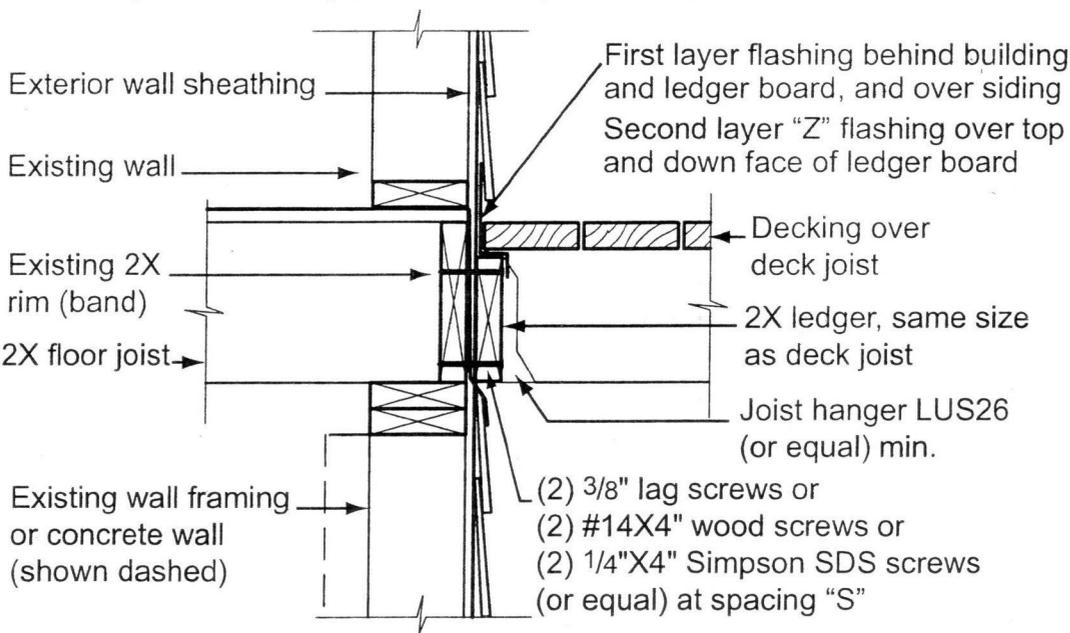


The Ledger Board

Decks that are attached to a house require a ledger board to be fastened to the house structure, and the deck joists are fastened to the ledger. If your deck will be free-standing and not attached to the house, skip this section and proceed to **Free-Standing Decks**.

There are several methods for attaching the ledger to the house, depending on how the house was built and how high the deck will be located relative to the house's existing floor framing. The ledger can be fastened to the house band board (or rim joist) (**Figure 5 or 6**), the wall studs (**Figure 7**) or a concrete wall (**Figure 8**). You will need to verify the existing conditions before you apply for a building permit. If you can't verify the existing conditions or if they are different from Figures 5, 6, 7 or 8 then a free-standing deck is required (see Free-Standing Decks).

Siding and Flashings: The siding or exterior finish system must be removed to install the ledger board against the wall sheathing. Two layers of continuous flashing must be properly installed to prevent water from getting into the wall where the siding has been removed. **See Figure 5.** The flashing material may be copper (using copper nails), stainless steel, galvanized steel coated with 1.85 oz/sf of zinc (G-185 coating), UV-resistant plastic, or self-sealing bituminous (tar) "peel-and-stick" flashing. The first layer is attached directly to the exterior wall sheathing starting behind and above the bottom edge of the building paper and siding, continuing straight down the face of the wall behind the ledger board



