

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Supplier 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 0000000000000000000000000036879	Page 1 of 8
Contract Dates 08/01/2018 to 07/31/2021	Origin CPS
Description: CPS-LAMPS & BALLASTS	Contract Maximum \$65,000.00
Buyer Name Trevor R Lewis	Buyer Phone Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
1		14-watt 2-foot Linear T5, Standard Output, Color Temperature = 3500K, SYLVANIA, FP14/835/ECO, Part# 20908, 2', Watts=14, Int. Lumens=1350, CRI=85, Rated hours=28000	EA	3.68000	0.00	0.00
2		24-watt 2-foot Linear T5, High Output, Color Temperature = 3500K, SYLVANIA, FP24/835/HO/ECO, Part# 20929, 2', Watts=24, Int. lumens=2000, CRI=85, Rated hours=36000	EA	3.68000	0.00	0.00
3		28-watt, 4-foot Linear T5, Standard Output, Color Temperature = 3500K, SYLVANIA, FP28/835/ECO, Part# 20901, 4', Watts=28, Int. Lumens=2900, CRI=85, Rated hours=36000	EA	4.91000	0.00	0.00
4		54-watt 4-foot Linear T5, High Output (T5HO), Color Temperature = 3500K, SYLVANIA, FP54/835/HO/ECO, Part# 20904, 4', Watts=54, Int. Lumens=5000, CRI=85, Rated hours=45000	EA	3.68000	0.00	0.00
5		32-watt 4-foot Linear T8, High Performance (On CEE Qualified List), Color Temperature = 4100K, SYLVANIA, FO32/841/XPS/ECO3, Part# 21681, 4', Watts=32, Int. Lumens=3100, CEE QUALIFIED, CRI=85, Rated hours=24000	EA	2.50000	0.00	0.00
6		28-watt 4-foot Linear T8, High Performance, Color Temperature = 3500K, SYLVANIA, FO28/835/XPPLUS/SS/ECO3, Part# 22483, 4', Watts= 28, Int. Lumens=2675, CEE QUALIFIED, CRI=85, Rated hours=24000	EA	2.35000	0.00	0.00

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Supplier 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 00000000000000000000000036879	Page 2 of 8
Contract Dates 08/01/2018 to 07/31/2021	Origin CPS
Description: CPS-LAMPS & BALLASTS	Contract Maximum \$65,000.00
Buyer Name Trevor R Lewis	Buyer Phone Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
7		"25-watt 3-foot Linear T8, Color Temperature = 4100K", SYLVANIA, FO25/841/ECO , Part# 22140, 3', Watts=25, Int. Lumens=2150, CRI=82, Rated hours=24000	EA	2.25000	0.00	0.00
8		"31-watt U-bent T8 With 1-5/8" Spacing, Color Temperature = 4100K", SYLVANIA, FBO31/841, Part# 21879, 22.5", Watts=31, Int. Lumens=2725, CRI=82, Rated hours=24000	EA	8.05000	0.00	0.00
9		"CFL, Bare Spiral, Screw Base, SYLVANIA, CF13DD/E/841/ECO, Part# 20667, 4.3", Watts=13, Int. Lumens=875, ENERGY STAR, CRI=82, Rated hours=10000	EA	2.55000	0.00	0.00
10		"CFL, Bare Spiral, Screw Base, Minimum 2600 Initial Lumens", SYLVANIA, CF40EL/TWIST/827/RP, Part# 29786, 6.38", Watts=40, Int. Lumens=2600, ENERGY STAR, CRI=82, Rated hours=10000	EA	7.75000	0.00	0.00
11		"CFL, PAR38, Screw Base, SYLVANIA, CF23EL/PAR38/2700K, Part# 29359, 6.25", Watts=23, Int. Lumens=1250, CRI= 82, Rated hours=8000	EA	7.15000	0.00	0.00
12		13-watt 4-pin CFL, Double Biax, Color Temperature = 4100K, SYLVANIA, CF13DD/E/841/ECO, Part# 20667, 5.2", Watts=13, Int. Lumens=900, CRI=82, Rated hours=20000	EA	2.55000	0.00	0.00

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Supplier 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 0000000000000000000000000036879		Page 3 of 8
Contract Dates 08/01/2018 to 07/31/2021		Origin CPS
Description: CPS-LAMPS & BALLASTS		Contract Maximum \$65,000.00
Buyer Name Trevor R Lewis	Buyer Phone	Contract Status Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
13		18-watt 4-pin CFL, Double Biax, Color Temperature = 4100K, SYLVANIA, CF18DD/E/841/ECO, Part# 20668, 5.8", Watts=18, Int. Lumens=1150, CRI=82, rated hours=20000	EA	2.87000	0.00	0.00
14		39-watt 4-pin CFL, Biax, Color Temperature = 3500K, SYLVANIA, FT36DL/835/ECO, Part# 20582, 16.6", Watts=36, Int. Lumens=2901, CRI=82, Rated hours=12000	EA	6.89000	0.00	0.00
15		100-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Cycling, SYLVANIA, LU100/ECO, Part# 67514, 7.75", Watts=100, Int. Lumens=9500, TCLP COMPLIANT, CRI=22, Rated hours=30000	EA	10.52000	0.00	0.00
16		150-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Cycling, SYLVANIA, LU150/55/ECO, Part# 67516, 7.75", Watts=150, Int. Lumens=16000, TCLP COMPLIANT, CRI=22, Rated hours=30000	EA	10.51000	0.00	0.00
17		200-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Cycling, SYLVANIA, LU200/ECO, Part# 67576, 9.75", Watts=200, Int. Lumens=22000, TCLP COMPLIANT, CRI=22, Rated hours=30000	EA	11.83000	0.00	0.00
18		400-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Cycling, SYLVANIA, LU400/ECO, Part# 67533, 9.75", Watts=400, Int. Lumens=50000, TCLP COMPLIANT, CRI=22, Rated hours=30000	EA	10.52000	0.00	0.00

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Supplier 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 00000000000000000000000036879	Page 4 of 8
Contract Dates 08/01/2018 to 07/31/2021	Origin CPS
Description: CPS-LAMPS & BALLASTS	Contract Maximum \$65,000.00
Buyer Name Trevor R Lewis	Buyer Phone Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
19		100-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Non-cycling, SYLVANIA, LU100/PLUS/ECO, Part# 67559, 7.75", Watts=100, Int. Lumens=10000, TCLP COMPLIANT, CRI=22, Rated hours=40000	EA	13.80000	0.00	0.00
20		150-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Non-cycling, SYLVANIA, LU150/55/PLUS/ECO, Part# 67494, 7.75", Watts=150, Int. Lumens=16000, TCLP COMPLIANT, CRI=22, Rated hours=40000	EA	13.80000	0.00	0.00
21		200-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Non-cycling, SYLVANIA, LU200/PLUS/ECO, Part# 67495, 9.75", Watts= 200, Int. Lumens=22000, TCLP COMPLIANT, CRI=22, Rated hours=40000	EA	13.80000	0.00	0.00
22		400-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Non-cycling, SYLVANIA, LU400/PLUS/ECO, Part# 67312, 9.75", Watts=400, Int. Lumens=50000, TCLP COMPLIANT, CRI=22, Rated hours=40000	EA	14.93000	0.00	0.00
23		50-watt Pulse Start Metal Halide Lamp, Clear, Protected (For Open or Enclosed Fixtures), Medium Screw Base, SYLVANIA, MP50/U/MED, Part# 64587, 5.43", Watts=50, Int. Lumens=3450, CRI=70, Rated hours=20000V	EA	15.77000	0.00	0.00
24		175-watt Pulse Start Metal Halide Lamp, Clear, (For Enclosed Fixtures Only), Mogul Base, SYLVANIA, M175/PS/U/ED28, Part# 64043, 8.31", Watts=175, CRI= 65, Rated hours=12000V	EA	18.40000	0.00	0.00

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Supplier 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 000000000000000000000036879		Page 5 of 8	
Contract Dates 08/01/2018 to 07/31/2021		Origin CPS	
Description: CPS-LAMPS & BALLASTS		Contract Maximum \$65,000.00	
Buyer Name Trevor R Lewis	Buyer Phone	Contract Status Approved	

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
25		39-watt Ceramic Metal Halide Lamp, Clear, Bi-pin G12 Base and T4.5 bulb, SYLVANIA, MC39T6/U/G12/830, Part# 64970, 3.94", Watts=39, Int. Lumens=3400, CRI= 82, Rated hours=15000	EA	42.35000	0.00	0.00
26		Electronic Fluorescent Instant Start Ballast for Two 4-foot T8 Lamps, Low Ballast Factor, SYLVANIA, QHE 2X32T8/UNV ISL-SC, Part# 49863, QUICKTRONIC, Factor=0.78, Input volts=120-277, NEMA/CEE, Starting=IS	EA	10.38000	0.00	0.00
27		SYLVANIA, QHE 3X32T8/UNV ISL-SC, Part# 49865, QUICKTRONIC, Factor=0.78, Input volts=120-277, NEMA/CEE, Starting=IS	EA	11.70000	0.00	0.00
28		Electronic Fluorescent Instant Start Ballast for Four 4-foot T8 Lamps, Low Ballast Factor, SYLVANIA, QHE 4X32T8/UNV ISL-SC, Part# 49867, QUICKTRONIC, Factor=0.78, Input volts=120-277, NEMA/CEE, Starting=IS	EA	13.01000	0.00	0.00
29		Electronic Fluorescent Program Start Ballast for Two 4-foot 54-watt Lamps, Normal Ballast Factor, SYLVANIA, QHE 2X54T5HO/UNV PSN-HT, Part# 51475, QUICKTRONIC, Factor=1, Input volts=120-277, Starting=PS	EA	21.48000	0.00	0.00
30		Electronic Fluorescent Program Start Ballast for Two 14- to 28-watt T5 Lamps, Normal Ballast Factor, SYLVANIA, QHE 2X28T5/UNV PSN, Part# 51472, QUICKTRONIC, Factor=1, Input volts=120-277, Starting=PS	EA	19.25000	0.00	0.00

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Supplier 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 0000000000000000000036879		Page 6 of 8	
Contract Dates 08/01/2018 to 07/31/2021		Origin CPS	
Description: CPS-LAMPS & BALLASTS		Contract Maximum \$65,000.00	
Buyer Name Trevor R Lewis	Buyer Phone	Contract Status Approved	

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
--------	---------	-----------	-----	------------	---------	---------

31		Electronic Low-frequency HID Ballast for One 150-watt Ceramic and/or Pulse Start Metal Halide Lamp, Low Ballast Factor, ADVANCE, IMH150HLFM, e-VISION, Factor=1, Input volts=120-277	EA	195.00000	0.00	0.00
----	--	--	----	-----------	------	------

32		Magnetic Pulse-Start Core and Coil Ballast Kit for One 150-watt High-Pressure Sodium Lamp, Normal Ballast Factor, SYLVANIA, LU150/MULTI-KIT, Part# 47335, LUMALUX, Factor=NORMAL, Input volts=120-277, Starting=PULSE-START	EA	45.59000	0.00	0.00
----	--	---	----	----------	------	------

33		LAMP CATEGORY DISCOUNTS	EA	0.01000	0.00	0.00
		Discount (%) off of Manufacturers Current Published Lowest Column per Category Fluorescent Lamps 45% Screw Based Compact Fluorescent Lamps 45% 4-Pin Compact Fluorescent Lamps 45% HID Lamps 45%				

34		BALLASTS CATEGORY DISCOUNTS	EA	0.01000	0.00	0.00
		Discount (%) off of Manufacturers Current Published Lowest Column per Category Fluorescent Electronic Ballasts 45% HID Ballasts 45%				

35		RECYCLING	EA	0.01000	0.00	0.00
		Recycling Services Item Discounts				

- Linear Fluorescent Lamp Recycling Service (PER LINEAR FOOT) \$0.09
- U-Bent or Circular Fluorescent Lamp Recycling Service (EACH) \$0.55
- Screw-based/Self-ballasted Compact Fluorescent Lamp Recycling Service (EACH) \$0.55
- Pin-Based Compact Fluorescent Lamp Recycling Service (EACH) \$0.55
- HID Lamp Recycling Service (EACH) \$1.65
- Fluorescent Ballast Recycling Service (EACH) .35/lb (non-PCB)
- HID Ballast Recycling Service (EACH) .35/lb (non-PCB)

1. Parties. This is a contract for Commodities between the State of Vermont, Department of Buildings and General Services (hereinafter called "State"), and Sonepar Distribution NE Inc. with a principal place of business in Williston, VT, (hereinafter called "Contractor"). Contractor's form of business organization is Corporation. It is Contractor's responsibility to contact the Vermont Department of Taxes to determine if, by law, Contractor is required to have a Vermont Department of Taxes Business Account Number.

2. Subject Matter. The subject matter of this contract is commodities generally on the subject of Lamps and Ballasts. Detailed requirements to be provided by Contractor are described in Attachment A.

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Supplier 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 0000000000000000000036879	Page 7 of 8
Contract Dates 08/01/2018 to 07/31/2021	Origin CPS
Description: CPS-LAMPS & BALLASTS	Contract Maximum \$65,000.00
Buyer Name Trevor R Lewis	Buyer Phone Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
--------	---------	-----------	-----	------------	---------	---------

3. Maximum Amount. In consideration of the commodities to be provided by Contractor, the State agrees to pay Contractor, in accordance with the payment provisions specified in Attachment B, a sum not to exceed \$65,000.00.

4. Contract Term. The period of contractor's performance shall begin on August 1, 2018 and end on July 31, 2020, with two (2) 12-month renewal options.

5. Prior Approvals. This Contract shall not be binding unless and until all requisite prior approvals have been obtained in accordance with current State law, bulletins, and interpretations.

6. Amendment. No changes, modifications, or amendments in the terms and conditions of this contract shall be effective unless reduced to writing, numbered and signed by the duly authorized representative of the State and Contractor.

7. Termination for Convenience. This contract may be terminated by the State at any time by giving written notice at least thirty (30) days in advance. In such event, Contractor shall be paid under the terms of this contract for all services provided to and accepted by the State prior to the effective date of termination.

8. Attachments. This contract consists of 20 pages including the following attachments which are incorporated herein:

- Attachment A - Statement of Work
- Attachment B - Payment Provisions
- Attachment C - "Standard State Provisions for Contracts and Grants" a preprinted form (revision date 12/15/2017)
- Attachment D - Specifications

9. Order of Precedence. Any ambiguity, conflict or inconsistency between the documents comprising this contract shall be resolved according to the following order of precedence:

- (1) Standard Contract
- (2) Attachment C (Standard Contract Provisions for Contracts and Grants)
- (3) Attachment A
- (4) Attachment B
- (5) Attachment D

SALES POINT OF CONTACT INFORMATION

John Corbin
802-658-1625
john.corbin@needco.com

STATE OF VERMONT CONTRACT #36879
CONTRACT AMENDMENT #1

It is hereby agreed by and between the State of Vermont, Office of Purchasing and Contracting (the "State") and Sonepar Distribution NE Inc., with a principal place of business in Williston, VT (the "Contractor") that the contract between them originally dated as of August 1, 2018, Contract # 36879, as amended to date, (the "Contract") is hereby amended as follows:

II. Contract Term. The Contract end date, wherever such reference appears in the Contract, shall be changed from July 31, 2020 to July 31, 2021. The Contract Term may be renewed for one additional one-year period at the discretion of the State.

Taxes Due to the State. Contractor certifies under the pains and penalties of perjury that, as of the date this contract amendment is signed, the Contractor is in good standing with respect to, or in full compliance with a plan to pay, any and all taxes due the State of Vermont.

Child Support (Applicable to natural persons only; not applicable to corporations, partnerships or LLCs). Contractor is under no obligation to pay child support or is in good standing with respect to or in full

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Supplier 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 0000000000000000000036879	Page 8 of 8
Contract Dates 08/01/2018 to 07/31/2021	Origin CPS
Description: CPS-LAMPS & BALLASTS	Contract Maximum \$65,000.00
Buyer Name Trevor R Lewis	Buyer Phone Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
--------	---------	-----------	-----	------------	---------	---------

compliance with a plan to pay any and all child support payable under a support order as of the date of this amendment.

Certification Regarding Suspension or Debarment. Contractor certifies under the pains and penalties of perjury that, as of the date this contract amendment is signed, neither Contractor nor Contractor's principals (officers, directors, owners, or partners) are presently debarred, suspended, proposed for debarment, declared ineligible or excluded from participation in federal programs, or programs supported in whole or in part by federal funds.

Contractor further certifies under pains and penalties of perjury that, as of the date this contract amendment is signed, Contractor is not presently debarred, suspended, nor named on the State's debarment list at: <http://bgs.vermont.gov/purchasing-contracting/debarment>

This document consists of 11 pages. Except as modified by this Amendment No. 1, all provisions of the Contract remain in full force and effect.

WE THE UNDERSIGNED PARTIES AGREE TO BE BOUND BY THIS CONTRACT

By the STATE of VERMONT

By the CONTRACTOR

Date: _____

Date: _____

Signature: _____

Signature: _____

Name: Christopher Cole

Name: _____

Commissioner - Buildings & General Services

Title: _____

Title: _____

Email: _____

Email: _____

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Vendor ID 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 000000000000000000000000000036879		Page 1 of 6
Contract Dates 08/01/2018 to 07/31/2020		Origin CPS
Description: CPS-LAMPS & BALLASTS		Contract Maximum \$65,000.00
Buyer Name Brian Jon Berini	Buyer Phone 802/828-2217	Contract Status Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
1		14-watt 2-foot Linear T5, Standard Output, Color Temperature = 3500K, SYLVANIA, FP14/835/ECO, Part# 20908, 2', Watts=14, Int. Lumens=1350, CRI=85, Rated hours=28000	EA	3.68000	0.00	0.00
2		24-watt 2-foot Linear T5, High Output, Color Temperature = 3500K, SYLVANIA, FP24/835/HO/ECO, Part# 20929, 2', Watts=24, Int. lumens=2000, CRI=85, Rated hours=36000	EA	3.68000	0.00	0.00
3		28-watt, 4-foot Linear T5, Standard Output, Color Temperature = 3500K, SYLVANIA, FP28/835/ECO, Part# 20901, 4', Watts=28, Int. Lumens=2900, CRI=85, Rated hours=36000	EA	4.91000	0.00	0.00
4		54-watt 4-foot Linear T5, High Output (T5HO), Color Temperature = 3500K, SYLVANIA, FP54/835/HO/ECO, Part# 20904, 4', Watts=54, Int. Lumens=5000, CRI=85, Rated hours=45000	EA	3.68000	0.00	0.00
5		32-watt 4-foot Linear T8, High Performance (On CEE Qualified List), Color Temperature = 4100K, SYLVANIA, FO32/841/XPS/ECO3, Part# 21681, 4', Watts=32, Int. Lumens=3100, CEE QUALIFIED, CRI=85, Rated hours=24000	EA	2.50000	0.00	0.00
6		28-watt 4-foot Linear T8, High Performance, Color Temperature = 3500K, SYLVANIA, FO28/835/XPPLUS/SS/ECO3, Part# 22483, 4', Watts= 28, Int. Lumens=2675, CEE QUALIFIED, CRI=85, Rated hours=24000	EA	2.35000	0.00	0.00
7		"25-watt 3-foot Linear T8, Color Temperature = 4100K", SYLVANIA, FO25/841/ECO, Part# 22140, 3', Watts=25, Int. Lumens=2150, CRI=82, Rated hours=24000	EA	2.25000	0.00	0.00
8		"31-watt U-bent T8 With 1-5/8" Spacing, Color Temperature = 4100K", SYLVANIA, FBO31/841, Part# 21879, 22.5", Watts=31, Int. Lumens=2725, CRI=82, Rated hours=24000	EA	8.05000	0.00	0.00
9		"CFL, Bare Spiral, Screw Base, SYLVANIA, CF13DD/E/841/ECO, Part# 20667, 4.3", Watts=13, Int. Lumens=875, ENERGY STAR, CRI=82, Rated hours=10000	EA	2.55000	0.00	0.00

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Vendor ID 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 0000000000000000000000000036879		Page 2 of 6
Contract Dates 08/01/2018 to 07/31/2020		Origin CPS
Description: CPS-LAMPS & BALLASTS		Contract Maximum \$65,000.00
Buyer Name Brian Jon Berini	Buyer Phone 802/828-2217	Contract Status Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
10		"CFL, Bare Spiral, Screw Base, Minimum 2600 Initial Lumens", SYLVANIA, CF40EL/TWIST/827/RP, Part# 29786, 6.38", Watts=40, Int. Lumens=2600, ENERGY STAR, CRI=82, Rated hours=10000	EA	7.75000	0.00	0.00
11		"CFL, PAR38, Screw Base, SYLVANIA, CF23EL/PAR38/2700K, Part# 29359, 6.25", Watts=23, Int. Lumens=1250, CRI= 82, Rated hours=8000	EA	7.15000	0.00	0.00
12		13-watt 4-pin CFL, Double Biax, Color Temperature = 4100K, SYLVANIA, CF13DD/E/841/ECO, Part# 20667, 5.2", Watts=13, Int. Lumens=900, CRI=82, Rated hours=20000	EA	2.55000	0.00	0.00
13		18-watt 4-pin CFL, Double Biax, Color Temperature = 4100K, SYLVANIA, CF18DD/E/841/ECO, Part# 20668, 5.8", Watts=18, Int. Lumens=1150, CRI=82, rated hours=20000	EA	2.87000	0.00	0.00
14		39-watt 4-pin CFL, Biax, Color Temperature = 3500K, SYLVANIA, FT36DL/835/ECO, Part# 20582, 16.6", Watts=36, Int. Lumens=2901, CRI=82, Rated hours=12000	EA	6.89000	0.00	0.00
15		100-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Cycling, SYLVANIA, LU100/ECO, Part# 67514, 7.75", Watts=100, Int. Lumens=9500, TCLP COMPLIANT, CRI=22, Rated hours=30000	EA	10.52000	0.00	0.00
16		150-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Cycling, SYLVANIA, LU150/55/ECO, Part# 67516, 7.75", Watts=150, Int. Lumens=16000, TCLP COMPLIANT, CRI=22, Rated hours=30000	EA	10.51000	0.00	0.00
17		200-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Cycling, SYLVANIA, LU200/ECO, Part# 67576, 9.75", Watts=200, Int. Lumens=22000, TCLP COMPLIANT, CRI=22, Rated hours=30000	EA	11.83000	0.00	0.00
18		400-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Cycling, SYLVANIA, LU400/ECO, Part# 67533, 9.75", Watts=400, Int. Lumens=50000, TCLP COMPLIANT, CRI=22, Rated hours=30000	EA	10.52000	0.00	0.00

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Vendor ID 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 000000000000000000000000036879		Page 3 of 6
Contract Dates 08/01/2018 to 07/31/2020		Origin CPS
Description: CPS-LAMPS & BALLASTS		Contract Maximum \$65,000.00
Buyer Name Brian Jon Berini	Buyer Phone 802/828-2217	Contract Status Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
19		100-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Non-cycling, SYLVANIA, LU100/PLUS/ECO, Part# 67559, 7.75", Watts=100, Int. Lumens=10000, TCLP COMPLIANT, CRI=22, Rated hours=40000	EA	13.80000	0.00	0.00
20		150-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Non-cycling, SYLVANIA, LU150/55/PLUS/ECO, Part# 67494, 7.75", Watts=150, Int. Lumens=16000, TCLP COMPLIANT, CRI=22, Rated hours=40000	EA	13.80000	0.00	0.00
21		200-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Non-cycling, SYLVANIA, LU200/PLUS/ECO, Part# 67495, 9.75", Watts= 200, Int. Lumens=22000, TCLP COMPLIANT, CRI=22, Rated hours=40000	EA	13.80000	0.00	0.00
22		400-watt High-Pressure Sodium (HPS) Lamp, Mogul Base, Non-cycling, SYLVANIA, LU400/PLUS/ECO, Part# 67312, 9.75", Watts=400, Int. Lumens=50000, TCLP COMPLIANT, CRI=22, Rated hours=40000	EA	14.93000	0.00	0.00
23		50-watt Pulse Start Metal Halide Lamp, Clear, Protected (For Open or Enclosed Fixtures), Medium Screw Base, SYLVANIA, MP50/U/MED, Part# 64587, 5.43", Watts=50, Int. Lumens=3450, CRI=70, Rated hours=20000V	EA	15.77000	0.00	0.00
24		175-watt Pulse Start Metal Halide Lamp, Clear, (For Enclosed Fixtures Only), Mogul Base, SYLVANIA, M175/PS/U/ED28, Part# 64043, 8.31", Watts=175, CRI= 65, Rated hours=12000V	EA	18.40000	0.00	0.00
25		39-watt Ceramic Metal Halide Lamp, Clear, Bi-pin G12 Base and T4.5 bulb, SYLVANIA, MC39T6/U/G12/830, Part# 64970, 3.94", Watts=39, Int. Lumens=3400, CRI= 82, Rated hours=15000	EA	42.35000	0.00	0.00
26		Electronic Fluorescent Instant Start Ballast for Two 4-foot T8 Lamps, Low Ballast Factor, SYLVANIA, QHE 2X32T8/UNV ISL-SC, Part# 49863, QUICKTRONIC, Factor=0.78, Input volts=120-277, NEMA/CEE, Starting=IS	EA	10.38000	0.00	0.00
27		SYLVANIA, QHE 3X32T8/UNV ISL-SC, Part# 49865, QUICKTRONIC, Factor=0.78, Input volts=120-277, NEMA/CEE, Starting=IS	EA	11.70000	0.00	0.00

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Vendor ID 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 00000000000000000000000036879		Page 4 of 6
Contract Dates 08/01/2018 to 07/31/2020		Origin CPS
Description: CPS-LAMPS & BALLASTS		Contract Maximum \$65,000.00
Buyer Name Brian Jon Berini	Buyer Phone 802/828-2217	Contract Status Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
28		Electronic Fluorescent Instant Start Ballast for Four 4-foot T8 Lamps, Low Ballast Factor, SYLVANIA, QHE 4X32T8/UNV ISL-SC, Part# 49867, QUICKTRONIC, Factor=0.78, Input volts=120-277, NEMA/CEE, Starting=IS	EA	13.01000	0.00	0.00
29		Electronic Fluorescent Program Start Ballast for Two 4-foot 54-watt Lamps, Normal Ballast Factor, SYLVANIA, QHE 2X54T5HO/UNV PSN-HT, Part# 51475, QUICKTRONIC, Factor=1, Input volts=120-277, Starting=PS	EA	21.48000	0.00	0.00
30		Electronic Fluorescent Program Start Ballast for Two 14- to 28-watt T5 Lamps, Normal Ballast Factor, SYLVANIA, QHE 2X28T5/UNV PSN, Part# 51472, QUICKTRONIC, Factor=1, Input volts=120-277, Starting=PS	EA	19.25000	0.00	0.00
31		Electronic Low-frequency HID Ballast for One 150-watt Ceramic and/or Pulse Start Metal Halide Lamp, Low Ballast Factor, ADVANCE, IMH150HLFM, e-VISION, Factor=1, Input volts=120-277	EA	195.00000	0.00	0.00
32		Magnetic Pulse-Start Core and Coil Ballast Kit for One 150-watt High-Pressure Sodium Lamp, Normal Ballast Factor, SYLVANIA, LU150/MULTI-KIT, Part# 47335, LUMALUX, Factor=NORMAL, Input volts=120-277, Starting=PULSE-START	EA	45.59000	0.00	0.00
33		LAMP CATEGORY DISCOUNTS Discount (%) off of Manufacturers Current Published Lowest Column per Category Fluorescent Lamps 45% Screw Based Compact Fluorescent Lamps 45% 4-Pin Compact Fluorescent Lamps 45% HID Lamps 45%	EA	0.01000	0.00	0.00
34		BALLASTS CATEGORY DISCOUNTS Discount (%) off of Manufacturers Current Published Lowest Column per Category Fluorescent Electronic Ballasts 45% HID Ballasts 45%	EA	0.01000	0.00	0.00
35		RECYCLING Recycling Services Item Discounts Linear Fluorescent Lamp Recycling Service (PER LINEAR FOOT) \$0.09 U-Bent or Circular Fluorescent Lamp Recycling Service (EACH) \$0.55 Screw-based/Self-ballasted Compact Fluorescent Lamp Recycling Service (EACH) \$0.55 Pin-Based Compact Fluorescent Lamp Recycling Service (EACH) \$0.55 HID Lamp Recycling Service (EACH) \$1.65 Fluorescent Ballast Recycling Service (EACH) .35/lb (non-PCB)	EA	0.01000	0.00	0.00

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Vendor ID 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 0000000000000000000000000036879	Page 5 of 6
Contract Dates 08/01/2018 to 07/31/2020	Origin CPS
Description: CPS-LAMPS & BALLASTS	Contract Maximum \$65,000.00
Buyer Name Brian Jon Berini	Buyer Phone 802/828-2217
Contract Status Approved	

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
		HID Ballast Recycling Service (EACH) .35/lb (non-PCB)				

CONTRACT TERMS AND ADDITIONAL INFORMATION

- Parties.** This is a contract for Commodities between the State of Vermont, Department of Buildings and General Services (hereinafter called "State"), and Sonepar Distribution NE Inc. with a principal place of business in Williston, VT, (hereinafter called "Contractor"). Contractor's form of business organization is Corporation. It is Contractor's responsibility to contact the Vermont Department of Taxes to determine if, by law, Contractor is required to have a Vermont Department of Taxes Business Account Number.
- Subject Matter.** The subject matter of this contract is commodities generally on the subject of Lamps and Ballasts. Detailed requirements to be provided by Contractor are described in Attachment A.
- Maximum Amount.** In consideration of the commodities to be provided by Contractor, the State agrees to pay Contractor, in accordance with the payment provisions specified in Attachment B, a sum not to exceed \$65,000.00.
- Contract Term.** The period of contractor's performance shall begin on August 1, 2018 and end on July 31, 2020, with two (2) 12-month renewal options.
- Prior Approvals.** This Contract shall not be binding unless and until all requisite prior approvals have been obtained in accordance with current State law, bulletins, and interpretations.
- Amendment.** No changes, modifications, or amendments in the terms and conditions of this contract shall be effective unless reduced to writing, numbered and signed by the duly authorized representative of the State and Contractor.
- Termination for Convenience.** This contract may be terminated by the State at any time by giving written notice at least thirty (30) days in advance. In such event, Contractor shall be paid under the terms of this contract for all services provided to and accepted by the State prior to the effective date of termination.
- Attachments.** This contract consists of 20 pages including the following attachments which are incorporated herein:

- Attachment A - Statement of Work
- Attachment B - Payment Provisions
- Attachment C - "Standard State Provisions for Contracts and Grants" a preprinted form (revision date 12/15/2017)
- Attachment D - Specifications

9. **Order of Precedence.** Any ambiguity, conflict or inconsistency between the documents comprising this contract shall be resolved according to the following order of precedence:

- (1) Standard Contract
- (2) Attachment C (Standard Contract Provisions for Contracts and Grants)
- (3) Attachment A
- (4) Attachment B
- (5) Attachment D

SALES POINT OF CONTACT INFORMATION

John Corbin
802-658-1625
john.corbin@needco.com

State of Vermont

Buildings and General Services
Office of Purchasing & Contracting
109 State St
Montpelier VT 05609-3001
USA

CONTRACT



Vendor ID 0000105475
Sonepar Distribution NE Inc
340 Avenue D Suite 10
Williston VT 05495
USA

Contract ID 0000000000000000000036879		Page 6 of 6
Contract Dates 08/01/2018 to 07/31/2020		Origin CPS
Description: CPS-LAMPS & BALLASTS		Contract Maximum \$65,000.00
Buyer Name Brian Jon Berini	Buyer Phone 802/828-2217	Contract Status Approved

Phone #: 802-658-1625

Line #	Item ID	Item Desc	UOM	Unit Price	Max Qty	Max Amt
--------	---------	-----------	-----	------------	---------	---------

WE THE UNDERSIGNED PARTIES AGREE TO BE BOUND BY THIS CONTRACT

By the STATE of VERMONT

By the CONTRACTOR

Date: _____

Date: _____

Signature: _____

Signature: _____

Name: _____

Name: _____

Title: _____

Title: _____

Email: _____

Email: _____

ATTACHMENT A – STATEMENT OF WORK

The Contractor shall provide:

1. Line Items 1 through 35 as identified on Page(s) 1-6 of the Standard Contract Form.
2. **WARRANTY:** The manufacturer shall include a written warranty for each product that it intends to furnish. Warrantees must be based on commercial use, and shall extend for a minimum term of one (1) year from the date a Product is available for use by the purchaser.
3. **REPORTING REQUIREMENTS:** Contractors will be required to submit quarterly product sales report to the Purchasing Agent pursuant to the schedule below. Each report must contain the following information: Contract Number; Using Department's Address, Contact Name, and Telephone Number; Product Ordered; Quantity Ordered; Quantity Shipped; and Price Charged, with totals for each product for each reporting period. We reserve the right to request additional information or to modify the reporting periods. Reporting Periods: Quarterly Reports must be submitted in accordance with the following schedule:

Reporting Period: January 1 to March 31 - Report Due April 15
Reporting Period: April 1, to June 30 - Report Due July 15
Reporting Period: July 1 to September 30 - Report Due October 15
Reporting Period: October 1 to December 31 - Report Due January 15
4. **DELIVERY:** All pricing is to include F.O.B. delivery to the ordering facility. Responsibility for product delivery remains with the contractor until the product is properly delivered and signed for. Shipments shall be securely and properly packed, according to accepted commercial practices, without extra charge for packing cases or other containers. Upon delivery, all packaging and containers shall become the property of the State, unless otherwise stated. Delivered goods that do not conform to the specifications or are not in good condition upon receipt shall be replaced promptly by the contractor.
5. **QUALITY:** All products will be new and unused. All products provided by the contractor must meet all federal, state, and local standards for quality and safety requirements. Products not meeting the requirements of this section the will be deemed unacceptable and returned to the contractor for credit at no charge to the State.
6. **DEFAULT:** In case of default of the contractor, the State may procure the materials or supplies from other sources and hold the contractor responsible for any excess cost occasioned thereby, provided, that if public necessity requires the use of materials or supplies not conforming to the specifications they may be accepted and payment therefore shall be made at a proper reduction in price.
7. **VERMONT STATE COLLEGES:** This contract is also available for use by the University of Vermont and the Vermont State Colleges Inc., a separate corporation, having under its jurisdiction Castleton State College, Johnson State College, Lyndon State College, Community College of Vermont, and the Vermont Technical College.
8. **TOWNS AND SCHOOLS OF THE STATE OF VERMONT:** This contract is also available for use by Towns and Schools of the State of Vermont. It should be noted that all such items furnished

will be billed directly to and paid for by the political subdivision or college and neither the State of Vermont, nor its Commissioner of Buildings and General Services, personally or officially, assumes any responsibility.

9. **AVAILABILITY:** Delivery shall be within 2-4 business days from receipt of order.

10. PERFORMANCE REQUIREMENTS:

1. DELIVERY IS REQUIRED WITHIN 2 AND 4 BUSINESS DAYS OF ACCEPTANCE OF A PURCHASE ORDER, UNLESS THE CONTRACTOR HAS ADVISED THE CUSTOMER ON AN ALTERNATE DELIVERY SCHEDULE (EXAMPLE-LONGER LEAD-TIME DUE TO MANUFACTURING CYCLE WHEN ORDERED FROM OEM). THE ACCEPTABLE QUALITY LEVEL FOR ON TIME DELIVERY SHALL BE 99%; THE CUSTOMER SHALL REPORT ANY DELIVERIES THAT DO NOT MEET THE CONTRACTORS PROMISED DELIVERY DATE TO THE STATE CONTRACT MANAGER. CONTRACTOR'S DELIVERY PERFORMANCE SHALL BE REVIEWED IN PERIODIC CONTRACT REVIEW MEETINGS BETWEEN THE STATE OF VERMONT (SOV) AND THE CONTRACTOR.

2. THE CONTRACTOR SHALL COMPLETE THE REPORTING REQUIREMENTS OUTLINED IN THIS CONTRACT. A FAILURE BY THE CONTRACTOR TO COMPLETE THEIR QUARTERLY REPORTING ON TIME IN TWO CONSECUTIVE QUARTERS SHALL RESULT IN A CONTRACT REVIEW WITH POTENTIAL CONSEQUENCES AS SEVERE AS TERMINATION.

3. ORDERING – SUPPLIER SHALL RESPOND TO CUSTOMER'S REQUESTS FOR TECHNICAL INFORMATION, PRICING, AND DELIVERY INFORMATION WITHIN 48 HOURS OR LESS OF THE FIRST CONTACT BY THE CUSTOMER. THE CUSTOMER SHALL REQUIRE A 99% COMPLIANCE TO THIS REQUIREMENT, WITH THE CUSTOMER REPORTING ANY CONTRACTOR NON-COMPLIANCE TO THE STATE CONTRACT MANAGER. THE CONTRACTOR'S CUSTOMER RESPONSE PERFORMANCE SHALL BE REVIEWED IN PERIODIC CONTRACT REVIEW MEETINGS BETWEEN THE SOV AND THE CONTRACTOR.

ATTACHMENT B – PAYMENT PROVISIONS

The maximum dollar amount payable under this contract is not intended as any form of a guaranteed amount. The Contractor will be paid for products actually delivered or performed, as specified in Attachment A, up to the maximum allowable amount specified on page 1 of this contract.

1. Prior to commencement of work and release of any payments, Contractor shall submit to the State:
 - a. a certificate of insurance consistent with the requirements set forth in Attachment C, Section 8 (Insurance), and with any additional requirements for insurance as may be set forth elsewhere in this contract; and
2. Payment terms are **Net 30** days from the date the State receives an error-free invoice with all necessary and complete supporting documentation.
3. All invoices are to be rendered by the Contractor on the vendor's standard billhead and forwarded directly to the institution or agency ordering materials and shall specify the address to which payments will be sent. Percentage discounts may be offered for prompt payments of invoices; however, such discounts must be in effect for a period of 30 days or more in order to be considered in making awards.
4. **PRICING:** All equipment pricing is to include F.O.B. delivery to the ordering facility. No request for extra delivery cost will be honored. All equipment shall be delivered assembled, serviced, and ready for immediate use, unless otherwise requested by the State. No charge for packing, shipping, or for any other purpose will be allowed over and above the price quoted.
5. The State of Vermont VISA Purchasing Card may be used as a form of payment
6. Contractor shall submit invoices to the State as identified on Page(s) 1-6 of the Standard Contract Form.

**ATTACHMENT C: STANDARD STATE PROVISIONS
FOR CONTRACTS AND GRANTS
REVISED DECEMBER 15, 2017**

1. Definitions: For purposes of this Attachment, “Party” shall mean the Contractor, Grantee or Subrecipient, with whom the State of Vermont is executing this Agreement and consistent with the form of the Agreement. “Agreement” shall mean the specific contract or grant to which this form is attached.

2. Entire Agreement: This Agreement, whether in the form of a contract, State-funded grant, or Federally-funded grant, represents the entire agreement between the parties on the subject matter. All prior agreements, representations, statements, negotiations, and understandings shall have no effect.

3. Governing Law, Jurisdiction and Venue; No Waiver of Jury Trial: This Agreement will be governed by the laws of the State of Vermont. Any action or proceeding brought by either the State or the Party in connection with this Agreement shall be brought and enforced in the Superior Court of the State of Vermont, Civil Division, Washington Unit. The Party irrevocably submits to the jurisdiction of this court for any action or proceeding regarding this Agreement. The Party agrees that it must first exhaust any applicable administrative remedies with respect to any cause of action that it may have against the State with regard to its performance under this Agreement. Party agrees that the State shall not be required to submit to binding arbitration or waive its right to a jury trial.

4. Sovereign Immunity: The State reserves all immunities, defenses, rights or actions arising out of the State’s sovereign status or under the Eleventh Amendment to the United States Constitution. No waiver of the State’s immunities, defenses, rights or actions shall be implied or otherwise deemed to exist by reason of the State’s entry into this Agreement.

5. No Employee Benefits For Party: The Party understands that the State will not provide any individual retirement benefits, group life insurance, group health and dental insurance, vacation or sick leave, workers compensation or other benefits or services available to State employees, nor will the State withhold any state or Federal taxes except as required under applicable tax laws, which shall be determined in advance of execution of the Agreement. The Party understands that all tax returns required by the Internal Revenue Code and the State of Vermont, including but not limited to income, withholding, sales and use, and rooms and meals, must be filed by the Party, and information as to Agreement income will be provided by the State of Vermont to the Internal Revenue Service and the Vermont Department of Taxes.

6. Independence: The Party will act in an independent capacity and not as officers or employees of the State.

7. Defense and Indemnity: The Party shall defend the State and its officers and employees against all third party claims or suits arising in whole or in part from any act or omission of the Party or of any agent of the Party in connection with the performance of this Agreement. The State shall notify the Party in the event of any such claim or suit, and the Party shall immediately retain counsel and otherwise provide a complete defense against the entire claim or suit. The State retains the right to participate at its own expense in the defense of any claim. The State shall have the right to approve all proposed settlements of such claims or suits.

After a final judgment or settlement, the Party may request recoupment of specific defense costs and may file suit in Washington Superior Court requesting recoupment. The Party shall be entitled to recoup costs only upon a showing that such costs were entirely unrelated to the defense of any claim arising from an act or omission of the Party in connection with the performance of this Agreement.

The Party shall indemnify the State and its officers and employees if the State, its officers or employees become legally obligated to pay any damages or losses arising from any act or omission of the Party or an agent of the Party in connection with the performance of this Agreement.

Notwithstanding any contrary language anywhere, in no event shall the terms of this Agreement or any document furnished by the Party in connection with its performance under this Agreement obligate the State to (1) defend or indemnify the Party or any third party, or (2) otherwise be liable for the expenses or reimbursement, including attorneys’ fees, collection costs or other costs of the Party or any third party.

8. Insurance: Before commencing work on this Agreement the Party must provide certificates of insurance to show that the following minimum coverages are in effect. It is the responsibility of the Party to maintain current certificates of insurance on file with the State through the term of this Agreement. No warranty is made that the coverages and limits listed

herein are adequate to cover and protect the interests of the Party for the Party's operations. These are solely minimums that have been established to protect the interests of the State.

Workers Compensation: With respect to all operations performed, the Party shall carry workers' compensation insurance in accordance with the laws of the State of Vermont. Vermont will accept an out-of-state employer's workers' compensation coverage while operating in Vermont provided that the insurance carrier is licensed to write insurance in Vermont and an amendatory endorsement is added to the policy adding Vermont for coverage purposes. Otherwise, the party shall secure a Vermont workers' compensation policy, if necessary to comply with Vermont law.

General Liability and Property Damage: With respect to all operations performed under this Agreement, the Party shall carry general liability insurance having all major divisions of coverage including, but not limited to:

Premises - Operations

Products and Completed Operations

Personal Injury Liability

Contractual Liability

The policy shall be on an occurrence form and limits shall not be less than:

\$1,000,000 Each Occurrence

\$2,000,000 General Aggregate

\$1,000,000 Products/Completed Operations Aggregate

\$1,000,000 Personal & Advertising Injury

Automotive Liability: The Party shall carry automotive liability insurance covering all motor vehicles, including hired and non-owned coverage, used in connection with the Agreement. Limits of coverage shall not be less than \$500,000 combined single limit. If performance of this Agreement involves construction, or the transport of persons or hazardous materials, limits of coverage shall not be less than \$1,000,000 combined single limit.

Additional Insured. The General Liability and Property Damage coverages required for performance of this Agreement shall include the State of Vermont and its agencies, departments, officers and employees as Additional Insureds. If performance of this Agreement involves construction, or the transport of persons or hazardous materials, then the required Automotive Liability coverage shall include the State of Vermont and its agencies, departments, officers and employees as Additional Insureds. Coverage shall be primary and non-contributory with any other insurance and self-insurance.

Notice of Cancellation or Change. There shall be no cancellation, change, potential exhaustion of aggregate limits or non-renewal of insurance coverage(s) without thirty (30) days written prior written notice to the State.

9. Reliance by the State on Representations: All payments by the State under this Agreement will be made in reliance upon the accuracy of all representations made by the Party in accordance with this Agreement, including but not limited to bills, invoices, progress reports and other proofs of work.

10. False Claims Act: The Party acknowledges that it is subject to the Vermont False Claims Act as set forth in 32 V.S.A. § 630 *et seq.* If the Party violates the Vermont False Claims Act it shall be liable to the State for civil penalties, treble damages and the costs of the investigation and prosecution of such violation, including attorney's fees, except as the same may be reduced by a court of competent jurisdiction. The Party's liability to the State under the False Claims Act shall not be limited notwithstanding any agreement of the State to otherwise limit Party's liability.

11. Whistleblower Protections: The Party shall not discriminate or retaliate against one of its employees or agents for disclosing information concerning a violation of law, fraud, waste, abuse of authority or acts threatening health or safety, including but not limited to allegations concerning the False Claims Act. Further, the Party shall not require such employees or agents to forego monetary awards as a result of such disclosures, nor should they be required to report misconduct to the Party or its agents prior to reporting to any governmental entity and/or the public.

12. Location of State Data: No State data received, obtained, or generated by the Party in connection with performance under this Agreement shall be processed, transmitted, stored, or transferred by any means outside the continental United States, except with the express written permission of the State.

13. Records Available for Audit: The Party shall maintain all records pertaining to performance under this agreement. "Records" means any written or recorded information, regardless of physical form or characteristics, which is produced or

acquired by the Party in the performance of this agreement. Records produced or acquired in a machine readable electronic format shall be maintained in that format. The records described shall be made available at reasonable times during the period of the Agreement and for three years thereafter or for any period required by law for inspection by any authorized representatives of the State or Federal Government. If any litigation, claim, or audit is started before the expiration of the three-year period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved.

14. Fair Employment Practices and Americans with Disabilities Act: Party agrees to comply with the requirement of 21 V.S.A. Chapter 5, Subchapter 6, relating to fair employment practices, to the full extent applicable. Party shall also ensure, to the full extent required by the Americans with Disabilities Act of 1990, as amended, that qualified individuals with disabilities receive equitable access to the services, programs, and activities provided by the Party under this Agreement.

15. Set Off: The State may set off any sums which the Party owes the State against any sums due the Party under this Agreement; provided, however, that any set off of amounts due the State of Vermont as taxes shall be in accordance with the procedures more specifically provided hereinafter.

16. Taxes Due to the State:

- A. Party understands and acknowledges responsibility, if applicable, for compliance with State tax laws, including income tax withholding for employees performing services within the State, payment of use tax on property used within the State, corporate and/or personal income tax on income earned within the State.
- B. Party certifies under the pains and penalties of perjury that, as of the date this Agreement is signed, the Party is in good standing with respect to, or in full compliance with, a plan to pay any and all taxes due the State of Vermont.
- C. Party understands that final payment under this Agreement may be withheld if the Commissioner of Taxes determines that the Party is not in good standing with respect to or in full compliance with a plan to pay any and all taxes due to the State of Vermont.
- D. Party also understands the State may set off taxes (and related penalties, interest and fees) due to the State of Vermont, but only if the Party has failed to make an appeal within the time allowed by law, or an appeal has been taken and finally determined and the Party has no further legal recourse to contest the amounts due.

17. Taxation of Purchases: All State purchases must be invoiced tax free. An exemption certificate will be furnished upon request with respect to otherwise taxable items.

18. Child Support: (Only applicable if the Party is a natural person, not a corporation or partnership.) Party states that, as of the date this Agreement is signed, he/she:

- A. is not under any obligation to pay child support; or
- B. is under such an obligation and is in good standing with respect to that obligation; or
- C. has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan.

Party makes this statement with regard to support owed to any and all children residing in Vermont. In addition, if the Party is a resident of Vermont, Party makes this statement with regard to support owed to any and all children residing in any other state or territory of the United States.

19. Sub-Agreements: Party shall not assign, subcontract or subgrant the performance of this Agreement or any portion thereof to any other Party without the prior written approval of the State. Party shall be responsible and liable to the State for all acts or omissions of subcontractors and any other person performing work under this Agreement pursuant to an agreement with Party or any subcontractor.

In the case this Agreement is a contract with a total cost in excess of \$250,000, the Party shall provide to the State a list of all proposed subcontractors and subcontractors' subcontractors, together with the identity of those subcontractors' workers compensation insurance providers, and additional required or requested information, as applicable, in accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54).

Party shall include the following provisions of this Attachment C in all subcontracts for work performed solely for the State of Vermont and subcontracts for work performed in the State of Vermont: Section 10 ("False Claims Act"); Section 11 ("Whistleblower Protections"); Section 12 ("Location of State Data"); Section 14 ("Fair Employment Practices and

Americans with Disabilities Act”); Section 16 (“Taxes Due the State”); Section 18 (“Child Support”); Section 20 (“No Gifts or Gratuities”); Section 22 (“Certification Regarding Debarment”); Section 30 (“State Facilities”); and Section 32.A (“Certification Regarding Use of State Funds”).

20. No Gifts or Gratuities: Party shall not give title or possession of anything of substantial value (including property, currency, travel and/or education programs) to any officer or employee of the State during the term of this Agreement.

21. Copies: Party shall use reasonable best efforts to ensure that all written reports prepared under this Agreement are printed using both sides of the paper.

22. Certification Regarding Debarment: Party certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, neither Party nor Party’s principals (officers, directors, owners, or partners) are presently debarred, suspended, proposed for debarment, declared ineligible or excluded from participation in Federal programs, or programs supported in whole or in part by Federal funds.

Party further certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, Party is not presently debarred, suspended, nor named on the State’s debarment list at: <http://bgs.vermont.gov/purchasing/debarment>

23. Conflict of Interest: Party shall fully disclose, in writing, any conflicts of interest or potential conflicts of interest.

24. Confidentiality: Party acknowledges and agrees that this Agreement and any and all information obtained by the State from the Party in connection with this Agreement are subject to the State of Vermont Access to Public Records Act, 1 V.S.A. § 315 et seq.

25. Force Majeure: Neither the State nor the Party shall be liable to the other for any failure or delay of performance of any obligations under this Agreement to the extent such failure or delay shall have been wholly or principally caused by acts or events beyond its reasonable control rendering performance illegal or impossible (excluding strikes or lock-outs) (“Force Majeure”). Where Force Majeure is asserted, the nonperforming party must prove that it made all reasonable efforts to remove, eliminate or minimize such cause of delay or damages, diligently pursued performance of its obligations under this Agreement, substantially fulfilled all non-excused obligations, and timely notified the other party of the likelihood or actual occurrence of an event described in this paragraph.

26. Marketing: Party shall not refer to the State in any publicity materials, information pamphlets, press releases, research reports, advertising, sales promotions, trade shows, or marketing materials or similar communications to third parties except with the prior written consent of the State.

27. Termination:

A. Non-Appropriation: If this Agreement extends into more than one fiscal year of the State (July 1 to June 30), and if appropriations are insufficient to support this Agreement, the State may cancel at the end of the fiscal year, or otherwise upon the expiration of existing appropriation authority. In the case that this Agreement is a Grant that is funded in whole or in part by Federal funds, and in the event Federal funds become unavailable or reduced, the State may suspend or cancel this Grant immediately, and the State shall have no obligation to pay Subrecipient from State revenues.

B. Termination for Cause: Either party may terminate this Agreement if a party materially breaches its obligations under this Agreement, and such breach is not cured within thirty (30) days after delivery of the non-breaching party’s notice or such longer time as the non-breaching party may specify in the notice.

C. Termination Assistance: Upon nearing the end of the final term or termination of this Agreement, without respect to cause, the Party shall take all reasonable and prudent measures to facilitate any transition required by the State. All State property, tangible and intangible, shall be returned to the State upon demand at no additional cost to the State in a format acceptable to the State.

28. Continuity of Performance: In the event of a dispute between the Party and the State, each party will continue to perform its obligations under this Agreement during the resolution of the dispute until this Agreement is terminated in accordance with its terms.

29. No Implied Waiver of Remedies: Either party's delay or failure to exercise any right, power or remedy under this Agreement shall not impair any such right, power or remedy, or be construed as a waiver of any such right, power or remedy. All waivers must be in writing.

30. State Facilities: If the State makes space available to the Party in any State facility during the term of this Agreement for purposes of the Party's performance under this Agreement, the Party shall only use the space in accordance with all policies and procedures governing access to and use of State facilities which shall be made available upon request. State facilities will be made available to Party on an "AS IS, WHERE IS" basis, with no warranties whatsoever.

31. Requirements Pertaining Only to Federal Grants and Subrecipient Agreements: If this Agreement is a grant that is funded in whole or in part by Federal funds:

- A. Requirement to Have a Single Audit:** The Subrecipient will complete the Subrecipient Annual Report annually within 45 days after its fiscal year end, informing the State of Vermont whether or not a Single Audit is required for the prior fiscal year. If a Single Audit is required, the Subrecipient will submit a copy of the audit report to the granting Party within 9 months. If a single audit is not required, only the Subrecipient Annual Report is required. For fiscal years ending before December 25, 2015, a Single Audit is required if the subrecipient expends \$500,000 or more in Federal assistance during its fiscal year and must be conducted in accordance with OMB Circular A-133. For fiscal years ending on or after December 25, 2015, a Single Audit is required if the subrecipient expends \$750,000 or more in Federal assistance during its fiscal year and must be conducted in accordance with 2 CFR Chapter I, Chapter II, Part 200, Subpart F. The Subrecipient Annual Report is required to be submitted within 45 days, whether or not a Single Audit is required.
- B. Internal Controls:** In accordance with 2 CFR Part II, §200.303, the Party must establish and maintain effective internal control over the Federal award to provide reasonable assurance that the Party is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the award. These internal controls should be in compliance with guidance in "Standards for Internal Control in the Federal Government" issued by the Comptroller General of the United States and the "Internal Control Integrated Framework", issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).
- C. Mandatory Disclosures:** In accordance with 2 CFR Part II, §200.113, Party must disclose, in a timely manner, in writing to the State, all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Failure to make required disclosures may result in the imposition of sanctions which may include disallowance of costs incurred, withholding of payments, termination of the Agreement, suspension/debarment, etc.

32. Requirements Pertaining Only to State-Funded Grants:

- A. Certification Regarding Use of State Funds:** If Party is an employer and this Agreement is a State-funded grant in excess of \$1,001, Party certifies that none of these State funds will be used to interfere with or restrain the exercise of Party's employee's rights with respect to unionization.
- B. Good Standing Certification (Act 154 of 2016):** If this Agreement is a State-funded grant, Party hereby represents: (i) that it has signed and provided to the State the form prescribed by the Secretary of Administration for purposes of certifying that it is in good standing (as provided in Section 13(a)(2) of Act 154) with the Agency of Natural Resources and the Agency of Agriculture, Food and Markets, or otherwise explaining the circumstances surrounding the inability to so certify, and (ii) that it will comply with the requirements stated therein.

(End of Standard Provisions)

SPECIFICATIONS

- 1. DETAILED REQUIREMENTS & SPECIFICATIONS:** The environmental criteria in these specifications include standards for energy efficiency, rated life, and toxicity. They vary by category of lamp and ballast products, which include: T5 and T8 fluorescent lamps, self-ballasted and pin-based compact fluorescent lamps (CFLs), high-pressure sodium and pulse-start metal halide lamps (including ceramic metal halides) as well as electronic ballasts for fluorescent lamps, compact fluorescent lamps (CFLs), and pulse start metal halide lamps.

Packaging for products supplied under this contract shall meet the following: reduced packaging, recycled paper products, soy-based inks, and chlorine-free paper stock.

1.1. Adherence to Energy Efficiency Standards Established by Federal and State Laws.

All lamps and ballasts sold under this contract shall meet or exceed all applicable provisions of the National Energy Independence and Security Act of 2007. For more information about federal energy-efficiency standards, see <http://www.gpo.gov/fdsys/pkg/BILLS-110hr6enr/pdf/BILLS-110hr6enr.pdf>.

Additional energy efficiency requirements are established in the specifications below. They include a requirement that self-ballasted compact fluorescent lamps (CFLs) be on the current list of ENERGY STAR Certified Light Bulbs (see <http://www.energystar.gov/productfinder/product/certified-light-bulbs/results>). Similarly, four-foot T8 lamps and corresponding ballasts must be on the Consortium for Energy Efficiency's list of "extra-efficient" *Commercial Lighting Qualifying Products*, which can be found at <http://library.cee1.org/content/commercial-lighting-qualifying-products-lists>.

For other types of fluorescent lamps, a minimum color rendering index (CRI) level is set because high-CRI lamps typically have a higher efficacy (measured as lumens per watt) as well as improved (rated life) compared to lower-CRI lamps of the same wattage.

1.2. Adherence to Vermont Act 36's Requirement that Manufacturer's Offer Lamp Collection and Recycling Program

On May 19, 2011, the State of Vermont enacted Act 36 Relating to the Collection and Disposal of Mercury-Containing Lamps. Under §7152 of the Act, "manufacturers of mercury-containing lamps are prohibited from selling a mercury-containing lamp unless they are implementing an approved collection plan, pay a fee to the state, are listed on the Vermont Agency for Natural Resources (ANR) web site as covered by an approved plan, and meet several other requirements." This requirement became effective July 1, 2012.

A list of approved manufacturers can be found at <http://www.lamprecycle.org/state-local-laws/vermont/participating-manufacturers/>. Accordingly, contractor shall offer only lamps and ballasts from manufacturers that are currently on the ANR list of approved manufacturers. In addition, contractor shall offer recycling services for lamps and ballasts under this contract.

1.3. Adherence to Mercury-Content Standards Established by Vermont State Laws

Act 36, §7159 establishes mercury content standards for all lamps sold in the State of Vermont. The law states, "Beginning January 1, 2013, a mercury-containing lamp sold in this state shall satisfy the mercury-content standard for lamps set by California." California's law has required that state to follow mercury content limits established by the European Union in its 2002 Restriction of Hazardous Substances (RoHS) Directive. For more information, see https://dtsc.ca.gov/HazardousWaste/UniversalWaste/RoHS_Lighting.cfm. The mercury content limits establishing in these specifications are at least as stringent as those in the 2002 RoHS Directive and are based on a market assessment of available products offered by major US manufacturers by category.

1.4. Adherence to Other Standards References in These Specifications

The State requires contractor to comply with all applicable and current environmental, health and safety, energy efficiency and other performance standards throughout the life of this contract that have been adopted by Federal and State governing bodies and that are referenced in these specifications. This includes, but is not limited to, all applicable standards adopted by the American National Standards Institute (ANSI), Illumination Engineering Society of North America (IES), Underwriters Laboratories (UL), National Fire Protection Association (NFPA), US Department of Energy (DOE), US Department of Transportation (DOT), US Environmental Protection Agency (EPA, including the ENERGY

STAR Program), Consortium for Energy Efficiency (CEE) and National Electrical Manufacturers Association (NEMA). All performance specifications shall be measured in accordance with these standards.

1.4.1. Lamp and Ballast Category Specifications:

1) Category 1: Fluorescent Lamps

- Contractor shall offer fluorescent lamps from a manufacturer capable of providing a full line of lamps models for each of the following types of fluorescent lamps.
- All fluorescent lamps in this category shall meet or exceed the following requirements

a) Category 1A: Fluorescent T5 Lamps

- Minimum rated lamp life is based on 3/hour program start testing on an electronic program start ballast.
- Example of acceptable products:
 - GE: F54W/T5/835/ECO
 - Phillips: F54T5/835/HO/ALTO
 - Sylvania: FP54/835/HO/ECO
 - Equivalent or better

Cat.	T5 Lamp Type	Minimum Rated Life (Hours)*	Minimum Warranty (Years)	Minimum CRI	Maximum Mercury (mg)
1A1	Standard linear T5	25,000	2	85	3
1A2	High-output linear T5 (T5HO)	25,000	2	85	3
1A3	Circular T5	12,000	2	82	10

b) Category 1B: Fluorescent T8 Lamps

- Minimum rated lamp life is based on 3/hour start cycle testing on a 0.9 electronic instant start ballast.
- Example of acceptable products:
 - GE: F32T8/SPX41/XL/ECO
 - Phillips: F32T8/TL841/PLUS/ALTO
 - Sylvania: FO32/841/XP/ECO
 - Equivalent or better

Cat.	T8 Lamp Type	Minimum Rated Life (Hours)*	Minimum Warranty (Years)	Minimum CRI	Maximum Mercury (mg)
1B1	48 inch, linear (including 32-watt and lower-wattage “energy-saving” models)	24,000	3	80	3.5
1B2	Shorter than 48 inch, linear	18,000	3	80	3.5
1B3	Longer than 48 inch, linear	18,000	2	80	10
1B4	U-bent	18,000	2	80	8

