

PROJECT: EAST END ELEMENTARY SCHOOL
 PROJ. NO: 03-0024
 DATE: 10/15/04
 STATUS: CHANGE ORDER #1

Bartlett Design
 LIGHTING & ELECTRICAL ENGINEERING
 942 WASHINGTON STREET BATH, MAINE 04530
 TEL (207) 443-5447 FAX (207) 443-5560

CONNECTED VOLT-AMPERES = 18600
 CONNECTED AMPERES = 52
 DEMAND VOLT-AMPERES = 9300
 DEMAND AMPERES = 26

CIRCUIT TYPE CODES
 L LIGHTS 1.0
 M MOTORS 0.5
 R RECEPTACLES 0.5
 H HEAT 1.0
 O OTHER 0.5
 S SPARE 0.5

BREAKER	A	P	DESCRIPTION	CKT	TYPE	LOAD			CKT	TYPE	CKT	DESCRIPTION	VA	P	A
						NO.	NO.	NO.							
			ACIP	696	M	1	1392		2	M	696	AC2P	696	1	15
			AC2P	696	M	3	1392		4	M	696	EF-3, EF-5	696	1	20
			AC3P	696	M	5		1896	6	R	1200	ROOFTOP RECEPTACLES	1200	1	20
			SPARE	500	S	7	800		8	M	300	EF-8, MOD	300	1	15
			SPARE	500	S	9		2000	10	M	1500	IRRIGATION PUMP	1500	1	20
			EF-14	528	M	11	1196	1224	12	M	696	EF7	696	1	20
			EF-13	696	M	13	1196		14	S	500	SPARE	500	1	20
			EF-12	528	M	15	1028		16	S	500	SPARE	500	1	20
			EF-11	696	M	17		1224	18	M	528	EF-16	528	1	15
			EF-9	696	M	19	1224		20	M	528	EF-10	528	1	15
			EF-17	528	M	21	1028		22	S	500	SPARE	500	1	20
			EF-15	696	M	23	1196		24	S	500	SPARE	500	1	20
			SPARE	500	S	25	1000		26	S	500	SPARE	500	1	20
			SPARE	500	S	27		1000	28	S	500	SPARE	500	1	20
			SPARE	500	S	29		1000	30	S	500	SPARE	500	1	20
PHASE TOTALS															
				5612	6448	6540									
DEMAND															

VOLTS: 120/208 SURFACE MOUNT: 120/208
 AMPS: 100 PHASE: 3
 MAIN: MLO WIRES: 4
 PANEL: M6 LOCATION: BOILER M 176

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CONNECTED VOLT-AMPERES= 156540
 CONNECTED AMPERES= 188
 DEMAND VOLT-AMPERES= 78270
 DEMAND AMPERES= 94

BREAKER	A	P	DESCRIPTION	CKT	TYPE	LOAD	NO.			CKT	TYPE	DESCRIPTION	CKT	TYPE	VA	P	A
							A	B	C								
				110	3	AC1				M	12248	1		13396			
				110	3	AC1				M	12249	3		13397			
				110	3	AC1				M	12249	5		13397			
				110	3	AC2				M	11252	7		12400			
				110	3	AC2				M	11252	9		12400			
				110	3	AC2				M	11252	11		12400			
				110	3	AC3				M	11252	13		14301			
				110	3	AC3				M	11252	15		14301			
				110	3	AC3				M	11252	17		14301			
				20	1	SPARE				S		19		3049			
				20	1	SPARE				S		21		3549			
				20	1	SPARE				S		23		3549			
				60	3	PANEL M6					5612	25		6112			
				60	3	PANEL M6					6448	27		6948			
				60	3	PANEL M6					6540	29		7040			
				20	1	SPARE				S		31		1000			
				20	1	SPARE				S		33		1000			
				20	1	SPARE				S		35		1000			
				20	1	SPARE				S		37		1000			
				20	1	SPARE				S		39		1000			
				20	1	SPARE				S		41		1000			
PHASE TOTALS																	
\$1258																	
\$2595																	
\$2687																	
DEMAND																	
				1	1	SPARE				S		42		500			0.5
				1	1	SPARE				S		40		500			0.5
				1	1	SPARE				S		38		500			1.0
				1	1	SPARE				S		36		500			0.5
				1	1	SPARE				S		34		500			0.5
				1	1	SPARE				S		32		500			1.0
				1	1	SPARE				S		30		500			0.5
				1	1	SPARE				S		28		500			0.5
				1	1	SPARE				S		26		500			0.5
				3	3	CP4				M	3049	24		3049			1.0
				3	3	CP4				M	3049	22		3049			0.5
				3	3	CP4				M	3049	20		3049			0.5
				3	3	CP3				M	3049	18		3049			0.5
				3	3	CP3				M	3049	16		3049			0.5
				3	3	CP3				M	3049	14		3049			0.5
				3	3	CP2				M	1148	12		1148			0.5
				3	3	CP2				M	1148	10		1148			0.5
				3	3	CP2				M	1148	8		1148			0.5
				3	3	CP1				M	1148	6		1148			0.5
				3	3	CP1				M	1148	4		1148			0.5
				3	3	CP1				M	1148	2		1148			0.5

VOLTS: 277/480 SURFACE
 AMPS: 225 PHASE: 3
 MAIN: MLO WIRES: 4
 PANEL: M4 LOCATION: BOILER RM 178
 MOUNT: 277/480 SURFACE

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CONNECTED VOLT-AMPERES= 170105
 CONNECTED AMPERES= 205
 DEMAND VOLT-AMPERES= 84820
 DEMAND AMPERES= 102

BREAKER	A	P	DESCRIPTION	CKT	TYPE	NO.	LOAD			CKT	TYPE	NO.	DESCRIPTION	CKT	TYPE	NO.	DEMAND
							A	B	C								
			LIGHTS	20	L	1	1119			2	M	B-1	3	15			
			B-2	15	M	3	998			4	M	B-1	3	15			
			B-2	15	M	5	998			6	M	B-1	3	15			
			B-2	15	M	7	999			8	S	SPARE	1	20			
			PBP-1	15	M	9	2660			10	M	PBP-2	3	15			
			PBP-1	15	M	11	2660			12	M	PBP-2	3	15			
			PBP-1	15	M	13	2660			14	M	PBP-2	3	15			
			AC4	125	M	15	26920			16	M	EF-1	3	15			
			AC4	125	M	17	26920			18	M	EF-1	3	15			
			AC4	125	M	19	26920			20	M	EF-1	3	15			
			SPARE	20	S	21	7915			22	M	ACS	3	70			
			SPARE	20	S	23	7915			24	M	ACS	3	70			
			PANEL M2	60	L	25	15979			26	M	ACS	3	70			
			PANEL M2	60	L	27	17403			28	M	ACS	3	70			
			PANEL M2	60	L	29	15125			30	M	ACS	3	70			
			SPARE	20	S	31	7915			32	M	AC6	3	70			
			SPARE	20	S	33	1000			34	S	SPARE	1	20			
			SPARE	20	S	35	1000			36	S	SPARE	1	20			
			SPARE	20	S	37	1000			38	S	SPARE	1	20			
			SPARE	20	S	39	1000			40	S	SPARE	1	20			
			SPARE	20	S	41	1000			42	S	SPARE	1	20			
PHASE TOTALS																	
56592																	
57896																	
55618																	

CIRCUIT TYPE CODES
 L LIGHTS 1.0
 M MOTORS 0.5
 R RECEPTACLES 0.5
 H HEAT 1.0
 O OTHER 0.5
 S SPARE 0.5

VOLTS: 277/480
 AMPS: 225
 PHASE: 3
 MAIN: MLO
 WIRES: 4
 PANEL: MI
 LOCATION: BOILER ROOM 178
 MOUNT: SURFACE

EEES Drawing List (CO # 1 revised drawings with 'R' or 'r' in bold)

Cr	Cover Page
T-1r	Drawing List, Legend, Abbreviations, General Notes, Mounting Heights
<u>CIVIL & LANDSCAPE DRAWINGS</u>	
C-1	Cover Sheet
C-2	General Notes
C-3	Overall Neighborhood & Abutters Map
C-4	Pre-contract Demolition Plan
C-5	Existing Conditions & Topographic Survey
C-6RA	Site Layout Plan
C-6RB	Site Layout Plan
C-6RC	Site Layout Plan
C-7	Site Layout Plan with Detail References
C-8r	Landscape Plan -- Base Bid & Alternate
C-9.0r	Detailed Site Plans
C-9.1r	Site Details
C-10r	Grading and Drainage Plan
C-13	Utility Plan
C-14	Erosion Control Plan
C-15	Erosion & Sediment Control Plan Narrative
C-16	Erosion Control & Special Details at Building Face
C-17	Site Electrical & Miscellaneous Site Details
C-18	Stormwater & Sewer Details
C-19	Pavement Markings & Edge Treatment Near Fences Detail
C-20	Athletic Field, Infield, & Misc. Site Details
C-21-R	Fencing Details
C-22	Typical Access Drive & Pavement Details
C-23	Water Quality Unit, Curb and Barrier Free Ramp Details
C-24	Water Main Details
C-25	Access Drive Profiles
C-26	Storm Drain Profiles
C-27	Storm Drain Profiles
C-28	Pre-development Watershed Plan
C-29	Post-development Watershed Plan
C-31-R	Retaining Wall Details, Plan & Profile
C-32	Class B High Intensity Soil Survey
C-33	Irrigation Plan & Details
NS-C 1	Cover Sheet
NS-C 2	North Street Typical Sections
NS-C 3-R	North Street Drainage & Street Improvements
NS-C 4	Overall Project Permanent Signage Plan
NS-C 5	North Street Offsite Drainage Improvements
NS-C 6	North Street Cross Sections
NS-C 7	North Street Cross Sections
NS-C 8	North Street Cross Sections
NS-C 9	North Street Cross Sections
NS-C 10	North Street Cross Sections
NS-C 11	North Street Cross Sections
NS-C 12	North Street Cross Sections
NS-C 13	North Street Cross Sections
NS-C 14	North Street Cross Sections
NS-C 15	North Street Cross Sections

1. Ceramic Mosaic Tile: 1/16 inch
 2. Quarry Tile: 1/4 inch or as recommended by manufacturer.
- C. Stone Thresholds: Install stone thresholds at locations indicated; set in same type of setting bed as abutting field tile, unless otherwise indicated.
1. Set thresholds in latex-portland cement mortar for locations where mortar bed would otherwise be exposed above adjacent nontile floor finish.
- D. Metal Edge Strips: Install at locations indicated or where exposed edge of tile flooring meets carpet, wood, or other flooring that finishes flush with top of tile.
- E. Grout Sealer: Apply grout sealer to grout joints according to grout-sealer manufacturer's written instructions. As soon as grout sealer has penetrated grout joints, remove excess sealer and sealer that has gotten on tile faces by wiping with soft cloth.

