2010 PORCH / DECK PERMIT

2801 89th Street, Sturtevant, Wisconsin 53177

DATE:_____PERMIT NO:_____ TAX KEY NO:_____

OWNER'S NAME: _____PHONE NUMBER:_____

JOB SITE ADDRESS: _____

PERMIT APPLICANT: OWNER or CONTRACTOR (Circle One)

Plan Review: - $73.00 Total Permit Fee:- $146.00

Building Permit Fee: - $73.00

DESCRIPTION: Deck_____ Attached_____ Detached _____ Porch_____

Porch/Deck Size: _____Wide by_____Length Heigth_____ Square Feet_____

Decking Material:_____ Location: Front yard - Back yard – Side yard (circle one)

- ATTACH DETAILED PLANS WITH ALL PERTINIENT DIMENSIONS
- AN ELECTRICAL PERMIT IS REQUIRED IF SUPPLYING ELECTRIC TO DECK / PORCH
- SITE PLAN OR SURVEY PLOT ATTACHED DEPICTING LOCATION OF DECK / PORCH
- READ ORDINANCE 14.30 FOR BUILDING CODE REQUIREMENTS
- OWNERS THAT APPLY FOR PERMITS READ AND SIGN THE CAUTIONARY STATEMENT
- CONTRACTORS THAT APPLY FOR PERMITS PROVIDE THE REQUIRED CREDENTIAL NUMBERS

RE-INSPECTION FEE: $151.80

ALL FEES EFFECTIVE JANUARY - 2010

CALL 262-886-7201 FOR POST HOLE – ROUGH FRAMING – AND FINAL INSPECTIONS

CONTRACTORS CREDENTIAL#_____DCQ#_____

COMPANY NAME:_____ PHONE #_____

STREET:_____ CITY:_____ STATE:_____ ZIP CODE: _____

APPLICANTS SIGNATURE:_____DATE:_____

APPROVED BY:_____ DATE:_____

BUILDING INSPECTOR

It is hereby agreed between the undersigned (as owner or agent) and the Village of Sturtevant, that for and in consideration of the premises and of the permit for the execution of electrical installation for light, heat or power as above described, to be issued and granted by the inspector of buildings, that the work will be done in accordance with the descriptions set forth in this statement, and it is further agreed to alter or install same in strict compliance with the Ordinances of the Village of Sturtevant, with Wisconsin Statues and Administrative Code, and to obey any and all lawful orders of the Electrical Inspector of the Village of Sturtevant. This permit will grant only two trips with one re-inspection for rough, final, and building service if needed. Additional trips, when needed, will be billed as re-inspection fees per trip. To schedule inspections call (262) 886-7201.

2009 CAUTIONARY STATEMENT TO OWNERS OBTAINING BUILDING PERMITS

101.65 (lr) of the Wisconsin Statutes requires municipalities that enforce the Uniform Dwelling Code to provide an owner who applies for a building permit with a statement advising the owner that:

If the owner hires a contractor to perform work under the building permit and the contractor is not bonded or insured as required under s.101.654 (2) (a), the following consequences might occur:

(a) The owner may be held liable for any bodily injury to or death of others or for any damage to the property of others that arises out of the work performed under the building permit or that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

(b) The owner may not be able to collect from the contractor damages for any loss sustained by the owner because of a violation by the contractor of the one – and two - family dwelling code or an ordinance enacted under sub. (1)(a), because of any bodily injury to or death of others or damage to the property of others that arises out of the work performed under the building permit or because of any bodily injury to or death of others or damage to the property of others that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

_____

Homeowner's Signature

Subscribed and sworn to before me
this _____ day of _____ , 2009

_____

Notary Public, Racine, Co., WI
My Commission Expires on: _____

STURTEVANT UNIFORM BUILDING CODE 14.30

DECKS

14.30 GENERAL REQUIREMENTS.

(1) DEFINITIONS.

(a) *Deck*: Any structure which serves as a raised horizontal platform on floor constructed of wood or other materials, without enclosing walls or roof.
(b) *Attached deck*: Any deck which is physically connected to the principal building or accessory structure.
(c) *Detached deck*: Any deck which is not physically attached to the principal building or accessory structure.

(2) SOIL AND EXCAVATION REQUIREMENTS FOR DECK PIERS OR FOUNDATIONS.

(a) No pier shall be placed on soil with a bearing capacity of less than 2,000 lbs. per square foot unless the pad support is designed through structural analysis.
(b) All organic material (roots, etc.) shall be cut off at the sidewalls of the borings or trench. All organic and loose material must be removed from the cavity area prior to pouring concrete.

(3) DECKS PIERS, PADS AND FOUNDATIONS.

(a) General footings, pads or piers shall be of adequate bearing area to safely distribute all live and dead loads to the supporting soil without exceeding the bearing capacity of the soil.
(b) Type and size of concrete pads, piers or foundations.

