

City of Portland, Maine - Building or Use Permit Application
 389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 02-0775	Issue Date: 30 7/11/02	CBL: 068 B012001
Location of Construction: 91 St John St	Owner Name: Greater Portland Transit	Owner Address: 89 St John St
Business Name: n/a	Contractor Name: Avery Services, Inc.	Contractor Address: 7 Thomas Drive Westbrook
Lessee/Buyer's Name: n/a	Phone: n/a	Permit Type: HVAC
		Zone: I kb

Past Use: Commercial / Transit District	Proposed Use: Commercial / Install Carrier Gas / Electric Roof Top Units	Permit Fee: \$30.00	Cost of Work: \$0.00	CEO District: 3
Proposed Project Description: Install Heating System		FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: S-1 Type: 2C B	
		Signature:	Signature: <i>[Signature]</i>	
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)				
Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied				
		Signature:	Date:	

Permit Taken By: gg	Date Applied For: 07/11/2002	Zoning Approval		
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1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. 2. Building permits do not include plumbing, septic or electrical work. 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..	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MIM <input type="checkbox"/>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied
	Date: <i>7/16/02</i>	Date:	Date: <i>[Signature]</i>

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.

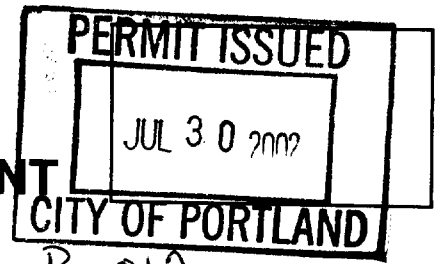
SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE



FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT



02 0775

68 B 012

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 91 St. John Use of Building METRO/OFFICES Date 7/12/02
 Name and address of owner of appliance GREATER PORTLAND TRANSIT DISTRICT
114 VALLEY ST - PORTLAND, ME 04102
 Installer's name and address EVERY SERVICES, INC 7 Thomas Drive Westbrook, Me
 Telephone 207-772-8687 64092

Location of appliance:

- Basement
- Attic
- Floor
- Roof

Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: Carrier Gas/Electric Rooftop Units

U.L. Approved Yes No

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 # PNT1431
- Other _____

Type of Chimney:

- Masonry Lined
Factory built N/A
 - Metal
Factory Built U.L. Listing # N/A
 - Direct Vent
Type _____ UL# _____
- CALL WHEN READY*

Type of Fuel Tank

- Oil
- Gas - no utilities

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 50,689.00

Permit Fee: \$ _____

Approved

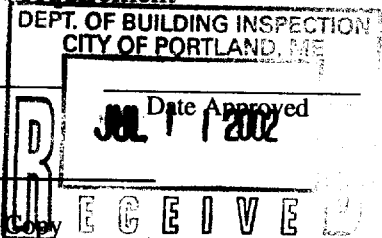
Fire: _____
 Ele.: _____
 Bldg.: _____

Approved with Conditions

- See attached letter or requirement

Signature of Installer Douglas Clancy

Inspector's Signature _____



White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

ALEXANDER HUTCHEON ASSOCIATES
ENGINEERS519 CONGRESS STREET
PORTLAND, MAINE 04101
TELEPHONE 207 774-0484

July 22, 2002

Mr. Stephen R. Kirby
Greater Portland Transit District
114 Valley Street
Portland, Maine 04102Re: Supports for new rooftop air conditioning units
Greater Portland Transit District Building

Dear Mr. Kirby:

At your request, I have examined the existing roof framing of the office section of your building at 114 Valley Street, and I have determined the loads which will be imposed on this roof framing by two new rooftop air conditioning units.

As shown on the enclosed calculation sheet, the new units can be installed in the locations shown without exceeding the allowable capacity of the roof framing.

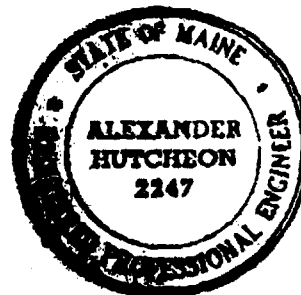
Part of the available reserve capacity in the roof is due to the fact that the same joist section, 14H7, was used on a 21 ft. span as for a 24 ft. span. Another factor is the removal of stone ballast from the roof, when the roofing was replaced.

