## **Section 7.25 Extraction Operations**

- **A.** Additional Materials to be Submitted: In addition to the information required by Article 14 for site plan review, the following information shall be provided to the Township:
  - 1. Location of all buildings within two hundred (200) feet of any activity proposed for the site.
  - 2. Detailed proposal as to method of operation, what type of machinery or equipment will be used, estimated period of time that such operation will cover, and all haul roads and truck entrance locations to be used.
  - 3. Detailed description of the material to be extracted, the anticipated average amount of material to be extracted each year, the total estimated area to be devoted to extraction, the planned progression of extraction across the site and corresponding time frames, the location of each principal phase, number of acres included in each phase, and the estimated length of time to complete extraction of each phase.
  - 4. Proposed plans for fencing.
  - 5. Depth to and directional flow of groundwater, and analysis data documenting the extent to which the extraction operation may undermine surface and ground water conditions of nearby properties such as in the case of lowering water levels of surface water bodies and ground water resources from which wells rely.
  - 6. Proposed side slopes and depths for all portions of the extracted area, including interim and final slopes.
  - 7. Detailed storm water management plans that delineate how runoff is to be removed from extraction areas including the delineation of proposed interim and finished grading and revegetation, directional flow of swales and other drainage courses, settling ponds and retention/detention ponds, points of discharge of runoff, the avoidance of stagnant ponding, and measures to minimize erosion and sedimentation of existing on-site and off-site water bodies.
  - 8. The proposed location of any buildings, storage areas, stockpiling areas, and sorting or crushing equipment as appropriate.
  - 9. A detailed reclamation plan that complies with all of the following:
    - a. Describes in detail the intended reclamation use of the site upon completion of extraction activities, the spatial arrangement of proposed reclamation uses, and preliminary final grading of the site.
    - b. Depiction of finished, stabilized, side slopes, and provisions for revegetation and stabilization.
    - c. The inclusion of a landscape plan, including an inventory of plant/tree species to be used, sizes, and locations, and the manner in which vegetation shall be restored upon the site including appropriate seeding of grasses or the planting of trees and shrubs to establish a permanent vegetative cover on the land surface to minimize erosion. The landscape plan shall provide that a layer of arable topsoil shall be spread over the excavated area, except exposed rock surfaces, to a minimum depth of four (4) inches in accordance with an approved grading plan and intended reclamation use.
    - d. Final slopes no greater than a 3:1 (horizontal:vertical) ratio.

- e. No noxious, flammable or toxic backfill and grading materials shall be used.
- f. Provides for the removal of all rubbish, debris, structures, buildings, and equipment within 365 days of the termination of extraction operations.
- g. The inclusion of a reclamation schedule that provides, in part, that reclamation shall be carried out progressively so as to ensure that no active extraction area exceeds five (5) acres in area, unless expressly authorized otherwise upon a finding that no practical alternatives exist and the public health, safety and welfare shall be ensured.
- **B. Compliance with Table 3-4:** See Table 3-4 for standards pertaining to minimum lot area, width, frontage, and yard setbacks, and maximum building height and building and lot coverage, except as follows:
  - 1. Minimum lot area shall be twenty (20) acres.
  - 2. Notwithstanding any other minimum setbacks required by this Ordinance, all extraction activities, including alteration of existing topographic conditions, fixed and temporary buildings and equipment, washing and stockpiling of materials, truck parking and truck storage areas, shall be set back a minimum distance of one hundred (100) feet from all lot lines and two hundred (200) feet from a residence existing at the time an application is submitted.

