

**Jackson Parish Library**  
**New Bookmobile Project**  
**2003 - 2004**

**Technical Specifications Summary**

<b>Model</b>	Blue Bird All American, forward control, front engine, transit type.
<b>Overall Length</b>	28 feet – 11 inches
<b>Load Space Length</b>	23 feet – 3 inches
<b>Overall Height</b>	135 inches
<b>Headroom</b>	77 inches
<b>Exterior Width</b>	96 inches
<b>Interior Width</b>	87 inches
<b>Wheelbase</b>	141 inches
<b>Turning Radius</b>	21 feet – curb to curb
<b>GVWR</b>	Rated at 25,800
<b>Engine</b>	Caterpillar C-7 diesel – 210 HP, 520 ft-lb torque
<b>Transmission</b>	Allison 2000 automatic
<b>Generator</b>	Onan 10 KW Quiet Diesel
<b>Tires</b>	Goodyear 16-ply tubeless
<b>HVAC</b>	Dometic Brisk Air, 15,000 BTU roof air conditioners (2) with 5,600 BTU heat strips; Red Dot chassis-driven air conditioning.
<b>Shelving</b>	Cabinet-grade, hardwood core 5-ply birch plywood
<b>Upfitting Features</b>	
<b>Audio Visual</b>	TV & VCR mounted in cabinet over windshield for Story Hour and other educational and cultural programs.
<b>Audio Visual</b>	AM/FM/CD with front & rear speakers for information & programs.
<b>Network</b>	Computer workstations with network wiring for <u>future</u> computer use. 2 staff workstations - 2 public workstations.
<b>Communications</b>	Cellular phone wiring and antenna.
<b>Staff Needs</b>	Staff microwave and refrigerator.
<b>Paint/Graphics</b>	Colorful promotional exterior paint and graphics design.
<b>Options</b>	Manual exterior awning.
	Exterior spotlights at patron doors.
	Extended warranty options on engine and transmission.
<b>Projected Cost</b>	Anticipated to be approximately \$175,000.00

Attn: Robin Toms  
614 South Polk Ave.  
Jonesboro, LA 71251

Jackson Parish Library  
Bookmobile Specifications

*OBS INC.*  
*Blue Bird Body Company*

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# SPECIFICATIONS

## Bookmobile

### General

1. **Scope of Work** Vendor to furnish all material and perform all labor to complete vehicle upfitting and conversion as specified herein, as shown on the concept drawings, or as required to complete the work.
2. **Delivery** Unit to be delivered to Jonesboro, LA. no later than 150 days after receipt of shell. To be delivered by vendor driver/trainer who will make any minor adjustments to the vehicle, provide on the road driver training as well as explain complete operation and routine maintenance of the vehicle.
3. **Quality Control** Upfitting and conversion to be performed by vendor regularly engaged in work of this type, in shop owned and operated by vendor, by full-time employees of vendor. Additionally, vendor must have produced and delivered a minimum of five (5) bookmobiles of the type and size specified herein or larger. Brand names are given to describe a level of quality; equivalent brands are acceptable with a description of the item that provides information as to its comparable level of quality/capacity. All exceptions must be specified in writing.
4. **Submittals** Vendor to prepare and submit with bid/proposal a full design drawing package to include: floorplan and left and right elevations indicating specific dimensions with regard to workstations, wire ways, and all other interior features; exterior side views showing door locations, windows, under floor equipment and storage locations, and dimensions to aid in exterior graphics design.

### Basic Specifications and Dimensions

1. **Overall Length** 28 ft. 11 inches, maximum.
2. **Load Space Length** 23 ft. 3 inches minimum.
3. **Overall Height** 135 inches, max(to top of roof mounted Air Cond)
4. **Headroom** 87"- finished floor to finished ceiling.
5. **Exterior Width** 96 inches, maximum
6. **Interior Width** 87 inches (finished wall to finished wall)

7. **Wheelbase** 141 inches.
8. **Turning Radius** 21 feet curb to curb.
9. **Gross Vehicle Weight Rating** 32,200 lbs. Rated at 25, 800 lbs.

