



ROOF INSPECTION REPORT

FOR

**THATCHMONT CONDOMINIUM
BROOKLINE, MASSACHUSETTS**

ROOF INSPECTION REPORT

Property Information

**Thatchmont Condominium
Brookline, Massachusetts**

Existing Conditions / Report Overview

The purpose of this report is to document the existing condition of all roof areas and all roof related components.

Inspection of roof systems was completed by direct access to all roof surfaces. The observed condition of the roofs and their components are described in text and illustrated with photographs.

Recommendations and potential repair/replacement budgets are provided as a guideline and should neither be used to solicit bids from contractors nor to secure funding for capital projects.

Observations

This property consists of two buildings that are identical in dimension and layout. The buildings are parallel to each other with a parking area in between. Each building consists of three (3) large roof sections, and each section is divided by a small parapet wall which ultimately creates six (6) roof sections per building. Each of these sections contains a stairway penthouse with a roof access door and many of them have a wooden roof deck.

All of the roofs at the Thatcher Street building are a fully adhered EPDM (rubber) single ply membrane roof system. In fact, all of the roofs have a Carlisle roof system except one that has a Goodyear system. Considering that some of the roofs were installed in 1986 and the newest roof installed in 1996 they are in decent condition.

A typical item of concern for these roofs is the field membrane seams, which on the oldest roof sections are beginning to fail. At 25 Thatcher Street, the parapet wall on the front of the building is covered with a metal panel that is severely pitted and deteriorated allowing water infiltration behind the panels and possibly into the building and/or roofing system. We also noticed that some of the older skylights are showing evidence of condensation which is an indication that the seal has broken and could be mistaken for a roof leak.

The accumulation of leaves and acorns is a concern for all the roof sections on the Thatcher Street building, but at #15 we observed a significant blockage of the roof drain that was causing a large area of ponded water. This is an adverse condition for an EPDM roof system.

The Egmont Street building is equally divided between fully adhered EPDM roof systems on the upper-most three sections, while an exposed aggregate and asphalt built-up roof system exists at the lower three sections. The EPDM sections are similar to the Thatcher Street roofs in that they are in decent condition but definitely in need of some preventative maintenance repairs. The built-up roof sections have reached the end of their useful service life and should be considered for replacement.

At both buildings we noticed that the masonry parapet cap is experiencing some sealant joint failure which can contribute to water infiltration problems both in the exterior walls and the roofs.

Recommendations and Engineer's Estimates of Costs

It is our recommendation that all of the field membrane seams and perimeter edge metal flashing of the EPDM roofs should be covered with a pressure sensitive flashing as a means of preventative maintenance. In addition to other small repairs like removing the pitted metal parapet flashing and re-sealing the masonry parapet cap joints, we believe that this course of action will extend the useful life of these roofs approximately 8-10 years beyond their current life expectancy which varies from section to section from 1-2 years to 6-8 years.

