

City of Minneapolis

# Detached Garages and Building Permits 1 and 2 Family Dwellings

# Why do I need a permit?

The City of Minneapolis adopts the State of Minnesota Building Code (MNSBC) and its associated state statutes and rules.

The City of Minneapolis is the Authority having Jurisdiction and is responsible for the enforcement of state and city rules, regulations and ordinances.

The permitting process assures that local codes and ordinances are followed.

# Is a building permit required to build my Garage?

- Yes, all garage construction projects require a permit.
- You do not need a permit to tear down your old detached garage, which is the only exception. This is not true if your garage is attached to the house.

# Who can obtain the Building Permit?

- State of Minnesota Licensed Building Contractor (with copy of Minnesota license)
- or
- The owner of the home (as stated on the Hennepin County property records web site, or if a new owner you must have the valid signed Deed for that address)

# Some brief points

- Plans are not required to be prepared by an architect; however, if you are unable to prepare plans that are clear and sufficient to convey the information needed, then the services of an architect, contractor or drafting service will be of help to you.
- Some lumber stores may provide a computer generated construction plan and materials list. Together with a copy of the site plan, these are usually acceptable submittals.

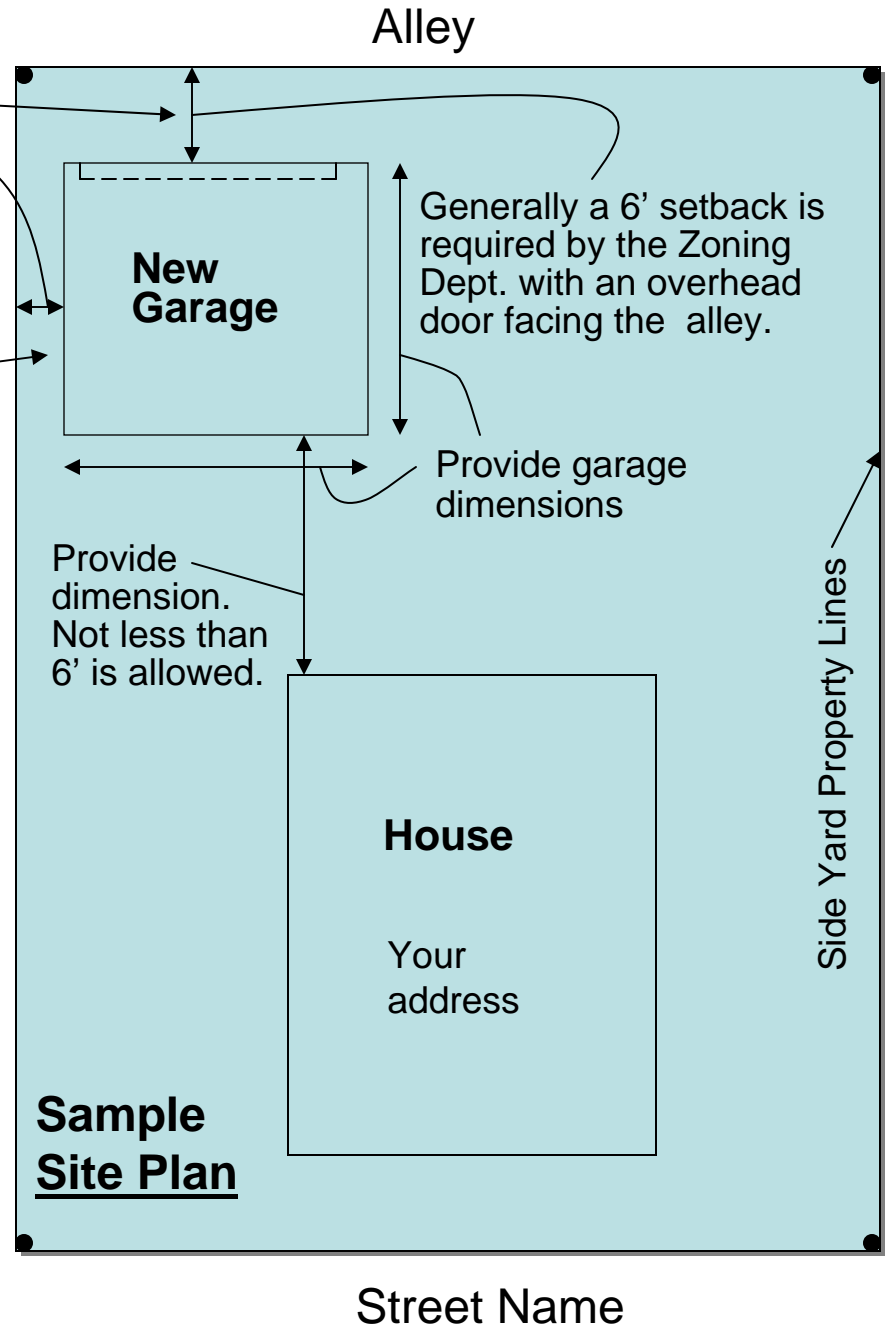
# What do I need to submit to get a building permit?