1. Decks attached to principal buildings.
    a. *Concrete Pads*. The minimum depth of a pad shall be 48" below grade. The minimum dimensions of this pad shall be 4" in depth and 8" in diameter.
    b. *Piers*. The minimum depth of concrete piers shall be 48" below grade. The minimum dimension of this pier shall be 8" in diameter. (The concrete pier(s) shall extend a minimum of 6" above grade unless an approved mounting bracket is secured at the top surface of the pier(s)).
    c. Direct burial wood posts shall be placed on a minimum 2" normal thickness treated plat or other approved materials at a uniform depth below grade. Posts shall be treated to the requirements of the American Wood Preserver's Association (AWPA) standards C2 and

C15, for direct soil contact 4" below grade. Posts shall be a minimum of 4' below grade.

(4) FRAMING.

(a) General Requirements.

1. *Materials*. All wood framing used in deck construction shall be pressure treated against decay or shall be a species of wood that is naturally decay resistant or shall be protected from weather.
2. *Design loading*. Decks shall be designed for a minimum of a 40 pound per square foot loading.
3. See fastener schedule for nailing requirements. (RB159-06/07)

(b) Column Posts.

1. *Column spacing*. Column posts shall be spaced per "Table No. 2".
2. *Column size*.
   a. All column posts not exceeding six (6) feet in height shall be a minimum of four inches by four inches (4 x 4) nominal thickness.
   b. All column posts exceeding six (6) feet in height shall be a minimum of six inches by six inches (6 x 6) nominal thickness.
3. *Lateral support*. Column posts shall be constructed in such a manner or mechanically attached to the deck foundation to resist lateral movement.

(c) Beams.

1. *Beam Size*. All beams shall be sized per "Table No. 2".
   a. Beams, except as otherwise noted in "Table No. 2", shall be a minimum of two (2), two (2) inch thick members or one (1) four (4) inch thick member (i.e., 2 2 x 8 or 1 4 x 8).
   b. Beams may be spaced on each side of the post provided that blocking is installed a minimum of twenty four (24) inches.

2. *Bearing*. Beams bearing directly on the posts shall be attached by means of approved metal anchors or other approved methods.

3. *Ledger boards*. Ledger boards attached directly to the house or other structure may be used to replace a beam or beams. A single member of equal depth to the required size beam shall be used. The ledger board shall be attached with bolts, lag bolts or nails, spaced no less than 16 inches on center, and secured directly into the building structure. Flashing shall be installed between the ledger and building structure.

4. *Beams* shall not be cantilevered more than twelve (12) inches past the column post.

(d) Joists.

1. *Joist size*. All deck joists shall be sized and spaced per "Table No. 2".
2. *Bearing*. Deck joists shall bear a minimum of one and one half (1½) inches on the beam or ledger board. Joists fastened to the face of the beam or ledger shall be attached with approved metal hangers.
3. *Bridging*. Bridging shall be provided at intervals not exceeding eight (8) feet.
4. *Overhanging of joists*. Joists which are at right angles to the supporting beam shall not be cantilevered more than two (2) feet past the supporting beam, unless designed by structural analysis.

(e) Decking.

1. *Material*. All decking material shall be a minimum of one and one quarter (1¼) inches thick, nominal thickness. One inch decking may be used provided that the joists are spaced no more than 16" o.c.
2. Decking Orientation.
   a. Decking shall be installed diagonally or at right angles to the joists.
   b. Decking shall be centered over joists with cuts made parallel to joists. Not more than two adjacent boards may break joints on the same joist except at ends and at openings.

(f) Guardrails and handrails.

1. Guardrails. All decks which are more than twenty four (24) inches above grade shall be protected with guardrails.
2. Handrails. Every stairway of more than three (3) risers shall be provided with at least one handrail. Handrails shall be provided on the open sides of stairways.
3. Guardrails and handrail detail.
   a. *Height:* Handrails shall be located at least thirty (30) inches, but not more than thirty four inches, above the nosing of the treads. Guardrails shall be located at least thirty six (36) inches above the surface of the deck.
   b. *Open railings*: Open guardrails or handrails shall be provided with intermediate rails or an ornamental pattern to prevent the passage of a sphere with a diameter greater than 4"(four) inches.
   c. *Railing loads*: Handrails and guardrails shall be designed and constructed to withstand a 200 pound load applied in any direction.

(g) Stairway, treads and risers.

1. *Risers*. Risers shall not exceed eight (8) inches in height measured from tread to tread.
2. *Treads*. Treads shall be at least nine (9) inches wide, measured

horizontally from nose to nose.

3. *Variation*. There shall be no variation in uniformity exceeding 3/16 inch in the width of a tread or in the height of risers.
4. *Stair stringers* shall be supported in accordance to the same manner as used for the deck.

(h) ALTERNATIVE PROVISIONS AND METHODS..

