

**120.490 Mining, Excavation, and/or Removal of Earth Minerals**

I. Mining, excavation and/or removal, by transporting same off the premises, of earth or any earth minerals (including gravel) exceeding 250 cubic yards in amount, when such removal is not incident to the construction of buildings or structures on said premises and temporary on-site processing of such earth or earth minerals. The following provisions are applicable to such a use:

A. Submission of Operational and Reclamation Plans:

1. When making an application for a Special Exception Use Permit, the applicant must submit a detailed plan of operation and a plan for reclamation of the premises for which the permit is sought. The plan of operation must disclose compliance with all the provisions of the within Ordinance or the manner in which compliance will be secured by the applicant. Such plans shall include, among other things, the following:
  - a. A contour map of the tract of land involved in the operations, including dimensions of the same, access thereto abutting public streets, and whether or not the same are "all weather" roads, additional roads, if any, to be constructed, and the location and nature of abutting improvements on adjoining property including all structures within 250 feet of the property line.
  - b. The number of acres and the location of the same proposed to be a part of the mining operation, including all areas required for setbacks and berms. A phasing plan showing the total number of acres and those to be operated upon within the following 12- month period after commencement of operations.
  - c. The type of mining or processing proposed to be conducted and the nature or type of equipment to be used and the number of each type of equipment which is to be used.

- d. The location of the processing equipment and the distance of any proposed excavation or mining from the boundaries of the site.
- e. The type of soil around the perimeter of the site as shown by soil boring tests in the event excavation or activities are to be conducted closer than 150 feet from the boundaries of the site, disclosing conditions satisfactory for lateral support of adjacent premises; or in lieu thereof, the written consent of the owners of adjoining premises to mining operations closer than specified in the within Ordinance to the boundaries of the site.
- f. Cross-section drawings showing depth of excavation in the area of operation for a 12- month period.
- g. A map or plan disclosing the approximate condition and topography of the land following completion of the mining operations, including the proposed uses then contemplated for the land, future lakes and roads and such other matters as may evidence the bona fide nature of the reclamation and rehabilitation plans and the fact that the land will not be devastated and rendered unusable by the proposed mining activities.

B. Duration:

A Special Exception Use Permit granted under this provision shall be for one (1) year in duration and the same is renewable upon reapplication and compliance with the applicable special exception use provisions of the Township's Zoning Ordinance.

C. Depth of Excavation:

When considering an application for a Special Exception Use Permit, the Planning Commission shall give particular consideration to the depth of excavation and the feasibility of reclaiming the area if deep or dangerous excavations are contemplated. In this regard, the Planning Commission may condition the Special Exception Use Permit by placing limits upon the depth of excavation so that after reclamation the topography of the area in question will be harmonious with that of surrounding properties.

D. Conditions and Limitations:

The proposed use shall be subject to the following further conditions and limitations:

1. Location:

- a. All such operations shall be located on a primary road, as defined by the County of Kalamazoo, for ingress and egress thereto, or on a road which does not create traffic through an area developed primarily for residential purposes. Where necessary, the Planning Commission may require the applicant to construct and/or improve a road to accommodate the truck travel necessitated by the operations as a condition to such operations, and for the purpose of routing traffic around residential areas and preventing the breaking up of existing roads which are not "all weather" roads.
- b. Sufficient setbacks shall be provided from all property lines and public highways to assure adequate lateral support for adjacent public and private property. No such excavation business shall be permitted closer than 150 feet to interior boundary lines of the property; provided, however, that such setback may be temporarily reduced to 50 feet if reclamation of the land is promptly effected to increase the setback to at least 150 feet in accordance with the reclamation plan approved by the Planning Commission and adequate lateral support as above set forth is at all times maintained.

