



# **REQUEST FOR PROPOSALS**

## **HEAVY DUTY BUSES**

**DULUTH TRANSIT AUTHORITY**

### **Addendum #7**

April 27, 2021

I. Please note: **The Proposal due date HAS BEEN CHANGED to 2:00 P.M. ON THURSDAY, May 20, 2021.** Please change all

references to the Proposal due date accordingly.

II. Approved Equals. Please note that those items that are accepted as an approved equal are selected individually by the purchasing agency at the time of placing an order under the Contract.

1. Section 100, Definitions: EIDorado National-California (~~ENC~~) BRT front end vehicle is accepted as a base vehicle.

2. Section 100, Definitions, Electronic Equipment: Clarification: Proposer must include wiring for fareboxes. For the DTA, fareboxes will be drop shipped to Duluth for installation by DTA. Participating Agencies will have fareboxes installed by the Contractor unless the Participating Agency requests otherwise. DTA has changed to the Genfare FastFare fareboxes.

3. Section 1.03, General: ENC~~q~~ request for an overall height of 128-inches on 30, 35 and 40-foot vehicles with a rooftop A/C unit and a 136-inch height on CNG models is accepted as an approved equal.

4. Section 1.03, General: ENC~~q~~ request to provide a 40-foot bus with a seating capacity of 37 with two wheelchair positions when unoccupied with the Q-Straint Quantum securement on the street side is accepted as an approved equal.

5. Section 1.03, General: Gillig~~q~~ request for an overall height of approximately 123 inches for 29-foot, 35-foot and 40-foot diesel buses is accepted as an approved equal, and approximately 132 inches on 29-foot, 35-foot and 40-foot hybrid buses, and approximately 135 inches on 29 foot, 35-foot and 40-foot buses is accepted as an approved equal.

6. Section 1.03, General: Gillig~~q~~ request for a 15.3-inch height from ground (front and rear) on 40-foot buses, 15.2 inches on 35-foot buses, and 15.3 inches in the front and 14.8-inches in the rear on 29-foot buses is accepted as an approved equal.

7. Section 1.03, General: ENC~~q~~ request to provide a

8. Section 1.04, Shell: Please change the roof decals from 36- inch to 24-inch high letters.

9. Section 1.04, Shell: Gillig~~q~~ request to eliminate the engine compartment decals and supply 6 sets of unit numbers on the exterior of the coach (on all four sides) is accepted as an approved equal.

10. Section 1.04, Shell: Due to CNG tank placement, decal placement on CNG buses will be dependent on the final bus configuration.

11. Section 1.04, Shell: AkzoNobel/Sikkens paint system and Axalta Imron Elite are accepted as approved equals.

12. Section 1.04, Shell: Clarification: exterior paint will be of the ~~wet~~ look type is referring to the top coat.

13. Section 1.05, Body Structure, paragraph 1: Please change the requirements on the warranty on carbon steel welded structure to 350,000 miles.

14. Section 1.05: Body Structure: New Flyers request to provide a semi-monocoque HSLA steel sheet and plate complying with ASTM A242, A588, A606, A568, CSA G40.21 44W, 50A, 50W and structural tube and channel complying with ASTM A500, CSA G40.21, 50A, 50W is approved provided they comply with the warranty provisions. ENC request to provide a Grade C ASTM 500 high strength carbon steel monocoque frame is accepted as an approved equal.
15. Section 1.05, Body Structure: The Alliance Bus Group Vicinity 30-foot monocoque steel chassis structure with a ferritic 4003 stainless steel frame is accepted as an approved equal on the 30-foot bus, but is not accepted on the 35-foot or 40-foot bus. The DTA requires a stainless steel chassis or a carbon steel chassis with additional warranty provisions. See Section 1.05 for more information.
16. Section 1.05, Body Structure: Gillig request to provide a standard modified body structure made from a combination of aluminum and stainless steel structural elements, including aluminum extrusions fastened together with T bolts and cast forged gussets is accepted as an approved equal.
17. Section 1.05, Body Structure, paragraph 8, Fire Protection; ENC request to use Nelson Fire Stop Putty in lieu of fire resistant fittings is accepted as an approved equal.
18. Section 1.05, Body Structure: Clarification: the DTA will conduct the vehicle inspection at three year, six year and nine year intervals, provided the Contractor provides a detailed inspection procedure prior to the time of inspection. Please DELETE the following: ~~The Contractor will be responsible for the labor costs incurred by the owner with any additional applications or modifications as per above.~~
19. Section 1.05, Body Structure: Please DELETE the following: ~~The understructure will then be undercoated with a wax based, self-healing coating applied to give an extra layer resistant to sound and stone chipping.~~ The DTA no longer requires this.
20. Section 1.05, Body Structure, paragraph 6: Jacking points located on the front and rear axles on Meritor axles is accepted as an approved equal.
21. Section 1.05, Body Structure, paragraph 11: Gillig standard water test procedure is accepted as an approved equal.
22. Section 1.05, Body Structure: Gillig request to supply a stainless steel transmission cooler without e-coating is accepted as an approved equal.
23. Section 1.05, Body Structure: HydroArmor 7790 undercoating is accepted as an approved equal.
24. Section 1.06 Interior: New Flyers request to provide a Secure Diagnostic Station box located on the wheelhouse where the forward wall of the box acts as the upper portion of the barrier and the wheelhouse as the lower portion of the barrier is accepted as an approved equal.
25. Section 1.06, Interior: Alliance Bus Group request for 72.5-inch clearance on the rear upper deck is approved, provided it meets the requirements for padding on the overhead paneling. Padding is not required over the rear bench seat.
26. Section 1.06, Interior: ENC request to provide a 60.25 inch headroom for centerline of window seats on 30-foot units is accepted as an approved equal.

