



CITY OF MELROSE
APPROPRIATIONS & OVERSIGHT COMMITTEE
AGENDA • JUNE 20, 2023

Council Chamber, First Floor, Melrose City Hall Budget Hearing
562 Main Street, Melrose, MA 02176

7:25 PM

I. CALL TO ORDER

Leila Migliorelli	Chair
Maya Jamaledine	Vice Chair
Shawn M. MacMaster	
Christopher Cinella	
Jack Eccles	
Mark Garipay	
Robb Stewart	
Manjula Karamcheti	
John Obremski	
Ryan Williams	
Jen Grigoraitis	President, Ex Officio

II. PUBLIC COMMENT

Remote Link for Public Comment:
<https://cityofmelrose-org.zoom.us/j/99081483447>

Meeting ID:
990 8148 3447

III. PUBLIC HEARING - 7:30 PM

FY24 Water & Sewer Rates

Remote Link for Public Hearing:
<https://cityofmelrose-org.zoom.us/j/99081483447>

Meeting ID:
990 8148 3447

IV. APPOINTMENT

1. **APPT-2023-18:** Appointment of Kelsey Lima, 53 Pearl Street, Apt. 3, to the Melrose Human Rights Commission, for a three-year term set to expire on the last day of February 2026.

From: City Council

ASSIGN TO COMMITTEE

V. ORDERS

1. **ORDER-2023-97** : Proposed FY24 Sewer Rates

Offered by: Mayor Paul Brodeur

2. **ORDER-2023-98** : Proposed FY24 Water Rates

Offered by: Mayor Paul Brodeur

VI. APPROPRIATION

1. **APPRO-2023-26:** An Appropriation from Free Cash in the amount of \$481,600 (Four Hundred Eighty One Thousand Six Hundred Dollars) to designated Public Works Account as set forth herein for the City share of the purchase of an Electric Trash Truck and Charging Infrastructure.

2. **APPRO-2023-34:** An Appropriation from Free Cash (account 01-324001) in the amount of \$66,309.58 to Fire Department-Overtime (012211-513000).

From: City Council

ASSIGNED TO COMMITTEE

3. **APPRO-2023-38:** An Appropriation from Free Cash (account 01-324001) in the amount of 32,764.60 to Inspection Services Department (#241) for a scanning project.

From: City Council

ASSIGNED TO COMMITTEE

4. **APPRO-2023-39:** An Appropriation from Ambulance Retained Earnings (account 6500-319000) in the amount of \$16,300 to Ambulance Professional Services (account 650052-529000).

From: City Council

ASSIGNED TO COMMITTEE

5. **APPRO-2023-41:** An Appropriation from Free Cash (account number 01-324001) in the amount of \$86,135.35 to Pine Banks Department (#652) for Capital items.

From: City Council

ASSIGNED TO COMMITTEE

6. **APPRO-2023-46:** An Appropriation From Free Cash (account 01-324001) in the amount of \$224,998.80 to the Police Department for overtime costs and a Case Cracker system.

From: City Council

ASSIGNED TO COMMITTEE

VII. ADJOURNMENT



Paul Brodeur
Mayor

CITY OF MELROSE

OFFICE OF THE MAYOR

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4440
Fax - (781) 662-2182

MEMORANDUM

To: Melrose City Council
From: Mayor Paul Brodeur
Re: Human Rights Commission
Date: May 24, 2023

I respectfully request the Honorable City Council confirm the appointment of Kelsey Lima, 53 Pearl Street, Apt. 3, to the Melrose Human Rights Commission, for a three-year term set to expire on the last day of February 2026. Ms. Lima's appointment fills a long-time vacancy on the commission.

For the past two years, I have known Ms. Lima in her capacity as a Co-Chair of my Diversity, Equity, and Inclusion Advisory Task Force. During her time on the Task Force, she has been a reliable, active member and has demonstrated values that align with those of the Human Rights Commission and is committed to Melrose's goal of being "One Community, Open to All."

It is with my strong encouragement that the appointment of Ms. Lima, a Licensed Certified Social Worker (LCSW) with extensive expertise in mental health, child welfare, and medical social work, to the MHRC is approved. Thank you for your consideration.

Kelsey Lima, LCSW

(P)

Education:

Boston University

Master's of Social Work

Major: Clinical

Salem State University

Bachelor's of Social Work

Bachelor's of Science, Geography

Commonwealth Honors Scholar

Professional Experience:

Adjunct Faculty *September 2022- current*

Salem State University, School of Social Work, Salem, MA

- ❖ Teach undergraduate level and graduate level social work courses: SWK 101: Introduction to Social Work, SWK 700: Human Behavior and the Social Environment, SWK715: Dynamics of Privilege and Oppression in Clinical Practice.

Clinical Social Worker *September 2021-current*

Lemuel Shattuck Hospital, Massachusetts Department of Public Health, Boston, MA

- ❖ Primary clinician for community patients in the Infectious Disease service and TB acute medicine.
- ❖ Experience with other services such as acute medicine, geriatric, MAS, MBS
- ❖ Mental health clinician for House of Corrections inpatient incarcerated patients.
- ❖ Conduct psychosocial assessments, discharge planning, safety planning, crisis intervention, provide consultation to multidisciplinary staff, family meetings, and brief supportive counseling.
- ❖ Trained two clinical social workers, facilitate routine department meetings, lecture acute medicine residents and new nurses on TB specific care and social work consultation services.

Clinical Social Worker/Therapist (per diem) *June 2021-Current*

Beth Israel Deaconess Medical Center, Boston, MA

Center for Violence Prevention and Recovery

- ❖ Overnight on-call clinician for ED, providing brief psychotherapy and other clinical interventions to patients and families in the ED impacted by interpersonal and community violence.
- ❖ Conduct psychological evaluations for asylum seekers and T-visa applicants.

Inpatient Social Work Department

- ❖ Primary per diem weekend clinician for inpatient units (medical/surgical, hematology/oncology, ICU, NICU and OBYN), emergency department and trauma surgical ICU.

Cognitive Neurology Unit, Ambulatory Care

- ❖ Provide short-term outpatient psychotherapy for Cognitive Neurology patients, specializing in cognitive behavioral treatment. Provide clinical psychosocial assessments for patients of the Parkinson's Disease Clinic and provide consultation in a multidisciplinary team.

Clinical Social Worker (contract) *April 2021-Current*

International Social Services, Massachusetts, USA

- ❖ Conduct home studies and post-reunification assessments in Massachusetts for kinship families seeking to provide permanency for children living in foreign countries.

Social Work Fellow (remote) *July 2021-March 2023*

International Legal Foundation, Palestine and Tunisia Offices

- ❖ Provide bimonthly clinical consultation on program policy development and psychosocial expertise to defense attorneys, law students and social work interns.

- ❖ Co-developed the Bachelor level social work position by writing a position manual.
- ❖ Conducted interviews for the social work position.
- ❖ Provide psychoeducation to attorneys, students, and social workers on trauma-informed practice with migrants and individuals impacted by human trafficking.
- ❖ Co-developed policy and practices in screening and assessment of clients.

Adoption Social Worker *August 1, 2018-September 10, 2021*

MSW Intern *June 2019-May 2020*

Massachusetts Department of Children and Families, Chelsea, MA

- ❖ Conducted clinical assessment and ongoing/specialized case management of foster youth and pre-adoptive families.
- ❖ Co-led office-wide Trauma-Informed Leadership Team, Diversity Leadership Team volunteer, and mentored new social workers.
- ❖ Wrote court reports, affidavits, adoption plans, pre-adoptive license home studies, child permanency assessments, and family assessments.

Publications and Presentations:

Natural Resource Exploitation: Violence Against Indigenous Women, Honors Thesis (2018)

Holistic Legal Representation: Social Work Perspective, Boston College Law School (2022)

BSW Alumni Panelist, Salem State University (2022)

Migrant Trauma and Human Trafficking, International Legal Foundation (2022)

Multi-contextual Journey of Addiction Recovery, Salem State University (2023)

Post-Graduate Training:

Geriatric Oncology: Cognition and Communication, April 2022

Asylum Network Training | Physicians for Human Rights (PHR), October 2021

Relational and Multi-Contextual Treatment of Trauma Certificate | Simmons University, April 2021

Cognitive Behavioral Interventions Certificate | Boston University, January 2021

Cognitive Processing Therapy Certificate | Medical University of South Carolina, 2020

Tourism Sustainability and Development Certificate | United Nations World Tourism Organization (2018)

Leadership and Awards:

40 Under 40 | Salem State University (2023)

Board Member | Friends of School of Social Work, Salem State University (May 2022-current)

Board Member | International Social Work Solutions (May 2021-current)

Outstanding Social Worker, Salem State University (2021)

Co-Chair | City of Melrose, Diversity Equity and Inclusion Task Force (February 2021-current)

BSW Student Representative | National Association of Social Workers, MA Chapter (June 2017-June 2018)

Volunteer Work:

- ❖ Responder Mental Health Clinician | MA Medical Reserve Corps
- ❖ MSW Mentor, MSW and Doctoral application reader | Council on Social Work Education, Minority Fellow Program (October 2021-July 2022)
- ❖ Psychological Evaluator | Beth Israel Medical Center, Harvard Medical School, Physician for Human Rights. (October 2021-current)
- ❖ Education Case Worker | Catholic Charities (May 2017- August 2017)

Professional Affiliations:

National Association of Social Workers (NASW) MA Chapter

Greater Boston Association of Black Social Workers
American Association of Geographers

Attachment: Resume_Kelsey_Lima_DPH_Redacted (APPT-2023-18 : Appointment of Kelsey Lima to the Human Rights Commission)

Application Form

Profile

Kelsey

First Name

Ann

Middle Initial

Lima

Last Name

Email Address

53 Pearl St

Home Address

APT 3

Suite or Apt

Melrose

City

MA

State

02176

Postal Code

What district do you live in?

☒ District 2

Home:

Primary Phone

Alternate Phone

MA Department of Public Health

Employer

Clinical Social Worker

Job Title

Which Boards would you like to apply for?

Human Rights Commission: Submitted

Interests & Experiences

Please tell us about yourself and why you want to serve.

Why are you interested in serving on a board or commission?

I am interested in serving on this commission because as a clinician my values align with this mission. My areas of expertise include mental health, child welfare, and medical social work. For the past two years, I have been on the DEI task force. After graduating from college at Salem State, I moved to Melrose as I began my social work career in Boston, MA. I identify as a Biracial woman (Cape Verdean and Caucasian).

[Resume_Kelsey_Lima_DPH_.docx](#)

Upload a Resume

Demographics

Some boards and commissions require membership to be racially, politically or geographically proportionate to the general public. The following information helps track our recruitment and diversity efforts.



CITY OF MELROSE

DEPARTMENT OF PUBLIC WORKS

Water and Sewer Rate Advisory Committee

Elena Proakis Ellis, P.E., Chair
 Patrick Dello Russo, CFO/Auditor
 Kathryn Armata, Treasurer/Collector
 Vonnie Reis, P.E., City Engineer
 Ryan Williams, City Council Representative
 Ken Truesdale, Resident Representative

**Melrose City Yard, 72 Tremont Street
 Melrose, Massachusetts 02176
 Telephone - (781) 665-0142**

MEMORANDUM

To: Melrose City Council

From: Water and Sewer Rate Advisory Committee

cc. Mayor Paul Brodeur
 James Troup, DPW
 Donna Cardillo, DPW
 Lisa Patterson, DPW

Date: May 30, 2023

Re: Summary of FY24 Water and Sewer Rate Orders

The Water and Sewer Rate Advisory Committee, consisting of the members listed above, respectfully submits the following proposed water and sewer rate adjustments for FY24. They are recommended by unanimous vote of the committee.

The combined rate impact across water and sewer is a 3.7% increase over FY23 rates for the average Melrose household (using 1,800 cubic feet of water per quarter), including both volumetric rates and base fees. The proposed rates, as shown on the next page, will appear on water bills beginning on October 1, 2023, since earlier bills would not consist entirely of water used within FY24. This decision was made several years ago and has been consistent since that time. We recommend continuing this practice in FY24.

For Fiscal Years 2022 and 2023, the Committee had recommended using some free cash to offset revenue requirements in light of the City's recovery from the impacts of the COVID-19 pandemic. This year, we are not proposing any free cash allocations to cover revenue requirements. According to our rate model, the rates, as proposed, are sufficient to meet our Water and Sewer Enterprise Fund revenue needs for FY24 based on our water and sewer use projections.

Attachment: FY24 Memo to Council WS Rates & Free Cash FINAL (ORDER-2023-97 : FY24 Sewer Rates - Sewer)

Water and Sewer Rate Advisory Committee Recommendations

Page 2

May 30, 2023

Proposed FY24 Water and Sewer Rates

Proposed FY23 Volumetric Rates	Water (per 100 cf)	Sewer (per 100 cf)
Tier 1	\$7.36	\$12.25
Tier 2	\$9.87	\$15.43
Proposed FY23 Base Fees (meter size)	Water (per meter)	Sewer (per meter)
5/8"	\$19.66	\$26.38
3/4"	\$19.66	\$26.38
1"	\$19.66	\$26.38
1.5"	\$76.98	\$103.58
2"	\$119.97	\$161.48
3"	\$220.28	\$296.58
4"	\$363.58	\$489.58
6"	\$721.83	\$972.08
2 nd Meter Fee	\$19.66 (\$50.00 if not upgraded)	--

In addition to these rates, the Committee respectfully recommends the following:

1. Approval of the Department of Public Works' Water Enterprise Operating Budget for Fiscal Year 2024 in the amount of \$6,328,916, as shown in the budget document submitted under separate cover to the City Council.
2. Approval of the Department of Public Works' Sewer Enterprise Operating Budget for Fiscal Year 2024 in the amount of \$8,712,803, as shown in the budget document submitted under separate cover to the City Council.
3. Transfer of free cash in the amount of \$10,179 to the Water Enterprise Fund to bring reserve funds as close as possible to the previously agreed upon 10% of the annual operating budget (achieves 9.6% using all available free cash).
4. Transfer of free cash in the amount of \$7,835 to the Sewer Enterprise Fund to bring reserve funds to the previously agreed upon 10% of the annual operating budget.

The Committee does not have any additional free cash recommendations at this time beyond those recently approved by the City Council for water and sewer capital expenses associated with the 2023 Water Main Improvements Project and the Upham and Fellsway Sewer Pump Station Generator Project.

We appreciate your consideration of these items and are happy to answer any questions you may have. We look forward to continuing the important work of our committee in FY24 to provide fiscally responsible and sustainable water and sewer rates for our community.



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 Patrick Dello Russo, CFO/Auditor
 Kathryn Armata, Treasurer/Collector
 Vonnie Reis, P.E., City Engineer
 Ryan Williams, City Council Representative
 Ken Truesdale, Resident Representative

**Melrose City Yard, 72 Tremont Street
 Melrose, Massachusetts 02176
 Telephone - (781) 665-0142**

MEMORANDUM

To: Melrose City Council

From: Water and Sewer Rate Advisory Committee

cc. Mayor Paul Brodeur
 James Troup, DPW
 Donna Cardillo, DPW
 Lisa Patterson, DPW

Date: May 31, 2023

Re: Summary of FY24 Water and Sewer Rate Orders

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Fiscal Year 2023 was the first year since FY18 that water volumetric rates or base fees had been increased, and the first year since FY17 that sewer volumetric rates had been increased. Sewer base fees had not been increased since FY20. The Committee has consistently tried to mitigate impacts to Melrose residents.

For Fiscal Years 2022 and 2023, the Committee had recommended using some free cash to offset revenue requirements in light of the City's recovery from the impacts of the COVID-19 pandemic. This year, we are not proposing any free cash allocations to cover revenue requirements. According to our rate model, the rates, as proposed, are sufficient to meet our Water and Sewer Enterprise Fund revenue needs for FY24 based on our water and sewer use projections.

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City of Melrose Fiscal Year 2024 Water/Sewer Rate Increase Impact - PROPOSED DRAFT

FY2023 Rates

Water Rates		Sewer Rates	
Base Fee to 1 inch	\$17.65	Base Fee to 1 inch	\$25.39
Base Fee 1.5 inch	\$67.29	Base Fee 1.5 inch	\$99.25
Base Fee 2.0 inch	\$104.52	Base Fee 2.0 inch	\$155.17
Base Fee 3.0 inch	\$191.39	Base Fee 3.0 inch	\$284.95
Base Fee 4.0 inch	\$315.49	Base Fee 4.0 inch	\$470.35
Base Fee 6.0 inch	\$625.74	Base Fee 6.0 inch	\$933.85
1st Step: 1 - 2000 cf	\$7.20	1st Step: 1 - 2000 cf	\$11.78
2nd Step: >2000 cf	\$9.65	2nd Step: >2000 cf	\$14.84

Proposed FY2024 Rates

Water Rates		Sewer Rates	
Base Fee to 1 inch	\$19.66	Base Fee to 1 inch	\$26.38
Base Fee 1.5 inch	\$76.98	Base Fee 1.5 inch	\$103.48
Base Fee 2.0 inch	\$119.97	Base Fee 2.0 inch	\$161.48
Base Fee 3.0 inch	\$220.28	Base Fee 3.0 inch	\$296.58
Base Fee 4.0 inch	\$363.58	Base Fee 4.0 inch	\$489.58
Base Fee 6.0 inch	\$721.83	Base Fee 6.0 inch	\$972.08
1st Step: 1 - 2000 cf	\$7.36	1st Step: 1 - 2000 cf	\$12.25
2nd Step: >2000 cf	\$9.87	2nd Step: >2000 cf	\$15.43

Customer (standard 5/8 inch meter with no irrigation meter)

Usage (with 5/8 inch meter)	IndoorUsage 90% sewer	Irrigation Usage (no sewer)	FY23 Rate		FY24 Rate		Qtrly Water Bill		
			Qtrly Bill		Qtrly Bill		Increase Amt	Percent	
500 cubic feet	500	0	\$132.05		\$137.97		\$5.92	4.5%	
700 cubic feet	700	0	\$167.65		\$174.74		\$7.09	4.2%	
900 cubic feet	900	0	\$203.26		\$211.51		\$8.25	4.1%	
1000 cubic feet	1,000	0	\$221.06		\$229.89		\$8.83	4.0%	
1200 cubic feet	1,200	0	\$256.66		\$266.66		\$10.00	3.9%	average customer range
1500 cubic feet	1,500	0	\$310.07		\$321.82		\$11.75	3.8%	average customer range
1800 cubic feet	1,800	0	\$363.48		\$376.97		\$13.49	3.7%	average customer range
2000 cubic feet	2,000	0	\$399.08		\$413.74		\$14.66	3.7%	average customer range
2500 cubic feet	2,500	0	\$507.99		\$526.17		\$18.18	3.6%	
3500 cubic feet	3,500	0	\$738.05		\$763.74		\$25.69	3.5%	
4000 cubic feet	4,000	0	\$853.08		\$882.52		\$29.44	3.5%	
6000 cubic feet	6,000	0	\$1,313.20		\$1,357.66		\$44.46	3.4%	
8000 cubic feet	8,000	0	\$1,772.32		\$1,832.80		\$60.48	3.4%	
12000 cubic feet	12,000	0	\$2,693.56		\$2,783.08		\$89.52	3.3%	

50% of our quarterly reads are under 1450 cubic feet

80% of our quarterly reads are under 2450 cubic feet

90% of our quarterly reads are under 3500 cubic feet

96% of our quarterly reads are under 5000 cubic feet

* Bill Amounts do not include Trash fee.

Attachment: FY24_Rate Impact_052923 (ORDER-2023-97 : FY24 Sewer Rates - Sewer)



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MEMORANDUM

To: Melrose City Council

From: Water and Sewer Rate Advisory Committee

cc. Mayor Paul Brodeur
 James Troup, DPW
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Date: May 30, 2023

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Attachment: FY24 Memo to Council WS Rates & Free Cash FINAL [Revision 1] (ORDER-2023-98 : FY24 Water Rates)

Water and Sewer Rate Advisory Committee Recommendations

Page 2

May 30, 2023

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**Melrose City Yard, 72 Tremont Street
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Attachment: FY24 Memo to Council WS Rates & Free Cash FINAL UPDATED (ORDER-2023-98 : FY24 Water Rates)

MEMORANDUM

To: Melrose City Council

From: Water and Sewer Rate Advisory Committee

cc. Mayor Paul Brodeur
 James Troup, DPW
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Date: May 31, 2023

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Proposed FY24 Water and Sewer Rates

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2 nd Meter Fee	\$19.66 (\$50.00 if not upgraded)	--

In addition to these rates, the Committee respectfully recommends the following:

1. Approval of the Department of Public Works' Water Enterprise Operating Budget for Fiscal Year 2024 in the amount of \$6,328,916, as shown in the budget document submitted under separate cover to the City Council.
2. Approval of the Department of Public Works' Sewer Enterprise Operating Budget for Fiscal Year 2024 in the amount of \$8,712,803, as shown in the budget document submitted under separate cover to the City Council.
3. Transfer of free cash in the amount of \$10,179 to the Water Enterprise Fund to bring reserve funds as close as possible to the previously agreed upon 10% of the annual operating budget (achieves 9.6% using all available free cash).
4. Transfer of free cash in the amount of \$7,835 to the Sewer Enterprise Fund to bring reserve funds to the previously agreed upon 10% of the annual operating budget.

The Committee does not have any additional free cash recommendations at this time beyond those recently approved by the City Council for water and sewer capital expenses associated with the 2023 Water Main Improvements Project and the Upham and Fellsway Sewer Pump Station Generator Project.

We appreciate your consideration of these items and are happy to answer any questions you may have. We look forward to continuing the important work of our committee in FY24 to provide fiscally responsible and sustainable water and sewer rates for our community.

City of Melrose Fiscal Year 2024 Water/Sewer Rate Increase Impact - PROPOSED DRAFT

FY2023 Rates

Water Rates		Sewer Rates	
Base Fee to 1 inch	\$17.65	Base Fee to 1 inch	\$25.39
Base Fee 1.5 inch	\$67.29	Base Fee 1.5 inch	\$99.25
Base Fee 2.0 inch	\$104.52	Base Fee 2.0 inch	\$155.17
Base Fee 3.0 inch	\$191.39	Base Fee 3.0 inch	\$284.95
Base Fee 4.0 inch	\$315.49	Base Fee 4.0 inch	\$470.35
Base Fee 6.0 inch	\$625.74	Base Fee 6.0 inch	\$933.85
1st Step: 1 - 2000 cf		1st Step: 1 - 2000 cf	\$11.78
2nd Step: >2000 cf		2nd Step: >2000 cf	\$14.84

Proposed FY2024 Rates

Water Rates		Sewer Rates	
Base Fee to 1 inch	\$19.66	Base Fee to 1 inch	\$26.38
Base Fee 1.5 inch	\$76.98	Base Fee 1.5 inch	\$103.48
Base Fee 2.0 inch	\$119.97	Base Fee 2.0 inch	\$161.48
Base Fee 3.0 inch	\$220.28	Base Fee 3.0 inch	\$296.58
Base Fee 4.0 inch	\$363.58	Base Fee 4.0 inch	\$489.58
Base Fee 6.0 inch	\$721.83	Base Fee 6.0 inch	\$972.08
1st Step: 1 - 2000 cf		1st Step: 1 - 2000 cf	\$12.25
2nd Step: >2000 cf		2nd Step: >2000 cf	\$15.43

Customer (standard 5/8 inch meter with no irrigation meter)

Usage (with 5/8 inch meter)	IndoorUsage 90% sewer	Irrigation Usage (no sewer)	FY23 Rate Qtrly Bill	FY24 Rate Qtrly Bill	Qtrly Water Bill Increase Amt Percent		
500 cubic feet	500	0	\$132.05	\$137.97	\$5.92	4.5%	
700 cubic feet	700	0	\$167.65	\$174.74	\$7.09	4.2%	
900 cubic feet	900	0	\$203.26	\$211.51	\$8.25	4.1%	
1000 cubic feet	1,000	0	\$221.06	\$229.89	\$8.83	4.0%	
1200 cubic feet	1,200	0	\$256.66	\$266.66	\$10.00	3.9%	average customer range
1500 cubic feet	1,500	0	\$310.07	\$321.82	\$11.75	3.8%	average customer range
1800 cubic feet	1,800	0	\$363.48	\$376.97	\$13.49	3.7%	average customer range
2000 cubic feet	2,000	0	\$399.08	\$413.74	\$14.66	3.7%	average customer range
2500 cubic feet	2,500	0	\$507.99	\$526.17	\$18.18	3.6%	
3500 cubic feet	3,500	0	\$738.05	\$763.74	\$25.69	3.5%	
4000 cubic feet	4,000	0	\$853.08	\$882.52	\$29.44	3.5%	
6000 cubic feet	6,000	0	\$1,313.20	\$1,357.66	\$44.46	3.4%	
8000 cubic feet	8,000	0	\$1,772.32	\$1,832.80	\$60.48	3.4%	
12000 cubic feet	12,000	0	\$2,693.56	\$2,783.08	\$89.52	3.3%	

50% of our quarterly reads are under 1450 cubic feet

80% of our quarterly reads are under 2450 cubic feet

90% of our quarterly reads are under 3500 cubic feet

96% of our quarterly reads are under 5000 cubic feet

* Bill Amounts do not include Trash fee.

