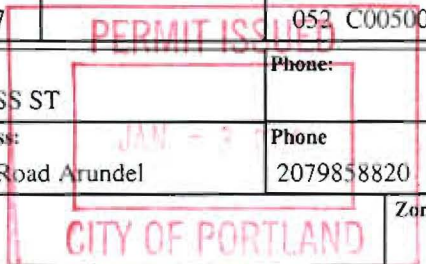


**City of Portland, Maine - Building or Use Permit Application**

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

|                       |             |                     |
|-----------------------|-------------|---------------------|
| Permit No:<br>05-1767 | Issue Date: | CBL:<br>052 C005001 |
|-----------------------|-------------|---------------------|

|   |   |   |                      |
|---|---|---|----------------------|
| Location of Construction:<br>233 PARK AVE | Owner Name:<br>CITY OF PORTLAND               | Owner Address:<br>389 CONGRESS ST                 | Phone:               |
| Business Name:                            | Contractor Name:<br>Mechanical Solutions, Inc | Contractor Address:<br>1513 Portland Road Arundel | Phone:<br>2079858820 |
| Lessee/Buyer's Name                       | Phone:  | Permit Type:<br>HVAC                              | Zone:                |



|  |   |  |                               |  |
|--|---|--|-------------------------------|--|
| Past Use:<br>Commercial/ Expo  | Proposed Use:<br>Expo/ install 2 Cleaver Brooks Gas & oil fired boilers in Basement | Permit Fee:<br>\$1,461.00  | Cost of Work:<br>\$160,000.00 | CEO District:<br>1   |
| Proposed Project Description:<br>install 2 Cleaver Brooks Gas & oil fired boilers in Basement  |   | <b>FIRE DEPT:</b><br><input checked="" type="checkbox"/> Approved<br><input type="checkbox"/> Denied<br>NFA 31<br>NFA 54<br>NFA 70 |                               | <b>INSPECTION:</b><br>Use Group: U<br>Type: NA<br>Boiler Replacement<br>Signature: [Signature]<br>Date: 12/27/05 |
| <b>PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)</b><br>Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied<br>Signature: _____ Date: _____ |   |  |                               |  |

|                             |                                 |                        |  |  |
|-----------------------------|---------------------------------|------------------------|--|--|
| Permit Taken By:<br>Idobson | Date Applied For:<br>12/06/2005 | <b>Zoning Approval</b> |  |  |
|-----------------------------|---------------------------------|------------------------|--|--|

|  |   |   |   |
|--|---|---|---|
| 1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.<br><br>2. Building permits do not include plumbing, septic or electrical work.<br><br>3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work.. | <b>Special Zone or Reviews</b><br><input type="checkbox"/> Shoreland<br><input type="checkbox"/> Wetland<br><input type="checkbox"/> Flood Zone<br><input type="checkbox"/> Subdivision<br><input type="checkbox"/> Site Plan<br>Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/><br>Date: | <b>Zoning Appeal</b><br><input type="checkbox"/> Variance<br><input type="checkbox"/> Miscellaneous<br><input type="checkbox"/> Conditional Use<br><input type="checkbox"/> Interpretation<br><input type="checkbox"/> Approved<br><input type="checkbox"/> Denied<br>Date: | <b>Historic Preservation</b><br><input type="checkbox"/> Not in District or Landmark<br><input type="checkbox"/> Does Not Require Review<br><input type="checkbox"/> Requires Review<br><input type="checkbox"/> Approved<br><input type="checkbox"/> Approved w/Conditions<br><input type="checkbox"/> Denied<br>Date: |
|--|---|---|---|

