# Request for Proposals: Repower of Diesel School Bus to Electric School Bus

October 2022



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# **Forth Mobility**

**Request for Proposals** 

Repower of Diesel School Bus to Electric School Bus

October 17th, 2022

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# **General Information**

Proposals Due:	Not Later than 5:00 PM Pacific Time, December 2nd, 2022
	NOTE: NO APPLICATIONS WILL BE ACCEPTED AFTER 5:00PM PT ON FRIDAY, DECEMBER 2, 2022.
Submit Proposals to:	Adrian Gomez adriang@forthmobility.org NO HARDCOPY SUBMITTALS WILL BE ACCEPTED.
Direct Questions to:	Adrian Gomez adriang@forthmobility.org Deadline for Questions: October 31st, 2022

- Attachment A: Standard Terms and Conditions
- Attachment B: Proposer Certification Form
- Attachment C: <u>Reference Form</u>
- Attachment D: Price Proposal Form
- Attachment E: RFP Evaluation Criteria
- Attachment F: Electric School Bus Specifications

## Introduction and Overview

<u>Forth</u>, a nonprofit organization located in Portland, Oregon, has a grant from the federal American Rescue Plan Act (ARPA) to further the adoption of electric school buses (ESBs) in Oregon. One element of this grant is repowering a mid-life diesel school bus with an electric powertrain. This Request For Proposals (RFP) focuses solely on that repower element. The larger context for ESB adoption is that the federal government is investing five billion dollars over five years in clean school buses via its <u>Clean School Bus Program</u>, with at least half of that amount devoted specifically to electric school buses.

About 8,000 school buses operate in Oregon. All but about six of them are currently powered by internal combustion engines, primarily diesel. The first two of the six ESBs currently in Oregon are owned and operated by Beaverton School District (BSD). BSD's experience with ESBs has led it to be selected for the repower portion of the ARPA grant.

Forth seeks written proposals from qualified vendors to repower one 2008 diesel school bus, owned and operated by BSD, with an electric powertrain. Performance of the repower work will occur in or near Washington County, Oregon. The repowered bus must meet or exceed Oregon Department of Education standards described in <u>581-053-0240</u> <u>Minimum Standards for School Buses</u>. Forth intends to award a single contract as a result of this RFP. This determination will be based upon the evaluation of scores underlying the rank of each proposal and shall be at the sole discretion of Forth.

The goal of this pilot project is to prove the concept that repowered buses can run reliably and that repowering a mid-

life diesel school bus is a viable, cost-effective alternative to buying a new ESB. The vision is that this project's success will facilitate, in the coming years, a large proportion of Oregon's diesel school buses to become repowered with electric powertrains.

## **About Forth**

Forth is a nonprofit organization dedicated to the equitable advancement of clean transportation. Forth's mission is to electrify transportation by bringing people together to create solutions that reduce pollution and barriers to access. Learn more at <u>forthmobility.org</u>

# **About Beaverton School District**

Beaverton is one of the major cities in the Portland Metropolitan Area. The Beaverton School District Transportation Department owns and operates one of the largest school bus fleets in the state and transports 28,000 students daily with a fleet of 300 school buses traveling 3,000,000 miles annually. The repowered electric bus will exclusively serve Title I schools.

# Timeline

ACTIVITY	DATE
Issuance of Request for Proposal	October 17th, 2022
Deadline for Questions or Clarifications	October 31st, 2022
Pre-bid Meeting	November 2nd, 2022
Proposals Due	December 2nd, 2022
Proposal Presentations	Week of January 16th, 2023
Notice of Intent to Award	February 17th, 2022
Anticipated Contract Start	March 20th, 2022

Forth reserves the right to deviate from this schedule, and to add a "best and final offer" process if deemed appropriate, though Forth is under no obligation to do so. If Forth, in its sole discretion, adds a best and final offer process, Forth will notify all Proposers that have submitted competitive Proposals of any terms and conditions of such process that are in addition to those specified below.

# **RFP** Questions, Clarifications and Changes

Any Proposer requiring clarification of the information provided in this solicitation must submit specific questions or comments via email to the Contact shown on page 1 of this document. Email is the preferred form of written communication. The deadline for submitting such questions is shown above.

# **Equity in Public Purchasing & Contracting Policy**

Forth strives to achieve race and gender equity and expects any firm contracting with it to do the same. Forth seeks when possible to increase contracting opportunities for Minority Business Enterprises (MBE), Women Business Enterprises (WBE), businesses owned by Service Disabled Veterans (SDV) and/or Emerging Small Businesses.

# **Scope of Work**

## Scope of Work

In an effort to further the electrification of transportation in Oregon, and to accelerate and render more affordable the state's adoption of electric school buses, Forth is requesting written proposals to perform, in or near Washington County, Oregon, the repowering of a diesel school bus with an electric powertrain. The finished bus must run reliably and meet or exceed guidelines set forth by Oregon Department of Education's <u>581-053-0240 Minimum Standards for</u> <u>School Buses</u>. Proposers will be evaluated using the Evaluation Criteria Document (please see Attachment E).

The repowered bus must be able to charge reliably from BSD's existing charging equipment, which are Nuvve Level 2 Charging Stations, single phase. Data collection and sharing on the performance of the finished bus with Forth and BSD is also a requirement. The below describes the diesel bus to be repowered.

Model year:	2008
VIN:	1BAKCCPA18F254352
Base platform	Blue Bird Vision – purpose built. Not a conversion
Wheelbase – was it stretched?:	WB is 217" and was not stretched.
Current rear HVAC set-up:	No AC; 80,000 btu rear heater
School bus body manufacturer:	Blue Bird

Additionally, it is desired that the repowered bus has the capacity to store 130 kW or a sustained range of 100 miles. While these specifications are desired, Forth and BSD will consider proposals for electric buses that store less than 130kW or have a sustained range of 100 miles. Finally, Forth and BSD will consider proposals that repower a different bus than the one stated above as long as it's a Type C Blue Bird with a 217-inch wheelbase. Please see Attachment F for more information on bus specifications.

## **Contractor Performance**

Contractor will provide a plan for on-call service for repairs and maintenance concerns that are beyond the scope of the BSD service team in regards to the electric powertrain of the bus.

Contractor will provide all warranty work, either on-site or arrange offsite.

Contractor will be responsible for motor and powertrain repair and preventative maintenance.

Contractor's work shall be performed in a good and workmanlike manner and in accordance with the highest professional standards, (3) Provider shall, at all times during the term of this Contract, be qualified, professionally competent, and duly licensed to perform the Work.

## **Beaverton School District Responsibilities**

BSD will provide the charging infrastructure, charging station and electricity source. It will also perform all non-motor related preventative maintenance service.

## **Proposal Format, Content, and Submission**

## **Proposal Format**

Forth proposal standards:

a) Proposal shall include a one-page cover letter as the first page of the proposal.

b) Proposal shall address all evaluation criteria in the order presented

Please do not include sales or promotional materials as part of your proposal.

## **Proposal Content**

Proposals shall include all elements listed in the Evaluation Criteria sheet below. Proposals lacking one or more of the elements below may be rejected as non-responsive.