Attachment: FY24_Rate Impact_052923 (ORDER-2023-98 : FY24 Water Rates)

April 07, 2023
 Elena Proakis Ellis
 DPW Director
 City of Melrose - Office of Planning and Community Development
 562 Main Street, Melrose, MA 02176
 RE: DPW Refuse truck DCFC Charger

Quote 22323A

Voltrek is pleased to provide the following pricing and information to install (1) ABB HV150-C and (1) Depot charger box DC Fast Charging system at Melrose DPW. This modular configuration provides DC fast charging for (1) heavy vehicles up to 150kW, but can support (2) additional depot charger boxes. In addition, the service has been sized to support future addition of (2) ABB Terra 184 (180kW) units. See attached product brochure for ABB HV150-C.

Quote

Item	Unit Price	Qty	Amount
EVSE			
ABB HVC150-C Single outlet HVC150-C charging system is a 150 kW DC Fast Charger rated up to 850 VDC. Includes 1x 150 kW power cabinet & 1 x depot charge box with 23 foot CCS1 charging cables. The HVC-150 features a cellular modem, 2 year standard warranty and includes the HVC robustness package (redundant aux. power supply; low temperature option: integrated heating system for extension of the operating temperature to -35 °C to +50 °C; active temperature measurement and control; intelligent air filter system; intelligent fuse control) and the HVC long distance support package (increases allowable distance between equipment to 150 meters, provides a data communication enhancer module and an overvoltage protection system). Part # (1) 6AGC070558 (1) 6AGC076522	\$82,023.00	1	\$82,023.00
HVC-150 Depot Charge Box standalone pedestal TPEdestal for Depot Box. Depot Box could also be mounted on the ceiling without a pedestal. Priced per depot box. Part# 6AGC069024-R	\$2,735.00	1	\$2,735.00
Shipping Per station	\$2,500.00	1	\$2,500.00
Tax (exempt)	\$0.00	1	\$0.00
Commissioning & Installation			
ABB Activation Required remote activation. Priced per station. Part# ACTHP	\$1,027.35	1	\$1,027.35
ABB Charger Connect (for 2 years) Annual data connectivity for HV150-C stations, priced per station. Part# 6AGC064781	\$247.00	2	\$494.00

ABB Commissioning Remote commissioning of stations, required for warranty. Part #CSAHVC	\$1,917.50	1	\$1,917.50
Installation			
Electrical Labor and Materials Includes the cost of Switchgear @ \$60,858.00	\$154,496.00	1	\$154,496.00
Excavation Labor and Materials	\$66,286.00	1	\$66,286.00

Total Project Cost \$311,478.85

Scope of Work

All labor and material required to install EV chargers:

- Cut bituminous pavement from Utility Pole # 3160 at entrance to Salt Shed on Tremont St. to the Island, Parking Lot & Storage Areas and excavate for installation of 2- 4" primary conduits (encased in concrete) from Utility Pole to padmount Transformer. Trench to be plated until after inspections & concrete is placed. Patch excavated driveway areas with bituminous pavement.
- Excavate for National Grid transformer & ground grid, construct gravel base & provide properly sized precast transformer pad & protection bollards. Mandrill primary conduits with Trench Inspector and install mule tape.
- Provide trench & conduits from utility transformer to switchboard. Install 4" conduits from utility transformer to switchboard location.
- Install conduits from switchboard to 150 kW HVC Power Cabinet & distribution cabinet, Power Cabinet to Depot Box and stub out conduits for future EV Stations.
- Form & pour concrete pad for switchboard, provide precast concrete vault for HVC Power Cabinet & concrete pad for Depot Box and install protection bollards for switchboard, HVC Power Cabinet & Depot Box.
- Stub out conduits from switchboard to future Level 3 EV Stations.
- Furnish and install of 1200 amp 480-volt 3 phase 3 section NEMA 3R switchboard with 1200-amp 3 pole GFI protected main circuit breaker, TSS and branch circuit breakers.
- Install 150 kW Power Cabinet & Depot Box (provided by others), provide 480-volt conductors from switchboard to Power Cabinet and terminate DC cables.
- Interlock & Fiber CAN Cable from Power Cabinet to Depot Box conductors from switchboard to HVC Power Cabinet & DC Cables to Depot Box to be compression lugs.
- Furnish & Install a 75 kVA 480-to-120/208-volt transformer, NEMA 3R distribution cabinet & 225-amp 208 volt "mcb" panelboard for providing 208-volt power for future Level 2 EV Stations & 20-amp 120-volt circuit for Depot box.
- Install protection bollards for HVC Power Cabinet & Depot Box, backfill & grade area as required.
- Total of protection bollards for all equipment – 22 (various diameters, transformer bollards per N. Grid specs).
- Coordinate with National Grid for installation of utility company meter to be installed on padmount transformer.
- Provide "Field Test & Inspection" of 1200-amp GFI main circuit breaker in switchboard by certified vendor.

- Work with National Grid to energize the utility transformer & power to switchboard.
- Activate, program, and test station.

Scope of work exclusions:

- Precast bases for ABB 184 kW stations or equivalent and conduits from switchboard.
- Furnishing or installation of Signs and Posts if required.
- Painting of Parking Spaces.
- Removal of tree(s) currently on the Island, relocation of Jersey barriers and removal of chain link fences as required for construction and placement of all equipment.
- Any National Grid costs associated with providing the service to the site.

NOTES:

- This proposal & design is based upon acceptance and approval by National Grid that they can service the site from Utility Pole # 3160 and size of switchboard for current and future loads.
- Currently the estimated delivery schedule for the switchboard is 285 days from placement of order & approval of switchboard design.
- Due to the global supply chain challenges the pricing on the switchboard is valid for 60 days. Price adjustment/update may be required past the validity period.

Warranty

ABB EVSE comes with a standard 2-year parts only warranty. This coverage can be extended by up to 3 years, and coverage for parts and labor can be added.

Communication Requirements

ABB stations rely on a cellular connection to communicate with ABB and EVConnect. A T-Mobile or ATT LTE/4G signal is required at the site.

Voltrek

Is a small business enterprise specializing in planning, installing, and servicing commercial charging station projects. We have been in business for 12 years and offer a full scope of turnkey services to meet your EV Charger needs. Voltrek has installed more than 3200 charging stations to date and is DBE & WBE certified. Voltrek is on State Contract VE102.

Terms

- Hardware is billed NET 30 from date of shipment. Labor is billed NET 30 from date of completion.
- New customers are subject to a credit check; partial prepayment may be requested based on results.
- Quote is valid for 90 days.
- Due to Global supply chain issues there maybe production delays that are not within the control of Voltrek.

- Voltrek may agree to accept assignment of a grant award. In the event of a grant award payment being denied for any reason, customer is responsible for the Total Project Cost.
- It is the customer's responsibility to read and comply with all grant program terms and conditions

Please contact me with any questions and thank you for considering Voltrek.

Sincerely,
Mohammed Faiz
Account Manager
VOLTREK, LLC.
Tel: (978) 985-6883

TO ACCEPT CONTRACT PLEASE COMPLETE BELOW AND RETURN TO VOLTREK. IF YOU WANT TO MODIFY OR ADD ITEMS PLEASE REQUEST VIA EMAIL AND AN UPDATED QUOTE WILL BE SENT.

NAME:

DATE:

SIGNATURE:

PRODUCT LEAFLET

Electric Vehicle Infrastructure

HVC-C UL depot charging for electric fleets



—
HVC Depot Boxes and power cabinets, lined up at a depot site.

A practical solution for busy depots

ABB Heavy Vehicle Charger (HVC) products enable electric buses and trucks to charge at the depot ensuring flexibility and scale for every fleet operation that is transitioning to zero-emission transportation.

Key Benefits

- + Smart charging
- + Small infrastructure footprint at vehicle interface
- + Flexible design for roof and floor mounting
- + SAE J1772 CCS and OCPP 1.6 compliant
- + Remote diagnostics and management tools

Sequential Charging

Improving total cost of ownership is easy using the sequential charging feature offered by ABB's depot chargers. This feature allows connection of up to three depot charge boxes with a single power cabinet and vehicles are charged sequentially over time. The system can follow an embedded, predefined charging process or remote triggers sent by a fleet management system via OCPP 1.6.

- Vehicles are charged with high power, maximizing vehicle availability
- The required grid connection is smaller, reducing upfront investments and operational costs
- The compact depot box is easy to install at sites with space constraints
- Optimal utilization of installed infrastructure meaning lower investments in charging equipment.

ABB HVC-C UL Depot Charging systems offer a highly reliable, intelligent and cost-effective solution to charge large EV fleets such as buses, trucks and other commercial vehicles.

Buy America

ABB can offer the HVC-C Depot Charging Solution with compliance to the Buy America Act Rule 49 CFR Part 661.5.

Future-proof modular design

Power cabinets can be upgraded from 100 or 150 kW in the field, as well as add additional depot charge boxes, allowing operators to scale their operation and to spread investments over time.

Safe and reliable operation

ABB fast chargers are designed to the highest international electrical, safety, and quality standards and are certified by notified bodies - guaranteeing safe and reliable operation.

Connectivity and remote services

ABB chargers come with an extensive suite of connectivity features including remote services such as monitoring, management, diagnostics and software upgrades. These advanced services provide equipment owners with powerful insights into their charging operations while enabling high uptime.

ABB is your experienced partner

ABB HVC products are based on a decade of high power experience in EV charging solutions. ABB has installed over 13,000 fast charging systems in more than 80 countries – and is the leading EV infrastructure technology supplier globally.

Overnight charging 100 kW - 150 kW

A field upgradeable system with future proof reliability

HVC 100C



HVC 150C



Upgrade
→

HVC 150C*



* 150 kW overnight charging system with three depot charge boxes; shown mounted on pedestal option.

Upgrade can be done in the field by adding an extra power module.
No groundworks, digging and disturbance to the site required.

Technical specifications

Configurations		HVC 100C	HVC 150C
Maximum output power		100 kW	150 kW
Input AC connection		3P + GND	
UL Model		480 VAC +/-10% (60 Hz)	
Input voltage	Rated input power	117 kVA	170 kVA
	Rated input current	3 x 132 A	3 x 198 A
	Rated input current	3 x 108 A	3x168A
CSA Model		600 VAC +/-10% (60 Hz)	
Input voltage	Rated input power	117 kVA	170 kVA
	Rated input current	3 x 108 A	3x168A
	Rated input current	3 x 108 A	3x168A
Output voltage range		150 – 850 VDC	
Maximum DC output current		166 A	200 A
Vehicle connection interface		CCS/Combo Type 1 Connector	
Cable length		3.5m/11.5ft OR 7m/23ft (optional)	
DC connection standard		SAE J1772 - IEC 61851-23 / DIN 70121 - ISO 15118	
Environment		Indoor/Outdoor	
Operating temperature		Standard: -10 °C to +50 °C (de-rating characteristic applies) Optional: -35 °C to +50 °C	
Protection		Power Cabinet: IP54 – IK10 (equivalent to NEMA 3R) Depot Charge Box: IP65 - IK10	
Network connection		GSM/3G modem 10/100 base-T Ethernet	
Compliance and Safety		CSA No. 107.1-16 and UL 2202 certified by TUV BA Rule 49 CFR Part 661.5 (Optional)	
Dimensions			
Power Cabinet	Dimensions (H x W x D)	2030 x 1170 x 770 mm / 79.9 x 46.1 x 30.3 in	
	Weight	1340 kg / 2954 lbs	
Depot Charge Box (without pedestal)	Dimensions (H x W x D)	800 x 600 x 210 mm / 75.4 x 23.6 x 8.3 in	
	Weight	61 kg / 134.5 lbs (with 7m / 23ft cable)	
Depot Charge Box (with pedestal)	Dimensions (H x W x D)	1914 x 600 x 400 mm / 75.4 x 23.6 x 16.3 in	
	Weight	181 kg / 398 lbs (with 7m / 23ft cable)	

ABB Inc.

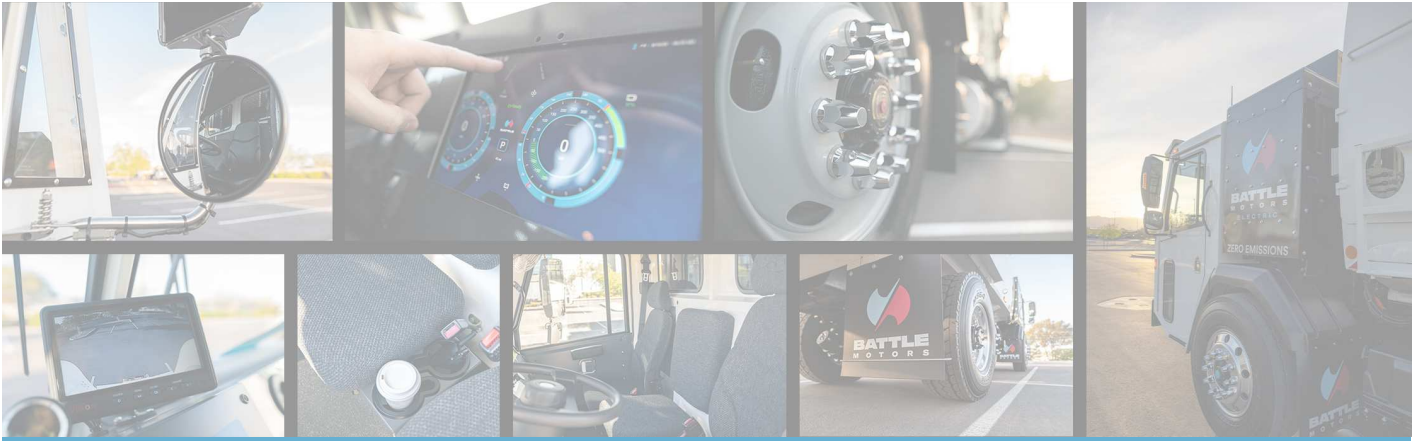
4050 E. Cotton Center Blvd
Phoenix, AZ 85040
United States
Phone: 800-435-7365
E-mail: US-evci@us.abb.com

abb.com/evcharging

ABB Inc.

800 Hymus Boulevard
Saint-Laurent, QC H4S 0B5
Canada
Phone: 800-435-7365
E-mail: CA-evci@abb.com

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MELROSE DIESEL LNT PROPOSAL



BATTLE
MOTORS

Date

03/10/2023

Quote Information

202303091637-8137

2024 Sales LNT

Qty: 1

Prepared For

City of Melrose

562 Main St.

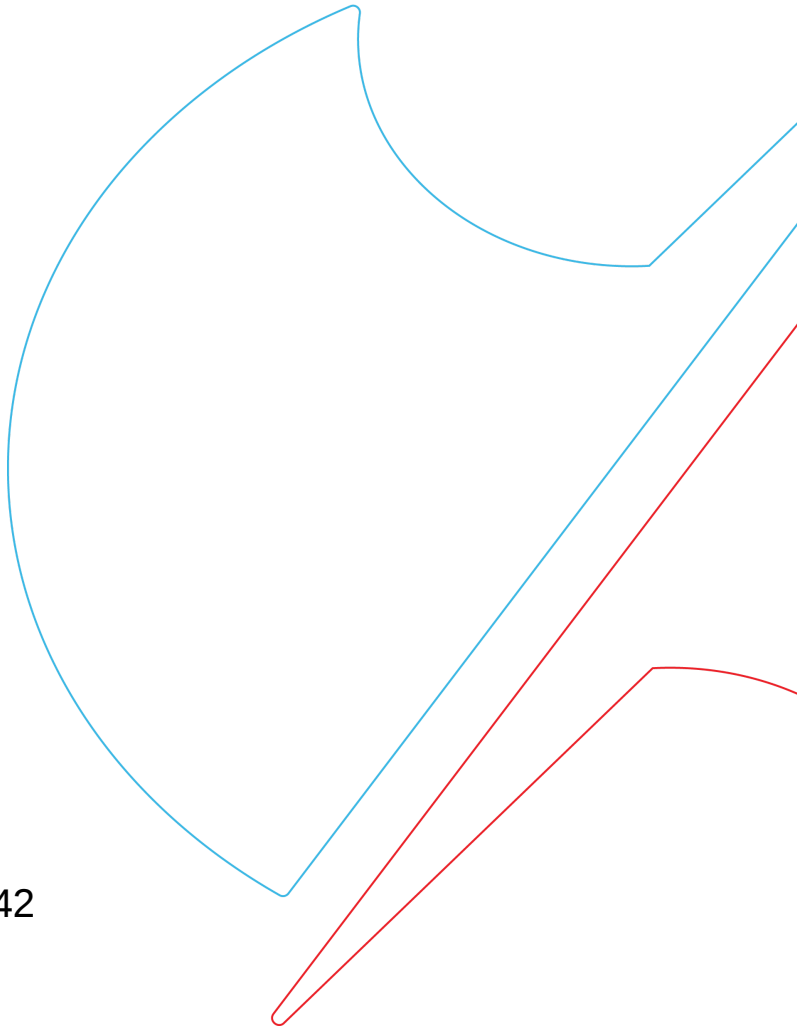
Melrose, Ma 02176

Elena Proakis Ellis 781-665-0142

Prepared By

Jeff Denesha

508-280-7411



MELROSE DIESEL LNT PROPOSAL

CUSTOM REQUESTED OPTIONS	NOTES
--------------------------	-------

11 YD REAR PACKER - AVERAGE COST USED FOR COMPARISON

CUSTOM OPTIONS	DESCRIPTION
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9999-CUSTOM-83331	CUSTOM OPTIONS	NO OPTION - CUSTOM OPTIONS
9999-CUSTOM-140540	FRAME (QUOTE ONLY)	NO-OPTION, FRAME AVAILABLE IN UPPER SELECTION
9999-CUSTOM-140539	PROP SHAFT (QUOTE ONLY)	NO OPTION - PROP SHAFT AVAILABLE IN UPPER SELECTION
9999-CUSTOM-141986	AIR PIPING, AIR DRYER (QUOTE ONLY)	NO OPTON (AVAILABLE IN UPPER SELECTION)
9999-CUSTOM-142066	BODY	NO OPTION - BODY

CAB	DESCRIPTION
-----	-------------

1800-1892-CAB	CAB MODEL	CAB ASSY, (2) REAR WINDOWS, NO ROOF VENTS, W/VISOR, LNT
1809-0177-CAB	CAB - OVERHEAD CONSOLE / RADIO	OVERHEAD CONSOLE, LHD/DUAL DRIVE, AM/FM/BLEETOOTH/HANDS FREE RADIO, HVAC CONTROLS, LNT
1809-0164-CAB	CAB - FLOOR GRIP TAPE	FLOOR COVERING INSTALLATION, LH / DUAL DRIVE, LNT
1001-0946-CAB	CAB - ACCELERATOR PEDAL	ACCELERATOR PEDAL, CUMMINS, SINGLE DRIVE
2100-3347-CAB	CAB - BASE ELECTRICAL	ELECTRICAL, BASE, 500K BUAD, AUTOCRAFT HEADLIGHT
9999-CUSTOM-82619	CAB - MODIFICATION (LH DOOR)	NO OPTION - CAB MODIFICAION (LH DOOR)
9999-CUSTOM-82620	CAB - MODIFICATION (RH DOOR)	NO OPTION - CAB MODIFICAION (RH DOOR)
2000-4561-CAB	CAB - GRAB HANDLES (LH)	LH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
2000-4862-CAB	CAB - GRAB HANDLES (RH)	RH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
9999-CUSTOM-		

MELROSE DIESEL LNT PROPOSAL

CAB		DESCRIPTION
82812	CAB, ELEC - DOOR WINDOWS - SWITCH COUNT	LH DRIVE, LH E/R, RH E/R
2100-3351-CAB	CAB, ELECTRICAL - DOOR WINDOWS	CAB, ELECTRICAL, POWER WINDOWS, 3 SWITCHES
9999-CUSTOM-139409	FUEL ACCESSORIES, CAB	NO OPTION - FUEL ACCESSORIES, CAB
9999-CUSTOM-82500	CAB - AIR HORN	NO OPTION - AIR HORN, CAB
9999-CUSTOM-83006	CAB - WHEEL DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CAB
9999-CUSTOM-82623	CAB - ABS SYSTEM	NO OPTION - ABS ATC OPTION
9999-CUSTOM-82513	CAB AIR PIPING, REAR AXLE	NO AIR PIPING REQUIRED
2000-4808-CAB	DECALS - CAB INTERIOR	DECALS, INTERIOR, SINGLE DRIVE, DIESEL
9999-CUSTOM-83100	DECALS - CALIFORNIA PROPOSTION 65	NO OPTION - EPA / NON-CARB
1810-0043-CAB	CAB - MISC COMPONENTS	CAB MODIF - LET2 COMPONENTS, LH/RH STEEL PANELS
9999-CUSTOM-83327	PUSHER/TAG CAB CONTROLS	NO OPTION - PUSHER/TAG AXLE CAB CONTROLS

CHASSIS		DESCRIPTION
9999-CUSTOM-83061	CHASSIS, CAB INTERAXLE BUZZER	NO OPTION - INTERAXLE BUZZER, CHASSIS
9999-CUSTOM-82671	DECAL - ENGINE, 50 STATE CLEAN IDLE/CARB	NO OPTION - CLEAN IDLE DECAL
2000-4813	DECALS - CHASSIS EXTERIOR	DECALS, EXTERIOR, DIESEL, TRANSYND
2003-0618	HVAC - CHASSIS	HVAC, LNT CAB, B6.7, AURORA NON-BLENDING
2201-0118	WINDSHIELD WIPERS - CHASSIS	WINDSHIELD WIPERS, SINGLE DRIVE
1010-1226	AIR CLEANER	AIR CLEANER, CUMMINS B6.7, DONALDSON EPG 13" LNT
		STANDARD

MELROSE DIESEL LNT PROPOSAL

CHASSIS		DESCRIPTION
1006-1276	ENGINE MOUNTING	ENGINE MOUNTING, CUMMINS B6.7, 3000RDS, 4 DEG, NO LINER, LNT
9999-CUSTOM-82621	GAUGE - ENGINE OIL TEMP GAUGE	NO OPTION - ENGINE OIL TEMP GAUGE
1802-0076	CAB MOUNTING	CAB MOUNTING - LET2 STANDARD CAB
1503-2969	OVER ENGINE CROSSMEMBER	OVER ENGINE CROSSMEMBER, OFFSET RH SIDE RADIATOR, LNT
2100-3347	ELECTRICAL, BASE, CHASSIS	ELECTRICAL, BASE, CHASSIS, 500K BUAD, DIESEL/CNG
9999-CUSTOM-82834	AUTO NEUTRAL - CHASSIS	NO OPTION - AUTO NEUTRAL, CHASSIS
9999-CUSTOM-83070	AIR PIPING, RDS-209 TRACTION ASSIST	NO OPTION - RDS-209 TRACTION ASSIST
1908-0066	AIR PIPING, REAR AXLE	AIR PIPING, SINGLE REAR AXLE, REYCO SUSP
9999-CUSTOM-139490	REAR BUMP BLOCKS	NO OPTION - BUMP BLOCKS
1402-0624	POWER STEERING RESERVOIR	POWER STEERING RESERVOIR, 4 QT, 2022 B6.7, TRW PUMP, LNT
1401-0336	STEERING COLUMN CHASSIS (LH)	STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-139406	STEERING COLUMN CHASSIS (RH)	NO OPTION - RH STEERING, CHASSIS
1400-0714	STEERING GEAR	STEERING GEAR, XD-120, LH DRIVE, STANDARD CAB, LNT ONLY
9999-CUSTOM-82837	ELECTRICAL, TRANSMISSION RETARDER	NO OPTION - TRANSMISSION RETARDER, CHASSIS
2501-1525	TRANSMISSION OIL PIPING	TRANSMISSION PIPING-L9/L9N/X12, 3000RDS/4000RDS
9999-CUSTOM-83008	GAUGES - MISC OPTIONS	NO OPTION - MISC GAUGES, CHASSIS
1503-3002	FRAME MODIF, CENTER BEARING DRILLING	FRAME MODIFICATION, CENTER BEARING DRILLING 1503-3002
9999-CUSTOM-142262	FRAME MODIF, REAR BUMPER ASSY	NO OPTION - FRAME MOD REAR BUMPER

MELROSE DIESEL LNT PROPOSAL

MODEL		DESCRIPTION
9999-CUSTOM-140231	SOURCEWELL	SOURCEWELL
9999-CUSTOM-139414	FUEL TYPE	DIESEL
9999-CUSTOM-82617	BODY APPLICATION	GENERIC CONFIGURATION
9999-CUSTOM-83335	PRODUCT AVAILABILITY	ORDER MAJOR COMPONENTS - LEAD TIME / AVAILABILITY
9999-CUSTOM-83099	CARB/EPA	EPA / NON-CARB
9999-CUSTOM-83019	FRAME - WHEELBASE	140 WHEELBASE
9999-CUSTOM-142098	FRAME SILLS	SINGLE SILLS - LNT
9999-CUSTOM-142335	FRAME SILL LENGTH	25' FRAME SILLS
9999-CUSTOM-83532	CAB STYLE	LNT CREW CAB WITH EXTERIOR SUNVISOR
9999-CUSTOM-83534	CAB / DOORS	LNT CREW CAB, W/VISOR, LH ELECTRIC ROLL-UP / RH ELECTRIC ROLL-UP DOORS
9999-CUSTOM-82491	DRIVE TYPE	LH DRIVE
9999-CUSTOM-83078	ENGINE MODEL	CUMMINS B6.7, LNT
9999-CUSTOM-139481	TRANSMISSION MODEL	ALLISON 3500RDS, LNT
1000-3228	ENGINE	CUMMINS 2021 B6.7, 300 HP, A/C, 2600RPM, 3000 SERIES TRANSMISSION, LNT
1007-1207	TRANSMISSION	TRANSMISSION ALLISON 3500RDS, TC413, SPL-170, B6.7, LNT
9999-CUSTOM-83068	REAR SUSPENSION MODEL	REYCO 102CC - REYCO SPRING SUSPENSION
9999-CUSTOM-83054	REAR DRIVE AXLE MODEL	S26-190 - REAR DRIVE AXLE
1200A-0238	REAR DRIVE AXLE	REAR AXLE, S26-190, 16.5 X 7.00, 5.57, STD DIFF, REYCO
1201-1407	REAR SUSPENSION	REAR SUSPENSION, REYCO 26K, 3 DEG, S26-190
9999-CUSTOM-83323	PUSHER AXLE	NO OPTION - PUSHER AXLE
9999-CUSTOM-83324	TAG AXLE	NO OPTION - TAG AXLE
1500-5509	FRAME	FRAME ASSMEBLY, 140 WB, 25' SILL, REYCO, STANDARD, LNT

