Currituck County



Development Services Department

Planning Division

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To: Board of Commissioners

From: Planning Staff

Date: January 30, 2023

Subject: PB 22-19 Currituck County Text Amendment - Mining

Background

The attached extractive industry text amendment was submitted by the Currituck County Development Services Department, on behalf of the Board of Commissioners (BOC). At the BOC fall mini retreat on October 11, 2022, the board discussed potential amendments to mining operations in the county. The proposed language would apply to new applications and expansions to existing operations.

Request Summary

The proposed text amendment as presented modifies several sections of the Unified Development Ordinance (UDO) for extractive industry (mining). Specifically, the amendment is intended to:

- 1. Extend the public hearing mailed notice requirement to property owners from 500 feet of the property lines to 1,500 feet of the property lines subject to the application;
- 2. Clarify the lands that are not included in the total site acreage (CAMA, US Army Corps of Engineers designated wetlands and surface waters including Waters of the US);
- 3. Remove the reduction in setbacks with additional screening; and,
- 4. Remove the administrative expansion provided to the planning director.

Text Amendment Review Standards

The advisability of amending the text of the UDO is a matter committed to the legislative discretion of the Board of Commissioners and is not controlled by any one factor. In determining whether to adopt or deny the proposed text amendment, the Board of Commissioners <u>may</u> weigh the relevance of and consider whether and the extent to which the proposed text amendment:

- 1. Is consistent with the goals, objectives, and policies of the Land Use Plan and other applicable county-adopted plans:
- 2. Is not in conflict with any provision of this Ordinance or the County Code of Ordinances;
- 3. Is required by changed conditions;
- Addresses a demonstrated community need;
- Is consistent with the purpose and intent of the zoning districts in this Ordinance, or would improve compatibility among uses and ensure efficient development within the county;
- 6. Would result in a logical and orderly development pattern; and

7. Would not result in significantly adverse impacts on the natural environment, including but not limited to water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment.

Imagine Currituck 2040 Vision Plan

The proposed language is consistent with the goals, objectives, policies, and action statements of the Imagine Currituck 2040 Vision Plan including:

- **Land Use Goal 2.** Carefully consider the design and location of intensive and potentially incompatible land uses to mitigate compatibility issues such as environmental quality, safety, overburdening local infrastructure, scale, use, design, location, and adverse effects.
- **Land Use Policy 2.6** Proposed residential development that would expose residents to the harmful effects of incompatible land uses or to environmental hazards shall be minimized. (For example: farm operations, mining activities, etc.)
- **Action CC-ACT-12**: Evaluate and strengthen standards for mining activities. (Policy Foundation LU-2)
- **Environment Goal 1.** Preserve and protect the County's environmentally significant and sensitive lands and surrounding areas.

Staff Recommendation

Planning staff recommends approval of the proposed text amendment as submitted because the amendment is consistent with the Land Use Goal 2., Land Use Policy 2.6., Action CC-ACT-12, and Environment Goal 1. of the Imagine Currituck 2040 Vision Plan and is not in conflict with any provisions of the Unified Development Ordinance or the County Code of Ordinances.

Planning Board Recommendation

On January 10, 2023, the Planning Board recommended approval of the proposed text amendment 5-0.

Mr. Ballance moved to recommend approval of PB 22-19 Currituck County because the request is consistent with Imagine Currituck 2040 Vision Plan including Land Use Goal 2, Land Use Policy 2.6, Action CCACT-12, and Environment Goal 1. 8.

Mr. Doll seconded the motion, and the motion was unanimously approved 5-0.



PB 22-19 CURRITUCK COUNTY TEXT AMENDMENT - MINING BOARD OF COMMISSIONERS FEBRUARY 6, 2023

Amendment to the Unified Development Ordinance Chapter 2: Administration and Chapter 4: Use Standards, to modify extractive industry (mining) regulations including the public hearing mailed notice requirements, total land area calculations, setbacks, and administrative authority for expansion.