## **Attachment B: Proposer Certifications and Representations**

Include a completed Attachment B: Proposer Certifications and Representations form, signed in ink.

#### **Proposal Responses to Evaluation Criteria**

Address each of the following Evaluation Criteria completely, and in the order provided (please see Attachment E).

# **Proposal Submission**

#### Electronic Submittal

Submit electronically to <u>adriang@forthmobility.org</u> no later than 5 p.m. on December 2nd, 2022. Submissions will be acknowledged with an email stating they were received.

#### Hardcopy Submittal

NO HARDCOPY SUBMITTALS WILL BE ACCEPTED.

## **Proposal Evaluation and Award**

## **Clarification of Responses**

In the event that one or more proposals are in need of clarification, Forth will request such clarification in writing and will afford the Proposer(s) contacted an opportunity to respond in kind, with the necessary clarification.

## **Proposal Evaluation**

The evaluation process of this RFP will consist of a written proposal evaluation as well as a virtual presentation.

An Evaluation Committee consisting of not less than three individuals, including at least two from Forth and at least one from BSD, shall evaluate the proposals. Each evaluator will independently evaluate and score proposals per the Evaluation Criteria. Forth may assign certain evaluators specific Evaluation Criteria and give particular weight to their responses, aligning with the evaluator's expertise.

After the proposals are submitted, the Evaluation Committee will score all submissions and select the highest-ranked proposals to be presented to the committee at a later date. Proposers will be contacted if the committee would like to schedule a presentation with them, and these presentations will take place virtually. In these presentations, Proposers will have the opportunity to expand on their proposal, meet the committee, as well as answer any questions the committee may have.

## **Ranking of Proposals**

Evaluations will be scored by rank. The highest-ranked proposal will be determined as follows:

- A. Each evaluator will assign a ranking to each proposal, based on the total score he or she awarded each proposal based on the evaluation criteria points.
- B. The proposal to which the evaluator awarded the most points will receive an Evaluator Final Rank of 1. The proposal to which the evaluator awarded the second most points will receive an Evaluator Final Rank of 2, and so forth.

C. The District will then sum the Evaluator Final Ranks for each proposal. The proposal with the lowest total final rank (the sum of all Evaluator Final Ranks) will be ranked first. The proposal with the second lowest final rank will be ranked second, and so on. The proposal with the highest final rank will be ranked last.

## **Tier 1: Written Proposal Evaluation**

- A. Each evaluator shall independently score and then rank proposals in accordance with the Evaluation Criteria.
- B. Forth staff members and BSD bus fleet personnel shall serve as evaluators.
- C. Forth shall sum the Tier 1 rankings per proposal for a total written evaluation ranking for each proposal.

#### **Best and Final Offers**

- A. At its sole discretion, Forth may require Best and Final Offers.
- B. At its sole discretion, Forth may re-establish the competitive range, based on written and interview rankings. If Forth exercises this option, it will require Best and Final Offers from Proposers within the re-established Competitive Range.
- C. In the event Forth requires Best and Final Offers, it shall establish a common date and time by which eligible Proposers must submit such Best and Final Offers. Forth shall evaluate Proposals as modified by the Best and Final Offer on the basis of the Evaluation Criteria.
- D. If a Proposer does not submit a Best and Final Offer or a notice of withdrawal, the Proposer's original proposal shall be construed as its Best and Final Offer.

#### References

Forth reserves the right to investigate references, including customers other than those listed in a Proposer's submission. This inquiry may include without limitation, investigation of past performance of any Proposer with respect to its successful performance of similar projects, compliance with specifications and contractual obligations, completion or delivery of a project on schedule, and its lawful payment of employees and subcontractors.

#### Notification of Intent to Award

Forth shall notify Proposers of its Intent to Award by sending emails to each Proposer by the "Notice of Intent to Award" date stated in the Timeline table above. Both the successful Proposer and those whose proposals were not selected will be notified.

## Solicitation Terms and Conditions; Protest of Solicitation or Award

## **Proposer Cost of Response Preparation**

Proposers will bear sole responsibility for all costs incurred in preparing and providing their proposals in response to this RFP.

#### **Submitted Materials are Forth Property**

All materials submitted for any proportion of a Proposal in response to this RFP, or during any tier of this solicitation, will become the property of Forth and will not be returned to proposers.

## **Proposal Validity**

Proposals will remain valid for a period of 90 days following the Proposal submission deadline.

## Solicitation Cancellation, Rejection of a Proposal or All Proposals

Forth may cancel the Procurement or reject any or all Proposals in its sole discretion.

Forth is not liable to any Proposer for any loss or expense caused by or resulting from the cancellation of a solicitation or rejection of a Proposal.

#### Disputes

In case of any doubt or difference of opinion as to:

- a) The items or service to be furnished under this RFP, or
- b) The interpretation of the provisions of the RFP the decision of Forth will be final and binding upon all parties.

## Publicity

News releases relating to this RFP will not be made without prior approval by, and in coordination with, Forth, whose approval may be withheld at its sole discretion.

## Confidentiality

In order for the successful Proposer to effectively provide the services required under any contract issued, if any, pursuant to this RFP, it may be necessary or desirable for Forth and BSD to disclose to the Proposer confidential and proprietary information and trade secrets pertaining to their activities. The successful Proposer shall agree to treat information which has been designated by Forth or BSD in writing as being confidential and proprietary information or trade secrets. The Proposer shall further agree that it will not disclose any such information so designated to any third party during the period of any contract issued, if any, pursuant to this RFP or thereafter without the prior written consent of Forth and BSD, unless the Proposer is required to disclose any such information for the following reasons: 1) to comply with a legal or court order, 2) to defend itself or pursue its legal rights in a legal proceeding, or 3) to protect the health, safety, or welfare or others.

# **Contract Terms and Conditions**

## **Contract Award and Term**

The contract award and term are as noted under Section 1 of this RFP.

Contingent on Forth's determination of a successful Proposer, the Institute will negotiate, in good faith, a contract to govern the terms under which the Proposer will provide the services that are the subject of this RFP, such contract to be based on the form provided in Schedule A.

#### Insurance

Contractor will promptly provide Certificates of Insurance at Forth's request. See Attachment A. Standard Terms and Conditions for details.



# ATTACHMENT A: STANDARD TERMS AND CONDITIONS

#### Contract No

This Master Personal Services Contract (the "**Contract**") effective as of [DATE] (the "Effective Date"), is by and between Forth ("Forth"), and [COMPANY NAME] ("**Contractor**"). Forth and Contractor may be referred to herein collectively as the "Parties" or individually as a "Party."

#### SUPERSEDING EFFECT.

There are no covenants, promises, agreements, conditions or understandings between the Parties, either oral or written, other than those contained in this Contract. This Contract and all exhibits and attachments hereto together constitute the entire agreement between the Parties (listed in order of precedence): (1) This Contract; (2) Exhibit A - Terms and Conditions; (3) Forth Solicitation, including issued Addenda, Specifications and Drawings (if any); and (4) Supplier Offer/Response.

