ARTICLE 13 ENVIRONMENTAL PROTECTION REGULATIONS

Sec. 13.01 CLEARING OF WOODLANDS AND EARTH CHANGES PRIOR TO DEVELOPMENT

Any property owner or their representative proposing to clear more than twenty-five percent (25%) of the trees of eight (8) inch caliper or larger on a site or any cut, fill or grading that would change the topography of the site by more than three (3) feet on average over the site shall first notify the Zoning Administrator of the intent of such clearing and/or earth change. The Zoning Administrator may require submittal of a proposed site plan for review and approval by the Planning Commission in accordance with the terms of this Ordinance. This section shall not prevent tree clearing or site grading for building envelopes, swimming pools, decks, utility lines or construction drives, provided necessary land use permits have been obtained; nor shall this ordinance prohibit site changes for farming purposes. This section shall not require Planning Commission approval for grading on an established residential lot; provided the area of disturbance is less than one (1) acre. The Zoning Administrator may waive this section for select clearing of lower quality species including Ash, Box Elder, Elms, Poplars, Willows and Cottonwoods. (as amended 12/31/06)

Sec. 13.02 WETLAND PROTECTION STANDARDS

The standards of this section are intended to protect the valuable wetlands in Genoa Township. The standards may also help ensure compliance with the Goemaere-Anderson Wetland Protection Act, Public Act 203 of 1979 through coordination with the Michigan Department of Environmental Quality (MDEQ) wetland protection and permit program. The standards of this section exceed the MDEQ regulations by requiring a setback from MDEQ regulated wetlands and encouraging the placement of buildings to protect non-MDEQ regulated wetlands between two acres and five acres in size.

The standards of this section acknowledge the unique and valuable attributes of wetlands as a stormwater retention areas to control runoff, improve groundwater quality and provide erosion control; for their visual assets as open space; and for their value as habitat for plants, fish and wildlife. The standards of this section strive to preserve these valuable resources while protecting the property owners' right to develop their property.

13.02.01 **Applicability**

- (a) No permit shall be issued for any construction, reconstruction, erection, expansion and/or change in use requiring site plan or plat approval except in accordance with the standards of this Section. Any state or federal legislation, policies, standards or procedures which are more stringent than the standards of this section shall supersede the appropriate provisions of this Section.
- (b) The standards of this Section apply to both new and existing development (including grading, parking, storage, building construction, etc.). The standards also apply to any drainage structure or basin within an MDEQ regulated wetland and/or use of a MDEQ regulated wetland as a retention or detention ponds/basin; which, if constructed below the Ordinary High Water Mark of an inland lake or stream, will require an MDEQ permit under the Inland Lakes & Streams Act, PA 346 of 1972. The following activities are specifically exempt from the standards of this Section:

- (1) Fishing, trapping, hunting or bird watching.
- (2) Swimming, boating, or canoeing.
- (3) Hiking.
- (4) Grazing and/or watering of animals.
- (5) Farming, horticulture, silviculture, lumbering, and ranching activities, including plowing, irrigation, irrigation ditching, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices. Wetland altered under this subdivision shall not be used for a purpose other than a purpose described in this subsection without a permit obtained from the MDEQ.
- (6) Maintenance or operation of serviceable structures in existence on the effective date of this amendment or constructed pursuant to this ordinance.
- (7) Construction or maintenance of farm or stock ponds.
- (8) Maintenance, operation, or improvement which includes straightening, widening, or deepening of the following which is necessary for the production or harvesting of agricultural products:
 - a. An existing private agricultural drain.
 - b. That portion of a drain legally established pursuant to the drain code of 1956, Act. No. 40 of the Public Acts of 1956, as amended, being section 280.1 to 280.630 of the Michigan Compiled Laws, which has been constructed or improved for drainage purposes.
 - c. A drain constructed pursuant to other provisions of this Ordinance.
- (9) Construction or maintenance of farm roads, forest roads, or temporary roads for moving mining or forestry equipment, if the roads are constructed and maintained in a manner to assure that any adverse effect on the wetland will be otherwise minimized.
- (10) Drainage necessary for the production and harvesting of agricultural products if the wetland is owned by a person who is engaged in commercial farming and the land is to be used for the production and harvesting of agricultural products. Except as otherwise provided in this Ordinance, wetland improved under this section after the effective date of this amendment shall not be used for nonfarming purposes without a permit from the Township. This shall not apply to a wetland which is contiguous to a lake or stream, or to a tributary of a lake or stream, or to a wetland which the Township has determined by clear and convincing evidence to be a wetland which is necessary to be preserved for the public interest, in which case a permit shall be required.
- (11) Maintenance or improvement of public streets, highways, or roads, within the right of way and in such a manner as to assure that any adverse effect on the wetland will be otherwise minimized. Maintenance or improvement does not

