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Green Acres Land Development Sand Mine – Special Use Permit

Appendix A – Project History, Purpose of Use Permit, and Narrative

1. Mr. Jeffrey A. Newbern, Sr., president of Green Acres Land Development, Inc., PO Box 67, Harbinger, NC 27941, desires to expand his currently permitted Green Acres Land Development Sand Mine on two parcels located at 7177 Caratoke Hwy (US 158), 0.5 mile south of the Jarvisburg, NC Post Office. The two parcels are owned by Green Acres Land Development, Inc, and are identified in the Currituck County Tax Office as Parcel ID No.0109-000-0061-0000 (north parcel) and No. 0109-000-061A-0000 (south parcel), Deed Book 602, Deed Page 392, and Deed Book 602, Deed Page 388, being approximately 58.81 acres total, zoned Agricultural, and have been historically used for sand mining and agricultural activities.

2. The mine shall be titled the Green Acres Land Development Sand Mine and will allow the applicant and operator, Jeffrey A. Newbern, Sr., to excavate sand and topsoil in a 28.54-acre excavation, operating within an approved affected area of 35.20 acres and an approved permit area of 58.81 acres. The sand mine will have an average depth of 25 feet below natural ground level, and a maximum depth of 30 feet below natural ground level.

3. The excavated pit, stockpiles and processing areas will be constructed and located on the 58.81-acre combined parcels. There are 1.42 acres of wetlands on the south parcel (delineated by USACE in 2019, no expiration). The 28.54-acre excavation will encompass 49.73% of the 57.39 acres of uplands on the parcels, with a maximum percentage of 50% required by Currituck County Ordinance. Permitted acreage will have sufficient room for a sand mining operation.

4. The Green Acres Land Development Mine has been operating since 2002 and has undergone six approved modifications to the State permit to expand excavation acreage or modify operating procedures. There have been no recorded violations of the State or County mining permit in the last twelve months.

5. Access to the excavation area will be via an existing 200-ft long by 35-ft wide paved driveway with an entrance onto Caratoke Highway, located west of the excavation area. The access road will be gated and locked at the entrance 200 feet from Caratoke Highway and 152 feet from the Caratoke Highway right-of-way. Vehicles owned or contracted by Green Acres Land Development will be allowed onsite by right, all others by permission only.

6. Green Acres Land Development will complete the development strictly in accordance with the plans submitted to Currituck County Planning and Inspections Department, and the North Carolina Department of Environmental Quality, Division of Energy, Mineral and Land Resources.

7. After completion of the project the remaining pit will become a 28.54-acre pond, utilized for environmental habitat and recreational use by the landowner, and will increase the scenic and recreational value of the property.

8. The property contains one zoning designation: AG, Agricultural. All mining activities occur within the AG, Agricultural zoning district. Sand mining is a Permitted Use in an AG, Agricultural zoning district with an approved Use Permit.

9. The property is surrounded by the following land uses:

   A. North: undeveloped woodland, zoned General Business; undeveloped woodland, zoned Agricultural.
   B. South: Meadowlake subdivision, which has twelve parcels adjacent to Green Acres Mine. Six are developed parcels with one business and five residences zoned GB General Business, five undeveloped parcels zoned GB General Business, and one developed parcel with residence zoned Ag Agricultural.
   C. East: two undeveloped parcels with woodland, zoned SFM Single Family-Mainland.
   D. West: three undeveloped parcels zoned Ag Agricultural and GB General Business

10. Currituck County Soil Maps indicate one type of soil on the property: Pt (Portsmouth fine sandy loam) CnA (Conetoe loamy sand), No (Nimmo coarse sandy loam), and Mu (Munden fine sandy loam.

11. Current Currituck County Flood Maps indicate the entire mining permit area to be located in the area of minimal flood hazard, outside of the 500-year flood plain (Flood Zone X, 0.2% annual chance flood hazard) according to FIRM panel map 3720992000K, dated December 21, 2018. Flood zone lines near the permit area are illustrated on the attached parcel map.