- c. No such operations shall be permitted within 150 feet of adjoining public rights-of-way except for the lowering of land adjoining said rights-of-way to the grade level of said rights-of-way. Such excavation businesses shall at no time be permitted where adequate lateral support for the maintenance of adjoining lands is not maintained.
- d. When considering an application for a Special Exception Use Permit, the Planning Commission shall give particular attention to on-site processing proposed. No "permanent" on-site processing (i.e., facilities that are not readily transportable at all times) may be conducted at the site. The temporary processing plant and its accessory structures shall not be located closer than 250 feet from the interior property lines and adjoining public rights-of-way and shall not be located closer than 500 feet from any residential zoning district ("R-1" through "R-6" Districts) or any abutting residential dwelling. This temporary processing plant, where practicable, shall be located at a lower level than the surrounding terrain to lessen visual and noise impact. The height of the berms may be increased to up to ten (10) feet to assist in minimizing such negative impacts on adjoining properties. The foregoing shall not apply to the digging or excavating apparatus nor the stockpiling or loading and transportation equipment. The Planning Commission may further condition, limit or prohibit the on-site processing so as to limit interference and make the proposed use compatible with adjacent land uses.
- e. No such operations shall be located within 100 feet of the margin of any stream or waterway unless previously approved, in writing, by the Michigan Water Resources Commission, or such other State Commission having jurisdiction thereof. No such mining operations shall interfere with the natural established flow of surface waters to the detriment or damage of adjoining public or private properties.

2. Sight Barriers and Fencing:

- a. In order to minimize any adverse effects of the proposed use on neighboring properties and the general public, the Planning Commission may require that sight barriers [be] provided along all or any portions of the boundaries of the site which lack natural screening conditions through existing contours or evergreen growth. Such barriers must be approved by the Planning Commission and shall consist of one or more of the following:
- b. Earth berms constructed to a height of six feet above the mean elevation of the center line of the adjacent public highway or six feet above the general level of terrain along interior property lines, as the case may be. Such berms shall have slopes that are not in excess of one foot vertical to four feet horizontal and shall be planted with grass, trees or shrubs. The Planning Commission may require that such berms include mature landscaping, with a total height of the berm and landscaping no less than ten feet, where visual or noise impacts are of greatest severity.
- c. Plantings of evergreen trees or shrubbery in three staggered rows parallel to the boundaries of the property, which shall be at least two-year transplants at the time of planting, and which grow to not less than six feet in height at maturity and sufficiently spaced to provide effective sight barriers when six feet in height. Trees which die must be replaced.
- d. Upon approval of the Planning Commission, such other forms of sight barriers that would adequately screen the site.
- e. All dangerous excavations, pits, pond areas, banks or slopes shall be fenced and posted with signs around the perimeters thereof and maintained to prevent injury to children and others, and such areas shall be eliminated as expeditiously as possible.

3. Nuisance Abatement:

- a. Noise and vibration shall be minimized in their effect upon adjacent properties by the utilization of modern equipment designed to accomplish such minimization and by the proper use of berms, walls, and natural planting screens. All equipment shall be maintained and operated in such a manner as to eliminate, as far as practicable, excessive noise and vibrations which are not necessary in the operation of such equipment. The applicant shall provide a noise study, identifying base readings prior to operation and proposed noise levels from such operation.
- b. Air pollution in the form of dust and dirt shall also be kept to a minimum by the use of modern equipment and methods of operation designed to avoid any excessive dust or dirt or other air pollution injurious or substantially annoying to adjoining property owners. Interior and adjoining roads used in the operations shall have their surface treated to minimize any such nuisance. The applicant shall provide an air quality study, identifying the type and intensity of particulate matter proposed to be released into the air during mining operations.
- c. Hours and/or days of operation may be restricted by the Planning Commission as is deemed necessary to minimize the adverse effects of the use upon neighboring properties and the general public. Such hours shall be posted at the site and management shall direct users to not arrive at the site prior to the commencement of such hours.
- d. Lighting shall be permitted for safety or security purposes provided that it in no way creates a nuisance onto adjoining properties.

