



Building a Deck Information Guide and Process

When is a building permit required for a deck?

- If the deck (new or replacement) is 24" high or greater above finished grade.
- A permit is also required if structural renovations will be made to an existing deck.

Drawing requirements for a building permit application

1. A copy of the property survey or site plan of your lot.
 - a. Please draw on location of deck with dimensions to lot lines
2. Deck drawings (Building centre drawings or hand drawn to scale and dimensioned)
 - a. Plan view showing posts, floor joists, beams, stairs, landings
 - b. Side view showing height of deck and guard

*ask for our deck design details for assistance

Guards/Railings (for decks 24" or higher)

The Ontario Building Code permits the installation of wood guards/railings. Should you plan on installing anything other than a wood guard/railing, please submit a copy of the Pre-Engineered guard/railing details with your building permit application. Typically you can receive this package of details from the supplier.

NOTE: Hollow plastic or vinyl guards/railing are not permitted

Approved Decking Materials (for decks 24" or higher)

- 5/4" wood decking
- CWS Composite Decking
- Duradek boards
- Brite Composite Decking
- Nexwood Composite Decking
- Trex Wood-Polymer Composite Decking
- Eon Composite Decking System
- Baleboard Poly Decking
- FORMADECK vinyl deck boards
- NCP Euroboard, Enviroboard, Northern Lite Decking
- Gorilla Deck PVC Deck Boards

Where to apply for a building permit

Apply online at www.kitchener.ca/onlinepermits or bring all required drawings to the 5th floor at City Hall. City Hall is located at 200 King St W, Kitchener, Ontario.

Cost of building permit

Please see our fee schedule online for our current building permit rates. We accept cash, cheque and debit as methods of payment. This includes the review of drawings, the building permit and building inspections. Our office hours are Monday to Friday, 8:30am - 5:00pm.

Time

Once a complete permit application is made the permit will be reviewed within a maximum of 10 business days.

Required Building Inspections

Building inspections are booked through our automated phone system or online. Please schedule in advance, same day service is only available when booked before 8:00am the day of the inspection. Required inspections include;

- Excavation/Footing inspection - Once the holes have been dug, but prior to concrete being poured
- Structural Wood Frame inspection - Once the framing is complete (posts, beams, joists)
- Final Building inspection - When the deck and guard/railing are complete

Important Numbers to know

- Ontario One Call (natural gas, sewer/ water lines, KW Hydro, Rogers Cable and Bell locates) 1-800-400-2255
- Electrical Safety Authority: 1-877-ESA-SAFE (1-877-372-7233)

Any Questions?

