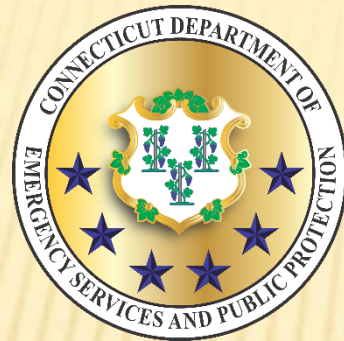


**DEPARTMENT of ADMINISTRATIVE SERVICES
and
DEPARTMENT of EMERGENCY SERVICES and PUBLIC PROTECTION**



**Presentation to the
Mystic Rod and Gun Club
Connecticut State Police Firearms
Training Facility Relocation Project**

July 5, 2016

OVERVIEW OF THE PROPOSED PROJECT

Project Description

- Up to approximately 55,000 gross square feet multipurpose training building(s).

Main space uses multipurpose training building(s):

- *classrooms of varying size to hold up to approximately 100 seats*
- *firearms simulator and open area training rooms*
- *active-shooter training*
- *gun cleaning and smithing*
- *staff offices and file storage room*
- *storage vaults*
- *recruit/staff kitchenette and eating area*
- *reloading area*
- *bathrooms with lockers and showers*
- *storage areas (i.e., garage, target storage)*



OVERVIEW OF THE PROPOSED PROJECT

Project Description

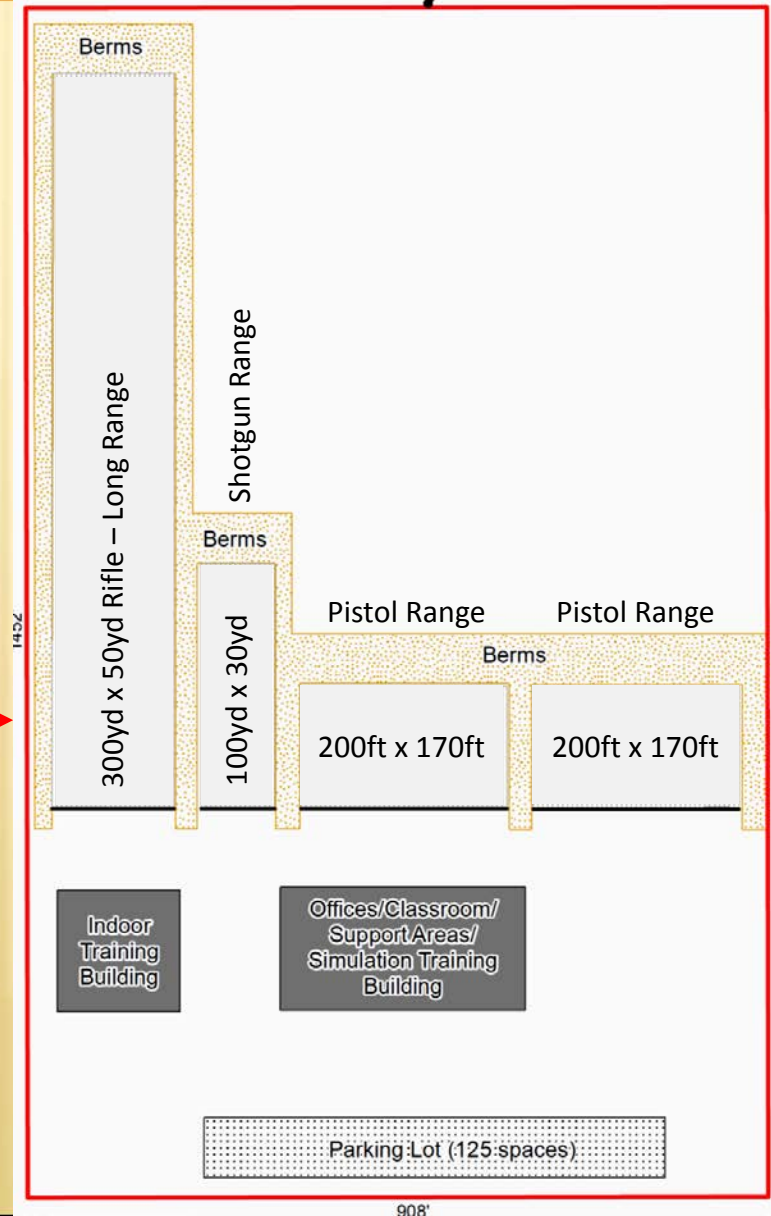
- 2 Range Control Buildings with elevated tower (~1 story high)
- 2 Pistol Ranges (approximately 200ft x 170ft)
- 1 Rifle Range (approximately 300yd x 50yd)
- 1 Shotgun Range (approximately 100yd x 30yd)
- Up to 125 parking spaces
- Well and septic systems, telecom and electrical utilities



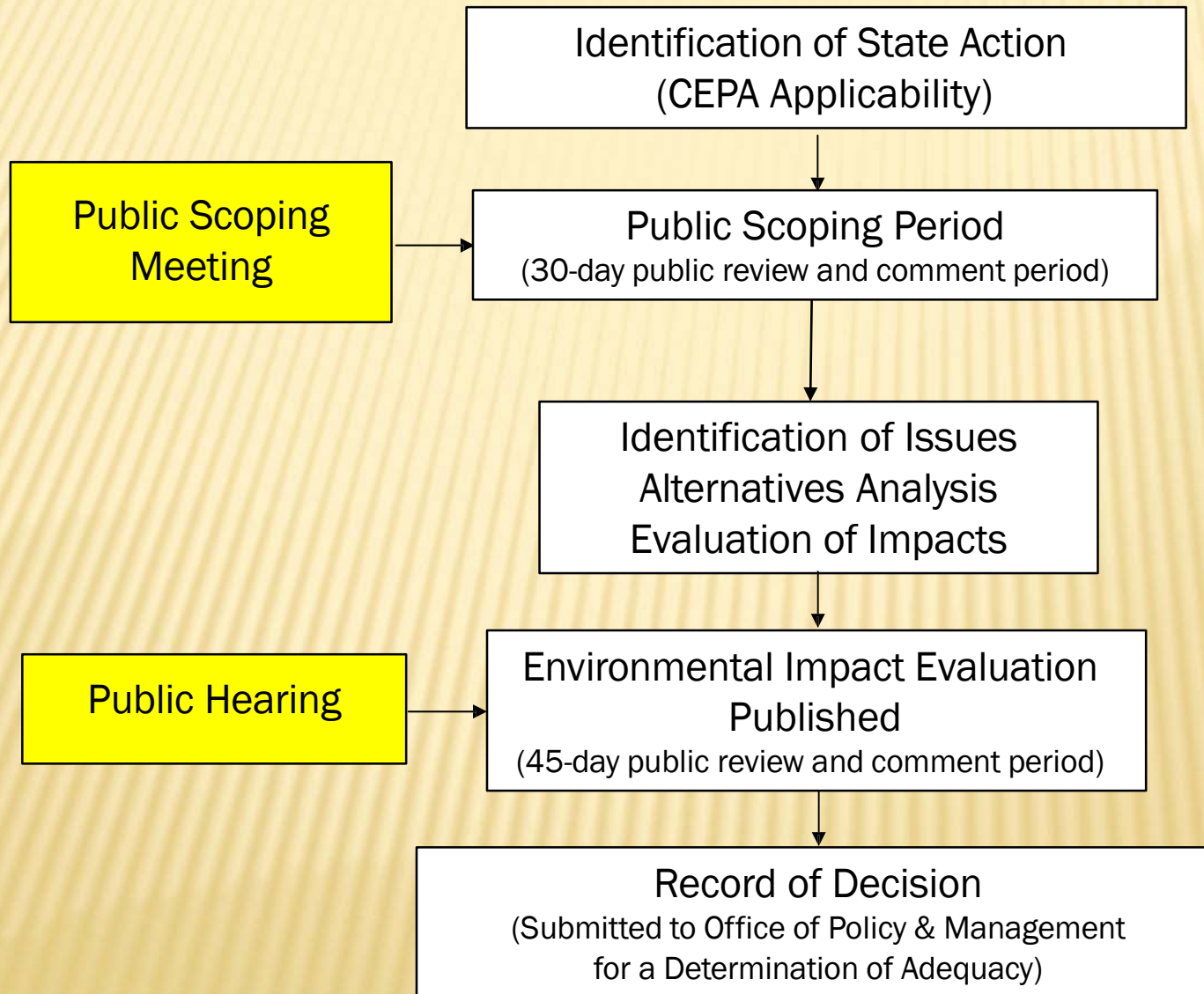
OVERVIEW OF THE PROPOSED PROJECT

Project Conceptual Layout

- ❑ Open ranges (2 pistol, shotgun/rifle, long rifle)
- ❑ Offices/Classroom Building
- ❑ Indoor Training Building
- ❑ Total area = 30 acres (as represented in the red rectangle)



Connecticut Environmental Policy Act (CEPA) Process



Environmental Impact Evaluation Overview

About 20 resource areas are explored in the EIE

- Noise
- Habitats
- Neighborhoods
- Traffic and parking
- Land use
- Socioeconomic factors
- Air quality
- Surface Water
- Wetlands
- Floodplains
- Groundwater
- Historic sites
- Archaeology
- Aesthetics
- Utilities
- Hazardous Materials
- Soils
- Energy use
- Consistency with State C&D Plan
- Cost/Benefit Analysis

Both beneficial and adverse impacts are evaluated

Impact response: avoid, minimize, mitigate

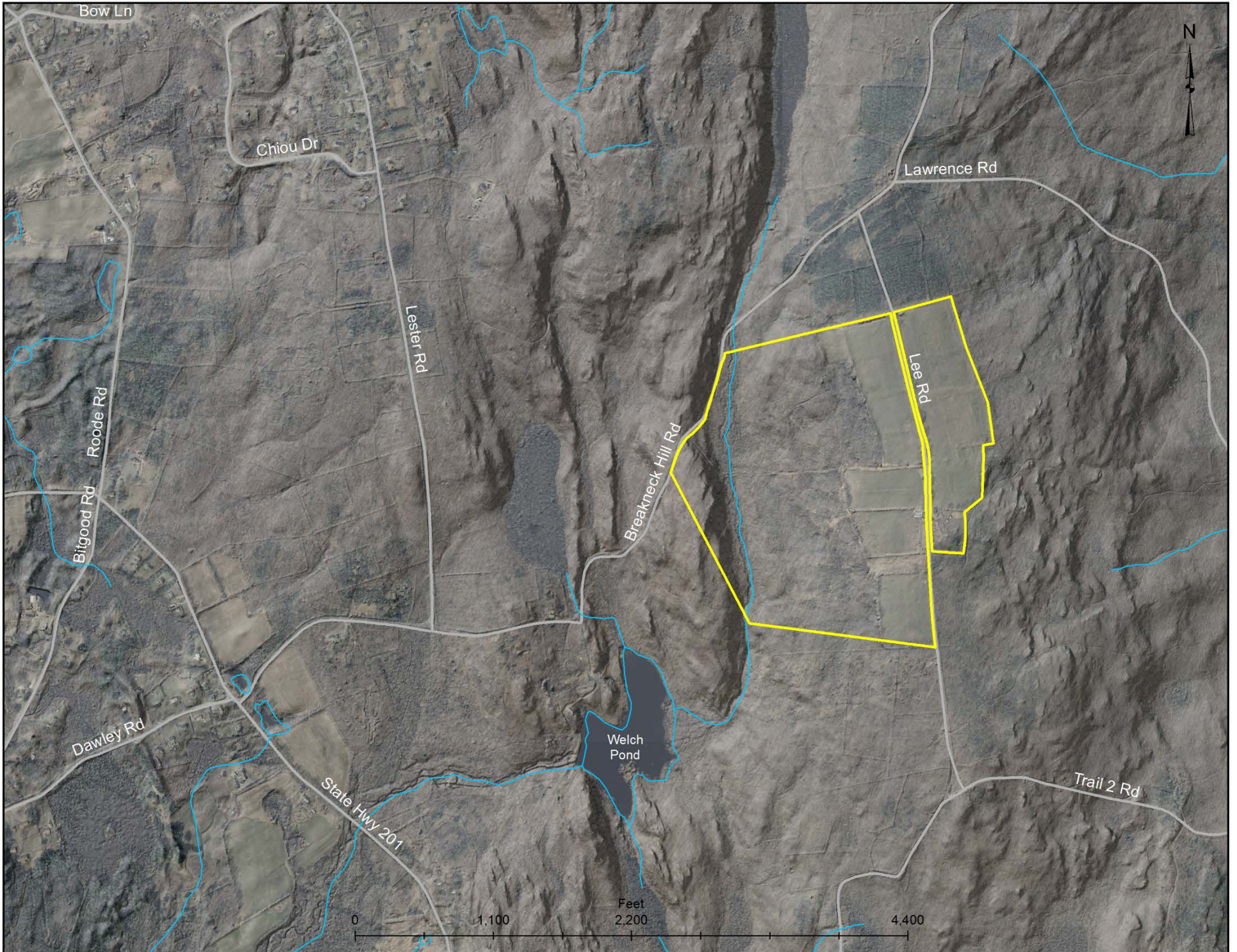
Alternatives are evaluated and compared



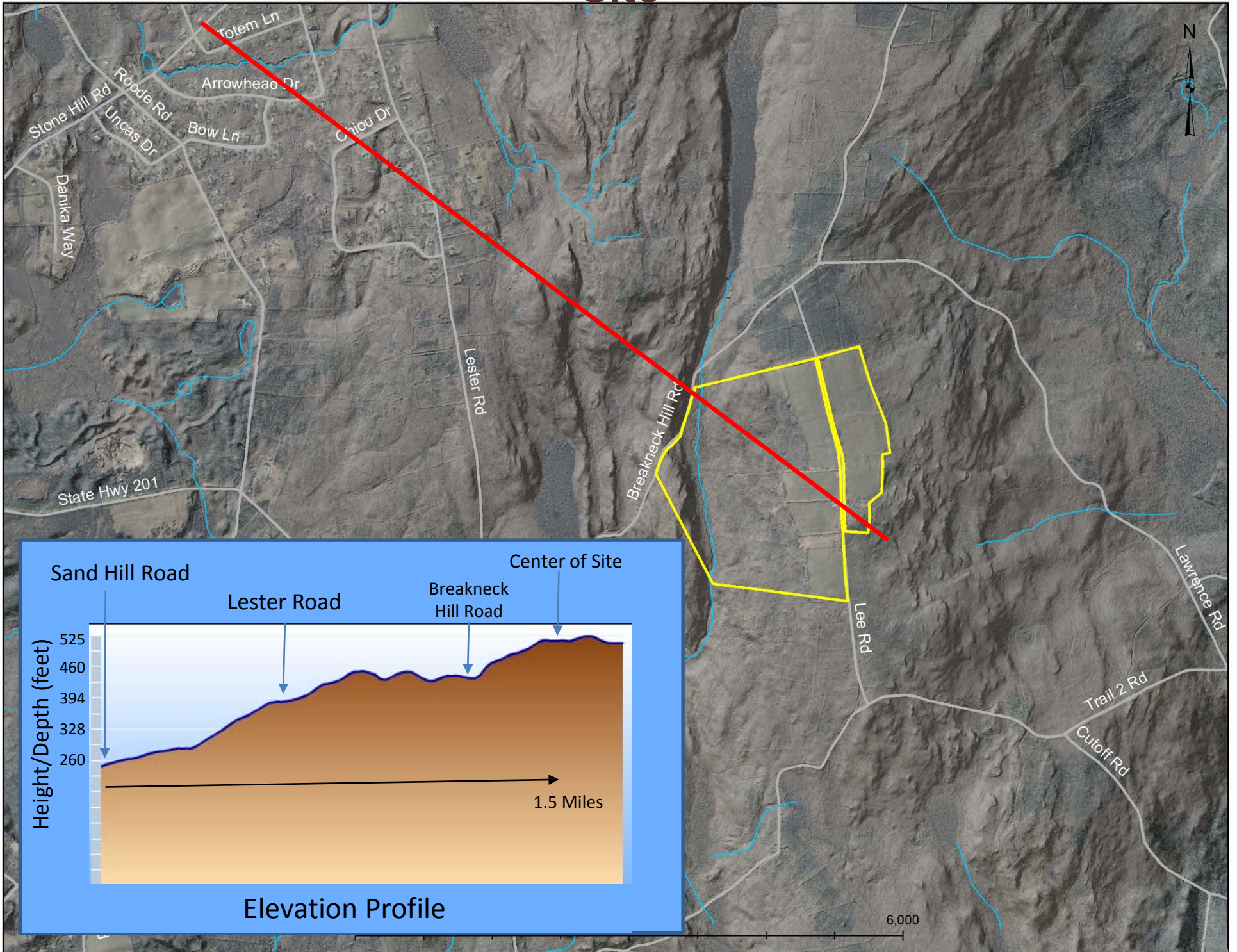
Site



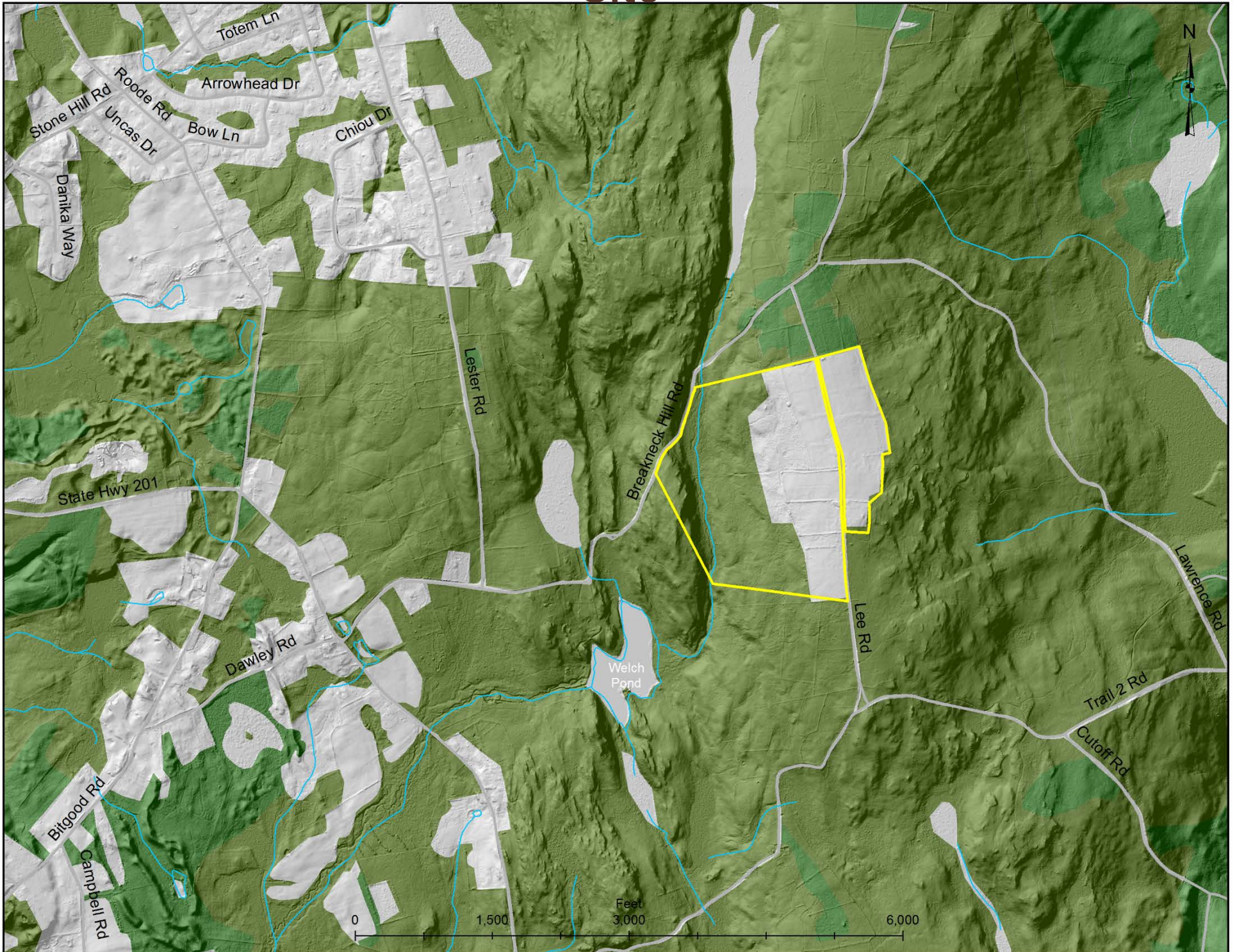
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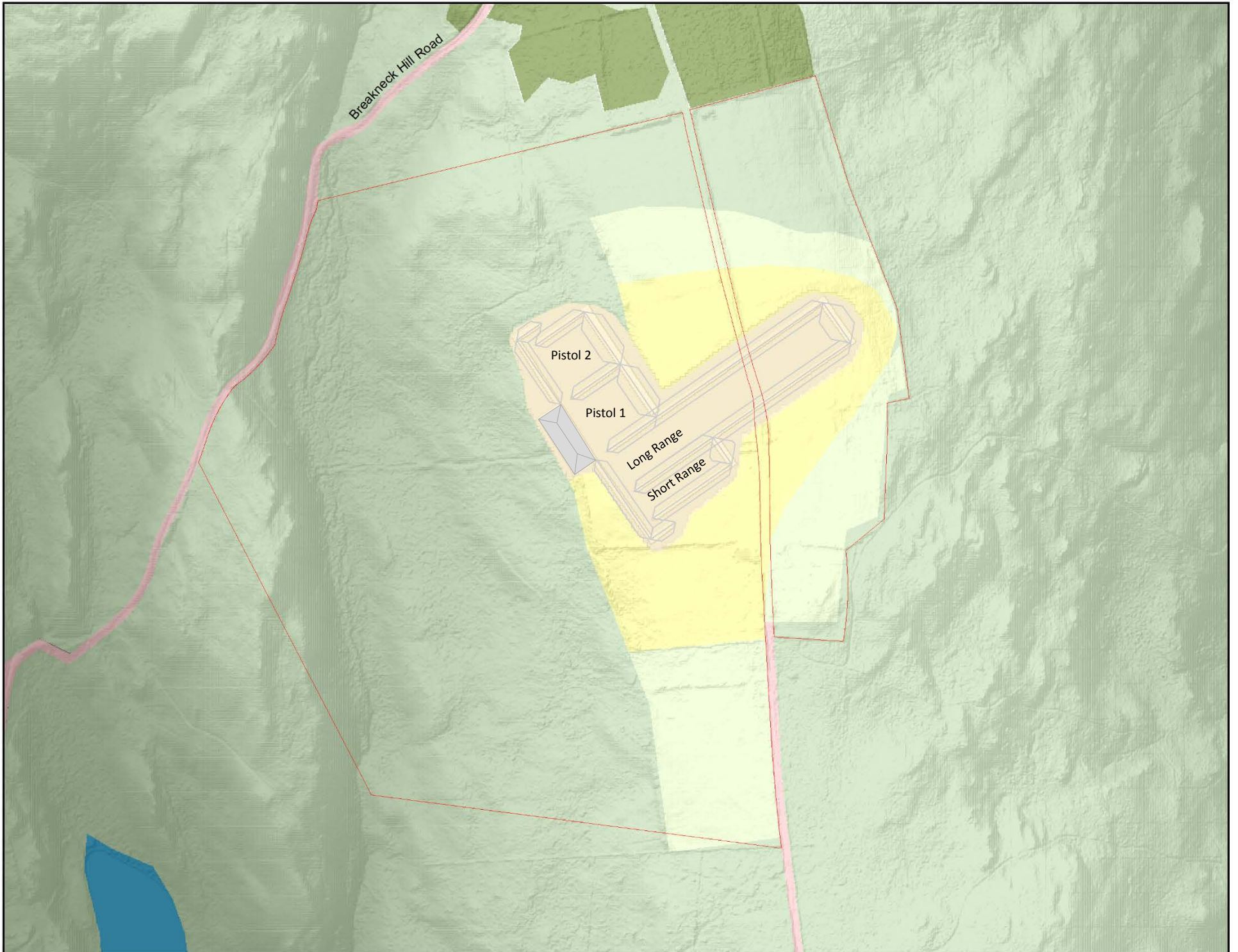


Site



Site





SPreAD-GIS: Conceptual Layout (NOT ACTUAL DESIGN)

LEVELS OF NOISE In decibels (dB)

PAINFUL & DANGEROUS		
Use hearing protection or avoid	140	<ul style="list-style-type: none"> • Fireworks • Gun shots • Custom car stereos (at full volume)
	130	<ul style="list-style-type: none"> • Jackhammers • Ambulances
UNCOMFORTABLE		
Dangerous over 30 seconds	120	<ul style="list-style-type: none"> • Jet planes (during take off)
VERY LOUD		
Dangerous over 30 minutes	110	<ul style="list-style-type: none"> • Concerts (any genre of music) • Car horns • Sporting events
	100	<ul style="list-style-type: none"> • Snowmobiles • MP3 players (at full volume)
	90	<ul style="list-style-type: none"> • Lawnmowers • Power tools • Blenders • Hair dryers
Over 85 dB for extended periods can cause permanent hearing loss.		
LOUD		
	80	<ul style="list-style-type: none"> • Alarm clocks
	70	<ul style="list-style-type: none"> • Traffic • Vacuums
MODERATE		
	60	<ul style="list-style-type: none"> • Normal conversation • Dishwashers
	50	<ul style="list-style-type: none"> • Moderate rainfall
SOFT		
	40	<ul style="list-style-type: none"> • Quiet library
	30	<ul style="list-style-type: none"> • Whisper
FAINT		
	20	<ul style="list-style-type: none"> • Leaves rustling

Environmental Issues

□ Noise

“Is it true that the noise from the range would carry up to 4 miles and at the boundary lines of the property could be as high as 100db?” – Public comment

- Acoustic (noise) engineers/consultants will be hired for the EIE and work in close collaboration between CSP range staff, DAS, CEPA consultant, and our range expert(s).
- We anticipate monitoring noise levels through out the nearby areas, including some specific locations. We would like to coordinate these locations with input from town staff or the First Selectman’s Office.
- Received numerous comments about how far or to what extent noise may have on the surrounding areas. While we still plan on conducting more detailed studies in the field, DAS Environmental Planning conducted an Initial Noise Assessment.



<http://i1.wp.com/keepvoluntownquiet.com/wp-content/uploads/2016/04/Sound-level.jpg>



Environmental Issues

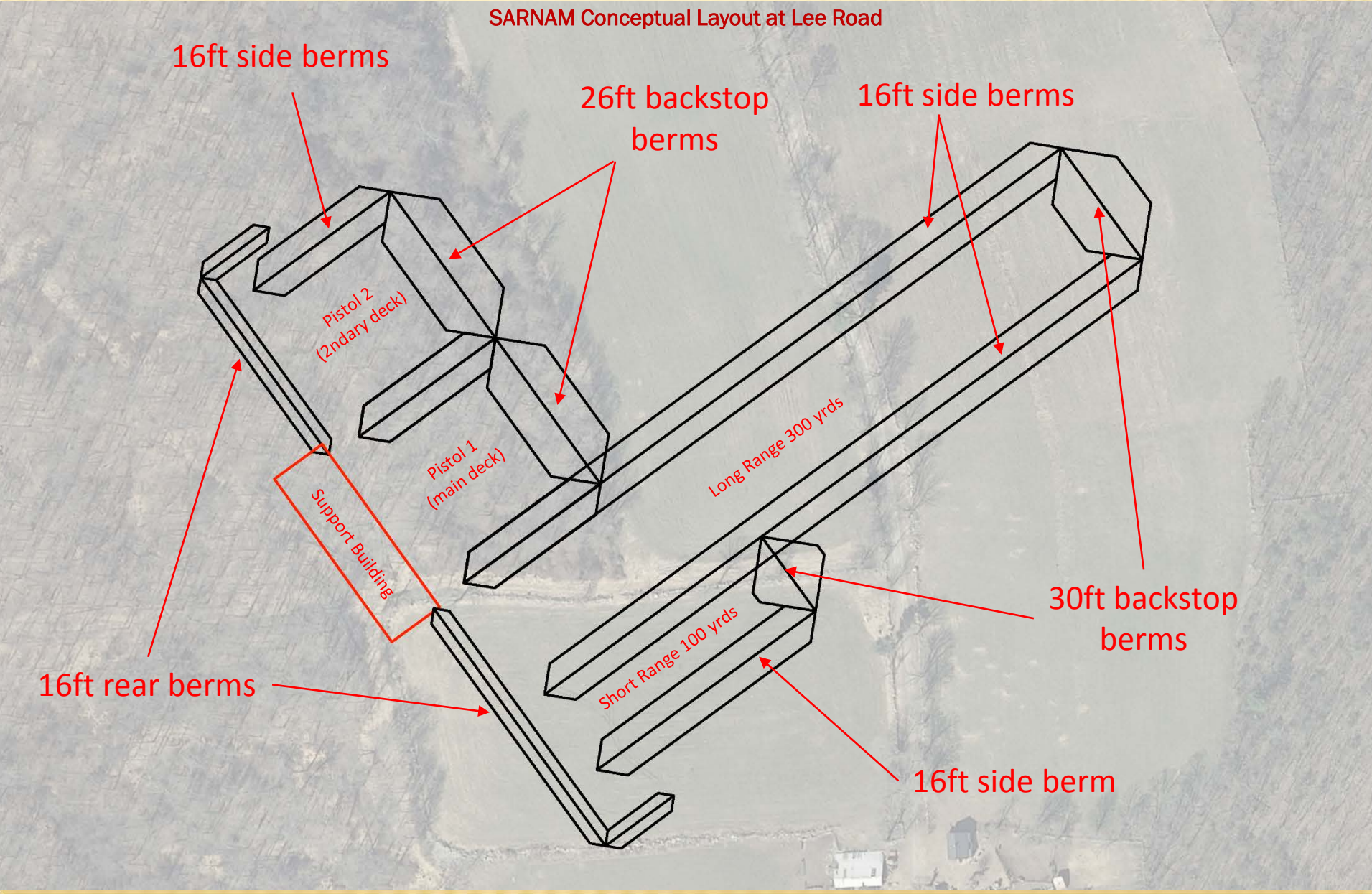
□ Noise

- Two software models were used.
- The first model is the Small Arms Range Noise Assessment Model (“SARNAM”) which was developed by the U.S. Army Engineer Research and Development Center (ERDC), Construction Engineering Research Laboratory (CERL).
- The second model used is called SPreAD-GIS, which is a GIS based noise model developed for the U.S. Forest Service by S. Reed, J. Boggs, and J. Mann.
- These models were used since they are publicly available at no cost and the same analysis and results can be replicated by others.



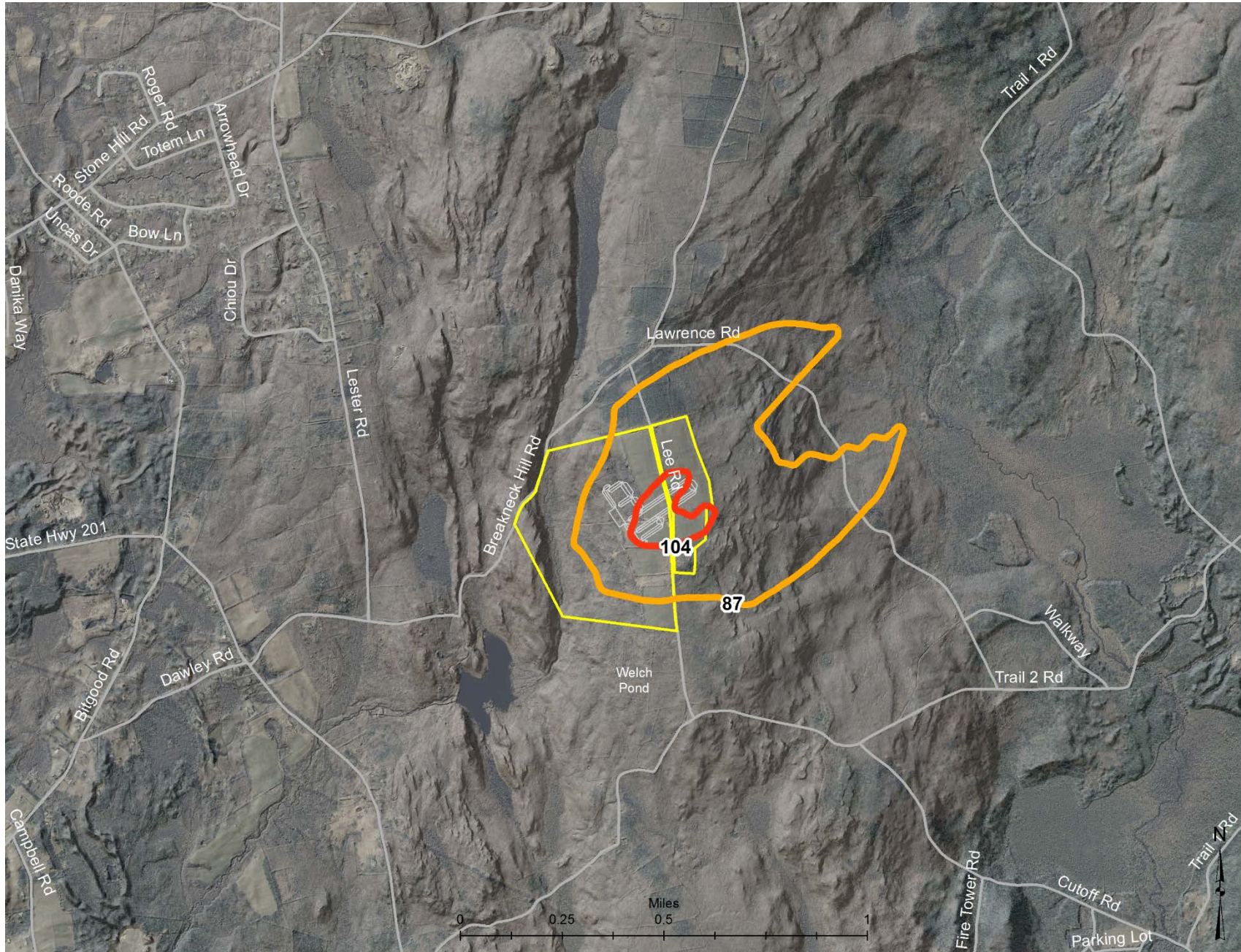
Initial Noise Assessment

SARNAM Conceptual Layout at Lee Road



NOT ACTUAL DESIGN

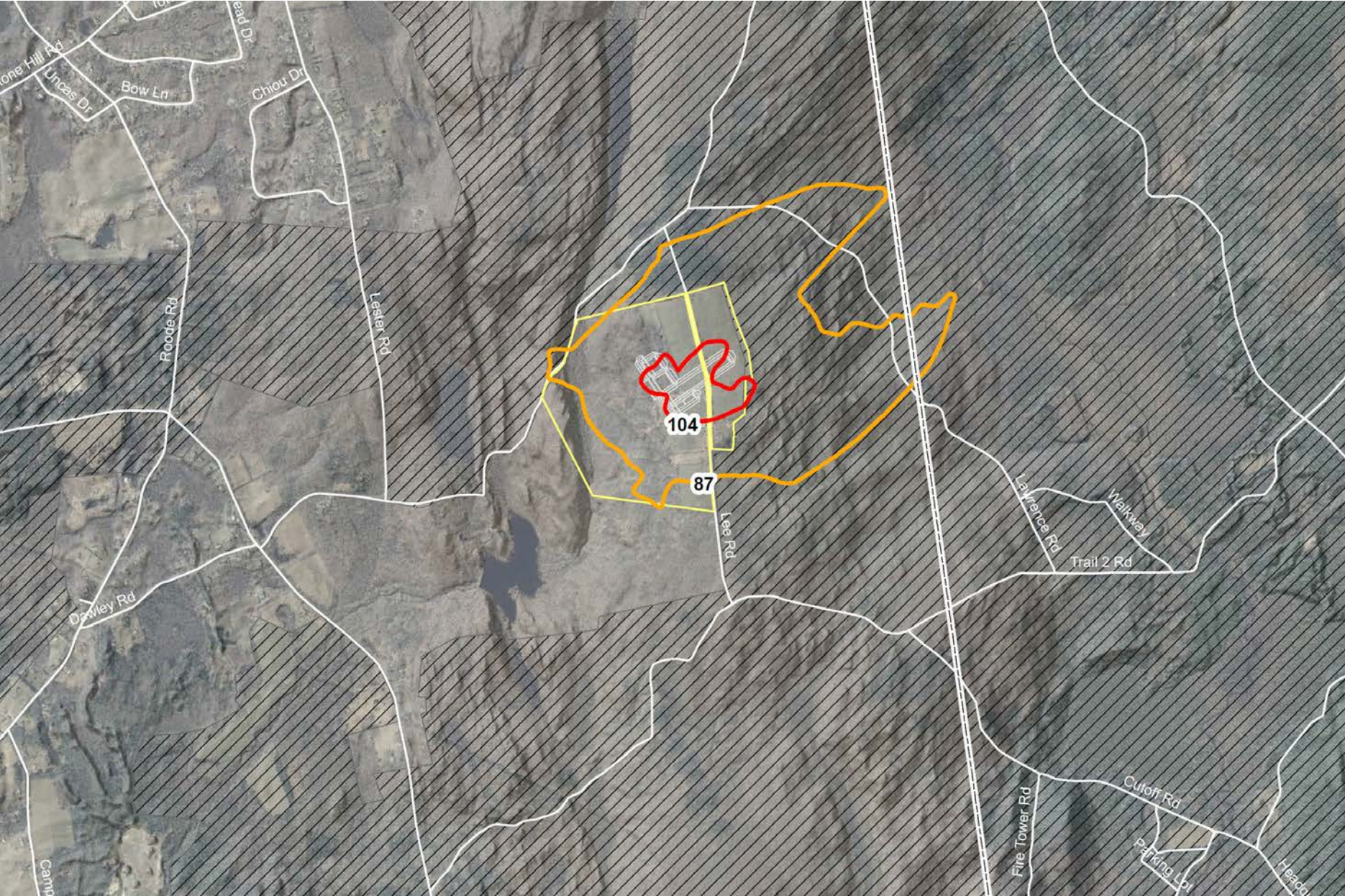
Initial Noise Assessment



SARNAM: Contours 104 dB and 87 dB

Normal Activity: Short Range (100 yds.): 15 shooters. Firearm: .223 Rifle

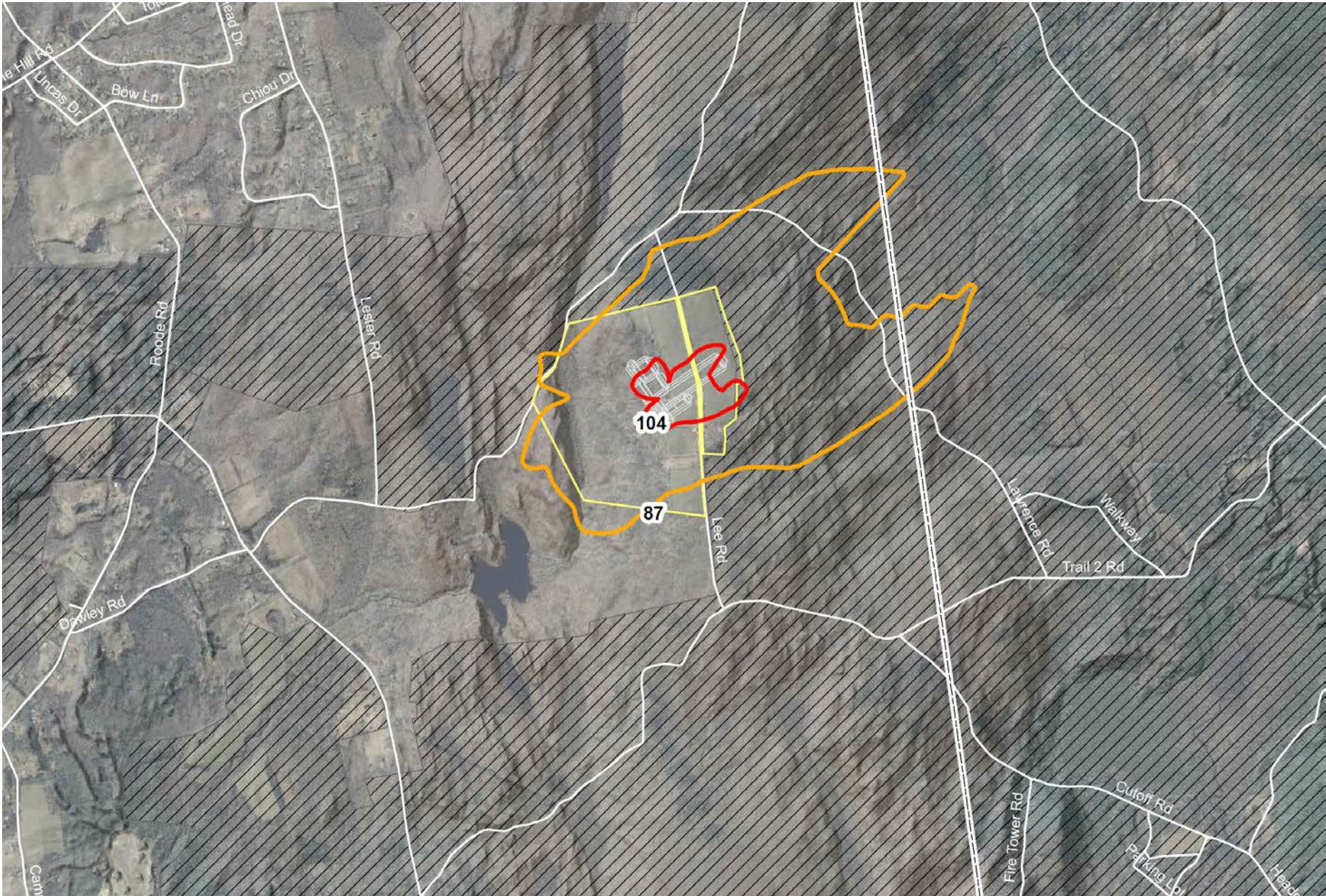
Initial Noise Assessment



SARNAM: Contours 104 dB and 87 dB

Hypothetical Simultaneous Firing Scenario: Pistol 1 and Short Range (.223) 15 shooters on Each Range

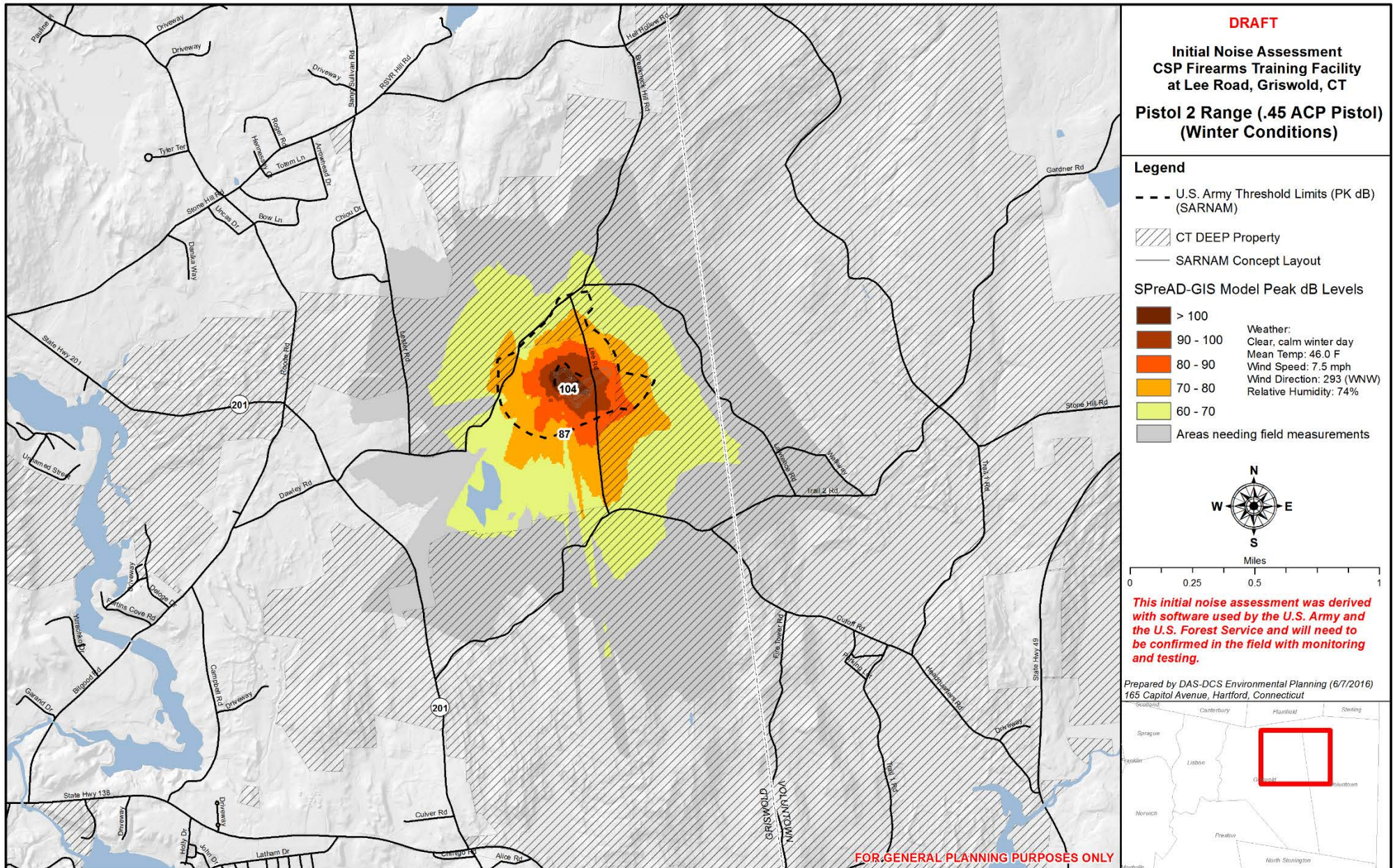
Initial Noise Assessment



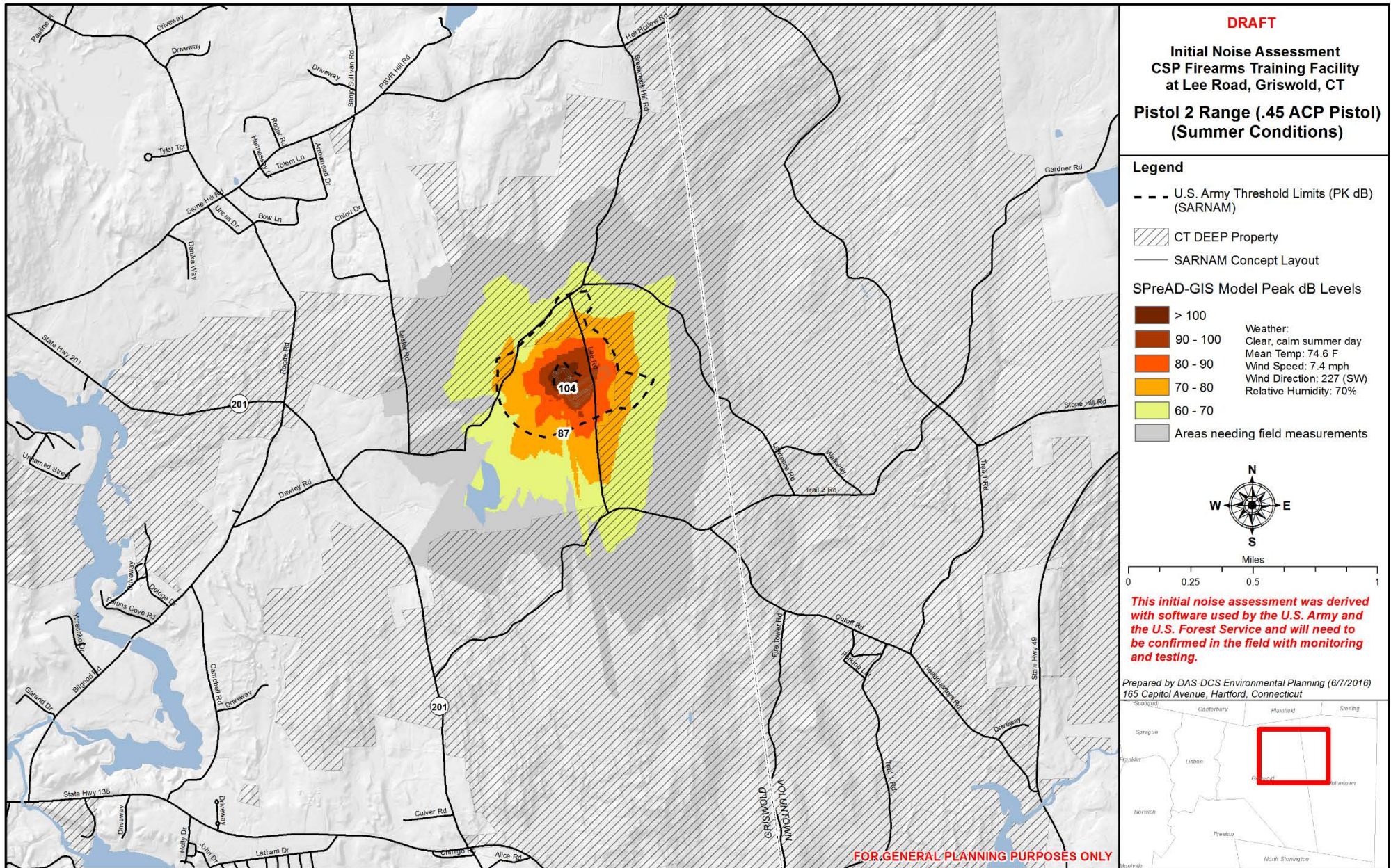
SARNAM: Contours 104 dB and 87 dB

Hypothetical Simultaneous Firing Scenario: Pistol 1 and Short Range (shotgun) 15 shooters on Each Range

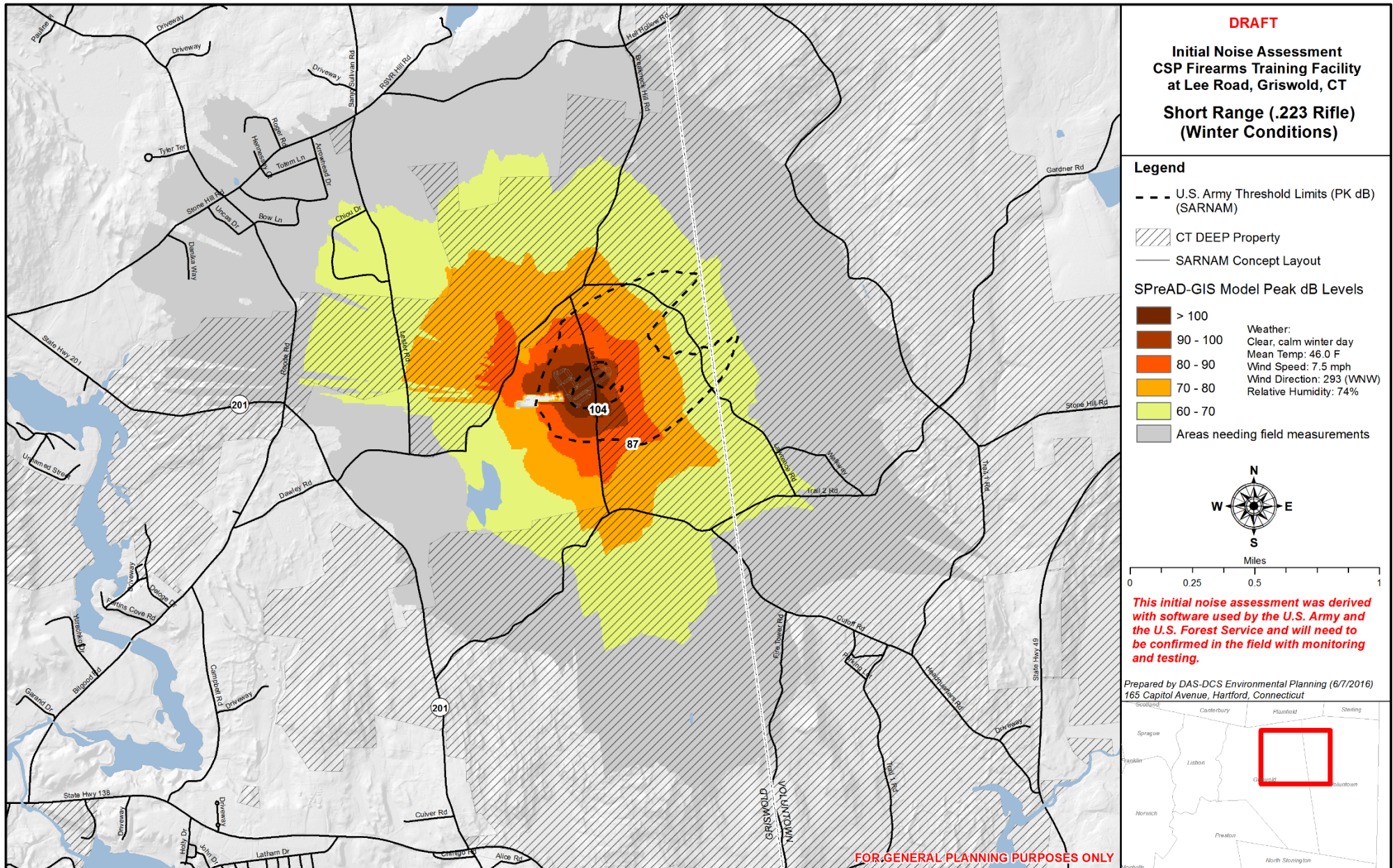
Initial Noise Assessment



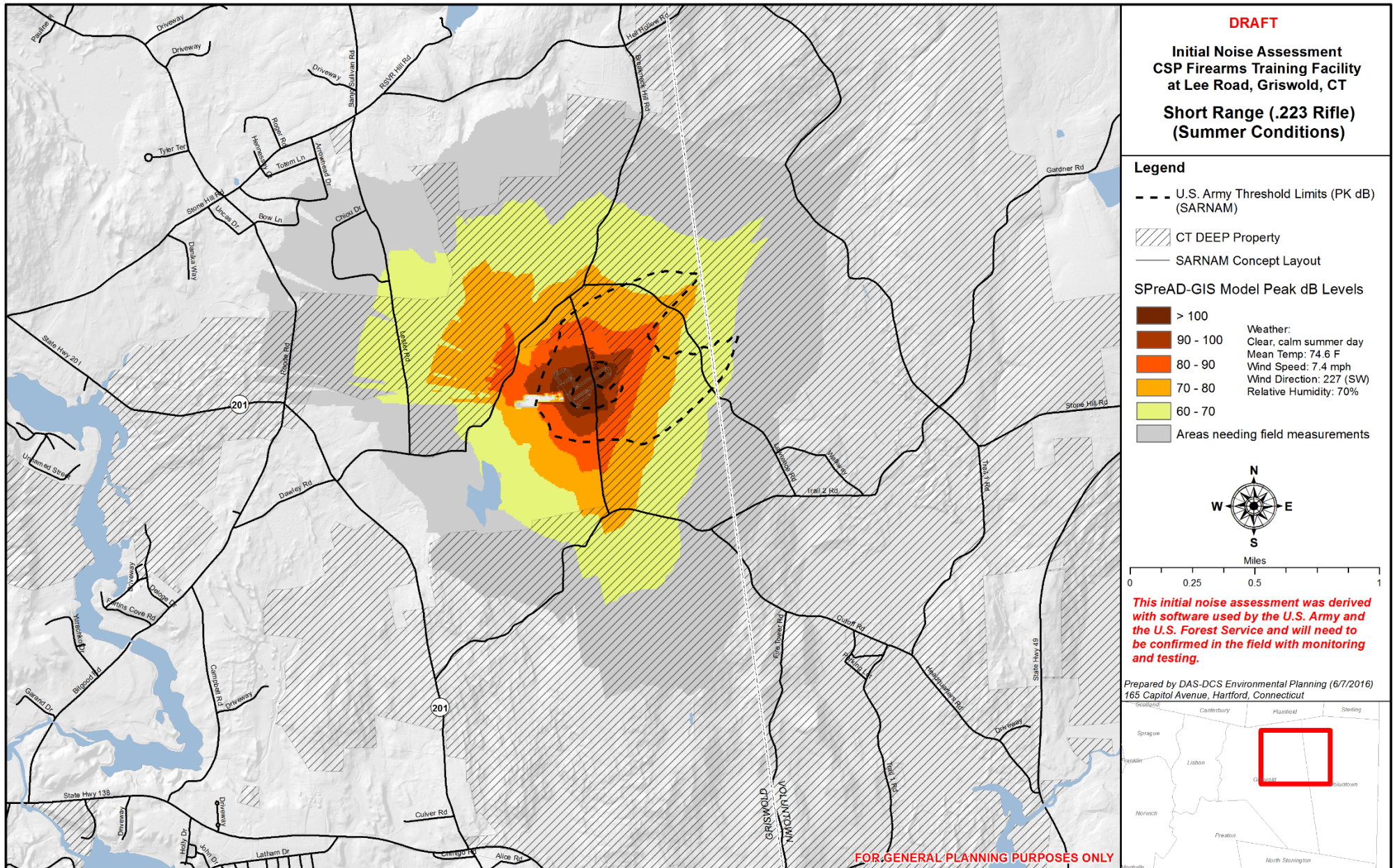
Initial Noise Assessment



Initial Noise Assessment



Initial Noise Assessment



500 FT Setback from Mystic Rod and Gun Club Property



Questions?

Project specific website: <http://www.ct.gov/csprange>

Project Email: Trainingfacilityinfo@ct.gov