27. Section 1.06, Driver Barrier: Gillig's standard contoured fiberglass behind the seat driver barrier is accepted as an approved equal.
28. Section 1.06, Driver Security Barrier: please add ~~for~~ rotary hinges+after piano hinges
29. Section 1.06, Driver Security Barrier: ENC's request to provide a full height electrical cabinet located directly behind the driver in lieu of a driver barrier is accepted as an approved equal.
30. Section 1.06, Modesty Panels: ENC's request to provide 1/4-inch thick gray melamine panels is accepted as an approved equal.
31. Section 1.07, Floor: Please note: Due to the amount of salt and other corrosive solvents carried on boots and shoes into the passenger areas of the bus, zinc floor fasteners are not accepted as an approved equal.
32. Section 1.07, Floor: In the main passenger cabin, flooring that is butted tightly together where the floor meets the well housing and then sealed with a sealant is NOT accepted as an approved equal. Salts and solvents that are carried into the bus deteriorate seals on DTA buses, allowing contaminants to infiltrate the flooring.
33. Section 1.07, Floor: ENC's request for a floor hatch located on the curbside upper deck in front of the rear row of seats is accepted.
34. Section 1.07, Floor: ENC's request to apply Sikaflex 211 (gray) multi-purpose general sealant on the subfloor is accepted as an approved equal.
35. Section 1.08, Wheelhousing: Gillig's request to provide a Wheelhousing manufactured of 14-gauge 3CR12 type stainless steel is accepted as an approved equal.
36. Section 1.09, Doors: Alliance Bus Group's request for a 33-inch wide by 74-inch high clearance on the front door of the Vicinity 30 and 35-foot buses is approved.
37. Section 1.09, Doors: Alliance Bus Group's request for a 34-inch wide by 74-inch high clearance on the rear door of the Vicinity 30 and 35-foot buses is approved.
38. Section 1.09 Doors: ENC's request for a Vapor Slide Glide door with a front door clear opening width of 32-inches in the BRT style buses and 34-inch opening in the box style buses is approved.
39. Section 1.09, Doors: A Vapor slide-glide rear door with a 30-inch clear opening is approved.
40. Section 1.10, Service Compartments and Access Doors: ENC's request to only provide one roof escape hatch on the CNG bus is approved.
41. Section 1.10, Service Compartments and Access Doors: ENC's standard battery box hinged at the leading edge and held closed by a positive locking flush mount latch is accepted as an approved equal.
42. Section 1.10, Service Compartments and Access Doors: ENC's standard radiator and engine doors hinged at the leading edge and held by a positive locking flush mount sliding latch is accepted as an approved equal.
43. Section 1.10, Service Compartments and Access Doors: ENC's engine and upper access door with gas springs are accepted as an approved equal.

44. Section 1.10, Service Compartments and Access Doors: Gillig's request to provide interior access doors with top hinges with safety props is accepted as an approved equal.
45. Section 1.10, Service Compartments and Access Doors: Gillig's request to provide two interior access doors, one to service the transmission and one to service the engine, is accepted as an approved equal.
46. Section 1.12, Windshield Wipers: DOGA brand electronically controlled variable speed windshield wipers that are not synchronized, with a single control rotary switch is accepted as an approved equal.
47. Section 1.12, Windshield Wipers: Gillig's request to provide a driver's side wiper on the BRT styling package that parks along the middle of the windshield and the curbside wiper to park along the outer edge of the glass is accepted as an approved equal.
48. Section 1.13, Lighting, Controls, Instruments: ENC's request to provide exterior lamps operating on 24 VDC are accepted as an approved equal.
49. Section 1.13, Lighting, Controls, Instruments: Gillig's request to provide front and rear doorstep lights mounted adjacent to the step on the side of the coach is accepted as an approved equal.
50. Section 1.13, Headlights: Please add the words "LED/halogen" before the words "sealed beam type" in the first sentence, and add "or approved equal" at the end of the sentence.
51. Section 1.13, Headlights: Trucklite 7-inch round LED high/low complex headlights are accepted as an approved equal on the Alliance Vicinity Bus.
51. Section 1.13, Headlights: ENC's request for 9-inch round LED headlight with a minimum of a 320-hour rack life is approved.
53. Section 1.13, Taillights: ENC's proposed location of the accident prevention lights in the rear cap upper door is approved.
54. Section 1.13, Taillights: Gillig's request to include provisions only and pre-wire for the accident prevention system with three additional rear cap grill stop lights mounted above the three already called for is accepted as an approved equal.
55. Section 1.13, Interior Lighting: I/O Controls Corp interior lighting system is accepted as an approved equal.
56. Section 1.13, Interior Lighting: ENC's request to provide standard doorway and interior step lighting with 2-inch round LED lights for stepwell lighting is accepted as an approved equal.
57. Section 1.13, Interior Controls, paragraph 13, Driver Controls: Please delete the words "envelope described in SAE Recommended Practice J287, Driver Hand Control Reach." These standards do not apply to heavy duty buses. Controls should be within driver's reach.
58. Section 1.13, Controls, speedometer: A Datcon electronic gauge with a trip reset button is accepted as an approved equal.
59. Section 1.13, Table II, Controls: Please delete the words "with electric adjusting" after the accelerator pedal and the brake pedal so the requirement is consistent with the written specification.

