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BELMONT, MA

Case #19-05

2019 APR 11 AM 11:23

NOTICE OF PUBLIC HEARING BY THE
PLANNING BOARD

ON APPLICATION FOR A SPECIAL PERMIT

Notice is hereby given that the Belmont Planning Board will hold a public hearing on **TUESDAY, MAY 7, 2019, at 7:00 PM** in the **Board of Selectmen's Meeting Room, Town Hall, 455 Concord Ave.**, to consider the application of **LILIT GASPARYAN** for a SPECIAL PERMIT under Section 1.5.4 of the Zoning By-Laws to **ALTER A NONCONFORMING STRUCTURE** (required: lot size - 9,000 sq. ft., lot frontage – 75', side setback – 10'; existing: lot size - 8,452 sq. ft., lot frontage – 70', side setback – 8.1') **IN ORDER TO INCREASE THE SIZE OF THE SINGLE-FAMILY HOME BY MORE THAN 30%** at **22 AUDREY ROAD** located in a Single Residence C Zoning District.

Planning Board



Town of Belmont
Zoning Board of Appeals

RECEIVED
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BELMONT, MA

2019 APR 11 AM 11:24

APPLICATION FOR A SPECIAL PERMIT

Date: March 6, 2019

Zoning Board of Appeals
Homer Municipal Building
19 Moore Street
Belmont, MA 02478

To Whom It May Concern:

Pursuant to the provisions of Massachusetts General Laws, Chapter 40A, Section 9, as amended, and the Zoning By-Laws of the Town of Belmont, I/we the undersigned, being the owner(s) of a certain parcel of land (with the buildings thereon) situated on 22 Audrey ~~Street~~/Road, hereby apply to your Board for a **SPECIAL PERMIT** for the erection or alteration on said premises or the use thereof under the applicable Section of the Zoning By-Law of said Town for the construction of a single family house on a non-conforming
lot in the SR-C zoning district

on the ground that the same will be in harmony with the general purpose and intent of said Zoning By-Law.

Signature of Petitioner

Print Name

Address

Daytime Telephone Number

Lilit Gasparyan

26 Audrey Road

Belmont, MA 02478

617 484-2075



OFFICE OF COMMUNITY DEVELOPMENT
TOWN OF BELMONT
19 Moore Street
Homer Municipal Building
Belmont, Massachusetts 02478-0900

Telephone: (617) 993-2650 Fax: (617) 993-2651

Building Division
(617) 993-2664
Engineering Division
(617) 993-2665
Planning Division
(617) 993-2666

April 23, 2018

Lilit Gasparyan
22 Audrey Road
Belmont, MA 02478

RE: Denial to Construct Second Floor and Two-Story Rear Additions

Dear Lilit Gasparyan:

The Office of Community Development is in receipt of your building permit application for the construction of a second floor addition top of your one story and a two-story addition at the rear of your home located in a Single Residence C (SR-C) Zoning District.

Your application has been denied because it does not comply with the Zoning By-Law. More specifically, your property does not conform to the minimum lot area, lot frontage, and side setback requirements (required: lot area - 9,000 sq. ft., lot frontage - 75', side setback - 10.0'; existing 6,508 sq. ft., 70' and 8.1').

You may alter your plans to conform to the Zoning By-Law and resubmit for a building permit or you may request three Special Permits under Section 1.5.4 of the Zoning By-Law from the Planning Board since your addition increases the size of your home by more than 30% of the gross floor area. If you choose this option, please call the Office of Community Development at (617)-993-2666 to schedule an appointment with Planning Staff, to discuss the Special Permit process.

Sincerely,

Glenn R. Clancy, P.E.
Inspector of Buildings

Special Permit Narrative Statement

Property: 22 Audrey Road

Town of Belmont Assessor's ID: Map 9, Parcel 16

Owner and submitted by: Lilit Gasparyan

Date: March 6, 2019

The single story two (2) bedroom ranch style house was purchased in 2017 with the intent of having my family reside in the house. We have been Belmont residents for over the last 23 years and will continue to make Belmont our home. The house was built in 1953 and since that time there have been no discernable renovations/upgrades made to the house. Photographs of the property (front, rear and side elevations) have been provided with this application. The existing two small bedrooms, single bathroom, small kitchen and living area will not provide enough space and privacy for our family and frequent houseguests. Although the basement is partially finished, it is practically unusable as the it is in significant deterioration and without proper heating and ventilation. We have been diligently and carefully working with a local and well experienced architect, Norayr Kherlop of Nordesign and Build LLC, to explore all options and plan and develop an ascetically balanced design that satisfied our needs and that would seamlessly fit within the changing and developing neighborhood.

The design is intended to be in harmony and consistent with the architecture and scale of the neighborhood and in many aspects more modest than some of the renovations and additions that have been already been constructed in the neighborhood. Photographs of similarly permitted and constructed homes throughout the neighborhood have been included with this application. The proposed design also reflects feedback from a meeting with Mr. Spencer Gober of the Planning Board that occurred early on the design process.

The design will allow for the day to day living area to be on the first floor. The first floor will have the living room, kitchen, bathroom, study and guestroom. The family sleeping areas will be on the second floor and provide for additional bathroom space. The design incorporates the existing attached garage with a living space above it, which is a feature that is an ordinary and common throughout the neighborhood as well as the Town of Belmont. The height of the proposed structure is less than the adjacent house and in keeping with the character of the neighborhood and the attic does not have dormers. Although the design provides that the house will be taller than the existing one-story ranch, it will be quite consistent with many neighboring homes and shorter than others with an attic presence.

It is important to note that the design is compliant with the Town building requirements, including but not limited to the front, side and rear setbacks, number of stories, maximum lot coverage and minimum open space.

Many of the material choices have also been influenced by and in keeping with the overall changing and developing style of the neighborhood. By way of illustration, the plans propose cement board siding, architectural roof shingles, windows and exterior trim that are consistent with the facades throughout the neighborhood, including but not limited to Audrey Road, Bacon Street, Dalton Street, Betts Road, School Street and Woods Road. The design and addition will also markedly and dramatically improve the house's energy efficiency by installing new thermal insulation.

Our family has shared the plans and received enthusiastic support from many neighbors. Letters of support and additional materials will be provided to the Planning Board and serve as a supplement to this application. The proposed design is in line with the intent of Planning Board Special Permit criteria (Section 1.5.4.B) and is not substantially detrimental to the neighborhood.

The new design and proposed construction represent a significant improvement to the property and the neighborhood as a whole. We look forward to creating a house and home that is an asset to the Town and that complements the neighborhood.

Thank you for your time and consideration.

Lilit Gasparyan
(617) 484-2075

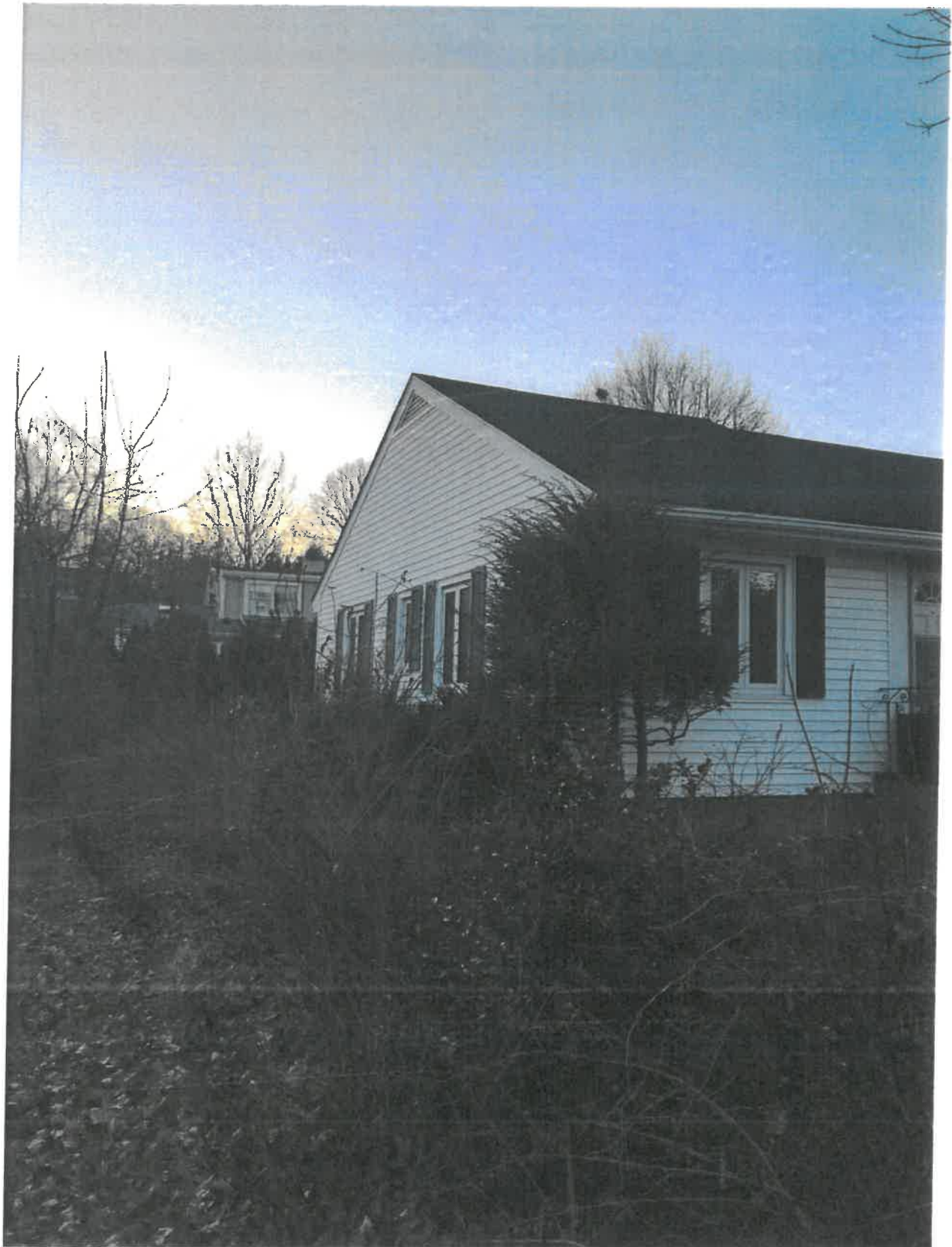
22 Audrey Road – front elevation



22 Audrey Road- rear elevation



22 Audrey Road – side elevation



22 Audrey Road – side elevation



9 Audrey Road



88 Dalton Road



100 Dalton Road



67 Betts Road



49 Betts Road



45 Grosvenor Road



46 Betts Road



97 Betts Road



91 Betts Road



436 School St



112 Dalton Rd



124 Dalton Road



140 Dalton Road



146 Dalton Road



19 Audrey Road

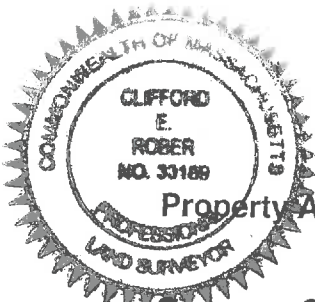


10 Woods Road



Zoning Compliance Check List

Properties Located within the SR-C Districts
(To be Completed by a Registered Land Surveyor)



Property Address: 22 Audrey Road

Surveyor Signature and Stamp: [Signature]

Date: 2/21/19

Per §4.2 of the Zoning By-Law									
		REQUIRED		EXISTING		PROPOSED			
Lot Area (sq. ft.)		9,000		6,508		—			
Lot Frontage (feet)		75		70'		—			
Lot Coverage (% of lot)		25		22%		25%			
Open Space (% of lot)		50		74.3%		71.1%			
Setbacks: (feet)	➤ Front ^(a)	23.25'		24.7		24.7			
	➤ Side/Side	10	10	10.8'	8.1'	10.8'	8.1'		
	➤ Rear	27.9		36.9'		33.6'			
Building Height:	➤ Midpoint (feet)	30		14.88'		20.16'			
	➤ Ridge (feet)	34		19.14'		31.66'			
	➤ Stories	2-1/2		1 STY		2 STY			
1/2 Story (feet) (Per §1.4)	➤ Perimeter (50%)								
	➤ Area (60%)								
	➤ Length (75%)								
HVAC ^(b)		Prohibited in Front Yard and Side and Rear Setbacks and shall be screened							

- (a) Front setback is equal to the average front setbacks of the abutting properties on either side.
- (b) Includes all outdoor mechanical equipment and fuel storage systems.

SUBMIT CALCULATIONS for all of the requirements listed above on a separate piece of paper(s) to verify how they were calculated.

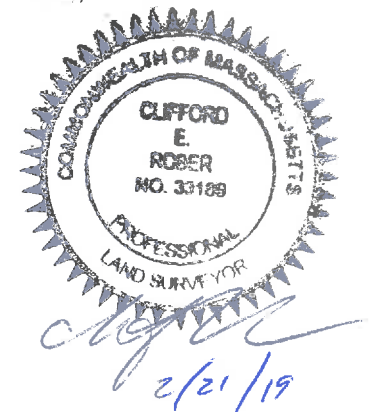
12-5387 22AV0207 2019

2/21/2019

Segment		Ceiling Elevation	Elevation From	Elevation To	Ceiling Length	Ceiling Height	Square Footage	Exposed Square Footage	% Covered
A	W	99.05	96.33	96.82	22.23	6.92	153.83	55.02	64.23%
B	S	99.05	96.82	96.82	1.82	6.92	12.59	4.06	67.77%
C	W	99.05	96.82	96.99	21.71	6.92	150.23	46.57	69.00%
D	S	99.05	96.99	96.97	30.58	6.92	211.61	63.30	70.09%
E	E	99.05	96.97	96.83	37.18	6.92	257.29	79.94	68.93%
F	N	99.05	99.05	99.05	26.50	6.92	183.38	0.00	100.00%
G	E	99.05	99.05	99.05	6.85	6.92	47.40	0.00	100.00%
H	N	99.05	96.33	96.33	6.08	6.92	42.07	16.54	60.69%
		99.05			152.95	6.92	1058.41	265.42	74.92%

Ceiling Height:	6.92	<- enter
Basement Floor Elevation	92.13	<- enter
Ceiling Elevation	99.05	
Perimeter Total Length	152.95	
Total Perimeter Square Foot	1058.41	
Exposed Square Footage	265.42	
% Covered	74.92%	<- result

North	South	East	West
0.00	0.00	0.00	22.23
0.00	1.82	0.00	0.00
0.00	0.00	0.00	21.71
0.00	30.58	0.00	0.00
0.00	0.00	37.18	0.00
26.50	0.00	0.00	0.00
0.00	0.00	6.85	0.00
6.08	0.00	0.00	0.00
32.58	32.4	44.03	43.94



R-5387

22 Avonoy rd

2/21/2019

Segment	Segment From Existing		Segment From New		Segment To		Segment		Avg	Difference
	Grade		Grade		Existing	New Grade	Length	Existing		
AA	96.33		96.33	96.33	96.33	96.33	0.38	36.6054	36.6054	0.00
BB	96.33		96.33	96.33	96.33	96.33	4.16	400.7328	400.7328	0.00
	96.33		96.33	96.33	96.33	96.33	6.75	650.2275	650.2275	0.00
	96.33		96.33	96.33	96.33	96.33	1.92	184.9536	184.9536	0.00
CC	96.33		96.33	96.82	96.82	96.82	22.23	2146.862	2146.862	0.00
DD	96.82		96.82	96.82	96.82	96.82	1.82	176.2124	176.2124	0.00
EE	96.82		96.82	96.82	96.82	96.82	16.32	1580.102	1580.102	0.00
FF	96.82		96.82	96.82	96.82	96.82	6.21	601.2522	601.2522	0.00
GG	96.82		96.82	96.99	96.99	96.99	15.5	1502.028	1502.028	0.00
HH	96.99		96.99	96.97	96.97	96.97	30.58	2965.648	2965.648	0.00
II	96.97		96.97	96.83	96.83	96.83	37.18	3602.742	3602.742	0
JJ	96.83		96.83	96.83	96.83	96.83	1	96.83	96.83	0
KK	96.83		96.83	96.68	96.68	96.68	13.97	1351.667	1351.667	0
LL	96.68		96.68	96.33	96.33	96.33	27.5	2653.888	2653.888	0
							185.52	17949.75	17949.75	0

Ceiling Height:	6.92
Basement Floor Elevation	92.13
Ceiling Elevation	99.05
Perimeter Total Length	185.52
Total Perimeter Square Foot	1283.80
Average Existing Grade	96.75
New Average Grade	96.75
Difference in Grade in feet	0.00

