



DETACHED STORAGE STRUCTURES

500 Fourth Avenue NE
Austin, Minnesota 55912-3773
Building Department
507-437-9950 Fax: 507-437-7101

PERMIT REQUIREMENTS: Please provide the following:

1. On the attached plot plan draw all buildings on proper dimensions of the buildings, and the distances from the buildings to the property lines. Please also identify streets and/or alleys.
2. If you are using a contractor, you must provide us with his or her Minnesota State License number. Building permits can not be issued without this information.
3. The information on page 3 of this handout must be completely filled out and returned to the Austin Building Department before the permit will be issued.
4. If garage location is within the floodplain certain restrictions apply. Please contact the Austin Planning and Zoning or Engineering Department before making permit application.

NOTE: The receipt you receive upon payment for the building permit application is NOT your permit to build. Your permit card will be mailed to you after approval by the Building Official. No work shall be started without prior approval by the Building Official, or until you receive your permit in the mail.

MN STATE BUILDING CODE & INTERNATIONAL RESIDENTIAL CODE REQUIREMENTS:

1. Minimum thickness of concrete floor slabs supported directly on the ground shall be not less than $3\frac{1}{2}$ ". R506.1
2. Must provide $\frac{1}{2}$ " anchor bolts. Bolts must be embedded at least 7" into the concrete and shall be spaced not more than 6' apart. There shall be a minimum of two bolts per piece with one bolt located not more than 12" or less than seven bolt diameters from each end of the piece. R403.1.6 IRC
3. Foundation plates or sills resting on concrete slabs shall be treated wood or foundation grade redwood. R319 IRC
4. Follow Manufacturer's requirements for metal fasteners in use with preserved treated wood
5. Flashing and counterflashing. Exterior openings exposed to the weather shall be flashed in accordance with R703.8.1
6. Engineered design required for pole barn structures.
7. Roof framing for detached garages must be designed for minimum 35 pounds per square inch live load (snow load).
8. Manufactured trusses shall not be altered.
9. **FIRE RESISTANCE OF WALLS (In regards to Property Lines).** Table R302.1 of the IRC states that any wall closer than 5' to the property line requires a firewall with a 1 hr. rating. This wall must be constructed of one layer of 5/8" type "X" rated gypsum sheathing and be applied to exterior and a single layer of 5/8" type "X" gypsum applied to the interior of the firewall. NOTE: Exterior gypsum sheathing should be used to resist moisture from entering the structure.
10. **OPENINGS IN FIRE RATED WALLS** less than 3' to the property line are permitted if they do not exceed 25% of the wall area

11. Projections such as overhangs and eaves shall not be closer than 2' to the property line
When a fire rated wall is installed the underside of the overhang shall be fire rated with one layer of type X gypsum
12. **FIRE RESISTANCE RATING OF EXTERIOR WALLS (REGARDING THE PROXIMITY TO EXISTING BUILDINGS).** Garages located less than 3 feet from a dwelling unit on the same lot shall be protected with no less than 1/2 inch gypsum board applied to the interior side of exterior walls that are within this area. Openings in these walls shall be equipped with solid wood doors not less than 1 3/8 inches in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches thick, or 20-minute fire rated doors.

REQUIRED INSPECTIONS: Please contact the Austin Building Department at 437-9950 to schedule inspections. Prior notice of 24 hours is encouraged to insure an appointment.

1. A **footing inspection** is required after excavation is complete and the form work and reinforcement is in place. This inspection must be done before the concrete is poured.
2. A **framing inspection** is to be completed after the building is framed with roof and shingles installed, but before siding is installed.
3. A **final inspection** is to be completed after grading is finished and the building is ready to be used.