1. *Wood Decks*. Wood decks attached to the dwelling may be constructed to the Uniform Dwelling Code standards listed below.
   a. Excavation requirements of §Comm 21.14
   b. Footing requirements of §Comm 21.15
   c. Frost penetration requirements of §Comm 21.16
   d. Load requirements of §Comm 21.02
   e. Stair, handrail and guardrail requirements of §Comm 21.04
   f. Decay protection requirements of §Comm 21.10

2. New materials and methods shall comply with the provisions of Section 14.60.

3. *Detached decks*.
   a. Concrete pads shall be provided at a uniform depth below grade with all loose or organic material moved from the pad area prior to placement of concrete. The pad shall have a minimum depth of 4" thick and 8" in diameter.
   b. Piers–The minimum of 8' diameter concrete piers shall be at a uniform depth below grade.
   c. Direct burial wood posts shall be placed on a minimum 2" nominal pressure treated plate or other approved materials at a uniform depth below grade. Posts shall be treated to at a uniform depth below grade. Posts shall be treated to CCA.40 for direct soil contact.
   d. Ground contact framing shall be allowed for decks which are less than 24" above grade. All materials in direct contact with the soil shall be treated to the requirements of the American Wood Preservers' Association (AWPA) Standards C2 and C15.

TABLE No. 2

JOIST LENGTH — TREATED LUMBER

POST SPACING		6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'
4'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	1 - 2x6	1 - 2x6 1 - 2x8	1 - 2x6 1 - 2x8	1 - 2x8 1 - 2x10	1 - 2x8 1 - 2x10	1 - 2x8 1 - 2x10	1 - 2x8 1 - 2x10	1 - 2x10 1 - 2x12	1 - 2x10	1 - 2x10 1 - 2x12	1 - 2x12
5'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	1 - 2x6	2 - 2x6 1 - 2x8	2 - 2x6 1 - 2x8	1 - 2x8 1 - 2x10	1 - 2x8 1 - 2x10	1 - 2x8 1 - 2x10	1 - 2x8 1 - 2x10	1 - 2x10 1 - 2x12	1 - 2x10	1 - 2x10 1 - 2x12	1 - 2x12
6'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	2 - 2x6	2 - 2x6 1 - 2x8	2 - 2x6 2 - 2x8	2 - 2x8 1 - 2x10	2 - 2x8 1 - 2x10	2 - 2x8 1 - 2x10	2 - 2x8 1 - 2x10	2 - 2x10 1 - 2x12	2 - 2x10 1 - 2x12	2 - 2x10 1 - 2x12	2 - 2x10 1 - 2x12
7'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	2 - 2x6	3 - 2x6 2 - 2x8	3 - 2x6 2 - 2x8	2 - 2x8 2 - 2x10	2 - 2x8 2 - 2x10	2 - 2x8 1 - 2x10	3 - 2x8 2 - 2x10	2 - 2x10 1 - 2x12	2 - 2x10 2 - 2x12	2 - 2x10 2 - 2x12	2 - 2x10 2 - 2x12
8'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	3 - 2x6 2 - 2x8	3 - 2x6 2 - 2x8	3 - 2x6 2 - 2x8	3 - 2x8 2 - 2x10	3 - 2x8 2 - 2x10	3 - 2x8 2 - 2x10	3 - 2x8 2 - 2x10	2 - 2x10 2 - 2x12	3 - 2x10 2 - 2x12	3 - 2x10 2 - 2x12	3 - 2x10 2 - 2x12
9'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	3 - 2x6 2 - 2x8	4 - 2x6 3 - 2x8	4 - 2x6 3 - 2x8	3 - 2x8 2 - 2x10	3 - 2x8 2 - 2x10	3 - 2x8 2 - 2x10	4 - 2x8 3 - 2x10	3 - 2x10 2 - 2x12	3 - 2x10 2 - 2x12	3 - 2x10 2 - 2x12	3 - 2x10 2 - 2x12
10'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	4 - 2x6 3 - 2x8	3 - 2x8 2 - 2x10	3 - 2x8 2 - 2x10	3 - 2x8 3 - 2x10	4 - 2x8 3 - 2x10	4 - 2x8 3 - 2x10	4 - 2x8 3 - 2x10	3 - 2x10 2 - 2x12	3 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12
11'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	3 - 2x8 2 - 2x10	3 - 2x8 2 - 2x10	4 - 2x8 3 - 2x10	4 - 2x8 3 - 2x10	3 - 2x10 2 - 2x12	3 - 2x10 3 - 2x12	3 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12
12'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	3 - 2x8 2 - 2x10	4 - 2x8 3 - 2x10	4 - 2x8 3 - 2x10	3 - 2x10 2 - 2x12	3 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	3 - 2x12	3 - 2x12	3 - 2x12
13'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	3 - 2x8 3 - 2x10	4 - 2x8 3 - 2x10	3 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	3 - 2x10	3 - 2x12	4 - 2x12	4 - 2x12	4 - 2x12
14'	JOIST SIZE	2x6 24" OC	2x6 16" OC 2x8 24" OC	2x6 16" OC 2x8 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 16" OC 2x10 24" OC	2x8 12" OC 2x10 16" OC	2x10 16" OC 2x12 24" OC	2x10 16" OC	2x10 12" OC 2x12 16" OC	2x12 16" OC
	BEAM SIZE	4 - 2x8 3 - 2x10	3 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x10 3 - 2x12	4 - 2x12	4 - 2x12	4 - 2x12	4 - 2x12	ENG. BEAM REQUIRED	ENG. BEAM REQUIRED