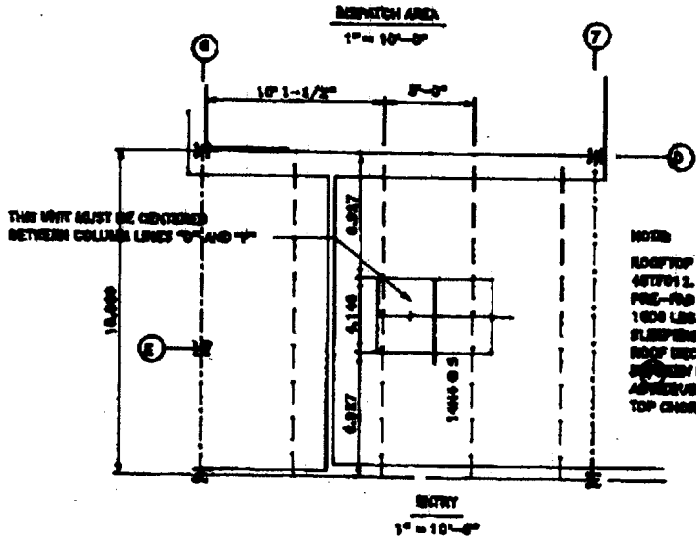
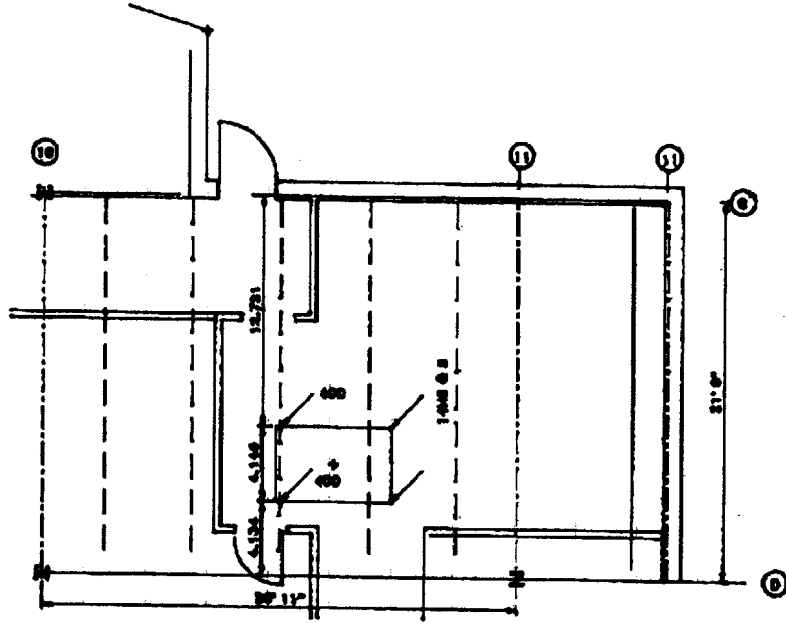
The steel girders have been unloaded by about 10 lbs. per sq. ft., and the new units will have no significant effect on these girders, because of this unloading.

Please note that the unit at the entry must be centered between the girder lines "D" and "F".

Your questions and comments regarding this report are welcome.

Very truly yours,

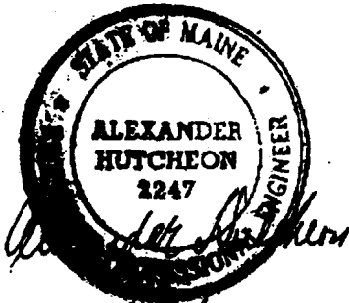
ALEXANDER HUTCHEON Associates,
EngineersAlexander Hutcheon, P.E.
PresidentEnclosures: Calculation sheet 1 of 1
Partial roof framing plans, with locations of new
units



NOTE:
 ROOFTOP UNITS ARE GARNER MODEL
 487012 OPERATING WEIGHT, INCLUDING
 PRE-PAID CURB, IS NOT GREATER THAN
 1000 LBS. CURBS MUST BEAR ON WOOD
 SLEEPERS, FASTENED TO THE DECK.
 ROOF DECK PROVIDE BUILDING
 SUPPORT ROOF DECK AND STEEL JOIST,
 APPROVED, TO TRANSFER LOAD TO
 TOP CHORDS OF STEEL JOISTS

SUPPORTS FOR ROOFTOP A. C. UNITS
 GREATER PORTLAND TRANSIT DISTRICT
 PORTLAND, ME.