Any Supplier Response (bid/proposal) attached to this Contract is incorporated solely for (i) any statement of fees and schedule that is consistent with the entire Contract as defined above; and (ii) any statement of Supplier's and its sub-suppliers scope of services that is consistent with the remainder of this Contract or that provides basic services in addition to those stated in this Agreement. No other provisions of any proposal are part of this Contract, including without limitation any purported limitation on liability. To the extent that a proposal term otherwise conflicts with the terms of this Contract or is not included in this agreement, such proposed terms are void and are expressly and wholly subject to the terms of this Contract. In the event of overlap or inconsistency between the provisions of such proposals and the other terms of this Contract, the provision that provides a better quality or quantity of service to Forth shall control.

#### **CONSIDERATION:**

Contractor shall perform/deliver the Work required, on an as-needed basis, in consideration for which Forth agrees to pay for the Work in a manner further described in the Contract and pursuant to the proposal pricing. Individual Project Work Authorizations (PWA) are required prior to any work being performed and will be issued by Forth on a requirements basis. Forth is not required to make any purchases under this Contract.

#### CONTRACT PERIOD.

The contract period shall be upon contract execution through December 31, 2023. Extensions are not possible due to stipulations made by the funding source.

#### **RENEWAL OPTION:**

None, due to the stipulations of the funding source.

#### FORTH REPRESENTATIVE:

The Forth Representative for this Contract is **Adrian Gomez at** <u>adriang@forthmobility.org</u>, (559) 829-7113. The Forth Representative shall be the initial point of contact for all matters related to performance, authorization, and carrying out the responsibilities of Forth.

In consideration of the mutual covenants, stipulations, and agreements, the Parties hereto do Contract and acknowledge that they have read and understood this Contract and agree to be bound by its terms and conditions:

Forth		
		(typed or printed name of officer)
Forth Representative Da	ate	Signature
Department Administrator Da	ite	Title: Phone/Fax:
Forth Purchasing Da	te	Date:
Not a valid Contract until all signatories are	e complete	Employer Id Number or Social Security Number

These terms and conditions of this Agreement apply to all purchases of services by or on behalf of Forth unless specifically provided otherwise in writing.

**Assignment.** Contractor shall not subcontract, assign or transfer any of its interest in this Contract without Forth's prior written consent.

**Compliance with Laws**. Contractor certifies that in performing this contract they will comply with all applicable provisions of the federal, state, and local laws, regulations, rules, and orders. Contractor expressly agrees to comply with:

- (i) Title VI and VII of Civil Rights Act of 1964, as amended;
- (ii) (ii) Sections 503 and 504 of the Rehabilitation Act of 1973, as amended;
- (iii) (iii) the Americans with Disabilities Act of 1990, as amended, and ORS 659.425;
- (iv) (iv) Executive Order 11246, as amended;
- (v) (v) The Age Discrimination in Employment Act of 1967, as amended, and the Age Discrimination Act of 1975, as amended;
- (vi) (vi) The Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended;

(vii) ORS Chapter 659, as amended; (viii) all regulations administrative rules established pursuant to the foregoing laws; and

(ix) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations.

Contractor shall further comply with all laws and regulations applicable to the ARPA funds, including but not limited to the applicable Office of Management and Budget Circulars. The Contractor shall only use ARPA funds for eligible ARPA activities as described under subsection (c)(1) of Section 603 of Title VI of the Social Security Act, as added by Section 9901 of ARPA, Section 35(b) of the ARPA Interim Final Rule (and final rule when effective), and all other applicable laws and regulations governing the use of ARPA funds. Contractor shall be responsible for any disallowances, questioned costs, or other items, including interest, not allowed under ARPA funding. The Contractor shall return to Forth any funds disallowed within ninety days of notification by Forth to return such funds.

Contractor must also comply with the most recent version of the Administrative Requirements, Cost Principles, and Audit requirements, and to the extent necessary cooperate and maintain information and documentation to allow Forth to comply with the applicable regulations governing use of the ARPA funds, including, but not limited to 2 CFR Part 200 – Uniform Administrative Requirements, Cost Principals, and Audit Requirements for Federal Awards. Failure to do so may result in disallowance of costs upon audit.

Contractor shall establish and maintain complete records,

including accurate books, records, documents, accounts, financial records, supporting documents, statistical records, and all other evidence and records pertinent to performance of work done for Forth under the Contract (the "**Records**") consistent with generally accepted bookkeeping practices.

Forth, the U.S. Treasury, the Comptroller General of the United States, the Government Accountability Office, the Pandemic Relief Accountability Committee, and any other authorized oversight agencies, or any of their duly authorized representatives, shall have, at any time and from time to time during normal business hours, access to any work product, books, documents, papers, and records of the Contractor which are directly pertinent to the Contract, for the purpose of inspection, audits, examinations, and making excerpts, copies and transcriptions.

**Changes**. Forth may make written changes to this contract. If such change causes an increase or decrease in the consideration or the time required to perform, an equitable adjustment shall be made and the Agreement modified in writing.

**Force Majeure**. Neither Forth nor Provider shall be held responsible for delay or default caused by any contingency beyond their control, including, but not limited to war or insurrection, fires, natural calamities, riots or demands or requirements of governmental agencies.

**Governing Law**. This Agreement is governed by and construed in accordance with the internal laws of the State of Oregon without giving effect to any choice or conflict of law provision or rule that would require or permit the application of the laws of any jurisdiction other than those of the State of Oregon. Any legal suit, action, or proceeding arising out of or related to this Agreement or the licenses granted hereunder will be instituted exclusively in the federal courts of the United States in Portland, Oregon or the courts of the State of Oregon located in the County of Washington, and each Party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action, or proceeding.All rights and remedies of Forth and Contractor shall be cumulative and may be exercised successively or concurrently.

Indemnification and Hold Harmless. Except for claims arising out of acts caused by the sole negligence of Forth, Contractor agrees to indemnify and hold harmless Forth and its board members, employees, and agents, from acts or omissions of any nature whatsoever of Contractor, its agents, servants, and employees, causing injury to, or death of a person(s) or damage to property as a result of work performed under this Contract, and from any expense incident to the defense of Forth therefrom. Contractor also agrees to indemnify and hold harmless Forth and its board members, employees, and agents, from and to defend it against, any and all claims arising from the purchase, installation, and/or use of the equipment, articles, materials, or services which are the subject of this

#### Contract.

**Independent Provider.** The services provided under this Contract are those of an independent contractor. Contrator is not an officer, employee, or agent of Forth. Although Forth reserves the right (i) to determine (and modify) the delivery schedule for the Work to be performed and (ii) to evaluate the quality of the completed performance, Forth cannot and will not control the means or manner of Contractor's performance.