SCANNED

**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

|   |         |      |       |
|---|---------|------|-------|
| SIGNATURE OF APPLICANT                      | ADDRESS | DATE | PHONE |
| RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE |         | DATE | PHONE |

|  |  |  |                            |
|--|--|--|----------------------------|
| <b>Location of Construction:</b><br>233 PARK AVE | <b>Owner Name:</b><br>CITY OF PORTLAND               | <b>Owner Address:</b><br>389 CONGRESS ST                 | <b>Phone:</b>              |
| <b>Business Name:</b>                            | <b>Contractor Name:</b><br>Mechanical Solutions, Inc | <b>Contractor Address:</b><br>1513 Portland Road Arundel | <b>Phone</b><br>2079858820 |
| <b>Lessee/Buyer's Name</b>                       | <b>Phone:</b>  | <b>Permit Type:</b><br>HVAC                              | <b>Zone:</b>               |

|   |   |                                 |                                  |
|---|---|---------------------------------|----------------------------------|
| <b>Dept:</b> Building   | <b>Status:</b> Approved with Conditions                 | <b>Reviewer:</b> Mike Nugent    | <b>Approval Date:</b> 12/27/2005 |
| <b>Note:</b>  | <b>Ok to Issue:</b> <input checked="" type="checkbox"/> |                                 |                                  |
| 1) Installation shall comply with 2003 International Mechanical Code and State of Maine Oil and Solid Fuel Board Laws and Rules |   |                                 |                                  |
| <b>Dept:</b> Fire   | <b>Status:</b> Approved with Conditions                 | <b>Reviewer:</b> Cptn Greg Cass | <b>Approval Date:</b> 12/07/2005 |
| <b>Note:</b>  | <b>Ok to Issue:</b> <input checked="" type="checkbox"/> |                                 |                                  |
| 1) Install to comply with the following codes.<br>NFPA 54<br>NFPA 31<br>NFPA 70<br>The more stringent shall apply               |   |                                 |                                  |

**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

---

|                       |         |      |     |
|-----------------------|---------|------|-----|
| SIGNATURE OF APPLICAN | ADDRESS | DATE | PHO |
|-----------------------|---------|------|-----|

---

|   |      |     |
|---|------|-----|
| RESPONSIBLE PERSON IN CHARGE OF WORK, TIT | DATE | PHO |
|---|------|-----|



FILL IN AND SIGN WITH INK

# APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

PERMIT ISSUED  
JAN 13 2006  
CITY OF PORTLAND  
SAC 5

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL 10/How Exposition Bldg 239 Park Use of Building School Bldg Date 12/6/05  
Name and address of owner of appliance City of Portland  
339 Congress St, Portland  
Installer's name and address Mechanical Solutions, Inc  
1510 Portland Rd, Arundel, ME Telephone 207 945-8820

### Location of appliance:

- Basement
- Floor
- Attic
- Roof

### Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: (2) Cleaver Boshers 1

U.L. Approved  Yes  No model # CO-20-155

Will appliance be installed in accordance with the manufacture's installation instructions?  Yes  No

IF NO Explain: \_\_\_\_\_

### The Type of License of Installer:

- Master Plumber # \_\_\_\_\_
- Solid Fuel # \_\_\_\_\_
- Oil # \_\_\_\_\_
- Gas # PNT 2139
- Other \_\_\_\_\_

### Type of Chimney:

- Masonry Lined
- Factory built \_\_\_\_\_

Metal select metal listed  
Factory Built U.L. Listing # UL 103

Direct Vent  
Type \_\_\_\_\_ UL# \_\_\_\_\_

### Type of Fuel Tank

- Oil
- Gas

Size of Tank 8000 gal - existing

Number of Tanks 1

Distance from Tank to Center of Flame 15 feet.