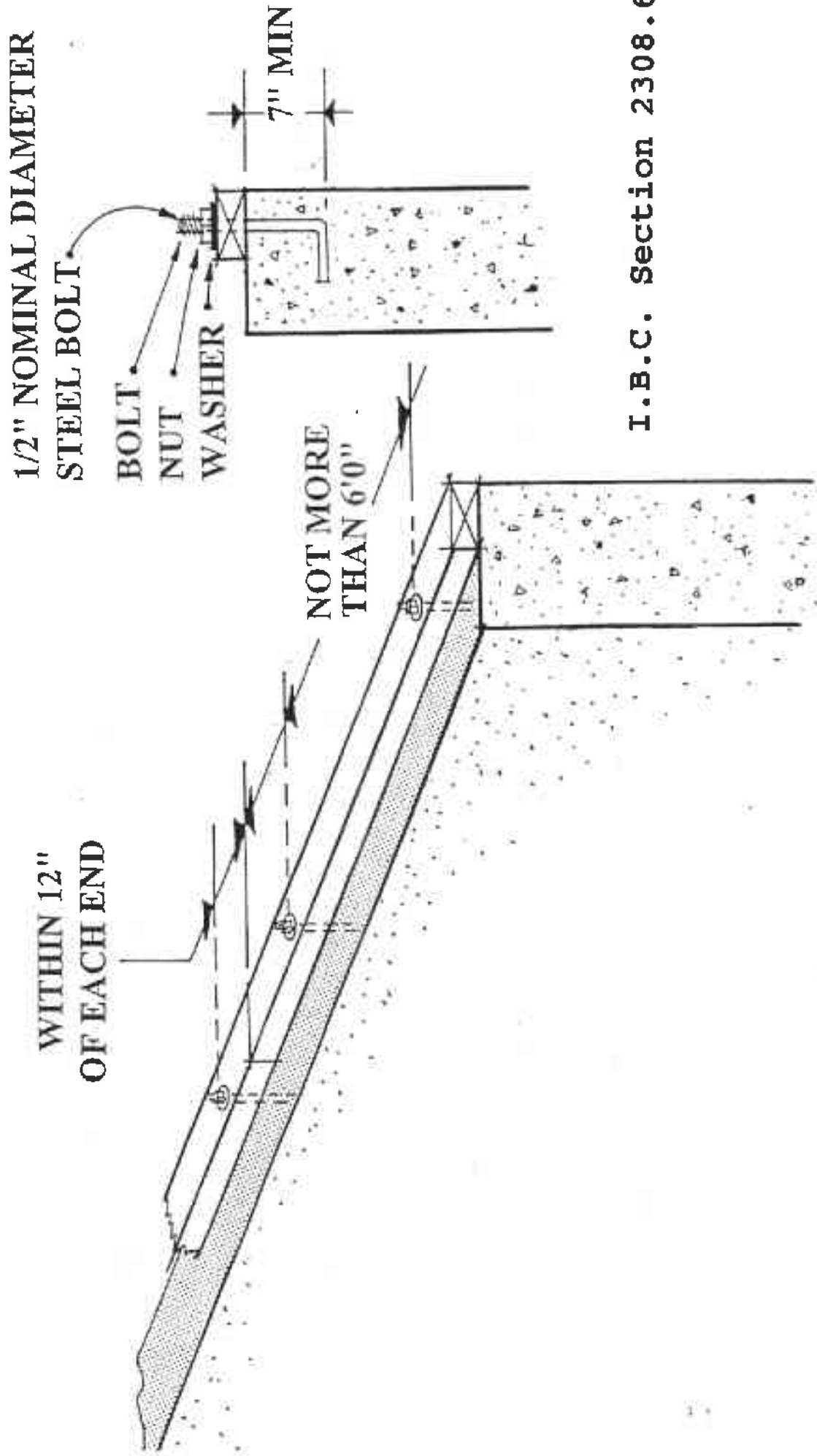
If you are doing your own wiring, you must apply for an electrical permit from the State Electrical Inspector, Scott Higgins (507-433-9788)

Foundation Construction: Detached garages or accessory structures may be constructed on floating slabs not protected from frost (monolithic slab). A monolithic slab is considered a single pour slab, it cannot be added onto for future additions unless engineering for such additions is provided by a structural engineer registered by the State of Minnesota. Monolithic garage slabs can be sawed to control cracking provided the following guidelines are adhered to: Depth of saw cuts shall be limited to $\frac{1}{4}$ " - $\frac{1}{2}$ "; reinforcement shall be of the following: No. 10 - 6"x6" wire mesh; No. 4 (1/2") rebar spaced 24 o.c. each way, beginning at centerline of slab.

