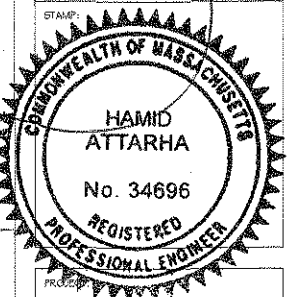


ADE
 DESIGNERS & ENGINEERS
 645 NEWBURY STREET SUITE #1
 EASTON, MASSACHUSETTS
 TEL: 617-336-6440



4/21/12

No. 86
 HIGHLAND AVE.
 APARTMENTS

LOCATION:
 NO. 86 HIGHLAND AVE.
 SOMERVILLE, MA

DRAWING:
 PROPOSED
 ENTRANCE

REVISIONS: 7/6/12

SCALE: AS SHOWN

DATE: 11/21/08

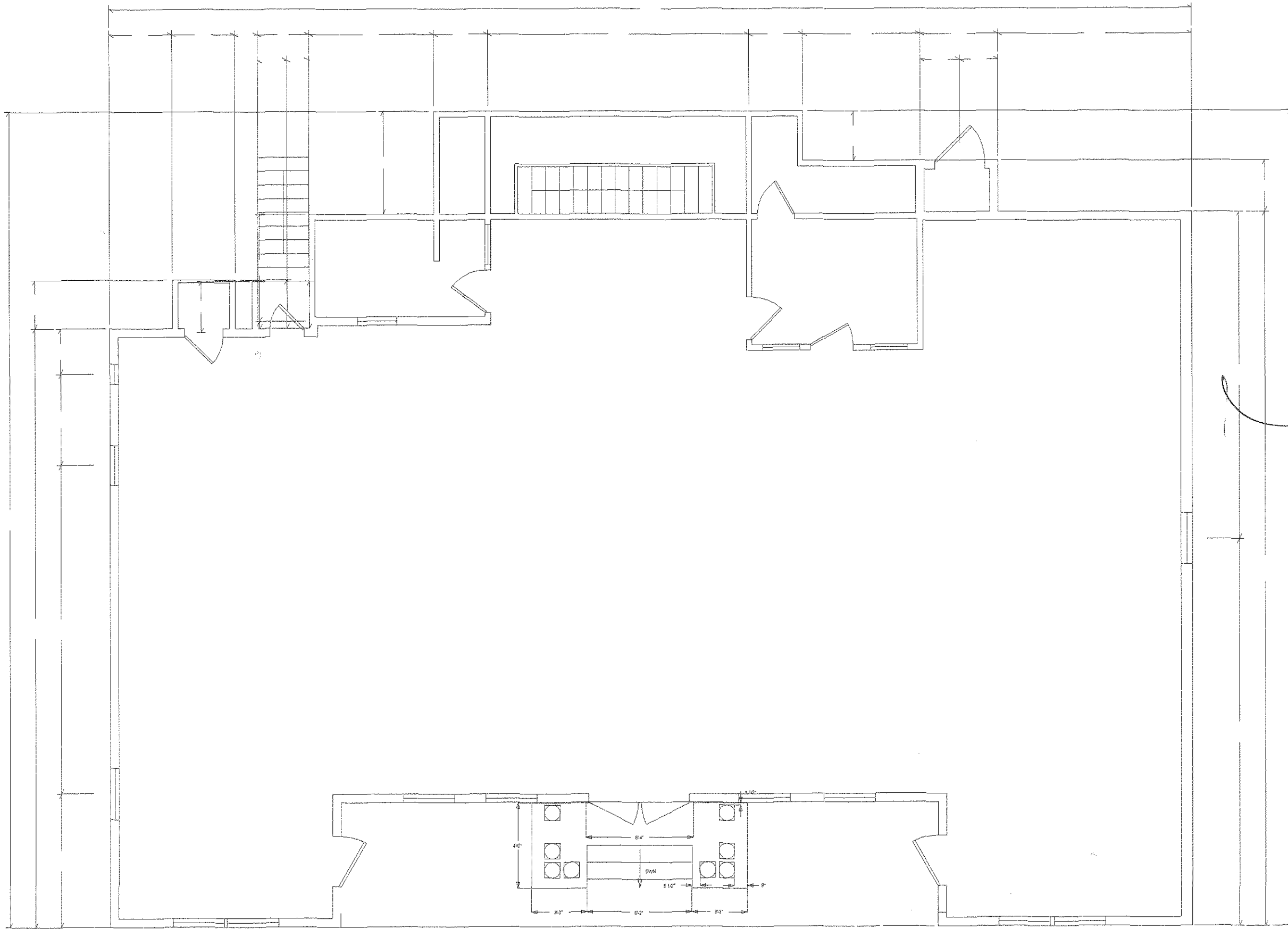
DRAWN BY: HA

CHECKED BY: K

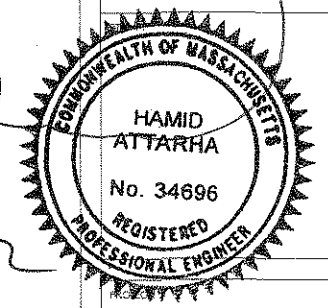
PROJECT NO: RO82999

SHEET NO:

F-1



ADE
DESIGNERS & ENGINEERS
122 FLOWERS STREET SUITE #1
CAMBRIDGE, MASSACHUSETTS
TEL: 617-552-5440



7/7/12

No. 86
HIGHLAND AVE.
APARTMENTS

LOCATION:
NO. 86 HIGHLAND AVE.
SOMERVILLE, MA

DRAWING:
PROPOSED
ENTRANCE

REVISIONS: 7/6/12

SCALE: AS SHOWN

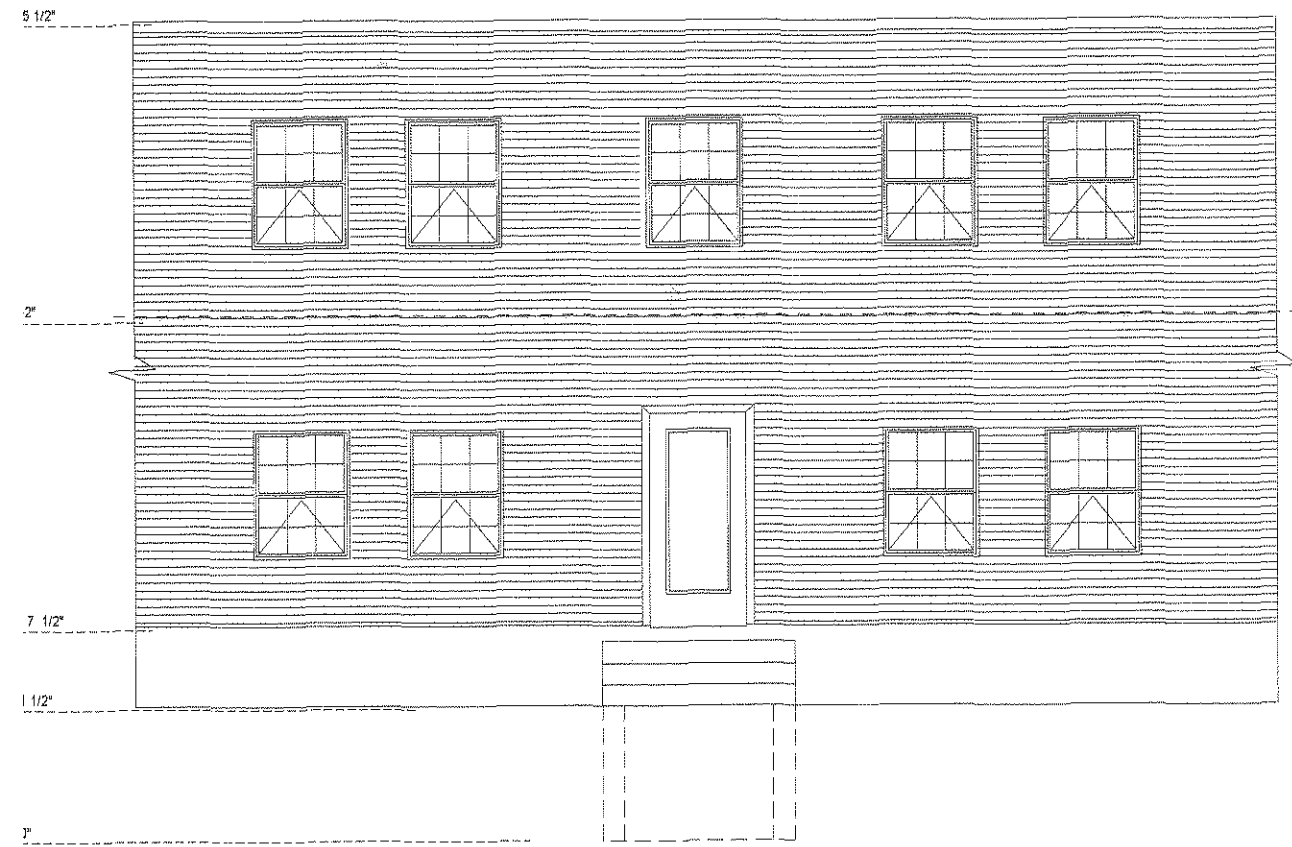
DATE: 11/21/08

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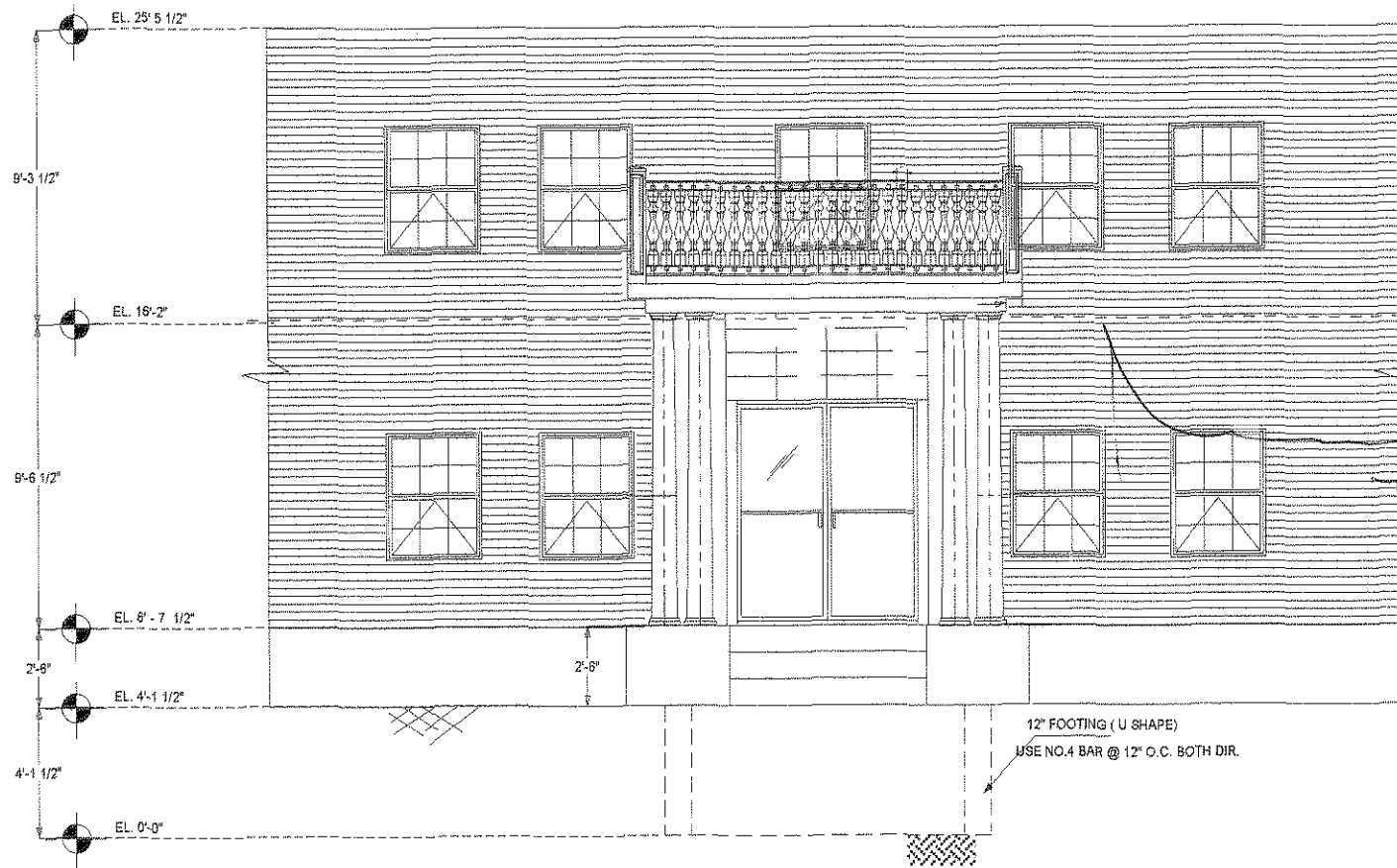
CHECKED BY: X

PROJECT NO: ROB2000

SHEET NO:

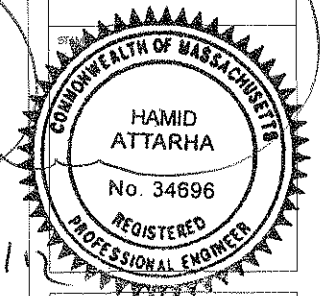


EXIST ELEV.
N.T.S.