% Covered using Avg Grade 66.82%

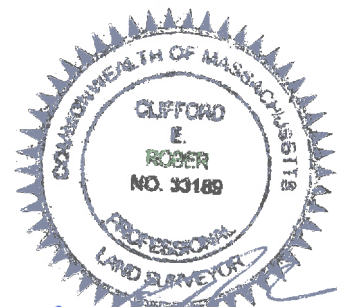
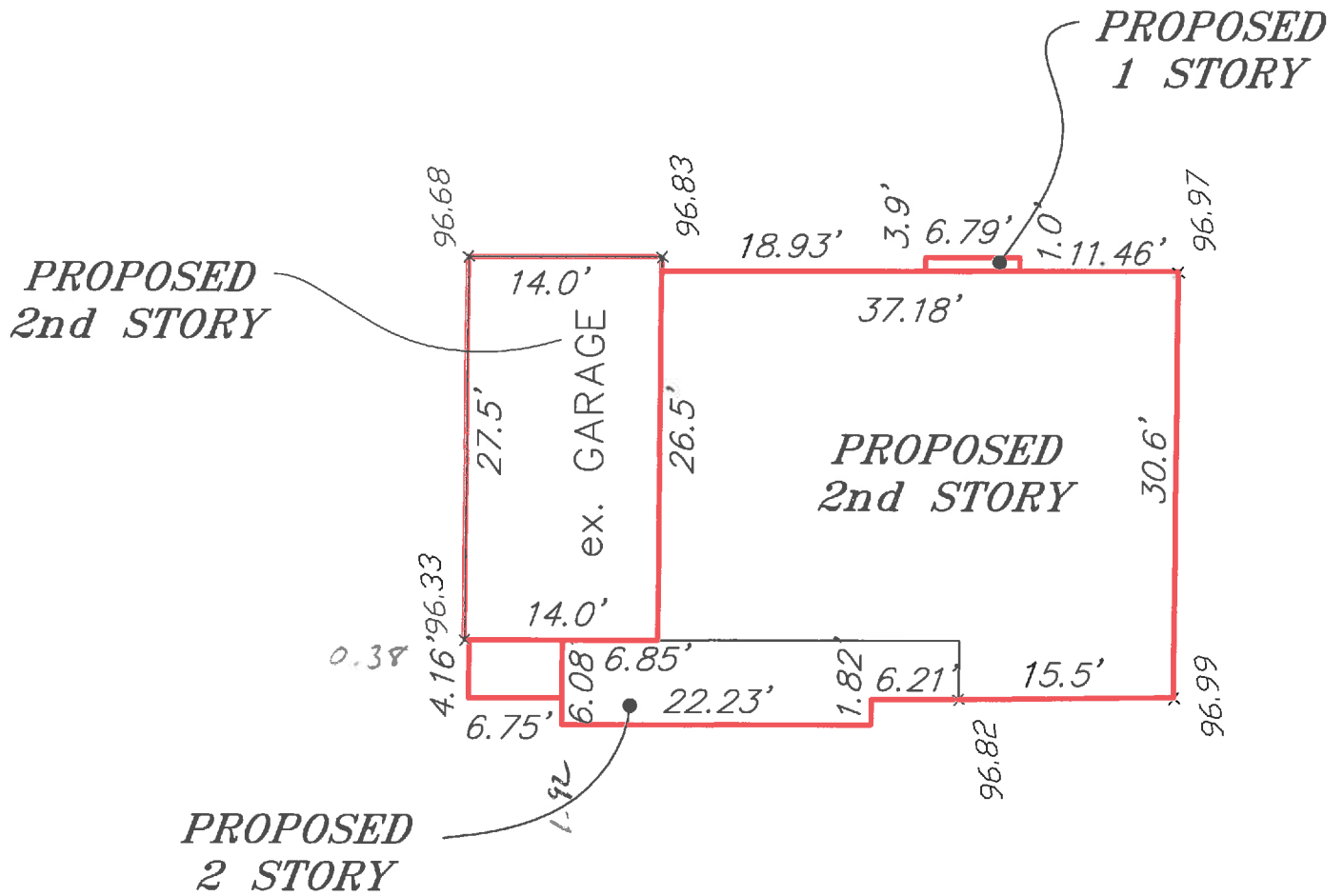


Clifford E. Roher
2/21/19

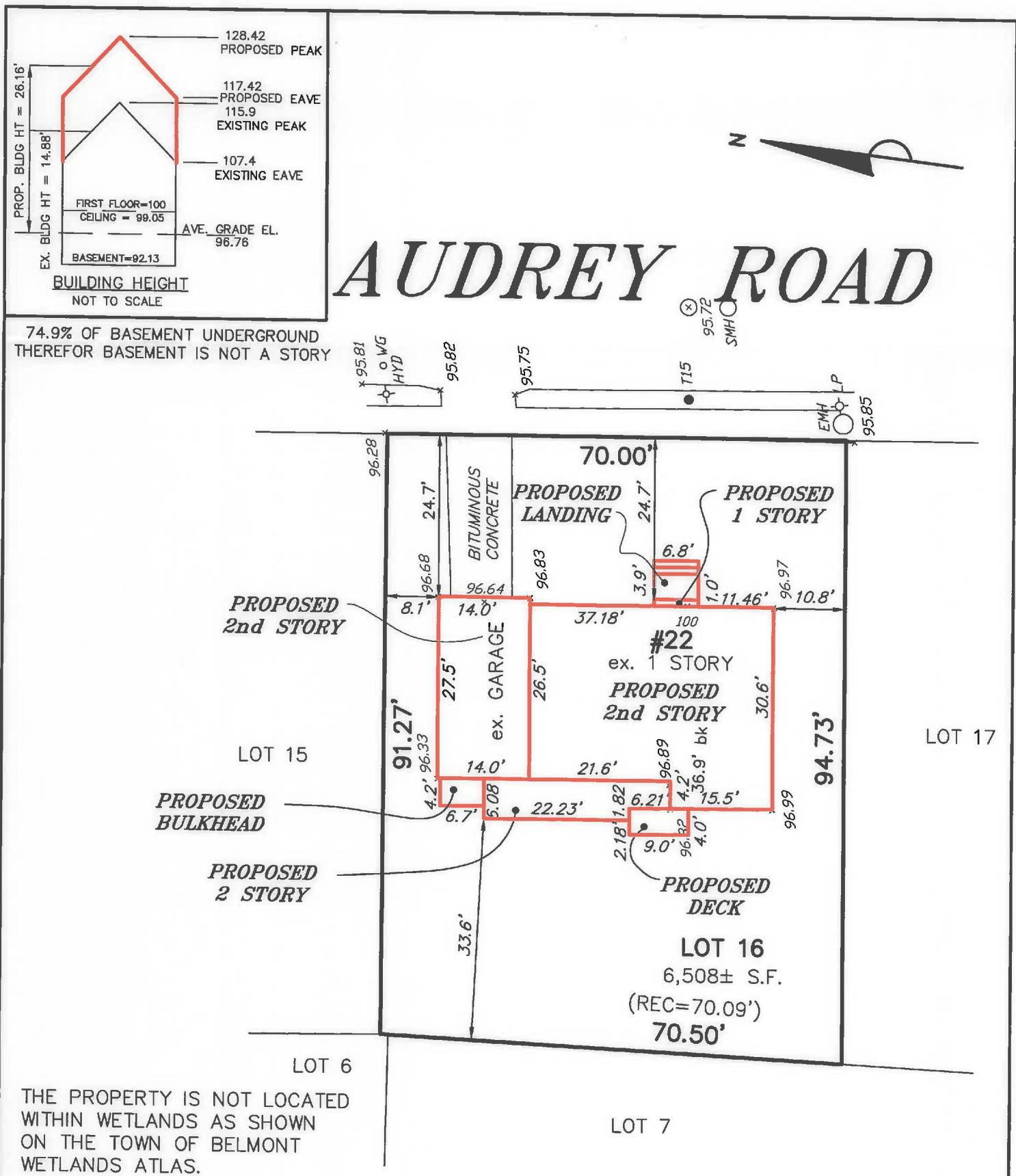
R-5387

22 AUGUST 2019

2/21/2019



2/21/19



THE PROPERTY IS NOT LOCATED
WITHIN WETLANDS AS SHOWN
ON THE TOWN OF BELMONT
WETLANDS ATLAS.

ZONING DISTRICT:	SC (SINGLE RESIDENCE C)		
	REQ.	EXISTING	PROP.
FRONT SETBACK:	23.25'	24.7'	24.7'
SIDE SETBACK:	10'	8.1'	8.1'
REAR SETBACK:	27.9'	36.9'	33.6'
MAXIMUM LOT COVERAGE:	25%	22.0%	25.0%
MINIMUM OPEN SPACE:	50%	74.3%	71.1%
LOT FRONTAGE:		70.00'	

TOTAL LOT AREA: 6,508± S.F.

OWNER: LILIT GASPARYAN
69780/254
ASSESSORS MAP 9 - PARCEL 16



Clifford E. Rober
CLIFFORD ROBER, PLS 2/21/19
DATE

PROPOSED PLOT PLAN
#22 AUDREY ROAD
IN
BELMONT, MA
(MIDDLESEX COUNTY)

SCALE: 1" = 20' REV 2/21/2019
DATE: 11/13/2017

0 20 40 60 ft

ROBER SURVEY
1072 MASSACHUSETTS AVENUE
ARLINGTON, MA 02476
(781) 648-5533
DWG. NO. 5387PP4.DWG

ADDITION AT
22 AUDREY ROAD
BELMONT MA

2/16/19

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA 02478, 617-283-5299

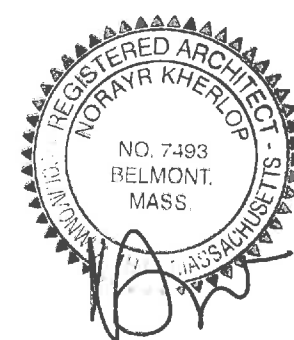


LIST OF DRAWINGS

L-1	LANDSCAPING PLAN
L-2	STREET ELEVATION
A-0	NOTES & WALL TYPES
A-1	EXISTING BASEMENT PLAN
A-2	EXISTING FIRST FLOOR PLAN
A-3	PROPOSED BASEMENT FLOOR PLAN
A-4	PROPOSED FIRST FLOOR PLAN
A-5	PROPOSED SECOND FLOOR PLAN
A-6	ATTIC FLOOR PLAN & CALCULATIONS
A-7	DOOR & WINDOW SCHEDULE
A-8	BUILDING SECTION A-A
A-9	BUILDING SECTION B-B
A-10	PROPOSED FRONT ELEVATION
A-11	PROPOSED NORTH SIDE ELEVATION
A-12	PROPOSED EAST (REAR) ELEVATION
A-13	PROPOSED SOUTH SIDE ELEVATION
A-14	EAVE & RAKE DETAILS
A-15	STAIR DETAILS
S-01	PROPOSED FOUNDATION PLAN + 1ST FL
S-02	PROPOSED FOUNDATION DETAIL
S-03	PROPOSED 2 ND FLOOR FRAMING PLAN
S-04	PROPOSED 3 RD FLOOR FRAMING PLAN
S-06	ROOF FRAMING PLAN
S-07	FRAMING DETAILS
S-08	STRUCTURAL NOTES
T-01	RADON INSTALLATION & NOTES



PROPOSED 22 AUDREY ROAD



ADDITION AT 22 AUDREY ROAD
BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA 02478 617-283-5299

STREEL ELEVATION WITH
ADJOINING HOUSES 1"=15'

2/16/19

L-2

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH IRC2015 WITH MASSACHUSETTS AMENDMENTS, STRETCH CODE-780CMR 9TH EDITION WITH AMENDMENTS, STATE ENERGY CODE 2015 IECC WITH AMENDMENTS, LOCAL ORDINANCES AND REGULATIONS

2. BY SUBMITTING A BID THE GENERAL CONTRACTOR ACCEPTS THAT HE IS AWARE OF ALL THE SITE & FIELD CONDITIONS. HE HAS REVIEWED ALL DRAWINGS AND HAS MADE ALLOWANCES FOR DISCREPANCIES. HE ALSOACCEPTS THAT ALL VARIATIONS, CONDITIONS AND DICREPANCIES. HAVE BEEN BROUGHT TO THE ATTENTION OF THE ARCHITECT.

3. THE CONTRACTOR SHALL NOT SCALE DRAWINGS TO LAYOUT & CONSTRUCT WORK. DIMENSIONS ARE SHOWN TO THE FACE OF FOUNDATION & STUD.

4. PIPING SHALL RUN ON THE WARM SIDE OF INSULATION. PIPING SHALL BE KEPT AT ROOM TEMPERATURE CONDITION.

5. CONTRACTOR SHALL SECURE AND PAY FOR ALL TEMPORARY UTILITIES, INCLUDING BUT NOT LIMITED TO TOILET FACILITIES, HEAT NECESSARY TO PERFORM WORK, HOISTING, MOVING, STORING, TEMP SUPPORTS & STAGING..

6. THE CONTRACTOR SHOULD PERFORM DAILY COMPLETE CLEANING AND MAINTAIN A SAFE SITE & FOLLOW OSHA GUIDELINES. A DUMPSTER PERMIT SHALL BE SECURED AND A DUMPSTERSHALL BE PRESENT AT ALL TIMES. HAZARDOUS MATERIAL SHALL BE HANDLED BY LICENSED HAZARD MATERIAL REMOVERS AND TAKEN TO THE APPROPRIATE SITE.

7. CONTRACTOR SHALL KEEP A COPY OF THE BUILDING PERMIT AND ALL CURRENT PROJECT INFORMATION AT THE SITE.

8. DURING ELECTRICAL AND MECHANICAL INSTALLATIONS CUTTING & PENETRATING STRUCTURAL COMPONENTS SHALL NOT BE PERFORMED UNLESS APPROVAL OR REINFORCEMENT DETAILS ARE OBTAINED FROM THE STRUCTURAL ENGINEER, IN WRINTING.

9. ALL ELECTRICAL AND MECHANICAL INSTALLATIONS SHALL BE COORDINATED IN ADVANCE TO AVOID CONFLICTS AND UNSIGHTLY CONDITIONS. THE CONTRACTOR SHOULD HAVE A WALK THROUGH WITH THE OWNER AND THE ARCHITECT TO SECURE A FINAL APPROVAL OF THE LOCATIONS OF ALL INSTALLATIONS.

10. KITCHEN LAYOUTS AS SHOWN ARE CONCEPTUAL AND MORE DETAILED KITCHEN DESIGN SHALL BE PROVIDED BY THE CONTRACTOR WITH FULL COORDINATION OF APPLIANCES, PIPING, WIRING AND CLEARANCE CONDITIONS.

11. ALL INSULATION AND VAPOUR BARRIER / RETARDER INTALLATIONS SHALL BE ACCORDING TO THE STATE REQUIREMENTS AND OR AS DETERMINED BY THE ENERGY MODELLING OF A CERTIFIED ENERGY CONSULTANT

12. IF A GYPSUM VENEERFINISH IS INDICATED A THREE COAT JOINT TAPE SYSTEM MAY BE SUBSTITUTED . FIRE RATING REQUIREMENTS SHALL BE MAINTAINED.

13. AT ALL TILED WALLS CEMENT BOARD HAS TO BE INSTALLED. MINIMUM 1/2" ON WALLS AND 1/4" ON FLOORS, FIRE RATING ASSEMBLIES SHALL BE MAINTAINED. IN SHOWER AND TUB AREAS A WATERPROOFING COAT HAS TO BE APPLIED OVER THE CEMENT BOARD.

14. IN EACH CLOSET PROVIDE AT LEAST ONE SHELF AND A HANGING ROD IN POPLAR OR METAL WITH ADEQAUTE SUPPORTS AND ACCESSORIES/

15. THE GENERAL CONTRACTOR SHALL INSTALL SOLID BLOCKING INSIDE WALLS OR WHERE APPROVED BY THE ARCHITECT FOR THE SUPPORT OF FIXTURES, EQUIPMENT, CABINETS AND OTHER INSTALLATIONS. FIRE RETARDANT BLOCKING SHALL BE PROVIDED WHERE NECESSARY. RATED WALLS SHALL HAVE FIRE RATED BLOCKING.

16. ALL PIPING DUCTWORK AND CONDUITS SHALL BE CONCEALED IN FRAMED COVERS FINISHED WITH GYPSUM WALL BOARD. FIRE RATING ASSEMBLIES SHALL BE MAINTAINED.

17. PROVIDE FIREBLOCKING AND FIRE CAULKING AT ALL FLOOR AND WALL PENETRATIONS.

18. ALL SURFACES SHALL RECEIVE A SEALER (OR PRIMER AND 3 COATS OF PAINT OR FINISH. AFTER PREPARING AND SANDING OF SURFACES ARCHITECT'S APPROVAL IS REQUIRED TO CONTINUE WITH ANY SUBSEQUENT WORK.

19. FIREWATCHING AND POLICE DETAIL SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR FOR WELDING, STREET CUTTING, TRAFFIC CONSTRAINTS AND OTHER SITUATIONS AS REQUIRED BY LOCAL REGULATIONS

20. SHORING AND BRACING SHALL BE PROVIDED WHERE NECESSARY, TO PROTECT WORK IN PLACE AND SURROUNDINGS.

21. UNSUITABLE SOIL WHENDISCOVERED SHALL BE REPLACED WITH APPROPRIATE MATERIAL AS DECIDED BY THE ENGINEER AND THE LOCAL INSPECTOR.

22. ALL FIRE ALARM INSTALLATIONS SHALL BE HARD WIRED.

* SD SMOKE DETECTOR

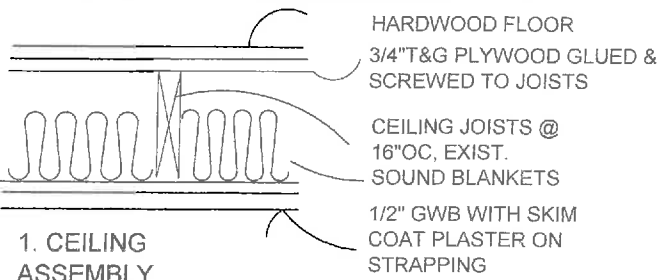
* HD HEAT DETECTOR

* CO CARBON MONOXIDE DETECTOR

: SD+CO SMOKE AND CARBON MONOXIDE DETECTOR COMBINED UNIT

WALL & CEILING ASSEMBLIES - NTS

LOCATION



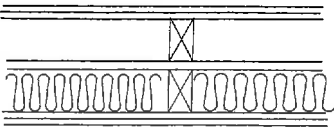
1. CEILING ASSEMBLY,

1a. CEILING ASSEMBLY

1b. 1HR CEILING ASSEMBLY



1c. STAIR SOFFIT



2. WALL TYPE 2HR RATED. STC 56. TEST USG 70129.

3. WALL TYPE: INTERIOR WALLS

3a. WALL TYPE: INTERIOR WALLS

3b. EXISTING GARAGE WALLS



4. WALL TYPE: BASEMENT EXT. WALLS

5. OTHER CEILINGS



6. WALL TYPE: EXTERIOR PERIMETER WALLS

HARDWOOD FLOOR
3/4" T&G PLYWOOD GLUED & SCREWED TO JOISTS

CEILING JOISTS @ 16" OC, EXIST.
SOUND BLANKETS

1/2" GWB WITH SKIM COAT PLASTER ON STRAPPING

SAME AS TYPE 1 BUT NO BLANKETS AND NO HARDWOOD FLOOR FINISH

SAME AS TYPE 1 BUT FIRE BLANKETS AND 5/8" GWB FIRE CODE.