ALEXANDER HUTCHEON Associates,
 Engineers
 515 Congress Street
 Portland, ME 04101
 (207) 774-0400



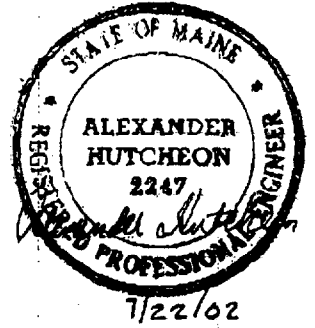
7/22/02

BY A. HUTCHEON DATE 7/22/02 SUBJECT A.C UNIT SUPPORTS
CHKD. BY _____ DATE _____ GREATER PORTLAND TRANSIT DIST.

SHEET NO. 1 OF 1
JOB NO. _____

ROOF SNOW LOAD : $7R_g = .7(60) = 42$ PSF.

ROOF DEAD LOAD : ROOFING & INSULATION	2	PSF.
STEEL ROOF DECK	2	
SUSPENDED CEILING	5	
LIGHTS, DUCTS, MISC.	2	
SPRINKLERS	2	
	<u>13</u>	PSF.



STEEL JOISTS SPACED 5' O.C.

ROOF LOAD TO JOISTS : 14 H7 5(55) + 10 = 285 PLF.
14 H4 5(55) +

FOR 14 H7 JOIST, 21' SPAN, AT DISPATCH AREA

CAPACITY AT 21' = 438 PLF. > 285 PLF OK

MAXIMUM ALLOWABLE MOMENT = 369,000 ^{ft-lb}

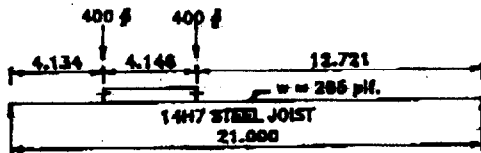
MOMENT, INCLUDING CONCENTRATED LOADS = 18,292 ^{ft-lb}
= 219,506 ^{ft-lb}

.85(369,000) = 313,650 ^{ft-lb} OK

MAXIMUM ALLOWABLE REACTION = 4600 ^{lb}

REACTION, INCLUDING CONCENTRATED LOADS = 3556 ^{lb}

.85(4600) = 3910 ^{lb} OK



LOADS 14H7
P1=-400.00
dP1=4.14

P2=-400.00
dP2=4.15

w1=-285.00
L1=21.00
dW1=0.00

SPAN=21.00

REACTIONS
LEFT=3,555.97
RIGHT=3,229.03

MAX M
X=9.7
M=18,292.16

FOR 14 H4 JOIST, 18' SPAN, AT ENTRY

CAPACITY, AT 18', = 389 PLF > 285 PLF: OK

MAXIMUM ALLOWABLE MOMENT = 212,000 ^{ft-lb}

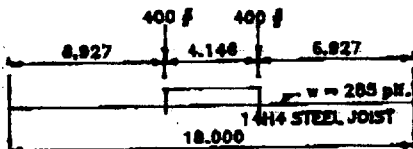
MOMENT, INCLUDING CONCENTRATED LOADS, = 14,313.3 ^{ft-lb}
= 171,760 ^{ft-lb}

.85(212,000) = 180,200 OK

MAXIMUM ALLOWABLE REACTION = 3500 ^{lb}

REACTION, INCLUDING CONCENTRATED LOADS = 2965 ^{lb}

.85(3500) = 2975 ^{lb} OK



LOADS 14H4
P1=-400.00
dP1=6.93

P2=-400.00
dP2=4.15

w1=-285.00
L1=18.00
dW1=0.00

SPAN=18.00

REACTIONS
LEFT=2,965.00
RIGHT=2,965.00

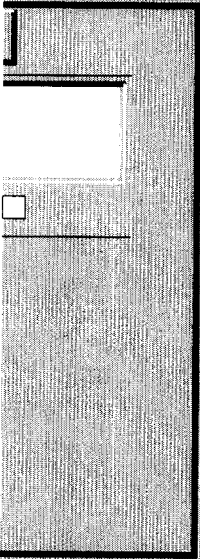
X=9.0
M=14,313.30

Taxes Due

Close

20775

07/11/2002



/2002

PROPOSAL

99

AVERY SERVICES, INC.
7 Thomas Drive
WESTBROOK, MAINE 04092
(207) 772-8687

J12957

FAX (207) 874-0933

TO: Greater Portland Transit District

~~Metro~~ 114 VALLEY ST
~~P.O. Box 1097~~ PORTLAND ME 04102
Attn: Steve Kirby
~~Portland ME 04104-1097~~