Zoning Ordinance Limitations of Accessory Use or Structure: The use or structure subordinate to the principal use of the land or a building on the same lot or adjoining lot and serving a purpose customarily incidental to the principal use or structure; or any structural addition to the manufactured home which includes awnings, cabanas, carports, porches, gazebos, ramadas, storage cabinets, and similar appurtenant structures. The aggregate area of accessory structures in residential districts shall not exceed 1,000 square feet for lots less than one (1) acre in size, and 1,584 square feet for lots equal to or greater than one (1) acre. The maximum number of accessory structures per lot shall be limited to two, and exterior finishes shall be similar to that of the primary structure on the property. Further, for lots less than one (1) acre in size, the maximum dimensions for an accessory structure shall be 26 feet by 38 feet with a maximum height of 20 feet; and for lots equal to or greater than one (1) acre in size, the maximum dimensions for an accessory structure shall 36 x 44 feet, with a maximum height of 25 feet.

The Building Department encourages the builder to contact us for further clarification on any questions encountered during the construction of their project.

FOUNDATION PLATE ANCHOR BOLTS



I.B.C. Section 2308.6

ALTERNATE BRACED WALL PANELS - I.B.C. Section 2308.9.3.1.

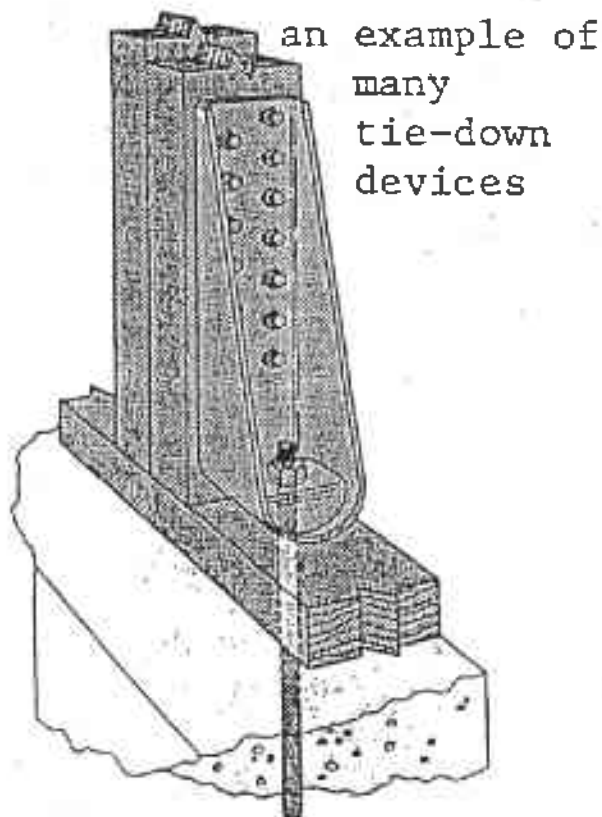
Method for bracing garage corners when wall is less than 4 feet in length.

For one-story buildings, the following applies:

1. Each panel must be a minimum 2 feet 8 inches in length with a maximum height of 10 feet.
2. Each panel sheathed on one face with minimum 3/8 inch thick plywood with all edges blocked.
3. Attach plywood with 8d common or galvanized nails spaced at 6 inches on center at edges, 12 inches at intermediate supports.
4. Each panel must be attached to the foundation with a minimum of 2 anchor bolts 1/2 inch in diameter, embedded 7 inches into concrete and placed at panel quarter points.
5. Each panel end stud shall have a tie-down device approved for a minimum 1800 lbs. uplift capacity. The tie-down device (hold down anchor) shall be installed in accordance with the manufacturer's recommendations.
6. Foundation continuous across entire length of braced wall line and reinforced with not less than one No. 4 bar top and bottom.