- **SITE PLAN** – A representation of your property illustrating property lines and the structures on your property. Show where you intend to build your new garage and dimensions of the garage, distance from property lines and distance between the garage and your house. This is something you can easily produce yourself on 8 ½ x 11 sheet of paper. It might look something like the following page;

Provide dimensions from proposed garage to the side yard property line, alley and your house.

Garage walls closer than 5' to property line require a 1 hour protected wall construction. Walls closer than 2' to the property line will also affect your roof eave. See City bulletin [“Garages – Detached Protected Wall”](#). (right click and open hyperlink)

Your **property corners must be revealed** (and string lines provided) **and inspected before concrete is poured**. Contact the building inspector listed on your permit for your inspection.



**Sample Site Plan**

# Some brief points

- The fence is not the property line. It may be an indicator as to its approximate location, but only revealing the property corners and stringing a line will provide a true property line.
- The [Hennepin County](#) website may provide limited property information that may assist you with your Site Plan for overall property configuration and dimensions.
- *If you can not locate your property corners, you will be **required** to contact a licensed Surveyor to locate and install at least the property corners most relevant to your project.*



# Property Corner Pins



String line placed by contractor or homeowner.



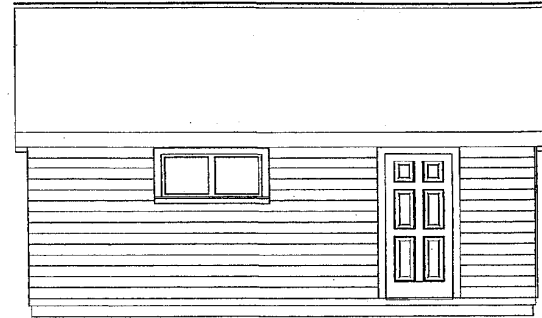
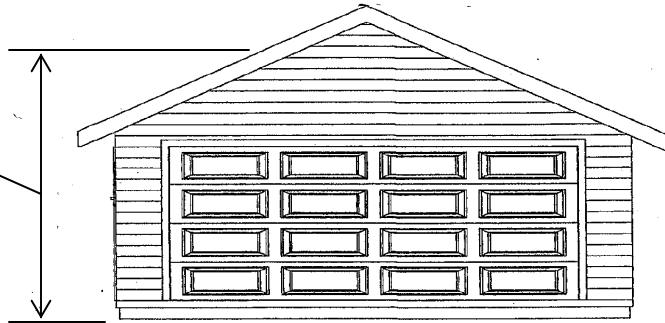
Property corners placed by Licensed Land Surveyors must not be moved or disturbed.

# What do I need to bring to get a building permit? (continued)

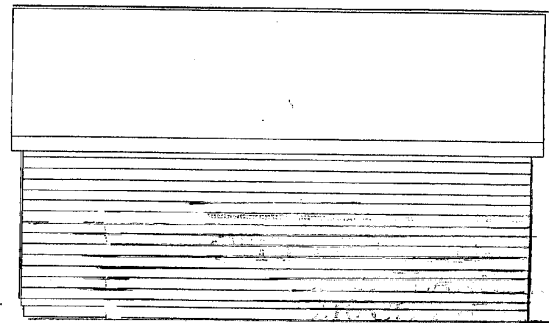
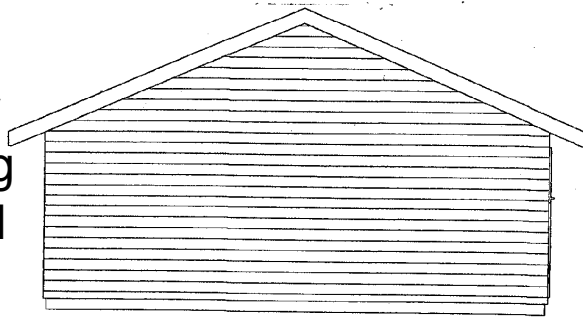
- You also need the following drawings;
- Garage Elevations
- Building Section detail
- Also see the [Protected Wall City bulletin](#) (right click the link above and click on 'open hyperlink') for Walls less than 5' to property lines. Note: the maximum allowable projection with garage walls closer than 2' to property line is a 4" eave overhang.

# Garage Elevations

12' maximum height to midpoint of roof pitch per Zoning Code.



Maximum 676 square foot area for detached accessory structures per Zoning Code. Includes total areas of all sheds and garage.