3.5 WALL TILE INSTALLATION

- A. Install types of tile designated for wall installations to comply with requirements in the Wall Tile Installation Schedule, including those referencing TCA installation methods and ANSI setting-bed standards.
- B. Joint Widths: Install tile on walls with the following joint widths:
1. Glazed Wall Tile: 1/16 inch.

3.6 CLEANING AND PROTECTING

- A. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
1. Remove epoxy and latex-portland cement grout residue from tile as soon as possible.
 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions, but no sooner than 10 days after installation. Use only cleaners recommended by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.
- B. When recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear.
- C. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of installed tile.
1. Verify that substrates for setting tile are firm; dry; clean; free of oil, waxy films, and curing compounds; and within flatness tolerances required by referenced ANSI A108 Series of tile installation standards for installations indicated.
 2. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work, and similar items located in or behind tile, has been completed before installing tile.
 3. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust joint locations in consultation with Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove coatings, including curing compounds and other substances that contain soap, wax, oil, or silicone, that are incompatible with tile-setting materials.
- B. Provide concrete substrates for tile floors installed with thin-set mortar that comply with flatness tolerances specified in referenced ANSI A108 Series of tile installation standards.
1. Fill cracks, holes, and depressions with trowelable leveling and patching compound according to tile-setting material manufacturer's written instructions. Use product specifically recommended by tile-setting material manufacturer.
 2. Remove protrusions, bumps, and ridges by sanding or grinding.
- C. Blending: For tile exhibiting color variations within ranges selected during Sample submittals, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.
- D. Field-Applied Temporary Protective Coating: Where indicated under tile type or needed to prevent grout from staining or adhering to exposed tile surfaces, precoat them with continuous film of temporary protective coating, taking care not to coat unexposed tile surfaces.
- E. Cracks and Control Joints for Thin-Set Tile:
1. Install crack suppression materials a minimum of 12 inches wide over construction and control joints. Install in accordance with manufacturer's instructions.

3.3 INSTALLATION, GENERAL

2. Bevel: Hospital Bevel to meet ADA accessibility requirements. Units for thin tiles that are less than 5/8" thick shall have bevels on each side.
3. Material: White Carrara Marble.

2.5 SETTING AND GROUTING MATERIALS

- A. Latex-Portland Cement Mortar (Thin Set): ANSI A118.4, consisting of the following:
 1. Prepackaged dry-mortar mix combined with acrylic resin liquid-latex additive.
 - a. For wall applications, provide non-sagging mortar that complies with Paragraph F-4.6.1 in addition to the other requirements in ANSI A118.4.
- B. Water-Cleanable, Tile-Setting Epoxy Adhesive: ANSI A118.3, with a VOC content of 65 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- C. Standard Sanded Cement Grout: ANSI A118.6, color as selected by Architect from manufacturers standard colors.
- D. Standard Unsanded Cement Grout: ANSI A118.6, color as selected by Architect from manufacturers standard colors.
- E. Polymer-Modified Tile Grout: ANSI A118.7, color as selected by Architect from manufacturers standard colors.
- F. Modified-Epoxy Emulsion Mortar (Light Commercial): ANSI A118.3.
 1. Products:
 - a. Product: Hydroment 1900; Bostik.
 - b. Product: Latapoxy SP-100; Latacrete.

2.6 ELASTOMERIC SEALANTS

- A. General: Provide manufacturer's standard chemically curing, elastomeric sealants of base polymer and characteristics indicated that comply with applicable requirements in Division 7 Section "Joint Sealants."
 1. Use sealants that have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- B. Colors: Provide colors of exposed sealants to match colors of grout in tile adjoining sealed joints, unless otherwise indicated.

2.7 MISCELLANEOUS MATERIALS

2.3 TILE PRODUCTS

A. Manufacturers:

1. American Olean; Div. of Dal-Tile International Corp.
2. Daltile; Div. of Dal-Tile International Inc.
3. United States Ceramic Tile Company.

B. Unglazed Ceramic Mosaic Tile: Factory-mounted flat tile as follows:

1. Composition: Porcelain.
2. Surface: Smooth, except where indicated Slip-resistant, with abrasive admixture.
3. Module Size: As indicated, if not indicated 1 by 1 2-by-2 inches.
4. Nominal Thickness: 1/4 inch.
5. Face: Plain, with cushion edges.
6. Colors: 80% standard colors, 20% designer colors.
7. Tile Type/Products: Available products include the following:
 - a. ~~Quarry Tile Company (509-536-2842); Eco-Tile~~
 - b. **Keystones Unglazed Ceramic Mosaic Tile by Daltile.**

~~8. Provide product that contains a minimum of 70 percent recycled content.~~

C. Unglazed Quarry Tile: Provide square-edged flat tile complying with the following requirements:

1. Wearing Surface: Natural textured finish.
2. Facial Dimensions: 6 by 6 inches (152 by 152 mm).
3. Thickness: 1/2 inch (12.7 mm).
4. Face: Pattern of design indicated.
5. Static Coefficient of Friction: Level Surfaces, minimum 0.6.
6. Tile Type/Products: Available products include the following:

- a. Quarry Naturals by American Olean.
- b. Quarry Textures by Daltile.

D. Glazed Wall Tile: Flat tile as follows:

1. Module Size: 4-1/4 by 4-1/4 inches.
2. Thickness: 5/16 inch.
3. Face: Plain with modified square edges or cushion edges.
4. Finish: Mat, opaque glaze.
5. Tile Type/Products: Available products include the following:

- a. ~~Quarry Tile Company (509-536-2842); Eco-Tile~~
- b. **Semi-gloss by Daltile.**

~~6. Provide product that contains a minimum of 70 percent recycled content.~~

E. Paver Tile: Provide square-edged flat tile complying with the following requirements:

- D. Material Test Reports: For each tile-setting and -grouting product.
- E. LEED Submittals:
 - 1. Credit MR 2.1 and 2.2: Comply with Division 1 Section "Construction Waste Management."
 - 2. Credit MR 4.1: Product Data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content. Include statement indicating costs for each product having recycled content.
 - 3. Credit EQ 4.1: Manufacturers' product data for adhesives and sealants, including printed statement of VOC content and material safety data sheets.

1.5 QUALITY ASSURANCE

- A. Source Limitations for Tile: Obtain all tile of same type from one source or producer.
 - 1. Obtain tile from same production run and of consistent quality in appearance and physical properties for each contiguous area.
- B. Preinstallation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Management and Coordination."
 - 1. Review details and components for thick-set tile, waterproofing, and crack suppression at control joints.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirement in ANSI A137.1 for labeling sealed tile packages.
- B. Store tile and cementitious materials on elevated platforms, under cover, and in a dry location.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Store liquid latexes and emulsion adhesives in unopened containers and protected from freezing.

1.7 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install tile until construction in spaces is complete and ambient temperature and humidity conditions are maintained at the levels indicated in referenced standards and manufacturer's written instructions.

HW25

Doors 177.1, 314.1, 315.1, 325.1, 325.2, 332.1, 338.1

Hinges

- 2 - Closers (reg arm)
- 2 - Exit Device (function I)
- 1 - Exit Device (function H)
- 3 - Cylinders
- 3 - I/C Cylinder core
- 2 - Kickplates
- 2 - Door Stops
- 2 - Silencers

ALTERNATE NO. 6

1. ~~Doors 101.2, 101.4, 102.1, 104.1, 104.2, 136.2, 158.1, 158.2, 177.2, 324.2~~

~~Change function to electric latch retraction; add power supply, door status switch, and electric hinge. Provide push buttons in front office 105 to release latch on doors 101.4 and 158.1. Add door status switches to all leaves on doors 101.1, 104.2, 152.2, 169.2, 201.1, 312.1, 312.2~~

2. ~~Doors 101.3~~

~~Change to hardware set HW2~~

END OF SECTION 08711

**EAST END ELEMENTARY SCHOOL
PROJECT 03.09**

**PORTLAND, ME
7/15/04**

- 1 - I/C Cylinder core
- 2 - Kickplates
- 2 - Door Stops
- 2 - Silencers

HW17

**Doors 108.1, 109.1, 110.1, 113.2, 115.1, 119.2, 120.2, 211.2, 213.2, 303.1, 308.2, 319.1,
328.1**

Hinges

- ~~1 - Lockset (function F)~~
- 1 - Lockset (function 4)**
- 1 - Door Stop
- 3 - Silencers

HW18

**Doors 105.1, 107.1, 110.2, 113.1, 117.1, 118.1, 119.1, 120.1, 122.1, 123.1, 124.1, 125.1,
129.1, 133.1, 134.1, 137.1, 140.1, 142.1, 145.1, 149.1, 150.1, 153.1, 157.1, 162.1, 166.1, 167.1,
170.1, 204.1, 205.1, 206.1, 207.1, 209.1, 210.1, 211.1, 213.1, 215.1, 216.1, 218.1, 221.1, 223.1,
224.1, 227.1, 230.1, 231.1, 235.1, 237.1, 238.1, 241.1, 244.1, 248.1, 250.1, 251.1, 254.1, 256.1,
308.1, 309.1, 311.1, 317.1, 320.1, 321.1, 327.1, 340.1, 340.2,**

Hinges

- ~~1 - Lockset (function G)~~
 - 1 - Lockset (function 38)**
 - 1 - Door Stop
 - 3 - Silencers
- HW19**

