



BUILDING DEPARTMENT
M moore engineering, inc.
925 10th AVENUE EAST
WEST FARGO, ND 58078
PHONE: 701-281-0597 FAX: 701-433-0376

GUIDELINE FOR BUILDING ADDITIONS TO DWELLINGS

This handout is a guide only and does not contain all the requirements of the City of Mapleton Building Code or City Ordinance

Building Permits are required for all additions to any dwelling. Separate permits are required for HVAC, Electrical and Plumbing work.

Building Permit Fees are based on the valuation of the construction project; this includes the materials and labor. If you will be doing the work yourself an estimate of labor cost shall be determined and included with the cost of materials.

Plan submittals shall be drawing to scale, neat and legible on suitable material. The plan submittal shall be of sufficient clarity to indicate the location, nature and extent of the work proposed.

Information required to be submitted along with your application for a building permit:

SITE PLAN – Drawing to scale shown lot dimensions, location and dimensions of both proposed and all existing buildings and distances from property lines to new addition. Show location of all public ways and easements.

FOUNDATION PLAN – Show outside lines and dimensions of the footing and foundation.
- Reinforcing type and layout.

FLOOR PLAN – Show outside lines and dimensions of the addition.
- Location and dimensions of interior walls.
- Size and location of doors and windows.
- Size of headers over openings.
- Size and spacing of wall studs.

EXTERIOR

ELEVATIONS – Show how the addition and existing building will look.
- Show height of the addition from grade to the highest point on the roof.
- Show the type of siding and roofing material used.

WALL SECTION – Show a cut through wall view of the addition.
- Show type, size and depth of footings and foundation walls.
- Show size and spacing of wall studs, wall sheathing type and type of siding.
- Show size and spacing of rafters and ceiling joists, type of roof sheathing and type of roof covering. If manufactured truss rafters are use, design and layout sheets must be submitted.
- Show roof pitch.

Allow 1-2 business days for review of your plans; you will be contacted when your plans have been approved. Any omissions in the application and/or plans will result in a delay of the approval.

BUILDING CONSTRUCTION GUIDELINES

1. **Setbacks** – Included with this guideline is Zoning Information with setback requirements for dwellings. All additions must conform to the current setback requirements regardless of the location of existing structure being added to.
2. **Building Size** – The maximum area for a dwelling is generally restricted by the maximum lot coverage.
3. **Light, ventilation and heating** – All habitable rooms shall aggregate glazing area of not less than 8% of the floor area of the room and have natural ventilation through windows, doors, louvers or other approved openings with a minimum openable area of 4% of the floor area being ventilated. Use of artificial light and mechanical ventilation shall be approved by the Building Department. All dwellings shall have heating facilities capable of maintaining room temperature of 68 degrees at a point 3 feet above the floor and 2 feet from the exterior wall in all habitable rooms.
4. **Room area and height** – All dwelling shall have one habitable room at least 120 square feet and other habitable rooms shall be not less than 70 square feet. All rooms shall have a ceiling height of not less than 7 feet.
5. **Garage and dwelling separation** – Garages shall be separated from the residence and its attic area by less than 1/2 inch gypsum board applied to the garage side
6. **Emergency escape and rescue openings** - Basements with habitable space and all sleeping rooms are required to have emergency escape and rescue openings. Where the basement contains one or more sleeping rooms, emergency escape and rescue openings shall be required in each sleeping room, but shall not in the adjoining areas of the basement. See attached sheet for minimum requirements for egress windows.
7. **Means of egress** - Means of egress from all dwellings shall be directly to the exterior and shall not require traveling through a garage. Egress door shall be a side hinged door not less than 3 feet in width and not less than 6 feet 8 inches in height. Door latches shall be readily openable from the interior without any special knowledge. Landings shall be provided on both sides of the door.
8. **Smoke alarms** - Smoke alarms are required in each sleeping room, outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story including the basement. All smoke alarms shall be interconnected. When interior alteration or remodeling that requires a permit or when bedrooms are added or created the entire dwelling shall have smoke alarms installed and shall be interconnected and hard wired.
9. **Moisture vapor retarder** - Moisture vapor retarder is required for all framed walls, floors and roof/ceilings comprising elements of the building thermal envelope and shall be installed on the warm-in-winter side of the insulation.
10. **Footing and Foundation** – Frost protected footings are required for dwellings. Frost depth is 54 inches. Sill plates shall be treated or foundation grade redwood anchored by approved foundation anchor straps or 1/2 inch X 10 inch bolts embedded into the concrete, with a washer and nut spaced not more than 6 feet on center and within 12 inches of each end and splice. Minimum of two per plate.
11. **Floors** – Manufactured floor trusses or engineered wood I-joist shall be installed as per manufacturer's instructions. If solid sawn lumber is used, the size of the joist is determined by the span and spacing of the joist. Floor sheathing must be of approved span rated sheathing.
12. **Walls** – Bottom plate shall be of at least the same width as the wall stud bearing upon it.
 - Wall studs shall be a minimum 2 X 4 and space maximum 24 inches on center, with three wall studs at each exterior corner.
 - Wall studs shall be capped with double top plates overlapped at corners and end joints offset at least 24 inches.
 - Structural wall sheathing is recommended. If structural wall sheathing is not used approved corner bracing shall be used and must be attached to wall studs and plates at all corners.
 - Structural wall sheathing panels are required a minimum of 4 feet from corners.
 - The exterior wall covering must be of an approved material that is resistive to weather such as siding, stucco, brick, etc. A weather barrier shall be applied to the studs or sheathing as required.
 - Headers must have at least one trimmer stud under each end. Headers over 6 feet shall have a minimum of two trimmer studs under each end. Headers over doors and windows must be of the follow minimum sizes for walls bearing roofs:

For opening:	Minimum header size:	Grade of wood:
6 foot opening	2 – 2 X 10	#2 SPF or #2 HF
8 foot opening	3 – 3 X 10	#2 HF

Headers for openings greater than 8 feet shall be approved by the Building Department.
(Consider pre-engineered laminated veneer lumbers for openings greater than 6 feet.)

13. **Roofs** – Manufactured roof trusses are highly recommended. If solid sawn lumber is used, the size of the rafter is determined by the span and spacing of the rafter. Roof sheathing must be of approved span rated sheathing.
 - Specify the type of roof covering to be used (i.e. wood shingles, asphalt shingles, etc.) including underlayment and ice dam protection at eaves.

All residential construction shall meet the minimum requirements of the City of Mapleton Building Code.

REQUIRED INSPECTIONS

1. **Site/Footing** – to approve accessory structure location and footing prior to pouring concrete.
2. **Foundation wall** – to approve rebar placement prior to pouring concrete.
3. **Framing** – after completion of structural frame, sheathing and roof to the building frame, and prior to covering the structural frame. All Electrical, HVAC, and Plumbing shall be installed and inspected before calling for framing inspection.
4. **Final** – when addition is completed and prior to occupying.

It shall be the responsibility of the permit holder to notify the Building Department when work is ready to be inspected. No work shall commence until the inspection is complete and approved.

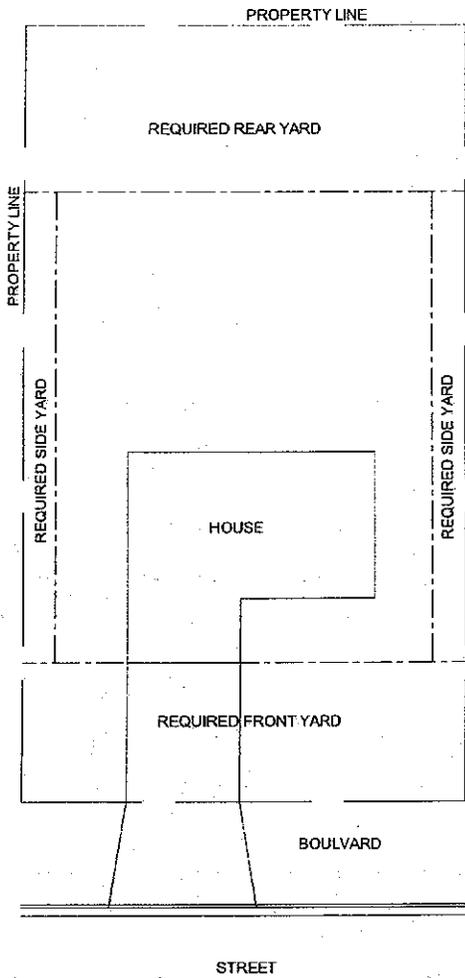
Mapleton Zoning Information

RESIDENTIAL PRINCIPLE STRUCTURE		MINIMUM SETBACKS (FT.)			MAXIMUM LOT COVERAGE (%)	MAXIMUM HEIGHT (FT.)	MINIMUM BUILDING AREA (SF)
		FRONT YARD	REAR YARD	SIDE YARD			
		ZONING DISTRICT					
A - AGRICULTURE							
FARM USE		50	50	25	NR	2½ Stories / 35 Ft.	NR
NON-FARM USE		50	50	25	NR	2½ Stories / 35 Ft.	NR
R - 1 LARGE LOT RESIDENTIAL DISTRICT							
ONE-FAMILY		25	25	12	50	2½ Stories / 35 Ft.	1500
R - 2 LOW DENSITY RESIDENTIAL DISTRICT							
ONE-FAMILY		25	25	12	50	2½ Stories / 35 Ft.	1500
R - 3 MEDIUM DENSITY RESIDENTIAL DISTRICT							
ONE-FAMILY		25	25	8	50	2½ Stories / 35 Ft.	(1)
TWO-FAMILY		25	25	8	50	2½ Stories / 35 Ft.	NR
TOWNHOMES		25	25	8	50	2½ Stories / 35 Ft.	NR
R - 4 TOWN HOUSE AND SMALL APARTMENT RESIDENTIAL DISTRICT							
TWO-FAMILY		25	25	8	NR	2½ Stories / 35 Ft.	NR
TOWNHOMES		25	25	8	NR	2½ Stories / 35 Ft.	NR
R - 5 MULTIPLE FAMILY RESIDENTIAL DISTRICT							
MULTIPLE DWELLING OF TWO TO FOUR UNITS		25	30	8	50	2½ Stories / 45 Ft.	NR
MULTIPLE DWELLINGS		25	25	10	50	3 Stories / 45 Ft.	NR

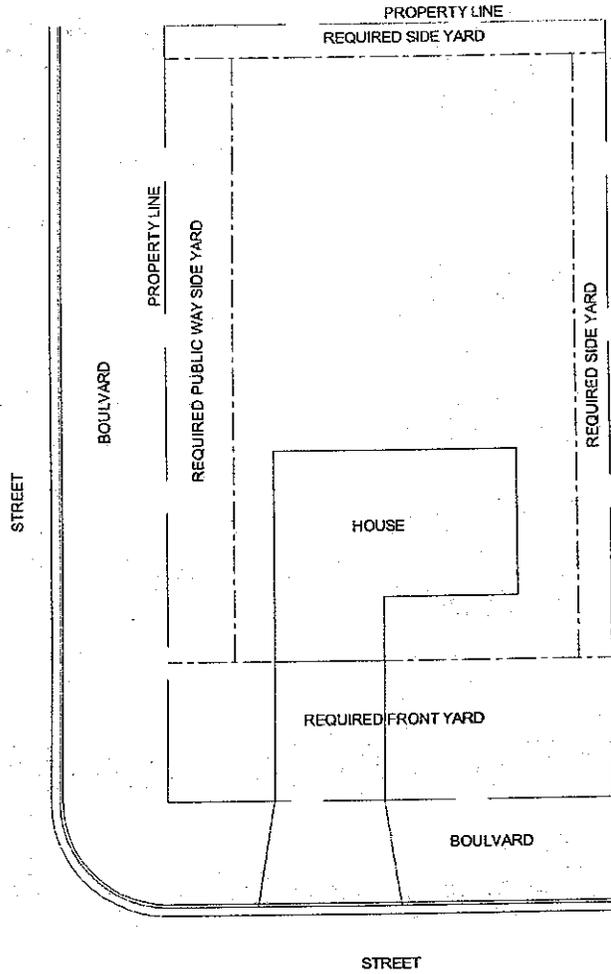
NR – Not regulated by the Land Development Code and shall be subject to approval by the Mapleton Planning and Zoning Committee and the Mapleton City Council.

To determine your property zoning district refer to the Zoning Map or contact the Mapleton Building Department at 281-0597 or the Mapleton Auditor's office at 282-6992.

The following sheets are only provided as reference to assist you in drafting your plans for your deck.



INTERIOR LOT

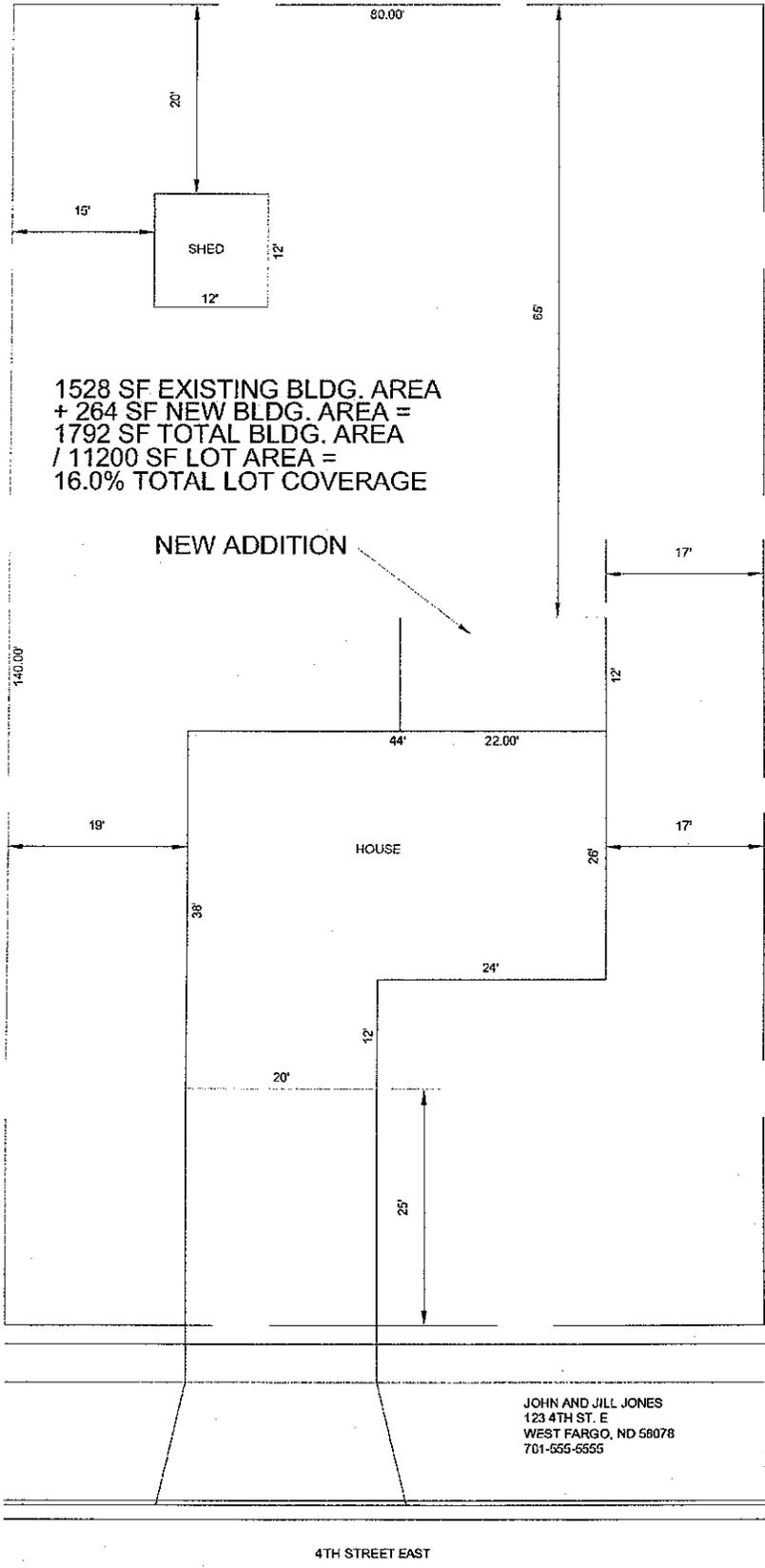


CORNER LOT

City of Mapleton, North Dakota

TYPICAL SETBACK REQUIREMENTS
WEST FARGO, NORTH DAKOTA

DATE	REVISED	CHD BY	DRAWING
AUG. 2006			1
DRAWN BY	PROJ. NO.	SCALE	OF
MAH		N.T.S.	1



1528 SF EXISTING BLDG. AREA
 + 264 SF NEW BLDG. AREA =
 1792 SF TOTAL BLDG. AREA
 / 11200 SF LOT AREA =
 16.0% TOTAL LOT COVERAGE

SHOW ON SITE PLAN

- Lot Lines
- Lot Dimensions
- Street Name(s)
- Address
- Owner Name
- All Existing Structure
- Pond/Lake/Stream
- Driveway
- Location of New Structure
- New Structure Distances to Lot Lines
- Distances to Other Structures
- Easements

Note: If Site Plan is not complete, the review process will be delayed

JOHN AND JILL JONES
 123 4TH ST. E
 WEST FARGO, ND 58078
 701-555-5555

4TH STREET EAST

City of Mapleton, North Dakota

TYPICAL SITE PLAN

DATE	REVISED	CH'D BY	DRAWING
AUG. 2006			1
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MAH		N.T.S.	1

22'

12'

10" X 20" CONCRETE FOOTING

8" THICK CONCRETE FOUNDATION WALL
WITH #4 REINFORCING BAR

CRAWL SPACE WITH 4" CONCRETE SLAB

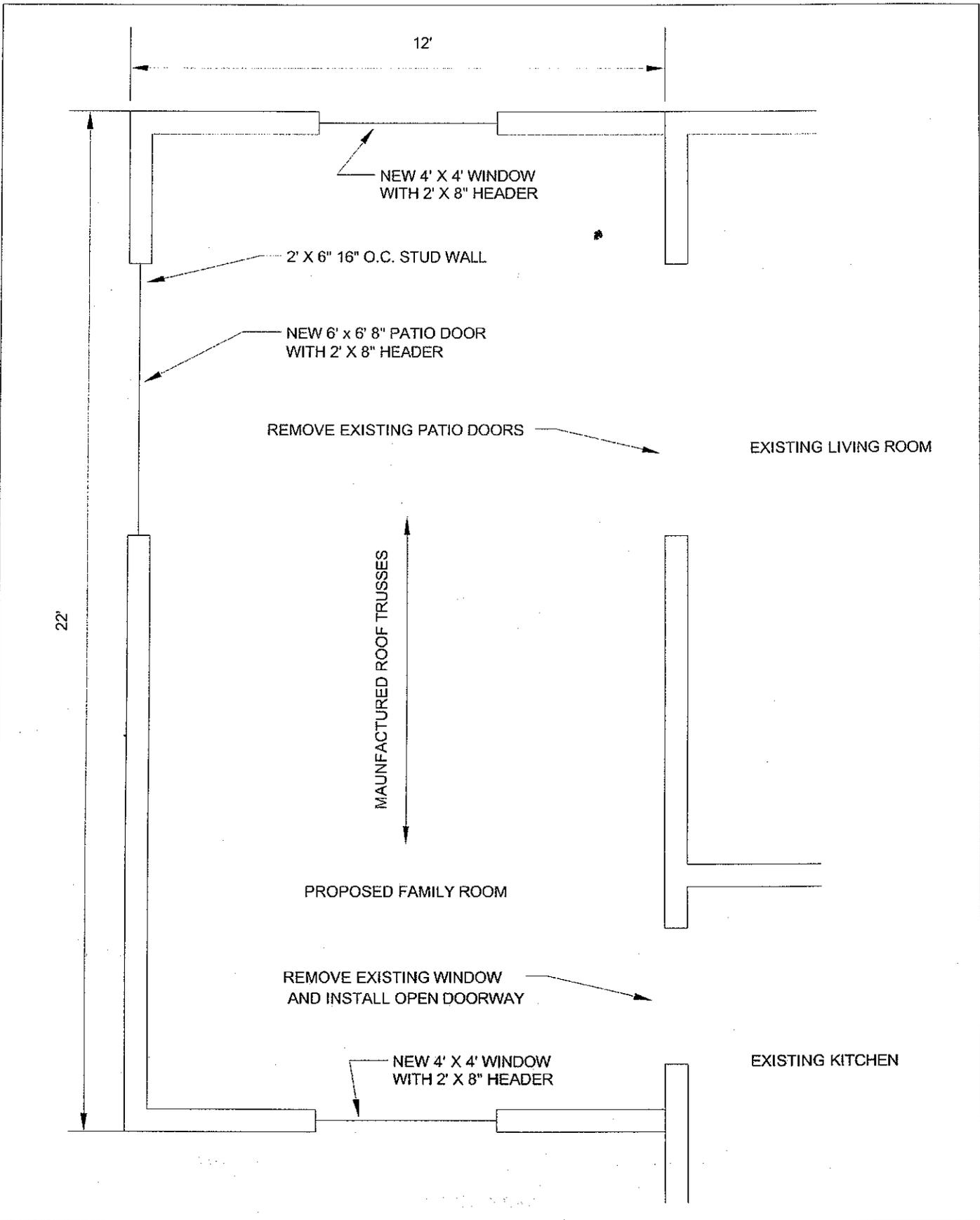
MAUNFACTURED FLOOR TRUSSES

EXISTING FOUNDATION SYSTEM

City of Mapleton, North Dakota

TYPICAL FOUNDATION PLAN

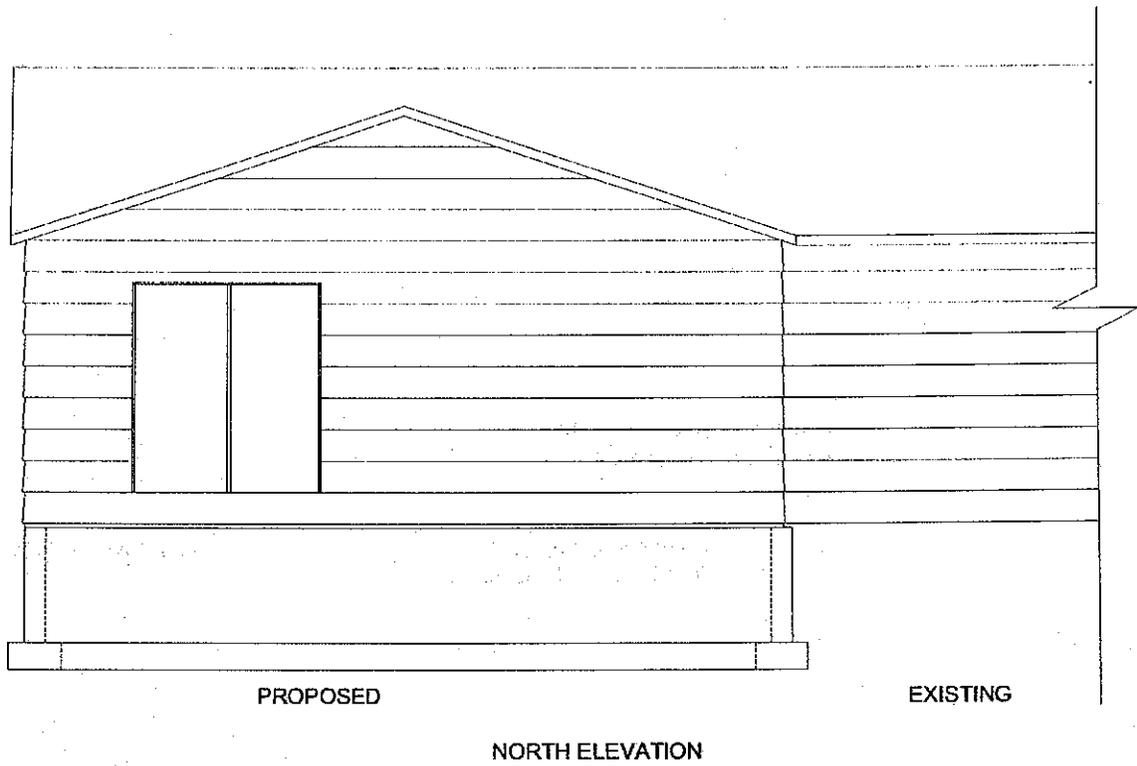
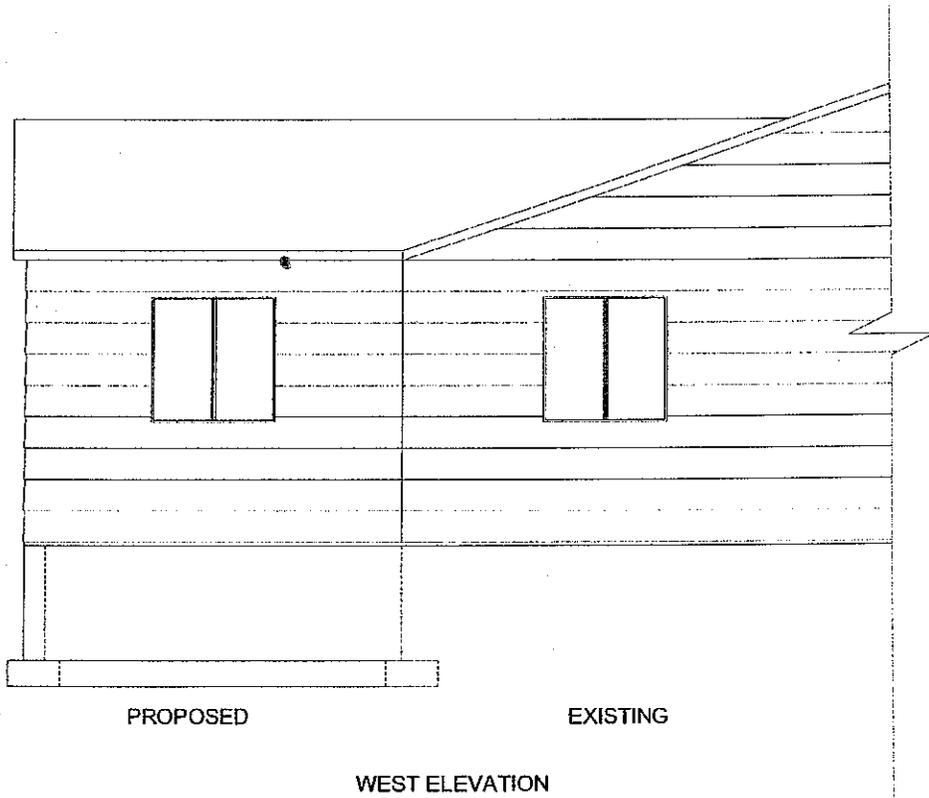
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City of Mapleton, North Dakota

TYPICAL FLOOR PLAN

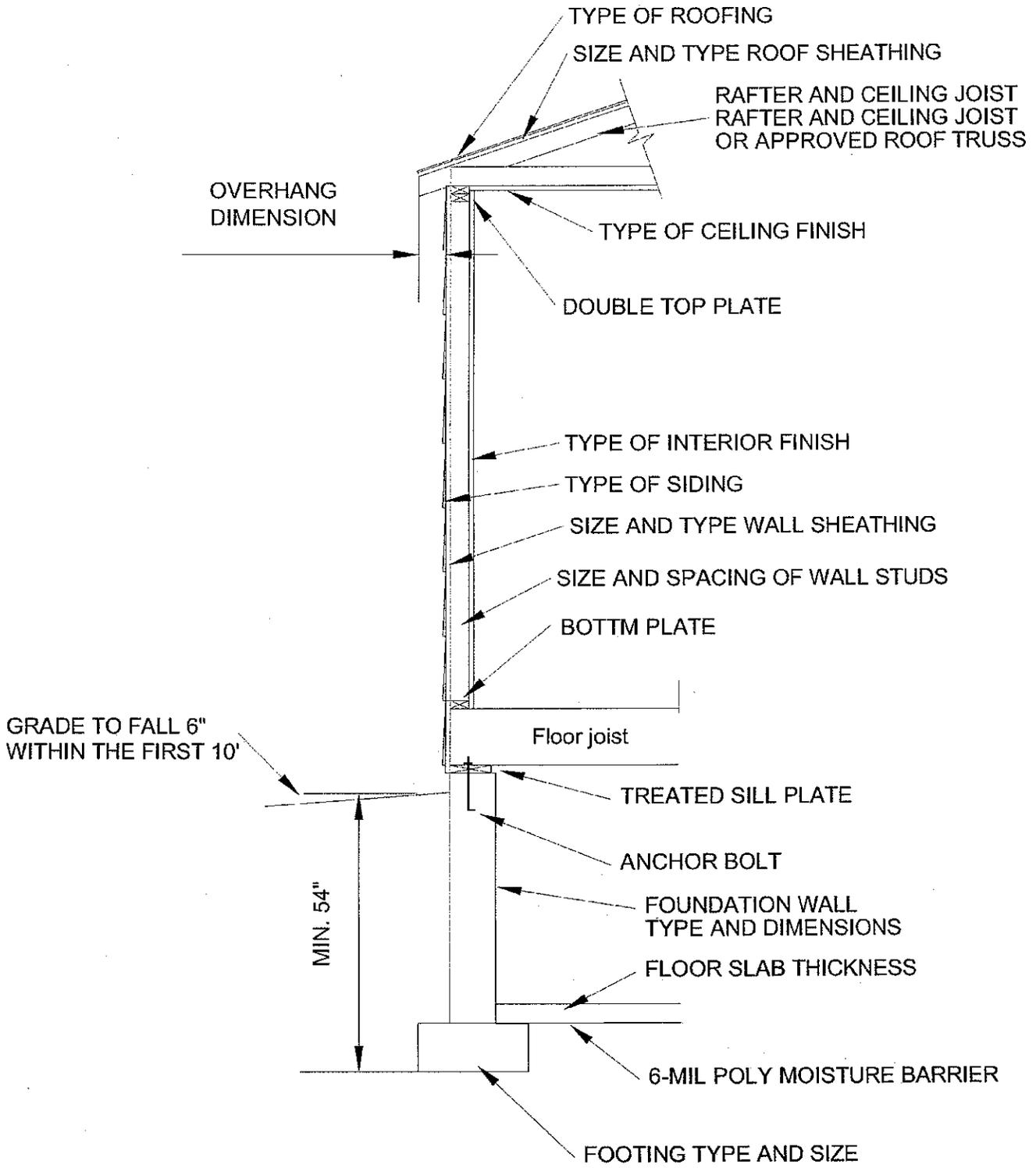
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City of Mapleton, North Dakota

TYPICAL ELEVATION PLAN

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MAH		N.T.S.	1



City of Mapleton, North Dakota

TYPICAL WALL SECTION DETAIL

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MAH		N.T.S.	1