PHONE 774-0351 - Fax: 774-6241	DATE 7/2/02
JOB NAME / LOCATION Removal of an existing Rooftop Gas Heat Unit Installation of Central HVAC System Office Areas at 114 Valley Street - Portland	
JOB NUMBER DCA- 230386	JOB PHONE

We hereby submit specifications and estimates for:

Avery Services, Inc. is pleased to quote as requested on the removal & disposal of your existing (failing Gas-Fired Rooftop Heating Unit, and installation of a Central Heating/Cooling system for your Office Suite as per our site visit discussion and limited information you provided. Scope of work to include:

Removal & disposal of your existing Dravo Hastings Gas-fired Rooftop units.

Supply & assemble (spot) (2) Manufacturer's roof curbs for the new Carrier gas/electric rooftop units. (Curbs to be installed & leveled by others).

Supply & install (2) Carrier 48TFE 10 ton gas/elec. Rooftop Units with an economizer to be set onto the new curb.

Supply & install (1) Carrier Comfort Zone (4-zone) system (for front offices, board room, maint. manager wing) includes: (1) Master controller, remote sensors, dampers, bypass damper, low voltage wiring. Supply & install a Carrier programmable thermostat & low voltage wiring for the other unit.

Demo the existing duct system (which is uninsulated & undersized for the new installation).

Supply & install PVC condensate trap on each rooftop unit.

Supply & install a galvanized (insulated supply) metal duct system above the drop ceiling. The supply duct will be comprised of pipe/flex runnouts & ceiling diffusion (with manual volume dampers at each take off). The return duct system will be comprised of both some high & low returns to allow the most comfort during both heat & cool seasons (some of the duct will be lined for sound attenuation).

Supply & install gas piping from the existing old unit piping across the roof & tie into the new units.

Price includes: crane cost, transportation of the new units to the site & old unit for disposal.

Start up & test, customer orientation of controls.

OPTION A: To add a (4) Zone Control System to the other unit (core area, dispatch, drivers room, locker room, lunch room), add \$2,800.00 initial.

EXCLUSIONS: Power wiring, structural, roof work, fire dampers, fire systems, overtime labor, , soffitng, carpentry, painting, air balance, drop ceiling disassembly/re-assembly, adequacy of existing systems.

We Propose hereby to furnish material and labor — complete in accordance with the above specifications, for the sum of:

Forty Seven Thousand Eight Hundred Eighty Nine and 00/100 Dollars

dollars (\$

47,889.00)

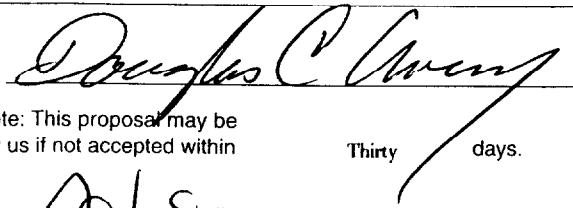
Payment to be made as follows:

25% Upon equipment delivery - Progress billing/net 10 days - Balance on completion.

If payment is not made as outlined above, a service charge of 2% per month on the overdue balance plus all reasonable costs of collection, including attorney's fees will be paid.

All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by Worker's Compensation insurance.

Authorized Signature

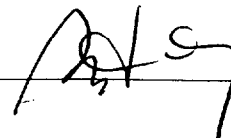


Note: This proposal may be withdrawn by us if not accepted within

Thirty days.

