

2525

CERTIFICATION



**AMERICAN METAL PROCESSING**  
 5000 Russell Schmidt Blvd.  
 Chesterfield Twp, MI 48051  
 Phone: (810) 948-3285  
 Fax: (810) 948-3286

Date: 12/14/01  
 PO #: 1714  
 Work Order #: 1952  
 Lot #: 0112-121  
 Heat #:

Part #: R0034  
 Description: Washer

TO:  
 Technical Springing, Inc.  
 50600 E. Russell Schmidt Blvd.  
 Chesterfield Twp, MI 48051  
 Phone: (810) 948-3285  
 Fax: (810) 948-3286

Material Chemistry assumed for this order

Element	Weight %	Element	Weight %	Element	Weight %
C	0.39	Si	0.00	Cu	0.00
Mn	0.94	Ni	0.02	Fe	0.00
				P	0.00

Scale / Units  
 Comments:

Customer Requirements:  
 minimum  
 maximum

SAITON Hardness HRC	Total Case Depth Inches	Case Hardness	RT Case Depth Inches
38.00			
45.00			
41.46			
42.41			
41.31			
42.67			
40.89			
41.48			
41.40			
41.53			
42.32			
40.66			
41.34			
40.89			
41.63			
42.11			
40.65			
41.80			
38.02			
41.51			
42.15			
40.72			
44.39			
44.39			
42.33			

Minimum:  
 Standard Deviations

12/14/01 8:42:34 AM

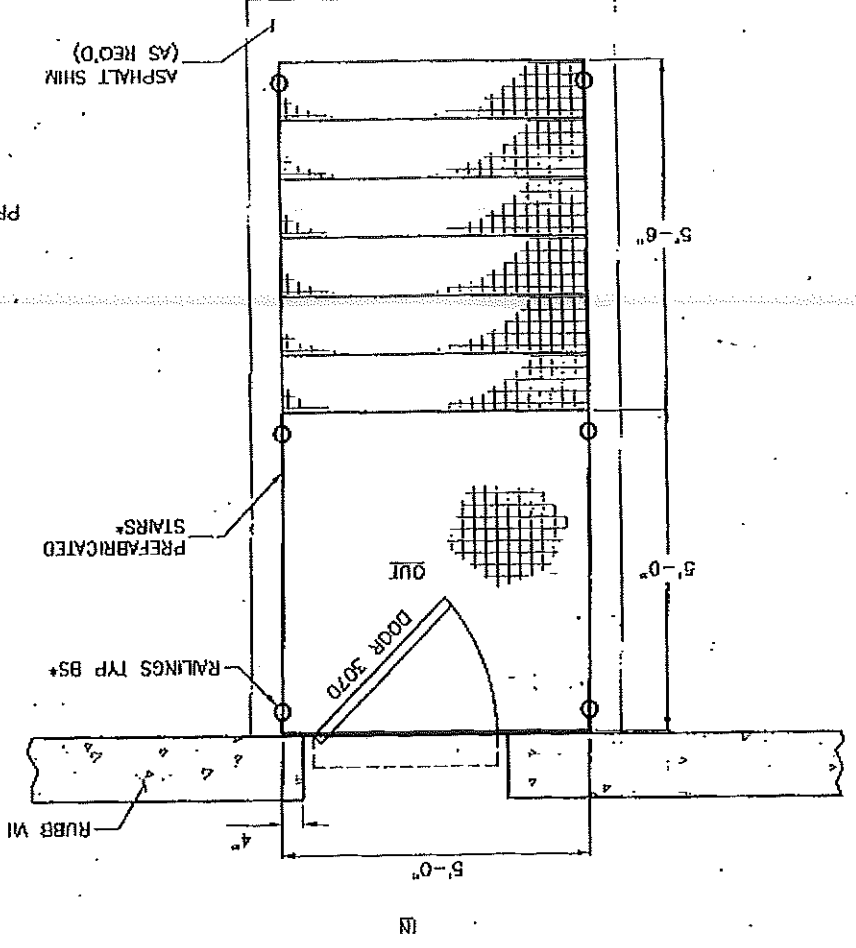
Work Order #: 1952

Page 1 of 2



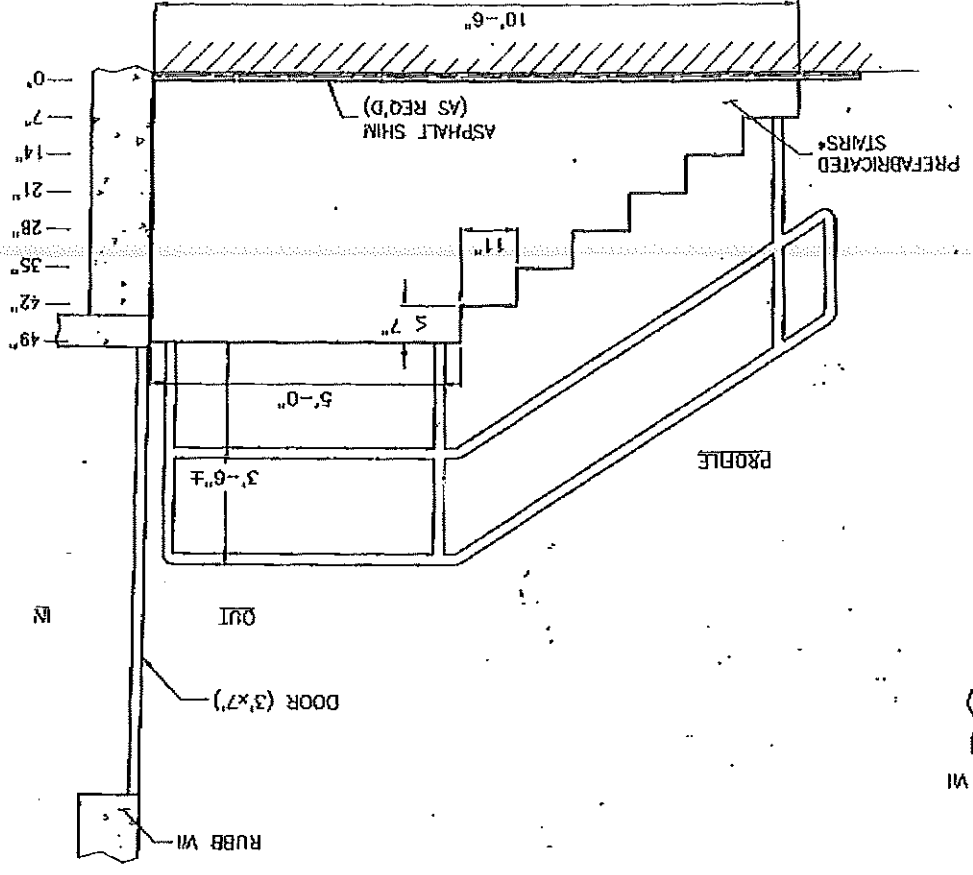
# PLAN

SCALE: 1/2"=1'-0"



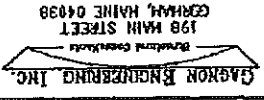
# PROFILE

SCALE: 1/2"=1'-0"



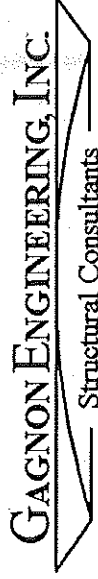
\*NOTE:  
STAIRS & RAILINGS  
SHALL COMPLY TO  
IBC SECTION 1009.

PROJECT: MERRILL MARINE TERMINAL/RUBB BUILDING VI  
 SUBJECT: PREFABRICATED METAL STAIRS  
 DRAWING: PLAN & PROFILE



DATE: 06/22/05  
 BY: RG / JC  
 SHEET: 1 OF 1  
 PROJECT NO. 407  
 REV DATE: 06/24/05

DRAWING NUMBER COMMUNICATION NUMBER DATE



City of Portland  
Building Code Enforcement Office  
389 Congress Street  
Portland, Maine 04101

November 22, 2005

Attn: Michael Nugent, Building Code Enforcement Officer

Re: Merrill – Rubb VII Project (Merrill's Marine Terminal), GEI Plans & Specs, Rev#7, 8/24/05  
Special Inspections – Foundations and Site Work

Dear Michael:

This letter serves notice that all Special Inspections were performed in accordance with applicable requirements of Section 1704 of IBC 2003, and as detailed in GEI Project-Specific Special Inspection Forms for Concrete and Site Work, dated 6-14-05.