60. Section 1.14, Interior Trim: Please delete the following: ~~+All plastic and synthetic materials used inside the bus shall be fire-resistant, except vinyl seat coverings which shall meet the requirements of Federal Specification CCC-A-680a Class 2(a)1 and seating upholstery textiles which shall meet the requirements for textiles in Federal Aviation Regulations Section 25.853(b), as tested in accordance with Appendix F of that part.~~

Please INSERT the following: ~~%~~All plastic and synthetic materials used inside the bus shall be fire-resistant, except vinyl seat coverings which shall meet the requirements of FMVSS 302 for smoke/flammability on transit vehicles.~~+~~

61. Section 1.14, Interior Trim: ENCs request to provide standard platinum gray 1/10-inch melamine sidewalls between the window posts that matches the sidewalls and ceiling is accepted as an approved equal.

62. Section 1.14, Interior Trim, Headlining: ENCs request to provide anodized aluminium trim J-moldings is accepted as an approved equal.

63. Section 1.14, Interior Trim, Headlining: ENCs request to provide slotted screw fasteners from ThermoKing in the standard air intake grille 95-inches above the floor is accepted as an approved equal in ENC buses with the ThermoKing Athenia AMI HVAC system.

64. Section 1.15, Passenger Seats: ENCs request to provide an aisle width of 21 inches in the 30-foot vehicle and 21 inches in 35-foot and 40-foot vehicles is accepted as an approved equal.

65. Section 1.15, Passenger Seats, paragraph 4, Wheelchair position: Please DELETE the following: ~~%~~The American Seating System with telescoping arm and retractable seat belts shall be used.~~+~~ The DTA has specified the Q-Pod system by QStraint.

66. Section 1.15, Passenger Seats: Please add the following:

~~%~~On 35-foot and 40-foot buses, tie down positions will be on either side of the bus, not both on the same side. Tie-down positions on 30-foot buses may be on the same side of the bus.~~+~~

67. Section 1.16, Drivers Seat: Please delete the words ~~%air bolster adjustment+~~ and insert ~~%with 3-cell air lumbar+~~

68. Section 1.16, Drivers Seat: Please delete ~~%A complete instruction sheet on the operations of the drivers seat shall be installed on the back of the front sun visor or on drivers effects door.~~

69. Section 1.16, Drivers Seat: Please delete ~~%Seat belt release shall be on the left-hand side of the driver.~~

70. Section 1.17, Floor: Please add the words ~~%SikaFlex 211 (gray) caulking after %~~D. Fuller Adhesive~~+~~

71. Section 1.17, Floor: Altro Transflor standard smooth floor covering in the center aisle is accepted as an approved equal. In paragraph 3, Passenger area, please delete the words ~~%longitudinally ribbed strip+~~ and at the rear door, delete the words ~~%transversely ribbed+~~

72. Section 1.18, Windows: a single pane, bonded in place windshield is not accepted as an approved equal for the DTA vehicles, but is accepted for Participating Agencies.

73. Section 1.18, Side Windows: Clarification: DTA or participating agency may select from a top tip in window with a frame, a top tip in window without a frame, or a flush mount, frameless window.
74. Section 1.18, Side Windows: ENC's request to provide optional flush framed windows made of 44% tempered glass in lieu of laminated glass for flush windows is approved.
75. Section 1.18, Side Windows: ENC's request to provide a framed with 28% laminated glass for the base bus is accepted as an approved equal.
76. Section 1.18, Side Windows: Please insert the following: The frames shall be black anodized aluminum, or aluminum frames with black power coat finish, or approved equal.
77. Section 1.18, Side Windows, please add ~~Icon~~ as an approved equal for Dura Ceramic Ink Jet Printing.
78. Section 1.18, Side Windows: ENC's request to provide extruded aluminum sash window frames painted black with an electrostatic coating process, Akzo Nobel/Sikkens Macroflex is accepted as an approved equal.
79. Section 1.18, Side Windows: Clarification: in the last light of the first paragraph, please DELETE ~~FMVSS 211~~ and insert ~~FMVSS-217~~, Bus Emergency Exits and Window Retention and Release.
80. Section 1.19, Insulation: AE64 Du Pont Styrofoam Square Edge is accepted as an approved equal.
81. Section 1.19, Sound Insulation: Please revise the dba level for the driver from 75 Dba to 77 Dba.
82. Section 1.20, Ancillary Features, paragraph 1, ~~Mirrors~~: ENC's pull down blinds on the driver's window and driver's side of the front windshield is accepted as an approved equal. Gillig's standard pull down sunscreens located at the driver's windshield and the driver's side window is accepted as an approved equal.
83. Section 1.20, Ancillary Features: Safefleet exterior fully adjustable, heated, remote control mirrors are accepted as an approved equal.
84. Section 1.20, Ancillary features, Exterior Mirrors: Gillig's request to delete the 5-inch convex mirror above the rectangular mirror on both sides of the coach and the 4-inch by 6-inch mirror mounted into the rectangular mirror on the passenger side of the coach and install a 5-inch by 7-inch convex mirror below the curbside mirror and a convex mirror mounted within the mirror housing on the street side mirror is accepted as an approved equal.
85. Section 1.21, Passenger Assists: Clarification: Ten hanging straps from the overhead assists must be provided in the general seating area of the bus. In addition, two hanging straps must be provided in the wheelchair seating area. Total number of straps for each bus is 12. Please delete the sentence ~~two grab straps per section (defined by vertical assists) shall be provided.~~ in paragraph (3).
86. Section 1.21, Passenger Assists: ENC's request to provide handrails constructed of 1-1/4 inch O.D. 304 stainless steel tubing is accepted as an approved equal.