### Chassis Specifications

1. **Model** Blue Bird All American, forward control, front engine, transit type. Current Model Year
2. **Air Cleaner** Dry type with restriction indicator.
3. **Alternator** 175 amp, minimum, Lecce-Neville
4. **Axle, Front** 14,600 rated at 13,200 lbs.
5. **Axle, Rear** 19,000 lbs., single speed with 5.29 to 1 ratio.
6. **Battery Group** Minimum two (2) Group 31, 900 CCA ca. for chassis. One (1) Delco 1150, 625 CCA for generator and auxiliary.
7. **Brakes**
  - a. Hydraulic service brakes.
  - b. 15" diameter x 1.438" thick rotor for both front and rear systems.
  - c. Bosch calipers with dual 73MM diameter hydraulic pistons at each wheel/rotor.
  - d. Emergency/Parking brake with internal expanding, transmission mounted, 9" diameter x 3" wide. Mechanical operation with hand control application at drivers left.
8. **Controls**
  - a. Headlight dimmer switch with indicator light.
  - b. Hazard switch on steering column.
  - c. Self-canceling turn signal with lights.
  - d. Rheostat dash dimmer on headlight switch.
  - e. Parking light position on headlight switch.
  - f. Electronic High Idle switch and Electronic Cruise Control.
  - g. Clearance and marker lights to be activated by headlight switch.
9. **Starter Switch** Key type starter switch with engine stop incorporated in key switch. As a safety feature, the starter switch shall be located to the right of the steering column.
10. **Radiator**
  - a. Cross flow radiator shall be mounted in tandem to the charge air radiator, i.e. one in front of the other.
  - b. Coolant radiator shall have molded fiber reinforced nylon top and bottom tanks with integral seam-free inlet and outlet fittings.
  - c. The radiator shall consist of 186 tubes with 15 fins per inch.

- d. Minimum radiator core cooling area shall be 777 square inches.
- e. Deaeration tank must be supplied.
- f. Shall include a 26" diameter Nylon cooling fan with 9 blades, hydraulically driven and thermostatically modulated by sensors in both coolant jacket and engine charge air intake.

**11. Charge Air (After Cooler)**

- a. Core area shall be a minimum of 707 square inches.
- b. The after cooler shall be welded aluminum construction, capable of withstanding pressure up to 25 psi.

**12. Transmission Oil Cooler**

- a. Must be mounted external from engine coolant radiator to prevent overheating.
- b. Modine oil to coolant heat exchanger, or equal.
- c. Minimum heat transfer shall be 1,530 BTU per minute.

**13. Cruise Control** Dash-mounted Electronic Cruise Control.

**14. Engine** Caterpillar 3126E, 210 HP, 520 ft-lb Torque  
**Engine Block Heater- 1000 Watts minimum to be provided**

**15. Engine Hood**

- a. Swing up engine hood for access to engine and transmission check.
- b. Right and left access doors on the front of the body.
- c. Center grill hinges down for radiator check and fill.

**16. Exhaust System**

- a. Single 5" O.D. 16 gauge, aluminized steel tailpipe with aluminized steel muffler.
- b. Wide band exhaust clamps are at all joints.

**17. Frame**

- a. Main Frame – Dual "C" channels, 9.63" high with 3" flanges made of .25" thick, 50,000 psi. steel, Section modulus + 10.1 in. cu.
- b. Insert (liner across rear suspension) Dual "C" channels, 9/16" web with 2 3/4" flanges made of .25" thick, 50,000 psi steel, Section Modulus = 9.5 in. cu.  
 Total Resisting Bending Moment (RBM) = 980,000 IN-LBS/RAIL.

**18. Sub Frame**

- a. Dual "C" channels, 50,000 psi steel, the sub-frame rails turned with flanges outward and lowered 6" below main frame to best accommodate engine and related components.
- b. Section Modulus = 7.45 in.cu. Sub-frame rails 65" long and overlap main rail and insert 24".
- c. Joining of sub to main frame rail to be reinforced with dual 3" x 3" x 1/4" angle iron.
- d. Section Modulus across joining – 28.96 in. cu./rail.
- e. All permanent fixtures on frame to be attached with hi-tensile strength "Huck Spin" fasteners with swaged lock nuts.

**19. Fuel System**

- a. 60-gallon capacity minimum, aluminized steel, safety fuel tank mounted between the frame rails.
- b. Provide sender inspection plate, sump and brass drain plug and right hand fill opening with spring loaded locking door.
- c. Primary Fuel Filter/Water Separator shall be Racor S32030 rated at 90 GPH, 30 micron, with see thru bowl and self-venting drain.
- d. Filter head to include integral check valve on inlet side.
- e. Secondary fuel filter to be spin on type mounted on engine and supplied by engine manufacturer.
- f. Fuel pump mounted on engine.