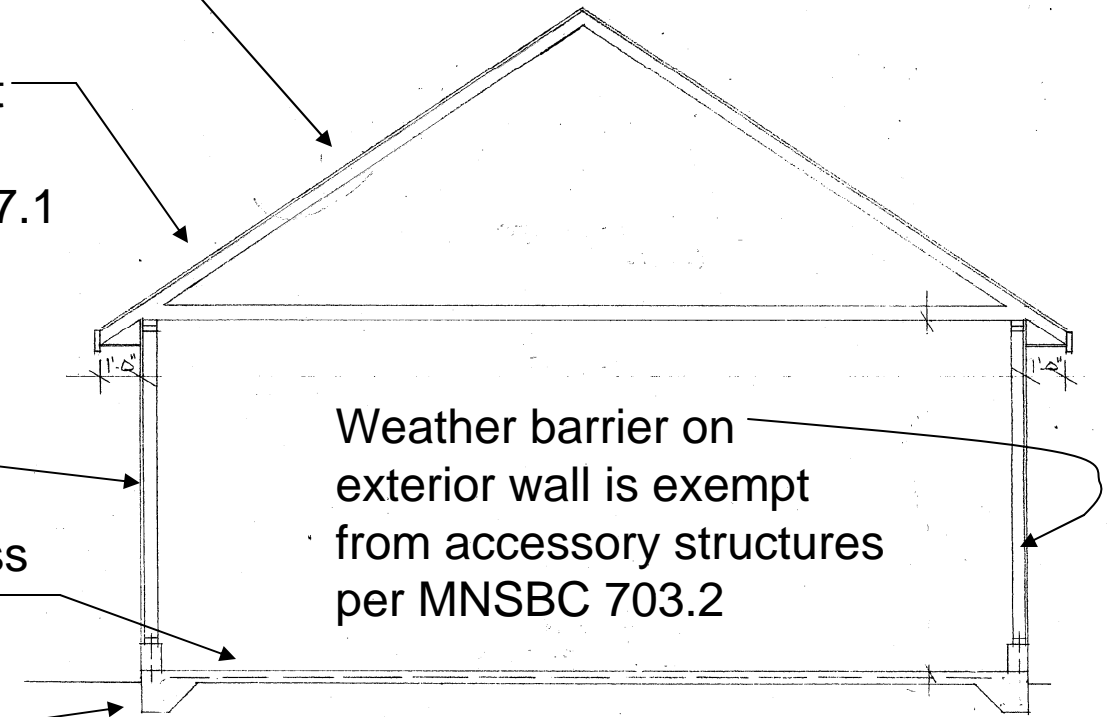
# Garage Building Section

Provide roof structure information, i.e. roof trusses or roof rafter size, spacing and direction.

Roof Ice barrier is exempt from unconditioned floor areas per MNSBC 905.2.7.1

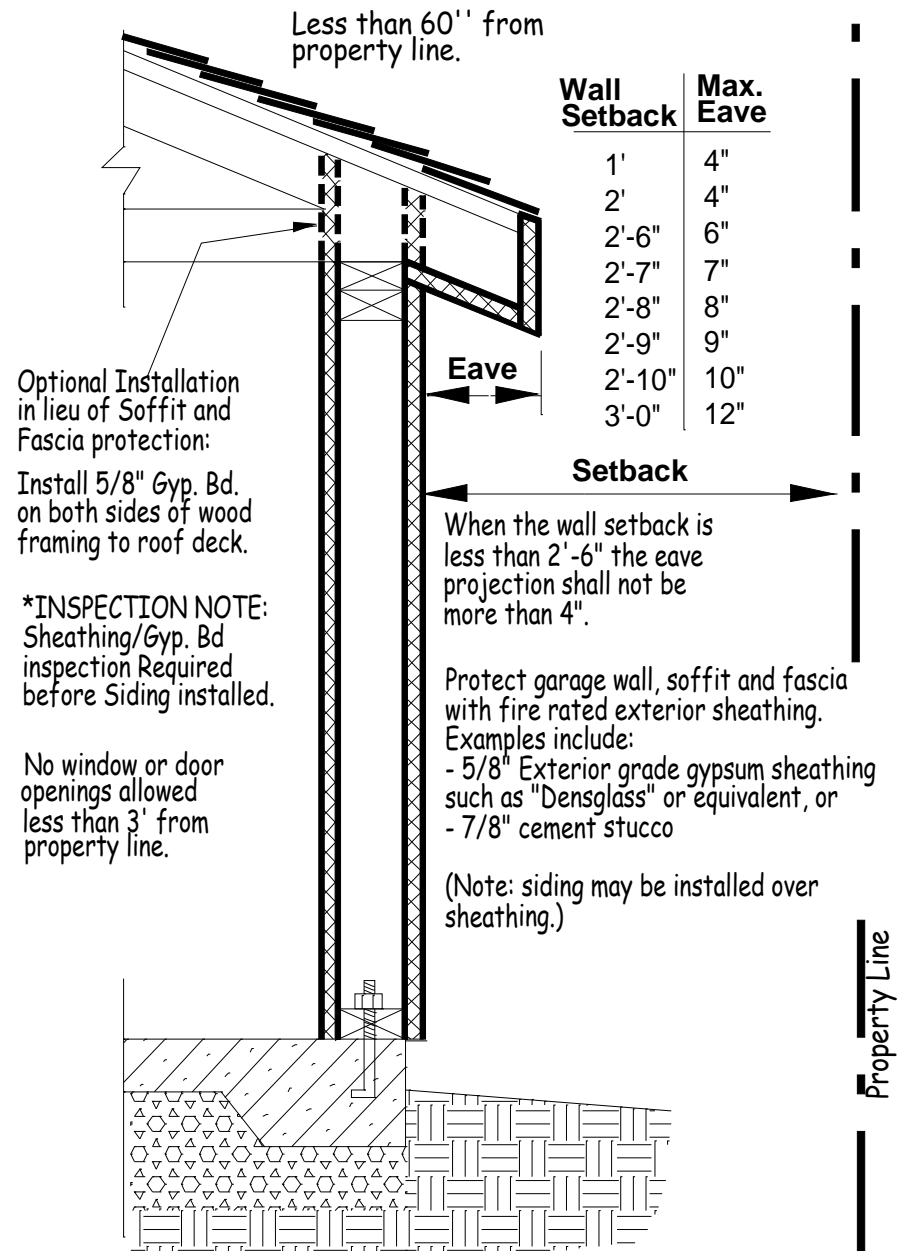
Provide wall construction and siding finish information.