Insurance. Provider shall purchase and maintain:

- a. WORKER'S COMPENSATION as required by law.
- EMPLOYER'S LIABILITY in the minimum amount of \$500,000 when the Provider has one or more employees performing services under the contract.
- c. COMPREHENSIVE AUTOMOBILE LIABILITY including owned, non-owned, and hired vehicles: \$1,000,000 Combined Single Limit Bodily Injury and Property Damage any one occurrence and in the aggregate. May be waived if Provider has no vehicle while providing work under the contract.
- d. COMPREHENSIVE GENERAL LIABILITY to include premises operations, independent Providers, products/completed operations, and blanket contractual: \$2,000,000 Combined Single Limit Bodily Injury, Property Damage, and personal injury any one occurrence and in the aggregate. May be waived only by Forth Risk Management Department.
- e. CERTIFICATES OF INSURANCE. Forth, its employees, officials, and agents shall be named as an Additional Insured on general liability and automobile policies and shall be provided a copy of the additional insured

endorsement. Such insurance shall be primary. Certificates of Insurance shall be issued, prior to the commencement of the contract, to Forth, 2035 NW Front Ave, Portland Oregon 97209. The Contractor agrees to pay for the insurance specified and agrees to provide Forth with a 30 days notice of cancellation if non-renewal occurs during the contract period. Insurance companies must have an A rating.

f. Forth reserves the right to require additional insurance which will be delineated in an attachment to this agreement.

**Ownership of Work Product**. Beaverton School District shall provide a diesel school bus owned by Beaverton School District to be repowered by Contractor with an electric powertrain. All work product of Contractor that results from this Contract (the "**Work**") shall be the exclusive property of Beaverton School District. Contractor hereby irrevocably assigns to Beaverton School District all of its right, title, and interest in and to any and all of the Work, including any right, title, or interest arising from copyright, patent, trademark, trade secret, or any other state or federal intellectual property law or doctrine. Contractor forever waives any and all rights relating to the Work including any and all rights arising under Title 17 USC §106A or any other rights of identification of authorship or rights of approval, restriction, or limitation on use or modifications.

Representations. Contractor represents and warrants to Forth that (1) Contractor has the power and authority to enter into and perform this Contract, (2) the Work under this Contract shall be performed in a good and workmanlike manner and in accordance with the highest professional standards, (3) Contractor shall, at all times during the term of this Contract, be gualified, professionally competent, and duly licensed to perform the Work, (4). the Work and all services will be provided without defects in materials or workmanship, (5) neither the Work nor any services provided by Contractor will infringe upon the intellectual property rights of any third parties; (6) the Work and all services will be provided in accordance with applicable laws and regulations, including permit or licensing requirements; and (7) Contractor will be responsible for all acts and omissions of any subcontractors as if Contractor has taken such acts or omissions. Contractor will obtain and hereby assigns to Forth any and all warranties and indemnities available from any manufacturer, supplier, or subcontractor of services, products and deliverables provided in connection with the Agreement. The Work and all services will be performed to the complete satisfaction of Forth.

**Responsibility for Taxes and Withholding.** Contractor shall be responsible for all federal or state taxes applicable to compensation paid to Contractor under this Contract. Forth will not withhold from such compensation any amount(s) to cover Contractor's federal or state tax obligations. Contractor is not eligible for any social security, unemployment insurance, or workers' compensation benefits from compensation paid to Contractor under this

#### Contract.

**Severability**. If any provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall be construed and enforced as if the Contract did not contain the particular provision held to be invalid.

#### Termination.

- a. Terminate For Convenience. This Contract may be terminated at any time by mutual written consent of the parties, or Forth may, at its sole discretion, terminate this Contract, in whole or in part, upon 30 days' notice to Contractor.
- b. Forth's Right to Terminate For Cause. Forth may terminate this Contract, in whole or in part, immediately upon notice to Contractor, or at such later date as Forth may establish in such notice, upon the occurrence of any of the following events:
  - (i) Forth fails to receive funding, or appropriations, limitations or other expenditure authority at levels sufficient to pay for Contractor's Work;
  - (ii) Federal or state laws, regulations or guidelines are modified or interpreted in such a way that either the Work under this Contract is prohibited or Forth is prohibited from paying for such Work from the planned funding source;
  - (iii) Contractor no longer holds any license or certificate that is required to perform the Work; or
  - (iv) Contractor commits any material breach or default of any covenant, warranty, obligation or agreement under this Contract, fails to perform the Work under this Contract within the time specified herein or any extension thereof, or so fails to pursue the Work as to endanger Contractor's performance under this Contract in accordance with its terms, and such breach, default or failure is not cured within 10 business days after delivery of Forth's notice, or such period as Forth may specify in such notice.
- c. Contractor's Right to Terminate for Cause. Contractor may terminate this Contract upon 30 days' notice to Forth if Forth fails to pay Contractor pursuant to the terms of this Contract and Forth fails to cure within 30 business days after receipt of Contractor's notice.
- d. Enforcement. Termination under any provision of this Contract shall not extinguish or prejudice Forth's right to enforce this Contract with respect to any breach of a Contractor warranty or any defect in or default of Contractor's performance that has not been cured, including any right of Forth to indemnification by Contractor. If this Contract is so terminated, Contractor shall be paid in accordance with the terms

of the contract for services rendered and accepted.

- e. Remedies. In the event of termination pursuant to the above, Contractor's sole remedy shall be a claim for the sum designated for accomplishing the Work multiplied by the percentage of Work completed and accepted by Forth, less previous amounts paid. If previous amounts paid to Contractor exceed the amount due to Contractor under this Agreement with or without cause pursuant to this subsection.
- f. Contractor's Tender Upon Termination. Upon receiving a notice of termination of this Contract, Contractor shall immediately cease all activities under this Contract, unless Forth expressly directs otherwise in such notice of termination. Upon termination of this Contract, Contractor shall deliver to Forth all documents, information, works-in-progress and other property that are or would be deliverables or Work had the Contract been completed, and Forth shall pay Contractor for all work performed prior to receiving Forth's notice of termination
- g. Limitation of Liabilities. Neither party shall be liable for (i) any indirect, incidental, consequential or special damages under the Contract or (ii) any damages of any sort arising solely from the termination of this contract in accordance with its terms.

Confidential information. Contractor acknowledges that it or its employees, subcontractors, or agents may, in the course of performing their responsibilities under this Contract, be exposed to or acquire information that is the confidential information of Forth or the Beaverton School District. Any and all information provided by Forth and marked confidential, or identified as confidential in a separate writing, that becomes available to Contractor or its employees, subcontractors, or agents in the performance of this Contract shall be deemed to be confidential information of Forth ("Confidential Information"). Any reports or other documents or items that result from Contractor's use of the Confidential Information and any Work that Forth designates as confidential are deemed Confidential Information. Confidential Information shall be deemed not to include information that: (a) is or becomes (other than by disclosure by Contractor) publicly known; (b) is furnished by Forth to others without restrictions similar to those imposed by this Contract; (c) is rightfully in Contractor's possession without the obligation of nondisclosure prior to the time of its disclosure under this Contract; (d) is obtained from a source other than Forth without the obligation of confidentiality; (e) is disclosed with the written consent of Forth; or (f) is independently developed by employees or agents of Contractor who can be shown to have had no access to the Confidential Information.

a. NON-DISCLOSURE. Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign,

license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of services to Forth under this Contract, and to advise each of its employees, subcontractors, and agents of their obligations to keep Confidential Information confidential. Contractor shall use its best efforts to assist Forth in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the generality of the foregoing, Contractor shall advise Forth immediately in the event Contractor learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Contract and Contractor will at its expense cooperate with Forth in seeking injunctive or other equitable relief in the name of Forth or Contractor against any such person. Contractor agrees that, except as directed by Forth, Contractor will not at any time during or after the term of this Contract disclose, directly or indirectly, any Confidential Information to any person, except in accordance with this Contract, and that upon the termination of this Contract or at Forth's request, Contractor will turn over to Forth all documents, papers, and other matter in Contractor's possession that embody Confidential Information.

b. INJUNCTIVE RELIEF. Contractor acknowledges that breach of this Section, including disclosure of any Confidential Information, will give rise to irreparable injury to Forth that is inadequately compensable in damages. Accordingly, Forth may seek and obtain injunctive relief against the breach or threatened breach of this Section, in addition to any other legal remedies that may be available. Contractor acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interests of Forth and are reasonable in scope and content.