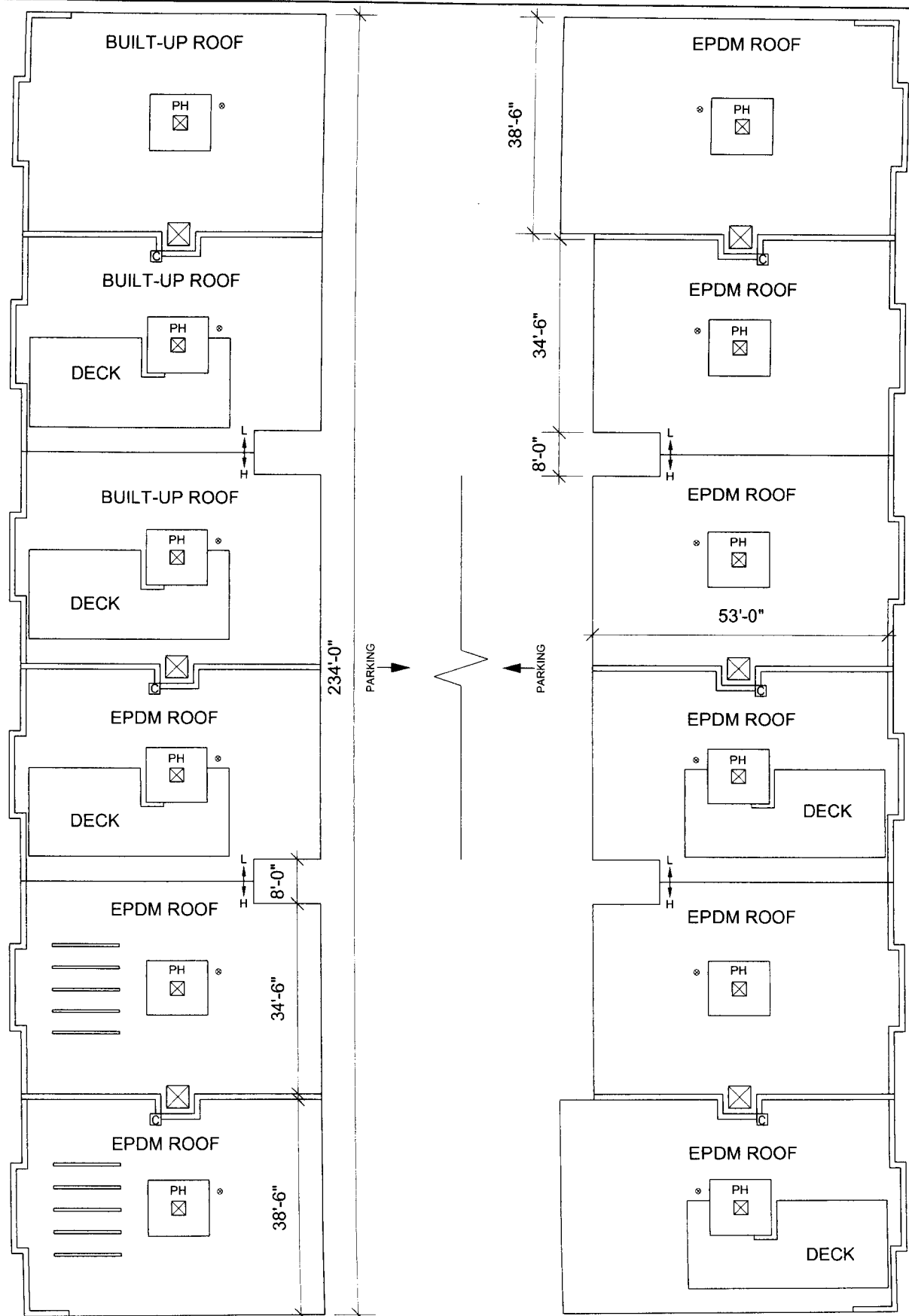
The built up roofs and their relative components should be considered for replacement as soon as possible. Reportedly, there are few / no active roof leaks which would lead us to the conclusion that a replacement project could be delayed until the Spring of 2007. Considering how a sudden capital expenditure such as this may have funding difficulties it is possible to delay this project a little further but it is important to understand that the longer it goes the worse it is going to get and that the cost of the replacement will definitely increase especially if the project is delayed until the Fall season when the pricing for this type of work typically increases.