87. Section 1.23, Wheelchair ramps and securements: Hometown request to provide the Vapor Door Control with Ramp Deploy and kneel operate by push buttons is accepted as an approved equal.
88. Section 1.23, Wheelchair Ramps and Securements, paragraph (1) Ramp: Please delete the words "(hydraulic backup)" in the first sentence. DTA does not require a hydraulic back up on the fold out electric ramp.
89. Section 1.23, Wheelchair Ramps and Securements: It is acknowledged that operating gaps in the ramp may allow dirt and debris to enter the ramp mechanism. A mechanical latch to release the ramp for manual deployment is accepted as an approved equal.
90. Section 1.24, Propulsion: A Voith D867.8 transmission with a top speed of 60 mph is accepted as an approved equal.
94. Section 1.24, Propulsion: A ZF TopDyn transmission is accepted as an approved equal at the Participating Agency's discretion.
92. Section 1.24, Operating Range: DTA acknowledges that terrain, traffic, driving style, weather and other factors affect the driving range of the coach. This number is a mileage goal, not a guaranteed minimum by the manufacturer.
93. Section 1.25, Power Plant Mounting and Accessories: New Flyer request to provide a diesel supply check valve for the primary fuel filter on the diesel engine is approved.
94. Section 1.25, Power Plant: Please add the following: **"All fuel lines, valves and fittings must be rated for use with B20 biofuels."**
95. Section 1.25, Power Plant Mounting and Accessories: Synthetic rubber lines with standard crimped end fittings manufactured by Manuli Rubber Industries and Aeroquip are accepted as approved equals provided they meet all Federal Safety Standards and are rated for B20 biofuels.
96. Section 1.25, Power Plant Mounting and Accessories: Alternate fuel filters will be accepted provided the primary filter is heated and meets the performance characteristics of the Davco 384.
97. Section 1.25, Power Plant Mounting and Accessories: Gillig request to provide an engine and transmission fluid drain plug that has an internal hex head is accepted as an approved equal.
98. Section 1.25, Power Plant Mounting and Accessories: New Flyer request to provide a check valve only in lieu of a fuel priming pump is approved.
99. Section 1.26, Engine: New Flyer request to provide a restriction indicator calibrated to 25-inches of water/vacuum is approved.
100. Section 1.26, Engine. A Neihoff C706 300 amp alternate is accepted as an approved equal on the Alliance Group Bus Vicinity 30-foot bus only.
101. Section 1.26, Engine. A Provalizer fitting is an approved equal.
102. Section 1.26, Engine, New Flyer request to provide a 500 amp alternator is approved.
103. Section 1.26, Engine. A Cummins ISB 6.7 engine is not accepted as an approved equal on 35-foot and 40-foot buses. It is accepted on an Alliance Bus Group Vicinity 30-foot bus.



104. Section 1.26, Engine: A dipstick and fuel level display in the rear run box is approved.
105. Section 1.26, Engine, paragraph 6: ENC request to supply a screw-on type cap for checking engine coolant level meeting Cummins design requirements for EPA 2017 and beyond is accepted as an approved equal.
106. Section 1.26, Engine: Gillig request to provide a Cummins B6.7 diesel engine rated at 280 HP and 660 pounds/torque is on the hybrid vehicles is accepted as an approved equals.
107. Section 1.26, Engine: Gillig request to provide a radiator/CAC cooling system with electronic fans is accepted as an approved equal.
108. Section 1.26, Engine: A radiator with 1/4-inch MPT brass hex plug at the low point in lieu of a petcock is accepted as an approved equal.
109. Section 1.26, Engine: Please delete the requirement that manufacturer will replace the Modine or Montreal radiators within **five** years, and insert that the manufacturer will replace the Modine or Montreal radiators within **three** years.
110. Section 1.26, Engine: Gillig request to provide FC186 stainless steel Teflon braided hose is accepted as an approved equal.
111. Section 1.26, Engine: Parker #V500P brass ball valves are accepted as an approved equal to gate valves.
112. Section 1.26, Engine: DTA acknowledges that biodiesel fuels in excess of B5 from non-BQ9000 suppliers may void the warranty.
113. Section 1.26, Engine: Please delete the words ~~%Offeror+~~ and insert the words ~~%a~~ authorized dealer of the component+ in the following sentence: ~~%A~~ All major repairs during the warranty period will be the responsibility of the ~~Offerer~~ authorized dealer of the component.+
114. Section 1.26, Engine: Gillig request to provide an engine oil extraction fitting at the engine oil filter head is accepted as an approved equal.
115. Section 1.26, Engine, paragraph 7, Transmission: A separate fitting is not required beyond the standard Voith transmission port on the side of the housing to collect oil.
116. Section 1.26, Engine, paragraph 7, Transmission: Please change the allowable time for a 3M mechanic to remove, replace and prepare the transmission assembly for service from ten total man hours to sixteen total man hours.
117. Section 1.26, Transmission: A Voith D867.8 seven speed transmission is accepted as an approved equal.
118. Section 1.26, Transmission: Gillig request to provide a rear-mounted stainless steel transmission oil cooler/heat exchanger of fluid to water (non-rebuildable) manufactured by Modine is accepted as an approved equal.
119. Section 1.26, Transmission: Please delete the word ~~%fferor+~~ and insert the words ~~%a~~ authorized dealer of the component+ All major repairs to the transmission during the warranty period will be the responsibility of the ~~Offerer~~ authorized dealer of the component.
120. Section 1.28, Final Drive: A Dana Model BRA 81 DC 80 rear axle is accepted as an approved equal on the Alliance Bus Group Vicinity 30-foot model.