Phone: 519-741-2433

Email: building@kitchener.ca

Web: www.kitchener.ca/building



Building
Division

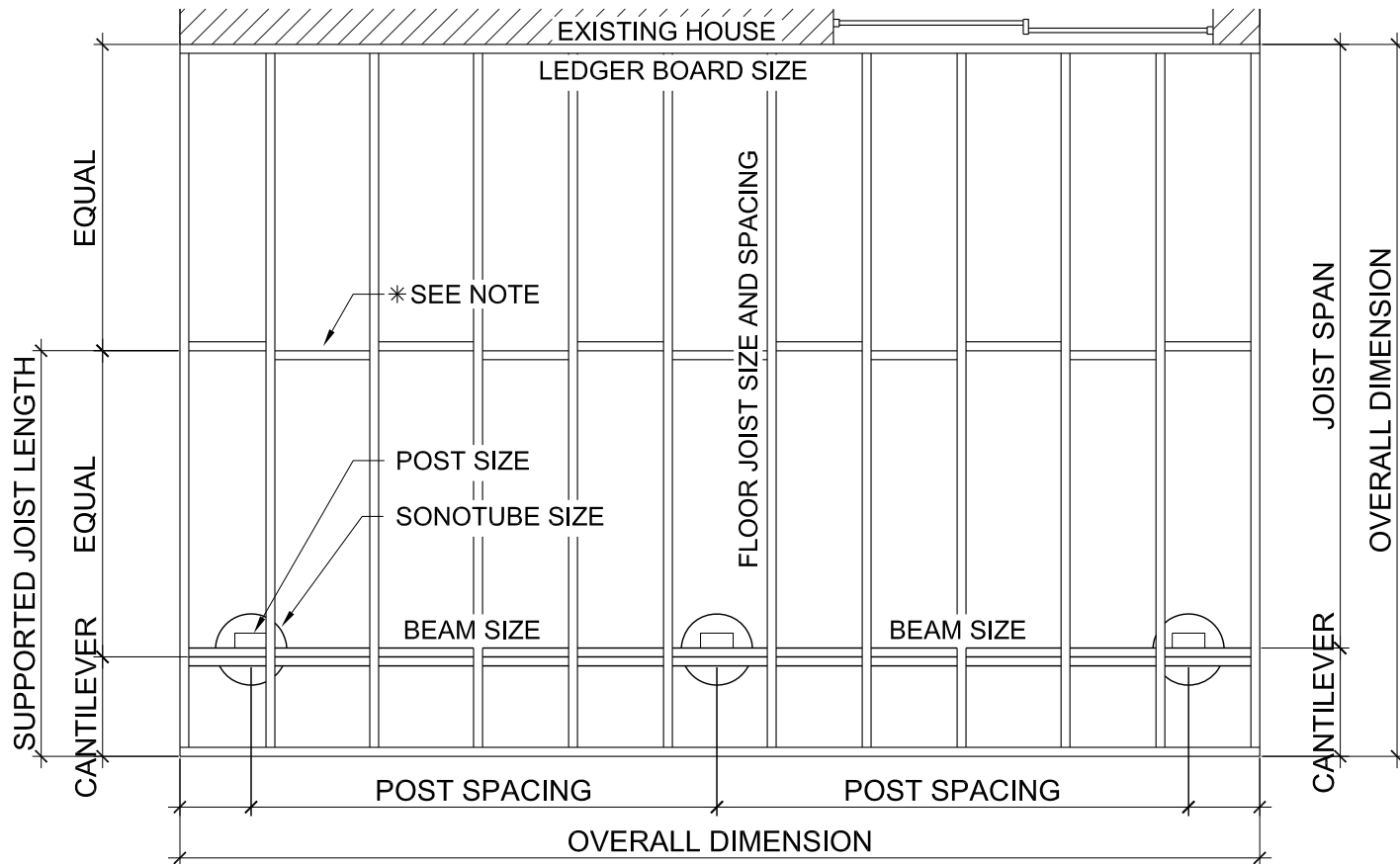
Deck Layout
and Span
Tables

DATE:
MAY 2015

SCALE:
NOT TO SCALE

DRAWING NO.:

9-3a



Deck Layout

**All decking is to be 5/4 x 6 wood material or approved equal

Maximum 2-Ply Beam Length			
Supported Joist Length	2 x 8	2 x 10	2 x 12
4'-0"	11'-7"	14'-10"	17'-4"
6'-0"	9'-10"	12'-1"	14'-0"
8'-0"	8'-7"	10'-6"	12'-3"
10'-0"	7'-8"	9'-4"	10'-8"
Maximum 3-Ply Beam Length			
8'-0"	10'-8"	13'-0"	15'-1"
10'-0"	9'-6"	11'-8"	13'-6"

Maximum Floor Joist Length		
Joist Size	Max. Span	Max. Cantilever
2x8 @ 12" O.C.	12'-6"	20"
2x8 @ 16" O.C.	11'-9"	16"
2x8 @ 24" O.C.	11'-0"	14"
2x10 @ 12" O.C.	14'-6"	28"
2x10 @ 16" O.C.	13'-8"	24"
2x10 @ 24" O.C.	12'-10"	20"
2x12 @ 12" O.C.	16'-5"	28"
2x12 @ 16" O.C.	15'-6"	24"
2x12 @ 24" O.C.	14'-6"	20"

* Install solid blocking when floor joist span exceeds 6'-10". Blocking required to be of the same material and size as the floor joist and located not more than 6'-10" from each support and other rows of blocking.