BE IT ORDAINED by the Board of Commissioners of the County of Currituck, North Carolina that the Unified Development Ordinance of the County of Currituck be amended as follows:

Item 1: That Chapter 2, Section 2.3.6.B. is amended by adding the following underlined language and deleting the struck-through language and renumbering accordingly:

2.3.6. Public Hearing Scheduling and Public Notification

(3) Mailed Notice Requirements

- (a) Except for community meetings, when the provisions of this Ordinance require mailed notice, the Director shall be responsible for preparing and mailing the written notice. Notice shall be mailed to:
 - (i) The owners of the land subject to the application;
 - (ii) The applicant, if different from the land owner;
 - (iii) Except for special use permit applications for extractive industry, take owners (shown as primary and secondary on the county tax listing) of land within 500 feet of the property lines of land subject to the application (including owners of land located outside the county) whose address is known by reference to the latest ad valorem tax records; and
 - (iv) The owners (shown as primary and secondary on the county tax listing) of land within 1,500 feet of the property lines of land subject to the

special use permit application for extractive industry (including owners of land located outside the county) whose address is known by reference to the latest ad valorem tax records, and,

(v) Commanders of military bases located within five miles of the subject application when the development proposal affects the type of uses

Item 2: That Chapter 4, Section 4.2.5. is amended by adding the following underlined language and deleting the struck-through language:

4.2.5. Industrial Uses

A. Extractive Industry

Extractive industry uses shall receive and maintain a State of North Carolina mining permit and comply with the following standards:

(1) General

- (a) Any mine activity affecting more than one acre (including excavation, area where overburden is placed, area used processing or treatment and settling ponds, access roads, etc.) shall be subject to these regulations and require a special use permit.
- (b) All State permits and applications for State permits associated with the mining activity, including permit modifications, shall be filed with the Development Services Department by the applicant.

(2) Size

No more than 30 percent of the total site shall be excavated at any given time during the mining operation and after completion except as otherwise provided in this section. <u>All on-site CAMA and US Army Corps of Engineers designated wetlands and surface waters, including Waters of the US, shall not be included in the total area calculation.</u>

(3) Setbacks

(a) No activities associated with the mine, including but not limited to excavation activities, vehicular access

(except for driveways providing access to the site) and detention ponds shall be located within 100 feet of any property line and 300 feet of any residence, school, religious institution, hospital, commercial or industrial building, vehicular right-of-way or easement, or cemetery.

(b) Setbacks may be reduced by 50 percent when there is a complete visual screen at least six feet in height and an intermittent visual screen to a height of at least 20 feet between the mining activity and the adjoining use. Further, the Board of Commissioners may reduce non-modified setbacks by 50 percent when the mining activity adjoins a vacant parcel or farmland.

(4) Height

Mined materials shall not be stored in excess of 25 feet in height.

(5) Access

- (a) For operations that generate more than five trips per peak hour, at least 200 feet of continuous pavement shall be required onsite starting at the point the access road intersects with a public street or highway unless such public street is not paved. Acceleration and deceleration lanes shall be required by the county when it determines, subject to input from the North Carolina Department of Transportation, that such lanes will enhance public safety. All access roads should intersect with public streets at right angles, but in no case be less than 60 degrees. All streets and roads utilized to access the mining site shall be maintained free of dust and sediment and shall be properly graded and drained.
- (b) Where two or more accesses to the mining operation exist, traffic shall be routed to the access having the least negative impact on adjoining properties.

(6) Vehicles

All trucks hauling mined materials (i.e., sand, clay, topsoil) shall be covered with a tarpaulin.

(7) Hours of Operation

In no case shall the hours of operation be beyond sunrise to sunset. Mining activities shall not occur on Saturdays from Memorial Day through Labor Day or Sundays.

(8) Refuse

No bulk waste, hazardous waste, commercial waste, garbage, construction, or demolition waste shall be placed on site. Notwithstanding the forgoing, warehousing, and distribution of medical waste for processing or disposal off-site may be authorized by a Special Use Permit in accordance with Section 4.2.5.D.4 Warehousing and Distribution of Medical Waste.

(9) Mine Discharge Water

- (a) Discharging of water from the mine site shall be permitted subject to obtaining a state permit. The county may require periodic testing of the mine discharge water for settable solids, total suspended solids, chlorides, turbidity, and pH at the operators' expense. Such testing shall not exceed six tests per year. Discharging without proper state permits will result in initiating procedures to revoke the special use permit.
- (b) Mine discharge water, including but not limited to discharge stormwater, mine dewatering, and process wastewater, shall not adversely affect downstream properties. Drainage patterns shall not be altered so as to cause flooding off-site while the permit is valid and after reclamation. The county may require decreased discharge rates until the downstream impacts are resolved.

(10) Signage

'No trespassing' signs indicating that a mining operation is being conducted on the site shall be spaced a minimum of 250 feet apart.

(11) Reclamation

Reclamation shall be conducted simultaneously with mining operations. Annual reclamation reports shall be submitted to the Development Services Department within ten days of being filed with the State.

(12) Overburden

Overburden to be used for future reclamation shall be placed where it will not be disturbed by normal mining activities and shall be stabilized to reduce wind and water erosion. Use of overburden for earth berms is encouraged to reduce the impact of the mining operation on adjoining properties.