**Waiver**. No failure of either Party to exercise any power given to it under this Contract or to insist upon strict compliance by the other Party with its obligations hereunder, and not custom or practice of the Parties at variance with the terms of this Contract, nor shall any payment under this Contract constitute a waiver of either Party's right to demand exact compliance with the terms hereof.

**Third-Party Beneficiaries**. The Parties hereby designate Beaverton School District as a third-party beneficiary of this Agreement



# **ATTACHMENT B: PROPOSER CERTIFICATION**

Legal Name of Proposer (Firm): \_\_\_\_\_

Physical Address:

Mailing Address:

The Proposer certifies and agrees:

- 1. The prices in this Proposal have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other Proposer relating to: the intention to submit a Proposal, or the methods or factors used to calculate the prices Proposed.
- 2. The Proposer has read and understands all terms and conditions of this Solicitation.
- 3. The Proposer agrees to provide insurance as required in Attachment A. Standard Terms And Conditions.
- 4. The Proposer has, or has available, the equipment, personnel, materials, equipment, facilities, and equipment as well as the technical and financial ability necessary to complete and execute all Work in a sound and suitable manner for the use specified and intended.
- 5. The Proposer agrees to execute the formal Contract within ten (10) days from date of Notice of Intent to Award.
- 6. The Proposer acknowledges that the person that signs this Certification is fully authorized to sign on behalf of the Proposer listed and to fully bind the Proposer to all conditions and provisions thereof.
- 7. The Proposer certifies that Proposer has complied or will comply with all requirements of local, state, and national laws, and that no legal requirement has been or will be violated in making or accepting this Proposal.
- 8. The Proposer certifies that it has not discriminated and will not discriminate, in violation of ORS 279A.110, against any disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emerging small business that is certified under ORS 200.055 in obtaining any required subcontract.
- 9. The Proposer agrees to comply with Oregon tax laws in accordance with ORS305.385.
- 10. The Proposer acknowledges receipt of the following addenda: (list by number and date appearing on addenda.)

Addendum Number	Date	Addendum Number	Date
·			

11. The Proposer (check one) will / will not extend the terms, conditions and prices to any Participating Agency that intends on establishing a Contract awarded to the Proposer resulting from this Solicitation.

Respectfully submitted this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.



Signature:	-
Printed Name:	Phone:
Title:	Fax:
Email Address:	



# **ATTACHMENT C - REFERENCE FORM**

Proposer shall provide at least 2 different firms that may be contacted by Forth regarding the quality of services provided within the last 5 years.

Name of Firm	1:			
Reference Co Person:	ntact			
Telephone:			Email:	
Optional: Alter Reference Co Person:				
Telephone:			Email:	
Description of service type, size, location, duration & objectives:				
Describe Tasks performed:				
Were contract	services acc	omplished with	in budget & s	schedule? If not, why?



## ATTACHMENT D: PRICE PROPOSAL FORM

Offeror shall specify the estimated pricing information for the project elements and total project price. The dollars amount shall be in whole numbers. OK to add line items if needed.

Price Proposal Cost Breakdown Summary:

Labor	\$
Parts	\$
Travel	\$
Leased workspace in Oregon	\$
Warranty including follow-through	\$
Communications	\$
Contingency	\$
	\$
	\$
	\$
	\$
	\$
	\$

Proposal Price; (Specify the Total Lump Sum price in both numbers and words, this price shall **equal** to the total sum of the items listed above)

Lump Sum (LS):

(\$\_\_\_\_\_)



SIGNATURE

DATE

PRINTED NAME AND COMPANY NAME

TITLE

# **Attachment E: RFP Evaluation Criteria**

#### Running total of points

**A. Vendor Experience** Please describe your company's history and its experience with repowering, including any experience with repowering diesel school buses with electric powertrains. Include miles logged by these vehicles, route lengths, number of days pulled out of service due to problems, and a summary of problems encountered and how they were resolved.

**B. Project Plan and Approach** Please describe how you would approach this project, including but not limited to finding a location in or near Washington County, Oregon at which to do the repower, an outline of a Project Management Plan including a communication plan with Forth and Beaverton School District (where the repowered bus will go into service), and how you'll deal with issues that arise as you execute the project. Include any information not commonly known about repowered buses.

**D. Diversity in Employment and Social Responsibility** Forth is committed to social responsibility and diversity, equity and inclusion (DEI). Please describe your company's DEI and social responsibility policies, commitments and practices. Include relevant links posted on your website. Supply data on your company's current demographics, i.e., gender and race/ethnicity for both leadership roles and non-leadership roles.

E. **Warranty and Maintenance** Please describe in detail how you will stand behind your work. Please describe the maintenance plan and how on-site and off-site work will be handled when it is beyond the scope of Beaverton School District technicians. Include any Warranty and Maintenance agreements you are currently operating under, including names and contact information of Maintenance Managers or others to whom your company is responsible.

**F. Timeline, Delivery Date and Delay Mitigation Plan** Context: this ARPA-funded project has a hard deadline of June 30, 2024, with no possibility of time extension. Taking into account all information available to you on supply chains, delay patterns and availability of parts and labor, provide a timeline, delivery date and delay mitigation plan

H. Price Proposal (in attachment) Goal is cost-effectiveness while maintaining quality of outcome.

## August 2022

2023 or newer transit type, electric-powered school bus capable of supporting the specified 24-passenger plus 1 wheelchair position body in a proper and safe manner. Body/chassis are to be designed, engineered, and built by one manufacturer. Bidder must be a valid dealer for units bid. Vehicles bid shall meet all current FMVSS and Minimum Standards for Oregon School Buses as listed in OAR 581-053-0240