Provide concrete thickness and perimeter concrete information. Minimum compressive strength of concrete shall be 3,500 psi per 2007MNSCB 402.2



Weather barrier on exterior wall is exempt from accessory structures per MNSBC 703.2

- **Protected wall detail**
- Walls less than 5' to property line. Note, the maximum allowable eave projection with garage walls closer than 2' to property line is 4" maximum. Also see [Protected Wall City bulletin](#) (right click the link above and click on 'open hyperlink').



# Some brief points

- Most detached garages are not required to be built on frost footing/foundation, however, this may depend on the grade or soil conditions of your property.
- A thickened perimeter concrete slab is a typical installation. See city bulletin [Garages – foundations and slabs](#) showing examples. (right click the link above and click on 'open hyperlink').
- Minimum compressive concrete strength is 3,500 psi per 2007 MNSBC 402.2

# Detached Garage Foundation and Slab bulletin



## DETACHED GARAGE FOUNDATIONS AND SLABS

Construction Code Services Division

Revised May 2007

### R404.1.6 HEIGHT ABOVE FINISHED GRADE

Concrete and masonry foundation walls shall extend above the finished grade adjacent to the foundation at all points a minimum of 4 inches (102mm) where masonry veneer is used and a minimum of 6 inches (152 mm) elsewhere.

### R403.1.6 FOUNDATION ANCHORAGE

When braced wall panels are supported directly on continuous foundations, the wall wood sill plate or cold-formed steel bottom track shall be anchored to the foundation in accordance with this section. The wood sole plate at exterior walls on monolithic slabs and wood sill plate shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet (1829 mm) on center. There shall be a minimum of two bolts per plate section with one bolt located not more than 12 inches (305 mm) or less than seven bolt diameters from each end of the plate section. Bolts shall be at least 1/2 inch (12.7 mm) in diameter and shall extend a minimum of 7 inches (178 mm) into masonry or concrete. Interior bearing wall sole plates on monolithic slab foundations shall be positively anchored with approved fasteners. A nut and washer shall be tightened on each bolt to the plate. Sills and sole plates shall be protected against decay and termites where required by Sections R322 and R323. Cold-formed steel framing systems shall be fastened to the wood sill plates or anchored directly to the foundation as required in Section R505.3.1 or R603.1.1. When vertical reinforcing is required by other sections of this code, the foundation anchor bolts shall align with the reinforcing. All anchor bolts installed in masonry shall be grouted in place with at least 1 inch (25 mm) of grout between the bolt and the masonry.

#### Exceptions:

Rev 5/16/2007 Minnesota Department of Labor and Industry, Construction Codes and Licensing Division 13

1. Foundation anchor straps spaced as required to provide equivalent anchorage to 1/2-inch-diameter (12.7 mm) anchor bolts. When vertical reinforcing is required by other sections of this code, the foundation anchor straps shall align with the reinforcing.
2. Walls 24 inches (609.6) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels according to Figure R602.10.5 at corners.
3. Walls 12 inches (304.8) total length or shorter connecting offset braced wall panels shall be permitted to be connected to the foundation without anchor bolts. The wall shall be attached to adjacent braced wall panels per Figure R602.10.5 at corners.