4. Reclamation of Mined Areas:

- a. A complete reclamation plan shall be submitted, indicating both the proposed use and final condition of the site following the termination of all mining activity. If the mining operation is done in phases, reclamation plans for each phase shall be provided. Reclamation and rehabilitation of mined areas shall be accomplished as soon as practicable following the mining or excavation of an area. Where possible, such rehabilitation and reclamation shall be accomplished concurrently with the mining or excavation operations. Substantial completion of reclamation and rehabilitation shall be affected within one year after termination of mining or excavation activity. Inactivity for a 12-month consecutive period shall constitute, for this purpose, termination of mining activity.
- b. The following standards shall control reclamation and rehabilitation:
  - i. All excavation shall be either to a water-producing depth of not less than five (5) feet below the average summer level of water in the excavation, or shall be graded or back-filled with non-noxious, non-inflammable and non-combustible solids to ensure:
    - (A) That the excavated area shall not collect stagnant water and not permit the same to remain therein; or,
    - (B) That the surface of such area which is not permanently submerged is graded or backfilled as necessary to provide a gently rolling surface that will minimize wind and water erosion, and which will be generally compatible with the adjoining land area.

- ii. The banks of all excavations shall be sloped to the waterline in a waterproducing excavation, and to the pit floor in a dry operation, at a slope which shall not be steeper than one (1) foot vertical to four (4) feet horizontal.
- iii. Topsoil of a quality equal to that occurring naturally in the area shall be replaced on excavated areas not covered by water, except where streets, beaches or other planned improvements are desired. Where used, topsoil shall be applied to a minimum depth of 2 inches sufficient to support vegetation.
- iv. Vegetation shall be restored by the appropriate seeding of grasses or the planting of trees and shrubs to establish a permanent vegetative cover on the land surface and to minimize erosion.
- v. Upon cessation of mining operations by abandonment or otherwise, the operating company, within a reasonable period of time not to exceed 12 months thereafter, shall remove all plant structures, buildings, stockpiles and equipment, provided that buildings and structures which have a function under the reclamation plan and which can be lawfully used under the requirements of the zoning district in which they will be located under such plan may be retained.

E. Financial guarantees shall be furnished to the Township ensuring the proper rehabilitation and reclamation of the mined and excavated areas prior to the commencement of any such mining or excavating operations. The amount of the guarantee shall be not less than \$3,000 per acre proposed to be mined or excavated in the following 12-month period and which has previously been mined or excavated during any preceding period and not reclaimed and rehabilitated in accordance with this Ordinance and the applicant's filed plan. Mined areas resulting in a water depth of 5 feet or more shall be deemed to be reclaimed areas to within 15 feet of any vertical shoreline thereof and to the extent of the shoreline where the same has been sloped to a grade of not more than 1 vertical to 4 horizontals, for the purpose of this financial guarantee. Such financial guarantee shall be reviewed annually, on or about the anniversary date of the excavation permit, for adjustment and compliance with the foregoing requirements by the zoning inspector of the Township or such other official as may be designated by the Township Board. Such financial guarantee may be in any one of the following forms: Cash, certified check, irrevocable bank letter of credit, or corporate surety bond of a licensed insurance company. In no event shall such a financial guarantee be less than \$5,000 in amount.

F. Hearing:

1. After receiving an application for the grant of a permit for an earth removal, quarrying, gravel processing, mining and related mineral extraction business accompanied by the required plans and specifications and permit fees, the Planning Commission shall hold a public hearing upon such application, preceded by not less than 15 days' notice of the time, place and purpose of such hearing to each owner of property adjoining the proposed site as shown on the last tax roll of the Township, as corrected by known transfers since the preparation of the same, by First Class Mail, and such other notice as may be deemed appropriate by said Board.
2. Following such hearing, the Board shall grant or deny the application and set forth its reasons for its decision. Such decision shall be based upon the criterion set forth in the within Ordinance and shall be based, in addition, on a consideration of the following:

- a. The most advantageous use of the land, resources, and property.
- b. The character of the area in question and its peculiar suitability, if any, for particular uses.
- c. Conservation of property values, as well as natural resources, and the general and appropriate trend and character of development in the subject area.
- d. The protection and preservation of the general health, safety, and welfare of the Township.
- e. The quality (scarcity or value) and quantity of the minerals sought to be mined as compared with the effect upon the adjacent community of the proposed operations.
- f. Whether a Special Exception Use Permit for mining, excavation and/or removal for the site had been issued to the applicant previously and, if so, the applicant's history of compliance with the conditions and limitations of same.
- g. In making any decision, the Planning Commission shall have the right and authority to impose such additional conditions and safeguards as it deems necessary for the protection of the health, safety, and general welfare of the neighborhood and of the adjoining residents and property owners. It may also limit the length of time its permit is to be effective and may provide for a periodic review of the proposed operations to ascertain compliance with the conditions and limitations imposed upon the same. It shall be empowered to renew or extend a permit where all standards and conditions are complied with and may revoke or refuse to renew the same where non-compliance exists. No revocation or failure to renew or extend a permit shall release the applicant from the duty of rehabilitation and reclamation of said mined or disturbed area.

G. Liability Insurance:

All operators shall be required to carry personal injury and property damage insurance while any unreclaimed or unrehabilitated area exists in the amount of not less than \$300,000.00 for each person or property injured or damaged and not less than \$1,000,000.00 for injury or damage to more than one person or one person's property arising out of one occurrence. Such insurance shall cover injury or damage occurring upon the site of the operations as well as upon properties adjoining thereto, as a result of conditions or activities existing upon the site. Such policy shall be filed with the Township Clerk.

H. Variances:

The Zoning Board of Appeals shall have the right and authority to grant variances from the foregoing conditions and limitations where peculiar circumstances or hardship may exist, the spirit and intent of the provisions to protect the neighborhood from devastation are still complied with and substantial justice would thereby be affected.

II. Mining, excavation, quarrying, removal of earth or earth minerals (including gravel), on-site processing and related businesses, subject to the following conditions and limitations:

A. Location:

1. All such operations shall be located on a primary road, as defined by the County of Kalamazoo, for ingress and egress thereto, or on a road which does not create traffic through an area developed primarily for residential purposes. Where necessary, the Planning Commission may require the applicant to construct and/or improve a road to accommodate the truck travel necessitated by the operations as a condition to such operations and for the purpose of routing traffic around residential areas and preventing the breaking up of existing roads which are not "all weather" roads.

2. Sufficient setbacks shall be provided from all property lines and public highways to assure adequate lateral support for adjacent public and private property. No such excavation business shall be permitted closer than 150 feet to interior boundary lines of the property; provided, however, that such setback may be temporarily reduced to 50 feet if reclamation of the land is promptly effected to increase the setback to at least 150 feet in accordance with the reclamation plan approved by the Planning Commission and adequate lateral support as above set forth is at all times maintained.
3. No such excavation business shall be permitted within 75 feet of adjoining public rights-of-way except for the lowering of land adjoining said rights-of-way to the grade level of said rights-of-way. Such excavation businesses shall at no time be permitted where adequate lateral support for the maintenance of adjoining lands is not maintained.
4. The permanent processing plant and its accessory structures shall not be located closer than 250 feet from the interior property lines and adjoining public rights-of-way and shall, where practicable, be located at a lower level than the surrounding terrain to lessen visual and noise impact. The foregoing shall not apply to the digging or excavating apparatus nor the stockpiling or loading and transportation equipment.
5. No such excavation businesses shall be located within 100 feet of the margin of any stream or waterway unless previously approved, in writing, by the Michigan Water Resources Commission or such other State Commission having jurisdiction thereof. No such mining operations shall interfere with the natural established flow of surface waters to the detriment or damage of adjoining public or private properties.

B. Sight Barriers and Fencing:

Sight barriers shall be provided along all boundaries of the site which lack natural screening conditions through existing contours or evergreen growth. Such barriers shall consist of one or more of the following:

1. Earth berms constructed to a height of six feet above the mean elevation of the center line of the adjacent public highway or six feet above the general level of terrain along interior property lines, as the case may be. Such berms shall have slopes that are not in excess of one foot vertical to four feet horizontal and shall be planted with grass, trees or shrubs.
2. Plantings of evergreen trees or shrubbery in three staggered rows parallel to the boundaries of the property, which shall be at least two-year transplants at the time of planting, and which grow to not less than six feet in height at maturity and sufficiently spaced to provide effective sight barriers when six feet in height. Trees which die must be replaced.