Cost of Work: \$ 160,000

Permit Fee: \$ \_\_\_\_\_

### Approved

Fire: \_\_\_\_\_  
Ele.: \_\_\_\_\_  
Bldg.: \_\_\_\_\_

### Approved with Conditions

See attached letter or requirement

Inspector's Signature

Date Approved

Signature of Installer B. T. Maw

Table A3-3. 4WG Ratings - Hot Water

| BOILER H.P.  | 100  | 125  | 150  | 200  | 250   | 300   | 350   | 400   | 500   | 600   | 700   | 800          |
|--|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|--------------|
| BURNER MODEL   | FP-3 | FP-3 | FP-3 | FP-4 | FP-4  | FP-4  | D145P | D175P | D210P | D252P | D300P | D378P        |
| RATINGS - SEA LEVEL TO 700 FT.   |      |      |      |      |       |       |       |       |       |       |       |              |
| Btu Output (1000 Btu/hr)   | 3347 | 4184 | 5021 | 6694 | 8368  | 10042 | 11715 | 13389 | 16736 | 20083 | 23430 | 26778        |
| APPROXIMATE FUEL CONSUMPTION AT RATED CAPACITY BASED ON NOMINAL 82% EFFICIENCY |      |      |      |      |       |       |       |       |       |       |       |              |
| Light Oil gph (140,000 Btu/gal)  | 29.2 | 36.4 | 43.7 | 58.3 | 72.9  | 87.5  | 102.0 | 116.6 | 145.8 | 174.9 | 204.1 | 233.3        |
| Gas CFH (1000 Btu)   | 4082 | 5102 | 6123 | 8164 | 10205 | 12246 | 14287 | 16328 | 20410 | 24492 | 28574 | 32656        |
| Gas (Therm/hr)   | 40.8 | 51.0 | 61.2 | 81.6 | 102.0 | 122.5 | 142.9 | 163.3 | 204.1 | 244.9 | 285.7 | 326.6        |
| POWER REQUIREMENTS - SEA LEVEL TO 700 FT. (60 HZ)                              |      |      |      |      |       |       |       |       |       |       |       |              |
| Blower Motor hp  | 2    | 3    | 5    | 5    | 5     | 7-1/2 | 15    | 20    | 25    | 30    | 40    | 75           |
| Circulating Oil Pump Motor hp (Oil only)                                       | *    | *    | *    | 1/2  | 1/2   | 3/4   | 3/4   | 3/4   | 3/4   | 3/4   | 1     | 1            |
| Oil Metering Pump Motor hp (Oil only)  | -    | -    | -    | -    | -     | -     | -     | 1/2   | 3/4   | 3/4   | 3/4   | 1            |
| Integral Oil/Air Motor hp (Oil only)   | -    | -    | -    | -    | -     | -     | 2     | -     | -     | -     | -     | -            |
| Air Compressor Motor hp (Oil only)   | **   | **   | **   | 3    | 3     | 3     | -     | 5     | 5     | 7-1/2 | 7-1/2 | 15           |
| BOILER DATA  |      |      |      |      |       |       |       |       |       |       |       |              |
| Heating Surface sq.-ft. (Fireside)   | 500  | 625  | 750  | 1000 | 1250  | 1500  | 1750  | 2000  | 2500  | 3000  | 3500  | See Note "B" |

\* Integral oil pump  
 \*\* No air compressor required (pressure atomized)  
 NOTES:

- A. All fractional hp motors will be single phase voltage except oil metering pump motor(3-phase); Integral hp motors will be 3-phase voltage.
- B. 800 hp boilers are available w/ 3500 or 4000 sq. ft. of heating surface