This table is based on the use of Ponderosa Pine No. 2 or better (treated for weather and/or ground exposure)

RB159–06/07

R502.2.2.1 (New), Table R502.2.2.1 (New), R502.2.2.1.1 (New)

FASTNER SCHEDULE

Proponent: Richard E. Bartell, Hanover County, VA, representing the Virginia Plumbing and Mechanical Inspectors Association/Virginia Building and Code Officials Association

Add new text and table as follows:

R502.2.2.1 Deck ledger connection to band joist. For residential applications and a total design load of 50 psf, the connection between a pressure preservative treated southern pine, incised PPT hem-fir, (or approved decay-resistant species) deck ledger and a 2-inch nominal band joist bearing on a sill plate or wall plate shall be constructed with ½-inch lag screws or bolts with washers per Table R502.2.2.1.

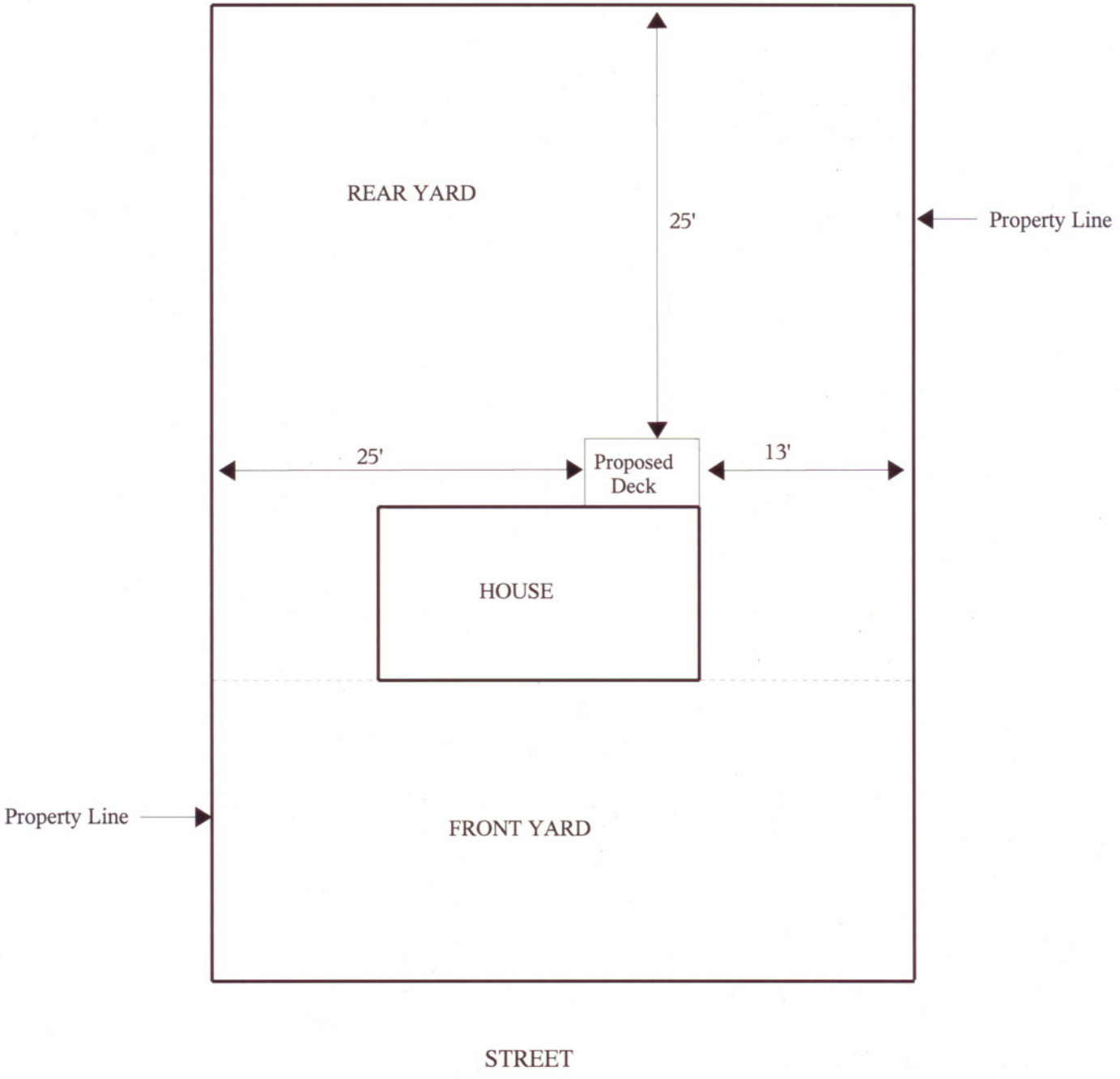
TABLE R502.2.2.1
FASTENER SPACING FOR A RESIDENTIAL PPT SOUTHERN PINE OR HEM-FIR DECK LEDGER AND A 2-INCH NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST (50 PSF TOTAL LOAD)[3,6]