**Building
Division**

**Deck
Details**

**Guard, Post,
Beam,
Footing and
Ledger
Board**

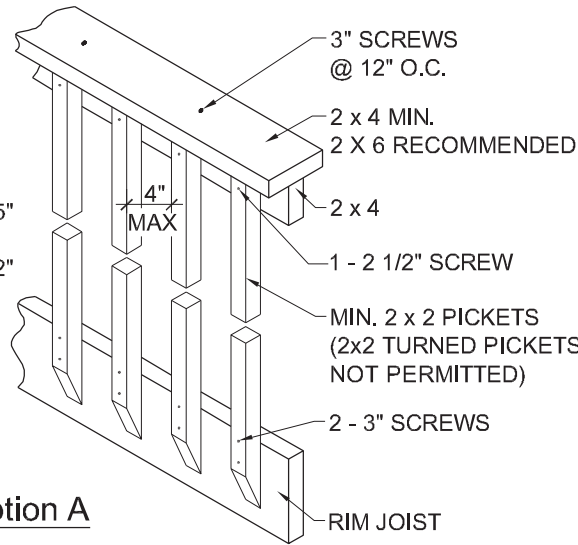
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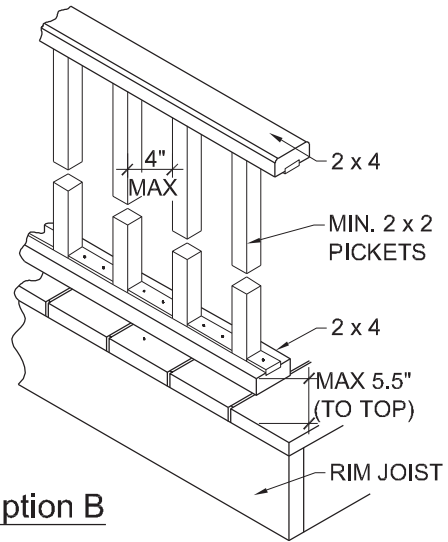
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MIN. GUARD HEIGHT
WITH DECKS:
- 5'-11" OR LESS
ABOVE GROUND = 35"
- MORE THAN 5'-11"
ABOVE GROUND = 42"



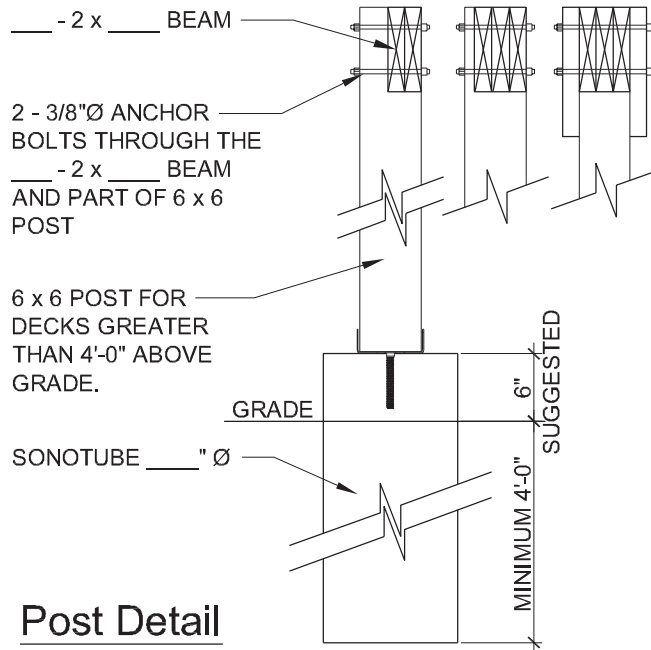
Option A



Option B

NOTE: ANYTHING OTHER
THAN A WOOD GUARD/
RAILING, PLEASE SUBMIT
A COPY OF THE
PRE-ENGINEERED
GAURD/RAILING DETAILS
WITH YOUR BUILDING
APPLICATION.