Materials Testing, Concrete and Earthwork, was performed by S.W.Cole Engineering, Inc. (Agent #2, Gray, Maine) as the Work was installed. I (Gagnon Engineering, Agent #1, Gorham Maine) inspected Details of the Work as Concrete and Earthwork were installed. All Testing and Inspection Work has been documented; all documents and records are on file at our (GEI) office.

Foundation and Site Work was Installed As Designed. Few (minor) discrepancies occurred during Construction; all were satisfactorily resolved. There are no outstanding issues with this Work.

Attached, please find completed Forms a) Report of Special Inspection (interim), and b) Final Report of Special Inspection, for this Project.

I trust that this information meets your immediate needs. Please call if you need more.

Sincerely,

Roger R. Gagnon, P.E.

Attachment:

Special Inspection Reports & Forms (4 shis)

CC: P.D. Merrill

Lou Campbell (Cianbro)

Mark Barnes (Shaw Brothers)

Roger Dimingo (S.W.Cole Engrg.)

File #407



## Final Report of Special Inspections

Project: Merrill / Rubb VII, (Foundations & Site)  
Location: West Commercial – Merrill's Marine Terminal  
Owner: Merrill's Marine Terminal  
Owner's Address: 601A Danforth Street, Portland ME

Agent: Gagnon Engineering, Inc.  
Special Inspector: Roger R. Gagnon, P.E.  
Inspection Item: Foundations & Site

To the best of my information, knowledge, and belief, the Special Inspections or testing required for this project, and designated for this agent in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved other than the following:

Comments: N/A


(Attach continuation sheets if required to complete the description of corrections.)

Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Respectfully submitted,  
Agent or Special Inspector

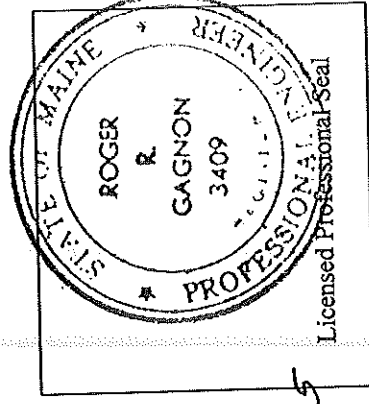
ROGER R. GAGNON

\_\_\_\_\_  
Type or print name

 11/22/05

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date





## Report of Special Inspections

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Location: West Commercial – Merrill's Marine Terminal

Owner: Merrill's Marine Terminal

Owner's Address: 601A Danforth Street, Portland ME

Agent: Gagnon Engineering, Inc.

Special Inspector: Roger R. Gagnon, P.E.

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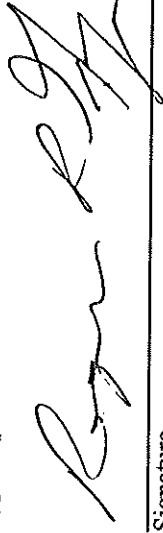
Comments: N/A

(Attach continuation sheets if required to complete the description of corrections.)

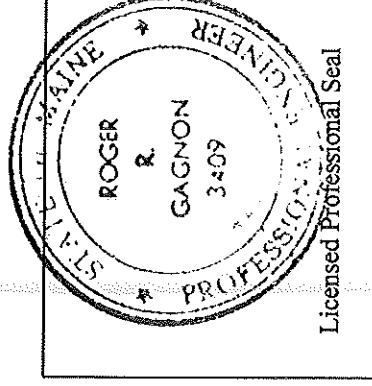
Respectfully submitted,  
Agent or Special Inspector

ROGER R. GAGNON, P.E.

\_\_\_\_\_  
Type or print name

  
\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date





**Project: Merrill / Rubb VII**

**Special Inspections: Concrete**

Date 06-14-05 By: RG

No.	Item (1)	Agent # (2)	Scope	Freq. (3)
1	Reinforcing Shop Drawings	#1	Materials, sizes, Layout, General Compliance, Footings, Walls, Slabs	
2	Concrete Mix Designs	#1	Compressive Strength, Ingredients, w/c, Slump, Additives, Walls, Footings, Slabs	
3	Footings	#1	Forms, Steps, Reinforcing	B/C
4	Walls	#1	Forms, Reinforcing, Protect & Cure	B/C
5	Inserts	#1	Anchor Bolts, Anchors & Inserts	B/C
6	Floor Slabs	#1	Reinforcing Layout, Details, Surface Preps, Concrete Placements, Protect & Cure	C/W
7	Testing	#2	Strength, Air, Slump, etc.	C/W

Notes.

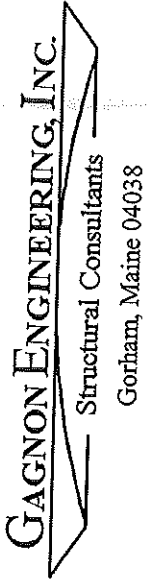
(1) Refer to Contract Plans & Specifications for Details.  
(2) Agents:

- #1) Gagnon Engineering, Inc.
- #2) SW Cole Engineering, Inc

(3) Frequency Codes. Perform Initial and work-complete inspections for all items; follow-up as required. Perform intermediate inspections or tests as follows:

- X/R = min percent / random
- C/W = continuous / with work
- B/C = Before covered

REG



Tel: (207) 839-8085 Fax: 839-8035

**Fax Transmission Cover Sheet**

Date: 11/23/05 From: Roger  
 To: Clint C Fax: 839 5036 Tel: 5039  
 Co./Org.: Gorham CED No. of Pgs: 2 (Incl Cover Pg)  
 Re: Gorham Sports Center

Notice: This message is intended only for the use of the addressee & copied individuals, and may contain confidential & privileged information. Any dissemination, distribution, or copying of this communication, except by the addressee or copied individuals is strictly prohibited. If you have received this communication in error, please notify Gagnon Engineering immediately by telephone.

Message: Clint As requested  
Please call with questions  
or if you need more  
Original of Plans are in  
the mail

Steve  
Roger  
 Please Review and Call if Questions, Problems, etc. Thanks,  
Steve Martin 839-6767

Copy: \_\_\_\_\_  
 File (GEI#): \_\_\_\_\_  
 Fax/Tel: \_\_\_\_\_





City of Portland  
 Building Code Enforcement Office  
 389 Congress Street  
 Portland, Maine 04101

Attn: Michael Nugent, Building Code Enforcement Officer

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CC: P.D. Merrill  
 Lou Campbell (Cianbro)  
 Mark Barnes (Shaw Brothers)  
 Roger Domingo (S.W.Cole Engrg.)  
 File #407



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Project: Merrill / Rubb VII, (Foundations & Site)

Location: West Commercial – Merrill's Marine Terminal

Owner: Merrill's Marine Terminal

Owner's Address: 601A Danforth Street, Portland ME

Agent: Gagnon Engineering, Inc.

Special Inspector: Roger R. Gagnon, P.E.

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Agent or Special Inspector

ROGER R. GAGNON

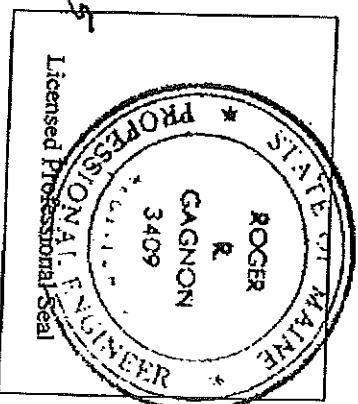
Type or print name



Signature

Date

11/22/05





## Report of Special Inspections

Project: Merrill / Rubb VII (Foundations & Site)

Location: West Commercial – Merrill's Marine Terminal

Owner: Merrill's Marine Terminal

Owner's Address: 601A Danforth Street, Portland ME

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Special Inspector: Roger R. Gagnon, P.E.

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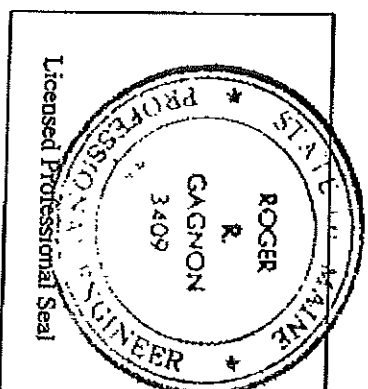
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Respectfully submitted,  
Agent or Special Inspector

ROGER R. GAGNON, P.E.