Doors 156.1, 175.1, 179.1, 180.1, 202.1, 304.1, 329.1, 337.1, 341.1

Hinges

- ~~1 - Lockset (function F) (function G-202.1)~~
- 1 - Lockset (function 4) (function 38 202.1)**
- 1 - Closer (reg arm)
- 1 - Door Stop
- 3 - Silencers

HW20

Doors 139.1, 174.1, 229.1, 316.1, 318.1, 322.1

Hinges

- ~~1 - Lockset (function F)~~
- 1 - Lockset (function 4)**
- 1 - Closer (par arm)
- 1 - Door Stop

DOOR HARDWARE

**08711 -28
POST BID ADDENDUM**

EAST END ELEMENTARY SCHOOL
PROJECT 03.09

PORTLAND, ME
7/15/04

HW9

Doors 181.1, 257.1, ~~258.4~~

Hinges

- 1 - Closer (reg arm)
- ~~1 - Lockset (function A) (function B at dr 181.1)~~
- 1 - Lockset (function 1) (knurled lever at dr 181.1)**
- 1 - Kick Plate
- 1 - Door Stop
- 3 - Silencers

HW10

Doors 126.1, 143.1, 175.2, 175.3, 176.1, 217.1, 232.1, ~~259.4~~, 260.1,

Hinges

- 1 - Closer (par arm)
- ~~1 - Lockset (function B) (function A at drs 217.1, 259.4)~~
- 1 - Lockset (function 1 with knurled lever) (function 1 at drs 217.1, 259.1)**
- 1 - Kick Plate
- 1 - Door Stop
- 3 - Silencers

HW11

Doors 178.1,

Hinges

- ~~1 - Lockset (function B)~~
- 1 - Lockset (function 1 with knurled lever)**
- 2 - Door Closers (par arm)
- 2 - Self-latching Flush Bolts
- 2 - Door Stops
- 2 - Silencers

HW12

Doors 114.1, 116.1, 121.1, 130.1, 132.1, 135.1, 138.1, 146.1, 148.1, 151.1, 154.1, 155.1,
163.1, 165.1, 168.1, 171.1, 203.1, 214.1, 220.1, 221A.1, 225.1, 228.1, 234.1, 235A.1, 239.1,
242.1, 243.1, 247.1, 248A.1, 252.1, 255.1, 305.1, 310.1,

Hinges

- ~~1 - Lockset (function H)~~
- 1 - Lockset (function 6)**
- 1 - Door Stop
- 3 - Silencers

DOOR HARDWARE

08711 - 26
POST BID ADDENDUM

**EAST END ELEMENTARY SCHOOL
PROJECT 03.09**

**PORTLAND, ME
7/15/04**

HW2

Doors 101.1, 158.2, 312.2

- 2 - Exit Device (function H)**
- 3 - Cylinders**
- 3 - I/C Cylinder cores**
- 2 - Pulls, type B**
- 2 - Closer-H-cush (par arm)**
- 2 - Floor Stop**

Balance of hardware by aluminum door supplier.

HW3

Doors 312.1

- 1 - Exit Device (function H)**
- 1 - Exit Device (function 306 x H)**
- 3 - Cylinders**
- 3 - I/C Cylinder cores**
- 2 - Pulls, type B**
- 2 - Closer-H-cush (par arm)**
- 2 - Floor Stop**

Balance of hardware by aluminum door supplier.

HW4

Doors 136.2, 152.2, 169.2,

Hinges

- 1 - Exit Devices (function A)**
- 2 - Cylinders**
- 2 - I/C Cylinder cores**
- 1 - Pull, type B**
- 1 - Closer-H-cush (par arm)**
- 1 - Threshold**
- 1 - Kickplate**
- 1 - Set of Weatherstripping**
- 1 - Door Sweep**
- 1 - Floor Stop**

HW5

Doors 101.4

DOOR HARDWARE

B. Wood Doors: Comply with DHI A115-W series.

3.3 INSTALLATION

A. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."

B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

C. Exit devices shall be carefully installed so as to permit friction free operation of crossbar, touch bar and lever. Latching mechanism shall also operate freely without friction or binding.

D. Key Control System: Place keys on markers and hooks in key control system cabinet, as determined by final keying schedule.

E. Boxed Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings. Verify location with Architect.

F. Thresholds: Set thresholds for exterior doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

3.4 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

1. Door Closers: Adjust sweep period so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches (75 mm) from the latch, measured to the leading edge of the door.

- B. Standard: Comply with BHMA A156.21.
- C. General: Extruded aluminum, depth as required for sill condition. Where thresholds extend out beyond face of frame, provide returned closed ends by miter cutting on a 45 degree angle and return to face of frame.
- D. Exterior Doors: Provide No. 896 with 95WH sweep on door by National Guard Products or approved substitute.
- E. Interior Doors at Gymnasium: Provide No. 8170 by National Guard Products or approved substitute.

2.17 FABRICATION

- A. Base Metals: Produce door hardware units of base metal, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18 for finishes. Do not furnish manufacturer's standard materials or forming methods if different from specified standard.
- B. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to commercially recognized industry standards for application intended. Provide Phillips flat-head screws with finished heads to match surface of door hardware, unless otherwise indicated.
 - 1. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.
 - 2. Steel Machine or Wood Screws: For the following fire-rated applications:
 - a. Mortise hinges to doors.
 - b. Strike plates to frames.
 - c. Closers to doors and frames.
 - 3. Spacers or Sex Bolts: For through bolting of hollow metal doors.
 - 4. Fasteners for Wood Doors: Comply with requirements of DHI WDHS.2, "Recommended Fasteners for Wood Doors."

2.18 FINISHES

- A. Standard: Comply with BHMA A156.18.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strappable, temporary protective covering before shipping.

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2.14 STOPS AND HOLDERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Glynn-Johnson; an Ingersoll-Rand Company (GJ).
2. Hager Companies (HAG).
3. Ives: H. B. Ives (IVS).
4. Rixson-Firemark, Inc.; Div. of Yale Security Inc. (RIX).
5. Rockwood Manufacturing Company (RM).

B. Standards: Comply with the following:

1. Stops and Bumpers: BHMA A156.16.
2. Mechanical Door Holders: BHMA A156.16.
3. Electromagnetic Door Holders: BHMA A156.15.
4. Door Silencers: BHMA A156.16.

C. Stops and Bumpers: BHMA Grade 1.

1. Wall Stops: Convex with concealed mounting.
2. Floor Stops: Dome stop, base thickness to accommodate flooring thickness.

D. Combination Floor and Wall Stops and Holders: BHMA Grade 1.

1. Cast floor stop with hook and eye.

E. Electromagnetic Door Holders for Labeled Fire Door Assemblies: Coordinate with fire detectors and interface with fire alarm system.

1. Rixson-Firemark: 9900 Series
2. Norton Door Controls: 6900 Series
3. Sargent: 1500 Series

F. Floor Stops: For doors, unless wall or other type stops are scheduled or indicated. Do not mount floor stops where they will impede traffic.

1. Where floor or wall stops are not appropriate, provide overhead holders.

G. Silencers for Metal Door Frames: BHMA Grade 1; neoprene or rubber, minimum diameter 1/2 inch (13 mm); fabricated for drilled-in application to frame.

2.15 DOOR GASKETING

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Door Gasketing and Door Bottoms:
 - a. National Guard Products, Inc. (NGP).
 - b. Pemko Manufacturing Co., Inc. (PEM).

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7. Door closers shall be adjusted by the installer in accordance with the manufacturer's templates and written instructions. Closers with parallel arms shall have back-check features adjusted prior to installation.
8. Closers shall conform to all applicable code and law requirements relative to setting closing speeds for closers and maximum pressure for operating interior and exterior doors.

9. Models:

	LCN	Sargent
Exterior	4111S-CUSH 4111S-H-CUSH	281 - CPS 281 - CPSH
Interior	4011 4111	281 - 0 281 - P10

- D. Size of Units: Unless otherwise indicated, comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.

2.12 POWERED DOOR OPERATORS

A. Electrically - Powered Door Operator

1. Referenced Standard: Provide unit that conforms to AAMA/BHMA A156.19 low energy operation, and to ADA Architectural Guidelines for opening force and time to close standards.
2. Products: Subject to compliance with requirements, furnish one of the following products:
 - a. Horton 4000 LE
 - b. LCN 4610/20 (Electrically powered "Auto-Equalizer" system).
 - c. Keane-Monroe Corporation, "Access Two" Series 3100.
3. General: Furnish complete system, including electro-mechanical swinging door operator and solid-state electronic control, aluminum header matching door frame, connecting hardware, and power on/off switch.
4. Operator: Opening by means of a fractional HP DC motor, through reduction gears, splined spindle, door arm and linkage assembly. If door encounters an obstacle, operator shall stop the door in the open position by electrically reducing the motor voltage and stalling. Spring closing, with closing speed controlled by the motor operating as a dynamic brake. Operator shall function as a manual door closer in the direction of swing, with or without electrical power.
 - a. Operator shall be removable from the header as a unit, for servicing and replacement.
 - b. Door Speed and Timing:

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1. Burns Manufacturing Incorporated (BM).
2. NT Quality Hardware; an Ingersoll-Rand Company (NTQ).
3. Rockwood Manufacturing Company (RM).

B. Standard: Comply with BHMA A156.6, solid bar.

C. Materials: Fabricate from stainless steel, unless otherwise indicated.

1. Push-Pull Design: Door Pulls: 1inch diameter by 10 inches long.

Type A

Rockwood BF111
Burns BF26C
Quality BF163-10"

Type B

Rockwood 157
Burns 39C
Quality 521

2. Push/Pull Bars: 1inch diameter.

Type A (Wide Stile Doors)

Rockwood BF11147 x T1006 Mounting
Burns BF26C x 442 x Sim. Mounting as Above
Quality BF482 x Sim. Mounting as Above

2.10 ACCESSORIES FOR PAIRS OF DOORS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Coordinators:
 - a. Door Controls International (DCI).
 - b. Glynn-Johnson; an Ingersoll-Rand Company (GJ).
 - c. Hager Companies (HAG).
 - d. Rockwood Manufacturing Company (RM).
2. Astragals:
 - a. Hager Companies (HAG).
 - b. National Guard Products, Inc. (NGP).
 - c. Pemko Manufacturing Co., Inc. (PEM).
 - d. Reese Enterprises, Inc. (RE).
 - e. Zero International, Inc. (ZRO).