5/8" FIRECODE GWB ON HAT SHAPED CHANNELS WITH SKIM COAT PLASTER

2 LAYERS OF 5/8" FIRECODE GWB WITH SKIM COAT PLASTER ON EACH SIDE OF 2X4 WOOD FRAMING @ 16" OC., 1" GAP IN BETWEEN, 3 1/2 FIRE BLANKETS IN ONE SIDE.

2X6 @ 16" FRAMING WITH 1/2" GWB ON EACH SIDE HAVING SKIN COAT PLASTER, SOUND BLANKETS IN BETWEEN.

SAME AS IN TYPE 3, BUT 2X4 @ 16" FRAMING

EXISTING 2X4 WALLS TO HAVE 5/8" FIRECODE GWB EACH SIDE & FIRE BLANKETS.

1/2" GWB WITH SKIM COAT PLASTER ON 2X3 @ 16" FRAMING WITH R-21 INSUL IN BETWEEN

1/2" GWB WITH SKIM COAT PLASTER ON 2X3 @ 16" FRAMING

1/2" GWB INSIDE WITH SKIM COAT PLASTER, SEALED VAPOUR RETARDER ON 2x6 @ 16" WOOD FRAMING, R-21 INSULATION IN BETWEEN. 1/2" PLYWOOD SHEATHING COVERED WITH AIR BARRIER & SIDING AS SHOWN ON ELEVATIONS

CEILING OVER ALL ROOMS EXCEPT NOTED OTHERWISE

ATTIC FLOOR

GARAGE CEILING

STAIR SOFFITS

N/A

REFERENCED OTHER INTERIOR WALLS

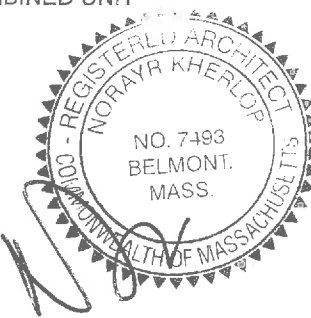
REFERENCED OTHER INTERIOR WALLS

AT THE INNER FACE OF FOUNDATION WALLS

DUCT ENCLOSURES, SOFFITS & PIPE COVERS WHERE NECESSARY. COORDINATE WITH MEP CONTRACTOR

ALL EXTERIOR FRAMED WALLS

NB. FIRE RATED ASSEMBLIES SHALL CONFORM TO UL263 & OR ASTM 119



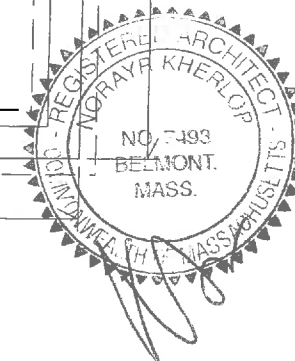
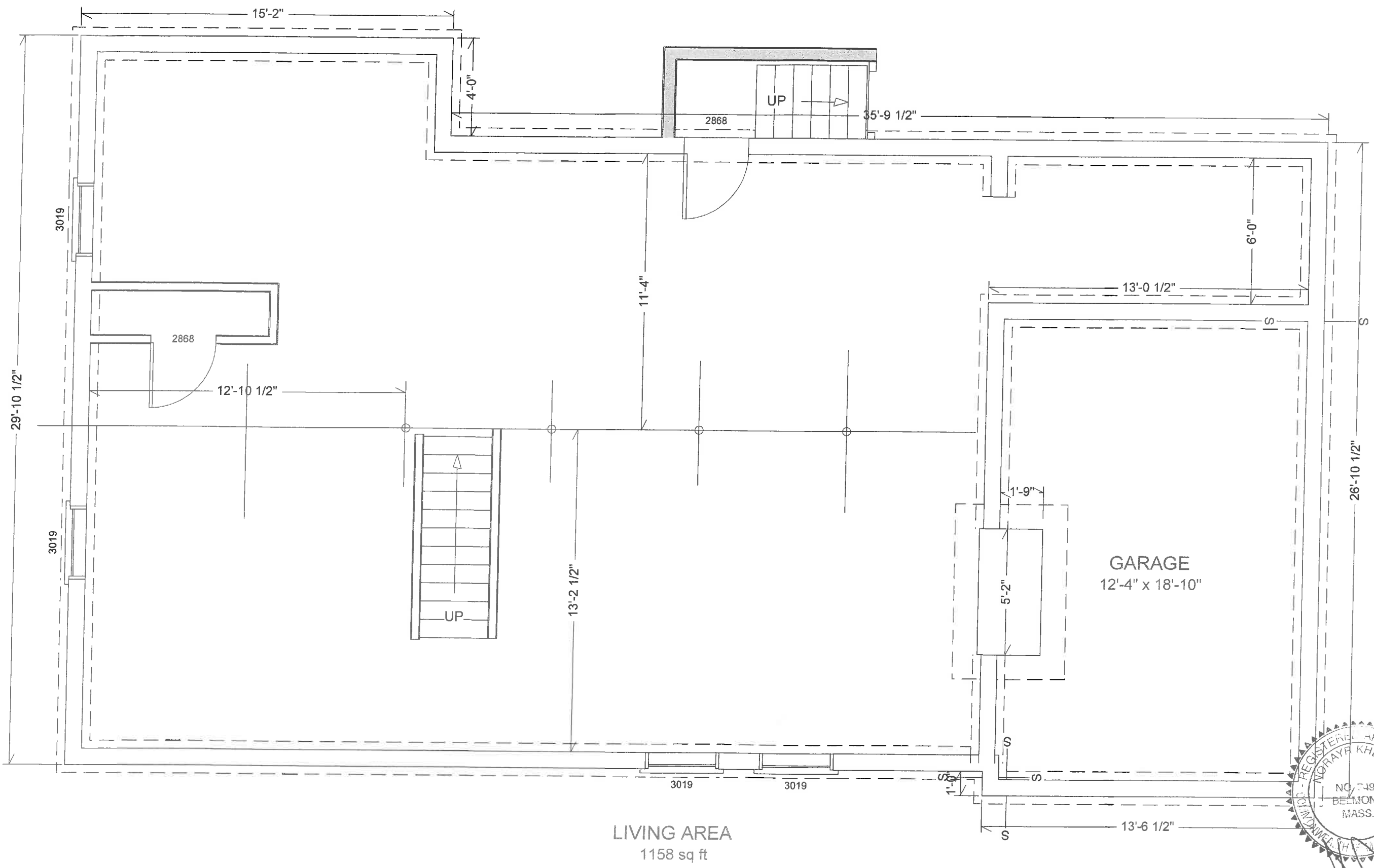
22 AUDREY ROAD,
BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA 02478 617-283-5299

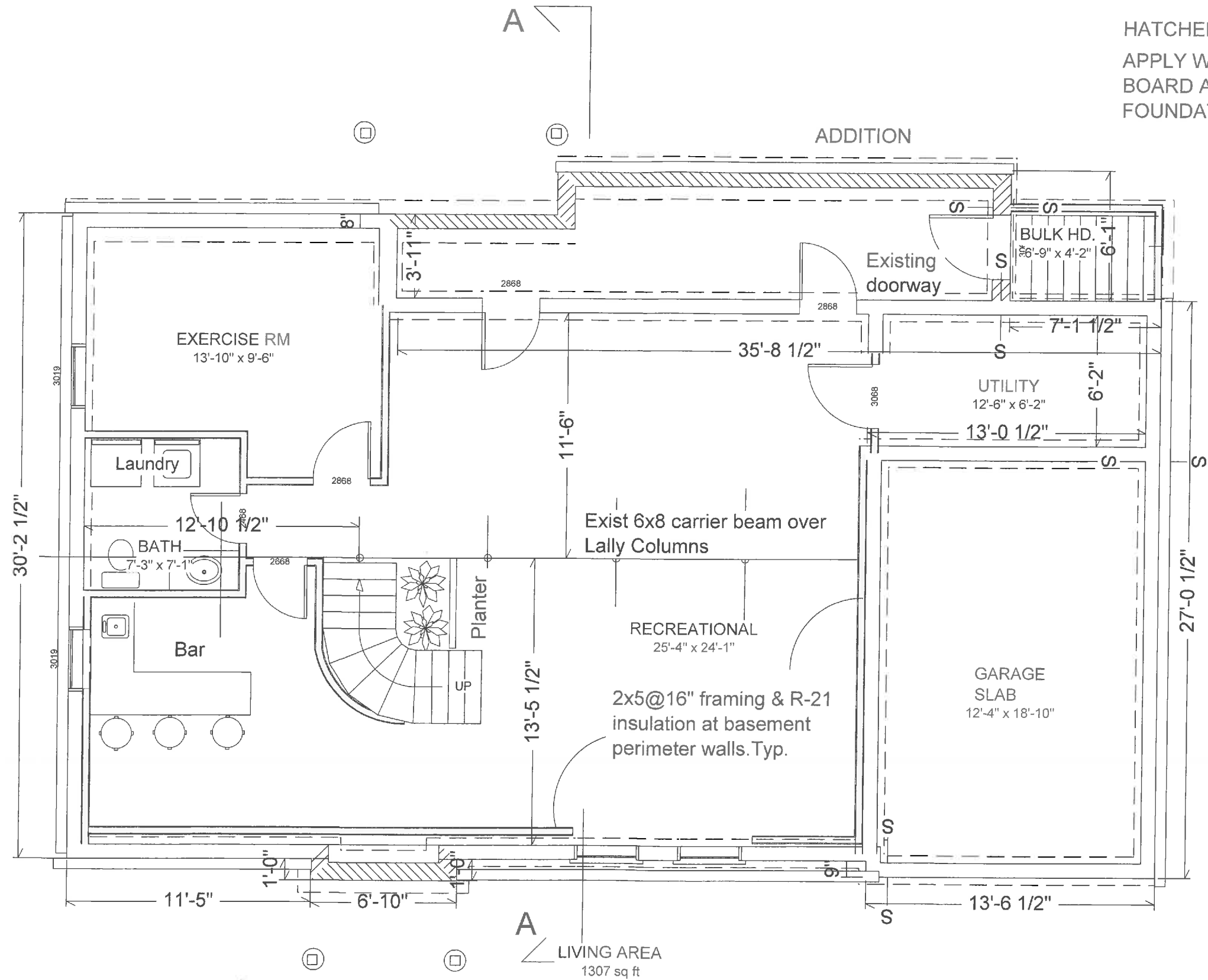
NOTES & WALL TYPES

6/6/18

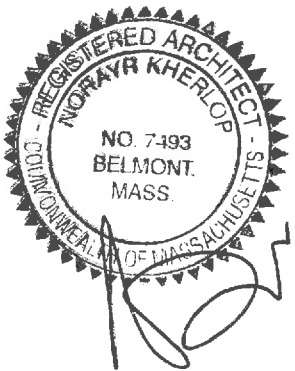
A-0



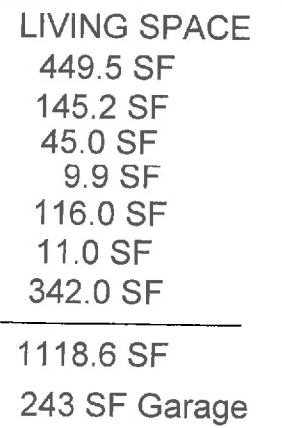
22 AUDREY ROAD BELMONT MA	NORDESIGN & BUILD LLC ARCHITECTS 21 HOUGH ROAD BELMONT MA 02478 617-283-5299	EXISTING BASEMENT FLOOR PLAN 1/4"=1'-0"	A-1 12/12/17
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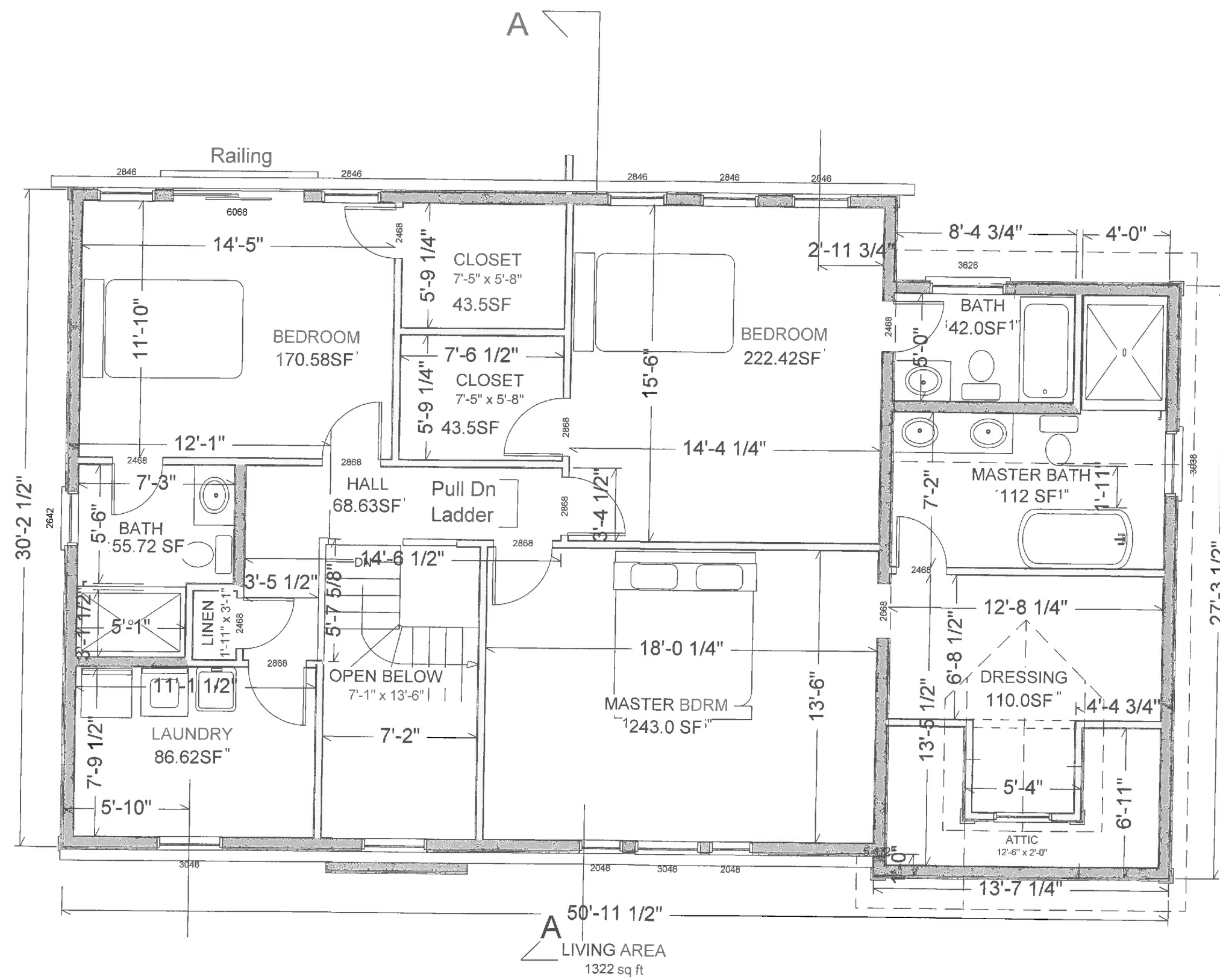
HATCHED WALLS ARE NEW ADDITION
APPLY WATERPROOFING WITH DRAIN BOARD AT THE EXTERIOR OF NEW FOUNDATION WALLS



22 AUDREY ROAD BELMONT MA	NORDESIGN & BUILD LLC ARCHITECTS 21 HOUGH ROAD BELMONT MA 02478 617-283-5299	PROPOSED BASEMENT FLOOR PLAN 3/16"=1'-0"	2/16/19	A-3
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A-4