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CAB		DESCRIPTION
1803-0087-CAB	CAB - DOOR (LH)	STANDARD DOOR, LH, ELECTRIC ROLL UP
1804-0086-CAB	CAB - DOOR (RH)	STANDARD DOOR, RH, ELECTRIC ROLL UP
9999-CUSTOM-82515	CAB - DOOR SAFETY BELT	NO OPTION - DOOR SAFETY STRAP
9999-CUSTOM-82532	CAB - FLOOR GRATING (LH)	NO OPTION - LH FLOOR GRATE
9999-CUSTOM-82533	CAB - FLOOR GRATING (RH)	NO OPTION - RH FLOOR GRATE
1806-1264-CAB	CAB - MIRROR (LH)	WEST COAST MIRROR, LH STANDARD DOOR, 16 X 7 NON-HEATED
1808-0055-CAB	CAB - MIRROR (RH)	WEST COAST MIRROR, RH STANDARD DOOR, 16 X 7 NON-HEATED
9999-CUSTOM-82675	CAB - MIRROR, SPOT	NO OPTION - SPOT MIRRORS
9999-CUSTOM-82673	CAB - MIRROR, LH LOOK DOWN	NO OPTION - LH LOOK DOWN MIRROR
9999-CUSTOM-82674	CAB - MIRROR, RH LOOK DOWN	NO OPTION - RH LOOK DOWN MIRROR
1401-0336-CAB	STEERING COLUMN CAB (LH)	STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-139404	STEERING COLUMN CAB (RH)	NO OPTION - RH STEERING, CAB
9999-CUSTOM-82609	RADIO OPTION - AM/FM/BLEETOOTH/HANDS FREE	RADIO - MOUNTED ON LH SIDE CAB, AM/FM/MP3/USB/BLEETOOTH/HANDS FREE
2003-0618-CAB	HVAC - CAB	HVAC, LNT CAB, B6.7, AURORA NON-BLENDING
2003-0369-CAB	CAB - DEFROST FANS	CAB DEFROST FANS, 2-SPD, DUAL FANS, LH & RH OVERHEAD CONSOLE
9999-CUSTOM-82530	CAB - ROOFTOP A/C OPTION	NO OPTION - ROOFTOP A/C
2100-3404-CAB	CAB, ELECTRICAL - IGNITION	CAB, IGNITION (2) KEYS D250, STD/BI-FOLD DOOR C250
2202-0085-CAB	CAB - DASH/INSTRUMENTATION	DIGITAL DASH, LH DRIVE, 8" SAMSUNG DISPLAY, MPH/KPH, 500K STEEL, DIESEL/CNG, LNT

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CAB		DESCRIPTION
2100-3436-CAB	CAB, ADAS	ELECTRICAL, CAB, MOBILE EYE ADAS
9999-CUSTOM-82622	CAB - GAUGES - ENGINE OIL TEMPERATURE	NO OPTION - ENGINE OIL TEMP GAUGE - CAB
9999-CUSTOM-82625	CAB - GAUGES - TRANSMISSION TEMP	NO OPTION - TRANSMISSION TEMP GAUGE
9999-CUSTOM-82626	CAB - GAUGES - MISC OPTIONS	NO OPTION - MISC GAUGES
9999-CUSTOM-83007	CAB, ELECTRICAL, ENGINE BRAKE	NO OPTION - ENGINE BRAKE CONTROLS, CAB
9999-CUSTOM-83060	CAB - INTERAXLE BUZZER/ALARM	NO OPTION - INTERAXLE BUZZER, CAB
9999-CUSTOM-82517	CAB - FLASHER OPTIONS	NO OPTION - FLASHERS
9999-CUSTOM-82518	CAB - LIGHTING OPTIONS	NO OPTION - CAB LIGHTING
9999-CUSTOM-82522	CAB - 12V POWER OPTIONS	NO OPTION - 12V POWER OPTIONS
1907-0466-CAB	CAB - AIR PIPING	CAB AIR PIPING, LHD ONLY, RH SIT-DOWN, LNT
9999-CUSTOM-82498	CAB - FIRE EXTINGUISHER	NO OPTION - FIRE EXTINGUISHER
9999-CUSTOM-82508	CAB - FIRST AID KIT	NO OPTION - FIRST AID KIT
9999-CUSTOM-82507	CAB - TRIANGLE KIT	NO OPTION - TRIANGLE KIT
1810-0061-CAB	CAB GRILLE	BATTLE GRILLE, SMOOTH FLAT BLACK

OPTIONS, CAB SEATS		DESCRIPTION
9999-CUSTOM-82616	CAB - SEAT MATERIAL	SEAT - ASPHALT CLOTH
2001-0518-CAB	CAB - SEATS (LH)	SEAT AIR RIDE, SEARS C2, ASPHALT CLOTH, LH, LNT
2011-0306-CAB	CAB - SEATS (RH)	SEAT ASSY RH; SEARS C2 2-WAY ADJ., ASPHALT CONFETTI, LNT

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CAB SEATS		DESCRIPTION
2011-0299-CAB	CAB - SEAT (CENTER BENCH)	SEAT CENTER BENCH ONLY, 1-MAN BENCH, ASPHALT CONFETTI, LNT
2000-4771-CAB	CAB - SEAT BELTS (LH)	SEAT BELT, BLACK, LH SIDE, AIR RIDE SEAT, LET2
2000-4859-CAB	CAB - SEAT BELTS (RH)	SEAT BELT, BLACK, RH SIDE, FIXED SEAT, LET2
9999-CUSTOM-82808	CAB - SEAT (LH), RH ARMREST	NO OPTION - RH ARMREST, LH SEAT
9999-CUSTOM-82809	CAB - SEAT (RH), LH ARMREST	NO OPTION - LH ARMREST, RH SEAT

OPTIONS, CHASSIS		DESCRIPTION
1100A-0057	FRONT STEER AXLE	FRONT STEER AXLE, D2000F, STD TRK, 24" CMBR, <190' WB, 16.5 X 7 ES 1100 BRAKES
1101-0651	FRONT SUSPENSION	FRONT SUSPENSION ASSY, CAST HANGERS, 14.6K, (2) TAPER LEAF, STD SHOCKS, 10.25" SILLS, LNT
2000-4749	LUBE, REAR DRIVE AXLE	LUBE, REAR AXLE, STANDARD, S21/23/26 AXLES 85W-140
9999-CUSTOM-83005	ELECTRICAL, AXLE DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CHASSIS
1003-0969	FUEL TANK	DIESEL FUEL TANK, SINGLE 60 GAL ROUND, ALUMINUM, W/O DRAIN
9999-CUSTOM-82505	FUEL ACCESSORIES	NO OPTION - FUEL ACCESSORIES
2503-0883	FUEL PIPING / FILTER	FUEL PIPING, B6.7, F.T. RH 80/104, DEF TANK RH, LNT
9999-CUSTOM-139401	FUEL PIPING, CNG	NO OPTION - FUEL PIPING, CNG
1003A-0049	DEF TANK	DEF TANK, MTD RH BEHIND FENDER, RH 32/38, B6.7/L9
2101-0643	BATTERY BOX	BATTERY BOX, (2) 950 CCA BATTERIES, W/ DISCONNECT SWITCH, PLASTIC COVER
1503-2281	BATTERY BOX SPACERS	BATTERY BOX SPACERS, LOWERS 8.5" BELOW TOP OF FRAME
9999-CUSTOM-83002	ELECTRICAL, BATTERY DCS INDICATOR LIGHT	NO OPTION - BATTERY DCS LIGHTING
9999-CUSTOM-82614	ELECTRICAL, JUMP START	NO OPTION - JUMP START
2000-4853	ELECTRICAL, BATTERY CABLES	BATTERY/ALT CABLES, B6.7 ELEC FANS, BATT BOX LH 32/44, LNT

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
2100-2983	ELECTRICAL, POWER FEED HARNESS	ELECTRICAL, POWER FEED, L9/X12, LH UP TO STA. 50
1010A-0054	AIR CLEANER STACK	AIR CLNR STACK ASSY, 2017 B6.7, DONALDSON EPG, LNT
1004A-0053	EXHAUST STACK	FLARED ELBOW EXHAUST STACK, STAINLESS STEEL, 36" LONG
2100-3392	ENGINE, ALTERNATOR	ALTERNATOR, DELCO 40 SI, 12V, 320 AMP, B6.7
9999-CUSTOM-82504	ENGINE COOLING, OPTIONS	NO OPTION - ENGINE COOLING
2000-4701	ENGINE, DIPSTICK/OIL FILL	ENGINE DIPSTICK MTG ONLY, L9/L9N
9999-CUSTOM-83013	ENGINE OIL SAMPLE VALVE	NO OPTION - ENIGNE OIL SAMPLE VALVE
162X-0494	ENGINE PROGRAMMING PARAMETERS	ENGINE PRGM-B6.7/L9, A/C, NO IDLE SHUTDOWN, 1450 RPM TA, 65 MPH
2502-0837	AIR DRYER	AIR DRYER, BENDIX AD-IS, LH FRONT/RH REAR/RH INSIDE SILL FRONT, ICE
1910-0502	AIR PIPING, AIR DRYER	AIR PIPING, ENGINE, B6.7, AD-IS, RH STA. 68, MTD FRONT, LNT
9999-CUSTOM-82833	AUTO NEUTRAL	NO OPTION - AUTO NEUTRAL, CAB
2100-3398	ELECTRICAL, TCM	TCM-ALLISON, 3500RDS, SINGLE DRIVE, TC413, 5 SPD, 145 AG, B6.7, LNT
9999-CUSTOM-83012	TRANSMISSION OIL SAMPLE VALVE	NO OPTION - TRANS OIL SAMPLE VALVE
9999-CUSTOM-83003	TRANSMISSION SKID PAN	NO OPTION - TRANSMISSION SKID PAN
1502-0644	FRONT BUMPER	BUMPER ASSEMBLY - FORMED, HENDRICKSON, STEEL, PC BLACK, LNT
9999-CUSTOM-142046	REAR BUMPER	NO OPTION - REAR BUMPER
1801-0610	FENDERS, FRONT	FENDER, FRONT - LNT, BLACK PLASTIC, NARROW
9999-CUSTOM-82521	ENGINE, BLOCK HEATER	NO OPTION - ENGINE BLOCK HEATER
1600-5132	PROPSHAFT	PROPSHAFT, 140" WB, B6.7, 3500RDS, S-170/190, LNT
1503-2885	AIR PIPING, FRAME SUPPORTS	FRAME AIR PIPING SUPPORTS, <190" WB, SINGLE AXLE, SINGLE SILLS
1906-0865	AIR PIPING, FRAME	FRAME AIR PIPING; (2) STEEL TANKS IN FRAME, AD-IS AIR DRYER,

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
W/ CENTRALIZED DRAINS, LNT		
9999-CUSTOM-83325	AIR PIPING, PUSHER/TAG AXLE	NO OPTION - PUSHER/TAG AXLE AIR PIPING
9999-CUSTOM-82502	AIR PIPING, OPTIONAL AUTOMATIC DRAIN VALVES	NO OPTION - DRAIN VALVES
9999-CUSTOM-82670	AIR PIPING, OPTIONAL MANUAL DRAIN VALVES	NO OPTION - MANUAL DRAIN VALVES
9999-CUSTOM-82501	AIR PIPING, OPTIONAL CHARGE VALVE	NO OPTION - CHARGE VALVE
9999-CUSTOM-82503	AIR PIPING, OPTIONAL GLADHANDS	NO OPTION - GLADHANDS
9999-CUSTOM-82499	AIR HORN, CHASSIS	NO OPTION - AIR HORN
2000-2215	BACK-UP ALARM	BACK-UP ALARM, ECCO 575, 107DB
9999-CUSTOM-139179	RETAINER CABLES	NO OPTION-RETAINER CABLES
9999-CUSTOM-82514	ELECTRICAL, DRIVE AWAY KIT	NO OPTION - DRIVE AWAY KIT
9999-CUSTOM-139184	WHEEL TORQUE INDICATORS	NO OPTION - WHEEL TORQUE INDICATORS
2501-1563	OIL PIPING, CAB TILT	CAB TILT, LNT, ELEC PUMP, ELEC. FAN, NO PLOW
1005-1888	ENGINE COOLING	COOLING ASSY; CUMMINS 2017 B6.7, OFFSET RADIATOR LNT
1004-2087	EXHAUST	EXHAUST, 2021 CUMMINS B6.7, 280-360HP, LNT
9999-CUSTOM-140340	TRACTOR PROTECTION VALVE	NO OPTION - TRACTOR PROTECTION VALVE

PAINT		DESCRIPTION
356-0322	PAINT, CAB	PAINT, CAB, STANDARD WHITE, G2-3460715-A
9999-CUSTOM-140265	PAINT, CAB VISOR	NO OPTION - CAB VISOR SAME COLOR AS CAB
9999-CUSTOM-83308	PAINT, CAB STRIPES	NO OPTION - CAB STRIPES
9999-CUSTOM-		

MELROSE DIESEL LNT PROPOSAL

PAINT		DESCRIPTION
83309	PAINT, CLEAR COAT	NO OPTION - CAB CLEAR COAT
356-0323	PAINT, CHASSIS	PAINT, CHASSIS, STANDARD BLACK, G2-2B1738
356-0329	PAINT, BUMPER	PAINT, BUMPER - STANDARD BLACK, G2-2B1738

TIRES / WHEELS		DESCRIPTION
2-519-2863-0124	TIRES/WHEELS - FRONT STEER AXLE	TOYO M170, 11R22.5, 16/H, ACCURIDE, STEEL, PC WHITE
4-514-2863-0124	TIRES/WHEELS - DRIVE AXLE	BRIDGESTONE R250ED, 11R22.5, 16/H, ACCURIDE, STEEL, PC WHITE
9999-CUSTOM-83538	TIRES/WHEELS - 60/40 STEER AXLE	NO OPTION - RIDEWELL RDS-209 TIRES
9999-CUSTOM-83539	TIRES/WHEELS - PUSHER AXLE	NO OPTION - PUSHER TIRES/WHEELS
9999-CUSTOM-83531	TIRES/WHEELS - TAG AXLE	NO OPTION - TAG AXLE TIRE/WHEELS

WARRANTY		DESCRIPTION
306A-0001	WARRANTY, CHASSIS	WARRANTY, CHASSIS, STANDARD, 1 YEAR, COVERAGE
306A-0041	WARRANTY, ENGINE	WARRANTY, CUMMINS STANDARD, 2 YEAR
9999-CUSTOM-83306	WARRANTY, ENGINE MAJOR COMPONENTS	NO OPTION-WARRANTY, MAJOR COMPONENTS
9999-CUSTOM-83307	WARRANTY, AFTERTREATMENT	WARRANTY, CUMMINS STANDARD, 2 YEAR
306A-0013	WARRANTY, TRANSMISSION	WARRANTY, ALLISION, 3 YR EDGE II PARTNER STANDARD
306A-0022	WARRANTY, DRIVE AXLE	WARRANTY, DANA, STANDARD 2 YEAR

MELROSE DIESEL LNT PROPOSAL

VEHICLE SPECIFICATION SUMMARY		UNIT	DESCRIPTION
MODEL			SALES LNT
ENGINE			CUMMINS 2021 B6.7, 300 HP, A/C, 2600RPM, 3000 SERIES TRANSMISISON, LNT
PEAK POWER	HP	300	
PEAK TORQUE	NM	600 @ 1600	
TRANSMISSION			TRANSMISSION ALLISON 3500RDS, TC413, SPL-170, B6.7, LNT

MELROSE DIESEL LNT PROPOSAL

DESCRIPTION	PRICE
BASE MSRP	\$252,063
CHASSIS OPTIONS	\$4,210
DESTINATION	\$2,870
DEALER MSRP	\$259,143
BODY OPTION AVERAGE	\$107,247
TOTAL PRICE with BODY	\$366,390
DISCOUNT	-\$71,212
WARRANTIES & OPTIONS	
WARRANTY, CHASSIS, STANDARD, 1 YEAR, COVERAGE WARRANTY, ALLISION, 3 YR	
EDGE II PARTNER STANDARD WARRANTY, DANA, STANDARD 2 YEAR	
WARRANTY, CUMMINS X12 W/ TOWING, 5 YR, 100,000 MI, PLAN 1, EPA/NON-CARB,	\$1706
WARRANTY, CUMMINS X12 AFTERTREATMENT, 5 YR, 100,000 MI	\$529
SOURCEWELL	\$1,000
	\$3,235
TOTAL SELLING PRICE (PER UNIT)	\$298,413

MELROSE DIESEL LNT PROPOSAL

TOTAL SELLING PRICE (PER UNIT)**\$298,413**

CUSTOMER

BATTLE MOTORS, INC.

DATE

DATE

Attachment: Melrose Diesel LNT Spec-Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and Infrastructure)

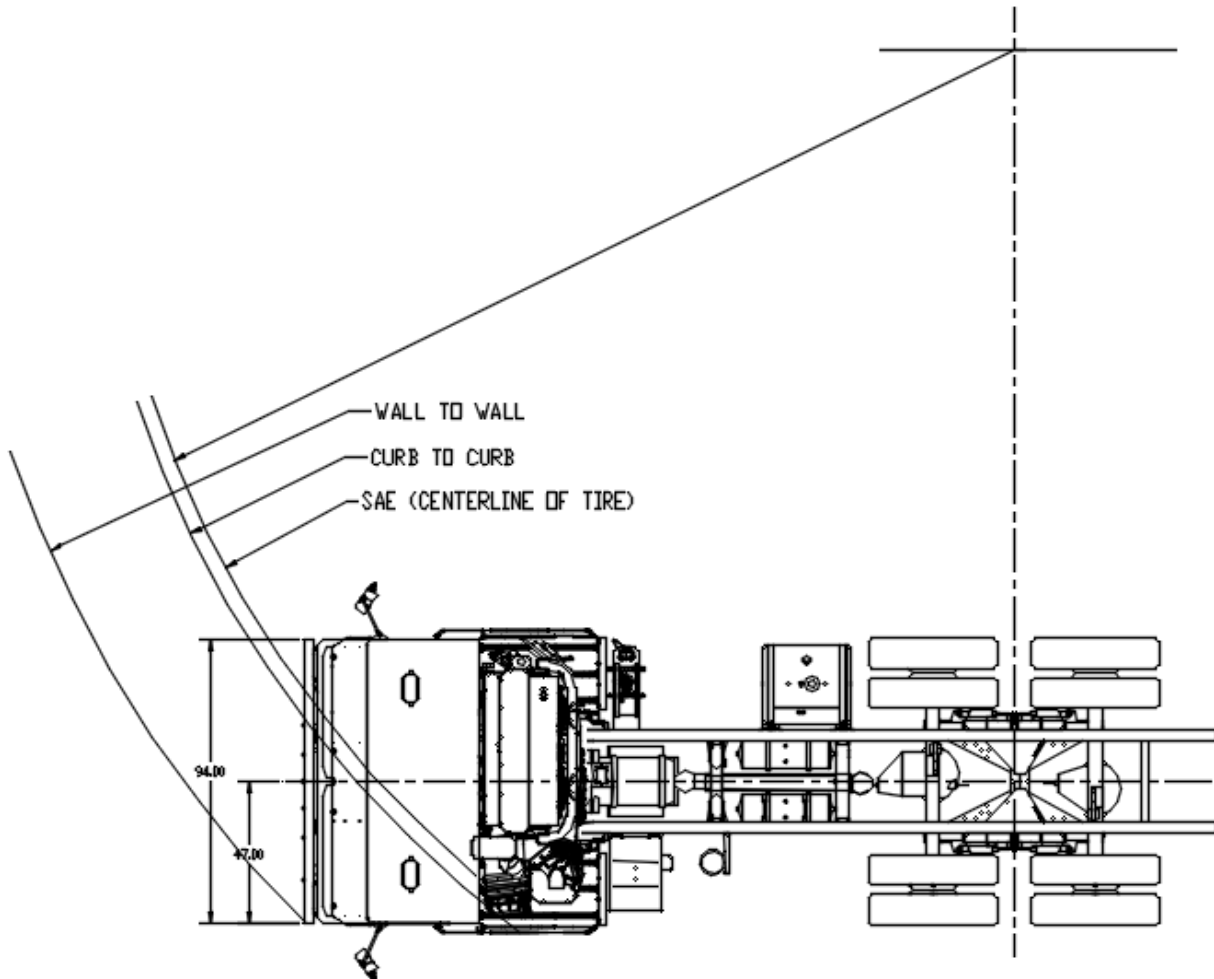
MELROSE DIESEL LNT PROPOSAL

AXLE POSITION	AXLE MODEL	AXLE/SUSP RATING (LBS)	SINGLE OR DUAL	WHEEL SIZE AND RATING (SIZE / LOAD @ PRESSURE)	TIRE SIZE AND RATING** (SIZE / LOAD @ PRESSURE / SPEED)	GAWR (LOAD @ PRESSURE / SPEED)
FRONT	D2000F	20,000	S	22.5 X 8.25 / 8,000 @ 120	11R22.5H/16 / 6,610 @ 120 / 75	13,220 @ 120 / 75
1ST INTERMEDIATE						
2ND INTERMEDIATE						
3RD INTERMEDIATE						
LAST	S26-190	26,000	D	22.5 X 8.25 / 8,000 @ 120	11R22.5H/16 / 6,005 @ 120 / 75	24,020 @ 120 / 75
DRIVETRAIN GVWR (LBS)						37,240
ENGINE APPLICATION GVWR (LBS)						33,000
TRANSMISSION APPLICATION GVWR (LBS)						60,000
CUSTOMER REQUESTED GVWR (LBS)						33,000
TRUCK GVWR (LBS)						33,000

Attachment: Melrose Diesel LNT Spec-Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and Infrastructure)

MELROSE DIESEL LNT PROPOSAL

COMPONENT	LOCATION
AIR DRYER	LH STA. 68 / FRONT
AIR TANKS	80/98
BATTERY CABLES	LH STA. 32/44
DEF TANK	RH STA. 32/38
DIESEL FUEL TANK	RH STA. 80/104



ESTIMATED VEHICLE WEIGHT DISTRIBUTION (LBS) - FULLY WET WITH 200# DRIVER (+/- 5%)

FRONT AXLE GROUND LOAD (LBS)	9,351.17
REAR AXLE GROUND LOAD (LBS)	4,683.83
TOTAL VEHICLE WEIGHT (LBS)	14,035.00

MELROSE DIESEL LNT PROPOSAL

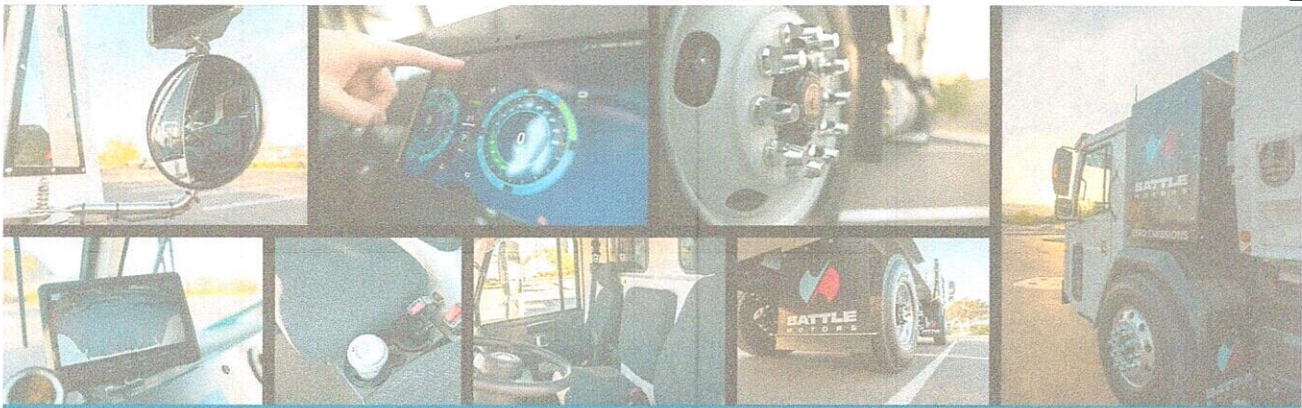
ESTIMATED VEHICLE TURNABILITY - TURN RADIUS (FEET) (+/- 5%)

SAE - TIRE CENTERLINE TO TIRE CENTERLINE (FT) 24.63

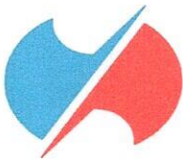
CURB-TO-CURB (FT) 25.55

WALL-TO-WALL (FT) 27.50

Attachment: Melrose Diesel LNT Spec-Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and Infrastructure)