121. Section 1.28, Final Drive: An Arvin-Meritor Model RS23 service rear drive axle is accepted on the 30-foot ENC bus.
122. Section 1.28, Final Drive, A Meritor RS23160 rear axle on the 29-foot Gillig coach is accepted as an approved equal.
123. Section 1.28, Final Drive: Arvin Meritor heavy duty rear axles with fixed load tubes are accepted as an approved equal.
124. Section 1.28, Final Drive: ENC's request for a Dana 1810 Series propeller unit on 35-foot and 40-foot buses is accepted as an approved equal, provided it must be fully guarded to prevent it from striking the floor of the bus or the ground.
125. Section 1.29, Suspension: Independent front suspension is not accepted as an approved equal on the DTA buses, but may be accepted as an equal upon Purchasing Agency request.
126. Section 1.29, Suspension: A front suspension regulated by a SmartRider electronic leveling system and a rear suspension equipped with Barksdale mechanical leveling valves on the New Flyer coaches are accepted as an approved equal.
127. Section 1.29, Suspension, Damping: Please change the requirement for replacement of the shock absorber from 15 minutes to one hour.
128. Section 1.29, Suspension: Clarification: The warranty on the pneumatic system regulated by leveling valves is 50,000 miles.
129. Section 1.29, Suspension: A 15.5-inch floor height from the longitudinal centerline of the coach, and a floor height of 11.5-inches when kneeling is accepted as an approved equal on the New Flyer coach.
130. Section 1.30, Steering: Hometown Trolley's request to provide TRW Model Steering is accepted as an approved equal.
131. Section 1.30: Steering: Please change the following: %fatigue life of all steering components shall meet or exceed 500,000 miles.+
132. Section 1.30, Steering: Douglas Model 920 steering column is accepted as an approved equal.
133. Section 1.31, Brakes: New Flyer's request to provide a MAN axle with %unitized+non-serviceable, maintenance free wheel bearings is approved.
134. Section 1.31, Brakes: Tire size 305/70R22.5 may be accepted as an approved equal by the respective agency.
135. Section 1.31: Brakes: Hometown Trolley's request to mount the air tanks in the lower access under the driver's platform is accepted as an approved equal.
136. Section 1.31, Brakes: A Haldex Gemini air dryer with an integrated oil/water separator is accepted as an approved equal. A SKF High Capacity Turbo 2000 dual desiccant cartridge heated air dryer is accepted as an approved equal.
137. Section 1.31, Brakes: A Bendix Model AD-9 air dryer is accepted as an approved equal.
138. Section 1.31, Brakes: A blue-colored airline denoting Suspension related lines is accepted.

139. Section 1.31, Brakes: Synthetic rubber lines with standard crimped end fittings, Equator 1/Equator 2/2807PTFE/GH100 fittings, manufactured by Manuli Rubber industries and Aeroquip are accepted as approved equals.

140. Section 1.31, Brakes: A rear disc parking brake is accepted as an approved equal.

141. Section 1.31, Brakes, paragraph 4: Please delete the following: ~~%Regardless of the system's air pressure, idle up to the rated engine speed shall be available to the driver with the transmission in neutral and the parking brake applied. The air system shall have an oil separator. ADIT High cycle required. Contact Jim Caywood at 218-623-4332 for further information.+~~

Please add: %Contractor must provide a provision to separate the oil from the air. A wet tank is accepted as an approved equal.+

142. Section 1.31: Brakes: ENC's standard air tank design with a wet tank stored within the engine compartment and the auxiliary tanks are stored above the rear engine deck are accepted as an approved equal.

143. Section 1.31, Brakes: Gillig's air system consisting of two dual-compartment air reservoirs mounted in the roof structure of the air tank compartment under the roof above the front wheel wells is accepted as an approved equal.

144. Section 1.31, Brakes: e-Stroke electronic brake monitoring system for disc brakes is accepted as an approved equal at the Participating Agency's discretion.

145. Section 1.31, Tires: Clarification, because of the design of the air tanks, petcock drains are not applicable. Please delete the following: ~~%All air tanks to be equipped with quality brass petcock type drain cocks.+~~ Gillig's request to provide 4 drain valves on the roadside of the bus above the battery box is accepted as an approved equal.

146. Section 1.31, Tires: Front wheel size 275/70R 22.5 inch tires are not accepted as approved equal on the 35-foot and 40-foot buses.

147. Section 1.31, Tires: Rear wheel size 385/55R 22.5 inch single tires are not accepted as approved equals on the 35-foot and 45-foot buses.

148. Section 1.32, Fuel Tank: Clarification: Fuel tanks larger than 100 usable gallons are accepted on 35-foot and 40-foot buses.

Fuel tanks with at least 75 usable gallons on 30-foot buses are accepted as an approved equal.

149. Section 1.32, Fuel Filler: Clarification: A fuel filler located on the curbside of the bus forward of the rear passenger door is accepted as an approved equal on 30-foot buses.

150. Section 1.32, Fuel Filters: Gillig's request to provide a gravity fill fuel filter is accepted as an approved equal.

151. Section 1.32: General Chassis: Fuel lines forward of the engine bulkhead that are orange colored is approved. All fuel lines **must be rated for B20 fuels.**

152. Section 1.32: General Chassis: Aeroquip GH100 high pressure diesel fuel hoses are approved equals provided they are rated for B20 biofuels.

153. Section 1.32, General Chassis: ENC's request to provide a remote secondary fuel filter is accepted as an approved equal.

154. Section 1.32, General Chassis: ENC's request to provide a 304 stainless steel fuel tank is accepted as an approved equal.