LIVING SPACE

- 170.58SF
- 43.5SF
- 43.5SF
- 222.42SF
- 42.0SF
- 112 SF
- 110.0SF
- 243.0 SF
- 86.62SF
- 55.72 SF
- 68.63SF

1155.97 SF, 2ND FL
1118.6 SF, FIRST FLOOR

2274.57 SF
TOTAL NET LIVING SPACE



22 AUDREY ROAD
BELMONT MA

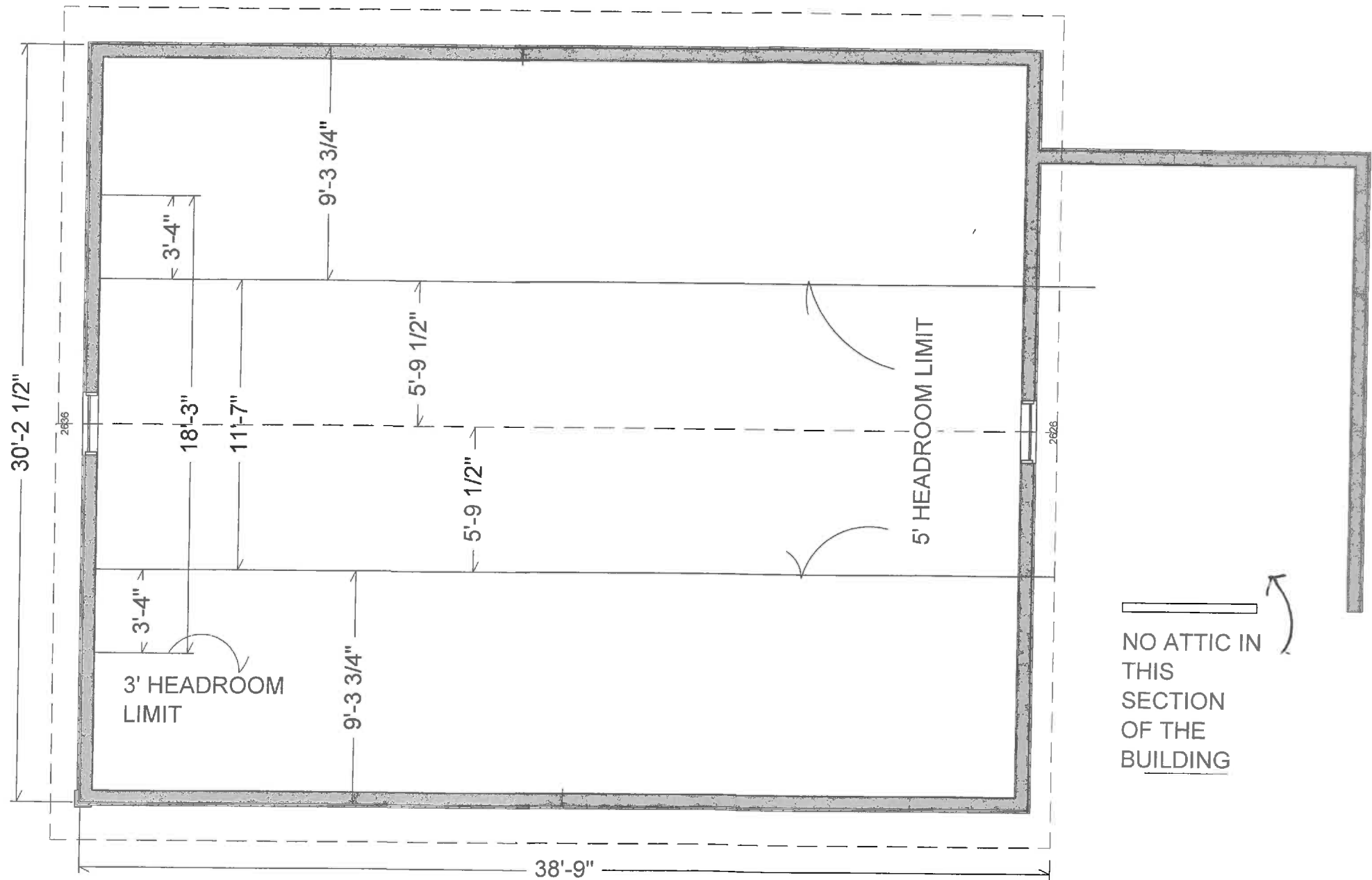
NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA 02478
617-283-5299

PROPOSED SECOND
FLOOR PLAN 3/16"=1'-0"

2/16/19

A-5

AREA OF ATTIC 30.2X38.75 = 1170.25 SF
AREA WITHIN 5' HEADROOM = 38.75X11.58 = 448.73sf
448.73 / 1170.25 = 38.34% < 60%
NO DORMERS IN ATTIC
3FT WALLS = 18.25x2 / (30.2+38.75)x2 = 26.46% < 50%



22 AUDREY ROAD
BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA 02478
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ATTIC PLAN &
CALCULATIONS 3/16"=1'-0"

2/16/19

A-6

DOOR SCHEDULE							
NUMBER	QTY	FLOOR	SIZE	DIMENSIONS	R/O	DESCRIPTION	THICKNESS
D01	1	0	3066	36X78X1 3/4"	37X79 1/2	EXT.	1 3/4
D02	1	0	2868	32X80X1 3/4"	33X81 1/2		1 3/4
D03	2	0	2868	32X80X1 3/8"	33X81 1/2		1 3/8
D04	1	0	2468	28X80X1 3/8"	29X81 1/2		1 3/8
D05	1	0	2668	30X80X1 3/8"	31X81 1/2		1 3/8
D06	1	0	3068	36X80X1 3/8"	37X81 1/2		1 3/8
D07	1	1	9080	108X96"	109X97 1/2	GARAGE	1 3/4
D08	2	1	5068	60X80"	61X81 1/2	SLIDER	1 3/8
D09	2	1	2668	30X80X1 3/8"	31X81 1/2		1 3/8
D010	2	1	2468	28X80X1 3/8"	29X81 1/2		1 3/8
D11	1	1	2868	32X80X1 3/4"	33X81 1/2	EXT.	1 3/4
D12	1	1	6068	72X80"	73X81 1/2	EXT. SLIDER-GLASS	1 3/4
D13	1	1	5068	30X80X1 3/4"	61X81 1/2	EXT. HINGED-GLASS	1 3/4
D14	5	2	2868	32X80X1 3/8"	33X81 1/2		1 3/8
D15	5	2	2468	28X80X1 3/8"	29X81 1/2		1 3/8
D16	1	2	6068	72X80"	73X81 1/2	EXT. SLIDER-GLASS	1 3/4

NOTES:

DOOR FROM GARAGE TO HOUSE SHALL HAVE MINIMUM 20 MIN RATING

ALL DOORS SHALL BE SOLID CORE AND PREHUNG WITH BRUSHED NICKEL OR SIMILAR HARDWARE

ALL GLAZED DOORS AND WINDOWS SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST ENERGY CODE

BATHROOM AND STAIR WINDOWS SHALL BE IN TEMPERED GLASS

BEDROOM WINDOWS AND THE HARDWARE SHALL MEET THE EGRESS CODE REQUIREMENTS

ALL WINDOW SIZES AND DIMENSIONS ARE NOMINAL ACTUAL DIMENSIONS AND COMPLIANCE SHALL BE ACCORDING TO THE SPECIFICATIONS OF THE MANUFACTURER.

WINDOW SCHEDULE						
NUMBER	QTY	FLOOR	SIZE	DIMENSIONS	R/O	DESCRIPTION
W01	4	0	3019	36"X21"	37X22 1/2	AWNING
W02	2	1	3046	36"X54"	37X55 1/2	DOUBLE HUNG
W03	1	1	9014	108"X16"	109X17 1/2	FIXED GLASS
W04	2	1	2046	24"X54"	25X55 1/2	DOUBLE HUNG
W05	2	1	26310	30"X46"	31X47 1/2	DOUBLE HUNG
W06	3	1	3048	36"X56"	37X57 1/2	DOUBLE HUNG
W07	1	1	5038	60"X44"	61X45 1/2	DBL CASEMENT-LHL/RHR
W08	2	2	2048	24"X56"	25X57 1/2	DOUBLE HUNG
W09	3	2	3048	36"X56"	37X57 1/2	DOUBLE HUNG
W010	1	2	3038	36"X44"	37X45 1/2	DOUBLE HUNG
W11	1	2	3626	42"X30"	43X31 1/2	AWNING
W12	1	2	2642	30"X50"	31X51 1/2	DOUBLE HUNG
W13	1	2	2820	32"X24"	33X25 1/2	AWNING
W14	5	2	2846	32"X54"	33X55 1/2	DOUBLE HUNG
W15	1	3	2636	30"X42"	31X43 1/2	DOUBLE HUNG
W16	1	3	2626	30"X30"	31X31 1/2	AWNING



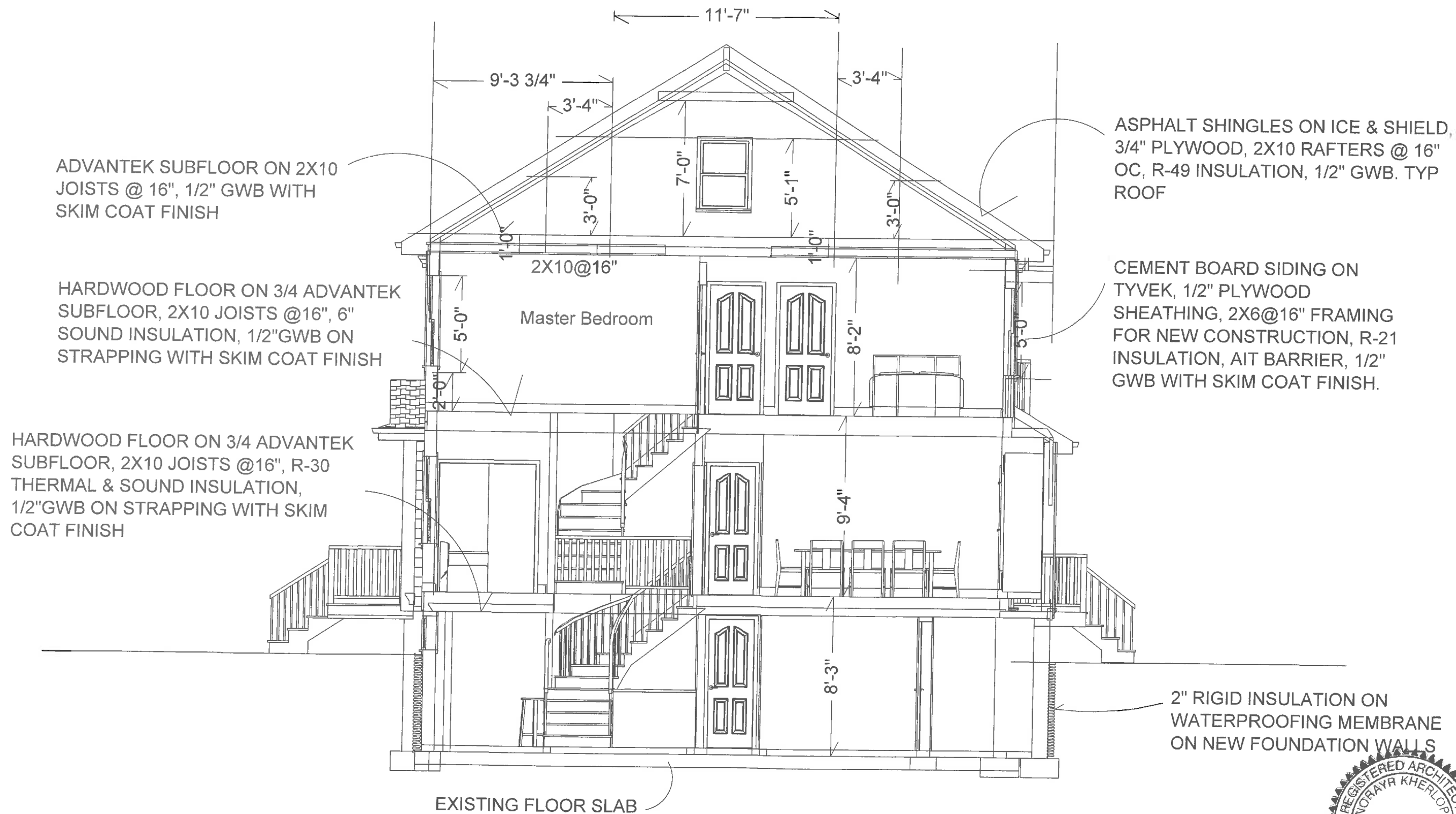
22 AUDREY ROAD
BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA 02478
617-283-5299

DOOR & WINDOW
SCHEDULE

2/16/19

A-17



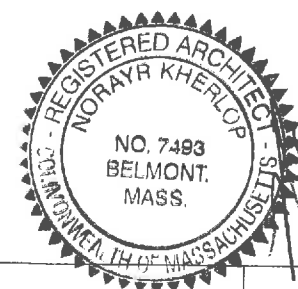
ADDITION AT 22 AUDREY
ROAD BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA
02478 917-283-5299

SECTION A-A
3/16"=1'-0"

2/16/19

A-8



ADDITION AT 22 AUDREY
ROAD BELMONT MA

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02478 617-283-5299

SECTION B-B 3/16" = 1'-0"

6/6/18

A-9



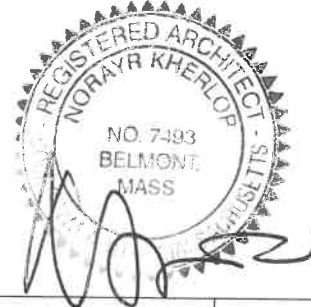
ASPHALT SHINGLES

1X10 RAKE WITH
1X4 TRIM & MOLDING

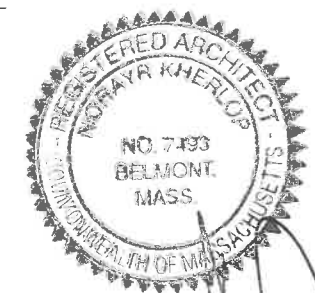
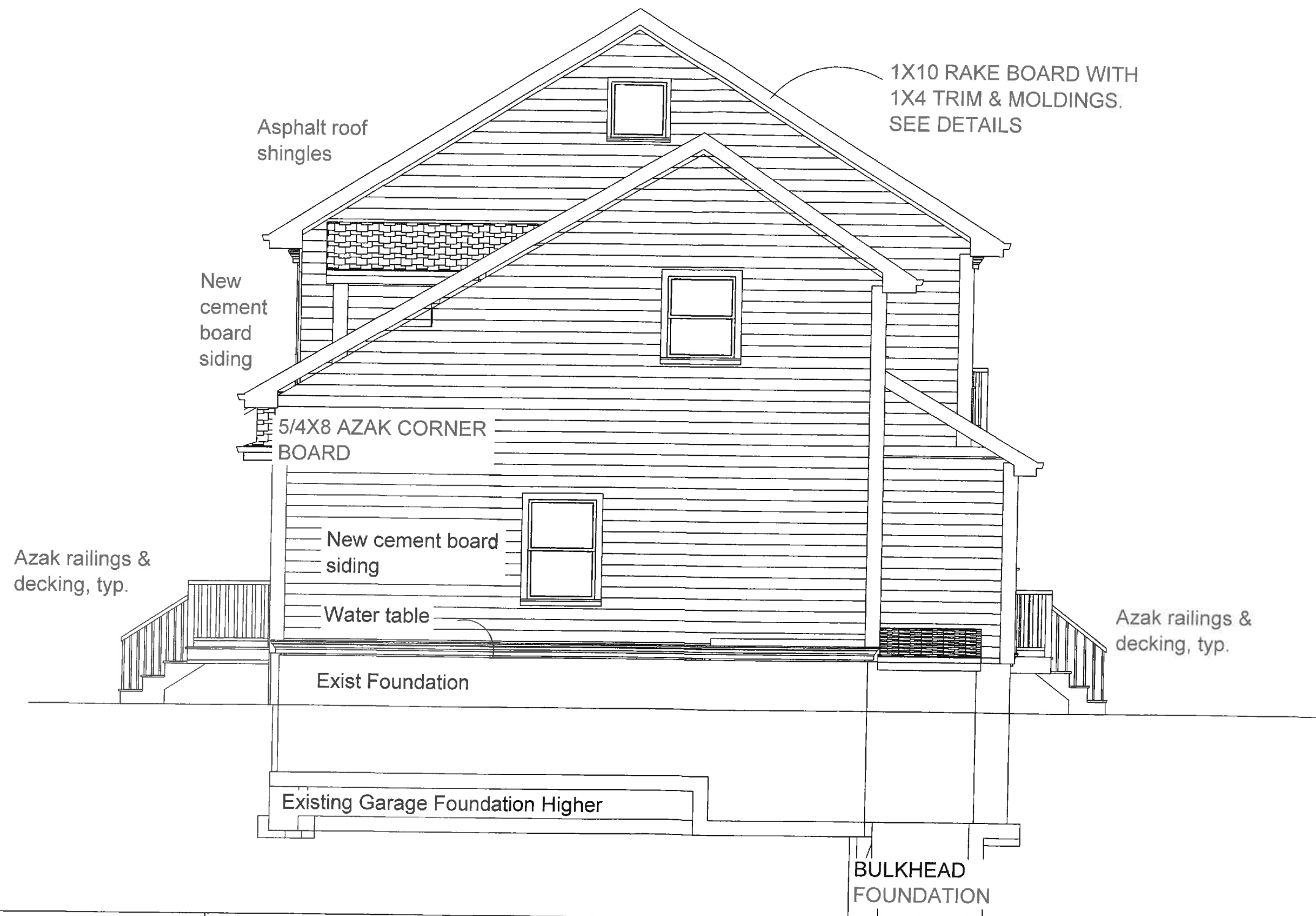
FRIEZE & MOLDING AT
EAVES & WINDOW HEADS

5/4x8 CORNER BOARDS,
5/4x4 DOOR & WINDOW
TRIM

96.76
Average Grade



22 AUDREY ROAD BELMONT MA	NORDESIGN & BUILD LLC ARCHITECTS 21 HOUGH ROAD BELMONT MA 02478 617-283-5299	FRONT ELEVATION 3/16"=1'-0"	2/16/19	A-10
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ADDITION AT 22 AUDREY
ROAD BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA
02478 617-283-5299

NORTH ELEVATION
3/16"=1'-0"

2/16/19

A-11

Sloped head, trim,
frieze & molding in
azak over windows
Typ.

Azak Fascia & soffit, alumin.
gutters & downspouts Typ.

Frieze & crown molding with metal
flashing at window heads Typ.

composite railings only no deck

5/4x8 corner boards and 5/4x4 trim
around doors & windows Typ.

Cement board siding 4"
to the weather Typ.

6" water table in azak
Typ.

BULKHEAD

Conc Found.

Conc. Found.