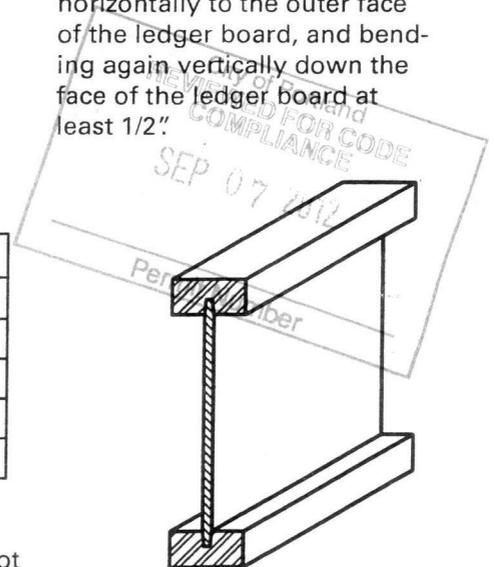
(before it is installed) and ending on the outer face of the exterior wall siding or foundation below the bottom of the ledger board. Self-sealing bituminous peel-and-stick flashing is ideal for the first layer. Pre-formed Z-shaped metal flashing is ideal for the outer, second layer of flashing. It is installed after the ledger board and before the joists, starting behind and above the bottom edge of the building paper and siding, continuing down vertically to the top of the ledger board, bending horizontally to the outer face of the ledger board, and bending again vertically down the face of the ledger board at least 1/2".

▲ **Fig. 5: Attachment of Ledger Board to Band Board with Lag or Wood Screws**
(See Fig. 12 for spacing and clearances)

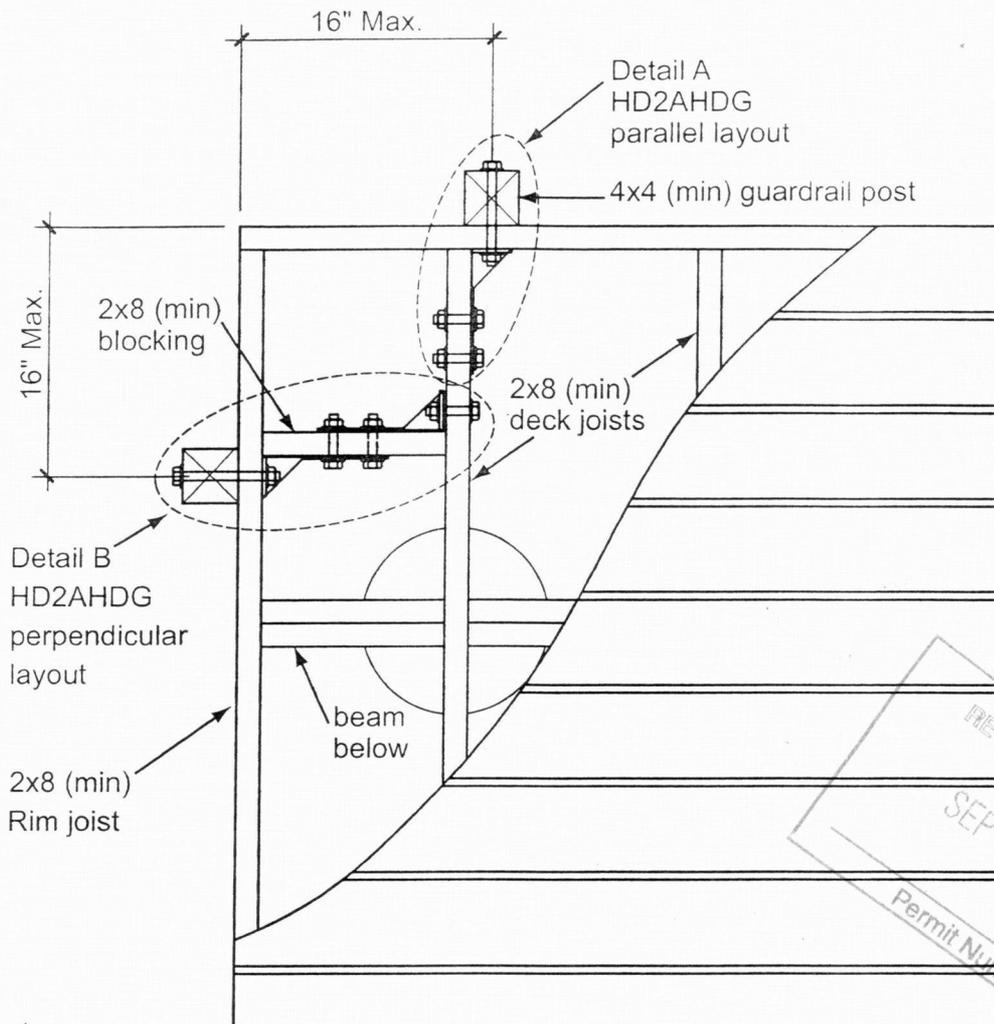
Joist Span	Spacing "S"		
	(2) 3/8" dia. lag screws*	(2) #14 X4" wood screws	(2) Simpson SDS 1/4" X4"
0 < span ≤ 8'	7"	10"	16"
8' < span ≤ 10'	5"	8"	16"
10' < span ≤ 14'	4"	6"	12"
14' < span ≤ 16'	3"	5"	9"

