Reviewed for Code Compliance
Inspection Division
Department of Building Inspection
Date: 10/05/17

732 FOREST AVE.

PORTLAND, MAINE

MULTI- FAMILY RESIDENCE CODE REVIEW

732 FOREST AVE.
PORTLAND, MAINE

PROJECT DESCRIPTION:
THIS PROJECT IS THE RE-CONSTRUCTION OF AN EXISTING 6 UNIT APARTMENT BUILDING WHICH WAS DESTROYED BY FIRE. THE RE-CONSTRUCTION IS BASED ON THE SAME FOOTPRINT, AREA AND VOLUME OF THE ORIGINAL STRUCTURE, WITH THE EXCEPTION OF NEW EXTERIOR BALCONIES ON THE FRONT AND NEW EXTERIOR STAIRS AT THE REAR. A SPRINKLER SYSTEM WILL BE INSTALLED PER NFPA 13R

IBC 2009 CODE STUDY:

CH. 3 USE AND OCCUPANCY CLASSIFICATIONS
BUILDING USES: (USE TO REMAIN AS IS) R-2.
THE BUILDING IS SINGLE USE/SEPARATED APARTMENT BUILDING CONSISTING OF 3 FLOORS WITH TWO APARTMENTS ON EACH FLOOR. THERE ARE 6 APARTMENTS TOTAL. THERE IS AN EXISTING BASEMENT.

EACH APARTMENT IS SEPARATED WITH A 1HR SEPARATION FROM THE APARTMENTS TO THE SIDE AND ABOVE. THIS IS ALLOWED PER TABLE 508.4 FOR SPRINKLERED BUILDING.

CH. 4 SPECIAL REQUIREMENTS BASED ON USE AND OCCUPANCY
SEC 420 GROUP R2

SEC 420.2 WALLS SEPARATING UNITS SHALL BE CONSTRUCTED AS FIRE PARTITIONS PER SEC 709

SEC 420.3 FLOORS SEPARATING UNITS SHALL BE CONSTRUCTED AS HORIZONTAL ASSEMBLYS PER SEC 712

CH. 5 GENERAL BUILDING HEIGHTS AND AREAS: EACH USE MEETS THE REQUIREMENT FOR AREA AND HEIGHT PER TABLE 503 AS SHOWN:

BUILDING USE SUMMARY:

	APARTMENTS		INCIDENTAL/UTILITY	
LEVEL	EXIST	NEW	EXIST	NEW
1	1715	0		
2	1715	0		
3	1715	0		
BASEMT			1715	0
TOTAL AREA	5145		1715	
HEIGHT	29F		N/A	

TABLE 503 ALLOWABLE AREA AND HEIGHT:
STORIES 2+1=3
AREA 7,000 > 1715
HEIGHT 60ft > 29
(Based on Type VB construction and sprinkler system)

ADDITIONAL INCREASES FOR FRONTAGE AND SPRINKLER APPLY PER SEC 506 BUT ARE NOT NEEDED TO MEET THE REQUIREMENTS

THE PROVISIONS OF SEC 507 UNLIMITED ARE DO NOT APPLY

SEC. 508.2.5 INCIDENTAL USE
BASEMENT BOILER < 400k BTU, SO NO SEPARATION REQ'D BUT WILL PROVIDE 1HR SEPARATION.

CH.6 TYPE OF CONSTRUCTION IS TYPE V-B, THEREFORE THE FOLLOWING FIRE RATINGS OF ASSEMBLIES IS PROVIDED
EXTERIOR WALLS - 0 HR.
INTERIOR WALLS - 0 HR.
RESIDENTIAL UNIT SEPARATION WALLS- 1 HR
1ST FLR CEILING / 2ND FLOOR - 1 HR
2ND FL CEILING / 3RD FLOOR - 1 HR
ROOF - 0 HR
EXT STAIR ENCLOSURE - 1 HR
AS NOTED ABOVE, CH.4 AND CH.7 REQUIRE ONLY A ½HR VERTICAL AND HORIZONTAL SEPARATIONS FOR R-2. WE HAVE PROVIDED ALL SEPARATIONS AS 1HR.

CH. 7 FIRE & SMOKE PROTECTION FEATURES -
SEC 709 FIRE PARTIONS - AS STATED ABOVE,
709.3 FIRE PARTITIONS SHALL BE MIN. ½hr RATED FOR UNIT SEPARATION WALLS & CORRIDORS (for sprinklered building) AND SHALL HAVE CONTINUITY PER 709.4

SEC 712 HORIZONTAL ASSEMBLIES SHALL BE MIN. ½hr. RATED FOR DWELLING/SLEEPING UNIT SEPARATIONS (for sprinklered building) AND HAVE CONTINUITY PER 712.4

CH. 8 INTERIOR FINISHES REF. TABLE 803.9
USE R-2, INTERIOR EXITS, STAIRS, RAMPS CLASS C
OTHER = CLASS C (FOR SPRINKLERED)