Composite decking
& railings

azak slats over
PT framing



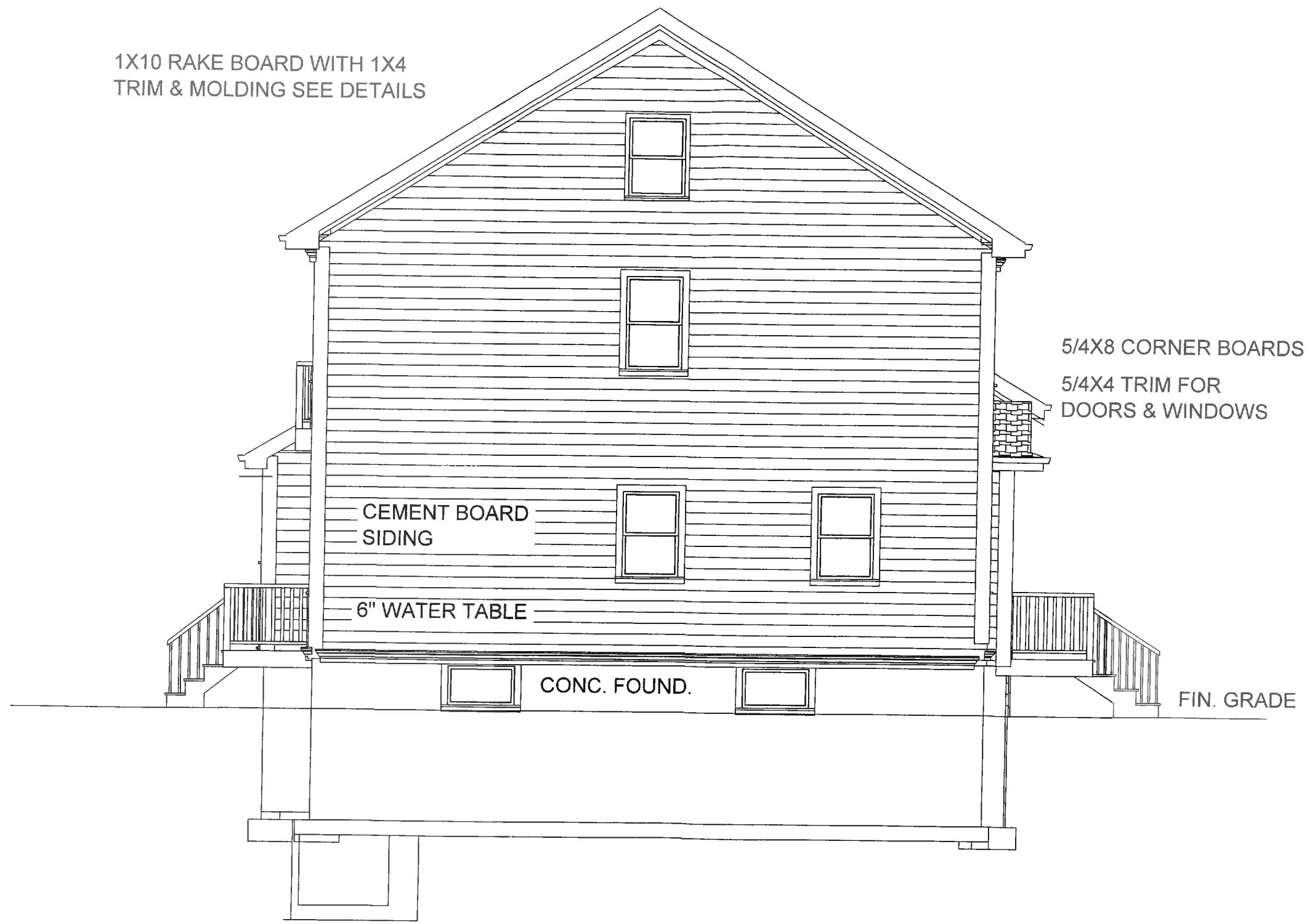
ADDITION AT 22 AUDREY
ROAD BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA
02478 617-283-5299

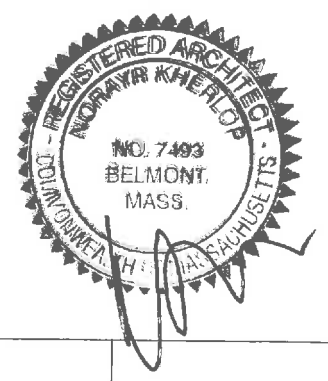
PROPOSED EAST (REAR)
ELEVATION 3/16" = 1'-0"

2/16/19

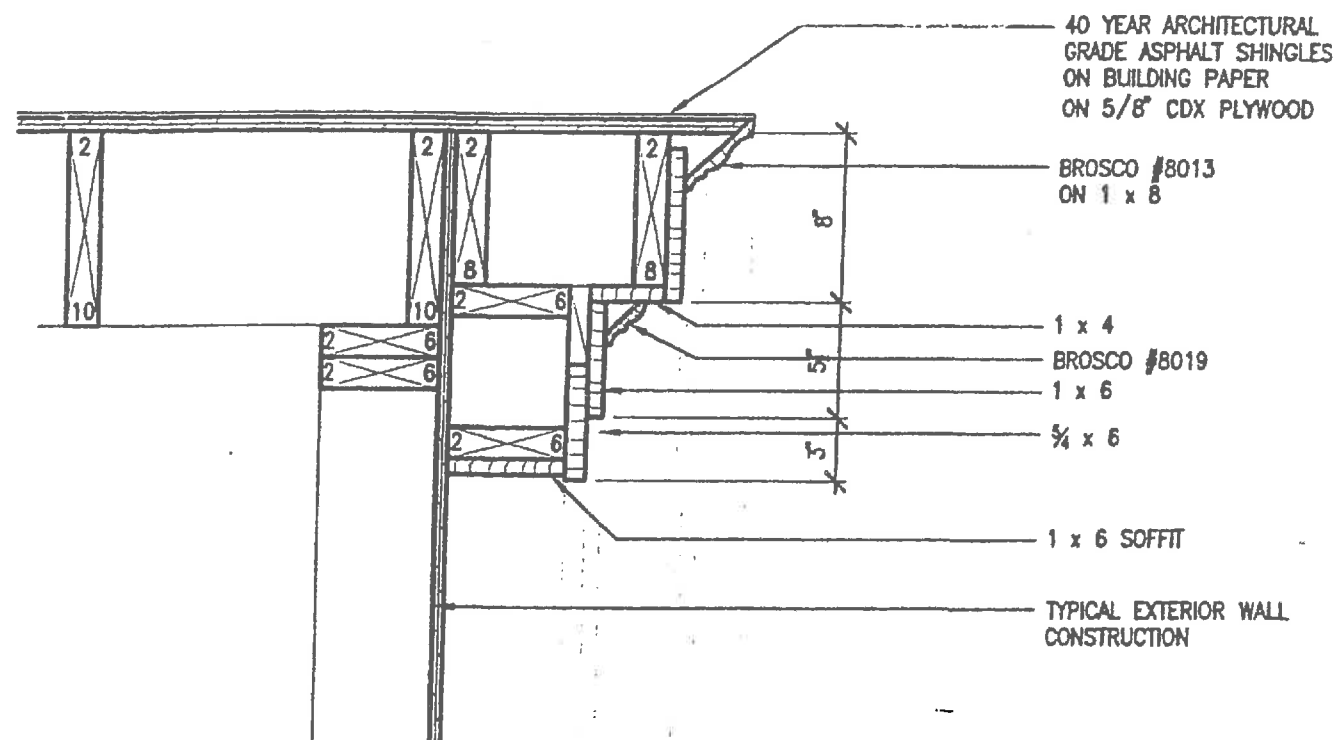
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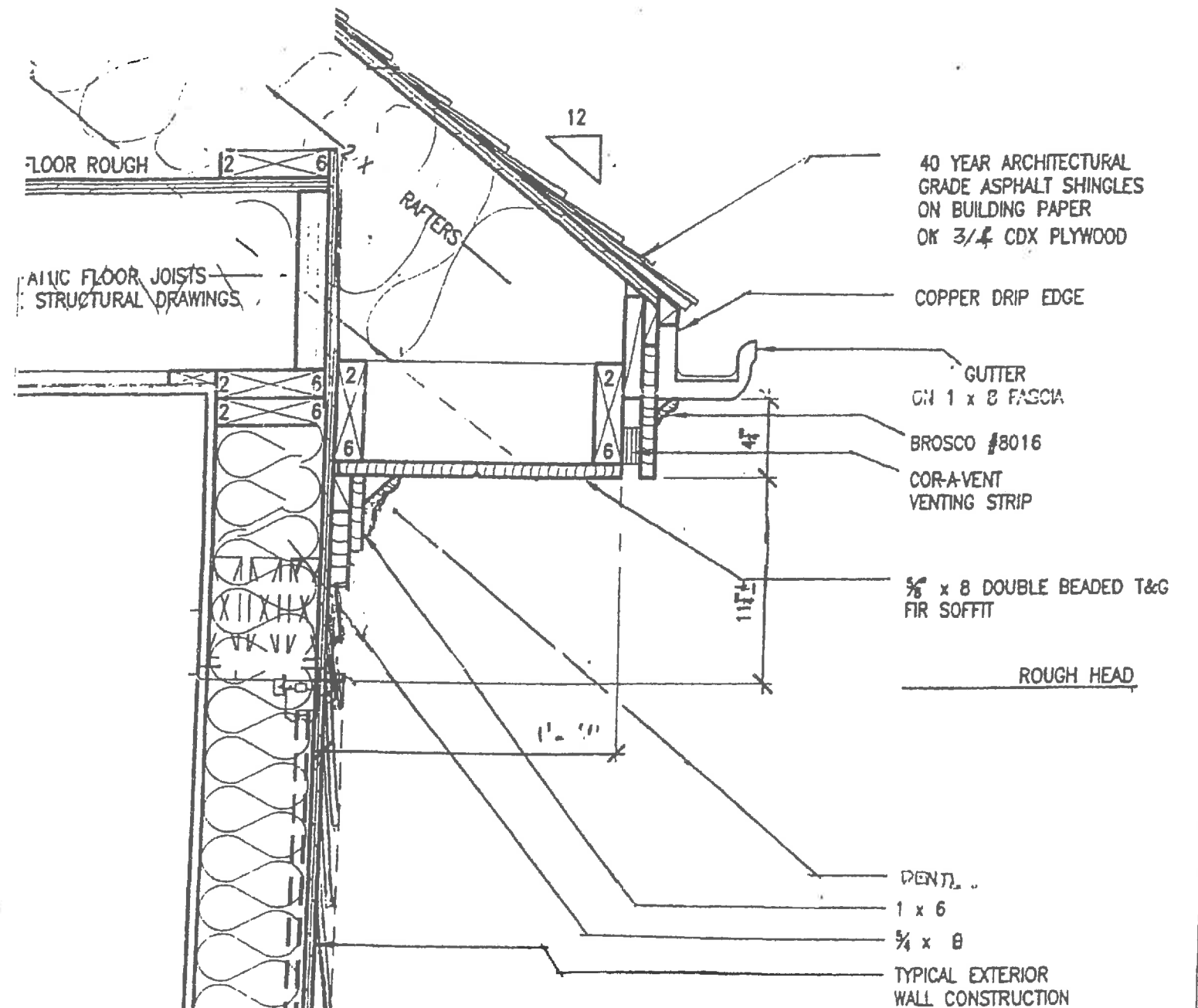
5/4X8 CORNER BOARDS
5/4X4 TRIM FOR
DOORS & WINDOWS



ADDITION AT 22 AUDREY ROAD BELMONT MA	NORDESIGN & BUILD LLC ARCHITECTS 21 HOUGH ROAD BELMONT MA 02478 617-283-5299	SOUTH SIDE ELEVATION 3/16" = 1'-0"	2/16/19	A-13
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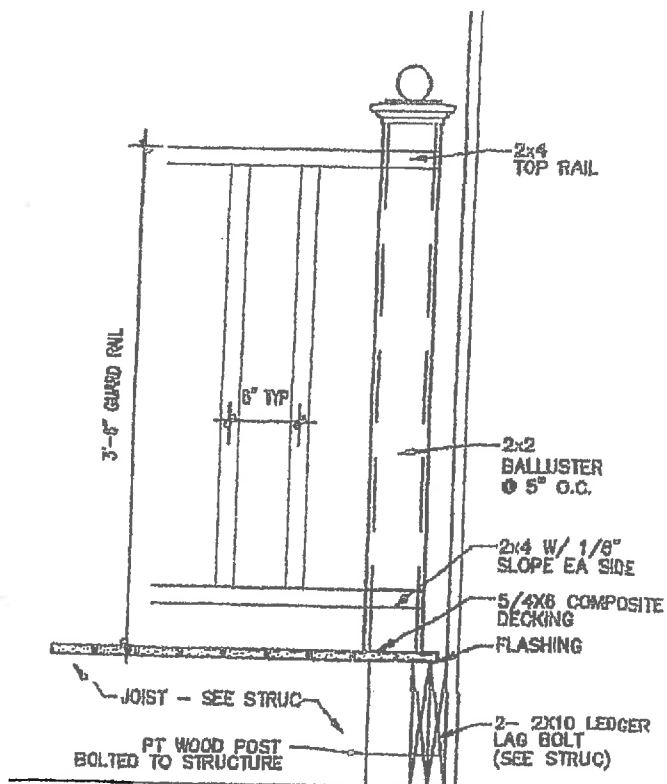