- include adding extra lanes; increasing the right of way; or deviating from the existing location of the street, highway, or road.
- (12) Maintenance, repair, or operation of gas or oil pipelines and construction of gas or oil pipelines having a diameter of 6 inches or less, if the pipelines are constructed, maintained, or repaired in a manner to assure that any adverse effect on the wetland will be otherwise minimized.
- (13) Maintenance, repair, or operation of electric transmission and distribution power lines and construction of distribution power line if the distribution power lines are constructed, maintained, or repaired in a manner to assure that any adverse effect on the wetland will be otherwise minimized.
- (14) Operation or maintenance, including reconstruction of recently damaged parts, of serviceable dikes and levees in existence on the effective date of this amendment or constructed pursuant to this Ordinance.
- (15) Construction of iron and copper mining tailings basins and water storage areas.

13.02.02 Applicant Responsibility for Compliance/Definition of a Wetland

The applicant is responsible for the accurate delineation/determination of the wetland area, as defined. The petitioner or his/her agent shall supply the following information:

- (a) The name, address and telephone number of the petitioner.
- (b) The name, address and telephone number of the petitioner's agent or the individual responsible for making the wetland determination.
- (c) The owner of the property if different from the petitioner, and the petitioner's interest in the property.
- (d) A legal description of the property, including the total area, exclusive of public road right-of-way, accurate to the nearest hundredths of an acre.
- (e) An accurate graphic description of the wetlands complete with:
 - (1) a written summary of how and when the wetland was delineated,
 - (2) what major plant species and animal breeding habitat are present and an estimation of how the wetland functions or relates to its general environment,
 - (3) the presence of any hills or springs,
 - (4) an accurate measurement of the wetland area to the nearest hundredth of an acre, and
 - (5) any proposed remedial or mitigating actions to be completed as part of the activity proposed in the land use request.

The study shall be prepared by an experienced consultant in the delineation and composition of wetlands. The MDEQ shall review all wetlands found to be greater than five (5) acres or other regulated wetlands according to their wetland determination and permit procedures. MDEQ findings will be an integral part of the Township review.

13.02.03 Compliance with State and Federal Wetland Protection Acts

- (a) Should available sources of wetland information, consultants report or the MDEQ determine potential or known presence of a wetland, the township may require a wetland determination by a recognized expert prior to approving a site plan. Upon finding site development is likely to disturb a MDEQ regulated wetland, includes a stormwater outfall structure or catch basin in a regulated wetland or includes use of a regulated wetland as a retention basin, the Planning Commission may condition approval on submittal of an MDEQ permit, including any attached conditions and mitigation plan, prior to the issuance of a land use permit.
- (b) Genoa Township may not issue a permit for activity (such as dredging or filling) or a land use permit where wetlands are believed to exist that may be regulated by the MDEQ unless sufficient wetlands information is provided by the applicant.
- (c) Should the MDEQ deny an application for permit which is necessary to develop the site plan, the site plan shall be resubmitted according to the standards of this Section. (as amended 12/31/06)