**20. Heater and Defroster (Cab)** Minimum 90,000 BTU heater and defroster with full length pressurized defroster channel.

**21. Horns** Dual Electric with non-glare horn button emblem.

**22. Instruments**

- a. Speedometer with English Major and Metric Minor.
- b. Seven Digit Odometer.
- c. Re-settable Trip Odometer.
- d. Tachometer
- e. Seven Digit Engine Hour meter
- f. Oil Pressure Gauge
- g. Voltmeter
- h. Fuel Level
- i. Coolant Temperature Gauge
- j. Digital Clock.
- k. Gauges to have automatic self-test at power up.
- l. Needles sweep while display indicates "TEST"
- m. Rheostat Panel Dimmer.

**23. LED Telltale Warning Signals**

- a. Right and Left Directionals (Green)
- b. High Beam Indicator (Blue)
- c. Service Brake Applied (Red)
- d. Park Brake Applied (Red)
- e. ABS Active (Amber)
- f. Stop Engine (Red)
- g. Service Engine Soon (Amber)
- h. Check Transmission (Red)
- i. Low Coolant Level (Amber).

**24. Dash Mounted Switches**

- a. Headlights with Parking Light position
- b. Incremental High Idle with Low Idle Return
- c. Cruise Control On/Off
- d. Cruise Set/Resume.

**25. Oil Filter** Full flow disposable.

- 26. Power Steering**
- a. Full Power; Ross TAS-65 power unit, integral design with 20.4 to 1 ratio.
  - b. Hydraulic pump is gear driven.
  - c. Tilt Telescoping steering column
  - d. Padded, two spoke, 18" diameter steering wheel.
  - e. Maximum steering wheel turning angle 42 degrees to safely ensure wheel "righting" when completing a turn.
- 27. Shocks** Front and rear heavy-duty, direct acting, 1.75 diameter bore double-action piston type with long life bonded bushings.
- 28. Springs**
- a. Front: 4" x 56", single stage, 2-stress peened parabolic leaves with up-turned eyes, 1.25" diameter pins in graphite-impregnated steel backed bronze bushings with urethane seals at each end. Minimum 14,000 lbs. Front.
  - b. Rear: 3" x 52" semi-elliptic, progressive, variable rate 14-leaf slipper springs, 23,000 lb. capacity, maintenance free, rubber bushed radius leaf to permit axle adjustment for dog tracking.
- 29. Tires**
- a. Bridgestone 11R22.5, load range H, 16 ply tubeless tires.
  - b. **[Optional] Spare tire/wheel shall be provided; shipped loose.**
- 30. Tow Hooks** Frame mounted tow hooks provided front and rear.
- 31. Transmission** Allison 2000 Automatic Transmission.
- 32. Wheels** 2.5 x 7.5 or 22.5 x 8.25 Ten stud disc wheels.

## **Body Specification**

- 1. Access Panels**
- a. Two (2) hinged doors with easy-access latches on right and left front of body below windshield.
  - b. Provide easy outside access for servicing wipers, brake treadle valve, front dash and instrument wiring.
  - c. Access panel with hinge and latch below driver window for 12 volt wiring and accessories.
- 2. Battery Compartment**
- a. Steel compartment with slide-out tray.
  - b. Includes hinged door with latch and key lock.
  - c. Hinges to be stainless steel pivots in nylon bearings.
- 3. Body Floor Construction**
- a. 14-gauge, zinc coated, steel floor, 28" & 35" width panels formed with 2" lip at each end; 1/8" steel bar, 1 1/2" width, shall be attached to inside of floor panel lip. 3/16" steel angle iron, 1 1/2" x 2", to be attached to inside lip of adjoining panel.