B. Standards: Comply with the following:

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Q 9927EO-F x LBR 12-PP/PR8710 FL-1201 x 1123-38 x LBR
R 9927L-F x LBR 12-PP/PR8713ET FL-1208 x 39L x 1123-38 x LBR
S 9927L-F-BE x LBR12-PP/PR8715ET FL-1208A x 39L x 1123-38 x LBR

2.7 CYLINDERS AND KEYING

- A. **Manufacturers:** Subject to compliance with requirements, provide products by one of the following:
1. **Cylinders:** Same manufacturer as for locks and latches.
 2. **Cylinders for Exterior Doors:**
 - a. "Restricted Keyway" by Sargent Manufacturing Company. (no substitutions)
 3. **Key Control Systems:**
 - a. Sargent Manufacturing Company, Div. of ESSEX Industries, Inc. (SGT). (no substitutions)
- B. **Standards:** Comply with the following:
1. **Cylinders:** BHMA A156.5.
 2. **Key Control System:** BHMA A156.5.
- C. **Cylinder Grade:** BHMA Grade 1.
- D. **Cylinders:** Manufacturer's standard tumbler type, constructed from brass or bronze, stainless steel, or nickel silver, and complying with the following:
1. **Number of Pins:** Six and seven.
 2. **Mortise Type:** Threaded cylinders with rings and straight- or clover-type cam.
 - a. With pick- and drill-resistant testing requirements of UL 437 (Suffix A).
 3. **Rim Type:** Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
- E. **Permanent Cores:** Manufacturer's standard; finish face to match lockset; complying with the following:
1. **Interchangeable Cores:** Core insert, removable by use of a special key, and usable with other manufacturers' cylinders.
- F. **Construction Keying:** Comply with the following:
1. **Construction Master Keys:** Provide cylinders with feature that permits voiding of construction keys without cylinder removal. Provide 10 construction master keys.
- G. **Keying System:** Unless otherwise indicated, provide a factory-registered keying system complying with the following requirements:

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FUNCTION SARGENT

- (1) 04
- (2) 05
- (3) 15
- (4) 37
- (5) 16
- (6) 65

F. Lock Throw: Comply with testing requirements for length of bolts to comply with labeled fire door requirements, and as follows:

- 1. Mortise Locks: Minimum 3/4-inch (19-mm) latchbolt throw.
- 2. Deadbolts: Minimum 1-inch (25-mm) bolt throw.

G. Backset: 2-3/4 inches (70 mm), unless otherwise indicated.

2.5 DOOR BOLTS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- 1. Flush Bolts:
 - a. Door Controls International (DCI).
 - b. Glynn-Johnson; an Ingersoll-Rand Company (GJ).
 - c. Ives: H. B. Ives (IVS).
 - d. Rixson-Firemark, Inc.; Div. of Yale Security Inc. (RIX).
 - e. Rockwood Manufacturing Company (RM).

B. Standards: Comply with the following:

- 1. Automatic and Self-Latching Flush Bolts: BHMA A156.3.
- 2. Manual Flush Bolts: BHMA A156.16.

C. Flush Bolts: BHMA Grade 1, designed for mortising into door edge.

D. Bolt Throw: Comply with testing requirements for length of bolts to comply with labeled fire door requirements, and as follows:

- 1. Mortise Flush Bolts: Minimum 3/4-inch (19-mm) throw.

E. Strikes: Provide matching strikes for heads of doors. Provide dust proof strikes at all floor locations.

2.6 EXIT DEVICES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- 1. Precision Hardware, Inc. (PH).

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- H. Electrified Functions for Hinges: Comply with the following:
1. Electrical Contact: Exposed electrical contacts for transfer of power.
 2. Power Transfer: Concealed PTFE-jacketed wires, secured at each leaf and continuous through hinge knuckle.
 3. Monitoring: Concealed electrical monitoring switch.
 4. Power Transfer and Monitoring: Concealed PTFE-jacketed wires, secured at each leaf and continuous through hinge knuckle, and with concealed electrical monitoring switch.
- I. Fasteners: Comply with the following:
1. Machine Screws: For metal doors and frames. Install into drilled and tapped holes.
 2. Threaded-to-the-Head Wood Screws: For fire-rated wood doors.
 3. Screws: Phillips flat-head screws; machine screws (drilled and tapped holes) for metal doors. Finish screw heads to match surface of hinges.
- 2.3 MORTISED LOCKS AND LATCHES
- A. Manufacturers: The Portland Public Schools has requested some proprietary products. Subject to compliance with requirements, provide products by the following:
1. Mechanical Locks and Latches:
 - a. Sargent Manufacturing Company, Div. of ESSEX Industries, Inc. (SGT).
 - B. Mortise Locks: Stamped steel case with steel or brass parts; BHMA Grade 1; Series 1000.
 1. Sargent: Series 8200, Lever design LNL.
 - C. Auxiliary Locks: BHMA Grade 1.
 - D. Lock Trim: Comply with the following:
 1. Lever: Forged or Cast.
 2. Escutcheon (Rose): Wrought, forged, or cast.
 3. Dummy Trim: Match lock trim and escutcheons.
 - E. Lock Functions: Function numbers and descriptions indicated in the Door Hardware Schedule comply with the following:
 1. Mortise Locksets:

Function	Sargent
A (Storeroom)	04
B (Storeroom)	04
C (Office)	05
D (Passage)	15

1. Structural failures including excessive deflection, cracking, or breakage.
 2. Faulty operation of operators and door hardware.
 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
- C. Warranty Period: Three years from date of Substantial Completion, unless otherwise indicated.
- D. Warranty Period for Manual Closers: 10 years from date of Substantial Completion.

1.8 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in this Section, and the Door Hardware Schedule at the end of Part 3.
1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and named manufacturer's products.
 2. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.
- B. Designations: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Schedule at the end of Part 3. Products are identified by using door hardware designations, as follows:

2.2 HINGES AND PIVOTS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Hinges:
 - a. Hager Companies (HAG).
 - b. McKinney Products Company; Div. of ESSEX Industries, Inc. (MCK).
 - c. Stanley Commercial Hardware; Div. of The Stanley Works (STH).
- B. Standards: Comply with the following:
1. Butts and Hinges: BHMA A156.1.

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- D. Source Limitations: Obtain each type and variety of door hardware from a single manufacturer, unless otherwise indicated.
- E. Regulatory Requirements: Comply with provisions of the following:
1. Comply with all applicable codes. Comply with Americans with Disabilities Act (ADA), as follows:
 - a. Handles, Pulls, Latches, Locks, and other Operating Devices: Shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist.
 - b. Door Closers: Comply with the following maximum opening-force requirements indicated:
 - 1) Interior Hinged Doors: 5 lbf (22.2 N) applied perpendicular to door.
 - 2) Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
 - c. Thresholds: Not more than 1/2 inch (13 mm) high. Bevel raised thresholds with a slope of not more than 1:2.
 2. NFPA 101: Comply with the following for means of egress doors:
 - a. Latches, Locks, and Exit Devices: Not more than 15 lbf (67 N) to release the latch. Locks shall not require the use of a key, tool, or special knowledge for operation.
 - b. Delayed-Egress Locks: Lock releases within 15 seconds after applying a force not more than 15 lbf (67 N) for not more than 3 seconds.
 - c. Door Closers: Not more than 30 lbf (133 N) to set door in motion and not more than 15 lbf (67 N) to open door to minimum required width.
 - d. Thresholds: Not more than 1/2 inch (13 mm) high.
 3. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
- F. Fire-Rated Door Assemblies: Provide door hardware for assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 252.
1. Test Pressure: Test at atmospheric pressure.
- G. Keying Conference: Conduct conference directly with the Owner. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including, but not limited to, the following:
1. Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 2. Requirements for key control system.
 3. Address for delivery of keys.

2. Detail interface between electrified door hardware and fire alarm system.
- D. Samples: For exposed door hardware of each type indicated below, in specified finish, full size. Tag with full description for coordination with the Door Hardware Schedule. Submit samples before, or concurrent with, submission of the final Door Hardware Schedule.
 - a. As requested by Architect.
 2. Samples will be returned to Contractor. Units that are acceptable and remain undamaged through submittal, review, and field comparison process may, after final check of operation, be incorporated into the Work, within limitations of keying requirements.
- E. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening.
 - a. Organize door hardware sets in same order as in the Door Hardware Schedule at the end of Part 3.
 3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of each door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - h. Description of each electrified door hardware function, including location, sequence of operation, and interface with other building control systems.
 - 1) Sequence of Operation: Include description of component functions that occur in the following situations: authorized person wants to enter; authorized person wants to exit; unauthorized person wants to enter; unauthorized person wants to exit.
- i. Provide hardware for every door in the project, except as indicated, so that each door functions correctly for its intended use. Where a door is not included in the Door Hardware Schedule at end of Part 3, provide hardware scheduled for similar type opening and review with Architect.

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- D. Collect wood packing shims and pallets; place in designated area.

END OF SECTION 08211

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~~B. Wood-Veneered-Beads-for-Light-Openings-in-Fire-Doors: Manufacturer's-standard wood-veneered-noncombustible-beads-matching-veneer-species-of-door-faces-and approved-for-use-in-doors-of-fire-rating-indicated. Include-concealed-metal-glazing-clips where-required-for-opening-size-and-fire-rating-indicated.~~

C. Metal Frames for Light Openings in Fire Doors: Manufacturer's standard frame formed of 0.0478-inch- thick, cold-rolled steel sheet; factory primed and approved for use in doors of fire rating indicated.

2.5 FABRICATION

A. Construct using hot press method for laminating door materials. Use Type I exterior water resistant adhesive. Stiles and rails must be securely bonded to the core and then abrasively planed prior to veneering.