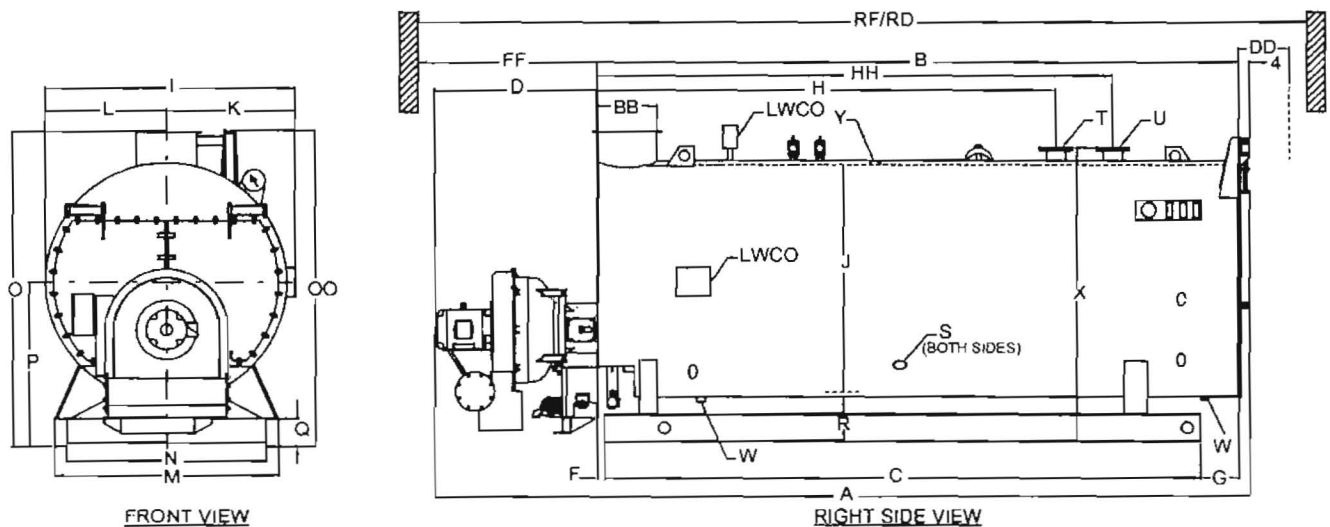


Figure A3-2. 4WG - Hot Water 100-800 HP

C129989

CONFIG  
PROC\_BEFORE  
SHUTDOWN  
OK4MAINT  
ARCH\_MAINT  
LOGTRIM  
FAXMODEMS  
STARTUP  
BACKUP  
DSDA\_LOAD  
CAB\_HOST\_DB  
DSDA\_CAP  
DSDA\_SEND  
ARCH\_STATUS  
ARCH\_QUEUE  
DISK\_SPACE  
AVAIL\_INODE  
PROC\_AFTER