13.02.04 Genoa Township Wetland Protection Standards

- (a) Limits on site activity: Any disturbance of soils, removal of stumps or landmark trees (deciduous over eight (8) inch caliper or evergreens over six feet in height), grading, alteration of water flowing into or from an MDEQ regulated wetland, or any prohibited activity as listed in Section 5 of Public Act 203 of 1979, without a permit from the MDEQ, will result in a stop work order issued by Genoa Township and/or require restoration of the wetland in accordance with MDEQ standards.
- (b) Buildable area calculations: Twenty five percent (25%) of wetland acreage shall be credited toward buildable acreage for purposes of determining maximum density for residential developments as a means of encouraging their preservation. The Planned Unit Development Districts are further intended to preserve large and small wetlands by offering flexibility in site design, such as open space/cluster housing developments.
- (c) Restrictions on land divisions: Article 20 stipulates land shall not be divided in a manner creating parcels or lots which cannot be used based on zoning district area, setback and dimensional requirements and in conformance with the requirements of this Section or the MDEQ regulations.
- (d) Required 25-foot setback: An undisturbed natural setback shall be maintained twenty-five (25) feet from a MDEQ determined/regulated wetland. Trails and recreational areas may be allowed in the wetland setback. Any site grading or storage within the wetland protection setback area shall require a Special Land Use Permit according to Article 19; provided that no such activity shall be allowed within ten (10) feet of a regulated wetland unless specifically approved by the Planning Commission.

(e) Preservation of nonregulated wetlands: Judicious effort shall be made through site plan design to preserve non-MDEQ regulated wetlands which exceed two (2) acres in size. Use of non-MDEQ regulated wetlands as detention or retention ponds may be allowed, following review of such plans by the Township Engineer.

13.02.05 Variances from the Wetland Setback Requirement

In considering a variance for the wetland setback, the applicant must demonstrate to the Board of Appeals:

- (a) the setback is not necessary to preserve the wetland's ecological and aesthetic value.
- (b) the natural drainage pattern to the wetland will not be significantly affected;
- (c) the variance will not increase the potential for erosion, either during or after construction:
- (d) no feasible or prudent alternative exists and the variance distance is the minimum necessary to allow the project to proceed; or
- (e) MDEQ permit requirements have been met and all possible avoidable impacts to wetlands have been addressed.

Sec. 13.03 RIPARIAN LOT COMMON USE (KEYHOLE)

- 13.03.01 **Intent:** The purpose of these regulations is to protect the public heath safety and welfare which could be threatened by the over usage of inland lakes, and avoid situations which may create a nuisance, impair important irreparable natural resources and destroy property values. These regulations are intended to reinforce the implementation of the Michigan Inland Lakes and Streams Act (Public Act 346 of 1972).
- 13.03.02 **Applicability:** The regulations shall apply to the following lots, parcels, sites and easements to be held in common by a subdivision, condominium, association, similar agency, or group of individuals (i.e. more than one individual or family):
 - (a) Lots created after the effective date of this section (4/15/95).
 - (b) Lots of record existing prior to the effective date of this section (4/15/95) that did not provide common use access to a water body (riparian rights to non-riparian land owners) prior to the effective date of this ordinance.
 - (c) These regulations shall apply to the establishment of a dockominium.
- 13.03.03 **Existing Keyholes:** Lots of record which existed prior to the effective date of this section (4/15/95) that provided common use access to a water body may continue to provide riparian rights subject to the marina operating permit requirements of the Michigan Department of Environmental Quality (MDEQ) under the Michigan Inland Lakes and Streams Act (Public Act 346 of 1972).
- 13.03.04 **Easements:** An easement over a residential riparian lot shall not be utilized to provide boat access or docking for an individual who is not a resident of such residential riparian lot.

