

Maryland Port Administration EPC PROJECT - Equipment List 2

SUMMARY OF ALL COST ITEMS

ENERGY PERFORMANCE CONTRACT

DGS PROJECT #

Building	Energy Conservation Measures	Equipment	Total Cost \$
Dunmar South	ECM 1 - Lighting Upgrades	1 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F17/T8 lamps	21,675.00
		9 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	
		3 x Retrofit 2x2 fixture to (2)F17/T8 lamps w/ (1) 2L High Power HE/unv ballast and centering kit	
		47 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F17/T8 lamps	
		253 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F28T8 lamps	
		8 x Replace existing exit sign w/ new LED universal SFDF sign with battery back up	
		7 x Replace existing lamp w/ new 23w compact fluorescent medium based screw-in lamp	
Dunmar North	ECM 1 - Lighting Upgrades	2 x Delamp & retrofit fixture to (2)F28/T8 lamps w/ (1) 2L Low Power HE/unv ballast and socket bar retro kit	34,602.00
		93 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F17/T8 lamps	
		377 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F28T8 lamps	
		1 x Retrofit fixture to (2)F28/T8 lamps w/ (1) 2L Low Power HE/unv ballast and socket bar retro kit	
		1 x New 2x4 lay-in fixture w 2 28 watt T5 lamps & dimming ballast - customer providing fixture and installation during separate renovation project	
		75 x New 2x4 lay-in fixture w 3 28 watt T5 lamps & dimming ballast - customer providing fixture and installation during separate renovation project	
		7 x new existing exit sign w/ new LED universal SFDF sign with battery back up - customer providing fixture and installation during separate renovation project	
		26 x New recessed can fixture w 1 100 watt incandescent lamp on dimmer - customer providing fixture and installation during separate renovation project	
		16 x Replace existing exit sign w/ new LED universal SFDF sign with battery back up	
		3 x Replace existing lamp w/ new 23w compact fluorescent medium based screw-in lamp	
		2 x Replace existing lamp w/ new 23w R40 compact fluorescent medium based screw-in lamp	
		1 x Replace existing lamp w/ new 42w compact fluorescent medium based screw-in lamp	
		2 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	
		3 x 750watt metal halide pulse start kit multi tap	
		1 x new 150 watt pulse start metal halide cut-off flood fixture with wall mount bracket	
		Police Building (96D)	
2 x Replace existing lamp w/ new 42w compact fluorescent medium based screw-in lamp			
11 x Delamp fixture to (2)F28/T8 lamps w/ (1) 2L Low Power HE/unv ballast and polished aluminum reflector kit			
11 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F17/T8 lamps			
15 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps			
2 x Retrofit 2x2 fixture to (2)F17/T8 lamps w/ (1) 2L High Power HE/unv ballast and centering kit			
14 x Retrofit 3L fixture w/ (1) 3L Low Power HE universal voltage electronic ballast and (3)F28T8 lamps			
124 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F28T8 lamps			
8 x 750watt metal halide pulse start kit multi tap			
11 x New 4 lamp T5/HO high bay fixture ; programmed start ballast			
Engineering Trailers	ECM 1 - Lighting Upgrades	4 x Replace existing lamp w/ new 42w compact fluorescent medium based screw-in lamp	3,300.00
		23 x Retrofit fixture to (4)F32/T8 lamps w/ (1) 4L Low Power HE/unv ballast and centering kit	
		4 x Retrofit 1L fixture w/ (1) 1L Low Power HE universal voltage electronic ballast and (1)F28T8 lamp	
		46 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	
		4 x Replace existing exit sign w/ new LED universal SFDF sign with battery back up	
Fleet Maintenance (91B)	ECM 1 - Lighting Upgrades	6 x Replace existing lamp w/ new 23w compact fluorescent medium based screw-in lamp	20,402.00
		2 x Retrofit fixture to (4)F32/T8 lamps w/ (1) 4L Low Power HE/unv ballast and centering kit	
		93 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	
		4 x Replace existing lamp w/ new 42w compact fluorescent medium based screw-in lamp	
Truck Gate	ECM 1 - Lighting Upgrades	11 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	4,599.00
		10 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F28T8 lamps	
		16 x 320watt metal halide pulse start kit multi-tap	
		10 x Replace existing lamp w/ new 23w compact fluorescent medium based screw-in lamp	