We would estimate that the construction cost to replace the built up roofs will be approximately \$65,000 - \$70,000.

We would estimate that the construction cost to perform all necessary preventative maintenance repairs will be approximately \$20,000 - \$25,000.

EGMONT STREET

THATCHER STREET



- K ○ DRAIN
- CHIMNEY
- ⊗ SKYLIGHT
- E PH PENTHOUSE
- Y L HIGH ROOF/LOW
- H ROOF TRANSITION

ROOF PLAN

THATCHMONT CONDOMINIUMS
BROOKLINE, MASSACHUSETTS

SCALE: N.T.S.
DATE: NOV 2006

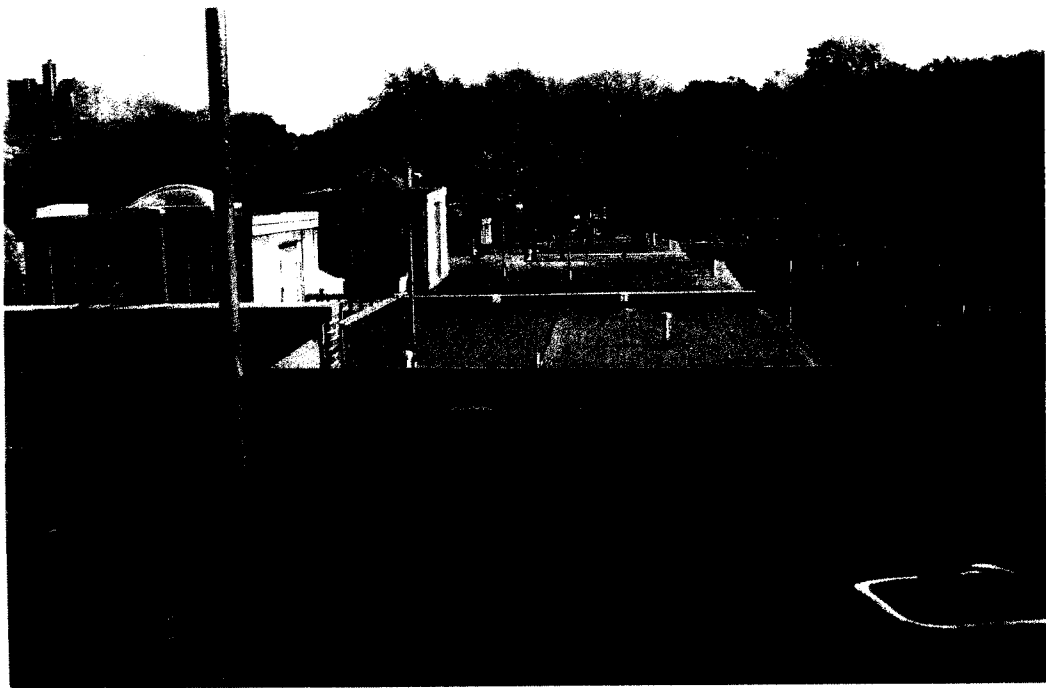


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TYPICAL BUILDING LAYOUT – 3 LARGE SECTIONS