*See Fig. 13 for length

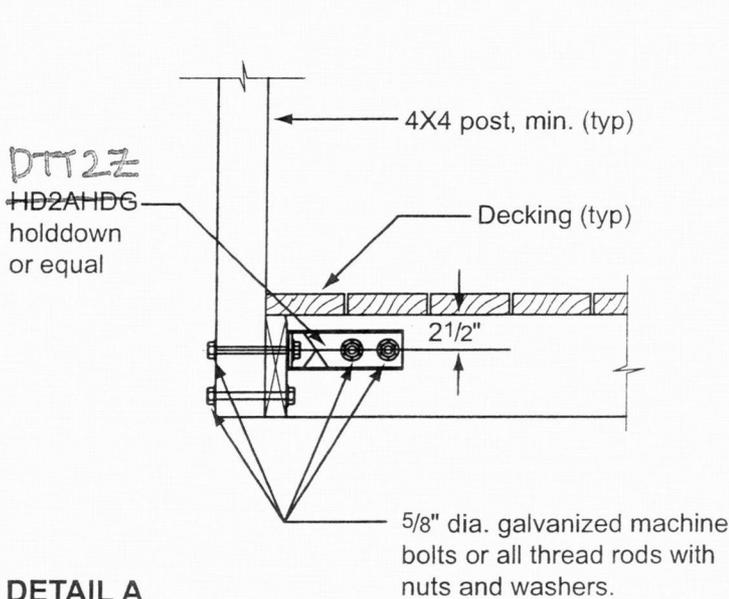
Manufactured Wood Joists (MWJs): If the existing house floor joists are MWJs, and not solid-sawn lumber, you will need to submit a ledger attachment detail that is approved by the MWJ manufacturer or a licensed engineer. Examples of MJWs are TJI, GPI and LPI. See Figure 4. Older homes constructed with MWJs may have a plywood band board, while some newer homes may have 1 1/4-inch manufactured wood rim joists.