	SPECIFICATION	BIDDER'S REPSONSE –
		MUST COMPLY OR STATE DEVIATIONS IN FULL
	CHASSIS OP	FIONS
-	LE DIMENSIONS: GVWR - 26,000 lbs. minimum.	
1.	Wheelbase shall not exceed 217".	
3.	Overall width not to exceed 102"; mirrors may exceed the	
0.	maximum allowable width by a distance of not greater than five inches on each side of the vehicle.	
4.	77-78" headroom at center aisle	
AXLES	:	
1.	Front – 12,000 lb. with synthetic-lubed wheel bearings.	
2.	Rear – 21,000 lb. with.5.29 ratio.	
	S - SERVICE:	
1.	Dual, full air system to meet FMVSS121.Bendix 13.2 CFM compressor. Three reservoir tanks for a total capacity of 2,855 cubic inches. Include a Bendix 4 channel ABS Bendix ADIP air dryer,	
2.	Meritor automatic slack adjuster if drum brakes are used	
3.	Front -, 24 sq. in. chambers. Non-asbestos "extended service" brake lining 16.5" X 6".	
4.	Rear -, 30 sq. in. chambers. Non-asbestos "extended service"	
5.	brake lining 16.5" X 8.62".	
BRAKE	ES - EMERGENCY/PARKING:	
1.	Separate dash mounted valve for parking brake application.	
BUMPE		
1.	Front	
	<ul> <li>a. Equivalent in strength and durability to pressed steel channel at least 3/16 inches thick and not less than 8 inches wide (high). It shall extend beyond the forward-most part of the body, grille, hood and fenders and shall extend to the outer edges of the fenders at the bumper's top line.</li> <li>b. Shall be of sufficient strength to permit pushing or being pushed by another vehicle with the same GVWR on a smooth surface with a five-degree (8.7 percent) grade, without permanent distortion to the bumper, chassis, or body.</li> </ul>	
	c. Shall be designed or reinforced so that it will not deform when the bus is lifted by a chain that is attached to both tow hooks when the bus is empty and positioned on a level, hard surface and both tow hooks share the load equally.	

<ul> <li>2. Rear <ul> <li>a. Shall be of pressed steel channel or equivalent material at least 3/16-inch thick and eight inches wide (high), and of sufficient strength to permit pushing by another vehicle without distortion: Bumper for all body on chassis units shall wrap around back comers of bus</li> <li>b. Shall extend forward at least 12 inches, measured from rear-most point of body at floor line.</li> <li>c. Bumper shall be attached to chassis frame in such manner that it may be easily removed, shall be so braced as to develop full strength of bumper section from rear or side impact, and shall be so attached as to prevent the insertion of small fingers between the body and bumper.</li> <li>d. Bumper shall extend beyond rear-most part of body</li> <li>surface at least one inch, measured at floor line;</li> </ul> </li> <li>CONTROLS - DRIVER'S AREA: <ul> <li>Suspended and adjustable brake &amp; accelerator pedals</li> <li>Key type starts and stop switch, compatible with CLB7 Key</li> <li>Headlight switch with headlight "on" reminder buzzer when key is turned off</li> <li>Steering column mounted dimmer switch with indicator light.</li> <li>Hazard signal switch-A31</li> <li>Directional signal switch, backlit design.</li> <li>Parking brake valve</li> <li>Entrance door control</li> <li>Cruise control</li> <li>Cruise control</li> <li>Noise suppression "raifroad" switch, latching</li> </ul> </li> <li>ELECTRICAL: <ul> <li>Manual resetting circuit breakers for body circuits.</li> <li>Two (2) group 31 batteries, maintenance free, minimum CCA total at 1400 amps.</li> <li>Battery compattment with locking roll out tray &amp; closeout seal</li> </ul> </li> <li>FRAME: <ul> <li>Frame shall be of such design and strength characteristics as to correspond at least to standard practice, for trucks of same general load characteristics which are used for highway service.</li> </ul> </li> <li>Holes in top or bottom flanges of frame side rail shall not be permitted except as provided in original chassis frame.</li> </ul>
<ul> <li>material at least 3/16-inch thick and eight inches wide         <ul> <li>(high), and of sufficient strength to permit pushing by             another vehicle without distortion; Bumper for all body             on chassis units shall wrap around back corners of             bus</li>             b. Shall extend forward at least 12 inches, measured             from rear-most point of body at floor line.</ul></li>             c. Bumper shall be attached to chassis frame in such             manner that it may be easily removed, shall be so             braced as to develop full strength of bumper section             from rear-or side impact, and shall be so attached as             to prevent the insertion of small fingers between the             body and bumper.             d. Bumper shall extend beyond rear-most part of body             surface at least one inch, measured at floor line; </ul> <li>CONTROLS - DNIVER'S AREA:         <ul> <li>Suspended and adjustable brake &amp; accelerator pedals</li>             key type starter and stop switch, compatible with CLB7 Key</ul></li> Headlight switch with headlight "on" reminder buzzer when key             is turned off             Stuereing column mounted dimmer switch with indicator light.             Hazard signal switch             Surface at least one inch, leasing.             Parking brake valve             settings or accessories with cap             1. Power socket for accessories with cap             1. Suspension "railroad" switch, latching <li>ELECTRICAL:         <ul>             manuel resetting circuit breakers for body circuits.</ul></li> from gets.             frame shall be of such design and strength characteristics as             to correspond at least to standard practice, for trucks of same             general load characteristics which are used for high way             service.
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service. 2. Holes in top or bottom flanges of frame side rail shall not be
permitted except as provided in original chassis frame
3. Frame lengths shall be established in accordance with the design griteria for the complete vehicle.
design criteria for the complete vehicle. HORN:
1. A backing safety horn activated whenever the bus is shifted
into reverse, sounds at 112 DB mounted under bus
INSTRUMENTS AND GAUGES - DRIVER'S AREA:
1. Speedometer
2. Odometer, which including tenths of miles
3. Display for state of Group 31 battery electric charge
4. Display for electric propulsion power
5. High beam headlight indicator light;
6. Front brake air pressure gauge
7. Rear brake air pressure gauge
8. Turn signal indicator light

<ol> <li>illuminated pilot lamps, one amber and one placed in accordance with requirements in 49 CFR 571.101</li> </ol>	
<ol> <li>Instrument panel shall have lamps of sufficient candlepower to illuminate all instruments and gauges and shift selector indicator for automatic transmission.</li> </ol>	
11. All control and indicator lights shall be dimmable except telltale lights	
INTERLOCK:	
<ol> <li>Vehicle shall be equipped with an interlock device to prevent vehicle motion when connected to charging infrastructure.</li> </ol>	
POWER TRAIN:	
1. Equivalent or greater of 250 hp (constant)	
2. Equivalent or greater of 650 lbft torque	
3. Minimum useable range of 100 miles	
4. Charging port to use J1772 plug	
5. Charging port located at rear of bus	
6. Regenerative braking required	
<ol> <li>High voltage batteries located between axles and inside frame rails</li> </ol>	
SHOCK ABSORBERS:	
1. Direct acting, double action piston type. Two front and two rear.	
STEERING:	
1. Full power steering with tilt/telescoping steering column	
TIRES:	
1. Standard equipment rib tires, LRH, all positions	
TOW HOOKS:	
Two front and two rear, frame mounted tow hooks.	
TRACTION:	
<ol> <li>On Spot brand automatic tire chains, rear axle.</li> <li>One (1) set Quick-Grip Truck Single Cam LSH Tire Traction chains.</li> </ol>	
SUSPENSION	
1. Front -	
<ul> <li>a. Front - 12,00 lbs. each at the ground. 4" wide X 56" Olong, single stage, 3-leaf, stress peened parabolic leaves with upturned eyes, 1.25" diameter pins in graphite impregnated steel backed bronze bushings with urethane seals at each end. Pins to include zirc fitting to allow pins to be easily lubricated. One inch spacer block between the front spring and the axle.</li> </ul>	
2. Rear -	
<ul> <li>Rear - Spring 3"x52" long semi-elliptic, progressive, variable rate 13 leaf slipper type spring. Rated 21,000 lb. each at ground minimum. A radius leaf with maintenance free bushing shall provide easy alignment adjustment.</li> </ul>	
WHEELS:	
1. 5 hand hole hub piloted steel wheels, 22.5 X 8.25, black	
BODY OPTIONS	
COMPARTMENTS:         1. Hinged engine cover.	
<ol> <li>Exterior electrical access panel below driver window, non- locking.</li> </ol>	