Joist Span (ft)	6' and less	6'-1 to 8'	8'-1" to 10'	10'-1" to 12'	12'-1" to 14'	14'-1' to 16'	16'-1" to 18"
	On-Center Spacing of Fasteners[4,5]						
½" diameter Lag Screw with 15/32" sheathing[1]	30	23	18	15	13	11	10
½" diameter bolt with 15/32" sheathing	36	36	34	29	24	21	19
½" diameter bolt with 15/32" sheathing and ½" stacked washers[2]	36	36	29	24	21	18	16

1 The tip of the lag screw shall fully extend beyond the inside face of the band joist.
2 The maximum gap between the face of the ledger board and face of the house band joist shall be ½".
3 Ledgers shall be flashed to prevent water from contacting the house band joist.
4 Lag screws and bolts shall be staggered per R502.2.1.1.
5 Deck ledger shall be 2x8 PPT No.2 grade (minimum) or other approved method and material as established by standard engineering practice.
6 When solid-sawn PPT deck ledgers are attached to engineered lumber products (composite rimboard or LVL), the ledger attachment requirements in the product manufacturer's engineering report shall be followed.

R502.2.2.1.1 Placement of lag screws or bolts in residential deck ledgers. The lag screws or bolts shall be placed two inches in from the bottom or top of the deck ledgers and two inches in from the ends. The lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger.

SAMPLE SITE PLAN



APPLICATION FOR PORCH / DECK PERMIT

Indicate the following on the site plan:

- Lot Dimensions: Width:_____ Depth:_____
- Indicate size, location and distance from property lines of proposed porch/deck
- Show existing structures (sheds, garages, detached decks, fences)
- Indicate location of all driveways (yours and your neighbors)

