REQUIRED INFORMATION FOR CONSTRUCTION PLAN REVIEW
COMMERCIAL AND MULTI-FAMILY

Please note this is not an all-inclusive list. The type and complexity of your project, may require that additional details or engineering by a state licensed design professional.

Failure to provide the minimum information required for plan review will result in plans being rejected or timely and unnecessary delays in the plan review process. The normal timeframe for plan review is ten (10) working days.

Failure to identify a code violation during the review of the plans, **DOES NOT** give the permit applicant the right to violate building codes.
All plans are subject to Field Inspections.

Submit three (3) sets of site, architectural, structural, electrical, plumbing, mechanical and fire protection drawings that contain the following information:

A. Drawings to consist of sheet size no large than 24" x 36".
B. All documents must be signed, sealed and dated by a state licensed design professional.
C. Plans to be designed with Michigan Codes currently in effect, indicate codes used on documents.

ARCHITECTURAL/STRUCTURAL

- ☐ Show the recommended foundation design and presumptive soil bearing capacity. Confirm if a geotechnical evaluation is required at proposed site.
- ☐ Include Type of Construction, existing and proposed.
- ☐ Identify the Use Group classification for all parts of the building.
- ☐ Identify the occupancy and number of occupants on every floor (including basements) and all rooms or spaces.
- ☐ Elevations of all sides of structure.
- ☐ Wall sections and stair details as needed.
- ☐ Door hardware, door and window schedule.
- ☐ The design/construction standards to be used for concrete, masonry, steel and wood.
- ☐ Show Means of Egress calculations used to determine exit requirements.
- ☐ A floor plan of the entire building, floor by floor, showing all rooms and spaces with proposed use, accessory, incidental areas. Include any fire separations, floor, ceiling or wall required by code.
- ☐ Floor plans of basements, stairs, doors, corridors, ect.
- ☐ Show how the proposed building meets the height and area limitations or calculations for modifications.
- ☐ A Key plan identifying the location of proposed work.
- ☐ List fire resistance rating of all structural elements with U.L. or other approved agency label.
- ☐ Location and hourly rating of all fire doors, fire dampers, fire windows and size of wired glass panels.
- ☐ Description and details of special occupancies, mezzanine, atrium, public garage, ect.
- ☐ Details of all penetration protection required at fire rated assemblies, include U.L. design number or other approved agency.
- ☐ Room finish schedule with flame spread and smoke developed documentation for all materials.
- ☐ Construction details showing proposed walls, floors, roofs and any pertinent construction designs.
- ☐ Sprinkler system, design standard-NFPA, calculations and evaluation of water supply and discharge requirements. Flow tests results, working drawings with pipe sizes, spacing of branch lines and sprinkler heads. Sprinkler head type. Hanger plan.

- □ Location of all exit signs and means of egress lighting
- □ Light and ventilation requirements of all affected space or building.
- □ Information on elevators or special equipment construction and installation.
- □ Details of plastic, insulation and safety glazing installation.
- □ Furniture and fixture layout with dimensions.
- □ Details of any required fire protection systems.
- □ Accessibility details noted below: Use ICC/ANSI A117.1 - 1998
- □ Dimensions, slopes and routes must be indicated to show compliance.
- □ Provide dimensions and details for all interior accessible routes.
- □ Tactile signage with height and locations.
- □ Accessible plumbing facilities, fixtures, controls and details, include height and location.
- □ Provide dimensions and details for all Use Groups requirements, features, and facilities required to meet Accessibility Codes.
- □ Dimensions to show required maneuvering clearance at all doors.

A letter from the owner or tenant, describing the nature of the business and contact information. MBC 106.1.1

Hazardous Materials list – If hazardous materials or chemicals are used for manufacturing, processing, dispensing or storage. Provide a letter from owner or tenant describing the type, use, quantity and location of all materials. Material Safety Data Sheets for all chemicals must be submitted. MBC 414
Fire Department will review information in accordance with the adopted Fire Code.

Special Inspections – A statement of special inspections prepared by the state licensed Design Professional In charge of the project must be submitted. To include a complete list of materials and work requiring special Inspections, the inspections to be performed and a list of the individuals, approved agencies and firms that will be conducting such inspections. MBC 1704.1

Energy Calculations – (three sets) – to show compliance with Michigan Uniform Energy Code. MBC 1301.0

Structural Calculations – (three sets) – For all structural members and foundations as required by section 1603.1. Include deflection limits and all live and dead loads for floors, roof, snow, wind, concentrated, combination of loads and special loads. MBC 1603.1

Cross section – (three sets) – from footing to roof peak. List all pertinent information.

Truss Design Drawings – (two sets) – engineered drawings on truss over 40 feet span, sealed & signed.

Specifications Manual – (two sets) – work to be performed.

Site Plan – (three sets) – The site plan must show details of the accessible route from accessible parking to accessible entrances and information required on Section 4.04 of the Zoning Ordinance.

Please note: Any change made to the approved drawings or changes made during construction must be discussed with the appropriate inspector before proceeding. Failure to notify the inspector could result in delay of your project and may result in significant added expense to the project.

These following documents may need to be obtained and a copy provided with the building permit application before a permit can be issued.

- ☐ Driveway permit – contact Saginaw County Road Commission – 989-752-6140. The Road Commission also handles connection to storm sewer for surface water runoff.

- ☐ Contact Bridgeport Charter Township Water Department for information on water tap and frontage assessment fees. There are also water meter and MXU fees. 989-777-0974

- ☐ Contact Bridgeport Charter Township Waste Water Department for sewer hookup fee. Oil and water separator may be required for some uses. 989-777-2041

- ☐ Contact Bridgeport Charter Township Fire Inspector. 989-777-2400

- ☐ Contact Saginaw County Public Health Department for food service, well and septic permits. 989-758-3830

- ☐ Consumers Energy for address and request for service. 800-477-5050

- ☐ Soil Erosion and Sedimentation control permit from Saginaw County Public Works Commission – 989-790-5258, if within 500 feet of water (lake, county drain, river) or disturbing more than one (1) acre.

- ☐ Any other permit required from the DEQ. 989-686-8025

- ☐ Miss Dig for underground utility location. 800-482-7171

Reference the Michigan Building Code 2000

INFORMATION **SECTIONS**

□ Plans must have signature, seal and date of a State Licensed Design Professional ……. 106.1
□ Means of Egress (provide calculations for exit width and travel distance) …….. 106.1.2
□ Show service utilities connections and sizes …… 111.1
□ Use Group Classifications ……..... 302.1
□ Incidental and Accessory Use Group ……... 302.1.1 & 302.2.2
□ Mixed Occupancies …….. 302.2
□ Separations between Uses …… T-302.3.3
□ Building Height and Area …… 503.1
1. Number of stories
2. Square footage of building or area from exterior wall or firewalls.
□ Provide calculations for Height or Area modifications (if applicable) …….504.1
□ Mezzanines …….. 505.1
□ Type of Construction ……... 602.1
Exterior and interior walls, floor/ceiling, and roof construction.
□ Fire Resistance Rating of all building components indicated and U.L. Design Number……. 703.1
□ Exterior Walls and Projections …… 704.1 & 704.2
□ Fire Walls Fire Resistance ratings ……... T-705.4
Provide U.L. Design Number.
□ Fire Barriers ……. 706.1
□ Fire Partitions …….. 708.1
□ Smoke Barriers …… 709.1
□ Horizontal Assemblies …… 710.1
□ Penetrations ……. 711.1
Penetration Protection, location and U. L. Design Number
□ Fire Resistance Joint Systems ……. 712.1
□ Fire Resistance of Structural Members ……... 713.1
□ Ducts and Air Transfer Openings and Systems …….. 715.1
Location and hourly rating of all fire doors, dampers, fire windows
□ Concealed Spaces ……... 716.1
Fire blocking and Draft stopping
□ Architectural Trim …….. 716.2.6
□ Interior Finishes (provide flame spread and smoke developed documentation) ……. 801.1
□ Fire Protective Systems …….. 901.1
Show locations of alarms, manual pull stations, smoke detectors, ect.
□ Standpipe Systems …….. 905.1
□ Sprinkler System …….
□ Fire Alarm Detection Systems ……... 907.1
□ Smoke Control and Detection Systems ……. 909.1
□ Exit Signs ……1003.2.10
□ Means of Egress Lighting ……...1003.2.11
□ Accessible Means of Egress ……1003.2.1
Guards ……1003.2.12

□ Means of Egress Components ……. 1003.3
2. Include sizes and locations of doors, corridors, stairways, aisles, ect.
3. Indicate Occupant Load and method to determine exit requirements.
4. Door hardware information.
5. Size, type, operation of windows.

□ Stairways …… 1003.3.3
□ Stair Treads and Risers ……... 1003.3.3.3
□ Handrails ……. 1003.3.3.11
□ Ramps ……. 1003.3.4
□ Accessibility ……1101.1
ICC/ANSI A117.1 – 1998 Accessible & Usable Buildings and Facilities
□ Interior Environment …….. 1201.1
□ Energy Efficiency (provide calculations) ……1301.1
□ Exterior Walls ……. 1404.1
□ Roof Assemblies and Rooftop Structures …… 1501.1
□ Structure Design (Construction Documents) …… 1603.1
Live and dead loads for floors, roof, snow, wind, concentrated and special loads
□ Structural Tests and Special Inspections …….. 1701.1
□ Soils and Foundations …….. 1801.1
□ Footing and Foundations …….. 1805.1
□ Masonry 2101.1 – (Construction Documents and Standards) ……. 2101.3
□ Steel - (Construction Documents and Standards)……2201.1
□ Wood – (Construction Documents and Standards)…… 2301.1
□ Safeguards During Construction 3301.1 – (Remodeling and Additions) ……. 3302.1

ELECTRICAL PLAN REVIEW

( ) Submit information unavailable fault current and compliance with NEC Art. 110 Section 110-9 & 110-10.
( ) Indicate the circuitry and wiring method proposed.
( ) Show lighting layout including emergency and exit lighting to code.
( ) Show locations for proposed control of lighting in each room.
( ) Indicate conductor type(s), sizes and insulation.
( ) Indicate raceway sizes, fill and rotating-overhead, underground, ect.
( ) Show service location, point of entry, lateral, overhead
( ) Indicate utility company name, main incoming service voltage and characteristics.
( ) Submit a riser diagram showing the distribution of power and lighting.
( ) Show circuitry for power distribution.
( ) Use electrical symbols of a standard such as ANSI or equal.
( ) Identify enclosures, fixtures and other equipment by referencing NEMA standards for their suitability for the environment.
( ) Submit a low-tech calculation for each branch circuit, each feeder and the total load on the service.
( ) Submit information on existing load called the service and proposed ended load.
( ) Show system voltages, single phase or three phase and 3 wire or 4 wire. These characteristics should be shown at all major points on the riser diagram.
( ) Indicate grounding electrode.
( ) Indicate UL system used for fire stopping penetrations through firewalls.
( ) Submit load schedule for each power panel and each lighting panel indicating circuitry, wattage, over-current production, voltage, phase and whether it is a 3 or 4 wire panel.
( ) Include all fire protection signaling devices, automatic fire detection systems and any emergency/standby systems.

Miscellaneous information_____

_____

_____

_____

_____

_____

PLUMBING PLAN REVIEW REQUIREMENTS

( ) Plumbing fixture and piping material specifications, including identification of the applicable referenced standard.
( ) Plumbing fixture information to include:
    The occupant load used to determine the number of required plumbing fixtures.
    Number and distribution based on the Use Group.
    Separate facilities for each sex (available to public).
    Accessible plumbing facilities and details.
    Pressure balanced valves.
( ) Plumbing piping plan showing layout, pitch of drainage lines, cleanouts, size of traps and riser diagram.
( ) Water supply and distribution plan showing piping sizes, valves, back-flow preventers, water heater details and thermal expansion control.
( ) Sanitary drainage and vent system riser diagram showing drainage fixture units (dfu), sizes and vent termination details through the roof.
( ) Potable water system riser diagram showing piping sizes and provisions for protection of potable water supply.
( ) Piping support and insulation.
( ) Storm drainage including rain gutter or roof drain sizes and downspouts sizes and secondary roof drainage.
( ) Health care plumbing and fixture details.
( ) Show the size, location of the proposed domestic water tap and fire line (if applicable).
( ) Show the size and location of the water meter with a backflow preventer.

Miscellaneous information _____

_____

_____

_____

_____

_____

( ) Heating equipment data including the following information:
( ) Equipment capacity (b.t.u.)
( ) Controls.
( ) Appliance layouts showing location, access and clearances.
( ) Disconnect switches.
( ) Ventilation Data, ductwork and equipment including the following:
( ) Ventilation schedule indicating the amount of outside air (in c.f.m.) supplied to each room
( ) or space.
( ) Layout showing the outside air intakes.
( ) Construction of ducts, including support and sheet metal thickness.
( ) Duct lining and insulation materials with flame spread and smoke developed ratings.
( ) Exhaust fan ductwork layout and termination to the outside.
( ) Size of louvers and grilles for attic ventilation.
( ) Boiler and water heater equipment and piping details including safety controls and distribution piping layout.
( ) Gas and fuel oil piping layout, material, sizes and valves.
( ) Combustion air intakes quantities and details.
( ) Commercial kitchen exhaust equipment details including hood and fan drawings, details of automatic fire suppression and clearances.
( ) Chimney and chimney connector or vent and vent connector details and connector gages and clearances.
( ) Mechanical refrigeration equipment data details.
( ) Solid fuel burning appliance details including incinerator and fireplace drawings and details.
( ) Energy conservation equipment data and details.
( ) Indicate smoke alarm location in duct with audio/visual and monitor stations.

( ) Miscellaneous _____

_____

_____

_____

_____

_____