Appendix B – Currituck County Applicable Standards, Findings of Fact

1. The proposed use will not endanger the public health or safety.

    a. Site of the Proposed Use is located 330 feet from Caratoke Highway (US 158). Proposed Use access road will intersect with Caratoke Highway via a paved construction entrance at an 91.0° sight angle (north) and 92.5° (south), which is within specification of county UDO Section 4.2.5.A(5)(a). Caratoke Highway is a four-lane public road and is considered heavily travelled. The last traffic count taken in 2023 by NCDOT along Caratoke Highway near the Green Acres parcel showed an annual daily traffic count of 20.000 vehicles per day, an average of 833 vehicles per hour. The mine operator estimates there will be an maximum of 20 vehicles per day leaving the mine site and intersecting with Caratoke Highway, an increase of 1-2 vehicles per hour (0.24%) over the current traffic volume. Maximum trips per hour are anticipated to average 2-3 during peak operation of the mine.

    b. Closest occupied residence (Bettinger) to the Proposed Use area is located 360 feet from location of mining activity and 560 feet from the proposed location of the dewatering pump. Residence is screened by 280-ft wide area of dense woodland. All other residences in Meadowlake subdivision are located a minimum of 400 feet from mining activity with 100-ft wide screen of woodland and 8-ft tall berms. A comparison of noise levels was taken from a similar sand mine operation utilizing a dewatering pump located at Parks Pit sand mine in Elizabeth City. Noise levels measured there across open land were found to be 47.7 decibels at 520 feet from the dewatering pump operation and 48.5decibels at 1000 feet from other mine activity, below the maximum 6o dB allowed by Chapter 9, Article II, Section 9-33 of the Currituck County Code of Ordinances. Noise levels were also measured along Caratoke Highway at the same distances from the highway as the closest residences to the mine site. Noise levels were found to be 48.8 - 52.4 decibels. The noise that may be generated by the Proposed Use will not be at a level that would materially endanger the public health and safety.

    c. The Proposed Use will have adequate sediment and erosion control measures in place around all active areas of the site, including erosion control berms, groundcover on active areas to control erosion, and construction entrances on access roads to prevent sedimentation from leaving the site. All stormwater will drain internally to the mine excavation. Except for a 200-foot long by 35-foot-wide paved driveway, there will be no impervious surfaces inside the permit area.

    d. **The Green Acres Land Development Mine will not be dewatered for mining purposes.** The operator will perform excavation activities with a long-reach excavator and loaders.

    e. Per the approved DEQ Mining Permit #27-47, Operating Condition III.4.C, dewatering activities will be limited to pumping to the pipe that discharges to the residential lake located south of the

mine. No dewatering shall be permitted to the hydration ditch.

f. At the request of property owners in the Meadowlake subdivision located south of the mine, the operator pumps fresh water by pipe from Green Acres Mine to Meadowlake Pond in Meadowlake Subdivision, to augment water level in the pond. Water amount added to Meadowlake Pond is approximately 12,000 gallons per day. This is the only outside discharge from mine dewatering from the Green Acres Mine.

g. Previously installed groundwater monitoring well #1 will continue to be maintained on north side of excavation area (see map), located 122 feet north of excavation edge. Monitoring well is checked monthly for groundwater levels and results reported quarterly to Currituck County Planning & Inspections Department.

h. Previously installed groundwater monitoring well #2 will continue to be maintained on south side of excavation area (see map), located 290 feet from proposed excavation edge. Monitoring well is checked monthly for groundwater levels and results reported quarterly to Currituck County Planning & Inspections Department.

i. Water removed from Green Acres Mine for water supply to Meadowlake subdivision pond will continue to be tested quarterly by a State-certified laboratory for turbidity, total suspended solids, enterococcus, and on premises for salinity and pH. The purpose of this analysis is to prevent excess sedimentation from leaving the mining activity area. Results from the analyses are reported quarterly to Currituck County Planning and Inspections Department.

j. Data from Currituck County Water Department indicates approximately thirty-three (33) active groundwater pumps and wells in use within 1500 feet of the proposed Green Acres Mine expansion area, closest being 420 feet away.