PROP. ELEV.
N.T.S.

ADE
DESIGNERS & ENGINEERS
REGISTRATION NO. 0000000000
TEL: 617-888-8888



PROJECT:
*No. 86
HIGHLAND AVE
APARTMENTS*

LOCATION:
*NO. 86 HIGHLAND AVE.
SOMERVILLE, MA*

DRAWING:
*PROPOSED
ENTRANCE*

REVISIONS:	
SCALE:	<i>AS SHOWN</i>
DATE:	<i>1/6/12</i>
DRAWN BY:	<i>HA</i>
CHECKED BY:	<i>X</i>
PROJECT NO.:	<i>ROB2555</i>
SHEET NO.:	

NOTES

1. A BUILDING PERMIT HAS BEEN OBTAINED.
 CONFORM WITH THE STATE OF MASSACHUSETTS CODES.

2. PROVIDE MATERIALS FOR A PERIOD OF ONE YEAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND/OR REPLACING HIS OWN WORK AND PAY ALL COSTS INCIDENTAL THERETO INCLUDING TRAVEL AND/OR EQUIPMENT.

3. ALL WORK SHALL BE LAID OUT BY DIMENSIONS. NOTIFY THE ATTENTION OF THE OWNER IMMEDIATELY. NOTIFY THE CONTRACTOR BEFORE HE BEGINS HIS WORK.

4. PROTECT ADJACENT PROPERTY FROM DAMAGE. NOTIFY THE ATTENTION OF THE OWNER IMMEDIATELY. NOTIFY THE CONTRACTOR BEFORE HE BEGINS HIS WORK.

5. INSTALLATION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

6. ALL WORK FOR WHICH MATERIALS ARE FURNISHED BY THE CONTRACTOR SHALL BE GUARANTEED FOR THE PERIOD OF ONE YEAR OF FINAL ACCEPTANCE. THIS WARRANTY SHALL APPLY TO DEFECTS IN THE MATERIAL AND WORKMANSHIP.

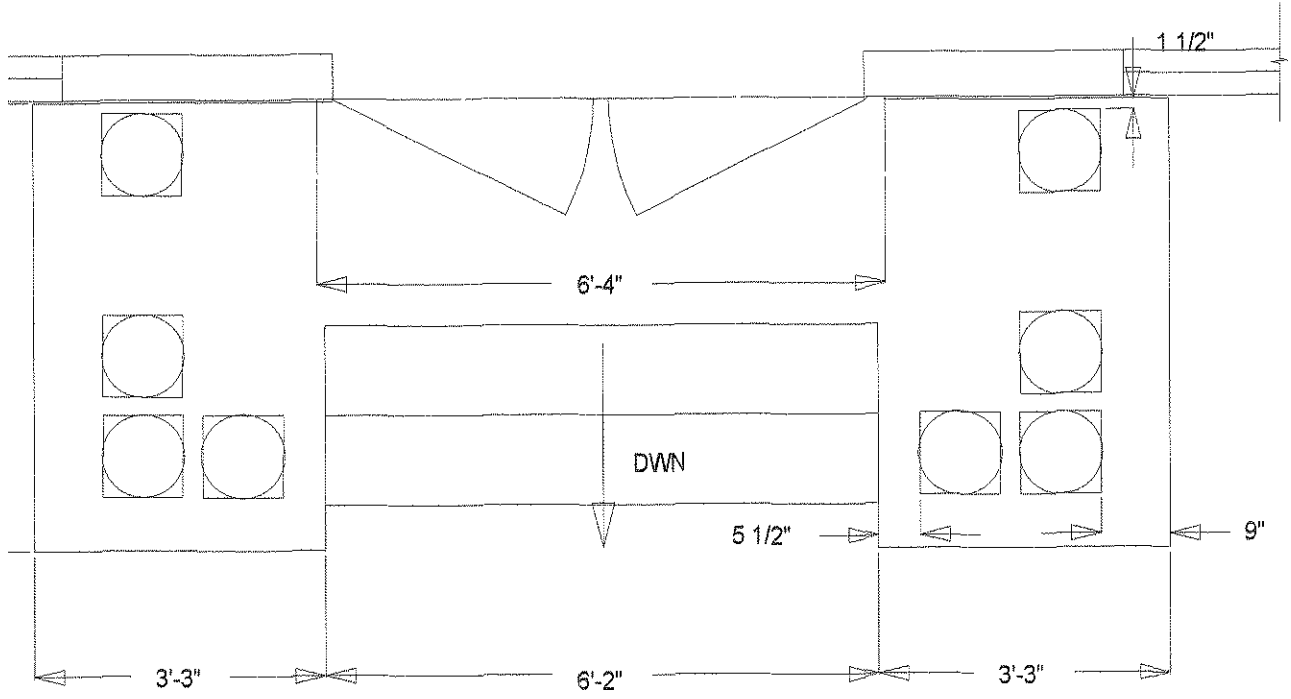
7. CONFORMANCE WITH THE MANUFACTURER'S DATA AND PROJECT SPECIFICATIONS.

8. TO BE INSTALLED BY A LICENSED PLUMBER AND SHALL CONFORM WITH ALL CITY, STATE AND FEDERAL REGULATIONS.

9. OPERATING CONDITIONS SHALL BE DETERMINED BY THE PLUMBING CONTRACTOR. NOTIFY THE ATTENTION OF THE OWNER IMMEDIATELY. NOTIFY THE CONTRACTOR BEFORE HE BEGINS HIS WORK.