B. Factory fit doors to suit frame-opening sizes indicated, with the following uniform clearances and bevels, unless otherwise indicated:

1. Comply with clearance requirements of referenced quality standard for fitting.
Comply with requirements in NFPA 80 for fire-rated doors.

C. Factory machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3. Comply with final hardware schedules, door frame Shop Drawings, DHI A115-W series standards, and hardware templates.

1. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before factory machining.

D. Transom Panels: Fabricate matching panels with same construction, exposed surfaces, and finish as specified for associated doors. Finish bottom edges of transoms and top edges of rabbeted doors same as door stiles.

E. Openings: Cut and trim openings through doors to comply with applicable requirements of referenced standards for kind(s) of door(s) required.

1. Light Openings: Trim openings with moldings of material and profile indicated.

2.6 ~~FACTORY-FINISHING~~

~~A. General: Comply with referenced quality standard for factory finishing.~~

~~B. Finish doors at factory.~~

~~C. Transparent Finish:~~

1. ~~Grade: Custom.~~
2. ~~Finish: Manufacturer's standard finish with performance comparable to AWW System IR-4 conversion varnish or AWW System IR-6 catalyzed polyurethane.~~
3. ~~Staining: None required.~~
4. ~~Sheet: Satin.~~

FLUSH WOOD DOORS

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1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install doors until building is enclosed, wet work is complete, and HVAC system is operating and will maintain temperature and relative humidity at occupancy levels during the remainder of the construction period.

1.7 WARRANTY

- A. General: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Warranty: Manufacturer's standard form, signed by manufacturer, Installer, and Contractor, in which manufacturer agrees to repair or replace doors that are defective in materials or workmanship, have warped (bow, cup, or twist), show telegraphing of core construction in face veneers, and which do not conform to tolerance limitations of specified quality standards.
1. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
 2. Warranty shall be in effect during the following period of time from date of Substantial Completion:
 - a. Solid-Core Interior Doors: Life of installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Flush Wood Doors:
 - a. Algoma Hardwoods Inc.
 - b. Graham Manufacturing Corp.
 - c. Marshfield DoorSystems, Inc. (formerly Weyerhaeuser).
 - d. Mohawk Flush Doors, Inc.

2.2 DOOR CONSTRUCTION, GENERAL

A. ~~Doors for Transparent Finish:~~

1. ~~Grade: Custom (Grade A faces):~~
2. ~~Species and Cut: White maple (all sapwood), plain sliced.~~
3. ~~Match between Veneer Leaves: Slip match.~~
4. ~~Assembly of Veneer Leaves on Door Faces: Running match.~~
5. ~~Room Match: Provide door faces of compatible color and grain within each separate room or area of building.~~
6. ~~Stiles: Same species as faces or a compatible species.~~

FLUSH WOOD DOORS

SECTION 08211 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:

- ~~1. Solid-core doors with wood veneer faces.~~
- ~~2. Solid-core doors with plastic laminate faces.~~
- ~~3. Factory finishing flush wood doors.~~
4. Factory fitting flush wood doors to frames and factory machining for hardware.

- B. Related Sections include the following:

1. Division 8 Section "Door Hardware" for door hardware.
2. Division 8 Section "Glazing" for glass view panels in flush wood doors.

1.3 SUBMITTALS

- A. General: Submit in accordance with Section 01330.
1. Submittals for Sections 08110, 08211, and 08711 shall be made concurrently.
- B. Product Data: For each type of door. Include details of core and edge construction, louvers, and trim for openings. Include factory-finishing specifications. Submit door manufacturer's storage, handling, finish, installation, and maintenance instructions.
- C. Shop Drawings: Indicate location, size, and hand of each door, elevation of each kind of door, face veneer, construction details not covered in Product Data, location and extent of hardware blocking; and other pertinent data.
1. Indicate dimensions and locations of mortises and holes for hardware.
 2. Indicate dimensions and locations of cutouts.
 - ~~3. Indicate requirements for veneer matching.~~
 4. Indicate doors to be factory finished and finish requirements.
 5. Indicate fire ratings for fire doors.
 6. Indicate the sound ratings for acoustical doors.
- D. Door Schedule: Submit schedule of doors using same reference numbers for details and openings as those on Contract Drawings.
1. Indicate coordination of glazing frames and stops with glass and glazing requirements.

A5.10r	Interior Elevations – Toilet Rooms & Locker Rooms
A5.11r	Interior Elevations – Toilet Rooms
A5.12r	Interior Elevations – Main Lobby
A6.1r	Floor Patterns
A7.1r	Door Schedule, Door & Frame Elev., Misc. Openings
A7.2r	Door Details
A7.3r	Curtainwall & Storefront Plans, Elevations, Details
A8.1r	Food Service Equipment Floor Plan
A8.2r	Food Service Equipment Rough-In Plans

STRUCTURAL DRAWINGS

S.1r	Foundation Plan - North
S.2r	Foundation Plan - South
S.3r	Slab Plan – North
S.4r	Slab Plan - South
S.5r	Concrete Sections & Details
S.6r	Concrete Sections & Details
S.7r	Concrete Sections & Details
S.8r	Second Floor / Low Roof Framing Plan - North
S.9r	Second Floor / Low Roof Framing Plan - South
S.10r	Roof Framing Plan - North
S.11r	Roof Framing Plan - South
S.12r	Bracing Elevations
S.13r	Bracing Elevations
S.14r	Structural Steel Sections & Details
S.15r	Structural Steel Sections & Details
S.16r	Structural Steel Sections & Details, Baseplate Schedule
S.17r	Structural Steel Sections & Details

MECHANICAL DRAWINGS

M1r	HVAC Ground Floor Plan North
M2r	HVAC Ground Floor Plan South
M3r	HVAC Second Floor Plan North
M4r	HVAC Second Floor Plan South
M5r	Plumbing Ground Floor Plan North
M6r	Plumbing Ground Floor Plan South
M7r	Plumbing Second Floor Plan North
M8r	Plumbing Second Floor Plan South
M9r	Mechanical Details & Schedules
M10r	Mechanical Details & Legend
M11r	Mechanical Details

SECTION 16910 GENERATOR TRANSFR SWITCH (VE # 48)
DELETE entire Section.

SECTION 16911 ELECTRICAL MONITORING SYSTEM
DELETE entire Section.

REVISE PARA. "A", AS FOLLOWS: Burners shall be oil-fired by Webster, Powerflame, Carlin or Beckett.

VE #40

REVISE PARA. "C", AS FOLLOWS: The burner management /firing rate controller shall be Honeywell or Fireye, as standard with the manufacturer.

Page 11, paragraph 2.11 PACKAGED ROOFTOP AIR CONDITIONING UNITS:

VE #4

REVISE PARA. "J" AS FOLLOWS: Mechanical cooling shall be deleted. The equipment shall be capable of supporting mechanical cooling at a future date.

VE #41

REVISE PARA. "M" AS FOLLOWS: Sound attenuating, seismic-rated spring curbs shall be provided as specified for AC-1 and AC-2. AC-3, 4 and 5 shall have standard curbs.

SECTION 15400 PLUMBING

Pages 3, 4, 5, paragraph 2.5 FIXTURES AND TRIM:

VE #39

REVISE PARA. "A, B, D, E" AS FOLLOWS: Delete reference to automatic electronic flush valves and faucets. Flush valves shall be Delany, Sloan, or Zurn. Lavatory faucets shall be Symmons "Scot" series, mixing metering faucets, ADA-compliant.

SECTION 15700 HVAC SYSTEM

Pages 13, 14, paragraph 2.15 ABOVEGROUND FUEL OIL SYSTEM:

VE #1

REVISE TITLE AS FOLLOWS: UNDERGROUND FUEL OIL TANK SYSTEM.
REVISE SUBPARAGRAPHS to reflect the change from an aboveground tank to an UL-listed underground tank, constructed in accordance with ACT-100 or StIP3 for a thirty (30) year warranty. Provide a 15 gallon spill containment sump. Underground / underslab fuel oil piping shall be Enviroflex double-wall secondary containment piping. Vent piping shall be AO Smith "Red Thread" fiberglass. Installation shall be in accordance with Maine DEP regulations. Provide 36" diameter manways at each tank manhole.

SECTION 15800 DUCTWORK

Page 5, paragraph 2.2 DUCTWORK ACCESSORIES:

VE #44

REVISE PARA. "J" AS FOLLOWS: Delete reference to Hardcast tape duct sealer and replace with Polymeric DP10010 duct sealer.

SECTION 16010 GENERAL ELECTRICAL REQUIREMENTS
DELETE Paragraph 1.2 in its entirety.

Change model # to MCT-HF4-Modified
Change quantity from 2 to 1

Specification: (Revised)

Unit to be model MCT-HF4 as manufactured by Mod-U-Serve. 64" L x 28-1/2" W x 36" H.

Frame: Featuring frameless construction utilizing 16 gauge type 304 stainless steel formed end panels with top and bottom horizontal members of 16 gauge type 304 stainless steel.

Casters: Heavy duty 5" diameter plate casters with polyurethane tires. Brake models to be supplied on rear corners of cabinet.

Top: 14 gauge type 304 stainless steel with 2" turndown on all sides and sound deadened applied between top and frame.

Serving Shelf: 16 gauge stainless steel serving shelf with 1 1/2" turndown on all sides. Support posts of 1 1/4" square 18 gauge stainless steel tubing. Pre-wired fluorescent light fixture with safety shields and toggle switch in control panel.

Sneeze Guard: 1/2" thick tempered plate glass with polished edges. Front Body Panel: Field removable plastic laminate panel. (Color to be determined)

Undershelf: 18 gauge type 304 stainless steel with 18" high ends and 6" high back. Undershelf is held back 6" from front panel forming a utility chase for plumbing and electrical services.

Work Shelf: 16 gauge stainless steel 8" wide shelf mounted at rear on fold down brackets.

Trayslide: 14 gauge type 304 stainless steel trayslide mounted on fold down brackets.

Hot Food Units: Unit to have (4) four, 12" x 20" individual drip-in units rated at 1200 watts each. Individual infinite controls with drain outlets manifolded to common globe valve.

Control Panel: All switches to be centrally located in common control panel assembly with fold down front for ease of maintenance and service.

