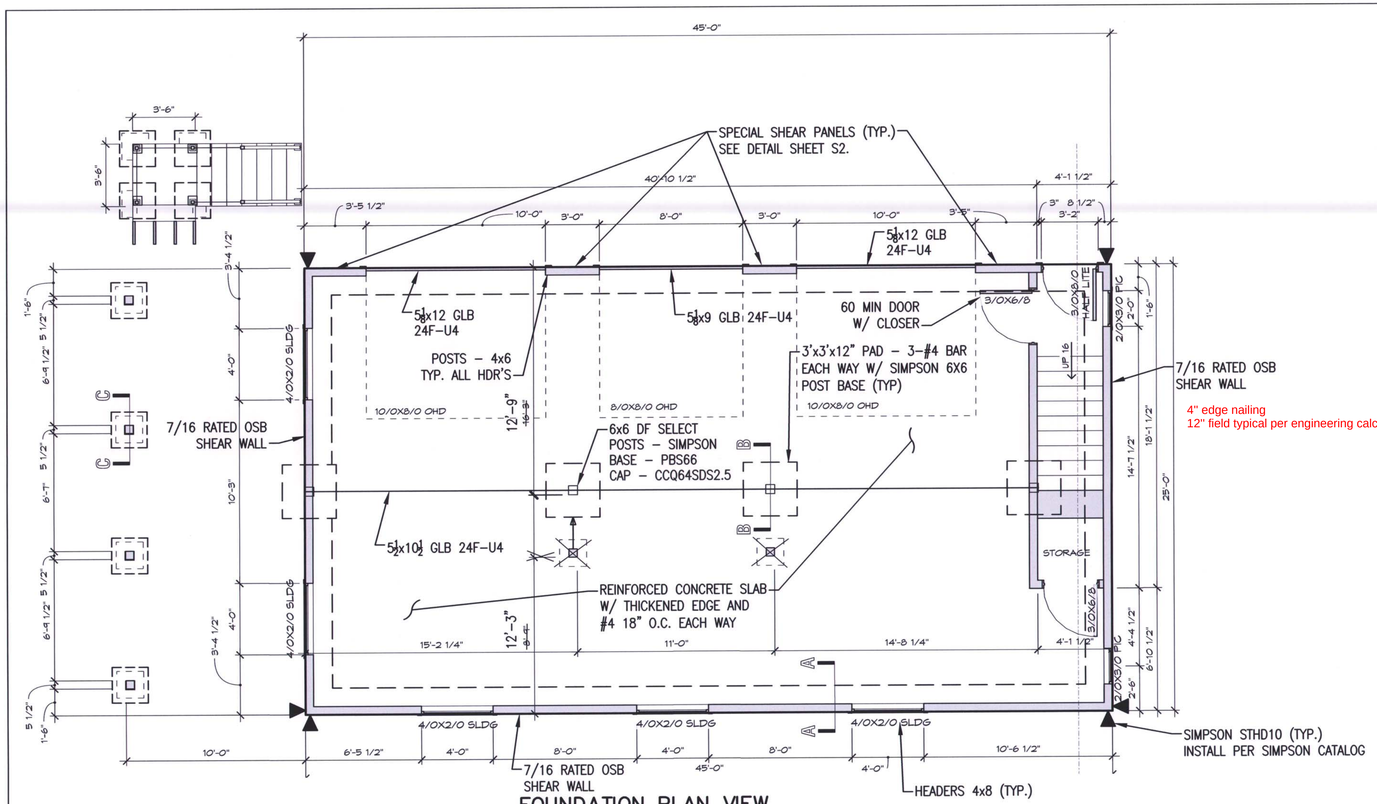
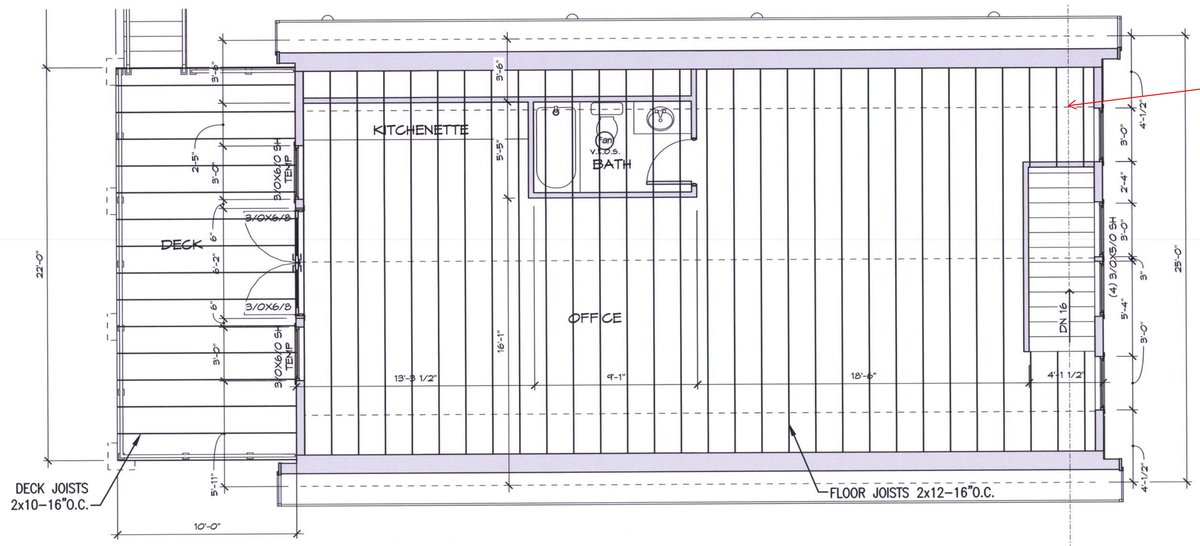