- b. All four pieces of metal shall be buck-riveted together.
  - c. Like construction at all floor joints.
  - d. Reinforcements of 16-gauge steel U-channel shall be welded to floor every nine inches between floor sections.
  - e. Interior floor shall be minimum 5/8" exterior grade plywood screwed securely throughout the coach.
  - f. All seams and edges shall be sealed.
4. **Frame Cross members**
- a. All cross members shall run full width of floor.
  - b. Auxiliary cross members shall be formed with water drainage ports.
  - c. An additional cross member shall be located in vicinity of generator installation.
5. **Bumpers**
- a. Chassis frame mounted. 3/16" steel, die-formed, ribbed, one piece.
  - b. Minimum bumper height shall be 12" front and rear.
6. **Doors**
- a. Two patron doors curbside with clear opening of 28" x 78", upper and lower sliding windows with screen and tinted glass.
  - b. Door closers, slam locks, holdbacks and bumpers shall be provided.
  - c. Exterior grab handles next to doors and interior grab handles in stepwell areas.
  - d. Doors shall be double-constructed aluminum with urethane foam insulation in the core.
  - e. Hinges shall be stainless steel continuous.
7. **Front Section**
- a. Front section shall be steel, assembled and welded in a jig.
  - b. Components shall consist of 14-gauge roof header, 14-gauge side header, 12-gauge corner posts, and 14-gauge windshield header.
  - c. In addition, front section shall consist of a windshield belt bar, 11-gauge windshield center post, 16-gauge front center post.
8. **Gussets**
- a. 16-gauge, die formed steel gusset, 19 3/8" high, shall be attached to the floor and extend the full length of the body, both sides.
  - b. Sealer shall be used between floor and gusset to keep out fumes, dust, and hot and cold air.
  - c. Drainage ports shall permit water to escape and evaporate at joint areas.
  - d. 11-gauge auxiliary triangular gussets shall be double riveted to main floor cross-members and project vertically to give additional support to side skirting.
9. **Insulation**
- a. Commercial application of urethane foam sprayed in place on interior walls, interior ceiling, and under floor.
  - b. R-14 Insulation.
10. **Lights-Body**

- a. Stepwell,
- b. exterior clearance,
- c. 7" stop and tail,
- d. 7" back-up,
- e. cluster front and rear,
- f. side markers,
- g. 7" directional,
- h. rectangular halogen headlamps.

**11. Metal Treatment**

- a. All exterior steel parts that shall be treated through a process of cationic epoxy electro coating to provide environmentally friendly, state of the art, corrosion protection (No Heavy Metals - lead, chrome, or zinc).
- b. Cathodic epoxy electro coat shall be applied by electrostatic spray and baked for 20 minutes at 375 DEG – metal temperature.
- c. PPG Powercron 590 epoxy or equal.

**12. Mirrors**

- a. Roscoe or equal west coast style mirrors, heated and remote controlled.
- b. Rearview mirror shall be clear, 16" wide x 4" high.

**13. Mud Flaps** Minimum 24" x 30" front and rear.

**14. Painting and Graphics**

- a. One solid color, fleet white, heat-cured polyurethane paint applied electrostatically to body.
- b. Exterior graphics are to be determined.

**15. Rain Visors** Aluminum rain visor molding, full length each side

**16. Rear Section**

- a. Rear section shall be steel, assembled, and welded in a jig.
- b. Components shall consist of 11-gauge posts, 14-gauge header, 16-gauge upper corner posts, 14-gauge belt rails, 14-gauge lower corner posts, and 14-gauge one-piece steel roof bow.
- c. Rear section shall become integral part of body structure.

**17. Reflectors** All necessary, side, front and rear reflectors.

**18. Roof Bows**

- a. 14-gauge, hat-shaped, cold-rolled, one-piece roof bows, of zinc-coated steel shall be installed at every main section.
- b. Bows shall extend from floor line on one side to floor line of the other side.
- c. Both ends of the continuous roof bows shall terminate and rest on the floor
- d. Bows shall be riveted to the main floor gusset and to adjoining body panels.

**19. Roof Panels**

- a. 20-gauge, zinc-coated, steel panels shall be one piece from side to side.
- b. Panels shall be riveted to the roof bows, stringers and headers.
- c. Panels shall begin at the rear, with each subsequent panel overlapping the previous one.

- d. Sealers and adhesives shall be used between each roof panel.
- e. 14-gauge, die-formed header panels shall be riveted to the front and rear structures.

**20. Rub Rails**

- a. Two (3) 16-gauge, die-formed steel rub rails shall be fastened to the body, one along the bottom of the skirt on each side, and one along the window line on each side (lower line of driver window).
- b. Upper rail shall be riveted through the exterior side panels and roof bows to become an integral part of the body structure.
- c. Rails shall be formed with drainage ports.