Stainless Steel Specification: All stainless steel to be type 304 with number 4 finish.

Options and Accessories:

1. Line Up Locks
2. Interconnection to single connection point with Item # 15.
3. Stainless steel adjustable legs in lieu of casters.

Item #: 17

Description: Serving Counter, Cashier Stand

Manufacturer: Mod-U-Serve

Model #: MCT-CRSG

Change quantity from 2 to 1

Item #: 19 (New Item)

Description: Serving Counter, Flat Top

Manufacturer: Mod-U-Serve

- a. Latch Hooks: Equip doors 48 inches (1219 mm) and higher with 3 latch hooks and doors less than 48 inches (1219 mm) high with 2 latch hooks; fabricated from minimum 0.0966-inch- (2.5-mm-) thick steel; welded or riveted to full-height door strikes; with resilient silencer on each latch hook.
 - b. Latching Mechanism: Manufacturer's standard rattle-free latching mechanism and moving components isolated to prevent metal-to-metal contact, and incorporating a prelocking device that allows locker door to be locked while door is open and then closed without unlocking or damaging lock or latching mechanism.
2. Provide ADA compliant latch and latch lifter for 2 percent of lockers provided, unless noted otherwise.

- I. Equipment: Equip each metal locker with identification plate and the following, unless otherwise indicated:
1. Double-Tier Units: One double-prong ceiling hook and two single-prong wall hooks.

J. Accessories:

1. Continuous Base: Fabricated from cold-rolled steel sheet, manufacturer's standard thickness, but not less than 0.0528 inch (1.35 mm) thick.
 - a. Height: As indicated on the drawings.
2. Continuous Sloping Tops: Fabricated from cold-rolled steel sheet, manufacturer's standard thickness, but not less than 0.0329 inch (0.85 mm) thick.
 - a. Closures: Vertical-end type.
 - b. Sloped top corner fillers, mitered.
3. Filler Panels: Fabricated from cold-rolled steel sheet, manufacturer's standard thickness, but not less than 0.0329 inch (0.85 mm) thick.
4. Finished End Panels: Fabricated from 0.0209-inch- (0.55-mm-) thick, cold-rolled steel sheet.

K. Finish: Powder coat.

1. Color(s): As selected by Architect from manufacturer's full range.

SECTION 11050 - LIBRARY EQUIPMENT

ADD: The following at the end of paragraph A in article 1.2: (VE # 33)

"Work in this section is NIC. This section is included for future reference only."

SECTION 11400 FOODSERVICE EQUIPMENT

REVISE article 3.5 Itemized Specifications as follows: (VE # 35)

Item #: 9

Description: Hot/Cold Transport Cart (Existing)
Change quantity from 4 to 6

Item #: 14

Description: Milk Cooler

SECTION 03326 - SPECIAL CONCRETE FINISHES
DELETE: Section 12494. (VE #2)

SECTION 06402 - INTERIOR ARCHITECTURAL WOODWORK
DELETE: Subparagraphs 4 and 6 in article 1.4, paragraph E. (VE #19)

SECTION 06450 - MODULAR CASEWORK
CHANGE: Paragraph A in article 2.6 to read as follows: (VE #20)

"A. Casework, Drawers, and Doors: Selection of colors from manufacturers basic range of 3 colors (white, putty, beige). All cabinet frontal edges, exposed shelf front edges, scribes, and fillers shall match the color for the doors and drawers."

SECTION 08711 - DOOR HARDWARE
REPLACE: Section 08711 with revised section. (VE # 1 and 21)

SECTION 08211 - FLUSH WOOD DOORS
REPLACE: Section 08211 with revised section. (VE # 22)

SECTION 08555 - FIBERGLASS WINDOWS
ADD: New subparagraph d to article 2.1, paragraph a.1 as follows: (VE # 3)

"d. Graham."

SECTION 08630 - METAL-FRAMED SKYLIGHTS
DELETE: Section 08630. (VE # 23)

SECTION 09680 - CARPET
DELETE: Section 09680. (VE # 25)

SECTION 09651 - RESILIENT FLOOR TILE
DELETE: Subparagraph 1 in article 3.5, paragraph B. (VE # 27)

SECTION 01770 - CLOSEOUT PROCEDURES
DELETE: Subparagraph j in article 3.1, paragraph B, 1. (VE # 27)

SECTION 09310 - CERAMIC TILE
REPLACE: Section 09310 with revised section. (VE # 28)

SECTION 10650 - OPERABLE PARTITIONS
DELETE: Partition Nos. M308.1 and M315.1 in Part 4. (VE # 32)

SECTION 10506 - PLASTIC LOCKERS
DELETE: Section 10506. (VE # 31)

SECTION 10505 - METAL LOCKERS
ADD: New article 2.7 as follows: (VE # 31)

Site Photographs – JS/RLH



P-3 Tank grave. No groundwater-no sheen or odor.



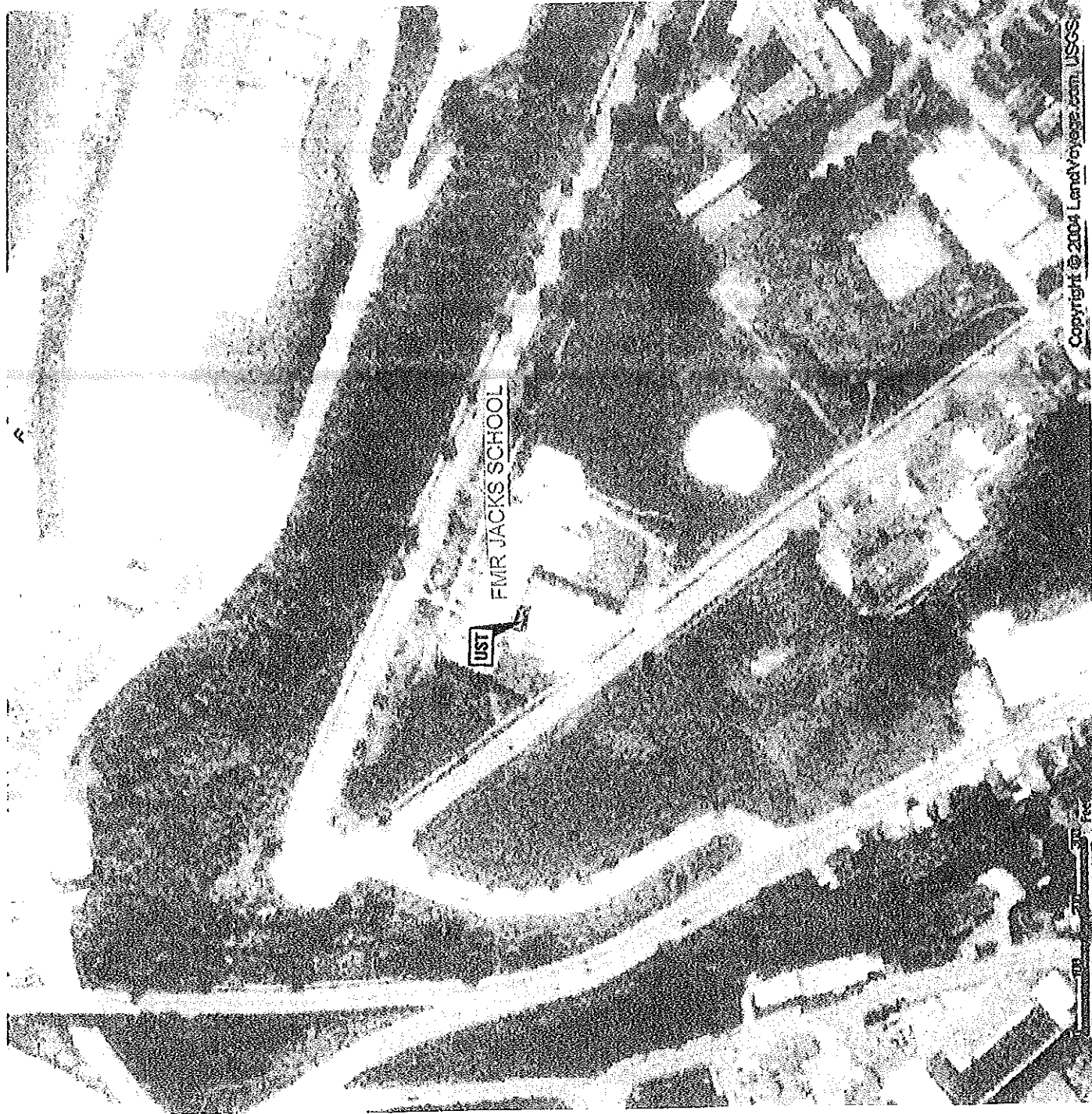
P-4 Bottom of 8,000 gallon double-walled fiberglass UST.

Former Jack School
414 East Promenade
Portland, Maine

July 1, 2004

HEI 03-47.1

Figure 3

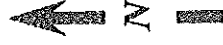


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HEI

HOFFMAN ENGINEERING, INC.
640 Ten Rod Rd.
North Kingstown, RI 02852

SITE PLAN
UST Closure Assessment
(UST# 12151)
Former Jack School
414 East Promenade
Portland, Maine



Date: 06-27-04

By: BLR

Base Map: Aerial Photograph
(circa 2000) Landvoye.com

Figure 2

- After cleaning, the USTs were transported off-site for disposal.

Field Screening

Excavated soils from around the tank were screened utilizing the "Headspace Technique" outline in Appendix Q: Field Determination of Soil Hydrocarbon Content by Jar/Poly Bag Headspace Technique of the Chapter 691 Regulations, amended March 2004 and the Calibration Set Point Memo, dated September 8, 1997 (for fuel oil). Soils were screened in the field utilizing a ThermoEnvironmental Instrument Model 580B portable organic vapor meter (OVM), equipped with a 10.6 eV lamp photoionization detector (PID) and calibrated to an isobutyl propane standard. Samples were collected in glass jars, 3/4 full and capped. The jars were then agitated just prior to headspace measurement. Instrument readings provide total Volatile Organic Compounds (VOCs) in parts per million volume (ppmv).

