

	Dynamic Specialty Vehicles	The Lion Electric Co
Completion Date (Time Period)	days	days
Defined Prices:		
SECTION TOTAL:	0	0
Combined Prices:		
Separate Prices:		
Alternate Prices:		
Unit Prices:		
Cash Allowances or Other Stipulated Sums:		
Sub Trade List Description:		
Bus Unit Price:		
Type A2 Over 6350kg GVW Chassis. All units and components must meet Federal and Provincial regulations and requirements and current D250 standards.	308434	D250 aproval is pending and is in process 268400
Type A2 (MFSAB) Over 6350kg GVW Chassis. All units and components must meet Federal and Provincial regulations and requirements and current D250 standards.	307910	D250 aproval is pending and is in process 270400
Base Bus Specifications: Body:		
1. Driver's Seat - Cloth Covered	Yes	Yes
1. Additional Information	OEM Ford	
2. MIRRORS Right and left side primary and convex mirrors; be remote adjustable Exterior convex crossovers self-defrosting mounted on right and left sides of hood	Yes	Yes
2. Additional Information	Self defrosting with timer	
3. One (1) LED stop arm with strobe lights (red) - electric operated front mounted with wind guard.	Yes	Yes
3. Additional Information		
4. Wet arm windshield wipers intermittent / delay preferred	Yes	Yes
4. Additional Information	OEM Ford	
5. Eight (8) light warning system roof mounted white flashing strobe light	Yes	Yes
5. Additional Information		
6. Steering - Full Power and Tilt	Yes	Yes
6. Additional Information	OEM Ford	
7. School buses must be equipped with heating units and be able to sustain 15.5 degrees C (plus or minus 2 degrees) inside the vehicle when the outside temperature is 0 degrees C ambient. Heaters should not decrease vehicle range by more than one percent. Please describe achievable in vehicle temperature when outside temperature is -30C and provide the expected impact of heating the interior cabin temperate on vehicle range especially when outside temperature conditions are very cold	Yes	Yes
7. Additional Information	This can be achieved with an Espar or Webasto heating system (diesel fired)	Please refer to narrative.
8. 73" minimum interior headroom at highest point	Yes	Yes
8. Additional Information	76"	
9. Horns - Dual Electric	Yes	Yes
9. Additional Information	OEM Ford dual note horn	
10. Sun Visor - 6" X 30"	No	Yes
10. Additional Information	OEM Ford	
11. One (1) roof emergency hatch/vent	Yes	Yes
11. Additional Information		
12. Min. 97dB Back up alarm	Yes	Yes
12. Additional Information		
13. Lights and Instrumentation - Specify Details	Yes	Yes
13. Additional Information	Lights will be LED 2021 gauge cluster appearance to be determined	All LED Lights
14. Crossing arm deactivation switch	Yes	Yes
14. Additional Information	included	Standard
15. Vendors should describe their proposed heating systems including fuel source and flexibility to accommodate different fuel types as requested by local school district. " The use of electric heaters to pre-heat the vehicle cabin is not preferred; however using electric heat to keep the batteries warm is acceptable. Vendors should also describe their proposed system for pre-heating vehicle cabins.	Yes	Yes
15. Additional Information	Please see attached Type A EV Bus Spec Response.pdf	Please refer to narrative.

	Dynamic Specialty Vehicles	The Lion Electric Co
16. INSULATION Body insulation including walls ceiling & roof bows - to be fiberglass or equivalent	Yes	Yes
16. Additional Information	1 1/2" fibreglass insulation (roof walls front cab & roof bows)	
17. FLOOR: 5/8" Plywood subfloor secured with screws only (no nails) water-proofed and sealed at joints with silicone sealer including floor to wall seams; floor covering and entry steps	Yes	Yes
17. Additional Information	5 layer floor w/ plywood and sound deadening & rustproof agent	
18. Lettering - Ext. Belt line both sides- Purchasers Name ( Six Inch )	Yes	Yes
18. Additional Information	As Specified	
19. Bus # two front corners and opposite license plate rear. ( Four Inch ) Capacity GVW (Purchaser name) on side panel back of entrance door and side panel below driver. ( Two Inch )	Yes	Yes
19. Additional Information		
20. Vandal Locks - Emergency and Entrance Doors	Yes	Yes
20. Additional Information		
21. Outward opening entrance door w/heavy duty control. Specify Control	Yes	Yes
21. Additional Information	32" entrance door electrically Controlled	Electric door
22. Driver's and rear dome lights to be on separate switches	Yes	Yes
22. Additional Information	OEM Ford driver's dome light & rear dome lights on separate switches	
23. AM/FM CD radio minimum four (4) speakers flush mounted	Yes	Yes
23. Additional Information	AM/FM/CD/USB and PA system with 4 speakers	
24. EMERGENCY EQUIPMENT COMPARTMENT Above windshield with emergency equipment	No	Yes
24. Additional Information	Extinguisher and reflectors mounted to floor seat belt cutter on doghouse first aid kit on bulkhead	
25. Body fully undercoated for noise and enhanced rust protection	Yes	Yes
25. Please describe what is included and optional levels of protection available including costs	Underbody sprayed with Tectyl included. Complete underbody including cabin floor sprayed \$102.00"	Undercoating for noise and enhanced rust protection is a standard feature on all our vehicles and is part of our enhanced customer experience to ensure a long-lasting anti-corrosion vehicle.