4 RAKE DETAIL AT CLAPBOARDS
SCALE: 1 1/2" = 1'-0"

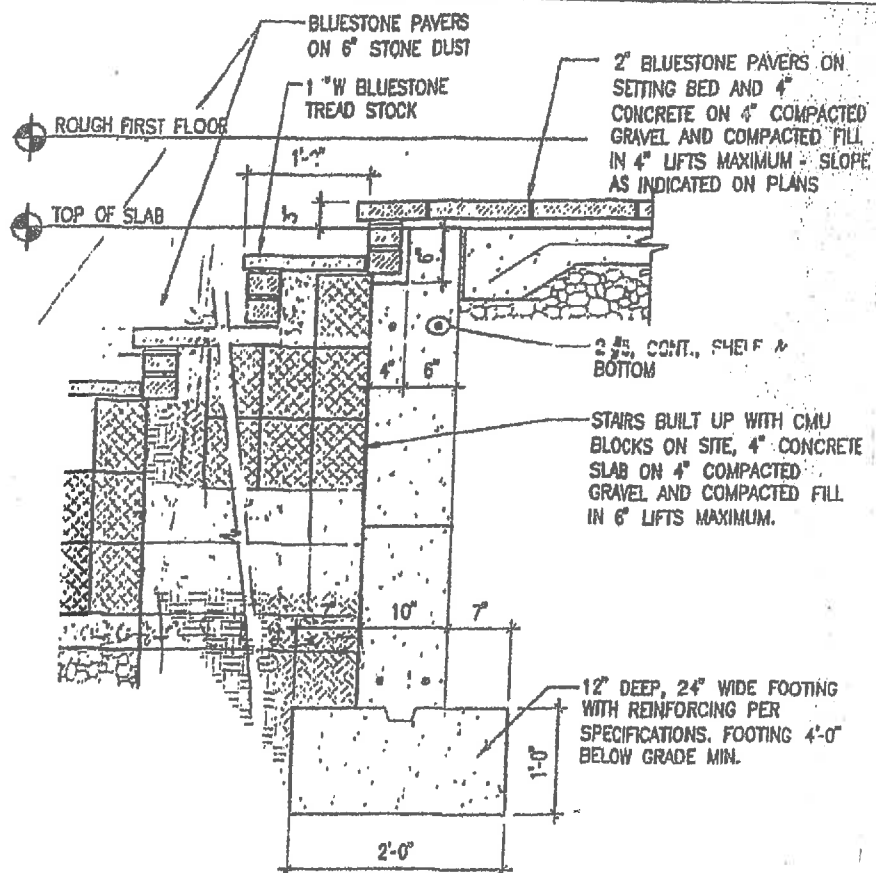


5 TYPICAL EAVE DETAIL
SCALE: 1 1/2" = 1'-0"

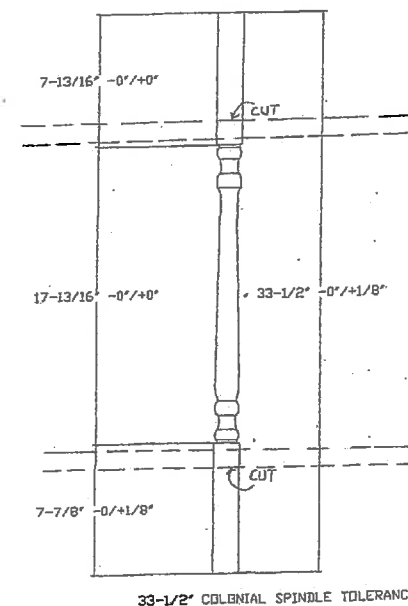




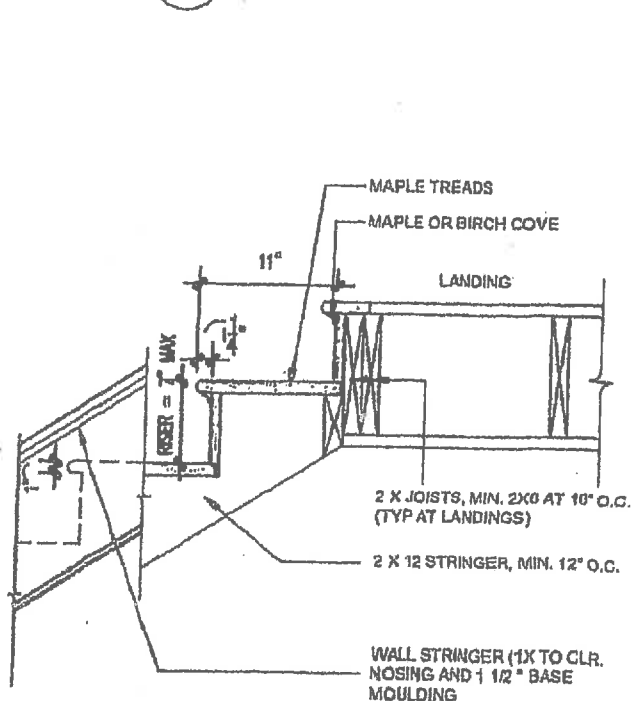
2
A1.0
TYP EXTERIOR LANDING DETAIL



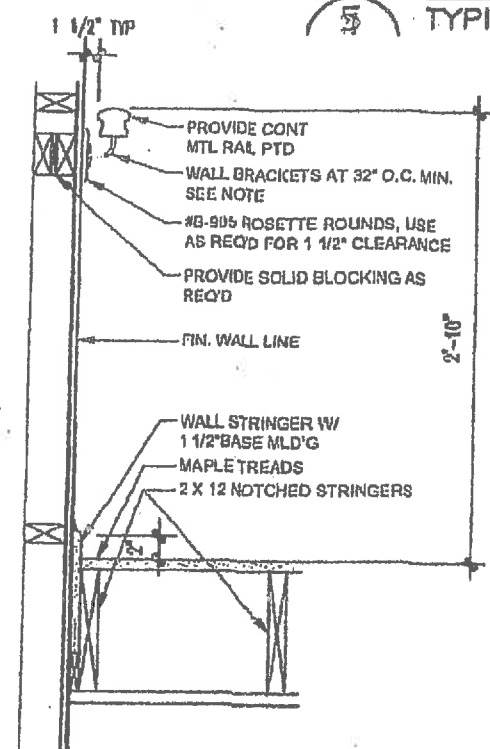
5
TYPICAL DETAIL AT OUTDOOR STEPS



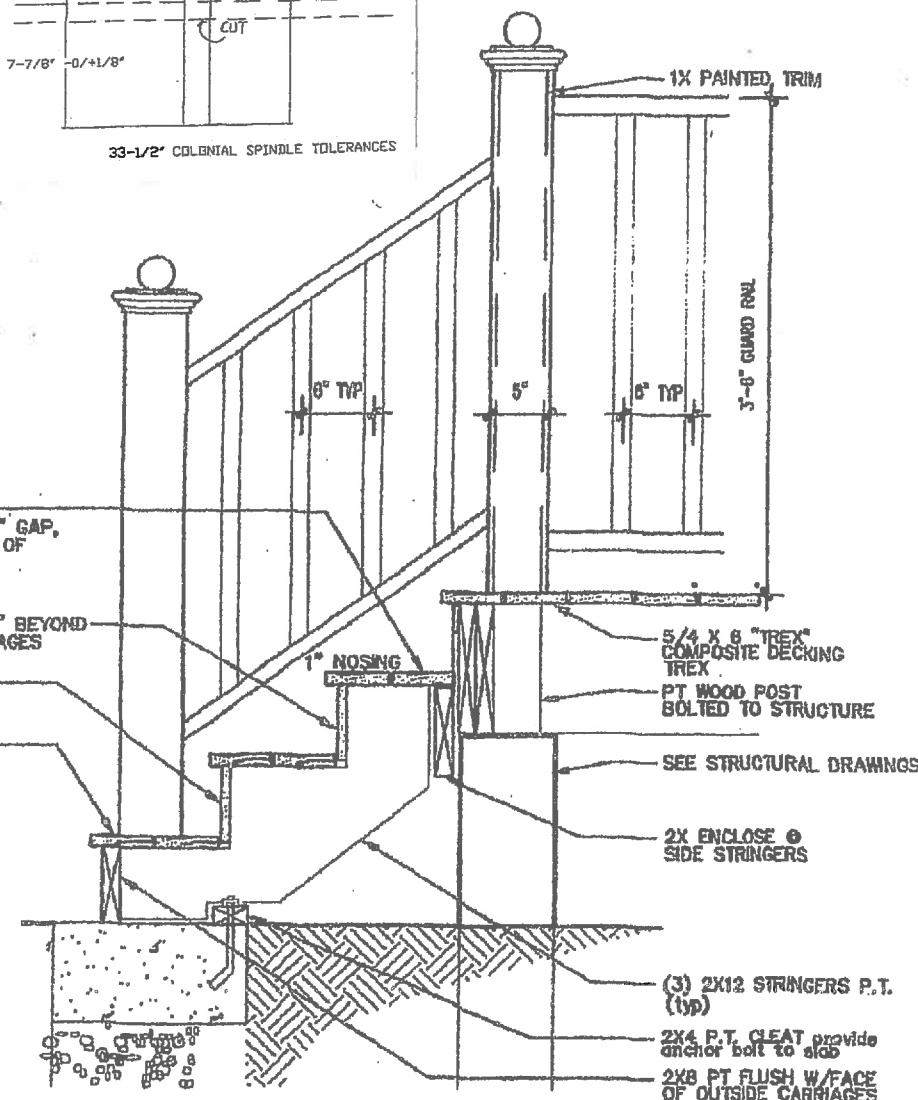
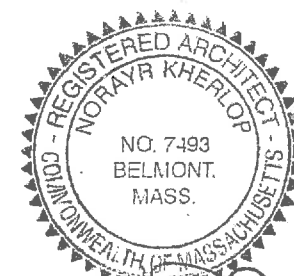
(/p-7232-fypon-vinyl-quickrail-straight-and-stair-kit.aspx)
Fypon Vinyl QuickRail Straight and Stair Kit (/p-7232-fypon-vinyl-quickrail-straight-and-stair-kit.aspx)



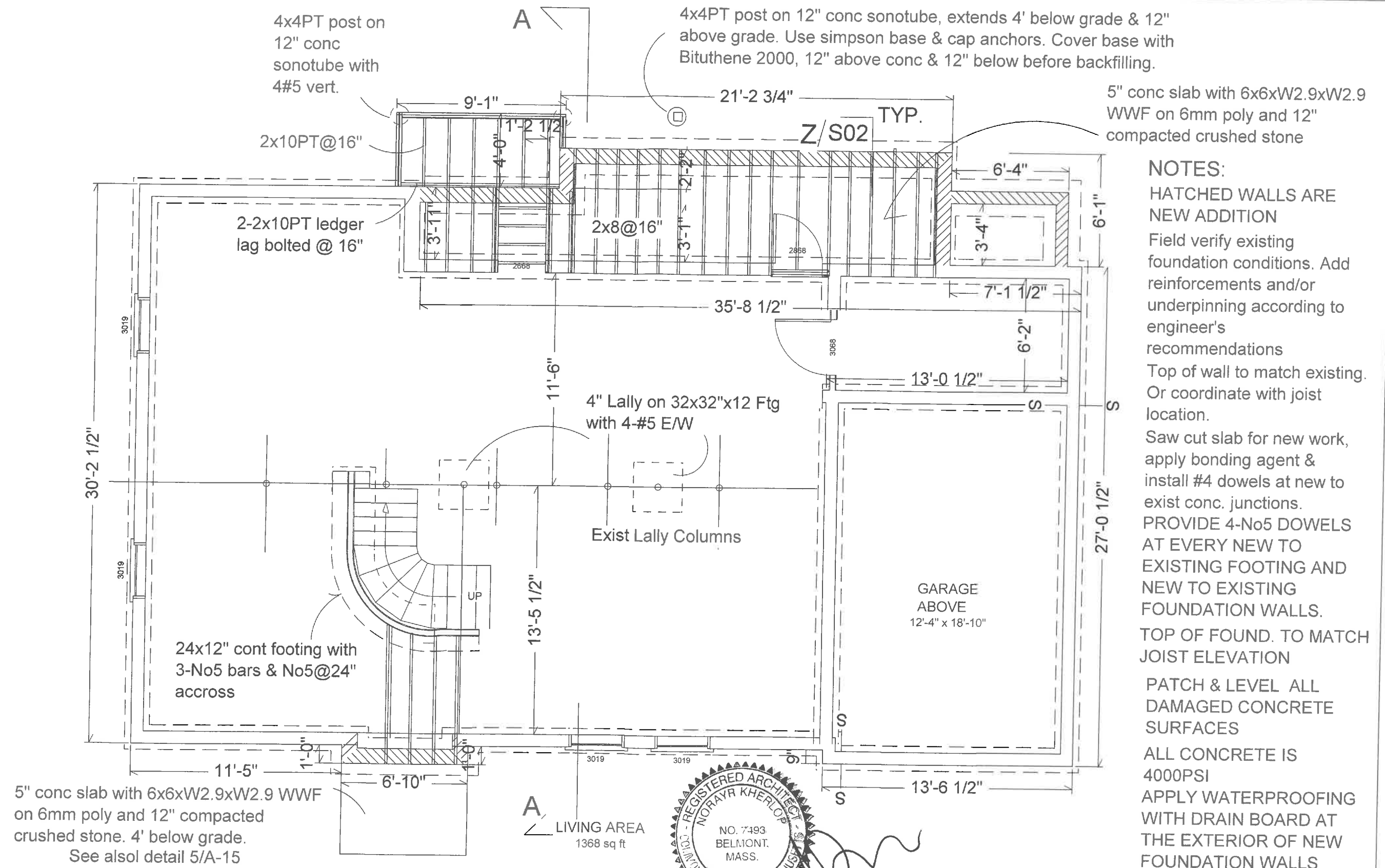
3
A1.0
TYP INTERIOR STAIR DETAIL



4
A1.0
STAIR LANDING



1
A1.0
TYP EXTERIOR STAIR DETAIL



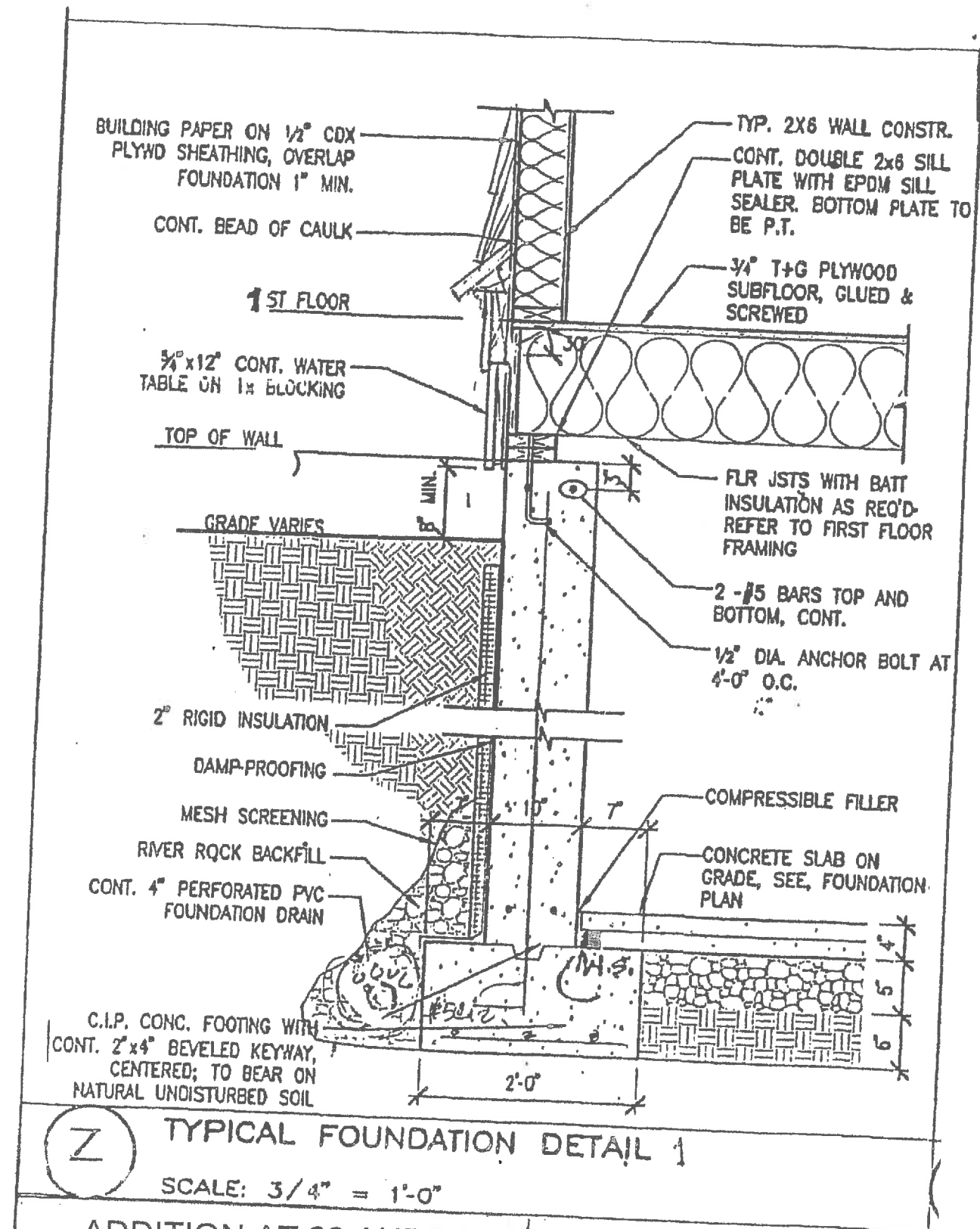
22 AUDREY ROAD
BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA 02478
617-283-5299

PROPOSED FOUNDATION PLAN &
1ST FLOOR FRAMING 3/16"=1'-0"

2/16/19

S-01



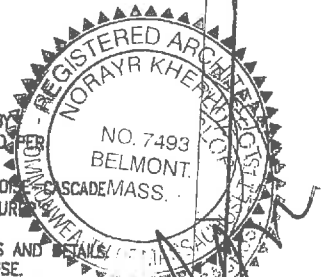
TYPICAL LUMBER NAILING SCHEDULE

NAILING SHOWN IS TYPICAL EXCEPT AS NOTED ON PLANS. USE COMMON NAILS.

1. JOIST TO SILL OR GIRDER, TOENAILS	3-8d
2. BRIDGING TO JOIST, TOE NAIL EACH END	2-8d
3. 1"x6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d
4. WIDER THAN 1"x6" SUBFLOOR TO EACH JOIST, FACE NAIL	3-8d
5. 2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d
6. SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL 16"O.C.	16d AT
7. TOP PLATE TO STUD, END NAIL	2-16d
8. STUD TO SOLE PLATE NAILS OR 4-8d TOE NAILS	2-16d END
9. DOUBLE STUDS, FACE NAIL 12"O.C.	16d AT
10. DOUBLED TOP PLATES, FACE NAIL 16"O.C.	16d AT
11. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d
12. CONTINUOUS HEADER, TWO PIECES 16"O.C. ALONG EA. EDGE	16d AT
13. CEILING JOISTS TO PLATE, TOE NAIL	3-8d
14. CONTINUOUS HEADER TO STUD, TOE NAIL	4-8d
15. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
16. CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
17. RAFTER TO PLATE, TOENAIL	3-8d
18. 1" BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d
19. 1"x8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8d
20. WIDER THAN 1"x8" SHEATHING TO EACH BEARING, FACE NAIL	3-8d
21. BUILT-UP CORNER STUDS 24"O.C.	16d AT
22. BUILT-UP GIRDER AND BEAMS 32"O.C. AT TOP & BOTTOM	20d AT
23. 2" PLANKS EACH BEARING	2-16d AT

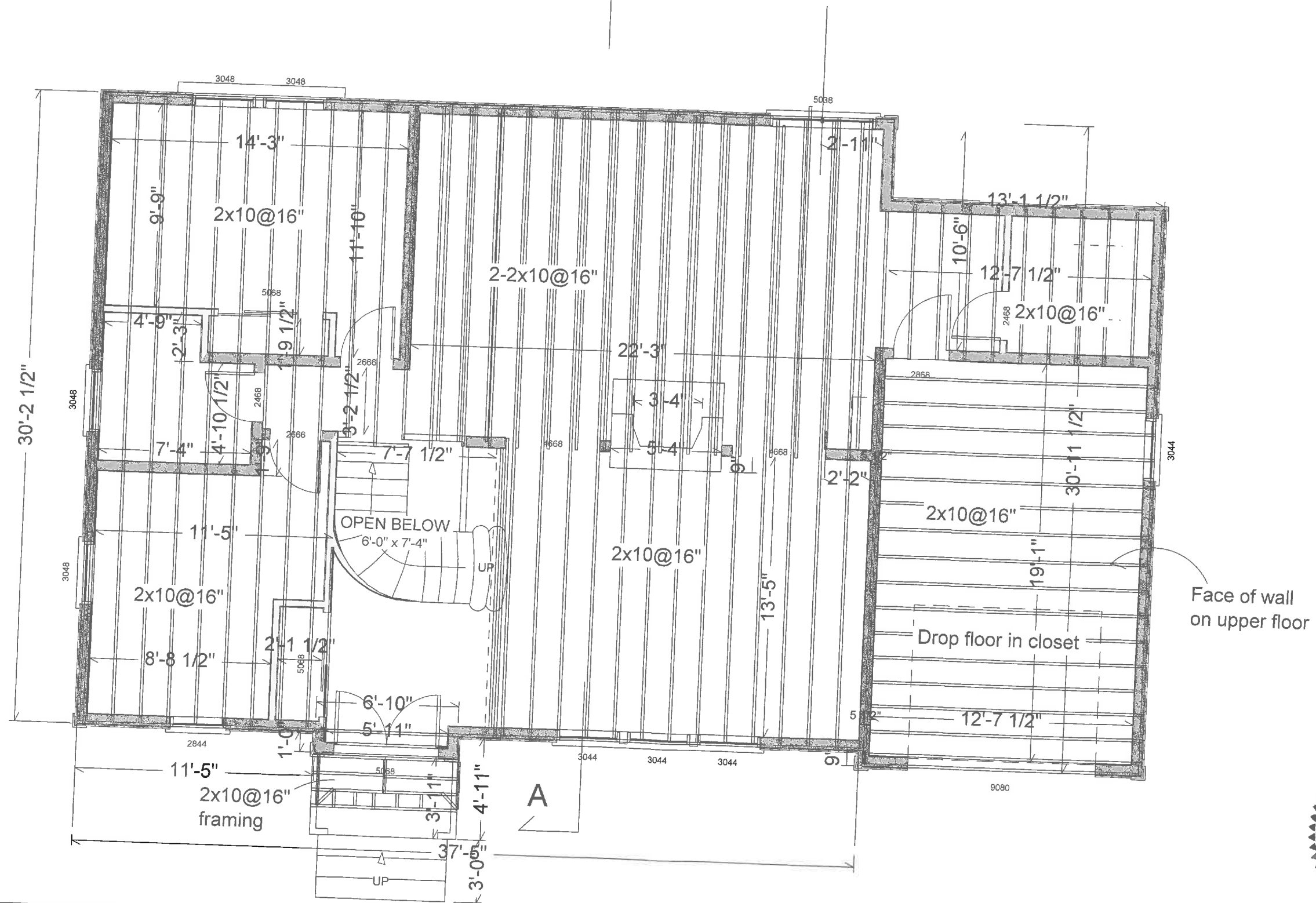
FLOOR JOISTS - ROOF RAFTERS:

- WOOD FLOOR SUPPORTS TO BE 11 7/8" DEEP @ 16" SPACING, SEE PLANS FOR SERIES NUMBER, BY BOISE-CASCADE CO. MAX LIVE LOAD DEF. = L/360. PROVIDE BLOCKING PANELS AND RIM BOARD PER MANUFACTURER'S RECOMMENDATION.
- WOOD ROOF SUPPORTS TO BE 16" DEEP @ 16" SPACING, SEE PLANS FOR SERIES NUMBER, BY BOISE-CASCADE CO. MAX LIVE LOAD DEF. = L/360. PROVIDE BLOCKING PANELS AND RIM BOARD PER MANUFACTURER'S RECOMMENDATION.
- PROVIDE FILLER BLOCKING, BACKERS, HANGERS AND NAILS PER MANUFACTURER RECOMMENDATIONS AND DETAILS. JOISTS USED IN FLOORING SYSTEM TO BE CONSISTENT MAKE AND MODEL UNLESS NOTED OTHERWISE.