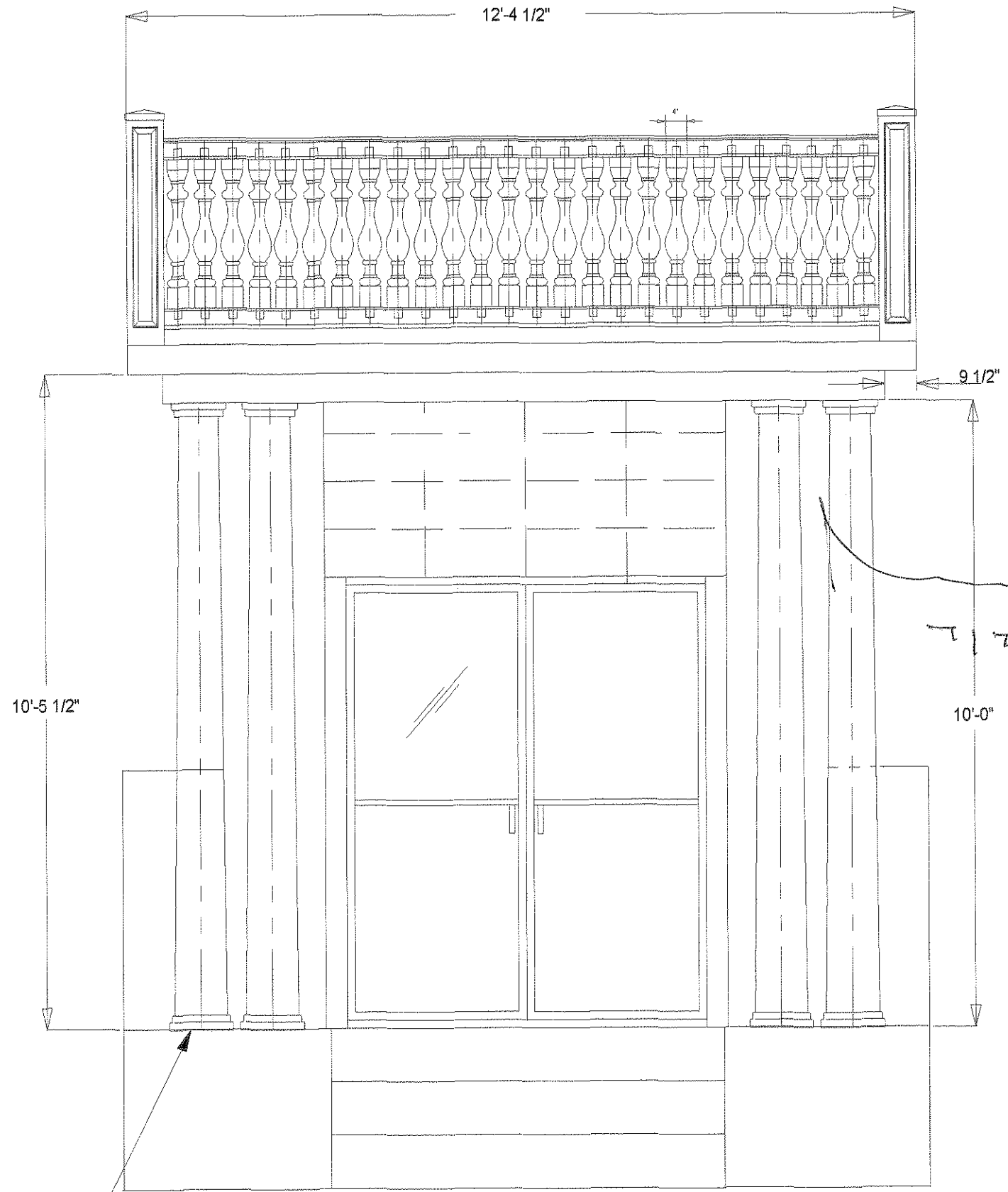
10. CONFORMANCE WITH THE MANUFACTURER'S DATA AND PROJECT SPECIFICATIONS.

11. CALCULATIONS AND PERMITS.



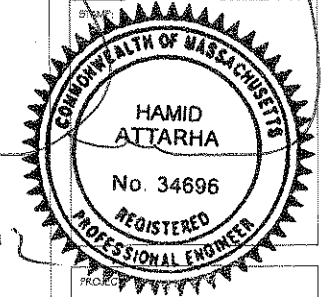
FRONT PLAN (NO.4)
 N T S

BOLTED CONN. PER MANUF. DETAIL
 MIN. UP LIFT CAPACITY OF 850 LB. TOP & BOT (TYP)
 (CONSULT W/ ENG. IF REQ.)



FRONT PROFILE (NO.4)

ADE
 DESIGNERS & ENGINEERS
 122 HICKORY STREET SUITE #1
 EASTON MASS 01922
 TEL: 978-838-8845



No. 86
 HIGHLAND
 APARTMENTS

LOCATION:
 No. 86 HIGHLAND AVE.
 SOMERVILLE, MA

DRAWING:
 PROPOSED
 ENTRANCE

REVISION: 7/5/12

SCALE: AS SHOWN

DATE: 11/20/11

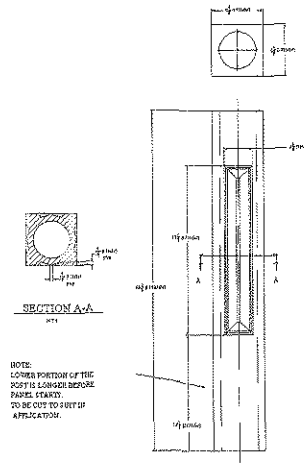
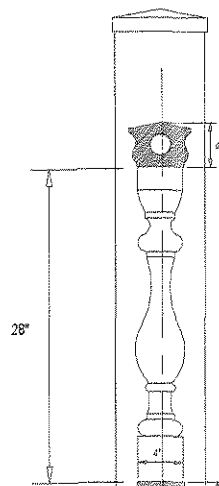
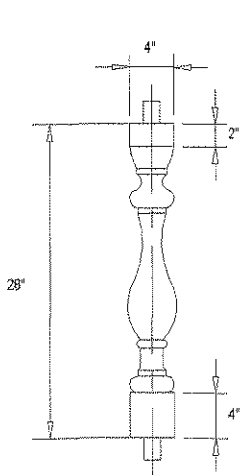
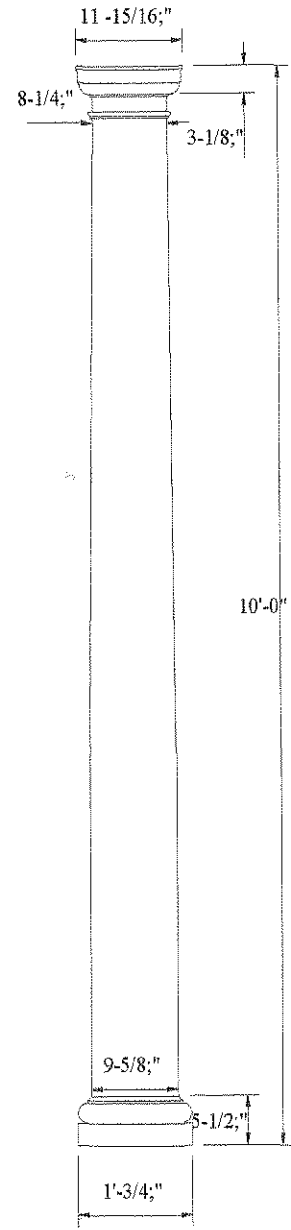
DRAWN BY: HA