\_\_\_\_\_  
Type or print name

Signature  Date 11/23/05





Project: Merrill / Rubb VII

Special Inspections: Concrete

Date 06-14-05 By: RG

No.	Item	Agent #	Scope	Freq.
	(1)	(2)		(3)
1	Reinforcing Shop Drawings	#1	Materials, sizes, Layout, General Compliance, Footings, Walls, Slabs	
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6	Floor Slabs	#1	Reinforcing Layout, Details, Surface Preps, Concrete Placements, Protect & Cure	C/W
7	Testing	#2	Strength, Air, Slump, etc.	C/W

Notes.

(1) Refer to Contract Plans & Specifications for Details.

(2) Agents:

#1) Gagnon Engineering, Inc.  
#2) SW Cole Engineering, Inc

(3) Frequency Codes. Perform Initial and work-complete inspections for all items; follow-up as required. Perform intermediate inspections or tests as follows:

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C/W = continuous / with work

B/C = Before covered



**Project: Merrill / Rubb VII**

**Special Inspections: Site Work**

Date: 06-14-05 By: RG

No.	Item	Agent #	Scope	Freq.
	(1)	(2)		(3)
1	General Pre-Excavation & Prep	#1	Asphalt Removal, Pre-Excavation, Proof-Compaction	50/R
2	Wall Excavations	#1	Initial Excavations, Bearing Capacity, Sub-Footing Fills	B/C
3	Wall Fills	#2	Materials, Specs/Gradations, ASTM D1557, Placement, Moisture Contr., Compaction	C/W
4	Sub-Floor Fills	#2	Materials, Specs/Gradations, ASTM D1557, Placement, Moisture Contr., Compaction	C/W
5	Storm & Underdrain	#1	Materials, Prep Install, Back-Fill	50/R

Notes:

(1) Refer to Contract Plans & Specifications for Details.

(2) Agents:

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11/4/05  
COMMERCIAL / INSTALLED GAS  
HEATING EXHAUST UNIT  
ARRANGEMENT  
ATTN: DONNA  
PLEASE EXPEDITE  
7950.00

# OPERATION

# MAINTENANCE



Applied Air

4830 Transport Drive

Dallas TX 75247

T 214.638.6010

F 214.638.3324



4830 TRANSPORT DRIVE

DALLAS, TX 75247

(214) 638-6010

# Indirect Fired Unit Specification Data: F.O. # 94143

**MODEL NUMBER** GHLIFP-400/250/200  
**UNIT QUANTITY** ONE  
**CUSTOMER ORDER #** 2866-10110  
**SUPPLY AIR VOLUME** 61,000 CFM  
**SUPPLY FAN** (2) 54"  
**SUPPLY FAN TYPE** PROP  
**SUPPLY FAN RPM** 625  
**TOTAL STATIC PRESSURE** 0.25" W.C.  
**SUPPLY FAN MOTOR HP** 7-1/2 HP  
**SUPPLY FAN MOTOR TYPE** ODP  
**EXHAUSTER MOTOR HP** 2 HP  
**EXHAUSTER VOLTAGE** 460/3/60  
**INSURANCE APPROVAL** STANDARD  
**ETL APPROVAL** YES

**UNIT TAG(s)**  
 BURNER MANUFACTURER MERRILL MARINE  
 BURNER MODEL Power Flame  
 BURNER MOTOR HP C2-G-20A  
 BURNER MOTOR VOLTAGE 3/4 HP  
 MAXIMUM INPUT BTU/HR 460/3/60  
 MINIMUM INPUT BTU/HR 2,500,000  
 MAXIMUM OUTPUT BTU/HR 833,333  
 TYPE OF FUEL 2,000,000  
 SUPPLY GAS PRESSURE LP GAS  
 UNIT F.L.A. 14"WC  
 LINE VOLTAGE 28.1 AMPS  
 CONTROL VOLTAGE 460/3/60  
 CONTROL X-FORMER VA 115/1/60  
 500

**Standard Accessories**

Intake / Prop Section  S.S. Primary/Mild Steel Tubes  S.S. Primary/S.S. Tubes Approx. Weight  
 Heat Exchanger   2,585 lbs  
 Extended Grease Lines   5,716 lbs  
 Adjustable Pitch Motor Sheave  
 Disconnect Switch  
 Burner Control  
 High Gas Pressure Regulator  
 1 Damper - Standard Arrangement  
 2 Dampers - Alternate Arrangement  
 Modulating Damper Control  
 Flat Bank Filter - For One Damper  
 Flat Bank Filter - 4 Sides  
 V-Bank Filter  
 Discharge Plenum "Screened"  
 Discharge Plenum Extension - Uninsulated

On-Off  High-Low\_Off  Modulating  Shipped Loose  
 Factory Mounted  Locking Quadrant  Locking Quadrant  
 Two Position  Two Position  Building Pressure  
 Modulating  Manual Pot  Pleated  Throwaway  
 Mixed Air  Cleanable  Pleated  Throwaway  
 No Filters  Cleanable  Pleated  Throwaway  
 No Filters  Cleanable  Pleated  Throwaway  
 3 Sides  4 Sides  w/ Fresh Air Intake Opening  
 Four Foot Extension 358 lbs  
576 lbs

Painted Cabinet / Accessories  
 Heating Coil Section  
 Heating Coil Section Coil Type  HW Coil  Steam  Future Coil  Customer Supplied 0 lbs  
 Electronic Time Clock  Factory Mounted  
 Alarm Horn w/ Silencing Switch  NEMA 1  NEMA 12  
 Remote Control Station  Factory Mounted  
 Smoke Detector  Factory Mounted  
 Night Set-Back Thermostat  Factory Mounted  
 U.L. Labeled Control Panel

**Standard Ship Loose Items:**

- 1) SILICONE, 3/16 x 3/4 GASKET, SHEET METAL SCREWS.
- 2) MANUAL BALL VALVE (GP-11)

**Special Notes:**

Approximate Shipping Weight: **9,235 lbs**  
 Prepared By: **BZP**

Rev #	Rev Date	Description

## SEQUENCE OF OPERATION

All safety interlocks are closed and unit main disconnect switch (SW-01) is closed.

### FAN OPERATION:

FAN ON OFF Switch (SW-15) in ON position(or relay RE-15). Fans will run continuously. The heating circuit is enabled.

FAN ON OFF Switch (SW-15) in OFF position(or relay RE-15). Fans are off. The heating circuit is disabled.

### HEAT OPERATION:

HEAT ON OFF ( relay RE-16)in ON position. If return air temperature falls below the set point of return air ductstat (TC-55), and all safety interlocks are satisfied, then the induced draft fan and burner motors will be energized, and the flame safety relay (RE-02) will begin a ninety second pre-purge cycle. After the purge is complete the flame safety relay checks that both the induced draft fan (PS-01) and burner (PS-02) air flow switches are made before attempting to light the pilot. Once pilot is proven the main gas valve (VG-02) and auxiliary gas valve (VG-03) are energized. If the temperature continues to fall below the second stage set point of return air thermostat (TC-55) then the burner will cycle to high fire.

HEAT ON OFF (relay RE-16) in OFF position. The burner circuit is disabled.

**FAN SWITCH (FL-01):** In the event that the heat exchanger temperature is above the set point on the the fan switch (FL-01) the fan switch will energize the main fan motor starter (ST-01) to cool down the combustion chamber. **Caution:** Latent heat in the system may cause main fans to start unexpectedly. Always open and lock out main power supply before servicing equipment.

