

# DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK CITY OF PORTLAND

Please Read Application And Notes, If Any, Attached

## BUILDING PERMIT

Permit Number: 090538

This is to certify that 63 KELLOGG STREET, LLC Construction Robert Nielsen  
has permission to Rebuild 1st floor rear, add 2nd floor sun room & rebuild 2nd floor deck & add 3rd floor deck  
AT 63 KELLOGG ST City of Portland 017 A003001

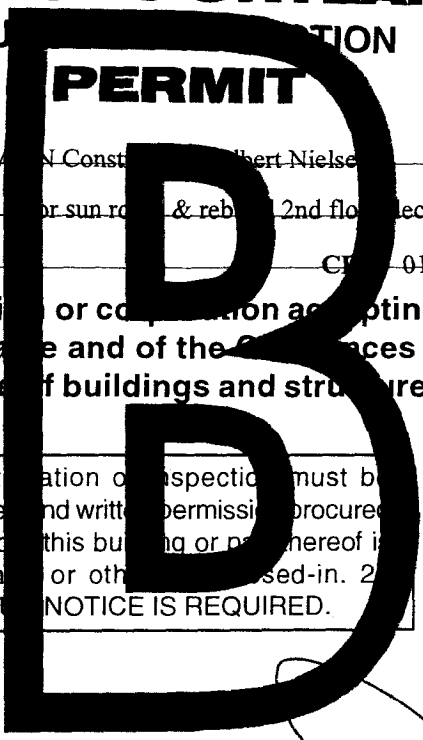
provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and written permission procured before this building or part thereof is lathed or otherwise closed-in. 24 HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS	
Fire Dept.	CAPT. R. [Signature]
Health Dept.	
Appeal Board	JUL 9 2009
Other	
Department Name	
CITY OF PORTLAND	



*James Bonte* 7/9/09  
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

Albert  
670-8608

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

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

Permit No: 09-0538	Issue Date:	CBL: 017 A003001
-----------------------	-------------	---------------------

Location of Construction: 63 KELLOGG ST	Owner Name: 63 KELLOGG STREET, LLC	Owner Address: 63 KELLOGG ST # 1	Phone:
Business Name:	Contractor Name: AJN Construction/ Albert Nielsen	Contractor Address: P.O. Box 155 Eutis	Phone 2076700600
Lessee/Buyer's Name	Phone:	Permit Type: Additions - Multi Family	Zone: R-6

Past Use: Residential - 3 unit - Connected w/ permit#090537  <i>legal use - 3 dw.</i>	Proposed Use: Residential - 3 unit Connected w/ permit#090537 - Rebuild 1st floor rear, add 2nd floor sun room & rebuild 2nd floor deck & add 3rd floor deck	Permit Fee: \$410.00	Cost of Work: \$38,500.00	CEO District: 1
---	---	-------------------------	------------------------------	--------------------

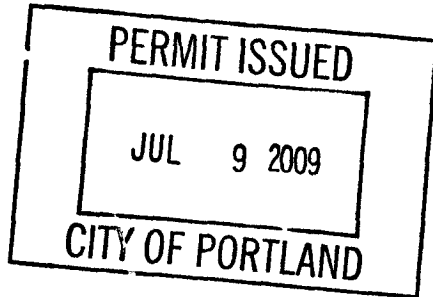
**Proposed Project Description:**  
Rebuild 1st floor rear, add 2nd floor sun room & rebuild 2nd floor deck & add 3rd floor deck - *add new entry rear entry.*

FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied  <i>* See Conditions</i>	INSPECTION: Use Group: <i>R2</i> Type: <i>SB</i>  <i>DOB-2003</i> <i>JMB 7/9/09</i>
Signature: <i>(KG)</i>	Signature: <i>(JMB)</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: Ldobson	Date Applied For: 06/02/2009	<b>Zoning Approval</b>	
-----------------------------	---------------------------------	------------------------	--

- This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
- Building permits do not include plumbing, septic or electrical work.
- 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> <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"/> MM <input type="checkbox"/> <i>OK w/ conditions</i> Date: 6/8/09 <i>ABM</i>	<b>Zoning Appeal</b> <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  Date: _____	<b>Historic Preservation</b> <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>ABM</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

## BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY )

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.**

  X   **Footing/Building Location Inspection: Prior to pouring concrete or setting precast piers**

  X   **Framing/Rough Plumbing/Electrical: Prior to Any Insulating or drywalling**

  X   **Final inspection required at completion of work.**

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 of Applicant/Designee

  7/9/09    
Date



Signature of Inspections Official

  7/9/09    
Date



# General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: <u>63 Kellogg St. Portland, ME 04101</u>		
Total Square Footage of Proposed Structure/Area	Square Footage of Lot <u>4158</u>	Number of Stories <u>3</u>
Tax Assessor's Chart, Block & Lot Chart#      Block#      Lot# <u>17</u> <u>A</u> <u>3</u>	Applicant * <u>must be owner, Lessee or Buyer</u> * Name <u>63 Kellogg Street, LLC</u> <u>Dominic White - Manager</u> Address <u>63 Kellogg St #1</u> City, State & Zip <u>Portland, ME 04101</u>	Telephone: <u>207-272-2157</u>
Lessee/DBA (If Applicable)	Owner (if different from Applicant) Name Address City, State & Zip	Cost Of Work: \$ <u>38,500</u> C of O Fee: \$ _____ Total Fee: \$ <u>410</u>
Current legal use (i.e. single family) <u>Residential Multi</u> Number of Residential Units <u>3</u> If vacant, what was the previous use? <u>Residential Multi</u> Proposed Specific use: <u>Residential Multi</u> Is property part of a subdivision? <u>NO</u> If yes, please name _____ Project description: <u>Rebuild by <del>tear down</del> Tear down back deck &amp; Addition</u> <u>Rebuild with additional sunrooms &amp; decks + Interior Remodel</u>		
Contractor's name: <u>Albert J. Nielsen Construction</u> Address: <u>P.O. Box <sup>155</sup> <del>755</del> Eustis, ME</u> City, State & Zip <u>Eustis, ME 04936</u> Telephone: <u>670-0600</u> <u>207-<del>272-2157</del></u> Who should we contact when the permit is ready: <u>Dominic White</u> Telephone: <u>207-272-2157</u> Mailing address: <u>63 Kellogg St #1 Portland, ME 04101</u>		

Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at [www.portlandmaine.gov](http://www.portlandmaine.gov), or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

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

Signature: Dominic White      Date: 5/29/09

This is not a permit; you may not commence ANY work until the permit is issued

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

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

<b>Permit No:</b> 09-0538	<b>Date Applied For:</b> 06/02/2009	<b>CBL:</b> 017 A003001
------------------------------	--	----------------------------

<b>Location of Construction:</b> 63 KELLOGG ST	<b>Owner Name:</b> 63 KELLOGG STREET, LLC	<b>Owner Address:</b> 63 KELLOGG ST # 1	<b>Phone:</b>
<b>Business Name:</b>	<b>Contractor Name:</b> AJN Construction/ Albert Nielsen	<b>Contractor Address:</b> P.O. Box 155 Eutis	<b>Phone</b> (207) 670-0600
<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> Additions - Multi Family	

<b>Proposed Use:</b> Residential - 3 unit Connected w/ permit#090537 - Rebuild 1st floor rear, add 2nd floor sun room & rebuild 2nd floor deck & add 3rd floor deck	<b>Proposed Project Description:</b> Rebuild 1st floor rear, add 2nd floor sun room & rebuild 2nd floor deck & add 3rd floor deck - expanded rear entry.
--	---

<b>Dept:</b> Zoning	<b>Status:</b> Approved with Conditions	<b>Reviewer:</b> Ann Machado	<b>Approval Date:</b> 06/08/2009
<b>Note:</b> Using section 14-436(b) to add 2nd floor sunroom. 80% of 1st floor footprint is 1252.8 sf. 2nd floor sunroom is 130 sf which is 10% of the allowable increase.			<b>Ok to Issue:</b> <input checked="" type="checkbox"/>
<ol style="list-style-type: none"> <li>1) This permit is being issued with the condition that all the work will take place within the existing footprint except the new rear entry which meets the zoning requirements.</li> <li>2) This property shall remain a three family dwelling. Any change of use shall require a separate permit application for review and approval.</li> <li>3) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.</li> </ol>			

<b>Dept:</b> Building	<b>Status:</b> Approved with Conditions	<b>Reviewer:</b> Jeanine Bourke	<b>Approval Date:</b> 07/09/2009
<b>Note:</b>			<b>Ok to Issue:</b> <input checked="" type="checkbox"/>
<ol style="list-style-type: none"> <li>1) Guards must be 42 inches in height with openings less than 4 inches. Graspable rails must be installed on both sides of the stair guard at 34" to 38". Stair treads shall not be less than 11". Stair risers shall not be more than 7".</li> <li>2) All penetrations between dwelling units and dwelling units and common areas shall be protected with approved firestop materials, and recessed lighting/vent fixtures shall not reduce the (1 hour) required rating per Sec. 712 of IBC</li> <li>3) Separate permits are required for any electrical, plumbing, sprinkler, fire alarm or HVAC or exhaust systems. Separate plans may need to be submitted for approval as a part of this process.</li> <li>4) Application approval based upon information provided by applicant and most recent revisions. Any deviation from approved plans requires separate review and approval prior to work.</li> <li>5) Permit approved based on the plans submitted and reviewed w/owner/contractor, with additional information as agreed on and as noted on plans.</li> <li>6) Fire doors are required to be self closing</li> <li>7) All new loadbearing beams shall have point loads carried to load bearing walls/beams or foundation. New footings may be required.</li> </ol>			

<b>Dept:</b> Fire	<b>Status:</b> Approved with Conditions	<b>Reviewer:</b> Capt Keith Gautreau	<b>Approval Date:</b> 06/09/2009
<b>Note:</b>			<b>Ok to Issue:</b> <input checked="" type="checkbox"/>
<ol style="list-style-type: none"> <li>1) Smoke Detectors are required in all sleeping rooms and 21' from the sleeping rooms in the apartment. They shall be hardwired with battery backup.</li> <li>2) The entire structure shall comply with NFPA 101 "Existing Apartments" Compliance shall be insured prior to the issuance of a Certificate of Occupancy.</li> <li>3) All construction shall comply with NFPA 101</li> </ol>			

<b>Location of Construction:</b> 63 KELLOGG ST	<b>Owner Name:</b> 63 KELLOGG STREET, LLC	<b>Owner Address:</b> 63 KELLOGG ST # 1	<b>Phone:</b>
<b>Business Name:</b>	<b>Contractor Name:</b> AJN Construction/ Albert Nielsen	<b>Contractor Address:</b> P.O. Box 155 Eutis	<b>Phone</b> (207) 670-0600
<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> Additions - Multi Family	

**Comments:**

6/22/2009-jmb: Spoke with Dominic W. About details of the review and required submissions, some issues are a spiral stairway being used for a common egress, fire/sound separation, framing, egress window, smoke detector and recessed fixture details. He will submit or have the contractor call.

6/4/2009-amachado: Existing storage shed & second floor deck are 8' x 18'. Numbers on plot plan don't reflect deed. Need to rebuild in existing footprint. Can have the two covered decks on the left side but third floor deck can't be covered. Can add one story over rear on right side but not two. Could put open deck on third floor. Spoke to Dominic White on 6/5/09. He will submit revised plans.

6/29/2009-lmd: Dominic White who submitted permit 09-0538, did not include in the cost of work of \$38,500.00 the cost of the electrical and the Plumbing. The total cost of which is \$32,900.00, bringing the total cost of work to \$71,400.00. Dominic paid an additional \$330.00 to cover the cost. I adjusted the cost of work on the permit to reflect the changes.

6/29/2009-jmb: I spoke with Dominic W. About the requirement for stamped plans based on the revised cost of work for the project. He will submit when completed.

7/1/2009-jmb: Received revisions/additions and letter stamped by Allied Engineering for specific portions of the proposed work.

7/6/2009-jmb: Reviewed the revisions, left vmsg for Dominic W. Need original copies, copies of faxed plans are not legible, verify 3rd floor ceiling joist span of 25', UL design for F/C & wall assemblies, is there an attic scuttle?

7/7/2009-jmb: Spoke with Dominic W., He verified there is an existing attic scuttle, the existing drop ceilings will be removed and new layer of 5/8 type x will be installed over the lath & plaster. He will provide UL listing on new F/C assemblies, original plans and have his contractor check in the attic for ceiling joist span.

7/8/2009-jmb: Dominic and contractor came in, verified 3rd floor ceiling joists run between rafters, not full walls. He is going to check specs on the isynene insulation and meeting the STC of 50 for the new addition. All existing ceilings will have SR over plaster & lath.

7/8/2009-jmb: Received fax from Anderson Insulation, shows factor for a 2x4 wall to be STC 37. Therefore, floors at 2x10 foam packed will meet the code. Note: realized that the new left side wall is less than 5' from the property line. This wall is required to be 1hr. Rated with exposure from both sides Sec.704.5 and no openings allowed. Dominic will have the contractor provide a detail.

7/9/2009-jmb: Dominic & contractor submitted spec on 1/2" fire retardant plywood for 30minute rating. I marked up plans to show that wall to be 1hr rated with no openings. Ok to issue

6/8/2009-amachado: Received revised plans that show the work is within the existing footprint.

Return to:  
63 Kellogg Street, LLC 63  
Kellogg Street Apt. #1  
Portland, Maine 04101

## WARRANTY DEED


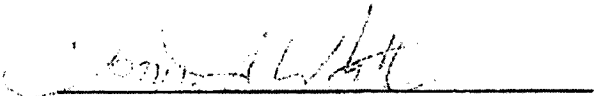
*KNOW ALL MEN BY THESE PRESENTS THAT* We, **Hoff Three Properties, LLC**, a Maine Limited Liability Company, of 50 Market Street, South Portland, County of Cumberland, State of Maine, for consideration paid, grant to **63 Kellogg Street, LLC**, a Maine Limited Liability Company of 63 Kellogg Street, Apt. # 1, Portland, County of Cumberland, State of Maine, with **WARRANTY COVENANTS**, the following described premises:

A certain lot or parcel of land, together with the buildings thereon, situated on Kellogg Street in the City of Portland, County of Cumberland, and State of Maine, bounded and described as follows:

BEGINNING at a point on the easterly side of Kellogg, formerly Warren Street, distant 80 feet southerly from Congress Street; thence southerly by said Kellogg Street 42.25 feet; thence easterly on a line at right angles with Kellogg Street 96.48 feet; thence northerly 42.27 feet; thence westerly on a line at right angles with Kellogg Street 97.42 feet to the point begun at. Being lot No. 3 in the block of land marked A on a Plan of Land of the Deering Estate recorded in the Cumberland County Registry of Deeds, Plan Book 4, Page 17, to which plan reference is made.

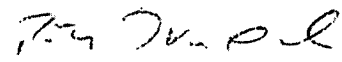
Meaning and intending to describe and convey the same premises as conveyed to Hoff Three Properties, LLC by Deed of IndyMac Federal Bank FSB fka IndyMac Bank F.S.B. dated 04/16/2009 and recorded with the Cumberland County Registry of Deeds in Book 26857, Page 208.

EXECUTED this 5th day of May, 2009

  
Hoff Three Properties, LLC  
By J. Daniel Hoffman Its  
Manager

State of Maine  
County of Cumberland

On this 5th day of May, 2009, personally appeared, before me, J. Daniel Hoffman, Manager of Hoff Three Properties, LLC, known to me or proven to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he executed the same as his free act and deed and the free act and deed of Hoff Three Properties, LLC in his said capacity .

  
~~Justice of the Peace/Notary Public/Attorney at Law~~  
Peter J. Van Hemen  
Print Name:

63 Kellogg St

Site Plan

Tear Down Existing  
First Floor Addition and  
Second Floor Deck.  
Rebuild First Floor Addition  
and Add Second and Third  
Additions with Decks.  
Submitted: 5/29/09

R-6

lot size = 4158

land area per d.u. = 1,000  $\phi$  (OK)

Setbacks

front - 10' or average

rear - 20' min - w/ stair deck 32.48' OK

\* side - 10' - not need it on the left

lot coverage - 50% = 2079  $\phi$  (OK 16/40)

Section 14-436(b)

existing footprint: 1566  $\phi$

80% = 1252.8  $\phi$

adding 130  $\phi$  10%  
fencing

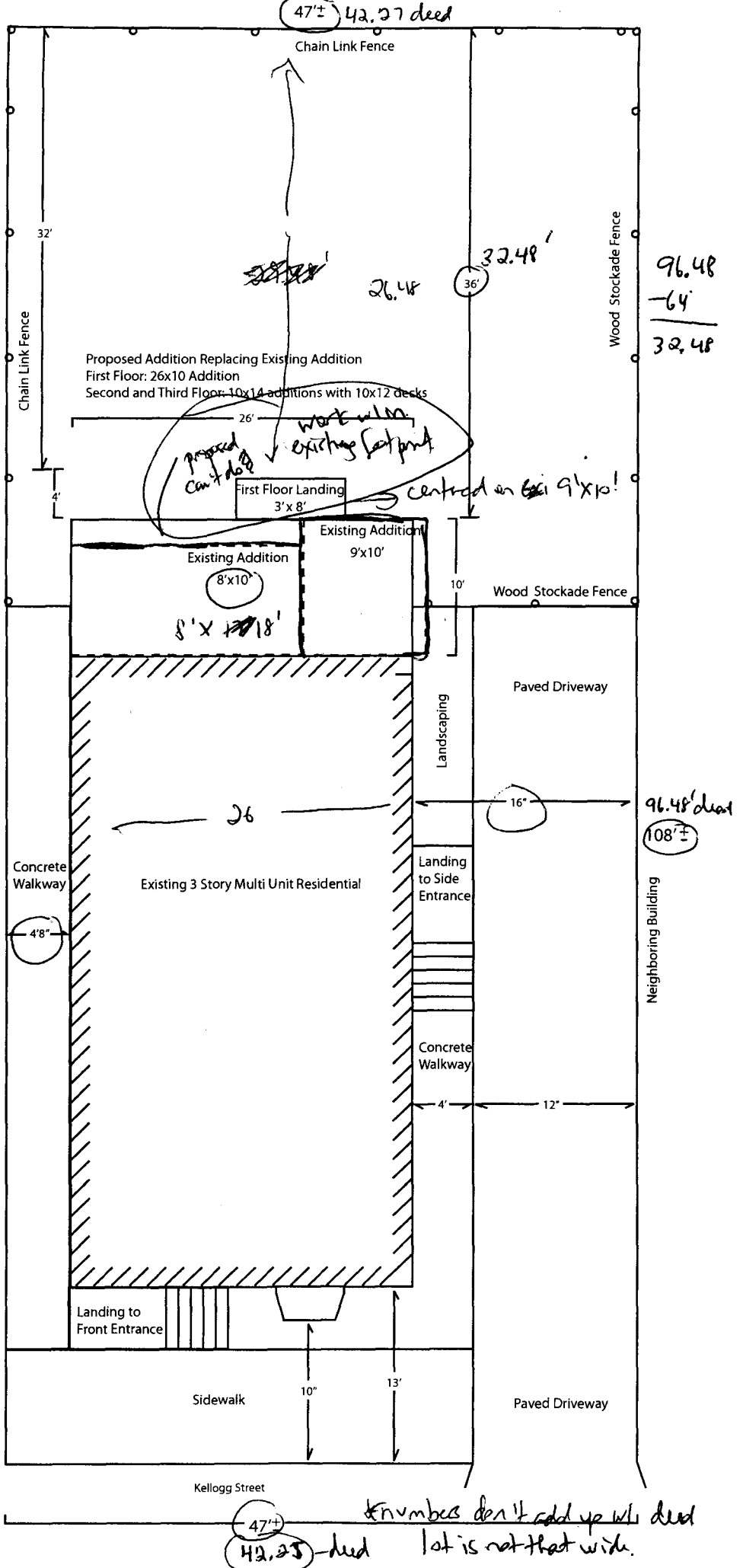
deed 97.42  
(108'  $\pm$ )

\* doesn't meet 14-433  
- doesn't have 5' inside.

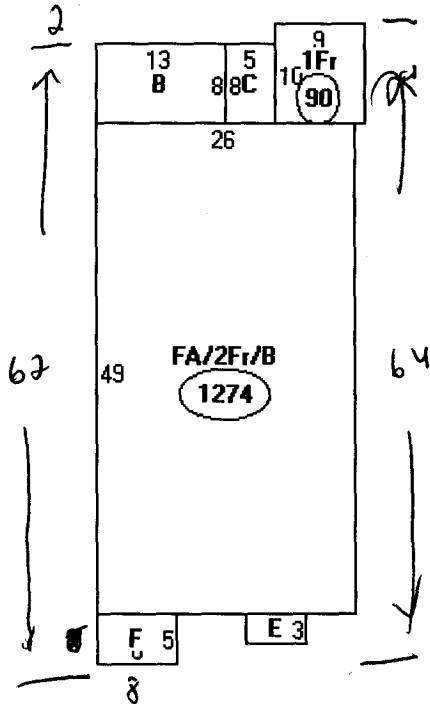
adding landing 3'x8' = 24  $\phi$

stairs 3'x8' = 24  
48  $\phi$

+ 1566  
1614 (OK)







Descriptor/Area

A: FA/2Fr/B  
1274 sqft

B: EP/EP  
104 sqft

C: OP/FUB  
40 sqft

D: 1Fr  
90 sqft

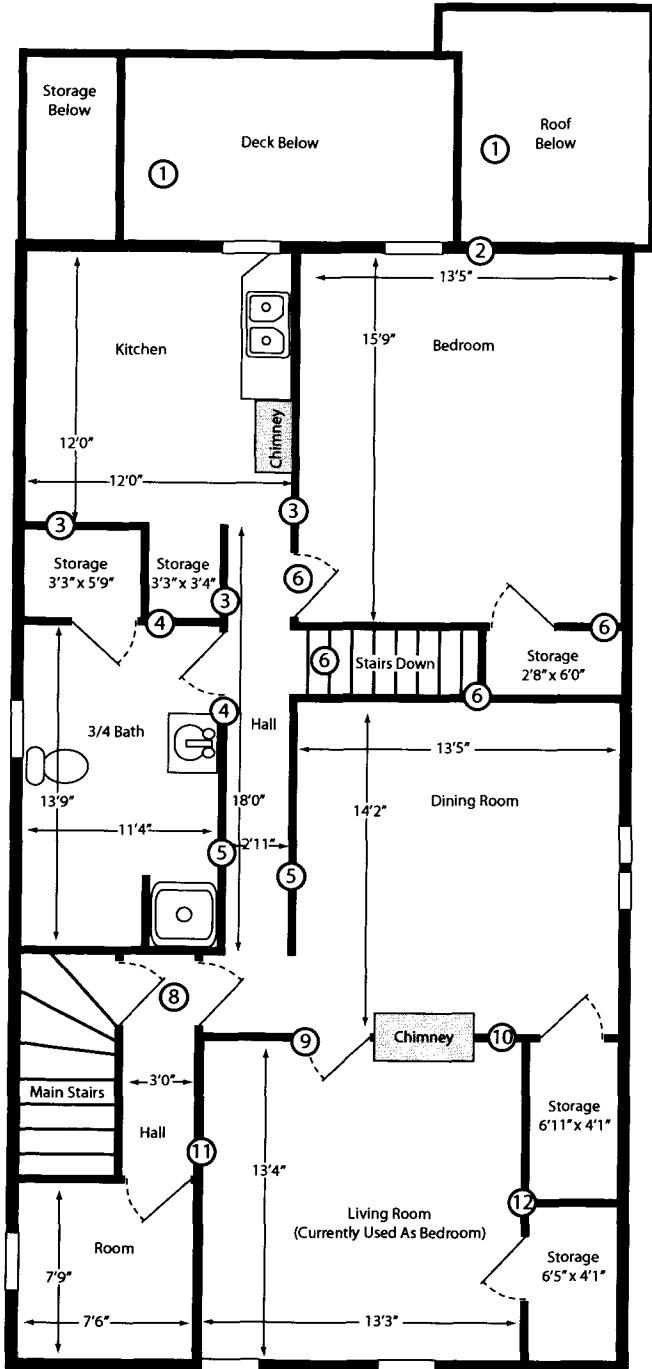
E: 2FBAY/B  
18 sqft

F: OFF  
40 sqft

= 1566



63 Kellogg Street  
 THIRD FLOOR - Existing Floor Plan  
 1/8" = 1' All Sizes Approximate  
 Revised Date: 6/05/09



JUN - 8 2009

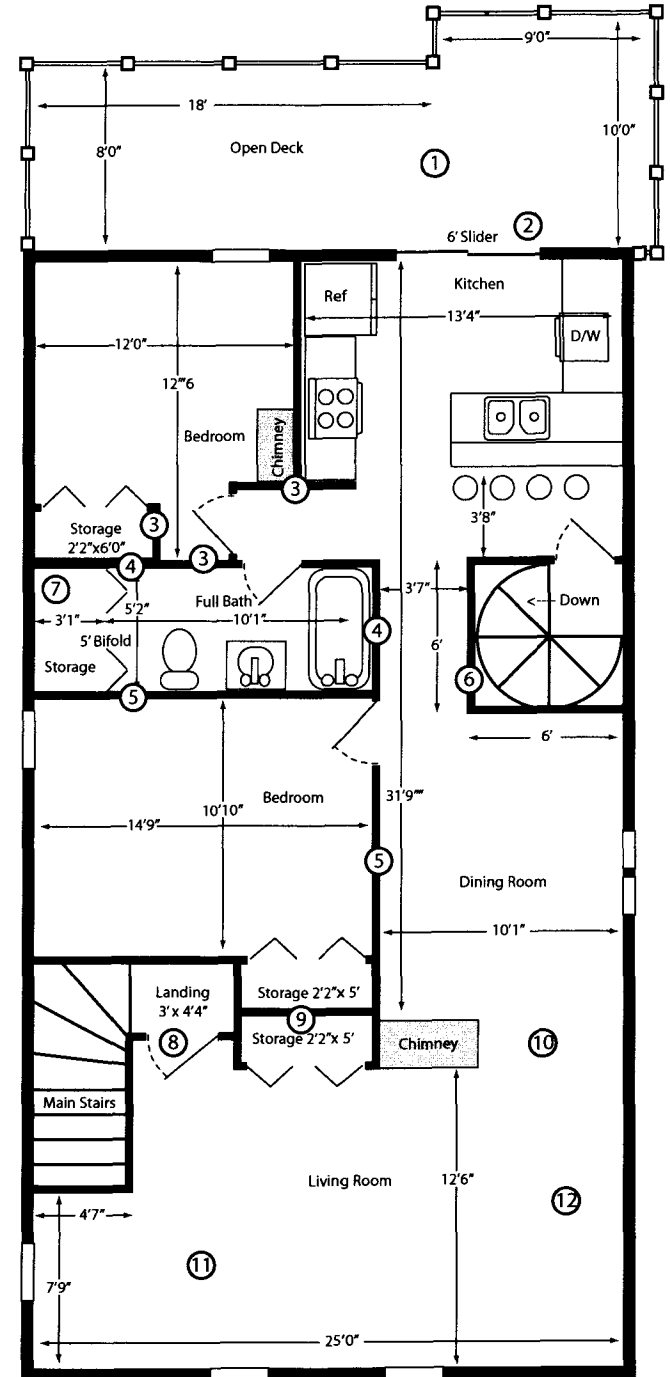


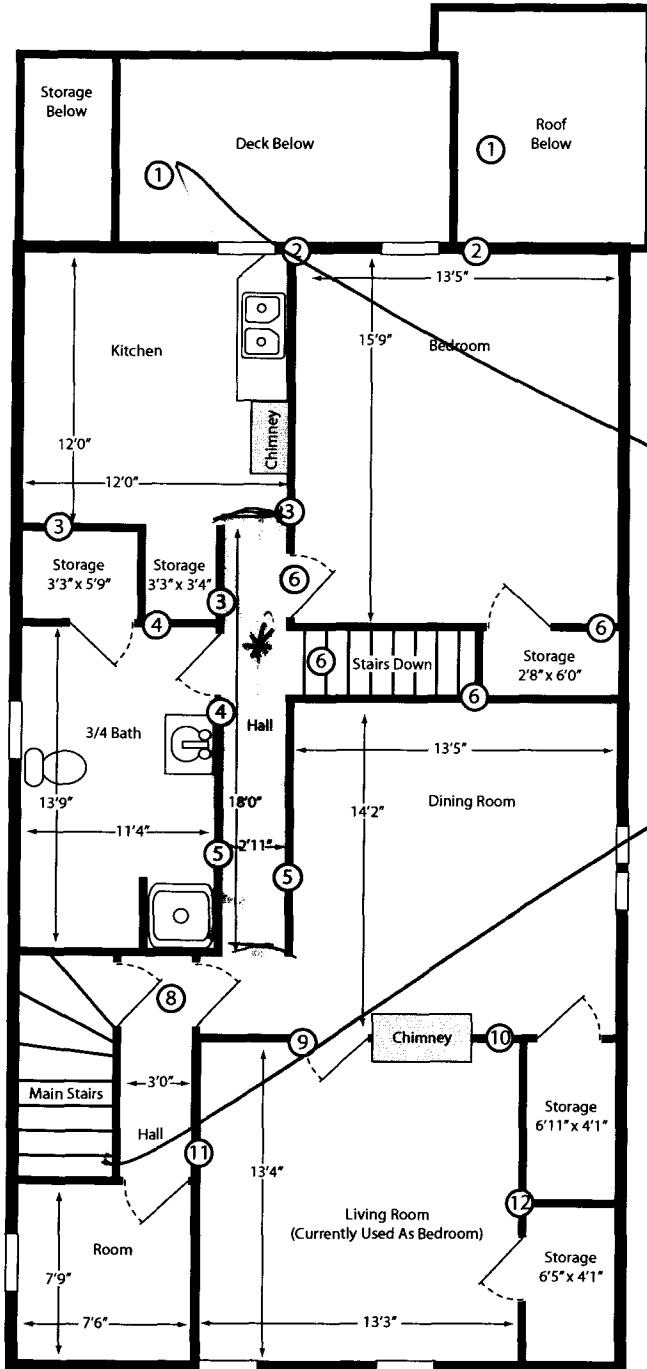
*revised.*

- 1: Build Open Deck (no roof) above 2nd floor deck and sunroom.
- 2: Add Sliding Door onto Deck from Kitchen.
- 3: Walls removed and added to create Bedroom
- 4: Walls added and removed to create bathroom
- 5: Existing bathroom wall removed and extended of existing dining room wall to create 2nd bedroom and bath.
- 6: Walls on ether side of stairwell removed and repositioned with existing stairwell to 2nd floor removed and install new spiral stair.
- 7: Pre-Plumb and Wire for future washer / dryer stackable
- 8: Remove doors and add walls to create landing
- 9: Remove door and wall and create storage
- 10: Remove wall between dining room and Living Room
- 11: Remove side room and hall way to expand living room
- 12: Remove storage closets to expand living room.

*Revised to conform to existing footprint*

63 Kellogg Street  
 THIRD FLOOR - Renovated Floor Plan  
 1/8" = 1' All Sizes Approximate. Revised Date: 6/05/09

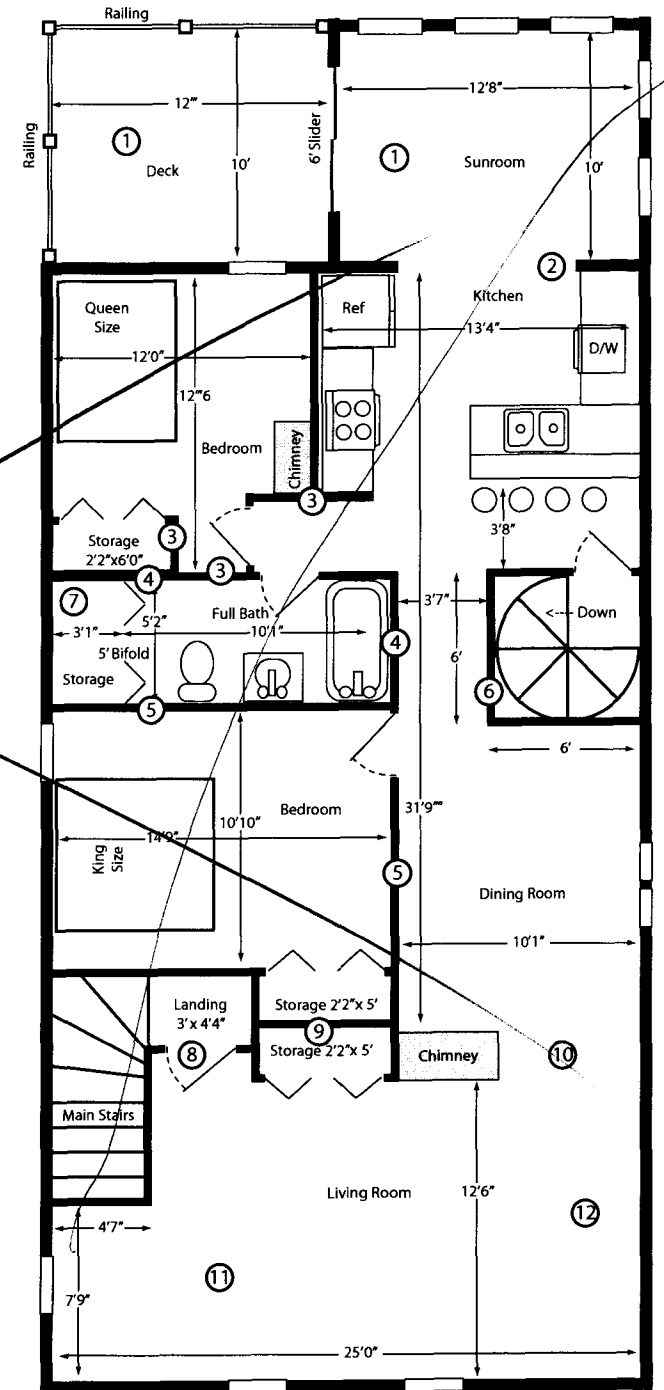




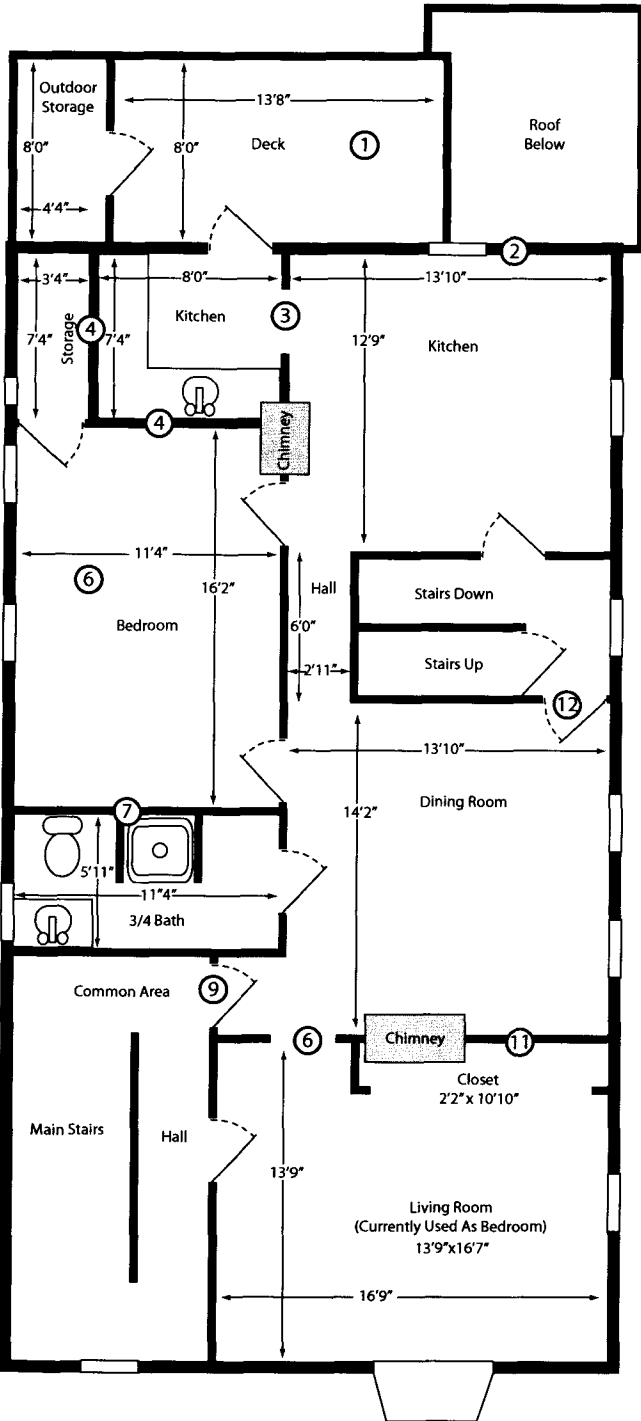
*old plan.*

\* Asbestos in hallway tile  
 will be removed by  
 New Meadow's Abatement  
 prior to construction.

- 1: Build Back Decks & Sunroom Above 2nd Floor Deck and Sun Room.
- 2: Create Passway (Arched?) between Kitchen and Sunroom
- 3: Walls removed and added to create Bedroom
- 4: Walls added and removed to create bathroom
- 5: Existing bathroom wall removed and extended ot existing dining room wall to create 2nd bedroom and bath.
- 6: Walls on ether side of stairwell removed and repositioned with existing stairwell to 2nd floor removed and install new spiral stair.
- 7: Pre-Plumb and Wire for future washer / dryer stackable
- 8: Remove doors and add walls to create landing
- 9: Remove door and wall and create storage
- 10: Remove wall between dining room and Living Room
- 11: Remove side room and hall way to expand living room
- 12 Remove storage closets to expand living room.



63 Kellogg Street  
**SECOND FLOOR - Existing Floor Plan**  
 1/8" = 1' All Sizes Approximate  
 Revision Date: 6/5/09



*Revised.*

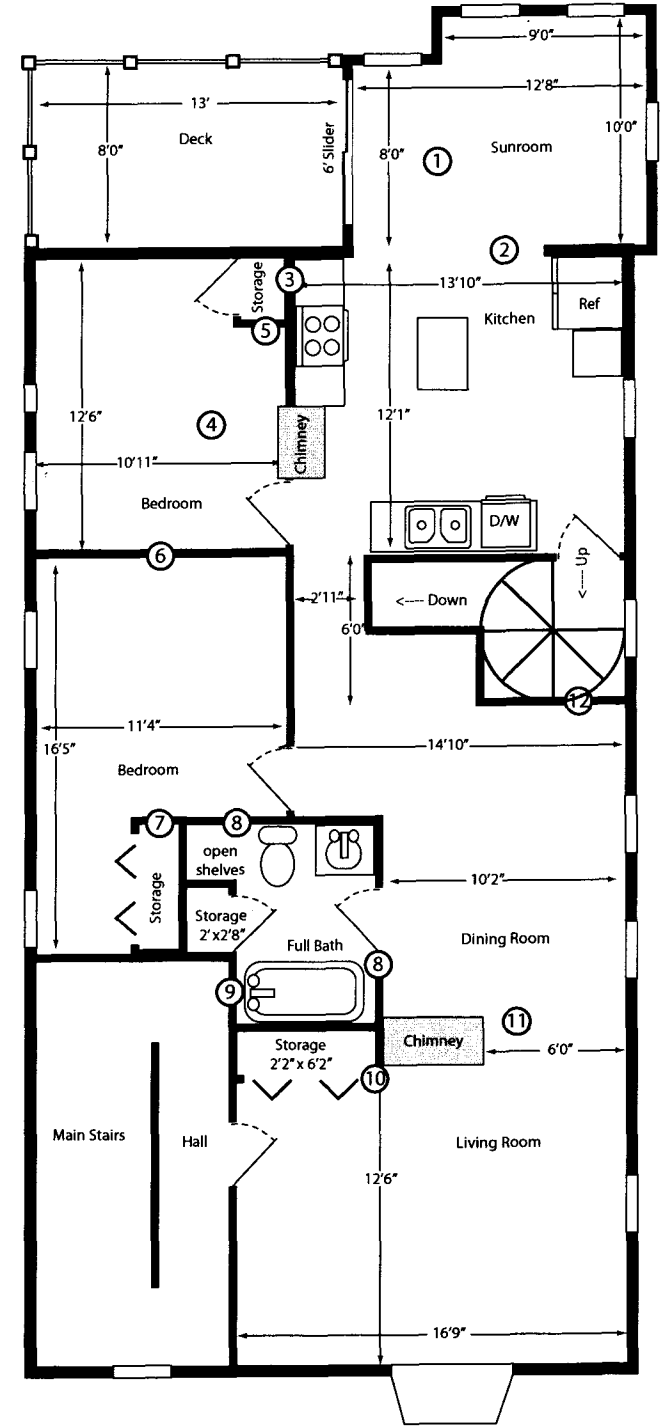


- 1: Build Deck and Sunroom above 1st Floor Addition.
- 2: Passway created from Kitchen to Sunroom
- 3: Passway blocked
- 4: Walls Removed to create bedroom
- 5: Walls Added to create storage
- 6: Wall added to create second bedroom
- 7: Wall removed from bathroom to create bedroom and storage
- 8: Walls added to create bathroom
- 9: Passway blocked
- 10: Walls added to create storage
- 11: Remove wall between living room and dining room.
- 12: Passway blocked and stairwell to third floor unit replaced with spiral stair.

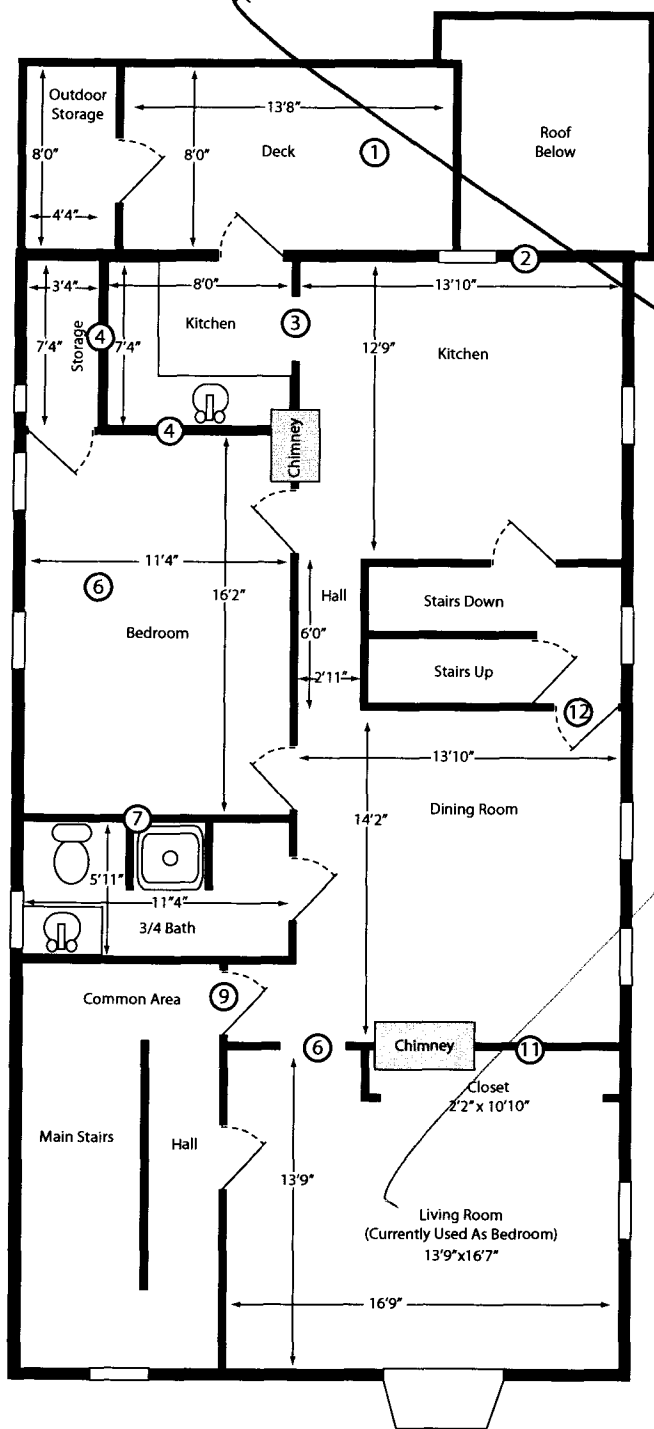
*Revised to conform to existing footprint*

63 Kellogg Street  
**SECOND FLOOR - Renovated Floor Plan**  
 1/8" = 1' All Sizes Approximate. Revision Date: 6/5/09

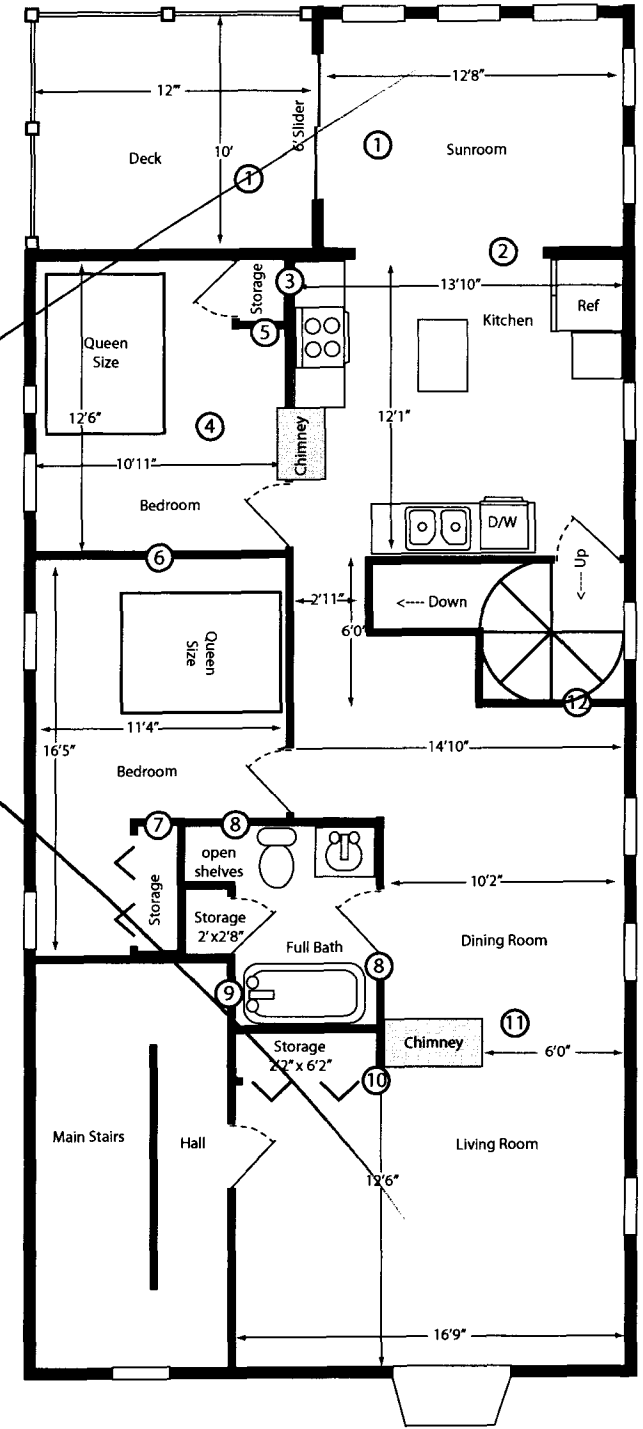
9x10 = 90φ  
 8x5 = 40φ  
 130φ



63 Kellogg Street  
 SECOND FLOOR - Existing Floor Plan  
 1/8" = 1' All Sizes Approximate  
 Revision Date: 5/29/09



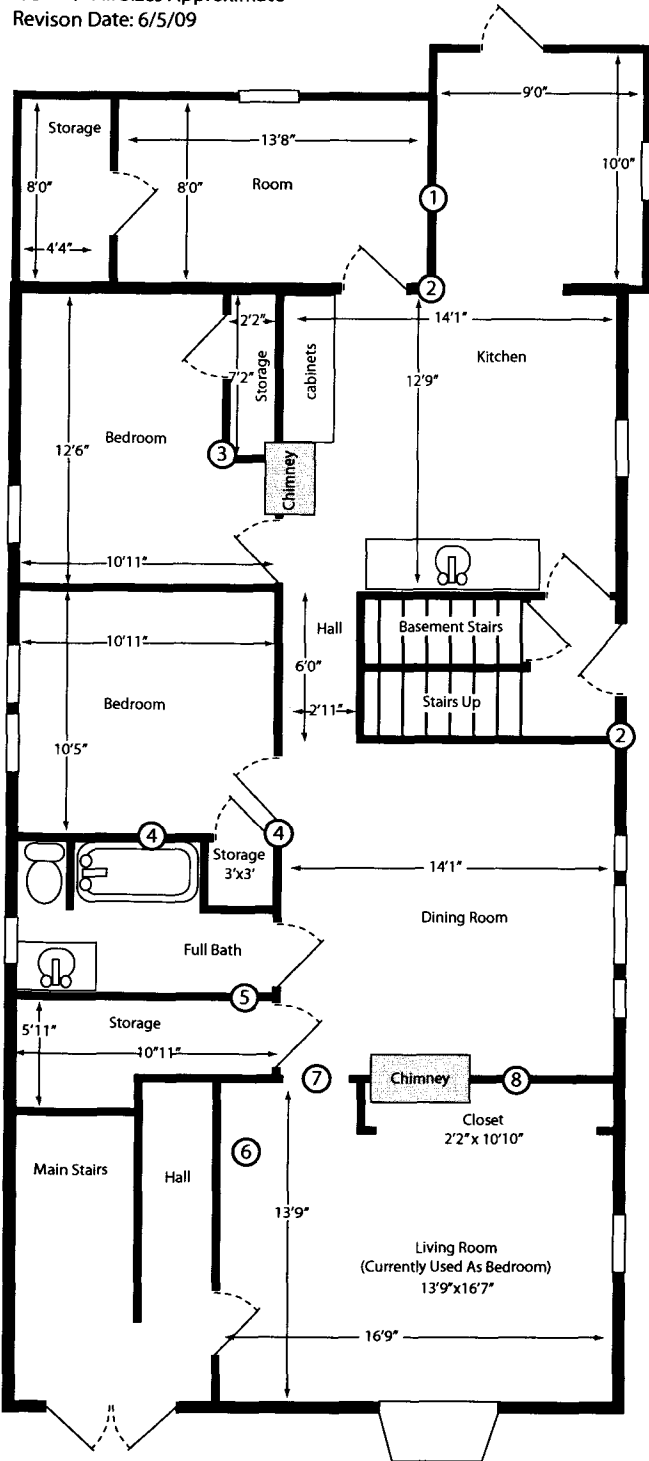
63 Kellogg Street  
 SECOND FLOOR - Renovated Floor Plan  
 1/8" = 1' All Sizes Approximate. Revision Date: 5/29/09



- 1: Deck rebuilt into sunroom and deck.
- 2: Passway created from Kitchen to Sunroom
- 3: Passway blocked
- 4: Walls Removed to create bedroom
- 5: Walls Added to create storage
- 6: Wall added to create second bedroom
- 7: Wall removed from bathroom to create bedroom and storage
- 8: Walls added to create bathroom
- 9: Passway blocked
- 10: Walls added to create storage
- 11: Remove wall between living room and dining room.
- 12: Passway blocked and stairwell to third floor unit replaced with spiral stair.

old

63 Kellogg Street  
 FIRST FLOOR - Existing Floor Plan  
 1/8" = 1' All Sizes Approximate  
 Revision Date: 6/5/09



Revised

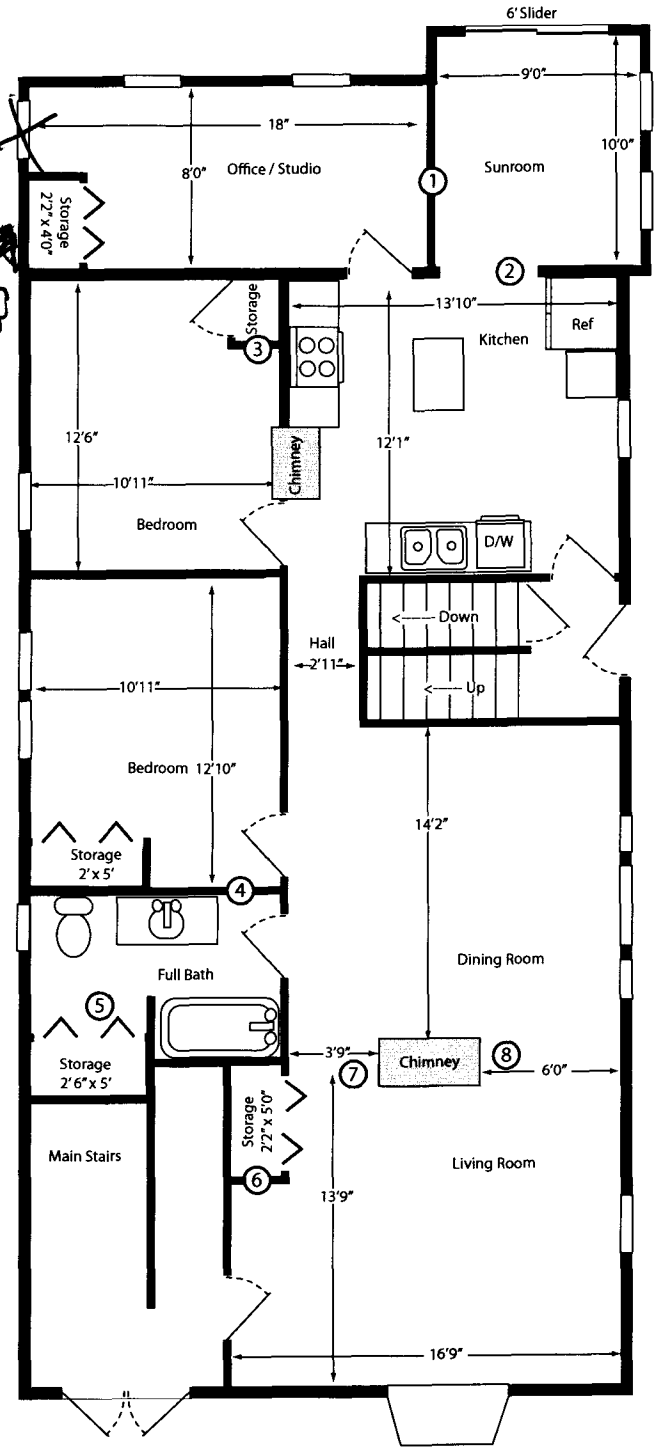


- 1: Addition rebuilt into office / studio and Sunroom.
- 2: Widen Passway from Kitchen into Sunroom
- 3: Wall moved to open up bedroom and shrink storage
- 4: Wall moved to widen bedroom
- 5: Wall removed to widen bathroom
- 6: Storage added
- 7: Passway removed
- 8: Closet and wall between living room and dining room removed.

Revised to conform to existing footprint

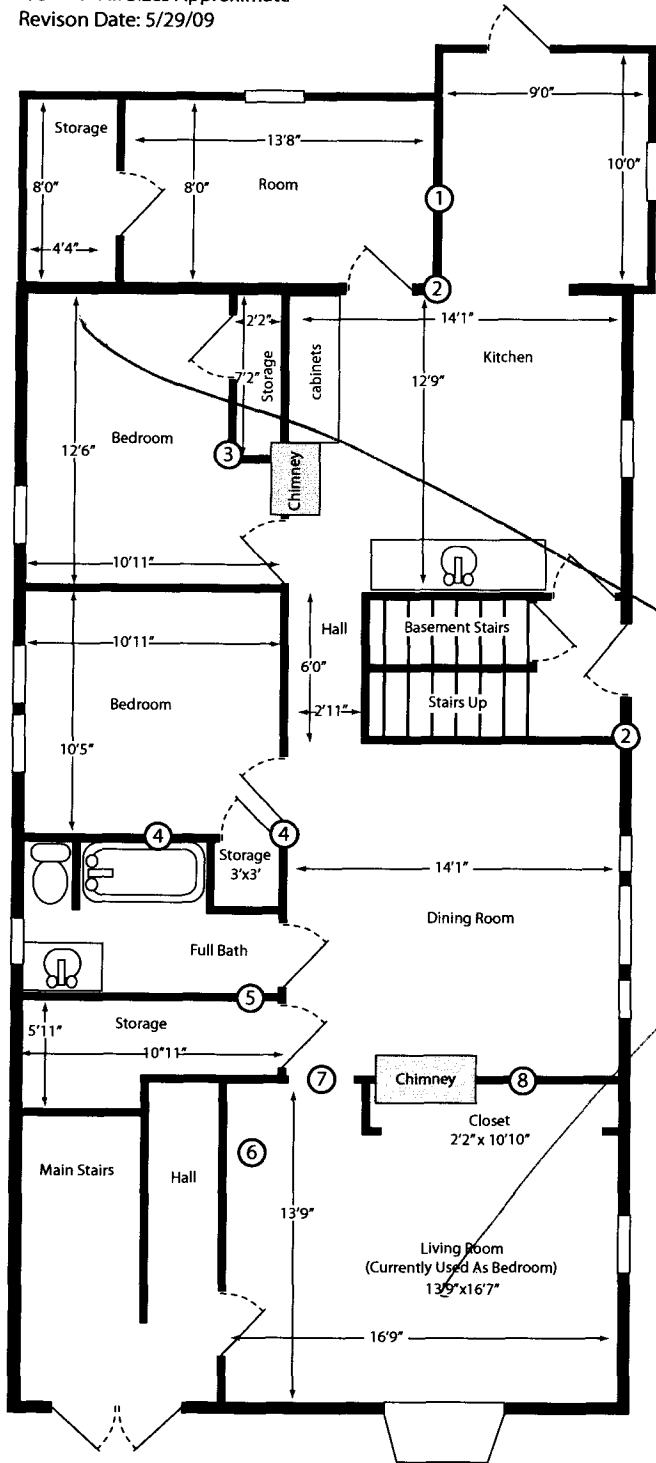
JUN - 8 2009

63 Kellogg Street  
 FIRST FLOOR - Renovated Floor Plan  
 1/8" = 1' All Sizes Approximate. Revision Date: 6/5/09



Window not allowed  
 Packed wall  
 5' both sides

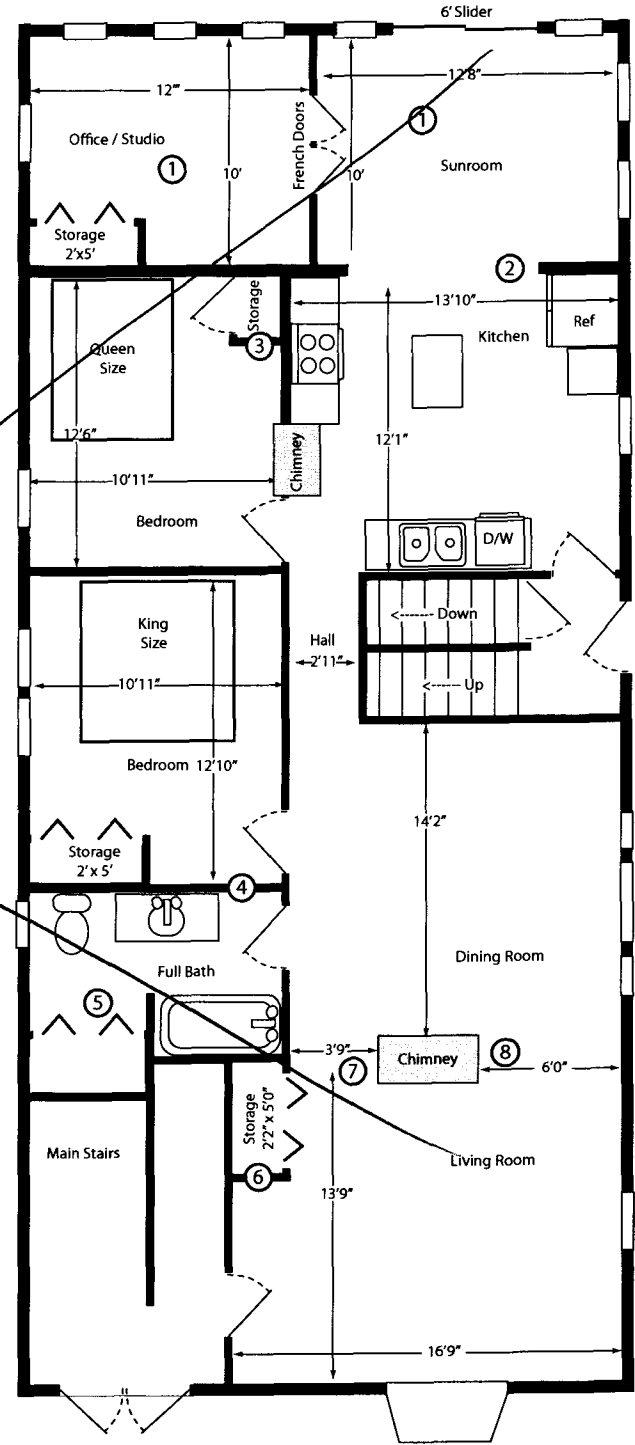
63 Kellogg Street  
 FIRST FLOOR - Existing Floor Plan  
 1/8" = 1' All Sizes Approximate  
 Revision Date: 5/29/09



- 1: Addition rebuilt into office / studio and Sunroom.
- 2: Widen Passway from Kitchen into Sunroom
- 3: Wall moved to open up bedroom and shrink storage
- 4: Wall moved to widen bedroom
- 5: Wall removed to widen bathroom
- 6: Storage added
- 7: Passway removed
- 8: Closet and wall between living room and dining room removed.

*old*

63 Kellogg Street  
 FIRST FLOOR - Renovated Floor Plan  
 1/8" = 1' All Sizes Approximate. Revision Date: 5/29/09





63 Kellogg Street, Portland Maine.  
Window Schedule for Building Permit

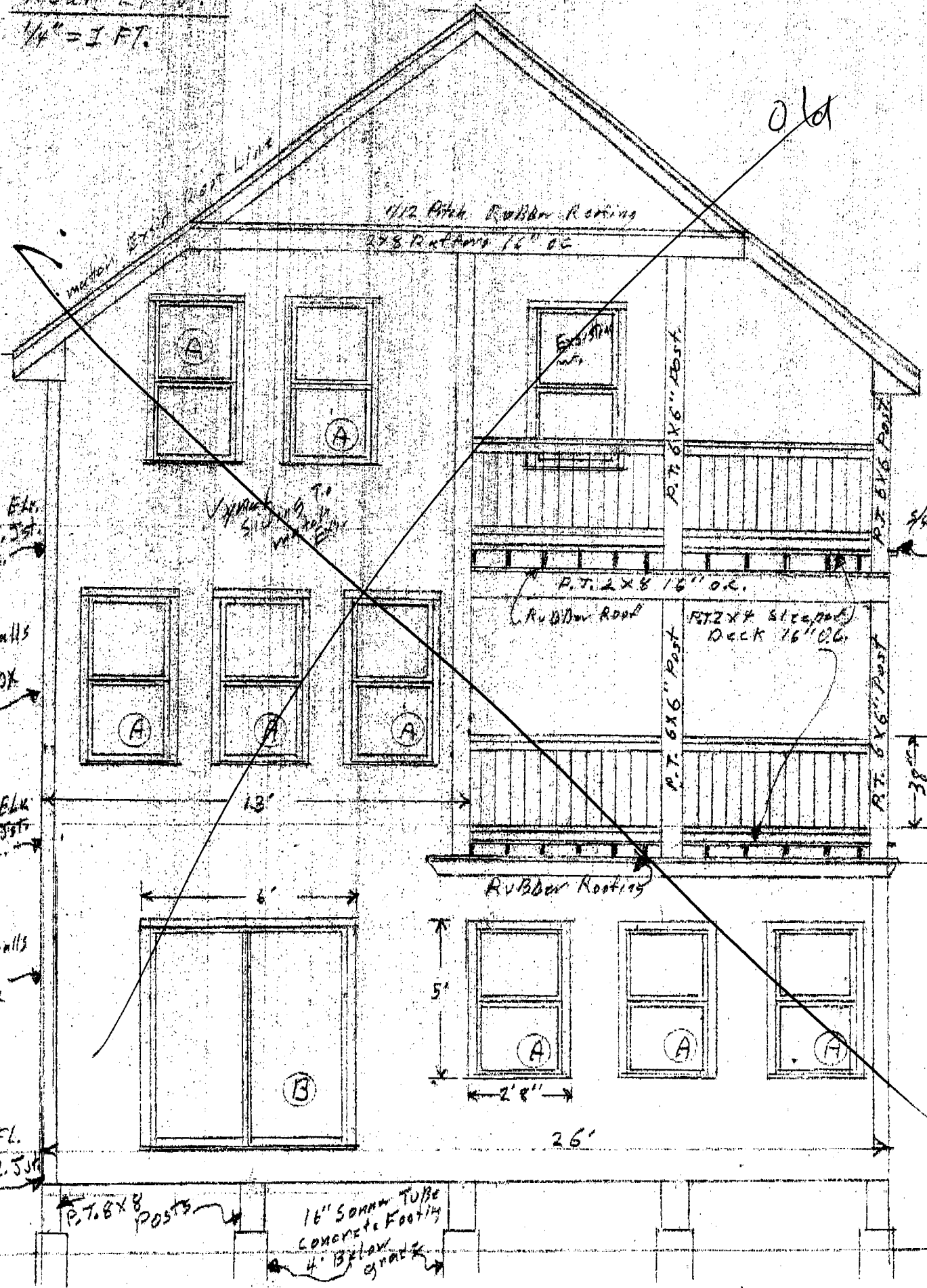
Anderson 400 Series tilt/wash, double hung  
Unit TW2448  
Ext. Vinyl  
Int. Wood  
QTY: 13  
R.O. 2'6 1/4" x 4'9"  
U-Factor .34

Anderson 400 Series Sliding patio door.  
Unit FWG6068R  
Ext. Vinyl  
Int. Wood  
QTY: 3  
R.O. 6' x 6' 7 1/2"  
U-Factor .33

Rear Elev.

1/4" = 1 FT.

Old



1/2 Pitch Rubber Roofing  
2x8 Rafters 16" O.C.

3rd Fl. Elev.  
2x8 Fl. Joist  
16" O.C.

2x4 walls  
16" O.C.  
1/2" CDX

2nd Fl. Elev.  
2x8 Fl. Joist  
16" O.C.

2x4 walls  
16" O.C.  
1/2" CDX

1st Fl.  
2x10 Fl. Joist  
16" O.C.

16" SAWN TUBE  
CONCRETE FOOTING  
4" BELOW GRADE

P.T. 6x8 POSTS

P.T. 6x6 POST

P.T. 6x6 POST

P.T. 6x6 POST

RUBBER ROOFING

RUBBER ROOFING

3/4" Deck

P.T. 2x8 16" O.C.  
RUBBER ROOF

P.T. 2x4 SLEEPER  
Deck 16" O.C.

38"

13"

6'

5'

2'8"

26'

Vertical text annotations: 5/8" ...

Vertical text annotations: 5/8" ...

Vertical text annotations: 5/8" ...

Vertical text annotations: 5/8" ...

Vertical text annotations: 5/8" ...

Vertical text annotations: 5/8" ...

Window label: A

Window label: A

Window label: EAST SIDE

Window label: A

Window label: A

Window label: A

Window label: B

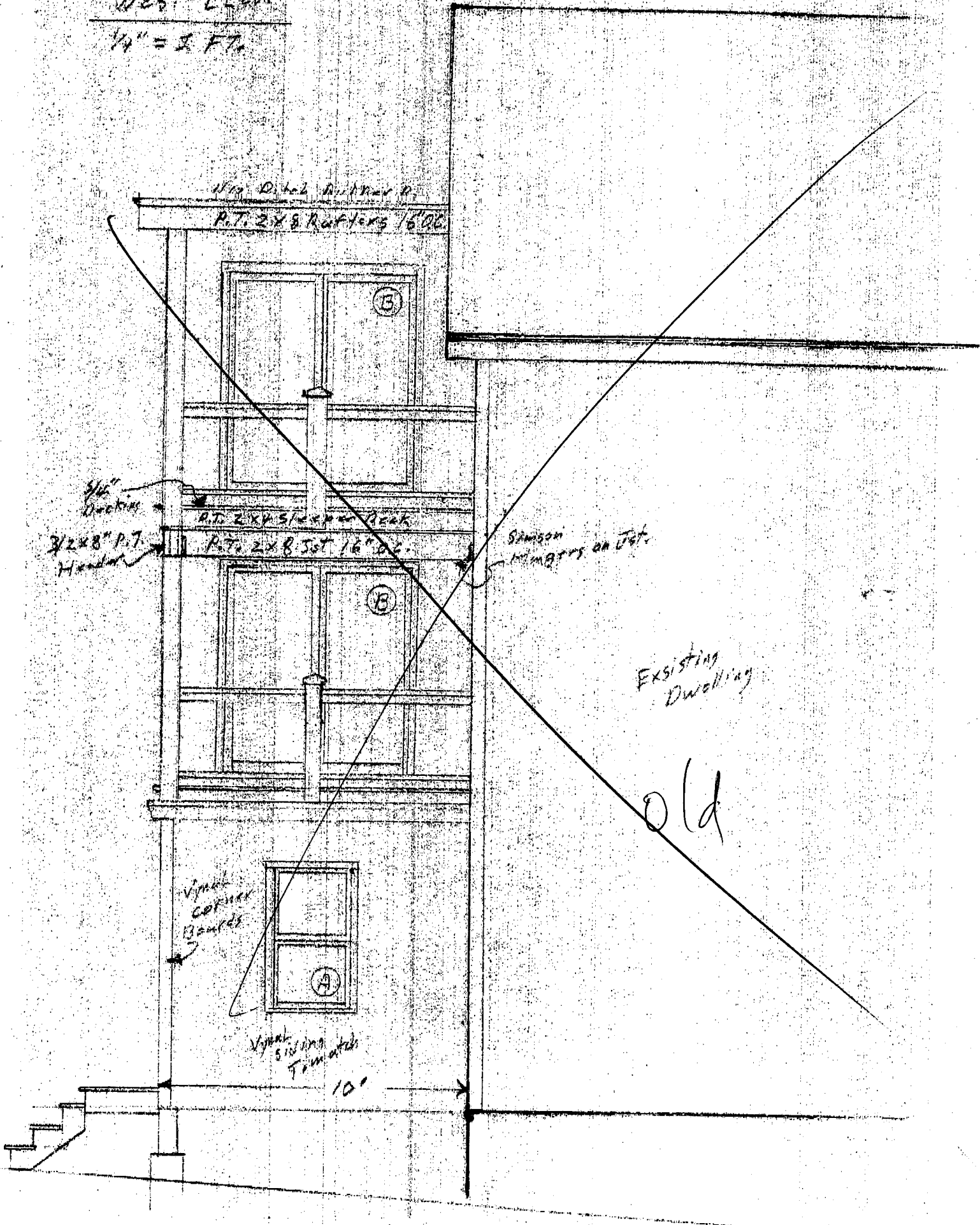
Window label: A

Window label: A

Window label: A

West ELEV.

1/4" = 1 FT.



Wing D. to 2nd Floor P.  
P.T. 2x8 Rafters 16" OC.

(3)

3/4" Decking

3/2x8" P.T. Handrail

P.T. 2x4 S/heave Deck

P.T. 2x8 Jst 16" OC.

Sawson Members on 1st.

(B)

Existing Dwelling

Old

Vynak CORNER Boards

(A)

Vynak Siding Trim at 10"

10"

East Elev  
1/4" = 2 FT.

1/12 Ditch Rafters Raining

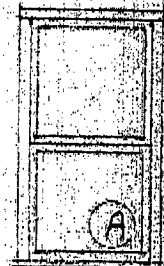
match  
Asphalt  
Roofing

*Old*

Existing  
Dwelling

3rd Fl. Elev.

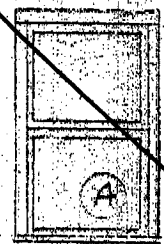
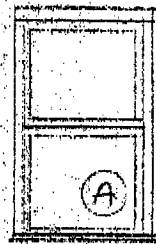
← 2x8 Joist 16" O.C. →



2nd Fl. Elev.

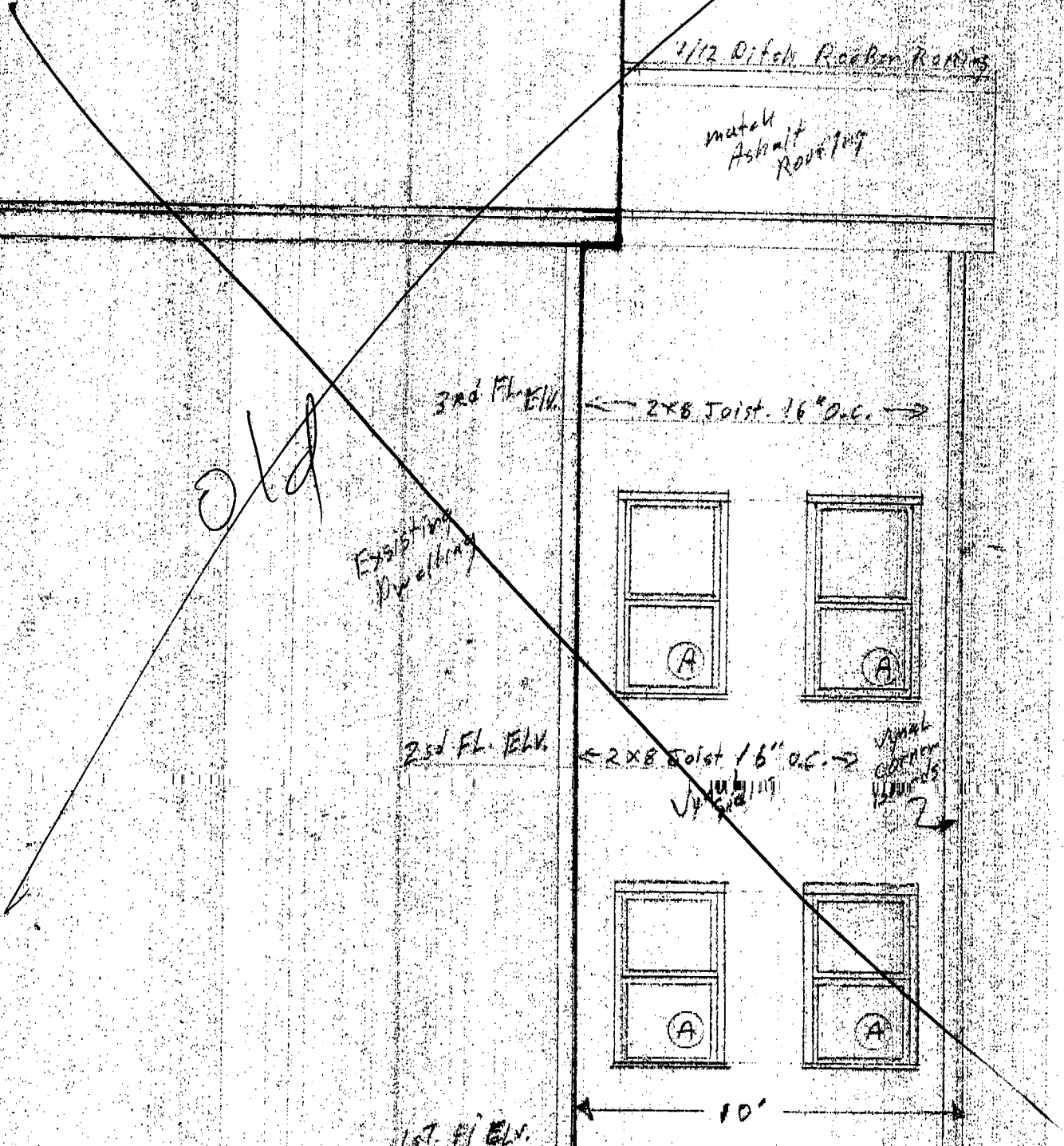
← 2x8 Joist 16" O.C. →

Match  
Asphalt  
Roofing



1st Fl. Elev.

← 10' →  
← 2x10 Joist 16" O.C. →



APPLICATION FOR PERMIT

PERMIT ISSUED

R.O.C.A. USE GROUP

R.O.C.A. TYPE OF CONSTRUCTION

472

ZONING LOCATION

R-6

FORTLAND, MAINE MAY 7 1984

TO THE CHIEF OF BUILDING & INSPECTION SERVICES, FORTLAND, MAINE

The undersigned hereby applies for a permit to erect, alter, repair, demolish, or remove or change use in accordance with the Laws of the State of Maine, the Ordinances of the City of Portland with plans and specifications prepared by me or my agent.

LOCATION 63 Kelloog Street

Owner's name and address Mrs. Ruth Johnson

Lessee's name and address

Contractor's name and address Oscar

Approx. use of building

Area

No. stories

Value on same lot

Contractual cost \$ 800.00

ARCHITECT—Mr.

775-545

TO construct 9' x 10' for pantry on rear of building

on 1st fl; Also 4' x 2' porch for an entrance

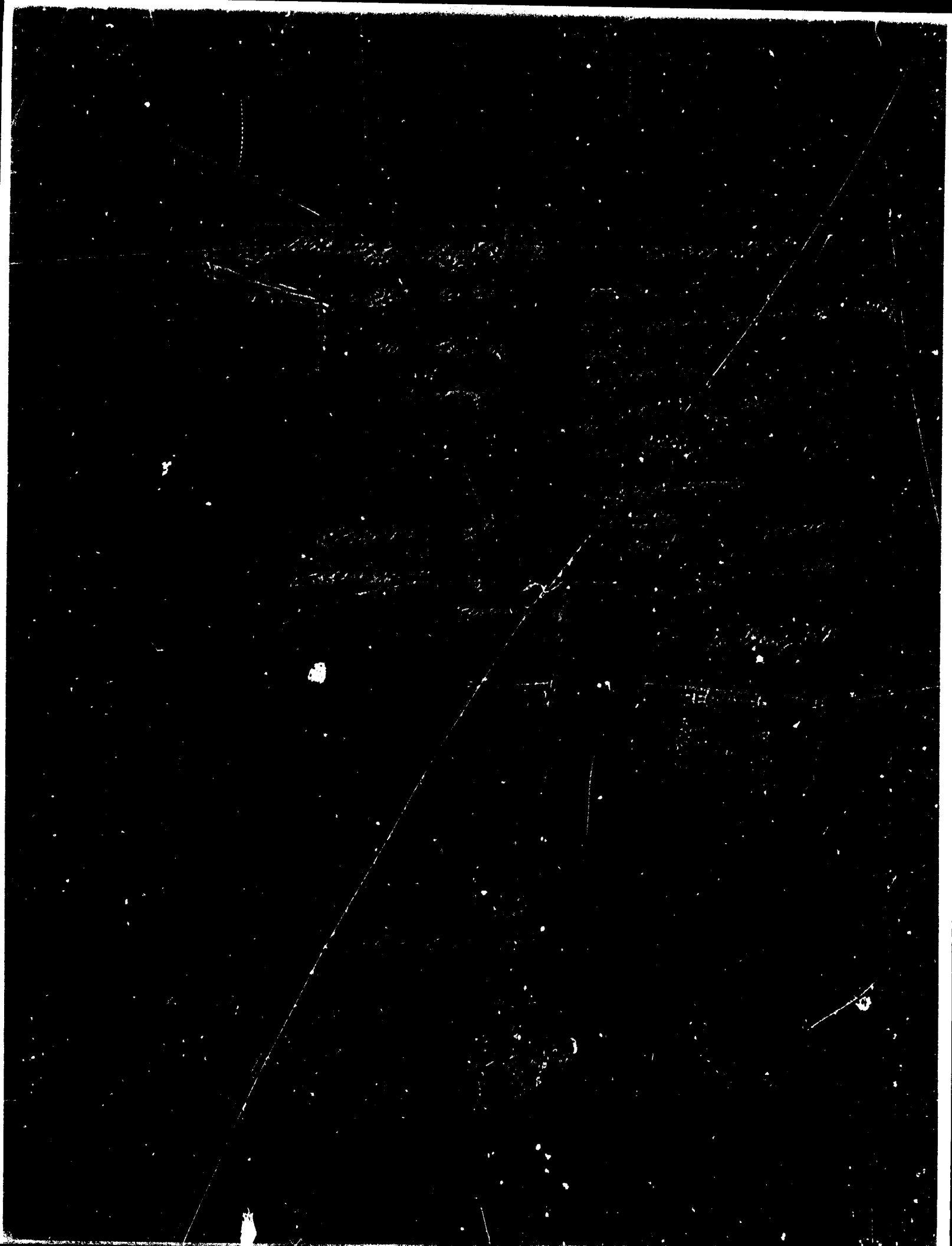
to rear

THIS PERMIT IS FOR 63 KELLOGG ST. FORTLAND, MAINE

THE APPLICANT hereby certifies that the installer and user of this permit are in compliance with the laws of the State of Maine and the Ordinances of the City of Portland.

DETAILS OF THIS WORK

10/10





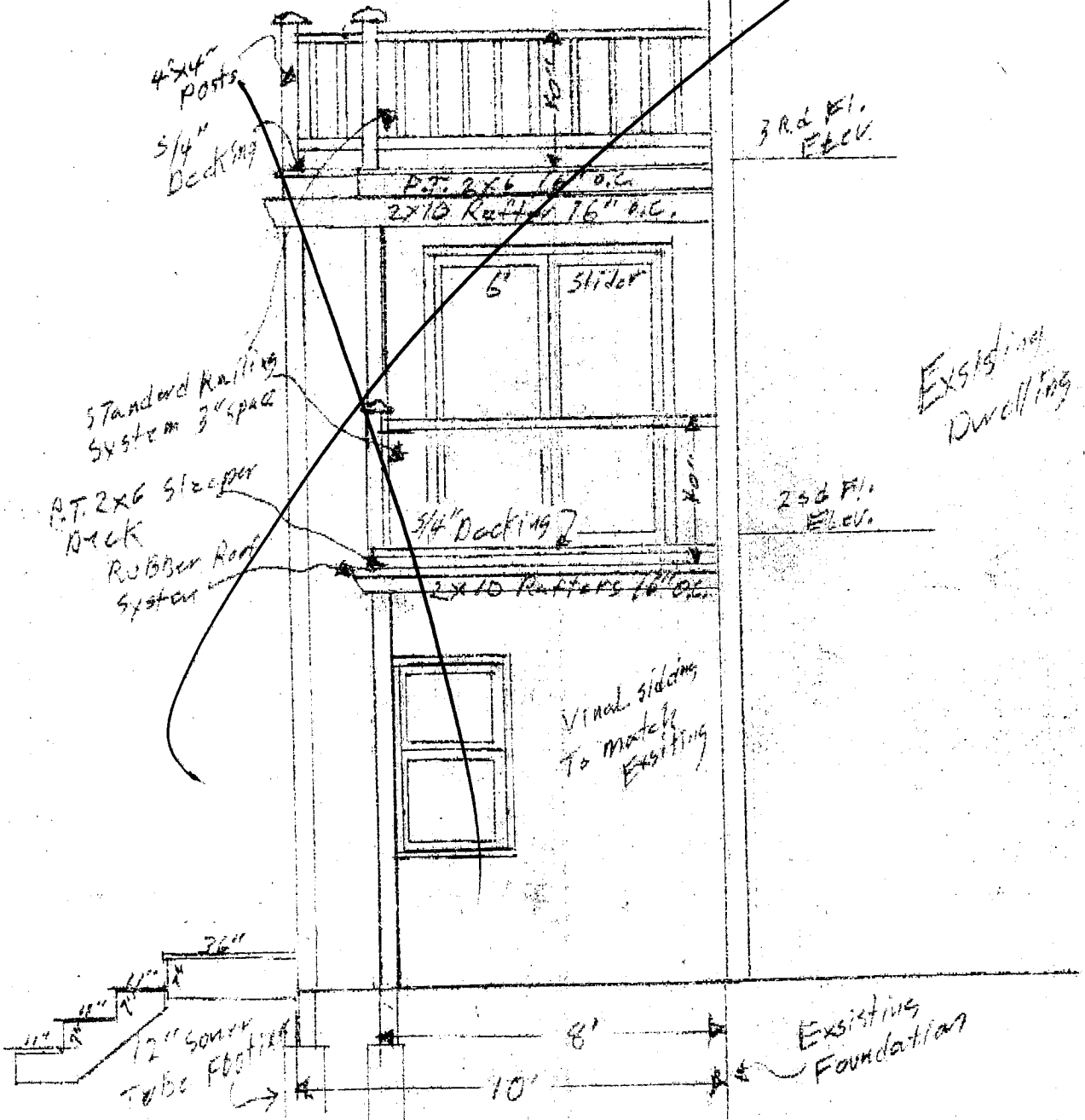
JUN - 8 2009

West Elev.

1/4" = 1 FT.

Revised to conform to  
existing footprint

63 Kellogg St.





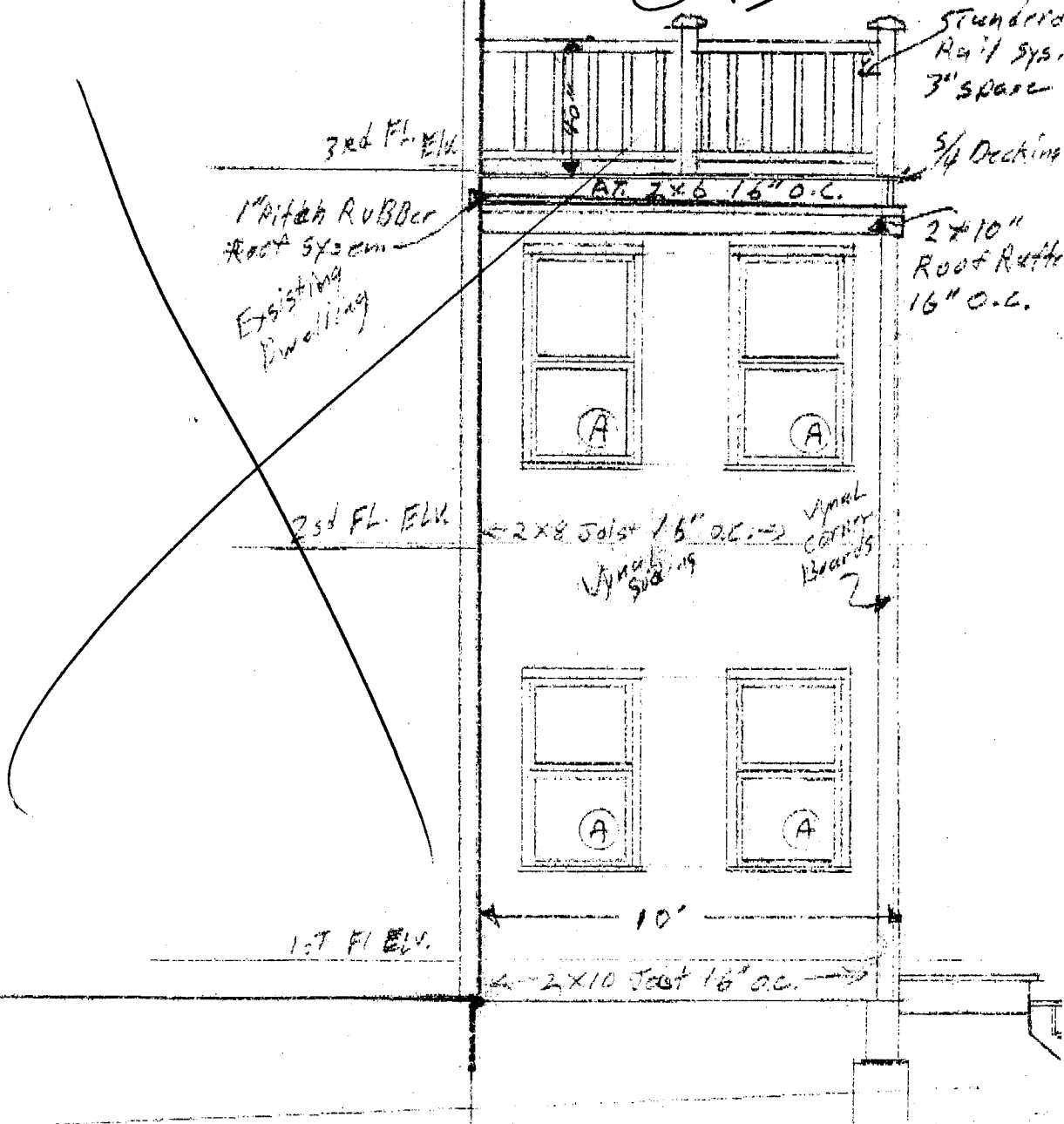
JUN - 8 2009

East Elev.  
1/4" = 1 FT.

Revised to match  
existing foot print

63 Hellog St.

JD



3rd FL. ELV.

1" Pitch RUBBER  
Roof System  
Existing  
Dwelling

2nd FL. ELV.

1st FL. ELV.

Standard  
Rail Sys.  
3" space

5/4 Decking

2x6 16" O.C.

2x10"  
Roof Rafter  
16" O.C.

2x8 Joist 16" O.C.

Vertical  
Siding

Vertical  
Corner  
Boards

10'

2x10 Joist 16" O.C.

REAR ELEV.

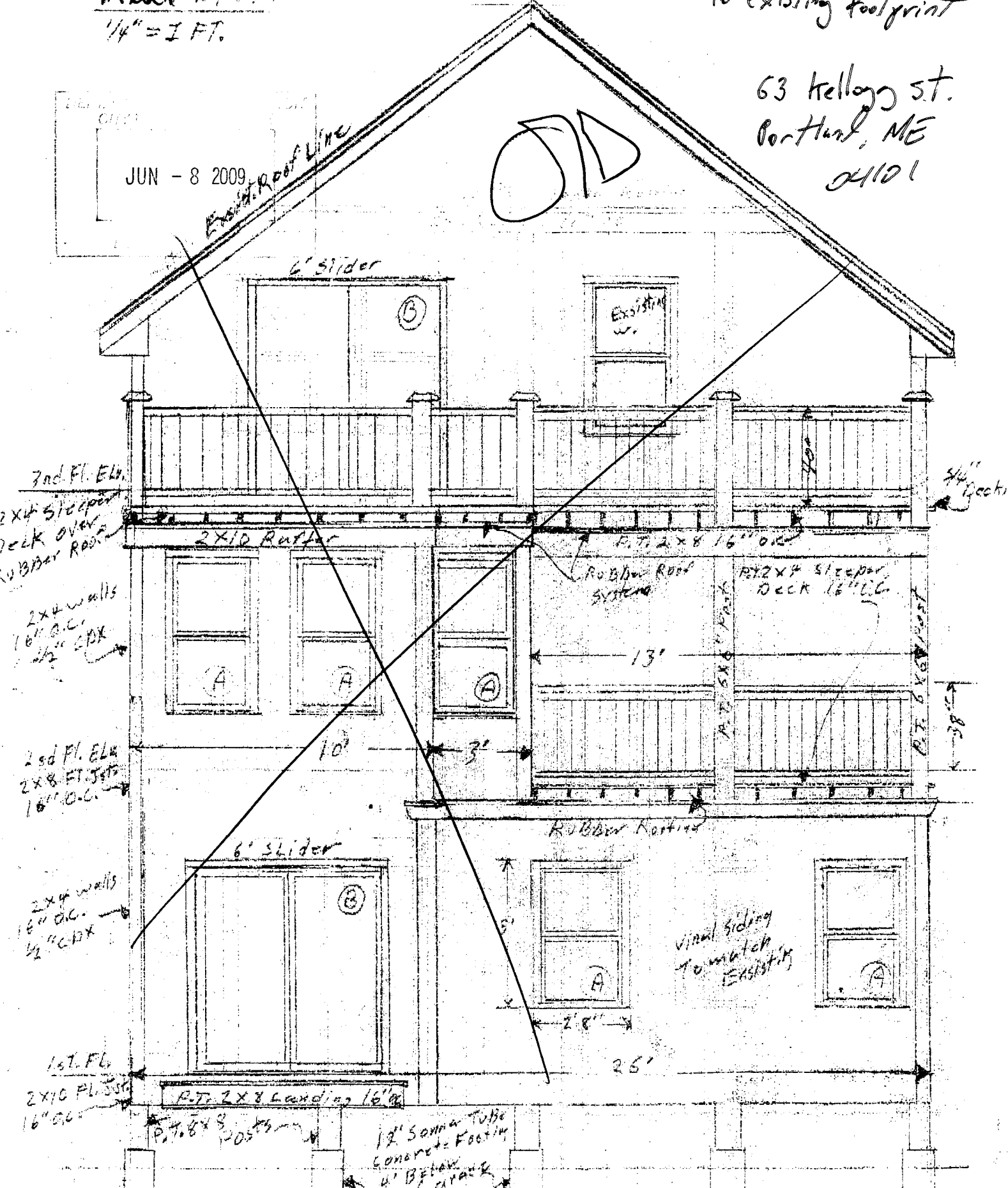
1/4" = 1 FT.

Revised to conform to existing footprint

63 Kellogg St.  
Portland, ME  
04101

JUN - 8 2009

OLD



Remove Existing Stair well to 3rd Fl. Unit.

Install New Spiral Stair Case 6'x6'

Existing Exit from 2nd Fl.

O/D

Existing Floor Joists

3'x6' Exs. Landing

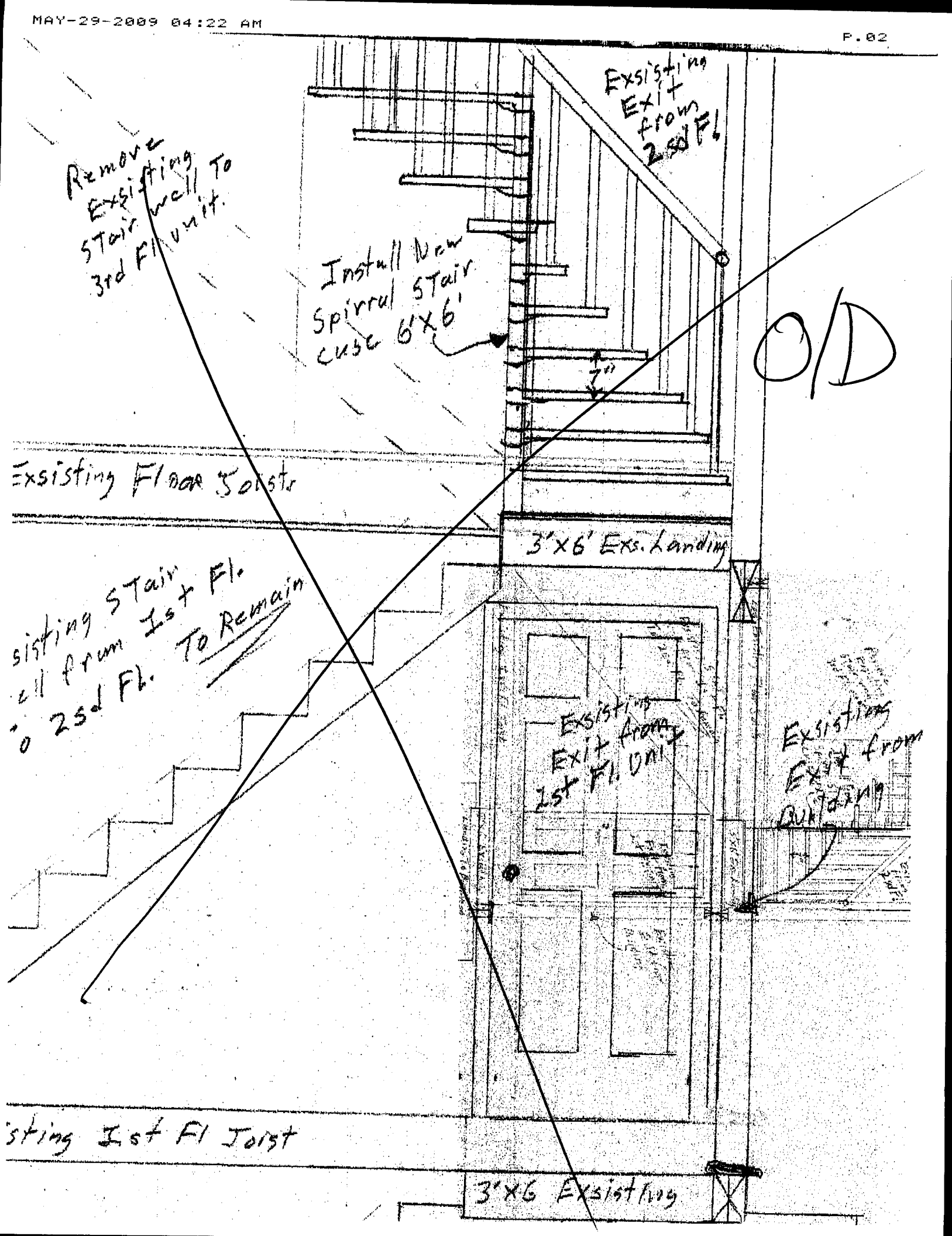
Existing Stair well from 1st Fl. to 2nd Fl. To Remain

Existing Exit from 1st Fl. Unit

Existing Exit from Building

Existing 1st Fl Joist

3'x6 Existing





## REScheck Software Version 4.2.1 Inspection Checklist

### Ceilings:

- Ceiling 1: Cathedral Ceiling (no attic), R-30.0 cavity insulation

Comments: \_\_\_\_\_

### Above-Grade Walls:

- Wall 1: Wood Frame, 18" o.c., R-13.0 cavity insulation

Comments: \_\_\_\_\_

### Windows:

- Window 1: Vinyl Frame, Double Pane with Low-E, U-factor: 0.300

For windows without labeled U-factors, describe features:

#Panels \_\_\_\_\_ Frame Type \_\_\_\_\_ Thermal Break? \_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_

Note: Up to 15 sq. ft. of glazed fenestration per dwelling is exempt from U-factor and SHGC requirements.

### Doors:

- Door 1: Glass, U-factor: 0.300

Comments: \_\_\_\_\_

### Floors:

- Floor 1: All-Wood Joist/Truss, Over Outside Air, R-30.0 cavity insulation

Comments: \_\_\_\_\_

Floor insulation is installed in permanent contact with the underside of the subfloor decking.

### Air Leakage:

- Joints, penetrations, and all other such openings in the building envelope that are sources of air leakage are sealed.
- Recessed lights are either 1) Type IC rated with enclosure sealed/gasketed against leaks to the ceiling, or 2) Type IC rated and ASTM E283 labeled, or 3) installed inside an air-tight assembly with a 0.5" clearance from combustible materials and a 3" clearance from insulation.

### Sunrooms:

- Sunrooms that are thermally isolated from the building envelope have a maximum fenestration U-factor of 0.50 and the maximum skylight U-factor of 0.75. New windows and doors separating the sunroom from conditioned space meet the building thermal envelope requirements.

### Vapor Retarder:

- Vapor retarder is installed on the warm-in-winter side of all non-vented framed ceilings, walls, and floors; or it has been determined that moisture or its freezing will not damage the materials; or other approved means to avoid condensation are provided.

Comments: \_\_\_\_\_

### Materials Identification:

- Materials and equipment are identified so that compliance can be determined.
- Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment have been provided.
- Insulation R-values and glazing U-factors are clearly marked on the building plans or specifications.
- Insulation is installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.

### Duct Insulation:

- Ducts in unconditioned spaces or outside the building are insulated to at least R-8.
- Ducts in floor trusses above unconditioned spaces or above the outdoors are insulated to at least R-6.

**Duct Construction:**

- Air handlers, filter boxes, and duct connections to flanges of air distribution system equipment or sheet metal fittings are sealed and mechanically fastened.
- All joints, seams, and connections are made substantially airtight with tapes, gasketing, mastics (adhesives) or other approved closure systems. Tapes and mastics are rated UL 181A or UL 181B.
- Building framing cavities are not used as supply ducts.
- Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.
- Additional requirements for tape sealing and metal duct crimping are included by an inspection for compliance with the International Mechanical Code.

**Temperature Controls:**

- Thermostats exist for each separate HVAC system. A manual or automatic means to partially restrict or shut off the heating and/or cooling input to each zone or floor is provided.

**Certificates:**

- A permanent certificate is provided on or in the electrical distribution panel listing the predominant insulation R-values; window U-factors; type and efficiency of space-conditioning and water heating equipment.

**NOTES TO FIELD: (Building Department Use Only)**

---

---

---

---

---

---

---

---



# 2006 IECC Energy Efficiency Certificate

## Unconditioned Spaces

Item	R-Value
Ceiling / Roof	30.00
Wall	13.00
Floor / Foundation	30.00
Ductwork (unconditioned space):	

## Conditioned Spaces

Item	R-Value	Notes
Window	0.30	
Door	0.30	NA

## Energy Efficient Equipment

Item	Efficiency
Water Heater:	

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Comments:



# REScheck Software Version 4.2.1 Compliance Certificate

Energy Code: 2006 IECC  
Location: Portland, Maine  
Construction Type: Single Family  
Project Type: Alteration  
Heating Degree Days: 7378  
Climate Zone: 6

Construction Site:  
63 Kellog St  
Portland, ME 04101

Owner/Agent:

Designer/Contractor:  
Albert Nielsen  
Albert Nielsen Construction

Compliance: 0.2% Better Than Code    Maximum UA: 163    Your UA: 163

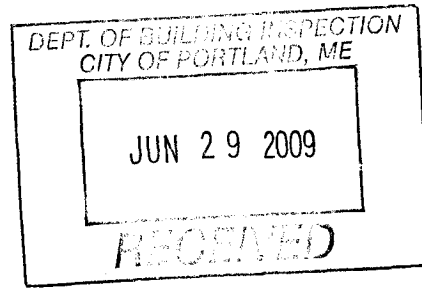
Assembly	Gross Area, Perimeter	U-Value	Cost, \$/sq ft	Glazing U-Factor	It
Ceiling 1: Cathedral Ceiling (no attic)	286	30.0	0.0		10
Wall 1: Wood Frame, 16" o.c.	980	13.0	0.0		54
Window 1: Vinyl Frame:Double Pane with Low-E	174			0.300	52
Door 1: Glass	126			0.300	36
Floor 1: All-Wood Joist/Truss:Over Outside Air	260	30.0	0.0		9

**Compliance Statement:** The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2006 IECC requirements in REScheck Version 4.2.1 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Name - Title: Jim KELLY      Signature: *Jim Kelly*      Date: 5-29-09

**PROJECT DESCRIPTION**

63 Kellogg St. Portland, ME.  
Assessors Lot 17-A-3  
Owner: 63 Kellogg Street, LLC  
Contact: Dominic White (207) 272-2157



**General Overview:**

The repair and remodel of a residential 3-unit for use as an owner-occupied rental building. All existing staircases and common area walls will remain intact. Rear addition on first and second floors will be demolished and rebuilt. All units will be repaired and remodeled. Common areas will have cosmetic repairs only as well as being updated with proper lighting and fire warning systems.

**Rear Addition:**

Remove and rebuild rear addition remaining within existing footprint. First floor addition will add a room on one side and expand the kitchen on the other side. The second floor kitchen will expand into the addition with a deck above the first floor room. The third floor will consist of an open deck only.

**Rental Units:**

All rental units will be remodeled to expand the bedrooms and open up the living spaces. The bathrooms and kitchens will be updated. In some areas portions of load bearing walls will be removed. The removed sections will be properly headed and will not exceed a 10' span.

All existing drop down ceilings on the 1<sup>st</sup> and 2<sup>nd</sup> floors will be removed and replaced with sheetrock meeting Fire 1 and Sound 50 ratings.

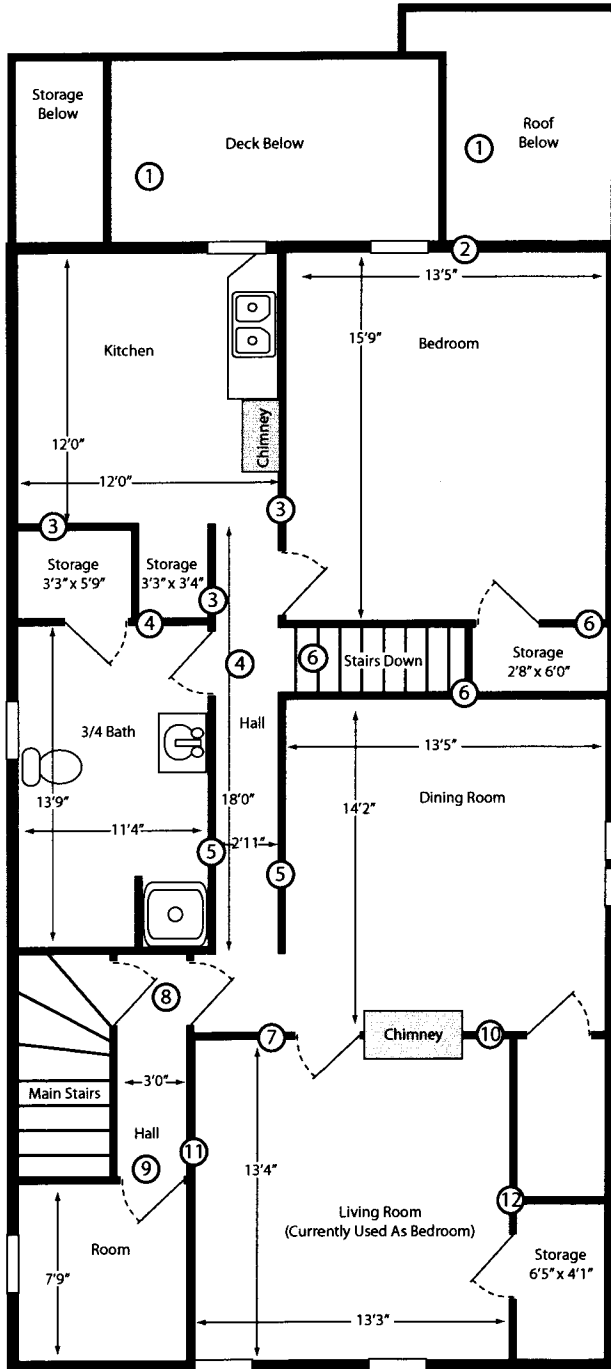
A half bath will be added in the second 1<sup>st</sup> and 2<sup>nd</sup> floor units.

**Basement:**

There are no structural changes to the basement. Proper hardwired fire alarms will be installed. The basement will continue to be used as a laundry room and storage area.

Estimated Costs:      Construction: \$38,500 — permit fee paid for this portion.  
                                  Electrical:     \$14,900 > check included for this portion.  
                                  Plumbing:     \$18,000



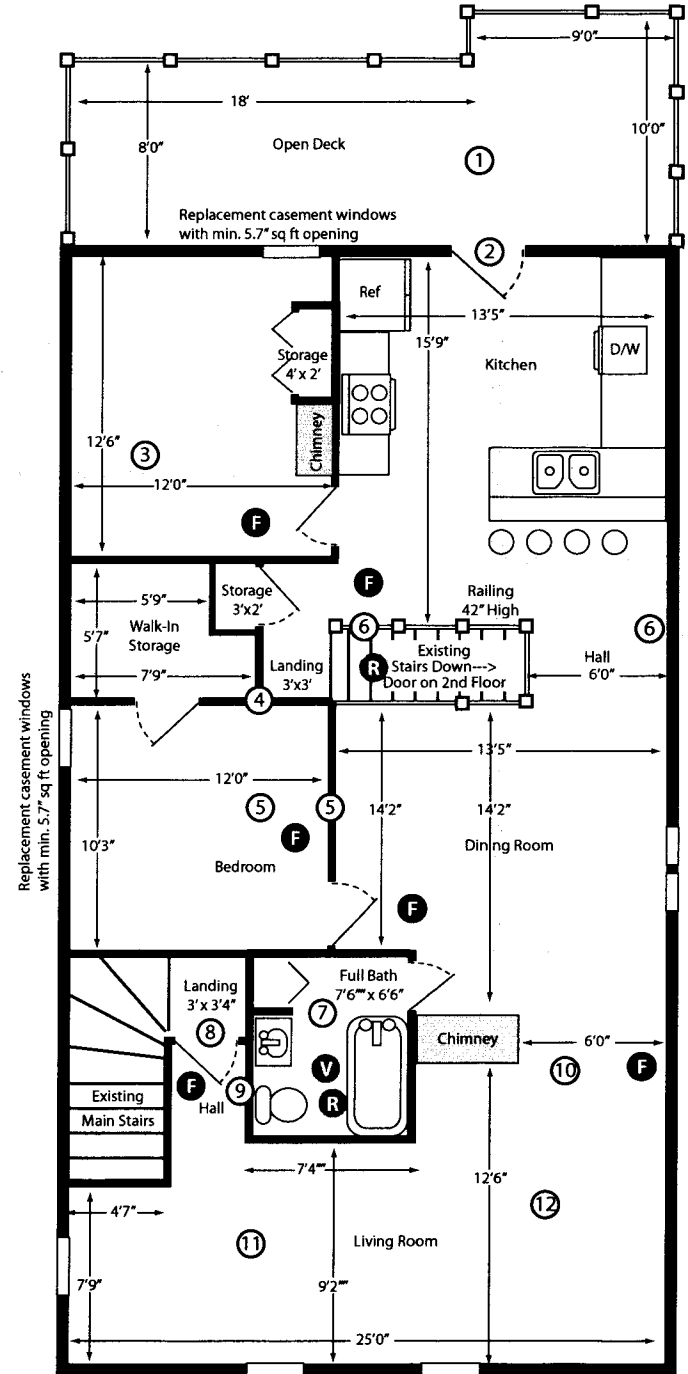


REVISED

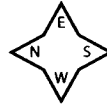
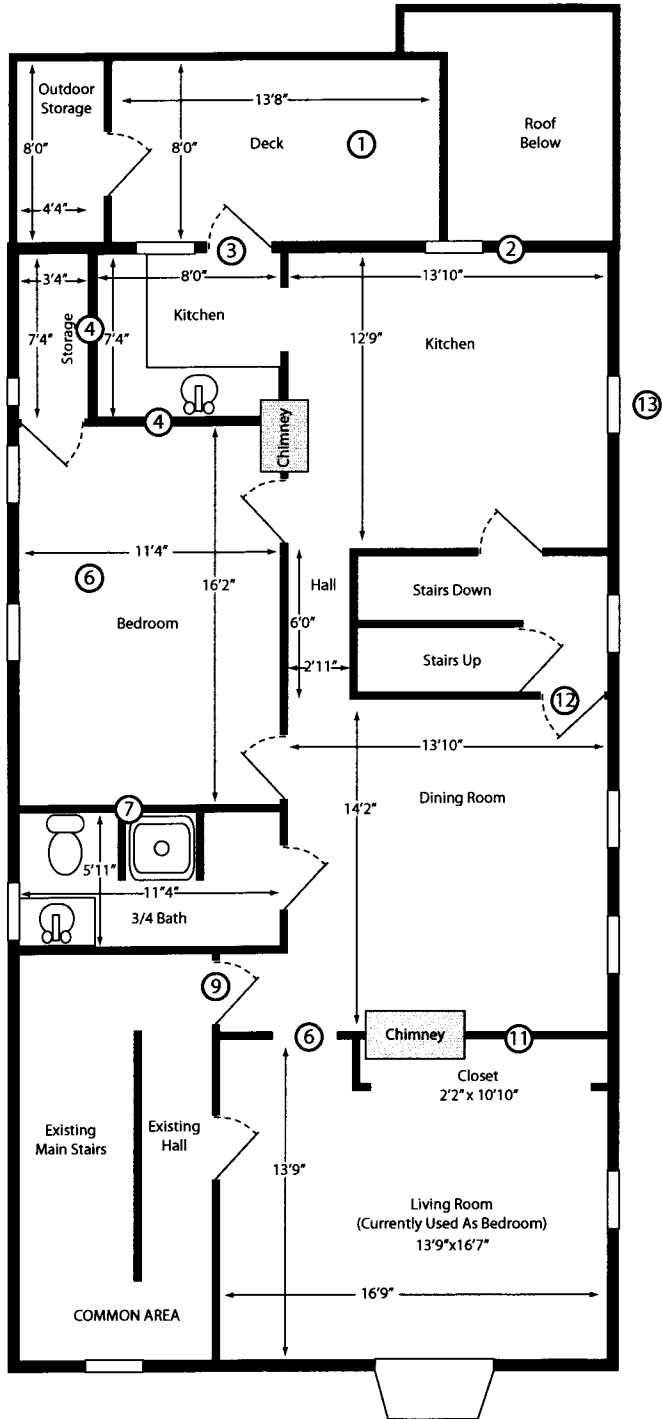


- 1: Build Open Deck (no roof) above 2nd floor deck and sunroom.
- 2: Add 36" Door onto Deck from Kitchen.
- 3: Walls removed and added to create Bedroom
- 4: Walls added and removed to create Bedroom, Storage and Landing.
- 5: Existing bathroom wall removed to create 2nd bedroom expanding to existing hall wall.
- 6: Walls on either side of staircase and storage removed and replaced with rail (to code) and pass through.
- 7: Remove existing wall to move existing bathroom.
- 8: Remove doors and add walls to create landing
- 9: Hall created by existing common area wall and new bathroom wall.
- 10: Remove wall between dining room and Living Room
- 11: Remove side room and hall way to expand living room
- 12: Remove storage closets to expand living room.

- F** Fire Alarm Locations
- V** Vents to outside  
All vents UL rated and installed according to code.
- R** Recessed Lighting Installed to Code

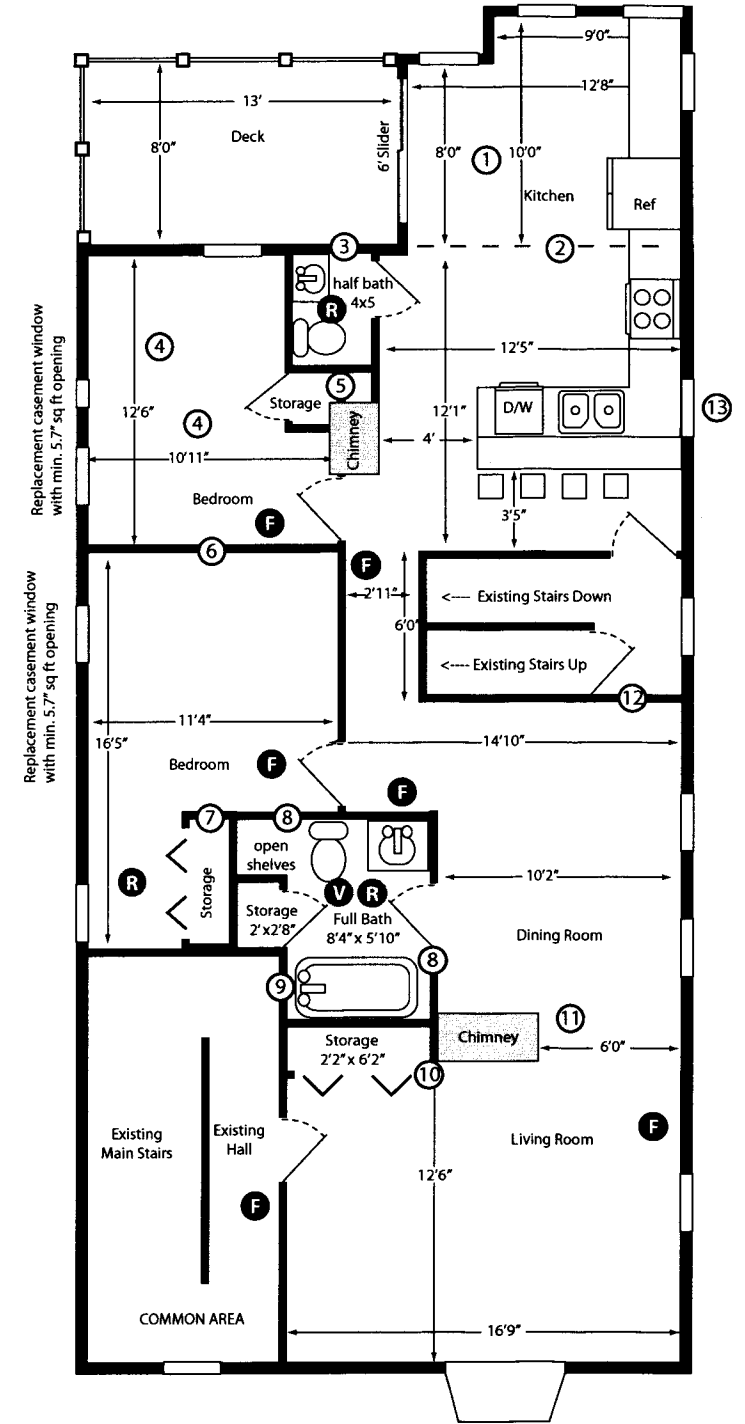


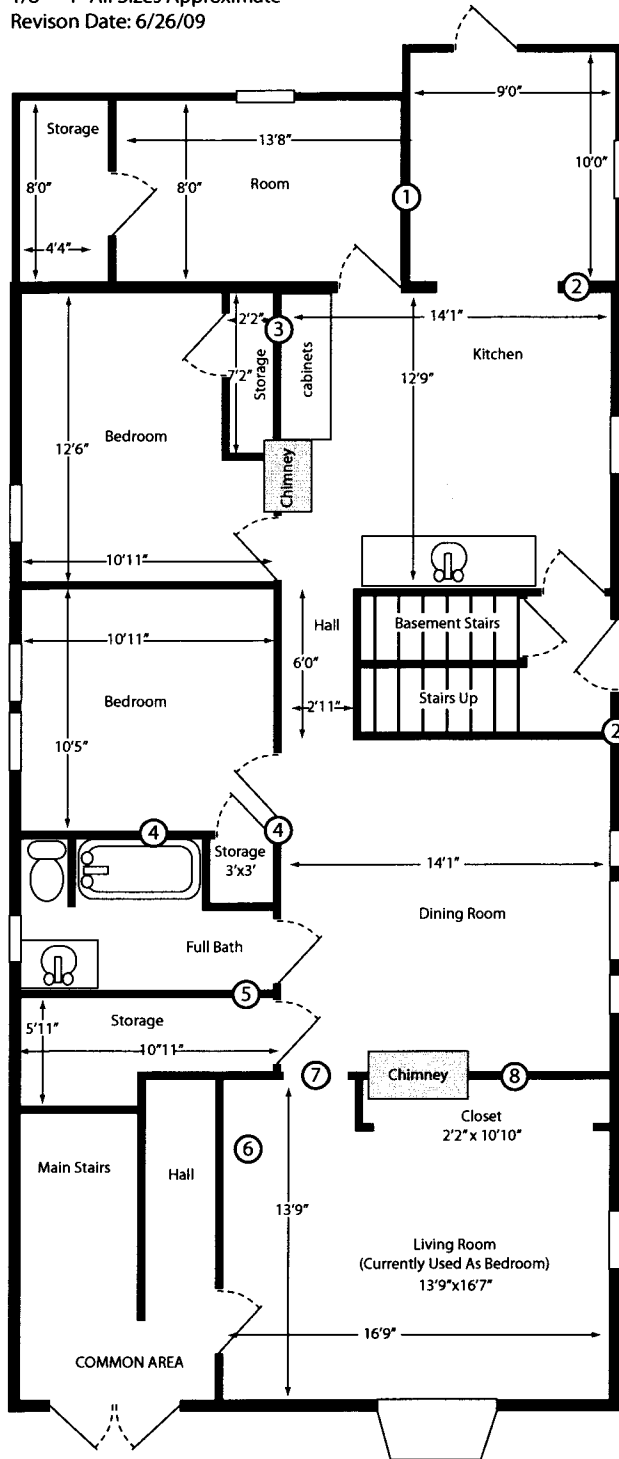
*REVISED*



- 1: Build Deck and Sunroom above 1st Floor Addition.
- 2: Passway created to expand kitchen
- 3: Passway blocked and half bath created
- 4: Walls Removed to create bedroom
- 5: Walls Added to create storage
- 6: Wall added to create second bedroom
- 7: Wall removed from bathroom to create bedroom and storage
- 8: Walls added to create bathroom
- 9: Passway blocked
- 10: Walls added to create storage
- 11: Remove wall between living room and dining room.
- 12: Passway blocked.
- 13: Existing Window Removed and replaced with shorter window to accommodate counter.

- F** Fire Alarm Locations
- V** Vents to outside  
All vents UL rated and installed according to code.
- R** Recessed Lighting Installed to Code



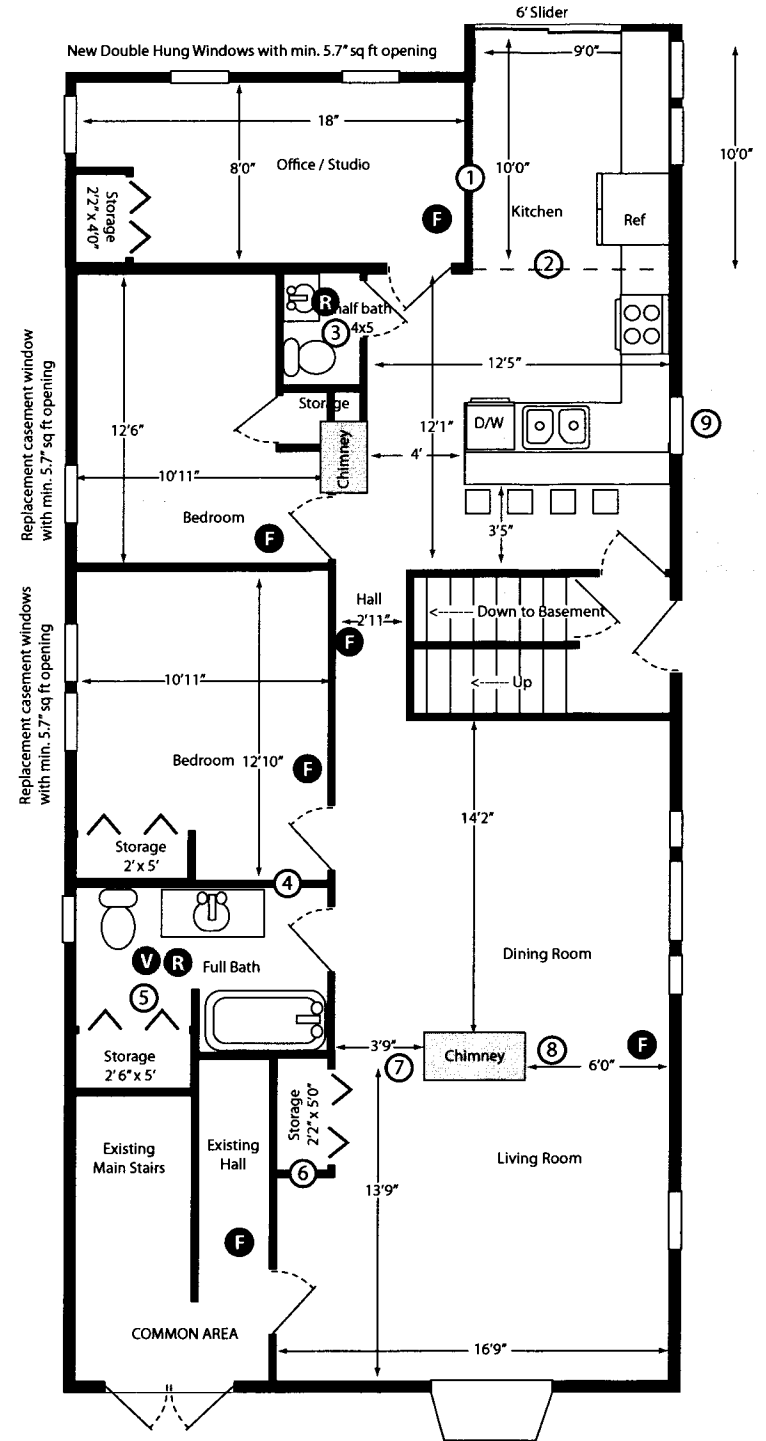


*Revised*



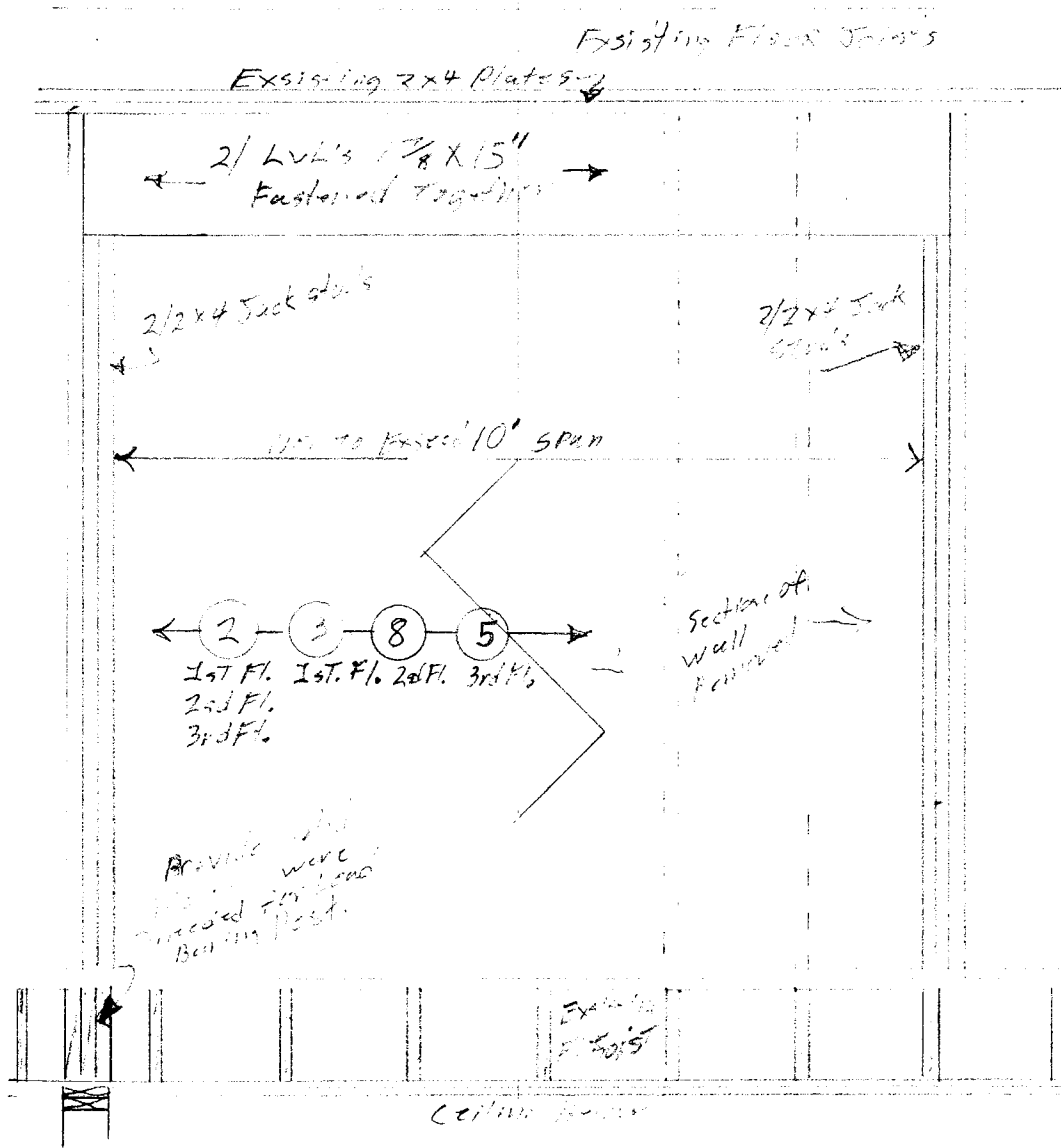
- 1: Addition rebuilt into office / studio and Sunroom.
- 2: Widen Passway from Kitchen to addition creating larger kitchen
- 3: Wall moved to make room for half bath
- 4: Wall moved to widen bedroom
- 5: Wall removed to widen bathroom
- 6: Storage added
- 7: Passway removed
- 8: Closet and wall between living room and dining room removed.
- 9: Existing Window Removed and replaced with shorter window to accommodate counter.

- F** Fire Alarm Locations
- V** Vents to outside  
All vents UL rated and installed according to code.
- R** Recessed Lighting Installed to Code



# DETAIL

Load Bearing Wall Sections Removed  
Openings To New Addition  
1/2" = 1 FT.



Existing Floor Assembly

Existing 1st and 2nd Fl  
Ceilings not to be removed

2x12  
16" o.c.

Wove Partition  
also removed  
Fire rated with  
Layer of gypsum  
board

Fire rated Res.  
Light cans installed  
to meet codes

- All ceilings in Units  
to be Resericed with  
3/8" Fire code blue board  
and plaster fastened  
to Existing strapping &  
joist w/min. 3" screws
- where Existing ceilings  
are removed double  
3/8" F. C. Blue Board,  
must be installed

All Common  
Area New  
Walls 9/16"  
Fire Code  
1/2" o.c.

2x10 Dr Headers  
w/ 1/2" Plywood

2x4 Partitions  
16" o.c.

3 1/2" Fiber glass  
Batts ins. for  
sound proof.

3/8" F. C. Blue Board  
Plaster finish

9 8  
East 3rd Fl.

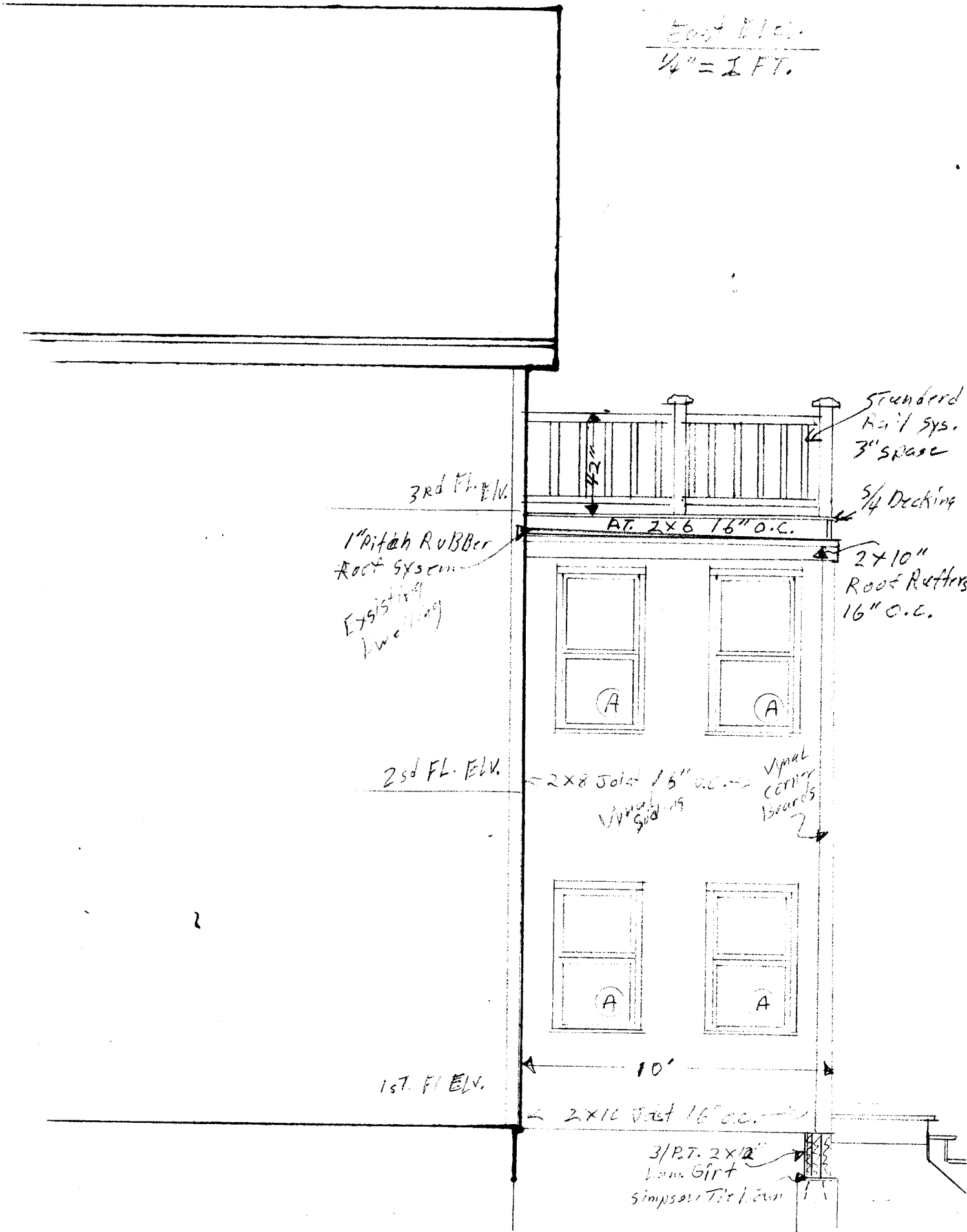
## DETAIL

First and Second Floor Ceilings

New Common Area Walls

1/2" = 1 FT.

East Elev.  
1/4" = 1 FT.



3rd FL. ELV.

1" Pitch RUBBER  
Roof system  
Existing  
Masonry

Standard  
Rail Sys.  
3" space  
5/4 Decking

AT. 2x6 16" O.C.

2x10"  
Roof Rafter  
16" O.C.

2nd FL. ELV.

2x8 Joist 16" O.C.  
Vinyl Siding

Vinyl  
Corner  
Boards

1st FL. ELV.

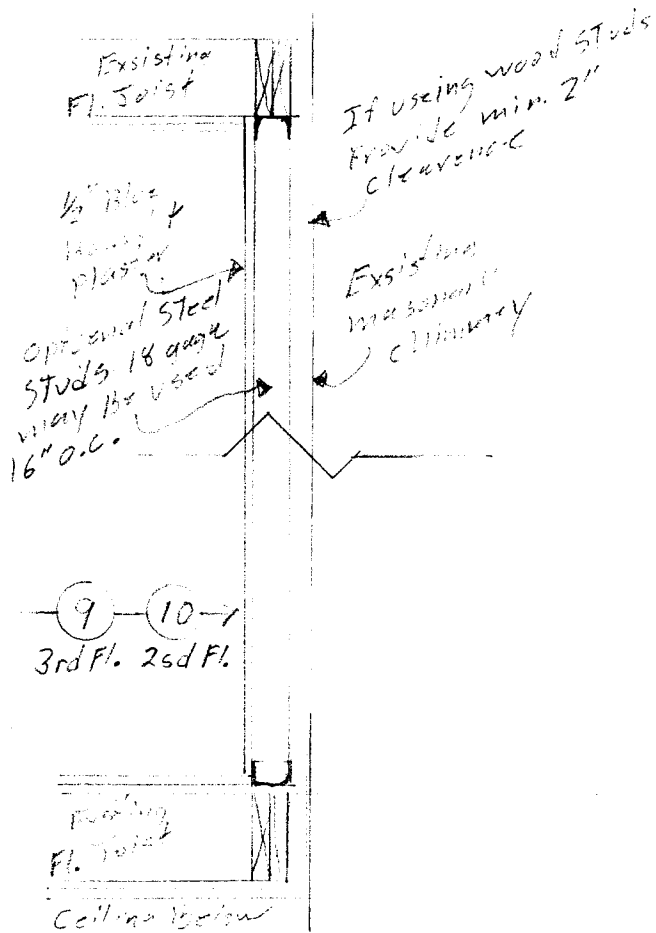
10'

2x10 Joist 16" O.C.

3/4" 2x12"  
Lam. Girt  
Simpson Tilt-Up

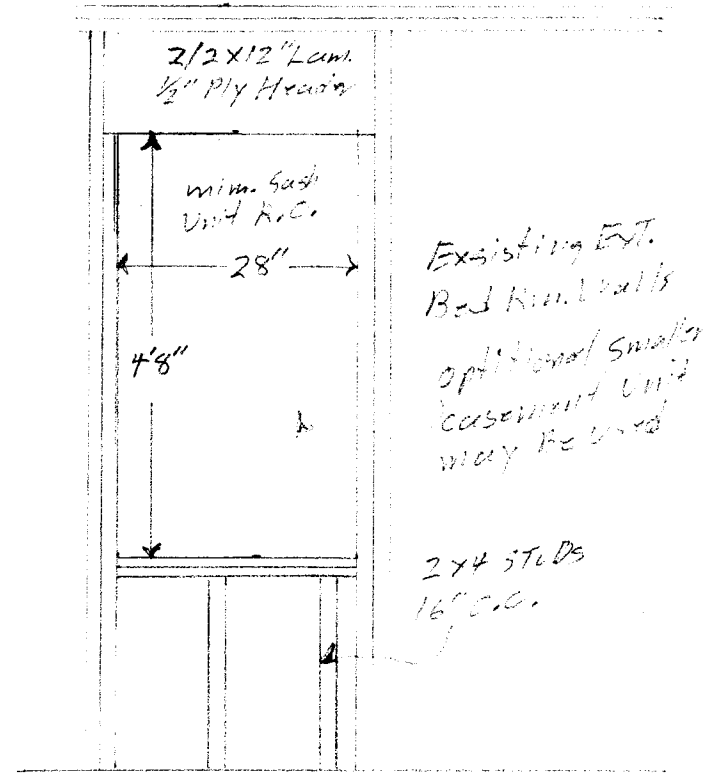
# DETAIL

Framing around chimneys.  
 $\frac{1}{2}" = 1 FT.$



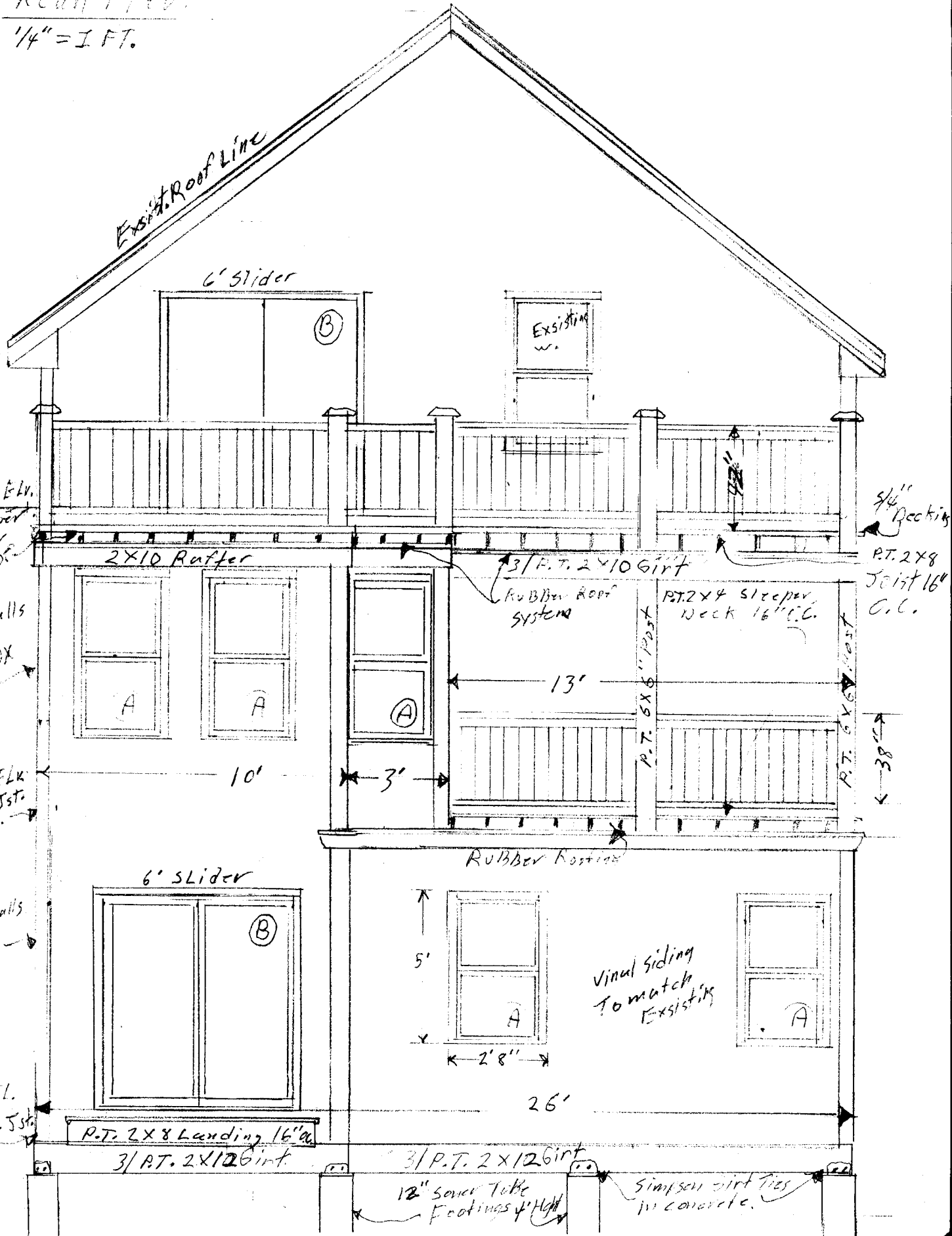
# DETAIL

Bed Rm. Window Framing  
 Sash Unit or Casement  
 $\frac{1}{2}" = 1 FT.$



Rear Elev.

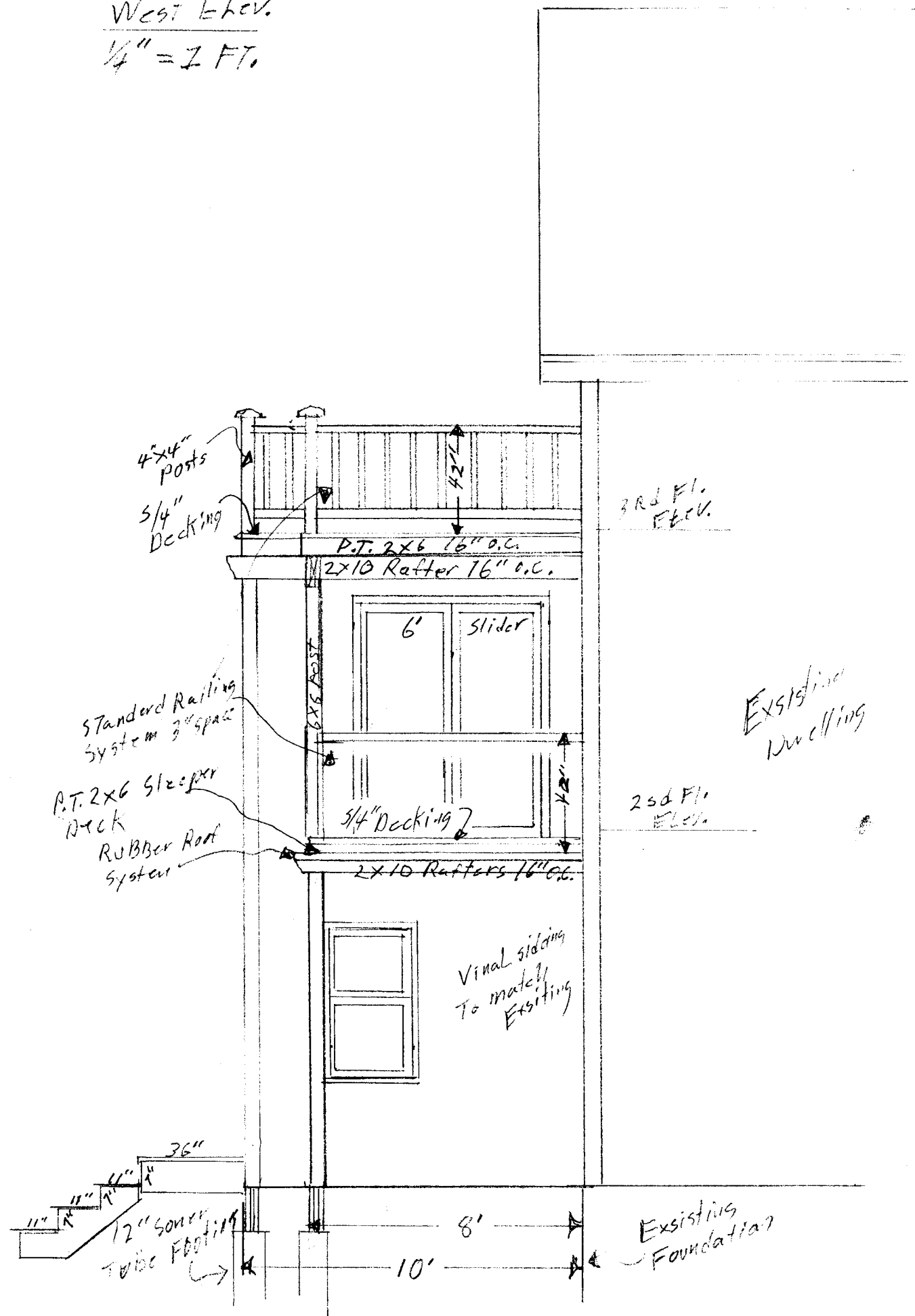
1/4" = 1 FT.





West Elev.

1/4" = 1 FT.



4x4 posts  
5/4" Decking

P.T. 2x6 16" o.c.  
2x10 Rafter 16" o.c.

6' Slider

Standard Railing System 3" space  
P.T. 2x6 SLEEPER  
Deck  
RUBBER ROOF System

5/4" Decking  
2x10 Rafters 16" o.c.

Vinyl siding  
To match existing

11" 11" 11" 11" 36" 12" SOWER TO GO FOOTING

8' 10'

3RD FL. ELEV.

2ND FL. ELEV.

Existing Walling

Existing Foundation



# CITY OF PORTLAND, MAINE

Department of Building Inspections

## Original Receipt

June 29 20 07

Received from 63 Kellogg, LLC

Location of Work 63 Kellogg St

Cost of Construction \$ 32,900- Building Fee: \_\_\_\_\_

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

Certificate of Occupancy Fee: \_\_\_\_\_

Total: 330<sup>00</sup>

Building (I1)  Plumbing (I5)  Electrical (I2)  Site Plan (U2)

Other TO INCLUDE ENTIRE COST OF PERMIT # 09-0538

CBL: 017.A.003

Check #: 1007 Total Collected \$ 330<sup>00</sup>

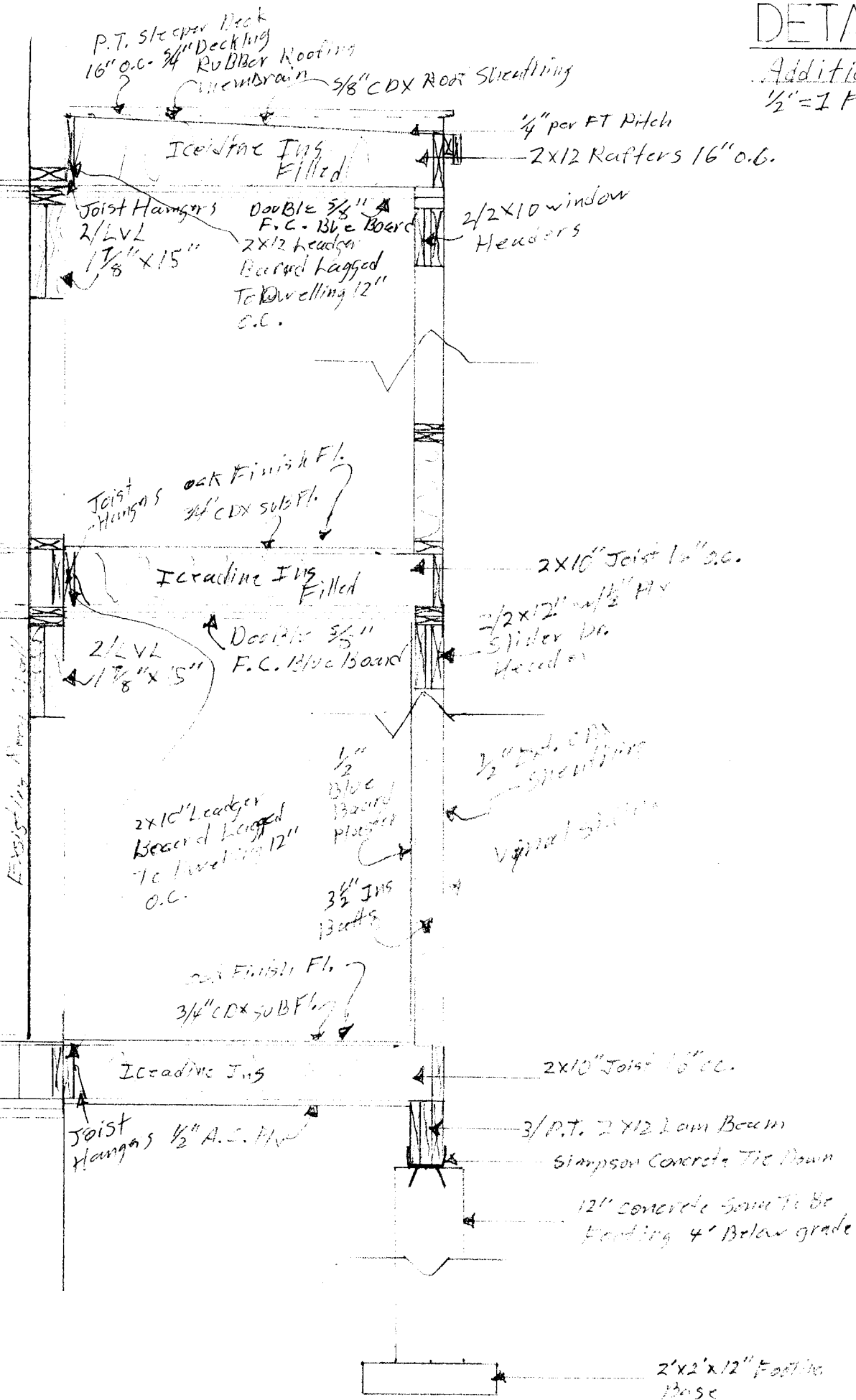
**No work is to be started until permit issued.  
Please keep original receipt for your records.**

Taken by: [Signature]

- WHITE - Applicant's Copy
- YELLOW - Office Copy
- PINK - Permit Copy

# DETAIL

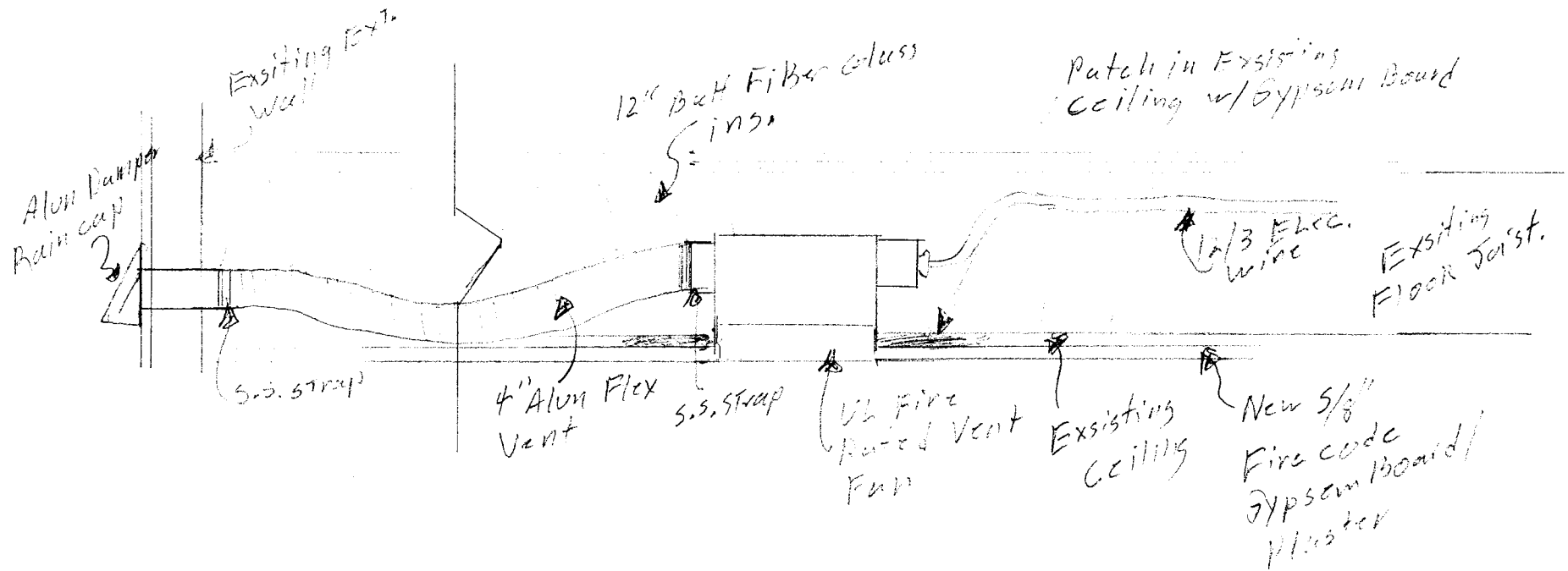
Additional Framing  
1/2" = 1 FT.



# DETAIL

Ceiling Fans

2" = 1 FT.



**New Meadows Abatement 2009**

PO Box 227  
BATH, ME 04530

**INVOICE**

Invoice Number: 341  
Invoice Date: Jun 15, 2009  
Page: 1

Voice: 207-443-1071  
Fax: 207-443-1613

**Bill To:**

DOMINIC WHITE  
63 KELLOGG STREET  
PORTLAND, ME 04101

**Ship to:**

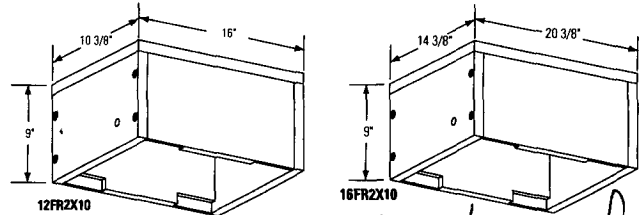
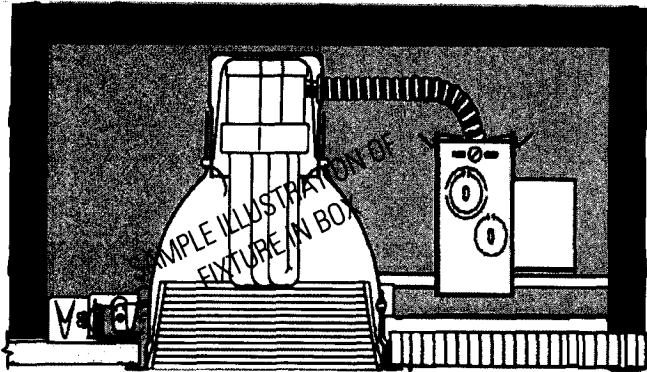
17-A-3

<b>Customer ID</b> WHITE, DOMINIC	<b>Customer PO</b>	<b>Payment Terms</b> Net 30 Days	
<b>Sales Rep ID</b>	<b>Shipping Method</b> Airborne	<b>Ship Date</b>	<b>Due Date</b> 7/15/09

Quantity	Item	Description	Unit Price	Amount
		09-06-04 REMOVAL AND DISPOSAL OF APPROXIMATELY 54 SQ FT OF ASBESTOS AT 63 KELLOGG ST PORTLAND, MAINE		900.00
<b>Subtotal</b>				900.00
<b>Sales Tax</b>				
<b>Total Invoice Amount</b>				900.00
<b>Payment/Credit Applied</b>				
<b>TOTAL</b>				<b>900.00</b>

*Receipt showing  
Removal of asbestos  
on ~~6/15/09~~ 6/4/09*

Check/Credit Memo No.



*Recessed Lighting for  
63 Kellogg St.*

*17-A-3*

Complete Fixture consists of Fire Rated Enclosure, Reflector Trim & Frame-In Kit. Select each separately.

FireLine Catalog No.	Use with Frame-In Kit	Use with Reflector Trim	Lamp	FireLine Catalog No.	Use with Frame-In Kit	Use with Reflector Trim	Lamp
12FR2X10	<b>Incandescent</b> 2000IC 2000AIC	All Applicable Trims	All Applicable Lamps	16FR2X10	<b>Fluorescent</b> 1100AICMFT 1104F Series 1004F Series 1101FIC Series 1001FIC Series 2001FIC Series 1102T26U 1050RN Series 1050SQ Series	All Applicable Trims	All Applicable Lamps
	1004IC 1104IC	All Applicable Trims	IC Lamp Wattages Only		<b>Low Voltage</b> 2000LVNT 2000AICV 1000ICV	All Applicable Trims	All Applicable Lamps
	<b>Fluorescent</b> 1004F Series 1104F Series 1050RN Series 1050SQ Series	All Applicable Trims	All Applicable Lamps		16FR2X10	<b>Incandescent</b> 1004IC 1104IC	All Applicable Trims
			2000IC 2000AIC 1000IC 1000AICM 1004ICX 1100IC 1100AICM 1104ICX 1100P1	All Applicable Trims		All Applicable Lamps	

### Features

- DriClad™ Fire Rated Enclosure:** 1" thickness, rated for minimum 2" x 10" construction.
- Parts Bag:** (containing)
  - 4 - 2" Drywall Screws
  - 4 - 1-1/4" Drywall Screws
  - 4 - Eyelets
  - 1 - Square, Mineral Wool
  - 1 - Metal Cap
- Reflector Trim:** (See Reflector Trim Specification Sheet.)
- Lamp:** (See Reflector Trim Specification Sheet and above.)
- Frame-In Kit:** (See Frame-In Kit Specification Sheet.)

### Labels

UL Classified for use in one-hour fire rated L500 Series floor/ceiling assemblies (Excludes Truss ceilings)



Luminaire Assemblies  
Classified for  
Fire Resistance

DriClad™ is a registered trademark of Stan Chem, Inc.

Job Information	Type:
<b>Job Name:</b>	
<b>Cat. No.:</b>	
<b>Lamp(s):</b>	
<b>Notes:</b>	

631 Airport Road, Fall River, MA 02720 • (508) 679-8131 • Fax (508) 674-4710  
We reserve the right to change details of design, materials and finish.  
www.lightolier.com © 2008 Philips Group • J0109

ALLIED ENGINEERING, INC.  
160 VERANDA STREET  
PORTLAND, ME 04103  
(207)221-2260

DOMINIC WHITE

Invoice number  
Date

4250  
6/30/2009

DOMINIC WHITE

Contract: 09-060

Customer ID: 570

63 KELLOGG ST PTLD RENOVATIONS

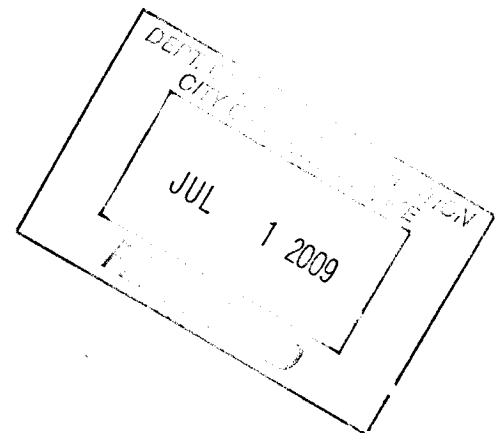
Scope of Work: RENOVATIONS FOR 63 KELLOGG STREET, PORTLAND, MAINE.

For Professional Services through July 1, 2009.

Item Description	Contract Amount	Billed To Date	Previously Billed	Current Billed
2 63 KELLOGG ST PTLD RENOVATIO	350.00	350.00	0.00	350.00
Contract total	350.00	350.00	0.00	350.00

Invoice total

350.00



Late Fee 1+1/2 Per Month assessed on Unpaid Balances over 30 days.

**HOOVER TREATED WOOD PRODUCTS, INC.****TECHNICAL NOTE**

FOR ADDITIONAL INFORMATION: 1-800-TEC-WOOD (832-9663)

Allen Kon**GUIDELINES FOR FINISHING AND USE OF ADHESIVES WITH  
PYRO-GUARD® FIRE RETARDANT TREATED WOOD**

Hoover's **PYRO-GUARD®** treated wood can be finished or glued with good results. The treatment chemicals are waterborne and contain no petroleum or solvents. Precautions and procedures for finishing or gluing these treated wood products are similar to those for untreated wood. As with untreated wood, finish and adhesive performance is highly dependent on moisture content, species, surface preparation, application method, and finishing system. For **Exterior Fire-X®** exterior fire retardant treated wood, see "Guidelines for Finishing Exterior Fire-X®."

**MOISTURE CONTENT**

Moisture content of the wood is a critical factor in determining the effectiveness of wood finishes and adhesives, whether treated or untreated, but all too often moisture content is overlooked in the rush to complete a construction project. If moisture content is too high, poor finish or adhesive performance is likely.

Even though **PYRO-GUARD®** lumber and plywood is always kiln dried after treatment (KDAT), additional drying time is necessary after installation because of possible re-wetting on the job or moisture gain due to high humidity. Furthermore, even freshly KDAT wood will not have a uniformly low enough moisture content for finishing. For example, untreated plywood is manufactured at 6-8% m.c. compared to treated plywood that's KDAT to 15%. This is why additional on-site drying is necessary, and it's also the reason why application of finish or adhesive to freshly un-bundled wood is not recommended.

**SURFACE PREPARATION**

Surface preparation is extremely important. In addition to being thoroughly dry, the surface must be free of dirt, surface deposits, pitch, dust, mildew and other materials. Sanding, cleaning, scraping, brushing or wiping may be necessary to clean the surface. Avoid washing or pressure washing because it re-wets the wood.

**TESTING OF FINISHES**

Due to the infinite variety of weather conditions, building exposures, storage conditions and construction techniques, Hoover Treated Wood Products, Inc. cannot make detailed recommendations for finishing its products. Hoover Treated Wood Products, Inc. accepts no liability with regards to the finishing of its products. **IT IS THE USER'S RESPONSIBILITY TO TEST THE DESIRED FINISHING SYSTEM ON SAMPLE MATERIAL AND EXPOSURE TO ACTUAL USE CONDITIONS TO DETERMINE IF THE DESIRED EFFECT CAN BE OBTAINED.**

Finpg: 3/99



# HOOVER TREATED WOOD PRODUCTS, INC.

## TECHNICAL NOTE

FOR ADDITIONAL INFORMATION: 1-800-TEC-WOOD (832-9663)

### CODE REFERENCES FOR THE USE OF FIRE-RETARDANT-TREATED WOOD

USES OF FIRE-RETARDANT-TREATED WOOD	NBC 1999	SBC 1999	UBC 1997	IBC 2006
Architectural trim, exterior	1407.2.2	F102.2.6		1406.2.2
Awning and Canopies.		3106.2		3105.3
Balconies and similar appendages; bay and oriel windows.	1407.4	1404.2		1406.3&.4
Combustible projections.				704.2.3
Exterior bearing and nonbearing walls in joisted masonry const.			503.4.3	602.3
Exterior bearing and nonbearing walls in heavy timber construction.			503.4.3	602.4
Exterior nonbearing walls with 0 fire resistance or NC materials req.		T600 "k"		603.1 #1.2
Fire barriers, corridors, partitions.	T602 "d"	609.2 <sup>3</sup>	602.1 & 603.1	603.1 #1.1
FRTW in enclosed combustible spaces in sprinklered buildings.	Sprinklers not required: 8.14.1.2.11 NFPA 13.2002 ed			
Fixed partitions establishing corridors in building with one tenant serving no more than 30 people.	603.2 <sup>5</sup>	704.2.3 <sup>3</sup>	601.5.2	603.1 #8
Fuel dispensing station (marine and motor vehicle).		404.2.2	311.2.3.2	406.5.2
Kiosks in Covered Mall Buildings.	402.14.1			402.10
Interior finish with flame spread index 25 or less (Class A or D).	T803.4	T803.3	T8-B	T803.5
Parapets not required when FRTW is used for sheathing:				
Exterior walls.	705.6			704.11#5 <sup>1</sup>
Fire and party walls.	707.6.2 <sup>1</sup>	704.5.1.1 <sup>2</sup>		705.6 #4
Townhouses, 4 ft. each side of wall.	707.6.2	704.4.1		*R317.2.2
Platforms.		403.2.4		410.4
Plenums.	SMC			IMC
Roof and roof/ceiling assemblies in noncombustible buildings.	T602 "d"	T600 "e" <sup>4</sup>		603.1#1.3
Roof construction, pedestrian walkways.				3104.3
Shakes and shingles Class A, B, and C roofs.	1506.3	1509.8.7	1504	T1506.1
Wood Veneer.	1407.2.2	1403.6.8.1	601.5.4 #2	1405.4
Walls and ceilings furled and dropped more than 1 3/4 inch.		803.8.2	803 #2	803.4.2

\* International Residential Code  
Standard Mechanical Code=SMC  
International Mechanical Code=IMC

#### NOTES:

- <sup>1</sup> R-2 and R-3 occupancies in Types III, IV or V construction.
- <sup>2</sup> Types III, V, and VI construction.
- <sup>3</sup> Except Type I and II construction of I-restrained occupancy.

<sup>4</sup> Building two stories or less in height.

<sup>5</sup> Area can be increased to a maximum of 7500 sq. ft.

<sup>6</sup> When required fire resistance is 1 hour or 2 hours.

08/06

P/E TN-01

## HOOVER TREATED WOOD PRODUCTS, INC.

### TECHNICAL NOTE

FOR ADDITIONAL INFORMATION: 1-800-TEC-WOOD (832-9663)

# SPECIFICATION GUIDE for *PYRO-GUARD*<sup>®</sup> Interior Fire Retardant Treated Wood

## PART 1 - GENERAL

### 1.01 PRODUCT IDENTIFICATION

- A. All lumber and plywood specified to be interior fire retardant treated wood shall be pressure impregnated with *PYRO-GUARD*<sup>®</sup> which has a flame spread rating of 25 or less when tested in accordance with ASTM E 84, "Standard Test Method for Surface Burning Characteristics of Building Materials". *PYRO-GUARD*<sup>®</sup> fire retardant treated wood shall show no evidence of significant progressive combustion when the test is extended for an additional 20 minute period. In addition, the flame front shall not progress more than 10½ feet beyond the centerline of the burners at any time during the test.
- B. Fire retardant treated lumber and plywood shall be manufactured under the independent third party inspection of Underwriters Laboratories Inc. (UL) Follow-Up Service and each piece shall bear the UL classified mark indicating the extended ASTM E 84 test.
- C. Each piece shall be labeled kiln dried after treatment (KDAT). Timber Products Inspection, Inc. (TP) shall monitor the process and the TP mark shall appear on the label.

## PART 2 - PRODUCTS

### 2.01 FIRE RETARDANT TREATMENT

- A. Treatment shall be *PYRO-GUARD*<sup>®</sup> manufactured by Hoover Treated Wood Products, Inc.
- B. Structural performance of fire retardant treated wood shall be evaluated in accordance with ASTM D 5664 for lumber and ASTM D 5516 for plywood. Evaluation of plywood data shall be in accordance with ASTM D 6305. The resulting design value and span rating adjustments shall be published in ICC Evaluation Service Report (ESR)-1791 issued by the ICC Evaluation Service, Inc. which includes evaluation of high temperature strength testing for roof applications.
- C. Interior fire retardant treated lumber and plywood shall have equilibrium moisture content of not over 28% when tested in accordance with ASTM D 3201 at 92% relative humidity.
- D. Interior fire retardant treated wood shall be kiln dried after treatment to a maximum moisture content of 19% for lumber and 15% for plywood.
- E. The fire retardant formulation shall be free of halogens, sulfates, chlorides, ammonium phosphate, and formaldehyde.
- F. Provide lumber of the appropriate grade and species as specified by the design criteria of the intended application after consideration of design value adjustments.
- G. Provide plywood of the appropriate size, grade and species as specified by the design criteria of the intended application after consideration of span rating adjustments.

### 2.02 PRODUCT SUBSTITUTION

No substitutions permitted.

## PART 3 - EXECUTION

### 3.01 FIELD CUTS

- A. Lumber: Do not rip or mill fire retardant treated lumber. Cross cuts, joining cuts, and drilling holes are permitted.
- B. Plywood: Fire retardant treated plywood may be cut in any direction.

### 3.02 APPLICATION

- A. *PYRO-GUARD*<sup>®</sup> fire retardant treated lumber and plywood used in structural applications shall be installed in accordance with the conditions and limitations listed in ESR-1791 as issued by the ICC Evaluation Service, Inc.
- B. Treated wood shall not be installed in areas where it is exposed to precipitation, direct wetting, or regular condensation.
- C. Exposure to precipitation during shipping, storage and installation shall be avoided. If material does become wet, it shall be replaced or permitted to dry to a maximum moisture content of 19% for lumber and 15% for plywood prior to covering or enclosure by wallboard, roofing or other construction materials.

PGD-8FBC: 11/03

TABLE 1— MAXIMUM LOADS AND SPANS FOR PYRO-GUARD® TREATED PLYWOOD

PLYWOOD <sup>8</sup> THICKNESS (inches)	UNTREATED ROOF/SUBFLOOR SPAN RATING	PYRO-GUARD <sup>9,10,11,12</sup> ROOF SHEATHING MAX. LIVE LOAD (psf)				PYRO-GUARD <sup>9,10</sup> Span (inches)
		Span (inches)	Climate Zone <sup>6,7</sup>			
			1A	1B	2	
<sup>16</sup> / <sub>32</sub> , <sup>1</sup> / <sub>2</sub>	32/16	24	19	30	43	16
<sup>10</sup> / <sub>32</sub> , <sup>5</sup> / <sub>8</sub>	40/20	24	42	64	87	20
		32	20	32	45	20
<sup>20</sup> / <sub>32</sub> , <sup>3</sup> / <sub>4</sub>	48/24	32	34	51	71	24
		48	10	18	27	24
<sup>7</sup> / <sub>8</sub>	—	48	12	20	30	—
<sup>1</sup> / <sub>4</sub>	—	48	21	33	47	48

For SI: 1 inch = 25.4 mm, 1 psf = 48 N/m<sup>2</sup>.

<sup>1</sup>All loads are based on two-span condition with panels 24 inches wide or wider, strength axis perpendicular to supports.

<sup>2</sup>Fastener size and spacing shall be as required in the applicable building code for untreated plywood of the same thickness; except that roof sheathing shall be fastened with (1) minimum 8d common or 8d deformed shank nails spaced a maximum 6 inches o.c. at edges and a maximum of 12 inches o.c. at intermediate supports for panels on 24- and 32-inch spans and spaced a maximum of 6 inches o.c. on all supports for panels on a 48-inch span, or (2) other fasteners with comparable withdrawal and lateral load capacities at the same maximum spacings. For <sup>1</sup>/<sub>4</sub>-inch roof sheathing panels, use minimum 10d common or deformed shank nails.

<sup>3</sup>Roof spans and loads apply to roof systems having the minimum ventilation areas required by the applicable building code. Fifty percent of required vent area shall be located on upper portion of sloped roofs to provide natural air flow.

<sup>4</sup>For low-sloped or flat roofs with membrane or built-up roofing having a perm rating less than 0.2, use rigid insulation having a minimum R value of 4.0 between sheathing and roofing, or use next thicker panel than tabulated for the span and load (e.g., <sup>10</sup>/<sub>32</sub> for 24 inches, <sup>20</sup>/<sub>32</sub> for 32 inches); and use a continuous ceiling air barrier and vapor retarder with a perm rating less than 0.2 on the bottom of the roof framing above the ceiling finish.

<sup>5</sup>Panel edge clips are required for roof sheathing: one midway between supports for 24-inch and 32-inch spans, two at <sup>1</sup>/<sub>2</sub> points between supports for 48-inch span. Clips shall be specifically manufactured for the plywood thickness used.

<sup>6</sup>Tabulated loads for Zone 1A are based on a duration of load adjustment for 7-day (construction) loads of 1.25. Tabulated loads for Zone 1B and Zone 2 are based on a duration of load adjustment for snow of 1.15. All values within the table are based on a dead load (DL) of 8 psf. If the DL is less than or greater than 8 psf, the tabulated live load shall be increased or decreased by the difference. Applicable material weights, psf: asphalt shingles - 2.0, <sup>1</sup>/<sub>2</sub>-inch plywood - 1.5, <sup>5</sup>/<sub>8</sub>-inch plywood - 1.8, <sup>3</sup>/<sub>4</sub>-inch plywood - 2.2.

<sup>7</sup>Climate Zone definition:

1 - Minimum design roof live load or maximum ground snow load up to 20 psf.

A - Southwest Arizona, Southeast Nevada (Las Vegas-Yuma-Phoenix-Tucson triangle)

B - All other qualifying areas of the continental United States

2 - Minimum ground snow load over 20 psf

<sup>8</sup>PYRO-GUARD® treated plywood shall not be used as roof sheathing if a radiant shield is used beneath the roof sheathing.

<sup>9</sup>The <sup>10</sup>/<sub>32</sub>-inch and <sup>5</sup>/<sub>8</sub>-inch thickness are limited to performance rated 4-ply or 5-ply. <sup>20</sup>/<sub>32</sub>- and <sup>3</sup>/<sub>4</sub>-inch thicknesses are limited to performance rated 5-ply or 7-ply.

<sup>10</sup>Subfloor applications are limited to 100 psf maximum live load, except <sup>1</sup>/<sub>4</sub>-inch thickness on 48-inch span limited to 65 psf total load.

<sup>11</sup>Deflection of roof sheathing at tabulated maximum live load is less than <sup>1</sup>/<sub>240</sub> of the span, and under maximum live load plus dead load is less than <sup>1</sup>/<sub>100</sub> of the span.

<sup>12</sup>Staples used to attach asphalt shingles shall be minimum <sup>10</sup>/<sub>16</sub>-inch crown and minimum 1-inch leg, or otherwise comply with the applicable code, with the quantity of fasteners adjusted in accordance with Table 2 of this report.

64

TABLE 2—DESIGN VALUE ADJUSTMENTS FOR PYRO-GUARD® TREATED LUMBER

PROPERTY	SERVICE TEMPERATURE <sup>f</sup> TO 100°F/38°C			PYRO-GUARD® ROOF FRAMING, CLIMATE ZONE <sup>1,2,g</sup>					
	SP	DF	Other	1A		1B		2	
				SP	DF	SP	DF	SP	DF
Extreme fiber in bending	0.91	0.97	0.88	0.80	0.90	0.85	0.93	0.89	0.96
Tension parallel to grain	0.88	0.95	0.83	0.80	0.80	0.84	0.87	0.88	0.93
Compression parallel to grain	0.94	1.00	0.94	0.94	0.94	0.94	0.98	0.94	1.00
Horizontal shear	0.95	0.96	0.93	0.92	0.95	0.93	0.95	0.94	0.95
Modulus of elasticity	0.95	0.96	0.94	0.95	0.96	0.95	0.96	0.95	0.96
Compression perp. to grain	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Fasteners/connectors	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90

<sup>1</sup>Climate Zone definition:

1 - Minimum design roof live load or maximum ground snow load up to 20 psf:

A - Southwest Arizona, Southeast Nevada (Las Vegas-Yuma-Phoenix-Tucson triangle)

B - All other qualifying areas of the Continental United States

2 - Minimum ground snow load over 20 psf


<sup>2</sup>Duration of load adjustments for snow loads, 7-day (construction) loads, and wind loads given in the National Design Specifications for Wood Construction apply.

<sup>3</sup>Where lumber decking serves as both exposed ceiling and roof sheathing, use extreme fiber in bending adjustments of 0.84, 0.83, and 0.89 for southern pine zones 1A, 1B, and 2, respectively; 0.92, 0.92, and 0.96 for Douglas fir zones 1A, 1B, and 2, respectively; except that where insulation having a minimum R value of 4.0 is installed above the decking, extreme fiber in bending adjustments of 0.91 for southern pine and 0.97 for Douglas fir are permitted in all zones.


<sup>4</sup>Modulus of elasticity values apply to all treated lumber decking.

<sup>5</sup>Roof framing adjustment factors apply to roof systems with minimum ventilation areas per applicable code. Locate 50 percent of required vent area on upper portion of sloped roofs to provide natural air flow.

<sup>6</sup>Species: SP - southern pine; DF - Douglas fir; Other softwoods - limited to those species listed in Section 3.1 of this report.

PYRO-GUARD® — HOOVER — TREATED WOOD PRODUCTS INC. (PLANT LOCATION) PROCESS CONTROL STANDARD 2200P MONITORED BY TP		CLASSIFIED  TREATED LUMBER 15P9 R7002
ICC-ESR-1791 MEA-359-88-M		SPECIES SURFACE BURNING CHARACTERISTICS FLAMESPREAD: SMOKE DEVELOPED:  30 MINUTE TEST

*\*left side wall*

PYRO-GUARD® — HOOVER — TREATED WOOD PRODUCTS INC. (PLANT LOCATION) PROCESS CONTROL STANDARD 2200P MONITORED BY TP		CLASSIFIED  TREATED PLYWOOD 17PO R7003
ICC-ESR-1791		SPECIES SURFACE BURNING CHARACTERISTICS FLAMESPREAD: SMOKE DEVELOPED:  30 MINUTE TEST

5

FIGURE 1—LUMBER AND PLYWOOD STAMPS

# ES REPORT™

ESR-1791

Issued November 1, 2005

This report is subject to re-examination in one year.

ICC Evaluation Service, Inc.  
www.icc-es.org

Business/Regional Office ■ 5360 Workman Mill Road, Whittier, California 90601 ■ (562) 699-0543  
Regional Office ■ 800 Montclair Road, Sylle A. Birmingham, Alabama 35213 ■ (205) 588-9800  
Regional Office ■ 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ■ (708) 799-2305

DIVISION: 06—WOOD AND PLASTICS  
Section: 06070—Wood Treatment

## REPORT HOLDER:

HOOVER TREATED WOOD PRODUCTS, INC.  
154 WIRE ROAD  
THOMSON, GEORGIA 30824  
(706) 595-7355  
[www.ftw.com](http://www.ftw.com)

## EVALUATION SUBJECT:

PYRO-GUARD® FIRE-RETARDANT-TREATED WOOD

## ADDITIONAL LISTEES:

JASPER WOOD PRODUCTS, LLC  
37385 JASPER LOWELL ROAD  
JASPER, OREGON 97438

KILFOYLE KRAFTS  
1510 SOUTH HIGHWAY 10  
PRICE, UTAH 84501

## 1.0 EVALUATION SCOPE

### Compliance with the following codes:

- 2003 *International Building Code*® (IBC)
- 2003 *International Residential Code*® (IRC)
- 1997 *Uniform Building Code*™ (UBC)
- *BOCA® National Building Code/1999* (NBBC)
- 1999 *Standard Building Code*® (SBC)

### Properties evaluated:

- Flame spread
- Structural strength
- Corrosion
- Hygroscopicity

## 2.0 USES

PYRO-GUARD® fire-retardant-treated wood is used in areas not exposed to the weather or wetting where the code permits the use of wood or fire-retardant-treated wood.

## 3.0 DESCRIPTION

### 3.1 General:

PYRO-GUARD® fire-retardant-treated wood is lumber and plywood that is pressure impregnated with the Hoover Treated Wood Products, Inc., fire retardant chemical PYRO-

GUARD®, PYRO-GUARD® fire-retardant-treated lumber and plywood is produced in accordance with an approved quality control procedure at facilities listed in Section 5.9 of this report.

PYRO-GUARD® treated lumber of the following species is recognized as being fire-retardant-treated wood: alpine fir, balsam fir, black spruce, Douglas fir, Englemann spruce, hem-fir, jack pine, lodgepole pine, ponderosa pine, red spruce, southern pine, spruce-pine-fir (SPF), western hemlock, white fir, and white spruce.

PYRO-GUARD® treated plywood fabricated with face and back veneers of the following species is recognized as being fire-retardant-treated wood: southern pine and Douglas fir for structural applications, and lauan for interior applications.

### 3.2 Flame Spread:

PYRO-GUARD® fire-retardant-treated wood, when tested in accordance with ASTM E 84 modified in accordance with Section 2303.2 of the IBC, has a flame-spread index of 25 or less.

### 3.3 Structural Strength:

The structural performance of PYRO-GUARD® fire-retardant-treated wood has been evaluated using ASTM D 5516 and D 6305 for plywood and ASTM D 5664 and D 6841 for lumber. The effects of the PYRO-GUARD® treatment on the strength of treated lumber shall be accounted for in the design of wood members and their connections. Load-duration factors greater than 1.6 shall not be used in design.

**3.3.1 Lumber:** The design value adjustments in Table 2 shall be used to modify the design values for untreated lumber found in the AF&PA National Design Specification (NDS) Supplement Design Values for Wood Construction, for the applicable species, use and property. Southern pine and Douglas fir have been evaluated for use in roof framing and shall be subjected to the adjustments indicated in Table 2 for roof framing. Other softwood species described in Section 3.1 shall be subjected to the design adjustments indicated in Table 2 for service temperatures up to 100°F (38°C).

**3.3.2 Plywood:** The maximum loads and spans shown in Table 1 shall be used to modify the panel span rating for untreated plywood described in the applicable codes, as determined by thickness and construction. The adjusted maximum loads and spans are based on tests of southern pine and Douglas fir and are applicable to all softwood species.

### 3.4 Corrosion:

The corrosion rate of aluminum, carbon steel, galvanized steel, copper or red brass in contact with wood is not increased by PYRO-GUARD® fire-retardant treatment when the product is used as recommended by Hoover Treated Wood Products.

ES REPORTS™ are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, Inc., express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



### 3.5 Hygroscopicity:

The moisture content of PYRO-GUARD® fire-retardant-treated lumber and plywood is less than 28 percent when evaluated in accordance with ASTM D 3201 at 92 percent relative humidity (Section 2303.2.4 of the IBC). PYRO-GUARD® is suitable for use in interior conditions where sustained relative humidity is 92 percent or less and condensation does not occur.

### 4.0 DESIGN AND INSTALLATION

Structural systems that include PYRO-GUARD® fire-retardant-treated lumber or plywood shall be designed and installed in accordance with the applicable code using the appropriate lumber design value adjustment factors and plywood spans from Tables 1 and 2 of this report. Ventilation shall be provided in compliance with the applicable codes.

Fasteners used in PYRO-GUARD® fire-retardant-treated wood shall be hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper, in accordance with IBC Section 2304.9.5, IRC Section R319.3, UBC Section 2304.3, and SBC Section 2306.3, and shall be subject to the design value adjustments indicated in Table 2 of this report.

### 5.0 CONDITIONS OF USE

The PYRO-GUARD fire-retardant-treated wood described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 All strength calculations shall be subject to the design factors or span ratings shown in Tables 1 and 2 of this report.
- 5.2 The strength design factors and span ratings given in this report shall only be used for unincised dimensional lumber and plywood of the species noted in this report.
- 5.3 All of the wood species listed in Section 3.1 of this report are permitted for interior applications and have been evaluated for structural performance for interior applications where the service temperature does not exceed 100°F (37.8°C). Southern pine and Douglas fir have been evaluated for structural performance for roof framing applications as indicated in Table 2 of this report. Southern pine and Douglas fir plywood are permitted for structural applications limited to the spans and loads indicated in Table 1 of this report.
- 5.4 PYRO-GUARD treated wood shall not be installed where it will be exposed to weather or damp or wet conditions.

5.5 PYRO-GUARD treated wood shall not be used in contact with the ground.

5.6 Except for the following, PYRO-GUARD lumber shall not be ripped or milled, as this may alter the surface-burning characteristics and invalidate the flame-spread classification: End cuts, holes, and joints such as tongue and groove, bevel, scarf and lap may be used.

5.7 Exposure to precipitation during storage or installation shall be avoided. If material does become wet, it shall be replaced or permitted to dry (maximum 19 percent moisture content for lumber and 15 percent moisture content for plywood) prior to covering or enclosure by wallboard or other construction materials (except for protection during construction).

5.8 The strength design factors and plywood spans in Tables 1 and 2 of this report are applicable under elevated temperatures resulting from cyclic climatic conditions in the continental United States. They are not applicable under continuous elevated temperatures resulting from manufacturing or other processes which shall require special consideration in design. Such conditions are outside the scope of this report.

5.9 Treatment is at the facilities of Hoover Treated Wood Products, Inc., in Thomson, Georgia, Pine Bluff, Arkansas, Milford, Virginia, Detroit, Michigan, and Winston, Oregon, and the Jasper Wood Products facility in Jasper, Oregon; and the Kilfoyle Krafts facility in Price, Utah; under a quality control program with inspections by Underwriters Laboratories Inc. (AA-668) and Timber Products Inspection Inc. (AA-696).

### 6.0 EVIDENCE SUBMITTED

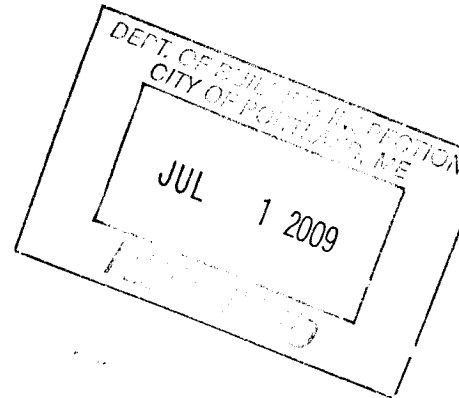
Data in accordance with the ICC-ES Acceptance Criteria for Fire-retardant-treated Wood (AC68), dated November 2005.

### 7.0 IDENTIFICATION

Lumber and plywood treated with PYRO-GUARD® fire-retardant chemicals shall be identified by the structural grade mark of an approved agency. In addition, all treated lumber and plywood shall be stamped with the name of the inspection agency [Underwriters Laboratories Inc. (AA-668) or Timber Products Inspection Inc. (AA-696)], the Hoover Treated Wood Products, Inc., name and address, labeling information in accordance with Section 2303.2.1 of the IBC, and the evaluation report number (ESR-1791).

# 50 YEARS OF BUILDING DESIGN

**Allied Engineering**  
Structural Mechanical Electrical Commissioning



July 1, 2009

Dominic White  
(Hand Delivered)

Re: Renovations for 63 Kellogg Street, Portland Maine

Mr. White:

AEI has had the opportunity to review the planned renovations offered on the before and after sketches prepared by you and dated "Revised 6/26/09". Additionally, we reviewed the hand sketches for the following details (Drawings and Details Attached):

- Detail - Framing around Chimneys
- Detail - Bedroom Window Framing
- Detail - Existing Floor Assembly – Detail for 1<sup>st</sup> and 2<sup>nd</sup> floor ceilings in New Common Area Walls.
- Rear Building Elevations – Deck configurations.
- West Elevation – Deck and building reconstruction
- East Elevation – Deck and building reconstruction
- Detail – Load Bearing Wall Sections removed Openings to new additions.

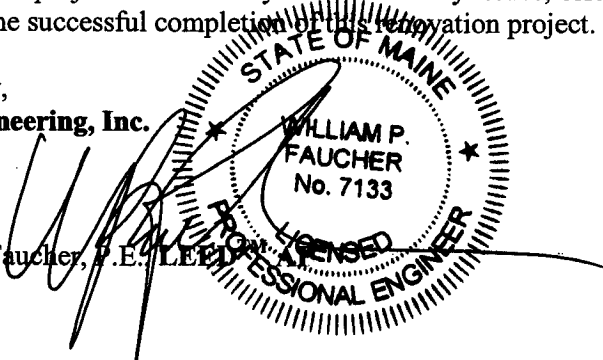
We visited the property this date and reviewed the recommended wall removals, planned wall installations and further discussed the anticipated header opening support options.

Given the minimal impact that these modifications entail, we offer this letter for your use and distribution to the City of Portland Building Department. This letter should serve to confirm that we have reviewed the above materials and visited the property to confirm the extent of the proposed work.

Additionally, we will make periodic site visits during the construction and remain available to you for the duration of the project to assess any constructability issues, offering calculation/sketch support as needed, to assist in the successful completion of this renovation project.

Respectfully,  
**Allied Engineering, Inc.**

William P. Faucher, P.E., LEED  
Principal

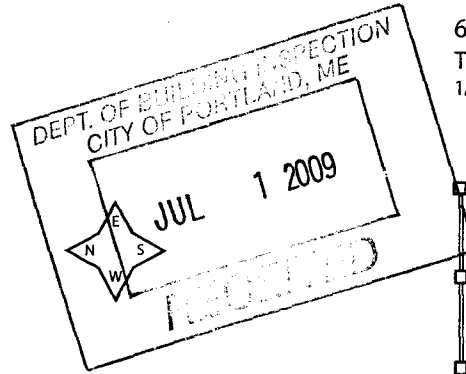
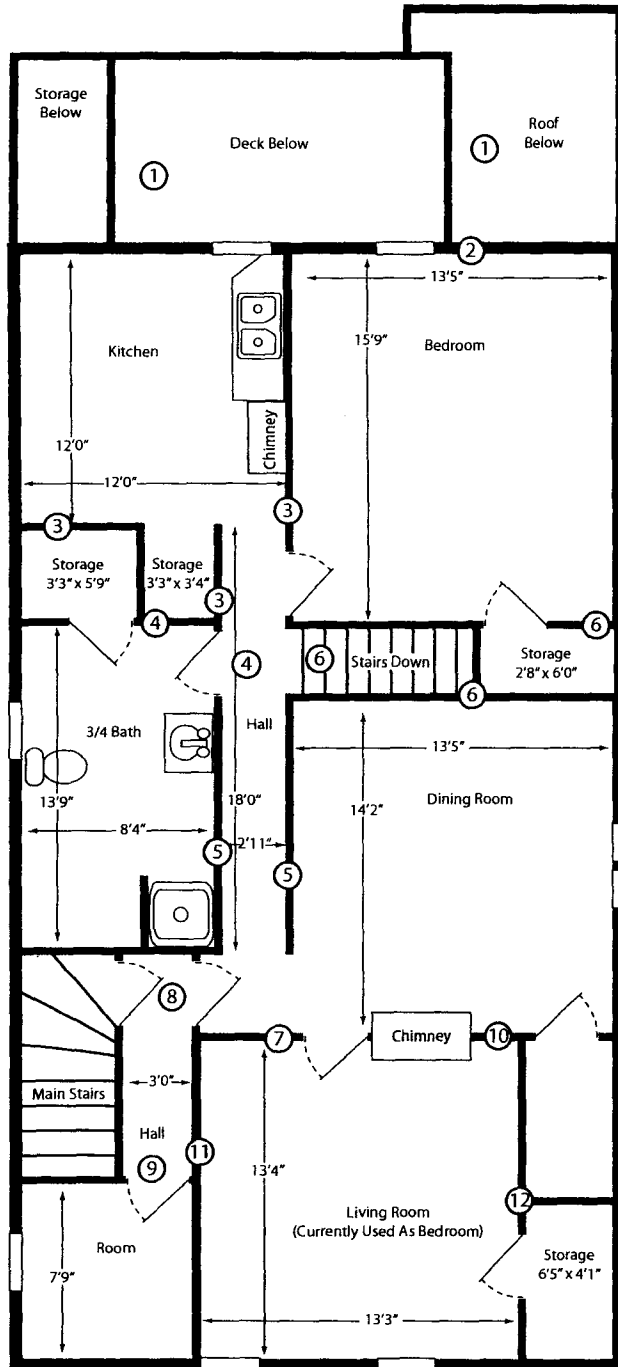


N:\Projects\2009\09060 ~ 63 Kellogg St Portland Renovation\10 Project Design\Reports\Letter for PBD 7-1-09.doc

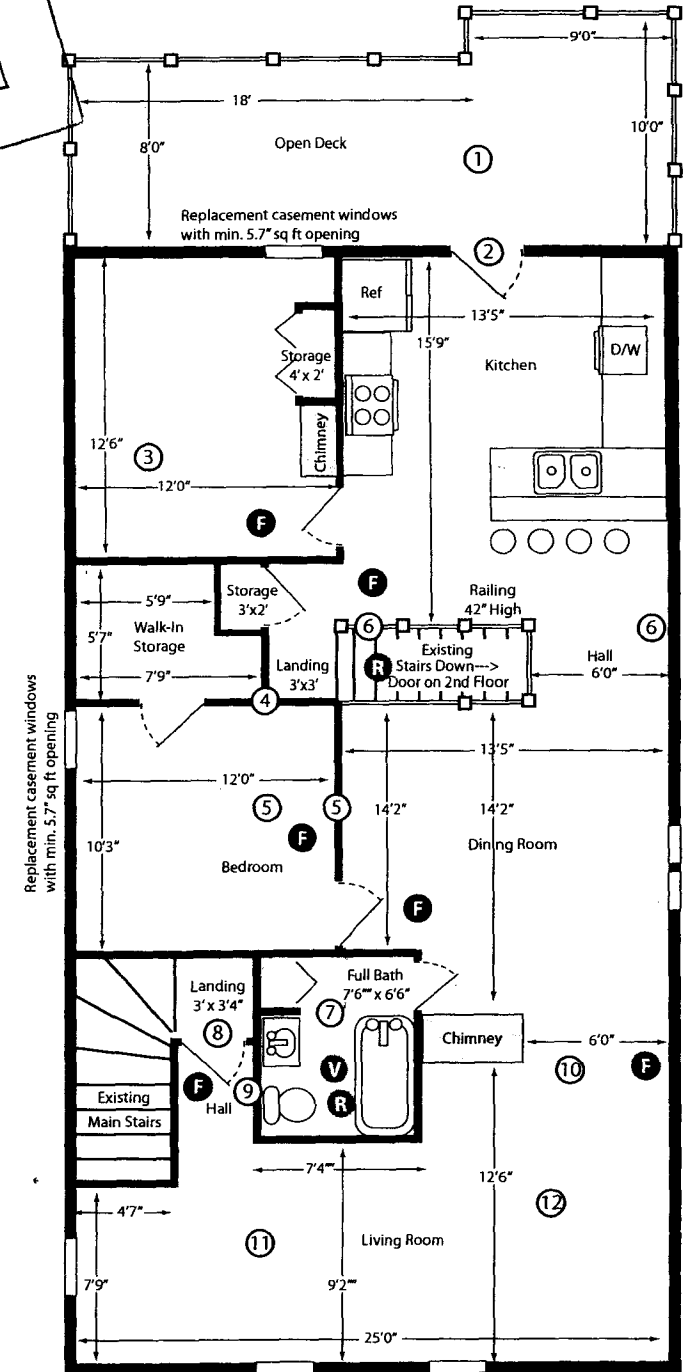
160 Veranda Street  
Portland, ME 04103

T 207.221.2260  
F 207.221.2266  
www.allied-eng.com

63 Kellogg Street  
 THIRD FLOOR - Existing Floor Plan  
 1/8" = 1' All Sizes Approximate  
 Revised Date: 6/26/09



63 Kellogg Street  
 THIRD FLOOR - Renovated Floor Plan  
 1/8" = 1' All Sizes Approximate. Revised Date: 6/26/09

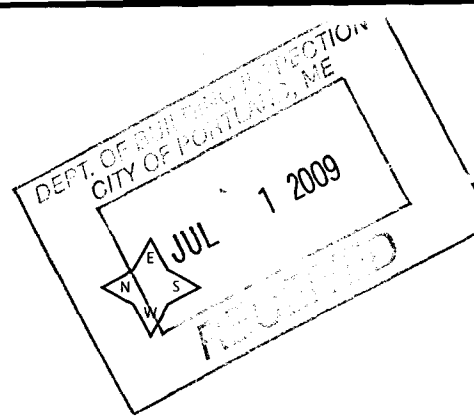
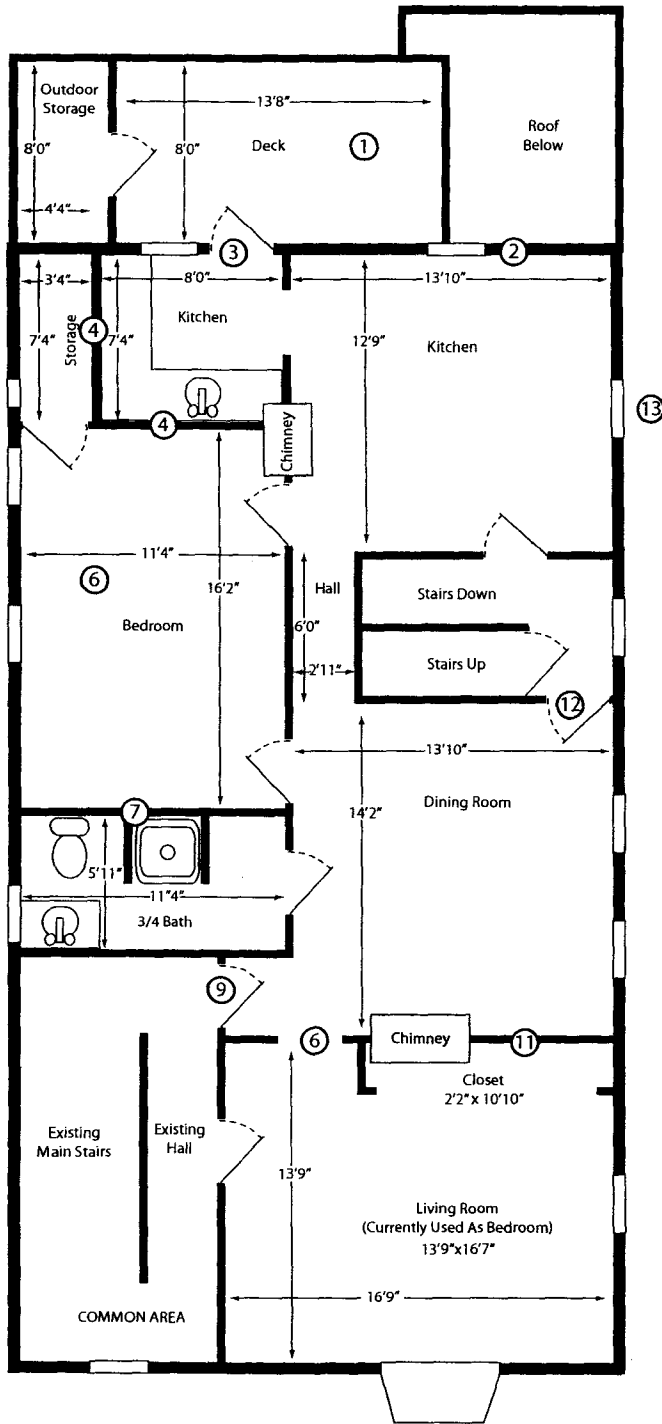


- 1: Build Open Deck (no roof) above 2nd floor deck and sunroom.
- 2: Add 36" Door onto Deck from Kitchen.
- 3: Walls removed and added to create Bedroom
- 4: Walls added and removed to create Bedroom, Storage and Landing.
- 5: Existing bathroom wall removed to create 2nd bedroom expanding to existing hall wall.
- 6: Walls on either side of staircase and storage removed and replaced with rail (to code) and pass through.
- 7: Remove existing wall to move existing bathroom.
- 8: Remove doors and add walls to create landing
- 9: Hall created by existing common area wall and new bathroom wall.
- 10: Remove wall between dining room and Living Room
- 11: Remove side room and hall way to expand living room
- 12: Remove storage closets to expand living room.

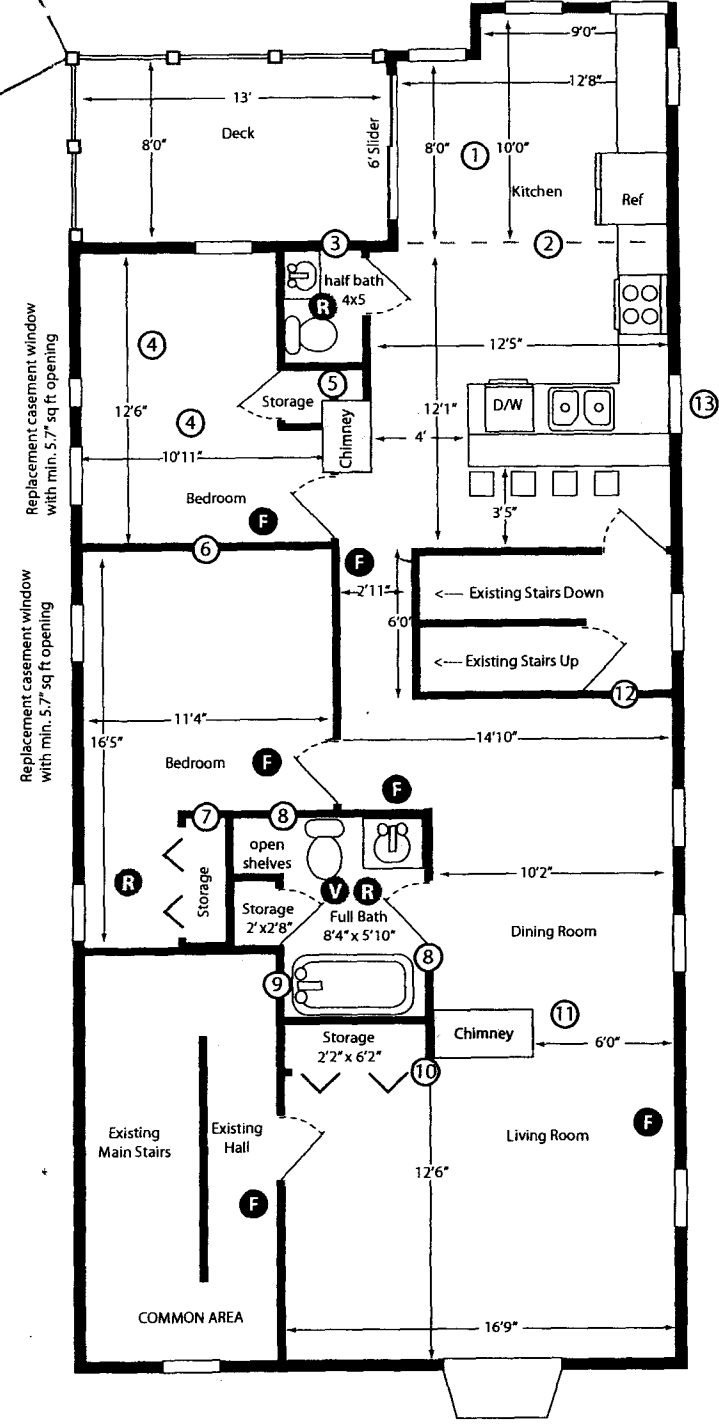
- F** Fire Alarm Locations
- V** Vents to outside  
All vents UL rated and installed according to code.
- R** Recessed Lighting Installed to Code



63 Kellogg Street  
 SECOND FLOOR - Existing Floor Plan  
 1/8" = 1' All Sizes Approximate  
 Revision Date: 6/26/09



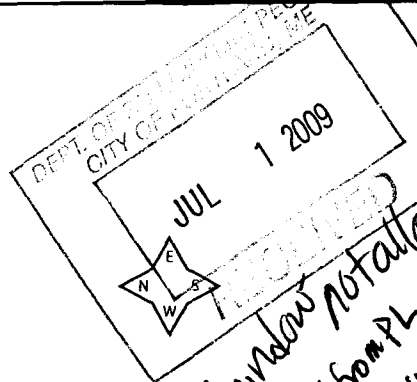
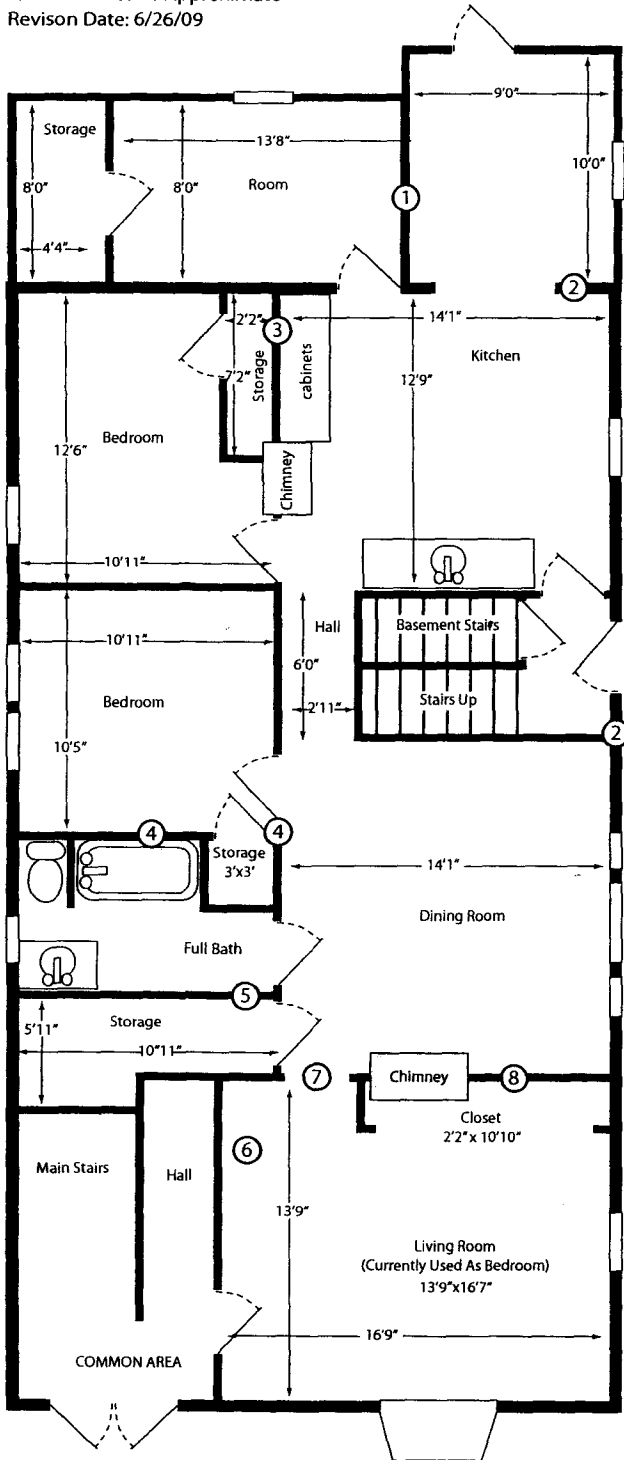
63 Kellogg Street  
 SECOND FLOOR - Renovated Floor Plan  
 1/8" = 1' All Sizes Approximate. Revision Date: 6/26/09



- 1: Build Deck and Sunroom above 1st Floor Addition.
- 2: Passway created to expand kitchen
- 3: Passway blocked and half bath created
- 4: Walls Removed to create bedroom
- 5: Walls Added to create storage
- 6: Wall added to create second bedroom
- 7: Wall removed from bathroom to create bedroom and storage
- 8: Walls added to create bathroom
- 9: Passway blocked
- 10: Walls added to create storage
- 11: Remove wall between living room and dining room.
- 12: Passway blocked.
- 13: Existing Window Removed and replaced with shorter window to accommodate counter.

- F** Fire Alarm Locations
- V** Vents to outside  
All vents UL rated and installed according to code.
- R** Recessed Lighting Installed to Code

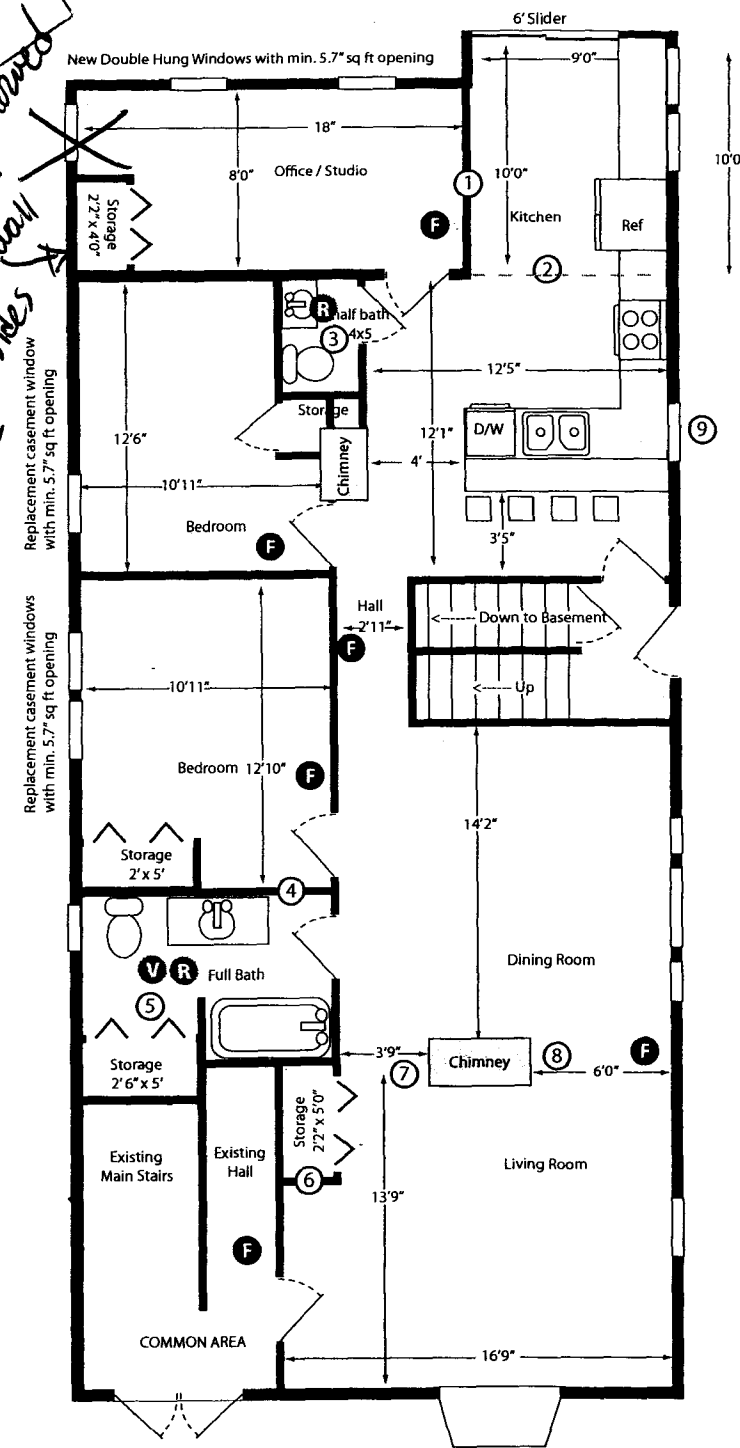
63 Kellogg Street  
 FIRST FLOOR - Existing Floor Plan  
 1/8" = 1' All Sizes Approximate  
 Revision Date: 6/26/09



*Windows not allowed  
 < 5' from PL  
 fire wall  
 1 in total - both sides*

- 1: Addition rebuilt into office / studio and Sunroom.
  - 2: Widen Passway from Kitchen to addition creating larger kitchen
  - 3: Wall moved to make room for half bath
  - 4: Wall moved to widen bedroom
  - 5: Wall removed to widen bathroom
  - 6: Storage added
  - 7: Passway removed
  - 8: Closet and wall between living room and dining room removed.
  - 9: Existing Window Removed and replaced with shorter window to accommodate counter.
- F** Fire Alarm Locations
  - V** Vents to outside  
All vents UL rated and installed according to code.
  - R** Recessed Lighting Installed to Code

63 Kellogg Street  
 FIRST FLOOR - Renovated Floor Plan  
 1/8" = 1' All Sizes Approximate. Revision Date: 6/26/09

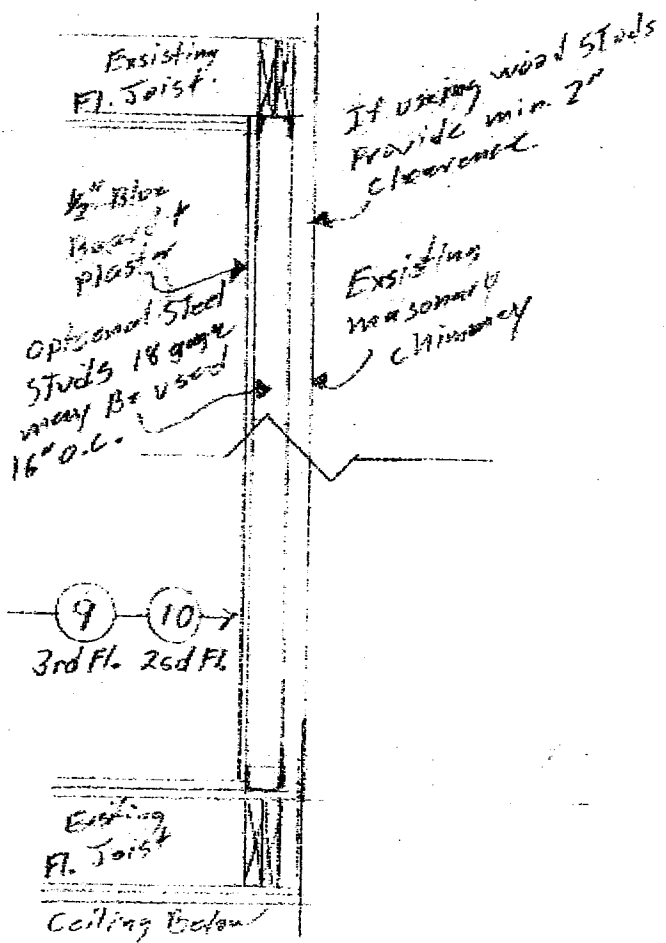


Replacement casement window with min. 5.7" sq ft opening

Replacement casement windows with min. 5.7" sq ft opening

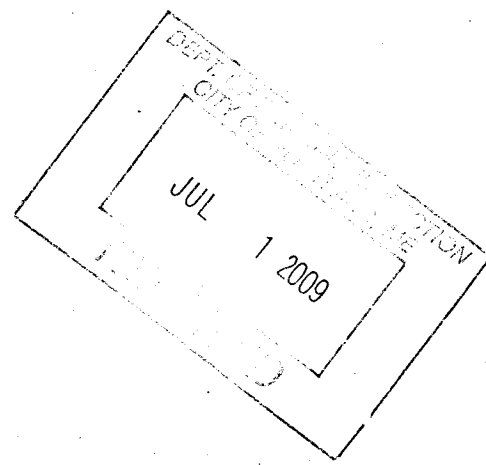
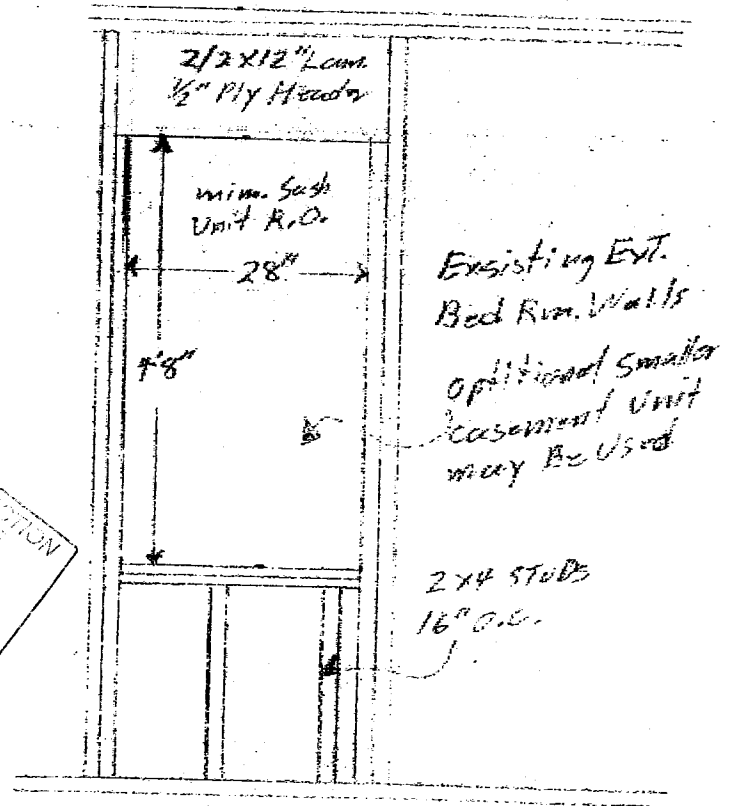
# DETAIL

Framing around chimneys  
1/2" = 1 FT.



# DETAIL

Bed Rm. Window Framing  
Sash Unit or Casement  
1/2" = 1 FT.



Existing Floor Assembly

Existing 1st and 2nd Fl  
Ceilings not To be Removed

2x12  
50' x 16' 00"

where Partitions  
were removed  
Fill cavity with  
Lagard & pins  
boards

Fire rated Res.  
Light cans installed  
to meet codes

- All ceilings in unit  
to be Resurficed with  
5/8" Fire code Blue Board  
and Plaster Fastener  
to Existing Strapping  
Joist w/ min. 3" screws
- where Existing Ceilings  
are removed Double  
5/8" F.C. Blue Board  
must be installed

All Common  
Area New  
Walls to be  
Double  
Fire Code  
Blue Board  
& Plaster

2 1/2 x 10 Or Headers  
w/ 1/2" Plywood

2x4 Partitions  
16" O.C.

3/2" Fiber Glass  
Batt Ins. for  
Sound Proofing

5/8" F.C. Blue Board  
& Plaster Finish

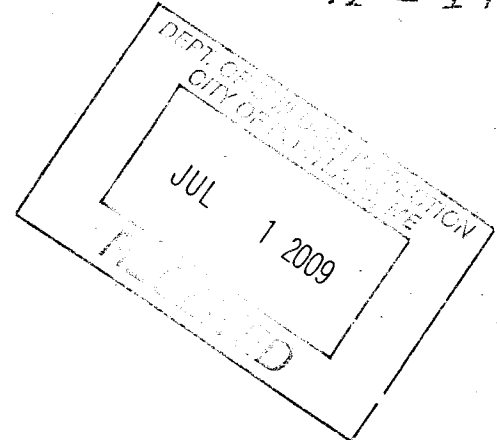
9 8  
2nd Fl. 3rd Fl.