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Maintenance Building (91A)	ECM 1 - Lighting Upgrades	8 x Delamp fixture to (2)F28/T8 lamps w/ (1) 2L Low Power HE/unv ballast and polished aluminum reflector kit	48,407.00	
		210 x Retrofit 1L fixture w/ (1) 1L Low Power HE universal voltage electronic ballast and (1)F28T8 lamp		
		1 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F25/T8 lamps		
		158 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps		
		15 x Retrofit 2x2 fixture to (2)F17/T8 lamps w/ (1) 2L High Power HE/unv ballast and centering kit		
		1 x Retrofit 2x2 fixture to (2)F17/T8 lamps w/ (1) 2L low Power HE/unv ballast and white or polished alum reflector kit		
		95 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F28T8 lamps		
		4 x Retrofit fixture to (2)F28/T8 lamps w/ (1) 2L Low Power HE/unv ballast and socket bar retro kit		
		3 x New 2x2 layin fixture with 4 17 watt 2' T8 lamps, powered by 1 4L normal power electronic ballast		
		11 x New 4 lamp F28/T8 8-foot strip fixture w/High Power HE/unv ballast		
		1 x New 4 lamp F28/T8 8-foot vapor tight fixture w/High Power HE/unv ballast		
		1 x New 4 lamp F28/T8 8-foot vapor tight fixture w/Low Power HE/unv ballast		
		4 x New 4 lamp T5/HO high bay fixture ; programmed start ballast		
		33 x New 6 lamp T5/HO high bay fixture; programed start ballast		
		5 x Replace existing exit sign w/ new LED universal SFDF sign with battery back up		
		2 x Replace existing lamp w/ new 32w compact fluorescent medium based screw-in lamp		
		10 x Replace existing lamp w/ new 42w compact fluorescent medium based screw-in lamp		
		2 x Replace existing lamps w/ (2) new 23w compact fluorescent medium based screw-in lamps		
		1 x Replace existing lamps w/ (6) new 13w compact fluorescent medium based screw-in lamps		
		6 x Retrofit fixture to (4)F32/T8 lamps w/ (1) 4L Low Power HE/unv ballast and centering kit		4,434.00
55 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps				
1 x Retrofit 2x2 fixture to (2)F17/T8 lamps w/ (1) 2L High Power HE/unv ballast and centering kit				
10 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F28T8 lamps				
1 x new 150 watt pulse start metal halide cut-off flood fixture with wall mount bracket				
14 x Replace existing lamp w/ new 23w compact fluorescent medium based screw-in lamp				
4 x Replace existing lamp w/ new 42w compact fluorescent medium based screw-in lamp				
21 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	1,308.00			
1 x Replace existing lamp w/ 2 new 23w PAR sized exterior compact fluorescent medium based screw-in lamp with reflector				
2 x Replace existing lamps w/ (2) new 13w compact fluorescent medium based screw-in lamps	624.00			
11 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps				
Crew Trailer (Cox Creek)	ECM 1 - Lighting Upgrades	4 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	243.00	
Lab Trailer (Cox Creek)	ECM 1 - Lighting Upgrades	1 x Replace existing lamp w/ new 13w compact fluorescent medium based screw-in lamp		
Maintenance Bldg 1 (Cox Creek)	ECM 1 - Lighting Upgrades	35 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	7,519.00	
		15 x New 6 lamp F28/T8 high bay fixture (2) 3L high power ballasts, wire guard		
		5 x Replace existing lamp w/ new 42w compact fluorescent medium based screw-in lamp		
Maintenance Bldg 2 (Cox Creek)	ECM 1 - Lighting Upgrades	2 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	172.00	
		4 x Replace existing lamp w/ new 23w compact fluorescent medium based screw-in lamp		
Exterior Pole Lights (Cox Creek)	ECM 1 - Lighting Upgrades	20 x 320watt metal halide pulse start kit multi-tap	3,916.00	
Police Building (96D)	ECM 2 - Occupancy Sensors	17 x Occupancy Sensors	2,356.00	
Fleet Maintenance (91B)	ECM 2 - Occupancy Sensors	40 x Occupancy Sensors	3,733.00	
Maintenance Building (91A)	ECM 2 - Occupancy Sensors	37 x Occupancy Sensors	3,513.00	
Crane Maintenance (90A)	ECM 2 - Occupancy Sensors	7 x Occupancy Sensors	2,526.00	
Modular Office (Cox Creek)	ECM 2 - Occupancy Sensors	2 x Occupancy Sensors	154.00	
Crew Trailer (Cox Creek)	ECM 2 - Occupancy Sensors	3 x Occupancy Sensors	460.00	
Maintenance Bldg 1 (Cox Creek)	ECM 2 - Occupancy Sensors	15 x Occupancy Sensors	1,098.00	
Lab Trailer (Cox Creek)	ECM 3 - Daylight Harvesting	2 x Sensors	570.00	
Engineering Trailers	ECM 4 - Water Conservation	2 x Install 1.1 GPF GET Pressure Tank Toilet	1,144.00	
		1 x Exposed Piston Valve only retrofit on existing china		
		3 x Install 0.5/1.5 GPM flow control on existing faucet		
Fleet Maintenance (91B)	ECM 4 - Water Conservation	3 x Install 1.28 GPF HET WH Toilet china and manual piston valves	2,183.00	
		2 x Exposed Piston Valve only retrofit on existing china		
		5 x Install 0.5/1.5 GPM flow control on existing faucet		
		3 x Install 2.0 GPM showerhead or low flow restrictor		
		9 x Install 1.28 GPF HET FM Toilet china and manual piston valves		
Maintenance Building (91A)	ECM 4 - Water Conservation	3 x Exposed Piston Valve only retrofit on existing china	5,501.00	
		2 x Install 0.5/1.5 GPM flow control on existing faucet		
		2 x Install 2.0 GPM showerhead or low flow restrictor		
		2 x Install 2.0 GPM showerhead or low flow restrictor		