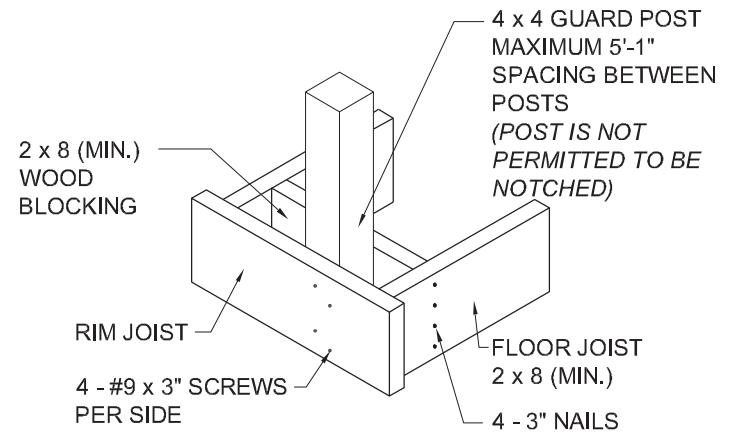
Guard Details



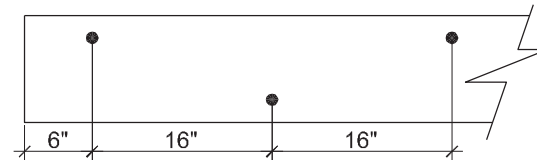
Post Detail

**SOLID BLOCKING REQUIRED FOR BEAMS @ 18" O.C.

**ADDITIONAL LATERAL BRACING MAY BE REQUIRED. CONFIRM
WITH BUILDING INSPECTOR @ FRAMING INSPECTION.



Guard Post Detail



MINIMUM 3/8"Ø ANCHOR BOLTS @ 16" CENTERS
STAGGERED. ANCHOR BOLTS MUST BE INTO
WOOD FRAMING OR FOUNDATION WALL. DO
NOT SECURE INTO BRICK VENEER ALONE.