FOUNDATION PLAN VIEW
SCALE: 1/4" = 1'–0"

4" edge nailing
12" field typical per engineering calcs. page 10.



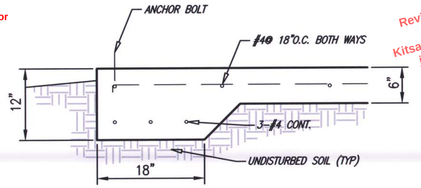
5/8" Type X, fastened 6" on center at bottom of floor joist.

FLOOR JOIST DETAIL
SCALE: 1/4" = 1'–0"

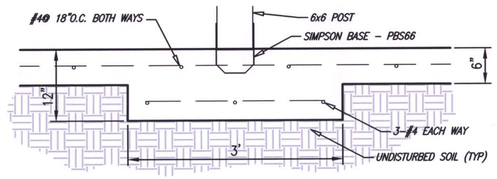
CHANGES MUST Be Approved Prior To Performing Work

Subject To Field Inspection

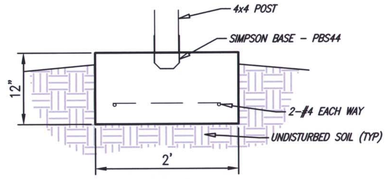
Must Comply With All Washington State Codes



SECTION A
SCALE: 1" = 1'



SECTION B
SCALE: 1" = 1'



SECTION C
SCALE: 1" = 1'

Reviewed for code compliance with IRC 2015
Kitsap County Building Department
jbowling@co.kitsap.wa.us
08/04/2020

Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of the International Codes or any other ordinance of Kitsap County. Permits presuming to give authority to violate or cancel the provisions of the International Codes and ordinances of Kitsap County shall not be valid. IBC & IRC 105

Permit Number: 20-02334

Prepared for:
MIKE AND CAROL WNEK
1655 SHERWOOD DRIVE
BREMERTON, WA 98311

Revisions:

SCALE: 1/4"=1'-0" (24X36)
DATE: 07-22-20
DESIGN BY: EPA
DRAWN BY: CDH
PROJ. #: ...

Prepared By:
AUSTIN ENGINEERING
CIVIL ENGINEER
2182 NE ETON LANE
BREMERTON, WA 98311
(360) 698–1661

FOUNDATION PLAN
WNEK BARN
BREMERTON WASHINGTON

S1

Section 3 – Technically Complete Details

Detailed application requirements are noted below.