Table A3-4. 4WG Dimensions - Hot Water

| BOILER H.P.  | DIM | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    | 500    | 600    | 700    | 800    | *800   |
|--|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>LENGTHS</b>   |     |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Overall Length   | A   | 174    | 198    | 186    | 227.5  | 220.25 | 244.25 | 245.25 | 263.25 | 276.75 | 311.75 | 296.5  | 304    | 331    |
| Shell  | B   | 131    | 155    | 143    | 177    | 172.5  | 196.5  | 189.75 | 207.75 | 213.75 | 248.75 | 232.75 | 232.75 | 259.75 |
| Base Frame   | C   | 119.63 | 143.63 | 131.5  | 165.5  | 159.12 | 183.12 | 176.75 | 194.75 | 198.75 | 233.75 | 217.75 | 217.75 | 244.75 |
| Burner Extension   | D   | 39     | 39     | 39     | 46.5   | 43.75  | 43.75  | 51.5   | 51.5   | 59     | 59     | 59.75  | 67.25  | 67.25  |
| Smokebox to Base   | F   | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    |
| Rear Ring Flange to Base   | G   | 10.88  | 10.88  | 11     | 11     | 13     | 13     | 13.5   | 13.5   | 14.5   | 14.5   | 14.5   | 14.5   | 14.5   |
| Smokebox to Return   | H   | 78     | 99     | 87     | 121    | 113.5  | 137.5  | 130.75 | 148.75 | 143    | 151.75 | 146.25 | 146.75 | 173.75 |
| Smokebox to Outlet   | HH  | 103    | 124    | 112    | 146    | 139.5  | 163.5  | 156.75 | 174.75 | 179    | 187.75 | 182.25 | 182.75 | 209.75 |
| <b>WIDTHS</b>  |     |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Overall Width  | I   | 70     | 70     | 77.5   | 77.5   | 88     | 88     | 95     | 95     | 108    | 106    | 118    | 116    | 116    |
| D. Boiler  | J   | 60     | 60     | 67     | 67     | 78     | 78     | 85     | 85     | 96     | 96     | 106    | 106    | 106    |
| Center to LWCO Controller  | K   | 37     | 37     | 40.75  | 40.75  | 46     | 46     | 49.5   | 49.5   | 55     | 55     | 60     | 60     | 60     |
| Center to Lagging  | L   | 33     | 33     | 36.75  | 36.75  | 42     | 42     | 45.5   | 45.5   | 51     | 51     | 56     | 56     | 56     |
| Base Outside   | M   | 52.5   | 52.5   | 51     | 51     | 64     | 64     | 60     | 60     | 71.88  | 71.88  | 74.75  | 74.75  | 74.75  |
| Base Inside  | N   | 44.5   | 44.5   | 43     | 43     | 56     | 56     | 47     | 47     | 58.88  | 58.88  | 61.75  | 61.75  | 61.75  |
| <b>HEIGHTS</b>   |     |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Base to Rear Davit   | OO  | 86.12  | 86.12  | 92.75  | 92.75  | 98.88  | 98.88  | 112.75 | 112.75 | 125.12 | 125.12 | 134.25 | 134.25 | 134.25 |
| Base to Vent Outlet  | O   | 85     | 85     | 89.88  | 89.88  | 106    | 106    | 115    | 115    | 126    | 126    | 135.83 | 135.83 | 135.83 |
| Base to Boiler Centerline  | P   | 46     | 46     | 50     | 50     | 56     | 56     | 61     | 61     | 67     | 67     | 71     | 71     | 71     |
| Height of Base Frame   | Q   | 12     | 12     | 12     | 12     | 12     | 12     | 12     | 12     | 12     | 12     | 12     | 12     | 12     |
| Base to Bottom of Boiler   | R   | 15.83  | 15.83  | 16.13  | 16.13  | 16.5   | 16.5   | 18     | 18     | 18.5   | 18.5   | 17.5   | 17.5   | 17.5   |
| Base to Return & Outlet  | X   | 82.38  | 82.38  | 92.63  | 92.63  | 101.5  | 101.5  | 110    | 110    | 121.5  | 121.5  | 130.5  | 130.5  | 130.5  |
| <b>BOILER CONNECTIONS</b>  |     |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Waterfill Connection (Both Sides)  | S   | 1.25   | 1.5    | 1.5    | 2      | 2      | 2      | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    |
| Water Return (See Note "A")  | T   | 4      | 6      | 6      | 6      | 8      | 8      | 8      | 10     | 10     | 12     | 12     | 12     | 12     |
| Water Outlet (See Notes "A & B")   | U   | 4      | 6      | 6      | 6      | 8      | 8      | 8      | 10     | 10     | 12     | 12     | 12     | 12     |
| Drain-Front & Rear   | W   | 1.5    | 1.5    | 1.5    | 2      | 2      | 2      | 2      | 2      | 2      | 2      | 2      | 2      | 2      |
| Air Vent   | Y   | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 2      | 2      | 2      | 2      | 2      | 2      |
| <b>VENT STACK</b>  |     |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Vent Stack Diameter (Flanged)  | BB  | 16     | 16     | 16     | 16     | 20     | 20     | 24     | 24     | 24     | 24     | 24     | 24     | 24     |
| <b>MINIMUM CLEARANCES</b>  |     |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Rear Door Swing  | DD  | 30     | 30     | 33.5   | 33.5   | 39     | 39     | 42.5   | 42.5   | 46     | 46     | 53     | 53     | 53     |
| Tube Removal - Front Only  | FF  | 96     | 120    | 108    | 142    | 132.5  | 156.5  | 148    | 166    | 169    | 204    | 188    | 188    | 215    |
| <b>MINIMUM BOILER ROOM LENGTH ALLOWING FOR DOOR SWING AND TUBE REMOVAL FROM.</b> |     |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Thru Window or Door  | RD  | 228    | 252    | 254.5  | 288.5  | 300.5  | 324.5  | 329.25 | 347.25 | 367.75 | 402.75 | 403.75 | 403.75 | 430.75 |
| Front of Boiler  | RF  | 257    | 305    | 284.5  | 352.5  | 344    | 392    | 380.25 | 418.25 | 428.75 | 498.75 | 473.75 | 473.75 | 527.75 |
| <b>WEIGHTS IN LBS</b>  |     |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Normal Water Weight  | -   | 6,890  | 8,580  | 8,870  | 11,600 | 14,760 | 17,380 | 19,220 | 21,520 | 26,260 | 31,580 | 35,900 | 35,900 | 40,930 |
| Approx. Shipping Weight - (30psig)   | -   | 10,860 | 12,080 | 13,090 | 15,260 | 19,110 | 21,050 | 24,760 | 27,640 | 33,295 | 38,150 | 42,320 | 42,320 | 46,300 |
| Approx. Shipping Weight - (125psig)  | -   | 11,600 | 12,980 | 14,040 | 16,680 | 20,670 | 23,140 | 26,930 | 30,060 | 35,390 | 40,550 | 45,430 | 45,430 | 49,750 |