**21. Seals**

- a. Body panels to be assembled with epoxy and silicone sealant,
- b. Windows set in rubber,
- c. Doors to have rubber seals.

**22. Side Panels**

- a. 16-gauge, zinc coated, smooth steel panels shall be riveted to the auxiliary floor gussets, side gussets, and roof bows.
- b. Panels shall be one piece extending from the roofline to the bottom of the skirt.
- c. Adhesives and sealers shall also be used.

**23. Stepwells**

- a. A two (2) step stepwell with 12" tread shall be provided at the patron door, this stepwell will be augmented with a two (2) step exterior remote electric step.
- b. The stepwells shall be lined with scuff-resistant transit rubber flooring material.
- c. The front edge of each tread shall incorporate a reflective strip.
- d. Treads shall be securely fastened and silicone-sealed at the edges.

**24. Sun Visors Driver and passenger 6" x 30" commercial type with tinted Plexiglas.**

**25. Undercoating**

- a. Urethane spray foam, minimum of 2 inches thick, applied under floor at the body manufacturer during production.
- b. All other exposed surfaces to be undercoated with Ashland Industrial Products TECTYL 355 Rustproofing.

**26. Ventilation**

- a. Fresh air-through-heater system.
- b. Air intake on right front side below windshield.

**27. Windows**

- a. Windows in doors as specified.
- b. Driver side horizontal sliding windows with lock.
- c. Rear Emergency Escape Window with crank out ventilation with screen.

**28. Windshield**

- a. Two-piece curved, tinted windshield, safety plate.
- b. To be minimum of 3368 sq. in.

**29. Wipers**

- a. Dual 2-speed electric parallelogram type;
- b. Wet arm,
- c. Bottom-mounted,
- d. Intermittent.

**30. Wiring**

- a. Basic body wiring to be number and color-coded.
- b. Protection to be provided by automatic resetting circuit breakers.

**Upfitting Specifications**

~~1. **Awning** [Optional] Provide a Dometic A&E Awning installed on the curbside of the vehicle located to provide cover for rear patron door.~~

**2. Audio/Visual/Appliances**

- a. **Battery operated clock shall be provided.**
- b. **AM/FM/CD with four (4) speakers (two fwd/two rear)**
- c. **Computer network wiring shall be provided for future use (2 computers).**
- d. **Observe Rear-vision backing camera with dash mounted monitor.**
- e. **Wiring and antenna for owner supplied cellular phone**
- f. **Microwave Oven**
- g. **Refrigerator**
  - i. **Both microwave and refrigerator housed in cabinet; location to be determined**
- h. **TV/VCR on pull-out tray. To be housed in lockable compartment.**

**3. Cabinetry**

- a. Provided in accordance with accompanying drawings and upfit specifications.
- b. Shall be constructed of cabinet grade birch, 5 ply, poplar core, ¾ inch plywood with ½ inch backing.
- c. All nail holes to be filled and sanded.
- d. All cabinetry shall be hand sanded to ensure a smooth and uniform surface and shall be sealed with one (1) coat of Sand-n-Sealer or equal, uniformly applied by spray method.
- e. One (1) coat of satin clear polyurethane shall be uniformly applied by spray method then hand sanded and finally two (2) additional finish coats.
- f. All countertop edges shall be vinyl T-molding.
- g. Backing shall be datoed, glued and secured with 1 ¼ inch, 18 gauge – narrow crown galvanized staples not more than 2 inches apart.
- h. Cabinets shall be fastened to walls and 2 x 4 furring using 2-½ inch, No. 10 coarse thread commercial grade wood screws.
- i. Base cabinets shall be fastened to walls and floors through ¾ inch thick, 1 ¼ inch wide, cabinet length hardwood cleat at mating surface, using appropriate length, No. 10 coarse thread commercial grade wood screws.