- 13.03.05 **Special Land Use Approval:** Boat launching sites and boat docks within a common use riparian lot shall be permitted in any district as a Special Land Use upon review and approval in accordance with the general standards of Article 19.
- 13.03.06 **Standards:** Waterfront sites dedicated to common use for boat launching and docking shall conform in all respects to the area and bulk requirements of the districts which they are located. In addition, common use riparian lots shall have the following minimum lot dimensions:
 - (a) Such riparian lot shall have a minimum of fifty (50) feet of riparian frontage for each non-riparian lot served. Riparian frontage shall be measured by a straight line which intersects each side lot line at the water's edge. Artificially created shoreline may not be used to increase the calculated riparian frontage.
 - (b) Such riparian lot or parcel shall have a minimum lot depth of 100 feet, measured as the minimum distance between the water's edge and the lot line which is opposite the water's edge.
 - (c) The deed to such lot or parcel shall specify the non riparian lots or parcels which shall have rights to its use.
 - (d) All structures and appurtenances shall comply with the requirements of Section 11.04.05.
- 13.03.07 **Developments:** For condominiums, site condominiums, multiple family residential or Planned Unit Developments where there are common areas with riparian frontage, there shall be a minimum of fifty (50) feet of riparian frontage for each boat docked within the common area. The Planning Commission has the discretion to modify this standard within Planned Unit Developments provided that the overall number of boats from the PUD accessing the lake remains constant. This shall be determined based upon the total number of boats with access to the lake from both private and common use sites, and the Planned Unit Development's overall riparian frontage.
- Marina Operating Permit: Any boat dock facility within a common use riparian lot must obtain a permit for marina operation from the MDEQ in accordance with Administrative Rules of the Michigan Inland Lakes and Streams Act (P.A. 346 of 1972, as amended). Design for a boat dock facility shall meet all of the MDEQ standards for marinas. Public access sites owned and operated by the State of Michigan are exempt from Township Common Use/Keyhole regulations.
- 13.03.09 **Dockominiums:** The establishment of a dockominium shall comply with the standards of this section and the condominium requirements of Section 12.07.

Sec. 13.04 SEWER AND SEPTIC SYSTEMS

13.04.01 **Requirement for Water and Sanitary Facilities:** No permit shall be issued for the construction of a building that is to have drinking water and sanitary facilities unless such facility is connected to a public sanitary sewer system approved by the Township, a septic system approved by the County Health Department or a common community sanitary drainfield approved under this section.

- 13.04.02 **Community Sanitary Drainfield:** Any form of common community sanitary drainfield or similar common system that serves more than two (2) dwelling units shall be granted final approval by the Township Board, following the approval of the County Health Department and/or the Michigan Department of Environmental Quality, as applicable prior to any land use permits being issued for any building. Any common community sanitary drainfield or similar commons system shall meet the following minimum requirements:
 - (a) The system shall be designed to meet all requirements of the County Health Department, the Michigan Department of Environmental Quality and Township Engineering Standards.
 - (b) Common sanitary treatment systems shall only be allowed where connection to a public sanitary sewer system is not possible and soil conditions preclude the use of individual sewage treatment systems.
 - (c) All systems shall be located and installed so that the systems function in a sanitary manner, are capable of accommodating the wastewater flow, and contaminant load, do not create sanitary nuisances, or health hazards and do not endanger the safety of any water supply, ground water, or surface waters.
 - (d) A maintenance agreement shall be prepared assigning responsibility of maintaining the private system with the owners of the development. The following requirements shall apply:
 - (1) The petitioner shall submit a recordable private system maintenance agreement as part of the site plan. The private system maintenance agreement shall detail the operating requirements, maintenance procedures, a schedule for routine maintenance and monitoring requirements. The private system maintenance agreement shall meet the requirements of the Township engineer.
 - (2) The owners shall have a written contract with a licensed maintenance provider to inspect and maintain the treatment system. The wastewater system shall be maintained in accordance with the approved management plan and permits, with periodic inspections of the system.
 - (3) The private system maintenance agreement shall be in the form approved by the Township Board and shall be recorded at the office of the County Register of Deeds after approval by the Township. The maintenance agreement shall not be changed without Township approval and shall contain language to that effect.
 - (4) The agreement shall provide that expenses incurred for inspection and maintenance shall be paid by the petitioner or the homeowner's association, as applicable and that the petitioner or association shall be responsible to pay for any damages or losses occurring to neighboring properties resulting from a failure of the private system.
 - (5) The provisions of the maintenance agreement shall be included in a separate disclosure document and shall be delivered to the prospective purchaser of a unit or lot served by a private system prior to the execution of a purchase agreement.
 - (e) A perpetual fund shall be established with sufficient cash for the long-term maintenance and replacement of the system. The fund shall be provided in a form approved by the Township Board in an amount sufficient to replace the system.

