





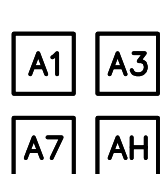



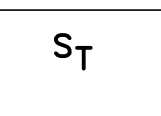
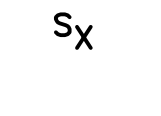


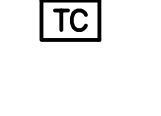


GENERAL ELECTRICAL EQUIPMENT SCHEDULE			
THE SYMBOLS AND THE EQUIPMENT SCHEDULE ARE FOR THE CONVENIENCE OF THE CONTRACTOR. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF QUANTITIES AND SHALL FURNISH ALL MATERIAL REQUIRED, WHETHER SPECIFIED OR NOT, TO PRODUCE A SATISFACTORY WORKING SYSTEM.			
CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE BUT ARE GIVEN ONLY TO AID THE CONTRACTOR IN THE SEARCH FOR MATERIAL. NO MATERIAL SHALL BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. EACH CONTRACTOR SHALL FIRST READ THE COMPLETE DESCRIPTION OF THE MATERIAL ON THESE DRAWINGS AND SPECIFICATIONS. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN. "STANDARD COLOR" INDICATES FACTORY FINISH AVAILABLE AT NO ADDITIONAL CHARGE.			
ITEM NO.	SYMBOL	DESCRIPTION	APPROVED MANUFACTURERS
1	DEVICE COLOR	ALL SWITCH, RECEPTACLE, OUTLET, AND COVERPLATE COLORS SHALL BE VERIFIED WITH ARCHITECT, UNLESS INDICATED OTHERWISE.	HUBBELL LEVITON PASS & SEYMOUR COOPER
2	COVER PLATES	ALL SWITCHES, RECEPTACLES, AND OUTLETS SHALL BE COMPLETE WITH UNBREAKABLE THERMOPLASTIC COVERPLATES IN FINISHED SPACES WHERE WALLS ARE FINISHED; #302 STAINLESS STEEL COVERPLATES IN UNFINISHED SPACES FOR FLUSH BOXES; AND GALVANIZED STEEL COVERPLATES IN UNFINISHED SPACES FOR SURFACE MOUNTED BOXES. WHERE SEVERAL DEVICES ARE GANGED TOGETHER, THE COVER PLATE SHALL BE OF THE GANGED STYLE FOR THE NUMBER OF DEVICES USED.	HUBBELL LEVITON PASS & SEYMOUR COOPER
3	S	SWITCH, SINGLE POLE, SINGLE THROW, 120/277 VOLT, 20 AMP. TOGGLE HANDLE, MAINTAINED CONTACT, SIDE AND BACK WIRED,	HUBBELL HBL1221 LEVITON 1221-2 PASS & SEYMOUR PS20AC1 COOPER 2221
4	S ₃	SWITCH, THREE WAY, 120/277 VOLT 20 AMP. TOGGLE HANDLE, SIDE AND BACK WIRED,	HUBBELL HBL1223 LEVITON 1223-2 PASS & SEYMOUR PS20AC3 COOPER 2223
5	S ₄	SWITCH, FOUR WAY, 120/277 VOLT 20 AMP. TOGGLE HANDLE, SIDE AND BACK WIRED,	HUBBELL HBL1224 LEVITON 1224-2 PASS & SEYMOUR PS20AC4 COOPER 2224
6		RECEPTACLE, DUPLEX, 125 VOLT, 20 AMP, 3 WIRE GROUNDING TYPE, N.E.M.A. 5-20R, IMPACT RESISTANT THERMOPLASTIC FACE, STEEL BACK STRAP. DOUBLE DUPLEX, CONSIST OF TWO DUPLEX RECEPTACLES, DOUBLE GANG BOX, PLASTER RING AND FACEPLATE.	HUBBELL 5352A LEVITON 5362-S PASS & SEYMOUR 5362 COOPER 5352
7		RECEPTACLE, GROUND FAULT DUPLEX, 125 VOLT, 20 AMP, 3 WIRE GROUNDING TYPE, N.E.M.A. 5-20R. TEST AND RESET BUTTONS IN IMPACT RESISTANT THERMOPLASTIC FACE. DOUBLE DUPLEX, CONSIST OF TWO DUPLEX RECEPTACLES, DOUBLE GANG BOX, PLASTER RING AND FACEPLATE.	HUBBELL GF20L LEVITON 7899 PASS & SEYMOUR 2095 COOPER VGF20
8		RECEPTACLE, GROUND FAULT DUPLEX, WEATHER RESISTANT, WEATHERPROOF COVERPLATE, 125 VOLT, 20 AMP, 3 WIRE GROUNDING TYPE, N.E.M.A. 5-20R. TEST AND RESET BUTTONS IN IMPACT RESISTANT THERMOPLASTIC FACE, NEMA 3R RATED WHILE IN USE, CLEAR, NON-LOCKING, STANDARD DEPTH, VERTICAL MOUNT.	HUBBELL GF20L/WP826MP LEVITON 7899/5977-CL PASS & SEYMOUR 2095/WUC10-C COOPER VGF20/4966
9		ELECTRICAL CONNECTION TO EQUIPMENT AND MOTORS, SIZE PER N.E.C. COORDINATE REQUIREMENTS WITH CONTRACTOR FURNISHING EQUIPMENT OR MOTOR. SEE SPECIFICATIONS AND GENERAL INSTALLATION NOTES FOR TERMINATIONS TO MOTORS.	SEE SPECIFICATIONS
10		JUNCTION BOX, SIZE PER N.E.C., SEE SPECIFICATIONS FOR GENERAL CONSTRUCTION, USE OF THIS SYMBOL DOES NOT INDICATE ALL JUNCTION BOXES REQUIRED FOR THIS CONTRACT ARE SHOWN.	SEE SPECIFICATIONS
11	FACP-3003 	FIRE ALARM CONTROL PANEL, ADDRESSABLE SYSTEM, FEATURING INTERFACE WITH ANALOG SENSING INITIATING DEVICES, EXPANDABLE MODULAR DESIGN, MICROPROCESSOR BASED ELECTRONICS, 120 VAC OPERATION, SURFACE MOUNT. REFER TO SPECIFICATIONS FOR COMPLETE REQUIREMENTS.	SIMPLEX 4XXX SERIES NOTIFIER SIEMENS FIRE SAFETY EDWARDS
12		FIRE ALARM AUDIO/VISUAL NOTIFICATION APPLIANCE, ELECTRONIC HORN WITH SELECTABLE OR TEMPORAL TONE AND HIGH-INTENSITY STROBE, RED HOUSING WITH WHITE LETTERING OR PICTOGRAM, SEMI-FLUSH WALL MOUNT; 24 VDC. WG SUBSCRIPT INDICATES WIRE GUARD IS REQUIRED. CANDELA RATINGS: A1=15, A3=30, A7=75, AND AH=110. CANDELA RATING SHALL BE VISIBLE FROM THE OUTSIDE OF THE DEVICE.	SYSTEM SENSOR P24 GENTEX GEC EDWARDS EG1 SIMPLEX 4903 SIEMENS UMIST WHEELOCK HS4
13		SMOKE DETECTOR, ADDRESSABLE, ANALOG PHOTOELECTRIC SENSOR, 24 VDC, 2-PIECE DESIGN, LOW-PROFILE MOUNTING BASE WITH MULTI-FUNCTION LED INDICATOR, COMPLETE WITH MOUNTING HARDWARE AND BACKBOX. PROVIDE A REMOTE LED INDICATOR DEVICE IF DETECTOR IS NOT VISIBLE FROM A FLOOR-STANDING POSITION.	SIMPLEX 4098 SERIES NOTIFIER SIEMENS FIRE SAFETY EDWARDS
14		FIRE ALARM MANUAL PULL STATION, ADDRESSABLE, DOUBLE ACTION WITH PLASTIC BREAKROD, RESET KEY LOCK, SEMI-FLUSH MOUNT, RED HIGH-ABUSE PLASTIC OR CAST METAL CONSTRUCTION WITH WHITE LETTERING. USE SURFACE MOUNT ONLY ON PRECAST CONCRETE OR STRUCTURE. WG SUBSCRIPT INDICATES WIRE GUARD IS REQUIRED.	SIMPLEX 2099 SERIES NOTIFIER SIEMENS FIRE SAFETY EDWARDS