**INTERLOCKING RELAY:** Energized when fan is on

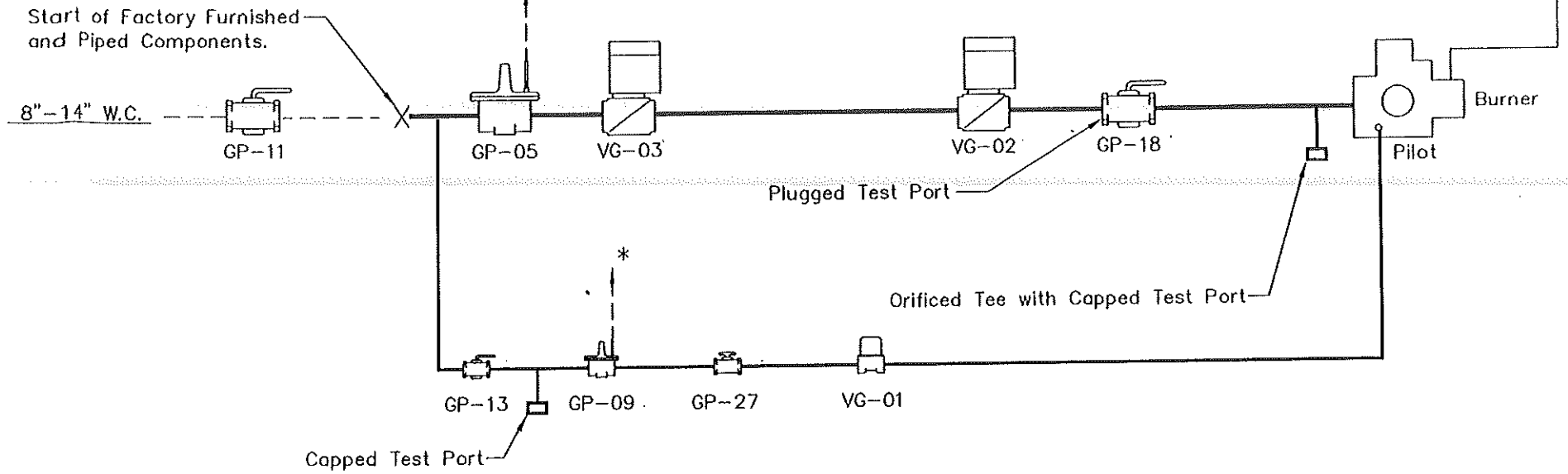


# Applied Air

REV: 0	TITLE: INDIRECT FIRED UNIT SEQUENCE OF OPERATION			DRAWING NO. SI-94143
F.O. NO. 94143	TAG: MERRILE MARINE	DRN. BY: BZP	DATE: 08.22.05	



— MANIFOLD SKETCH —



BTU/Hr. OUTPUT	350,000 THRU 750,000	850,000 THRU 1,250,000	1,500,000 THRU 1,750,000	2,000,000
PIPE SIZE	1"	1-1/4"	1-1/2"	2"

MARK	DESCRIPTION
GP-05	MAIN GAS PRESSURE REGULATOR
GP-09	PILOT GAS PRESSURE REGULATOR
GP-11	GAS SHUT-OFF VALVE ( SHIP LOOSE)
GP-13	PILOT GAS SHUT-OFF VALVE
GP-18	AUXILIARY GAS SHUT-OFF VALVE
GP-27	ORIFICED NEEDLE VALVE
PS-02	BURNER AIR FLOW SWITCH
PS-01	DRAFT PROVING SWITCH
VG-01	PILOT GAS VALVE
VG-02	MAIN GAS VALVE (3 POSITION)
VG-03	AUXILIARY GAS VALVE


**GAS PIPING - INDIRECT FIRED NOTES**

BTU BASED ON 8" INLET NATURAL GAS

— — DENOTES PIPING BY OTHERS

\* VENT LIMITING DEVICES ARE PROVIDED WHEREVER POSSIBLE, WHEN VENTING IS REQUIRED THE VENTING TO OUTSIDE IS BY OTHERS ON INDOOR UNITS, FURNISHED BY FACTORY ON OUTDOOR UNITS.

1	03/19/03	R.B.	SWITCHED POSITIONS WITH VG-01 & GP-27
REV	DATE	BY	DESCRIPTION

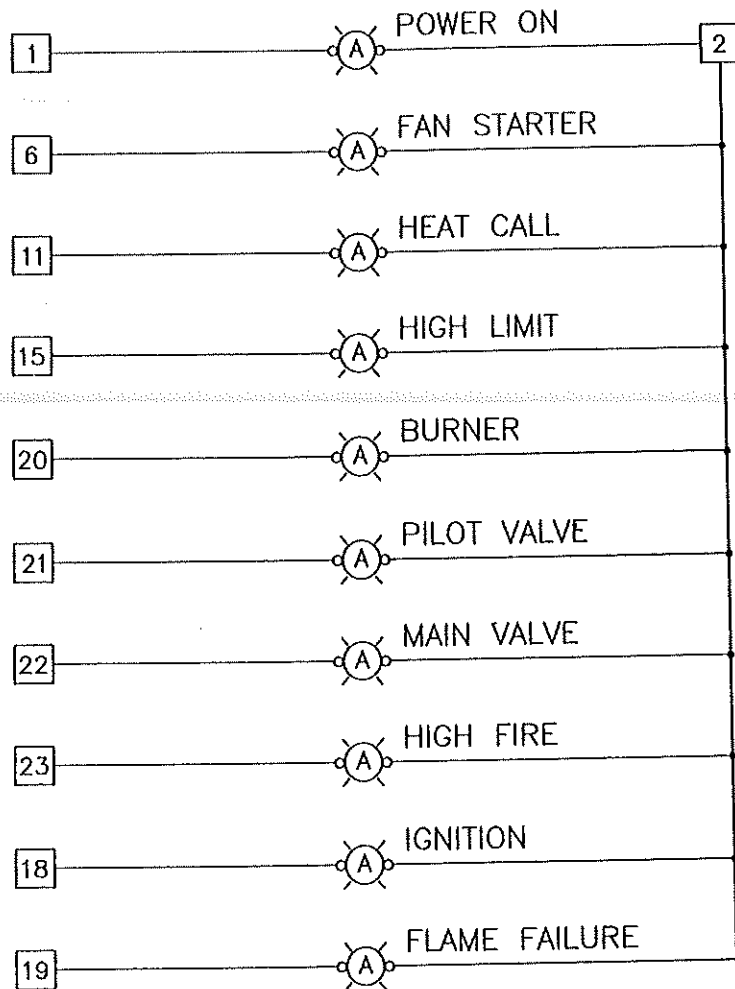

**Applied Air**

**TITLE:** OFF/LOW/HIGH STANDARD-SINGLE STAGE INDIRECT FIRED

**SCALE:** TAG: MERRILL MARINE

**REV:** 1 **F.O.#:** 94143 **DRAWING NO.:** PI-94143

**BY:** BZP **DATE:** 01/10/03



DENOTES CONTROL CABINET TERMINAL



Applied Air

REV:  
0

TITLE: 10 POINT CIRCUIT ANALYZER  
MOUNTED AND WIRED

DRAWING NO.

