

# EVERYONE 12+ IS NOW ELIGIBLE!

Everyone 12 and older in SC is now  
eligible for the COVID-19 vaccine!  
Get your vaccine ASAP.

THE COVID-19 **VACCINE**



**COVID-19 Vaccine Information Line**  
**1-866-365-8110**

**[www.scdhec.gov/vaxfacts](http://www.scdhec.gov/vaxfacts)**

# Proposed Fairfield I-77 Quarry **PUBLIC MEETING**



To avoid echoing or feedback, all lines are muted.



At the end of the presentation, we will unmute and call upon those who would like to speak.



This virtual meeting will be recorded and posted on our webpage.

# Option to Call In

If you are experiencing audio problems, join the virtual hearing by phone:

Phone number: **1 (864) 558-7311**

Access Code: **168 852 451#**



Exits the hearing. (If you accidentally exit the hearing, you can rejoin.)



# Proposed Fairfield I-77 Quarry

Mine Operating Permit  
Application I-002329

Fairfield County

**PUBLIC MEETING**



# Agenda

- Gathering Time & Instructions for Participating Remotely
- Introductions & Opening Remarks
- DHEC Presentations
- Questions & Answers Period
- Closing Remarks
- Meeting Adjourned

# Mining Topics

- Mine Permitting Process
- General Information
- Proposed Permitted Area
- Reclamation
- Next Steps
- Addressing Expressed Concerns

March 16,  
2021

- DHEC-Mining and Reclamation Program Receives Application
- Begins Administrative Review

April 15,  
2021

- DHEC-MR Publishes Initial Public Notice
- Begins Technical Review
- DHEC-MR Acknowledges Public Hearing Request (May 12, 2021)

July 22,  
2021

- DHEC holds a Public Meeting
- Technical Review Continues

August 05,  
2021

- DHEC holds a Public Hearing
- **Comment Period Ends August 20, 2021**
- Technical Review Continues

TBD

- DHEC to Make Mine Permitting Decision
- Summary Response to Comments
- Opportunity to Appeal

# Proposed Site

TMS# 166-00-00-018

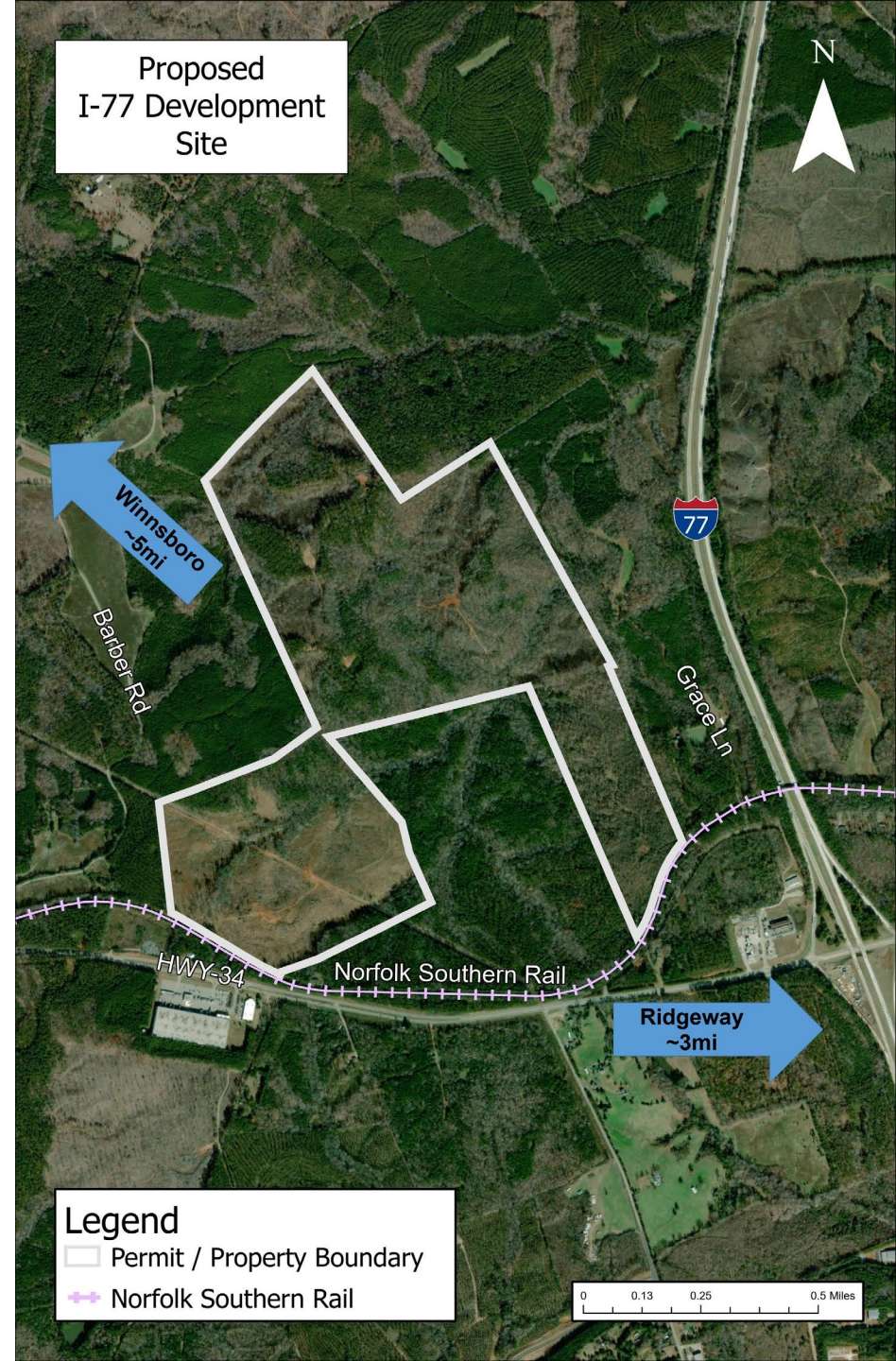
166-00-00-028

166-00-00-030

Total Area: 416.8ac

Land Use: Undeveloped

Owner: Luck Stone Corporation  
(under purchase agreement)