# DETAIL

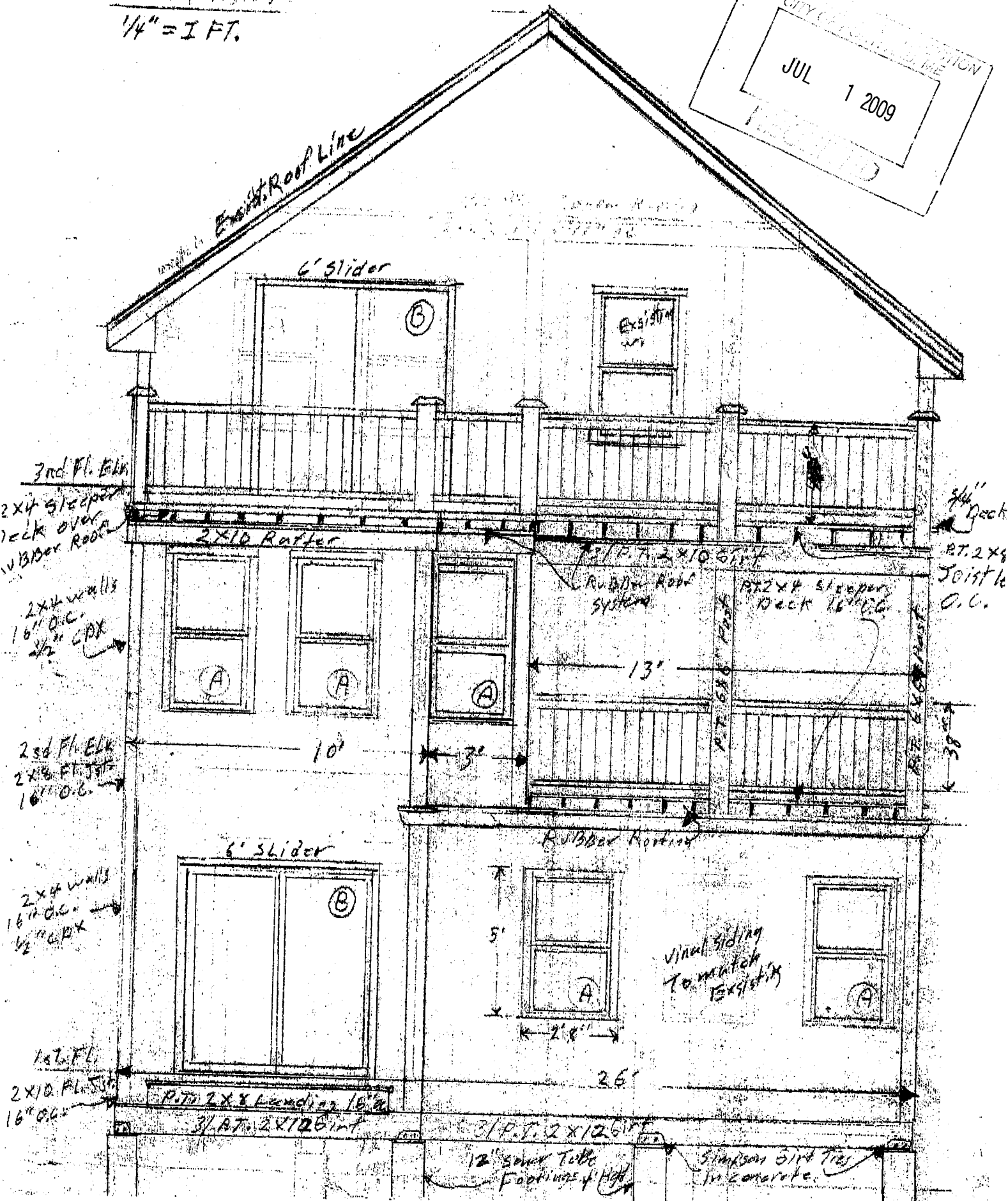
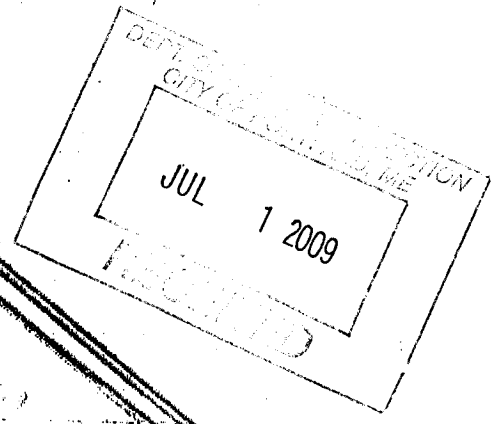
First and Second Floor Ceilings

New Common Area Walls

1/2" = 1 FT.



REAR ELEV  
1/4" = 1 FT.



EXIST. ROOF LINE

6' slider

(B)

EXISTING

3rd Fl. Eln

2x4 sleepers  
deck over  
RUBBER ROOF

2x10 Rafter

3/4" P.T. 2x10 SIRT  
RUBBER ROOF  
SYSTEM

P.T. 2x4 SLEEPER  
DECK 16" O.C.

5/8" Deck  
P.T. 2x4  
Joist 16"  
O.C.

2x4 walls  
16" O.C.  
1/2" G.P.X.

(A) (A) (A)

13'

2nd Fl. Eln  
2x8 FT. JOIST  
16" O.C.

10'

3'

RUBBER ROOFING

2x4 walls  
16" O.C.  
1/2" G.P.X.

6' slider

(B)

(A)

(A)

vinyl siding  
to match  
existing

2'8"

26'

1st Fl.  
2x10 PL. SIRT  
16" O.C.

P.T. 2x8 Landing 16" O.C.

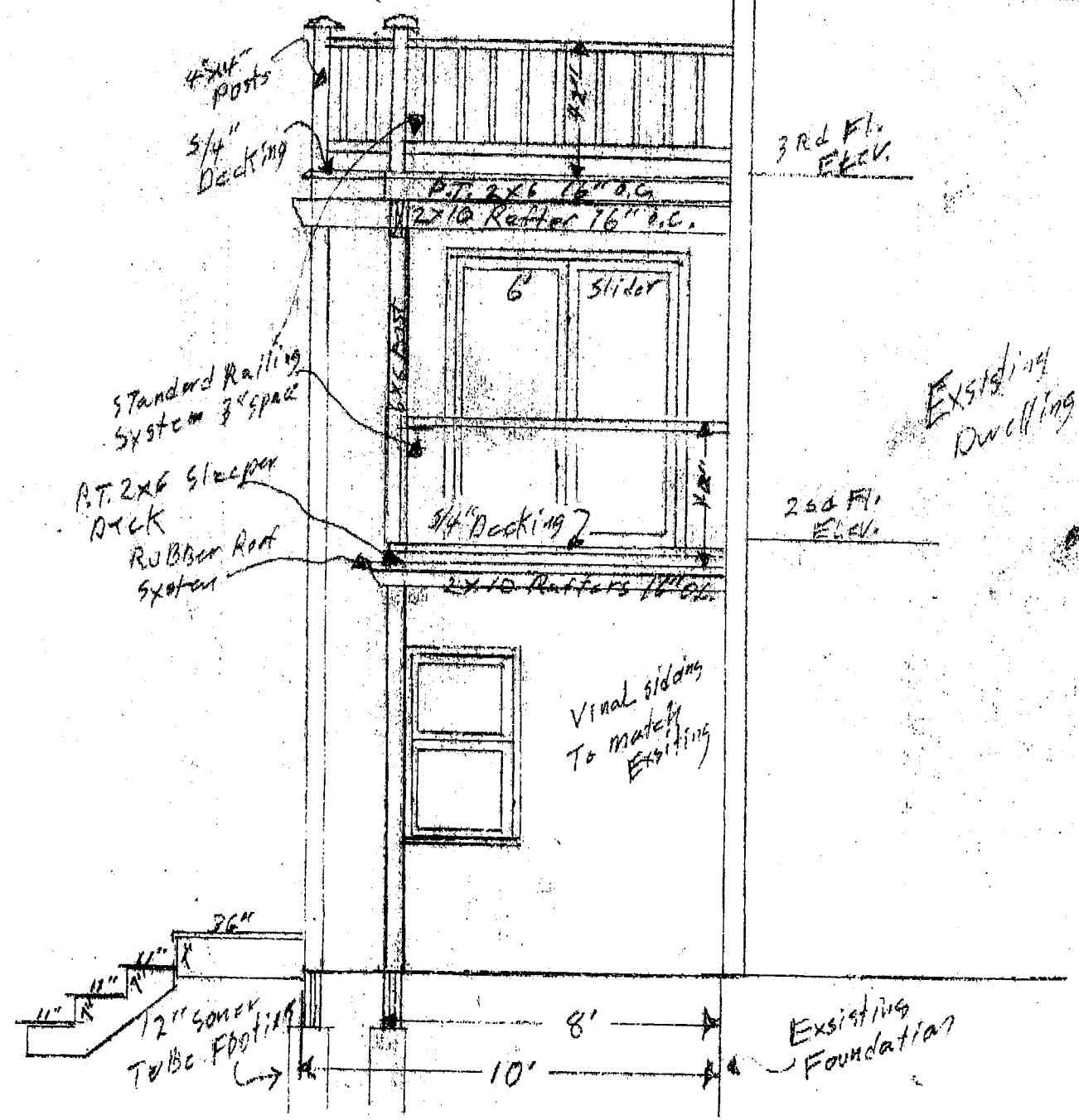
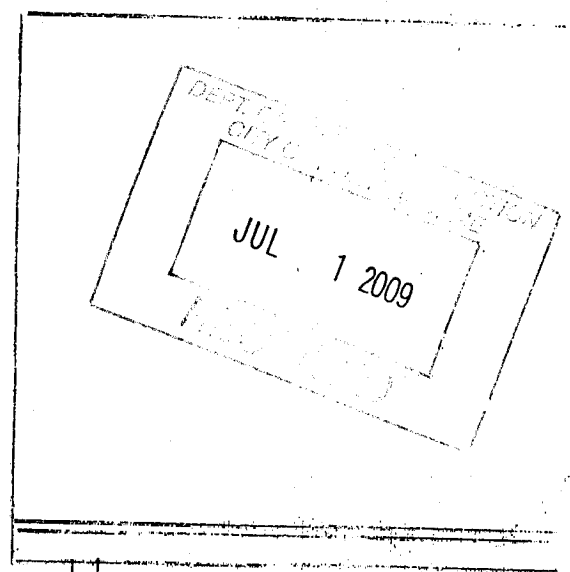
3/4" P.T. 2x10 SIRT

3/4" P.T. 2x12 SIRT

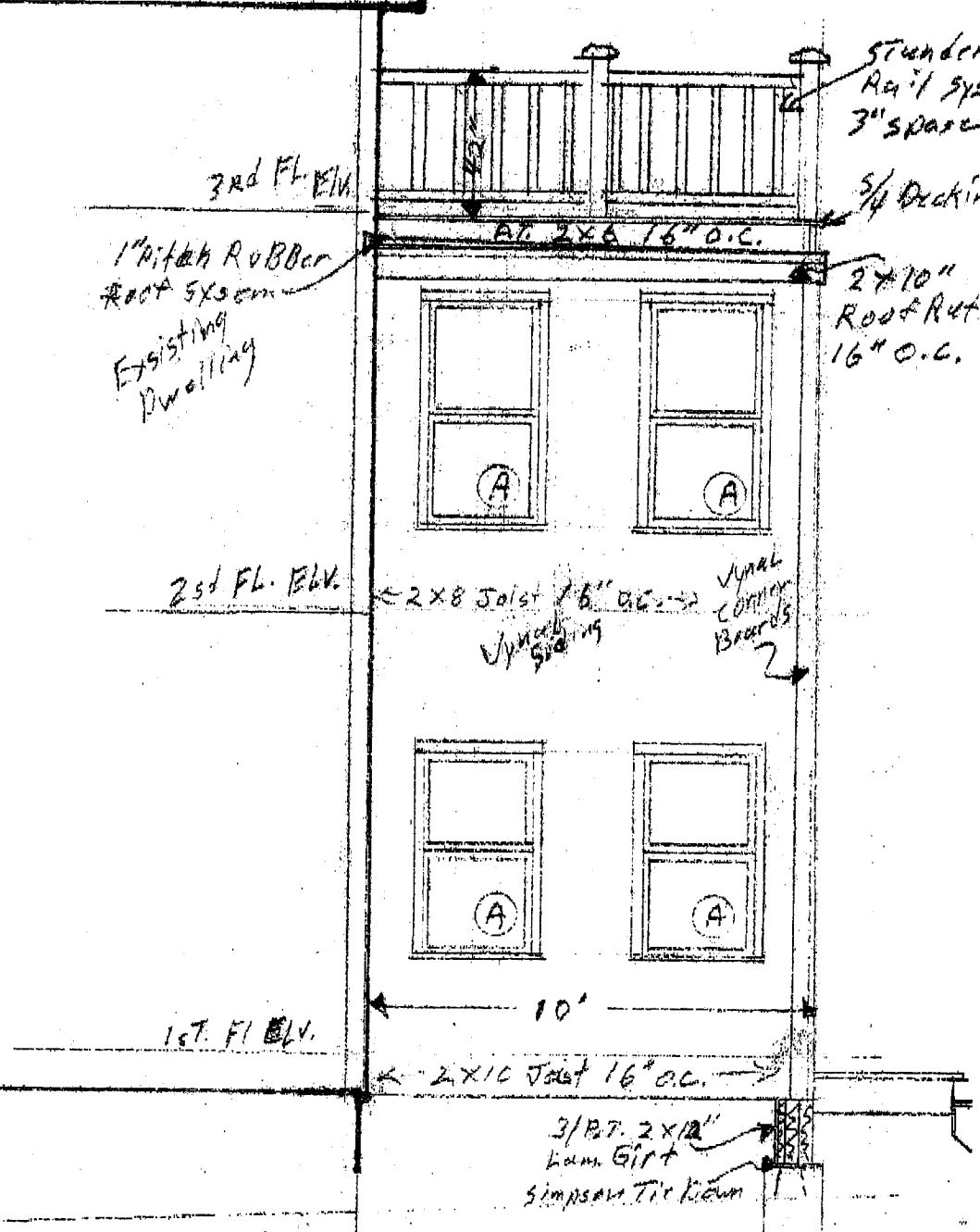
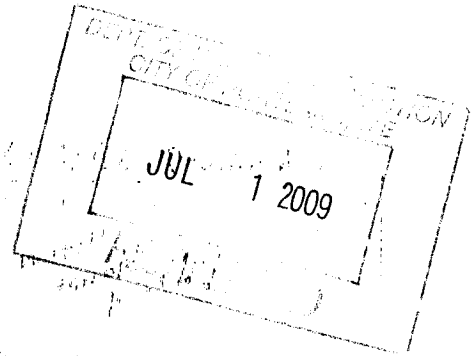
12" SINK TUBE  
FOOTINGS @ 4' HD

SIMPSON SIRT TIES  
IN CONCRETE

West Elev.  
1/4" = 1 FT.



East Elev.  
1/4" = 1 FT.



3rd FL. ELEV.

Stander  
Rail 5/8"  
3" space

5/4 Decking

1" Pitch Rubber  
Roof system  
Existing  
Dwelling

2x6 16" O.C.

2x10"  
Roof Rft  
16" O.C.

2nd FL. ELEV.

2x8 Joist 16" O.C.

Vynak  
Siding

Vynak  
Corner  
Boards

1st FL. ELEV.

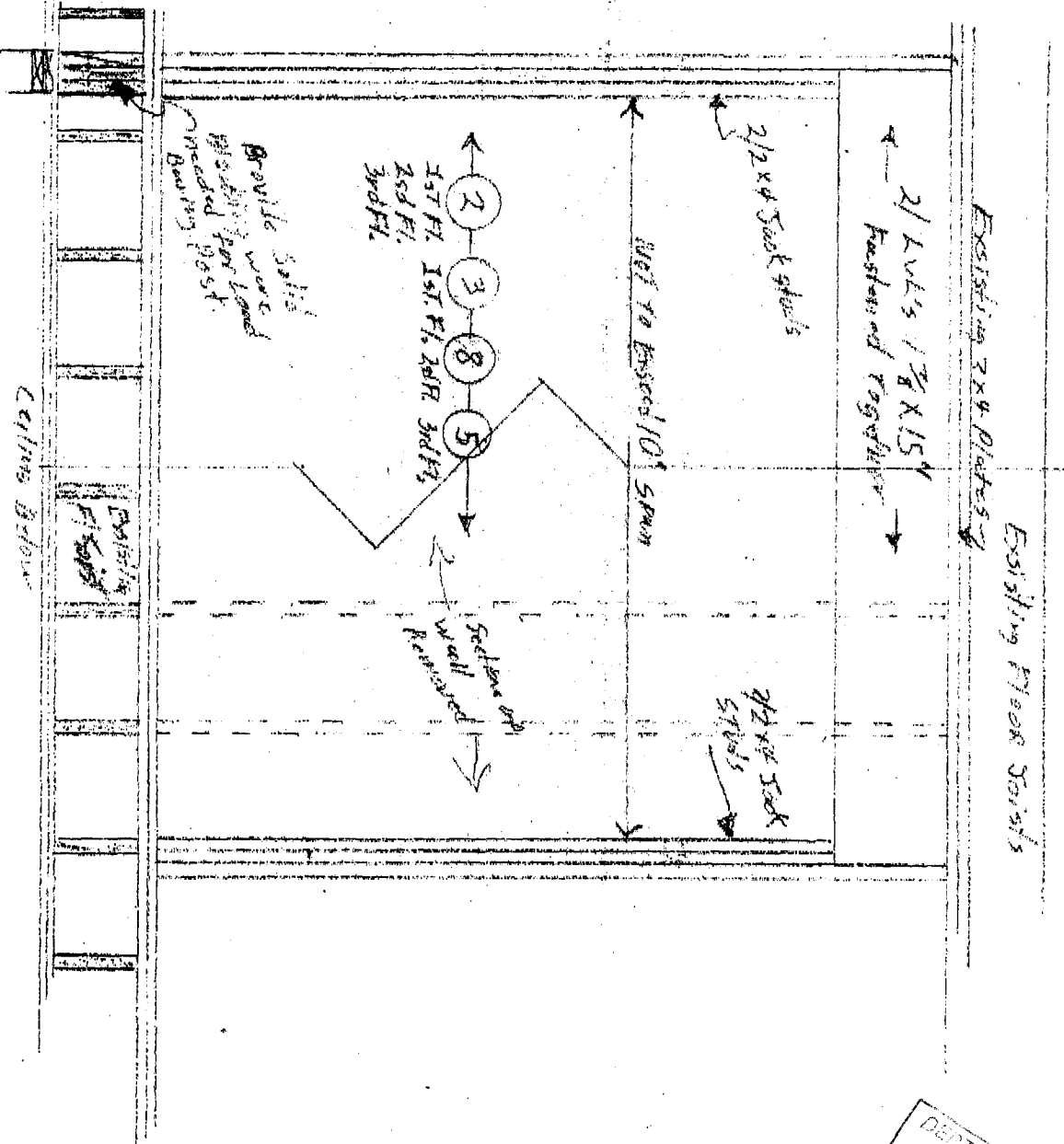
10'

2x10 Joist 16" O.C.

3/8" 2x12"  
Lam Girt  
Simpson Tie Down

# DETAIL

Load Bearing Wall Sections Removed  
Openings To New Addition 1  
1/2" = 1 FT.

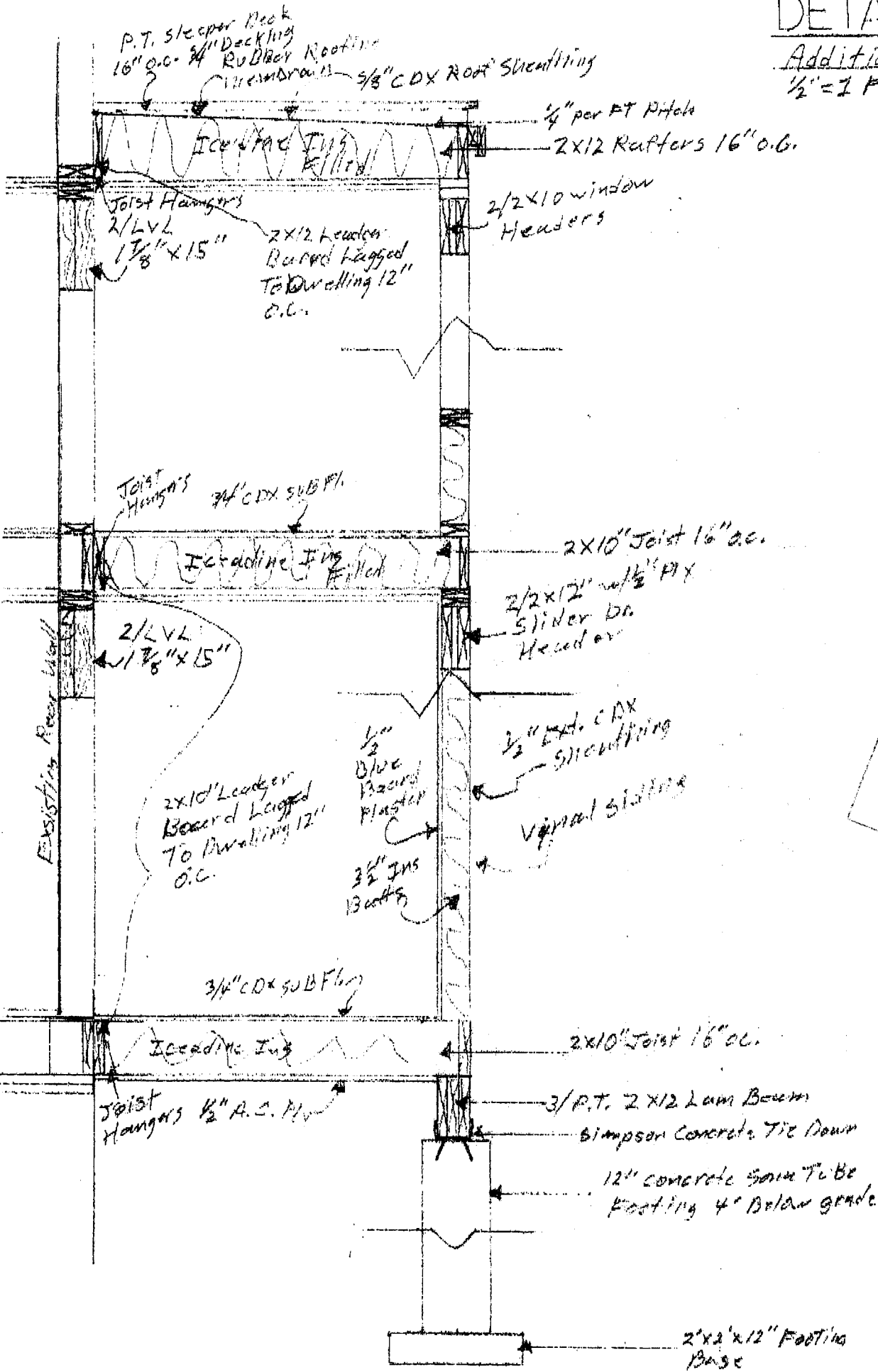


DEPT. OF PUBLIC WORKS  
CITY OF NEWARK, N.J.  
JUL 1 2009  
RECEIVED



# DETAIL

Addition Framing  
1/2" = 1 FT.



JUL 1 2009  
 CITY OF...  
 DEPT. OF...

# Anderson Insulation, Inc

Voice: 781-857-1000  
Fax: 781-857-1054

TO: Jeanie Bourke 207-874-8716

FROM: Jim Kelly Ext. 206

DATE: 7/8/09

RE: \_\_\_\_\_

Number of pages including cover: 3

## Message

---

---

---

---

---

---

---

---



## The Icynene Insulation System.

### 1. PRODUCT NAME

Icynene is the registered trademark for polycyrene insulation manufactured by Icynene Inc. Icynene spray formula is a 1/2 lb. density open celled material.

### 2. MANUFACTURER

Icynene is made on site from liquid components manufactured by Icynene Inc. Installation and on-site manufacturing is supplied by independent certified contractors.

### 3. PRODUCT DESCRIPTION

Icynene insulates and "draftproofs" a building at the same time. Its performance is less installation sensitive than factory manufactured insulation materials. It is an effective "breathing" air barrier that can adjust with the building to maintain a seal against energy-robbing air leakage for the life of the building. Convective air movement inside wall cavities is virtually eliminated, providing more uniform temperatures throughout the building. The result is superior quality construction, with higher comfort levels at lower thermostat settings and lower heating and cooling costs. Savings vary.

The Icynene is applied by spraying liquid components onto an open wall or ceiling surface where they expand 100:1 in just seconds to provide a flexible foam blanket of millions of tiny air cells completely filling building cavities and sealing cracks and crevices in the process. It adheres to virtually everything it touches, sealing out air infiltration. Excess material is easily trimmed off, leaving a surface ready for drywalling or other finish.

### 4. TECHNICAL DATA

(Based on Core Samples)

#### Thermal Performance

Thermal resistance (R-value) ASTM C-518:  
R 3.6 hr.ft<sup>2</sup>/F/FTU. in.  
RSI 0.62 m<sup>2</sup> °C/W per 25 mm  
Average insulation contribution in stud wall:  
2" x 4" = R13      2" x 6" = R20

Icynene provides more effective performance than the equivalent R-value of hand fitted air permeable insulation materials. It is not subject to loss of R-value due to aging, windy conditions, convection or air infiltration; nor is it likely to be affected by moisture related conditions. See FACT SHEET on reverse.

#### Air Permeance/Air Barrier/Air Seal

Icynene completely fills any shaped cavity, and adheres to other building materials, creating assemblies with very low air permeance. No additional interior or exterior air infiltration protection is necessary.

Air permeability of core foam - ISSN 0701.5232:  
1.6 l/sec/m<sup>2</sup> @ 3" (76 mm) at 75 Pa. pressure  
1.0 l/sec/m<sup>2</sup> @ 5" (127 mm) at 75 Pa. pressure

The air permeability of wall assemblies incorporating Icynene is reduced by the incorporation of all other wall components into a monolithic assembly. Where maximum air tightness is required, spaces where Icynene is not installed such as between double studs and between flooring and base plates should be caulked.

In all well built buildings adequate ventilation/air supply should be planned to avoid combustion equipment backdrafting and humidity problems.

Inadequate ventilation is hazardous.

#### Water Vapor Permeance

Icynene is water vapor permeable and allows structural moisture to diffuse and dissipate. It will not entrap moisture in materials to which it is applied.

Water vapor transmission properties: (ASTM E98)

16 perms 941 ng/(Pa·s·m<sup>2</sup>) @ 3" (76 mm) thick  
10 perms 565 ng/(Pa·s·m<sup>2</sup>) @ 5" (127 mm) thick

Because of its low air permeance, Icynene is not infiltrated by moisture laden air. When applied to a vapor permeable surface, condensation will not occur within it. It does not require a vapor barrier unless applied to a non-vapor permeable surface in extreme vapor drive conditions. A vapor retardant paint is adequate in such situations.

#### Water Absorption Properties

Icynene is hydrophobic. It does not wick and is water repellent. Water can be forced into the foam under pressure because it is open celled. Water will drain by gravity rather than travel horizontally or vertically through the foam. It dries quickly and thermal performance is fully restored.

#### Acoustical Properties

(performance in a 2" X 4" wood stud wall @ 125 250 500 1000-2000 4000 Hz. freq.)

STC Sound Transmission Class - 37  
19 30 31 42 38 48 (ASTM E-90)

NRC Noise Reduction Coefficient - 70  
.11 .43 .89 .72 .71 .87 (ASTM C-423)

Acoustical performance is less installation dependent than that of hand fitted sound blankets.

#### Burn Characteristics

Icynene will be consumed by flame, but will not sustain flame upon removal of the flame source. It leaves a charcoal residue. It will not melt or drip. It must be applied in accordance with all applicable building codes.

#### U.S.A.

Surface Burning Characteristics of Building Materials ASTM E-84

Flame spread < 20  
Smoke Development < 400  
Fuel contribution 0

#### CANADA

Corner wall test CAN4-S102 4 FSC  
Flame spread 510-530  
Smoke development 95-150

Oxygen Index ASTM D-2863  
N.Y. State Fire gas toxicity

23  
LC<sub>50</sub> -

These test results are not indicative of performance under actual fire conditions.

#### Electrical wiring

Icynene has been evaluated with both 14/3 and 12/2 residential wiring (max. 122°F/50°C). It is chemically compatible with electrical wiring coverings.

**Note:** Not to be used with knob and tube wiring.

#### Corrosion

Icynene did not cause corrosion when evaluated in contact with steel under 85% relative humidity conditions.

#### Bacterial or Fungal Growth and Food Value

Icynene provides no support to bacterial or fungal growth. It has no food value for insects or rodents.

#### Environmental / Health / Safety

Icynene contains no formaldehyde or ozone destroying CFC's or HCFC's. It has been thoroughly evaluated for in-situ emissions by industry and government experts. After 30 days from application it has no detectable emissions of any type.

#### Limitations

Not intended for exterior use. Must be covered by an approved fire barrier. Not to be installed within 2" (50 mm) of heat emitting devices.

### 5. INSTALLATION

Icynene is installed by a network of professional contractors trained and certified in the installation of Icynene. Installation is generally independent of environmental conditions. It can be installed in hot, humid or freezing conditions. Surface preparation is similar to that required for painting or other products requiring surface adhesion. Within minutes the foaming process is complete and the walls may be covered. Any installation deficiencies are subject to immediate visual quality control and remedial action. Installers are responsible for trimming foam as required and removal of scrap for recycling.

### 6. AVAILABILITY

Check regional yellow pages or contact Icynene Inc. at 1.800-758-7925

### 7. WARRANTY

THE COMPANY WARRANTS THAT THE PROPERTIES OF THE PRODUCT MEET THE PRODUCT SPECIFICATIONS OUTLINED IN THE COMPANY'S LATEST PRODUCT SPECIFICATION, WHEN INSTALLED WITH THE STANDARD EQUIPMENT AND IN ACCORDANCE WITH ITS INSTALLERS MANUAL. ANY LIABILITY UNDER THIS WARRANTY WILL NOT EXCEED A REFUND OR REPLACEMENT OF THE MATERIAL. THE COMPANY MAKES NO WARRANTIES, EXPRESS OR IMPLIED, REGARDING THE PRODUCT OR ITS MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE COMPANY SHALL NOT BE LIABLE IN CONTRACT OR TORT FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES SUFFERED OR INCURRED BY THE CONTRACTOR AND RELATING TO PRODUCT, INCLUDING BUT NOT LIMITED TO LOSS OF USE, LOSS OF WORK IN PROGRESS, DOWN TIME OR LOSS OF PROFITS EXPERIENCED BY THE CONTRACTOR.

**8. TECHNICAL**

Certified contractors and Icynene Inc. provide support on both technical and regulatory issues. Model architectural specifications are available on request. Extended services include air leakage testing, thermography and energy consumption modelling.

**9. RELATED REFERENCES**

Polyicynene Insulation Icynene has been evaluated by materials evaluation services in both the United States and Canada. Confirmation of acceptance by specific local governments and copies of evaluation reports are available upon request.

All physical properties were determined through testing by accredited third party agencies. Icynene Inc. reserves the right to change specifications in its effort to enhance quality features. Please confirm that technical data literature is current.

Council of American Building Officials NER-420 Canadian Construction Materials Centre 12070-R

**9. PACKAGING AND STORAGE**

Packaging - 55 U.S. gallon, (45 Imperial gallon) open top steel drums

Component 'A' - 550 lb. per drum  
- Polyicynene MDI

Component 'B' - 500 lb. per drum  
- Polyicynene Resin

**Storage**

Component A must be protected from freezing.

Component B can be frozen but must be protected from overheating (120°F) and prolonged storage above 100°F. Component B separates during storage.

**10. OPERATING SPECIFICATIONS**

Operating Parameters :

Pressure - use maximum settings  
Preheater - 130°F - 160°F  
Line Heat - same setting as preheater

**Preparation**

Component B is viscous and separates when left standing. It should be heated to about 80°F in the drum and mixed thoroughly to achieve a homogenous mix prior to and during use.

**Yield**

Yield will vary with the temperature of the substrate but an average of 15,000 bd.ft. per drum set can be expected, with higher yields expected in warm weather and lower yields in cold weather.

Refer to Icynene Installers' Manual for expanded information.

**Insulation Fact Sheet**

This is a polyicynene cavity fill insulation.

**READ THIS BEFORE YOU BUY.  
WHAT YOU SHOULD KNOW ABOUT R-VALUES**

R-value, A.S.T.M. C-518, Btu. In/hr. ft<sup>2</sup> °F.  
R-3.6 per inch  
R-13 based on 3 1/2'  
R-20 based on 5 1/2'

The chart shows R value of this insulation.

R means resistance to heat flow. The higher the R-value, the greater the insulation power. Compare insulation R-values before you buy.

There are other factors to consider. The amount of insulation you need depends on the climate you live in. Also your fuel savings from insulation will depend upon the climate, the type and size of your house, the amount of insulation already in your house, and your fuel use patterns and family size. If you buy too much insulation, it will cost more than you'll save on fuel.

To get the market R-value, it is essential that this insulation be installed properly.

**The Icynene Insulation System.**

Sooner or later every home will have it.

Icynene Inc.  
376 Watline Avenue  
Mississauga, Ontario, Canada  
L4Z 1X2

(905) 890-5EAL  
(905) 890-7325  
1-800-758-7325  
FAX (905) 890-7784