In the first story of a two-story building, each panel shall be constructed as for one-story buildings with the following exceptions:

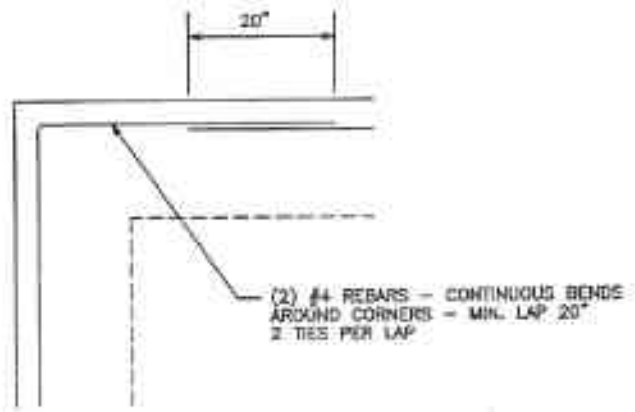
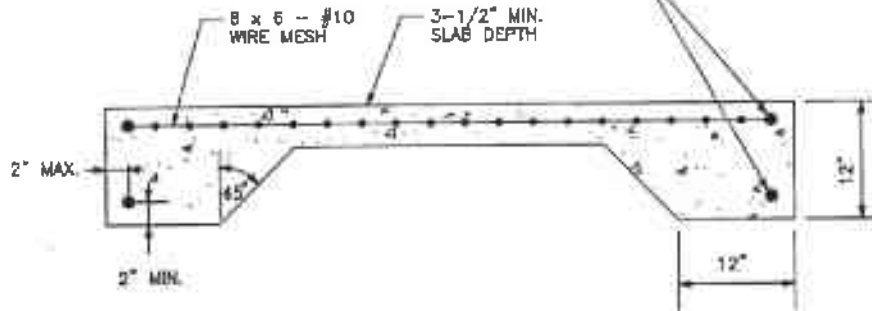
1. Each panel must be sheathed on each face.
2. Three anchor bolts per panel placed at one-fifth points.
3. Tie-down device uplift capacity shall not be less than 3000 lbs.



DETAIL A
 MONOLITHIC SLAB DESIGN
 (SINGLE DETACHED STRUCTURE APPLICATION)

Note: #4 rebar can be substituted for wire mesh.
 Recommended spacing is 24 inches on center each way

(2) #4 REBARS - CONTINUOUS BENDS
 AROUND CORNERS - MIN. LAP 20"
 2 TIES PER LAP



TYPICAL CORNER DETAIL

DETAIL B
 MONOLITHIC SLAB DESIGN
 (ATTACHED STRUCTURE APPLICATION)

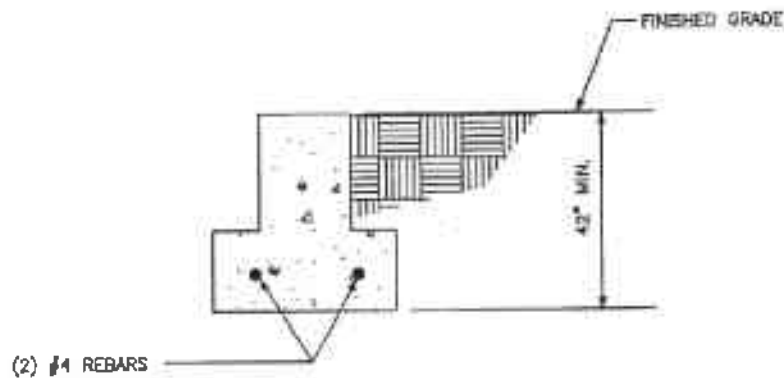


TABLE R602.10.6
MINIMUM WIDTHS AND TIE-DOWN FORCES OF ALTERNATE BRACED WALL PANELS

SEISMIC DESIGN CATEGORY AND WINDSPEED	TIE-DOWN FORCE (lb)	HEIGHT OF BRACED WALL PANEL				
		Sheathed Width				
		8 ft. 2' - 4"	9 ft. 2' - 6"	10 ft. 2' - 8"	11 ft. 3' - 2"	12 ft. 3' - 6"
SDC A, B, and C Windspeed < 110 mph	R602.10.6.1, Item 1	1800	1800	1800	2000	2200
	R602.10.6.1, Item 2	3000	3000	3000	3300	3600
SDC D ₀ , D ₁ and D ₂ Windspeed < 110 mph						
		Sheathed Width				
		2' - 8"	2' - 8"	2' - 8"	Note a	Note a
	R602.10.6.1, Item 1	1800	1800	1800	—	—
	R602.10.6.1, Item 2	3000	3000	3000	—	—

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.
 a Not permitted because maximum height is 10 feet.