P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL



BATTLE
MOTORS

Date

03/8/2023

Quote Information

202209231750-A466

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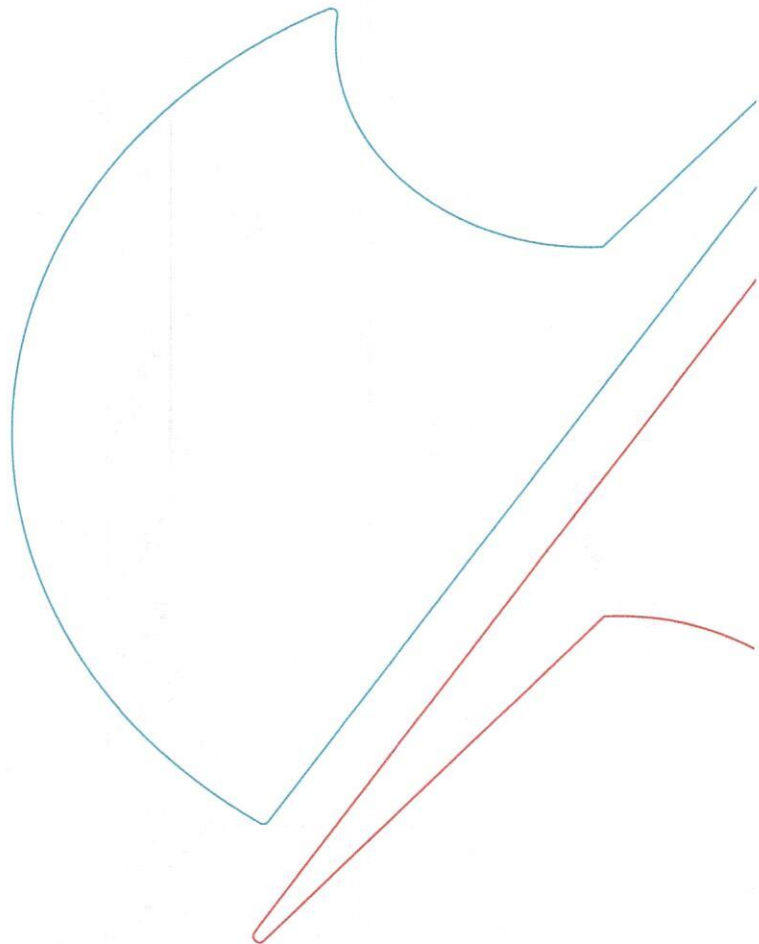
1001572-1001591

2024 Sales LNT BEV

Qty: 1

Prepared For
MELROSE

Prepared By
JEFF
DENESHA




**BATTLE
MOTORS**

TECHNICAL SPECIFICATIONS

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

CUSTOM OPTIONS	DESCRIPTION
9999-CUSTOM-83331	CUSTOM OPTIONS
9999-CUSTOM-140347	BEV WALL CHARGER
9999-CUSTOM-140540	FRAME (QUOTE ONLY)
9999-CUSTOM-140539	PROP SHAFT (QUOTE ONLY)
9999-CUSTOM-141986	AIR PIPING, AIR DRYER (QUOTE ONLY)
9999-CUSTOM-142066	BODY

CAB	DESCRIPTION
1800-1892-CAB	CAB MODEL
1809-0177-CAB	CAB - OVERHEAD CONSOLE / RADIO
1809-0164-CAB	CAB - FLOOR GRIP TAPE
1001-0960-CAB	CAB - ACCELERATOR PEDAL
2100-3420-CAB	CAB - BASE ELECTRICAL
9999-CUSTOM-82619	CAB - MODIFICATION (LH DOOR)
9999-CUSTOM-82620	CAB - MODIFICATION (RH DOOR)
2000-4561-CAB	CAB - GRAB HANDLES (LH)
2000-4862-CAB	CAB - GRAB HANDLES (RH)
9999-CUSTOM-82818	CAB, ELEC - DOOR WINDOWS - SWITCH COUNT
2100-3352-CAB	CAB, ELECTRICAL - DOOR WINDOWS
2000-4582-CAB	CAB - AIR HORN
9999-CUSTOM-83006	CAB - WHEEL DIFF LOCK CONTROLS
9999-CUSTOM-82623	CAB - ABS SYSTEM


**BATTLE
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TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

CAB	DESCRIPTION
9999-CUSTOM-82513	CAB AIR PIPING, REAR AXLE NO AIR PIPING REQUIRED
2000-4886-CAB	DECALS - CAB INTERIOR DECALS, INTERIOR, DUAL DRIVE, DIRECT DRIVE, BEV
2000-4797-CAB	DECALS - CALIFORNIA PROPOSTION 65 DECAL - CALIFORNIA PROPOSITION 65
1810-0043-CAB	CAB - MISC COMPONENTS CAB MODIF - LET2 COMPONENTS, LH/RH STEEL PANELS
9999-CUSTOM-83327	PUSHER/TAG CAB CONTROLS NO OPTION - PUSHER/TAG AXLE CAB CONTROLS

CHASSIS	DESCRIPTION
2000-4887	DECALS - CHASSIS EXTERIOR DECAL, EXTERIOR, BEV
2003-0604	HVAC - CHASSIS HVAC, A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2201-0119	WINDSHIELD WIPERS - CHASSIS WINDSHIELD WIPERS, DUAL DRIVE
1005-1906	BEV COOLING, MANIFOLD CIRCUIT COOLING ASSY- MANIFOLD CIRCUIT LNT BEV
1006-1299	BEV MOTOR MOUNTING MOTOR MTG ASSY- 4 DEG, DIRECT DRIVE, LNT, BEV
1802-0076	CAB MOUNTING CAB MOUNTING - LET2 STANDARD CAB
9999-CUSTOM-83075	FRAME - FUEL TANK MTG, DROP FRAME NO OPTION - FUEL TANK MTG, DROP FRAME
2100-3420	ELECTRICAL, BASE, CHASSIS ELECTRICAL, BASE CHASSIS, 500K, AUTOCRAFT, BEV
1908-0096	AIR PIPING, REAR AXLE AIR PIPING, SINGLE AXLE - 2-SPEED, REYCO SUSP
9999-CUSTOM-139490	REAR BUMP BLOCKS NO OPTION - BUMP BLOCKS
1402-0640	POWER STEERING RESERVOIR POWER STEERING, 4 QT, COULOMB PS PUMP, LNT BEV
1401-0336	STEERING COLUMN CHASSIS (LH) STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
1401-0337	STEERING COLUMN CHASSIS (RH) STEERING COLUMN, CAB - LNT, RHD, TILT, W/CRUISE, 16" WHEEL
1400-0715	STEERING GEAR STEERING GEAR, XD-120, RH/DUAL DRIVE, STANDARD CAB, LET2
9999-CUSTOM-83008	GAUGES - MISC OPTIONS NO OPTION - MISC GAUGES, CHASSIS
1000A-0002	MOTOR OIL PAN, BEV MOTOR ASSEMBLY, CASCADIA OIL PAN
2101-0666	BEV LOWER POWER SLED LOWER POWER SKID, 240 KWH, CATL, BEV
2100-3421	ELECTRICAL, BEV LOW VORAGE, POWER SLED ELECTRICAL LOWER POWR SLED, LOW VOLTAGE HARNESS, BEV


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

CHASSIS	DESCRIPTION
2100-3437	ELECTRICAL, BEV EPTO HV JUNCTION BOX ELECTRICAL ASSY - BEV HV COMPONENT CABLES
2100-3438	ELECTRICAL, BEV CHARGING INLET ELECTRICAL, CHARGING INLET, BEV
2100-3440	ELECTRICAL, BEV LV POWER FEED ELECTRICAL ASSY - LV CABLES, BEV
2100-3439	ELECTRICAL, BEV CHARGER JUNCTION BOX ELCTRICAL, CHARGER JUNCTION BOX, BEV
2500-0128	BATTERY COOLANT PLUMBING, BEV PIPING, BATTERY COOLANT CIRCUIT, BEV
2500-0129	COOLANT PIPING, CAB HEATER, BEV PIPING, CAB COOLANT CIRCUIT, BEV
2500-0130	BULKHEAD PLATE, BEV PIPIN, BULK HEAD PLATE, BEV
2501-1556	PIPING, MOTOR OIL COOLING, BEV PIPING, MOTOR OIL COOLING, BEV
1503-3002	FRAME MODIF, CENTER BEARING DRILLING FRAME MODIFICATION, CENTER BEARING DRILLING 1503-3002
9999-CUSTOM-142262	FRAME MODIF, REAR BUMPER ASSY NO OPTION - FRAME MOD REAR BUMPER
9999-CUSTOM-142330	FRAME MODIF, PUSHER AXLE NO OPTION - FRAME MOD PUSHER

MODEL	DESCRIPTION
9999-CUSTOM-140230	SOURCEWELL NON-SOURCEWELL
9999-CUSTOM-140179	FUEL TYPE BEV (ELECTRIC)
9999-CUSTOM-140243	BODY APPLICATION NEWWAY, RL, VIPER, SINGLE, 13 CY
9999-CUSTOM-83334	PRODUCT AVAILABILITY STOCKED MAJOR COMPONENTS
9999-CUSTOM-83098	CARB/EPA CARB / EPA - CLEAN IDLE COMPLIANT
9999-CUSTOM-83019	FRAME - WHEELBASE 140 WHEELBASE
9999-CUSTOM-83058	FRAME SILLS SINGLE SILL
9999-CUSTOM-83532	CAB STYLE LNT CREW CAB WITH EXTERIOR SUNVISOR
9999-CUSTOM-83534	CAB / DOORS LNT CREW CAB, W/VISOR, LH ELECTRIC ROLL-UP / RH ELECTRIC ROLL-UP DOORS
9999-CUSTOM-82516	DRIVE TYPE DUAL DRIVE, RH STAND-UP
1000A-0001	BEV MOTOR ELECTRIC MOTOR, CASCADIA, HVH410-150, 442 HP @ 1700 RPM, 1476 LB-FT TORQUE (0 TO 1700 RPM)


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

MODEL		DESCRIPTION
1007-1219	BEV TRANSMISSION	DIRECT DRIVE, SPL-140, OIL COOLED, BEV
9999-CUSTOM-83068	REAR SUSPENSION MODEL	REYCO 102CC - REYCO SPRING SUSPENSION
9999-CUSTOM-83048	REAR DRIVE AXLE MODEL	23082T - REAR DRIVE AXLE 23,000
1200A-0420	REAR DRIVE AXLE	REAR AXLE, 23082T, 6.17/8.40, BENDIX AIR DISC BRAKES, REYCO, SPL-140, LET2/LNT
1201-1254	REAR SUSPENSION	REAR SUSPENSION, REYCO 102CC 21K, 3 DEG, 23082T
9999-CUSTOM-83323	PUSHER AXLE	NO OPTION - PUSHER AXLE
1500-5630	FRAME	FRAME ASSEMBLY, 140" WB, REYCO 102CC, 10.25" SINGLE SILL, LNT BEV
2102-0132	ABS SYSTEM	ABS SYSTEM, BENDIX 4S/4M, 500K BAUD

OPTIONS, CAB		DESCRIPTION
1803-0087-CAB	CAB - DOOR (LH)	STANDARD DOOR, LH, ELECTRIC ROLL UP
1804-0086-CAB	CAB - DOOR (RH)	STANDARD DOOR, RH, ELECTRIC ROLL UP
9999-CUSTOM-82515	CAB - DOOR SAFETY BELT	NO OPTION - DOOR SAFETY STRAP
9999-CUSTOM-82532	CAB - FLOOR GRATING (LH)	NO OPTION - LH FLOOR GRATE
9999-CUSTOM-82533	CAB - FLOOR GRATING (RH)	NO OPTION - RH FLOOR GRATE
1806-1332-CAB	CAB - MIRROR (LH)	WEST COAST MIRROR, LH STANDARD DOOR, 16 X 7 HEATED
1808-0120-CAB	CAB - MIRROR (RH)	WEST COAST MIRROR, RH STANDARD DOOR, 16 X 7 HEATED
1806-1292-CAB	CAB - MIRROR, SPOT	MIRROR, SPOT - (1) LH / (1) RH, BOTTOM MIRROR ARMS, 8" ROUND, SS, HEATED
9999-CUSTOM-82673	CAB - MIRROR, LH LOOK DOWN	NO OPTION - LH LOOK DOWN MIRROR
9999-CUSTOM-82674	CAB - MIRROR, RH LOOK DOWN	NO OPTION - RH LOOK DOWN MIRROR
1401-0336-CAB	STEERING COLUMN CAB (LH)	STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
1401-0337-CAB	STEERING COLUMN CAB (RH)	STRG COLUMN ASSY - LNT, RHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-82609	RADIO OPTION - AM/FM/BLUETOOTH/HANDS FREE	RADIO - MOUNTED ON LH SIDE CAB, AM/FM/MP3/USB/BLUETOOTH/HANDS FREE



TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

OPTIONS, CAB		DESCRIPTION
2003-0604-CAB	HVAC - CAB	HVAC, BEV A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2003-0369-CAB	CAB - DEFROST FANS	CAB DEFROST FANS, 2-SPD, DUAL FANS, LH & RH OVERHEAD CONSOLE
2100-3404-CAB	CAB, ELECTRICAL - IGNITION	CAB, IGNITION (2) KEYS D250, STD/BI-FOLD DOOR C250
2202-0072-CAB	CAB - DASH/INSTRUMENTATION	DIGITAL DASH, DUAL DRIVE, 8" SAMSUNG DISPLAY, MPH/KPH, 500K STEEL, BEV, LNT
2100-3436-CAB	CAB, ADAS	ELECTRICAL, CAB, MOBILE EYE ADAS
9999-CUSTOM-83060	CAB - INTERAXLE BUZZER/ALARM	NO OPTION - INTERAXLE BUZZER, CAB
9999-CUSTOM-82517	CAB - FLASHER OPTIONS	NO OPTION - FLASHERS
9999-CUSTOM-82522	CAB - 12V POWER OPTIONS	NO OPTION - 12V POWER OPTIONS
1907-0480-CAB	CAB - AIR PIPING	CAB AIR PIPING, DUAL DRIVE, RH STAND-UP SEATING, LNT
9999-CUSTOM-82498	CAB - FIRE EXTINGUISHER	NO OPTION - FIRE EXTINGUISHER
9999-CUSTOM-82508	CAB - FIRST AID KIT	NO OPTION - FIRST AID KIT
9999-CUSTOM-82507	CAB - TRIANGLE KIT	NO OPTION - TRIANGLE KIT
1810-0061-CAB	CAB GRILLE	BATTLE GRILLE, SMOOTH FLAT BLACK

OPTIONS, CAB SEATS		DESCRIPTION
9999-CUSTOM-82616	CAB - SEAT MATERIAL	SEAT - ASPHALT CLOTH
2001-0518-CAB	CAB - SEATS (LH)	SEAT AIR RIDE, SEARS C2, ASPHALT CLOTH, LH, LNT
2011-0311-CAB	CAB - SEATS (RH)	SEAT FLIP-UP/FOLD-DOWN, ASPHALT CLOTH, RH, LNT
2011-0299-CAB	CAB - SEAT (CENTER BENCH)	SEAT CENTER BENCH ONLY, 1-MAN BENCH, ASPHALT CONFETTI, LNT
2000-4771-CAB	CAB - SEAT BELTS (LH)	SEAT BELT, BLACK, LH SIDE, AIR RIDE SEAT, LET2
2000-4859-CAB	CAB - SEAT BELTS (RH)	SEAT BELT, BLACK, RH SIDE, FIXED SEAT, LET2
9999-CUSTOM-82808	CAB - SEAT (LH), RH ARMREST	NO OPTION - RH ARMREST, LH SEAT
9999-CUSTOM-82809	CAB - SEAT (RH), LH ARMREST	NO OPTION - LH ARMREST, RH SEAT



TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
1100A-0052	FRONT STEER AXLE	FRONT STEER AXLE, D2000F, STD TRACK, 20" CMBR, ALL WB'S, AIR DISC BRAKES
1101-0659	FRONT SUSPENSION	FRONT SUSPENSION ASSY, CAST HANGERS, 17K TLS, (3) TAPER LEAF, STD SHOCKS, 10.25" SILLS, LNT
2000-4798	LUBE, REAR DRIVE AXLE	REAR AXLE LUBE, GEAR OIL 85W-140 FOR 23082T
9999-CUSTOM-83005	ELECTRICAL, AXLE DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CHASSIS
2101-0675	BEV UPPER BATTERY RACK	BEV BATTERY UPPER RACK, ALUMINUM BLACK COVERS, 240KWH, CATL, BEV
2300-0712	BEV EPTO	EPTO, CASCADIA IM-225DZ-S;SAE "C" MNT/"C" SHAFT, BEV
2101-0643	BATTERY BOX	BATTERY BOX, (2) 950 CCA BATTERIES, W/ DISCONNECT SWITCH, PLASTIC COVER
1503-2281	BATTERY BOX SPACERS	BATTERY BOX SPACERS, LOWERS 8.5" BELOW TOP OF FRAME
9999-CUSTOM-83002	ELECTRICAL, BATTERY DCS INDICATOR LIGHT	NO OPTION - BATTERY DCS LIGHTING
2000-4854	ELECTRICAL, BATTERY CABLES	BATTERY / POWER FEED CABLES, BEV, LH 32/44
2502-0843	AIR DRYER	AIR DRYER, BENDIX AD-IS AIR DRYER W/BLOCK, BEV
1910-0507	AIR PIPING, AIR DRYER	AIR PIPING, 3.7KW COLUMB COMP, AD-IS, LH 68 / FRONT, LNT BEV
9999-CUSTOM-82833	AUTO NEUTRAL	NO OPTION - AUTO NEUTRAL, CAB
1502-0644	FRONT BUMPER	BUMPER ASSEMBLY - FORMED, HENDRICKSON, STEEL, PC BLACK, LNT
9999-CUSTOM-142046	REAR BUMPER	NO OPTION - REAR BUMPER
1801-0619	FENDERS, FRONT	FENDER, FRONT - LNT, BATTLE, BLACK PLASTIC, WIDE
1600-5213	PROPSHAFT	PROPSHAFT, 140"WB, EM/DD, REYCO,S26-S30, SPL140, LNT BEV
1503-2885	AIR PIPING, FRAME SUPPORTS	FRAME AIR PIPING SUPPORTS, <190" WB, SINGLE AXLE, SINGLE SILLS
1906-0850	AIR PIPING, FRAME	FRAME AIR PIPING; (2) STEEL AIR TANKS IN FRAME, AD-IS AIR DRYER, W/ CENTRALIZED DRAINS, LNT BEV
9999-CUSTOM-83325	AIR PIPING, PUSHER/TAG AXLE	NO OPTION - PUSHER/TAG AXLE AIR PIPING
1904-0073	AIR PIPING, OPTIONAL AUTOMATIC DRAIN VALVES	BENDIX DV-2 HEATED @ WET TANK ONLY
9999-CUSTOM-82670	AIR PIPING, OPTIONAL MANUAL DRAIN VALVES	NO OPTION - MANUAL DRAIN VALVES
9999-CUSTOM-82501	AIR PIPING, OPTIONAL CHARGE VALVE	NO OPTION - CHARGE VALVE
2000-4582	AIR HORN, CHASSIS	AIR HORN, DUAL TONE, UNDER CAB
2000-2215	BACK-UP ALARM	BACK-UP ALARM, ECCO 575, 107DB


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
9999-CUSTOM-139179	RETAINER CABLES	NO OPTION-RETAINER CABLES
2104-0117	ELECTRICAL, DRIVE AWAY KIT	BODY STD TAILBOARD HARNESS ONLY
9999-CUSTOM-139184	WHEEL TORQUE INDICATORS	NO OPTION - WHEEL TORQUE INDICATORS
2501-1558	OIL PIPING, CAB TILT	PIPING ASSY - CAB TILT, ELECTRIC TILT PUMP, LNT BEV
1005-1905	BEV COOLING, SYSTEM	COOLING ASSY- EMP E-FAN COOLING SYS 2, LET2/LNT BEV
9999-CUSTOM-142003	ELECTRICAL, HIGH VOLTAGE, POWER SLED	NO OPTION - POWER SLED, HIGH VOLTALGE HARNESS, BEV
9999-CUSTOM-140335	BEV SKID PLATE	NO OPTION - MOTOR SKID PLATE BEV
9999-CUSTOM-140340	TRACTOR PROTECTION VALVE	NO OPTION - TRACTOR PROTECTION VALVE

PAINT		DESCRIPTION
356-0322	PAINT, CAB	PAINT, CAB, STANDARD WHITE, G2-3460715-A
9999-CUSTOM-140265	PAINT, CAB VISOR	NO OPTION - CAB VISOR SAME COLOR AS CAB
9999-CUSTOM-83308	PAINT, CAB STRIPES	NO OPTION - CAB STRIPES
9999-CUSTOM-83309	PAINT, CLEAR COAT	NO OPTION - CAB CLEAR COAT
356-0323	PAINT, CHASSIS	PAINT, CHASSIS, STANDARD BLACK, G2-2B1738
356-0329	PAINT, BUMPER	PAINT, BUMPER - STANDARD BLACK, G2-2B1738

TIRES / WHEELS		DESCRIPTION
2-519-4687-0140	TIRES/WHEELS - FRONT STEER AXLE	TOYO M153, 315/80R22.5, 20/L, ACCURIDE, ALUMINUM, XTRA POLISH FINISH, 7.00" OUTSET
4-519-2863-0141	TIRES/WHEELS - DRIVE AXLE	TOYO M170, 11R22.5, 16/H, ACCURIDE, ALUMINUM, XTRA POLISH FINISH
9999-CUSTOM-83539	TIRES/WHEELS - PUSHER AXLE	NO OPTION - PUSHER TIRES/WHEELS

WARRANTY		DESCRIPTION
306A-0010	WARRANTY, CHASSIS	WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV
306A-0022	WARRANTY, DRIVE AXLE	WARRANTY, DANA, STANDARD 2 YEAR


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TECHNICAL SPECIFICATIONS (CONT.)
**P1001572-P1001523 BR BEV LNT 11YD LOADMASTER
 PROPOSAL**

VEHICLE SPECIFICATION SUMMARY		UNIT	DESCRIPTION
MODEL			SALES LNT BEV
TRANSMISSION			DIRECT DRIVE, SPL-140, OIL COOLED, BEV

Attachment: Loadmaster Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


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PRICING SUMMARY (CONT.)
**P1001572-P1001523 BR BEV LNT 11YD LOADMASTER
 PROPOSAL**
TOTAL SELLING PRICE (PER UNIT)
\$498,500
CUSTOMER
BOSTON FREIGHTLINER
DATE
DATE

Attachment: Loadmaster Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


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PRICING SUMMARY
**P1001572-P1001523 BR BEV LNT 11YD LOADMASTER
 PROPOSAL**

DESCRIPTION	PRICE
BASE MSRP	\$461,314
DESTINATION	\$3,921
DEALER MSRP	\$465,235
BODY PACKAGE - LOADMASTER 11 YARD	\$123,450
TOTAL MSRP	\$588,685
DISCOUNT	\$92,067
WARRANTIES & OPTIONS	
NO OPTION - BEV WALL CHARGER	\$0
NON-SOURCEWELL	\$0
WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV	\$1,882
WARRANTY, DANA, STANDARD 2 YEAR	\$0
SUBTOTAL	\$1,882
TOTAL SELLING PRICE (PER UNIT)	\$498,500

Attachment: Loadmaster Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
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GVWR

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

AXLE POSITION	AXLE MODEL	AXLE/SUSP RATING (LBS)	SINGLE OR DUAL	WHEEL SIZE AND RATING (SIZE / LOAD @ PRESSURE)	TIRE SIZE AND RATING** (SIZE / LOAD @ PRESSURE / SPEED)	GAWR (LOAD @ PRESSURE / SPEED)
FRONT	D2000F	20,000	S	22.5 X 9.00 / 10,000 @ 130	315/80R22.5L/20 / 10,000 @ 130 / 68	20,000 @ 130 / 68
1ST INTERMEDIATE						
2ND INTERMEDIATE						
3RD INTERMEDIATE						
LAST	23082T	23,000	D	22.5 X 8.25 / 7,400 @ 131	11R22.5H/16 / 6,005 @ 120 / 75	23,000 @ 120 / 75
DRIVETRAIN GVWR (LBS)						43,000
ENGINE APPLICATION GVWR (LBS)						66,000
TRANSMISSION APPLICATION GVWR (LBS)						33,000
TRUCK GVWR (LBS)						33,000