Code Requirement	Code Reference
All wood must be pressure treated or of natural resistance to decay.	IRC R317.1
Fasteners, hangers, nails, etc., must be stainless steel, hot-dipped galvanized, or as specifically required for the specified wood preservative used.	IRC R317.3.1
Lateral connection is required to resist overturning	IRC R507.5.1
Ledger boards must be attached with structural wood screws to the building and all connections between the deck and dwelling must be flashed with metal flashing. Hold-down tension ties shall be installed in not less than 2 locations.	IRC R507.2 IRC R507.2.4
Joists are of appropriate size to support imposed loads. The span of a joist is measured from the centerline of bearing at one end of the joist to the centerline of bearing at the other end of the joist and does not include length of the overhangs. Use Table 1 to determine joist span based on lumber size and joist spacing.	IRC R507.5
All decks, balconies or porches, open sides of landings and stairs which are more than 30" above grade or a floor below must be protected by a guardrail not less than 36" high (42" for commercial or common areas of multi-family dwellings). Open guardrails and stair railings require intermediate rails or an ornamental pattern such that a ball 4" in diameter cannot pass through.	IRC R312
Footings are of appropriate size to support imposed loads and extend a minimum of 12" below grade. See Table 1 for footing sizes.	IRC 403.1.4
Columns and posts exposed to the weather or to water splash must be supported by and connected to concrete piers or metal pedestals projecting above grade. Columns and posts in contact with the ground or embedded in concrete or masonry must be of special pressure treated wood approved for ground contact.	IRC R317.1.2 IRC R317.1.4
Positive connections required to secure posts to beams.	IRC R507.7.1
Decks should not overhang beams by more than ¼ the actual adjacent span, nor should beams overhang posts by more than ¼ the actual beam span at the ends unless a specific design is calculated. Floor joist spacing at 24" on center requires 2x decking, and floor joist spacing at 16" on center requires 1 ¼ actual thickness.	IRC R507.5 IRC R507.6 IRC R507.4
Deck stairs (exterior stairways) shall be provided with a source of illumination at the top landing, controlled from within the dwelling or by automatic means.	IRC R303.8

Section 4 – Prescriptive Construction Drawings

Construction Details

2" x 10" Joist

16"O.C. Joist spacing

4" x 10" Support Beam(s)

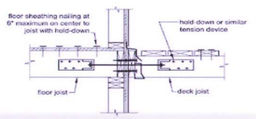
4" x 4" Support Post(s)

7' Post Spacing

Footing Size:

Round: N/A

Square: 2' x 2' by 12" deep



Lateral Connection Detail
IRC Figure R502.2.2.3

Deck supports or footings may not bear directly **on top** of septic system components.

If the deck is located **over** the septic system, ensure access to septic lids and ports. Contact Kitsap Public Health for assistance 360-337-5235.

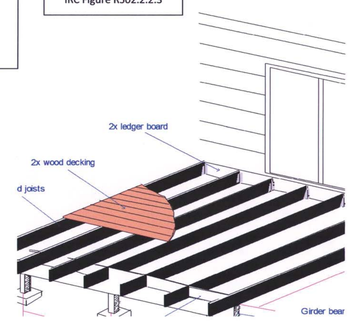


Table 1

Footing Sizes				
Beam Span, LB	Joist Span LJ	Round Footing Diameter	Square Footing Dimensions	Footing Thickness2
6'	≤10'	15"	13"	6"
	≤14'	17"	15"	6"
	≤18'	20"	18"	7"
8'	≤10'	17"	15"	6"
	≤14'	20"	18"	8"
	≤18'	23"	21"	9"
10'	≤10'	19"	17"	7"
	≤14'	22"	20"	9"
	≤18'	25"	23"	10"
12'	≤10'	21"	19"	8"
	≤14'	24"	22"	10"
	≤18'	28"	26"	11"
14"	≤10'	22"	20"	9"
	≤14'	26"	24:	11"
	≤18'	30"	28"	12"
16'	≤10'	24"	22"	9"
	≤14'	28"	26"	12"
	≤18'	32"	30"	13"
18'	≤10'	25"	23"	10"
	≤14'	30"	28"	12"
	≤18'	34"	32"	14"

Notes

1. Assumes 1,500 PSF soil bearing capacity.
2. Assumes 2,500 PSI compressive strength of concrete. Coordinate footing thickness with post base and anchor requirements.
3. No 12" x 12" preformed pier blocks allowed.
4. Post sizes are dictated by beam size. Required 4x beam requires 4x4 post, 6x beam requires 6x6 post.
5. Footing to be 12" below grade minimum.
6. Footing to have a minimum of (2) #4 rebar each way, 3-4" from bottom of the footing.