155. Section 1.33, Bumpers: Gillig's request to provide energy absorbing bumpers manufactured by Ro-Lab American Rubber Company in a three piece design in the front and a section design in the rear without side extensions is accepted as an approved equal.

156. Section 1.34, Electrical: Please DELETE the following: ~~%All wire harnesses over 5-feet long and containing at least five wires shall include 5% excess wires for spares that are the same size as the largest wire in the harness excluding the battery cables.+~~ The DTA no longer requires the spare wires.

157. Section 1.34, Electrical System: ENC's request to provide sonically welded splices are accepted as an approved equal.

158. Section 1.35, Batteries: The DTA prefers two jump start connectors, one in the front of the coach and one in the rear. Anderson 350 jump start connectors are accepted as approved equals.

159. Section 1.35, Batteries: Please delete the following: ~~%Different sized positive and negative posts will be provided.+~~ DTA no longer requires this provision.

160. Section 1.35, Batteries: Convuluted PVC loom type material battery cables are accepted as an approved equal.

161. Section 1.35, Batteries: ENC's request to provide a battery compartment aft of the rear wheel on the right side of the bus, is protected from tire spray and houses circuit breakers and the rotary Master Battery Disconnect Switch is approved.

162. Section 1.35, Fire Detectors: Gillig's request to provide a fire detection system utilizing linear wire is accepted.

163. Section 1.35: Farebox Collection: Gillig's request to provide a 5.86-inch high farebox pedestal is accepted as an approved equal.

164. Section 1.35, Fire Detection and Suppression: Please DELETE the following:

~~%Optical fire detectors shall sense infrared radiation emitted from a fire (three-dimensional detection) and be designed for use in engine compartments. Optical fire detectors must be able to view a fire in order to detect and must be mounted per the installation instructions. The optical detector shall have at least a 90 degree conical field of view. The optical fire detector shall have a response time of less than one half of one second to a fire. The optical detection system in the engine compartment will be comprised of at least two each infrared optical fire detectors.+~~

The DTA no longer requires an optical flame sensor.

165. Section 1.36, Supplemental Heat: The DTA no longer requests the Wabasto 300, 104,000 BTU supplemental heater.

Please insert: ~~%Broheat X-30 31,000 BTU diesel fuel fired auxiliary heater or approved equal.+~~

166. Section 1.36. Supplemental Heat: An LED back-lit toggle switch in lieu of a dash light is accepted as an approved equal.

167. Section 1.36, Interior Climate Control: Please correct the Thermo King Intelligaire II unit to Intelligaire III unit.

168. Section 136, Interior Climate Control: ENC's request to provide the ThermoKing Athenia AMI Rooftop Mounted HVAC system is accepted as an approved equal. The HVAC system will be mounted at the rear of the CNG buses.

169. Section 1.36, Interior Climate Control: Gillig's request to provide standard heat air ducting located on the ceiling lines above the windows is accepted as an approved equal.

170. Section 1.36, Interior Climate Control, Driver's Area: Please insert the following: ~~The~~ DTA prefers, but does not require, that the defrost system be capable of mixing drier outside air during winter months to reduce moisture on the interior windows. ~~The DTA does not require this feature.~~

171. Section 1.36, Interior Climate Control, Driver's Area: Gillig's request to provide a driver's two speed fan that provides cooled or heated air from the passenger heater or air conditioner is accepted as an approved equal.

172. Section 1.36, Interior Climate Control: Gillig's request to provide an engine air intake system through a louvered or grilled screen opening located curbside just below the roof line at the rear of the coach is accepted as an approved equal.

173. Section 1.36, Interior Climate Control: Gillig's request to provide standard HVAC return air filters with a dust holding capacity of 40 grams and 42% weight arrestance is accepted as an approved equal.

174. Section 1.36, Interior Climate Control: Please ADD the following: ~~Contractor shall~~ include the S391 Screw-type compressor in cost for the ~~base bus~~for the DTA.

175. Section 1.36, Interior Climate Control: Please ADD the following: Contractor shall include the brushless evaporator and condenser motor in the cost for the ~~base bus~~for the DTA.

#### **IV. Section Number: SPECIAL TRAINING**

1. Paragraph 1, please add the following: ~~At the Participating Agency's~~ option, remote training may be provided. Contractor shall provide separate pricing for in-person and remote training.

2. Paragraph 1, please add the following: ~~For~~ all training requirements, the DTA or the Participating Agency, shall, at their discretion, determine if in-person or remote training sessions are needed. Contractor shall cooperate with the DTA or the Participating Agency to schedule the type of training, in person or remote, that best meets the needs of the Agency.

3. Please add the following: ~~The~~ DTA estimates that approximately 14 drivers and operators may participate in each phase of the maintenance training.

4. Paragraph 2, please add the words ~~on-site or remote~~ in front of ~~orientation~~. Please delete the word ~~instruction~~ and insert the word ~~information~~ for the behind the wheel training on transmission shifting patterns, the braking system and turns. The DTA does not require the Contractor to provide driving instruction.

5. Paragraph 2, Please DELETE the following: ~~The instructor will be on-site until the buses are able to be put into service.~~

Please INSERT the following: ~~%~~ Contractor shall work with the Participating Agency to schedule a service technician to be on-site soon after the buses start arriving, or as mutually agreed by the Agency. The technician will continue to be available on site for as many workdays as necessary to get all buses accepted for service. This also applies to pre-set or regularly scheduled service visits during the warranty period.+

## **DOCUMENTATION**

1. Documentation: Please DELETE the following: ~~%~~ Sources for all spare parts shall be identified. Samples of this documentation shall be submitted for DTA approval prior to the start of installations. If the bidder does not have them in their documentation information from subs, then they must supply similar documentation from that sub.+

## **FINISH AND COLOR**

1. ~~%~~ Finish and Color+, SikaGard 6682 is accepted as an approved equal undercoating.
2. Exterior Colors: AkzoNobel/Sikkens paint system, and Axalta Imron Elite are accepted as approved equals.
3. Finish and Color: SikaGard 6682 heavy duty undercoating is accepted as an approved equal.