# Proposed Permitted Area

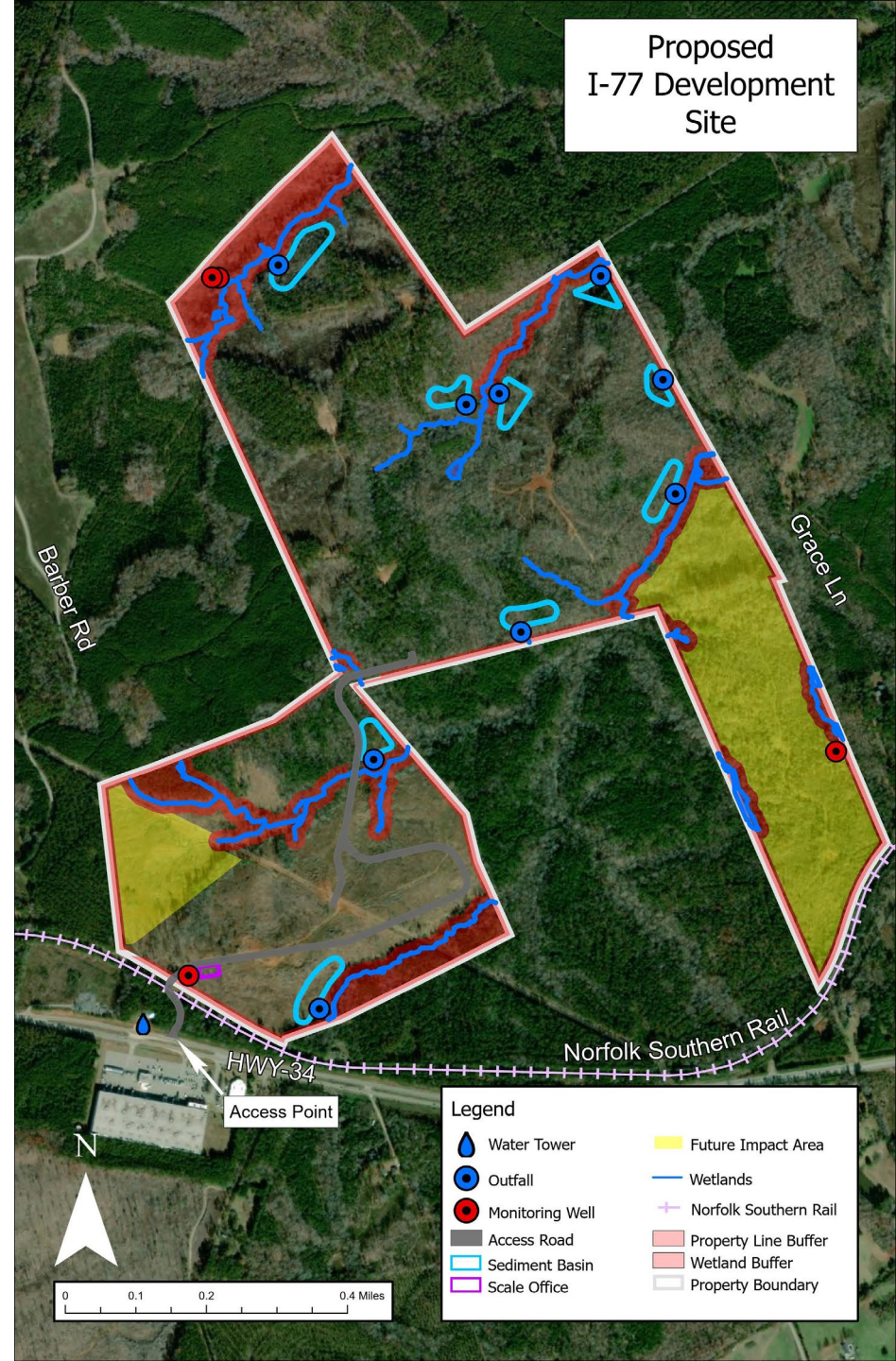
Total Area: 416.8ac

Affected Area: 259.5ac

Buffer: 74.9ac

Future Reserves: 77.9ac

Buffer Area is defined as setback or areas that will not be disturbed beyond the pre-mine natural state.

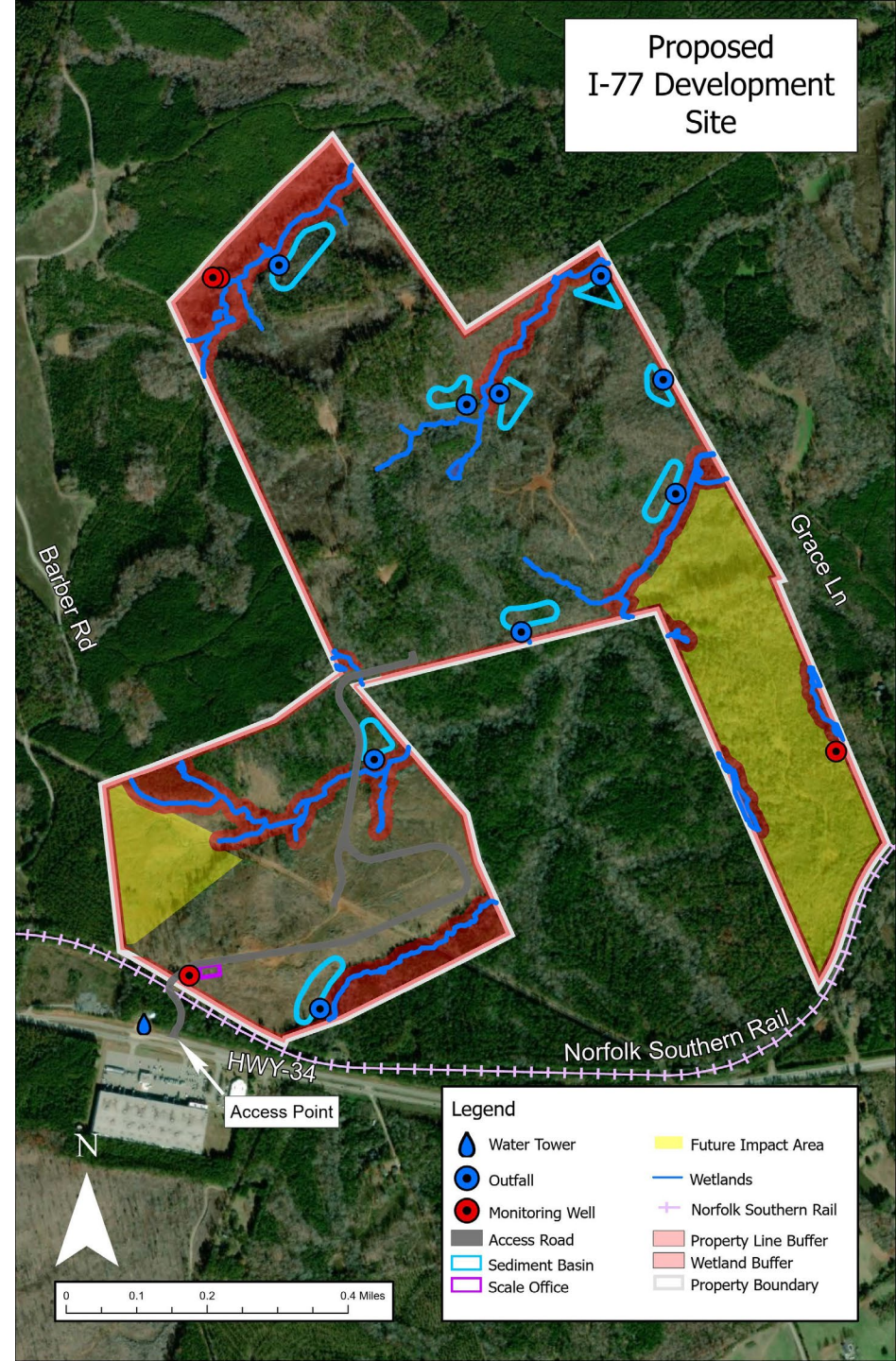


# Proposed Permitted Area

Total Area: 416.8ac  
Affected Area: 259.5ac  
Buffer: 74.9ac  
Future Reserves: 77.9ac

Prior to the initiation of activity in future reserves, the operator shall:

- submit detailed mine and reclamation plans to DHEC for approval
- Receive approval from USACE to disturb wetlands or stream channels
- Adjust reclamation costs to cover proposed activities



# Proposed Permitted Area

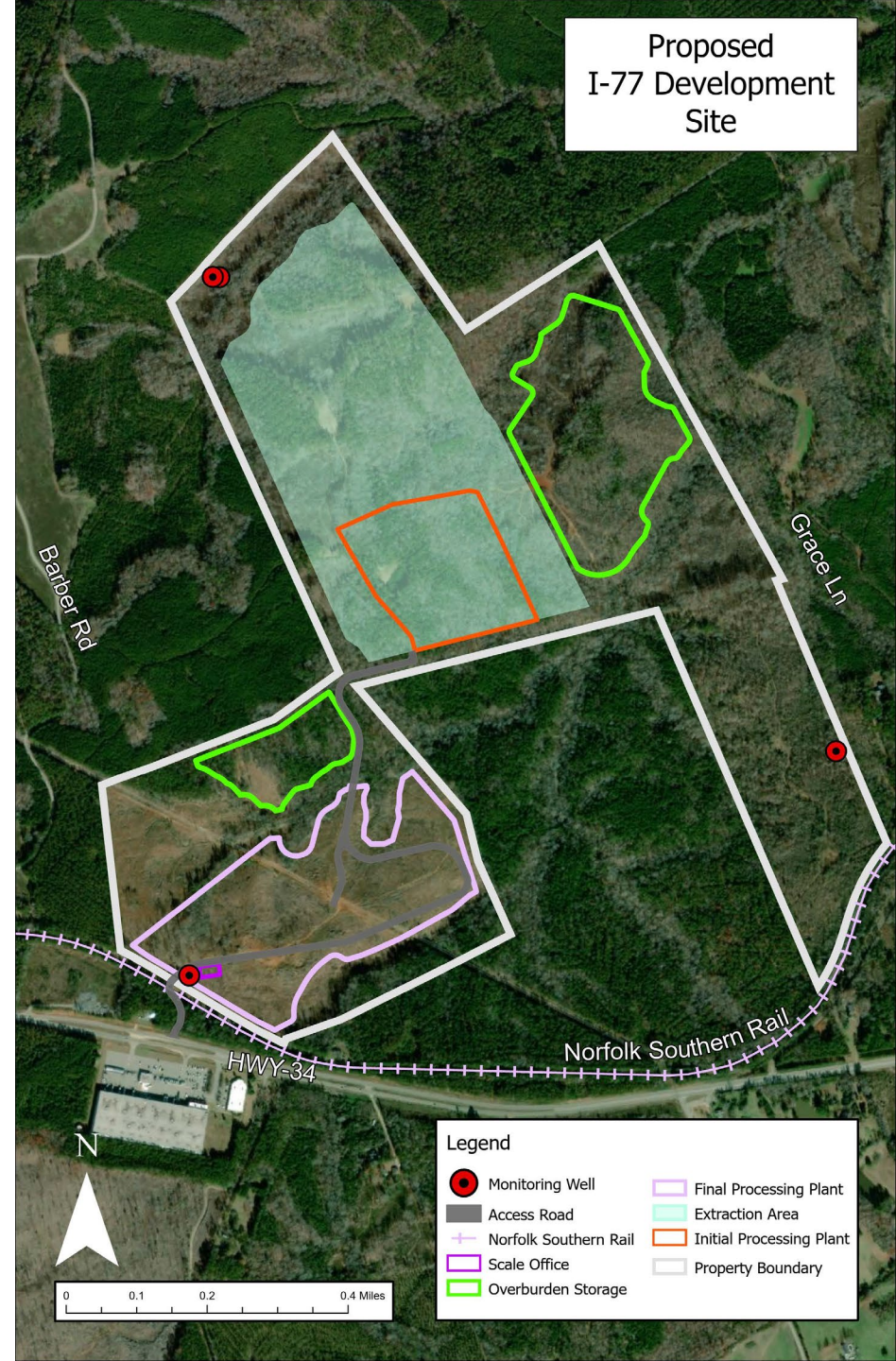
Total Area: 416.8ac

Affected Area: 259.5ac

Buffer: 74.9ac

Future Reserves: 77.9ac

- Green - Overburden Stockpile Area
- Teal - Pit Area
- Orange – Initial Plant Area
- Purple - Office, Scale House, Maintenance Area, Haul Road, and Final Plant Area



# Proposed Mining Process

- Installation of BMPs
- Clearing of trees and vegetation
- Topsoil removed and stockpiled for future reclamation
- Overburden stockpiled and reclaimed as soon as feasible
- Pit developed and dewatered, as needed
- Granite processed and stockpiled in plant area



Silt fence



Brush Barrier



Stormwater Basin



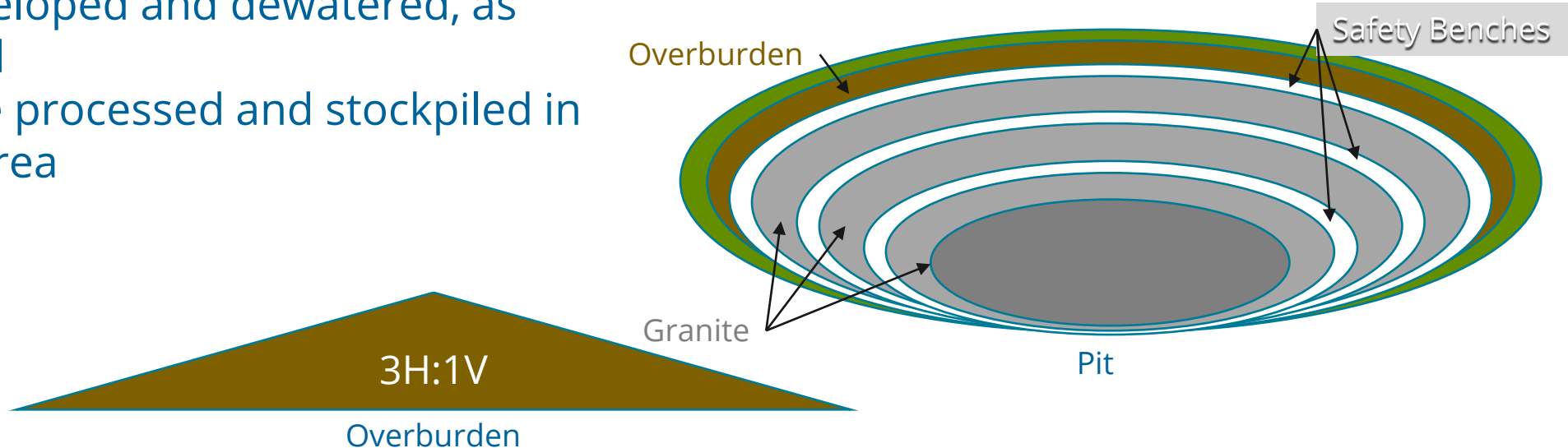
Water Truck



Check Dams

## Proposed Mining Process

- Installation of BMPs
- Clearing of trees and vegetation
- Topsoil removed and stockpiled for future reclamation
- Overburden stockpiled and reclaimed as soon as feasible
- Pit developed and dewatered, as needed
- Granite processed and stockpiled in plant area





Example of a granite quarry excavating ore

## Proposed Mining Process (cont.)

- Maximum proposed depth: 485ft.
- Applicant requests permission to blast
  - Landowners with structures within a half mile of blasting will be offered a pre-blast survey
- Applicant may request to mine permitted future reserve areas (requires DHEC approval)

# Reclamation

**Reclamation** is the planned process for restoring the affected land to a useful purpose while protecting natural resources of the surrounding area.

- Reclamation plan included in application
  - Will be reclaimed to ponds and grasslands
  - Land is sloped and graded during the mining process
  - Stockpiled topsoil used to enhance vegetation
- Reclamation bond is required prior to permit issuance to ensure that reclamation is completed



Emergency Water Reservoir  
Loudon County, Virginia



Example of a reclaimed granite quarry

# Other DHEC Permits

- Bureau of Air Quality
  - Air Synthetic Minor Construction Permit
- Bureau of Water
  - National Pollution Discharge Elimination System (NPDES) General Permit
  - Stormwater Pollution Prevention Plan (SWPPP)

# Agency Responses

- SC State Historic Preservation Office
  - Requested intensive survey performed
- SC Department of Natural Resources
  - conducted site visit with applicant and DNR on May 11, 2021
  - recommendations received on May 14, 2021
  - DNR offered no objection beyond these recommendations
- Town of Ridgeway
  - Expressed concerns for Public Water Supply Well

## Common Concerns

- General blasting concerns.
- Dewatering will lessen the groundwater supply for nearby residents.
- Increased truck traffic will be unsafe for neighborhood residents.
- Protection of cultural/historic places.
- Impacts to potential Scenic Byway project.
- Impacts to Lake Wateree.

# Blasting

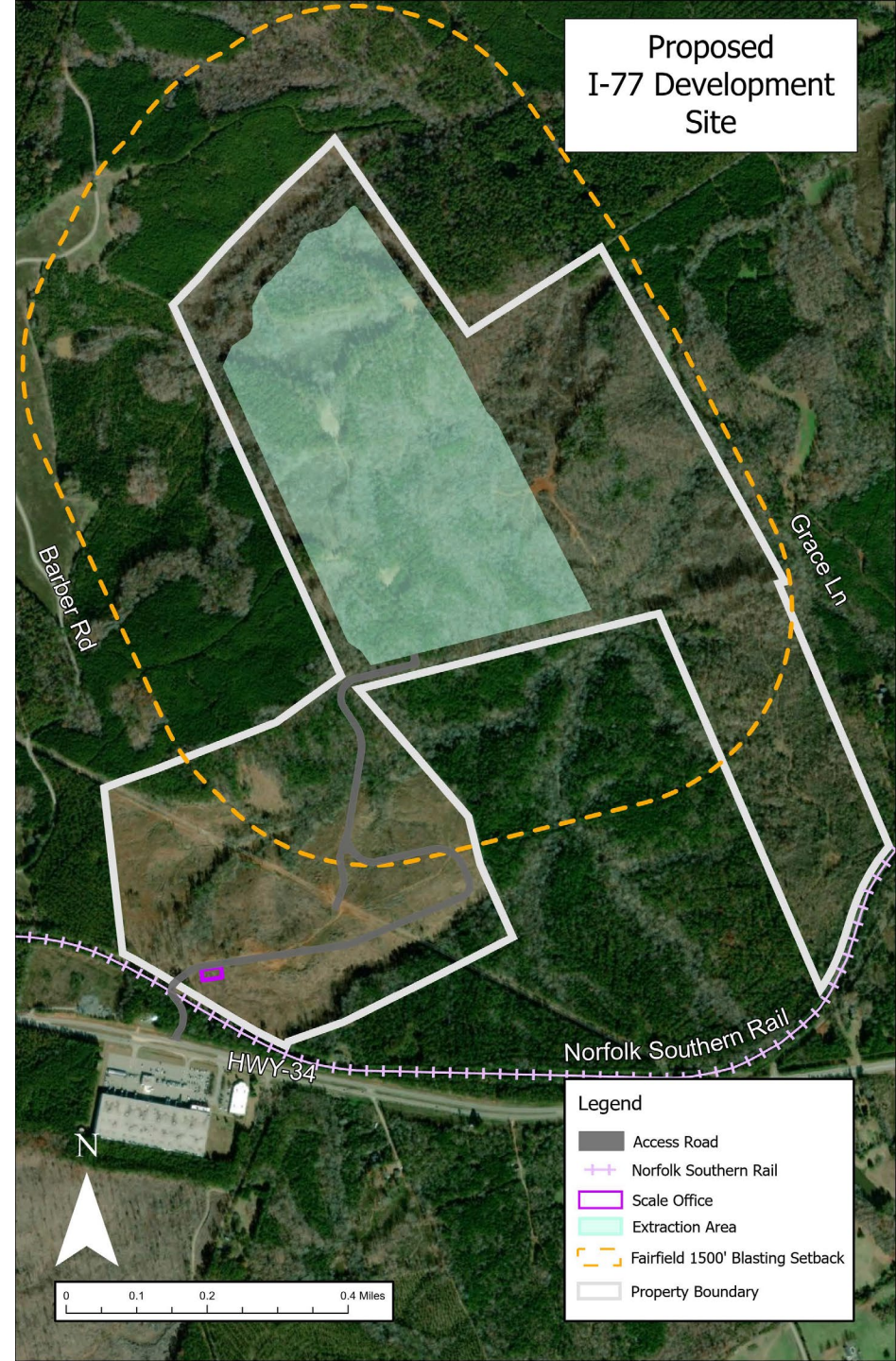
Typically, 2-4 times a month

“...a safe particle velocity maximum of 2.0in/sec is recommended for all houses.”

--U.S. Bureau of Mines

DHEC limits maximum particle velocity to 1.0in/sec.

All residences >1,500ft from blasting



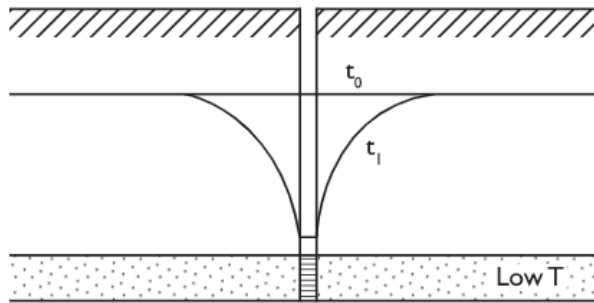
## Common Concerns

- General blasting concerns.
- Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
- Increased truck traffic will be unsafe for neighborhood residents.
- Protection of cultural/historic places.
- Impacts to potential Scenic Byway project.
- Impacts to Lake Wateree.

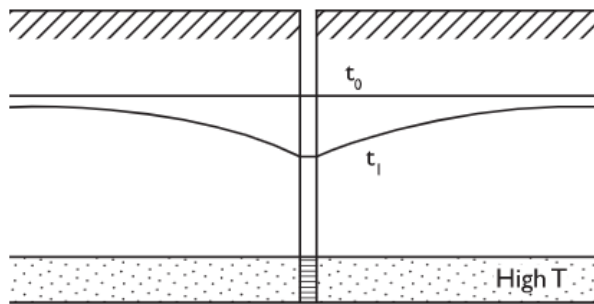
# Dewatering

Maximum Depth: 485ft.

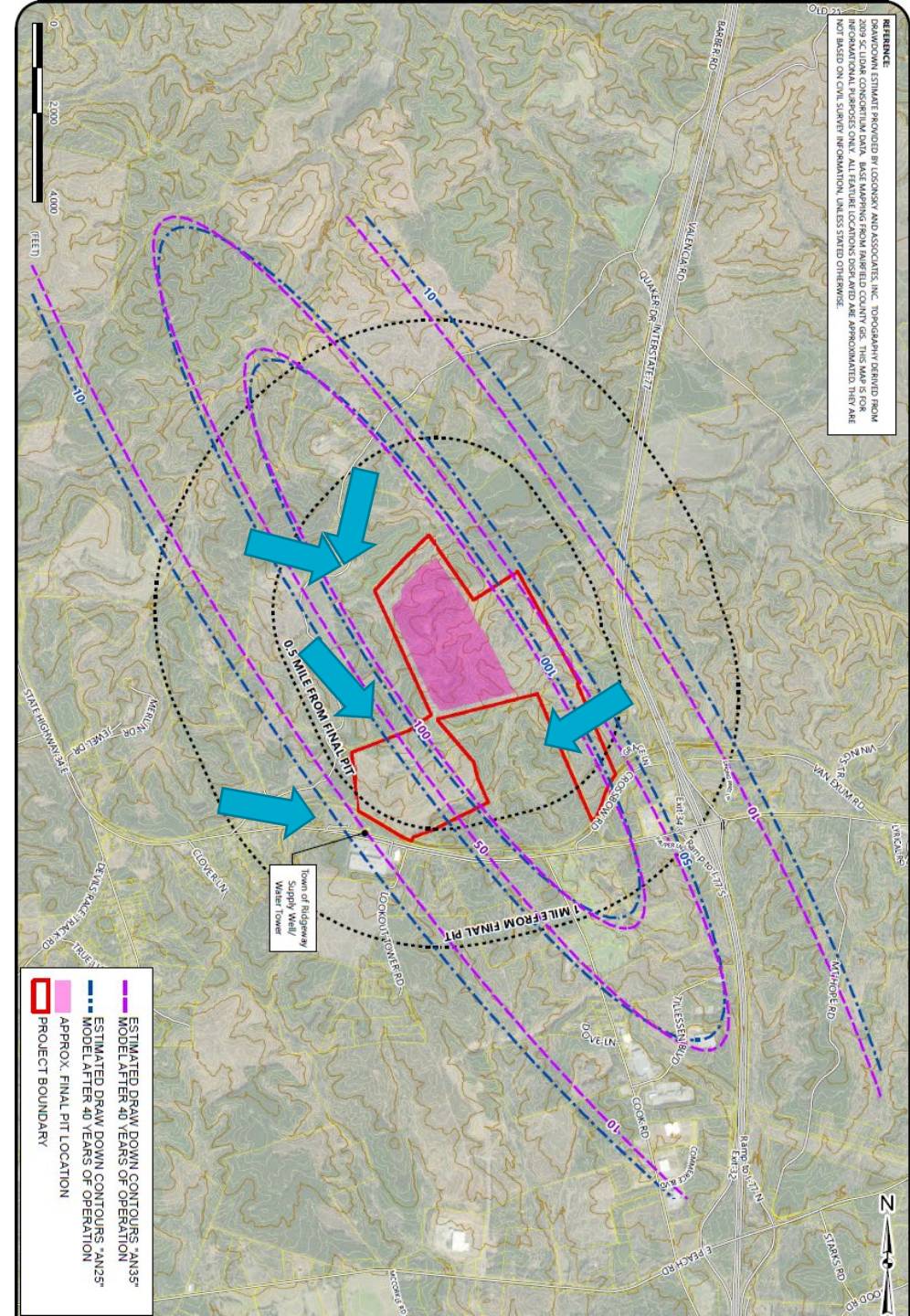
Primary Dewatering Layer: Granite

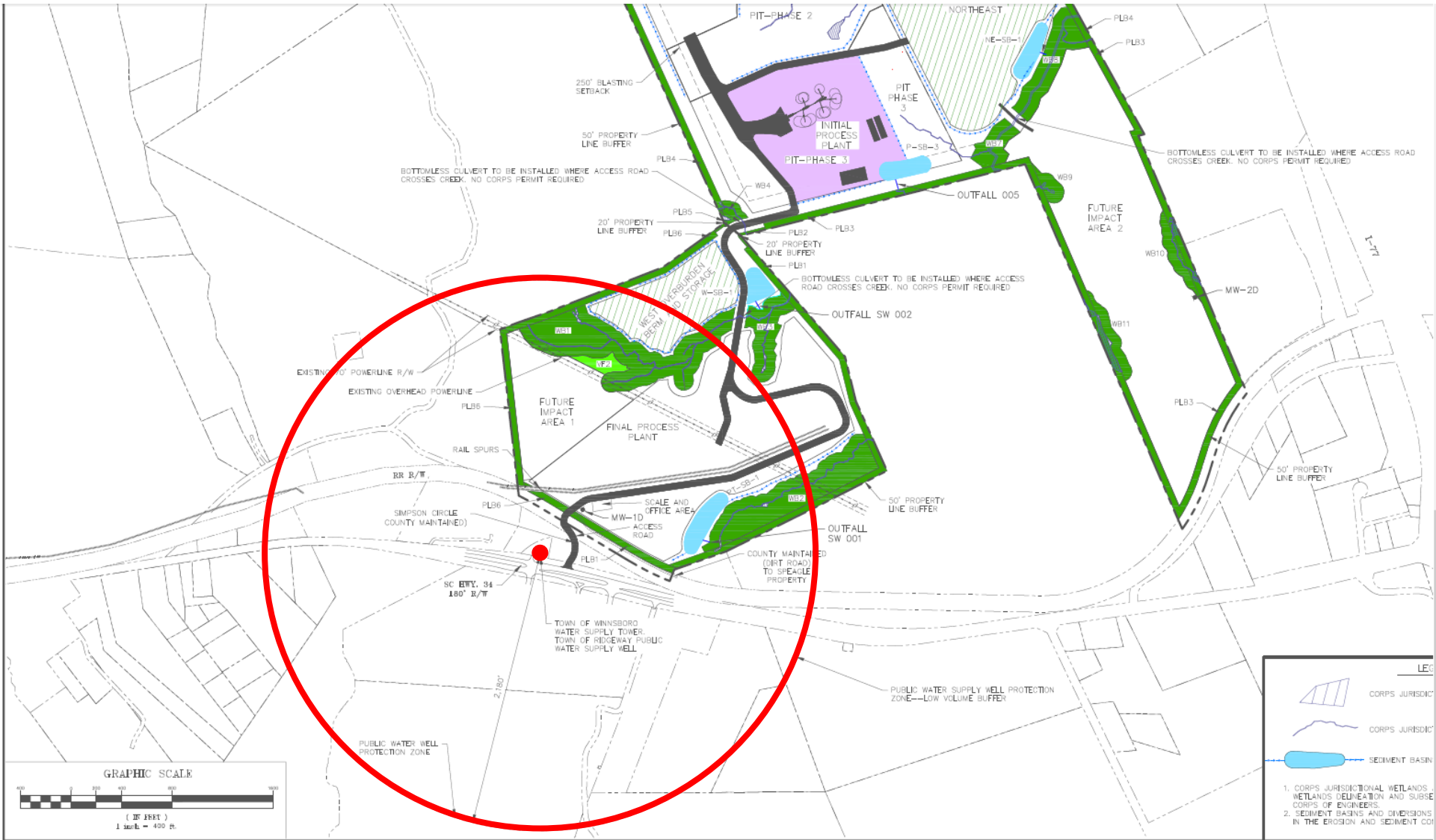


(a)



(b)







## Common Concerns

- General blasting concerns.
- Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
- **Increased truck traffic will be unsafe for neighborhood residents.**
- Protection of cultural/historic places.
- Impacts to potential Scenic Byway project.
- Impacts to Lake Wateree.

## Increased Truck Traffic

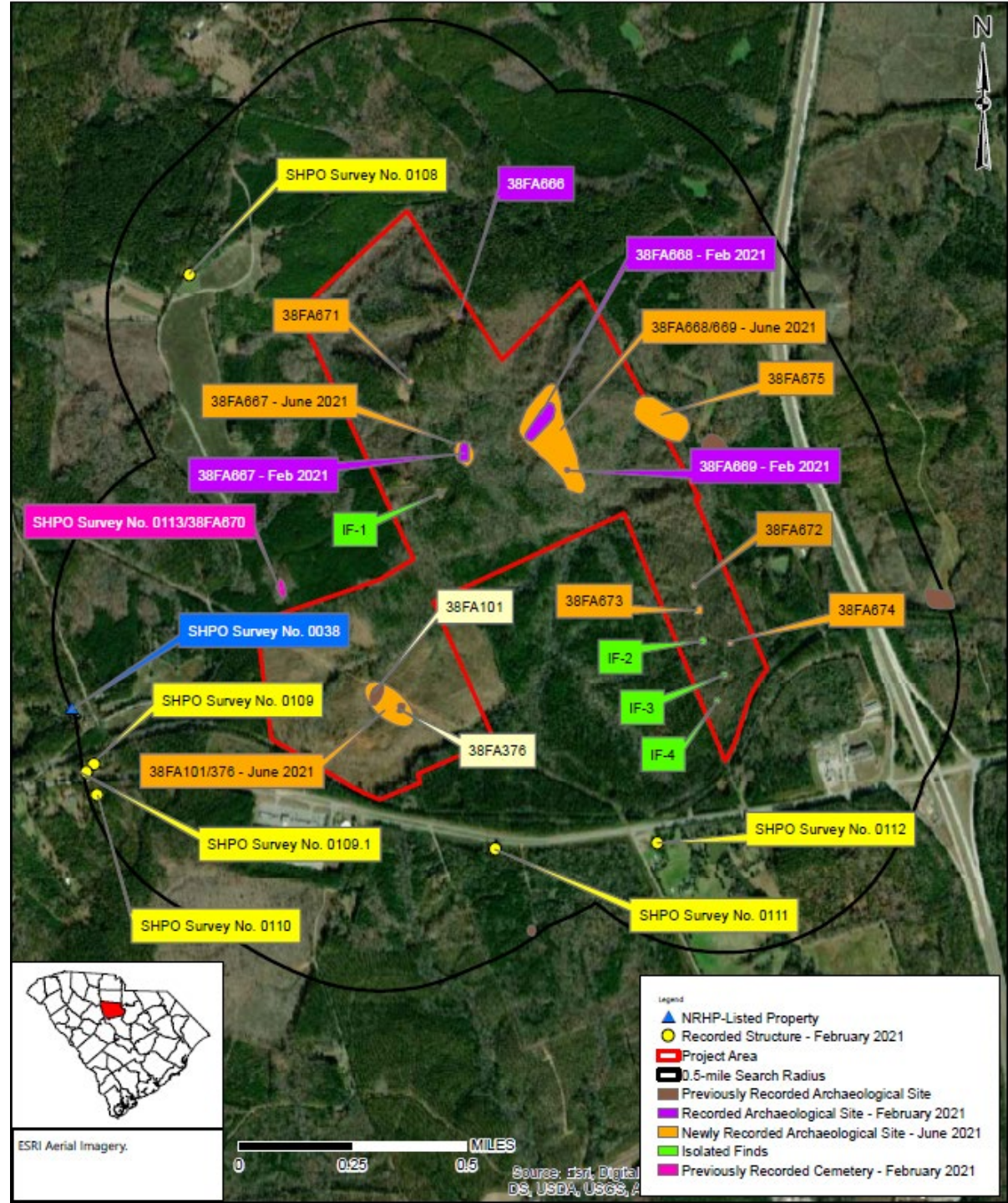
- S.C. Mining Act does not grant DHEC authority to regulate truck traffic outside the permit boundary.
  - DHEC can only evaluate physical effects of mining, such as blasting or undermining.
- SC DOT, SC Public Service Commission, or Fairfield County Department of Public Works have jurisdiction
  - SC DOT **District 4**  
1232 JA Cochran Bypass  
Chester, SC 29706  
(803) 377-4155
  - SC Public Service Commission  
[contact@psc.sc.gov](mailto:contact@psc.sc.gov) | (803) 896-5100
  - Fairfield Public Works  
Director: Jonathan Burroughs  
[jonathan.burroughs@Fairfield.sc.gov](mailto:jonathan.burroughs@Fairfield.sc.gov) | (803) 635-5209

## Common Concerns

- General blasting concerns.
- Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
- Increased truck traffic will be unsafe for neighborhood residents.
- **Protection of cultural/historic places.**
- Impacts to potential Scenic Byway project.
- Impacts to Lake Wateree.

# State Historic Preservation Office (SHPO)

- Recon Survey
  - Entire site + 1/2mi search radius
  - 8 sites
    - Not eligible for NRHP
  - 7 resources
    - 6 not eligible for NRHP
  - 1 Cemetery
    - Not eligible for NRHP
    - Protected by state law
    - Protected by 1,800ft buffer



## Common Concerns

- General blasting concerns.
- Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
- Increased truck traffic will be unsafe for neighborhood residents.
- Protection of cultural/historic places.
- **Impacts to potential Scenic Byway project.**
- Impacts to Lake Wateree.

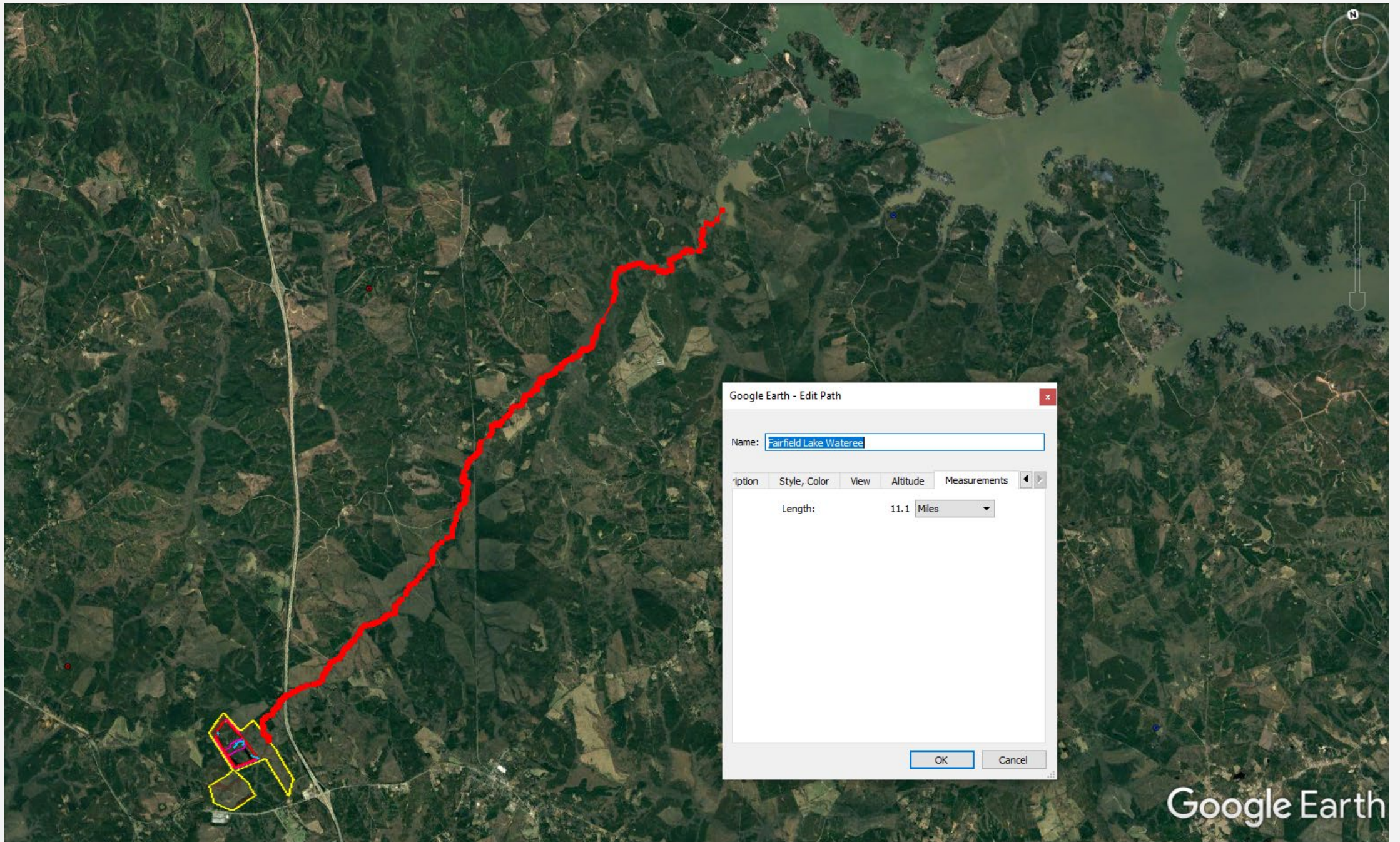
# Piedmont Gateway State Scenic Byway



- Minimum 50ft. undisturbed perimeter
- Pit and initial plant area greater than 3,000ft
- Neither project anticipated to impact the other

## Common Concerns

- General blasting concerns.
- Dewatering will lessen the groundwater supply for nearby residents and/or the town water supply.
- Increased truck traffic will be unsafe for neighborhood residents.
- Protection of cultural/historic places.
- Impacts to potential Scenic Byway project.
- **Impacts to Lake Wateree.**



Google Earth - Edit Path

Name:

Option Style, Color View Altitude Measurements

Length: 11.1 Miles

OK Cancel



# Next Steps

- DHEC will review all comments received and conclude the technical review.
- DHEC will make a final permitting decision and provide notification and a written response to all comments to everyone on mailing list.
- Final decision date begins 15-day appeal period.



South Carolina Department of Health and Environmental Control

---

# **Draft Synthetic Minor Air Construction Permit**

Bureau of Air Quality

---

# Project Overview

- 550 tons per hour Stone Processing Plant
  - Process Equipment
    - Crushers
    - Screens
    - Conveyors
  - Additional sources of dust generated onsite
    - Plant and Customer Haul Roads
    - Storage Piles

# Draft Air Construction Permit

- Pollutant addressed: particulate matter (dust)
- Permit compliance demonstration includes minimization and control of dust
- Weekly recorded inspection of water spray systems to ensure proper operation and dust control
- Potential (“worst case”) emissions below major thresholds with wet suppression

# Particulate Matter

- Mixture of solid particles and liquid droplets
- PM<sub>10</sub>: Inhalable particles, with diameters 10 microns ( $\mu\text{m}$ ) and smaller
- PM<sub>2.5</sub>: Fine inhalable particles, with diameters 2.5 microns ( $\mu\text{m}$ ) and smaller

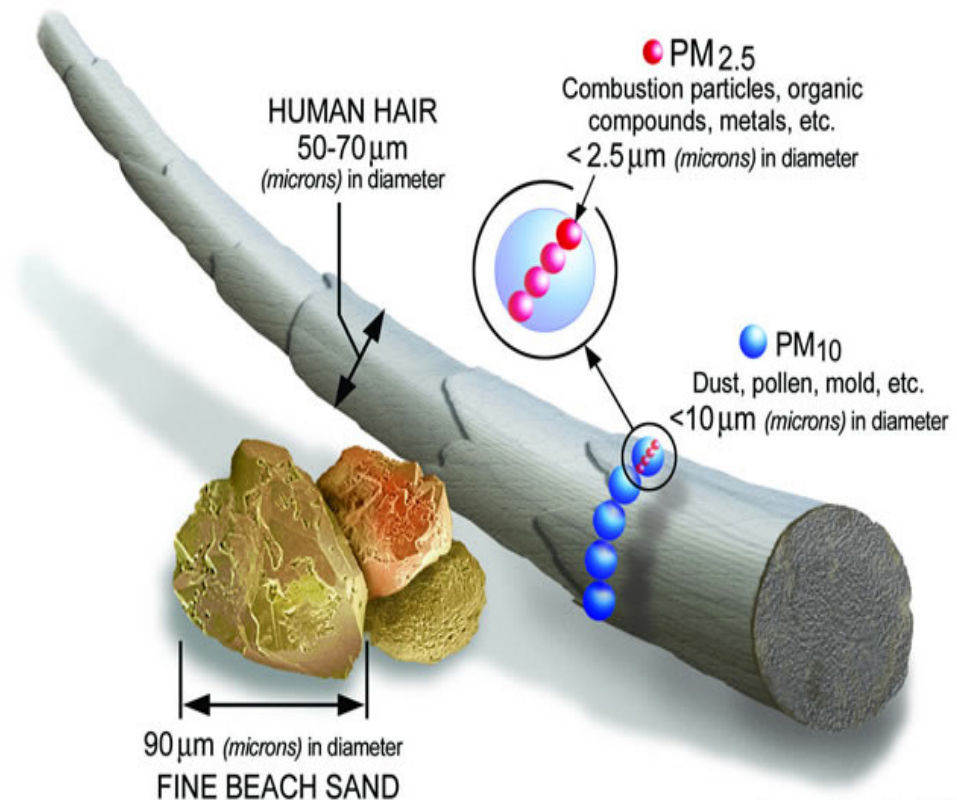


Image courtesy of the U.S. EPA

# Draft Air Construction Permit

- Federal Regulation Opacity Limitations
  - Required to test equipment to ensure opacity limitation being met
  - 7% opacity limit for screeners/conveyors
  - 12% opacity limit for crushers
- State Opacity Limitations
  - 20% facility-wide opacity limit (includes dust from storage piles and on-site truck traffic)

# Example Simulated Opacities

20% Opacity



30% Opacity



40% Opacity



50% Opacity



# Air Quality Analysis

Air Pollutant	Max Predicted Concentration ( $\mu\text{g}/\text{m}^3$ )	Background Concentration ( $\mu\text{g}/\text{m}^3$ )	Total Concentration ( $\mu\text{g}/\text{m}^3$ )	State/Fed. Standard ( $\mu\text{g}/\text{m}^3$ )	Meets Standard?
PM <sub>10</sub> 24-hr	53.8	34	88	150	Yes

- The background concentration of the location is 34  $\mu\text{g}/\text{m}^3$
- The predicted facility concentration is 53.8  $\mu\text{g}/\text{m}^3$
- Combined, the total concentration will be 88  $\mu\text{g}/\text{m}^3$  and remains below the National Ambient Air Quality Standard (~59% of standard)



# Onsite Dust Control

- Dust control plan to be reviewed prior to operation
  - Addresses water trucks, truck traffic, storage piles, and process equipment
  - Crusher/screeners/conveyors equipped with wet suppression spray nozzles
  - Onsite truck traffic dust is controlled by the use of water trucks

# Air Construction Permit

- Includes:
  - Applicable State/Federal Regulations that were established to be protective of the environment and public health, including the health of sensitive populations such as asthmatics, children, and the elderly
  - Recordkeeping, reporting and/or testing requirements that demonstrate compliance
  - “Synthetic Minor” construction permit restricts facility to less than 250.0 tons/yr for PM and less than 100.0 tons/yr PM<sub>10</sub> to avoid “major” thresholds

# Contact Information

## **Lance Davis, Permit Writer**

Air Permitting Division  
Bureau of Air Quality  
803-898-7220  
davisml@dhec.sc.gov

## **Steve McCaslin, Air Permitting Director**

Air Permitting Division  
Bureau of Air Quality  
803-898-3839  
mccaslsd@dhec.sc.gov

# Next Steps for Draft Air Permit

- DHEC will review all comments received
- DHEC will make a final permitting decision and provide notification and a written response to all comments to everyone on mailing list
- Final decision date begins 15-day appeal period

# How to Comment

Submit comments by mail or email through

**August 20, 2021** to:

Jeremy Eddy  
DHEC/BLWM  
2600 Bull Street  
Columbia, SC 29201  
[eddyje@dhec.sc.gov](mailto:eddyje@dhec.sc.gov)

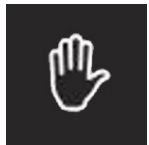
Additional information can be found at:

[www.scdhec.gov/LuckStoneFairfield](http://www.scdhec.gov/LuckStoneFairfield)

# How to Participate

To indicate you would like to speak:

- Unmute your line
- Click the 'Hand Raise' icon



Hand Raise  
(click this icon to  
indicate you would like  
to speak)



Muted  
(no one in the meeting  
can hear you)



Unmuted  
(everyone in the  
meeting can hear you)



If you have called into  
the meeting, press \*6  
to unmute



# DHEC Staff

## **Bureau of Land & Waste Management Division of Mining & Solid Waste Management**

Juli Blalock Assistant Bureau Chief

Joe Koon Section Manager

Jeremy Eddy, GIT Project Geologist

## **Bureau of Air Quality Air Construction Permitting Section**

Steve McCaslin Air Permitting Director

Lance Davis Permit Writer

## **Bureau of Water Industrial Wastewater Permitting Section**

Brett Caswell Environmental Engineer

## **Bureau of Environmental Health Services Columbia Office**

Veronica Barringer Area Director

Chris Corley Air Team Lead