

# DECK

Website: [www.fdl.wi.gov](http://www.fdl.wi.gov)  
City-County Government Center  
160 S. Macy Street - P.O. Box 150 - Fond du Lac, WI 54936-0150

## Residential Deck Information

### Residential Decks follow the Wisconsin Uniform Dwelling Code Ch. SPS 321

**Required Documents-** Permit application, site plan and deck drawings.

**Building Permits-** Required for the construction of any deck.

**Frost Footings-** Required for any deck attached to a dwelling, porch or garage that has frost footings. The minimum depth to the base of the footing is 48".

**Live Load-** All decks shall be designed to support a live load of 40 pounds per square foot.

**Guardrails-** Required on all decks at 24 inches or higher. Rail must be 36 inches minimum height. Open guardrails and stair railings must have intermediate rails that a four and three-eighths-inch (4-3/8") sphere cannot pass through. *Exception:* The triangular opening formed by the riser, tread and bottom element (shoe rail) of a guardrail may be sized so that a six inch (6") sphere cannot pass through.

**Cantilevers- 'Overhanging Joists and Beams'**- Joists are not to overhang beams by more than two feet, nor are beams allowed to overhang posts by more than one quarter the beams span unless accompanied with engineering documents.

**Flashing-** All connections between deck and dwelling shall be weatherproof. Any cuts in exterior finish shall be flashed.

**Framing Details-** Header beams and joists that frame into ledgers or beams shall be supported by approved framing anchors such as joist hangers.

**Nails and Screws-** Use only fasteners approved for use with treated material. i.e. stainless steel, double hot-dipped galvanized.

**Wood Required-** All wood used in the construction of decks is required to be of a type that is naturally resistance to decay (redwood, cedar, etc.) or of an approved treated wood.

**Stairs-** Minimum width of 36 inches. Maximum rise of eight-inches (8"). Minimum run of nine-inches (9"). Largest tread width or riser height shall not exceed the smallest by more than three-eighths-inch (3/8") inch in any run.

**Handrails-** The top shall be placed not less than 30 inches or more than 38 inches above the nosing of the treads. Stairways having more than 3 risers shall be provided with a handrail. The handrails cross sectional area shall not exceed two and seven-eighths-inch (2-7/8"). Please see the attached sample for approved handrail shapes.

**Special Design Note-** Some deck designs may not be appropriate should the placement of a screen porch or 3-season porch on the deck platform be a future consideration. Setbacks for porches are not the same as setbacks for decks.