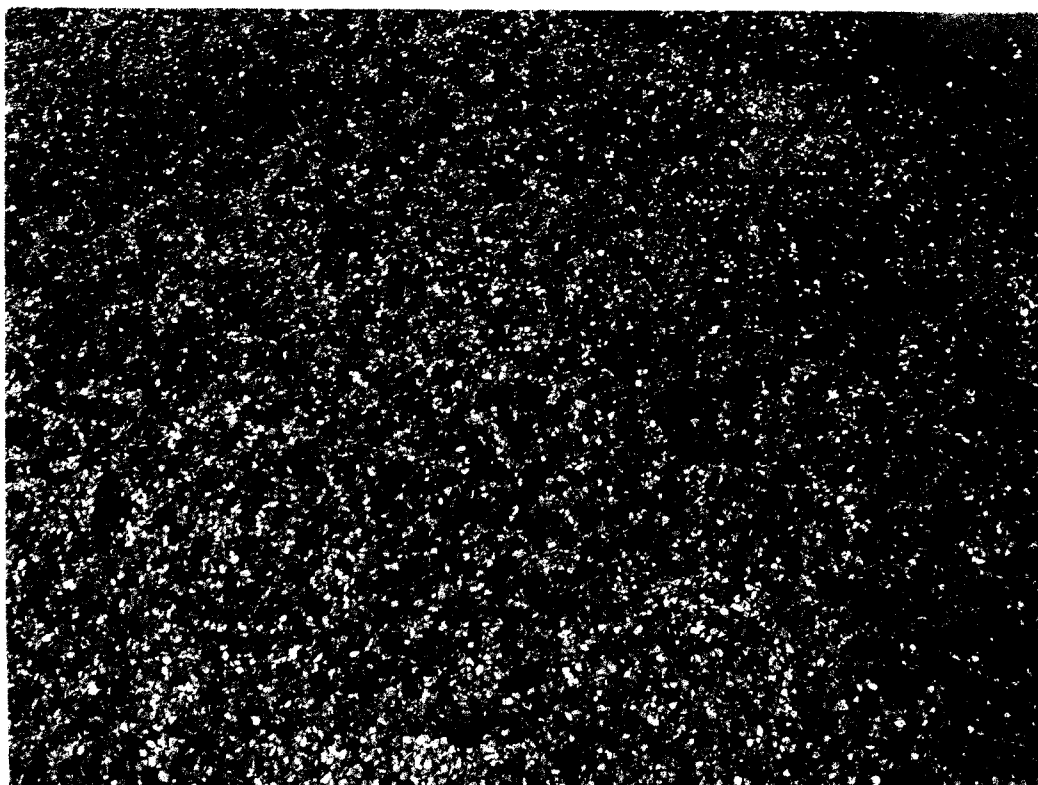


EGMONT STREET BUILDING ROOF OVERVIEW

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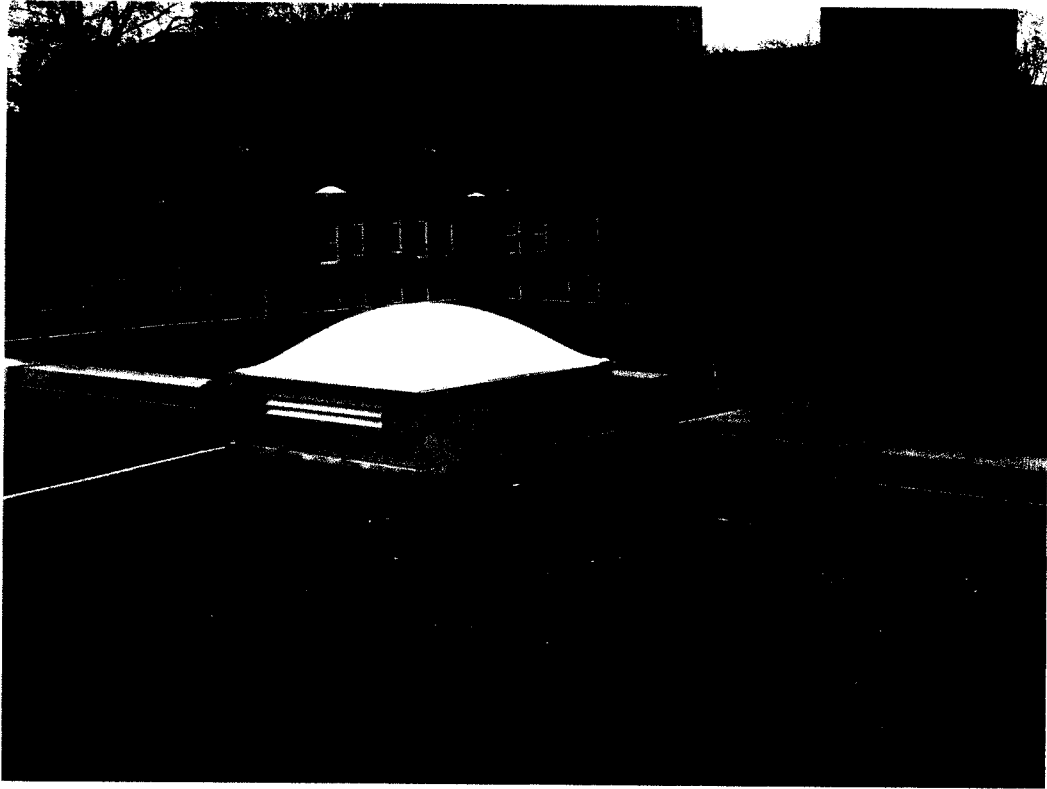


PONDED WATER AND VEGETATION GROWTH AT EGMONT