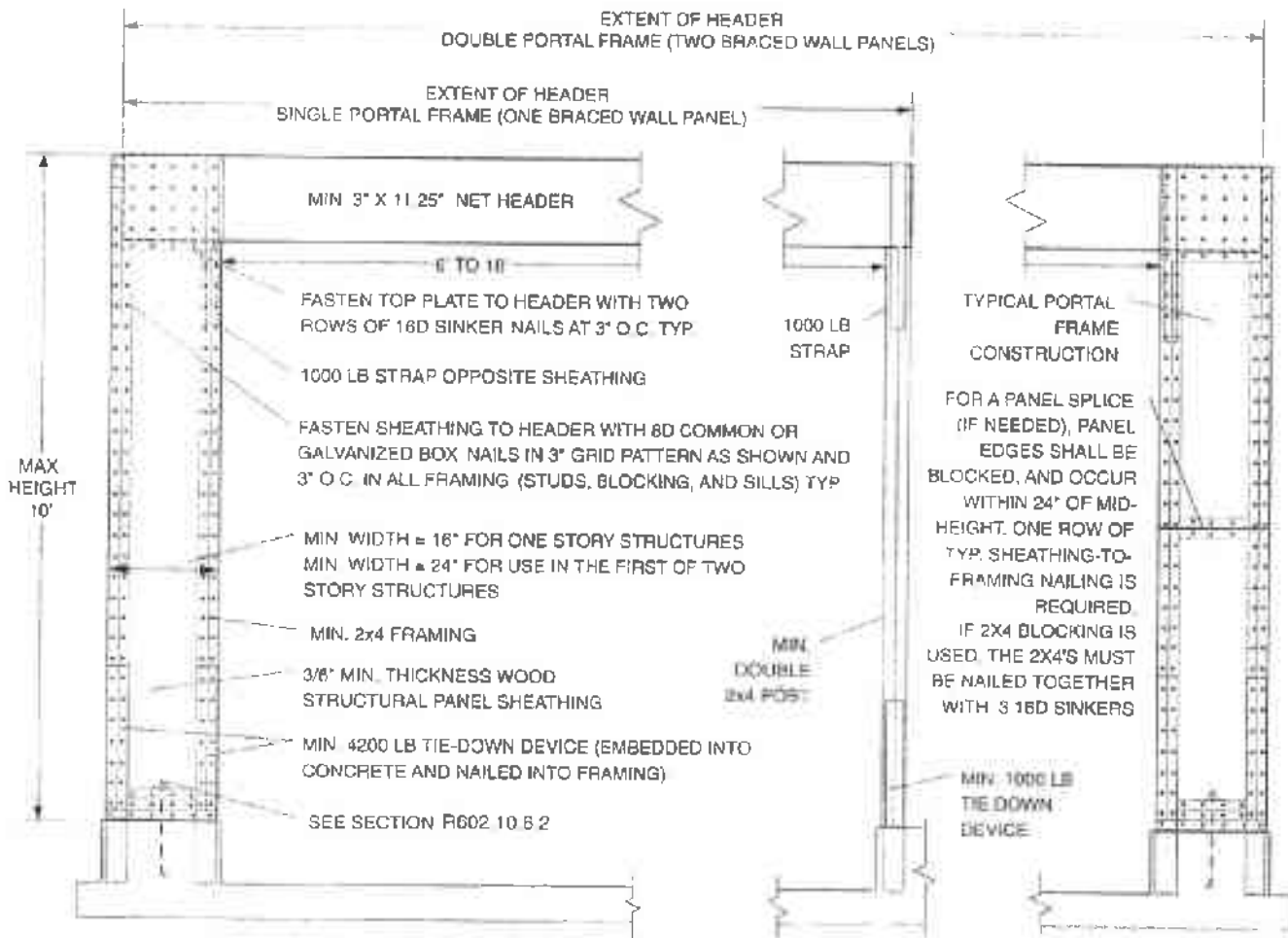


FIGURE R602.10.6.2
ALTERNATE BRACED WALL PANEL ADJACENT TO A DOOR OR WINDOW OPENING

RESIDENTIAL DETACHED STORAGE BUILDING OVER 120 SQ.FT.