C. Nuisance Abatement:

1. Noise and vibration shall be minimized in their effect upon adjacent properties by the utilization of modern equipment designed to accomplish such minimization and by the proper use of berms, walls, and natural planting screens. All equipment shall be maintained and operated in such a manner as to eliminate, as far as practicable, excessive noise and vibrations which are not necessary in the operation of such equipment.
2. Air pollution in the form of dust and dirt shall also be kept to a minimum by the use of modern equipment and methods of operation designed to avoid any excessive dust or dirt or other air pollution injurious or substantially annoying to adjoining property owners. Interior and adjoining roads used in the operations shall have their surface treated to minimize any such nuisance.

D. Reclamation of Mined Areas:

1. Reclamation and rehabilitation of mined areas shall be accomplished as soon as practicable following the mining or excavation of an area. Where possible, such rehabilitation and reclamation shall be accomplished concurrently with the mining or excavation operations. Substantial completion of reclamation and rehabilitation shall be affected within two years after termination of mining or excavation activity. Inactivity for a 12-month consecutive period shall constitute, for this purpose, termination of mining activity.

2. The following standards shall control reclamation and rehabilitation:
  - a. All excavation shall be either to a water-producing depth of not less than five (5) feet below the average summer level of water in the excavation or shall be graded or back-filled with non-noxious, non-inflammable and non-combustible solids to ensure:
    - i. That the excavated area shall not collect stagnant water and not permit the same to remain therein; or,
    - ii. That the surface of such area, which is not permanently submerged, is graded or backfilled as necessary to provide a gently rolling surface that will minimize wind and water erosion, and which will be generally compatible with the adjoining land area.
  - b. The banks of all excavations shall be sloped to the waterline in a water-producing excavation and to the pit floor in a dry operation at a slope which shall not be steeper than one (1) foot vertical to four (4) feet horizontal.
  - c. Topsoil of a quality equal to that occurring naturally in the area shall be replaced on excavated areas not covered by water, except where streets, beaches or other planned improvements are desired. Where used, topsoil shall be applied to a minimum depth of 2 inches sufficient to support vegetation.
  - d. Vegetation shall be restored by the appropriate seeding of grasses or the planting of trees and shrubs to establish a permanent vegetative cover on the land surface and to minimize erosion.
  - e. Upon cessation of mining operations by abandonment or otherwise, the operating company, within a reasonable period of time not to exceed 12 months thereafter, shall remove all plant structures, buildings, stockpiles and equipment; provided, that buildings and structures which have a function under the reclamation plan and which can be lawfully used under the requirements of the zoning district in which they will be located under such plan may be retained.

3. Financial guarantees shall be furnished to the Township insuring the proper rehabilitation and reclamation of the mined and excavated areas prior to the commencement of any such mining or excavating operations. The amount of the guarantee shall be not less than \$3,000.00 per acre, proposed to be mined or excavated in the following 12-month period and which has previously been mined or excavated during any preceding period and not reclaimed and rehabilitated in accordance with this Ordinance and the applicant's filed plan. Mined areas resulting in a water depth of 5 feet or more shall be deemed to be reclaimed areas to within 15 feet of any vertical shore line thereof and to the extent of the shore line where the same has been sloped to a grade of not more than 1 vertical to 4 horizontal, for the purpose of this financial guarantee. Such financial guarantee shall be reviewed annually, on or about the anniversary date of the excavation permit, for adjustment and compliance with the foregoing requirements by the zoning inspector of the Township or such other official as may be designated by the Township Board. Such financial guarantee may be in any one of the following forms: Cash, certified check, irrevocable bank letter of credit, or corporate surety bond of a licensed insurance company. In no event shall such a financial guarantee be less than \$9,000 in amount.

E. Submission of Operational and Reclamation Plans:

No earth removal, quarrying, gravel processing, mining and related mineral extraction businesses shall be allowed or commenced until a plan has been submitted to the Planning Commission disclosing compliance with all the provisions of the within Ordinance or the manner in which compliance will be secured by the applicant. Such plans shall include, among other things, the following:

1. A contour map of the tract of land involved in the operations, including dimensions of the same, access thereto abutting public streets, and whether or not the same are "all weather" roads, additional roads, if any, to be constructed, and the location and nature of abutting improvements on adjoining property.
2. The number of acres and the location of the same proposed to be operated upon within the following 12-month period after commencement of operations.

3. The type of mining or processing proposed to be conducted and the nature of the equipment to be used.
4. The location of the principal processing plant and the distance of any proposed excavation or mining from the boundaries of the site.
5. The type of soil around the perimeter of the site as shown by soil boring tests in the event excavation or activities are to be conducted closer than 150 feet from the boundaries of the site, disclosing conditions satisfactory for lateral support of adjacent premises or, in lieu thereof, the written consent of the owners of adjoining premises to mining operations closer than specified in the within Ordinance to the boundaries of the site.
6. A map or plan disclosing the approximate final grades and levels to be established following the completion of the mining operations, including the proposed uses then contemplated for the land, future lakes and roads and such other matters as may evidence the bona fide nature of the reclamation and rehabilitation plans and the fact that the land will not be devastated and rendered unusable by the proposed mining activities.

F. Hearing:

1. After receiving an application for the grant of a permit for an earth removal, quarrying, gravel processing, mining and related mineral extraction business accompanied by the required plans and specifications and permit fees, the Planning Commission shall hold a public hearing upon such application, preceded by not less than 10 days' notice of the time, place and purpose of such hearing to each owner of property adjoining the proposed site as shown on the last tax roll of the Township, as corrected by known transfers since the preparation of the same, by First Class Mail, and such other notice as may be deemed appropriate by said Board.
2. Following such hearing, the Board shall grant or deny the application and set forth its reasons for its decision. Such decision shall be based upon the criterion set forth in the within Ordinance and shall be based, in addition, on a consideration of the following:
  - a. The most advantageous use of the land, resources, and property.
  - b. The character of the area in question and its peculiar suitability, if any, for particular uses.

- c. Conservation of property values, as well as natural resources and the general and appropriate trend and character of development in the subject area.
- d. The protection and preservation of the general health, safety, and welfare of the Township.
- e. The scarcity or value of the minerals sought to be mined as compared with the effect upon the adjacent community of the proposed operations.
- f. In making any decision, the Planning Commission shall have the right and authority to impose such additional conditions and safeguards as it deems necessary for the protection of the health, safety, and general welfare of the neighborhood and of the adjoining residents and property owners. It may also limit the length of time its permit is to be effective and may provide for a periodic review of the proposed operations to ascertain compliance with the conditions and limitations imposed upon the same. It shall be empowered to renew or extend a permit where all standards and conditions are complied with and may revoke or refuse to renew the same where non-compliance exists. No revocation or failure to renew or extend a permit shall release the applicant from the duty of rehabilitation and reclamation of said mined or disturbed area.

G. Fencing:

Any dangerous excavations, dangerous pits, dangerous pond areas, dangerous banks or dangerous slopes shall be adequately guarded or fenced and posted with signs around the perimeter thereof to prevent injury to children or others, and such dangerous conditions shall be eliminated as expeditiously as possible.

H. Liability Insurance:

All operators shall be required to carry personal injury and property damage insurance while any unreclaimed or unrehabilitated area exists in the amount of not less than \$100,000.00 for each person or property injured or damaged and not less than \$300,000.00 for injury or damage to more than one person or one person's property arising out of one occurrence. Such insurance shall cover injury or damage occurring upon the site of the operations, as well as upon properties adjoining thereto, as a result of conditions or activities existing upon the site. Such policy shall be filed with the Township Clerk.

I. Variances:

The Zoning Board of Appeals shall have the right and authority to grant variances from the foregoing conditions and limitations where peculiar circumstances or hardship may exist, the spirit and intent of the provisions to protect the neighborhood from devastation are still complied with and substantial justice would thereby be affected.

[Ord. No. 265, eff 08/31/2023]