AI-94143

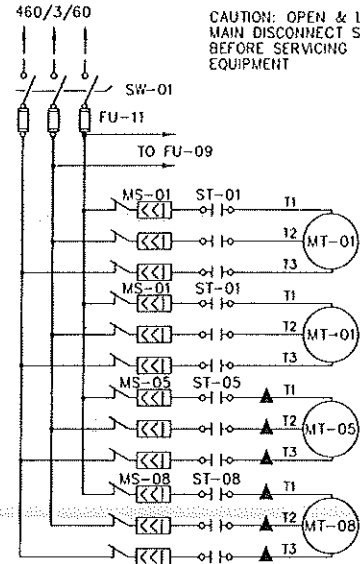
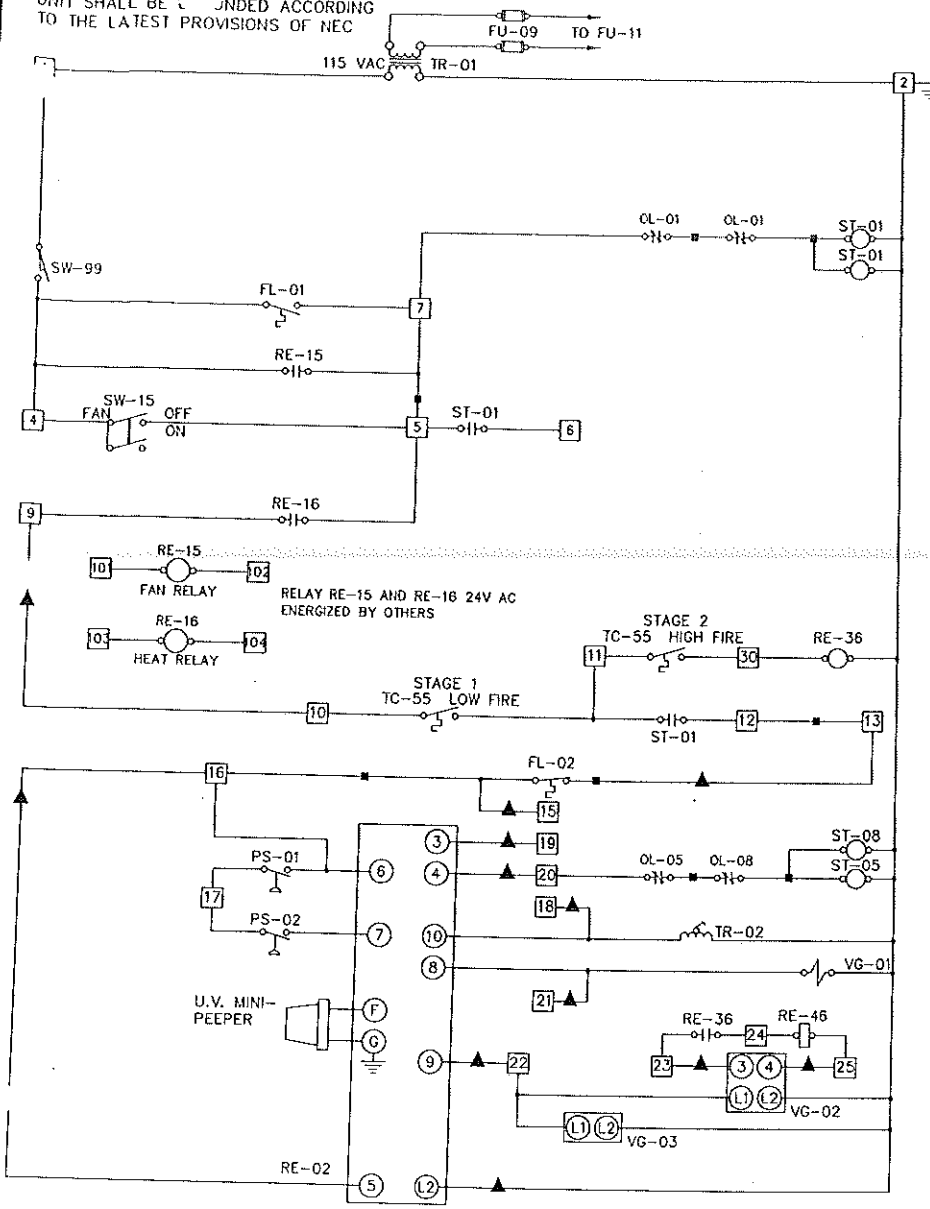
F.O. NO.  
94143

TAG:  
MERRILL MARINE

DRN. BY:  
BZP

DATE:  
08.22.05

UNIT SHALL BE INSTALLED ACCORDING TO THE LATEST PROVISIONS OF NEC



CAUTION: OPEN & LOCK OUT MAIN DISCONNECT SWITCH BEFORE SERVICING EQUIPMENT

- COMPONENT IDENTIFICATION
- FL-01 FAN SWITCH
  - FL-02 HIGH TEMPERATURE LIMIT SWITCH (AUTO)
  - FU-09 CONTROL TRANSFORMER FUSE
  - FU-11 MAIN DISCONNECT FUSE
  - MS-01 MANUAL MAIN MOTOR PROTECTOR
  - MS-05 MANUAL INDUCED DRAFT FAN PROTECTOR
  - MS-08 MANUAL BURNER FAN PROTECTOR
  - MT-01 MAIN SUPPLY FAN MOTOR
  - MT-05 INDUCED DRAFT FAN MOTOR
  - MT-08 BURNER MOTOR
  - PS-01 DRAFT PROVING SWITCH
  - PS-02 BURNER AIR SWITCH
  - RE-02 BURNER RELAY
  - RE-15 FAN RELAY (24V)
  - RE-16 HEAT RELAY (24V)
  - RE-36 HIGH FIRE RELAY
  - RE-46 TIME DELAY RELAY (SET @ 10 SEC.)
  - ST-01 MAIN SUPPLY FAN MOTOR STARTER
  - ST-05 INDUCED DRAFT FAN MOTOR STARTER
  - ST-08 BURNER FAN MOTOR STARTER
  - SW-01 MAIN DISCONNECT SWITCH
  - SW-15 FAN ON-OFF SWITCH
  - SW-16 HEAT ON-OFF SWITCH
  - SW-99 DOOR INTERLOCK SWITCH
  - TC-55 2 STAGE RETURN AIR DUCTSTAT
  - TR-01 CONTROL VOLTAGE TRANSFORMER
  - TR-02 GAS IGNITION TRANSFORMER
  - VG-01 PILOT GAS VALVE
  - VG-02 MAIN GAS VALVE
  - VG-03 AUX. GAS VALVE

NOTES

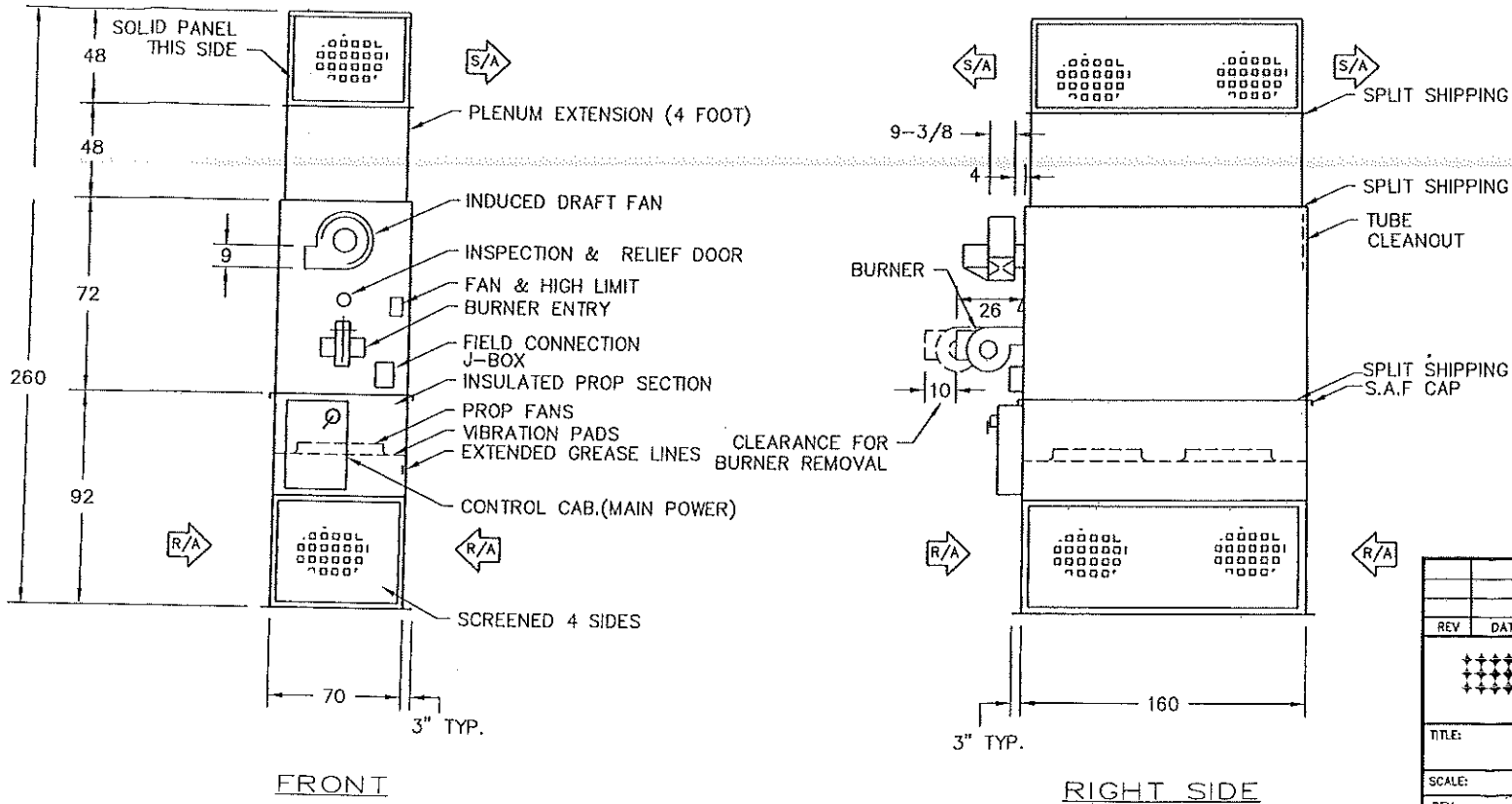
- NOTE: BECAUSE OF SHIPPING RESTRICTIONS FIELD CONNECTIONS AND/OR WIRING BETWEEN COMPONENTS OR SECTIONS MAY BE REQUIRED
- DENOTES COMPONENT TERMINAL NUMBER AND WIRING
  - DENOTES JUMPER WIRE
  - +— DENOTES WIRE CONNECTION
  - DENOTES CONTROL CABINET TERMINAL BLOCK & WIRE NUMBER
  - DENOTES BURNER TERMINAL BLOCK & WIRE NUMBER
  - DENOTES WIRING BY OTHERS
  - ⌘ DENOTES WIRE NUMBER LEADS
  - ▲ DENOTES WIRE CONNECTION BY OTHERS BETWEEN HEAT EXCHANGER J-BOX AND MAIN CONTROL CABINET AFTER FIELD MOUNTING OF SECTIONS
  - △ DENOTES COMPONENTS BY OTHERS