[See page two for diagrams]

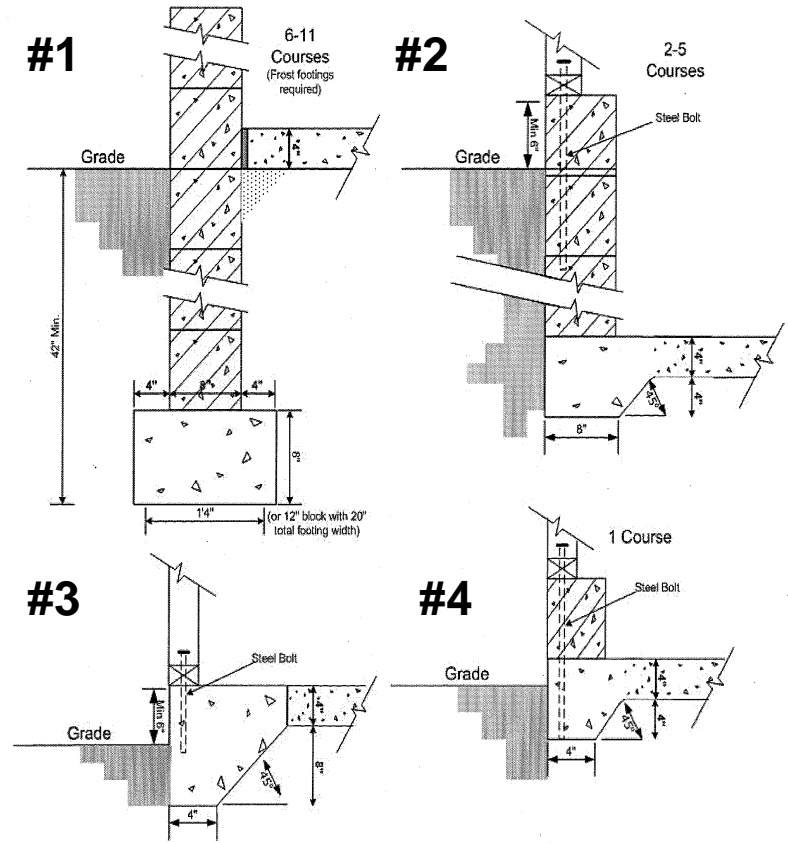
#1 depicts frost footing at 42" below grade and masonry foundation for garage. This type is always required when garage is attached to the house.

#2 depicts garage foundation similar to retaining wall section.

#3 depicts wall framing and plate directly on thickened perimeter footing.

#4 depicts wall framing over 1 course masonry block on top of thickened perimeter footing.

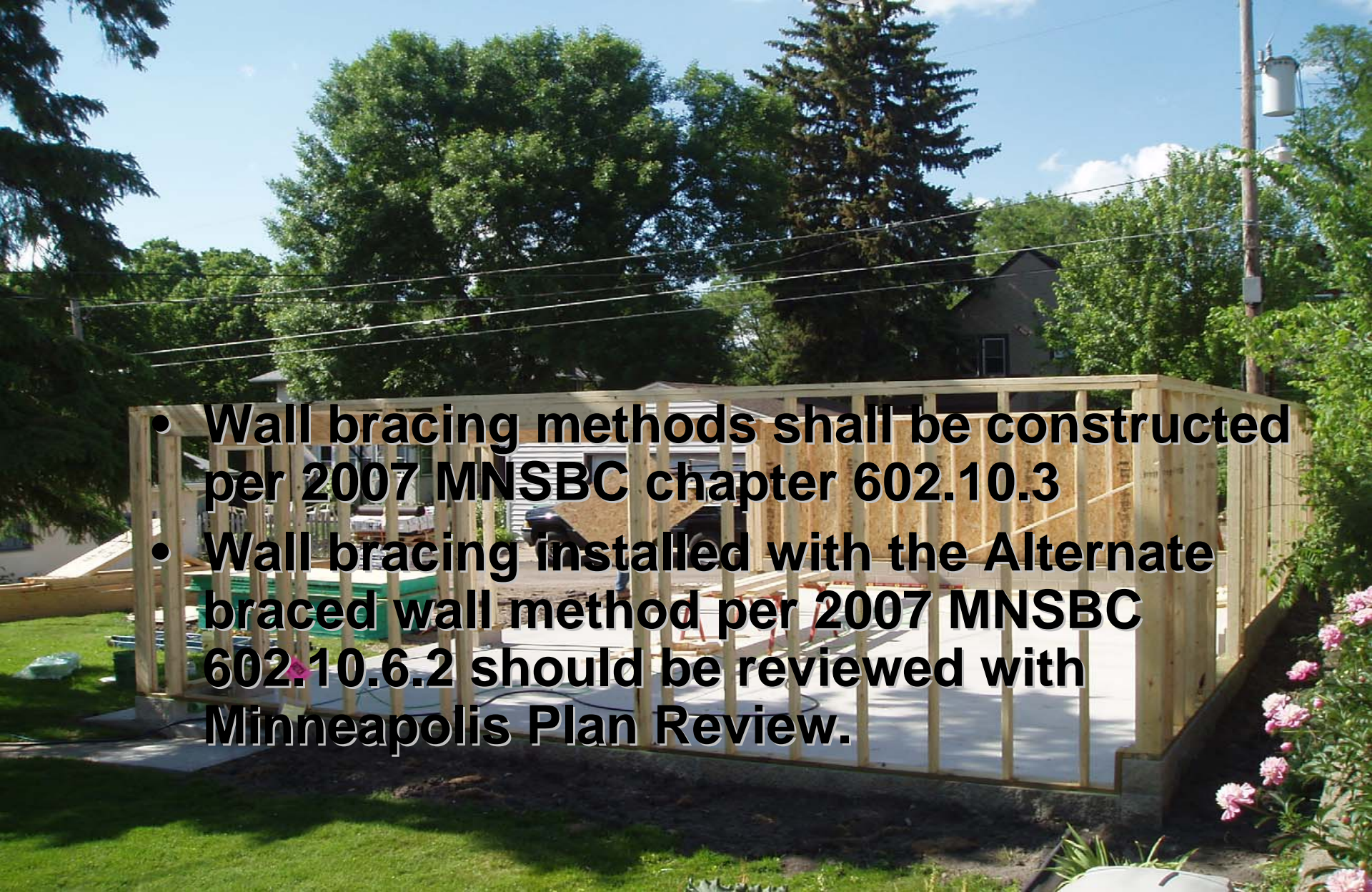
Sections #3 and #4 are most typical.