TYPICAL CONDITION OF ROOF SURFACE AT EGMONT

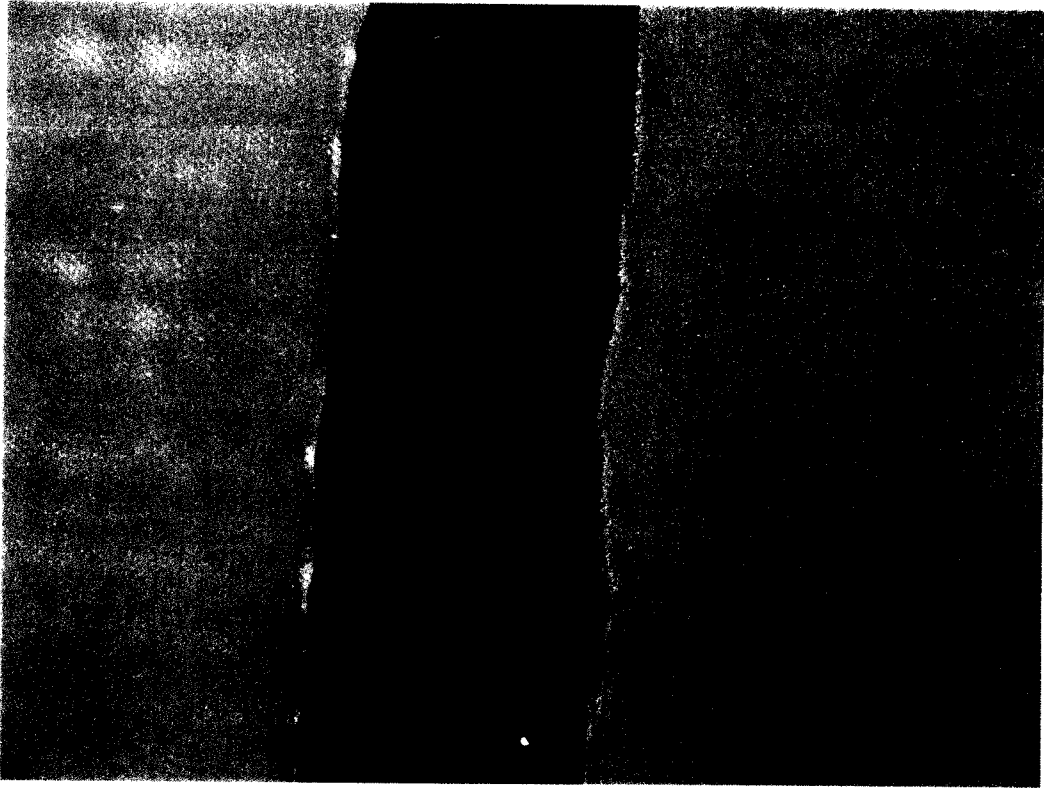
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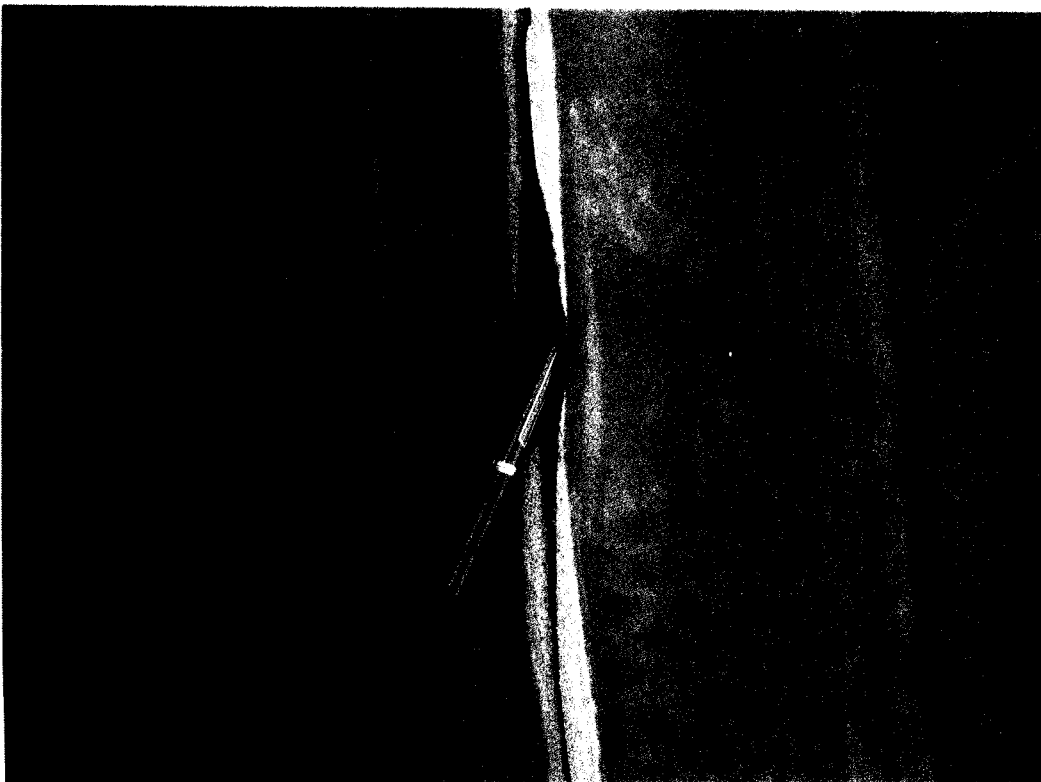
TYPICAL LAYOUT OF PARAPET WALL BETWEEN ROOF SECTIONS