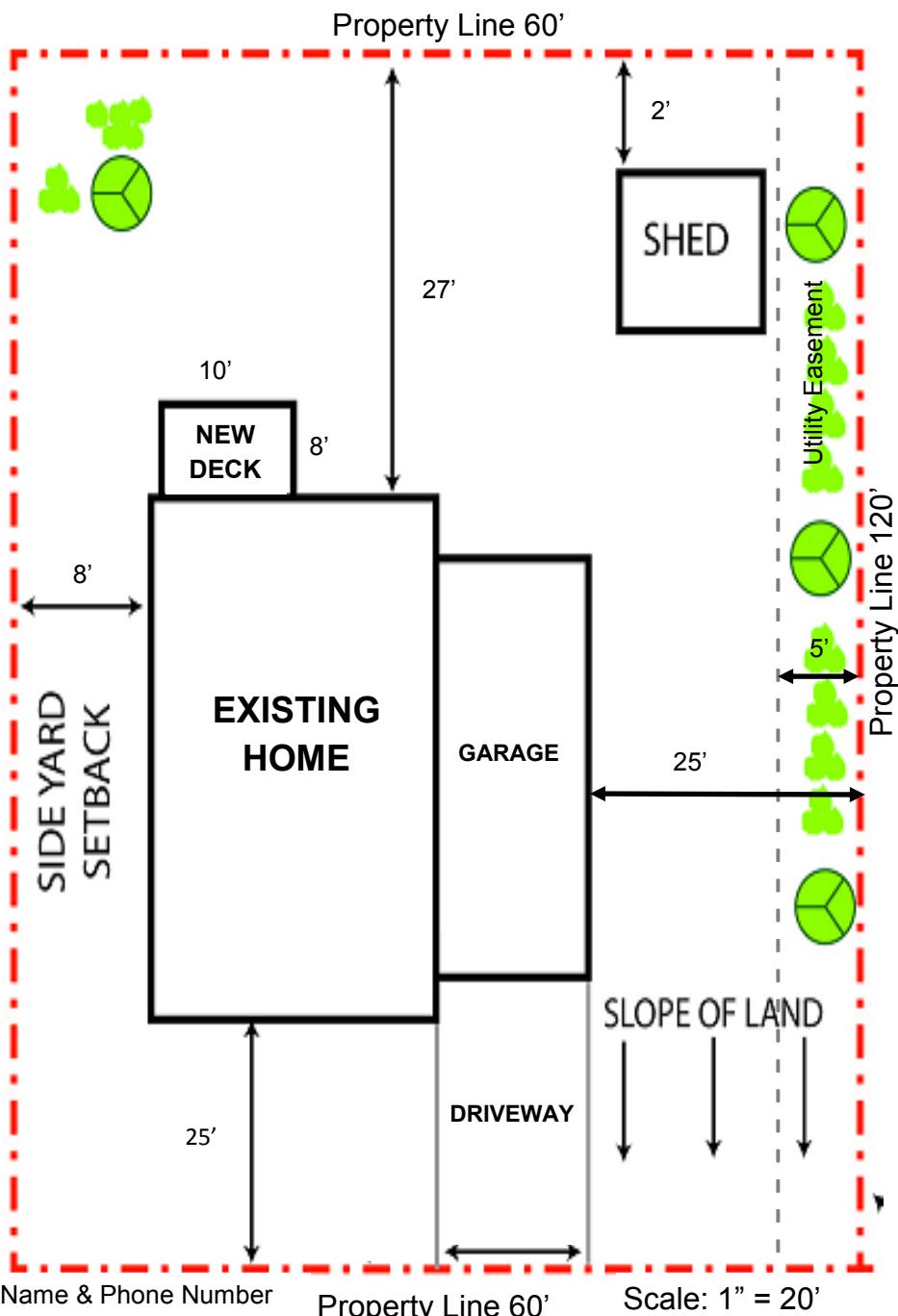
**Inspection of footings is required before pouring concrete.**