Storage Building Address: _____

Property Owner: _____

Property Owner Address: _____

Building Dimensions: Width: _____ Length: _____ Height: _____

Specify Type of Foundation:

- Monolithic slab design (see page 6, detail A)
- Conventional footing with frost wall (see page 6, detail B)

Wall Framing:

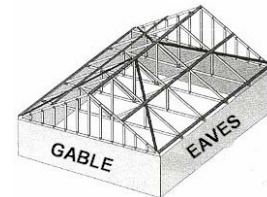
1. Treated sill plates to be used, 2x _____
2. Double top plate to be used, 2x _____
3. Wall framing studs to be used, 2x _____
4. Wall sheathing to be used (ex. 1/2" CDX Plywood) _____
5. Exterior finish to be used (City Code requires similar siding/finish to primary structure/dwelling) _____

Roof Framing:

1. Specify roof system to be used
 - Hand framed
 - Pre-engineered roof trusses
2. Specify sheathing to be used (ex. 1/2" CDX Plywood)
3. Specify severe weather underlayment to be used
 - Self-adhering polymer modified membrane
 - Two layers of underlayment cemented together
4. Specify roof covering to be used (ex. Class A Shingles) _____
5. Specify overhang on gable end _____ & eaves end _____

Structural:

Length of eaves ends _____
 Length of gable ends _____



Overhead door location: Eaves end Gable end
 Overhead door width _____ feet, _____ inches

Entry door location: Eaves end Gable end
 Entry door width _____ feet, _____ inches

Window(s) location: Eaves end Gable end
 Window(s) width _____ feet, _____ inches

Header material to be used

Overhead door, two _____ x _____
 Entry door, two _____ x _____
 Window(s), two _____ x _____

Additional Notes:

1. Provide diagonal bracing on both gable ends which extends from plate to plate and fasten into bottom cord of trusses.
2. Severe weather underlayment to extend to a point 24" above inside wall line.
3. Diagonal braced wall panels required at each corner and every 25' of wall.
4. Wall panels less than 48" are required to be constructed with alternate brace tie down devices (see page 4).
5. Provide positive drainage away from building- minimum 6" of fall for first 10'.