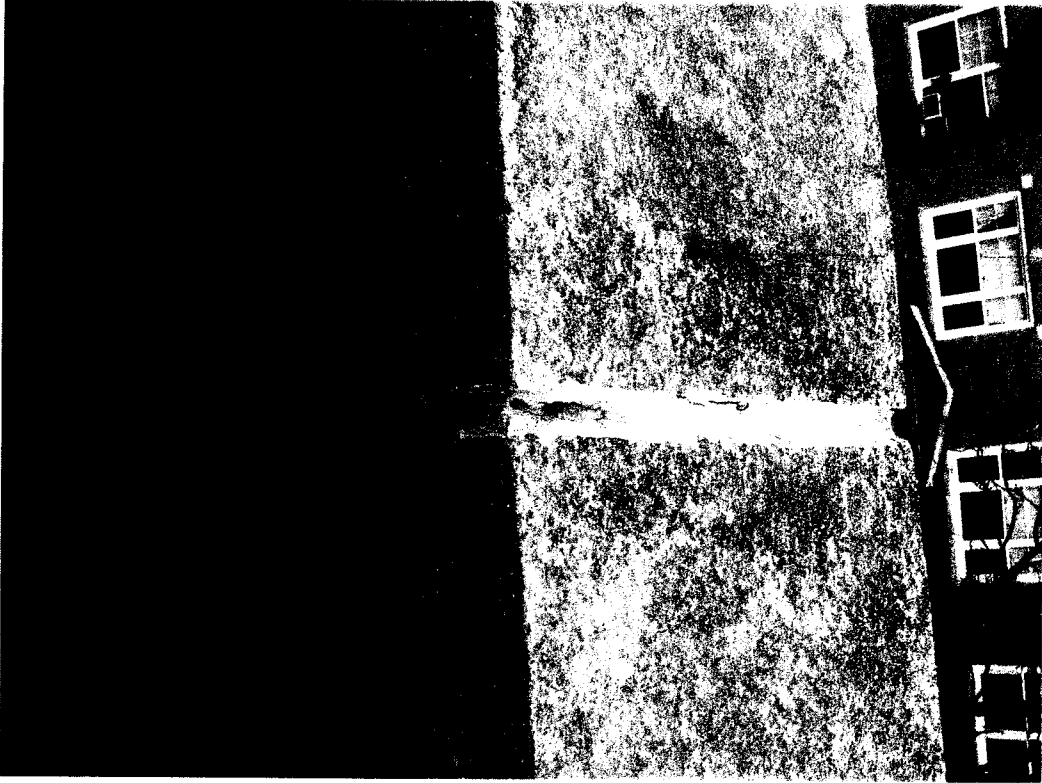
TYPICAL DECK CONFIGURATION



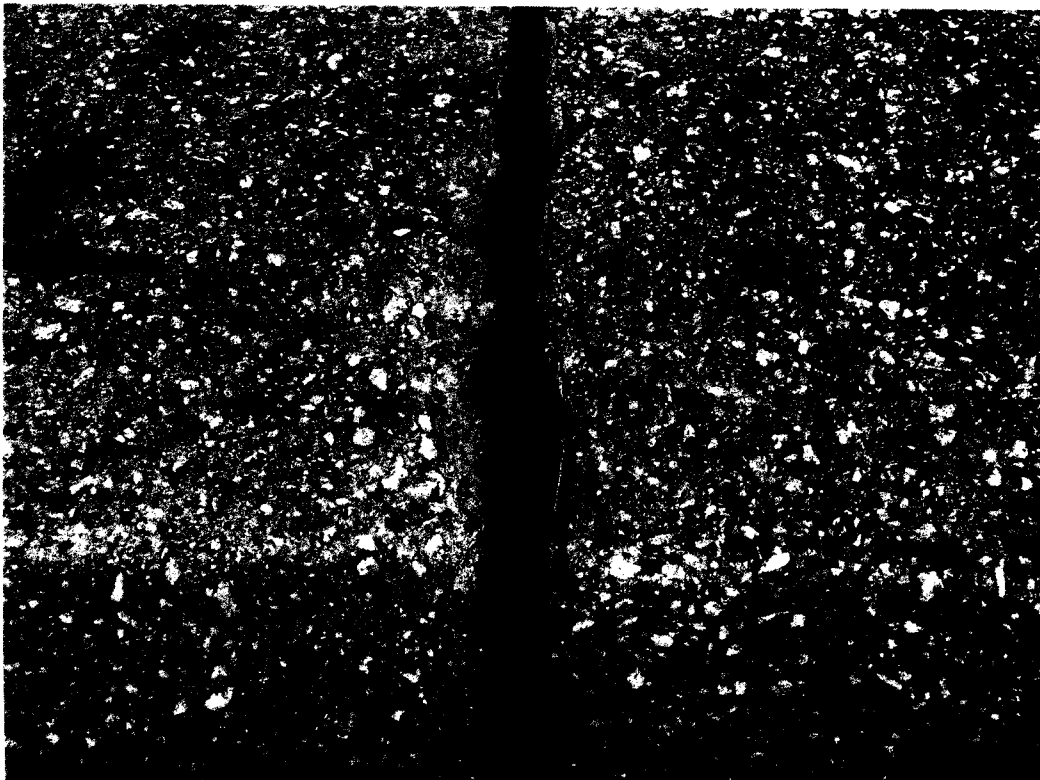
TYPICAL EPDM FIELD SEAM



EPDM SEAM BEGINNING TO FAIL

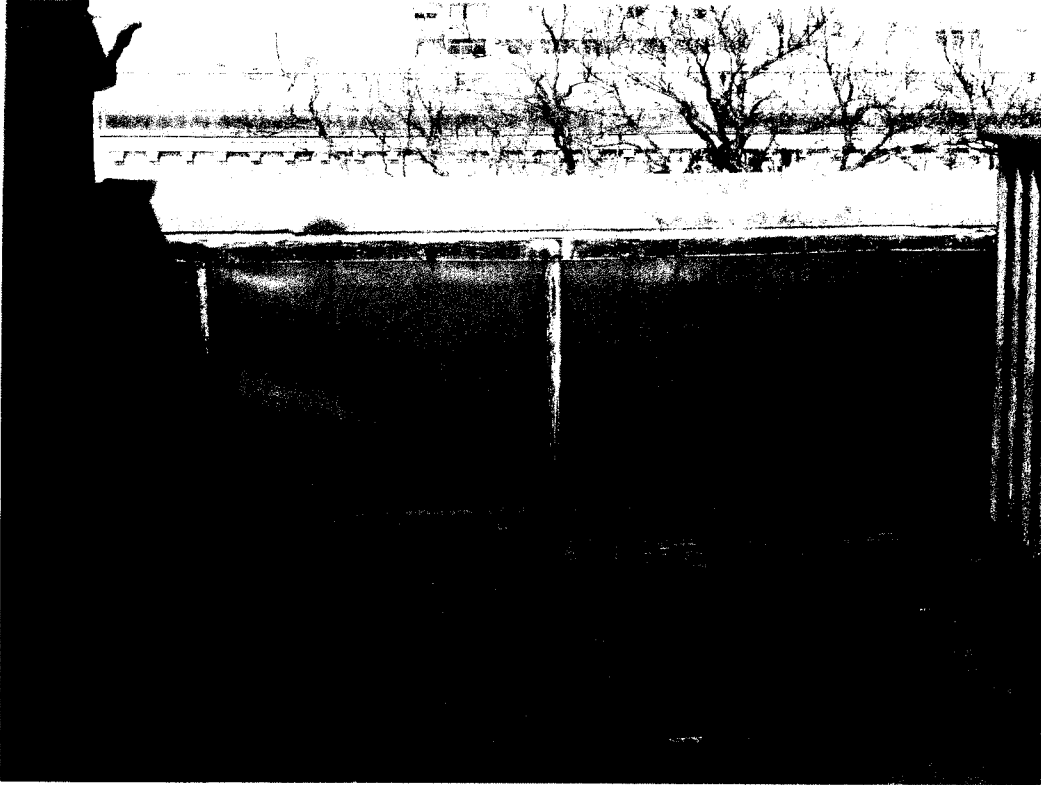


TYPICAL MASONRY PARAPET SEALANT JOINT BEGINNING TO FAIL

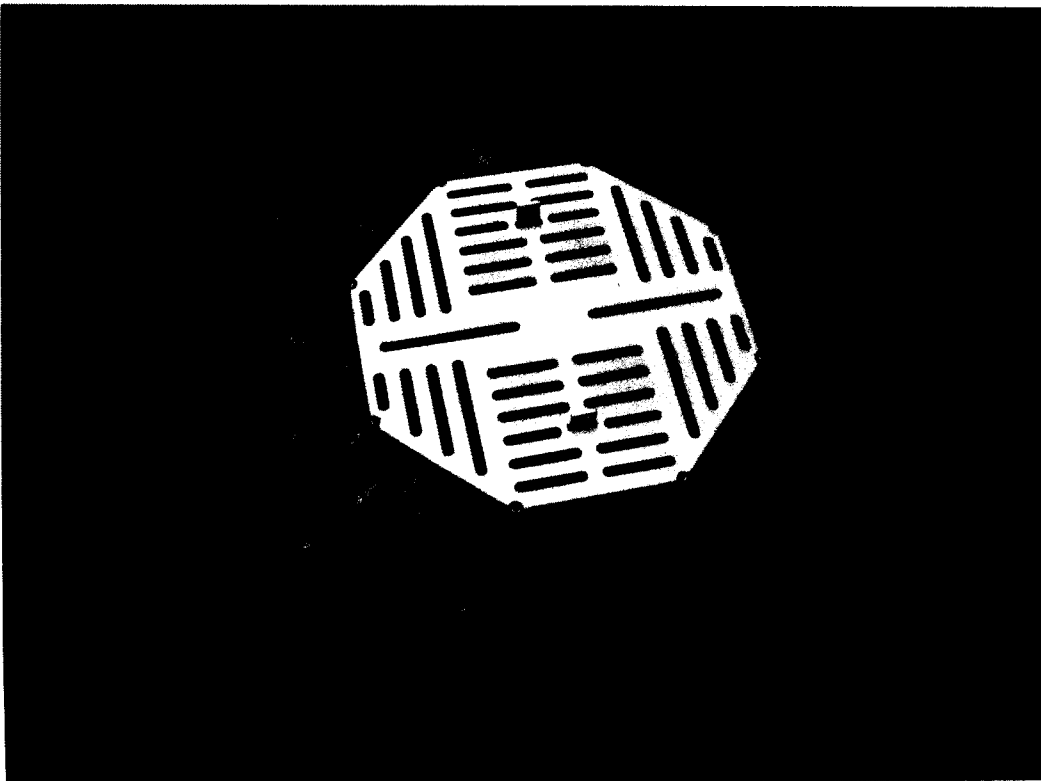