1-TO-99 TERMINAL BLOCK-115 VOLT  
101-TO-199 TERMINAL BLOCK-24 VOLT

REV	DATE	BY	DESCRIPTION
TITLE:			GHLIFP-400/250/200
SCALE:		TAG: MERRILL MARINE	
REV: 0	F.D.#: 94143	DRAWING NO:	
BY: BZP	DATE: 08.22.05	WI-94143	

NOTES

1. UNIT SUITABLE FOR INDOOR APPLICATION.
2. DISCHARGE SECTION SHIPPED KNOCKED DOWN.
3. DISCHARGE PLENUM EXTENSION 4 FOOT.



REV	DATE	BY	DESCRIPTION
 <b>Applied Air</b>			
TITLE:			GHLIFP-400/250/200
SCALE:		TAG: MARRILL MARINE	
REV:	0	F.O.#:	94143
BY:	BZP	DATE:	08.22.05
			DRAWING NO. DI-94143

04480

*LOLA DANKFORTH ST*  
*WPD Zone*

**MEMORANDUM**

*2/2/05  
called PD  
spoke to.*

To: Bill Needleman, City of Portland, Planning Department

From: Don McElhinney

Date: February 1, 2005

Subject: Response to DeLuca-Hoffman Comments  
Merrill Industries - Rubb #7  
Site Location Application

*Don McElhinney*

*2/2/05*

Enclosed please find updated site plans for the project. These plans include:

- A Site Circulation Plan by Sebago Technics, Inc. (STI)
- A Revised Grading and Utility Plan by Gagnon Engineering
- An Erosion/Sediment Control Plan by STI
- Two 11 x 17 drawings from Rubb Building Systems

The balance of this memo responds point by point to the comments of DeLuca-Hoffman Associates.

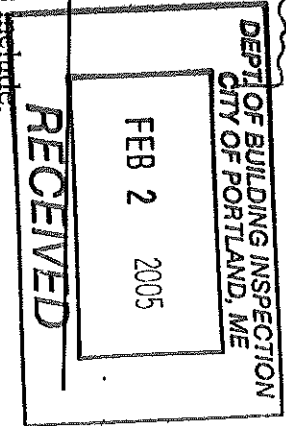
**Item 1a** - A copy of the response to this application from the Maine Historic Preservation Commission is attached. No response has been received to date from the Maine Inland Fish and Wildlife Department.

**Item 1b** - The company owns a "Tenant" vacuum sweeper which it uses to clean roadways and parking lots as required. The cleanliness standard is mandated primarily by its customers.

**Item 2** - We concur that water quality should be improved simply due to the change in use and elimination of the scrap metal piles which historically occupied the development area.

**Item 3a** - We have reviewed the project with Portland Water District. A copy of correspondence from them is attached for your use.

**Item 3b** - A site circulation map has been developed for the site. A copy has been attached. The hydrant located near the proposed building is a private hydrant and as such, the maintenance



of the hydrant has been performed by Merrill Industries and the City of Portland Fire Department has also conducted inspections routinely. During this project, Lt. Gaylon McDougall of the Portland Fire Department was consulted for his input on fire flows at this location. Since we know the available flow/pressure from hydrant testing on West Commercial Street by PWD in the 1990s, Lt. McDougall was not concerned that available water flow and pressure would be available at the private hydrant.

**Item 3c** – Sebago Technics has reviewed and modified the site grading and stormwater conveyance system. Please refer to the revised plans enclosed herein.

**Items 3d** – We have received sections of the building from Rubb Building Systems which show the height of the building.

**Items 3e** – We are in the process of determining whether FAA review is necessary and if we need to file for review with them.

**Item 3f** – Proper inverts for the stormwater conveyance system have been added to the site utility and grading plan.

**Item 3g** – The building floor plan showing points of egress has been included with this submittal. Generally, it is seen that personnel doors are located at each corner of the building and one additional personnel door is located midway along the south side of the building.

**Item 3h** – Lights will be located on all sides of the building. These are now shown on the attached drawings from Rubb and these are generally located 11' from grade.

**Item 3i** – An Erosion/Sedimentation Control Plan has been developed for the site by STI. This drawing is enclosed.

**Items 3j** – The proposed building will predominantly be founded on fill material. Dewatering during construction is not anticipated by the geotechnical report Section 11 of the original submittal.

DTM:djf



MAINE HISTORIC PRESERVATION COMMISSION

55 CAPITOL STREET

65 STATE HOUSE STATION

AUGUSTA, MAINE

04333

C 4480

JOHN ELIAS BALDACCI

GOVERNOR

EARLE G. SHETTLEWORTH, JR.

DIRECTOR

December 22, 2004

Donald T. McElhinney, VP Environmental Engineering  
Sebago Technics  
1 Chabot St. / P.O. Box 1339  
Westbrook, ME 04098-1339

Project: MHPC #2667-04 - proposed development; Merrill Industries site, Danforth Street  
Town: Portland, ME

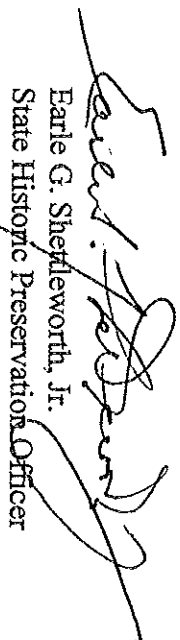
Dear Mr. McElhinney:

In response to your recent request, I have reviewed the information received December 3, 2004 to initiate consultation on the above referenced project pursuant to Maine's Site Location of Development Law.

Based on the location and scope of work, I have concluded that this project will have no effect upon historic properties [architectural or archaeological].

Please contact Mike Johnson of my staff if we can be of further assistance in this matter.

Sincerely,

  
Earle G. Shettleworth, Jr.  
State Historic Preservation Officer

EGS/mj

12-28-04



INSTITUTIONAL SERVICES UNIT

PHONE: (207) 287-2132

FAX: (207) 287-2335



Portland Water District  
P.O. Box 3553  
225 Douglass Street  
Portland, Maine 04104-3553

Phone: 207-774-5961  
FAX: 207-761-8307  
Web Site: [www.pwd.org](http://www.pwd.org)

1/28/2005

Mr. Donald Maceihinney  
Sebago Technics  
One Chabot St., POB 1339  
Westbrook, ME 040981339

With regard to the Project known as Merrill Marine Terminal located on/in Danforth Street, Portland we offer the following comments pertaining to plans received 1/27/2005

It was a pleasure to meet with you on January 26, 2005 to discuss this project. This letter will confirm that an "easement modification agreement" will be needed to permit the fill over our existing 20" water main and any other site improvements that are planned within our easement. As long as no building will be constructed in the easement, this can be handled at staff level without Trustee action being required. If the corner of the proposed building will encroach, then Trustee action would be required. Based on our review of the plans you left with me, it appears that the building will encroach by one foot.

You mentioned that the westerly end of the building may be shortened and moved easterly a few feet, and if this is done it is likely that the encroachment will not occur. If there is no shortening of the building, then, sliding the whole structure to the east a few feet, or to the south a foot would clear the encroachment, too.

As your plans develop, please apply to Norman Twaddel, our Right of Way Agent, to initiate the easement modification process. If I can be of further assistance, please advise me.



Jeff Hewett



**Intended Use**

For outdoor storage areas, warehouse and factory perimeters and loading docks.

**Features**

**Housing** - Rugged, die-cast aluminum housing. Corrosion-resistant captive external hardware includes slotted hex-head fasteners. Standard finish is dark bronze polyester powder, electrostatically applied and oven-cured. Other architectural colors available.