- Typical footing/foundation and concrete slab for detached garages.



# Wall Bracing

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- Wall bracing methods shall be constructed per 2007 MNSBC chapter 602.10.3
  - Wall bracing installed with the Alternate braced wall method per 2007 MNSBC 602.10.6.2 should be reviewed with Minneapolis Plan Review.

# Overhead Garage Door Wind rating

- New overhead garage doors on newly built garages (and replacement doors) are to be rated for a 90 mph wind speed per 2007 MNSCB R301.2.1.
- Doors should be tested to meet either DASMA 108 or ASTM E330 standards for wind load.
- Garage door wind rating is converted from MPH to Pounds per Square Foot (PSF).
- A manufacturers label must be displayed on the door with the PSF ratings. The minimum PSF for 90 mph wind load should read +12.4 / -13.8 or higher.

# Overhead Garage Door Wind rating

wind load label

Design values only applicable when installation is in accordance with referenced installation drawing.

Building Products Company

Installed Design (Mark ONE)	Manufacturing Product Code	Drawing Reference	Design Pressure* (PSF)	Impact & Cyclic Rated**	State / Local Approval Number
<input type="checkbox"/> W1	PAN-1E151	104145	+12.5 / -14.0	NO	

\*In accordance with ANSI/DASMA 108  
\*\*In accordance with ANSI/DASMA 115

LABEL ID: PAN-1E151-10-S

**WARNING**

Keep fingers away from the joints between door sections when this door is being raised or lowered. Placing fingers in the gaps between door sections can result in serious injury. If this door has not been fitted with handles, contact your authorized dealer.

DO NOT REMOVE THIS LABEL.

S/N 012B103109486  
PID 0T50SW10016000700

8585 DURE BLVD  
MASON, OH 45040

P/N 0162430, 10-2001

# How much does a permit cost?

- The State of Minnesota sets minimum value of work per square foot for new construction.
- Building Permit fees are based on value of work, which includes a value for labor and materials.
- See the City bulletin [Garages – fee schedule](#) for current garage values and permit fees. (right click the link above and click on ‘open hyperlink’).

# Building Inspections

- Now that you have your permit, you are able to start building. Read and review the required inspections (also listed on your permit). These are stages of the project you need to call the building inspector and have work inspected/approved before proceeding further.
  - Provide at least 24 hour notice to building inspectors for an inspection request.
- **Required Inspections:**
  - **1. Footing inspection:** after excavations for footings are complete and any required reinforcing steel is in place --PROPERTY STAKES MUST BE MARKED AND IDENTIFIED--;
  - **2. Foundations:** (1 - poured walls) after all forms, required reinforcing and bracing are in place (2 - prior to backfill) including damp proofing/waterproofing as well as exterior insulation (if used);
  - **3. Under floor and slab:** after all in-slab and under floor items are in place;
  - **4. Framing and Masonry:** after all plumbing, mechanical and electrical rough-ins are approved and after all fire stopping, draft stopping and bracing are in place;
  - **5. Insulation and vapor barrier prior to concealment;**
  - **6. Gypsum board** - before taped (usually only required when garage is less than 5' to a shared property line).
  - **7. Final inspection:** after all work is completed

(Many garages will require only #1, 6 and 7.)