TYPICAL MASONRY PARAPET SEALANT JOINT BEGINNING TO FAIL

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MEMBRANE FLASHING AT EGMONT FRONT WALL IS LOOSE

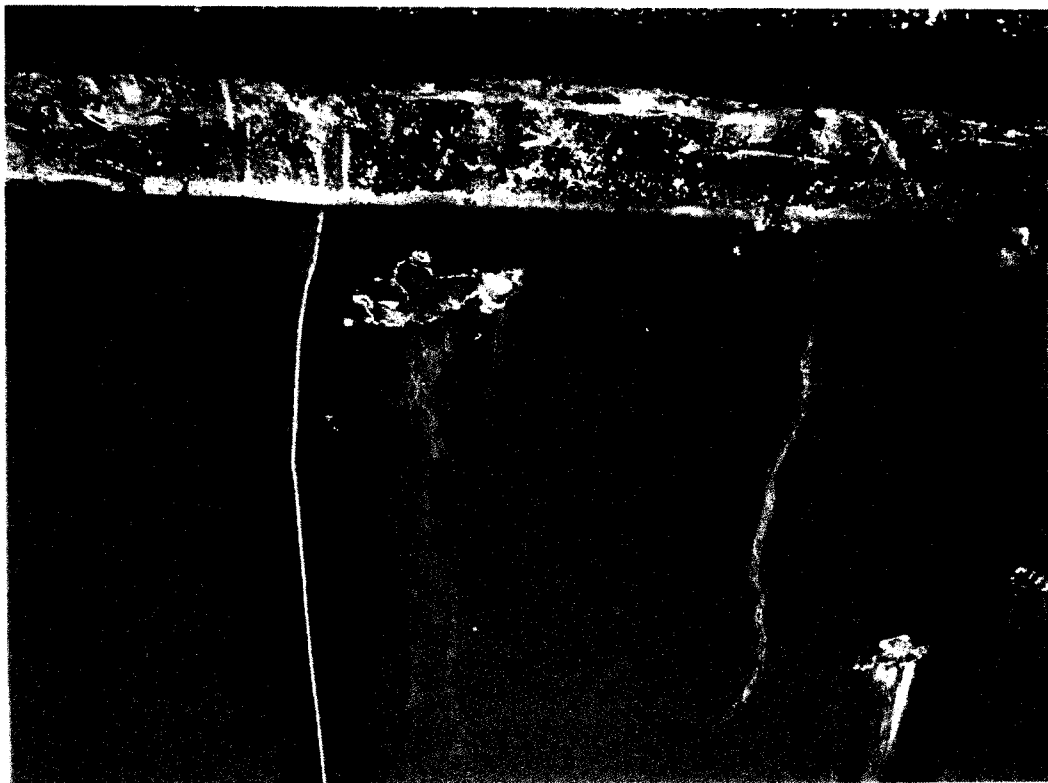


15 THATCHER STREET ROOF DRAIN BLOCKED WITH LEAVES AND ACORNS