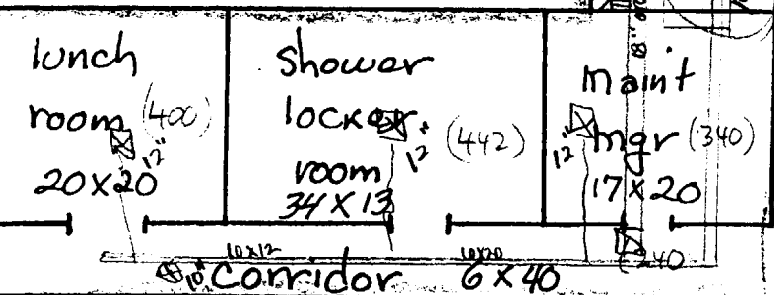
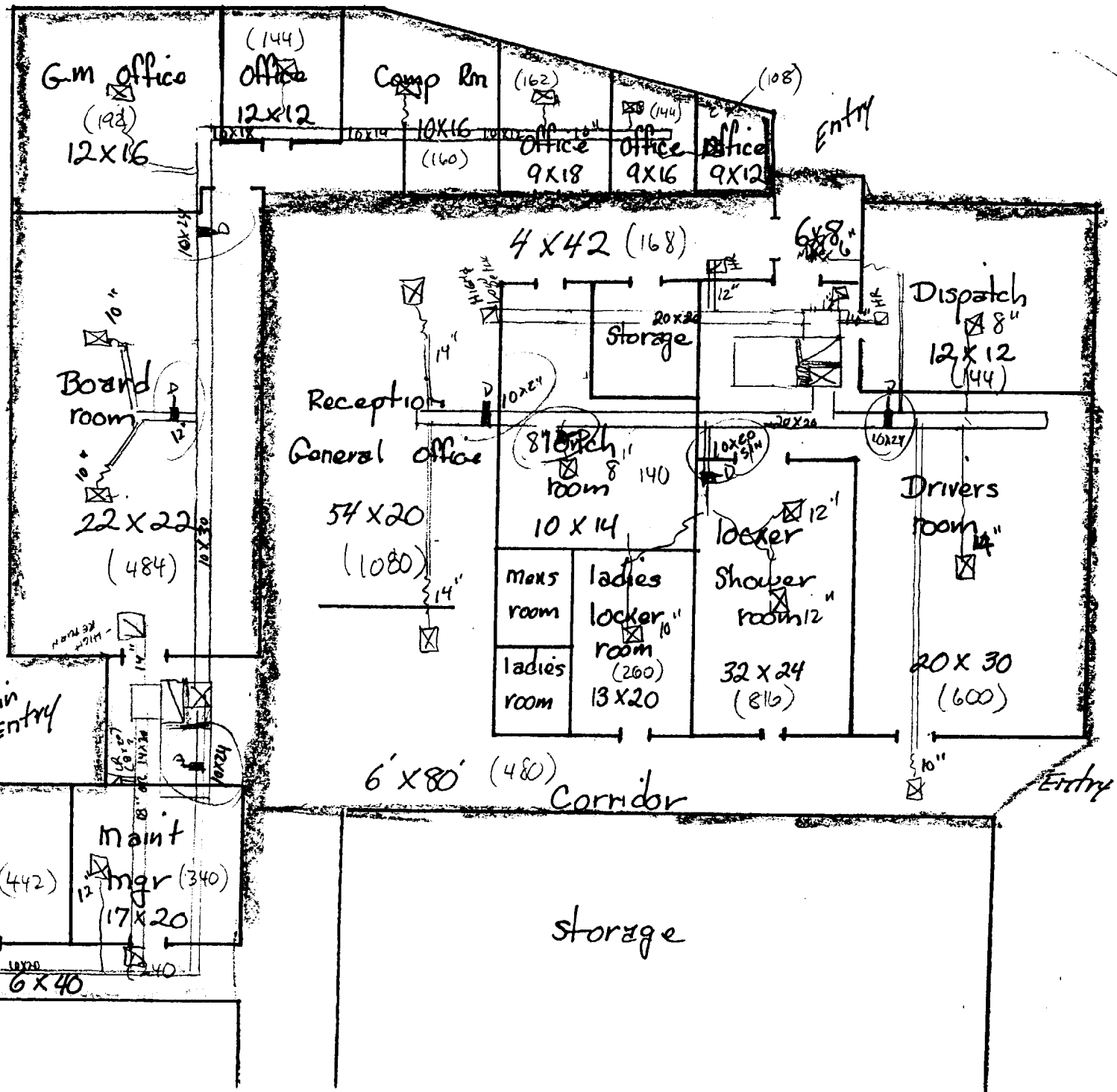
Acceptance of Proposal — The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature



Signature

Date of Acceptance: July 9, 2002



GREATER PORTLAND TRANSIT DISTRICT

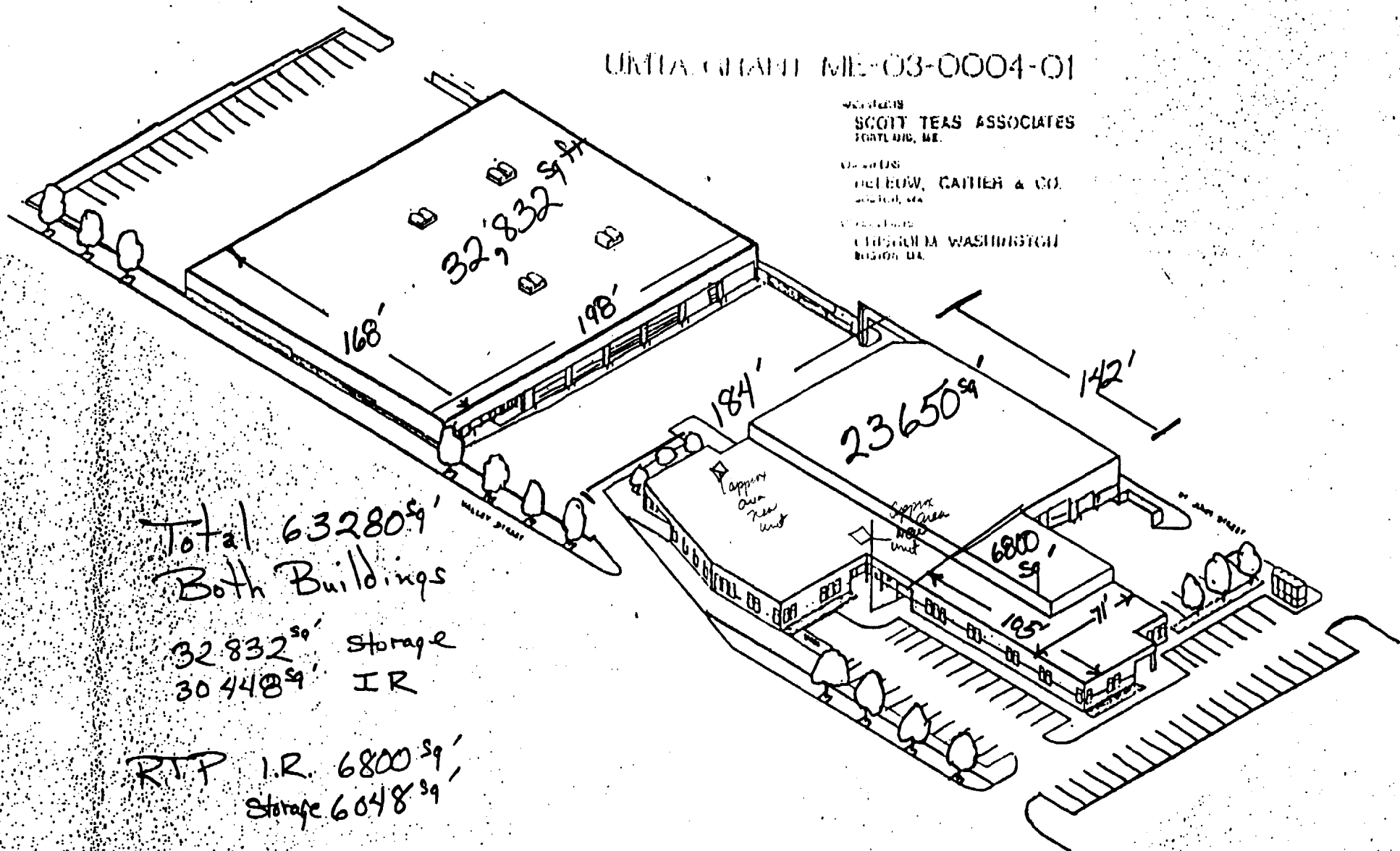
BUS OPERATING FACILITY

UNTA GRANT ME-03-0004-01

ARCHITECT
SCOTT TEAS ASSOCIATES
PORTLAND, ME.

OWNER
RENEW, CARTER & CO.
PORTLAND, ME.

ENGINEER
LESTER M. WASHINGTON
PORTLAND, ME.



Total 63280^{sq}'
Both Buildings

32832^{sq}' Storage
30448^{sq}' I.R.

RTP I.R. 6800^{sq}'
Storage 6048^{sq}'