CHECK ONE: Alley ☐
Neighbor ☐

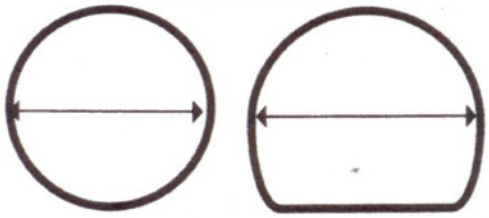
CHECK ONE:
Alley ☐
Neighbor ☐

CHECK ONE:
Alley ☐
Neighbor ☐

STREET

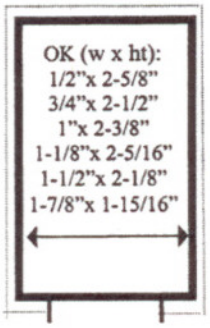
HANDRAIL SHAPES

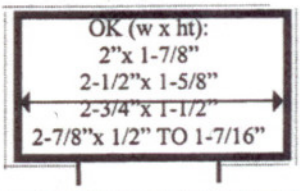
ROUND



MAXIMUM 2"
DIAMETER

RECTANGULAR

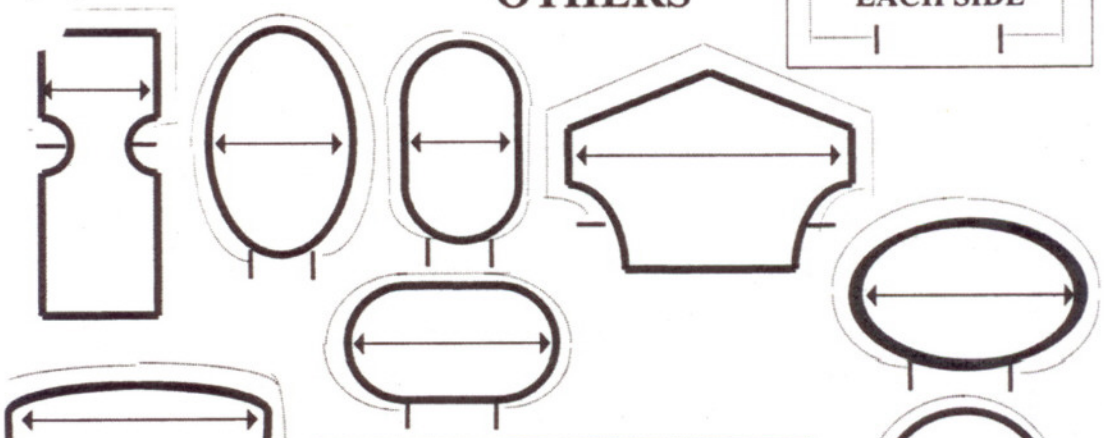




MAXIMUM 2-7/8"
CROSS SECTION

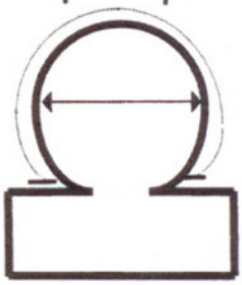
MAX. 6-1/4"
GRIPPING
SURFACE INCL.