26. Each unit shall be equipped with a Sound Generator that complies with FMVSS and CMVSS 141	No	Yes
26. Additional Information	Sound generator CMVSS 141 compliant pending	
Base Bus Specifications: Chassis:		
1. Chassis make year model.	2021 Ford E450	2021-2022
1a.Propulsion system - vehicle performance include: A sustained speed of 70 kph on a 2.5% grade; and 20 kph on a 20% grade. An ability to accelerate to 20 kilometers per hour (kph) in four seconds; to 40 kph in 10 seconds; 50 kph in 20 seconds and 70 kph in 35 seconds. Expectations are that the school bus shall be capable of a minimum of 200 kilometer range on a single battery charge on route measured with 50% city miles and 50% highway miles. Vehicles should be capable of operating at minus 30 degrees Celsius (-30C) to 35C with limited loss of range (no more than 10% reduction of documented range) in these variable conditions. This range rating must be tested with all normal accessories running in the conditions described including terrain encountered in BC.	Yes	Yes
1a. Describe vehicle performance while fully loaded in terms of maximum operating speed grade-ability and acceleration. Please provide documentation of for verifying submitted vehicle performance claims to meet above performance specifications.	The performance is comparable to a 6.8L equipped bus of the same configuration. No documentation available at this time.	Lion is using an electric motor with up to 200HP and 885 ft-lbs torque an overkill for a school bus. Our buses can go up a 20% hill when fully loaded.
2. Wheelbase info - up to 170"	Yes	Yes
2. Additional Information	158"	143 in
3. Wheels - Disc Hub Piloted	Yes	Yes
3. Additional Information	OEM Ford	
4. Tires - Six (6) - specify OEM supplied	Yes	Yes
4. Additional Information	LT225/75R16E Hankook	Dunlop or Goodyear

	Dynamic Specialty Vehicles	The Lion Electric Co
5. Vehicles should have the ability to change the powertrain deferential ratio to maximize range performance in mountain routes city routes highway routes or a combination of mountain city and highway routes. Please describe your process for achieving this?	Yes	Yes
5. Additional Information	A 2 speed transmission is used to achieve the same result	Please refer to narrative.
6. BATTERY Vendors should describe their proposed energy storage/battery system including the number of battery packs and battery chemistry. " Battery efficiency (kilometers per kWh) " Time (in minutes) to charge batteries from 20% to 100% state of charge on a level 2 charger. " Time (in minutes) to charge batteries from 20% to 80% state of charge on a level 2 charger. " Battery capacity (amps per hour per cell) " Battery storage capacity (kWh) " Total usable battery energy storage capacity (kWh) " Total battery pack C-rate. " Total battery pack E-rate " Battery Cycle life in number of charge-discharge cycles at a specific depth of discharge (DOD) " Battery thermal management type (describe battery maintenance and operational requirements when vehicle is in use and not in use	Yes	Yes
6. Additional Information	Yes - Please see Type A EV Bus Spec Response.pdf for complete response.	Please refer to narrative.
7. Additional power supply feeds available to power end user devices	Yes	Yes
7. Additional Information		
8. Rear tow hooks	Yes	Yes
8. Additional Information	2 Rear tow hooks	
9. On-Board Charging Systems Vendors should describe their preferred charging/discharging systems including EVSE noting that the expectation is that vehicles will be fitted with on board AC (19.2 kW) bidirectional charging/discharging systems that conform to the most recent SAE J1772 standards and/or other relevant standards for V2B bi-directional power flow. The vehicles should also be fitted with DC Level II charge/discharge coupler capable of a sustained maximum of 90kW of power transfer at a maximum of 200 AMPs. The coupler should conform to all current SAE standards. All charging system components shall have CSA certification or provide acceptable documentation. Charging systems shall be capable of operating from -30C to 40C with no more than 10% degradation in performance	No	Yes
9. Additional Information	Please see attachment Type A EV Bus Spec Response.pdf for complete response	Please refer to narrative.