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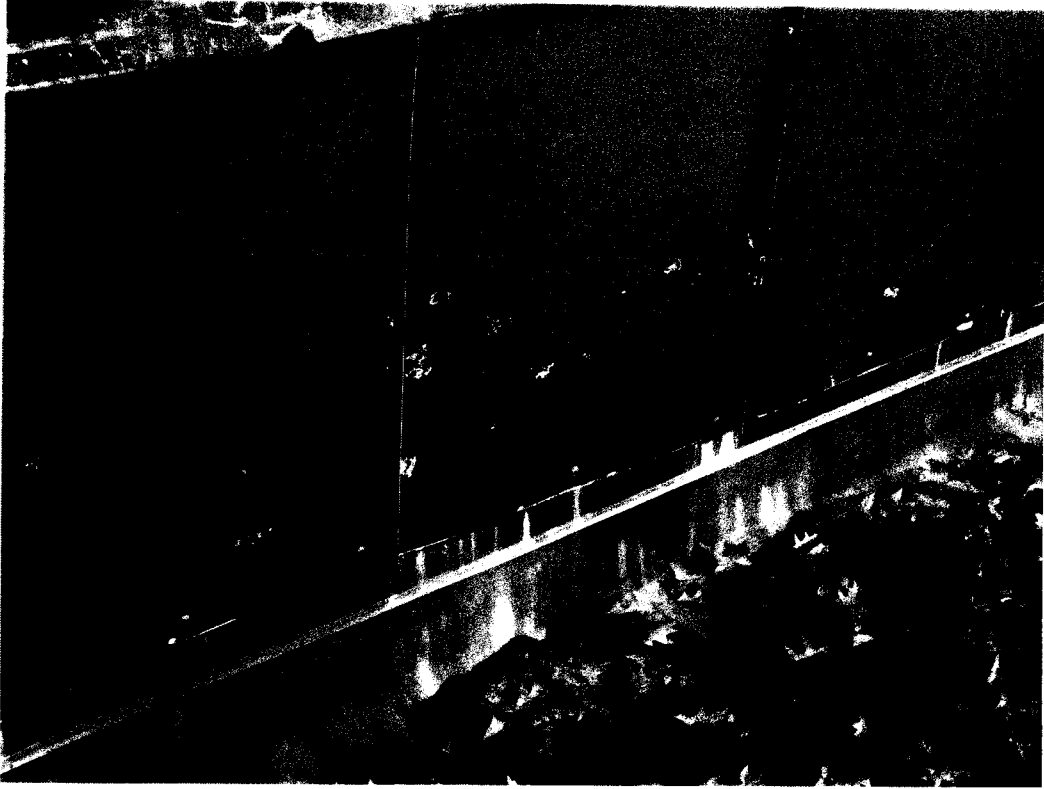


LEAVES ON MOST ROOF AREAS AT THATCHER STREET BUILDING



25 THATCHER STREET PARAPET WALL PANELS WITH HOLES

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25 THATCHER STREET PARAPET WALL PANELS WITH HOLES
NOTICE THE MOISTURE COMING OUT FROM THE HOLES