- (f) The Township may require the applicant to petition the Township Board to establish a special assessment district for the development prior to granting final approval. The purpose of the special assessment district would be to provide for assessment of the units or lots for the costs of inspection, maintenance or repair of the private system in the event the developer or homeowner's association, as applicable fails to properly perform such work or the cost of connection to a public system should the private system fail. However, the responsibility for maintaining the system shall be the responsibility of the developer or homeowner's association, as applicable and nothing therein shall obligate the Township to conduct any inspection, monitoring, maintenance, repair, operation or replacement of the private system.
- (g) The Township may require that the community system be dedicated to the County or other public agency for operation and maintenance. (as amended 3/5/10)
- 13.04.03 **Reservation of Alternative Drainfield:** For sites with individual septic systems or community sanitary drainfields, an area of land shall be designated on the site plan as reserved as an alternate location for a septic disposal system to provide for the possible failure of a septic disposal system.

Sec. 13.05. PERFORMANCE STANDARDS

No use otherwise allowed within any use district shall be permitted which does not conform to the following standards of use, occupancy, and operation.

- 13.05.01 **Smoke:** It shall be unlawful for any person, firm or corporation to permit the emission of smoke from any source in an amount which shall be injurious or substantially annoying to persons in the affected area.
- 13.05.02 **Airborne Solids:** It shall be unlawful for any person, firm or corporation to operate and maintain, or cause to be operated and maintained, any process or activity which shall be productive of dust, dirt, fly ash or other airborne matter which shall be injurious or substantially annoying to persons in the vicinity of such activity or process, or which shall cause injury to neighboring business or property.
- 13.05.03 **Odor:** The emission of odors which shall be found to be obnoxious to any considerable number of persons in the area shall be prohibited.
- 13.05.04 **Gases:** The emission or release of corrosive or toxic gases, in amounts which are injurious or substantially annoying to persons living or working in the affected area, shall be prohibited.
- 13.05.05 **Vibration:** Machines or operations which cause vibration shall be permitted in Industrial Districts, provided vibrations emanating there from shall not be discernable and substantially annoying or injurious to property beyond the lot lines of the affected premises.
- Noise: The noise permitted under any use of land shall be no greater than the normal level of traffic noise existing in the area at the time of such emission, when determined at the boundary of the property. Industrial districts may have higher levels of noise within their industrial premises, provided berms, walls or other sound barriers of equal effect shall prevent their being substantially annoying to adjacent areas.

- 13.05.07 **Glare and Radioactive Materials:** Glare from any process or operation shall be shielded to be invisible beyond the property lines of the premises on which the process is performed. Radiation, including radioactive materials and electro-magnetic radiation such as that emitted by the x-ray process or diathermy, shall not be emitted to exceed quantities established as safe by the U.S. Bureau of Standards when measured at the property line.
- 13.05.08 **Fire and Safety Hazards:** The storage and handling of flammable liquids, liquefied petroleum gases and explosives shall comply with all regulations of the Township and with all state rules and regulations. Further, all storage tanks for flammable liquid materials above ground shall be located at least one hundred and fifty (150) feet from all property lines, and shall be completely surrounded by earth embankments, dikes or other types of retaining wall which will contain the total capacity of all tanks so enclosed.
- 13.05.09 **Underground Storage Tanks:** Storage of flammable liquids below ground shall be located not closer to a lot line than the greater depth to the bottom of the buried tank, and shall be enclosed by an impervious envelope adequate to prevent a liquid from contaminating the groundwater in an event of a rupture of the tank.
- 13.05.10 **Above Ground Storage of Toxic and Hazardous Material:** The above ground storage of toxic and hazardous material shall be located on an impervious and containing surface which will prevent a leak of the tank from flowing onto the soil in order to protect against groundwater contamination. The area of the impervious surface shall be of sufficient size to contain the total capacity of the tank.
- 13.05.11 **Violations:** The violation of any of these standards constitutes a public nuisance, and as such, may be abated by court action to be undertaken by the injured party or parties and/or by the Township.

Sec. 13.06 FLOOR DRAINS

General purpose floor drains in work and storage areas of commercial or industrial facilities are prohibited except in facilities which do not store or use flammable or combustible materials and under one of the following conditions:

- 13.06.01 **Holding Tank.** The drain(s) are connected to a holding tank or sump which is pump out and hauled away for proper disposal.
- 13.06.02 **Permit from Township.** A permit is obtained from the Township to permit the drain(s) to be connected to the sanitary sewer system.
- 13.06.03 **Permit from State.** A state ground water discharge permit is obtained.

