounted OS undertray behind rear wheels



Indicative Costs

Indicative prices as at April 2024 (excludes GST)

Cost escalation to point of build in 2024/25 up to 10% increase

Funding Break up

Brigade Contribution	\$48,333
Grant Contribution	\$96,667

Total Project Costs **\$145,000**

Option Awning (per side) – Additional	Brigade Contribution	\$2,200
Option Fuel Locker – Additional	Brigade Contribution	\$1,100



REHABILITATION UNIT – 2024/25

OVERALL SPECIFICATIONS

- | | | | |
|--|-----------------------------|--|--------------------------------|
| <input type="checkbox"/> GVM: | 4.5T | <input type="checkbox"/> Overall Length: | 5.80 m |
| <input type="checkbox"/> Crew: | 4 | <input type="checkbox"/> Overall Height: | 2.60 m |
| <input type="checkbox"/> Operating Weight: | 4.0T (<i>with 4 crew</i>) | <input type="checkbox"/> Overall Width: | 2.63 m (<i>over mirrors</i>) |
| | | <input type="checkbox"/> Turning Circle: | 11.8 m (<i>kerb to kerb</i>) |

CREW CAB CHASSIS (4x2)

- Isuzu NNR 45-150 4x2 Crew Cab Chassis (or equivalent)
- Engine – 110 kW (147HP), 4-cylinder diesel engine
- Six (6) speed Automated Manual Transmission
- Seating for four (4) crew – 2 in the front & 2 in the rear (*all seats fitted with lap/sash seatbelts*)
- 100L fuel tank
- 195/85 R16 tyres
- Air conditioning, electric windows, rear view camera
- Hydraulic Dual Circuit braking system (*incl. ABS, EBD, ESC and AEB*)

MULTIPURPOSE BODY

- Vehicle control system including:
 - Cabin forward console – emergency response system control
- Plug in point for CFA radio in rear compartment
- 240V plug in for in station charging with automatic plug eject
- Aluminium fabricated lockering including:
 - **NS1** – roll up locker door, with shelving and tie down straps for gear
 - **OS1** - roll up locker door, with shelving and tie down straps for gear
 - **REAR** - top hinged lift up door with gas struts, with shelving and tie down straps for gear

CFA SUPPLIED STOWAGE

- 100L freshwater tank
- 4.0m manual telescopic light mast with 4 LED lights fitted
- 1.0m x 0.5m whiteboard, including markers
- Fridge slide/s with fridge plug in and optional slide out table
- CFA approved livery (stickers and lights)

STOWAGE – BRIGADE FUNDED (space and tie down straps allocated)

- Folding tables x 3
- Large Marquee x 2
- Slabs of water (24 x 600ml) x 8
- Fridge/s
- Rehab chairs x 10
- Generator x 1 (depending on size)
- First aid kit x 1
- Defib x 1
- Health monitoring x 1
- Space for large and small tubs

Optional Extras

Fully Funded by Brigade

Description	Estimated Brigade Cost exc GST per unit	Please (✓) if required
3m Awning manually operated, Thule Omnistor 4900 or an equivalent – per unit cost <i>Fitment on Nearside and/or Offside</i>	\$2,200 each	
Nearside Fitment (✓) if required		
Offside Fitment (✓) if required		
Fuel Locker	\$1,100	
Total Brigade Cost	\$	

Signed by CFA Fire Brigade

Name & Position of Brigade Representative:

Date: / /

Summary Specification Prepared By:

CFA Fleet and Protective Equipment

Issue 5

March 2024

**CFA specifications are general in nature and are subject to change without notice during tender and manufacturing*



VESEP Multi-Purpose Vehicles



Overview

The appliance is a multi-purpose vehicle licensed to carry five (5) crew, including the driver. The rear of the appliance can be configured to suit Brigade's specific requirements. Appliance to be stowed with equipment to secure and clean up after an incident. It is offered in three (3) versions:

- Version 1 – 4 x 4 short body (manual) – approx. 6.6m Long, 2.3m Wide, 2.8m High
- Version 2 – 4 x 2 short body (manual) – approx. 6.6m Long, 2.3m Wide, 2.7m High
- Version 3 – 4 x 2 long body (auto) – approx. 7.4m Long, 2.3m Wide, 2.5m High