- j. The cabinets shall have latching doors/trays/drawers, which when in the closed position will prevent the accidental opening of the compartments while the vehicle is in motion.
  - k. All cabinet doors shall have standard wire pulls and are side hinged unless specified. **Cabinets to be lockable where specified by customer**
4. **Ceiling**
- a. Commercial textured fiberglass interior ceiling panels for ease of maintenance and cleaning;
  - b. Marlite or Sequentia Fiberglass Reinforced Plastic (FRP),
  - c. P-100 white in color,
  - d. ASTME-84 rated.
5. **Door Finish**
- a. Doors shall be finished with white FRP, same as ceiling.
  - b. Doors shall be made to seal properly to deter water, dirt and dust, and provide noise reduction consistent with the vehicle body.
6. **Electrical Requirements**
- a. 120/240 Volt system sized to exceed vehicle load requirements. Generator/OFF/Shoreline source switch shall be located near panel and generator remote start controls.
  - b. All 120VAC circuits will be GFCI protected.
  - c. Circuit breaker panel and wiring to meet National Electric Code.
  - d. All wiring must be secured at maximum intervals of 18 inches.
  - e. Wiring must be one size larger than required by NEC.
  - f. An independent ground wire must be installed.
  - g. The main AC electrical load panel shall be Siemens or equal with resettable circuit breakers.
  - h. Electrical Source Switch shall be provided with Generator – OFF – Shoreline selections.
  - i. Panel shall have a minimum 100 Amp main breaker.
  - j. The Converter/Charger shall be a Magnetec 930 (30Amp) and shall be configured to replenish coach battery as well as chassis batteries through the use of the “jump” switch.
  - k. The Converter/Charger, coach battery and shoreline shall be housed in under floor storage compartment with access door, latch and key lock.
7. **Floor Covering**
- a. Floor covering shall be 10-year wear dated carpet, University Collection or equal with no seams.
  - b. Vinyl cove base shall be installed where flooring edges meet sidewalls or partitions.
  - c. Choice of carpet/cove base to be subject to customer approval.
8. **Generator**
- a. One (1) ONAN 10 KW Quiet Diesel generator shall be provided. Installation must meet specifications as established by manufacturer, minimum 12” ground clearance.
  - b. Generator shall be mounted on heavy-duty steel frame bolted to chassis frame rail with no load being born by the vehicle floor.

- c. An additional chassis frame crossmember must be installed in location adjacent to generator installation.
  - d. Heavy-duty steel rollout tray, with industrial-grade, stainless steel, sealed roller bearings shall be provided for easy access for service and maintenance.
  - e. Battery for generator start shall be Delco 1150 Series 625 CCA or equal and separate from chassis batteries.
  - f. Jump switch between generator start battery and chassis batteries shall also be provided for contingencies.
9. **Generator Compartment**
- a. Located immediately forward of the rear axle on the driver's side and accessed by a single, top hinged, 16 gauge steel door assembly with hold open device, dual latches and a key lock.
  - b. Compartment shall enclose the generator on top and three sides with treated steel sheeting. (Generator is vacu-flow with air intake and exhaust from bottom of generator.)
  - c. Louvered venting in compartment walls sufficient to prevent ambient heat buildup.
  - d. Compartment shall be fully lined utilizing a thermal - acoustic barrier with absorber consisting of 1" thick acoustical foam with a metalized polyester facing, a 1 LB/SQFT loaded vinyl barrier and a 0.25 inch thick foam rubber decoupling layer with a supported acrylic pressure sensitive adhesive.
10. **Hardware**
- a. All necessary door locks, handrails, door closers, holdbacks, and hinges will be furnished to provide smooth, efficient operation.
  - b. All handrails to be of one-piece construction.
11. **HVAC**
- a. Two (2) Dometic, 15,000 BTU, Brisk Air, AC powered, roof mounted air conditioners shall be provided and shall include 5600 BTU heat strips.
  - b. Red Dot 6100 chassis driven cab air conditioning.
12. **Interior Finish**
- a. Interior to be custom-designed to purchaser's requirements including desks, closets, storage, bulletin boards, shelving, and interior walls.
  - b. Samples will be provided for flooring, fabric, and laminates.
  - c. Fabric covered front header panel and on panels above driver and opposite doors shall be provided.
  - d. All upholstery to meet FMVSS302
13. **120 VAC Lighting**
- a. Two (2) rows of 120VAC double tube fluorescent fixtures, low-profile type, anchored to steel roof bows in 2' and 4' lengths as required.
  - b. Shall include prismatic clear acrylic diffusers for uniform light distribution.
  - c. Diffusers shall snap into place to prevent shifting or accidental opening.
  - d. Lights shall be CSA NRTL/C certified, suitable for use in damp locations.
  - e. Zig-zag switching shall be provided to power every other fixture for 50% and 100% lighting.