**Rough Framing Inspection is required prior to installation of decking**

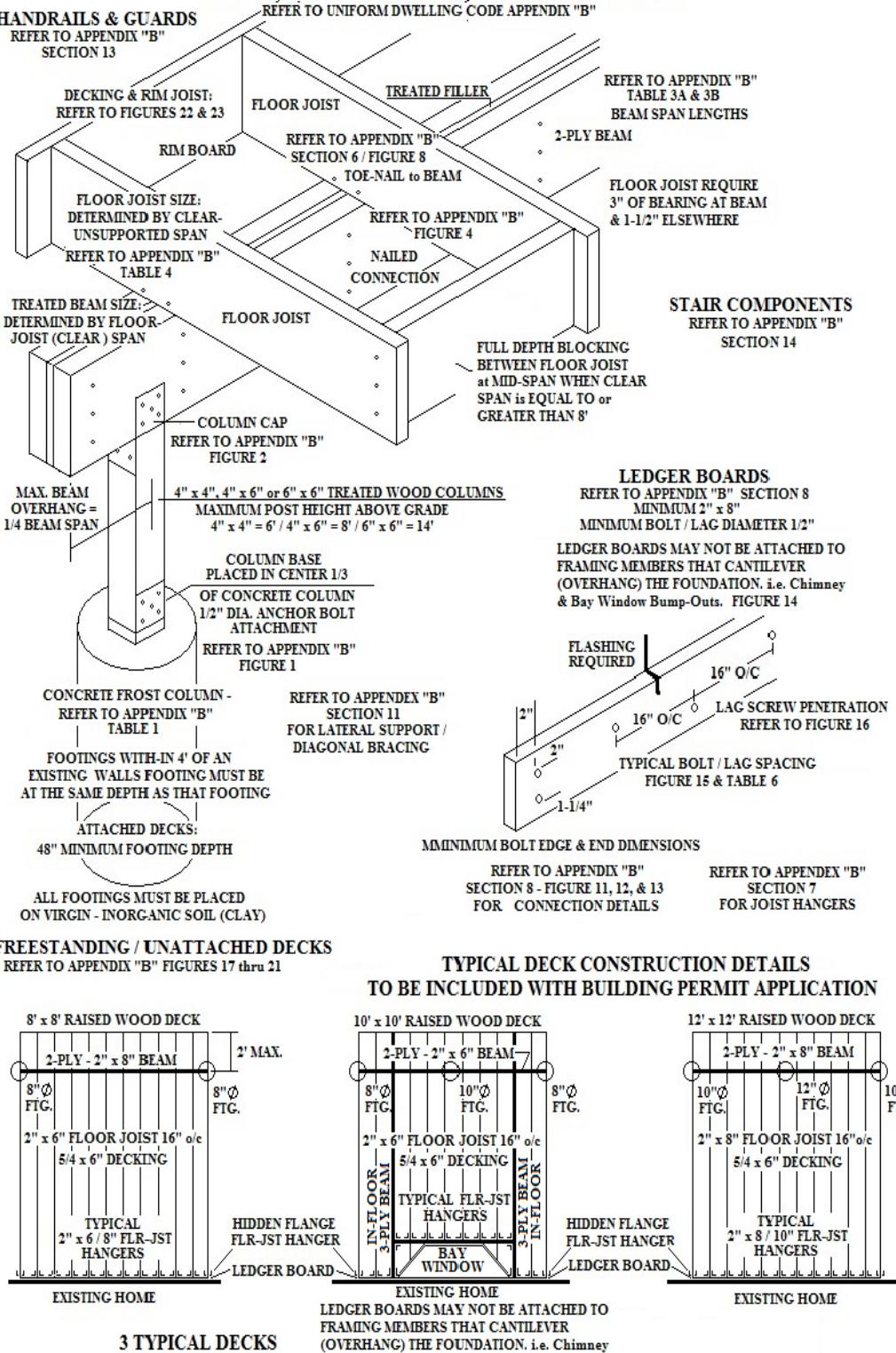
**Final inspection of completed work is required. All stairs, handrails & guard rails are installed.**

*Fond du Lac City Government's mission is to provide excellent local government through responsiveness and accountability to the citizens of Fond du Lac.*

