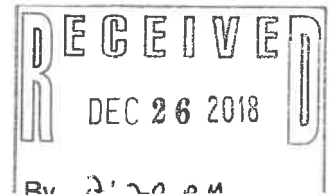


CITY OF PORTSMOUTH
Zoning Board of Adjustment Application



Department Use Only

Assessor Plan # 138

Zone GRC

Fill in below

Applicant Neil Cohen

Applicant Street Address 21-23 Langdon St. Owner Street Address _____

Applicant City / State / Zip Portsmouth, NH 03801 Owner City / State / Zip _____

Applicant phone (____) _____ Owner phone (____) _____

Applicant e-mail zip3200@yahoo.com

Location (street address) of proposed work: 21-23 Langdon St.

Existing use: Duplex

Undersigned hereby requests:

Article and Section

☐ Appeal from an Administrative Decision
See Article 2, Section 10.234.30

☐ Special Exception
See Article 2, Section 10.232.20

☐ Variance
See Article 2, Section 10.233.20

☐ Other _____
See Article 2, Section 10.233.20

see attached

To permit the following:

Demolition and reconstruction of existing duplex structure, with reduced first floor footprint to allow approved 2nd driveway in right side yard.

The undersigned alleges that the required conditions exist for granting of this request according to the terms of the Zoning Ordinance as demonstrated in the attached submittals.

Only complete applications will be accepted by the deadline date. A complete application shall consist of: a completely filled out application with original signatures, the application fee, and 12 packets of required plans and any supporting documents or photos. Incomplete applications will not be accepted. Applications received after the deadline will be scheduled for the following month. The owner or his/her representative is required to attend the Public Hearing for the above appeal.


Signature of Owner

ATTY for OWNER

12/26/18

12/26/2018

Date

Please PRINT name here Bernard Pelech

Applicant's Responsibilities

1. All applications for Variances and Special Exceptions must be submitted to the Planning Department prior to the published deadline. In the case of Appeals from an Administrative Decision, the appeal shall be filed no later than 30 days from the date of the action which is being appealed.
2. A Building Permit application must also be filed for the project for which zoning relief is being sought. The Building Permit application can be submitted with the Board of Adjustment application or filed prior. The Planning Department may waive this requirement when the application is for a substandard lot for subdivision purposes and no other zoning relief is required.
3. An applicant shall be one of the following: a) the owner of record of the property, or b) the holder of a valid purchase and sales agreement for the purchase of the subject property, or c) the holder of a valid option for the purchase of the subject property.
4. All applications shall include a written statement explaining how the request complies with the requirements of the Zoning Ordinance as provided in Article 2 (see Section 10.234.30 for Administrative Appeals, Section 10.233.20 for Variances, Section 10.232.20 for Special Exceptions).
5. It is the obligation of the applicant to submit adequate plans and exhibits in accordance with the terms of the Zoning Ordinance for all applications for Administrative Appeals, Variances, Special Exceptions, and Equitable Waivers.
6. One (1) original copy of a completed and signed "Board of Adjustment Application Check-List" shall accompany all applications.
7. For applications requesting dimensional relief, the minimum requirements for adequate plans shall include the following:

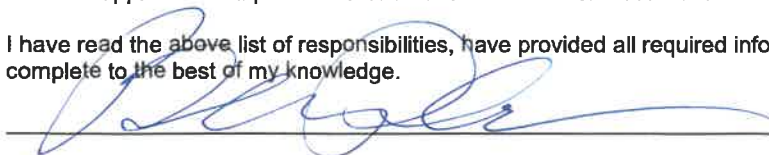
<input type="checkbox"/> Site Plan(s) showing existing and proposed conditions including: <ul style="list-style-type: none">- Front, side and rear setback / yard dimensions (this is the distance from a structure to the lot line)- Lot dimensions- Abutting street(s) and street names- Driveways / accessways- Dimensions (size and height) of structures- Dimensions and location of parking spaces	<input type="checkbox"/> Scale of all drawings and plans (the scale is the ratio of the drawing's size relative to the actual size) <input type="checkbox"/> Labeled photo(s) of existing conditions <input type="checkbox"/> Building plans and elevations of any <i>proposed</i> structures or additions <input type="checkbox"/> Interior floor plans for any renovations or expansion to existing structures
---	---

8. For applications requesting relief from land use requirements, the minimum requirements for adequate plans shall include the following:

<input type="checkbox"/> Site Plan showing dimensions and location of parking spaces including the scale (the scale is the ratio of the drawing's size relative to the actual size) <input type="checkbox"/> Interior floor plans and/or exterior site plans showing the location of the proposed use(s) <input type="checkbox"/> Labeled photo(s) of existing conditions

9. Plans should be 8 1/2" x 11" in size, 11" x 17" plans may be used only if the plan would otherwise be unreadable.
10. The Planning Department is authorized by the Board of Adjustment to refuse applications which do not meet these minimum requirements. The Planning Department may also require additional information and/or exhibits as needed to illustrate the scope of the project. Public Hearings shall not be scheduled, advertised or held until such time as the minimum requirements for adequate plans have been submitted. The Board may postpone any application requiring more information prior to any action being taken.
11. The applicant shall submit one (1) original and eleven (11) copies of the application and any plans, exhibits, and supporting documents.
12. The applicant shall provide electronic files in Portable Document Format (PDF) of all submittals.

I have read the above list of responsibilities, have provided all required information, and such information is current, accurate, and complete to the best of my knowledge.



(Applicant's Signature, date)

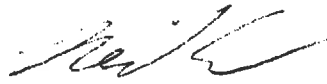
The Applicant is encouraged to consider the following when completing the application:

- ☐ Provide neat and clear plans
- ☐ Use of color or highlights is encouraged in order to identify pertinent areas on plans
- ☐ Applicants are encouraged to review the application with a member of the Planning Department staff prior to submittal
- ☐ All applicants are encouraged to discuss the project with impacted neighbors

STATEMENT OF AUTHORIZATION

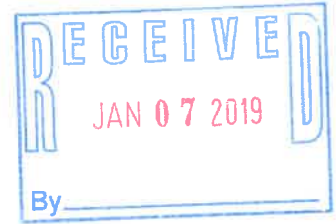
The undersigned, Neil Cohen owner of property at 21-23 Langdon St. Portsmouth, NH, does hereby authorize Bernard W. Pelech, as attorney, to prepare and file any and all applications for the City of Portsmouth Zoning Board of Adjustment and Planning Board, and further authorizes Bernard W. Pelech to represent my interests before the Zoning Board and/or Planning Board for the City of Portsmouth with regard to the property located on Langdon Street.

Dated: January 1, 2019



Neil Cohen

21-23 LAUGDON ST
APPLICANT: Neil Cohen



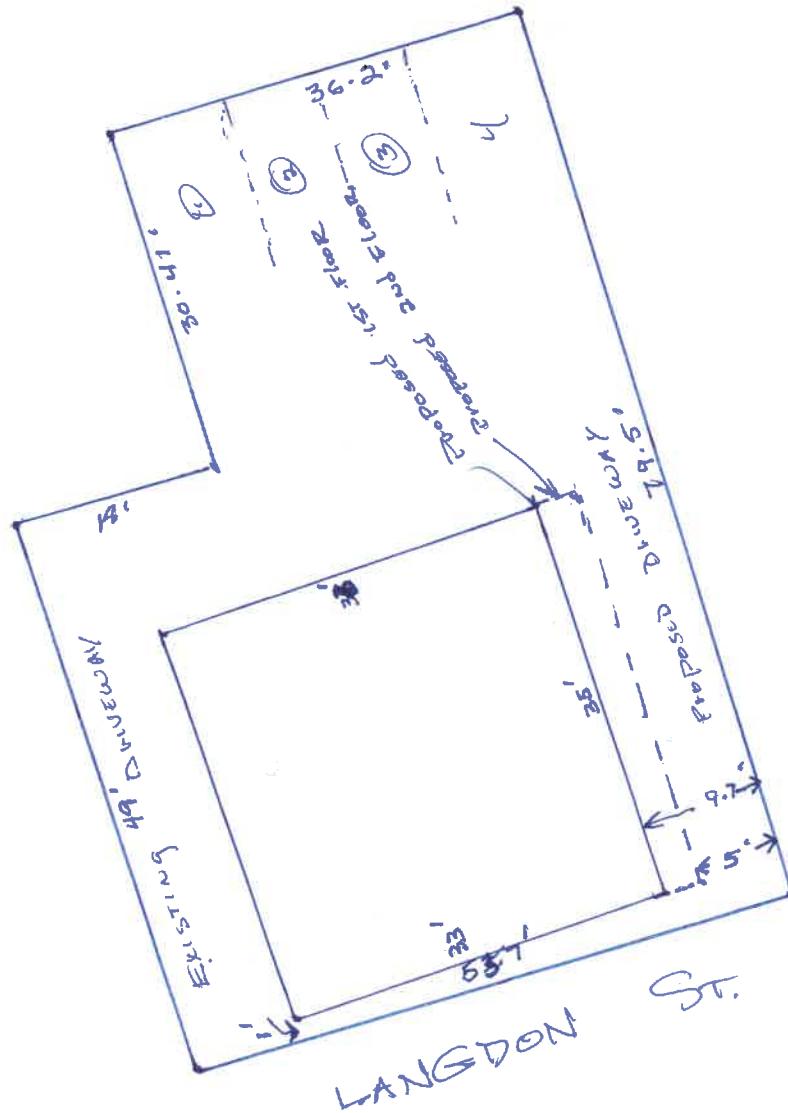
VARIANCES REQUESTED:

- (1) 10.321 TO ALLOW RECONSTRUCTION OF A NON CONFORMING STRUCTURE
- (2) 10.521 TO ALLOW A LOT AREA / DWELLING UNIT OF 1742.5 # WHERE 3500 # IS REQUIRED
- (3) 10.521 TO ALLOW A LOT AREA OF 3485 # WHERE 3,500 # IS REQUIRED
- (4) 10.521 TO ALLOW LOT FRONTAGE OF 55.71 FEET WHERE 20' IS REQUIRED
- (5) 10.521 TO ALLOW BUILDING COVERAGE OF 39.2% WHERE 35% IS THE MAXIMUM ALLOWED
- (6) 10.521 TO ALLOW A FRONT YARD SETBACK OF 0' WHERE 5' IS REQUIRED
- (7) 10.521 TO ALLOW A RIGHT SIDE YARD OF 5' WHERE 10 FEET IS REQUIRED.
- (8) 10.521 A LEFT SIDE SETBACK OF 5.78' WHERE 10' IS REQUIRED

VARIANCE APPLICATION PLAN

VANCES REQUESTED:

- (1) 10.321 RECONSTRUCTION OF A NON CONFORMING STRUCTURE
- (2) 10.521 LOT AREA/DWELLING UNIT OF 1742.5 # WHERE 3,500 # IS REQUIRED
- (3) 10.621 LOT AREA OF 3485 # WHERE 3,500 # IS REQUIRED
- (4) FRONTAGE OF 55.71' WHERE 70' IS REQUIRED
- (5) BUILDING COVERAGE OF 39.17% WHERE 35% IS THE MAXIMUM ALLOWED
- (6) FRONT YARD SETBACK OF 0' WHERE 5' IS REQUIRED
- (7) RIGHT SIDE YARD OF 5' WHERE 10' IS REQUIRED.



MAP 138 LOT 32
21-23 LANGDON ST.
OWNER: NEIL COHEN



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DEC 26 2018

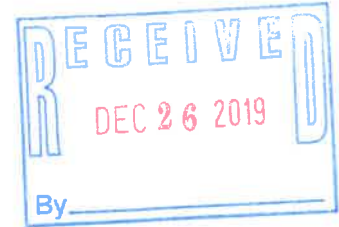
BY: _____

CITY OF PORTSMOUTH

ZONING BOARD OF ADJUSTMENT

**RE: APPLICATION OF NEIL COHEN
21-23 LANGDON STREET
MAP 138 / LOT 32**

APPLICANT'S NARRATIVE



I. THE PROPERTY

21-23 Langdon Street is an existing side-by-side 2 ½ story duplex which was built in 1910. The property consists of a 3,485 square feet, L-shaped lot with 55+/- feet of fronting on Langdon Street. The condition of the two-family structure is such that renovation and gutting, which was originally proposed by the Applicant, is not feasible and demolition (which has been applied for) is the only solution. The property is located in the General Residence C-Zone.

The lot is nonconforming as to frontage, lot size and lot area per dwelling unit.

The structure is non-conforming as to front setback, side setback and lot coverage.

II. THE PROPOSAL

The Applicant proposes to demolish the existing structure and to construct a new two-family structure on virtually the same footprint. The new structure will have a more conforming front setback; and building coverage and the side setback will remain as they now exist..

III. ARGUMENT

The Applicant believes that the five (5) criteria necessary for the Board to grant the required variances are met by the within Application. First and foremost, granting the requested variances will not result in a substantial change to the characteristics of the neighborhood nor will public health, safety and welfare be threatened. In essence, the proposal is to demolish the existing duplex and replace it with a more conforming structure in the approximate same location.

The new structure will be more conforming as to front yard; and building coverage and the right side yard setback will remain the same Because the essential characteristics of the neighborhood will not be substantially altered, and because the public health, safety and welfare will not be threatened, granting the requested variances would be within the spirit and intent of the ordinance and would not be contrary to the public interest.

Granting the requested variances would not result in any diminution in value of surrounding properties. As can be seen from the attached, the new structure and is in keeping with the characteristics of the existing structure as well as those of surrounding properties.

Granting the requested variances would result in substantial justice being done because the hardship upon the owner/applicant were the variances be denied is not outweighed by some benefit to the general public. The proposed structure is certainly in keeping with the characteristics of the neighborhood, is well thought out and attractive and will not in any way deter from the public interest. Thus, to balance the hardship upon the owners were the Application to be denied against a perceived benefit to the general public in denying the variance, it is clear that there is no benefit to the general public in denying the requested variance.


Finally, there is a hardship inherent in the land due to the special conditions of the lot. The lot does not meet the minimum lot size requirements for the District, nor does it meet the frontage requirements. The placement of the existing residence does not conform with setbacks required in today's zoning ordinance. Secondly, there is no fair and substantial relationship between the intent of the ordinance as it is applied to this particular lot. Because of the shape of the lot and the configuration of structures on the lot, the residences existing at 21-23 Langdon Street have adequate light, air and access for emergency vehicles and are situated at a considerable distance from other surrounding residences. The intent of the zoning ordinance in creating setbacks is clearly to provide for adequate light, air and emergency vehicle access and that is accomplished at 21-23 Langdon Street despite the encroachment into the front yard setback. The use is a reasonable use being allowed by the zoning ordinance.

IV. CONCLUSION

In conclusion, it is the Applicant's position that the variances requested meet the five (5) criteria necessary for the Board to grant the variances are met by the within Application and it is respectfully requested that the Application be granted as presented and advertised.

Respectfully submitted,

Dated: December 26, 2018



Bernard W. Pelech, Esq.

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DEC 26 2018

BY: _____

RECEIVED
By _____



DEMOLITION NOTICE + ADDRESS



RIGHT YARD

RECEIVED
DEC 26 2018



REAR YARD



REAR YARD



front YARD



Front setback

DEC 26 2018

By



FRONT ELEVATION



LEFT SIDE YARD

City of Portsmouth, NH

Property

Share Print 21 langdon

Search

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Download Results

21 LANGDON ST #23
COHEN NEIL
0138-0032-0000

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By

21 LANGDON ST #23**Location** 21 LANGDON ST #23**Mblu** 0138/ 0032/ 0000/ /**Acct#** 34189**Owner** COHEN NEIL**PBN****Assessment** \$420,400**Appraisal** \$420,400**PID** 34189**Building Count** 1**Current Value**

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$170,400	\$250,000	\$420,400
Assessment			
Valuation Year	Improvements	Land	Total
2018	\$170,400	\$250,000	\$420,400

Owner of Record**Owner** COHEN NEIL**Sale Price** \$150,000**Co-Owner****Certificate****Address** 21 LANGDON ST
PORTSMOUTH, NH 03801**Book & Page** 5373/2458**Sale Date** 11/02/2012**Instrument** 21**Ownership History**

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
COHEN NEIL	\$150,000		5373/2458	21	11/02/2012
FINK GOLDIE	\$0		2241/1961		

Building Information**Building 1 : Section 1**

Year Built: 1910
Living Area: 2,590
Replacement Cost: \$334,162
Building Percent Good: 51
Replacement Cost Less Depreciation: \$170,400

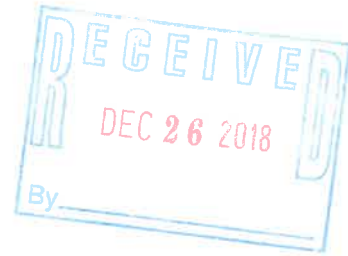
Building Attributes	
Field	Description
Style	Duplex
Model	Residential
Grade:	C
Stories:	2.5
Occupancy	2
Exterior Wall 1	Clapboard
Exterior Wall 2	
Roof Structure:	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Wall 1	Plastered
Interior Wall 2	
Interior Flr 1	Inlaid Sht Gds
Interior Flr 2	Carpet
Heat Fuel	Gas
Heat Type:	Warm Air
AC Type:	None
Total Bedrooms:	6 Bedrooms
Total Bthrms:	2
Total Half Baths:	0

Building Photo

(http://images.vgsi.com/photos2/PortsmouthNHPhotos/\00\02\1

Building Layout

(http://images.vgsi.com/photos2/PortsmouthNHPhotos//Sketches

Building Sub-Areas (sq ft)**Legend**

Total Xtra Fixtrs:	2
Total Rooms:	16
Bath Style:	Avg Quality
Kitchen Style:	Avg Quality
Kitchen Gr	
WB Fireplaces	0
Extra Openings	0
Metal Fireplaces	0
Extra Openings	0

Code	Description	Gross Area	Living Area
BAS	First Floor	1,295	1,295
FUS	Upper Story, Finished	1,295	1,295
FOP	Porch, Open	30	0
UBM	Basement, Unfinished	1,295	0
UHS	Half Story, Unfinished	1,295	0
		5,210	2,590

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 1040
Description TWO FAMILY
Zone GRC
Neighborhood 105
Alt Land Appr No
Category

Land Line Valuation

Size (Acres) 0.08
Frontage
Depth
Assessed Value \$250,000
Appraised Value \$250,000

Outbuildings

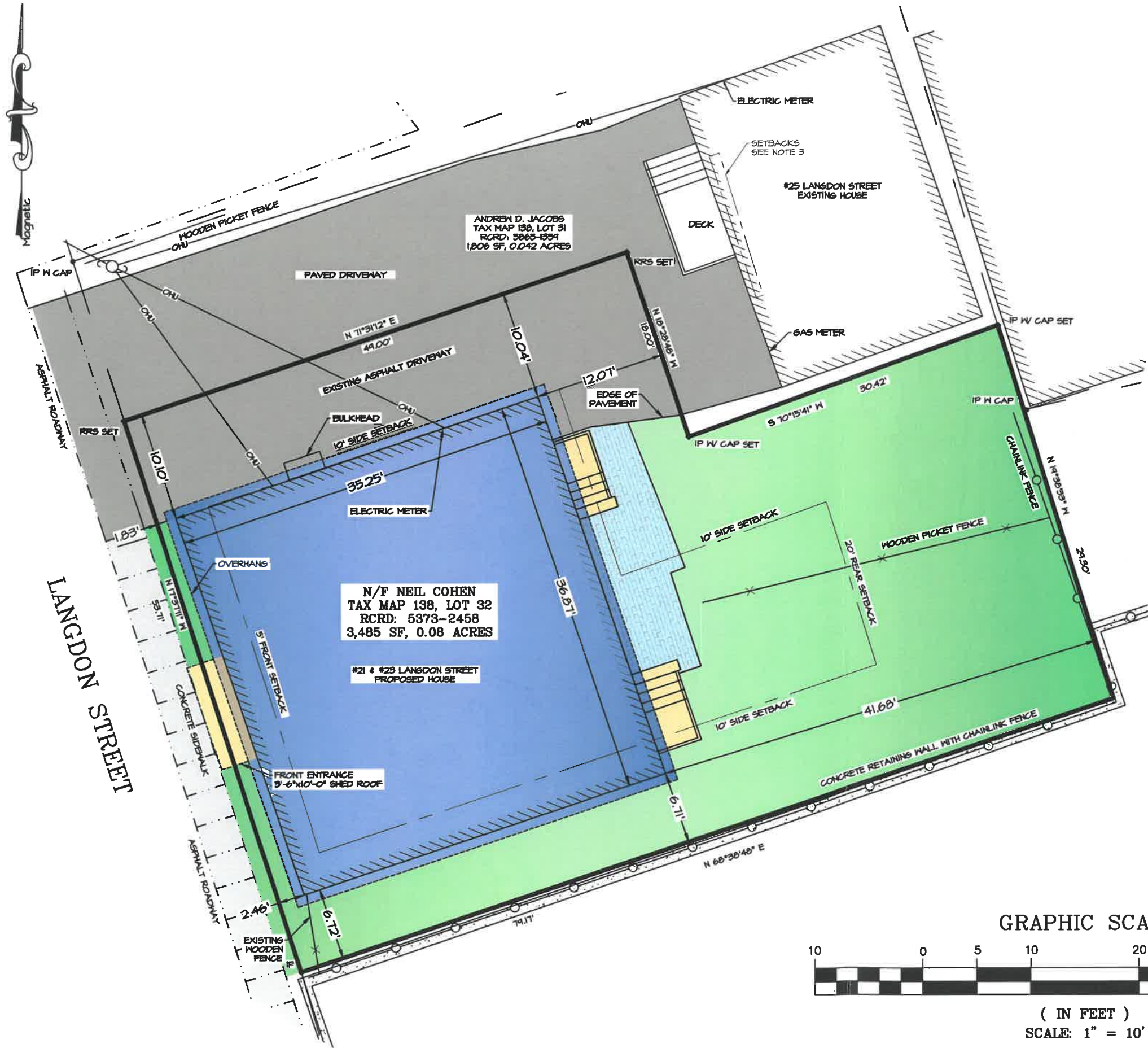
Outbuildings	Legend
No Data for Outbuildings	

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$170,400	\$250,000	\$420,400
2017	\$170,400	\$209,300	\$379,700
2016	\$150,700	\$158,100	\$308,800

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$170,400	\$250,000	\$420,400
2017	\$170,400	\$209,300	\$379,700
2016	\$150,700	\$158,100	\$308,800

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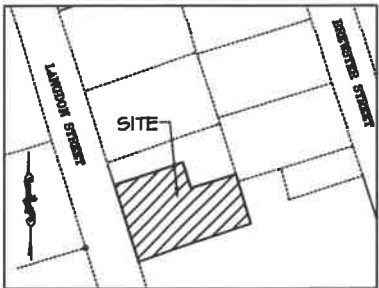


LEGEND

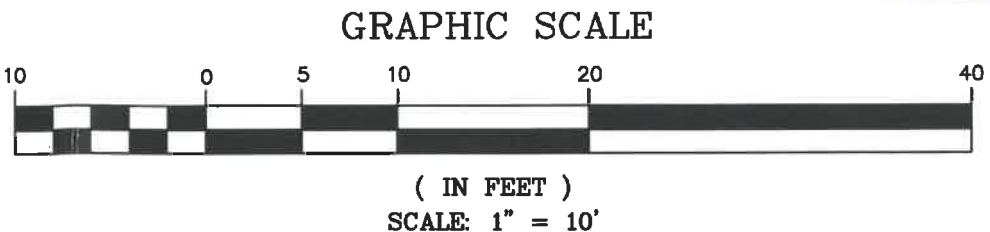
- MONUMENT FOUND
- ⊕ MONUMENT SET UTILITY
- POLE OVERHEAD
- UTILITIES ABUTTING TAX
- 130/46 MAP & LOT

NOTES

- 1) OWNER OF RECORD:
NEIL COHEN
TAX MAP 138, LOT 32
21 LANGDON STREET
PORTSMOUTH, NH 03801
RCRD: 5373-2458
AREA: 3,485 S.F., 0.08 ACRES
- 2) ZONING REGULATIONS
ZONE: GENERAL RESIDENCE ZONE C (GRG):
MINIMUM LOT AREA.....3,500 SF
MINIMUM FRONTAGE.....10 FT
MINIMUM DEPTH.....50 FT
SETBACKS:
FRONT.....5 FT
SIDE.....10 FT
REAR.....20 FT
MAXIMUM BUILDING HEIGHT.....35 FT
MAXIMUM BUILDING COVERAGE.....35%
MINIMUM OPEN SPACE.....20%
- 3) BUILDING HEIGHT.....25.54' FT
- BUILDING COVERAGE
BUILDING.....1,276 SF
STAIRS.....58 SF
PORCHES.....51 SF
BUILDING COVERAGE = 1,385 SF = 39.7%
- OPEN SPACE
BUILDING COVERAGE.....1,385 SF
BUILDING OVERHANG.....158 SF
REAR PATIO.....138 SF
EXISTING DRIVEWAY.....534 SF
TOTAL.....2,215 SF
OPEN SPACE = 3,485 - 2,215 = 1,270 SF = 36.4%



LOCUS PLAN
N.T.S.



2	1/4/2019	ZBA SUBMITTAL
1	5/30/2018	ZBA SUBMITTAL
ISS.	DATE	DESCRIPTION OF ISSUE
SCALE 1" = 10'		
CHECKED		
DRAWN A.L.G.		
CHECKED A.R.		
ROSS ENGINEERING Civil/Structural Engineering & Surveying 909 Idington St. Portsmouth, NH 03801 (603) 433-7560		
CLIENT NEIL COHEN 21 LANGDON STREET PORTSMOUTH, N.H. 03801		
TITLE EXISTING CONDITIONS FOR NEIL COHEN 21 LANGDON ST. #23 PORTSMOUTH, NH TAX MAP 138, LOT 32		
JOB NUMBER	DWG. NO.	ISSUE
17-058	1 OF 2	2





N/F MICHAEL S. VENN
TAX MAP 138, LOT 30, UNIT 1
RCRD: 4797-842

N/F KATELYN ELIZABETH KHOKA
TAX MAP 138, LOT 30, UNIT 2
RCRD: 5540-332

ANDREW D. JACOBS
TAX MAP 138, LOT 31
RCRD: 5865-1334
1,806 SF, 0.042 ACRES

N/F NEIL COHEN
TAX MAP 138, LOT 32
RCRD: 5373-2458
3,485 SF, 0.08 ACRES

#21 & #23 LANGDON STREET
PROPOSED HOUSE

N/F WILLIAM SPRECHER HURD III
TAX MAP 138, LOT 35, UNIT 1
RCRD: 5746-480

N/F THOMAS R. HUDSON
& KELLY L. HURD
TAX MAP 138, LOT 3, UNIT 2
RCRD: 5741-1535

NOTES

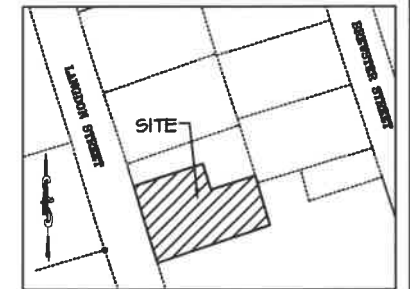
1) OWNER OF RECORD:
NEIL COHEN
TAX MAP 138, LOT 32
21 LANGDON STREET
PORTSMOUTH, NH 03801
RCRD: 5373-2458
AREA: 3,485 S.F., 0.08 ACRES

2) ZONING REGULATIONS
ZONE: GENERAL RESIDENCE ZONE C (GRC):
MINIMUM LOT AREA.....3,500 SF
MINIMUM FRONTAGE.....70 FT
MINIMUM DEPTH.....50 FT
SETBACKS:
FRONT.....5 FT
SIDE.....10 FT
REAR.....20 FT
MAXIMUM BUILDING HEIGHT.....35 FT
MAXIMUM BUILDING COVERAGE.....35%
MINIMUM OPEN SPACE.....20%

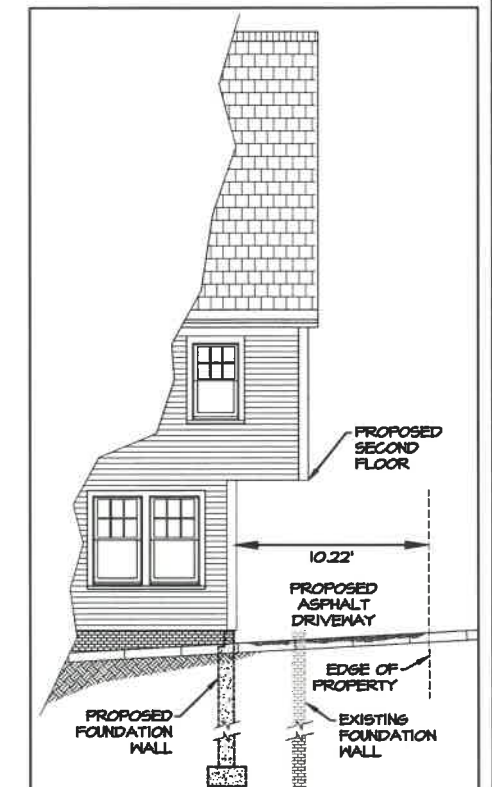
3) BUILDING HEIGHT.....34.50' FT

BUILDING COVERAGE
BUILDING.....1,276 SF
FRONT STAIRS.....52 SF
REAR STAIRS.....32 SF
BUILDING COVERAGE = 1,386 SF = 39.7%

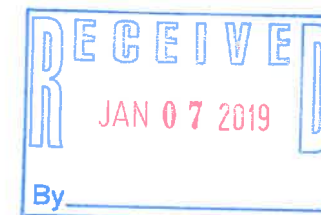
OPEN SPACE
BUILDING COVERAGE.....1,386 SF
BUILDING OVERHANG.....122 SF
REAR PATIO.....134 SF
EXISTING DRIVEWAY.....534 SF
PROPOSED DRIVEWAY.....250 SF
TOTAL.....2,441 SF
OPEN SPACE = 3,485 - 2,441 = 1,017 SF = 30%



LOCUS PLAN
N.T.S.



SECTION A-A
Scale: 1"=20'



LEGEND

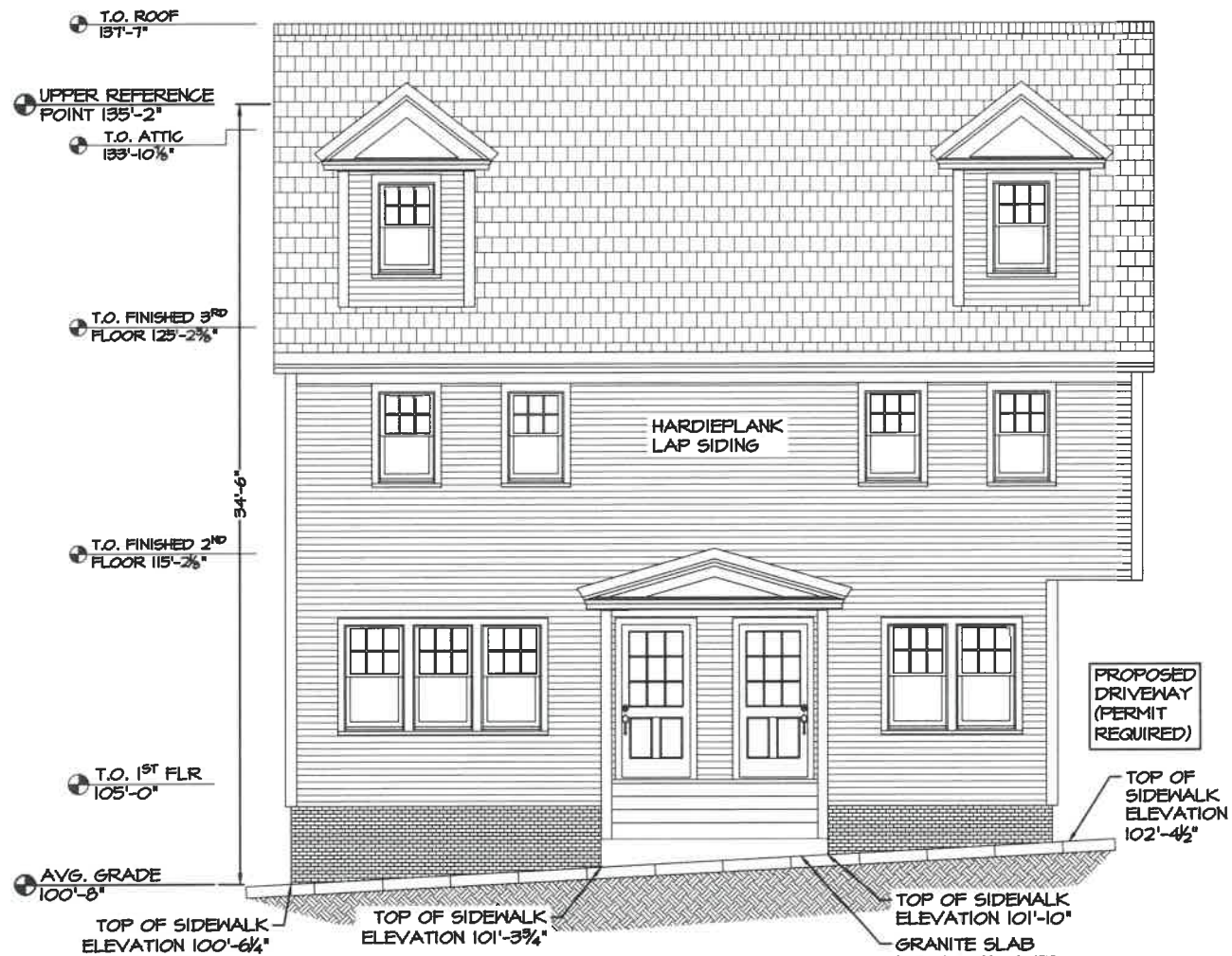
- MONUMENT FOUND
- MONUMENT SET UTILITY
- POLE OVERHEAD
- UTILITIES ABUTTING TAX MAP & LOT



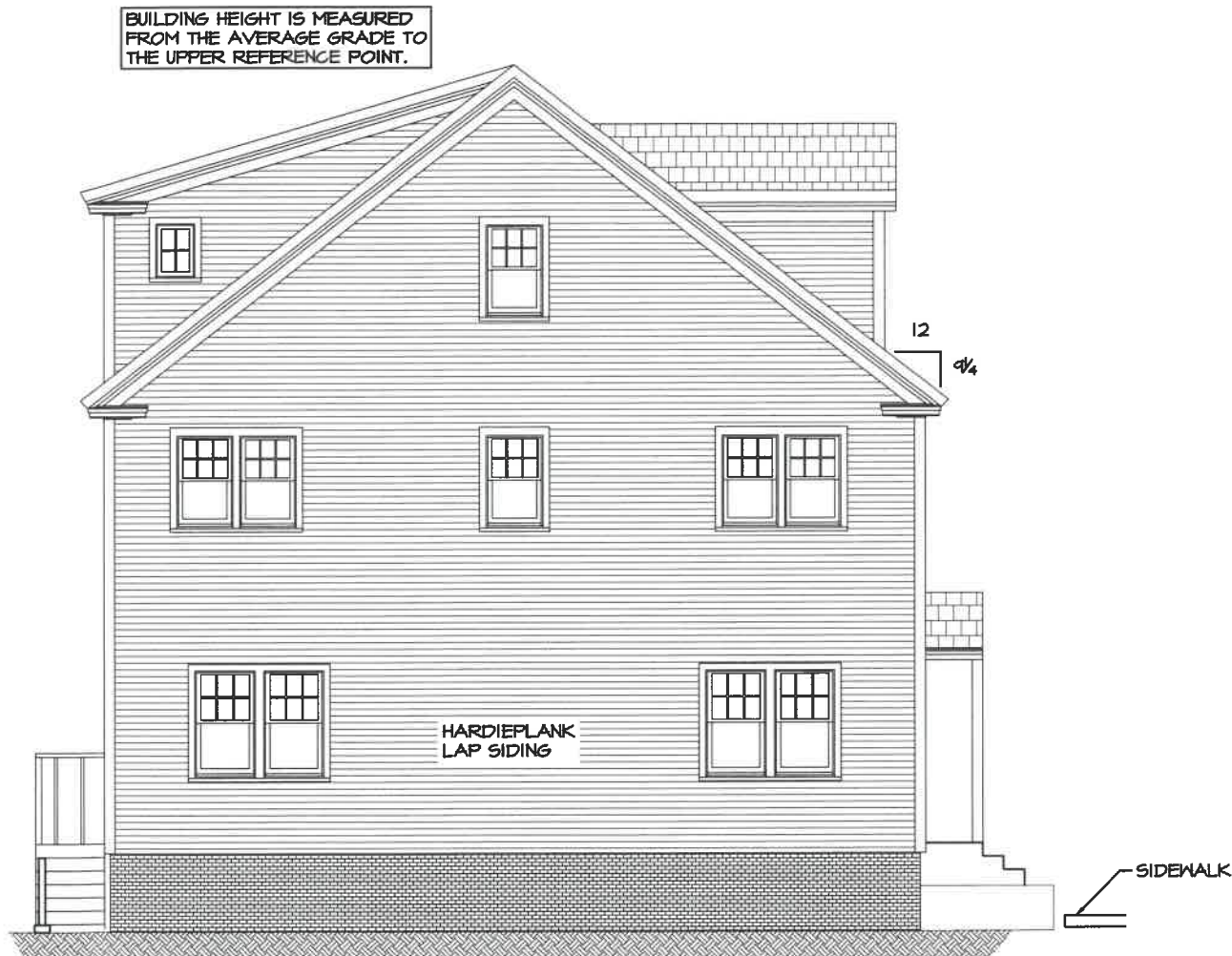
(IN FEET)
SCALE: 1" = 10'



2	1/4/2019	ZBA SUBMITTAL
1	5/30/2018	ZBA SUBMITTAL
ISS.	DATE	DESCRIPTION OF ISSUE
SCALE	1" = 10'	
CHECKED	A.L.G.	
DRAWN	A.L.G.	
CHECKED	A.R.	
CLIENT	NEIL COHEN 21 LANGDON STREET PORTSMOUTH, NH. 03801	
TITLE	SITE PLAN FOR NEIL COHEN 21 LANGDON ST. #23 PORTSMOUTH, NH TAX MAP 138, LOT 32	
JOB NUMBER	17-058	DATE NO. 2 OF 2
ISSUE		2



FRONT ELEVATION



NORTH ELEVATION

RECEIVED
DEC 26 2019
By _____

REVISION HISTORY			
REV	DATE	DESCRIPTION	CHK
1	5/30/2018	ZBA SUBMITTAL	
2	1/4/2019	ZBA SUBMITTAL	

ROSS ENGINEERING
Civil/Structural Engineering & Surveying
909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

PROPOSED ELEVATIONS
COHEN RESIDENCE
21 LANGDON STREET
PORTSMOUTH NEW HAMPSHIRE

PREPARED FOR:
NEIL COHEN
21 LANGDON STREET
PORTSMOUTH, NH 03801

DESIGNED BY:
AG 5/24/2018

DRAFTED BY:
AG 5/24/2018

CHECKED BY:
AR 5/30/2018

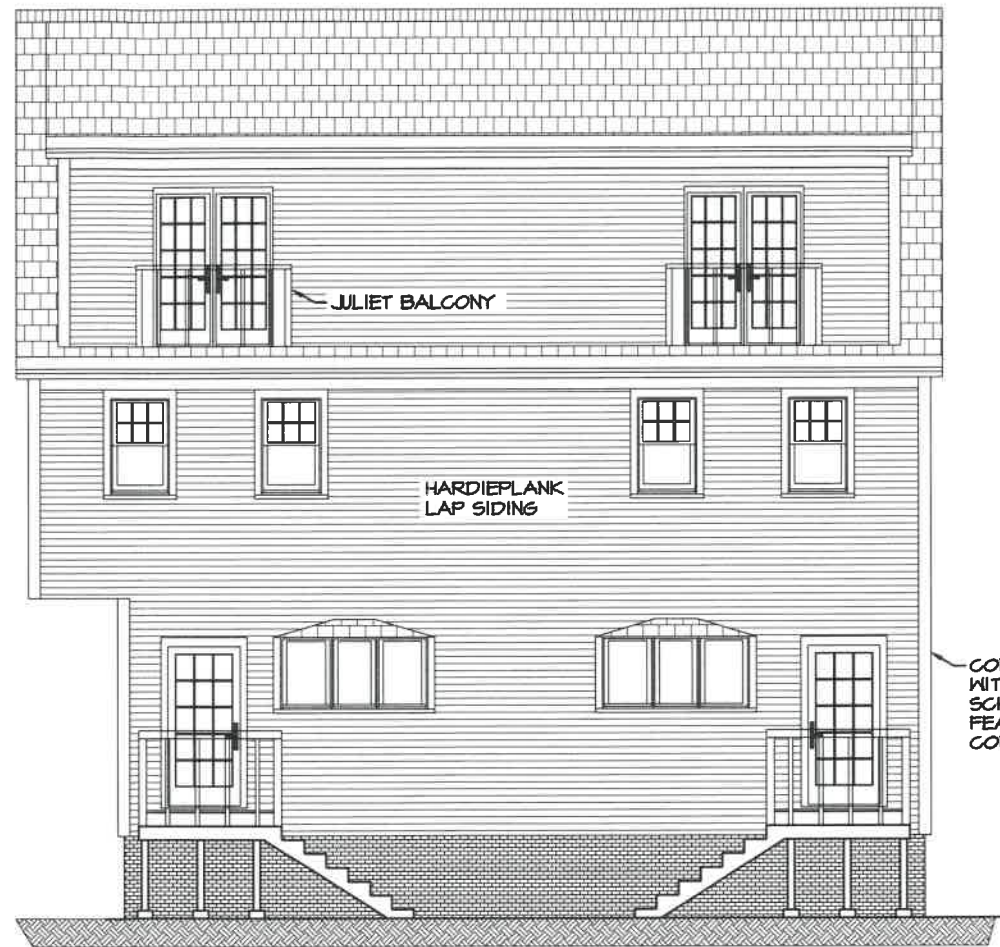


JOB #: 17-058
SCALE: 1/8"=1'-0"
SHEET: 1 OF 2
DRAWING:

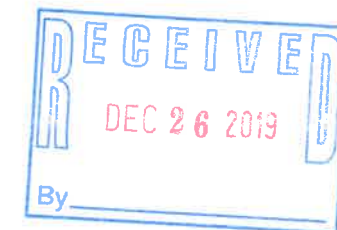
A1



SOUTH ELEVATION



REAR ELEVATION



REVISION HISTORY			
REV	DATE	DESCRIPTION	CHK
1	5/30/2018	ZBA SUBMITTAL	
2	1/4/2019	ZBA SUBMITTAL	

**ROSS
ENGINEERING**
Civil/Structural Engineering
& Surveying
909 Islington St
Portsmouth, NH 03801
(603) 433-7560

PROPOSED ELEVATIONS
COHEN RESIDENCE
21 LANGDON STREET
PORTSMOUTH
NEW HAMPSHIRE

PREPARED FOR:
NEIL COHEN
21 LANGDON STREET
PORTSMOUTH, NH 03801

DESIGNED BY:
AG 5/24/2018

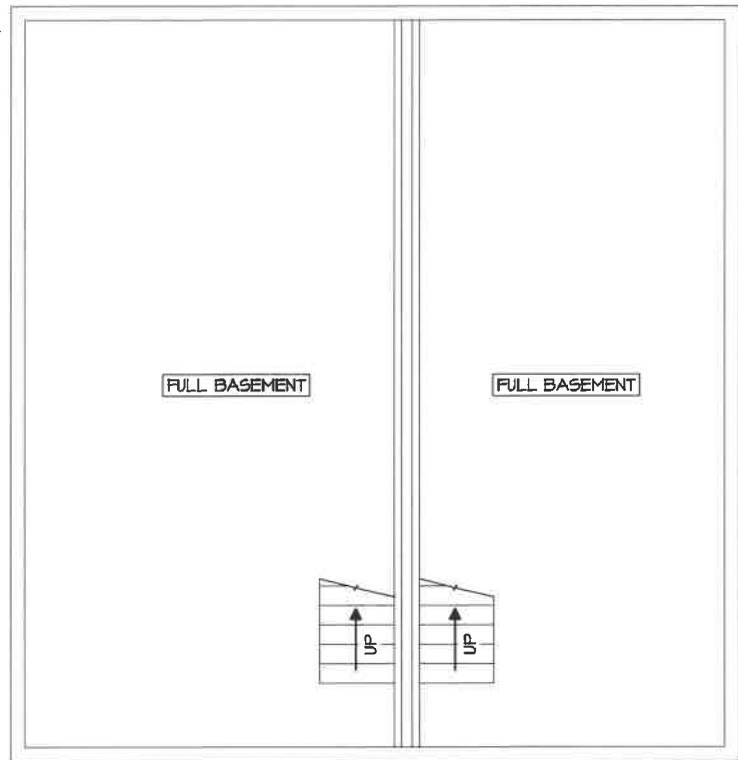
DRAFTED BY:
AG 5/24/2018

CHECKED BY:
AR 5/30/2018



JOB #: 17-058
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SHEET: 2 OF 2
DRAWING:

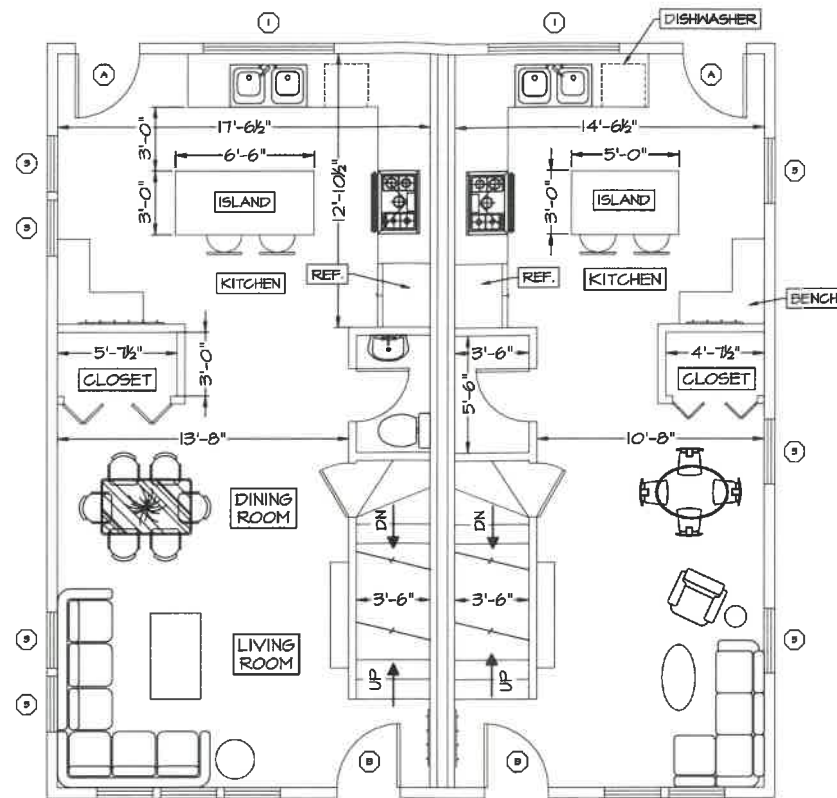
A2



LANGDON STREET

PROPOSED BASEMENT PLAN

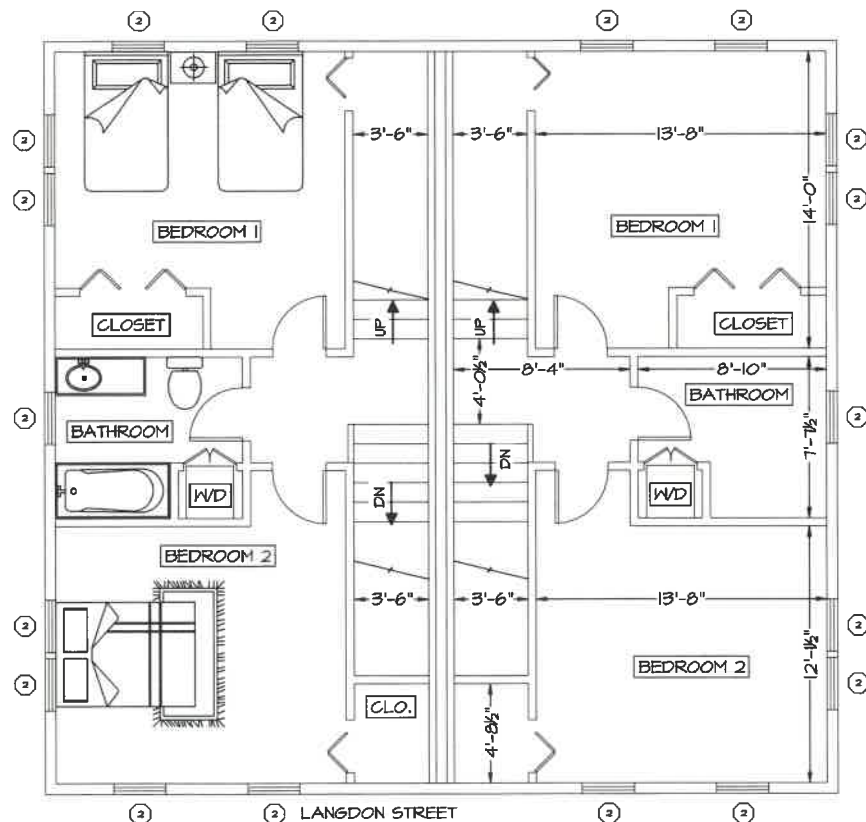
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LANGDON STREET

PROPOSED FIRST FLOOR PLAN

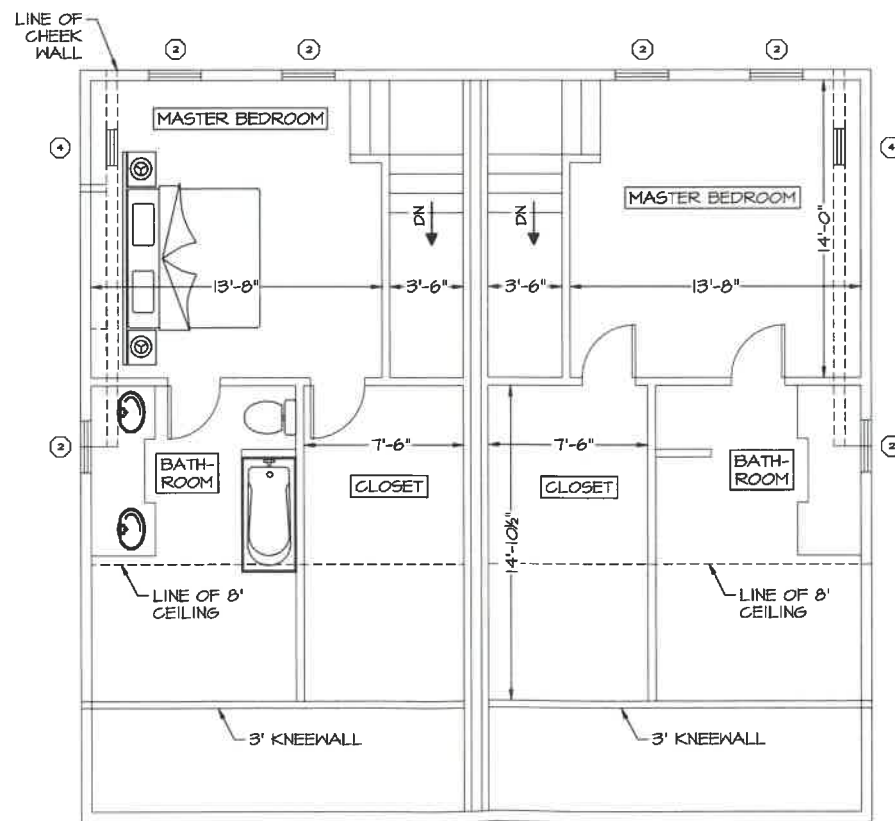
Scale: 1/4"=1'-0"



LANGDON STREET

PROPOSED SECOND FLOOR PLAN

Scale: 1/4"=1'-0"



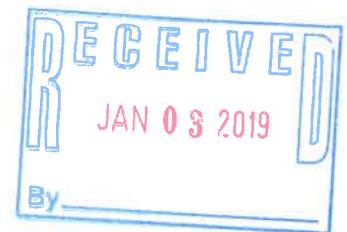
LANGDON STREET

PROPOSED THIRD FLOOR PLAN

Scale: 1/4"=1'-0"

DOOR SCHEDULE					
LABEL	QTY	DIMENSIONS R.O.	DESCRIPTION	MAUFACT.	COMMENTS
A	2	3'-1"x6'-8"	FWH3168(AR)	ANDERSEN	REAR DOOR
B	2	3'-0"x6'-8"	SAPELE MAHOGANY	REEB	FRONT DOOR

WINDOW SCHEDULE						
LABEL	QTY	DIMENSIONS R.O.	DESCRIPTION	MAUFACT.	COMMENTS	
1	2	6'-15/8"x3'-2"	C33 BOW	ANDERSEN	KITCHEN	KITCHEN
2	24	2'-6 1/8"x4'-0 1/8"	DOUBLE HUNG TW24310	ANDERSEN	2ND/3RD FLR	2ND/3RD FLR
3	1	2'-8 1/8"x4'-8 3/8"	DOUBLE HUNG TW2646	ANDERSEN	1ST FLR	1ST FLR
4	2	1'-4"x2'-4 1/8"	CASEMENT CN125	ANDERSEN	3RD FLR	3RD FLR
5	3	1'-4"x3'-0 1/2"	AWNING WINDOW AN31	ANDERSEN		1ST FLR



REVISION HISTORY			
REV	DATE	DESCRIPTION	CHK
1	4/10/2018	FOR PERMITS	

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Civil/Structural Engineering & Surveying
909 Islington St.
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(603) 433-7560

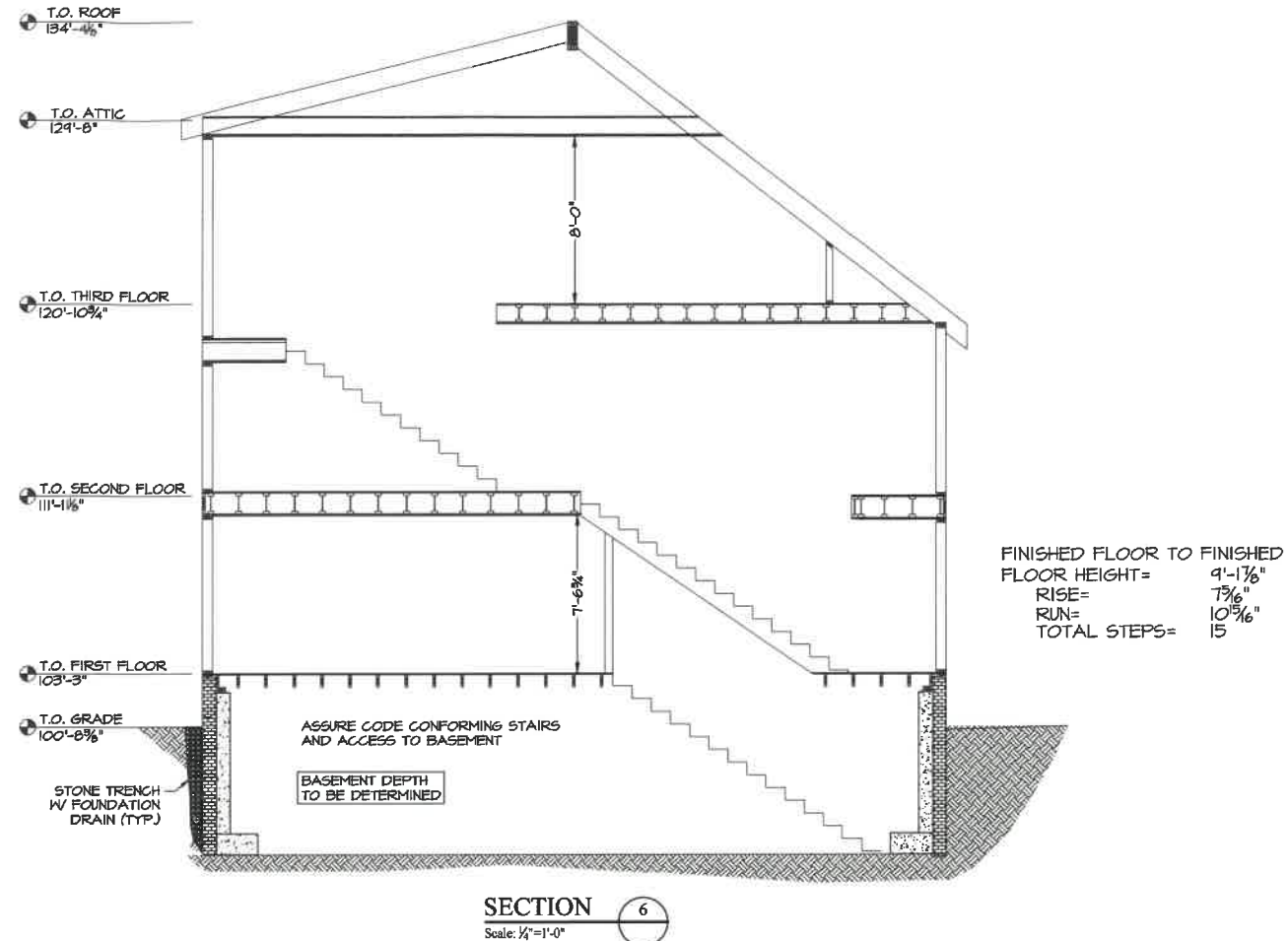
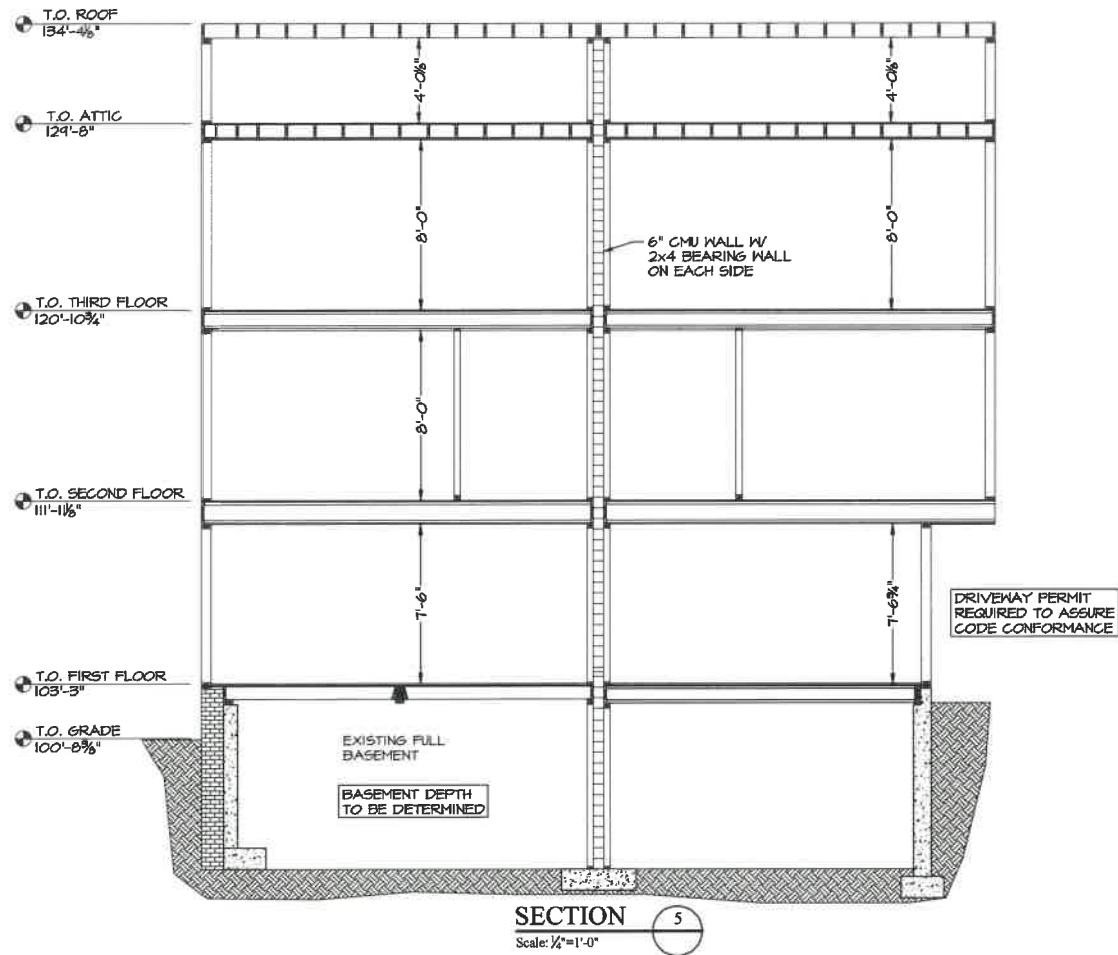
PROPOSED FLOOR PLANS
COHEN RESIDENCE
21 LANGDON STREET
PORTSMOUTH NEW HAMPSHIRE

PREPARED FOR:
NEIL COHEN
21 LANGDON STREET
PORTSMOUTH, NH 03801
DESIGNED BY:
DC 11/1/2017
DRAFTED BY:
DC 3/21/2018
CHECKED BY:
AR 3/21/2018



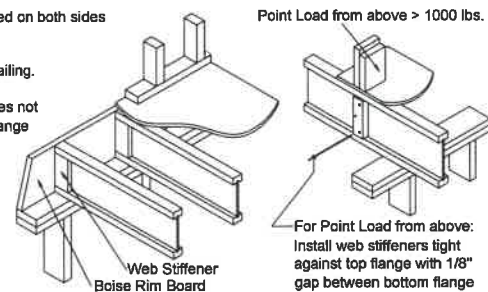
JOB #: 17-058
SCALE: AS NOTED
SHEET: 2 OF 6
DRAWING:

A2



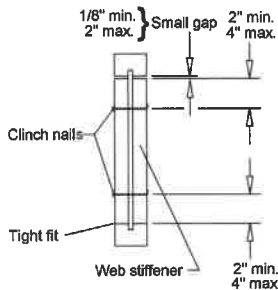
Stiffeners are required on both sides of the web when:

- Hangers with side nailing.
- Any hanger with sides not containing the top flange of the joist.
- Web stiffener nailed as shown on table



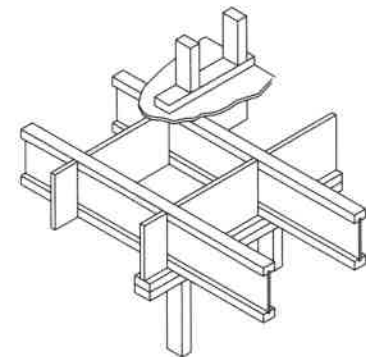
Web Stiffener Fastener Schedule			
Joist Series	Bearing Location		
	Depth	End	Intermediate
AJS 20	9-1/2"	3-16d	3-16d
BCI 90s 2.0	11-7/8"	3-16d	3-16d
	14"	5-16d	5-16d

Web Stiffener Schedule	
Joist Series	Stiffener Material
AJS 20	1" Structural Panel Both Sides
BCI 90s 2.0	2x4 SPF Both Sides

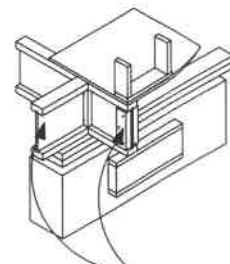


Note: Web Stiffeners Required in all Joist that Sit Directly Below a Bearing Wall

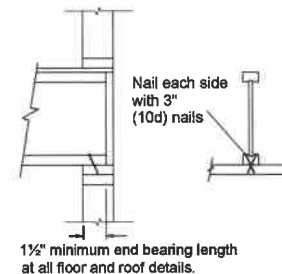
WEB STIFFENER DETAIL
Scale: NTS



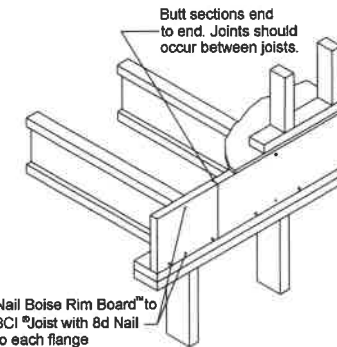
SOLID BLOCKING DETAIL
Scale: NTS



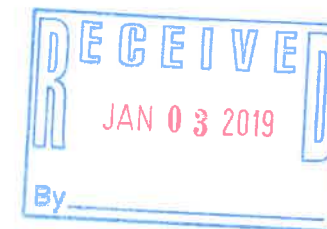
FLOOR JOIST CANTILEVER DETAIL
Scale: NTS



I-JOIST TO WALL DETAIL
Scale: NTS



RIM BOARD TO I-JOIST DETAIL
Scale: NTS



REVISION HISTORY			
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ROSS ENGINEERING
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909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

PROPOSED CROSS SECTIONS
COHEN RESIDENCE
21 LANGDON STREET
PORTSMOUTH NEW HAMPSHIRE

PREPARED FOR:
NEIL COHEN
21 LANGDON STREET
PORTSMOUTH, NH 03801
DESIGNED BY:
DC 11/1/2017
DRAFTED BY:
DC 3/21/2018
CHECKED BY:
AR 3/21/2018



JOB #: 17-058
SCALE: AS NOTED
SHEET: 5 OF 6
DRAWING:

S3

GENERAL NOTES:

SCOPE OF ENGINEERING SERVICE:

ROSS ENGINEERING IS ONLY RESPONSIBLE FOR THE STRUCTURAL DESIGN AND ENGINEERING AS SHOWN ON THESE DRAWINGS.

THE INTENT OF THIS DRAWING SET IS TO DEPICT THE STRUCTURAL MEMBERS REQUIRED.

GENERAL:

1. ALL WORK SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS:

- "INTERNATIONAL BUILDING CODE" - 2009 EDITION.
- "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" - ASCE 7-10.
- "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" - ACI 301-05.
- "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" - ACI 318-11.
- "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - AF&PA NDS-2005.

2. ALL CONTRACTORS SHALL VERIFY AND COORDINATE ALL DIMENSIONS AND DETAILS RELATED TO THIS PROJECT. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED WORK. ANY CHANGES OR SUBSTITUTIONS OF MATERIALS OR DETAILS FROM THOSE INDICATED ON THE CONTRACT DOCUMENTS MAY BE MADE ONLY WITH PRIOR APPROVAL OF THE PROJECT ENGINEER.

3. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, COORDINATION OF OTHER TRADES AND THE TECHNIQUES TO PRODUCE A SOUND AND QUALITY PROJECT. SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.

4. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ALL JOB SAFETY DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO SHEETINGS, SHORING, AND GUYING STRUCTURES, BARRIERS AND SIGNAGE.

5. ALL DETAILS AND NOTES SHOWN ON THE CONTRACT DOCUMENTS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS EXCEPT WHERE SPECIFICALLY REQUIRED OTHERWISE.

6. NO MAIN FRAMING OR STRUCTURAL MEMBERS ARE TO BE MODIFIED, ALTERED, OR CUT WITHOUT THE APPROVAL OF THE PROJECT ENGINEER.

STRUCTURAL LOADS:

1. LIVE LOADS
- PER INTERNATIONAL BUILDING CODE - 2009 EDITION
 - LIVING SPACE.....40 PSF
 - ATTIC SPACE (WITHOUT STORAGE).....10 PSF

2. SNOW LOADS
- PER INTERNATIONAL BUILDING CODE - 2009 EDITION AND MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES - ASCE 7-10
 - EXPOSURE.....B
 - GROUND SNOW LOAD.....50 PSF
 - FLAT ROOF SNOW LOAD.....30.5 PSF
 - (ADDITIONAL ALLOWANCES FOR DRIFTING AND SLIDING SNOW)

3. WIND LOADS
- PER INTERNATIONAL BUILDING CODE - 2009 EDITION AND MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES - ASCE 7-10
 - OCCUPANCY CATEGORY.....2
 - STRUCTURE TYPE.....RIGID
 - BASIC WIND SPEED.....101 MPH
 - EXPOSURE.....C
 - INTERNAL PRESSURE COEFFICIENT.....SCPI 1/-10
 - GUST EFFECT FACTOR.....0.85
 - TOPOGRAPHY FACTOR.....1.0

FOUNDATIONS:

1. FOUNDATION DESIGN IS BASED ON AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF. VARYING CONDITIONS MUST BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER PRIOR TO WORK BEING CARRIED OUT. IT IS RECOMMENDED THAT THE OWNER HIRE A CONSULTANT TO PERFORM SOIL BORINGS AND ASSOCIATED TESTING TO VERIFY THE ASSUMED VALUES. THE CONTRACTOR OR OWNER SHALL ASSUME ALL RESPONSIBILITY IF A GEOTECHNICAL ENGINEER IS NOT RETAINED.

2. FOUNDATIONS SHALL BE FOUNDED ON NATURALLY UNDISTURBED SOIL OR CONTROLLED STRUCTURAL FILL HAVING A NET ALLOWABLE BEARING CAPACITY OF 2000 PSF.

3. MAINTAIN CONTINUOUS CONTROL OF SURFACE AND SUBSURFACE WATER DURING CONSTRUCTION SUCH THAT FOUNDATION WORK IS IN DRY AND UNDISTURBED SUB-GRADE MATERIAL, AS APPLICABLE.

4. ALL FOOTINGS EXPOSED TO FROST TO BE PLACED AT A MINIMUM DEPTH OF 4'-0" BELOW FINISH GRADE. ANY DISCREPANCIES OR ADJUSTMENTS TO THE FOOTING ELEVATIONS TO BE BROUGHT TO THE PROJECT ENGINEER PRIOR TO PLACEMENT OF CONCRETE.

5. ALL FOOTINGS SHALL BE CENTERED UNDER SUPPORTED STRUCTURAL MEMBERS UNLESS OTHERWISE NOTED ON THE DRAWINGS.

6. BACKFILL THE EXCAVATION WITH APPROVED GRANULAR MATERIAL PLACED IN 6 INCH LIFTS AND COMPACTED TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT, AS DEFINED BY ASTM D1557, METHOD D AFTER BOTTOM OF EXCAVATION HAS BEEN APPROVED BY THE PROJECT ENGINEER.

7. BACKFILL SHALL BE PLACED TO EQUAL ELEVATIONS ON BOTH SIDES OF FOUNDATION WALLS. WHERE BACKFILL IS ON ONE SIDE ONLY, WORK SHALL BE SHORED OR HAVE PERMANENT ADJACENT CONSTRUCTION IN PLACE BEFORE BACKFILLING.

CONCRETE NOTES:

1. CONCRETE WORK SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS:
- "INTERNATIONAL BUILDING CODE" - 2009 EDITION.
 - "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" - ACI 301-05.
 - "COLD WEATHER CONCRETING" - ACI-306.
 - "DETAILING REINFORCING STEEL" - ACI 315-05.
 - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" - ACI 318-11.
 - "BUILDING CODE REQUIREMENTS FOR PLAIN CONCRETE" - ACI 322-05.
 - "FORMWORK" - ACI 347-05.

2. COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 4000 PSI AFTER 28 DAYS. WITH A SLUMP SHALL OF 4" TO 6" AND IN ACCORDANCE WITH ASTM C143.

3. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60. EXCEPT TIES AND STIRRUPS MAY BE GRADE 40. WELDED WIRE FABRIC (WUF) SHALL BE SHEETS ONLY, IN ACCORDANCE WITH ASTM A185. LAP TWO SQUARES AT ALL JOINTS AND TIE AT 3'-0" ON CENTER.

4. CEMENT MIXTURE FOR CONCRETE SHALL CONTAIN TYPE II CEMENT CONFORMING WITH ASTM-C 150. THE WATER-CEMENT RATIO SHALL NOT EXCEED 0.45.

5. AGGREGATE SHALL BE SOUND AND CONFORM TO THE PROVISIONS OF ASTM C33. COARSE AGGREGATE SIZE SHALL NOT EXCEED 3/4". (NO. 67)

6. PLACING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 304-05 AND SHALL BE A CONTINUOUS OPERATION AVOIDING ANY HORIZONTAL JOINTS. FORMWORK SHALL BE SMOOTH PLYWOOD FORMS FOR EXPOSED SLABS OR VERTICAL SURFACES. BOARD FORMS FOR FOOTINGS OR UNEXPOSED CONCRETE SURFACES. NO EARTH FORMS SHALL BE PERMITTED. ALL CONCRETE SHALL BE VIBRATED.

CONCRETE (CONTINUED):

7. PLACE REINFORCING USING STANDARD BAR SUPPORTS TO PROVIDE PROPER CLEARANCE AND PREVENT DISPLACEMENT DURING CONCRETE OPERATIONS. LAP CONTINUOUS BARS 40 DIAMETERS.

8. REINFORCING BARS SHALL BE PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE CRSI "RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS".

9. PROPERLY BRACE AND SHORE FORMWORK TO MAINTAIN ALIGNMENT AND TOLERANCES IN ACCORDANCE WITH ACI 347-05.

10. PROVIDE TWO #5 BARS EACH SIDE OF ALL OPENINGS IN WALLS AND SLABS. BARS TO EXTEND 24" BEYOND EDGE OF OPENINGS. (FOR SIZE AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS).

11. MINIMUM CONCRETE COVER REQUIREMENTS OVER REINFORCING STEEL ARE AS FOLLOWS:

- FORMED CONCRETE EXPOSED TO EARTH, WEATHER, OR WATER - 2"
- UNFORMED CONCRETE PLACED AGAINST THE EARTH - 3"
- UNFORMED CONCRETE PLACED AGAINST VAPOR BARRIER - 2"
- SLABS ON GRADE - 1" FROM TOP

12. DETAILS NOT SHOWN ON DRAWINGS SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL (ACI 315-05).

13. CONTRACTOR TO NOTIFY THE OWNER'S ENGINEER 48 HOURS IN ADVANCE OF CONCRETE PLACEMENT SO THAT THE FORMWORK AND REINFORCING MAY BE INSPECTED PRIOR TO BEING COVERED.

14. CONSULT PROJECT OWNER FOR SURFACE FINISHES REQUIRED FOR CONCRETE SLAB.

15. UNDERSLAB VAPOR BARRIER SHALL BE AS MANUFACTURED BY STEGO INDUSTRIES OR EQUAL CONSISTING OF 10 MIL STEGO MEM VAPOR BARRIER SEAMS SHALL BE OVERLAPPED A MINIMUM OF 6" AND TAPED WITH STEGO VAPOR BARRIER TAPE OR EQUAL AS REQ'D.

16. QUALITY CONTROL SPECIFICATIONS ARE AS FOLLOWS:

- CONTRACTOR SHALL MAKE PROVISIONS TO HAVE FOUR CYLINDERS CAST FOR EACH 50 CYCLES OR FOR ANY ONE DAY'S OPERATION.
- TESTING LABORATORY SHALL BE RESPONSIBLE FOR MAKING AND CURING SPECIMENS IN CONFORMANCE TO ASTM C31 AND TESTING SPECIMENS IN ACCORDANCE WITH ASTM C24.
- ALL TESTING ASSOCIATED WITH CONCRETE SHALL BE IN ACCORDANCE WITH CHAPTER 11 OF "INTERNATIONAL BUILDING CODE" - 2009 EDITION.
- THE COSTS OF ALL TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE OWNER.

WOOD FRAMING:

1. ALL WOOD FRAMING SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS:
- "INTERNATIONAL BUILDING CODE" - 2009 EDITION
 - "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - AF&PA NDS-2005

2. ALL FRAMING MEMBERS SHALL BE NO. 1 / NO. 2 OR BETTER SPRUCE-PINE-FIR WITH A MAXIMUM MOISTURE CONTENT OF 19% UNLESS NOTED OTHERWISE.

- BASE DESIGN VALUES:

F_b=875 (1,000 REP) PSI, F_v=10 PSI, E=1,400 KSI

3. ALL LUMBER AND PLYWOOD SHALL BE GRADE-STAMPED BY THE APPROPRIATE MANUFACTURER'S ASSOCIATION FOR THE APPROPRIATE USE.

- ROOF: 1/2" SQUARE EDGE PLYWOOD W/ FRAMING CLIPS

- FLOORS: 2 3/4" TONGUE & GROOVE PLYWOOD

- WALLS: 5/8" PLYWOOD

4. ROOF AND WALL SHEATHING SHALL COMPLY WITH THE FOLLOWING:

- APA RATED SHEATHING, EXPOSURE 1 OR 2
- ROOF SHEATHING SHALL HAVE A 40/20 SPAN RATING
- ROOF SHEATHING SHALL HAVE (1) PANEL EDGE CLIP BETWEEN EACH SUPPORT
- A 1/8" EXPANSION GAP SHALL BE LEFT BETWEEN ALL PANELS AS REQUIRED BY APA
- SHEETS SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTING MEMBERS

5. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, OR EARTH SHALL BE PRESSURE TREATED (PT) WITH A CCA-C 0.40 PROCESS.

6. ALL FRAMING SHALL BE PLUMB, TRUE, AND ADEQUATELY BRACED SUCH THAT THE STRUCTURE IS RIGID AND BEARS FULLY WITHOUT THE USE OF SHIMS.

7. SPIKE TOGETHER ALL FRAMING MEMBERS WHICH ARE BUILT UP WITH 16d NAILS AT 16" O.C. MAX UNLESS NOTED OTHERWISE. PROVIDE PLYWOOD FILLERS BETWEEN 2x MEMBERS TO MATCH WALL THICKNESS.

8. PROVIDE A MINIMUM OF TWO 2x STUDS AT THE END OF ALL BUILT-UP 2x BEAMS AND LVL BEAMS, UNLESS NOTED OTHERWISE.

9. CORNERS OF EXTERIOR WALLS SHALL HAVE A MINIMUM OF (3) 2x STUDS.

10. PROVIDE SOLID BLOCKING UNDER ALL CONCENTRATED LOADS. PROVIDE CONTINUITY TO TOP OF FOUNDATION WALL OR FOOTING.

11. PROVIDE A DOUBLE TOP PLATE FOR ALL EXTERIOR WALLS W/ SPLICES STAGGERED BY 4'-0" MIN.

12. NON-STRUCTURAL INTERIOR WALLS SHALL BE CONSTRUCTED W/ 2x4 STUDS.

WOOD CONTINUED:

13. ENGINEERED LUMBER PRODUCTS SHALL BE MANUFACTURED BY BOISE CASCADE OR APPROVED EQUAL, INCLUDING ALL I-JOISTS AND LVL's. ALL BOISE CASCADE PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS AND STANDARD DETAILS AS PUBLISHED BY BOISE CASCADE.

- BASE DESIGN VALUES:

- 1 3/8" WIDE VERSA-LAM BEAMS GRADE 3100 Fb SP

F_b=3,100 PSI, F_v=285 PSI, E=2,000 KSI

- 3 1/2" WIDE VERSA-LAM BEAMS GRADE 3100 Fb SP

F_b=3,100 PSI, F_v=285 PSI, E=2,000 KSI

- VERSA-LAM COLUMNS GRADE 3100 Fb SP

F_b=3,100 PSI, F_c=1,300 PSI, E=1,800 KSI

14. FASTENERS SHALL COMPLY WITH THE FOLLOWING:

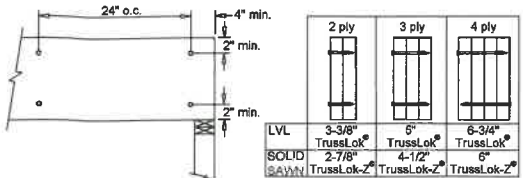
- NAILS SHALL BE COMMON WIRE NAILS, GALVANIZED & EXPOSED FRAMING
- BOLTS, NUTS AND WASHERS SHALL BE ASTM A-307, HOT DIP GALVANIZED AT EXTERIOR EXPOSED FRAMING CONFORMING TO ASTM A153
- METAL CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON OR APPROVED EQUAL
- STAINLESS STEEL NAILS FOR ATTACHING EXTERIOR TRIM AND SIDING
- ALL WOOD MEMBERS TO BE NAILED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE - 2009 EDITION APPENDIX C

15. PLYWOOD SHALL BE NAILED AT 6" O.C. AT ALL JOINTS AND EDGES & AT 10" O.C. AT OTHER SUPPORTS. PLYWOOD SUB-FLOORS SHALL BE GLUED TO JOISTS, BEFORE NAILING WITH CONSTRUCTION ADHESIVE.

16. LIGHTWEIGHT LALLY COLUMNS - 4" OUTER DIAMETER 16 GAGE STEEL PIPE CONFORMING TO ASTM A513 FILLED WITH CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS. (UNLESS OTHERWISE NOTED.)

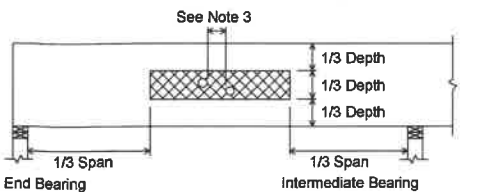
17. PROVIDE DOUBLE JOISTS UNDER PARALLEL PARTITION WALLS AT ALL FLOORS UNLESS OTHERWISE NOTED.

18. NEW PRESSURE TREATING PROCESSES REQUIRED FOR WOOD ARE HIGHLY CORROSIVE. SEE NOTE 5. AND MANUFACTURER'S RECOMMENDATIONS FOR FASTENING TO PT WOOD.



- All TrussLoK® screws may be installed from one side of multi-ply Versa-Lam beams.
- Bring underside of washer-head flush with wood surface. Do not countersink.

BUILT UP BEAM DETAIL



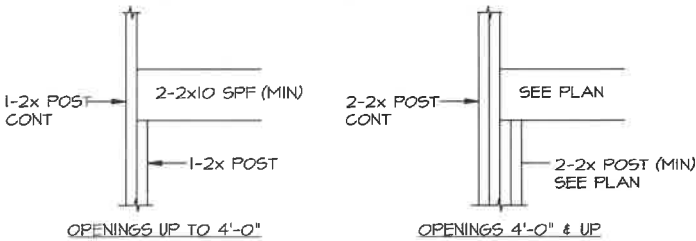
NOTES:

- Square and rectangular holes are NOT permitted.
- Round holes may be drilled or cut with a hole saw anywhere within the hatched area of the beam.
- The horizontal distance between adjacent holes must be at least two times the diameter of the larger hole.
- Do not drill more than three access holes in any four foot long section of beam.
- The maximum round hole diameter permitted is:

Beam Depth	5 1/2"	7 1/4"	9 1/4" +
Maximum Hole Diameter	3/4"	1"	2"

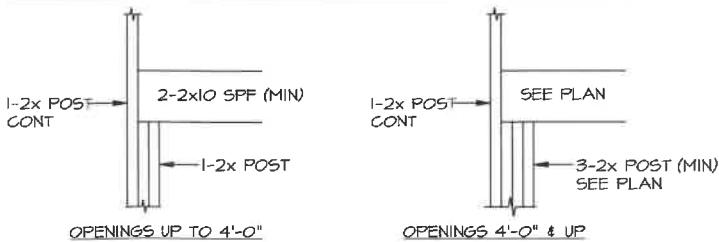
- These limitations apply to holes drilled for plumbing or wiring access only. The size and location of holes drilled for fasteners are governed by the provisions of the National Design Specification® for Wood Construction.
- Beams deflect under load. Size holes to provide clearance where required.
- This hole chart is valid for beams supporting uniform load only. For beams supporting concentrated loads or for beams with larger holes, contact Boise® EWP Engineering.

ALLOWABLE HOLES IN LVL BEAMS



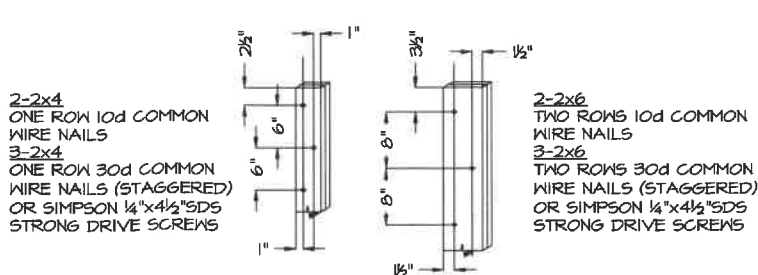
UNLESS OTHERWISE NOTED

TYPICAL BUILT-UP HEADER EXTERIOR WALL

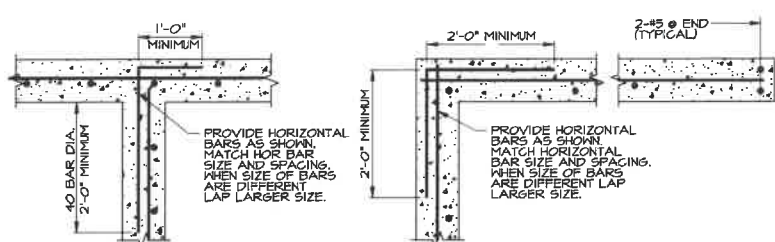


UNLESS OTHERWISE NOTED

TYPICAL BUILT-UP HEADER INTERIOR WALL



TYPICAL BUILT-UP POST

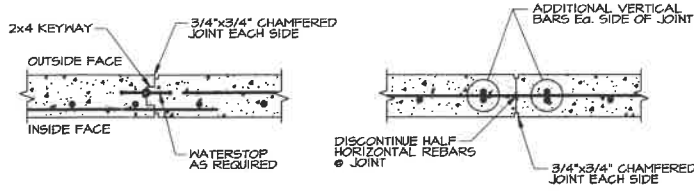


INTERSECTION DETAIL

CORNER DETAIL

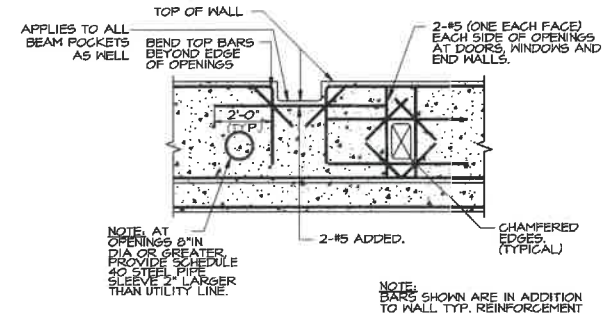
END WALL DETAIL

TYPICAL CONCRETE WALL DETAIL WITH SINGLE LAYER REINFORCING

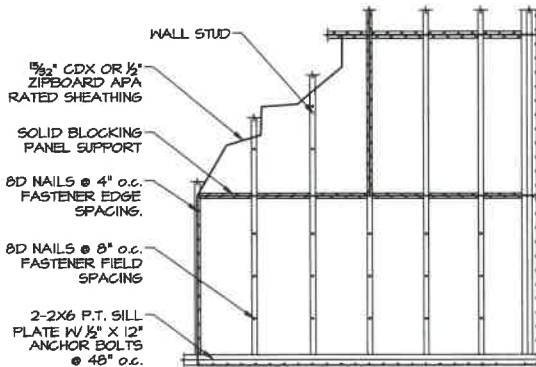
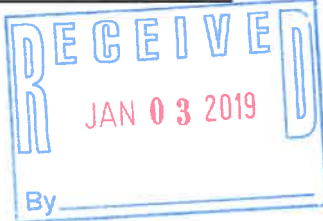


CONSTRUCTION JOINT AT CONCRETE WALL

CONTROL JOINT W/ SINGLE REINFORCING AT CONCRETE WALL



TYPICAL ADDITIONAL REINFORCING AT OPENINGS AND BREAKS IN CONCRETE WALLS



NOTE: NO PLYWOOD JOINTS SHALL OCCUR WITHIN 2 FT OF PLATE LINE.

ALL NAILS TO BE DRIVEN IN FLUSH W/ PLYWOOD SURFACE. DO NOT FRACTURE SURFACE OF SHEATHING W/ NAIL HEADS.

APPLIES TO ALL EXTERIOR WALLS AND SPECIFIED INTERIOR WALLS

WALL SHEATHING NAILING PATTERN

Scale: 1/2"=1'-0"

REV	DATE	DESCRIPTION	CHK
1	4/10/2018	FOR PERMITS	

ROSS
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& Surveying
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STRUCTURAL NOTES
COHEN RESIDENCE
21 LANGDON STREET
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JOB #: 17-058
SCALE: AS NOTED
SHEET: 6 OF 6
DRAWING:

S4