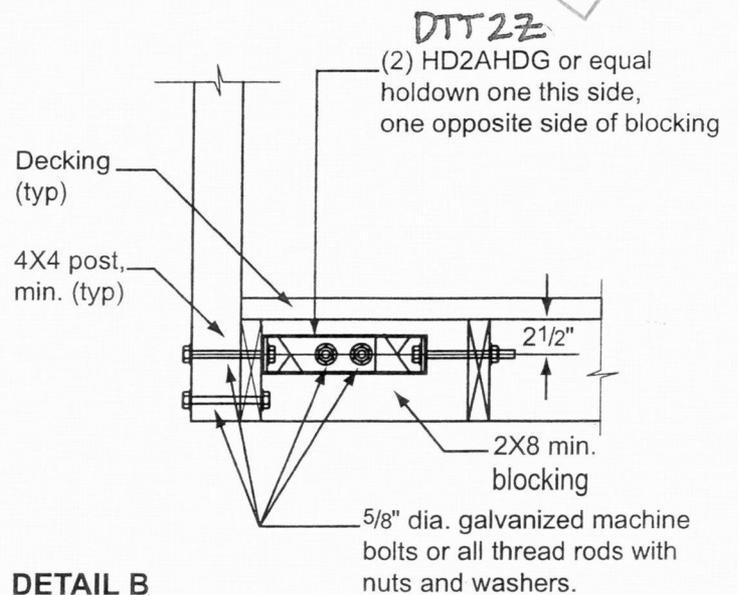
▲ **Fig. 4: MWJ profile**



▲ Figure 30: Guardrail attachment option 5 plan view



DETAIL A



DETAIL B

▲ Fig. 31: Guardrail attachment option 5 parallel layout

▲ Fig. 32: Guardrail attachment option 5 perpendicular layout



Building Permit Application
City of Portland, Oregon - Bureau of Development Services

1900 SW 4th Avenue, Portland, Oregon 97201 • 503-823-7310 • TTY 503-823-6868 • www.portlandoregon.gov/bds

Type of work

New construction Addition/alteration/replacement
 Demolition Other:

Category of construction

1 & 2 family dwelling Commercial/industrial Accessory building
 Multifamily Master builder Other:

Job site information and location

Job no.: 6 Job address: 624 SE 33RD AVE
 City/State/ZIP: PORTLAND OR 97214
 Suite/bldg./apt. no.: Project name: BOYLE DECK
 Cross street/directions to job site:
 Subdivision: Lot no. Tax map/parcel no.

Description of work

ADD DECK TO BACK OF HOUSE

Reference RS / Combination Permit no.

Property owner Tenant

Name: PATRICK AND DENISE BOYLE
 Address: 624 SE 33RD AVE
 City/State/ZIP: PORTLAND OR
 Phone: (503) 233-8497 FAX:

Owner installation: This installation is being made on property that I own, which is not intended for sale, lease, rent, or exchange.

Owner signature: Date:

Contractor

Business name: CINCH ARCHITECTURE & CONSTRUCTION
 Address: 1742 NE 66TH AVE
 City/State/ZIP: PORTLAND OR 97213
 Phone: (503) 706-1447 FAX:
 CCB lic. no. 189350
 Authorized signature: M.C.
 Print name: MATT CINORICA Date: 09.07.12

Applicant Contact Person

Business name:
 Contact name:
 Address:
 City/State/ZIP:
 Phone: FAX:
 E-mail:
 Authorized signature:
 Print name: Date:

This permit application expires if a permit is not obtained within 180 days after it has been accepted as complete.

Office Use Only

Permit no:
 Date received:
 By:

Required Data: One and Two Family Dwelling

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	\$ 30000.00
Number of bedrooms:	
Number of bathrooms:	
Total number of floors:	
New dwelling area:	square feet
Garage/carport area:	square feet
Covered porch area:	square feet
Deck area:	square feet
Other structure area:	square feet

Required Data: Commercial Use

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	
Existing building area:	square feet
New building area:	square feet
Number of stories:	
Type of construction:	
Occupancy groups	
Existing:	
New:	

Notice

All contractors and subcontractors are required to be licensed with the Oregon Construction Contractors Board under ORS 701 and may be required to be licensed in the jurisdiction in which work is being performed. If the applicant is exempt from licensing, the following reasons apply.