NOTES:

Accompanying dimensions, while sufficiently accurate for layout purposes, must be confirmed for construction by certified dimension diagram/drawing

All Connections are Threaded Unless Otherwise Indicated:

NOTE "A": ANSI 150 psig Flange

NOTE "B": Water Outlet includes 2" Dip Tube

NOTE "C": \*800 hp w/ 4000 sq. ft. of heating surface

Status of DSDA Servers before health

|             |                       |   |         |
|-------------|-----------------------|---|---------|
| [ dsda_cap] | DSDA Capture          | 6 | running |
| [ dsdasend] | DSDA Archive Manager  | 1 | running |
| [ dbsvr]    | Ctree Database Server | 1 | running |
| [ imgsrvr]  | Image Server          | 1 | running |
| [ faxsrvr]  | Fax Server            | 1 | running |
| [ fs]       | Font Server           | 1 | running |
| [ dsdamgr]  | DSDA Process Manager  | 1 | running |

*P - 8/74*

MNT Archive Directory Maintenance

FormQ          DateDir

Testing FAXModem

FAXModem status before test

fax1 /dev/ttya03mbi 2079851937 idle

23:02/04/2002:1515:jarilyn:5:2:F:Retry times used up.:6:3243454:ASAP:1545:5:5:N  
73:05/28/2002:1458:karen:5:2:F:Retry times used up.:6:7978080:ASAP:1528:5:5:N  
77:06/18/2002:0957:ken:5:1:F:Retry times used up.:6:8540745:ASAP:1023:5:5:N  
78:06/18/2002:0957:ken:5:2:F:Retry times used up.:6:8540745:ASAP:1028:5:5:N

fax1: Modem on port ttya03m alive and verified.

FAXModem status after test

fax1 /dev/ttya03mbi 2079851937 idle

SyncConfig Status

Last SyncConfig on 2002/11/04 06:44:59 OK

Nightly Tape Backup Status

2002/10/30 00:24:21 01:00:43 837MB/0MB - Successful - FSV verify9530  
2002/10/31 00:24:22 01:00:50 838MB/0MB - Successful - FSV verify20316  
2002/11/01 00:24:25 01:00:59 839MB/0MB - Successful - FSV verify32421  
2002/11/02 00:24:19 01:00:58 839MB/0MB - Successful - FSV verify2987  
                  OMB/OMB - NA - FSV verify17317

DSDA Software Load Status

|        |                       |        |            |          |
|--------|-----------------------|--------|------------|----------|
| DX041B | DSDA CoRA Integration | loaded | 09/27/2001 | 12:56:00 |
| DK041B | Data Archiving        | loaded | 10/17/2001 | 13:51:00 |
| DC041B | Central DSDA Support  | loaded | 10/17/2001 | 13:53:00 |
| DP041B | DSDA Fax              | loaded | 10/17/2001 | 13:51:00 |



# CITY OF PORTLAND, MAINE

## Department of Building Inspections

12-6 20 05

Received from Mechanical Services

Location of Work Exp 239 Park

Cost of Construction \$ \_\_\_\_\_

Permit Fee \$ \_\_\_\_\_

Building (IL)  Plumbing (I5)  Electrical (I2)  Site Plan (U2)

Other \_\_\_\_\_

CBL: 0205

Check #: 3803

Total Collected \$ 1461

## THIS IS NOT A PERMIT

No work is to be started until PERMIT CARD is actually posted upon the premises. Acceptance of fee is no guarantee that permit will be granted. PRESERVE THIS RECEIPT. In case permit cannot be granted the amount of the fee will be refunded upon return of the receipt less \$10.00 or 10% whichever is greater.

WHITE - Applicant's Copy

YELLOW - Office Copy

PINK - Permit Copy