



**CITY OF GENEVA**  
**BUILDING DIVISION**  
109 JAMES STREET  
GENEVA, IL 60134  
630/262.0280  
[www.geneva.il.us](http://www.geneva.il.us)

# Residential Electrical Upgrade Permit

Revised: 4/20/20

A building permit is required prior to upgrading a residential electric service. The following are guidelines and comments for obtaining an electric upgrade permit.

## Application and Drawing Procedures:

- An Application for permit is to be filled out and submitted to the Building Division.
- For general permit application questions for any property within the City of Geneva, please contact the Building Division at 630 262-0280 or [pdf@geneva.il.us](mailto:pdf@geneva.il.us).
- Mill Creek residents with building permit questions should contact the Kane County Building Division at 630 232-3485 or [keriazakosEleas@co.kane.il.us](mailto:keriazakosEleas@co.kane.il.us) because Mill Creek properties are not under the jurisdiction of the City of Geneva.
- The contractor's name, address, phone number and, if required, their license numbers are to be filled out when submitting the application.
- The location of the new service must be installed per the requirements of The City of Geneva Electric Division.
- Two (2) copies of the plans showing the following information:
  - Panel Location (cannot be installed in closet or bathroom)
  - Distance from the meter (greater than 5 feet requires an exterior disconnect)
  - Objects in the area of the panel (3 foot by 3 foot of clear space must be maintained in front of the panel)
  - Detailed 1-line electrical diagram
- Permit fee is paid after review and approval of all required documents; you will be called when permit is ready to be picked up. Review time is usually 10 days after ALL required documents are received.

## Fees: Residential Electrical Upgrade

- \$50.00 plan review fee plus
- \$75.00 for the first \$1,000 of project cost plus
- \$10 per each thousand or portion of the project cost after the first \$1,000
- **Re-inspection fee:** \$75.00 to be paid prior to re-inspection if an inspection has failed.
- We accept cash, check (made payable to the City of Geneva), MC, VISA, MC, and AMEX.

## General Comments:

- Installation shall meet all the requirements of the 2005 NEC
- Panel location
  - Cannot be installed in clothes closets or bathrooms.
  - If panel is 5 feet or more from the meter an exterior disconnect will be required.
  - 3 foot by 3 foot clear floor space is required in front of the panel.
  - Meter cans need a 3' x 3' of clear space from decks, ac units and other obstructions.
- A service light must be installed near electrical panel.
- Placement of one (1) GFCI at the panel for service.
- An 8 foot ground rod to be installed and bonded to neutral in meter can.
- A service grounding electrode shall run continuous from the panel to street side of water meter and jumpered back to the house side. The size is determined by the 2005 NEC table 250-95.

- A minimum of 24-hour notice is required when scheduling any inspection.
- Service size to be a minimum of 100 amp or the load calculation, whichever is greater.
- Attachments to structure per City of Geneva Electric Division. See handouts included in packet.
- Service conductors should meet the following:
  - 3/0 copper for 200 amp service.
  - 1/0 copper for 150 amp service.
  - #3 copper for 100 amp service.

**Inspections – Clarification and Details:**

The following is a list of inspections that may be required for your project and the approximate amount of time it will take for the inspection.

- |                                       |               |
|---------------------------------------|---------------|
| ✓ <b>Final Inspection</b>             | <b>½ hour</b> |
| ✓ <b>Electric Division Inspection</b> | <b>½ hour</b> |

The following are general guidelines and details on the types of inspections that may be required for your project. For further clarification, please call our office and speak with one of our building inspectors.

**Final:**

- ✓ Check for panel location.
- ✓ Check panel bonding and grounding.
- ✓ Confirm breaker panel labeled.
- ✓ An inspection from the Electrical Division must be set for the inspection from the meter out to transformer.

**Building Codes:**

The following are the Building Codes the City of Geneva has adopted.