Cab Chassis

- Version 1 - Isuzu NPS 75-155 (or equivalent) 4x4 Crew Cab Chassis with 7.5T GVM
- Version 2 - Isuzu NPR 65-190 (or equivalent) 4x2 Crew Cab Chassis with 6.5T GVM
- Version 3 - Hino 921 (or equivalent) 4x2 Crew Auto Cab Chassis with 8.5T GVM

Body

- Prefabricated aluminum framed body (SES specification)
- Stowage compartments can be configured to suit user requirements
- White painted cab and body
- Rear lift-up door with gas struts
- Roller access doors each side

Items included:

- Cab and body painted white
- CFA livery (decals & striping)
- Emergency Lighting
- Scene and locker lighting
- Seating for 5 crew (including 3 x lap/sash seat belts in rear)
- Stowage console between driver and front passenger seats
- Nearside awning
- Minor brackets and straps for Brigade stowage items
- Installation of CFA supplied radio and portable radio charger
- Registration (brigade owned vehicle)

Version 1



Version 2



Version 3





Options available at additional cost:

- Red painted cab and body
- Aluminum bullbar
- 240V reticulated power system
- Wheel arch lockers (x 2)
- **Overview**Inbuilt 240V compressed air system (240V generator or 240V inverter system is required)
- Pneumatic light mast – 4m height, external mounting, 3 x standard LED lights, hand pump
- Pneumatic light mast – 4m height, external mounting, 3 x standard LED lights, electric pump
- Pneumatic light mast – 6m height, internal mounting, 4 x high powered LED lights, electric pump
- Pneumatic light mast – 6m height, internal mounting, 4 x high powered LED lights, robotic head, electric pump
- Version 2 - Upgrade to 7.5 tonne GVM (Isuzu NPR 75-190 4 x 2 Crew)
- Version 2 – Automated Manual Transmission (AMT)
- Version 1 – Automated Manual Transmission (AMT)
- Vertical exhaust
- High intensity scene lighting
- Customised shelving/bracketry

Indicative Costs - ex GST

Indicative Costs as at April 2024 (excludes GST)

Cost escalation to point of build in 2024/25 up to 10% increase

Funding Break up	Version 1 x 4 Short Body Manual	Version 2 x 2 Short body Manual	Version 3 x 2 Long Body Auto
Brigade Contribution	\$91,666	\$86,667	\$91,666
VESEP Contribution	\$183,333	\$173,333	\$183,333
Total Project Costs (excluding options)	\$275,000	\$265,000	\$275,000





These specifications are indicative and are subject to change during tendering and manufacturing

Overview

The Field Hygiene Unit supports the health and wellbeing of members at prolonged incidents.

- Purpose built steel trailer with egress steps
- Option of one or two portable toilets
- Wash basin station
- Waste disposal bin
- Solar / Mains 12V LED Lighting System
- Weight – Single 850kg / Double 1140kg
- Dimensions:
 - *Double toilet:* Length 5500mm, Width 2350mm, Height 2700mm
 - *Single toilet:* Length 5700mm, Width 1880mm, Height 2700mm



Indicative Costs

Funding Break up

Single Toilet

Brigade Contribution \$ 6,333
Grant Contribution \$12,667

Total Project Costs \$19,000

Double Toilet

Brigade Contribution \$11,833
Grant Contribution \$23,666

Total Project Costs \$35,500

Indicative prices as at April 2024 (excludes GST)
Cost escalation to point of build in 2024/25 up to 10% increase



Overview

The trailer pump has a tandem axle, equipped with a water-cooled diesel engine with a nominal pump output of 2,000 L/min @700 kPa. Primarily utilised for water fill points on the fire ground however can also be connected to a hydrant if necessary.