ASSESSMENT FINDINGS

- The tank was found to be in good condition with no holes. The piping leading back to the oil burner, which it supplied, was previously removed by the demolition contractor.
- Soil samples were collected from the four tank sidewalls, as well as the bottom north end and bottom south end. No detectable readings were observed.
- One groundwater sample was collected. No sheen or odor was noted in the groundwater sample or within the groundwater within the tank grave.
- No visual or olfactory evidence (i.e. staining, odor) of a petroleum release was noted in the soils surrounding the tank.
- Groundwater was encountered at approximately 6-7 feet below grade. No sheen or odor was noted on the groundwater.

RECOMMENDATIONS AND CONCLUSIONS

Based on field observations, field screening, analytical testing and information gathered during closure activities for the subject 8,000 gallon No. 4 fuel oil tank, it is HEI's opinion that there is no evidence that a release or spillage associated with the former tank has occurred.

Therefore, no further investigation or remediation is warranted at this time relative to the subject UST.

LIMITATIONS

The work reported herein was conducted to determine the presence of subsurface contamination as a result of leakage/spillage from the subject underground storage tank. The information presented in this report is based on visual observations and soil screening conducted by HEI personnel in the field during the closure activities. The potential presence of subsurface contamination (if any) from other sources (e.g., other abandoned tanks, drywells, lifts, improper petroleum/chemical handling), both on and off-site, were not addressed or investigated, as part of this Closure Assessment.

PURPOSE

This underground storage tank (UST) assessment was conducted in order to monitor and assess the soils around and under an 8,000 gallon No. 4 fuel tank to determine if a discharge of oil occurred.

The tank was removed in order to comply with Maine Department of Environmental Protection (MEDEP) regulations prohibiting the abandonment of unused underground storage tanks. Mr. Robert L. Hoffman, PE the undersigned, conducted the subject site assessment as required in Chapter 691, Appendix P of the "Regulations for Registration, Installation, Operation and Closure of Underground Oil Storage Facilities", amended March 14, 2004.

FACILITY & SITE LOCATION

The subject site, the former Jack School (Portland School System), is located at the northeastern intersection of Eastern Promenade and North Street, in Portland, Maine. A Site Locus Map is presented as Figure 1.

SITE HISTORY

The Site, which is currently undeveloped and undergoing regarding for site redevelopment with graded soils had been occupied by Jack's Junior High School for more than 50 years. In 2003, it was decided to demolish the school due to a significant mold problem. A new school is planned for the Site redevelopment.

Surrounding land use is comprised of a mixture of commercial/ professional offices and residential properties.

The former school, as well as the surrounding area, are serviced by the municipal sewer and public water systems. The new school will also be serviced by these public utilities.

UST HISTORY & DESCRIPTION

One 8,000 gallon No. 4 fuel oil UST was utilized by the former school to provide heat to the school. Prior to demolition the tank was located beneath a concrete pad running parallel with North Street.

The subject tank was reportedly installed in 1998 to provide heat to the school. No tank testing or historical information was available for the tank. The following provides a description of the tank:

Construction: (27'L x 8' dia.); double-walled fiberglass equipped with leak detection; utilized a 4" direct drop fill equipped with spill containment.

Piping: Vent and product lines that ran to the former building had been removed by the demolition contractor.

A site plan showing the location of the tank is provided as Figure 2. Photographs of the UST and Site are presented in Figure 3.

SITE LOCATION OF DEVELOPMENT (SITE)
STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

1. This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect
2. The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.
3. The applicant shall submit all reports and information requested by the Board or Department demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
4. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
5. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.
6. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.
7. If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.
8. A copy of this approval must be included in or attached to all contract bid specifications for the development.
9. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)/Revised November 1, 1979

DEPLW 148

M11

MECHANICAL DETAILS

CHANGE: the mounting height of the emergency eyewash fixture (P11) from 3'-7" to 3'-1" to the top of the spray heads (above finished floor level).

END OF ADDENDUM #3

- CHANGE:** lighting fixtures Type G2 to lighting fixtures Type A1 in Literacy Data Specialist 216. Space at eight foot on center across the length of the room and six foot on center across the width of the room, center in room.
- E3.4 EMERGENCY LIGHTING RISER DIAGRAM**
ADD: two lighting fixtures Type E1 to the riser diagram. Label one Self-Contained 213 and the other Resource 215.
- E4.1 SINGLE LINE DIAGRAM**
CHANGE: the single line diagram as indicated in attached sketch SKE-4.1A.
CHANGE: the ground conductor size between transformer T-P4 and panel P4 to be # 6 AWG.
ADD: following note to the Single Line Diagram:
 "Provide a 1-1/4" underground conduit from the CMP service transformer to the CMP service meter for CMP meter wiring. Also provide a dedicated telephone line from the *telephone service board to the CMP service meter.*"
ADD: the following wire/conduit size to the incoming service entrance to SWBD-1: *Parallel Service: 4-750 MCM in each of 3-4" conduits, plus 3-4" spare conduits.*
- E4.2 DATA COMM. RACK – CHAIR STOR. 316**
ADD: a homerun and circuit designation to the west most quad receptacle. Circuit to Panel P7 #32.
ADD: a homerun and circuit designation to the east most quad receptacle. Circuit to Panel P7 #30.
- E4.2 DATA COMM. ROOM 229 – 2nd FL**
ADD: a homerun and circuit designation to the north most quad receptacle. Circuit to Panel P5 #28.
ADD: a homerun and circuit designation to the south most quad receptacle. Circuit to Panel P5 #30.
- E4.2 DATA COMM. ROOM 139 – 1st FL**
ADD: a homerun and circuit designation to the north most quad receptacle. Circuit to Panel P4 #34.
ADD: a homerun and circuit designation to the south most quad receptacle. Circuit to Panel P4 #36.
- E4.2 DATA COMM. ROOM 174 – 1st FL**
ADD: a homerun and circuit designation to the north most quad receptacle on the west wall. Circuit to Panel P6 #55.
ADD: a homerun and circuit designation to the south most quad receptacle on the west wall. Circuit to Panel P6 #57.
ADD: a homerun and circuit designation to the two west most quad receptacles on the south wall. Circuit to Panel P6 #59.
ADD: a homerun and circuit designation to the east most quad receptacle on the south wall and the quad receptacle on the northeast wall. Circuit to Panel P6 #61.
- E4.2 SERVER / MEDIA ROOM**
ADD: a homerun and circuit designation to the north most quad receptacle on the west wall. Circuit to Panel P6 #54.
ADD: a homerun and circuit designation to the south most quad receptacle on the west wall. Circuit to Panel P6 #56.

E2.2 KITCHEN 321

ADD: a wall mounted clock above equipment item #9 on south wall.
CHANGE: receptacle, data and telephone jack grouping to receptacle and split data/telephone jack grouping.
DELETE: 120 volt, 20 amp receptacle and associated wiring serving kitchen item #15 on south wall
DELETE: 120 volt, 20 amp receptacle and associated wiring serving kitchen item #16 on northwest wall
ADD: a 208 volt, 30 amp receptacle to the northwest wall to serve kitchen items #15 and #16. Circuit to Panel K1 #8, 10, provide 2 pole, 20 amp circuit breaker.
DELETE: 120 volt, 20 amp receptacle and associated wiring serving kitchen item #15 on south wall
DELETE: 120 volt, 20 amp receptacle and associated wiring serving kitchen item #16 on south wall
ADD: a 208 volt, 30 amp receptacle to the south wall to serve kitchen items #15 and #16. Circuit to Panel K1 #19,21, provide 2 pole, 20 amp circuit breaker.
ADD: two heat detectors centered in the space approximately twenty-two feet apart.
ADD: an audio visual device labeled 30cd located on the back of wall separating the dishwashing area.

E2.2 ELECTRICAL 176 / BOILER 178

CHANGE: horsepower notation on B1 from 3/4 to 1.
CHANGE: horsepower notation on B2 from 3/4 to 1.
ADD: a junction box for LMP Panel in Boiler 178. Circuit to Panel M2 #24. Coordinate location with Mechanical Contractor.
CHANGE: the notation for the automatic transfer switch located in Elec. Rm. 176 to read: "Manual Transfer Switch".

E2.3 SECOND FLOOR NORTH POWER PLAN

CHANGE: receptacle, data and telephone jack grouping in Staff Lounge 204 to receptacle and split data/telephone jack grouping.
CHANGE: receptacle, data and telephone jack grouping in Explore 249 to receptacle and split data/telephone jack grouping.
ADD: a wall mounted clock to the south east wall adjacent to the door in Literacy Book Storage 202.
ADD: a ceiling mounted speaker centered in the room in Literacy Book Storage 202.
ADD: one split data/telephone jack adjacent to the south-most receptacle on the south wall, and one split data/telephone jack adjacent to the receptacle on the northwest wall in Literacy Book Storage 202.
CHANGE: receptacle, data and telephone jack grouping and the receptacle and data jack groupings in Linerant Office 256 to receptacle and split data/telephone jack groupings.
CHANGE: receptacle, data and telephone jack grouping and the receptacle and data jack groupings in Office 205 receptacle and split data/telephone jack groupings.
CHANGE: receptacle, data and telephone jack grouping and the receptacle and data jack groupings in Office 206 to receptacle and split data/telephone jack groupings.
MOVE location of EF8 from Corridor 257 to Storage 259.
CHANGE: horsepower notation on EF8 from 1/4 to 1/20.
ADD: motor operated damper to Storage 259. Circuit to Panel M6 #8.
CHANGE: horsepower notation on EF17 from 1/4 to 1/6.