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Building	Energy Conservation Measures	Equipment		Total Cost	\$
Dunmar North	ECM 5 - Building Envelope	1. Inspect and adjust each exterior, fire, hatch and mechanical door weatherstripping and/or replace as required (32 doors) 2. Seal approx 9 a/c units 3. Treat 1 attic hatch 4. Install approx 25,584 square feet of R-40 cellulose insulation in attic area 5. Seal approx 27 penetrations in attic area		49,626.00	
Police Building (96D)	ECM 5 - Building Envelope	1. Inspect and adjust each exterior, fire, hatch and mechanical door weatherstripping and/or replace as required (6 doors)		9,530.00	
Engineering Trailers	ECM 5 - Building Envelope	1. Inspect and adjust each exterior, fire, hatch and mechanical door weatherstripping and/or replace as required (7 doors)		1,750.00	
Fleet Maintenance (91B)	ECM 5 - Building Envelope	1. Inspect and adjust each exterior, fire, hatch and mechanical door weatherstripping and/or replace as required (23 doors, 12 - 12' x 14', 1 - 10' x 14', 1 - 8' x 8' garage doors) 2. Install 12,900 square feet of white thermax 3. Seal approx 500 linear feet of roof/wall intersection		15,750.00	
Maintenance Building (91A)	ECM 5 - Building Envelope	1. Inspect and adjust each exterior, fire, hatch and mechanical door weatherstripping and/or replace as required (26 doors, 3 - 10' x 14', 2 - 20' x 20', and 1 - 8' x 12' garage doors) 2. Install approx 6346 square feet of R-30 batt insulation above the drop ceiling 3. Install approx 19372 square feet of white Thermax in the ceiling of the shop area 4. Seal approx 400 linear feet of roof/wall intersection 5. Install an insulated wall in front of garage door (10' x 15'). Using metal studs, insulation and matching the metal "skin" as close as possible to color and design.		24,619.00	
Crane Maintenance (90A)	ECM 5 - Building Envelope	1. Inspect and adjust each exterior, fire, hatch and mechanical door weatherstripping and/or replace as required (5 doors, 1 - 8' x 12' garage door) 2. Seal approx 6 a/c units		2,050.00	
Maintenance Building (91A)	ECM 6 - Window Replacements	5	x Aluminum frame windows (34x56")	2,595.00	
Engineering Trailers	ECM 7 - Programmable Thermostats	3	x thermostats	2,366.00	
Fleet Maintenance (91B)	ECM 7 - Programmable Thermostats	5	x thermostats	3,746.00	
Truck Gate	ECM 7 - Programmable Thermostats	4	x thermostats	3,155.00	
Maintenance Building (91A)	ECM 7 - Programmable Thermostats	1	x thermostat	1,201.00	
Dundalk Marine Terminal	ECM 18 - High Mast Lighting - New Poles	New high mast poles		811,528.00	
Dundalk Marine Terminal	ECM 19 - High Mast Controls	ROAM Lighting Controls		450,480.00	
Maintenance Building (91A)	ECM 25 - 91A HVAC Upgrades	1	x 1999 MBH modular boiler	393,347.00	
		1	x 6500 CFM AHU with DX and HW Coils		
		1	x 25000 CFM AHU with HW Coils		
		1	x 15 ton Condensing Unit		
		8	x 71500 MBH Gas Infrared Heaters		
Police Building (96D)	ECM 27 - 96D Boiler Replacement	1	x 1143 MBH cast iron steam boiler	127,580.00	
Shed 10 (South Locust Point)	ECM 31 - PV Solar	1703	x Sharp 235 watt PV modules	1,182,373.00	
		2	x Inverters (260 kW and 100 kW)		
Cruise Passenger Building	ECM 31 - PV Solar	1495	x Sharp 235 watt PV modules	1,048,345.00	
		2	x Inverters (260 kW and 50 kW)		
Various	ECM 33 - Submetering	7	x Recordall disc water meters at 90A, 91A, 91B, Dunmar North, Dunmar South, 403A, and 503B	47,746.00	
		1	x Recordall turbo water meter at 503A		
		5	x Electric meters, CTs, and VTs at 96D, 90A, Dunmar North, Dunmar South, and Shed 10 (South Locust Point)		
Dundalk Marine Terminal	ECM 35 - Energy Awareness	Energy Awareness Program		20,000.00	
Project Management				180,682.00	
Pepco Energy Contingency				133,729.99	
MPA Owners Contingency				65,867.01	
Commissioning			Included in Project Cost		
Bonding/insurance				38,861.00	
Design Engineering/PM				293,592.00	
Training			Included in Project Cost		
Two Year Warranty			Included in Project Cost		
M & V Installation				83,716.00	
G&A & Profit				1,297,306.00	
Phase 1 Audit			Included in Project Cost		
			Project Subtotal	6,486,533.00	
			Sunburst Grant	(750,000.00)	
			Rebates	(42,965.00)	
			Capital Funds	(1,142,924.00)	
			SREC	(338,317.00)	
			Lease Financing Amount	4,212,327.00	