Ledger Board Detail



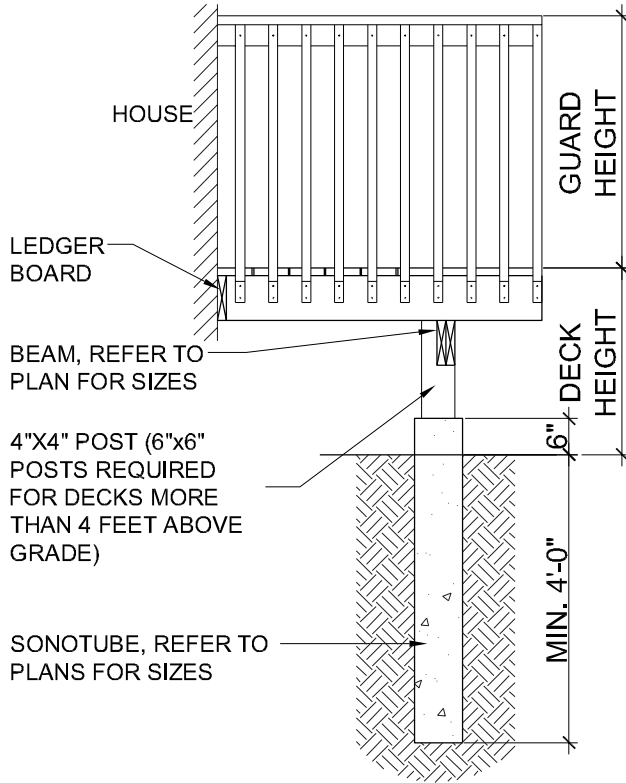
**Building
Division**

**Deck
Elevations
and
Details**

DATE:
JANUARY 2013

SCALE:
NOT TO SCALE

DRAWING NO.:
9-3c



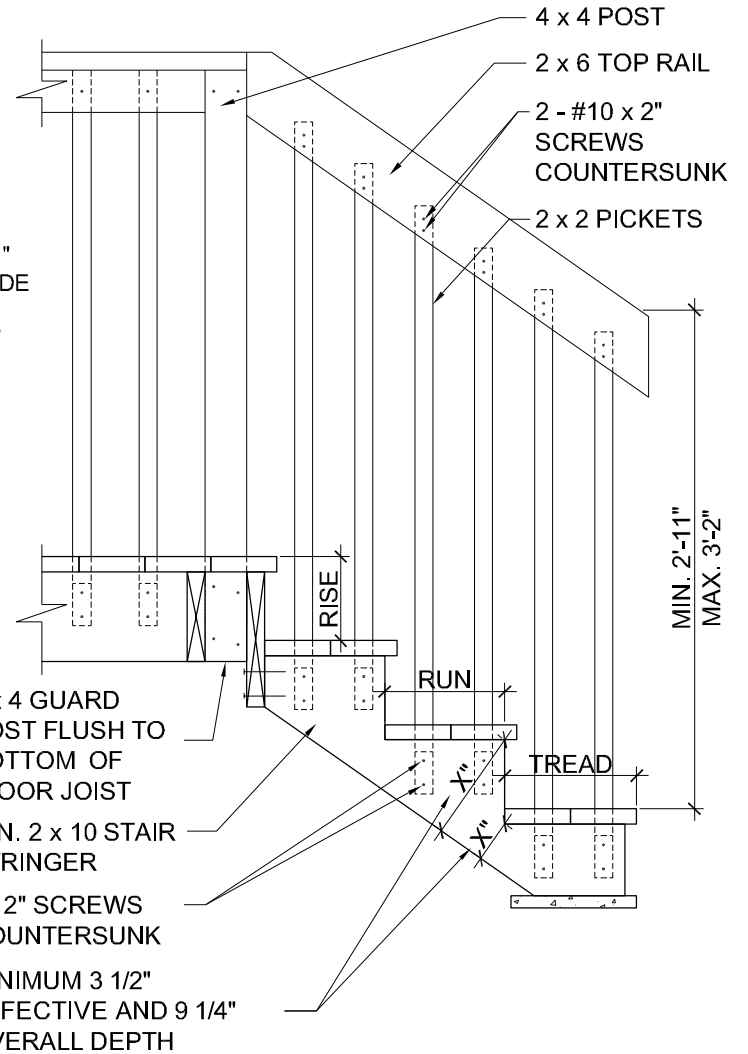
- 35" FOR DECKS 5'-11"
OR LESS ABOVE GRADE
- 42" FOR DECKS
GREATER THAN 5'-11"
ABOVE GRADE.

Deck Elevation

Sonotube Sizes

Diameter	*Weight
8"Ø	1047 lbs
10"Ø	1635 lbs
12"Ø	2355 lbs
14"Ø	3207 lbs
16"Ø	4189 lbs

*Weight = (supported joist
length each side of post x half
beam length each side of post)
x 40 lbs/SF



Stair Detail

Stair Dimensions		
Type	Max.	Min.
Rise	7 7/8"	4 7/8"
Run	14"	8 1/4"
Tread	14"	9 1/4"

*Risers shall have a uniform
height in any one flight of stairs.
*Treads shall have a uniform
run and tread depth in any one
flight of stairs.