MIN. 1/4"
RECESS ON
EACH SIDE

OTHERS

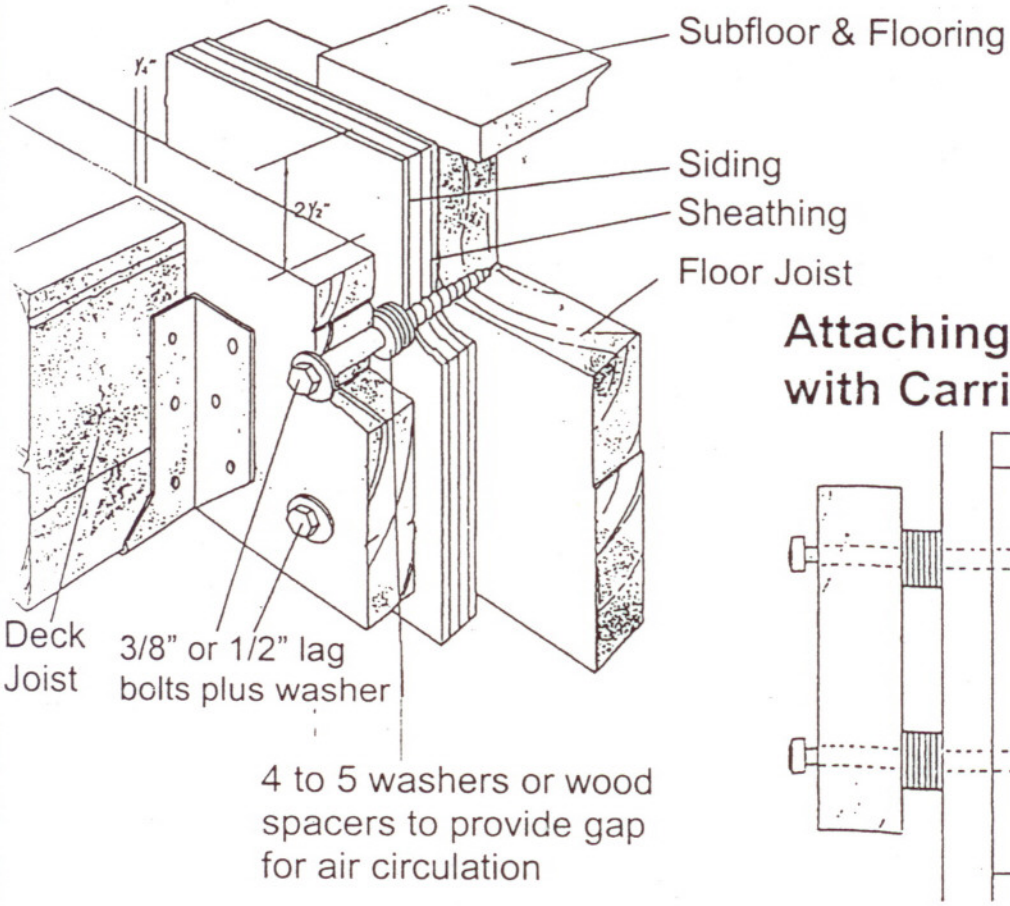


MAXIMUM 2-7/8"
CROSS SECTION

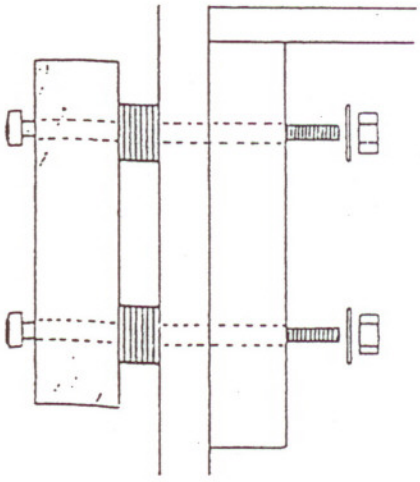
4" TO 6-1/4" GRIPPING
SURFACE, INCLUDING A
MIN. 1/4" RECESS ON
EACH SIDE



Attaching a Ledger with Lag Bolts

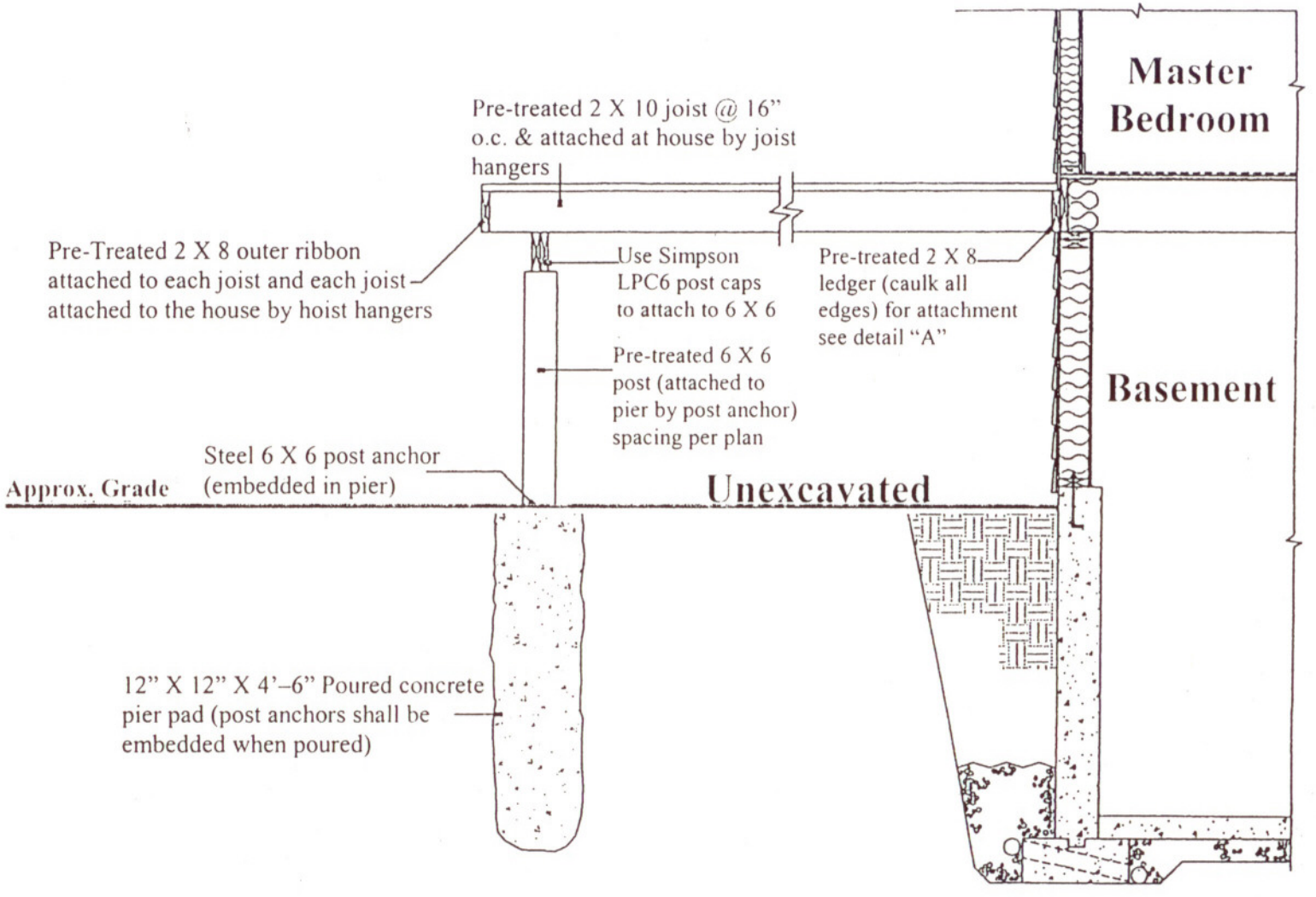


Attaching a Ledger with Carriage Bolts



Use carriage bolts or machine bolts if you can get under floor to attach and tighten nuts

