Attached Garage Construction Permits Submittal Checklist

_________ Building Permit Application
_________ Site Plan
_________ Construction Plans
_________ Electrical, Plumbing and Mechanical Permit Applications (when applicable)

BUILDING PERMIT APPLICATION
Submit completed Building Permit Application

SITE PLAN
Submit an accurate site plan for review and approval, which includes:
Location of the proposed garage, the house and any other building or structures on the property.
Distances between buildings and structures and to property lines.
Easements, drainage and City Right-of-Way (when applicable)

CONSTRUCTION PLANS
Submit complete set of construction plans drawn to scale no smaller than ¼ inch to 1 foot - electronic plans are also required for plans larger than 11x17.
OR fill out the following Construction Details, Floor Plan and Cross Section pages of this handout

ADDITIONAL PLANS AND INFORMATION REQUIRED FOR:
Gambrel roof or unconventional roof framing.
Attic storage area and/or stairs to storage area, basement or second floor.
Any use other than a building accessory to one and two family dwellings.
Any living space above the garage.

ELECTRICAL, PLUMBING AND MECHANICAL PERMIT APPLICATIONS:
When applicable, separate permit applications must be submitted for each of the following respective trades Electrical, Plumbing and Mechanical Permits as separate permits are required.
Contractors licensed in accordance with State of Iowa Licensing Laws for the respective trade must obtain these permits and perform the work.
Per State of Iowa Code, homeowners may obtain these permits and perform the work, provided the homeowner has lived there for at least six months.

OTHER INFORMATION:
After application, the building inspector does a thorough plan review and notes any code deficiencies or missing information on the plans.
When the plans are approved and permit fees are paid, the building permit is issued and construction is authorized to begin.
Construction Details

Construction Details for garages attached to one and two family dwellings. Please provide the following information:

**Size of New Garage**  
\[ \text{Length} \times \text{Width} \]

**Wall Height**

**Enlarging an existing attached garage?**
- Yes
- No

**Attaching to new house at:**
- Hall
- Laundry
- Kitchen
- Mud Room
- Dining
- Living
- Sleeping
- Other

**Closing windows at:**
- Hall
- Laundry
- Kitchen
- Mud Room
- Dining
- Living
- Sleeping
- Other

**Will this garage have living space above it?**
- Yes
- No

**If yes, used for:**

**Will this garage have storage space above it?**
- Yes
- No

**Stairs?**
- Yes
- No

**Wall Sheathing**
- Plywood (approved structural wood panel)
- OSB (approved structural wood panel)
- Other sheathing

**Roof Framing**
- Manufactured wood trusses (truss design required)
- Rafters (ask for rafter information sheet and rafter tables)

**Roof Sheathing**
- Plywood (approved structural wood panel)
- OSB (approved structural wood panel)

**Roof Sheathing Size**
- 7/16"
- 1/2"
- 5/8"

**Roofing Underlayment**

**Separation from house**
- Solid wood door
- Metal door (no windows)
- On garage side of common wall up to roof sheathing
- On garage side of common wall up to ceiling height and on entire garage ceiling
- On all garage walls and on entire garage ceiling if living area above

### OVERHEAD DOORS

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Width</th>
<th>Height</th>
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<tr>
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<td>X</td>
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**In gable end?**
- Yes
- No

**Overhead doors Headers LVL:**
- 1 3/4" X
- 2" X

### DOORS AND WINDOWS

**Doors:**
- Swing out
- Swing in

**Door Headers:**
- 2" X

**Windows:**
- X

**Window headers:**
- 2" X
Floor Plan

- Show door and window sizes and locations.
- Show dimensions.
- Indicate where garage attaches to house. Indicate Roof Lines of house and garage.
**Attached Garage Construction Guidelines**

**2015 International Residential Code**

**Cross Section**

Check, circle, or fill in each detail to create your building design.

### ROOF DESIGN
- **Ice and Water Barrier** (to 24" inside wall line)
  - + Felt
- **Roof Sheathing**
  - Circle: 7/16" or 1/2"
  - OSB or Plywood
- **Rafters**
  - 2 X _______ on center
  - 2 X _______ Ceiling Joists _______ on center
- **Hip/Valley Rafters**
- **Manufactured Trusses** (Provide Mfr. Specs. at or before Rough Frame Inspection)
- **Roof Ventilation**: Total Vent Area in Sq. Inches: _______

### WALL DESIGN
- **Double Top Plate**
  - Circle: 2X4 or 2X6
  - (Consult Building Department Staff for Single Top Plate Option)
- **Window Header**: 2 X _____ – or – LVL 1 3/4" X _______
- **Door Header**: 2 X _____ – or – LVL 1 3/4" X _______
- **Studs**
  - Circle: 2X4 or 2X6 at _______ on center
- **Bottom Plate** (Single) – Same as Top Plates
- **Wall Sheathing**: __________
- **Weather Barrier**
  - Circle: House Wrap or Felt
- **Siding**: __________
- **Sill Plate**
  - Circle: 2X6 or 2X8
  - (Must be Treated or Naturally Decay Resistant)

### FOUNDATION DESIGN
- **1/2" X 10" Anchor Bolt**, Washer and Nut (or other approved anchors), 6' on center and 12" max. from plate splices. Anchor Bolt MUST have 7" embedment in concrete.
- **Foundation Rebar**
- **UFER Ground** (1/2" X 20' Rebar Typical) for connection to new electrical panel
- **Foundation Depth** – 42" minimum below finished grade
- **Footing Size**: 8"X16" minimum or _______
- **Foundation Wall Width**: _______ Height: _______
- **Drainage Tile Required for Basement Foundations**
- **Slope Finished Grade Away from Building**– min. 6" in 10'
- **Maintain 6" Clearance from Exterior Siding to Grade**

### ROOF SLOPE
- **12 inches**
- _______ Inches
- **Attic Insulation**: Minimum R49

### INTERIOR FINISH
- **Ceiling**: 5/8" Drywall, Typical; Other _______
- **Wall Insulation** (Minimum R20): 6" Fiberglass or better in 2X6 Wall
  - or –
  - 2X4 Wall with Alternate Insulation (Circle):
    - Foam or Cellulose or Rigid Foam Sheathing Plus Fiberglass (+ Wind Bracing)
- **Vapor Barrier**: __________
- **Wall Finish** – 1/2" Drywall; Other _______
- **Wall Height** (from Finished Floor): _______ ft. _______ in.

### FLOOR DESIGN
- **Subfloor**: _______
- **Floor Joists**
  - Circle: 2 X _______ on center
- **Engineered Floor System**
- **Center Beam Size**
  - Circle: 2 X _______ or _______ 1 3/4" X _______ LVL
  - or –
  - □ Steel:

### CRAWL SPACE
- **Pressure Treated Beams** within 12" and Joists within 18" of Earth
- **Clear Height Provided**: __________
- **Vapor Barrier Over Earth**
  - Circle: Yes or No
  - **Ventilation**: _______ square inches
- **Insulation** (Circle):
  - R10 Foundation Walls or R30 Floors
  - **Insulate Mechanical Ducts**: R6 Minimum
Cross Section Example

Attached Garage Construction Guidelines
Community Development Department - Construction Permits and Inspection Services
215 Sycamore St Muscatine, IA 52761 - PH 563.262.4141 - FAX 563.262.4142
www.muscatineiowa.gov/26/Community-Development

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Engineered trusses. Submit truss design drawings prior to rough frame inspection.

Approved structural wood panel (plywood or OSB) roof sheathing

Bracing per manufacturer’s truss design drawings

Double 2 x 4 Top Plate

Header over door and window openings

2 x 4 studs 16” or 24” OC up to 10’ in height

2 x 4 preservative treated bottom plate

1/2” diameter anchor bolts with nut and washer maximum 6’ OC and within 12” of corners and ends, min 2 bolts per plate. 7” min embedment. (other methods or anchors must be approved by the building official)

Min 4” concrete slab reinforced with 6” x 6” #10 welded wire mesh or #4 reinforcing bars 24” OC both ways

Min width of trench footing at base is 8”. Variable depending on total load supported and soil conditions.

Min 6” at bottom of foundation and Min 8” at top of foundation. 7” Min Embedment

Approved wood structural wall sheathing (plywood or OSB)

Weather Barrier (felt paper or house wrap) Required

Siding

Min #15 asphalt felt underlay

Fave Ice Barrier

Shingles installed per manufacturer
Attached Garage
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Inspections Required

The inspection card must be kept at the jobsite to be available to the building inspector at all times. The permit card must be displayed and visible from the street. If this is impossible, post on an exterior to be visible to the building inspector on site.

Each phase of construction listed below shall comply with City of Muscatine Codes and shall pass inspection before work proceeds. It is the responsibility of the permit holder or their agent to call for inspections and to provide access for inspection. At least 24 Hours Notice is required prior to inspection. Based on the scope of work, all inspections listed below may not be required for every project.

Footings Excavation complete, forms, and steel reinforcement in place, before concrete is poured. Includes post, pier, trench, spread, pad and other footings. Concrete encased electrode (UFER ground) in place for new buildings and building additions.

Groundwork Underground or under slab plumbing, PEX tubing, HVAC, or electrical work before covering. Water test with 10’ head pressure required on plumbing Drain, Waste, Vent system.

Utilities Temporary and permanent electrical services.

Gas Piping Rough-In Gas piping before covering or concealment. Coordinate air test on gas piping with Alliant Energy.

Plumbing Rough-In Before insulation, gypsum board, or any covering has been installed.

Mechanical Rough-In Before insulation, gypsum board, or any covering has been installed.

Electrical Rough-In Before insulation, gypsum board, or any covering has been installed.

Framing Rough-In All framing complete, after the above rough-ins have been approved, before insulation, gypsum board, or any covering has been installed. Truss design drawings shall be on site. If possible, coordinate rough-in inspections for one trip.

Final Inspection After all phases of construction are complete and building is ready for occupancy.

The portion or addition of the garage affected by the work must not be occupied until Final Inspection has been completed, approved and a Certificate of Occupancy has been issued by Community Development.