FOUNDATION DETAILS

S02
1/6/18



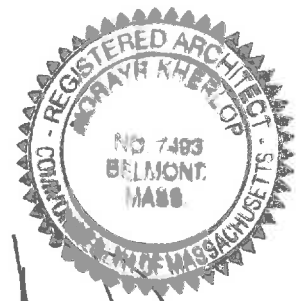
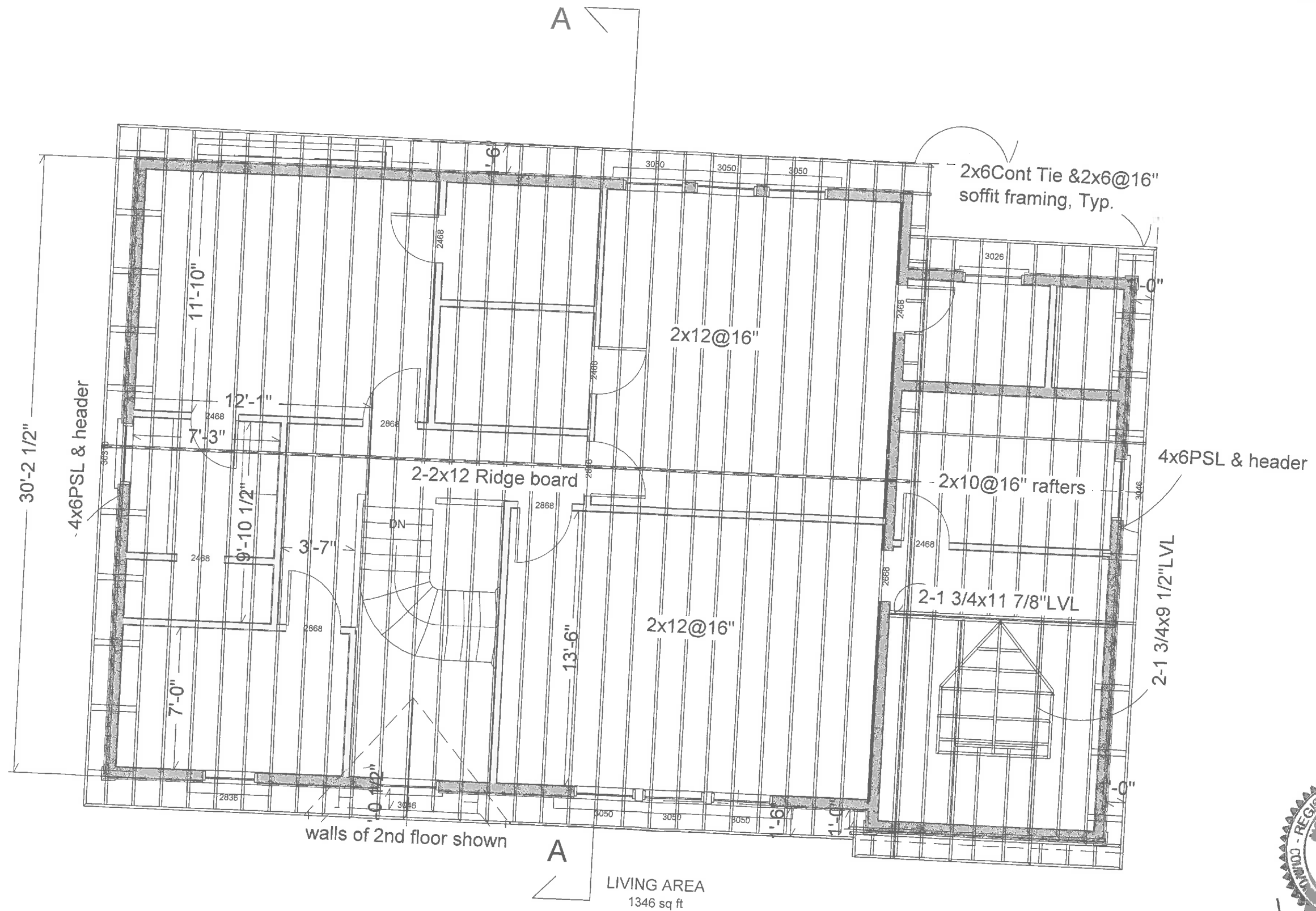
22 AUDREY ROAD
BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA 02478
617-283-5299

PROPOSED 2ND FLOOR
FRAMING PLAN 3/16"=1'-0"

2/16/19

S-03



22 AUDREY ROAD
BELMONT MA

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA 02478
617-283-5299

PROPOSED ROOF
FRAMING PLAN 3/16"=1'-0"

2/16/19

S-06

WOOD FRAMING NOTES

1. ALL ROUGH FRAMING SHALL BE NO. 2 OR BETTER SPRUCE-PINE-FIR, UNLESS OTHERWISE NOTED OR SHOWN ON THE DRAWINGS.
2. ALL TWO (2) INCH NOMINAL LUMBER TO BE SEASONED TO 19% MAXIMUM MOISTURE CONTENT.
3. ALL LUMBER AND PLYWOOD SHALL BE GRADE-STAMPED BY THE APPROPRIATE MANUFACTURER'S ASSOCIATION FOR THE APPROPRIATE USE.
4. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, OR EARTH SHALL BE PRESSURE TREATED WITH A CCA-C 0.40 PROCESS.
5. ALL WOOD FRAMING SHALL BE BUILT PLUMB, LEVEL, SQUARE, AND TRUE WITH ADEQUATE BRACING AND CONNECTION HARDWARE TO ENSURE A RIGID STRUCTURE.
6. ROUGH CONNECTIONS SHALL BE ACCURATELY CUT AND TIGHTLY FITTED AS NECESSITATED BY THE CONDITIONS ENCOUNTERED TO PROVIDE FULL BEARING WITHOUT USE OF SHIMS.
7. ALL FLOORS SHALL BE SHEATHED WITH 3/4" TONGUE AND GROOVE STRUCTURAL 1 PLYWOOD, GLUED AND NAILED, UNLESS OTHERWISE SHOWN OR NOTED. ALL ROOFS SHALL BE SHEATHED WITH 5/8" T&G STRUCTURAL 1 PLYWOOD, GLUED & NAILED, UNLESS OTHERWISE SHOWN OR NOTED.
8. ALL PLYWOOD SHALL BE LAID WITH LONG DIMENSIONS PERPENDICULAR TO SUPPORTS. STAGGER ALL JOINTS. PROVIDE BLOCKING AT ALL JOINTS ONLY WHERE SHOWN ON PLAN.
9. ALL EXTERIOR WALL PLYWOOD SHALL BE FASTENED WITH 8d NAILS 4" ON CENTER, 10d NAILS @ 3" ON CENTER (THIRD TO FIRST FLOOR) FRONT & REAR WALLS ONLY, AT SUPPORTED PANEL EDGES AND AT 10" ON CENTER AT INTERMEDIATE SUPPORTS, UNLESS OTHERWISE SHOWN OR NOTED.
10. ALL INTERIOR DOOR HEADERS SHALL CONSIST OF TWO 2X8'S WITH ONE LAYER OF 1/2" PLYWOOD SPACER, UNLESS OTHERWISE NOTED OR SHOWN ON THE DRAWINGS. FOR 2X6 EXTERIOR STUD WALLS, ALL EXTERIOR WINDOW AND DOOR HEADERS OVER THREE (3) FEET WIDE SHALL BE THREE 2X8'S WITH TWO LAYERS OF 1/2" PLYWOOD, U.N.O. AT EXTERIOR HEADERS, 1" THICK RIGID INSULATION MAY BE USED IN PLACE OF [2] 1/2" PLYWOOD SPACERS; LOCATE BETWEEN DOUBLE HEADER AT OUTSIDE FACE AND SINGLE HEADER AT INSIDE FACE.
11. ALL HEADERS OVER SIX (6) FEET IN LENGTH SHALL REST ON DOUBLE STUD POSTS AS A MINIMUM, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
12. SIMPSON CONSTRUCTION HARDWARE (OR APPROVED EQUAL) SHALL BE FASTENED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND NAILING SCHEDULE. THE GENERAL CONTRACTOR MUST BE FAMILIAR WITH, AND HAVE THE APPROPRIATE PRODUCT CATALOGS ON SITE. ALL EXTERIOR CONNECTORS AND NAILING TO BE GALVANIZED.
- A. ALL SPECIFIED FASTENERS MUST BE INSTALLED ACCORDING TO THE INSTRUCTIONS IN THE SIMPSON CATALOG. INCORRECT FASTENER QUANTITY, SIZE, TYPE, MATERIAL, OR FINISH MAY CAUSE THE CONNECTION TO FAIL. 16D FASTENERS ARE COMMON NAILS (8 GAGE X 3-1/2") AND CANNOT BE REPLACED WITH 16D SINKERS (9GAGE X 3-1/4") UNLESS OTHERWISE SPECIFIED.
- B. BOLT HOLES SHALL BE A MINIMUM OF 1/32" AND A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER (PER THE 1997 NDS, SECTION 8.1.2.1.).
- C. INSTALL ALL SPECIFIED FASTENERS BEFORE LOADING THE CONNECTION.
- D. PNEUMATIC NAILERS MAY BE USED TO INSTALL CONNECTORS, PROVIDED THE CORRECT QUANTITY AND TYPE OF NAILS ARE PROPERLY INSTALLED IN THE NAIL HOLES. TOOLS WITH NAIL HOLE-LOCATING MECHANISMS SHOULD BE USED. FOLLOW THE MANUFACTURER'S INSTRUCTIONS AND USE THE APPROPRIATE SAFETY EQUIPMENT.
- E. JOISTS SHALL BEAR COMPLETELY ON THE CONNECTOR SEAT AND THE GAP BETWEEN THE JOIST AND THE HEADER SHALL NOT EXCEED 1/8".
13. UNLESS NOTED OTHERWISE, MINIMUM FASTENING OF WOOD MEMBERS SHALL CONFORM TO TABLE 602.3 (1) OF THE 2009 IRC CODE. WHERE CONFLICT WITH NAILING SCHEDULE ON THIS DRAWING, USE HEAVIER NAILING.
14. ALL PLYWOOD OR OSB SHALL BE APA RATED AND SHALL BE ADEQUATELY SPACED AT JOINTS (1/8" TYP) AS REQUIRED BY APA FOR EXPANSION.
15. ALL SOLID WOOD POSTS SHALL BE DOUGLASS FIR NO. 1 OR BETTER.
16. BEAMS NOTED AS "PSL" SHALL BE "PARALLAM" AS MANUFACTURED BY TRUS JOIST MACMILLAN (E=1,800,000 PSI, FB=2900 PSI). PARALLAM PRODUCTS SHALL BE ADEQUATELY STORED AND COVERED AT THE JOB SITE TO BE PROTECTED FROM WATER DAMAGE PRIOR TO INSTALLATION.
17. BEAMS NOTED AS "LVL" SHALL BE AS MANUFACTURED BY TRUSS JOIST MACMILLAN (E=2,000,000 PSI, FB=2,900 PSI). LVL PRODUCTS SHALL BE ADEQUATELY STORED AND COVERED AT THE JOB SITE TO BE PROTECTED FROM WATER DAMAGE PRIOR TO INSTALLATION.
18. SHEAR WALL SHEATHING AT ALL EXTERIOR WALLS SHALL BE IN ACCORDANCE WITH SHEARWALL SCHEDULE. ALL SHEETS SHALL BE STAMPED WITH THE MANUFACTURER'S INFORMATION AND SHEATHING CERTIFICATION.
19. ALL STUDS SHALL ALIGN WITH JOISTS. AT TYPICAL AREAS SUCH AS OPENING JAMBS, PROVIDE STUDS OR BLOCKING TO MAINTAIN A SOLID CONTINUOUS LOAD PATH TO FOUNDATION.

CONCRETE WORK:

CONCRETE STRENGTH:	PROVIDE THE FOLLOWING 28 DAY COMPRESSIVE STRENGTH FOR FIELD CONCRETE: 4000 PSI NORMAL WEIGHT FOR ALL CAST IN PLACE CONCTETE.
PORTLAND CEMENT:	ASTM C150, TYPE II. WATER CEMENT RATIO AS REQUIRED FOR DESIGN STRENGTH.
AGGREGATE:	NORMAL WEIGHT : ASTM C35, WITH MAXIMUM SIZE OF 3/4".
WATER:	POTABLE
SLUMP:	ACI TABLE 305A
ADMIXTURE:	ASTM C260 AIR-ENTRAINING AGENT AS REQUIRED FOR A TOTAL ENTRAINED AIR CONTENT OF 6% : 8% FOR ALL CONCRETE EXPOSED TO FREEZING. DO NOT USED CALCIUM CHLORIDE.
STEEL REINFORCEMENT:	ASTM A615 GRADE 60 ASTM A185 FOR WIRE FABRIC. PROVIDE #3 CHAIR BARS, HIGH CHAIRS, TIES, CLIPS, SLAB BOLSTERS AND OTHER ACCESSORIES WHERE NOT SPECIFIED ON THE DRAWINGS IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE OR DETAILING REINFORCING CONCRETE STRUCTURES ACI 315 OR CRSI-WRSI MANUAL OF STANDARD PRACTICE. USE PLASTIC TIPS ON ALL CHAIRS PLACED ON THE SIDES OF CONCRETE FORM-WORK.
OPENINGS:	PROVIDE 2-#6 AT EACH SIDE OF ALL OPENINGS IN WALLS AND SLABS AND EXTEND 2'-6" BEYOND THE OPENING OR AS DETAILED, EXCEPT VERTICAL BARS AT SIDES OF OPENINGS IN WALLS ARE TO EXTEND FROM FLOOR TO FLOOR. BARS MAY BE MOVED ASIDE AT OPENINGS OR SLEEVES BUT DO NOT CUT OR OMIT.
MINIMUM CONCRETE COVER:	CONCRETE PLACED AGAINST EARTH 3" STRUCTURAL SLAB BOTTOM 1 1/2" STRUCTURAL SLAB TOP 1" FORMED CONCRETE EXPOSED TO EARTH, WATER OR WEATHER..... 2" INTERIOR FACES OF WALLS 1" COLUMNS OR PIERS (MAIN REINFORCEMENT) 2"
SPLICING OF REINFORCEMENT:	AS SHOWN ON PLANS BUT NOT LESS THAN 40 DIAMETERS FOR SLABS AND BEAM BOTTOM BARS, AND NOT LESS THAN 48 BAR DIAMETERS FOR WALLS AND BEAM TOP BARS. PROVIDE A LAP OF 8" OR 1 1/2 SPACES, WHICHEVER IS LARGER, FOR WWF. TIE WIRES TOGETHER AT LAP.
MINIMUM REINFORCEMENT:	REINFORCE ALL WALLS WITH #4 @ 12" IN EACH WAY EACH FACE AND 2 - #6 EACH EDGE, U.N.O. IN SLABS, PROVIDE AT LEAST 0.0018 TIMES THE AREA OF CONCRETE IN EACH DIRECTION, U.N.O.
SHOP DRAWINGS:	SUBMIT FOR DESIGNER'S APPROVAL COMPLETE BENDING AND PLACING DETAILS AT ALL REINFORCING STEEL INCLUDING WELDED WIRE FABRIC (WWF), INCLUDING POSITION OF SPLICES. INCLUDE ACCESSORY DRAWINGS.
STANDARD SPECIFICATIONS:	COMPLY WITH THE LATEST RECOMMENDATIONS AND SPECIFICATIONS OF THE AMERICAN CONCRETE INSTITUTE. ACI 301 STRUCTURAL CONCRETE FOR BUILDINGS ACI 302 CONCRETE FLOOR AND SLAB CONSTRUCTION ACI 304 MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE ACI 305 HOT WEATHER CONCRETING ACI 306 COLD WEATHER CONCRETING ACI 315 DETAILING REINFORCING STEEL ACI 318 GENERAL DESIGN OF ITEMS NOT OTHERWISE SPECIFIED ACI 347 FORMWORK CRSI MANUAL OF STANDARD PRACTICE.
CONSTRUCTION JOINTS:	PROVIDE KEYS AND DOWELS AT ALL CONSTRUCTION JOINTS. PROVIDE DOWELS WITH AN AREA EQUAL TO 0.003 TIMES THE CONCRETE CROSS SECTIONAL AREA AT CONSTRUCTION JOINT. SUBMIT THE PROPOSED LOCATION OF CONSTRUCTION JOINTS TO THE DESIGNER FOR APPROVAL. MAXIMUM SPACING OF CONSTRUCTION JOINTS TO BE 30 FEET FOR WALLS AND STRUCTURAL FLOORS AND 20 FEET FOR SLABS ON GRADE.
SURFACE TREATMENT:	ROUGHEN ALL EXISTING CONCRETE SURFACES COMMON WITH NEW CONCRETE TO AN AMPLITUDE OF 1/4"

GENERAL STRUCTURAL NOTES

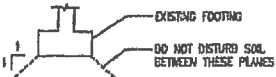
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MASSACHUSETTS STATE BUILDING CODE.
2. THE CONTRACTOR SHALL NOT SCALE THE CONTRACT DRAWINGS.
3. TYPICAL AND CERTAIN SPECIFIC CONDITIONS HAVE BEEN DETAILED ON THE DRAWINGS. FOR CONDITIONS NOT SPECIFICALLY SHOWN, THE CONTRACTOR SHALL PREPARE DETAILS SIMILAR TO THOSE SHOWN AND SUBMIT THEM WITH THE RELEVANT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.
4. ALL EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMISSION OF RELEVANT SHOP DRAWINGS FOR REVIEW AND PRIOR TO COMMENCEMENT OF FABRICATION AND CONSTRUCTION.
5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF FIELD CONDITIONS WHICH ARE IN CONFLICT WITH THE STRUCTURAL CONTRACT DOCUMENTS.
6. THE DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, AND OTHER METHODS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR.
7. THE CONTRACTOR SHALL COORDINATE THE STRUCTURAL CONTRACT DOCUMENTS WITH CIVIL, ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS BEFORE COMMENCEMENT OF WORK AND SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS.

DESIGN LOADS

1. FLOOR LIVE LOADS
A. ALL FLOORS - 40 PSF
2. ROOF LIVE LOADS
A. SNOW 45 (GROUND SNOW) PSF
3. WIND LOADS
A. REFERENCE WIND VELOCITY = 105 MPH (3 SECOND GUSTS)
B. REFERENCE WIND PRESSURE = 28 PSF
C. EXPOSURE = C
D. DESIGN METHOD 2
E. MAIN LATERAL SYSTEM PRESSURE = 28PSF
4. SEISMIC LOADS
Si = 0.29
Ss = 0.068

FOUNDATIONS

- A. SOIL BEARING:
SPREAD FOOTINGS..... DESIGNED FOR A MAXIMUM ALLOWABLE BEARING PRESSURE OF 1.0 TSF ALLOWABLE BEARING PRESSURE TO BE VERIFIED BY A GEOTECHNICAL ENGINEER IN THE STATE OF MASSACHUSETTS.
- B. EXCAVATION..... EXCAVATE TO LINES AND GRADES TO PROPERLY INSTALL FOUNDATIONS ON UNRESTRICTED SOIL. IN NO CASE SHALL THE BOTTOM OF FOOTING BE LOCATED LESS THAN 4'-0" BELOW THE LOWEST ADJACENT SURFACE EXPOSED TO FREEZING.
- C. BACKFILL UNDER SLAB OR GRADE..... BACKFILL WHERE REQUIRED BELOW SLABS WITH APPROVED GRANULAR SOIL PLACED IN 6" LAYERS AND COMPACTED TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT AS DEFINED BY ASTM D-1557, METHOD D.
- D. FOUNDATION PLACEMENT AND PROTECTION..... DO NOT PLACE FOUNDATION CONCRETE IN WATER OR ON FROZEN GROUND. PROTECT IN-PLACE FOUNDATIONS AND SLABS FROM FROST PENETRATION UNTIL THE PROJECT IS COMPLETE. DO NOT EXCAVATE WITHOUT ENGINEER'S WRITTEN PERMISSION. ANY SOILS BELOW HYPOTHETICAL PLANES BEGINNING AT THE BOTTOM EDGE OF EXISTING FOOTINGS AND EXTENDING DOWNWARDS AND AWAY FROM THE FOOTING AT A 1:1 SLOPE.
- E. UNDERPINNING DESIGN OF UNDERPINNING AND LAGGING BY CONTRACTOR. SUBMIT DRAWINGS AND CALCULATIONS, STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS, TO THE ENGINEER FOR REVIEW



STRUCTURAL STEEL NOTES:

1. STRUCTURAL SHAPES:
- PIPE..... ASTM A53 TYPE E, GRADE B OR ASTM A501
- BOLTED CONNECTIONS..... FOR BOLTED BEAM CONNECTIONS NOT SHOWN ON THE DRAWINGS PROVIDE ANGLES AND PLATES WITH A THICKNESS TO DEVELOP THE CAPACITY OF THE BOLTS PROVIDED. AT EXPOSED BRACED FRAME CONNECTIONS USE A490 TENSION CONTROL BOLTS ROUND HEADS ORIENTED TOWARDS BUILDING INTERIOR. TIGHTEN NUTS TO SNUG-TIGHT CONDITION.
- ANCHOR BOLTS..... ASTM A307 OR ASTM F1554 GRADE 36 BOLTS (UDN) ON THE DRAWINGS.
- WELDING ELECTRODES CONFORM TO AWS SPECIFICATIONS FOR ELECTRODES BASED ON WELDING PROCESS AND THE TYPE AND GRADE OF STEEL. MINIMUM E70XX ELECTRODES.
- ERECTION PROVIDE ANCHOR BOLTS, STEEL WEDGES, THREADED SCREWS OR SHIMS TO SUPPORT AND PLUMB ALL COLUMNS. GROUT SOLID UNDER BASE PLATES



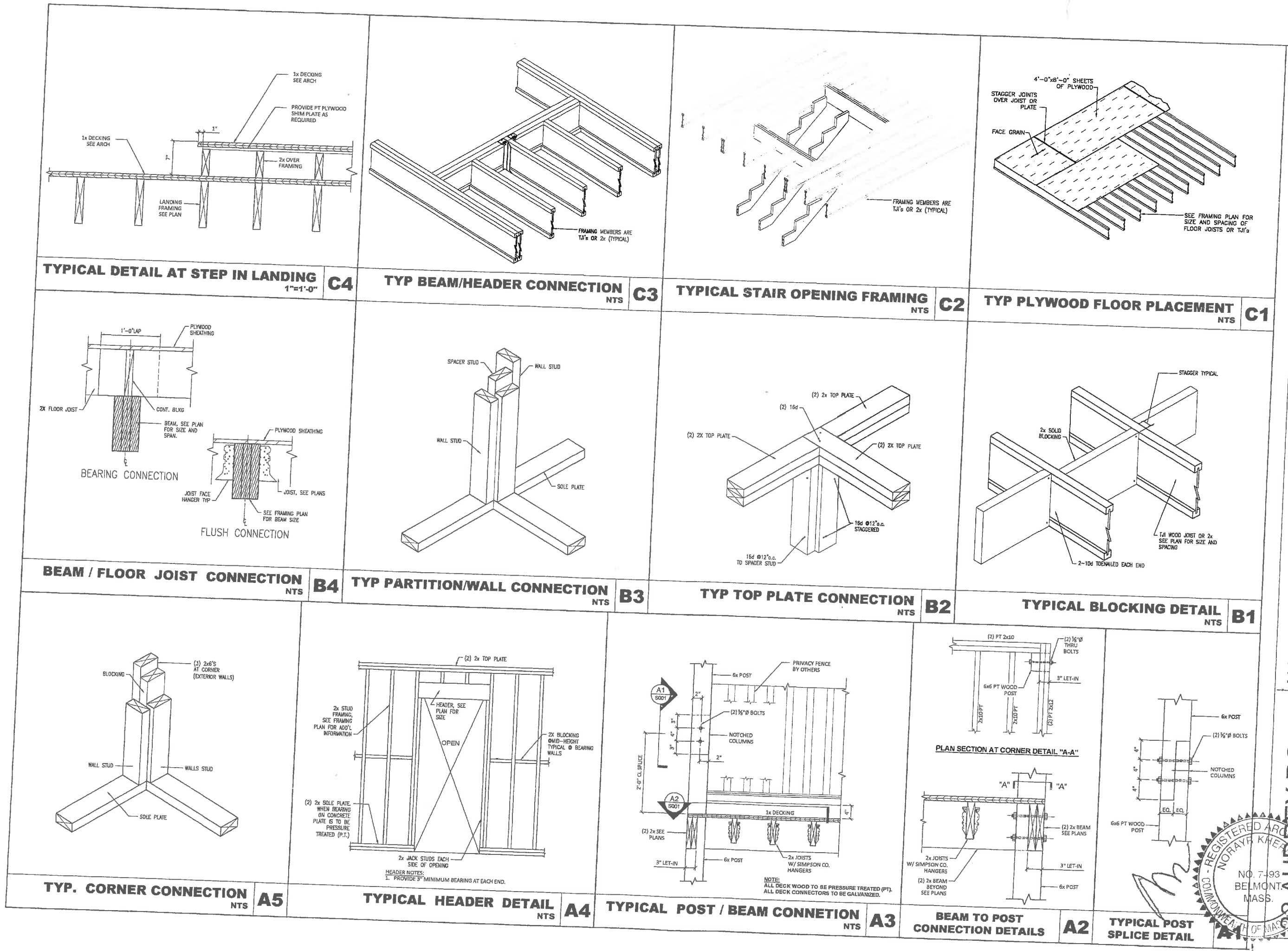
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STRUCTURAL NOTES

NORDESIGN & BUILD LLC

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BELMONT MA 02478 617-283-5299

22 AUDREY ROAD
BELMONT MA

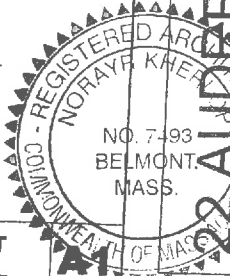


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**FRAMING
DETAILS**

NORDESIGN & BUILD LLC ARCHITECTS
21 HOUGH ROAD BELMONT MA
02478 617-283-5299

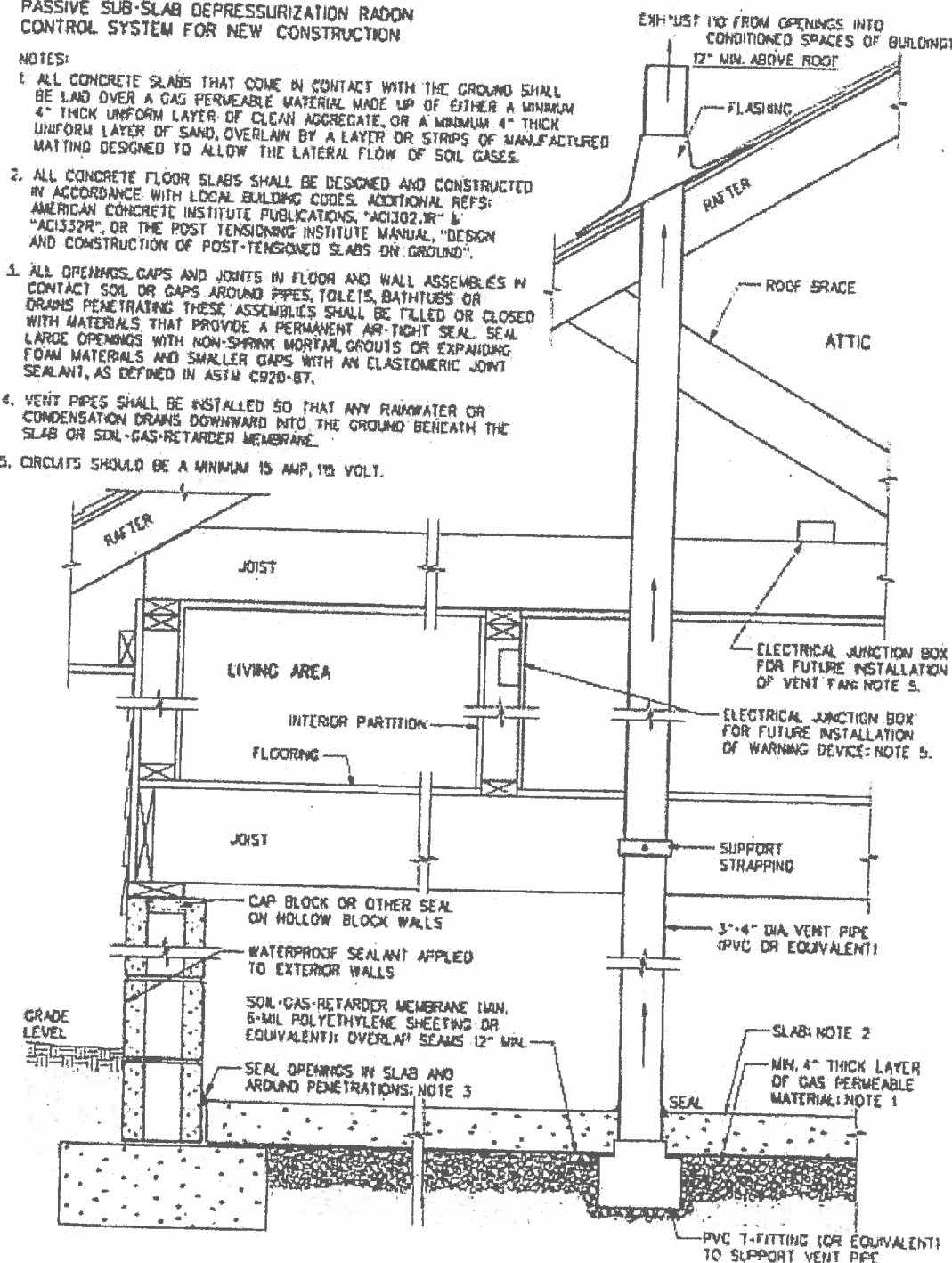
**22 AUDREY ROAD
BELMONT MA**



PASSIVE SUB-SLAB DEPRESSURIZATION RADON CONTROL SYSTEM FOR NEW CONSTRUCTION

NOTES:

1. ALL CONCRETE SLABS THAT COME IN CONTACT WITH THE GROUND SHALL BE Laid OVER A GAS PERMEABLE MATERIAL MADE UP OF EITHER A MINIMUM 4" THICK UNIFORM LAYER OF CLEAN AGGREGATE, OR A MINIMUM 4" THICK UNIFORM LAYER OF SAND, OVERLAIN BY A LAYER OR STRIPS OF MANUFACTURED MATTING DESIGNED TO ALLOW THE LATERAL FLOW OF SOIL GASES.
2. ALL CONCRETE FLOOR SLABS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL BUILDING CODES. ADDITIONAL REFS: AMERICAN CONCRETE INSTITUTE PUBLICATIONS, "ACI302.2R" & "ACI332R", OR THE POST TENSIONING INSTITUTE MANUAL, "DESIGN AND CONSTRUCTION OF POST-TENSIONED SLABS ON GROUND".
3. ALL OPENINGS, GAPS AND JOINTS IN FLOOR AND WALL ASSEMBLIES IN CONTACT WITH SOIL OR GAPS AROUND PIPES, TOILETS, BATHTUBS OR DRAINS PENETRATING THESE ASSEMBLIES SHALL BE FILLED OR CLOSED WITH MATERIALS THAT PROVIDE A PERMANENT AIR-TIGHT SEAL. SEAL LARGE OPENINGS WITH NON-SHRINK MORTAR, GROUTS OR EXPANDING FOAM MATERIALS AND SMALLER GAPS WITH AN ELASTOMERIC JOINT SEALANT, AS DEFINED IN ASTM C920-87.
4. VENT PIPES SHALL BE INSTALLED SO THAT ANY RAINWATER OR CONDENSATION DRAINS DOWNWARD INTO THE GROUND BENEATH THE SLAB OR SOIL-GAS-RETARDER MEMBRANE.
5. CIRCUITS SHOULD BE A MINIMUM 15 AMP, 120 VOLT.



COMPLY WITH THE PROVISIONS & REQUIREMENTS OF THE FOLLOWING:

INTERNATIONAL RESIDENTIAL CODE IRC 2015
WITH MASSACHUSETTS AMENDMENTS
STRETCH CODE-780CMR 9TH EDITION APPENDIX
A-A WITH AMENDMENTS
STATE ENERGY CODE 2015 IECC WITH AMENDMENTS
ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE
DEFORMED BARS SHALL BE PROVIDED PER ASTM A615 GRADE 60
ACI 315 MANUAL OF STANDARD PRACTICE FOR
DTAILING STRUCTURAL CONCRETE
ACI 318-14 BUILDING CODE REQUIREMENTS
FOR STRUCTURAL CONCRETE
ALL CONCRETE SHALL DEVELOP A COMPRESSIVE STRENGTH OF
4000PSI IN 28 DAYS, 4" +/- 1" SLUMP REFER TO ACI TABLE 305,
AIR ENTRAINMENT PER ASTM C231. ALL CONCRETE SHALL BE
READY MIXED & DELIVERY TICKETS WITH SPECIFICATIONS
SHALL BE PROVIDED FOR VERIFICATION & APPROVALS..
AISC 360-16 FOR STRUCTURAL STEEL
NDS 2018 FOR WOOD FRAMING



RADON INSTALLATION DETAIL-NTS

22 AUDREY ROAD
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RADON INSTALLATION DETAIL
& COMPLIANCE NOTES

2/16/19

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