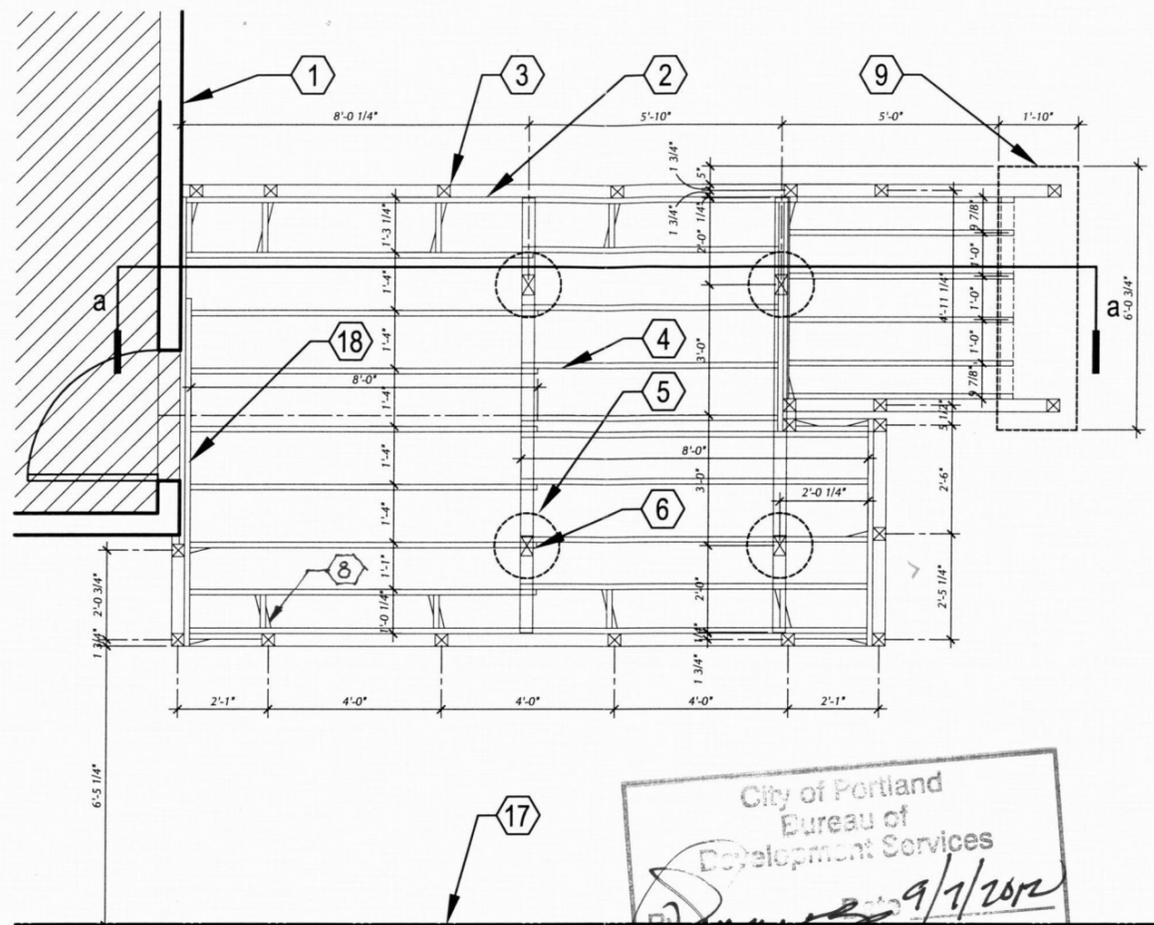
Statement of Fact: I certify that the facts and information set forth in this application are true and complete to the best of my knowledge. I understand that any falsification, misrepresentation or omission of fact (whether intentional or not) in this application or any other required document, as well as any misleading statement or omission, may be cause for revocation of permit and/or certificate of occupancy, regardless of how or when discovered.

Building Permit Fees*

Please refer to fee schedule

Fees due upon application	
Amount received	
Date received	

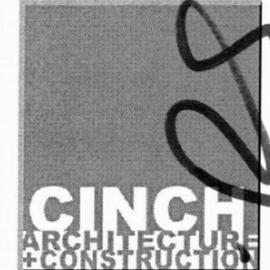
Sub-contractor information can be faxed to 503-823-7693.