CH. 9 FIRE PROTECTION SYSTEMS -

AN NFPA 13R SPRINKLER SYSTEM IS TO BE INSTALLED (TO BE DESIGNED BY A QUALIFIED PERSON)

FIRE ALARM AND DETECTION -
FIRE DETECTION - R-2, PER 907.2.9
SMOKE DETECTION - R-2 PER 907.2.11.2
CARBON MONOXIDE - AS REQUIRED BY CODE

CH. 10 MEANS OF EGRESS -

NOTE: FOR ALL CODE REFERENCES BELOW REFER TO IEBC CH. 7, SEC. 705 MEANS OF EGRESS UNLESS NOTED OTHERWISE

EACH APARTMENT HAS TWO EXITS IN ACCORDANCE WITH SEC. 705.4.1, WITH REVISIONS TO INCLUDE HANDRAILS BOTH SIDES TO THE EXISTING FRONT EXIT

SEC 705.5 EXIT DOORS FROM APARTMENTS TO STAIRWAY/CORRIDORS TO BE 1HR RATED AND BE SELF CLOSING PER SEC 705.5

ALL BEDROOMS IN THE APARTMENTS ARE PROVIDED WITH EGRESS WINDOWS

TRAVEL DISTANCE:
SEC 705.6 MAX. DEAD END CORRIDOR = 70FT
IBC SEC 1014.3 COMMON PATH OF EGRESS TRAVEL =125FT
IBC SEC 1016.2 EXIT ACCESS TRAVEL DISTANCE = 250FT

SEC. 705.7 MEANS OF EGRESS LIGHTING ARE PROVIDED
SEC. 705.8 EXIT SIGNS ARE PROVIDED

SEC. 705.9 THE EXISTING EGRESS STAIR (TO REMAIN) WILL HAVE HANDRAILS ON BOTH SIDES AND 1HR RATED DOORS

NFPA 101 CHAPTER 31 EXISTING APARTMENT BUILDINGS

TRAVEL DISTANCE: (sprinklered building)
MAX. TRAVEL DIST WITHIN UNIT = 125FT
MAX TRAVEL DIST FROM UNIT ENTR. TO EXIT =200FT
AT 1ST FLR MERCANTILE MAX TRAVEL DIST = 250FT AND COMMON PATH OF TRAVEL = 100FT

CH. 31.2.4.6
A SINGLE EXIT FROM THE APARTMENTS IS PERMITTED BY EXIT DOORS FROM APARTMENTS TO STAIRWAY TO BE 1HR RATED AND BE SELF CLOSING

SITE LOCATION

ARCHITECTURAL SPECIFICATIONS:

FLOOR SYSTEM:
Joists As Indicated
Bridging at Center
Subfloor As Indicated

EXTERIOR WALLS:
2x Studs to Remain. Where Indicated to be Replaced Due to Damage, Match Existing as Close as Practical.
Sheathing to Remain Where Indicated to be Replaced Due to Damage, Provide 7/16" OSB Sheathing.
Vapor Barrier at Inside
FG Batt Insulation Per Energy Code
Siding/Finish By Owner

INTERIOR WALLS:
2x4 Studs @ 16"oc U.N.O.
½" Gypboard as Indicated-U.N.O.
5/8" Type X Gypboard at Rated Assemblys

ROOF SYSTEM:
Joists as Indicated
Sheathing as Indicated (7/16")
15# Underlayment
Ice & Water Shield at Eaves/Valleys
.060 EPDM Adhered Rubber Membrane, or
Architectural Shingles at Slopes > 4/12

INSULATION:
Exterior Walls -at Existing, Fill Cavities
Roof R-38, Where Possible, or Fill Cavities But Maintain Ventilation Where Conditions Permit.
Basement Ceiling R-30

BEAMS/HEADERS:
As Indicated on Plan, or
(3)2x10s Max. 40" Span
(3)1.75x9.25 LVLs Max 80" Span
Min. 4" Bearing all Beams

INTERIOR FINISHES:
Paint As Indicated At Walls/Ceilings
Flooring As Indicated

Note: Items not Indicated Shall be Per Contract/Code

DRAWING LIST:

A0.0	COVER SHEET
A0.1	FIRE BLOCKING
A1.0	1st FLOOR PLAN
A1.1	2nd & 3rd FLOOR PLANS
A2.0	ELEVATIONS
A3.0	BLDG SECTIONS
S1.0	FOUNDATION PLAN
S2.0	FRAMING PLANS
S2.1	BALCONY FRAMING PLANS
S3.0	BUILDING SECTIONS

FOR PERMIT
ISSUED
9/28/17

3	
2	09/28/17
1	08/09/17

STATE OF MAINE
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Portland, Maine

TITLE: COVER SHEET

DATE: 4/25/17	DRAWN BY: BWM	DRAWING NUMBER:
SCALE: as noted	PROJ NO: 2017-031	A-0.0