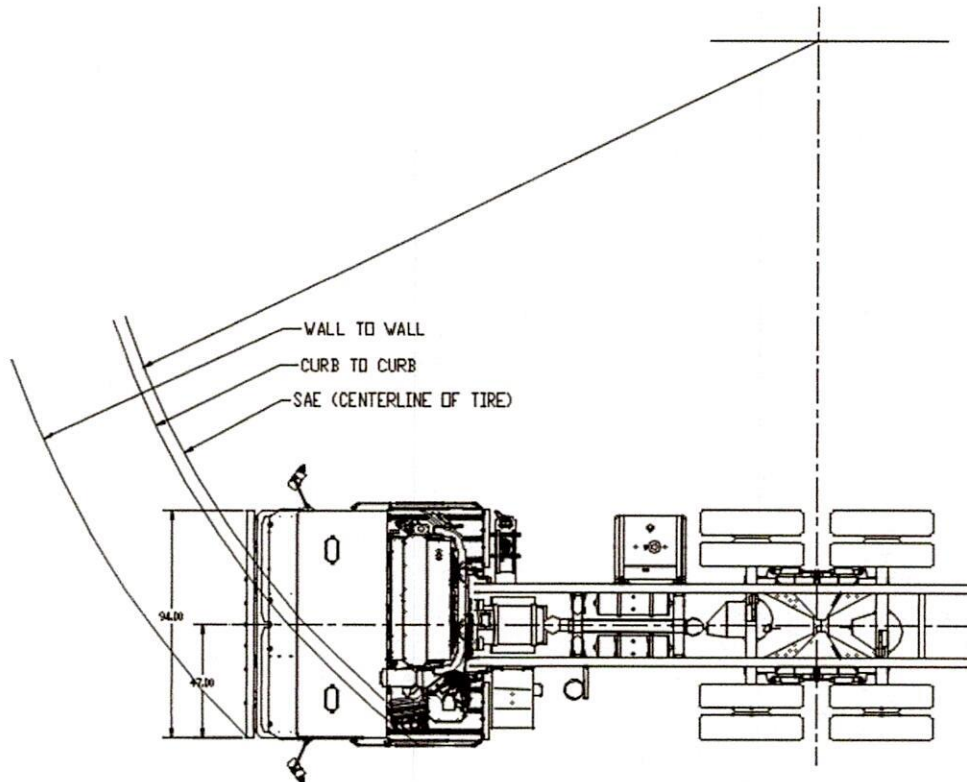
Attachment: Loadmaster Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 MOTORS

COMPONENT LOCATIONS

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

COMPONENT	LOCATION
AIR DRYER	LH STA. 68 / FRONT
AIR TANKS	92/110
BATTERY CABLES	LH STA. 32/44



ESTIMATED VEHICLE WEIGHT DISTRIBUTION (LBS) - FULLY WET WITH 200# DRIVER (+/- 5%)

FRONT AXLE GROUND LOAD (LBS)	8,863.61
REAR AXLE GROUND LOAD (LBS)	3,392.39
TOTAL VEHICLE WEIGHT (LBS)	12,256.00

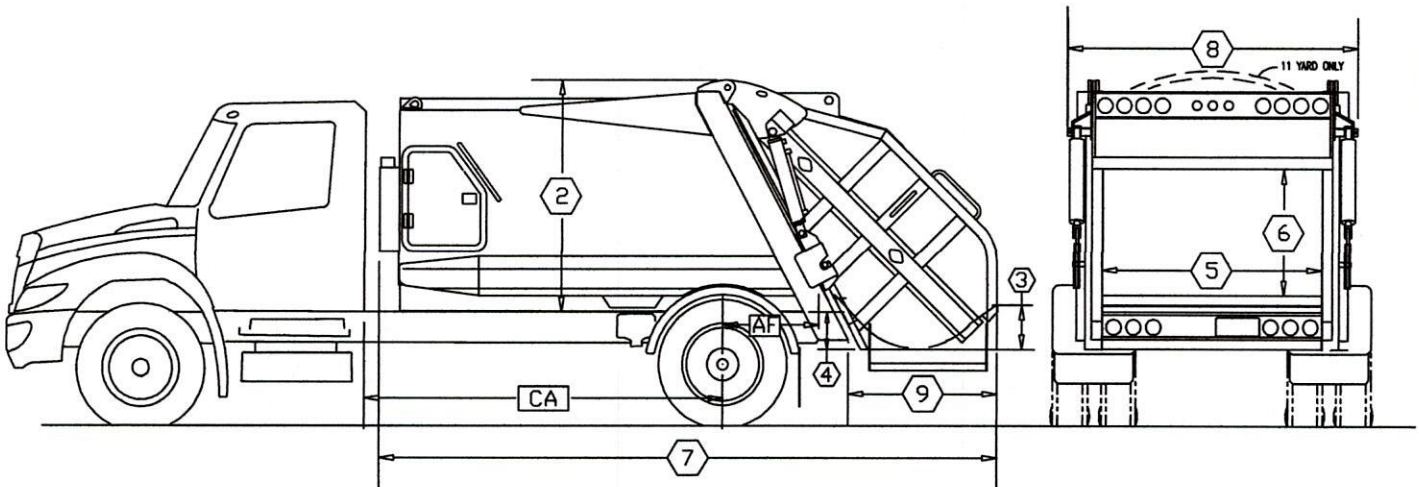
ESTIMATED VEHICLE TURNABILITY - TURN RADIUS (FEET) (+/- 5%)

SAE - TIRE CENTERLINE TO TIRE CENTERLINE (FT)	27.80
CURB-TO-CURB (FT)	28.84
WALL-TO-WALL (FT)	30.48

LOADMASTER

ELITE SERIES

"small" rear loader



DIMENSIONAL SPECIFICATIONS

1 AVAILABLE BODY VOLUMES →	6 YARD ³	8 YARD ³	10 YARD ³	11 YARD ³
2 HEIGHT ABOVE CHASSIS FRAME	69 3/4	69 3/4	69 3/4	73 1/4
3 DEPTH OF HOPPER	13	13	13	13
4 HOPPER BELOW CHASSIS FRAME	11	11	11	11
5 HOPPER INSIDE WIDTH	66	66	66	66
6 HOPPER OPENING HEIGHT	41	41	41	41
7 OVERALL LENGTH	161 3/4	185 3/4	209 3/4	209 3/4
8 OVERALL WIDTH	85 1/2	85 1/2	85 1/2	85 1/2
9 REAR OF BODY TO REAR OF TAILGATE	44 3/4	44 3/4	44 3/4	44 3/4
10 APPROX BODY WEIGHT	7,200 LBS	7,700 LBS	8,200 LBS	8,500 LBS
11 LOAD SILL ABOVE CHASSIS FRAME	2 INCHES	2 INCHES	2 INCHES	2 INCHES
12 HOPPER CAPACITY	1.0 YD ³	1.0 YD ³	1.0 YD ³	1.0 YD ³
13 HEIGHT ABOVE FRAME (WITH GATE RAISED)	118	118	118	118

CHASSIS RECOMMENDATIONS

Specify ELITE chassis to have 19.5 wheel size (not 22.5).
Consult factory IF intending 22.5 wheel size.

BODY SIZE	MINIMUM GVWR	CA	MINIMUM AF
6 YD ³	17,000	85"	34"
8 YD ³	21,000	108"	34"
10 YD ³	25,500	134"	34"
11 YD ³	25,500	134"	34"

ISUZU "NOTES":

FOR the ELITE 6 and ELITE 8...THE ISUZU "N-SERIES" CHASSIS IS "POPLUAR" CHOICE.

ISUZU "ONLY" OFFERS "AFT OF REAR AXLE" FUEL TANK. THIS TANK MUST BE "MOVED"

Aft of rear axle fuel tanks will require fuel tank "move" ... and will be Dealer's responsibility!!

FOR the ELITE 8...THE ISUZU WB = 132.5" IS THE "CORRECT" ISUZU WHEEL BASE ... AND ISUZU's "HORIZONTAL" EXHAUST IS NEEDED.

FOR the ELITE 6...THE ISUZU WB = 132.5" IS THE "WORKABLE" ISUZU WHEEL BASE ... AND EITHER THE "HORIZONTAL" EXHAUST or "VERTICAL" EXHAUST will WORK.

The ELITE 6 "CAN BE" ON ISUZU's WB = 109" BUT THEN "BOTH" THE FUEL TANK AND THE "BATT BOX" NEED RE-LOCATION. THE "HORIZONTAL" EXHAUST "MUST BE" SPEC'd for ELITE 6 on WB = 109"

LOADMASTER reserves the right to revise product specifications.

This "DATA SHEET" is "informational" only. Consult with your LOADMASTER dealer prior to ordering...for final specifications.

For "CT"...assure Clear & Useable per this info. (If EXHAUST stack is "consuming" space... then "account" for EXHAUST when you are "specing" Chassis.)

LOADMASTER

loadmaster@loadmaster.org

800-433-2768

100 west eleventh avenue
po box 186
Norway, Michigan 49870-0186
fax 906-563-9800 fax

JULY 01, 2018

ELITE BASE-PRODUCT SPECIFICATIONS**(JULY 2018)****Material Specifications-Body**

Body sides	10 ga. high tensile
Body rearward floor	3/16" high tensile
Body forward floor	1/8" high tensile
Body roof	10 ga. high tensile
Floor's longitudinals	tubular 3" x 8" x 3/16" wall
Ejector's track channel	1/4" high tensile
Body structural upgrade options available (thickness and alloy)	

Material Specifications-Tailgate

Lower tailgate Sides	3/16" T-1 alloy
Upper tailgate Sides	10 ga. high tensile
Hopper floor	3/16" T-1 alloy
Separator panel	3/16" abrasion-resistant grade235
Tailgate structural upgrade options available (thickness and alloy)	

Material Specifications-Blades

Ejector's face panel	10 ga. high tensile
Ejector's structure	tubular 2" x 3" x 3/16"
Ejector's tracking shoes	UHMW polyethylene
Sweep blade face	3/16" T-1 alloy
Sweep blade pusharms	1/2" high tensile
Slide blade face	7ga. high tensile
Blades wrist pin & axles	2 1/4" dia. med carb cold finish
Slider's shoeing	nylatron nsm & uhmw polyethylene

Hydraulic Specifications

Reservoir	20 gallon	Sweep Cylinders (2)	3 1/2" bore
Pump	cast iron gear-type (3 cubic inch per rev)	Pack (slider) Cylinders (2)	3 1/2" bore
Pump flow	18 gpm	Gate lift Cylinders (2)	3 1/2" bore
Max syst pressure	2,700 psi	Ejector Telescopic	2-stage (4.5/3.5)
Suction Filter	100 mesh	Body-mounted valve	2 function sectional
Return Filter	5 micron tank top	Tailgate-mounted valve	3 function sectional

Electrical Specifications

Wire	14 ga sxl	Switches	centralized,in-cab panel
Wire identifiers	color & function labelling	Lights	grommet-mounted
Harnessing	multi-section; braid covering		
Harness Connects	Deutsch aircraft type		
Wire connects	heat shrink sealed		

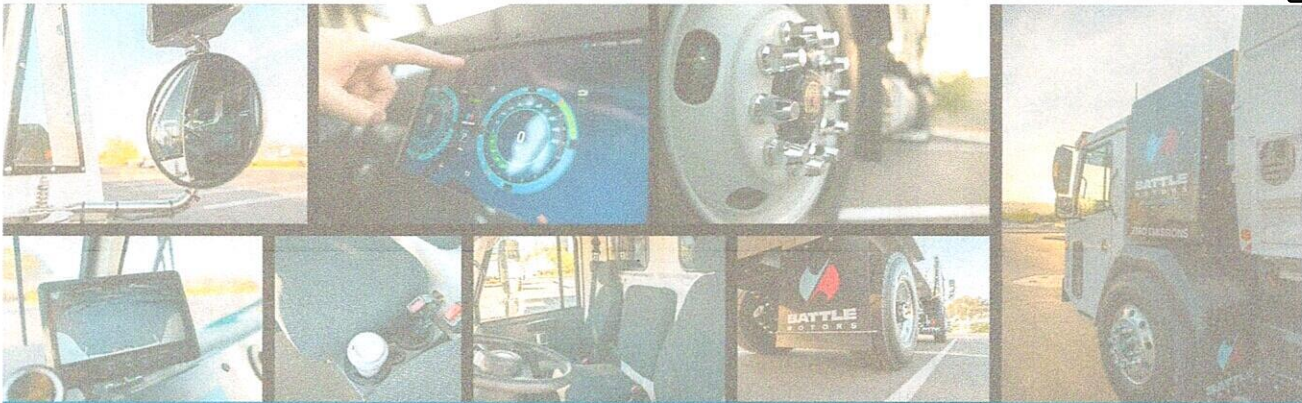
Some standard features

Epoxy primer paint
 Undercoated
 Automatic tailgate latches
 Body access door with ladder
 Full complement of lights
 Quick change shoeing

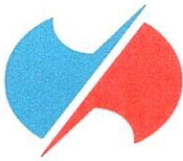
Some available options

Hot-shift PTO or cable shift "Customer-preferred" choices
 Work lights
 Strobe lights
 8k Drum winch (container handling)
 Cart Tipper/ Barrel Tipper





P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL



BATTLE
MOTORS

Date

03/8/2023

Quote Information

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9000-0284B

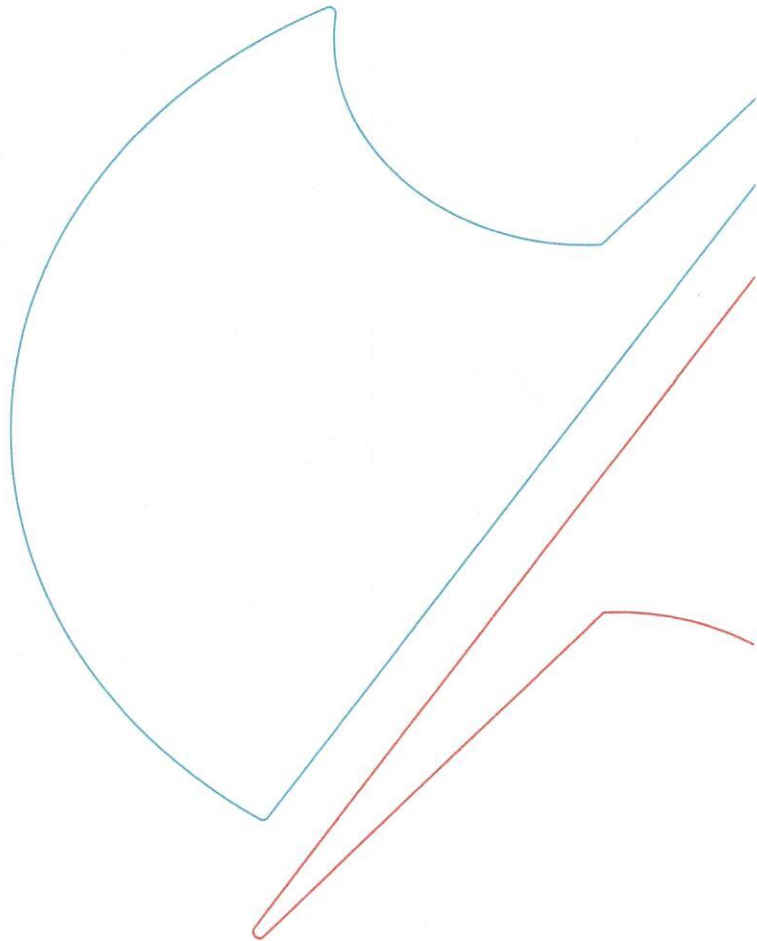
1001572-1001591

2024 Sales LNT BEV

Qty: 1

Prepared For
MELROSE

Prepared By
JEFF
DENESHA




**BATTLE
MOTORS**

TECHNICAL SPECIFICATIONS

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

CUSTOM OPTIONS		DESCRIPTION
9999-CUSTOM-83331	CUSTOM OPTIONS	NO OPTION - CUSTOM OPTIONS
9999-CUSTOM-140347	BEV WALL CHARGER	NO OPTION - BEV WALL CHARGER
9999-CUSTOM-140540	FRAME (QUOTE ONLY)	NO-OPTION, FRAME AVAILABLE IN UPPER SELECTION
9999-CUSTOM-140539	PROP SHAFT (QUOTE ONLY)	NO OPTION - PROP SHAFT AVAILABLE IN UPPER SELECTION
9999-CUSTOM-141986	AIR PIPING, AIR DRYER (QUOTE ONLY)	NO OPTON (AVAILABLE IN UPPER SELECTION)
9999-CUSTOM-142066	BODY	NO OPTION - BODY

CAB		DESCRIPTION
1800-1892-CAB	CAB MODEL	CAB ASSY, (2) REAR WINDOWS, NO ROOF VENTS, W/VISOR, LNT
1809-0177-CAB	CAB - OVERHEAD CONSOLE / RADIO	OVERHEAD CONSOLE, LHD/DUAL DRIVE, AM/FM/BLEETOOTH/HANDS FREE RADIO, HVAC CONTROLS, LNT
1809-0164-CAB	CAB - FLOOR GRIP TAPE	FLOOR COVERING INSTALLATION, LH / DUAL DRIVE, LNT
1001-0960-CAB	CAB - ACCELERATOR PEDAL	ACCELERATOR PEDAL, CUMMINS, DUAL DRIVE
2100-3420-CAB	CAB - BASE ELECTRICAL	ELECTRICAL, BASE, CAB, 500K, AUTOCRAFT HEADLIGHT, BEV
9999-CUSTOM-82619	CAB - MODIFICATION (LH DOOR)	NO OPTION - CAB MODIFICAION (LH DOOR)
9999-CUSTOM-82620	CAB - MODIFICATION (RH DOOR)	NO OPTION - CAB MODIFICAION (RH DOOR)
2000-4561-CAB	CAB - GRAB HANDLES (LH)	LH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
2000-4862-CAB	CAB - GRAB HANDLES (RH)	RH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
9999-CUSTOM-82818	CAB, ELEC - DOOR WINDOWS - SWITCH COUNT	DUAL DRIVE, LH E/R, RH E/R
2100-3352-CAB	CAB, ELECTRICAL - DOOR WINDOWS	CAB, ELECTRICAL, POWER WINDOWS, 4 SWITCHES
2000-4582-CAB	CAB - AIR HORN	AIR HORN, DUAL TONE, UNDER CAB
9999-CUSTOM-83006	CAB - WHEEL DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CAB
9999-CUSTOM-82623	CAB - ABS SYSTEM	NO OPTION - ABS ATC OPTION


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

CAB	DESCRIPTION
9999-CUSTOM-82513	CAB AIR PIPING, REAR AXLE NO AIR PIPING REQUIRED
2000-4886-CAB	DECALS - CAB INTERIOR DECALS, INTERIOR, DUAL DRIVE, DIRECT DRIVE, BEV
2000-4797-CAB	DECALS - CALIFORNIA PROPOSITION 65 DECAL - CALIFORNIA PROPOSITION 65
1810-0043-CAB	CAB - MISC COMPONENTS CAB MODIF - LET2 COMPONENTS, LH/RH STEEL PANELS
9999-CUSTOM-83327	PUSHER/TAG CAB CONTROLS NO OPTION - PUSHER/TAG AXLE CAB CONTROLS

CHASSIS	DESCRIPTION
2000-4887	DECALS - CHASSIS EXTERIOR DECAL, EXTERIOR, BEV
2003-0604	HVAC - CHASSIS HVAC, A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2201-0119	WINDSHIELD WIPERS - CHASSIS WINDSHIELD WIPERS, DUAL DRIVE
1005-1906	BEV COOLING, MANIFOLD CIRCUIT COOLING ASSY- MANIFOLD CIRCUIT LNT BEV
1006-1299	BEV MOTOR MOUNTING MOTOR MTG ASSY- 4 DEG, DIRECT DRIVE, LNT, BEV
1802-0076	CAB MOUNTING CAB MOUNTING - LET2 STANDARD CAB
9999-CUSTOM-83075	FRAME - FUEL TANK MTG, DROP FRAME NO OPTION - FUEL TANK MTG, DROP FRAME
2100-3420	ELECTRICAL, BASE, CHASSIS ELECTRICAL, BASE CHASSIS, 500K, AUTOCRAFT, BEV
1908-0096	AIR PIPING, REAR AXLE AIR PIPING, SINGLE AXLE - 2-SPEED, REYCO SUSP
9999-CUSTOM-139490	REAR BUMP BLOCKS NO OPTION - BUMP BLOCKS
1402-0640	POWER STEERING RESERVOIR POWER STEERING, 4 QT, COULOMB PS PUMP, LNT BEV
1401-0336	STEERING COLUMN CHASSIS (LH) STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
1401-0337	STEERING COLUMN CHASSIS (RH) STEERING COLUMN, CAB - LNT, RHD, TILT, W/CRUISE, 16" WHEEL
1400-0715	STEERING GEAR STEERING GEAR, XD-120, RH/DUAL DRIVE, STANDARD CAB, LET2
9999-CUSTOM-83008	GAUGES - MISC OPTIONS NO OPTION - MISC GAUGES, CHASSIS
1000A-0002	MOTOR OIL PAN, BEV MOTOR ASSEMBLY, CASCADIA OIL PAN
2101-0666	BEV LOWER POWER SLED LOWER POWER SKID, 240 KWH, CATL, BEV
2100-3421	ELECTRICAL, BEV LOW VOLTAGE, POWER SLED ELECTRICAL LOWER POWR SLED, LOW VOLTAGE HARNESS, BEV


BATTLE
MOTORS
TECHNICAL SPECIFICATIONS (CONT.)
**P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
PROPOSAL**

	CHASSIS	DESCRIPTION
2100-3437	ELECTRICAL, BEV EPTO HV JUNCTION BOX	ELECTRICAL ASSY - BEV HV COMPONENT CABLES
2100-3438	ELECTRICAL, BEV CHARGING INLET	ELECTRICAL, CHARGING INLET, BEV
2100-3440	ELECTRICAL, BEV LV POWER FEED	ELECTRICAL ASSY - LV CABLES, BEV
2100-3439	ELECTRICAL, BEV CHARGER JUNCTION BOX	ELECTRICAL, CHARGER JUNCTION BOX, BEV
2500-0128	BATTERY COOLANT PLUMBING, BEV	PIPING, BATTERY COOLANT CIRCUIT, BEV
2500-0129	COOLANT PIPING, CAB HEATER, BEV	PIPING, CAB COOLANT CIRCUIT, BEV
2500-0130	BULKHEAD PLATE, BEV	PIPING, BULK HEAD PLATE, BEV
2501-1556	PIPING, MOTOR OIL COOLING, BEV	PIPING, MOTOR OIL COOLING, BEV
1503-3002	FRAME MODIF, CENTER BEARING DRILLING	FRAME MODIFICATION, CENTER BEARING DRILLING 1503-3002
9999-CUSTOM-142262	FRAME MODIF, REAR BUMPER ASSY	NO OPTION - FRAME MOD REAR BUMPER
9999-CUSTOM-142330	FRAME MODIF, PUSHER AXLE	NO OPTION - FRAME MOD PUSHER

	MODEL	DESCRIPTION
9999-CUSTOM-140230	SOURCEWELL	NON-SOURCEWELL
9999-CUSTOM-140179	FUEL TYPE	BEV (ELECTRIC)
9999-CUSTOM-140243	BODY APPLICATION	NEUWAY, RL, VIPER, SINGLE, 13 CY
9999-CUSTOM-83334	PRODUCT AVAILABILITY	STOCKED MAJOR COMPONENTS
9999-CUSTOM-83098	CARB/EPA	CARB / EPA - CLEAN IDLE COMPLIANT
9999-CUSTOM-83019	FRAME - WHEELBASE	140 WHEELBASE
9999-CUSTOM-83058	FRAME SILLS	SINGLE SILL
9999-CUSTOM-83532	CAB STYLE	LNT CREW CAB WITH EXTERIOR SUNVISOR
9999-CUSTOM-83534	CAB / DOORS	LNT CREW CAB, W/VISOR, LH ELECTRIC ROLL-UP / RH ELECTRIC ROLL-UP DOORS
9999-CUSTOM-82516	DRIVE TYPE	DUAL DRIVE, RH STAND-UP
1000A-0001	BEV MOTOR	ELECTRIC MOTOR, CASCADIA, HVH410-150, 442 HP @ 1700 RPM, 1476 LB-FT TORQUE (0 TO 1700 RPM)


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

MODEL	DESCRIPTION
1007-1219	BEV TRANSMISSION DIRECT DRIVE, SPL-140, OIL COOLED, BEV
9999-CUSTOM-83068	REAR SUSPENSION MODEL REYCO 102CC - REYCO SPRING SUSPENSION
9999-CUSTOM-83048	REAR DRIVE AXLE MODEL 23082T - REAR DRIVE AXLE 23,000
1200A-0420	REAR DRIVE AXLE REAR AXLE, 23082T, 6.17/8.40, BENDIX AIR DISC BRAKES, REYCO, SPL-140, LET2/LNT
1201-1254	REAR SUSPENSION REAR SUSPENSION, REYCO 102CC 21K, 3 DEG, 23082T
9999-CUSTOM-83323	PUSHER AXLE NO OPTION - PUSHER AXLE
1500-5630	FRAME FRAME ASSEMBLY, 140" WB, REYCO 102CC, 10.25" SINGLE SILL, LNT BEV
2102-0132	ABS SYSTEM ABS SYSTEM, BENDIX 4S/4M, 500K BAUD

OPTIONS, CAB	DESCRIPTION
1803-0087-CAB	CAB - DOOR (LH) STANDARD DOOR, LH, ELECTRIC ROLL UP
1804-0086-CAB	CAB - DOOR (RH) STANDARD DOOR, RH, ELECTRIC ROLL UP
9999-CUSTOM-82515	CAB - DOOR SAFETY BELT NO OPTION - DOOR SAFETY STRAP
9999-CUSTOM-82532	CAB - FLOOR GRATING (LH) NO OPTION - LH FLOOR GRATE
9999-CUSTOM-82533	CAB - FLOOR GRATING (RH) NO OPTION - RH FLOOR GRATE
1806-1332-CAB	CAB - MIRROR (LH) WEST COAST MIRROR, LH STANDARD DOOR, 16 X 7 HEATED
1808-0120-CAB	CAB - MIRROR (RH) WEST COAST MIRROR, RH STANDARD DOOR, 16 X 7 HEATED
1806-1292-CAB	CAB - MIRROR, SPOT MIRROR, SPOT - (1) LH / (1) RH, BOTTOM MIRROR ARMS, 8" ROUND, SS, HEATED
9999-CUSTOM-82673	CAB - MIRROR, LH LOOK DOWN NO OPTION - LH LOOK DOWN MIRROR
9999-CUSTOM-82674	CAB - MIRROR, RH LOOK DOWN NO OPTION - RH LOOK DOWN MIRROR
1401-0336-CAB	STEERING COLUMN CAB (LH) STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
1401-0337-CAB	STEERING COLUMN CAB (RH) STRG COLUMN ASSY - LNT, RHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-82609	RADIO OPTION - AM/FM/BLUETOOTH/HANDS FREE RADIO - MOUNTED ON LH SIDE CAB, AM/FM/MP3/USB/BLUETOOTH/HANDS FREE


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

OPTIONS, CAB		DESCRIPTION
2003-0604-CAB	HVAC - CAB	HVAC, BEV A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2003-0369-CAB	CAB - DEFROST FANS	CAB DEFROST FANS, 2-SPD, DUAL FANS, LH & RH OVERHEAD CONSOLE
2100-3404-CAB	CAB, ELECTRICAL - IGNITION	CAB, IGNITION (2) KEYS D250, STD/BI-FOLD DOOR C250
2202-0072-CAB	CAB - DASH/INSTRUMENTATION	DIGITAL DASH, DUAL DRIVE, 8" SAMSUNG DISPLAY, MPH/KPH, 500K STEEL, BEV, LNT
2100-3436-CAB	CAB, ADAS	ELECTRICAL, CAB, MOBILE EYE ADAS
9999-CUSTOM-83060	CAB - INTERAXLE BUZZER/ALARM	NO OPTION - INTERAXLE BUZZER, CAB
9999-CUSTOM-82517	CAB - FLASHER OPTIONS	NO OPTION - FLASHERS
9999-CUSTOM-82522	CAB - 12V POWER OPTIONS	NO OPTION - 12V POWER OPTIONS
1907-0480-CAB	CAB - AIR PIPING	CAB AIR PIPING, DUAL DRIVE, RH STAND-UP SEATING, LNT
9999-CUSTOM-82498	CAB - FIRE EXTINGUISHER	NO OPTION - FIRE EXTINGUISHER
9999-CUSTOM-82508	CAB - FIRST AID KIT	NO OPTION - FIRST AID KIT
9999-CUSTOM-82507	CAB - TRIANGLE KIT	NO OPTION - TRIANGLE KIT
1810-0061-CAB	CAB GRILLE	BATTLE GRILLE, SMOOTH FLAT BLACK

OPTIONS, CAB SEATS		DESCRIPTION
9999-CUSTOM-82616	CAB - SEAT MATERIAL	SEAT - ASPHALT CLOTH
2001-0518-CAB	CAB - SEATS (LH)	SEAT AIR RIDE, SEARS C2, ASPHALT CLOTH, LH, LNT
2011-0311-CAB	CAB - SEATS (RH)	SEAT FLIP-UP/FOLD-DOWN, ASPHALT CLOTH, RH, LNT
2011-0299-CAB	CAB - SEAT (CENTER BENCH)	SEAT CENTER BENCH ONLY, 1-MAN BENCH, ASPHALT CONFETTI, LNT
2000-4771-CAB	CAB - SEAT BELTS (LH)	SEAT BELT, BLACK, LH SIDE, AIR RIDE SEAT, LET2
2000-4859-CAB	CAB - SEAT BELTS (RH)	SEAT BELT, BLACK, RH SIDE, FIXED SEAT, LET2
9999-CUSTOM-82808	CAB - SEAT (LH), RH ARMREST	NO OPTION - RH ARMREST, LH SEAT
9999-CUSTOM-82809	CAB - SEAT (RH), LH ARMREST	NO OPTION - LH ARMREST, RH SEAT



TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
1100A-0052	FRONT STEER AXLE	FRONT STEER AXLE, D2000F, STD TRACK, 20" CMBR, ALL WB'S, AIR DISC BRAKES
1101-0659	FRONT SUSPENSION	FRONT SUSPENSION ASSY, CAST HANGERS, 17K TLS, (3) TAPER LEAF, STD SHOCKS, 10.25" SILLS, LNT
2000-4798	LUBE, REAR DRIVE AXLE	REAR AXLE LUBE, GEAR OIL 85W-140 FOR 23082T
9999-CUSTOM-83005	ELECTRICAL, AXLE DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CHASSIS
2101-0675	BEV UPPER BATTERY RACK	BEV BATTERY UPPER RACK, ALUMINUM BLACK COVERS, 240KWH, CATL, BEV
2300-0712	BEV EPTO	EPTO, CASCADIA IM-225DZ-S;SAE "C" MNT/"C" SHAFT, BEV
2101-0643	BATTERY BOX	BATTERY BOX, (2) 950 CCA BATTERIES, W/ DISCONNECT SWITCH, PLASTIC COVER
1503-2281	BATTERY BOX SPACERS	BATTERY BOX SPACERS, LOWERS 8.5" BELOW TOP OF FRAME
9999-CUSTOM-83002	ELECTRICAL, BATTERY DCS INDICATOR LIGHT	NO OPTION - BATTERY DCS LIGHTING
2000-4854	ELECTRICAL, BATTERY CABLES	BATTERY / POWER FEED CABLES, BEV, LH 32/44
2502-0843	AIR DRYER	AIR DRYER, BENDIX AD-IS AIR DRYER W/BLOCK, BEV
1910-0507	AIR PIPING, AIR DRYER	AIR PIPING, 3.7KW COLUMB COMP, AD-IS, LH 68 / FRONT, LNT BEV
9999-CUSTOM-82833	AUTO NEUTRAL	NO OPTION - AUTO NEUTRAL, CAB
1502-0644	FRONT BUMPER	BUMPER ASSEMBLY - FORMED, HENDRICKSON, STEEL, PC BLACK, LNT
9999-CUSTOM-142046	REAR BUMPER	NO OPTION - REAR BUMPER
1801-0619	FENDERS, FRONT	FENDER, FRONT - LNT, BATTLE, BLACK PLASTIC, WIDE
1600-5213	PROPSHAFT	PROPSHAFT, 140"WB, EM/DD, REYCO,S26-S30, SPL140, LNT BEV
1503-2885	AIR PIPING, FRAME SUPPORTS	FRAME AIR PIPING SUPPORTS, <190" WB, SINGLE AXLE, SINGLE SILLS
1906-0850	AIR PIPING, FRAME	FRAME AIR PIPING; (2) STEEL AIR TANKS IN FRAME, AD-IS AIR DRYER, W/ CENTRALIZED DRAINS, LNT BEV
9999-CUSTOM-83325	AIR PIPING, PUSHER/TAG AXLE	NO OPTION - PUSHER/TAG AXLE AIR PIPING
1904-0073	AIR PIPING, OPTIONAL AUTOMATIC DRAIN VALVES	BENDIX DV-2 HEATED @ WET TANK ONLY
9999-CUSTOM-82670	AIR PIPING, OPTIONAL MANUAL DRAIN VALVES	NO OPTION - MANUAL DRAIN VALVES
9999-CUSTOM-82501	AIR PIPING, OPTIONAL CHARGE VALVE	NO OPTION - CHARGE VALVE
2000-4582	AIR HORN, CHASSIS	AIR HORN, DUAL TONE, UNDER CAB
2000-2215	BACK-UP ALARM	BACK-UP ALARM, ECCO 575, 107DB



TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
9999-CUSTOM-139179	RETAINER CABLES	NO OPTION-RETAINER CABLES
2104-0117	ELECTRICAL, DRIVE AWAY KIT	BODY STD TAILBOARD HARNESS ONLY
9999-CUSTOM-139184	WHEEL TORQUE INDICATORS	NO OPTION - WHEEL TORQUE INDICATORS
2501-1558	OIL PIPING, CAB TILT	PIPING ASSY - CAB TILT, ELECTRIC TILT PUMP, LNT BEV
1005-1905	BEV COOLING, SYSTEM	COOLING ASSY- EMP E-FAN COOLING SYS 2, LET2/LNT BEV
9999-CUSTOM-142003	ELECTRICAL, HIGH VOLTAGE, POWER SLED	NO OPTION - POWER SLED, HIGH VOLTALGE HARNESS, BEV
9999-CUSTOM-140335	BEV SKID PLATE	NO OPTION - MOTOR SKID PLATE BEV
9999-CUSTOM-140340	TRACTOR PROTECTION VALVE	NO OPTION - TRACTOR PROTECTION VALVE

PAINT		DESCRIPTION
356-0322	PAINT, CAB	PAINT, CAB, STANDARD WHITE, G2-3460715-A
9999-CUSTOM-140265	PAINT, CAB VISOR	NO OPTION - CAB VISOR SAME COLOR AS CAB
9999-CUSTOM-83308	PAINT, CAB STRIPES	NO OPTION - CAB STRIPES
9999-CUSTOM-83309	PAINT, CLEAR COAT	NO OPTION - CAB CLEAR COAT
356-0323	PAINT, CHASSIS	PAINT, CHASSIS, STANDARD BLACK, G2-2B1738
356-0329	PAINT, BUMPER	PAINT, BUMPER - STANDARD BLACK, G2-2B1738

TIRES / WHEELS		DESCRIPTION
2-519-4687-0140	TIRES/WHEELS - FRONT STEER AXLE	TOYO M153, 315/80R22.5, 20/L, ACCURIDE, ALUMINUM, XTRA POLISH FINISH, 7.00" OUTSET
4-519-2863-0141	TIRES/WHEELS - DRIVE AXLE	TOYO M170, 11R22.5, 16/H, ACCURIDE, ALUMINUM, XTRA POLISH FINISH
9999-CUSTOM-83539	TIRES/WHEELS - PUSHER AXLE	NO OPTION - PUSHER TIRES/WHEELS

WARRANTY		DESCRIPTION
306A-0010	WARRANTY, CHASSIS	WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV
306A-0022	WARRANTY, DRIVE AXLE	WARRANTY, DANA, STANDARD 2 YEAR


BATTLE
 M O T O R S

TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
 PROPOSAL

VEHICLE SPECIFICATION SUMMARY	UNIT	DESCRIPTION
MODEL		SALES LNT BEV
TRANSMISSION		DIRECT DRIVE, SPL-140, OIL COOLED, BEV

Attachment: New Way Body Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


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PRICING SUMMARY

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
 PROPOSAL

DESCRIPTION	PRICE
BASE MSRP	\$461,314
DESTINATION	\$3,921
DEALER MSRP	\$465,235
BODY PACKAGE - NEWAY VIPER 13 YARD	\$108,979
TOTAL MSRP	\$574,214
DISCOUNT	\$-87,196
WARRANTIES & OPTIONS	
NO OPTION - BEV WALL CHARGER	\$0
NON-SOURCEWELL	\$0
WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV	\$1,882
WARRANTY, DANA, STANDARD 2 YEAR	\$0
SUBTOTAL	\$1,882
TOTAL SELLING PRICE (PER UNIT)	\$488,900

Attachment: New Way Body Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 M O T O R S

PRICING SUMMARY (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
 PROPOSAL

TOTAL SELLING PRICE (PER UNIT)
\$488,900
CUSTOMER
BOSTON FREIGHTLINER
DATE
DATE

Attachment: New Way Body Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and



P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
PROPOSAL

AXLE POSITION	AXLE MODEL	AXLE/SUSP RATING (LBS)	SINGLE OR DUAL	WHEEL SIZE AND RATING (SIZE / LOAD @ PRESSURE)	TIRE SIZE AND RATING** (SIZE / LOAD @ PRESSURE / SPEED)	GAWR (LOAD @ PRESSURE / SPEED)
FRONT	D2000F	20,000	S	22.5 X 9.00 / 10,000 @ 130	315/80R22.5L/20 / 10,000 @ 130 / 68	20,000 @ 130 / 68
1ST INTERMEDIATE						
2ND INTERMEDIATE						
3RD INTERMEDIATE						
LAST	23082T	23,000	D	22.5 X 8.25 / 7,400 @ 131	11R22.5H/16 / 6,005 @ 120 / 75	23,000 @ 120 / 75
DRIVETRAIN GVWR (LBS)						43,000
ENGINE APPLICATION GVWR (LBS)						66,000
TRANSMISSION APPLICATION GVWR (LBS)						33,000
TRUCK GVWR (LBS)						33,000

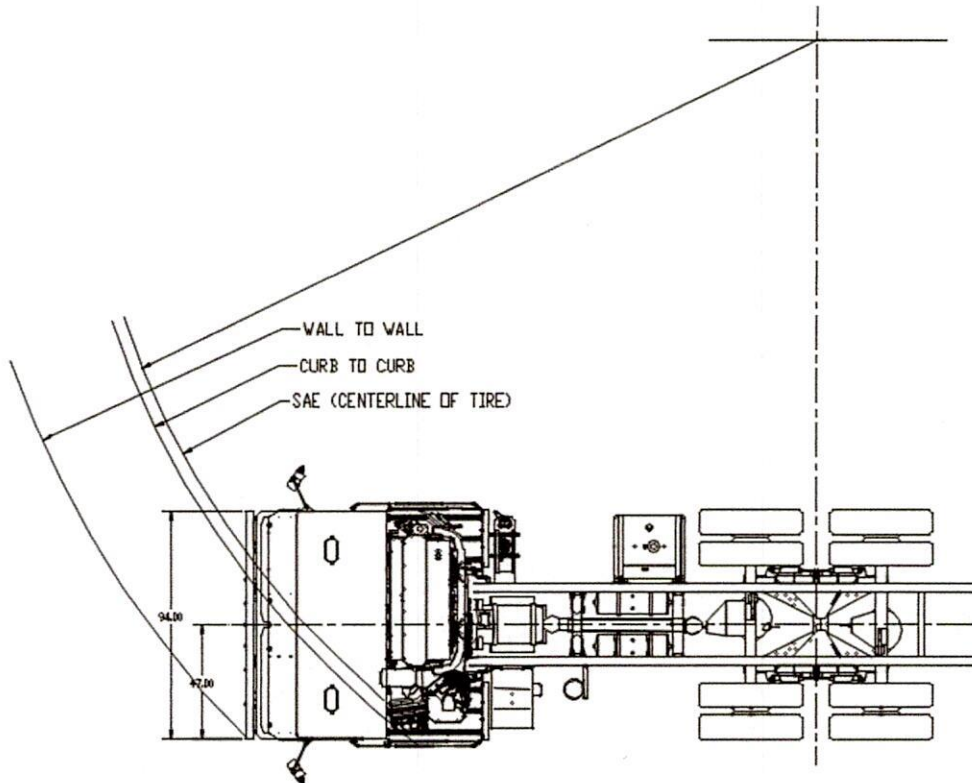
Attachment: New Way Body Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


**BATTLE
MOTORS**

COMPONENT LOCATIONS

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
PROPOSAL

COMPONENT	LOCATION
AIR DRYER	LH STA. 68 / FRONT
AIR TANKS	92/110
BATTERY CABLES	LH STA. 32/44



ESTIMATED VEHICLE WEIGHT DISTRIBUTION (LBS) - FULLY WET WITH 200# DRIVER (+/- 5%)

FRONT AXLE GROUND LOAD (LBS)	8,863.61
REAR AXLE GROUND LOAD (LBS)	3,392.39
TOTAL VEHICLE WEIGHT (LBS)	12,256.00

ESTIMATED VEHICLE TURNABILITY - TURN RADIUS (FEET) (+/- 5%)

SAE - TIRE CENTERLINE TO TIRE CENTERLINE (FT)	27.80
CURB-TO-CURB (FT)	28.84
WALL-TO-WALL (FT)	30.48

VIPER™

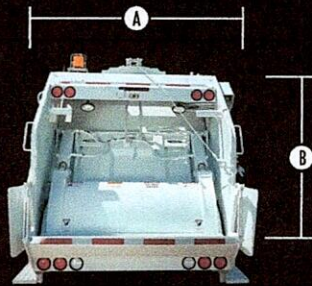
S E R I E S



PACKING A POWERFUL BITE

The New Way® Viper™ is one of the most popular 9 to 13 yd³ mid-compaction rear-loader bodies on the market today. Larger capacity Viper™ units are excellent for both residential and commercial work. With options including all varieties of residential cart tippers and commercial containers, a rear-view camera and a two-year cylinder warranty, this venomous Viper™ is sure to paralyze the competition.

VIPER™



GENERAL SPECIFICATIONS

Model	9 V ^{**}	11 V	13 V
Body Capacity	9 yd ³	11 yd ³	13 yd ³
Body Width (A)	82"	96"	96"
Body Height (B)	71"	72"	72"
Body Length (C)	191.5"	195"	211"
*Approx. Body Weight	9,290 lbs	9,650 lbs	10,012 lbs
Hopper Capacity	2 yd ³	2.7 yd ³	2.7 yd ³
Hopper Opening Width	60"	80"	80"
Loading Sill Height	Frame	Frame	Frame
Hopper Cycle Time	26-30 secs.	22-24 secs.	22-24 secs.

MINIMUM CHASSIS SPECIFICATIONS (STANDARD)

Model	9 V ^{**}	11 V	13 V
** Minimum GVWR	23,000 lbs	26,000 lbs	29,000 lbs
Cab to Trunnion	84"	84"	102"

HYDRAULIC CYLINDER SPECIFICATIONS (STANDARD)

Model	9 V ^{**}	11 V	13 V
Slide Cylinders (2)	4"	4"	4"
Sweep Cylinders (2)	5"	5"	5"
Tailgate Cylinders (2)	3.5"	3.5"	3.5"
Ejection Cylinder	3-Stage 5.5"	3-Stage 5.5"	4-Stage 6.5"

BODY CONSTRUCTION

Roof & Sides	10 gauge	80K GR
Floor (center)	1/4"	50K GR
Floor (sides)	10 gauge	80K GR
Ejection Panel	10 gauge	50K GR
Sweep Panel	1/4"	80K GR
Tailgate (upper & lower)	10 gauge	50K GR
Hopper Floor	1/4"	50K GR
Hopper Floor (back)	1/4"	100K GR
Side Panel	7 gauge	50K GR

HYDRAULIC SYSTEMS

Oil Reservoir	45 gal
Oil Flow w/std. pump	25 gpm
Min. Accept. Oil Flow	20 gpm
Operating Pressure	2,350 psi
Engine RPM for STD gpm	1,350-1,550
Hydraulic Hoses	4-to-1 burst
Return Filter	10 micron

STANDARD EQUIPMENT

- Semi automatic cycling
- Accelerator kit
- Auto-lock tailgate
- Back up alarm
- All LED lights
- Upper rear lights
- Sight gauge on oil tank
- Chrome cylinder rods
- Side access door
- Driver alert buzzer
- Tailgate ajar indicator
- Pump
- Adjustable riding step
- Imron elite productive paint
- Color rear vision camera system

OPTIONAL EQUIPMENT

- Special lighting
- PTO
- Container lifts (commercial & residential)
- Pack at low idle
- Hopper liners
- Upgraded body steel package
- Body scale systems
- CNG fueling system
- Axalta Imron Elite finish paint

^{**} 9 yd³ model will be built with external hydraulic cylinders.

* Approximate Body Weight empty and exclusive of options.

** Any Chassis sent to Scranton Manufacturing with less than the minimum guideline requirements will not be mounted. (Chassis must be capable of carrying the net weight of the body plus the weight of the refuse collected.)

AUTHORIZED NEW WAY DISTRIBUTOR

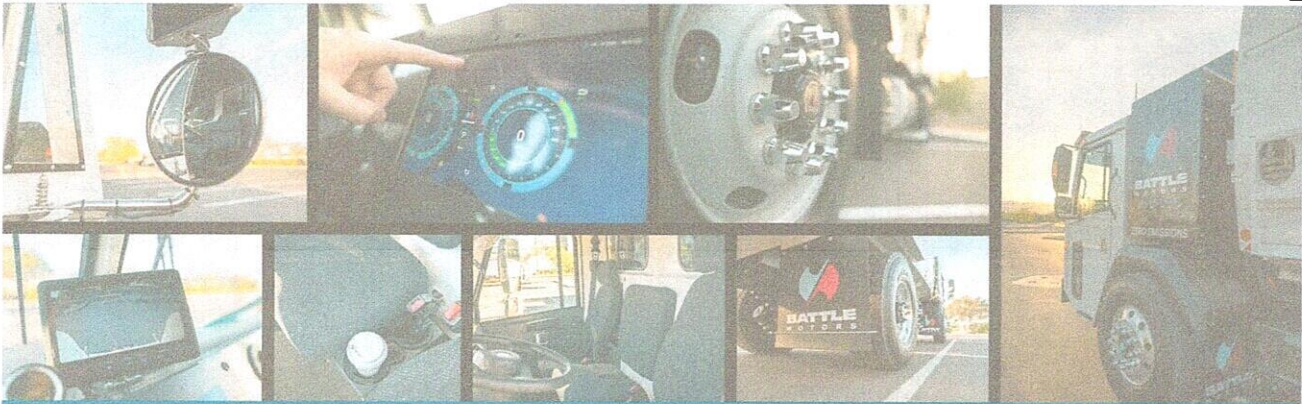


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PART 110

Packet Pg. 72



P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL



BATTLE
MOTORS

Date

03/8/2023

Quote Information

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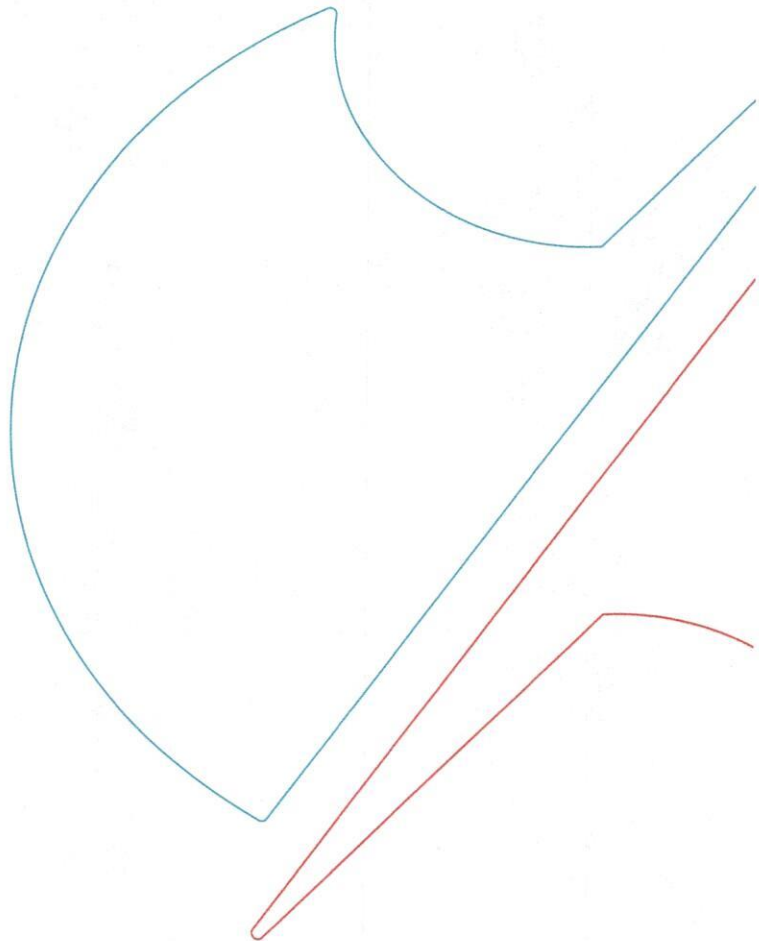
1000252-1000256

2024 Sales LNT BEV

Qty: 1

Prepared For
MELROSE

Prepared By
JEFF
DENESHA




**BATTLE
MOTORS**

TECHNICAL SPECIFICATIONS

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

CUSTOM OPTIONS		DESCRIPTION
9999-CUSTOM-83331	CUSTOM OPTIONS	NO OPTION - CUSTOM OPTIONS
9999-CUSTOM-140347	BEV WALL CHARGER	NO OPTION - BEV WALL CHARGER
9999-CUSTOM-140540	FRAME (QUOTE ONLY)	NO-OPTION, FRAME AVAILABLE IN UPPER SELECTION
9999-CUSTOM-140539	PROP SHAFT (QUOTE ONLY)	NO OPTION - PROP SHAFT AVAILABLE IN UPPER SELECTION
9999-CUSTOM-141986	AIR PIPING, AIR DRYER (QUOTE ONLY)	NO OPTON (AVAILABLE IN UPPER SELECTION)
355H-0046	BODY	BODY PACKAGE - CURBTENDER EV 11 CY REAR LOADER, P1000252

CAB		DESCRIPTION
1800-1892-CAB	CAB MODEL	CAB ASSY, (2) REAR WINDOWS, NO ROOF VENTS, W/VISOR, LNT
1809-0177-CAB	CAB - OVERHEAD CONSOLE / RADIO	OVERHEAD CONSOLE, LHD/DUAL DRIVE, AM/FM/BLEETOOTH/HANDS FREE RADIO, HVAC CONTROLS, LNT
1809-0164-CAB	CAB - FLOOR GRIP TAPE	FLOOR COVERING INSTALLATION, LH / DUAL DRIVE, LNT
1001-0946-CAB	CAB - ACCELERATOR PEDAL	ACCELERATOR PEDAL, CUMMINS, SINGLE DRIVE
2100-3420-CAB	CAB - BASE ELECTRICAL	ELECTRICAL, BASE, CAB, 500K, AUTOCRAFT HEADLIGHT, BEV
9999-CUSTOM-82619	CAB - MODIFICATION (LH DOOR)	NO OPTION - CAB MODIFICAION (LH DOOR)
9999-CUSTOM-82620	CAB - MODIFICATION (RH DOOR)	NO OPTION - CAB MODIFICAION (RH DOOR)
2000-4561-CAB	CAB - GRAB HANDLES (LH)	LH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
2000-4862-CAB	CAB - GRAB HANDLES (RH)	RH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
9999-CUSTOM-82812	CAB, ELEC - DOOR WINDOWS - SWITCH COUNT	LH DRIVE, LH E/R, RH E/R
2100-3351-CAB	CAB, ELECTRICAL - DOOR WINDOWS	CAB, ELECTRICAL, POWER WINDOWS, 3 SWITCHES
2000-4582-CAB	CAB - AIR HORN	AIR HORN, DUAL TONE, UNDER CAB
9999-CUSTOM-83006	CAB - WHEEL DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CAB
9999-CUSTOM-82623	CAB - ABS SYSTEM	NO OPTION - ABS ATC OPTION
9999-CUSTOM-82513	CAB AIR PIPING, REAR AXLE	NO AIR PIPING REQUIRED


BATTLE
MOTORS
TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

CAB	DESCRIPTION
2000-4884-CAB	DECALS - CAB INTERIOR DECALS, INTERIOR, SINGLE DRIVE, DIRECT DRIVE, BEV
2000-4797-CAB	DECALS - CALIFORNIA PROPOSITION 65 DECAL - CALIFORNIA PROPOSITION 65
1810-0043-CAB	CAB - MISC COMPONENTS CAB MODIF - LET2 COMPONENTS, LH/RH STEEL PANELS
9999-CUSTOM-83327	PUSHER/TAG CAB CONTROLS NO OPTION - PUSHER/TAG AXLE CAB CONTROLS

CHASSIS	DESCRIPTION
2000-4887	DECALS - CHASSIS EXTERIOR DECAL, EXTERIOR, BEV
2003-0604	HVAC - CHASSIS HVAC, A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2201-0118	WINDSHIELD WIPERS - CHASSIS WINDSHIELD WIPERS, SINGLE DRIVE
1005-1906	BEV COOLING, MANIFOLD CIRCUIT COOLING ASSY- MANIFOLD CIRCUIT LNT BEV
1006-1299	BEV MOTOR MOUNTING MOTOR MTG ASSY- 4 DEG, DIRECT DRIVE, LNT, BEV
1802-0076	CAB MOUNTING CAB MOUNTING - LET2 STANDARD CAB
9999-CUSTOM-83075	FRAME - FUEL TANK MTG, DROP FRAME NO OPTION - FUEL TANK MTG, DROP FRAME
2100-3420	ELECTRICAL, BASE, CHASSIS ELECTRICAL, BASE CHASSIS, 500K, AUTOCRAFT, BEV
1908-0096	AIR PIPING, REAR AXLE AIR PIPING, SINGLE AXLE - 2-SPEED, REYCO SUSP
9999-CUSTOM-139490	REAR BUMP BLOCKS NO OPTION - BUMP BLOCKS
1402-0640	POWER STEERING RESERVOIR POWER STEERING, 4 QT, COULOMB PS PUMP, LNT BEV
1401-0336	STEERING COLUMN CHASSIS (LH) STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-139406	STEERING COLUMN CHASSIS (RH) NO OPTION - RH STEERING, CHASSIS
1400-0714	STEERING GEAR STEERING GEAR, XD-120, LH DRIVE, STANDARD CAB, LET2
9999-CUSTOM-83008	GAUGES - MISC OPTIONS NO OPTION - MISC GAUGES, CHASSIS
1000A-0002	MOTOR OIL PAN, BEV MOTOR ASSEMBLY, CASCADIA OIL PAN
2101-0666	BEV LOWER POWER SLED LOWER POWER SKID, 240 KWH, CATL, BEV
2100-3421	ELECTRICAL, BEV LOW VOLTAGE, POWER SLED ELECTRICAL LOWER POWR SLED, LOW VOLTAGE HARNESS, BEV
2100-3443	ELECTRICAL, BEV EPTO HV JUNCTION BOX ELECTRICAL ASSY, BEV HV COMPONENT CABLES, NO EPTO



TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

CHASSIS	DESCRIPTION
2100-3438	ELECTRICAL, BEV CHARGING INLET ELECTRICAL, CHARGING INLET, BEV
2100-3440	ELECTRICAL, BEV LV POWER FEED ELECTRICAL ASSY - LV CABLES, BEV
2100-3439	ELECTRICAL, BEV CHARGER JUNCTION BOX ELCTRICAL, CHARGER JUNCTION BOX, BEV
2500-0128	BATTERY COOLANT PLUMBING, BEV PIPING, BATTERY COOLANT CIRCUIT, BEV
2500-0129	COOLANT PIPING, CAB HEATER, BEV PIPING, CAB COOLANT CIRCUIT, BEV
2500-0130	BULKHEAD PLATE, BEV PIPIN, BULK HEAD PLATE, BEV
2501-1556	PIPING, MOTOR OIL COOLING, BEV PIPING, MOTOR OIL COOLING, BEV
1503-3002	FRAME MODIF, CENTER BEARING DRILLING FRAME MODIFICATION, CENTER BEARING DRILLING 1503-3002
9999-CUSTOM-142262	FRAME MODIF, REAR BUMPER ASSY NO OPTION - FRAME MOD REAR BUMPER

MODEL	DESCRIPTION
9999-CUSTOM-140230	SOURCEWELL NON-SOURCEWELL
9999-CUSTOM-140179	FUEL TYPE BEV (ELECTRIC)
9999-CUSTOM-140312	BODY APPLICATION CURBTENDER, RL, QUANTUM MD, 11 CY, BEV
9999-CUSTOM-83335	PRODUCT AVAILABILITY ORDER MAJOR COMPONENTS - LEAD TIME / AVAILABILITY
9999-CUSTOM-83098	CARB/EPA CARB / EPA - CLEAN IDLE COMPLIANT
9999-CUSTOM-83019	FRAME - WHEELBASE 140 WHEELBASE
9999-CUSTOM-83058	FRAME SILLS SINGLE SILL
9999-CUSTOM-83532	CAB STYLE LNT CREW CAB WITH EXTERIOR SUNVISOR
9999-CUSTOM-83534	CAB / DOORS LNT CREW CAB, W/VISOR, LH ELECTRIC ROLL-UP / RH ELECTRIC ROLL-UP DOORS
9999-CUSTOM-82491	DRIVE TYPE LH DRIVE
1000A-0001	BEV MOTOR ELECTRIC MOTOR, CASCADIA, HVH410-150, 442 HP @ 1700 RPM, 1476 LB-FT TORQUE (0 TO 1700 RPM)
1007-1219	BEV TRANSMISSION DIRECT DRIVE, SPL-140, OIL COOLED, BEV
9999-CUSTOM-83068	REAR SUSPENSION MODEL REYCO 102CC - REYCO SPRING SUSPENSION



TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

MODEL	DESCRIPTION
9999-CUSTOM-83048	REAR DRIVE AXLE MODEL 23082T - REAR DRIVE AXLE 23,000
1200A-0420	REAR DRIVE AXLE REAR AXLE, 23082T, 6.17/8.40, BENDIX AIR DISC BRAKES, REYCO, SPL-140, LET2/LNT
1201-1254	REAR SUSPENSION REAR SUSPENSION, REYCO 102CC 21K, 3 DEG, 23082T
9999-CUSTOM-83323	PUSHER AXLE NO OPTION - PUSHER AXLE
1500-5630	FRAME FRAME ASSEMBLY, 140" WB, REYCO 102CC, 10.25" SINGLE SILL, LNT BEV
2102-0132	ABS SYSTEM ABS SYSTEM, BENDIX 4S/4M, 500K BAUD

OPTIONS, CAB	DESCRIPTION
1803-0087-CAB	CAB - DOOR (LH) STANDARD DOOR, LH, ELECTRIC ROLL UP
1804-0086-CAB	CAB - DOOR (RH) STANDARD DOOR, RH, ELECTRIC ROLL UP
9999-CUSTOM-82515	CAB - DOOR SAFETY BELT NO OPTION - DOOR SAFETY STRAP
9999-CUSTOM-82532	CAB - FLOOR GRATING (LH) NO OPTION - LH FLOOR GRATE
9999-CUSTOM-82533	CAB - FLOOR GRATING (RH) NO OPTION - RH FLOOR GRATE
1806-1332-CAB	CAB - MIRROR (LH) WEST COAST MIRROR, LH STANDARD DOOR, 16 X 7 HEATED
1808-0120-CAB	CAB - MIRROR (RH) WEST COAST MIRROR, RH STANDARD DOOR, 16 X 7 HEATED
1806-1292-CAB	CAB - MIRROR, SPOT MIRROR, SPOT - (1) LH / (1) RH, BOTTOM MIRROR ARMS, 8" ROUND, SS, HEATED
9999-CUSTOM-82673	CAB - MIRROR, LH LOOK DOWN NO OPTION - LH LOOK DOWN MIRROR
9999-CUSTOM-82674	CAB - MIRROR, RH LOOK DOWN NO OPTION - RH LOOK DOWN MIRROR
1401-0336-CAB	STEERING COLUMN CAB (LH) STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-139404	STEERING COLUMN CAB (RH) NO OPTION - RH STEERING, CAB
9999-CUSTOM-82609	RADIO OPTION - AM/FM/BLUETOOTH/HANDS FREE RADIO - MOUNTED ON LH SIDE CAB, AM/FM/MP3/USB/BLUETOOTH/HANDS FREE
2003-0604-CAB	HVAC - CAB HVAC, BEV A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2003-0369-CAB	CAB - DEFROST FANS CAB DEFROST FANS, 2-SPD, DUAL FANS, LH & RH OVERHEAD CONSOLE


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

OPTIONS, CAB		DESCRIPTION
2100-3404-CAB	CAB, ELECTRICAL - IGNITION	CAB, IGNITION (2) KEYS D250, STD/BI-FOLD DOOR C250
2202-0070-CAB	CAB - DASH/INSTRUMENTATION	DIGITAL DASH, LH DRIVE, 8" SAMSUNG DISPLAY, MPH/KPH, 500K STEEL, BEV, LNT
2100-3436-CAB	CAB, ADAS	ELECTRICAL, CAB, MOBILE EYE ADAS
9999-CUSTOM-83060	CAB - INTERAXLE BUZZER/ALARM	NO OPTION - INTERAXLE BUZZER, CAB
9999-CUSTOM-82517	CAB - FLASHER OPTIONS	NO OPTION - FLASHERS
9999-CUSTOM-82522	CAB - 12V POWER OPTIONS	NO OPTION - 12V POWER OPTIONS
1907-0466-CAB	CAB - AIR PIPING	CAB AIR PIPING, LHD ONLY, RH SIT-DOWN, LNT
9999-CUSTOM-82498	CAB - FIRE EXTINGUISHER	NO OPTION - FIRE EXTINGUISHER
9999-CUSTOM-82508	CAB - FIRST AID KIT	NO OPTION - FIRST AID KIT
9999-CUSTOM-82507	CAB - TRIANGLE KIT	NO OPTION - TRIANGLE KIT
1810-0061-CAB	CAB GRILLE	BATTLE GRILLE, SMOOTH FLAT BLACK

OPTIONS, CAB SEATS		DESCRIPTION
9999-CUSTOM-82616	CAB - SEAT MATERIAL	SEAT - ASPHALT CLOTH
2001-0518-CAB	CAB - SEATS (LH)	SEAT AIR RIDE, SEARS C2, ASPHALT CLOTH, LH, LNT
2011-0300-CAB	CAB - SEATS (RH)	SEAT ASSY RH; SEARS C2 AIR RIDE FIXED LUMBAR, ASPHALT CONFETTI, LNT
2011-0299-CAB	CAB - SEAT (CENTER BENCH)	SEAT CENTER BENCH ONLY, 1-MAN BENCH, ASPHALT CONFETTI, LNT
2000-4771-CAB	CAB - SEAT BELTS (LH)	SEAT BELT, BLACK, LH SIDE, AIR RIDE SEAT, LET2
2000-4856-CAB	CAB - SEAT BELTS (RH)	SEAT BELT, BLACK, RH SIDE, AIR RIDE SEAT, LET2
9999-CUSTOM-82808	CAB - SEAT (LH), RH ARMREST	NO OPTION - RH ARMREST, LH SEAT
9999-CUSTOM-82809	CAB - SEAT (RH), LH ARMREST	NO OPTION - LH ARMREST, RH SEAT

OPTIONS, CHASSIS		DESCRIPTION
1100A-0052	FRONT STEER AXLE	FRONT STEER AXLE, D2000F, STD TRACK, 20" CMBR, ALL WB'S, AIR DISC BRAKES


BATTLE
MOTORS
TECHNICAL SPECIFICATIONS (CONT.)
**P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD
 PROPOSAL**

OPTIONS, CHASSIS		DESCRIPTION
1101-0654	FRONT SUSPENSION	FRONT SUSPENSION ASSY, CAST HANGERS, 20K, (4) TAPER LEAF, STD SHOCKS, 10.25" SILLS, LNT
2000-4798	LUBE, REAR DRIVE AXLE	REAR AXLE LUBE, GEAR OIL 85W-140 FOR 23082T
9999-CUSTOM-83005	ELECTRICAL, AXLE DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CHASSIS
2101-0675	BEV UPPER BATTERY RACK	BEV BATTERY UPPER RACK, ALUMINUM BLACK COVERS, 240KWH, CATL, BEV
9999-CUSTOM-139559	BEV EPTO	NO OPTION - BEV EPTO
2101-0645	BATTERY BOX	BATTERY BOX, (3) 950 CCA BATTERIES, W/ DISCONNECT SWITCH, PLASTIC COVER
1503-2281	BATTERY BOX SPACERS	BATTERY BOX SPACERS, LOWERS 8.5" BELOW TOP OF FRAME
9999-CUSTOM-83002	ELECTRICAL, BATTERY DCS INDICATOR LIGHT	NO OPTION - BATTERY DCS LIGHTING
2000-4854	ELECTRICAL, BATTERY CABLES	BATTERY / POWER FEED CABLES, BEV, LH 32/44
2502-0802	AIR DRYER	AIR DRYER, BENDIX, AD9EP, LH FRONT/RH REAR/RH INSIDE SILL FRONT
1910-0530	AIR PIPING, AIR DRYER	AIR PIPING, 3.7KW COLUMB COMP AD9EP/AD-IP, LH STA. 68/FRT, LNT BEV
2502-0827-CAB	AUTO NEUTRAL	PARK BRAKE AUTO NEUTRAL
1502-0644	FRONT BUMPER	BUMPER ASSEMBLY - FORMED, HENDRICKSON, STEEL, PC BLACK, LNT
9999-CUSTOM-142046	REAR BUMPER	NO OPTION - REAR BUMPER
1801-0619	FENDERS, FRONT	FENDER, FRONT - LNT, BATTLE, BLACK PLASTIC, WIDE
1600-5213	PROPSHAFT	PROPSHAFT, 140"WB, EM/DD, REYCO,S26-S30, SPL140, LNT BEV
1503-2885	AIR PIPING, FRAME SUPPORTS	FRAME AIR PIPING SUPPORTS, <190" WB, SINGLE AXLE, SINGLE SILLS
1906-0859	AIR PIPING, FRAME	FRAME AIR PIPING; (3) STEEL AIR TANKS IN FRAME, W/ CENTRALIZED DRAINS, LNT BEV
9999-CUSTOM-83325	AIR PIPING, PUSHER/TAG AXLE	NO OPTION - PUSHER/TAG AXLE AIR PIPING
1904-0073	AIR PIPING, OPTIONAL AUTOMATIC DRAIN VALVES	BENDIX DV-2 HEATED @ WET TANK ONLY
9999-CUSTOM-82670	AIR PIPING, OPTIONAL MANUAL DRAIN VALVES	NO OPTION - MANUAL DRAIN VALVES
9999-CUSTOM-82501	AIR PIPING, OPTIONAL CHARGE VALVE	NO OPTION - CHARGE VALVE
2000-4582	AIR HORN, CHASSIS	AIR HORN, DUAL TONE, UNDER CAB
2000-2215	BACK-UP ALARM	BACK-UP ALARM, ECCO 575, 107DB


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
9999-CUSTOM-139179	RETAINER CABLES	NO OPTION-RETAINER CABLES
2104-0117	ELECTRICAL, DRIVE AWAY KIT	BODY STD TAILBOARD HARNESS ONLY
9999-CUSTOM-139184	WHEEL TORQUE INDICATORS	NO OPTION - WHEEL TORQUE INDICATORS
2501-1558	OIL PIPING, CAB TILT	PIPING ASSY - CAB TILT, ELECTRIC TILT PUMP, LNT BEV
1005-1905	BEV COOLING, SYSTEM	COOLING ASSY- EMP E-FAN COOLING SYS 2, LET2/LNT BEV
9999-CUSTOM-142003	ELECTRICAL, HIGH VOLTAGE, POWER SLED	NO OPTION - POWER SLED, HIGH VOLTALGE HARNESS, BEV
9999-CUSTOM-140335	BEV SKID PLATE	NO OPTION - MOTOR SKID PLATE BEV
9999-CUSTOM-140340	TRACTOR PROTECTION VALVE	NO OPTION - TRACTOR PROTECTION VALVE

PAINT		DESCRIPTION
356-0322	PAINT, CAB	PAINT, CAB, STANDARD WHITE, G2-3460715-A
9999-CUSTOM-140265	PAINT, CAB VISOR	NO OPTION - CAB VISOR SAME COLOR AS CAB
9999-CUSTOM-83308	PAINT, CAB STRIPES	NO OPTION - CAB STRIPES
9999-CUSTOM-83309	PAINT, CLEAR COAT	NO OPTION - CAB CLEAR COAT
356-0323	PAINT, CHASSIS	PAINT, CHASSIS, STANDARD BLACK, G2-2B1738
356-0329	PAINT, BUMPER	PAINT, BUMPER - STANDARD BLACK, G2-2B1738

TIRES / WHEELS		DESCRIPTION
2-519-4687-0140	TIRES/WHEELS - FRONT STEER AXLE	TOYO M153, 315/80R22.5, 20/L, ACCURIDE, ALUMINUM, XTRA POLISH FINISH, 7.00" OUTSET
4-519-2863-0141	TIRES/WHEELS - DRIVE AXLE	TOYO M170, 11R22.5, 16/H, ACCURIDE, ALUMINUM, XTRA POLISH FINISH
9999-CUSTOM-83539	TIRES/WHEELS - PUSHER AXLE	NO OPTION - PUSHER TIRES/WHEELS

WARRANTY		DESCRIPTION
306A-0010	WARRANTY, CHASSIS	WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV
306A-0022	WARRANTY, DRIVE AXLE	WARRANTY, DANA, STANDARD 2 YEAR


BATTLE
 M O T O R S

TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD
 PROPOSAL

VEHICLE SPECIFICATION SUMMARY	UNIT	DESCRIPTION
MODEL		SALES LNT BEV
TRANSMISSION		DIRECT DRIVE, SPL-140, OIL COOLED, BEV

Attachment: Curbtender Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 M O T O R S

PRICING SUMMARY

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

DESCRIPTION	PRICE
BASE MSRP	\$439,159
DESTINATION	\$3,921
DEALER MSRP	\$443,080
BODY PACKAGE - CURBTENDER EV 11 CY REAR LOADER, P1000252	\$89,291
TOTAL	\$532,371
DISCOUNT	\$-81,953
WARRANTIES & OPTIONS	
NO OPTION - BEV WALL CHARGER	\$0
NON-SOURCEWELL	\$0
WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV	\$1,882
WARRANTY, DANA, STANDARD 2 YEAR	\$0
SUBTOTAL	\$1,882
TOTAL SELLING PRICE (PER UNIT)	\$452,300

Attachment: Curbtender Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 M O T O R S

PRICING SUMMARY (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD
 PROPOSAL

TOTAL SELLING PRICE (PER UNIT)
\$452,300
CUSTOMER
BOSTON FREIGHTLINER
DATE
DATE

Attachment: Curbtender Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
MOTORS
GVWR

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

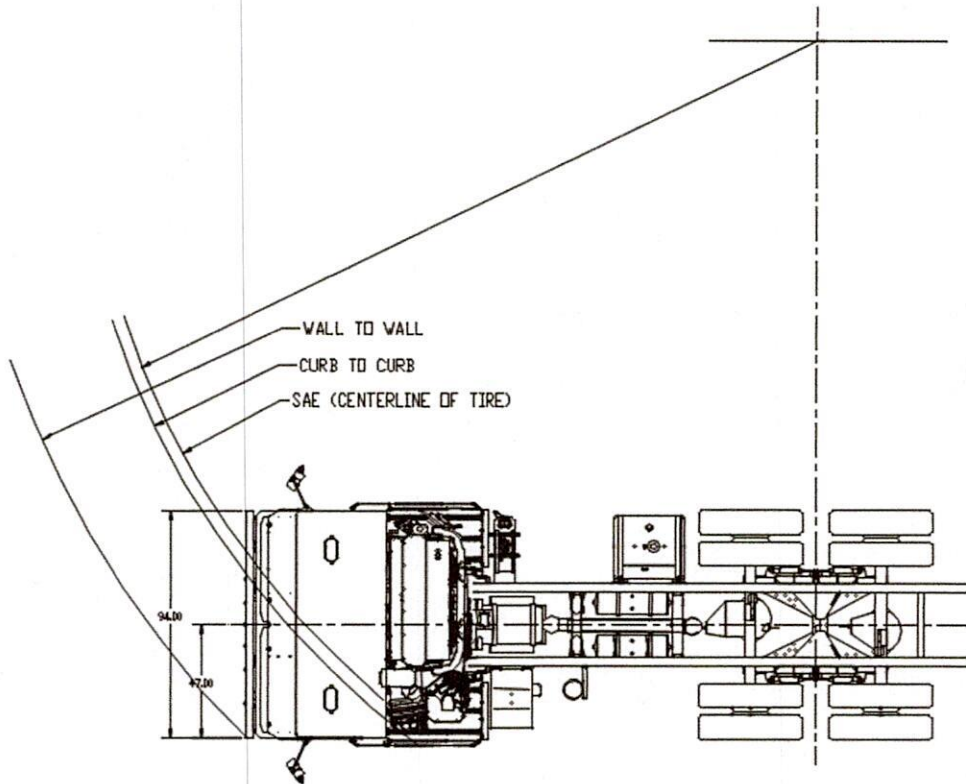
AXLE POSITION	AXLE MODEL	AXLE/SUSP RATING (LBS)	SINGLE OR DUAL	WHEEL SIZE AND RATING (SIZE / LOAD @ PRESSURE)	TIRE SIZE AND RATING** (SIZE / LOAD @ PRESSURE / SPEED)	GAWR (LOAD @ PRESSURE / SPEED)
FRONT	D2000F	20,000	S	22.5 X 9.00 / 10,000 @ 130	315/80R22.5L/20 / 10,000 @ 130 / 68	20,000 @ 130 / 68
1ST INTERMEDIATE						
2ND INTERMEDIATE						
3RD INTERMEDIATE						
LAST	23082T	23,000	D	22.5 X 8.25 / 7,400 @ 131	11R22.5H/16 / 6,005 @ 120 / 75	23,000 @ 120 / 75
DRIVETRAIN GVWR (LBS)						43,000
ENGINE APPLICATION GVWR (LBS)						66,000
TRANSMISSION APPLICATION GVWR (LBS)						33,000
TRUCK GVWR (LBS)						33,000


BATTLE
 MOTORS

COMPONENT LOCATIONS

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

COMPONENT	LOCATION
AIR DRYER	LH STA. 68 / FRONT
AIR TANKS	92/110
BATTERY CABLES	LH STA. 32/44



ESTIMATED VEHICLE WEIGHT DISTRIBUTION (LBS) - FULLY WET WITH 200# DRIVER (+/- 5%)

FRONT AXLE GROUND LOAD (LBS)	8,972.04
REAR AXLE GROUND LOAD (LBS)	3,454.96
TOTAL VEHICLE WEIGHT (LBS)	12,427.00

ESTIMATED VEHICLE TURNABILITY - TURN RADIUS (FEET) (+/- 5%)

SAE - TIRE CENTERLINE TO TIRE CENTERLINE (FT)	27.80
CURB-TO-CURB (FT)	28.84
WALL-TO-WALL (FT)	30.48

QUANTUM MD



**America's Favorite Small Rear Loader
Residential and Medium Duty**



CURBTENDER

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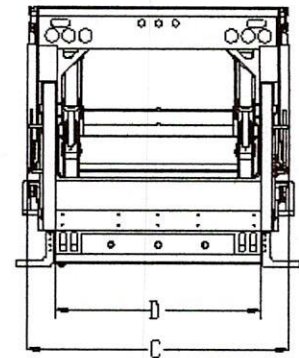
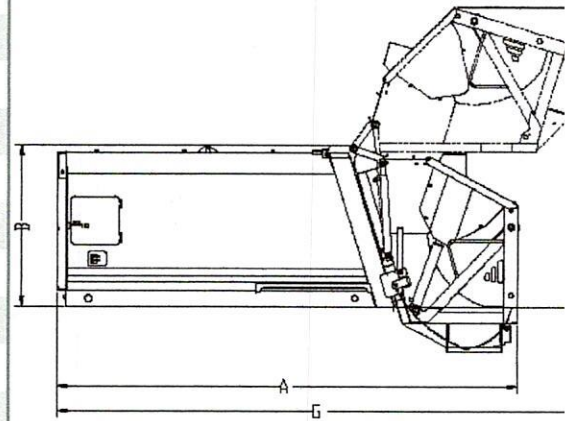
Packet Pg. 86

QUANTUM MD

REAR LOADER

BODY SPECIFICATIONS

Body Capacity	11yd ³	13yd ³
A. Body Length	191"	209"
B. Height Of Body Above Chassis	74"	74"
C. Body Width	94"	94"
D. Hopper Opening Width	74"	74"
E. Loading Sill Below Chassis Frame	0"	0"
F. Hopper Opening Height	58"	58"
F. Height Of Tailgate Above Chassis Frame (Tailgate Raised)	191"	191"
G. Length Of Body (Tailgate Raised)	221"	239"
CA. Cab To Axle Minimum	108"	126"
CF. Minimum Usable Cab To End Of Frame	140"	158"
Hopper Capacity	1.75yd ³	1.75yd ³
Dynamic Hopper Capacity (yd ³ /minute)	7yd ³	7yd ³
Body Weight	8,400 LBS.	8,750 LBS.



MINIMUM CHASSIS REQUIREMENTS

Minimum GVWR	29,000 LBS.*	33,000 LBS.
Front Axle	10,000 LBS.	10,000 LBS.
Rear Axle	19,000 LBS.	23,000 LBS.
Required Frame Height	38" – 40"	38" – 40"
Chassis Frame Height	36" – 39"	36" – 39" 210"

*11yd Quantum can be configured for under CDL with a 26,000 LBS. min. GVWR (10,000 LBS. front axle & 16,000 LBS. rear axle). However, this configuration reduces the allowed LBS./yd³ by 30% to remain at or below min. GVWR.

Body Construction

- Body Sides: 11 Gauge GR50
- Body Roof: 11 Gauge GR50
- Body Floor: 11 Gauge GR50
- Ejection Panel: 11 Gauge GR50
- Sweep Face: 3/16 GR100
- Tailgate Side Wall: 11 Gauge GR50
- Upper, 7 Gauge GR50 Lower
- Tailgate Floor: 3/16 AR400

Features

- High Strength Curved Shell Body
- Patented Packing Mechanism
- Rear Fenders Standard
- Curved Floor Provides Liquid Sump
- Low Body Height
- Easy to Maintain
- Pack Cycle Time of 15 Seconds

Hydraulics

- Oil Reservoir: 25 Gal. (94.6 Liters)
- Oil Flow w/ Standard Pump: 25 GPM
- Operating Pressure: 3,000 PSI
- Engine RPM: 1,300 RPM
- Hose Burst Ratio: 4 to 1
- Return Filter: 10 Micron
- Pack Cylinders: 4.0"
- Sweep Cylinders: 4.0"
- Eject Cylinders
 - 11yd³: 4.5", 2 Stage Telescopic
 - 13yd³: 5.0", 3 Stage Telescopic
- Tailgate Lift: 3"

Optional Features

- Container Roll Bar with Lip-and-Latch
- Container Lip-And-Latch with 8,000 LBS. Drum Winch
- Single & Dual Tipper(s)
- Cart Tipper Tap-In-Kits
- Work Lights
- Strobe Lights
- Broom and Shovel Holder
- Rear View Color Camera System



CITY OF MELROSE

DEPARTMENT OF PUBLIC WORKS

Administration–Engineering–Water–Sewer–Facilities
Parks–Forestry–Highway–Sanitation–Cemetery–Fleet

Elena Proakis Ellis, P.E., BCEE
Director of Public Works

City Yard, 72 Tremont Street
Melrose, Massachusetts 02176
Telephone – (781) 665-0142
E-mail: eproakis@cityofmelrose.org

MEMORANDUM

Date: April 24, 2023

To: Mayor Paul Brodeur

From: Elena Proakis Ellis, Director of Public Works

cc: Patrick Dello Russo, CFO/Auditor
James Troup, Deputy Director Admin & Finance
Martha Grover, Sustainability Manager

Subject: DERA Grant Match Component Free Cash Request

In August 2022, Melrose DPW, working with Sustainability Manager Martha Grover, submitted an application to the Massachusetts Department of Environmental Protection for a Diesel Emissions Reduction Act (DERA) grant. These grants provide up to 45% of the cost of heavy duty electric vehicles and the associated charging infrastructure. In February 2023, we were informed that the City was awarded \$268,000 from this grant program. A separate Order requests the acceptance of this grant. This memo describes the associated free cash request to fund the City's portion of the project costs.

We are hereby requesting the allocation of \$481,600 of free cash to fund the City's portion of the purchase of one electric refuse truck and the infrastructure upgrades and equipment necessary to have a Level 3 charging station at the DPW City Yard.

Melrose Electric Vehicle First Policy

Shortly after adopting the Melrose Net Zero Action Plan in April 2022, the City put in place an Electric Vehicle First Fleet Policy which requires that we replace our existing fleet vehicles with electric vehicles when it is feasible and cost effective. Melrose receives support for fleet electrification initiatives from National Grid's Fleet Advisory Services Program (FASP) consultants who provide ongoing advice and analysis. In addition, the City coordinates closely with National Grid on infrastructure planning and installations related to electric vehicle charging. Our FASP program partners identified our smaller refuse truck (Truck #18) as cost-effective for replacement with a full electric option. This is a great opportunity for Melrose to lead by example, and we are excited to present this project to the City Council for funding consideration.

DERA Grant Match Component Free Cash Request

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April 24, 2023

Electric Refuse Truck

Melrose DPW currently has two diesel refuse trucks – one standard size (Truck #26) and one smaller (approximately 13 yard) truck (#18). The larger Truck #26 is used predominately for seasonal curbside yard waste collection, while Truck #18 is used for collection of the following items:

- Solid waste from approximately 100 barrels on municipal properties, three days/week
- Solid waste from select municipal barrels seasonally on Sunday mornings to divert heavy weekend loads from the barrels
- Residential metal goods on Tuesdays
- School dumpsters on approximately a daily basis
- Residential solid waste from a handful of neighborhoods on dead ends or other streets that are difficult for our contracted vendor to access

After evaluating options, the DPW determined it was most advantageous for the City to replace Truck #18 at this time, given its extensive use for a myriad of services and its need for costly repairs in recent years. Truck #18 is a 2010 International with over 130,000 miles. The DERA grant requires for a vehicle to have three years of useful life remaining and requires for the vehicle to be taken off the road when the replacement EV begins to be used. We are able to achieve both of these requirements with Truck #18.

Attached to this memo are quotes for four different Class 7 (33,000 gross vehicle weight rating) EV trucks with refuse bodies of a comparable size to Truck 18. These quotes range from \$452,000 to \$498,500. All of the proposed trucks are from known, trusted manufacturers, along with four different refuse bodies. The DPW decided early on that we would only consider companies who have been manufacturing comparable diesel trucks for many years, to ensure that the non-EV parts would be tested and accessible for repairs. The attached four quotes are for the following vehicles:

- Peterbilt EV with a Heil refuse body
- Crane Carrier EV with a Curbtender refuse body
- Crane Carrier EV with a Loadmaster refuse body
- Crane Carrier EV with a NewWay refuse body (most similar to the existing Truck #18 body)

The grant was awarded with the assumption of a \$492,000 price for the truck. With the DERA grant covering 45% of the vehicle cost, this equates to \$221,400 of grant funding, and a City match component of \$270,600 for the truck.

In order to compare pricing, the City obtained a quote to purchase a diesel truck meeting the same specifications. The quote, also attached hereto, is for \$298,000. Thus the purchase of the EV considering the grant component results in a savings to the City for the vehicle purchase of \$27,400. These savings do not factor in the additional savings of operating an EV rather than paying for gas. Over the last 12 months, Truck #18 has used 1,716 gallons of diesel fuel.

Charging Infrastructure

The original grant submission was based on a cost proposal for Level 3 charging infrastructure for approximately \$105,000. It was later determined that the electrical service at the City Yard does not have the capacity for this charging infrastructure and would require an upgrade. The new quote to

DERA Grant Match Component Free Cash Request

Page 3

April 24, 2023

bring in a new electrical service from the street, and furnish and install both the associated transformer and the Level 3 charging station, is approximately \$311,000.

Given the City's EV-first vehicle policy, charging will be required at the City Yard in order to manage an increasing number of EVs. We presently have two EV Ford Focuses, and we have one Ford Lightning pickup truck on order. The two existing EVs charge in an outlet on the front of the Administration Building which only has the capacity to charge one of the two cars at a time. With the future arrival of the Ford Lightning, the need for better charging infrastructure is imminent. This project affords the City the opportunity to take advantage of a combination of the DERA grant and National Grid incentives to install Level 3 charging. The DERA grant portion of the costs is \$46,600. National Grid incentives account for another \$60,000 per port for the infrastructure to power the charging station and an additional \$40,000 per port for the charging station equipment. We are awaiting confirmation from National Grid whether the DERA-funded portion would be subtracted by National Grid before the incentive is provided, which would result in a National Grid incentive of \$53,400. This has been assumed herein to arrive at a conservative City match estimate. This leaves a City-funded portion of the charging infrastructure of \$211,000.

Note that the charging infrastructure may also be eligible for additional tax credits, which may fund up to 30% of the cost. Furthermore, National Grid has indicated that each additional port would result in another \$100,000 of incentive payments. It is possible that the cost of an additional port may be less than \$100,000, so we may opt to add ports to bring the total costs down while providing additional benefits. These details would be worked out in the coming months, so the costs shown here are presented to conservatively reflect the high end of the City's share.

Summary

The total project costs are summarized as follows:

	Total Cost	City Portion	DERA Portion	NGRID Incentives
Electric Refuse Truck	\$492,000	\$270,600	\$221,400	N/A
Electrical Service and Charging Infrastructure	\$311,000	\$211,000	\$46,600	\$53,400*
Grand Total	\$803,000	\$481,600	\$268,000	\$53,400*

*Could be \$100,000 if National Grid does not subtract out the DERA-funded portion of the charging infrastructure

If the level of conservatism in these estimates ultimately results in cost savings compared to the free cash allocation, any remaining free cash will be put toward additional charging ports.

We respectfully request your consideration of a free cash allocation of \$481,600 to allow us to proceed with this important initiative to meet both our current and future fleet electrification and Net Zero goals.

Ghobrial, Andrew

From: Ellen Katz <[REDACTED]>
Sent: Monday, May 8, 2023 9:55 AM
To: City Council
Cc: Grover, Martha; Fleischman, Margot; Gaffey, Denise; Proakis Ellis, Elena
Subject: Appropriation Orders May 8, 2023

Dear City Councilors,

On behalf of Melrose Energy and Climate (aka Melrose Energy Commission), I'm writing to support the appropriation request for the Electric Trash truck and charging infrastructure.

Electrifying vehicles is an important step toward reducing the impacts of climate change. While a lot of focus has been on purchasing electric passenger vehicles, heavy duty diesel trucks have a greater impact. Trash trucks move slowly from location to location, stopping and idling along the route, emitting pollutants that contribute to asthma and other respiratory diseases in addition to greenhouse gas emissions.

By purchasing this vehicle Melrose is taking a significant step toward reducing air pollution and emissions that contribute to climate change. Please support this request.

Sincerely,

Ellen Katz

[REDACTED]

****CITY OF MELROSE PUBLIC RECORDS NOTICE: Please be advised that the Massachusetts Attorney General has determined that email is a public record unless the content of the email falls within one of the stated exemptions under the Massachusetts Public Records Laws.****

Attachment: Katz_Redacted (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and Infrastructure)

Ghobrial, Andrew

From: Irina Sidorenko <[REDACTED]>
Sent: Monday, May 8, 2023 1:21 PM
To: City Council
Cc: Grover, Martha
Subject: Appropriation Orders May 8, 2023

Dear City Councilors,

I'm writing to support the appropriation request for the Electric Trash truck and charging infrastructure. My husband and I recently moved to Melrose and we were pleasantly surprised by all the efforts Melrose is taking to combat climate change. By purchasing this vehicle Melrose is taking a significant step toward reducing air pollution and emissions that contribute to climate change. Please support this request.

Sincerely,
Irina Sidorenko
[REDACTED]

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Attachment: Sidorenko_Redacted (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and Infrastructure)



CITY OF MELROSE

OFFICE OF THE MAYOR

PAUL BRODEUR
Mayor

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4440
Fax - (781) 662-2182

To: Melrose City Council
From: Mayor Paul Brodeur
Re: APPRO-2023-26: Free Cash Appropriation for EV trash truck/infrastructure
Date: June 16, 2023

The Honorable City Council has before it an appropriation request in the amount of \$481,600 to enable the DPW to purchase an electric trash truck and install the necessary infrastructure to charge it. This represents the City's portion of a project that will be partially funded through a \$268,000 Protection for a Diesel Emissions Reduction Act (DERA) grant from the Massachusetts Department of Environmental Resources (DOER).

As the Council considers this request, I respectfully request the Council consider the following:

First and foremost, I urge you to pass this order. This appropriation is not about just acquiring a refuse truck, although that is certainly an important step to take. The much greater significance is that it will allow us to build out the charging infrastructure for this vehicle and any future EVs acquired by the DPW. Communities around the Commonwealth are realizing that fleet electrification is impossible without the necessary charging infrastructure, which is costly and for which few funding resources are currently available. It would be short sighted to allow this opportunity to create the necessary EV infrastructure to meet our fleet electrification goals to pass us by.

Understanding, however, that there continue to be concerns about City finances, should the Council choose not to support this appropriation, I would respectfully request that \$481,600 be instead appropriated to the Capital Stabilization Fund. This would provide the opportunity for any outstanding financial questions to be addressed, and the funds could be appropriated out of the Stabilization Fund at any time. Should the Council not take this action, these funds would instead fall to Free Cash, which would mean they would not be available to appropriate for any purpose until the City's Free Cash is certified by the Department of Revenue, leaving the City unable to access these funds until February 2024 at the earliest.

In conclusion, I urge the Council to take action to avoid losing the DOER grant opportunity that would offset the cost of a project that we know will be necessary in the future, and to preserve our ability to appropriate the funds that have been requested for this purpose.



FIRE DEPARTMENT CITY OF MELROSE

OFFICE OF THE CHIEF

Edward J. Collina
Chief of Department

**Fire Headquarters, 576 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4404
Fax - (781) 662-2304**

To: Mayor Paul Brodeur / City CFO Patrick Dello Russo

Cc: Kerri Ann Golden, Assistant Auditor

Date: May 31, 2023

Re: *Additional Appropriations*

I respectfully request an appropriation in the amount of \$66,309.58 to the Fire Department's Budget and the transfer of \$15,000.00 to the Fire Department for Overtime costs.

Additionally, I request an appropriation in the amount of \$16,300 from the retained earnings to the Ambulance Professional Services line for Pro-EMS billing.

Thank you,

A handwritten signature in blue ink that reads "Edward J. Collina".

Edward J Collina
Chief of Department

Attachment: Fire-Appropriation (APPRO-2023-34 : An Appropriation from Free Cash in the amount of \$66,309.58 to the Fire Department)



City of
Melrose
MASSACHUSETTS

City Hall, 562 Main Street

Melrose, MA 02176

Telephone (781) 979-4135

Albert Talarico

Director of Inspectional Services

Building Commissioner

MEMORANDUM

Date: May 30, 2023

To: Mayor Paul Brodeur

Cc: Patrick Dello Russo, CFO / Auditor
Kerriann Golden, Assistant City Auditor
Kathryn Armata, Treasurer / Collector

From: Albert Talarico – Director of Inspectional Services
Building Commissioner

Subject: Request to Digitize Building Department Documents

Dear Honorable Mayor Brodeur,

I hope this memo finds you well. I am writing to request an appropriation of \$32,764.60 of free cash to digitize all department folders and documents in the Inspectional Services Department.

We face a significant challenge with storage space, and this project will help free up physical space in our office. Additionally, it will give the public instant access to our records, reduce our carbon footprint, eliminate wasteful copying, and reduce clerical work. With this project, we will be able to complete Freedom of Information Act requests instantly by email, and the customer can print them out.

After careful consideration, I have chosen the New England archive center for the project. I have worked with them before on a similar project in Peabody and have a well-established relationship with them. The proposed work would involve preparing all documents to be transported to their facility in Holyoke; we would be scanning approximately 320,800 images and 6560 full-scale plans. The new folders would be organized by street name and number and saved as a PDF file on a hard drive. Once the project is complete, they could either transport the documents back to City Hall or destroy them at the facility.

I have attached a detailed cost estimate for your review. I appreciate your time and consideration in this matter.

Sincerely,

Albert Talarico, CBO

Building Commissioner / ISD Director

City Of Melrose

New England Archives Center

Micrographic Systems

Electronic Imaging Services

Records Storage

March 21, 2023

Albert Talarico, CBO
City of Melrose
562 Main Street
Melrose, MA 02177

Re: Phase 1 – Digitizing Building Department Files – 82 File Drawers

This proposal is for the scanning of Building Department Files. The folders are in order by Street Name and Street Number. They will be indexed using those two fields. The files will be output to PDF file format name by the Street Name and Number, so they can be electronically filed in order. One PDF file will be created for each address. An example of the file name would be: (Monument Ave_0022.pdf). Scanning will be at 200 DPI in bi-tonal format. The PDF files will be “OCR’d” for text search capabilities. The files will be prepared for scanning and will be returned to the folders without reassembly. Large format plans will be scanned and placed at the end of the paper file and pdf file. The number of plans is estimated at 1 per file. A large format plan is any page larger than 11 x 17 inches.

There are 82 file drawers of transcripts. The files are in hanging folders and the index information is located on the tab of the folder. If necessary, the folders may be copied in order to scan information as the leading page in the PDF file. Each drawer has an estimated 4,000 images to scan and 80 files to index. The total for 82 file drawers would be an estimated 328,000 images to scan and 6,560 records to index. If the Town has information on the number of addresses that number will be used for the estimate. NEAC will validate the estimates throughout the conversion process.

NEAC personnel will pack and transport the files to our facility for scanning. NEAC estimates 220 storage boxes will be needed for the project. The final disposition of the paper files is to be determined.

Estimated Conversion Cost

Scanning: 328,000 Images @ \$.059 =	\$19,352.00
Scanning Plans: 6,560 @ \$.76 =	\$ 4,985.60
Document Preparation: 230 Hours @ \$19 =	\$ 4,370.00
Indexing Charge: 6,560 @ \$.20 =	\$ 1,312.00
OCR: 328,000 Images @ \$.005 =	\$ 1,640.00
Storage Boxes: 220 @ \$4 =	\$ 880.00
Trip Charge: 3 @ \$75 =	\$ 225.00

Total Estimated Cost: **\$32,764.60**

***Note: Final Billing is based upon the actual number of records scanned and indexed.
Reference Service while file are in NEAC possession is at no additional charge.***

I am available to answer any questions you have.

David Monaco

Best regards,
New England Archives Center

Digitally signed by David Monaco
DN: cn=David Monaco, o=Eastern Micro-Graphics, Inc., ou=Eastern Micro-Graphics, Inc.,
email=dmonaco@neac.com, c=US
Date: 2023.03.28 08:41:30 -04'00'

David G. Monaco
Regional Sales Manager

#2023-041

Attachment: 2023-041 Melrose Building Department Files signed (APPRO-2023-38 : An Appropriation from Free Cash in the amount of



FIRE DEPARTMENT CITY OF MELROSE

OFFICE OF THE CHIEF

Edward J. Collina
Chief of Department

Fire Headquarters, 576 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4404
Fax - (781) 662-2304

To: Mayor Paul Brodeur / City CFO Patrick Dello Russo

Cc: Kerri Ann Golden, Assistant Auditor

Date: May 31, 2023

Re: *Additional Appropriations*

I respectfully request an appropriation in the amount of \$66,309.58 to the Fire Department's Budget and the transfer of \$15,000.00 to the Fire Department for Overtime costs.

Additionally, I request an appropriation in the amount of \$16,300 from the retained earnings to the Ambulance Professional Services line for Pro-EMS billing.

Thank you,

Edward J Collina
Chief of Department

Attachment: Fire-Appropriation (APPRO-2023-39 : An Appropriation from Ambulance Retained Earnings in the amount of \$16,300)



CITY OF MELROSE

Auditor's Office

Patrick D. Dello Russo
CFO/City Auditor

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4110

To: Honorable Mayor Paul Brodeur & City Council
City of Melrose

From: Patrick D. Dello Russo, CFO/City Auditor
City of Melrose

Date: June 12, 2023

Re: 6/5/23 APPRO 2023-41

Free Cash in the amount of \$86,135.35 is requested to be allocated to Pine Banks for the following projects:

Dugout/Dog Park Bench Roofs (4) \$22,125
Pickleball Court - \$34,010.35
Truck Replacement \$30,000

The costs above represent the Melrose share of these expenses.

Ghobrial, Andrew

From: Dello Russo, Patrick
Sent: Wednesday, June 14, 2023 12:01 PM
To: Ghobrial, Andrew
Subject: FW: Free Cash Appropriation

From: Dello Russo, Patrick <PDelloRusso@CityofMelrose.org>
Sent: Wednesday, June 14, 2023 11:49 AM
To: C. Henry Kezer <kezer@kezer.com>
Cc: Golden, Kerriann <kgolden@CityofMelrose.org>
Subject: RE: Free Cash Appropriation

Henry,
 Good morning.

It is my understanding that given the timing of the budget submission, in this funding cycle, we needed to utilize Free Cash to address the Capital Costs share of the city for the "new initiative items" (Appro-2023-41). We have in fact, done this same thing in the past (depending upon receipt of the budget request at times). The other Capital Items (\$149,893.00 our share) are found in the City Capital Budget #931. Please let us know if you have any other questions. As you know, we have always fulfilled our budgetary financial obligation to Pine Banks and are so very appreciative of all your continued support.

Best regards,
 Patrick

From: C. Henry Kezer <kezer@kezer.com>
Sent: Tuesday, June 13, 2023 5:30 PM
To: Dello Russo, Patrick <PDelloRusso@CityofMelrose.org>
Subject: FW: Free Cash Appropriation
Importance: High

Patrick

We had a budget hearing June 5th, and presented the attached budget. We sent you a full copy of the annual report, with pictures of events in the last year.

The capital budget consists of \$299,783.69 of debt service as was the case last year.

New initiatives are \$174,250 (line 65) for dugout roofs on the softball field and dog park benches, a Pickleball Court, and a pickup truck to replace the one we got in 2008.

The total capital items is \$474,033.69. (line 67).

In prior years we have not been needed for a separate presentation on these expenses. Can you provide guidance on whether this is require this year?

Thanks as always.

Attachment: Free Cash Appropriation (APPRO-2023-41 : An Appropriation from Free Cash in the amount of \$86,135.35 to Pine Banks for

 C. Henry Kezer, President
 Pine Banks Park
 The Pine Banks Park Foundation, Inc.
 350 Main Street
 Malden, MA 02148
 tel (781) 324 1231
 fax (781) 397 0531

From: Ghobrial, Andrew <aghobrial@CityofMelrose.org>

Sent: Tuesday, June 13, 2023 3:57 PM

To: C. Henry Kezer <kezer@kezer.com>

Subject: Free Cash Appropriation

Importance: High

Good afternoon Mr. Keezer,

As linked [herein](#), please see the agenda for the Tuesday, June 20th meeting beginning at 7:25. Kindly confirm your attendance to speak on the below:

APPRO-2023-41: An Appropriation from Free Cash (account number 01- 324001) in the amount of \$86,135.35 to Pine Banks Department (#652) for Capital items.

Thank you,

Andrew

Andrew Ghobrial
 Clerk of Committees
 Notary Public
 Webmaster
 City of Melrose
 562 Main Street
 Melrose, MA 02176
 P: 781-979-4100
 E: aghobrial@cityofmelrose.org



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Attachment: Free Cash Appropriation (APPRO-2023-41 : An Appropriation from Free Cash in the amount of \$86,135.35 to Pine Banks for

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Attachment: Free Cash Appropriation (APPRO-2023-41 : An Appropriation from Free Cash in the amount of \$86,135.35 to Pine Banks for



CITY OF MELROSE

POLICE DEPARTMENT

KEVIN FALLER
Chief of Police
Public Records Custodian

Office of the Chief
56 West Foster Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4457
Facsimile - (781) 979-4488

30 May 2023

Mayor Paul Brodeur, City of Melrose

Re: Police Free Cash Appropriation 10935 Request to the City Council

Dear Mayor Brodeur,

The Police Department has been notified that the following items are on the Free Cash Appropriation 10935, requested for approval from the City Council in the amount of \$224,998.80.

Police Overtime Deficit	\$200,000.80
Purchase of the Case Cracker System	<u>\$ 24,998.00</u>
TOTAL	\$224,998.80

POLICE OVERTIME DEFICIT

The request for additional overtime funds is requested to cover a deficit in the salary and wages category. Overtime is particularly difficult to project as it covers, but is not limited to, additional staffing at the OT rate to cover vacation, sick time, FMLA, Police OT costs for all community events hosted by City Hall, as well as Military Leave of Absence, and maintaining minimum manning staffing levels brought on when the department is training new recruits/academy recruits. Additionally, the deficit is due to the significant retirement payouts from 3 sworn employees who separated this fiscal year as well as the new OT rates for the Superior Officers contract. Although the union contract was funded in a previous appropriation, all known and estimated OT going forward for the remainder of this fiscal year increased the overall deficit.

PURCHASE OF THE CASE CRACKER SYSTEM

The Case Cracker system is an upgrade to our current Interview and Booking Room Audio/Video Recording System. It is a cloud-based solution that is replacing a soon to be obsolete system that has new features that provide a more robust capability for the department.

If you have any questions, please contact me directly.

Respectfully,

Chief Kevin Faller