Table 2

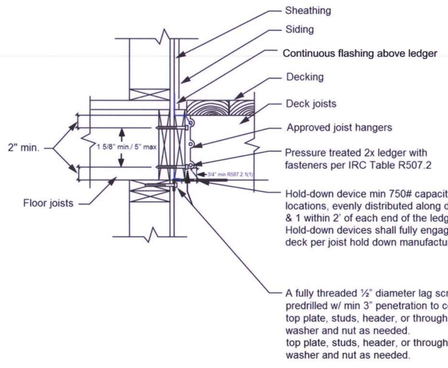
Deck Beam Spans (LB)1 for Joists Framing from One Side Only								
		Joist Spans (LJ) Less Than or Equal to:						
Species	Size	6'	8'	10'	12'	14'	16'	18'
Douglas Fir-Larch, Hem-Fir, SPF3	3x6 or (2) 2x6	5'-5"	4'-5"	3'-6"	2'-11"	2'-6"	2'-2"	1'-11"
	3x8 or (2) 2x8	7'-3"	5'-9"	4'-8"	3'-10"	3'-4"	2'-11"	2'-7"
	3x10 or (2) 2x10	8'-11"	7'-5"	5'-11"	4'-11"	4'-3"	3'-8"	3'-3"
	3x12 or (2) 2x12	10'-4"	8'-11"	7'-2"	6'-0"	5'-2"	4'-6"	4'-0"
	4x6	6'-3"	5'-11"	4'-11"	4'-1"	3'-6"	3'-1"	2'-9"
	4x8	8'-9"	7'-9"	6'-6"	5'-5"	4'-8"	4'-1"	3'-7"
	4x10	11'-0"	9'-6"	8'-3"	6'-11"	5'-11"	5'-2"	4'-7"
	4x12	12'-10"	11'-1"	10'-0"	8'-5"	7'-2"	6'-3"	5'-7"
	(3) 2x6	6'-11"	6'-6"	6'-1"	5'-3"	4'-6"	3'-11"	3'-6"
	(3) 2x8	9'-8"	8'-6"	7'-8"	6'-11"	5'-11"	5'-3"	4'-8"
	(3) 2x10	11-11"	10'-4"	9'-4"	8'-5"	7'-7"	6'-8"	5'-11"
	(3) 2x12	13'-10"	12'-0"	10'-10"	9'-10"	9'-1"	8'-1"	7'-2"

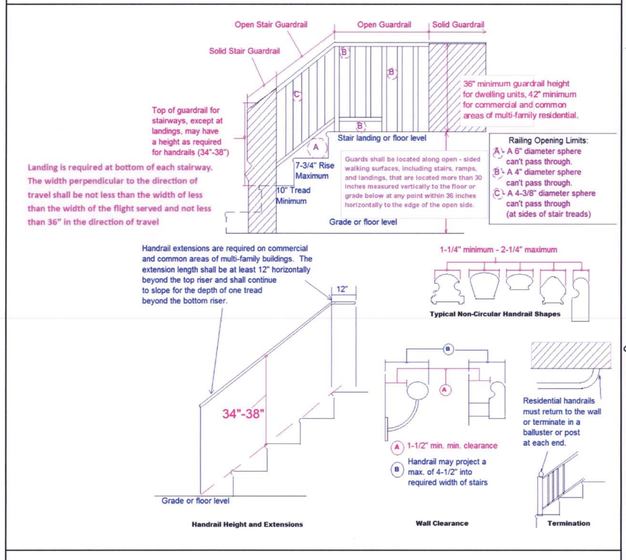
Table 3

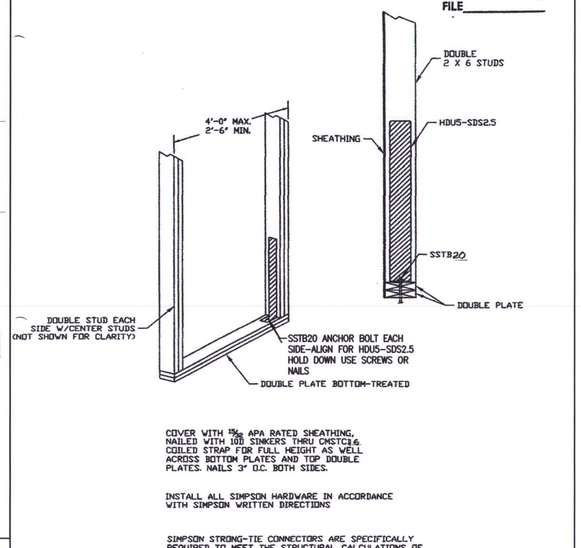
Maximum Joist Spans							
		Joist Spacing (o.c)					
		Without Overhangs1			With Overhangs up to LJ/42		
Species	Size	12"	16"	24"	12"	16"	24"
Douglas Fir-Larch, Hem-Fir, SPF3	2x6	8'-1"	7'-0"	5'-9"	7'-5"	6'-9"	5'-9"
	2x8	10'-10"	9'-5"	7'-8"	9'-7"	8'-8"	7'-7"
	2x10	13'-3"	11'-6"	9'-4"	13'-3"	11'-6"	9'-5"
	2x12	15'-4"	13'-4"	10'-10"	15'-5"	13'-4"	10'-11"

1. Assumes 60 PSF live load, 10 PSF dead load, L/360 deflection, #2 grade, and wet service conditions.
2. Assumes 60 PSF live load, 10 PSF dead load, L/180 cantilever deflection with 220 lb. point load, #2 grade, and wet service conditions.
3. Incising assumed for refractory species including Douglas Fir-Larch, Hem-Fir, and Spruce-Pine-Fir.