# Building Inspections

- APPLICANT IS RESPONSIBLE TO LOCATE AND IDENTIFY THE PROPERTY STAKES AND CALL BUILDING INSPECTOR FOR VERIFICATION AND FOUNDATION INSPECTION BEFORE CONCRETE IS Poured.



# Building Inspections

- Provide String line and reveal property corners for Building Inspector verification.



# Building Inspections

Inspector  
approves  
Thickened  
perimeter  
slab base  
preparation  
before concrete  
is poured.



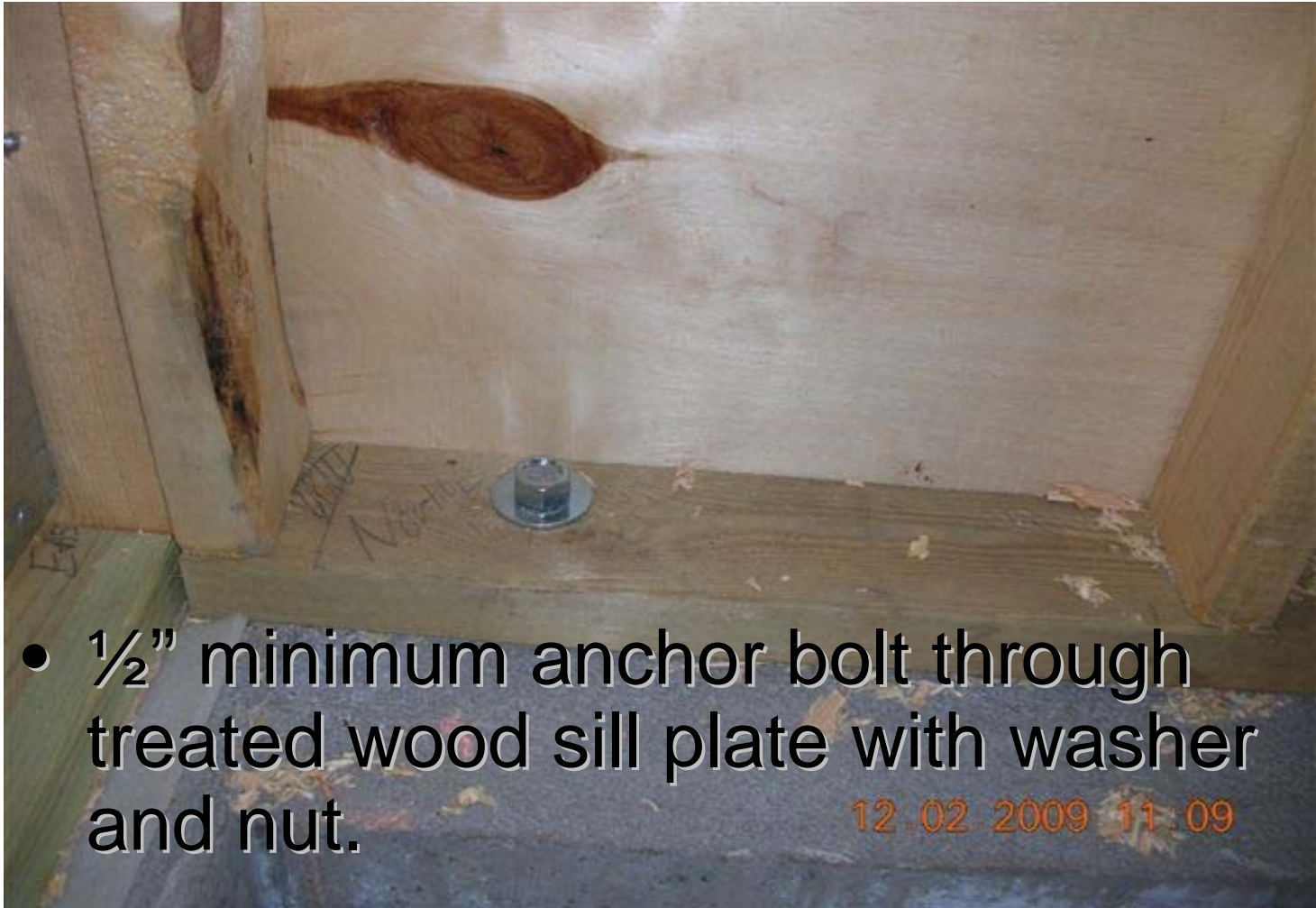


# Building Inspections

- 1/2" anchor bolts shall extend 7" min. into masonry or concrete and spaced a maximum of 6' on center and within 12" from each end. MNSBC 403.1.6



# Building Inspections



- 1/2" minimum anchor bolt through treated wood sill plate with washer and nut.