## **DECALS AND MONOGRAMS**

Please Delete: ~~%~~ Buses will be numbered 141 to 150 for Duluth.+

## **WARRANTY**

1. 1.1 Warranty Requirements: Please add the following: ~~%~~ In the event that production or delivery of the coaches are delayed under a Force Majeure event prior to all of the coaches being completed and delivered, the warranty period for the partial coach delivery shall begin upon acceptance of the last coach delivered or on the date each coach is placed into revenue service, whichever comes first. When production and delivery restarts after a Force Majeure event, the warranty period for the remaining coaches to be delivered shall be when the last coach is delivered or the date when each coach is placed into revenue service, whichever comes first.
2. Section 2.1, Repair Performance: Please add ~~%~~ including an equipment supplier or designated authorized dealer+ to the designated representative definition.
3. Please add the following: ~~%~~ New Flyers Customer Warranty Portal is an accepted process for documenting warranty repairs on New Flyer vehicles, as are standard warranty procedures from other Contractors that meet the intent of the Contract Documents.+
4. Section 2.3.2, Contractor Supplied Parts: Please add the following: ~~%~~ Contractor shall maintain a sufficient supply of high usage and fast moving parts to prevent delays in delivery to the procuring agency. If additional time is required by the Contractor to supply parts to allow an engineering review, within 10 days of the procuring agency request, the Contractor will supply an action plan for the new parts requested.+

5. Section 2.3.3, Defective Component Returns: Please add the following words after ~~the instructions:~~ ~~to~~ no later than 45 days after the discovery of the defective part unless otherwise agreed to by the Contractor and the procuring agency.
6. Section 2.3.4, Reimbursement for Labor: New Flyer requests that reimbursement by contractor for agency supplied labor to be consistent with New Flyer's Standard Repair Time Manual. DTA will agree to add the following language: ~~Upon~~ upon advance written agreement between the procuring agency and the Contractor, the Contractor may use its Standard Repair Time for reimbursing the procuring agency for labor. If the actual, documented time spent for repairs performed by the procuring agency exceeds the Standard Repair Time by more than 20% of the Contractor's Standard Repair Time and is not due to errors or omissions by the procuring agency, actual hours shall be used unless otherwise agreed to by the procuring agency.+
7. Section 2.3.5, Reimbursement for Parts: New Flyer's request to reimburse the procuring agency for parts required to correct a defect during the warranty period at will be reimbursed at the then current published price plus applicable taxes, and handling costs of up to \$100 per claim is approved, provided New Flyer pre pays shipping for the procuring agency to return the parts to the nearest New Flyer parts distribution center.
8. Section 2.5, Warranty of Basic Coach Structure, please add the words ~~at the Contractor's~~ option+after ~~the~~ Contractor will+in the eighth sentence.
9. Section 2.5, Warranty of Basic Coach Structure At the end of the Section, please add the following: ~~Minor,~~ Minor, warranty covered repairs will be completed by the procuring agency. Major warranty repairs will be coordinated between the Contractor and the procuring agency. Repairs beyond the procuring agency's expertise will be completed by the Contractor.+

#### IV. INTELLIGENT TECHNOLOGY SPECIFICATIONS

1. Paragraph 1 (a) please change the front sign to a 17 by 160 matrix configuration.
2. Section 1.3, Data Communication, paragraph a: Please delete the following: ~~we currently do not have this, we currently upload data once the vehicle pulls in, it currently just picks up where it left off.)+~~
3. Section 1.3. paragraph b, please insert ~~FirstNet~~ FirstNet+after 4G: ~~It~~ shall be a rugged, all-in one 3G/4G FirstNet mobile communications solution with true enterprise class routing, security and firewallö +
4. Section 2.0, Automatic Vehicle Locator: Please delete the part numbers for the cellular modem: ~~25T0422-002, 24T0782-001, 75T1199-025.+~~

The DTA is requesting the Sierra MG90 cellular modem and applicable cabling and antennae.

5. Section 2.0, Automatic Vehicle Locator: Cradlepoint IBR 1700 router with WiFi is accepted as an approved equal at the Participating Agency's discretion.
6. Section 3.3, Destination Signs, paragraph 1. : Please DELETE the following:  
~~A side destination sign shall be provided, as well as a remote emergency switch shall be provided that will display an emergency message on the exterior of the vehicle. The message will not appear on the driver's message monitor. The switch will be mounted on the driver's control panel and not the floor area. Controls will be reachable by a seated driver.+~~

7. Section 3.1, Destination Signs: Please DELETE the word yellow and insert amber or white, and insert the words color as option. The colors of the signs will be amber or white dots on black background, color as option.

8. Section 3.3.1, Destination Signs, paragraph a, Front Sign: Please insert 7 row by 160 column.

9. Section 3.3.1, Paragraph 3, Destination Signs, paragraph c: Clarification: The DTA does not have a street side sign. Please delete the words street side sign in the title and everything after the word bus in the first sentence:

~~Provide 16 x 48 matrix signs in the rear of the bus and in the top of the front street side window behind the driver's barrier. If the top of the front street side window (behind the driver's barrier) is unavailable for sign placement, then place the sign in the top of the next window back.~~

Please add 5 row by 48 column.