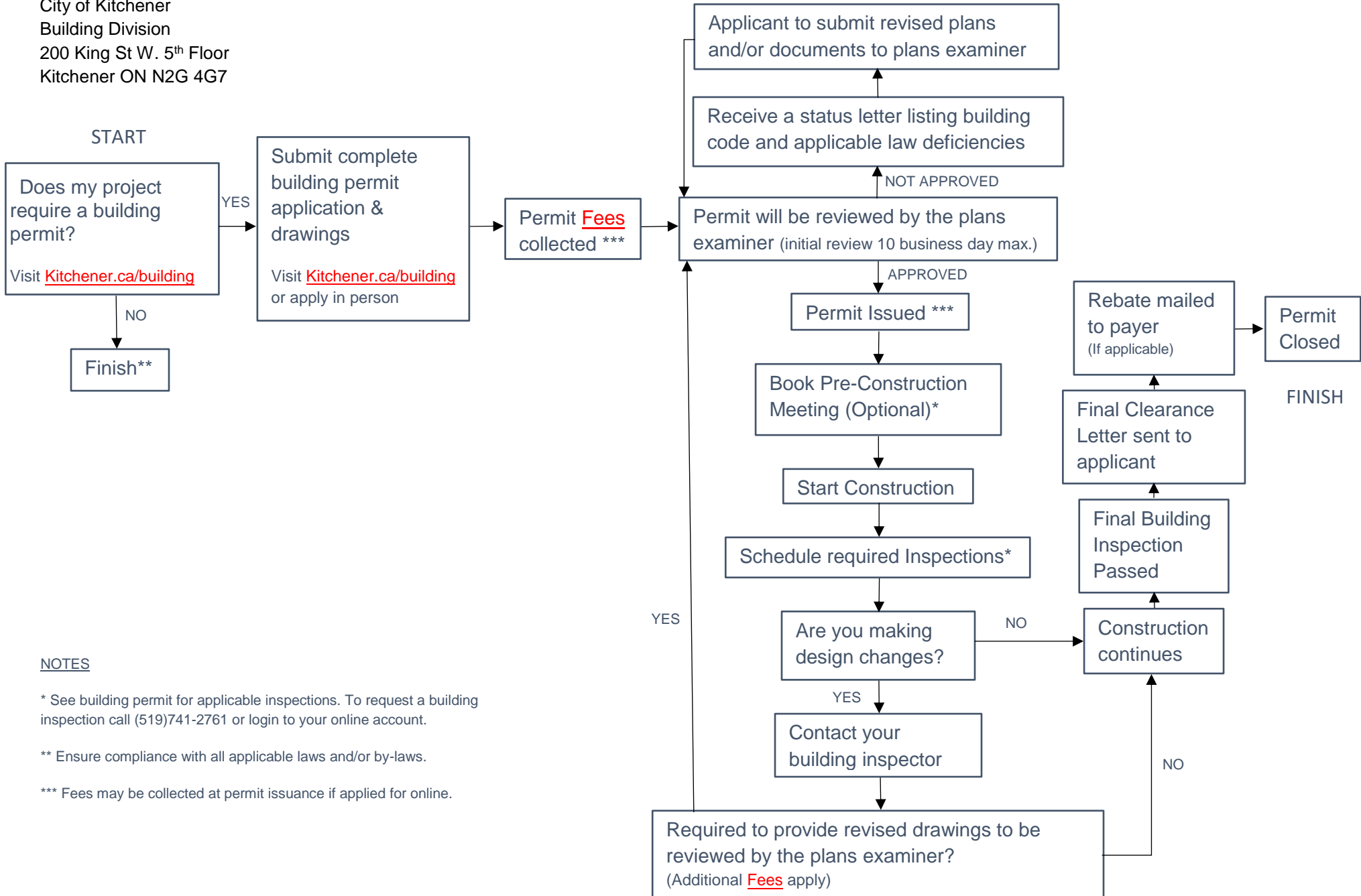
max 1" nosing

Residential Building Permit Process

This permit process is for miscellaneous permits for houses including but not limited to:

Accessory structure	Load bearing wall removals	Additions
Solar Panels	Duplex conversions	Decks
Plumbing Permits	Interior finish	Carports

City of Kitchener
 Building Division
 200 King St W. 5th Floor
 Kitchener ON N2G 4G7



NOTES

* See building permit for applicable inspections. To request a building inspection call (519)741-2761 or login to your online account.

** Ensure compliance with all applicable laws and/or by-laws.

*** Fees may be collected at permit issuance if applied for online.