Sec. 13.07 HAZARDOUS MATERIALS AND FUEL STORAGE

Any use that involves fuel services and use or storage of large quantities of hazardous materials shall comply with the following requirements:

13.07.01 **Above Ground Storage Tanks:** Above ground storage tanks shall be limited to three hundred (300) gallon capacity, shall be located not less than seventy-five (75) feet from any occupied building or any lot line and shall be mounted on a solid concrete slab to prevent overturn and spilling;

- 13.07.02 **Below Ground Fuel Storage Tanks:** Below ground fuel storage tanks shall be at least two thousand (2,000) feet from any drinking water well serving two or more residential units.
- 13.07.03 **Secondary Containment:** Uses utilizing, storing or handling hazardous material have provided secondary containment facilities and provide documentation of compliance with state and federal regulations, as required.
- 13.07.04 **Pollution Incident Prevention Plan:** A Pollution Incident Prevention Plan (PIPP) shall be submitted that provides documentation for the following, with appropriate correspondence from the MDEQ, Michigan State Police Fire Marshall, local fire department, and Livingston County Health Department:
 - (a) Description of any discharge of any type of wastewater to a storm sewer, drain, lake, stream, wetland, other surface water body or into the groundwater;
 - (b) Description of storage of any salt, oil or other potentially hazardous materials including common name, name of chemical components, location, maximum quantity expected on hand at any time, type of storage containers or base material, and anticipated procedure for use and handling;
 - (c) Description of any transportation, on-site treatment, storage or disposal of hazardous waste generated in quantities of 250 gallons or 2200 pounds per month;
 - (d) Description of any secondary containment measures proposed including design, construction materials and specifications, volume and security measures;
 - (e) Name and phone number(s) of person(s) responsible for materials and available 24 hours, in case of detected spill.
- 13.07.05 **Permits:** Any discharge of wastewater to a storm sewer, drain, lake, stream or other surface water shall be documented and appropriate permits obtained from the MDEQ, Surface Water Quality Division. Any discharge of liquids, sludge, wastewater and/or wastewater residuals into or onto the ground shall be documented and appropriate permits obtained from the MDEQ, Waste Management Division. If flammable or combustible liquids are to be stored in fixed aboveground storage containers with a capacity greater than 1,100 gallons, this shall be documented and appropriate permits obtained from the State Police Fire Marshal Division. Storage of pesticide or fertilizer in quantities greater than 55 gallons or 100 pounds shall be documented and appropriate permits obtained from the Michigan Department of Agriculture, Pesticide and Plant Pest Division.

Sec. 13.08 STORMWATER MANAGEMENT

- 13.08.01 **Engineering Standards.** All site plans shall provide for stormwater management meeting the requirement of the Genoa Township Engineering Standards. Where possible, and upon recommendation by the Township Engineer and approval by the Planning Commission, the Township encourages the implementation of Low Impact Development (LID) tools and techniques. (as amended 3/5/10)
- 13.08.02 **Underground Stormwater Detention.** The Planning Commission may permit underground stormwater detention systems as an alternative to surface detention for stormwater control, based upon the recommendation of the Township engineer, in the Town Center District or for

space-limited sites where there is not adequate land for surface detention areas, such as infill development or redevelopment of existing developed lots.

- (a) Underground stormwater detention systems must be used in conjunction with other water quality control structures as required by the Township Engineering Standards.
- (b) The petitioner shall be responsible for removal of any trash/debris and sediment buildup in the underground vaults or tanks on no less than an annual basis and perform structural repairs to inlet and outlets as needed based on inspection. The petitioner shall submit an annual maintenance plan for the Township engineer's approval during the site plan review process.
- (c) The petitioner shall be required to submit a recordable development agreement as part of the site plan that outlines requirements for periodic inspection and maintenance. The development agreement shall meet the requirements of the Township engineer.
- (d) The agreement shall provide that expenses incurred for inspection and maintenance shall be paid by the petitioner and that the petitioner shall be responsible to pay for any damages or losses occurring to neighboring properties resulting from a failure of the underground stormwater detention system. (as amended 12/31/06 and 3/5/10)