2) Category 2: Compact Fluorescent Lamps

- Contractor shall offer compact fluorescent lamps from a manufacturer capable of providing a full line of lamp models for each of the following types of compact fluorescent lamps.
- All compact fluorescent lamps in this category shall meet or exceed the following requirements

a) Category 2A: Screw Based Compact Fluorescent Lamps (CFLs) – Self Ballasted

- All products shall be ENERGY STAR rated and be on the [Energy Star List](#):
 - Web address: <http://www.energystar.gov/productfinder/product/certified-light-bulbs/results>
- Examples of acceptable products:
 - GE: FLE26/2/PAR38/XL
 - Phillips: EL/A PAR38 23W
 - Sylvania: CF23EL/PAR38/827
 - Equivalent or better

b) Category 2B: 4-Pin Compact Fluorescent Lamps (CFLs)

- Example of acceptable products:

- GE: F18DBX/841/ECO/4P
- Phillips: PL-C 18W/841/4P/ALTO
- Sylvania: CF18/DD/E/841
- Equivalent or better

Cat.	CFL Lamp Type	Minimum Rated Life (Hours)	Minimum Warranty (Years)	Minimum CRI	Maximum Mercury (mg)
2B	4-pin	12,000	1	82	5.0

3) **Category 3: High Intensity Discharge (HID) Lamps**

- Contractor shall offer HID lamps from a manufacturer capable of providing a full line of lamp models for each of the following HID lamps: High Pressure Sodium and Metal Halides.
- All HID lamps in this category shall meet or exceed the following requirements

a) **Category 3A: High Pressure Sodium (HPS) Lamps: Cycling**

(1) Example of acceptable products:

- GE: LU100/H/ECO
- Philips: C100S54/ALTO
- Sylvania: LU100/ECO
- Equivalent or better

Cat.	HPS Lamp Type	Minimum Rated Life (Hours)	Minimum Warranty (Years)	Maximum Mercury (mg)
3A	Mogul base, cycling, up to 1000 watts	24,000	1	TCLP-compliant

b) **Category 3B: High Pressure Sodium (HPS) Lamps: Non- Cycling**

(1) Example of acceptable products:

- GE: LU100/ECO/NC
- Philips: C100S54/ALTO NC HPS
- Sylvania: LU100/PLUS/ECO
- Equivalent or better

Cat.	HPS Lamp Type	Minimum Rated Life (Hours)	Minimum Warranty (Years)	Maximum Mercury (mg)
3B	Mogul base, non-cycling, up to 1000 watts	30,000	2	10 maximum, TCLP-compliant

c) **Category 3C: Pulse-Start Metal Halides**

(1) Example of acceptable products:

- GE: MVR175/VBU/PA
- Philips: MS175/BU/PS
- Sylvania: MS175/PS/BU-ONLY
- Equivalent or better

Cat.	Metal Halide Lamp Type	Minimum Rated Life (Hours)	Minimum Warranty (Years)	Maximum Mercury (mg)
3C	Pulse-Start Metal Halide lamps	No min	1	TCLP-compliant preferred-whenver available from manufacturer

d) **Category 3D: Ceramic Metal Halides**

(1) Example of acceptable products:

- GE: CMH39TUVVCU830G12
- Philips: CDM35/T6/830
- Sylvania: MC39T6/U/G12/830PB
- Equivalent or better

Cat.	Metal Halide Lamp Type	Minimum Rated Life (Hours)	Minimum Warranty (Years)	Maximum Mercury (mg)
3D	Ceramic Metal Halide Lamps	No min	1	TCLP-compliant preferred-whenver available from manufacturer

e. Prohibited Lamps

a. HID Lamps, “Prohibited”

- i. The following HID lamps shall not be provided on this contract nor permitted to be purchased by State departments:
 - a. Probe-Start Metal Halides
 - b. Mercury Vapor
 - c. Low Pressure Sodium

b. Halogen and Other Incandescent Lamps, “Prohibited”

- i. Halogen and Incandescent lamps shall not be provided on this contract nor permitted to be purchased by State departments.
- ii. Contractor is encouraged to provide more energy-efficient and long-lasting replacements for halogen lamps.

f. Ballasts, General Technical Requirements

- a. Manufacturer shall carry a full line of each commonly used type and wattage of ballast models, including both fixed output and dimming ballasts.
- b. Contractor shall offer ballasts from a manufacturer capable of providing a full line of models for each of the following types of ballasts: fluorescent and compact fluorescent (electronic only) and electronic and magnetic HID.
- c. All ballasts shall meet or exceed the following requirements:
 - a) All ballasts shall be UL-listed.
 - b) All ballasts shall contain auto restart circuitry in order to restart lamps without resetting power.
 - c) To the greatest extent practicable, all ballasts should be ROHS-compliant (i.e., compliant with the European Union’s Restriction on Hazardous Substances Directive).
 - d) All manufacturers of ballasts to be sold under the resulting contract shall have at least a minimum 5-year history of producing ballasts for the North American market.

g. Category 4: Fluorescent Ballasts

- a. All fluorescent ballasts shall be electronic, instant start or program start only (No magnetic fluorescent ballasts).
- b. All fluorescent ballasts shall have a Class A sound rating.
- c. All linear and U-bent fluorescent ballasts shall have a power factor of >0.90. (According to the US Department of Energy, “Power factor indicates how effectively the input power and current are converted into usable watts of power delivered to the ballast. High-power-factor ballasts reduce current loads on building wiring and transformers.”)
- d. All ballasts shall be high-frequency and operate lamps at a frequency above 42k Hz to avoid interference with infrared devices and to eliminate visible flicker.
- e. Contractor shall make available for sale under the contract, instant start ballasts that can run on 120V or 277V or both. All Program Start ballasts shall be multi-voltage and run on 120V, 230V and 277V.
- f. All fluorescent ballasts shall have a total harmonic distortion (THD) of <10% at full light output.
- g. Warranty for fluorescent ballast <70 degrees C to be a minimum of five (5) years from date of manufacture.

- h. Warranty for fluorescent ballast >70 degrees C to be a minimum of three (3) years from date of manufacture.

h. Category 4: Fluorescent Ballasts

a. Category 4A: Electronic Fluorescent Ballasts for 4' T8 Lamps

1. All electronic instant start and programmed start fluorescent ballasts with standard or low- ballast factors for 4-foot T8 lamps shall be “extra efficient”:
 - a. The extra-efficient ballasts are those that are found on either the Consortium from Energy Efficiency List: <http://library.cee1.org/content/commercial-lighting-qualifying-products-lists>. Click on "lamps-ballasts.xls"
 - b. OR the “NEMA Premium Efficiency”: https://www.nema.org/Policy/Energy/Efficiency/Documents/nema_premium_electronic_ballast_program.pdf
2. Instant start ballasts shall provide independent Lamp Operation, which enables the remaining lamp or lamps to maintain full light output when one or more lamps fails.
3. Compact fluorescent ballasts shall employ end-of-life (EOL) circuitry to shut down the circuit at the end of the lamp life. This removes power from the obsolete lamp and prevents lamp overheating.

b. Category 4B: Electronic Ballasts for T5 lamps, Program Start

1. T5 fluorescent ballasts shall employ end-of-life (EOL) circuitry to shut down the circuit at the end of the lamp life. This removes power from the obsolete lamp and prevents lamp overheating.

i. Category 5: High Intensity Discharge (HID) Ballasts

- a. All HID ballasts shall have a minimum 2-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.

i. Category 5A: Electronic HID Ballasts

1. Have a Power Factor greater than 90%.
2. Have a minimum efficiency of 88%
3. Be designed in accordance with all applicable ANSI specifications including ANSI C82.4.
4. Provide a “Lamp Current Crest Factor” of less than 1.7.
5. Employ end-of-life (EOL) circuitry to shut down the circuit at the end of the lamp life.

ii. Category 5B: Magnetic HID Ballasts

1. Limited Use Magnetic HID Ballasts
2. Core & Coil ballasts shall be designed with class “H” (180°C) or higher insulation system
3. All coils shall be precision wound.
4. Core & Coil ballasts shall be designed to operate for 60,000 hours of continuous operation at their maximum rated temperature.
5. Core & Coil ballasts and starter combinations shall be designed to provide a reliable operation.
6. Lamp starting down to -40°C for High Pressure Sodium and -30°C for Metal Halide at nominal line voltage of plus or minus 10%.

j. Prohibited Ballasts

- a) The following types of ballasts shall not be provided on this contract nor permitted to be purchased by State Departments.
- Mercury Vapor (all)
 - Metal Halide (probe-start for 150-500 watt lamps)
 - Low-pressure Sodium (all)
 - Magnetic T12 and T9 circular (all) 2 pin (magnetic) fluorescent (all)
 - Preheat (magnetic) fluorescent (all)