Standard Deck Connection Details







SPECIAL SHEAR PANEL DETAIL
SCALE: N.T.S.

R. PAUL AUSTIN
STATE OF WASHINGTON
16968
REGISTERED
PROFESSIONAL ENGINEER
JUL 28 2020

Prepared for:
MIKE AND CAROL WNEK
1655 SHERWOOD DRIVE
BREMERTON, WA 98311

Revisions:

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DESIGN BY: EPA
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PROJ. #: ...

Prepared By:
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CIVIL ENGINEER
2180 NE ETON LANE
BREMERTON, WA 98311
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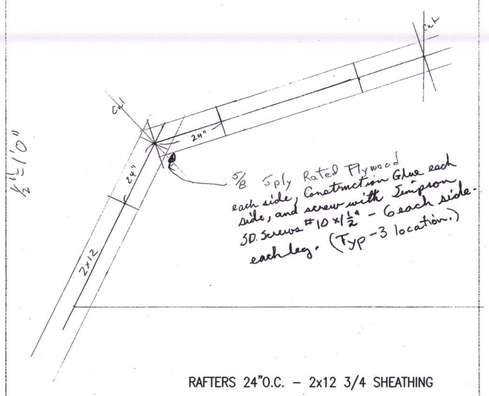
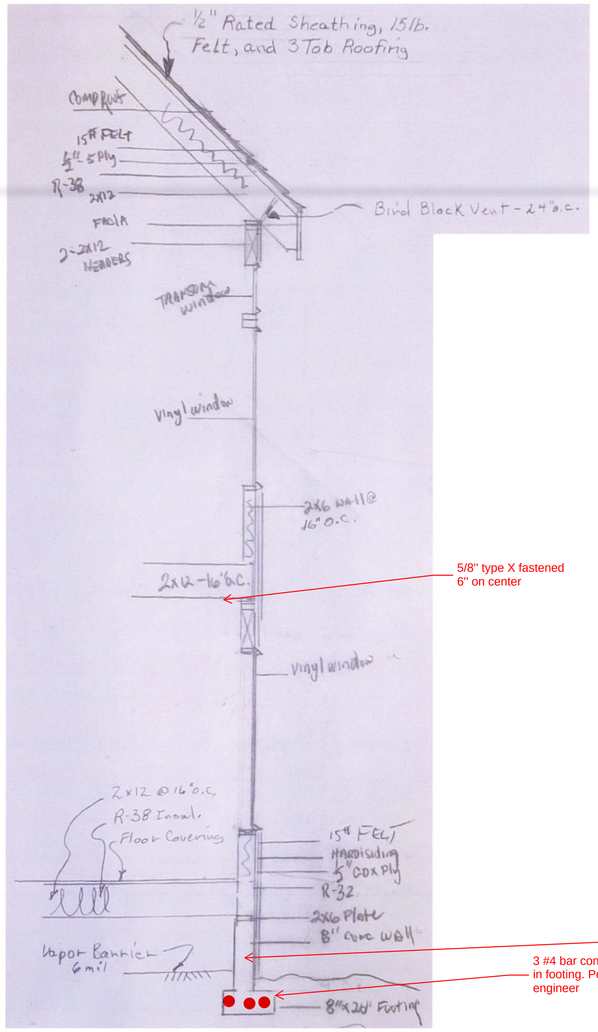
DETAILS
WNEK BARN
BREMERTON WASHINGTON

S2



RAFTERS 24"O.C. – 2x12 3/4 SHEATHING



5/8" type X fastened 6" on center

#4 bar vertical every 48" with alternating hooks. Per engineer

3 #4 bar continuous in footing. Per engineer

WALL SECTION
SCALE: 1/4" = 1'–0"

0 4 8 12
GRAPHIC SCALE (in feet)

Reviewed for code compliance with IRC 2015
Kitsap County Building Department
jbowling@co.kitsap.wa.us
08/04/2020

CHANGES
MUST Be Approved Prior
To Performing Work

Subject To Field Inspection

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DETAILS
WNEK BARN
BREMERTON WASHINGTON

S3

Permit Number: 20-02334