- City of Geneva Municipal Code
- 2009 Int'l Building Code w/amendments
- 2015 Int'l Mechanical Code
- 2005 Nat'l Electrical Code
- 2014 State Plumbing Code
- 2015 Int'l Residential Code w/amendments
- 2009 Int'l Fire Code w/amendments
- 2018 Int'l Energy Conservation Code
- 2015 Int'l Swimming Pool and Spa Code (ISPSC) w/amendments
- 2015 Int'l Fuel and Gas Code w/amendments

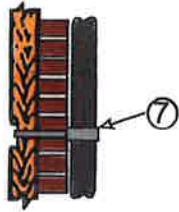
**Homeowner – Contractor Responsibilities:**

- It is the responsibility of the homeowner/contractor to schedule with the required inspections. The required inspections are indicated on the plan review form, which is attached to your permit and the field copy of drawings. When calling to schedule an inspection, please have the address and permit number available.
- Inspections shall be canceled a minimum of 24 hours before the scheduled time.

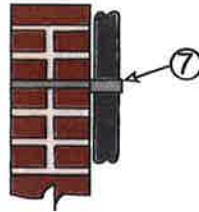
# City of Geneva- Steel Conduit Service Riser

For Service Entrance Capacity of 400 Amperes or Less - Single-Phase  
200 Amperes or Less - Three-Phase

All installations shall follow 2005 NEC

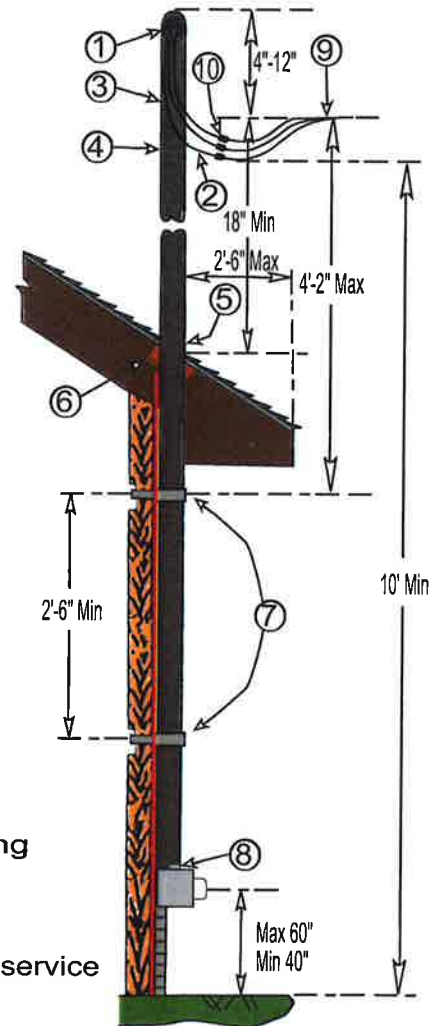


Installation on Brick Veneer Wall



Installation on Brick Wall

Installation on Frame or Stucco Wall



\* Ground wire must be bonded in the meter can

## NO ROOF PLATES PERMITTED

I. Customer furnishes, installs, and maintains the following equipment:

- 1) Service head (Weatherhead)
- 2) Service run wires (allow a minimum of 24 inches beyond the service head to make connections to service drop)
- 3) Service attachment (Porcelain)
- 4) Rigid steel conduit - 2 1/2" for 100 ampere or smaller or 3" for larger service entrance equipment or metallic raceway of equivalent strength may be used.
- 5) Metal flashing sealed with mastic. (See Note)
- 6) 2" x 4" blocking solidly installed between rafters. (See Note)
- 7) Mounting clamp with 1/2" bolts, nuts, and washers. For frame, stucco, or brick veneer, install bolts in center line of studding or, in the case of two bolt strap attachment, straddling a stud with an anchor plate bridging stud.
- 8) Meter connection device adapter.(Hub)