14. **12 VDC Interior Lighting**

- a. Four (4) 12V fluorescent dome lights, recessed into reinforced ceiling, shall be provided as auxiliary lighting.
  - b. Dome lights shall be Thinlight Model RE716XL or equal.
  - c. 12V stepwell and exterior entrance lights shall be provided at each patron door.
  - d. Two (2) total 12V dual lamp map lights shall be provided over the driver and passenger seats respectively.
15. **Lighting (exterior)**
- a. 12VDC fluorescent "porch" lights shall be provided at each patron door.
  - b. Exterior step light shall be provided at each patron door.
  - c. ~~Optional~~ **Two (2) Whelen 8-32 scene lights shall be located on curbside of vehicle for area lighting.**
16. **Safety Equipment**
- a. Two (2) 5 lb. 20 B.C. Fire Extinguisher shall be provided.
  - b. One (1) Triangle Reflector Set shall be provided.
  - c. One (1) First Aid Kit shall be provided.
  - d. Back-up alarm shall be provided.
17. **Seats**
- a. Driver's and passengers seat shall be high back bucket type with armrests, CE White or equal with customer selected fabric or vinyl.
  - b. Seat shall have approved seat belt and retractor.
  - c. Seat shall be adjustable in the fore/aft and up/down positions and shall swivel 180 degrees.
  - d. All seat hardware shall be FMVSS compliant.
18. **Shelves**
- a. Shelving construction must have been demonstrated in the field for a minimum of 10 years on a bookmobile (NO EXCEPTIONS).
  - b. Shelving sections shall be constructed of 3/4 in. uprights and 3/4 in. shelves and shelf backs.
  - c. Material shall be cabinet-grade, hardwood core 5-ply birch plywood.
  - d. Sections shall be constructed as individual, removable bookcases with fixed top and bottom shelves.
  - e. **Shelving to include oversized shelves with clear, plexiglass dividers; magazine and periodical shelving; standard shelving. Final floorplan to be determined by library after award of contract.**
  - f. The front edges of all double uprights to be covered with hardwood molding glued and nailed in place.
  - g. All nail holes to be filled and sanded by hand.
  - h. All cabinetry shall be hand-sanded to ensure a smooth and uniform surface.
  - i. All wood cabinetry shall be sealed with one (1) coat of Sand-n-Sealer or equal, uniformly applied by spray method.
  - j. One (1) coat satin clear polyurethane shall be uniformly applied by spray method, and then hand-sanded and two (2) additional coats spray-applied.
  - k. Hardwood moldings to be applied to front edge of all shelves.
  - l. Sections to be anchored to structural members in walls and to each other.

- m. Shelf backs to be recessed into a groove in the shelf at 90 degrees, glued and nailed in place.
- n. KV255 steel adjustable track with KV256 steel clips recessed into the uprights, adjustable in 1/2" increments shall be provided.

19. **Storage**

- a. **Interior compartment with door and lock above windshield with corkboard and fabric covering.**
- b. Other interior storage throughout as per attached drawing.
- c. Shoreline/charger and auxiliary battery compartment.
- d. Miscellaneous storage compartment 36"W x 28"D x 19"H.
- e. Compartment doors shall be made of same gauge steel as body skirt,
- f. Continuous stainless steel hinges,
- g. Extruded rubber seal
- h. Southco barrel locks.
- i. All exterior storage compartment locks keyed alike.
- j. All exterior compartment doors shall have hold open devices.

20. **Window Shades**

- a. **In the cab area, the windshield, driver window and top half of patron door shall have roller shades.**

21. **Warranty**

- a. Engine: 3 years, 36K miles. [Optional: 5 yr/100K, to 7yr/300K(ISC) - 8yr/250K(Cat)]
- b. Transmission: 3 years, Unlimited miles. [Optional: 4, 5 years, Unlimited]
- c. **Body: 5 years**
- d. Upfitting and Conversion: Five year limited warranty.
- e. All other components as specified by manufacturer.

22. **Graphics Allowance: Design to be determined after award of bid. Include \$5,000 allowance. Standard vehicle color is Fleet White. Other colors available at additional charge.**