<ol> <li>Keyed locking interior drivers' area storage compartment,</li> <li>Non locking interior compartment above windshield.</li> <li>interior storage compartments keyed alike.</li> </ol> <b>CONSTRUCTION:</b> <ol> <li>Body parts must be rust-proofed after fabrication and before assembly.</li> <li>16-gauge exterior side panels shall be one piece from windowsills to bottom of skirt. Skirts shall be extended type.</li> <li>Four protective rub rails at window level, seat level, near floor level and bottom of skirt. riveted to body.</li> </ol>	
<ul> <li>4. Non locking interior compartment above windshield.</li> <li>5. interior storage compartments keyed alike.</li> <li>CONSTRUCTION: <ol> <li>Body parts must be rust-proofed after fabrication and before assembly.</li> <li>16-gauge exterior side panels shall be one piece from windowsills to bottom of skirt. Skirts shall be extended type.</li> <li>Four protective rub rails at window level, seat level, near floor</li> </ol> </li> </ul>	
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4. Interior side panels shall be aluminized from windowsill to top	
of seat rail with mar-resistant finish.	
5. One piece roof panels from window top on one side to window	
top on other side for maximum strength. Spliced roof sheet	
not acceptable. Rain visors to be embossed in roof panels	
over each window.	
DIFFERENTIAL	
1. Synthetic-lubed differential	
EMERGENCY EXITS:	
1. Doors shall comply with the design and performance requirements of 49 CFR 571.217.	
2. Rear emergency door with upper and lower glass. Include	
header pads and retainers to hold doors open	
3. All emergency exits shall have vandal locks that when	
actuated, disenable engine from starting.	
ENTRANCE DOOR:	
1. Air operated, outward-opening type. Include header pad and	
vandal lock.	
FENDERS:	
1. Formed rubber fenders shall be mounted around front and rear	
wheelhouse openings.	
FLOOR COVERING:	
1. Floor in under seat area, including tops of wheel housing,	
driver's compartment, and toe board, shall be covered with	
grey rubber floor having minimum overall thickness of .125	
inch with aluminum aisle trip:	
2. Floor covering in aisle shall be of aisle-type fire-resistant	
rubber, wear-resistant and ribbed or equivalent non-slip	
material. Minimum overall thickness shall be .1875 inch	
measured from tops of ribs.	
<ol> <li>Floor covering shall be permanently bonded to floor and shall not crack when subjected to sudden changes in temperature.</li> </ol>	
4. Bonding or adhesive material shall be waterproof and shall be	
of type recommended by manufacturer of floor-covering	
material.	
5. All seams shall be sealed with waterproof sealer.	
<ol><li>Molded rubber covers required over wheel housings.</li></ol>	
7. Rounded rust proofed cove molding applied where floor meets	
wall	
8. Subfloor shall be 5/8' Marine-grade plywood screwed down;	
HEATER AND DEFROSTER:	
1. Electrically controlled water regulating valve	
2. 50,000 BTU front heater and defroster. Defroster shall be full	
length below driver's window and windshield.	

3.	Rear under seat heater, 50,000 BTU, LH rear. Floor mounted heater preferred	
4.	Two (2) 6" windshield auxiliary fans, upper left and upper right mounting	
5.	All plumbing for the heater/defroster system shall be of a series type for maximum heat and for drivers' field of vision and safety.	
6.	All heater hoses to be silicone with constant tension clamps	
INSULA	ATION:	
1.	Body to be insulated with 1-1/2" of fiberglass in roof, bows, sides, and ends providing an "R" value of 5.75.	
2.	integrity over the life of the bus.	
3.	in full length front to rear.	
4.	Sound deadening spray coat shall be provided covering the center one-third of panels to include the following: roof sheet, outside side, and inside side.	
5.	Provide additional insulation in driver's area and stepwell .	
LETTE	RING & DECALS:	
1.	"BEAVERTON SCHOOL DISTRICT" belt line decal, 3/4 stroke black 6" X 2 1/2" block font, centered on each side of the bus	
2.	Bus numbers: 3/4 stroke, Black 6" X 2 1/2" block font, begin with number <b>TBD</b> .	
3.	Number placement at the front and rear of the LH and RH belt line, one number at the front, one at the rear and one at the interior rear above the emergency exit door	
4.	Roof top numbers, to district specifications, E-plate number, 24" high	
5.	Seat row ID, 2" black vinyl letters, single letter LH and double letter RH, installed	
6.	Reflective materials to meet or exceed ASDM D4956	
7.	Lettering specifying electric drive may be used in place of fuel type decals and shall meet the same requirements as fuel type decals.	
LIGHTI		
1. 2.	Backlighting of switch panel controlled by rheostat switch Two (2) white LED rear back-up lamps that have a minimum illuminated area of 12 square inches. If back up lamps are placed in the same horizontal line as the tail-stop lamps and turn signal lamps, they shall be to the inside.	
3.	Red and Amber LED eight-way warning lights with strobing flash pattern. <u>NO HOODS.</u> Wired to allow continued operation of red lights at stops with ignition switch off and key removed, installed in accordance with SAE Standard J887 Each lamp shall have a minimum illumination area of 38 square inches, flash a minimum of 60 times per minute, and be clearly visible in direct sunlight from 500ft along the axis of the vehicle. Each amber light shall be located near each red signal lamp, at the same level, but closer to the vertical centerline of the bus. The area around each lens of the bus safety lights shall be black, extending outward a minimum of 3 inches where practicable.	
4. 5.	LED clearance/cluster lights, grommet and flush mounted. LED Headlamps	