**Optics** - Reflector is specular anodized aluminum. Refractor is prismatic borosilicate glass. Lens is sealed and gasketed to inhibit entrance of outside contaminants.

**Ballast** - 70-150W HPS & 100-150M: High-reactance, high-power factor. All others: Reactant-wattage autotransformer. Encased-and-potted solid-state ignitors (HPS and 100MH). Ballast is copper wound and 100% factory tested. UL listed. Electrical components mounted in

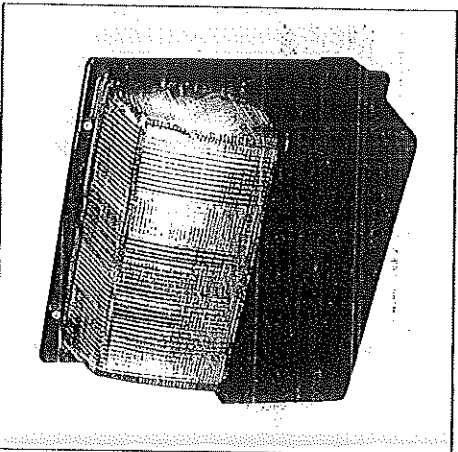
hinged front cover that includes primary and secondary electrical disconnect.

**Installation** - Back housing is separated from front housing, eliminating ball weight and promoting easy handling.  $\frac{3}{4}$ " threaded wiring access. Back access through removable  $\frac{3}{4}$ " knockout. Mount on any flat, non-combustible vertical surface. **Not recommended in applications where a sprayed stream of water can come in direct contact with glass lens.**

**Socket** - Glazed porcelain (mogul-base horizontally oriented with cooper all-nickel-plated screw shell and center contact 4KV pulse rated. Medium-base: listed 660W, 600V. Mogul-base: UL listed 1500W, 600V.

**Listings** - UL Listed (standard). CSA NOM Certified (see Options). UL listed wet locations. IP65 rated (250W and below) or IP54 rated (400W) in accordance with IEC standard 529.

For product details and performance data, see the OUTDOOR binder or the on-line catalog at [www.litonia.com](http://www.litonia.com)



**Ordering Information**

Example: **TWH 250S**

Designation	Voltage
High Pressure Sodium	120
TWH 78S	208 <sup>7</sup>
TWH 100S	240 <sup>7</sup>
TWH 150S <sup>3</sup>	277
TWH 200S	347
TWH 250S	480 <sup>8</sup>
TWH 400S	480 <sup>8</sup>
TWH 250/400S <sup>4</sup>	TB <sup>9</sup>
Metal Halide	
TWH 150M	
TWH 175M	
TWH 200M <sup>10</sup>	
TWH 250M <sup>11</sup>	
TWH 320M <sup>12</sup>	
TWH 350M <sup>13</sup>	
TWH 400M <sup>14</sup>	
Mercury Vapor	
TWH 100H	
TWH 175H	
TWH 250H	
Low Pressure Sodium	
TWH 35LT	
Incandescent	
TWH 300I <sup>2</sup>	

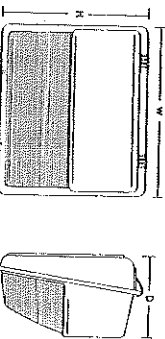
Installed	Options/Accessories
SF Single fuse (120, 277, 347V) <sup>1</sup>	CR Corrosion-resistant finish
DF Double fuse (208, 240, 480V) <sup>1</sup>	
EC Emergency circuit <sup>1,12</sup>	
QRS Quartz restrike system <sup>1,12</sup>	

Lamp/Fixture/Ballast Data <sup>10</sup>	Weight
Wattage	Lbs. Kg.
High Pressure Sodium (Med/Clear)	
35 RHPF-RNPF	24 11
50 RHP	24 11
70 HX-HPF	24 11
100 HX-HPF	24 11
150	26 12
High Pressure Sodium (Mog/Clear)	
200	28 13
250 CWA	32 15
400	42 19
Metal Halide (Med/100) Mog/Clear	
100 XHP	26 12
150	26 12
175	26 12
250 CWA	32 15
400	42 19
Mercury Vapor (Mog/Coated)	
100	21 10
175 CWA	23 10
250	26 12
Low Pressure Sodium (D.C. Bay/Clear)	
35 HX-HPF	25 11

CRT Corrosion-resistant finish (Teflon) <sup>13</sup>	RNP Reactor Normal Power Ballast (HPS 150W & below only)
PE Photoelectric cell - button type	XHP Reactance High Power Reactor ballast (HPS 150W & below only)
PER NEMA twist-lock receptacle <sup>13</sup>	CSA CSA Certified (cons factory)
LPI Lamp (shipped in carton with fixture)	NOM NOM Certified (cons factory)
LS Lamp support (mogul socket only)	
FS Full shield	
WG Wireguard <sup>15</sup>	
VG Vandal guard <sup>15</sup>	
SCWA Super SCWA Pulse Start Ballast (150M-400M only--n/a 175M )	
RHP Reactor High Power factor Ballast (HPS 150W & below only)	

For optional Architectural Colors, see page 349.

Accessories	(Order separat
RK1 PER1	Photoelectric control kit, 120V
PE3	NEMA twist-lock photocontrol, 34
PE4	NEMA twist-lock photocontrol, 48



Dimensions are shown in inches (centimeters) unless otherwise noted.

TWH  
Height 15 1/4 (40)  
Width 16 1/4 (40.9)  
Depth 8 (20.3)

**NOTES:**

- 1 Not available TB.
- 2 120V only.
- 3 Operates 55V lamp.
- 4 Shipped as 250S.
- 5 Must be ordered with SCWA.
- 6 Frequency: T-15, ED or BT 28 reduced jacket temp.
- 7 Consult factory for availability in Canada.
- 8 Not available in Canada.
- 9 Optional multi-tap ballast (120, 208, 277V; 120, 277, 347V in Canada).
- 10 Other ballast types available.
- 11 Lamp not included.
- 12 Quartz lamp wattages do not exceed last wattage rating.
- 13 Black finish only.
- 14 Photocell not included.
- 15 Requires factory modification.

**MERRILL INDUSTRIES, INC.**

Minutes of Neighborhood Meeting  
6:00 PM Monday January 31, 2005

At  
601 Danforth Street  
Portland, Maine

Attendance: A) Neighborhood: Joan Amory  
59 Chadwick Street  
Portland

B) Merrill Industries: P. D. Merrill

Subject: Proposed Rubb VII Warehouse Development

Meeting was called to order at 6:10 PM in the lower corridor of the marine terminal office to review the overall site plan and proposed warehouse layout and elevations.

Mrs. Amory was reporting for "Working Waterfront" newspaper and was interested in the building construction, history of the building company, other applications of the building and its performance in fire and other casualty situations.

All questions were covered and the meeting was adjourned at 6:28 PM.

Respectfully submitted,

P. D. Merrill

subject to the following requirements:

- (1) Minimum lot size: None.
- (2) Minimum frontage: None.
- (3) Minimum yard dimensions:
  - Front setback: None.
  - Side setback: None.
  - Rear setback: None.
- Setback from pier line: Notwithstanding the above requirements, a minimum setback of five (5) feet from the edge of any pier, wharf or bulkhead shall be required for any structure. The setback area may be utilized for activities related to the principal uses carried on in the structure, subject to the provisions of sections 14-319 and 14-320, but shall not be utilized for off-street parking. The edge of any pier, wharf or bulkhead shall include any attached apron(s).
- (4) Maximum lot coverage: One hundred (100) percent.
- (5) Maximum building height: Forty-five (45) feet, except as follows:
  - a. In the areas bounded as described below, facilities for bulk storage of materials delivered to a site by waterborne transportation or awaiting transportation from the site by means of waterborne transportation may be erected up to the maximum heights indicated (above mean sea level):
    1. In the area that lies between Danforth Street and the Veterans Memorial Bridge: One hundred Forty-five (145) feet.
    2. In the area between Danforth Street and the projection of the centerline of Vaughn Street between its intersections with Orchard Street and Danforth Street: Seventy (70) feet.