GENERAL ELECTRICAL EQUIPMENT SCHEDULE - CONTINUED			
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ITEM NO.	SYMBOL	DESCRIPTION	APPROVED MANUFACTURERS
15		OCCUPANCY SENSOR, HIGH BAY, PASSIVE INFRARED 360 DEGREE COVERAGE 20'-40' MOUNTING HEIGHT, MINIMUM 1.3:1 WALKING MOTION COVERAGE PATTERN TO HEIGHT RATIO. ADJUSTABLE SENSITIVITY AND TIME DELAY, INTEGRAL ISOLATED RELAY CONTACT, 5 YEAR WARRANTY. SENSOR SHALL CONTROL ALL LUMINAIRES IN AREA. INITIAL SETTINGS: TIME DELAY 10 MINUTES. CONTRACTOR SHALL SUBMIT MANUFACTURER SUPPLIED SENSOR COVERAGE DRAWING FOR SHOP DRAWING REVIEW.	WATT STOPPER HB-300 SERIES HUBBELL AUTOMATION FHB 140 SERIES LEVITON OSFHU GREENGATE OEF-P
16		SWITCH, LOCAL TIMER, 125 VOLT 20 AMP RATED. 0-60 MINUTE OFF DELAY. SPRING WOUND.	PARAGON SWPD60M TORK A560M MARK-TIME 9008
17		SWITCH, EXPLOSION PROOF, SINGLE POLE 120/277 VOLT 20 AMP MAINTAINED CONTACT. TOGGLE HANDLE. SUITABLE FOR USE IN CLASS I, DIVISION I AREA.	APPLETON EDSC175-F2 CROUSE-HINGS KILLARK
18		PANELBOARD, SURFACE MOUNT, 208/120 VOLT, 3 PHASE, 4 WIRE, S/N, GROUND BUS, COPPER BUS, BOLT-ON BREAKERS, NEMA 1 ENCLOSURE. SEE SCHEDULES FOR SIZE AND CONFIGURATION, SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.	SQUARE D NQ GENERAL ELECTRIC AQ SIEMENS P1 CUTLER-HAMMER PRL1
19		PHOTOCELL, 120/277 VOLT, 1800 V.A. RATED, SINGLE POLE, SINGLE THROW CONTACT, WEATHERPROOF AND CORROSION PROOF ENCLOSURE, MOUNT FACING NORTH, U.L. LISTED. PHOTOCELL SHALL BE SAME MANUFACTURER OR COMPATIBLE WITH TIME CLOCK MANUFACTURER.	PARAGON CW-201-70 TORK 2107 INTERMATIC K4236
20		TIMER, 24 HOUR, 20 AMP CONTINUOUS CONTACTS, 1 N.O. AND 1 N.C. CONTACTS, SPRING WOUND BACK-UP, 120 VOLT, OVERRIDE SWITCH, U.L. LISTED. COORDINATE INITIAL SETTINGS WITH CEMETERY DIRECTOR	PARAGON 4213-OS TORK 7200L INTERMATIC T173CR