CHECKED BY: X

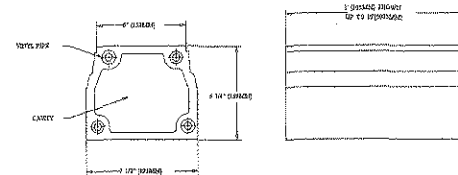
PROJECT NO: ROB2205

SHEET NO:

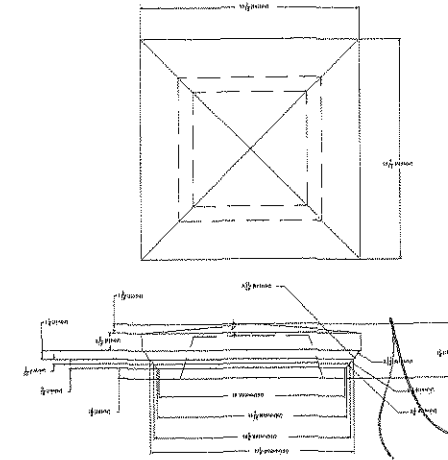
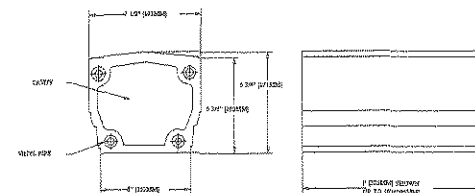
COLUMN DETAIL
N.T.S.



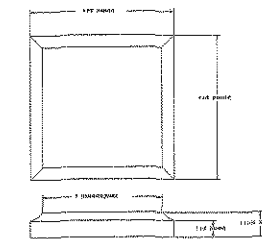
POST
N.T.S.



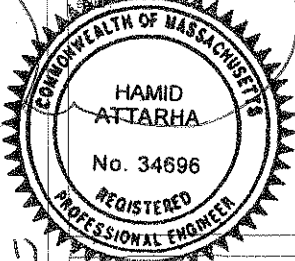
DWG TITLE: BOTTOM RAIL
N.T.S.



N. CAP
N.T.S.



CAP
N.T.S.



ADE
DESIGNERS & ENGINEERS
150 WASHINGTON STREET, SUITE #1
BOSTON, MASSACHUSETTS 02108
TEL: 617-633-5440

No. 86
HIGHLAND
APARTMENTS

LOCATION:
No. 86 HIGHLAND AVE.
SOMERVILLE, MA

DRAWING:
ARCHITECTURAL
DETAILS

REVISIONS: 7/5/12

SCALE: 1/8" = 1'-0"

DATE: 11/20/08

DRAWN BY: SA

CHECKED BY: X

PROJECT NO.: RO82003

SHEET NO.:

ACCORDANCE WITH THE CODE SPECIFICATIONS LIST BELOW:
 1. BUILDING CODE.
 2. STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN.
 3. CONCRETE CONSTRUCTION, ALLOWABLE STRESS DESIGN.
 4. SECTION 05110 - CONCRETE REINFORCEMENT, ACI 318-2

DESIGN METHOD IN ACCORDANCE WITH AISC, MANUAL OF STEEL CONSTRUCTION IS USED FOR STEEL MEMBERS. LOAD FACTOR DESIGN METHOD IN ACCORDANCE WITH ACI 318-02 IS USED FOR CONCRETE ELEMENTS.

R-40 PSF
 R-30 PSF
 (HABITABLE): 30 PSF.
 (FLOOR LOAD): 30 PSF.
 (CEILING): 10 PSF.

THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS.

SHALL BE SET BY TEMPLATE BEFORE THE CONCRETE IS PLACED.

SHALL CONFIRM TO THE REQUIREMENTS OF ASTM A615, GRADE 60.