E2.1

GROUND FLOOR NORTH POWER PLAN

- ADD:** two junction boxes in Men 330 for electric hand dryers. Circuit to Panel P7 #26.
- ADD:** two junction boxes in Women 331 for electric hand dryers. Circuit to Panel P7 #28.
- MOVE** location of EF3 from Toilet 310 to Family Resource 311.
- MOVE** location of EF7 from Community Meeting 309 to Toilet 310.
- MOVE** location of receptacle located on southwest wall in Gym Lobby 312 so that is it adjacent to the fire alarm pull station.
- MOVE** the security panel with door access control panel from Maintenance Office 175 to Corridor 107 adjacent to the fire alarm control panel.
- DELETE** card reader and reference to Note 5 from exterior door leading into Stair 169.
- CHANGE:** receptacle, data and telephone jack groupings in Principal 108 to receptacle and split data/telephone jack groupings.
- CHANGE:** receptacle, data and telephone jack groupings in Assistant Principal 109 to receptacle and split data/telephone jack groupings.
- CHANGE:** receptacle, data and telephone jack grouping in Conference 310 to receptacle and split data/telephone jack grouping.
- CHANGE:** receptacle, data and telephone jack grouping in Explore 164 to receptacle and split data/telephone jack grouping.
- CHANGE:** two receptacle, data and telephone jack groupings in Maintenance Office 175 to two receptacle and split data/telephone jack groupings.
- CHANGE:** receptacle, data and telephone jack grouping in Media Center 302 and receptacle, data and telephone jack grouping mounted in floor box to receptacle and split data/telephone jack grouping and to receptacle and split data/telephone jack grouping mounted in floor box.
- CHANGE:** receptacle, data and telephone jack groupings in Work Room 303 to receptacle and split data/telephone jack groupings.
- CHANGE:** receptacle, data and telephone jack grouping in Community Meeting 308 to receptacle and split data/telephone jack grouping.
- CHANGE:** receptacle, data and telephone jack grouping in Community Meeting 309 to receptacle and split data/telephone jack grouping.
- CHANGE:** receptacle, data and telephone jack grouping in Family Resource 311 to receptacle and split data/telephone jack grouping.
- CHANGE:** receptacle, data and telephone jack grouping in PE Office 327 to receptacle and split data/telephone jack grouping.
- CHANGE:** receptacle, data and telephone jack grouping in Recreation Office 328 to receptacle and split data/telephone jack grouping.
- CHANGE:** receptacle, data and telephone jack grouping in Music 338 to receptacle and split data/telephone jack grouping.
- CHANGE:** receptacle and data jack grouping located on short northwest wall in Family Resource 311 on to receptacle and split data/telephone jack grouping.
- CHANGE:** receptacle and data jack grouping located on north wall in Art 340 to receptacle and split data/telephone jack grouping.
- ADD:** a pull station adjacent to the exit door in Oil Tank 350.
- ADD:** the Note 6 as follows to the drawings notes:

“Provide an empty junction box and a 120 volt duplex receptacle above the ceiling at the following locations for future surveillance cameras. Extend a ¾” empty conduit from each junction box to above the ceiling in Files 106.

Kitchen Corridor 324 (at loading dock door)
Corridor 177 (at rear service door)
Vestibule 101

Circuit receptacles to:

Corr 324 P7 #27

with bronze and stainless steel construction, liquid fill thermal motor with coiled sensing tube and bellows. Sizes and capacities shall be as scheduled. The bellows shall be mounted out of the water. Provide with self-cleaning swivel action check-stops and bimetal outlet thermometer and shut-off valve. Provide a wall-mounting bracket.

Section 15900 AUTOMATIC TEMPERATURE CONTROLS
SYSTEM POINT LIST, page 1 of 5:

ADD: Main Heating Pumps (CP3, CP4), provide a 0-10V. or 4-20 ma signal to vary the pump speed (variable frequency drives) to maintain the system pressure differential as sensed by the differential pressure transducer, located as indicated.

Section 16470 PANELBOARDS

CHANGE: Panelboard schedules for panels P4 and P6 as attached

Section 16910 GENERATOR TRANSFER SWITCH

CHANGE: paragraph 2.1 B 1 to read:
"1. 300 amp current rating."

DRAWINGS

A1.4 SECOND FLOOR PLAN SOUTH, ROOM FINISH SCHEDULE

REVISE: Room Finish Schedule per attached ASK-9 to add fiberglass faced tile backer board at toilet rooms and mop sinks as indicated.

ADD: "Gym Lobby" to Room Use column in Key 7 row per attached ASK-9.

DELETE: "See note 15" from Remarks column in Key row 7 per attached ASK-9.

DELETE: "See note #15" from Remarks column in Key row 18 per attached ASK-9.

DELETE: "See note #15" from Remarks column in Key row 26 per attached ASK-9.

A1.9 GAME LINES, PLAN DETAILS

DELETE: "See Ait. #3" following the note "CMU Veneer" at detail 3.

A2.4 WINDOW SCHEDULE & DETAILS

CHANGE: note at detail 4 from "CMU return ground face both exposed sides" to "CMU return ground face exterior face only".

CHANGE: note at details 3 & 5 from "Ground face CMU sill" to "4"x8"x16" ground face cmu sill"

A3.14 SECTION DETAILS

CHANGE: Note at detail 4/A3.14 from "Extend flashing 3/8" beyond face of fdn." to "Trim flashing flush with fdn. wall".

ADD: The note "(2" at radiant heat)" following "1" rigid insulation bd. (xeps)" at detail 4/A3.14.

DELETE: Pre-finished metal 'J'-trim from detail 10/A3.14

A7.2 HOLLOW METAL DOOR DETAILS

DELETE: the three dashed lines shown at the solid wood blocking in detail #11.

C5B SURVEY PLAN

ADD: This drawing is a new drawing which depicts the conditions and elevations in the former Jack School area after the demolition was complete. This new drawing is enclosed. A

Section 07212 - CAVITY EXTERIOR WALL INSULATION

ADD: the following new subparagraph 3 to 1.2, B:

- "7. Division 4 Section "Unit Masonry Assemblies" for rigid insulation to be installed behind masonry systems."

Section 08110 - STEEL DOORS AND FRAMES

ADD: The following to the end of paragraph 3.1, B: "Fill exterior door frames with grout."

Section 08331 - OVERHEAD COILING DOORS

DELETE: Subpagraph 1.2, B, 2.

ADD: The following new article 3.4:

"3.4. OVERHEAD COILING DOOR SCHEDULE

- A. Exterior Insulated Service Door: Provide manually operated, insulated service door for Equipment Shed.
- B. Interior Service Doors: Provide manually operated (non-insulated) service doors at the Kitchen."

Section 08555 - FIBERGLASS WINDOWS

CHANGE: Subpagraph 2.1, A, 1, b to read "InLine Windows (available from New England Window Systems (617-269-6397))."

CHANGE: Subpagraph 2.1, A, 1, c to read "Thermotech Windows, Ltd., Ottawa, Ontario, (613-225-1101).

Section 08711 - DOOR HARDWARE

CHANGE: Type B pull to type A in HW1.

CHANGE: Type B pull to type A in HW2.

CHANGE: Type B pull to type A in HW3.

CHANGE: Type B pull to Trim Design FLW by Sargent in HW4.

DELETE: Function A in HW8. Provide function B for both doors.

ADD: Door Tag 257.1 to function B at HW9.

DELETE: Door Tag 217.1 in function A at HW10.

CHANGE: function B to D at deadbolt in HW13.

ADD: Tactile warning levers at door tags 226.1, 204.1, 253.1 in HW15.

ADD: Sound seals to door Tag 211.2 in HW 17.

ADD: Door closer and kickplate to the following door tags in HW18: 105.1, 133.1, 134.1, 137.1, 145.1, 149.1, 150.1, 153.1, 162.1, 166.1, 167.1, 170.1, 218.1, 223.1, 224.1, 227.1, 235.1, 238.1, 241.1, 248.1, 250.1, 251.1, 254.1.

ADD: Sound seals to door Tags 120.1 and 211.1 in HW 18.

ADD: Tactile warning levers at door tag 175.1 in HW19.

ADD: Door closer and self latching flush bolts at door 222.1 in HW21.

Section 09260 - GYPSUM BOARD ASSEMBLIES

ADD: New paragraph C in article 2.5 as follows:

- "C. Glass-Mat, Water-Resistant Backing Board: ASTM C 1178/C 1178M.
- 1. Product: Subject to compliance with requirements, provide "Dens-Shield Tile Backer" manufactured by G-P Gypsum Corp.
 - 2. Core: 5/8 inch (15.9 mm), Type X.

Section 00020 INVITATION TO BID

Page 3, Paragraph 4

CHANGE: "10% retainage" to "5% retainage"

Section 00810 EXHIBIT "A" SUPPLEMENTARY GENERAL CONDITIONS

Article 1, paragraph E, page 1 of 15:

CHANGE: "Add: Subparagraphs 1.2.6 through 1.2.13 as follows:" to "Add: Subparagraphs 1.2.6 through 1.2.7 as follows:"

Article 8, paragraph B, page ~~9 of 15~~ **14 of 15**:

CHANGE: "Add: subparagraphs 8.2.4 through 8.2.10 as follows:" to "Add: subparagraph 8.2.4 as follows:"

ADD: ARTICLE 11 – INSURANCE AND BONDS

A. In Subparagraph 11.1(d) in the first line delete the word "CONTRACTOR" and substitute "OWNER".

Section 00840 SPECIAL CONDITIONS

Part 1, 1.01, #1, page 1 of 2:

CHANGE: "July 27, 2004" to "August 26, 2004"

Part 1, 1.01 #2, page 1 of 2:

DELETE: "2. Construction Schedule"

Part 1, 1.01 #3, page 1 of 2

DELETE: "3. Vehicle Traffic Control and Access"

Part 1, 1.01 #4, page 1 of 2

CHANGE: "4. Safety Summary" to "5. Safety Summary"

Part 1, 1.01 #5.4, page 2 of 2

DELETE: paragraph 5.4 in its entirety.

Part 1, 1.01 #5, page 2 of 2

DELETE: "5. Security Requirements"

DIVISION 1 – GENERAL REQUIREMENTS

Section 01500 TEMPORARY FACILITIES AND CONTROLS

ADD: Construction Sign per attached ASK-2.

Section 02000 SITE PERMITS

The project is subject to the Maine Department of Environmental Protection Standard Conditions of Approval. A copy of these standard conditions is attached to this addendum. The General Contractor is responsible for compliance with conditions 2, 8, and 9; the site contractor is responsible for conditions 2 and 9; and the Owner is responsible for conditions 1, 3, 4, 5, 6, and 7.