Trailer

- Fabricated galvanized steel/aluminum chequer plate tray frame and drawbar
- Tandem axle c/w mechanical override, hydraulic operated, drum brakes
- Jockey wheel, lockable tow coupling and 7 pin electrical connection
- Retractable rear end stabilizers
- 15” Light Truck tyres fitted to Sunraysia rims including spare
- Aggregated Trailer Mass (ATM) : 1.6 Tonne

Pump and Plumbing

- Water pump coupled to a 38kW water cooled diesel engine c/w noise suppression cowling
- 60L diesel fuel tank
- Electric priming pump
- 2 x Ø65mm Storz deliveries (near side)
- 9m Ø100mm pre connected suction hose fitted to the rear located in a dedicated locker behind tailgate

Electrical

- 4m extendable hand operated pneumatic light mast c/w 4 x LED lights
- Green “water point” LED strobe (mounted on top of light mast)
- NS control panel incorporating pump controls, gauges, warning lights and light switching
- Single battery and pre connected 240v trickle charging system

Stowage

- Red painted aluminum fabricated lockering c/w gas strut assisted “hinge up” doors and LED lockering

Nearside 1 locker	Offside 1 locker
Hose (4x65mm-15m, 2x65mm-30m, 1x38mm-15m)	3m x 3m CFA water point marquee
Miscellaneous adaptors	2 x folding chairs
	Miscellaneous tools and first aid kit
General Tray	
4.5kg ABE dry chemical extinguisher	Offside 2 Locker
10L diesel fuel container	2 Eskies
Shovel, aluminium hydrant, 2 x traffic cones, rake hoe	Personal Gear
Mussel c/w 100 mm Storz	
	Forward Wheel Arch Lockers x (2)
	Wheel chocks, jack and wheel brace
	Stabiliser pads
	Miscellaneous



Indicative Cost

Indicative price is at April 2024 (excludes GST)
Cost escalation to point of build in 2024/25 allow up to 10% increase

Brigade Contribution	\$27,333
Total Grant Contribution	\$54,667
Total Project Costs	\$82,000

It is important to note that GST is not factored into the total project costs, therefore the GST exclusive amount should be used to calculate the Brigade and VESEP contribution

Grant Formula

Equipment grants are funded by VESEP & Brigade, \$2 VESEP to \$1 Brigade with a maximum VESEP contribution of \$150,000



Overview

The trailer pump has a single axle, equipped with a water-cooled diesel engine with a nominal pump output of 2,000 L/min @700 kPa. Primarily utilised for water fill points on the fire ground however can also be connected to a hydrant, if necessary.

Trailer

- Fabricated galvanized steel/aluminum checker plate tray frame and drawbar
- Single axle c/w mechanical override, hydraulic operated, drum brakes
- Jockey wheel, lockable tow coupling and 7 pin flat electrical connection
- Retractable rear end stabilizers
- 15” Light Truck tyres fitted to Sunraysia rims including spare
- Aggregated Trailer Mass (ATM) : 1.2 tonne

Pump and Plumbing

- Water pump coupled to a 38kW water cooled diesel engine c/w noise suppression cowling
- 60L diesel fuel tank
- Electric priming pump
- 2 x Ø65mm Storz deliveries (near side)
- 9m Ø100mm pre connected suction hose fitted to the rear located in a dedicated locker behind tailgate

Electrical

- 4m extendable hand operated pneumatic light mast c/w 4 x LED lights
- Green “water point” LED strobe (mounted on top of light mast)
- NS control panel incorporating pump controls, gauges, warning lights and light switching
- Single battery and pre connected 240v trickle charging system

Stowage

- Red painted aluminum fabricated lockering c/w gas strut assisted “hinge up” doors and LED lockering

Nearside 1 locker	Offside 1 locker
Hose (2xØ65mm-15m, 1xØ38mm-15m)	Esky
Miscellaneous adaptors	First aid kit
General Tray	Forward Wheel Arch Lockers x (2)
4.5kg ABE dry chemical extinguisher	Wheel chocks, jack and wheel brace
10L diesel fuel container	Stabiliser pads
Shovel, rakehoe, 2 x traffic cones	Miscellaneous
Mussel c/w Ø100 mm Storz	



Indicative Cost

Indicative price is at April 2024 (excludes GST)

Cost escalation to point of build in 2024/25 allow up to 10% increase

Brigade Contribution	\$23,300
Total Grant Contribution	\$46,600
Total Project Costs	\$70,000

It is important to note that GST is not factored into the total project costs, therefore the GST exclusive amount should be used to calculate the Brigade and VESEP contribution

Grant Formula

Equipment grants are funded by VESEP & Brigade, \$2 VESEP to \$1 Brigade with a maximum VESEP contribution of \$150,000.

CFA Minimum Standards Requirements

Overview

Trailers will be offered under VESEP in the following sizes-

- 7x5 Single Axle
- 8x5 Tandem Axle
- 10x6 Tandem Axle.