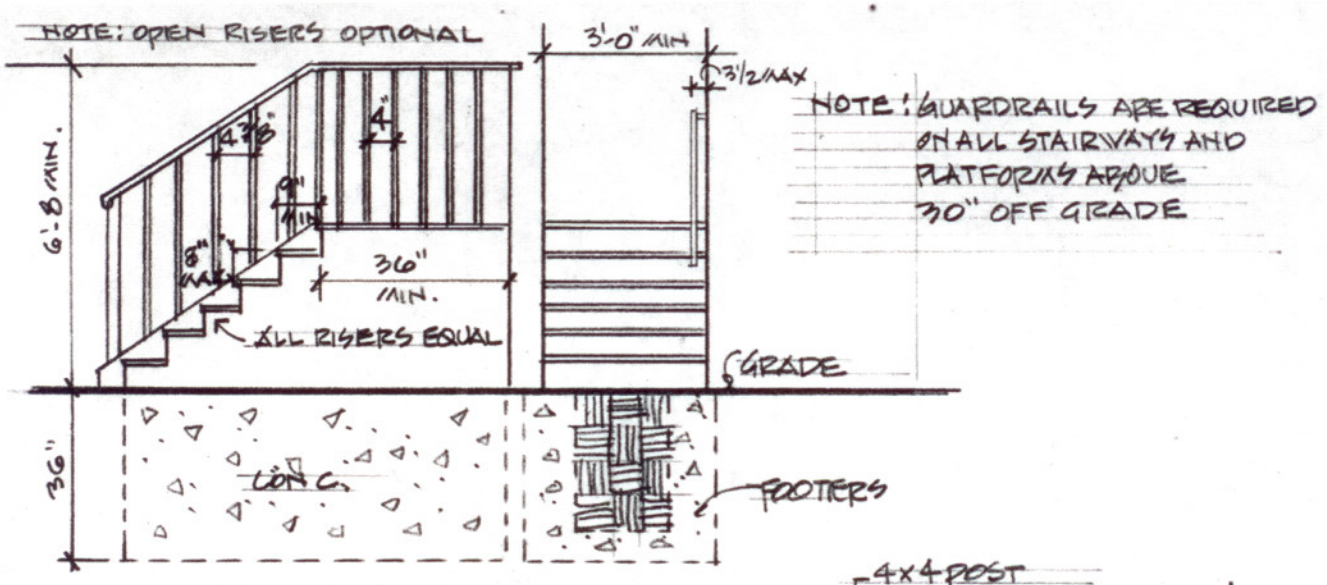
EXAMPLES



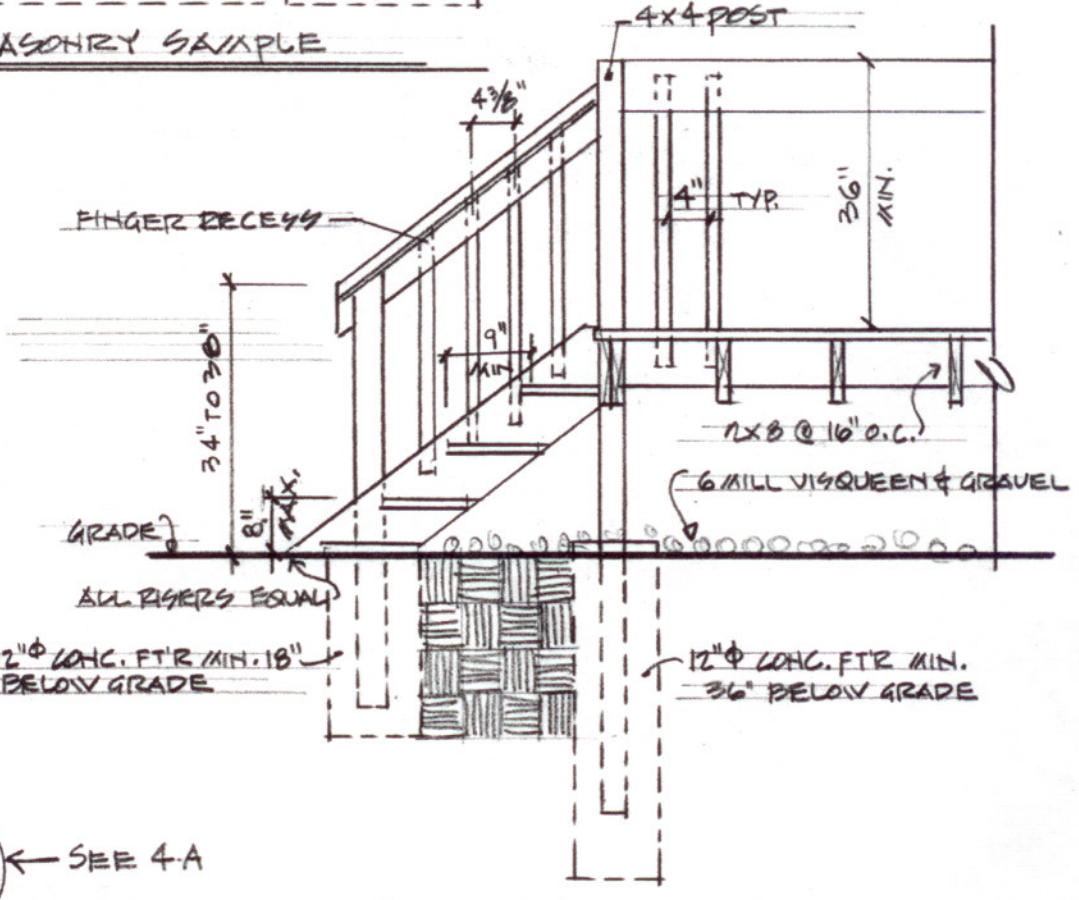
Deck Detail

EXAMPLE

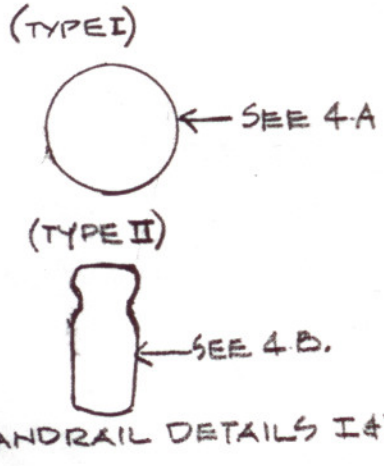
EXTERIOR STEPS - sample drawings



MASONRY SAMPLE



TREATED LUMBER SAMPLE



SAMPLES