## C. Additional Standards and Requirements:

- 1. Rumble strips shall be provided along access drives to discourage the tracking of dirt onto adjacent roads. Public streets within one thousand (1,000) feet of the exit of the extraction site shall be kept reasonably clear on a daily basis of mud, dirt and debris from vehicles exiting the site.
- Measures shall be employed as necessary to prohibit windborne dust, sand, or other materials
  from leaving the extraction site, including the seeding of exposed earth, use of berms and
  vegetative screens, and the application of chemicals to non-vegetated areas provided such
  chemicals are biodegradable and non-toxic.
- 3. No topsoil shall be removed from the extraction site except as may be delineated on an approved site plan or otherwise authorized as part of an approval of the extraction operation.
- 4. Extraction areas shall be graded in a fashion which will not cause water to accumulate in stagnant pools.
- 5. Truck or heavy vehicle traffic related to extraction operations shall use major thoroughfares for access to the greatest extent feasible. The applicant shall make an adequate financial guarantee with the Michigan Department of Transportation and/or County Road Commission to address any additional road maintenance and/or improvements necessitated by extraction operation truck traffic.
- 6. Extraction operations, including crushing, washing, processing, loading and transport operations, shall commence no earlier than 8:00 a.m. and cease no later than 5:00 p.m. Extraction operations shall not occur on Sundays, Christmas Day, and Thanksgiving Day. A modification of these limitations may be made upon a finding that specific conditions are present or are to be established that support more lenient limitations.
- All temporary structures shall be removed from the premises upon completion of the extraction
  activity unless said structures are of sound construction and are compatible with the approved
  reclamation plan.

- 8. The site shall be rehabilitated progressively as extraction areas are worked or abandoned so that they shall be in a condition of being entirely lacking in hazards and be inconspicuous, and blended with the general surrounding ground form. Reclamation of the site concurrent with extraction activities shall be undertaken to the extent that the reclamation activities will not interfere with the excavating activity or if the extraction activity will damage the reclaimed areas. Extraction areas shall be reclaimed pursuant to the approved reclamation plan. The excavator shall be required to post an acceptable performance guarantee pursuant to Section 2.6 of this Ordinance to address the reclamation costs for each five (5) acres of land to be disturbed or fraction thereof. Extraction activities shall not be initiated on any location of the site until such performance guarantee has been posted for that area of the site.
- 9. Any expansion of an extraction operation beyond that area covered by a valid zoning permit shall be subject to the special land use provisions of Article 15.
- 10. Any performance bond that may be required according to Section 2.6 may cover anticipated yearly or other periodic inspections.
- 11. All areas which are subject to current extraction operations, or past extraction operations but which have yet to be reclaimed or otherwise exhibit slopes in excess of 3:1 (horizontal to vertical), shall be fenced to a minimum height of six (6) feet. Any gates made part of such fencing shall be secured at all times when the site is unattended by the operator. Such fencing shall include signs no less than three (3) square feet in area and spaced no greater than two hundred (200) feet apart, with the following or similar notice: "Warning Danger, Excavation in Progress."

## D. Abandonment/Termination of Use:

- 1. An operator shall submit written notice to the Zoning Administrator of the abandonment of an extraction operation within six (6) months of such abandonment.
- When extraction operations have ceased for more than 365 consecutive days or when, by examination of the premises or other means, the Zoning Administrator determines that the extraction operation has been abandoned, the Zoning Administrator shall give the owner written notice of the intent to declare the extraction operation abandoned. Within thirty (30) days following receipt of such notice, the owner shall have an opportunity to submit evidence that the use of the extraction operation, or portion thereof, has not been abandoned.
- 3. The Township Board shall then render a decision as to the extent to which extraction operations may continue or the operation shall be declared as abandoned. Upon a declaration of abandonment, the owner shall complete all provisions of the approved reclamation plan not otherwise completed to date, within six (6) months of such declaration, except upon a finding by the Township Board that there exist special or unique conditions that support a different time frame for completion.
- 4. Where an extraction operation has been declared abandoned, a new application and permit shall be necessary before additional extraction activities may occur.
- **E. No Very Serious Consequence:** When reviewing and taking action on a special land use application for an extraction operation, and in addition to reviewing such application according to the general special land use approval standards of Section 15.6, such application shall also be reviewed to determine whether adequate documentation has been submitted demonstrating that "no very serious consequences" will result by the approval of such application. The determination of "no very serious consequence" may be based on any of the following factors as may be applicable:
  - 1. The relationship of extraction and associated activities with existing land uses.

- 2. The impact on existing land uses in the vicinity of the property.
- 3. The impact on property values in the vicinity of the property and along the proposed hauling route serving the property, based on credible evidence.
- 4. The impact on pedestrian and traffic safety in the vicinity of the property and along the proposed hauling route serving the property.
- 5. The impact on other identifiable health, safety, and welfare interests in the Township.
- 6. The overall public interest in the extraction of the specific natural resources on the property.