10. Data collection for performance and analytical comparisons must be available on a regular basis for both ASTSBC and the purchaser. Training must be provided	Yes	Yes
10. Additional Information	Please see attachment Type A EV Bus Spec Response.pdf for complete response	Please refer to narrative.
11. Mud Flaps - Front and Rear. Rear with rubber fender skirts	Yes	Yes
11. Additional Information	4 mud flaps Shock resistant injected plastic black wheel well trims.	
12. OWNER'S MANUAL AND DIAGNOSTIC SOFTWARE Supply those available for end users.	Yes	Yes
12. Additional Information	Will be supplied	
13. Supply line setting ticket	Yes	Yes
13. Additional Information	Will be supplied	
Options Prices:		
1 - Price per additional row of seating positions ranging from 24 - 29 passenger	Additional	Not Available
1 - If Additional please indicate the Price		1525
2 - Power and Range upgrade -Price for each additional 25km range per charge	Not Available	Additional
2 - If Additional please indicate the Price		70000
3 - Recommended Level 2 charging system for your bus	Included	Additional
3 - If Additional please indicate the Price and Infomation		3 000.00 Please refer to narrative.

	Dynamic Specialty Vehicles	The Lion Electric Co
4 - One (1) additional spare tire mounted	Additional	Additional
4 - If Additional please indicate Price		243 166
5 - Current Gatekeeper digital video system supplied and installed with two (2) cameras	Additional	Additional
5 - If Additional please indicate Price		1838 3000
6 - Current Seon digital video system supplied and installed with two (2) cameras	Additional	Additional
6 - If Additional please indicate Price		1989 3000
7 - Pre-wiring for 2-way radios thru noise suppression switch - power and antenna	Additional	Included
7 - If Additional please indicate Price		69
8 - Driver's compartment storage overhead	Not Available	Included
8 - If Additional please indicate Price		
9 - Installed Zonar current GPS unit with EVIR and handheld device with all accessories. Please quote on the hand held devices available	Additional	Additional
9 - If Additional please indicate Price		895 144.89
10 - Zonar current GPS device installed	Additional	Additional
10 - If Additional please indicate Price		616 144.89
11 - Driver's clipboard storage - assessable from drivers seat	Additional	Included
11 - If Additional please indicate Price		42
12 - Traction control through ABS	Not Available	Included
12 - If Additional please indicate Price		
13 - Limited Slip Rear Axle	Not Available	Included
13 - If Additional please indicate Price		
14 - Acoustic ceiling panels throughout	Additional	Additional
14 - If Additional please indicate Price		1661 1200
15 - Winter front and bug screen	Additional	Additional
15 - If Additional please indicate Price		225 200
16 - Interior - Exterior intercom	Additional	Additional
16 - If Additional please indicate Price		179 450
17 - Emergency hatch roof vent with exhaust fan	Additional	Included
17 - If Additional please indicate Price		948
18 - Luggage racks (interior) - and seat belt equipped seats for 24 passenger or greater MFSAB activity bus only.	Additional	Additional
18 - If Additional please indicate Price		12867 4295
19 - Integrated child seat - specify options available	Additional	Additional
19 - If Additional please indicate Price		685 775
20 - Wheelchair lift specify OEM in attached info. Supply and install wheelchair lift with one chair position across from lift inclusive of tie down system.	Additional	Additional
20 - If Additional please indicate Price		8000
21 - Track seating per wheelchair space	Additional	Additional
21 - If Additional please indicate Price		495
23 - Drivers side running board	Additional	Additional
23 - If Additional please indicate Price		281 500
24 - OPTION # 18 CLARIFICATION: MFSAB PRICE IS FOR 24 CE WHITE FAMILY SEAT (HIGH BACK BUCKET WITH 3 POINT SEATBELT) VS. BENCH SEATS ON 177" WB GM 4500 GAS CHASSIS; PARCEL RACKS INCLUDED.	Additional	Additional
24 - If Additional please indicate Price		4295
25 - Stop Arm Camera	Additional	Additional
25 - If Additional please indicate Price		480 350
26 - Pedestrian Detection System	Additional	Additional
26 - If Additional please indicate Price		2450 3630
Additional information:		
This section gives you the opportunity to add boxes with additional information on items that you may want to make us aware of.		Lion is currently on the board of D250-21 regulations and we are in the process of certifying the vehicle. We will be compliant at the time of delivery.