DISCONNECT AND STARTER SCHEDULE										
				REMARKS:						
STARTER TYPE:				SA - STANDARD ACCESSORIES (INCLUDES * ITEMS)						
FV - FULL VOLTAGE				*CT - CONTROL TRANSFORMER, FUSED 120V				PF - PHASE FAILURE RELAY (5 HP OR GREATER)		
YD - WYE - DELTA										
RE - REVERSING				*EO - ELECTRONIC OVERLOAD				TO - MELTING THERMAL OVERLOADS		
TW - 2 SPEED, 2 WINDING				*HA - HAND-OFF-AUTO IN DOOR				TS - 2 SPEED SELECTOR SWITCH IN DOOR		
SW - 2 SPEED, 1 WINDING				*RP - RED (RUN) PILOT LIGHT IN DOOR				GP - GREEN (OFF) PILOT LIGHT IN DOOR		
RV - REDUCED VOLTAGE AUTOXFMR								FA - 4-CONVERTIBLE AUXILIARY CONTACTS		
SS - SOLID STATE				*TA - TWO CONVERTIBLE AUXILIARY CONTACTS				EI - ELECTRICAL INTERLOCK (2)-N.O.& (2)-N.C		
MS - MANUAL STARTER								SS - START-STOP PUSHBUTTON IN DOOR		
MX - MANUAL SWITCH				S/N - INSULATED NEUTRAL ASSEMBLY				HL - HANDLE PADLOCK HASP		
FS - FUSED SWITCH										
NOTE: ALL DISCONNECTS (EXCEPT MANUAL STARTERS) SHALL BE HEAVY DUTY TYPE.										
ITEM	DISCONNECT TYPE & RATING			VOLTAGE	POLES	STARTER		NEMA ENCLOSURE	REMARKS	APPROVED MANUFACTURERS
	FUSED	NON-FUSED	CIRCUIT BREAKER			NEMA SIZE	TYPE			
MX-14				120	1		MX	4	RP, 115 VOLT PILOT LIGHT CIRCUIT, HL	SQUARE D 2510 KW1A CUTLER-HAMMER TYPE MS GENERAL ELECTRIC TYPE TC SIEMENS TYPE MMS

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BID DOCUMENTS 7/1/2011

Revisions	Date

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STRUCTURAL / MECHANICAL / ELECTRICAL /
TECHNOLOGY / MEDICAL EQUIPMENT SOLUTIONS

I hereby certify that this Plan, Specification, or Report was prepared by me, or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Oregon.
Signature: Lee D. VanOordorp
Name: Lee D. VanOordorp
Discipline: Electrical
Oregon Registration No. 78702PE Expiration date: 06.30.12
Date Issued: **/**/11

Drawing Title ELECTRICAL MATERIAL LIST - VEHICLE STOR.		Project Title REPLACE ADMINISTRATION AND MAINTENANCE BUILDING AND SITE IMPROVEMENTS		Date 7-1-2011
Approved: Director, Office of Construction Management		Building Number 3003	Checked JOHMcG	Drawn BRAWIT
Approved: Director, Project Management Service		Location EAGLE POINT NATIONAL CEMETERY 2763 RILEY ROAD EAGLE POINT, OR 97524		DRAWING NO. E-3003-5.1 Dwg. 174 OF 181