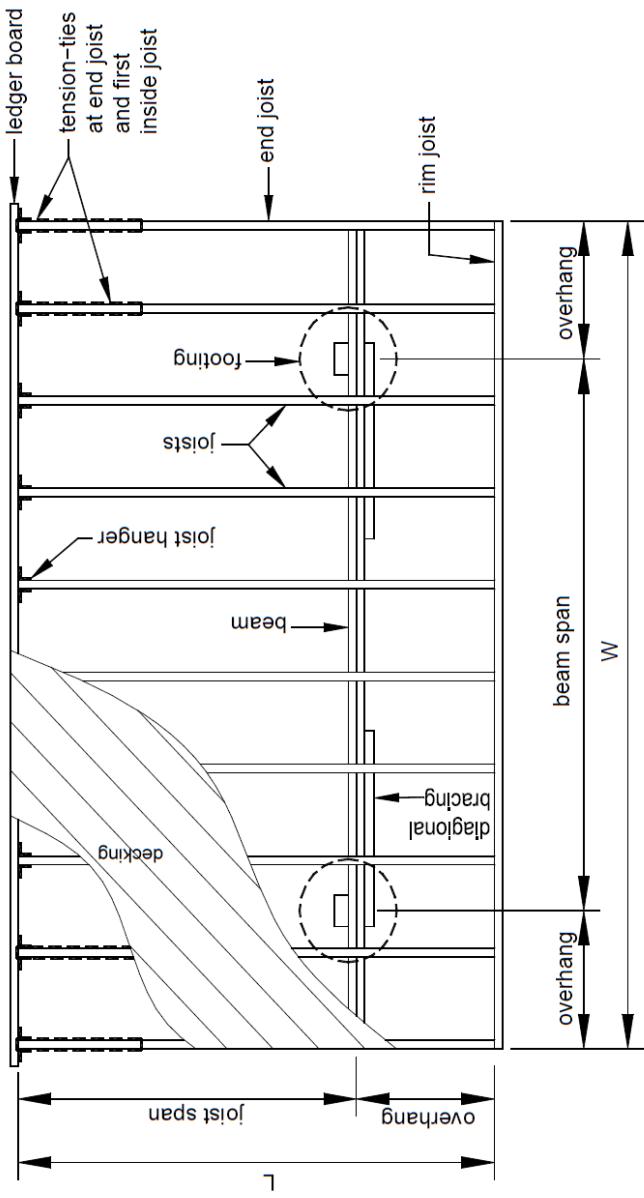
# Typical Site Plan



## TYPICAL DECK CONSTRUCTION DETAILS



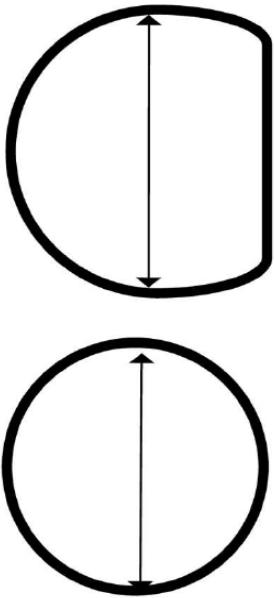
**Figure 35**  
**TYPICAL DECK FRAMING PLAN**



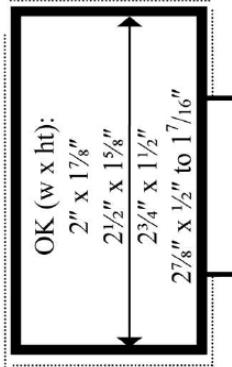
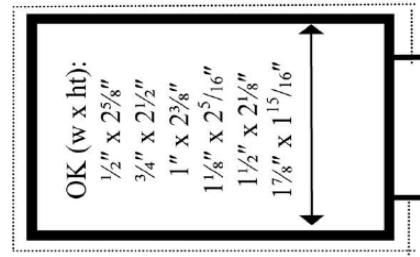
- Decking:**  2x4    2x6    five-quarter board    wood-plastic composite (per ASTM D 7032)  
 Other decking, evaluation report number: \_\_\_\_\_
- Joists:** size:  2x6    2x8    2x10    2x12    2x14  
 joist span dimension: \_\_\_\_\_ ft. - \_\_\_\_\_ in.  
 overhang:  Yes    No    No overhang dimension: \_\_\_\_\_ ft. - \_\_\_\_\_ in.
- rim joist:  2x6    2x8    2x10    2x12
- Beam(s):** number of plies:  2    3    4    5  
 size:  2x6    2x8    2x10    2x12  
 overhang:  Yes    No    No overhang dimension: \_\_\_\_\_ ft. - \_\_\_\_\_ in.  
 height: \_\_\_\_\_ ft. - \_\_\_\_\_ in.
- Posts:** size:  4x4    4x6    6x6  
 size: \_\_\_\_\_ in.    square    round   thickness: \_\_\_\_\_ in.
- Footings:** size:  2x8    2x10    2x12    Not applicable (free-standing deck)
- Ledger:** ledger board size:  2x8    2x10    2x12  
 fastener:  Through bolt    Lag screw  
 Expansion anchor    Adhesive anchor
- Lateral support:**  Tension-tie    Diagonal bracing, size:  2x  
 (not permitted for free-standing deck)
- Deck size:** L = \_\_\_\_\_ ft. - \_\_\_\_\_ in.   W = \_\_\_\_\_ ft. - \_\_\_\_\_ in.

# HANDRAIL SHAPES

## ROUND



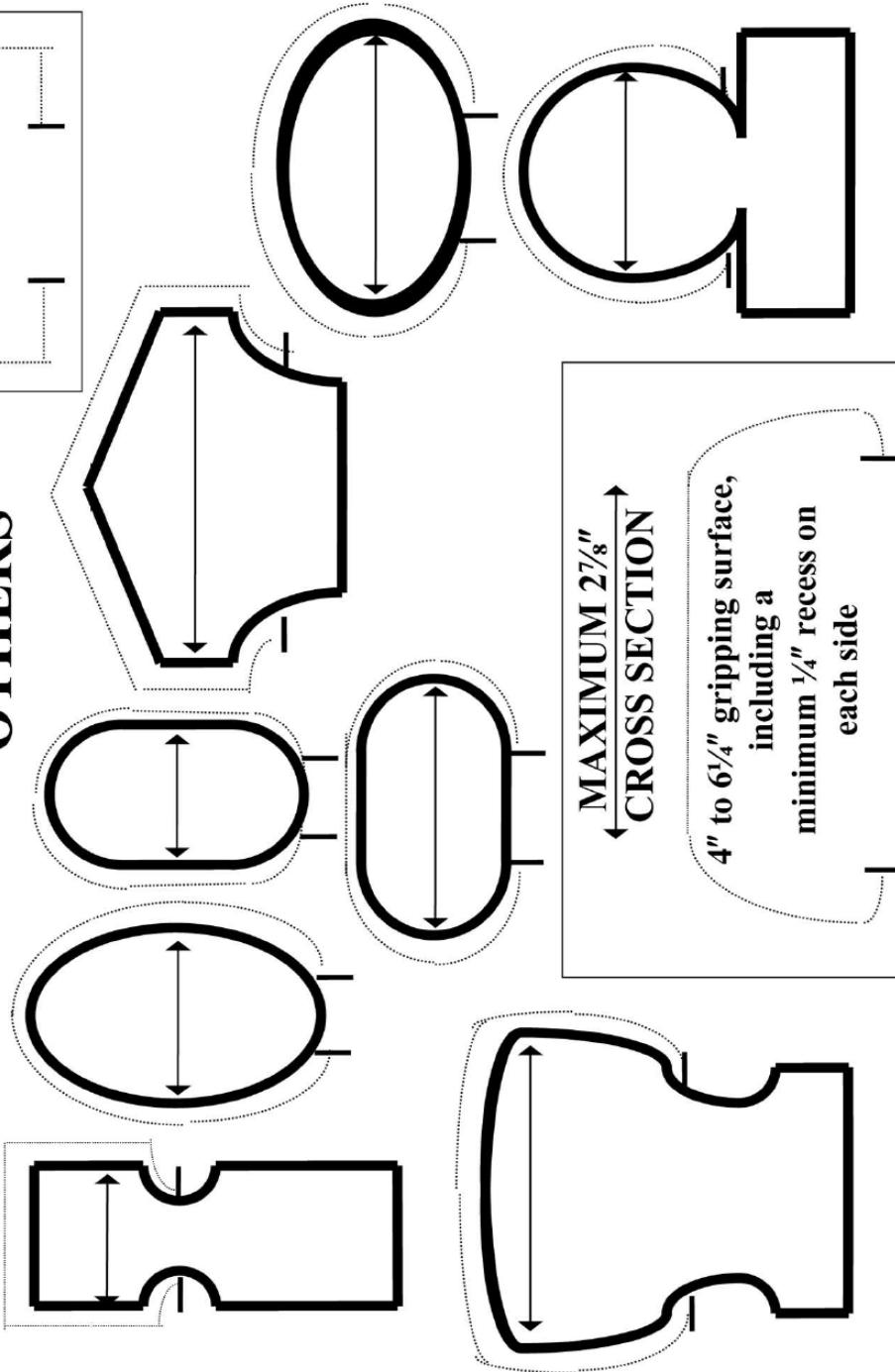
## RECTANGULAR



**MAXIMUM 2 $\frac{7}{8}$ " CROSS SECTION**

Maximum  $6\frac{1}{4}$ " gripping surface including minimum  $\frac{1}{4}$ " recess on each side

## OTHERS



**MAXIMUM 2 $\frac{7}{8}$ " CROSS SECTION**

4" to  $6\frac{1}{4}$ " gripping surface, including a minimum  $\frac{1}{4}$ " recess on each side