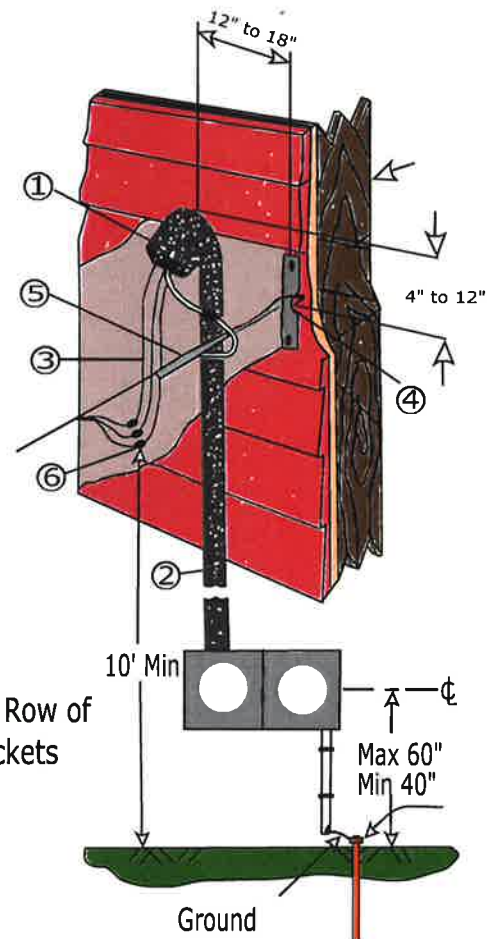
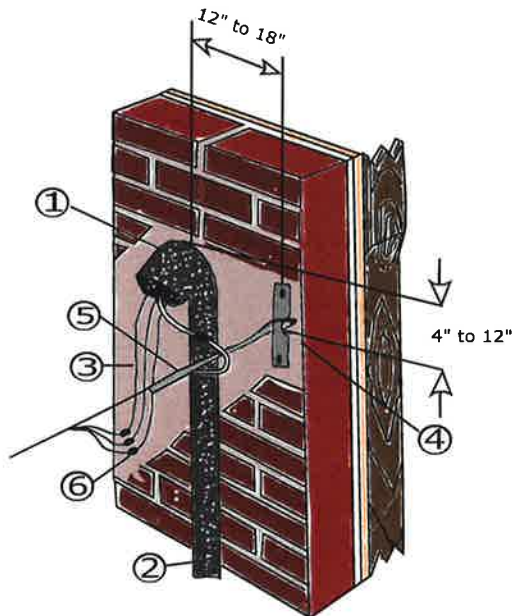
II. Company furnishes, installs, and maintains the following equipment:

- 9) Service drop dead-end (Bail)
- 10) Connectors for connecting Customer's wires to service drop.

Note: Items 5 and 6 required where the riser extends through the roof.

# City of Geneva- Service Attachments

For Frame, Stucco, or Brick Veneer installations 400 Amperes or less- Single-Phase  
200 Amperes or less- Three-Phase



Single socket or Single Row of  
Horizontal Grouped Sockets

\*Grounding wire must be bonded in meter can

## I. Customer furnishes, installs, and maintains the following equipment:

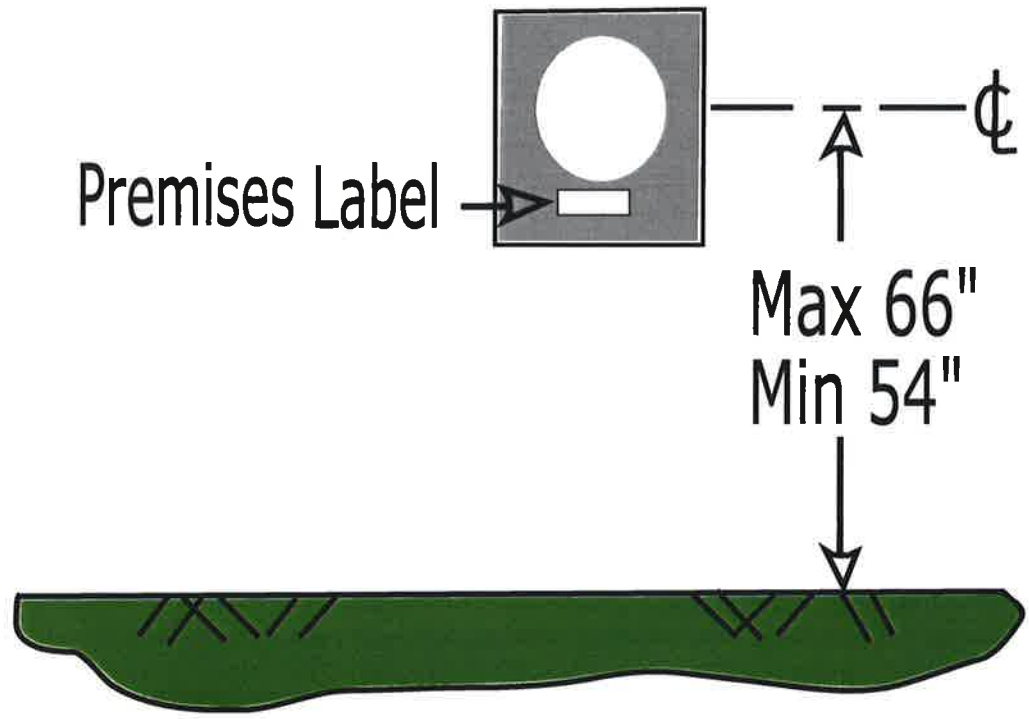
- 1) Service head (Weatherhead)
- 2) Service mast
- 3) Service run wires (allow a minimum of 18 inches beyond the service head to make connections to service drop)
- 4) Service attachment wall strap (Joslyn #J7692 or equivalent to the center line of studding with 4" long 1/2" lags.  
When used on brick wall, service attachment wall strap shall be used with two 1/2"

## II. Company furnishes, installs, and maintains the following equipment:

- 5) Service drop dead-end
- 6) Connectors for connecting Customer's wires to service drop.

# City of Geneva- Meter Specification

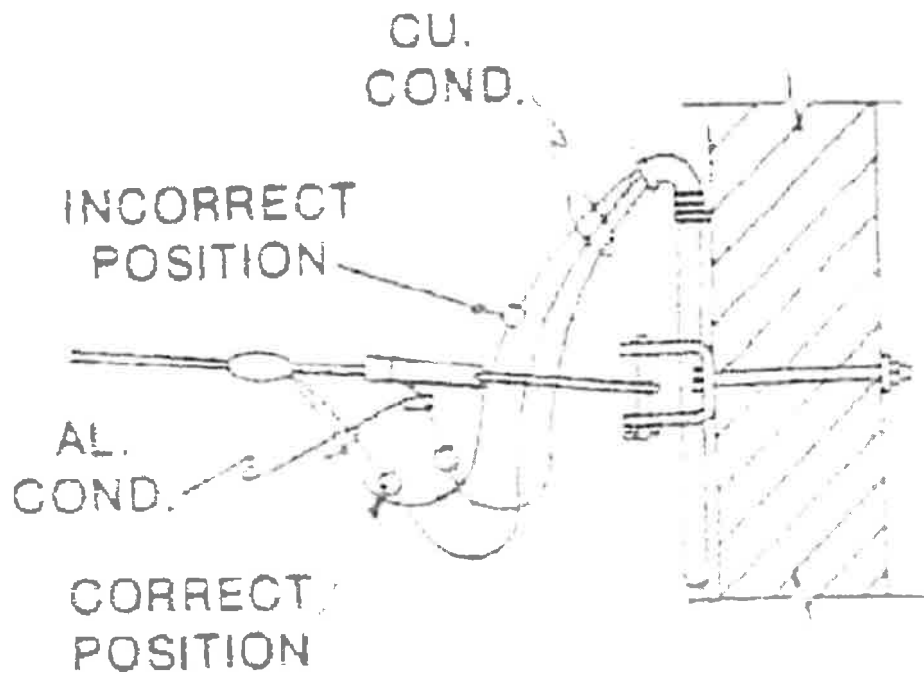
## Transformer Rated Socket



\*Ground wire must be bonded in meter can

# City of Geneva- Service Wiring

For Frame, Stucco, or Brick Veneer installations 400 Amperes or less- Single-Phase  
200 Amperes or less- Three-Phase



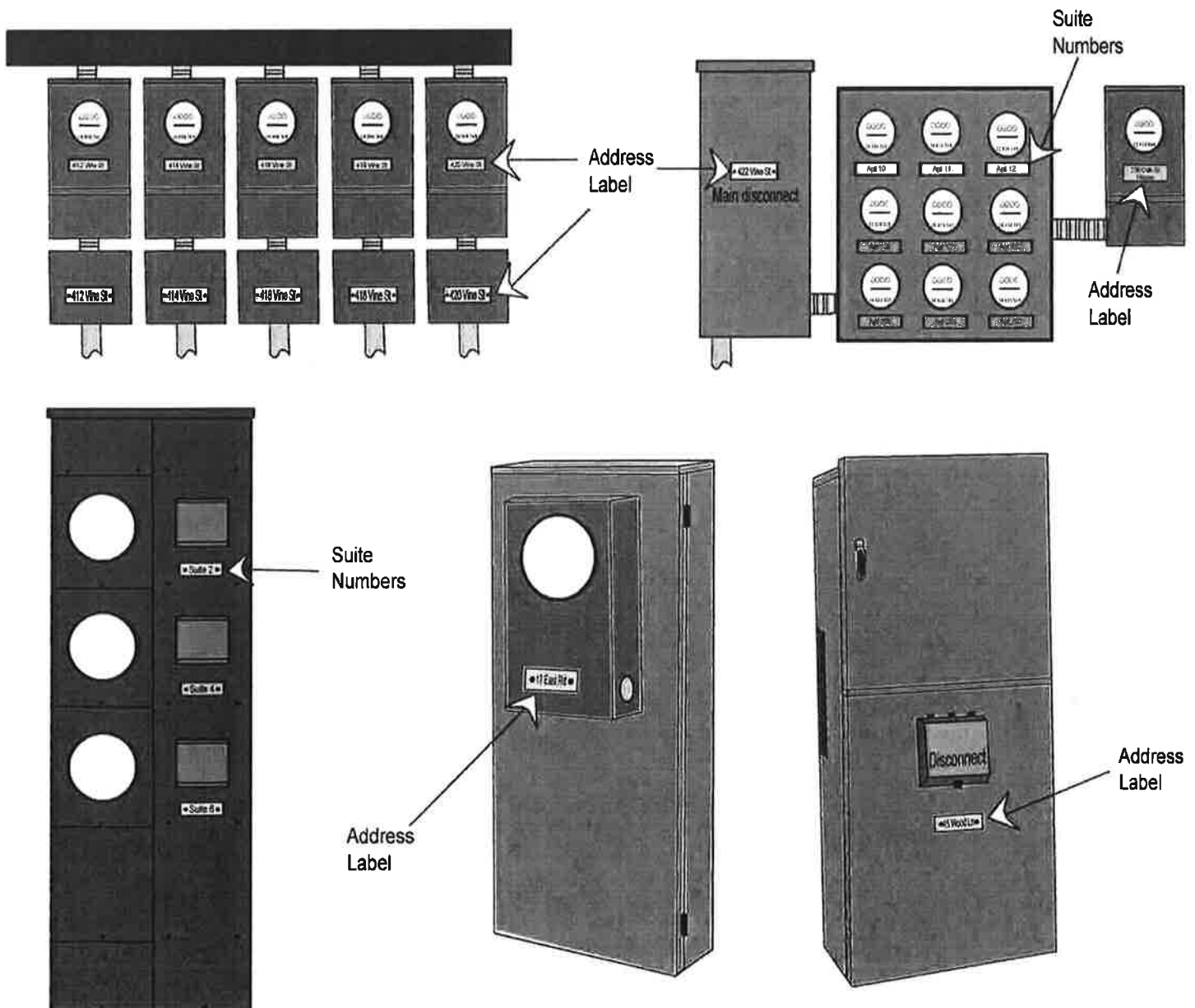
# City of Geneva - Meter Address Labeling

Meter address labels must be installed on EVERY commercial building AND residential building with more than one address (i.e. two flat, duplex, apartments, etc.)

## Meter Socket/ Service Disconnect Labeling

- Meter sockets must be permanently labeled to indicate the part of the premises they serve, for example, the suite (0-99 = Basement, 100-199 = 1st floor, ect.) number in addition to complete address(number and street name).
- The customer's name is not acceptable.
- The labels must be engraved phenolic nameplates, at least 1" high, and riveted into panel cover.
- Felt-tip pens and label maker tape are not considered permanent marking.

Service Will Not Be Established Until Label Is Complete



## VERTICAL CLEARANCE FROM GROUND

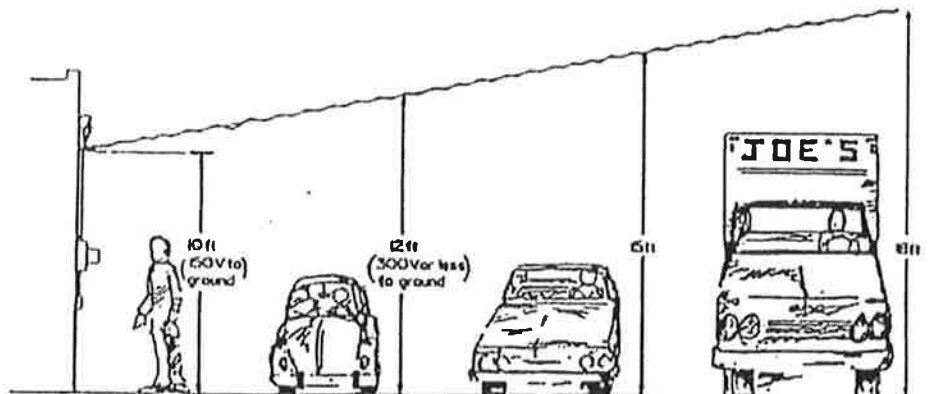
Service - drop conductors where not in excess of 600 volts, nominal, shall have the following minimum clearance from final grade.

10 feet - at the electric service entrance to buildings, or at the drip loop of the building electric entrance, measured from final grade or other accessible surface only for service - drop cables supported on and cabled together with a grounded bare message and limited to 150 volts to ground.

12 feet - for those areas listed in the 15 foot classification when the voltage is limited to 300 volts to ground.

15 feet - over residential property and driveways, and those commercial areas not subject to truck traffic.

18 feet - over public streets, alleys, roads, parking areas subject to truck traffic, driveways on other than residential property, and other land traversed by vehicles such as cultivated, grazing, forest and orchards.







**CITY OF GENEVA**  
**BUILDING DEPARTMENT**  
**109 JAMES STREET**  
**GENEVA, IL 60134**  
**630/262.0280**  
**pdf@geneva.il.us**

*For Office Use Only*

**PERMIT NUMBER** \_\_\_\_\_

**BIN NUMBER** \_\_\_\_\_

**APPLICATION FOR PERMIT**

**PROJECT ADDRESS** \_\_\_\_\_

**APPLICANT** \_\_\_\_\_  Check here if applicant is property owner

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
City State Zip  
 Email \_\_\_\_\_ Phone \_\_\_\_\_

**PROPERTY OWNER** \_\_\_\_\_

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
City State Zip  
 Email \_\_\_\_\_ Phone \_\_\_\_\_

**CONTRACTOR** \_\_\_\_\_

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
City State Zip  
 Email \_\_\_\_\_ Phone \_\_\_\_\_  
 Roofing License \_\_\_\_\_ Plumbing License \_\_\_\_\_

**BUILDING TYPE**

Residential  
 Commercial  
 Other

**TYPE OF WORK - GENERAL**

Change of Tenant  Addition  
 Remodel  Demolition  
 New construction  Other

**TYPE OF WORK - SPECIFIC (Check all that apply)**

Driveway/Parking  Replace Windows  Fence  Electric  
 Sidewalk  Roof/Siding  Patio  Plumbing  
 Basement/Attic  Sign/Awning  Shed  HVAC  
 Kitchen/Bath  Irrigation System  Deck  Other

**DESCRIPTION OF WORK**

*Applications will not be accepted without supporting documentation, attach additional sheets and submit plans/drawings, plat of survey, etc. as needed to illustrate proposed work*

**HISTORIC PRESERVATION**

Is subject property located in the Historic District or a Historic Landmark? Historic Preservation Commission review is required for exterior improvements.  
 Yes  No

**ZONING**

What zoning district is the property located in? \_\_\_\_\_  
 Is the use permitted at this location?  Yes  No  
 Is a variance needed?  Yes  No

**PROJECT COST**

What is the estimated project cost? \_\_\_\_\_

**I HEREBY CERTIFY THAT I AM THE OWNER OF RECORD OR THAT THE PROPOSED WORK IS AUTHORIZED BY THE OWNER OF RECORD; THAT I HAVE BEEN AUTHORIZED BY THE OWNER TO MAKE THIS APPLICATION AND TO SCHEDULE ALL NECESSARY INSPECTIONS AS AN AGENT, AND THAT I AGREE TO CONFORM TO ALL APPLICABLE CODES, LAWS, AND ORDINANCES OF THE CITY OF GENEVA.**

Signature \_\_\_\_\_ Date \_\_\_\_\_

*For Office Use Only*

<b>FEEES</b>	<b>ROUTING</b>
Building Permit Fee _____	Engineering _____
Fire Department Fee _____	Historic Preservation _____
Plumbing Fee _____	Fire _____
Public Works Fee _____	Tree Preservation Review _____
Tree Preservation Fee _____	Electric _____
<b>TOTAL FEES</b> _____	City Engineer _____
	Planning/Zoning _____
	First Inspection Services _____