

CITY OF WEST CHICAGO

Building Permit Guide for: DECKS

Checklist for Permit Application Submittal:

- Completed Residential Building Permit Application

- TWO (2) SETS OF PLANS specifying:
 - All pier and beam placements
 - Size and type of all lumber to be used
 - Stair placement
 - Height of deck above grade
 - Guardrail details
 - Specify method for providing lateral load support attachment of deck to house in at least two locations. This may be accomplished by:
 - Utilizing an approved pre-engineered system having a 1500 pound capacity at each connection,
 - Providing a design stamped by an engineer licensed in the State of Illinois,
 - Using the system shown in Figure 502.2.2.3 of 2009 IRC, or
 - Constructing the deck as entirely freestanding (cantilevered decking may butt up against the house)

- Copy of the homeowner's most recent PLAT OF SURVEY indicating:
 - The proposed deck LOCATION and SIZE DIMENSIONS (LENGTH X WIDTH) and setback distances to existing building(s) and lot lines

City of West Chicago

Residential Decks—Information Sheet

<i>Frost Footings:</i>	Required for any deck. The minimum depth from finished grade to the base of the footing is 42 inches. Diameter of 8 inches for 4x4 posts and 12 inches for 6x6 posts.
<i>Live Load:</i>	All decks shall be designed to support a live load of 60 pounds per square foot.
<i>Cantilevers:</i>	Joists should not overhang beams by more than two feet, nor should beams overhang posts by more than one foot.
<i>Flashing:</i>	It is recommended that any cuts in exterior finish be flashed.
<i>Framing Details:</i>	Header beams and joists over 4 feet that frame into ledgers or beams shall be supported by approved framing anchors, such as joist hangers. Blocking is required where joists are lapped.
<i>Nails & Screws:</i>	Use only stainless steel, high strength aluminum or hot-dipped galvanized.
<i>Wood:</i>	All exposed wood used in the construction of decks is required to be an approved wood of natural resistance to decay (redwood, cedar, etc.) or an approved treated wood.
<i>Stairs:</i>	Minimum width is 36 inches. Maximum rise is 7 ³ / ₄ " inches. Minimum run is 10 inches. Stringers must be supported by slab or piers at grade.
<i>Guardrails:</i>	Required on all decks more than 30 inches above grade. Rail must be a minimum of 36 inches in height. Open guardrails and stair railings must have intermediate rails that a four-inch sphere cannot pass through.
<i>Handrails:</i>	The top shall be placed a minimum of 34 inches above the nosing of the treads. Stairways having four or more risers shall have at least one handrail. The handgrips shall not be more than 2-3/8 inches in cross-section. The handgrip shall have a smooth surface with no sharp corners.
<i>Supports:</i>	Wooden post support for decks with finished floor construction six feet (6') or more above grade shall be no less than six-inch-by-six-inch (6"x6") nominal lumber.

City of West Chicago

Deck Design Chart

MINIMUM BEAM SIZES

Post Span

	4'	5'	6'	7'	8'	9'	10'
6'	2x6 (2)	2x6 (2)	2x6 (2)	2x8 (2)	2x8 (2)	2x8 (2)	2x10 (2)
7'	2x6 (2)	2x6 (2)	2x8 (2)	2x8 (2)	2x8 (2)	2x10 (2)	2x10 (2)
<i>Joist</i>	8'	2x8 (2)	2x8 (2)	2x8 (2)	2x10 (2)	2x10 (2)	2x12 (2)
<i>Span</i>	9'	2x8 (2)	2x8 (2)	2x10 (2)	2x10 (2)	2x10 (2)	2x12 (2)
	10'	2x8 (2)	2x10 (2)	2x10 (2)	2x12 (2)	2x12 (2)	2x12 (3)
	11'	2x10 (2)	2x10 (2)	2x12 (2)	2x12 (2)	2x12 (2)	2x12 (3)
	12'	2x10 (2)	2x12 (2)	2x12 (2)	2x12 (2)	2x12 (3)	2x12 (3)