Livery Standards

All trailers will include a minimum livery. CFA decals will be displayed in the following locations- left and right-hand sides and rear (three in total).

Finish/ paint

All trailers will be finished with either paint, powder coat or galvanized.

Color

If a trailer is not galvanized, the only approved colour is red.

Compliance

All trailers will comply with the requirements of Vehicle Standards Bulletin (VSB) 1 Revision 6.

Registration

Registration costs (initial and ongoing) of Brigade owned (VESEP funded) trailers will be at the cost of brigades.

Lighting

All trailer lighting will be LED. Preference is for readily available and reputable brands. Two reverse lights will be included (1x near side and 1x offside).

Braking Systems

Trailers above 750kg will require trailer braking. Hydraulic braking is preferred.

Wiring

Trailer plug will be the 7-pin flat plug. However, each trailer is required to include an adaptor.

Tyres

Minimum requirement will be 14inch light truck tyres with Ford stud pattern. Each trailer will have a spare tyre secured under the draw bar.

Rope Rail

Each trailer will include a rope rail to enable securing of loads. Rope rail will be on all 4 sides.

Jockey Wheel

All trailers will be fitted with a jockey wheel.

CFA specifications are general in nature and are subject to change without notice during tender and manufacturing

Other Information

- Trailers application are for replacement of existing trailer only
- Applications for single or double axel trailers will be based on a 1 for 1 basis with evidence of disposal to be provided once new trailer is received.
- Copy of quote to be supplied with application.
- GST is not factored into the total project costs, therefore the ex-GST amount should be used for the application and to calculate the Brigade and VESEP contribution.

Note: Additional referencing for trailers please refer to;
Operations Bulletin 004 -2020 Trailers Final 22.07.20,
including Appx1 & Appx2

Grant Formula

Trailer grants are funded by VESEP & Brigade, \$2 VESEP to \$1 Brigade with a maximum VESEP contribution of \$150,000.



VESEP 2024/25 Personal Protective Clothing Chainsaw Operations



Overview

CFA has introduced a new standard for Personal Protective Clothing whilst undertaking operational activities using a chainsaw. The new standard includes an outer layer of fire-resistant material (Proban) on the chaps and a new helmet specification (AS/NZS 1801 Type 3).

These items are available through the CFA State Logistics Centre

Details

	Product	Cost Exc GST
<p>Stihl Government & Utility Proban covered chainsaw chaps' high visibility orange</p> <p>SLC Product Codes</p> <p>CHAPSCS -Available in short, medium & long lengths</p>		<p>\$259.10</p>
<p>Professional Safety Helmet (supplied with visor and earmuffs)</p> <ul style="list-style-type: none"> •Helmet incudes CFA logo <p>SLC Product Codes</p> <ul style="list-style-type: none"> •HELMCS - Helmet (\$55.25) •HELMCSEMUFF - Ear Muffs (\$25.93) •HELMCSVISOR – Visor (\$40.90) 		<p>\$122.08</p>

Indicative Cost

Example of Funding Breakup 1/3rd Brigade & 2/3rd VESEP

Brigade Contribution	\$127.06
Grant Contribution	\$254.12
Total Project	\$381.18

Pricing – Indicative @ April 2024

Prices may change

Overview

This trailer is designed to allow brigades to test several lengths of hose quickly and safely to the required standard. The hose testing trailer allows for the safe and efficient testing of multiple lengths of hose using an electric jacking pump. If a failure occurs the hose just “drops” rather than flying around in a dangerous manner.

Body Construction

- Galvanised tray frame.
- Aluminium chequer plate construction with 3 lockers along the offside.
- Deck access handle
- Stainless steel plumbing.
- LED tail, tool box, work and flood lights.
- Grundfos 50ZH electric testing pump.
- 64mm – 3TPI storz couplings.
- 240 volt single phase operation.
- Mounted hose washer and custom hose winder.
- Hydraulic override brakes.
- Tests to Australian Standards up to 1400kpa.



Indicative Costs

Indicative prices as at April 2024 (excludes GST)

Cost escalation to point of build in 2024/25 up to 10% increase

Funding Break up

Brigade Contribution \$17,600

Grant Contribution \$35,200

Total Project Cost \$52,800



CFA has one approved Thermal Imaging Camera and supplier

Model: - 3M Scott V320

Features a 90mm screen size and will operate in a temperature range of -20°C to $+650^{\circ}\text{C}$.
Up to Eight-hour runtime with a removable rechargeable battery.