2. The Proposed Use will not injure the value of adjoining or abutting lands and will be in harmony with the area in which it is located.

   a. Mining activities in the subject parcel will occur behind a natural full growth foliage visual screen minimum 60 feet wide north and south of mining activity which will limit the impact of noise from the Proposed Use and will screen the activity from adjoining properties. 20-ft tall x 35-ft wide intermittent visual screening exists westward between mining activity and Caratoke Hwy. One residence located 300 feet west of mining activity is screened by 100-ft wide full growth woodland. The Green Acrees mine site is adjacent to undeveloped farm fields to the west and undeveloped

woodland to the east. Mining activities will occur behind other internal sand berms which, along with distance, will screen activities from the east and west.

b. The Proposed Use will comply with the setbacks required by UDO Section 4.2.5.A(3)(a) and will include all landscape buffers that meet the requirements of UDO Section 4.2.5.A(3)(b), both of which will limit the Proposed Use's impact on adjoining property.

c. The Applicant has requested the services of Mr. Kim B. Tate, SRA, RES, of Tate Appraisal & Consultation, Inc., who will present appraiser testimony on the issue of whether the Proposed Use would substantially injure the value of adjoining property to the Green Acres mine site.

d. The Proposed Use is intended to serve the growing residential and commercial area of Lower Currituck County in which the Green Acres mine site is located. Sand is a required component in many types of residential and commercial construction, and the location of the Proposed Use will benefit the local community with reduced costs of this commodity due to lower transportation costs.

e. Green Acres Land Development Mine site is located on a parcel zoned AG Agricultural. Mining is a permitted use on a parcel zoned AG Agricultural with an approved Use Permit.

3. The Proposed Use will be in conformity with the Land Use Plan or other officially adopted plan.

a. The Green Acres mine site parcel is in the Jarvisburg Land Use Plan Subarea and is designated as a Limited Service class in the Currituck County Land Use Plan with low-density growth. There will be no structures or residential development on the Subject Property.

b. The Subject Property is in the AG Agricultural zoning district. Sand mining is a permitted use in an AG Agricultural zoning district with an approved Use Permit and is therefore not an incompatible land use.

c. The Proposed Use is believed to be in conformity with the Currituck County Land Use Plan and the Unified Development Ordinance.

4. The Proposed Use will not exceed the county's ability to provide adequate public facilities, including, but not limited to, schools, fire and rescue, law enforcement, and other county facilities. Applicable state standards and guidelines shall be followed for determining when public facilities are adequate.

a. The Proposed Use will not add any additional burden on schools, fire and rescue, law enforcement or other public facilities due to the nature of the Proposed Use itself. The site will have no structures, no electrical, phone or public water requirements. The remaining pond will be available as a water source

for usage by EMS if needed. The proposed Use is expected to have minimal to no impact on the County's public facilities.

Additional Considerations for the Operation of the Green Acres Land Development Mine

1. The applicant shall complete the development strictly in accordance with the plans submitted to and approved by the Currituck County Board of Commissioners.
2. All trucks hauling mined or quarried materials (i.e., sand, clay, topsoil) shall be covered with a tarpaulin when materials extend above the raised board of the truck.
3. All trucks hauling mined or quarried materials will utilize the single paved mine access road entrance to Caratoke Highway. A locking gate provides security to the access road entrance.
4. The mine operator estimates there will be a maximum of 20 vehicles per day leaving the mine site and intersecting with Caratoke Highway, an increase of 1-2 vehicles per hour over the current traffic volume. Maximum trips per hour are anticipated to average 2-3 during peak operation of the mine.
5. No bulk waste, hazardous waste, commercial waste, garbage, construction, or demolition waste will be placed on the site.
6. A weekly log shall be maintained by the operator to ensure on-going maintenance of sediment and erosion control devices.
7. This Special Use Permit is requested to be valid for 10 years.
8. "No Trespassing" signs will be posted around the mining permit area at a maximum distance of 250 feet apart indicating that a mining operation is being conducted on the property.
9. Copies of the following documents shall be provided to Currituck Planning and Inspections Department prior to the start of this project:
    a. Approved NCDEQ Division of Energy, Mineral & Land Resources mining permit.
    b. Approved NCDEQ Stormwater Program and National Pollutant Discharge Elimination System general permit for removing water from the Green Acres Mine site and transfer to Meadowlake Pond..

c. Approved water usage registration with the NC Division of Water Resources.

10. The hours of operation of the mine shall not be beyond sunrise to sunset. No mining activities will be conducted on Saturdays from Memorial Day through Labor Day, or any Sunday.

11. A sign shall be placed at the entrance to the property showing the applicant's name, telephone number and basic permit information.

12. All provisions of state and federal permits shall remain valid, and any conditions required within the permits shall be upheld throughout the lifetime of the mining operation.

13. If any conditions affixed hereto or any part thereof shall be held invalid or void, then this permit shall be void and of no effect.

14. Sequence of events for the development and operation of the Green Acres Land Development Mine:

    a. Operator will obtain all required mining permits from NCDEQ.
    b. Operator will maintain existing 35' wide paved construction entrance joining intersection of mine access road and US 158 Caratoke Highway. Paved entrance will be 200 feet long.
    c. Operator will maintain existing locking gate to be located across the mine access road entrance 80 feet from intersection with the Caratoke Highway right-of-way.
    d. Operator will remove topsoil in unexcavated area down to 2.5 feet below natural ground level, and stockpile overburden for use in erosion control berms.
    e. Operator will construct a 2-ft tall x 10-ft wide (2:1) vegetated berm for erosion control along the perimeter of processing areas.
    f. Operator will maintain existing foliage and cultivated field visual screen along perimeter of the affected area.
    g. Operator will maintain existing Godwin Dri-Prime or similar model water transfer pump at the south corner of the main excavation. The pump will remove approximately 12,000 gallons of water per day from the main excavation and discharge it into Meadowlake Pond adjacent to excavation for use by residents upon their need.
    h. Operator will continue existing excavation of the main pond (28.54 acres) by digging with long-reach excavator and removing sand & topsoil to maximum depth feasible without dewatering the excavation.
    i. 3:1 cut slopes will be constructed around excavation edge down to normal groundwater level. As water is removed from excavation, 2:1 cut slopes will be constructed below normal groundwater level around excavation edge.
    j. Pond will be excavated to average 25 feet and maximum 30 feet below normal ground level.

Excavated material (sand) will be stockpiled in unexcavated portion of proposed excavation area. Sand will be loaded onto trucks and removed from area via paved construction entrance to US 158 Caratoke Highway.

k. After all excavation is complete, operator will establish groundcover on 3:1 above-water slopes of excavation and will construct a minimum 8-ft wide 4:1 berm around excavation edge to prevent erosion of pond slopes, with outside edge of berm graded down to natural ground level.
l. Former stockpile / berm areas and processing areas outside of main excavations will be graded, leveled, and seeded with groundcover. Areas will be allowed to return to previous non-erosive field state.
m. Former hydration swale area will be filled with soil removed during its construction. Ground will be levelled and sown with ground cover.
n. Internal roadways and haul roads will be graded, leveled, seeded with groundcover, and allowed to return to natural field state. A field path will remain around the perimeter of the excavated pond.
o. Remaining affected areas inside main permit area will be fertilized and returned to natural field state.
p. Remaining 28.54-acre pond will be utilized by Green Acres Land Development, Inc. for scenic & recreational purposes, and for wildlife habitat.

15. Reclamation of the sides of the excavated pond and the general permit area will be conducted simultaneously with mining operations according to NCDEQ specifications. Annual Reclamation Reports will be submitted to Currituck County Planning and Inspections and to NCDEQ in August of each year.

16. Green Acres Land Development will maintain a State-required minimum 25-ft wide bonded unexcavated buffer (no excavation in buffer, but roadways, berms and erosion & sedimentation control measures may be installed within it) between mining activity and the undisturbed buffer, per NCDEQ mining permit requirements.

17. Green Acres Land Development will maintain a minimum 100-ft property line setback, required by Currituck County ordinance, on all sides of the permit area between affected area and adjacent property lines.

18. Green Acres Land Development will maintain a minimum 300-ft setback, required by Currituck County ordinance, on all sides of the permit area between affected area and adjacent residences, commercial buildings, or public highways.

19. Green Acres Land Development will maintain an existing reclamation bond of $30,800 with NCDEQ to guarantee correct reclamation of the property once excavation has been completed.

20. All provisions of State and local permits shall be met.

21. If at any time the NCDEQ permits for this mining project are revoked or suspended, the revocation or suspension will cause the Currituck County Use Permit to become void.

22. Any modifications to the State permit will be filed within 10 days to Currituck County Planning and Inspections Department.

23. Surrounding areas use (agriculture) will not be affected by location of sand mine. Sand mine will enhance storm water drainage of adjacent fields and can supply water for irrigation efforts. Excavated pond can also serve as water source for the local volunteer fire department and EMS service if needed.

24. On a yearly basis, the operator anticipates an average of no more than 4-5 people will be present for excavation purposes on site at any given time. Vehicular traffic will be minimal, operator anticipates a daily maximum of 20 trucks transporting sand. Noise from loaders and excavators will be mitigated by presence of sand berms and foliage along perimeter of sand mine. Dewatering pump will be located at furthest point away from residences in corner of excavation surrounded by berms or below ground level, running at idle speed.

25. No fume generation or land clearing burning will be necessary to prepare area for excavation.

26. Dust from access and haul roads will be controlled by 10-mph maximum speed limit for haul trucks on the premises, and application of water to roads will help minimize dust. Topsoil stockpile areas and berms will be stabilized with groundcover to reduce wind and water erosion.

27. The mine access road entering from Caratoke Highway will be properly graded and drained to minimize potholes and standing water. Roadside drainage ditches will have rock dams installed to mitigate sedimentation leaving the site.

28. Limited ingress/egress to site will insure safe traffic movement. Trucks will exit Green Acres mine site on a paved access road directly onto four-lane US 158 Caratoke Highway. Proposed maximum removal is up to 20 truckloads per day.

29. No explosives will be used during excavation of the Bayview Sand Mine.

30. No solvents or other chemical reagents will be stored onsite during excavation of the Green Acres Mine.

31. Green Acres Land Development will maintain a locked gate at the mine access road entrance to help prevent inadvertent public entry.

32. Drainage patterns of the area will not be altered to cause flooding off-site while the permit is valid and after reclamation.

33. An approved NCDEQ Division of Energy, Mineral & Land Resources Mining Permit for modification of the Green Acres Land Development Mine, and an NCDEQ DEMLR NCG02 Notice of Intent General Permit application for dewatering is on file with the Currituck County Planning and Inspections Department.

34. An NCDEQ DEMLR Stormwater permit application will be submitted if required by NCDEQ. A stormwater permit has not been required thus far due to minimal impervious surface impact in the affected area.

35. No sewage will be generated during the mining operation or after reclamation.

36. No permanent constructions will be present on the mine site or permit area.

37. No single-family homes or dwellings will be constructed on this property during the permit period.

38. Sole drinking water supply in this area is well water. No drinking water wells are planned to be in this project area. Closest private well or septic system is located 360 feet from proposed excavation edge.

39. The proposed mining operation should not negatively affect or impact the ability of Currituck County to provide public services. The remaining sand pit will be available as a water source to the local Volunteer Fire Department and EMS.

The applicant shall complete the development strictly in accordance with the plan submitted to and approved by the Currituck County Board of Commissioners, in addition to those additional requirements contained herein. The applicant acknowledges that if any of the conditions affixed hereto or any part thereof shall be held invalid or void then this permit shall be void and of no effect.

Ken Elliott
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For Jeffrey A. Newbern, Sr., president
Green Acres Land Development, Inc.
May 21, 2025