6.	Dual row LED interior lights. Driver's, LH, RH, & rear on	
_	separate switches. Dome lights are to be wired directly to	
	battery allowing operation with the ignition off. There shall be	
	at least one interior lamp for every two rows of passenger	
	seats.	
7.	LED exterior student loading door light which will adequately	
/.	illuminate the entire step well. The lamp circuit shall be wired	
	through the headlamp or clearance lamp system and shall be	
	activated only when the door is opened.	
8.	LED Tail lamps & Stop lamps equipped with four combination	
0.	red tail-stop lamps: Two (2) combination lamps with a	
	minimum 38 square inches of illuminated area shall be	
	mounted immediately inside of, and in line with, the rear turn	
	signal lamp; Two (2)combination lamps with a minimum 12	
	square inches of illuminated area shall be placed on the rear of	
	the bus between the beltline and the floor line. The horizontal	
	centerline of the lights shall be a maximum of 12 inches above	
	the floor line; Stop lamps shall be activated by the service	
	brakes and shall emit a steady light when illuminated.	
9.	Amber LED Turn Signals	
	Front - shall have a minimum illuminated area of 38 square	
_	inches; Rear signals shall have a minimum illuminated area of	
	38 square inches and be placed as wide apart as practical with	
	the horizontal centerline a maximum of 12 inches below the	
	rear window:	
11.	Side - shall have a minimum of 4 candlepower and be	
	mounted on each side of the bus at approximately seat level	
	height, located to the rear of the entrance door on the right	
	side, and to the rear of the stop arm on the left side. Side turn	
	signals should be in approximately the same location on each	
	side of the bus.	
12.	All turn signal lamps shall be independent units and connected	
	to turn signal switch and four-way hazard warning switch that	
	will cause all turn signals to flash simultaneously.	
13.	light monitor for warning light system, stop, tail and directional	
	light monitoring. Monitor to be mounted at the dash or switch	
	console	
	Light check system for checking operation of exterior lighting	
15.	Stop arm, air operated, with LED cluster lights, hi-reflective;	
	meets or exceeds ASDM D4956 for reflection	
16.	Required reflectors.	
MIDDO	20	
MIRRO		
'.	Rosco, Remote control, Heated OpenView ES mirrors, 7 3/8" X 10" flat and 7 3/8" X 10" convex mirrors.	
2	Heat on timer (15 minutes).	
2. 3.	Mirror brackets shall be black. Chrome brackets are not	
5.	acceptable.	
4.	Heated, High-Definition cross view mirrors.	
4. 5.	Interior rearview mirror, 6"X30"	
PAINT:	Interior rearview minor, 0 X30	
<b>FAINT.</b> 1.	Chassis, bumpers, and wheels shall be black.	
2.	Bus body shall be painted a uniform National School Bus	
۷.	Yellow.	
3.	Body exterior paint trim, bumper, and emergency door lettering	
5.	shall be black.	
4.	Background behind warning lights to be painted black.	
	Roof to be painted white and extend across the roof down to	
	the drip rails.	
6.	Front and rear caps shall remain National School Bus Yellow.	
U.		

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RADIO:	):	
	AM/FM radio with PA, mounted in dash, eight (8) interior deluxe speakers.	
2.		
3.	Kenwood NX-5800 two-way radio, to district specs. Preferred mounting on the dash and left of the driver. Filter required where necessary to assure uninterrupted operation. Radio is to be wired or programmed to allow for operation with the ignition in the on, off and accessory positions.	
SAFET	TY EQUIPMENT:	
1.	First aid kit, body fluid kit & 5 lb. fire extinguisher to be mounted in non-locking bulkhead storage compartment above the windshield. Bulkhead compartment door shall be labeled indicating safety equipment content;	
2.	Triangle kit to be mounted in a bracket at the wall ahead of right seat barrier; plexiglass, mounted on forward bulkhead	
3.	Certificate holder, 4" X 6", to be mounted on forward bulkhead	
SEATS		
1.	Driver	
	<ul> <li>Adjustable and retractable driver's shoulder and lap belt, 17" adjustment</li> </ul>	
	<ul> <li>b. National Premium Air Suspension seat with grey upholstery. Seat controls mounted on the right side. Seat and barrier mounting shall provide ample room for seat adjustment to accommodate both large and small drivers.</li> </ul>	
2.	Passenger	
	<ul> <li>Barrier storage pouch installed, three to five pockets, with Velcro closure</li> </ul>	
	<ul> <li>b. Four (4) rows (rows 1 through 4) of 36" wide CE White QuasiStatic 3PT + 2 ICS seats. Each seat has two (2) 3PT lap/shoulder belts and two (2) integrated child restraints. Total of 16 restraint positions.</li> <li>c. Two (2) rows (rows 5 and 6) of 36" CE White QuasiStatic 3PT lap/shoulder belt seats, each with two (2) 3PT lap/shoulder belts. Seats 5-6 LH are track</li> </ul>	
	mounted.	
STEPW		
	Three (3) step entrance angled toward center aisle with rubber covered steps. Maximum riser height shall be 8-1/2". Stepwell shall be rubber studded or pebble step treads, w/white "no trip" vertical leading edge and skid plate installed underneath to minimize curbing damage. Stainless steel grabrail installed in entrance door area	
SUN VI	-	
	6 1/2" X 30" dark tinted plexiglass windshield sun visor,	
2.	protective edges. Dark tinted plexiglass driver's side window sun visor, protective edges	
UNDER	RCOATING:	
	Body shall be fully undercoated under floor, skirt panels and wheel wells prior to mounting on chassis.	
1	Page 7 of 0	

\/ <b>F</b> \$! <b>T</b> !!	ATION	
	ATION:	
1.	Two (2) Spheros Smart Hatch Roof Hatches, without power vent installed in roof.	
	SYSTEM:	
1.	Seon TH4 camera System, with 1 TB hard drive (GPS not	
1.	required). Recorder to be mounted for ease of access for hard drive removal and installation	
2.	Three (3) 170-degree side mounted IR cameras and one (1)	
Ζ.	170-degree windshield camera.	
3.	Mounting and programming to district specifications.	
WINDO		
1. 2.	All windows clear and tempered. 12" split sash passenger windows.	
2. 3.	Two (2) swing out emergency windows, one per side.	
4.	Two (2) grip handles for cleaning windshield;	
	HIELD WIPERS:	
1.	Electric intermittent, single switch operated wipers; bottom	
	mounted with a parallelogram sweep.	
2.	Washers to be mounted on wiper arms.	
3.	One gallon plastic windshield washer reservoir.	
REPAIR	R MANUALS:	
1.	Maintenance manual shall be provided to include major	
	component manuals, wiring diagrams and recommended	
	service requirements for vehicle.	
2.	Parts and service manuals shall be provided on USB flash	
WARR	drive.	
1.	Base warranty	
2.	Extended warranty	
3.	Paint	
4.	Body structure	
5.	Sheet metal (rust through)	
6.	Passenger seats	
7.	Front Axle	
8.	Rear Axle	
9.	Electric Motor	
	High Voltage Electric Batteries	
	Seon Surveillance System Wheelchair	
1.		
1. 2.	Include minimum of forty (40) hours of technician training	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
3.	Include minimum one (1) year subscription to web-based diagnostic support	
4.	Include manufacturing/assembly plant tour/inspection with travel & lodging for up to eight (8) BSD employees.	
SPECIA	AL NEEDS EQUIPMENT:	
1.	Wheelchair Lift door	
2.	Flat floor configuration	
3.	Braun Century lift, FMVSS 403/404 compliant	
4.	Wheelchair lift wired hot to battery; lift will operate with ignition in the OFF position	
5.	Permanent W/C position, "L" track, 4 sticks vertical track, installed LH rear of bus	

6.	Minimum and maximum seat spacing dimensions label permanently affixed as required for track seating by the	
	Oregon Department of Education	
7.	Floor tracks for one w/c position, seats included LH forward of	
	LH rear permanent position.	
8.	One (1) set of Shurlock Titan auto-retracting wheelchair tiedowns	
9.	One (1) wheelchair lap and shoulder belt	
10.	One (1) Storage bag for wheelchair tie downs mounted at the	
	wall to the rear of the permanent wheelchair position	