The package includes:-

- 2 x batteries
- Hard carry case
- 240V charger
- Retractable lanyard

Pricing as @ June 2024 - \$3,510 excl. GST

Brigade Contribution \$1,170

VESEP Contribution \$2,340



Grant Formula

Equipment grants are funded by VESEP & Brigade, \$2 VESEP to \$1 Brigade with a maximum VESEP contribution of \$150,000.



Background

The 2024-25 program continues the Amenities category to assist Brigades / Groups with grants for minor works and equipment that enhances the CFA member's wellbeing and amenities. The total value of these projects shall be less than \$5K in total (\$3,333 VESEP & \$1,667 Brigade contribution) and should be of a non-structural nature and not requiring a building permit.

Items

Some suggestions for Volunteer amenities available under the program are listed below but are not limited to:

- Air Conditioning (New installations)
- Hot water Services (Upgrades)
- Kitchen Appliances: Fridge, Dishwasher, Oven, Boiling Water Unit, Crockery, Cutlery
- Furniture / Table / Chairs (Indoor & Outdoor)
- Window Furnishings

Grant Formula

\$2 VESEP to \$1 Brigade – to a maximum VESEP contribution of \$3,333



Background

The 2024-25 program continues with the Minor works category to a maximum project value of \$150,000.

Outline

These projects are of a larger scale and will require full scoping and planning. Brigades and Groups interested must pre-register application details to ensure proposal is fully scoped with the VESEP Land & Buildings Department and should be discussed with their local Catchment Officer, Asset Project Officer and Assistant Chief Fire Officer.

The total project value is to be less than \$150,000.
(\$100,000 VESEP and \$50,000 Brigade contribution)

Projects with a total project cost greater than \$150,000 will not be considered.

Some suggestions available under the program are but are not limited to:

- Air Conditioning (New installations)
- Hot water Services (Upgrades)
- Kitchen Appliances: Fridge, Dishwasher, Oven, Boiling Water Unit, Crockery, Cutlery
- Furniture / Table / Chairs (Indoor & Outdoor)
- Window Furnishings

VESEP Minor Works Pre-Registration

All applications must be registered with the VESEP Land & Buildings Project Manager via email VESEPProject@cfa.vic.gov.au by the 31st May 2024.

Refer to the VESEP 2024/25 Guidelines for more information regarding pre-registration.

Questions: Matthew Mallett

☎: 0408 055 163

Email: m.mallett@cfa.vic.gov.au

GRANT FORMULA

\$2 VESEP to \$1 Brigade – to a maximum VESEP contribution of \$100,000

VESEP 2024/25



Following the introduction of VESEP funding for infrastructure works many brigades across the state have procured and installed static generators at Stations, Group Headquarters and Local Command Facilities.

To ensure a standard approach for maintenance, safety and recurrent costs, CFA has developed a standard specification for CFA Power Continuity.

Details

Generator Capacity	Estimated Cost
20KVA	\$20,000
30KVA	\$23,000

Pricing – Indicative @ March 2024 (ex GST)

Please Note: The above costs **do not include** Installation costs. i.e. concrete slab, permits, switching arrangements nor commissioning. These costs are estimated between **\$8,000 - \$15,000** subject to site conditions.

Generally 20 kVA generator is applicable to a level 1C or less fire station.

30 kVA generator with an LCF with a for level 2 or above fire stations.

The generator capacity is designed to operate at an optimum operating capacity.

VESEP Pre-Registration

All applications must be registered with VESEP Land & Buildings Project Manager, via Emailing [VESEP Project@cfa.vic.gov.au](mailto:VESEP.Project@cfa.vic.gov.au)

Refer to **VESEP 2024/25 Guidelines** for more information regarding pre-registration

Questions: Matthew Mallett

☎: 0408 055 163

Email: m.mallett@cfa.vic.gov.au

Note: VESEP does not cover the generators ongoing maintenance and servicing. Please discuss with your APO regarding a maintenance and servicing plan.

Grant Formula

Equipment grants are funded by VESEP & Brigade, \$2 VESEP to \$1 Brigade with a maximum VESEP of \$150,000