PLOT PLAN

ADDRESS: _____

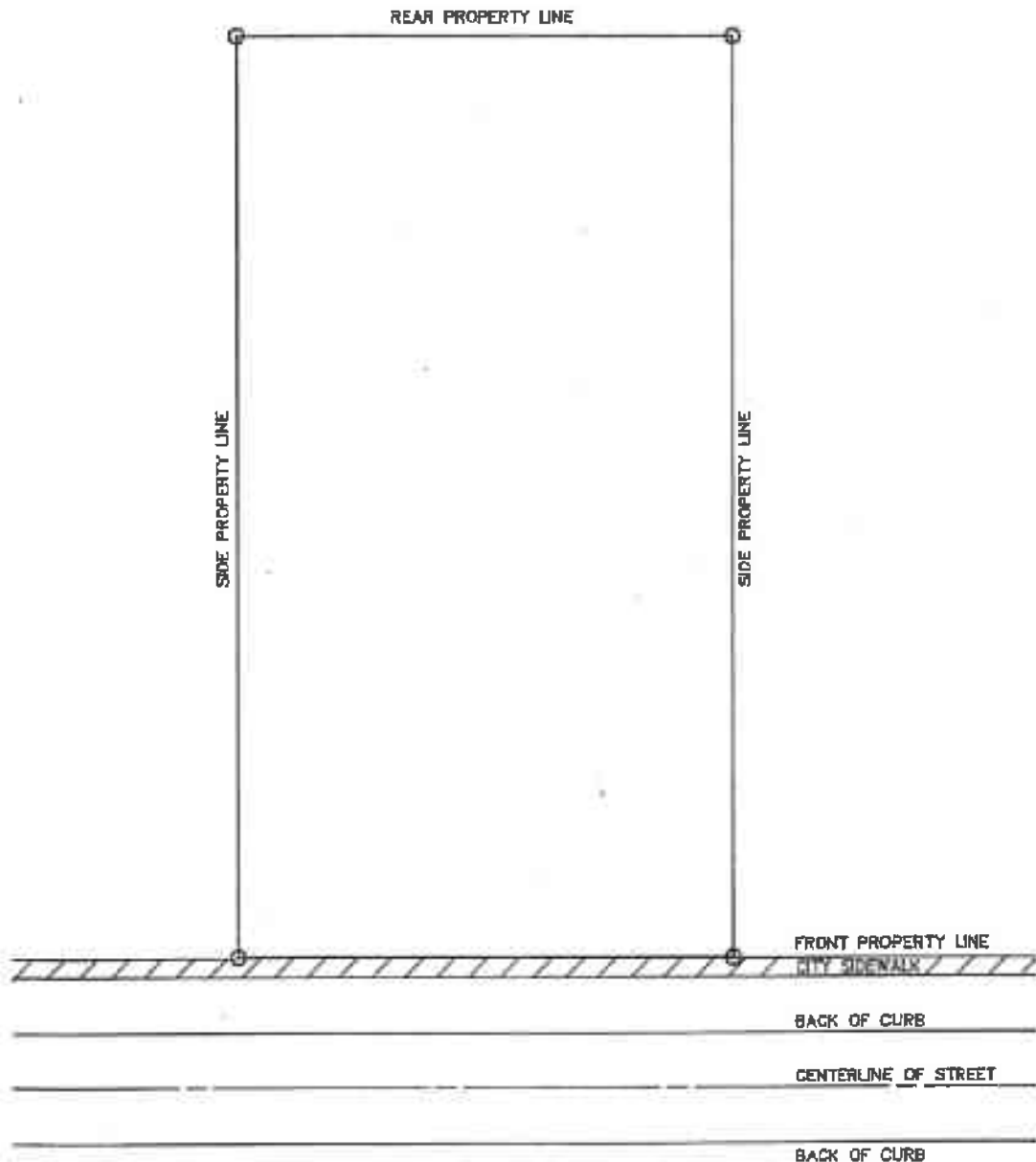
LEGAL DESCRIPTION: LOT _____ BLOCK _____ ADDITION _____

SITE AREA _____ SQ. FT. AREA OF SITE OCCUPIED BY BUILDINGS _____ SQ. FT.

INSTRUCTIONS TO APPLICANT:

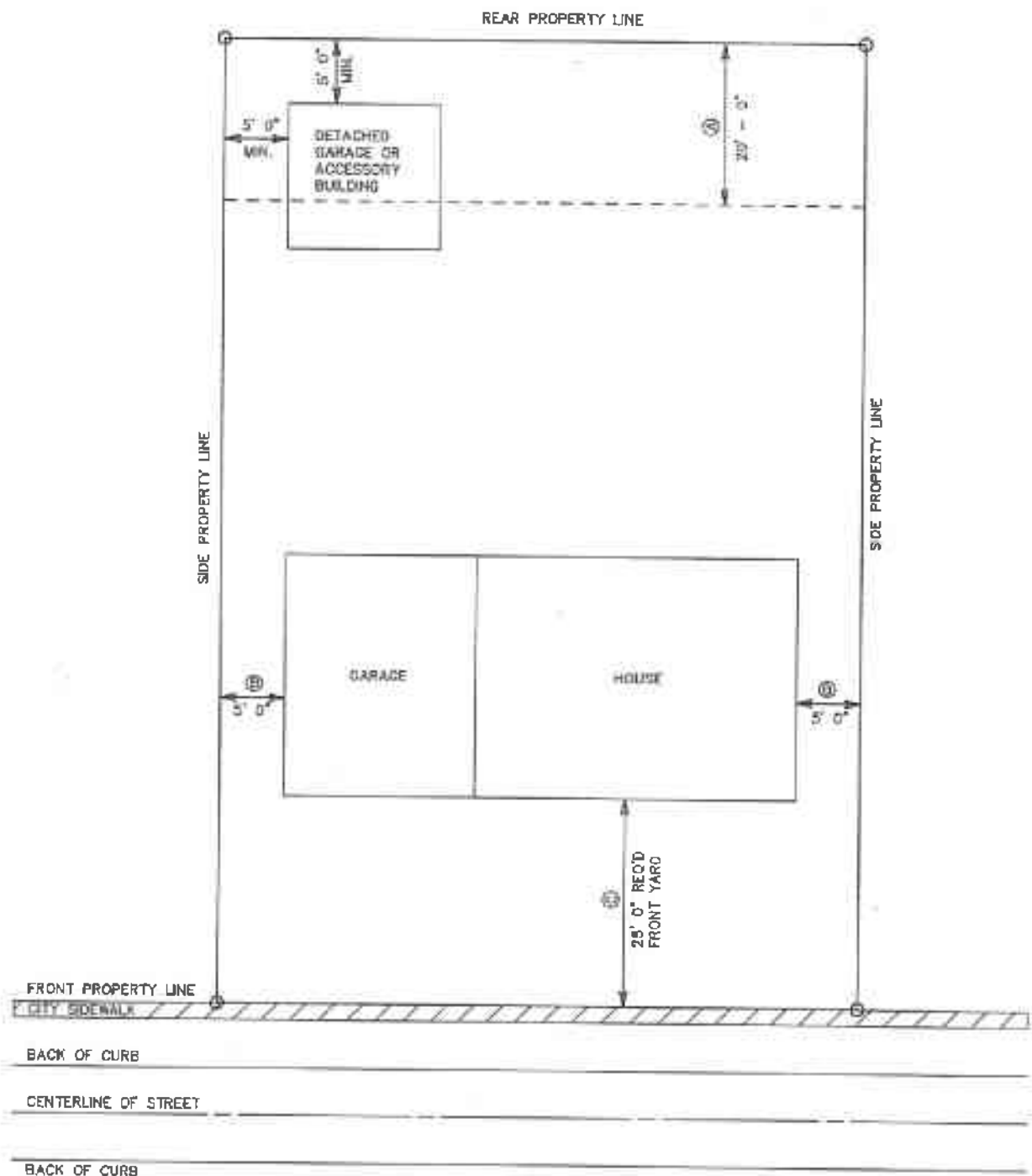
FOR NEW BUILDINGS AND BUILDING ADDITIONS THE FOLLOWING INFORMATION MUST BE PROVIDED IN THE SPACE BELOW:

- 1) Location of proposed construction and existing improvements.
- 2) Show buildings (square footage) and setback distances of existing buildings and new structures.
 - a) How far the new building will be away from the front yard property line.
 - b) How far away the new building will be from the side property line.
 - c) How far away the new building will be from the rear property line.
 - d) How far the new structure will be away from existing structure.
- 3) Show easements.
- 4) Indicate whether property is a corner lot.
- 5) Show street and avenue location.



SIGNATURE OF OWNER OR AUTHORIZED REPRESENTATIVE: _____

RESIDENTIAL MINIMUM REQUIRED YARD SETBACKS



SETBACKS

- "A" Rear Yard - R1 = 20' 0" required to rear property line.
- "B" Side Yard - 5' minimum on interior side yards. Minimum corner side yard setbacks must be one half the front yard setback.
- "C" Front Yard - R1 = 25' 0" minimum.

OTHER DEVELOPMENT RESTRICTIONS

Maximum structure lot coverage 40%

Maximum accessory buildings limited to 1,000 sq. ft.

Average Depth of Front Yards. In any District where front yards are required, whenever the average depth of at least two existing front yards on lots within one hundred (100) feet of the lot in question and within the same block is less or greater than the least front yard depth prescribed elsewhere in this Chapter, the required depth of the front yard on such lot may be modified. In such cases, this shall not be less than the average depth of said existing front yards on the two lots immediately adjoining or in the case of a corner lot, the depth of the front yard on the lot immediately adjoining.