1 framing plan
scale: 1/4"=1'-0"

City of Portland
Bureau of
Development Services
Approved by
Planning and Zoning Review
9/1/2012

- key notes
- ① existing house
 - ② 2x8 pt rim joist (typ)
 - ③ 4x4 cedar guardrail post (typ)
 - ④ 2x8 pt joists (typ)
 - ⑤ 18" dia x 24" deep footing (typ)
 - ⑥ 4x6 p.t. post (typ)
 - ⑦ 4x10 pt beam (typ)
 - ⑧ simpson DTT2Z holddown (typ)
 - ⑨ 4" conc pad.
 - ⑩ 2x6 pt cross braces w/ 3/8" dia through bolt connections
 - ⑪ simpson PB46 post base (typ)
 - ⑫ simpson ZMAX post to beam connector (typ)
 - ⑬ wood composite decking
 - ⑭ finish floor inside
 - ⑮ 2x6 cedar cap rail
 - ⑯ 4" max opening
 - ⑰ property line
 - ⑱ 2x8 pt ledger
 - ⑲ 2x6 bracing



1742 ne 60th ave
portland, or 97213
(503) 706-1447

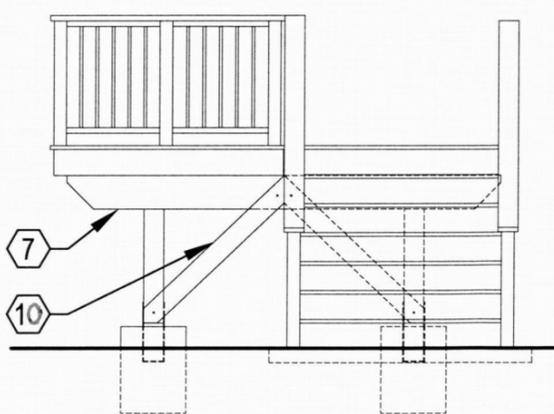
owner
patrick + denise boyle
624 se 33rd ave
portland, or 97214
(503) 233-8497