Provide 15 row by 48 column amber dots on a black background in the rear of the bus.

Please add: Illig request to mount the rear sign on the HVAC panel is approved.

10. Section 3.3.1, Destination Signs, paragraph D, Sign Control: Please DELETE the words via the DDU. at the end of the paragraph.

11. Section 3.3.1, Destination Signs, paragraph D, Sign Control, please add the following:  
ENC request to provide a destination sign control panel located left in in reach of the driver in an overhead switch panel is accepted as an approved equal.

12. Section 3.3.2, Sign Lighting and Boxes, subparagraph (c): please delete the second paragraph, there are no street side signs and curb side and rear signs do not have compartments, the signs are mounted on brackets.

13. Section 3.4, Communications Antennas, please add the words, sealed with waterproof caulk after the words machine screws.

Unpainted antennas are mounted with rivnuts and machine screws, sealed with waterproof caulk; installation to be approved by the DTA.

14. Section 3.5, Radio: Please delete TRS and TRS RF. Please insert See Technical Spec 2.0 for part numbers.

15. Section 3.6, GPS, please DELETE TRS and Mobile Mark SM1575 GPS and CAB 000030640140050. Insert the following:

2.6 GPS (see Technical Specification 2.0 for part numbers.)

a. In addition, to the antenna is a dual-band GPS/WLAN. This antenna will be located on the roof of the front of the bus, have an unobstructed view for satellite reception and not interfere with other communication devices. The cable will run from the GPS location to the equipment box with three feet of cable coiled at non-terminated ends.

7. Please change Section 3.6 (b), Mobile Access Router:

Provide a Sierra Wireless AirLink 6-in-1 dome antenna . 2xLTE, GNSS, 3x WIFI, 2.4 and 5 GHz, Bolt Mount, white or approved equal antenna with cable leading into the EEC and ending in a 3-foot coil of extra length. This antenna shall be mounted near the front edge of the roof.



8. Section 3.6, GPS, paragraph (d): ENC request to provide white access covers is accepted as an approved equal.

9. Section 3.6, GPS, paragraph (e): Please DELETE this paragraph entirely.

10. Section 3.7, Passenger Signal, subparagraph 1, System A: Please change the number of signs from two to One. Please delete the words: ~~at the rear of the driver's barrier and one single sided sign opposite the rear door~~ +

Please add: ~~ENC~~ request to provide a Hydrobrand brand tiller rope guide is accepted as an approved equal. Gillig request to provide pull cord clamps with a Phillips head screw is accepted as an approved equal.+

11. Section 3.8. Public Address System: Only four speakers are required on 30-foot buses.

12. Section 3.8, Public Address System: Gillig request to provide an external P.A. Midwest #1180 weatherproof speaker mounted in the curbside skirt panel adjacent to the front door is accepted as an approved equal.

13. Section 3.9, Automatic Passenger Counter Provisions: Please add ~~%see~~ Technical Specification 2.0 for part numbers+after the title. Please Delete ~~%MAPC~~ in paragraph (a).

14. Section 3.11, paragraph (c), delete the last line: ~~%Pay particular attention to mounting the handset and the driver's microphone to prevent interference.~~+

15. Section 3.12, Driver Display Unit: Clarification: Contractor shall install the Driver Display Unit at the time of manufacture.

16. Section 3.12, Driver Display Unit: Gillig request to provide RG 58 coaxial cable routed to protect the cable is accepted as an approved equal.

17. Section 3.13, Emergency Alarm: Please add ~~%see~~ Technical Specification 2.0 for Part numbers.)

18. Section 3.14, Cable Installation: Please insert the words ~~%or~~ description+after ~~%W~~ numbers.

19. Section 3.14, Cable Installation: Clarification: the Contractor shall install the Trapeze CAD/AVL system in the DTA base bus and include the cost of the noted cables with the cost of the base bus. Please note that these cable specifications set the standard for the cables for the CAD/AVL system, but are to be labeled as requested to facilitate easier identification for technicians.

20. Section 4.4, Multiplex Level, paragraph a, Data Access: Gillig request to provide three diagnostic connector ports with one accompanied with a 12v power outlet, one near the rear run box in the engine compartment, one under the dash at the driver's left knee, and one with a 12-v power port located in the overhead I/O Controls multiplexing system compartment is accepted as an approved equal.

21. Section 4.4, please add ~~%in~~ the event of bankruptcy or material breach of the contract+  
~~%The~~ DTA requests to have full programming access to the multiplex system in the event of bankruptcy or material breach of the contract.+

22. Section 4.6, Camera Surveillance System: At the end of the first paragraph, please add the words ~~%in~~ installation of Door Open/Close Discrete Signals.+

23. Section 4.7, Transit Signal Priority System, please add a GPS control:

Provide and install Opticom Transit Signal Priority Multimode Emitter, Low Priority, model 794TM, part number 76-100-114-0, and GPS Control Unit, Low Priority, part number 76-1000-116-00 (kit) in accordance with these specifications and manufacturer's instructions.

Please add: GPS Control Unit roof mount, cable path shall be approved by the DTA.+

24. Please ADD section 4.8, Mobile Fare Collection Solution:

4.8. Mobile Fare Collection Solution

a. Provide all connections for Masabi Validator to Cellular Modem. DTA to install the validators.+

- VI. 1. Clarifications on the RFP portion of the specifications will be provided under a separate addendum.**
- 2. Clarifications and corrections to the Vendor Pricing Sheet will be provided under a separate addendum.**
- 3. The marked up RFP and Technical Specification will be provided under a separate addendum for reference purposes.**