3. In the area between the projection of the centerline of Vaughn Street between its intersections with Orchard Street and Danforth Street and the projection of the centerline of Fletcher Street between its intersections with Orchard Street and Danforth Street: Seventy-five (75) feet.
4. In the area formed by the projection of the centerline of Fletcher Street between its intersections with Orchard Street and Danforth Street easterly to the projection of the centerline of Emery Street between its intersections with Taylor Street and Danforth Street: Seventy-five (75) feet.
5. In those areas where the maximum height may not exceed forty-five (45) feet above grade, no structure may exceed sixty-five (65) feet in height above mean sea level.

b. For purposes of this section, a projection of the centerline of a street shall consist of an extension of the centerline of the street to the water side boundary of the waterfront port development zone.

Additional bulk, height and location standards for structures exceeding forty-five (45) feet in height above grade within the waterfront port development zone:

1. The maximum horizontal diagonal measurement of portions of a structure, cluster of structures or equipment exceeding forty-five (45) feet in height above grade shall not exceed one hundred (100) feet, except that for each foot that the structure, cluster of structures, or equipment is lowered from the maximum permitted height, the maximum horizontal measurement may increase by one (1) foot.

In addition to any other setback requirements, portions of structures or clusters of

Chapter 14  
Page 354 of 666

100' max + 90' = 190' = MAX horizontal measurement

145' height  
55' - guess  
980' lower than max  
2.

# MERRILL INDUSTRIES, INC.

114 Eben Hill Road, Yarmouth, ME 04096

May 20, 2005

City of Portland  
Building Department  
Attn: Michael Nugent  
389 Congress Street  
Portland, ME 04102

Re: Building Permit Application  
Rubb VII, 601 Danforth Street

Dear Mr. Nugent:

Merrill Industries is now applying for a building permit to allow construction of Rubb VII as reviewed and approved with certain conditions by the Planning Department on February 8, 2005.

Merrill Industries, Inc. owns the land and improvements and leases them to Sprague Energy Inc. which operates the property as a marine terminal in substantially the same manner as it has been operated since 1982. The proposed building will be constructed on the site of a pad currently used for the accumulation of recycled metal prior to shipment by ocean vessel. This activity will be terminated and the space will be occupied by Rubb VII which will be constructed in substantially the same manner and for the same purpose as Rubb VI which we constructed in 2002. Rubb VII is designed and will be used for the storage of newsprint. This building will be served by rail and truck and will receive cargo from vessels which is currently being transshipped directly from the vessel to South Portland warehouses. The net result is a significant reduction of truck traffic in and out of the terminal because of the elimination of the recycled metal operation.

As with Rubb VI, Rubb VII will have an advanced smoke detection and alarm system. Fire suppression as designed and installed by Dean & Allyn will be provided by six hose reels served by an 8" water main.

Planning Department conditions:

- i. A water capacity letter from the Portland Water District is enclosed.
- ii. A \$5,000 check to the Portland Tree Trust is enclosed.
- iii. Evidence of inspection, cleaning and maintenance of the existing vortechmics unit is enclosed.
- iv. A revised exterior lighting fixture (copy enclosed) has been submitted to the Planning Board for review and approval.
- v. A Permit By Rule application for grading at the water's edge has been filed.

Building Department requirements:

A permit fee based on a construction cost of \$2,410,000 is enclosed in the amount of \$21,711.


Two sets of stamped drawings and 1 PDF including site plan, grading plan and foundation and slab plan prepared by Gagnon Engineering Inc. of Gorham, Maine are enclosed.

Two sets of stamped drawings and 1 PDF including building plan and elevation, anchor bolt layouts, roof truss, leg truss and axial steel together with cable isometric drawings, purlin and steel layout drawings all prepared by Rubb Buildings of Sanford, Maine are enclosed.

Both firms performed similar work for Rubb VI.

A Signage permit application will be filed separately.

Thanks for your early consideration of this important working waterfront project.

Sincerely,  
  
P.D. Merrill  
President

**Please call 874-8703 or 874-8693 to schedule your inspections as agreed upon**

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

A Pre-construction Meeting will take place upon receipt of your building permit.

- Call Footing/Building Location Inspection: Prior to pouring concrete
- Call Re-Bar Schedule Inspection: Prior to pouring concrete
- Call Foundation Inspection: Prior to placing ANY backfill
- Call Framing/Rough Plumbing/Electrical: Prior to any insulating or drywalling
- Call Final/Certificate of Occupancy: Prior to any occupancy of the structure or use. NOTE: There is a \$75.00 fee per inspection at this point.

Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects DO require a final inspection

         If any of the inspections do not occur, the project cannot go on to the next phase, **REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.**

**CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED**

[Signature]  
Signature of Applicant/Designee

Date

6/24/06

Date

[Signature]  
Signature of Inspections Official

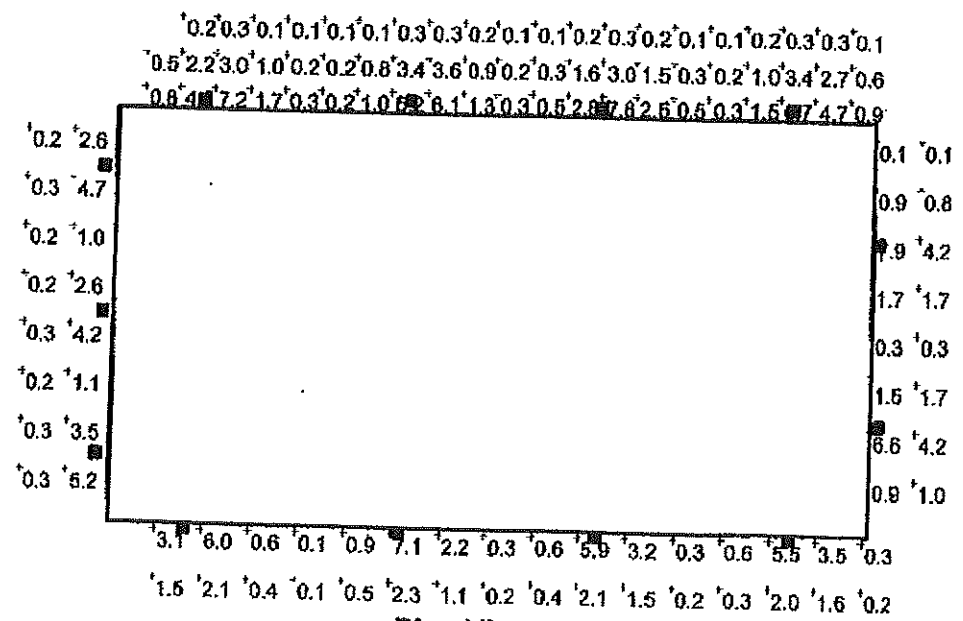
CBL 012 A 003 Building Permit #: 050630

# LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
■	A	13	MH-IT-175	CUT-OFF WALL LUMINAIRE	175 WATT MH ED-17 MEDIUM BASE CLEAR	IP15H.IES	14000	0.75	210

## STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
North End	+	1.5 fc	7.8 fc	0.1 fc	78.0:1	14.7:1
South End	+	1.8 fc	7.1 fc	0.1 fc	71.0:1	17.7:1
West End	+	1.7 fc	5.2 fc	0.2 fc	26.0:1	8.4:1
East End	+	2.1 fc	7.9 fc	0.1 fc	79.0:1	21.2:1



**Plan View**  
Scale 1" = 80'

*Everett  
18  
observer will*



Merrill Marine  
RUBB Building Exterior Lighting

Designer MRW
Date Apr 28 2005
Scale
Drawing No.



Merrill's Marine Terminal  
**Weekly Stormwater System Maintenance Report**

By: Jeff Brawn      Week Ending: 2-May-05

DAILY: Yard sweeping by.      Initials required

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
DG	DG	DG	DG	DG		

WEEKLY:

Mead Pad CATCH BASIN #1	Warren Pad CATCH BASIN #2	NORTH TRENCH	EAST TRENCH	SOUTH TRENCH
CLEAN	CLEAN	OK	OK	N/A

**SILT FENCE**  
 Check, Clean and Repair/Replace as needed

- East Pool      OK
- Center Pool    OK
- West Wharf    OK

MONTHLY:      Open and check on or about the First      4/11/2005

VORTECH #1 North west 32" SEDIMENT

VORTECH #2 South 38" SEDIMENT

GENERAL COMMENTS (Heavy Precipitation, Spills, System Malfunctions, Cleanings, ETC.)

ALL SILT FENCE REPAIRED

CATCH BASINS AND VORTECS NEED CLEANING AND PUMPING