project
boyle deck

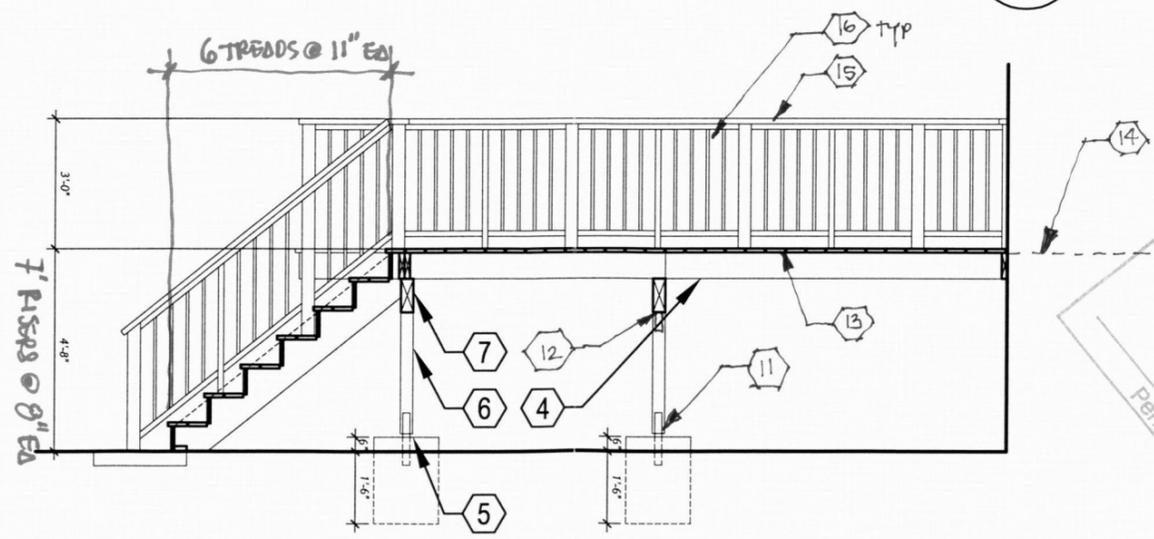
date
09.06.12

sheet no.
a1

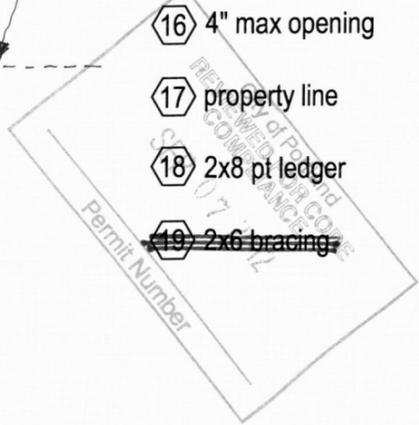
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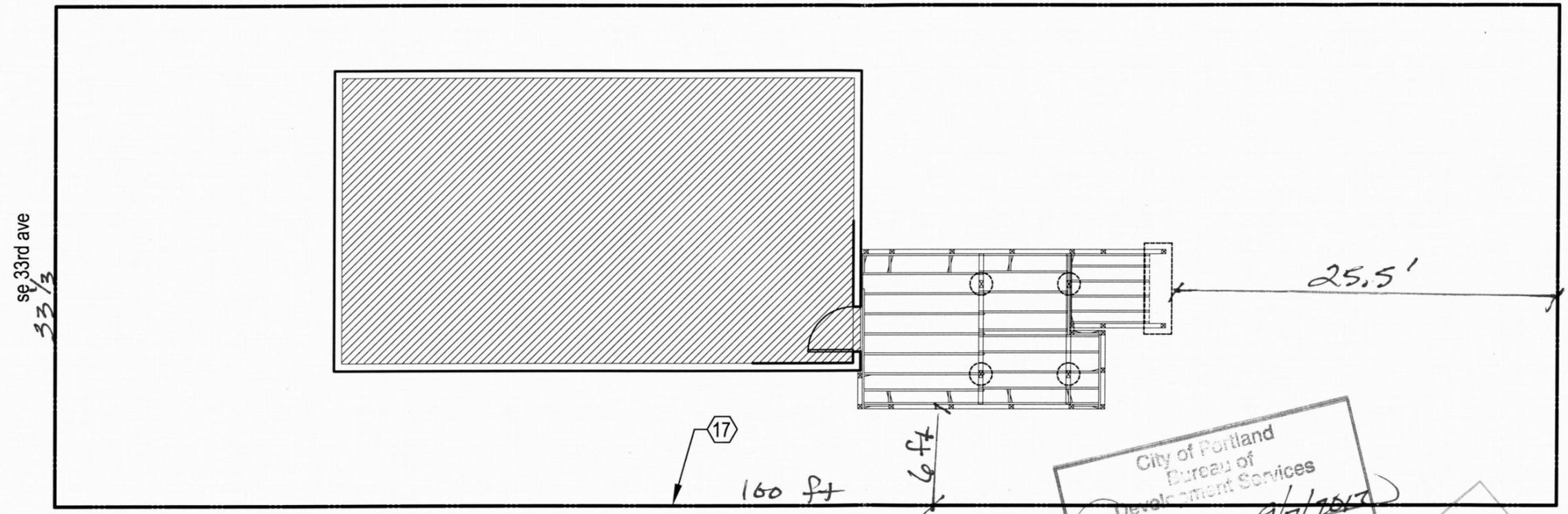
3 east elevation
scale: 1/4"=1'-0"



2 section aa
scale: 1/4"=1'-0"



key notes
① property line



City of Portland
Bureau of
Development Services
By *[Signature]* Date *9/7/2012*
Approved by
Planning and Zoning Review

City of Portland
REVIEWED FOR CODE
COMPLIANCE
SEP 07 2012
Permit Number



1 | site plan
scale: 1/4"=1'-0"



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boyle deck

date
09.06.12

sheet no.
a2