MINIMUM POST SIZES

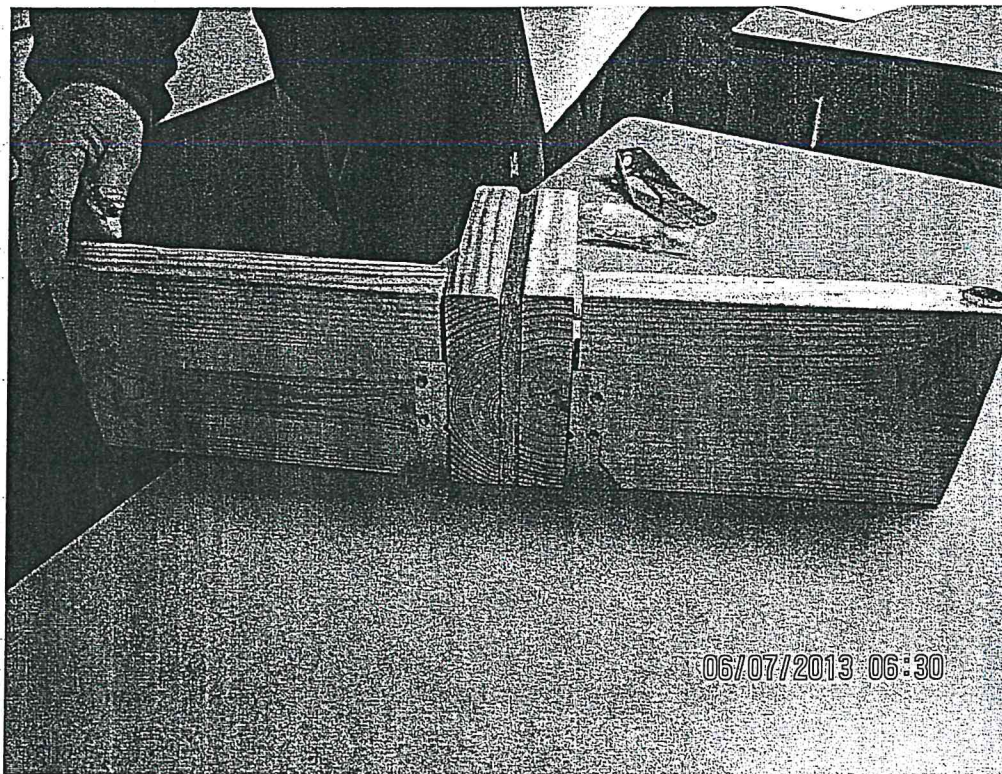
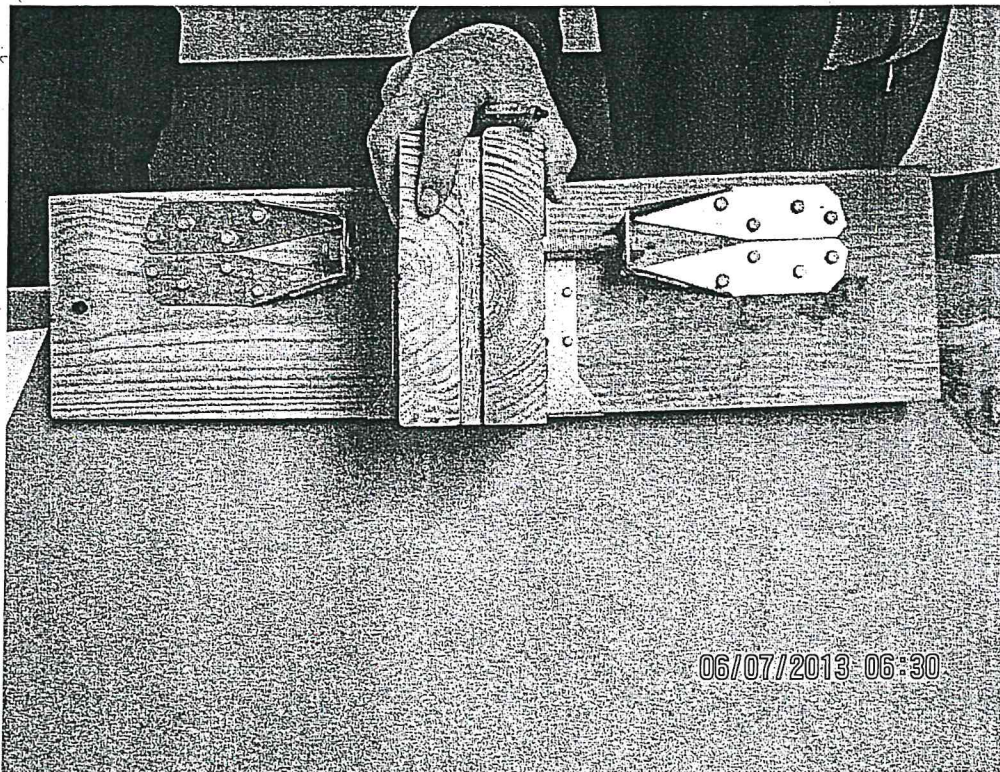
Load Area (beam spacing X post spacing)

		48' sq.	72' sq.	96' sq.	120' sq.	144' sq.
<i>Height</i>	up to 5'	4x4	4x4	6x6	6x6	6x6
	up to 9'	6x6	6x6	6x6	6x6	6x6

MAXIMUM ALLOWABLE JOIST SPAN

Joist Spacing

	12	16	19.2	24	
<i>Joist Size</i>	2x6	10'4"	9'5"	8'9"	7'10"
	2x8	13'8"	12'5"	11'7"	10'2"
	2x10	17'5"	15'5"	14'9"	14'7"

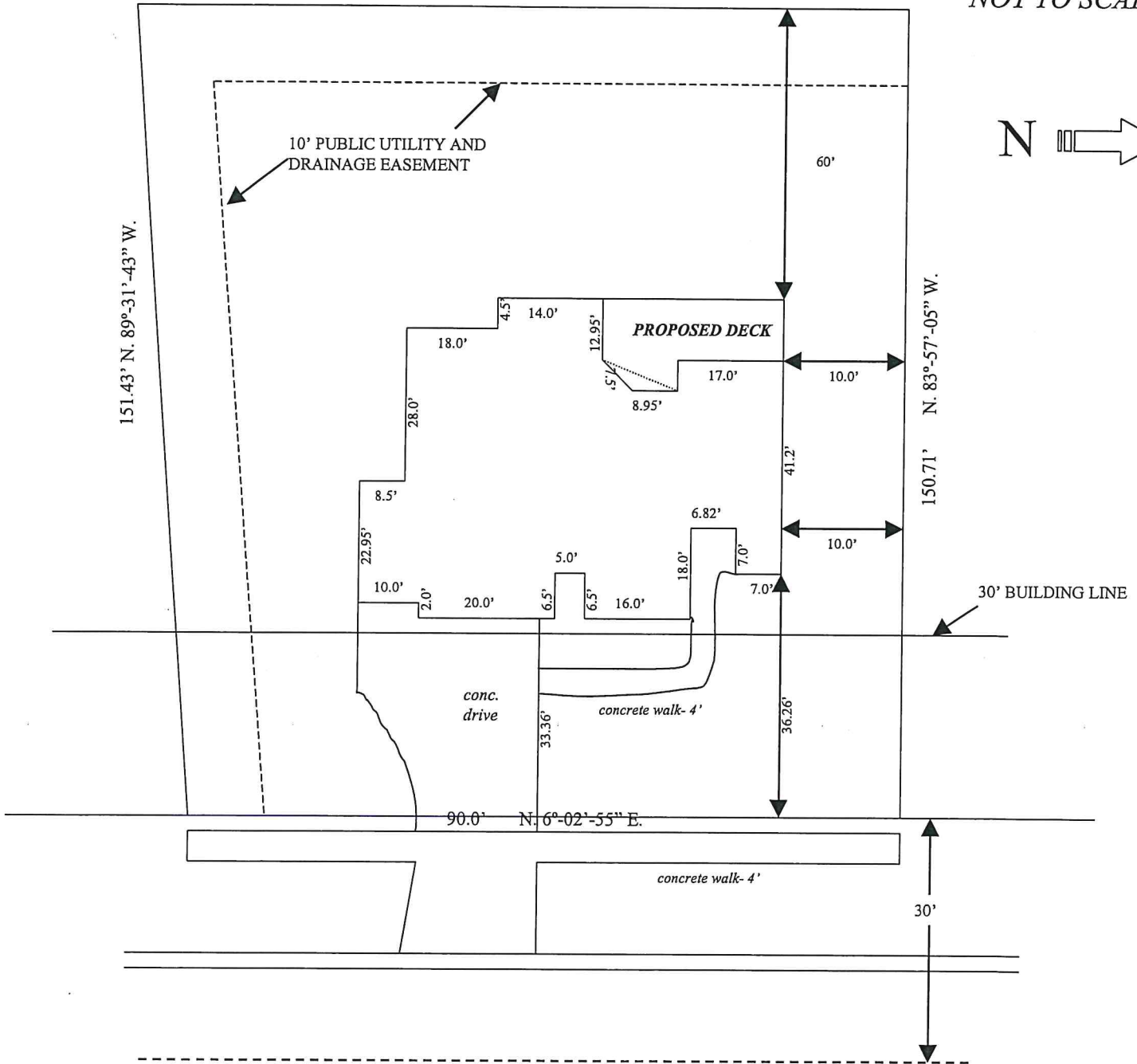
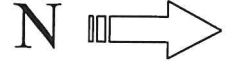


PLAT OF SURVEY

SAMPLE

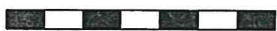
NOT TO SCALE

104.72' N. 6°-02'-55" E.

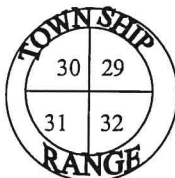


Ordered by: _____

SURVEYOR/ENGINEER



(SCALE OF MAP)



STATE OF ILLINOIS:

I, _____, Illinois Registered Land Surveyor No. _____ do hereby certify that I have surveyed the tract of land above described and that the hereon drawn plat is a correct representation thereof.

Dated this ____ day of _____, 19____