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# Building Inspections



- **Framing and Masonry inspection: after all plumbing, mechanical and electrical rough-ins are approved and after all fire stopping, draft stopping and bracing are in place**

# Building Inspections



- **Building Inspector to verify one hour exterior wall for walls less than 5' to property line (before covering).**

# Electrical work

- Electrical permits are obtained from the State of Minnesota, 651-284-5026
- <http://www.dli.mn.gov/business/electrical-contractors/electrical-permits-contractors>



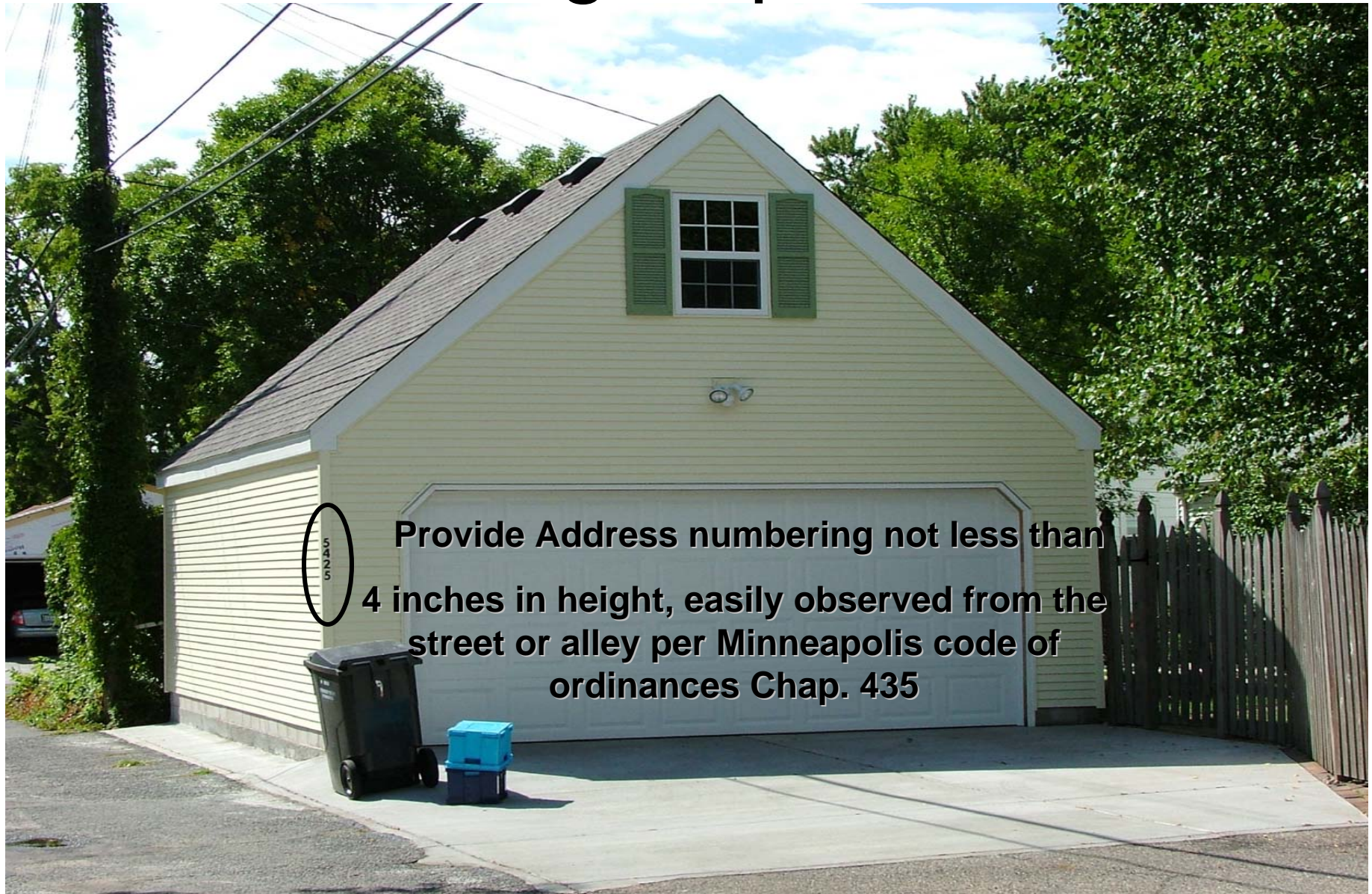
# Building Inspections

- Final inspection after all work is complete.

Any gutters and downspouts provided at roof eaves must be directed to the front and rear of your property so as to not drain directly onto your neighbors yard.



# Building Inspections



**Provide Address numbering not less than 4 inches in height, easily observed from the street or alley per Minneapolis code of ordinances Chap. 435**