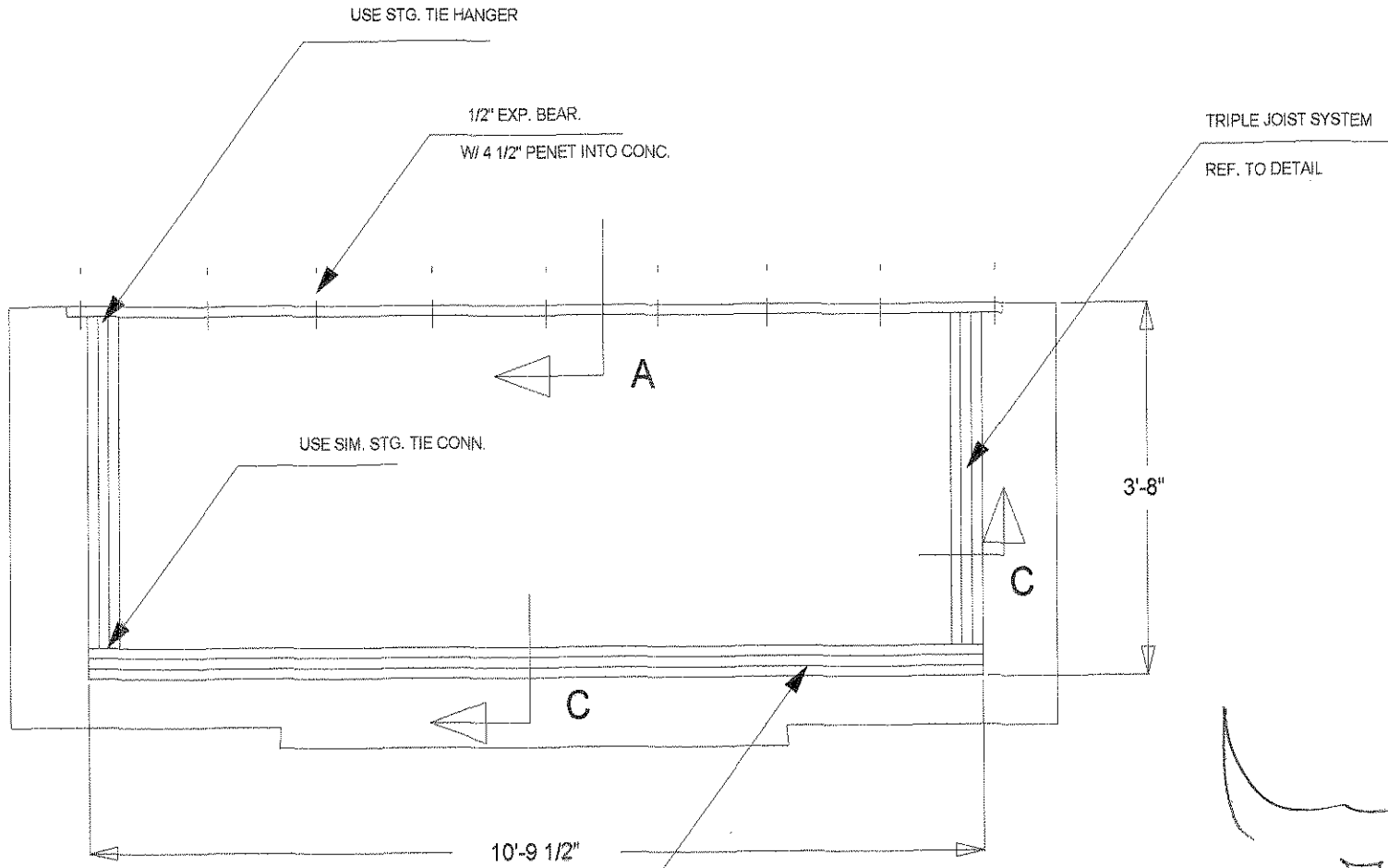
STEEL SHALL BE $F_y=36$ KSI FOR THE BEAMS & PLATES AND $F_y=50$ KSI FOR THE COLUMNS.
 WELDED JOINTS SHALL BE IN ACCORDANCE WITH THE WELDING CODE ANS/AWS D1.5.
 ALL WELDS SHALL BE 3/4" DIAMETER OF 1/2" DIAMETER AND CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A325, UNLESS OTHERWISE NOTED.

COMPRESSIVE STRENGTH SHALL BE MINIMUM OF 3000 PSI

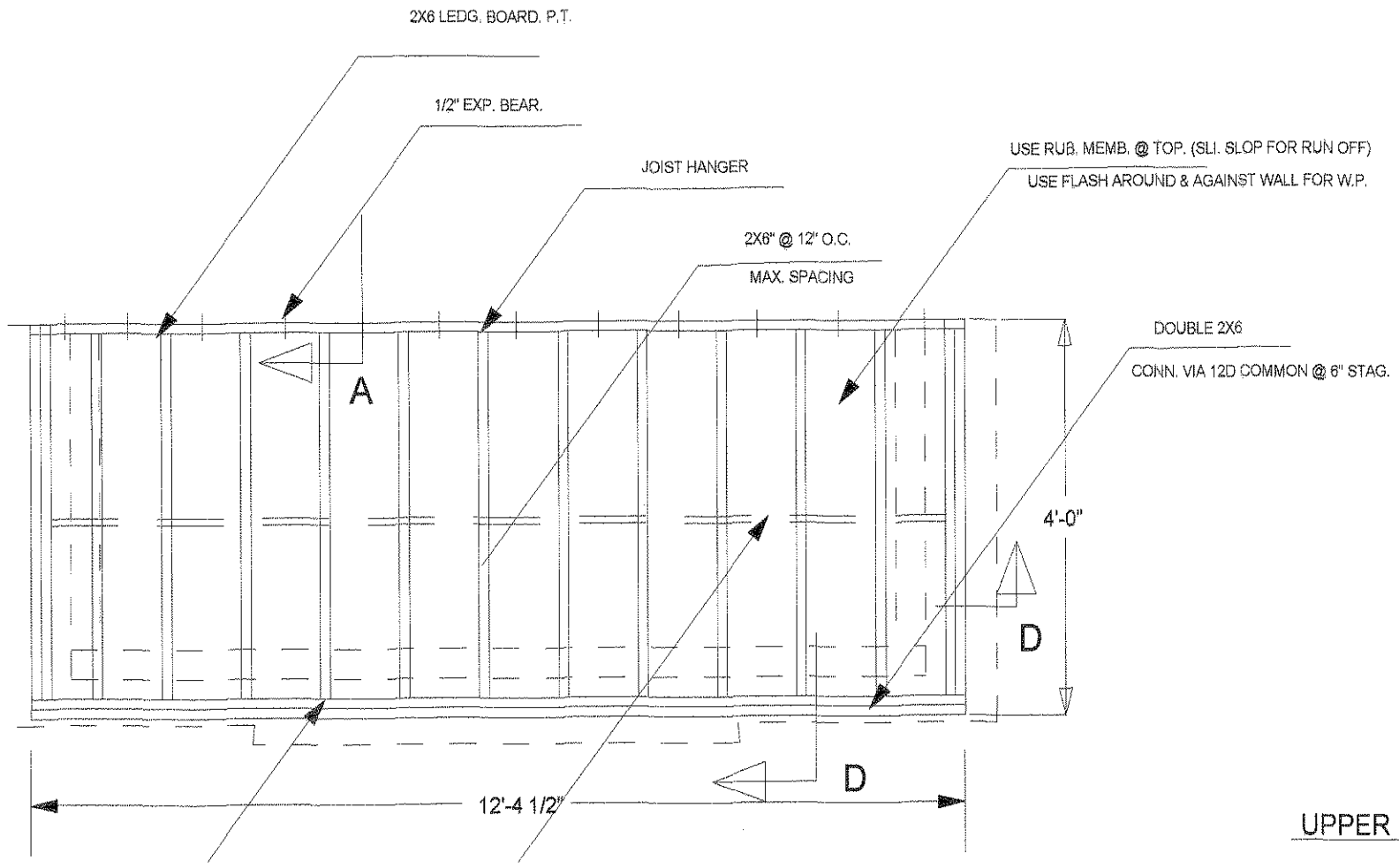
BEARING CAPACITY OF THE SOIL MUST BE MINIMUM OF 5.0 KSF.

MIN. $F_b=1200$ PSI & $V_h=95$ PSI.
 MEMBER V_h MIN. $F_b=2850$ PSI & MINIMUM $V_h=285$ PSI.

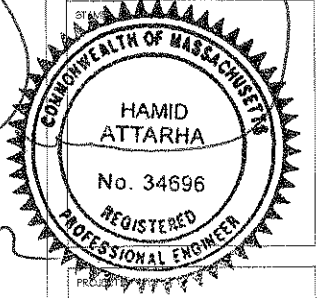
DESIGNER IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION.



LOWER FRAMING
 N.T.S.



UPPER FRAM. (JOIST SYSTEM)
 N.T.S.



No. 86
 HIGHLAND
 APARTMENTS

LOCATION:
 No. 86 HIGHLAND AVE.
 SOMERVILLE, MA

DRAWING:
 FRAMING
 REPAIR DETAILS

REVISIONS: 7/7/12

SCALE: AS SHOWN

DATE:

DRAWN BY: HIA

CHECKED BY: X

PROJECT NO: K082000

SHEET NO:

ACCORDANCE WITH THE CODE SPECIFICATIONS LIST BELOW:
 1. BUILDING CODE.
 2. CONSTRUCTION, ALLOWABLE STRESS DESIGN CODE.
 3. REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318-2

DESIGN METHOD IN ACCORDANCE WITH AISC, MANUAL OF STEEL CONSTRUCTION IS USED FOR MEMBERS. LOAD FACTOR DESIGN METHOD IN ACCORDANCE WITH ACI 318-02 IS USED FOR CONCRETE ELEMENTS.

DEAD LOAD: 40 PSF
 FINISH FLOOR: 30 PSF
 PARTITION: 20 PSF
 MECHANICAL/ELECTRICAL (M/E): 30 PSF

THESE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS.

FORMWORK SHALL BE SET BY TEMPLATE BEFORE THE CONCRETE IS PLACED.

STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615, GRADE 60.

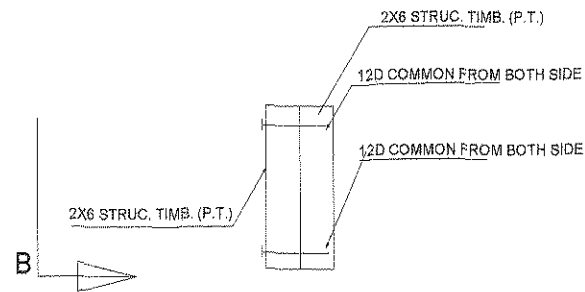
STEEL SHALL BE $F_y=36$ KSI FOR THE BEAMS & PLATES. WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH THE WELDING CODE ANSI/AWS D1.5. WELDS SHALL BE 3/4" DIAMETER OF 1/2" DIAMETER AND CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A575, UNLESS OTHERWISE NOTED.

CONCRETE COMPRESSIVE STRENGTH SHALL BE MINIMUM OF 3000 PSI.

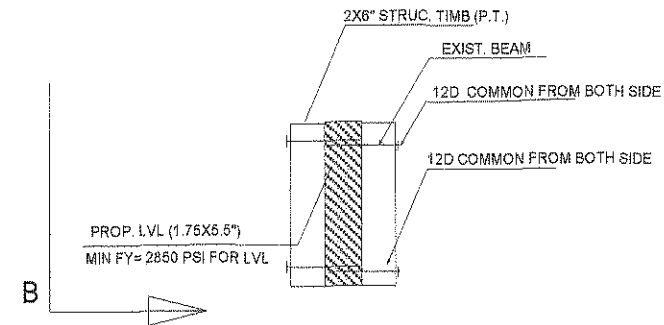
ALLOWED BEARING CAPACITY OF THE SOIL MUST BE MINIMUM OF 5.0 KSF.

MINIMUM DESIGN WIND SPEED: $V_F=120$ PSI & $V_H=95$ PSI.
 MEMBER WIND MIN. $F_y=2850$ PSI & MINIMUM $V_H=285$ PSI.

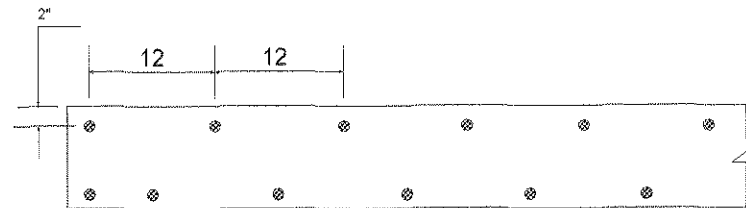
DESIGNER IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION.



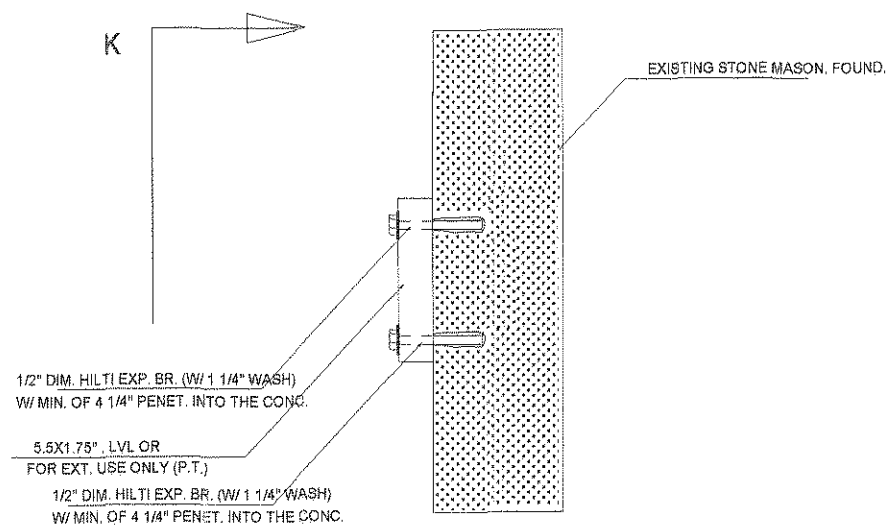
SECTION D-D
NTS



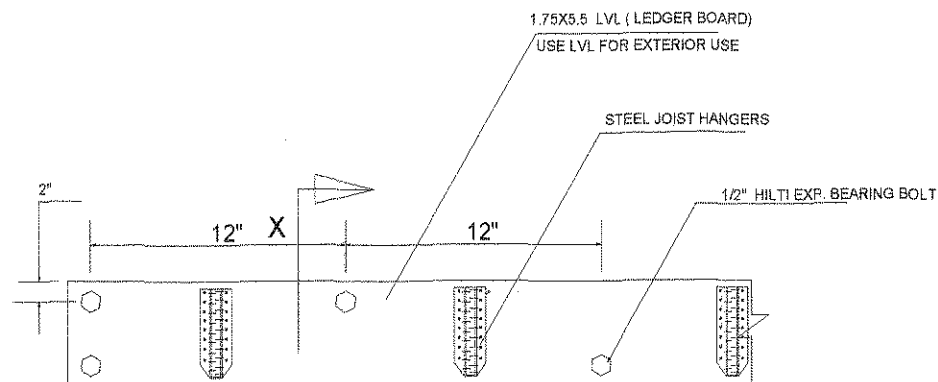
SECTION C-C
NTS



SECTION B-B
NTS



SECTION X-X
NTS



SECTION K-K
NTS

ADE
DESIGNERS & ENGINEERS

HAMD
ATTARHA
No. 34896
REGISTERED
PROFESSIONAL ENGINEER

COMMONWEALTH OF MASSACHUSETTS

PROJECT:
No. 86
HIGHLAND
APARTMENTS

LOCATION:
No. 86 HIGHLAND AVE.
SOMERVILLE, MA

DRAWING:
FRAMING
REPAIR DETAILS

REVISIONS: 7/6/12

SCALE: AS SHOWN

DATE: 11/20/11

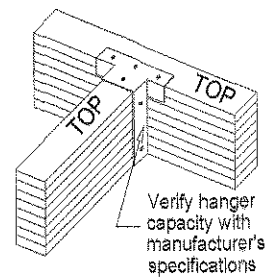
DRAWN BY: HA

CHECKED BY: Y

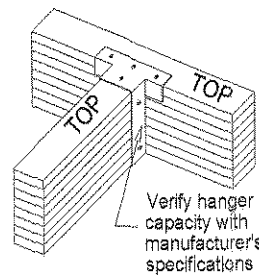
PROJECT NO: ROB2000

SHEET NO:

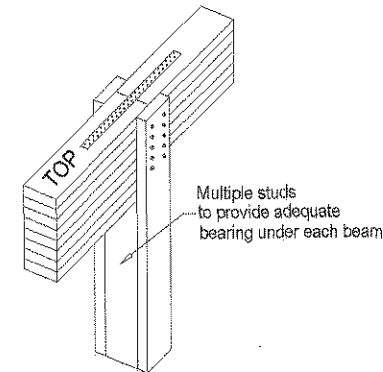
Beam to Beam Connection



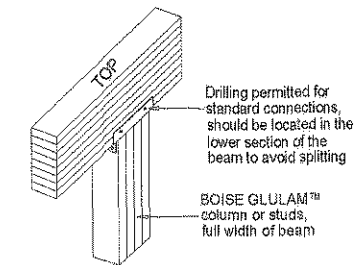
Beam to Beam Connection



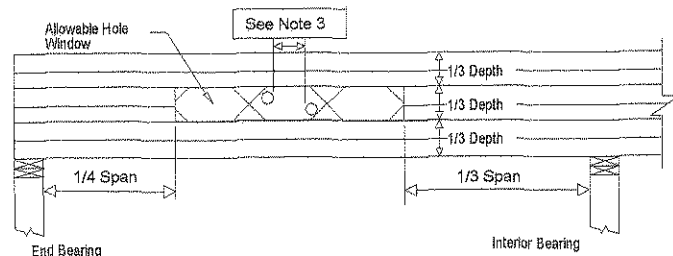
Beam Depth Change at Intermediate Support



Beam to Column Connection

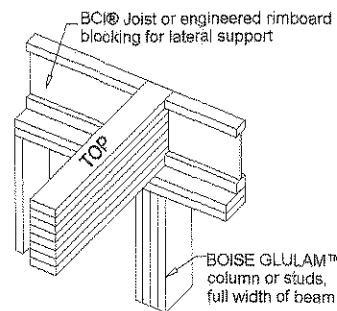


Allowable Horizontal Holes in Glulam Beams

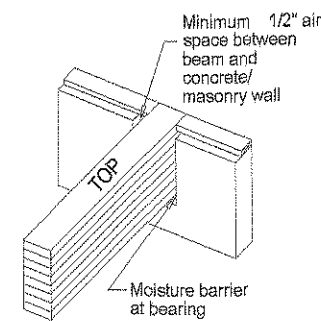


- 1) Square and rectangular holes not permitted.
- 2) Circular hole may be cut anywhere in the shaded area.
- 3) The horizontal distance between adjacent holes shall be at least two times the diameter of the larger hole.
- 4) Do not drill more than three access holes in any four foot long section of the beam.
- 5) The maximum round hole diameter permitted is 1" for beams 7'-1/2" or less in depth, 2" holes for beams deeper than 7'-1/2".
- 6) These limitations apply to holes drilled for plumbing or wiring access only. The size and location of holes drilled for fasteners are governed by the provisions of the National Design Specification for wood construction.
- 7) Beams deflect under load. Size holes to provide clearance where required.
- 8) This hole chart is valid for BOISE GLULAM beams supporting uniform load only. For beams supporting concentrated loads or for beams with larger or vertical holes, contact BOISE EWP Engineering.

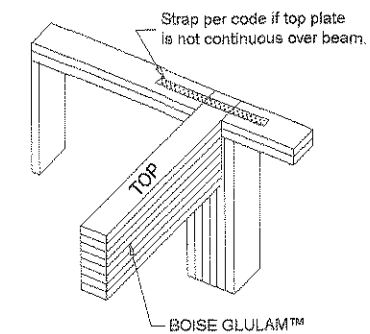
Beam to Wall with Lateral Support



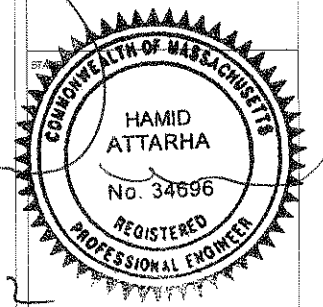
Beam to Concrete/Masonry Wall



Beam Framing to Wall



ADE
DESIGNERS & ENGINEERS
REGISTERED PROFESSIONAL ENGINEER
200 FLYING DUTCHMAN ROAD
TELE: 603-885-4444



PROJECT:	No. 86 HIGHLAND APARTMENTS
LOCATION:	No. 86 HIGHLAND AVE. SOMERVILLE, MA
DRAWING:	STRUCTURAL DETAILS
REVISIONS:	7/5/11
SCALE:	AS SHOWN
DATE:	11/20/11
DRAWN BY:	
PROJECT NO.:	ROB2005
SHEET NO.:	