(13) Groundwater Level Impacts

No mining activities shall adversely affect surrounding in use wells, ponds or increase chlorides in downstream water bodies. If a mine that requires off-site dewatering is located within a 1,500 foot radius of an in use well, pond, or a source intrusion, saltwater hydrogeological reports performance guarantees with monitoring wells shall be required and the Board of Commissioners may consider adjusting setbacks or imposing other conditions on the applicant. Any person owning or operating a mining site in a manner that adversely affects an in use well through contamination or diminution of groundwater shall provide the well owner with a replacement water supply of equal quantity and quality. Any person owning or operating a mining site in a manner which creates lowering of pond levels below moderate drought levels or increases chloride levels downstream of dewatering operations shall decrease pumping rates until normal levels are reached. A rebuttal is permitted that contamination or diminution of water has been caused by the mining activity. Proposals for mining activities shall be accompanied by a hydrogeological report or performance guarantees with monitoring wells as provided in this section.

(a) Hydrogeological Report

A hydrogeological report may be required for mining activities with dewatering operations when an existing in use well is located within a 1,500 foot radius of the excavation area. The requirement to provide a hydrogeological report shall be determined by the County Engineer and shall be based on proximity, number, and depth of existing in use wells. The report shall be prepared by a registered engineer, geologist, or other professional approved by the County Engineer. The report shall include the following:

- (i) Location and description of all in use wells located within a 1,500 foot radius of the excavation area.
- (ii) Description of existing and proposed drainage patterns located within a 1,500 foot radius of the excavation area.
- (iii) Proposed mine construction and operation plan.
- (iv) Description of dewatering activities.
- (v) Field analysis to include aquifer tests using test well pumping to monitor water levels for a 24 hour period and appropriately located piezometers in a pattern to reflect the water table aquifer and drainage influences. Water level measurements shall be made in each piezometer to build and calibrate a model to analyze the hydrologic relationship between proposed mine operations and the surrounding environment.
- (vi) Hydrogeological model simulation demonstrating the effects of mine dewatering on the groundwater drawdown in a 1,500 foot radius of the excavation area.
- (vii) Description of the impacts on the quality and quantity of in use wells, lowering of ponds, and any potential saltwater contamination sources

and recommended mitigation action of any adverse impacts.

(b) Performance Guarantees and Monitoring Wells

The mine operator may offer a performance guarantee and monitoring wells, in lieu of hydrogeological reports, to replace any in use wells located within a 1,500 foot radius of the excavation area that have diminished in quantity or quality from the mines dewatering operation.

(i) Performance Guarantees

- (A) The mine operator shall guarantee replacement of water supply to that of equal quantity and quality of owners in use well.
- (B) A performance guarantee, in the form of a cash deposit, shall be established in the amount of \$3,000 per in use well to assure the operator has funds available should the need arise to replace any of the in use wells.

(ii) Monitoring Wells

Monitoring wells may be required for mining activities with dewatering operations when an existing in use well, pond, or a source of saltwater intrusion is within a 1,500 foot radius of the excavation area. A plan shall be provided outlining groundwater monitoring strategies which demonstrates the effects of pumping. Monitoring well requirements shall include the following:

(A) Monitoring wells to assess hydrogeological conditions shall be constructed to comply with the provisions of NCDEQ rule 15A NCAC 02C – Well Construction Standards.

- (B) Install to a depth equal to the maximum depth of the mine dewatering operation.
- (c) Monitoring wells shall be located between the excavation area and the in use wells or pond and located as close as possible to the mine property line. In no instance shall the monitoring well be located closer than one-third the distance from the in use well to the mine. In some instances, it may be necessary to install the well on adjacent properties, in which case a well construction permit will be required through NCDEQ.
- (D) Monitoring wells shall be installed prior to dewatering operations and maintained throughout the duration of the mine permit period.
- (E) Water levels shall be collected monthly and submitted quarterly to the Development Services Department.
- In the event an in use well or pond within (F) a 1,500 foot radius of the excavation area has an issue with quality or quantity of water levels, the monitoring well(s) water level data will be used to assess changes in the water table levels over the period of time the mine was dewatering. Decreased water table levels below in use well depths or pond depths shall constitute the requirement to replace an in use well so as not to be affected by the mine dewatering operations or to modify dewatering rates so as to not lower water levels in adjacent ponds below their moderate drought levels.

