



July 26, 2018

Alex Coupe 28 Inverness Street Portland, ME 04103

Re: 28 Inverness Street, PO

Ability to Serve with PWD Water

Dear Mr. Coupe:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on July 18, 2018. Based on the information provided, we can confirm that the District will be able to serve the proposed project as further described in this letter. Please note that this letter constitutes approval of the water system as currently designed. Any changes affecting the approved water system will require further review and approval by PWD.

#### **Conditions of Service**

The following conditions of service apply:

- A new 1-inch service may be installed from the water main in Inverness Road. The service should enter through the properties frontage on Inverness Road at least 10-feet from any side property lines.
- A single service line may be used to serve both domestic and fire protection needs. The split for the sprinkler service must be located after the water meter and must include a non-testable backflow prevention device. The sprinkler system designer must provide documentation indicating the peak flow in gallons per minute required to operate the life safety system in order for the meter to be appropriately sized.

Prior to construction, the owner or contractor will need to make an appointment to complete a service application form and pay all necessary fees. The appointment shall be requested through <a href="MEANS@pwd.org">MEANS@pwd.org</a> or by calling 207-774-5961 ext. 3199. Please allow (3) business days to process the service application paperwork. PWD will guide the applicant through the new development process during the appointment.

#### **Existing Site Service**

According to District records, the project site does not currently have existing water service.

#### Water System Characteristics



According to District records, there is an 12-inch diameter cast iron water main in Inverness Road and anti-anti-anti-proved with Conditions fire hydrant located approximately 220 feet from the site. The most recent static pressure reading was 100/ps/2018 on June 14, 2018.

#### Public Fire Protection

The installation of new public hydrants to be accepted into the District water system will most likely not be required. It is your responsibility to contact the Portland Fire Department to ensure that this project is adequately served by existing and/or proposed hydrants.

#### **Domestic Water Needs**

The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of your proposed project. Based on the high water pressure in this area, we recommend that you consider the installation of pressure reducing devices that comply with state plumbing codes.

#### Private Fire Protection Water Needs

You have not indicated whether this project will require water service to provide private fire protection to the site. Please note that the District does not guarantee any quantity of water or pressure through a fire protection service.

Should you disagree with this determination, you may request a review by the District's Internal Review Team. Your request for review must be in writing and state the reason for your disagreement with the determination. The request must be sent to MEANS@PWD.org or mailed to 225 Douglass Street, Portland Maine, 04104 c/o MEANS. The Internal Review Team will undertake review as requested within 2 weeks of receipt of a request for review.

If the District can be of further assistance in this matter, please let us know.

Sincerely, Portland Water District

Robert A. Bartels, P.E. Senior Project Engineer

BLEGISHS



# WARRANTY DEED

(Maine Statutory Short Form - 33 M.R.S.A. §§ 761 et seq.)

KNOW ALL PERSONS BY THESE PRESENTS, that I, Jennifer Goodwin-Alley k/n/a Jennifer Warren Goodwin of the City of Portland, County of Cumberland and State of Maine for valuable consideration received, hereby GRANT to Alexander P. Coupe and Daniel W. Anderson of the City of Portland, County of Cumberland and State of Maine, as JOINT TENANTS and not as tenants-in-common, with WARRANTY COVENANTS a certain lot or parcel of land, together with any buildings or improvements thereupon, situated in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

See Exhibit A, attached hereto and incorporated herein.

Witness my hand and seal this 3rd day of August, 2018.

vviuiess

Jephifer Warren Goodwin

STATE OF MAINE COUNTY OF CUMBERLAND, SS.

Then personally appeared this 3rd day of August, 2018, the above named Jennifer Warren Goodwin and acknowledged the foregoing instrument to be her free act and deed.

Before me.

Notary Public/ Attorney at Law

Printed Name:

My Comm. Exp: 5/22/2624

Katherine G. Young
Notary Public
State of Maine
My Commission Expires 5/22/2024



# **EXHIBIT A**

(28 Inverness Street-Portland, Maine)

Two certain lots of parcels of land, with the buildings thereon, located on Inverness Street, in the City of Portland, County of Cumberland, and State of Maine being lots 89 and 90 on Inverness Street, as designated on Plan of Property of Fred S. Jordan, recorded in the Cumberland County Registry of Deeds in Plan Book 10, Page 9, to which Plan reference is hereby made for a more particular description.

For source of title, reference may be made to a Quitclaim Deed with Covenant from William A. Gordan to Raymond Alley and Jennifer Goodwin-Alley dated September 15, 1995 and recorded in Book 12115, Page 236 in the Cumberland County Registry of Deeds. Raymond Alley predeceased Jennifer Goodwin-Alley leaving her surving joint tenant.

\* \* \* \*

Reviewed and Approveds

Received
Recorded Resister of Deeds
Aus 06,2018 10:46:39A
Cumberland Counts
Nancy A. Lane





### **Project**

Energy Code: 2009 IECC

Location: Portland, Maine
Construction Type: Single-family
Project Type: New Construction

Conditioned Floor Area: **1,444 ft2** Glazing Area **14%** 

Climate Zone: 6 (7378 HDD)

Permit Date: Permit Number:

Construction Site: 22-26 Iverness St. Portland, ME Owner/Agent: New Construction Designer/Contractor: Architectural Plans



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 Low Cost

#### Compliance: Passes using UA trade-off

Compliance: 7.3% Better Than Code Maximum UA: 233 Your UA: 21

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules. It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

# **Envelope Assemblies**

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Ceiling area of home forming top of insulation envelope: Flat Ceiling or Scissor Truss	746	49.0	0.0	0.026	19
Wall area of home forming sides of insulation envelope: Wood Frame, 16" o.c.	1,593	21.0	0.0	0.057	75
Window area of home using energy efficient units: Vinyl/Fiberglass Frame:Double Pane with Low-E	209			0.290	61
Energy efficient door unit: Solid	21			0.200	4
Energy efficient door unit: Solid	21			0.200	4
Energy efficient door unit: Glass	21			0.300	6
Subfloor of cantilever forming bottom of insulation envelope for the area: All-Wood Joist/Truss:Over Unconditioned Space	48	30.0	0.0	0.033	2
Basement wall area of home forming bottom of insulation envelope: Solid Concrete or Masonry	864	0.0	11.0	0.052	45

Wall height: 8.0' Depth below grade: 8.0' Insulation depth: 8.0'

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2009 IECC requirements in REScheck Version 4.6.5 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Jobe Leonard

Name - Title

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# **REScheck Software Version 4.6.5**

# **Inspection Checklist**

Permitting and Inspections Department Approved with Conditions 10/10/2018

**Reviewed for Code Compliance** 

Energy Code: 2009 IECC

Requirements: 0.0% were addressed directly in the REScheck software

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.2 [PR1] <sup>1</sup>	Construction drawings and documentation demonstrate energy code compliance for the building envelope.			□Complies □Does Not □Not Observable □Not Applicable	
103.2, 403.7 [PR3] <sup>1</sup>	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the commercial code.			□Complies □Does Not □Not Observable □Not Applicable	
403.6 [PR2] <sup>2</sup>	Heating and cooling equipment is sized per ACCA Manual S based on loads per ACCA Manual J or other approved methods.	Heating: Btu/hr Cooling: Btu/hr	Heating: Btu/hr Cooling: Btu/hr	□Complies □Does Not □Not Observable □Not Applicable	

**Additional Comments/Assumptions:** 

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Section					
# & Req.ID	Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions Reviewed for Code Compliance Permitting and Inspections Departmen
402.1.1 [FO4] <sup>1</sup>	Conditioned basement wall insulation R-value. Where interior insulation is used, verification may need to occur during Insulation Inspection. Not required in warm-humid locations in Climate Zone 3.	R	R	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies Conditions table for values. 10/10/2018
303.2 [FO5] <sup>1</sup>	Conditioned basement wall insulation installed per manufacturer's instructions.			□Complies □Does Not □Not Observable □Not Applicable	
402.2.7 [FO6] <sup>1</sup>	Conditioned basement wall insulation depth of burial or distance from top of wall.	ft	ft	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2.1 [FO11] <sup>2</sup>	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.			□Complies □Does Not □Not Observable □Not Applicable	
403.8 [FO12] <sup>2</sup>	Snow- and ice-melting system controls installed.			□Complies □Does Not □Not Observable □Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

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Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions Reviewed for Code Compliance Permitting and Inspections Departs
Door U-factor.	U	U	□Complies □Does Not	See the Envelope Assemblies Conditions table for values. 10/10/2018
		 	□Not Observable □Not Applicable	
Glazing U-factor (area-weighted average).	U	U	□Complies □Does Not	See the Envelope Assemblies table for values.
			□Not Observable □Not Applicable	
U-factors of fenestration products			□Complies	
with the NFRC test procedure or				
taken from the default table.			□Not Applicable	] 
Fenestration that is not site built is listed and labeled as meeting			□Complies □Does Not	
AAMA/WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			□Not Observable □Not Applicable	
C-rated recessed lighting fixtures sealed at housing/interior finish			□Complies □Does Not	
and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			□Not Observable □Not Applicable	
Supply ducts in attics are insulated to ≥R-8. All other ducts	R	R	□Complies	
in unconditioned spaces or outside the building envelope are insulated to ≥R-6.	K	K	□Not Observable □Not Applicable	
All joints and seams of air ducts, air handlers, filter boxes, and			□Complies □Does Not	
building cavities used as return ducts are sealed.			□Not Observable	
Building cavities are not used for			Complies	
supply ducts.				
			□Not Observable □Not Applicable	
HVAC piping conveying fluids	R	R	□Complies	
below 55 ºF are insulated to ≥R-				
3.			□Not Applicable	
Circulating service hot water pipes are insulated to R-2.	R	R	$\square$ Complies $\square$ Does Not	
		: 	□Not Observable	
Automatic or gravity damners are				
installed on all outdoor air			□Does Not	
intakes and exhausts.			□Not Observable	
The Carlot of th	Door U-factor.  Glazing U-factor (area-weighted average).  J-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.  Fenestration that is not site built is listed and labeled as meeting AMA/WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code imits.  C-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm eakage at 75 Pa.  Gupply ducts in attics are insulated to ≥R-8. All other ducts in unconditioned spaces or outside the building envelope are insulated to ≥R-6.  All joints and seams of air ducts, fair handlers, filter boxes, and ouilding cavities used as return ducts are sealed.  Building cavities are not used for supply ducts.  HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥R-3.  Circulating service hot water bipes are insulated to R-2.	Door U-factor.  U	Oper U-factor.  U	Value   Value   Value   Value   Compiles

	1 High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions Reviewed for Code Compliance Permitting and Inspections   Pepartment
303.1 [IN13] <sup>2</sup>	All installed insulation is labeled or the installed R-values provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Approved with Conditions 10/10/2018
402.1.1, 402.2.5, 402.2.6 [IN1] <sup>1</sup>	Floor insulation R-value.	R Wood Steel	R Wood Steel	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2, 402.2.6 [IN2] <sup>1</sup>	Floor insulation installed per manufacturer's instructions, and in substantial contact with the underside of the subfloor.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.1.1, 402.2.4, 402.2.5 [IN3] <sup>1</sup>	Wall insulation R-value. If this is a mass wall with at least ½ of the wall insulation on the wall exterior, the exterior insulation requirement applies.	R Wood Mass Steel	R	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2 [IN4] <sup>1</sup>	Wall insulation is installed per manufacturer's instructions.			□Complies □Does Not □Not Observable □Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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			1	1	
Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions Reviewed for Code Compliance Permitting and Inspections department
402.1.1, 402.2.1, 402.2.2 [FI1] <sup>1</sup>	Ceiling insulation R-value. Where > R-30 is required, R-30 can be used if insulation is not compressed at eaves. R-30 may be used for 500 ft <sup>2</sup> or 20% (whichever is less) where sufficient space is not available.	R	R Wood Steel	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies Conditions table for values. 10/10/2018
303.1.1.1, 303.2 [FI2] <sup>1</sup>	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft <sup>2</sup> .			□Complies □Does Not □Not Observable □Not Applicable	
402.2.3 [FI3] <sup>1</sup>	Attic access hatch and door insulation ≥R-value of the adjacent assembly.	R	R	□Complies □Does Not □Not Observable □Not Applicable	
402.4.2, 402.4.2.1 [FI17] <sup>1</sup>	Building envelope tightness verified by blower door test result of <7 ACH at 50 Pa. This requirement may instead be met via visual inspection, in which case verification may need to occur during Insulation Inspection.	ACH 50 =	ACH 50 =	□Complies □Does Not □Not Observable □Not Applicable	
403.2.2 [FI4] <sup>1</sup>	Post construction duct tightness test result of ≤8 cfm to outdoors, or ≤12 cfm across systems. Or, rough-in test result of ≤6 cfm across systems or ≤4 cfm without air handler. Rough-in test verification may need to occur during Framing Inspection.	cfm	cfm	□Complies □Does Not □Not Observable □Not Applicable	
403.1.1 [FI9] <sup>2</sup>	Programmable thermostats installed on forced air furnaces.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.1.2 [FI10] <sup>2</sup>	Heat pump thermostat installed on heat pumps.			□Complies □Does Not □Not Observable □Not Applicable	
403.4 [FI11] <sup>2</sup>	Circulating service hot water systems have automatic or accessible manual controls.			□Complies □Does Not □Not Observable □Not Applicable	
404.1 [FI6] <sup>1</sup>	50% of lamps in permanent fixtures are high efficacy lamps.			□Complies □Does Not □Not Observable □Not Applicable	
401.3 [FI7] <sup>2</sup>	Compliance certificate posted.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
303.3 [FI18] <sup>3</sup>	Manufacturer manuals for mechanical and water heating equipment have been provided.			□Complies □Does Not □Not Observable □Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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1 High Impact (Tier 1) 3 Low Impact (Tier 3) 2 Medium Impact (Tier 2)

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Insulation Rating	R-Value	
Above-Grade Wall	21.00	
Below-Grade Wall	11.00	
Floor	30.00	
Ceiling / Roof	49.00	
Ductwork (unconditioned spaces):		
Glass & Door Rating	U-Factor	SHGC
Window	0.29	
Door	0.20	
Heating & Cooling Equipment	Efficiency	
Heating System:		
Cooling System:		
Water Heater:		
Name:	Date:	

**Comments** 



Client:

Project: Address: Date: 10/9/2018 Designer: PD

Job Name: 22-26 Inverness St, Portland Maine

Project #:

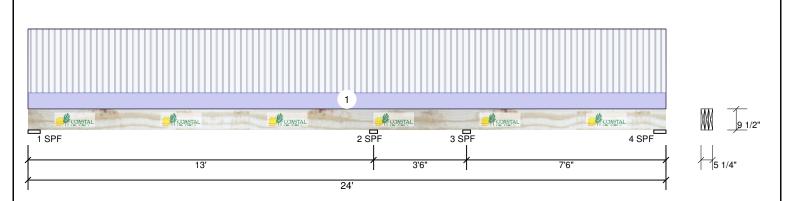


1.750" X 9.500" 3-Ply - PASSED 2.0E CP-LAM

Level: Level

Permitting and Inspections Depar Approved with Conditions

10/10/2018



Member Info	rmation	Reaction	Reactions UNPATTERNED lb (Uplift)						
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const
Plies:	3	Design Method:	ASD	1	1298	394	0	0	0
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	3176	965	0	0	0
Deflection LL:	360	Load Sharing:	Yes	3	424	129	0	0	0
Deflection TL:	240	Deck:	Not Checked	4	862	262	0	0	0
Importance:	Normal								
Temperature:	Temp <= 100°F			Bearings	s				
				Bearing	Length	Cap. Reac	t D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF	5.500"	14% 39	4 / 1303	1697 L_L	D+L
				2 - SPF	3.500"	57% 96	5 / 3521	4486 LL_	D+L
Analysis Resu	ilts			3 - SPF	3.500"	25% 12	9 / 1793	1922 _LL	D+L

4 - SPF 5.500"

9%

#### Analysis Results

	Camb	
Analysis Actual Location Allowed Capacity	Comb.	Case
Neg Moment -5078 ft-lb 13' 22231 ft-lb 0.228 (23%	6) D+L	LL_
Pos Moment 4087 ft-lb 5'5 1/16" 22231 ft-lb 0.184 (189	6) D+L	L_L
Unbraced 4087 ft-lb 5'5 1/16" 22231 ft-lb 0.184 (18%	6) D+L	L_L
Shear 2375 lb 12'2 1/2" 9476 lb 0.251 (25%	6) D+L	LL_
LL Defl inch 0.101 (L/1502) 6' 1/16" 0.423 (L/360) 0.240 (249	6) L	L_L
TL Defl inch 0.132 (L/1156) 6' 1/16" 0.634 (L/240) 0.210 (219	(s) D+L	L_L

#### **Design Notes**

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Tie-down connection required at bearing 3 for uplift 1240 lb (Combination D+L, Load Case
- 4 Top must be continuously braced.
- 5 Bottom must have sheathing attached or be continuously braced.

6 Lateral slenderness ratio based on single ply width.											
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Uniform		6-0-0	Far Face	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF		
	Self Weight				13 PLF						

#### Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- LVL beams must not be cut or drilled
  Refer to manufacturer's product information
  regarding installation requirements, multi-ply
  fastening details, beam strength values, and code
  approvals
  Damaged Beams must not be used

- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 7/10/2021

Pacific Woodtech Corp 1850 Park Lane Burlington, WA 98233 (888) 707-2285 www.pacificwoodtech.com APA: PR-L233, ICC-ES: ESR-2909

Manufacturer Info

Coastal Forest Products 451 South River Rd, NH USA 03110

(-1240)

1140 L\_L

D+L

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