(14) Plan Requirements

In addition to the site plan requirements in the Administrative Manual, plans for mining operations shall include the following items:

- (a) Name of mine;
- (b) Name and address of property owner and mine operator;
- (c) Existing and proposed mine boundaries, including acreages;
- (d) Location of existing and proposed vehicular access and haul road(s);
- (e) Location and dimension of existing and proposed buffer(s) and berms;
- (f) Location, acreage, and height of stockpile and overburden disposal areas;
- (g) Location of 100-year floodplain and wetland boundaries;
- (h) Phasing of mining operations including reclamation;
- (i) Estimated noise levels at exterior property lines;
- (j) Location of existing and proposed drainage features within a 1,500 foot radius of the excavation area;
- (k) Location of existing in use wells and ponds within a 1,500 foot radius of the excavation area if the mine will use dewatering operations; and
- (I) Hydrogeological report, monitoring well plan, or performance guarantee as determined by the County Engineer addressing potential impacts to in use wells, ponds, or saltwater intrusion sources within a 1,500 foot radius of the excavation area.

(15) Expansion

An expansion of an existing mining operation shall comply with the following procedures and additional standards:

(a) Procedure

(i) With the approval of the Director, additional area within the site can be mined provided previously mined areas are reclaimed with non-

- contaminated soils to the original ground elevation in accordance with state standards. All reclaimed land shall be identified on a map recorded in the register of deeds.
- (ii) With the approval of the Director, an expansion of an existing mine operation not to exceed 40 percent of the total site area can be mined.
- (iii) In accordance with Section 2.3.14, the Board of Commissioners can approve an expansion of an existing mine operation not to exceed 50 percent of the total site area.

(b) Additional Standards

- (i) The existing mine has an active special use permit and State permit.
- (ii) The existing mine has been in operation for a period of no less than five years.
- (iii) The existing mine has maintained compliance with all applicable state and local permit regulations for the past five years of operation.
- (iv) The cumulative total of the mine's excavation area, including the requested expansion, shall not exceed 50 percent of the total site area. All on-site CAMA and US Army Corps of Engineers designated wetlands and surface waters, including Waters of the US, shall not be included in the total site area calculation.
- (v) All state mining permit modifications shall be obtained prior to any expansion activities being performed.

(16) Expiration

The special use permit shall be valid for the same permit period as the State of North Carolina mining permit not to exceed ten years from the date of issuance or for a shorter duration as deemed appropriate by the Board of Commissioners. In the event the property owner desires to continue the mining operation thereafter, he shall again petition the Board of Commissioners for a new permit.

(17) Extension of Expiration Time Period

The Director may, upon receiving a written request for extension, grant an extension not to exceed ten years provided the existing mine has maintained compliance with all applicable state and local regulations.

Item 3: Staff Suggested Statement of Consistency

The proposed language is consistent with the goals, objectives, policies, and action statements of the Imagine Currituck 2040 Vision Plan including:

- Land Use Goal 2. Carefully consider the design and location of intensive and potentially
 incompatible land uses to mitigate compatibility issues such as environmental quality,
 safety, overburdening local infrastructure, scale, use, design, location, and adverse
 effects.
- Land Use Policy 2.6 Proposed residential development that would expose residents to the harmful effects of incompatible land uses or to environmental hazards shall be minimized. (For example: farm operations, mining activities, etc.)
- Action CC-ACT-12: Evaluate and strengthen standards for mining activities. (Policy Foundation LU-2)
- **Environment Goal 1.** Preserve and protect the County's environmentally significant and sensitive lands and surrounding areas.

Item 4: The provisions of this Ordinance are severable and if any of its provisions or any sentence, clause, or paragraph or the application thereof to any person or circumstance shall be held unconstitutional or violative of the Laws of the State of North Carolina by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the remaining provisions which can be given effect without the invalid provision or application.

Item 5: This ordinance amendment shall be in effect from and after the, 2023.	day of
Board of Commissioners Chairman Attest:	
Leeann Walton Clerk to the Board	

DATE ADOPTED: MOTION TO ADOPT BY COMMISSIONER:
SECONDED BY COMMISSIONER:
VOTE:AYESNAYS
DI ANNING DOADD DATE: 4/40/2022
PLANNING BOARD DATE: <u>1/10/2023</u> PLANNING BOARD RECOMMENDATION: Approved
VOTE: 5 AYES 0 NAYS
ADVERTISEMENT DATE OF PUBLIC HEARING: 1/18/2023 & 1/25/2023
BOARD OF COMMISSIONERS PUBLIC HEARING: 2/6/2023
BOARD OF COMMISSIONERS ACTION:
POSTED IN UNIFIED DEVELOPMENT ORDINANCE:
AMENDMENT NUMBER: