

SUBDIVISION REVIEW EXERCISE

DEVELOPMENT PROPOSAL

The applicant presents a sketch plan for a 6-lot subdivision of a 150-acre wooded parcel in a rural-residential area zoned for 3-acre minimum lot size. Proposed lot sizes are 10-60 acres. The drawing (Figure 1) shows proposed building envelopes, driveways, and viewways (to be cleared). A total of 20 acres would be cleared to accommodate these features. Successful perc tests for septic leachfield capability have been conducted on all lots. A “no further subdivision” clause will be added to the deed for each lot. The applicant presents this as a conservation-minded project because it would have only 6 large lots on land that could accommodate 50 lots by right. The applicant has presented this sketch to elicit an initial response from the Planning Board, before engaging an engineer to make the more detailed drawings required for a formal application.

BACKGROUND INFORMATION

Setting

The general setting of the project is depicted in Figure 1, and elevation contours are shown in Figure 2. The parcel occupies a hill overlooking a hamlet to the west, and active farmland on three sides. A perennial stream runs along the base of the hill on the north and west sides. The hill extends beyond the parcel boundary to the south, and is part of a forested area totaling 280 acres. The hamlet is served by individual and communal drinking water wells tapping a high-yield aquifer in the stream corridor (Figure 3).

Local Policy

Comprehensive Plan: The town’s Comprehensive Plan calls for “Identifying and preserving the most important environmental, visual, and historic resources, including **high quality agricultural land, scenic roads, ridgelines, wetlands, stream corridors, aquifers, mature forests, important wildlife habitats, and historic structures and land areas.**” Elsewhere, the Comprehensive Plan states the need for measures to insure **clean and plentiful surface water and groundwater supplies, to reduce carbon emissions** by activities of residents, businesses, and town operations, and to **increase carbon storage** in the natural landscape and by other means. The zoning ordinance and other parts of the local code have few provisions that specifically address these general policy statements.

Aquifer Overlay District: The town has mapped a proposed Aquifer Overlay District based on the locations of high-yield groundwater sources and high-sensitivity areas for groundwater contamination. The District and associated regulations have not yet been adopted.

Conservation Subdivision Law: In certain situations, the Planning Board may require submission of a “Conservation Subdivision” plan that would concentrate new development in the least-sensitive areas, and preserve intact (by conservation easement) at least 70% of the land area of the original parcel. This requirement can only be invoked if the parcel has some apparent conservation value, and if the proposed number of lots exceeds 1/3 of the allowable lots for the parcel.

Steep Slope regulations: No buildings, driveways, or roads may be constructed on grades exceeding 20%, except by special approval of the Planning Board or Building Inspector.

FIGURES

Figures 1-4 depict the landscape setting and other features of the parcel on a color infrared aerial photo base.

Figure 1. Subdivision “sketch plan”

Figure 2. a. Topography b. Steep slopes

Figure 3. Unconsolidated aquifer.

Figure 4. (Blank: use this to draw an improved design.)

YOUR TASKS

1. Review the sketch plan from the point of view a town Planning Board member.
2. Answer these questions with reference to the proposed project:
 - What are your concerns, if any, related to water conservation (e.g., stream flows, stream water quality, groundwater recharge, drinking water supply)? _____

 - What are your concerns, if any, related to other issues, such as
carbon sequestration _____
forest conservation _____
wetland conservation _____
habitat conservation _____
soil conservation _____
farmland conservation _____
other _____
 - What additional information, if any, do you need to make an informed decision about the appropriateness of the subdivision proposal from a natural resource perspective?

3. If you think the project is already well-designed, then your work is done for this stage of the review. Be prepared to explain the merits of the applicant's proposal.
4. If you think the project could be better designed to protect water or other resources, choose **one or two** of the tools below that would help you, as a Planning Board member, to insure a better outcome.
 - **Wetland & stream law**, that protects wetlands of 1/10 ac and larger, protects all intermittent and perennial streams, and requires a minimum 50-ft buffer of undisturbed vegetation and soils. (Buffer can be enlarged at the Planning Board's discretion, as long as there is reasoned and written justification related to public welfare.)
 - **Land clearing ordinance** that prohibits clearing of slopes >15%, and prohibits selective cutting on slopes >25% without special approval by the Planning Board.
 - **Requirement for Conservation Analysis** prior to submitting any subdivision plan. (Applicant is asked to follow town guidelines for identification of important habitats, and description of potential impacts on water resources, farmland resources, and plants, animals, and habitats of conservation concern).
 - **Critical Environmental Area designation** for all contiguous forests (unfragmented by roads, clearings, or development) of 200 ac and larger. In this town, CEA status would require a Conservation Analysis using town guidelines, and submission of a conservation subdivision plan.
 - **Aquifer protection law** that requires special scrutiny of development projects within main recharge zones of a significant aquifer, and within the watershed of that aquifer.
 - **A Subdivision Law** that makes "**conservation subdivision**" (see explanation under Local Policy, previous page) the default requirement for subdivision of parcels of 20 acres and larger. In those cases, applicants must provide special justification for a conventional subdivision plan.
5. Using those tools and considering town interests and existing town regulations as described above, draw onto Figure 4 an improved design for the subdivision project. Be prepared to explain to the assembled group why you chose certain tools and the rationale for your design.
6. What other regulatory or non-regulatory tools would have helped the Planning Board to better serve the public welfare and private interests in this situation. _____

Figure 1. Sketch plan

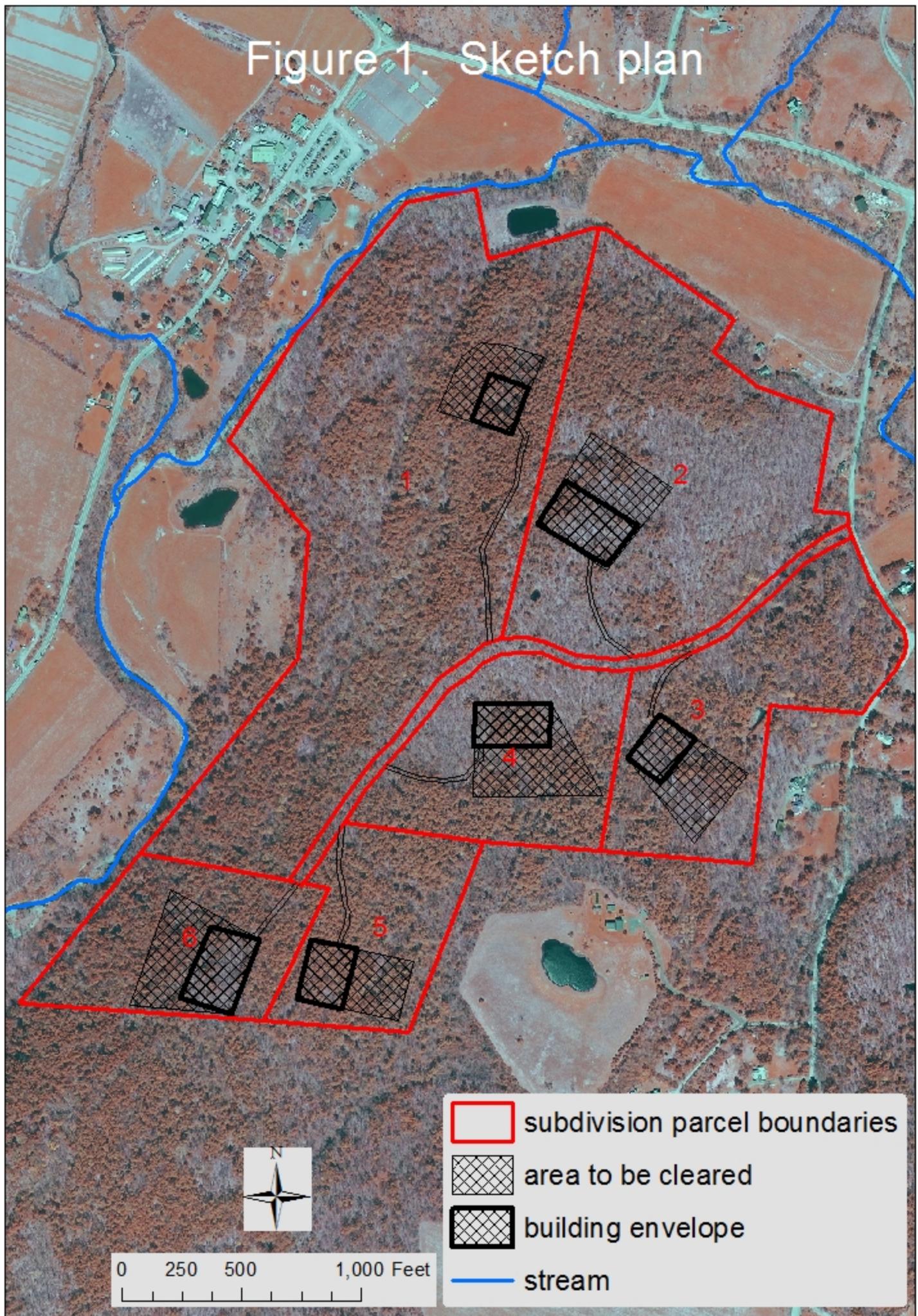


Figure 2a. Elevation contours

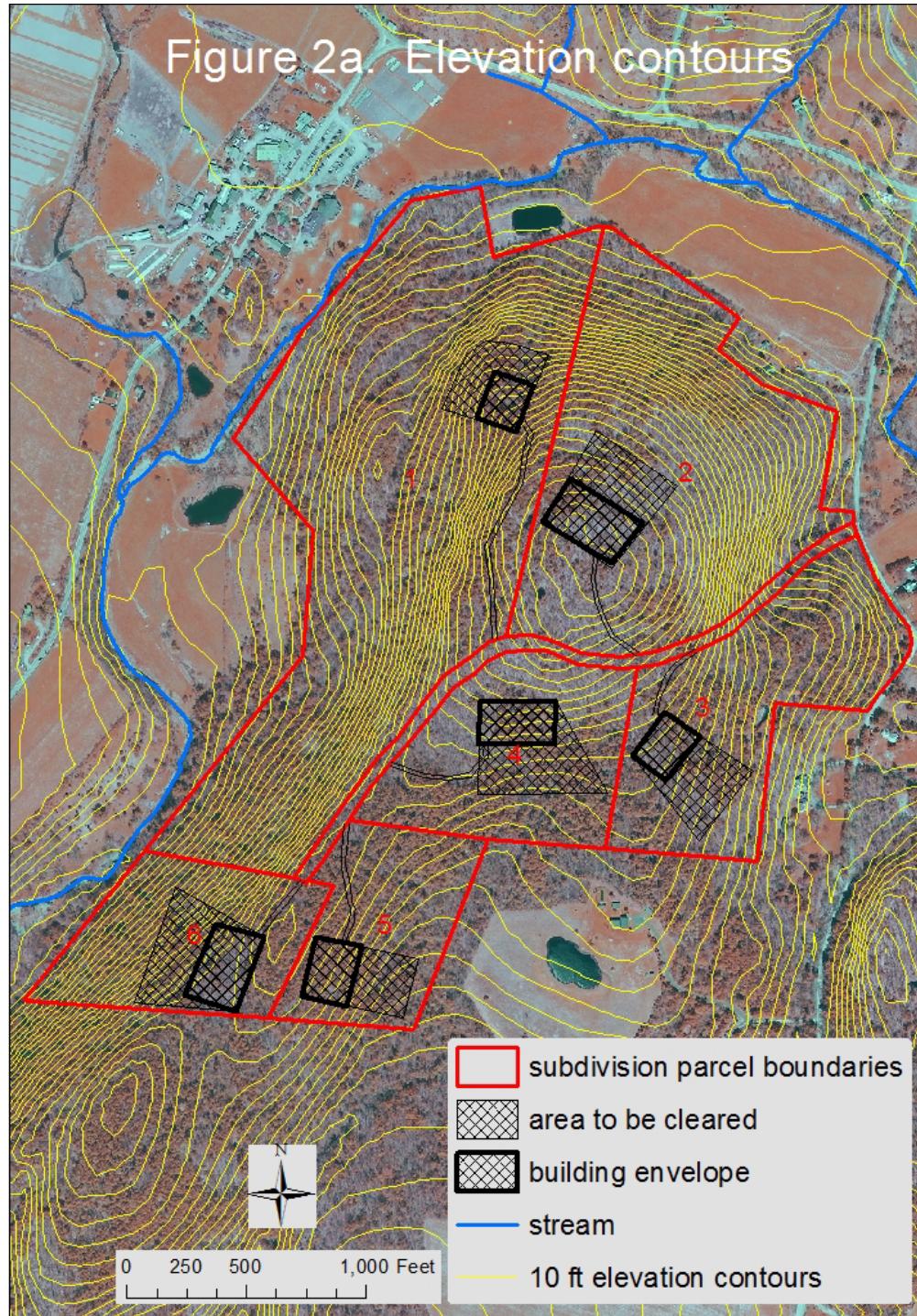


Figure 2b. Steep slopes

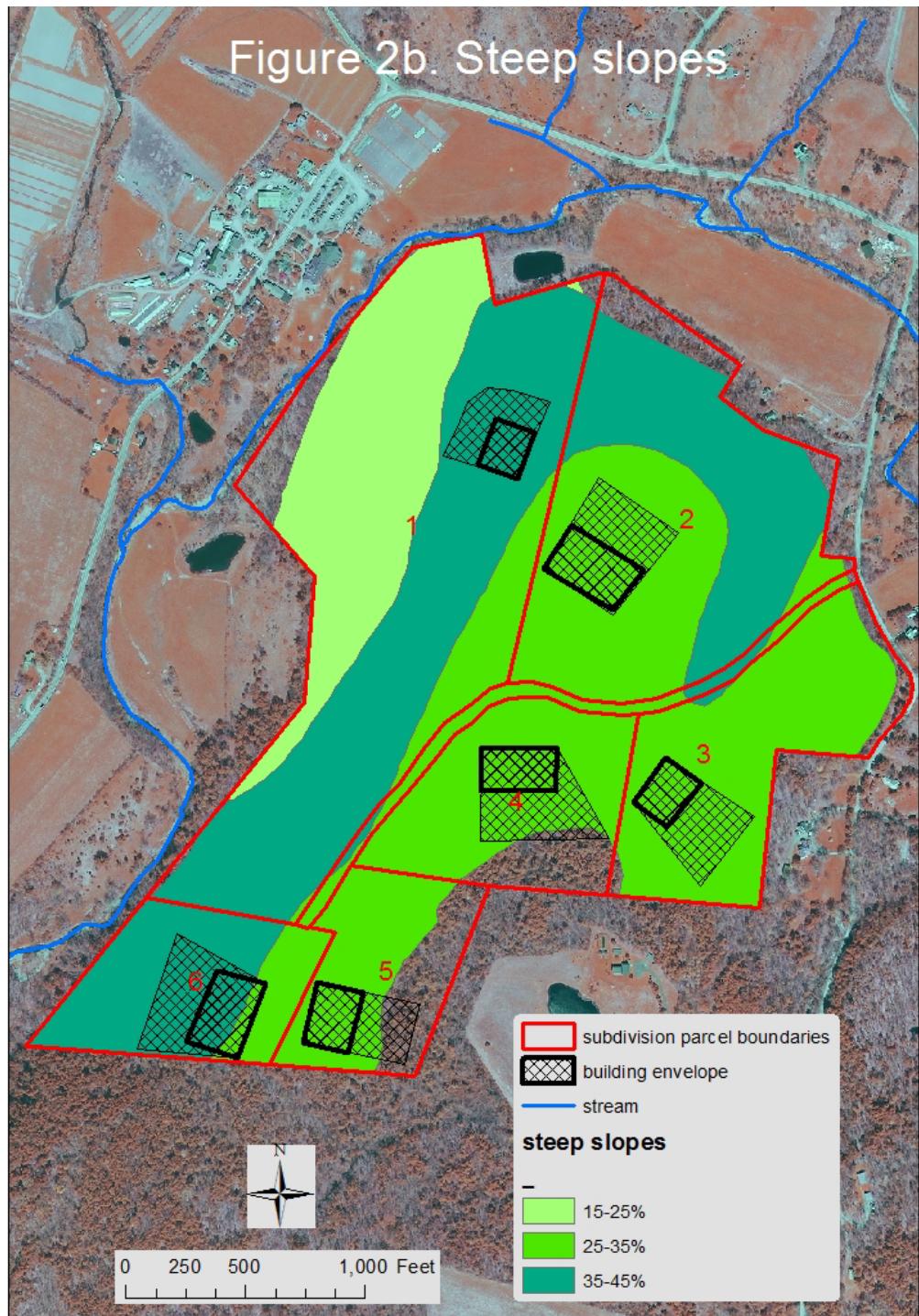


Figure 3. Unconsolidated aquifer

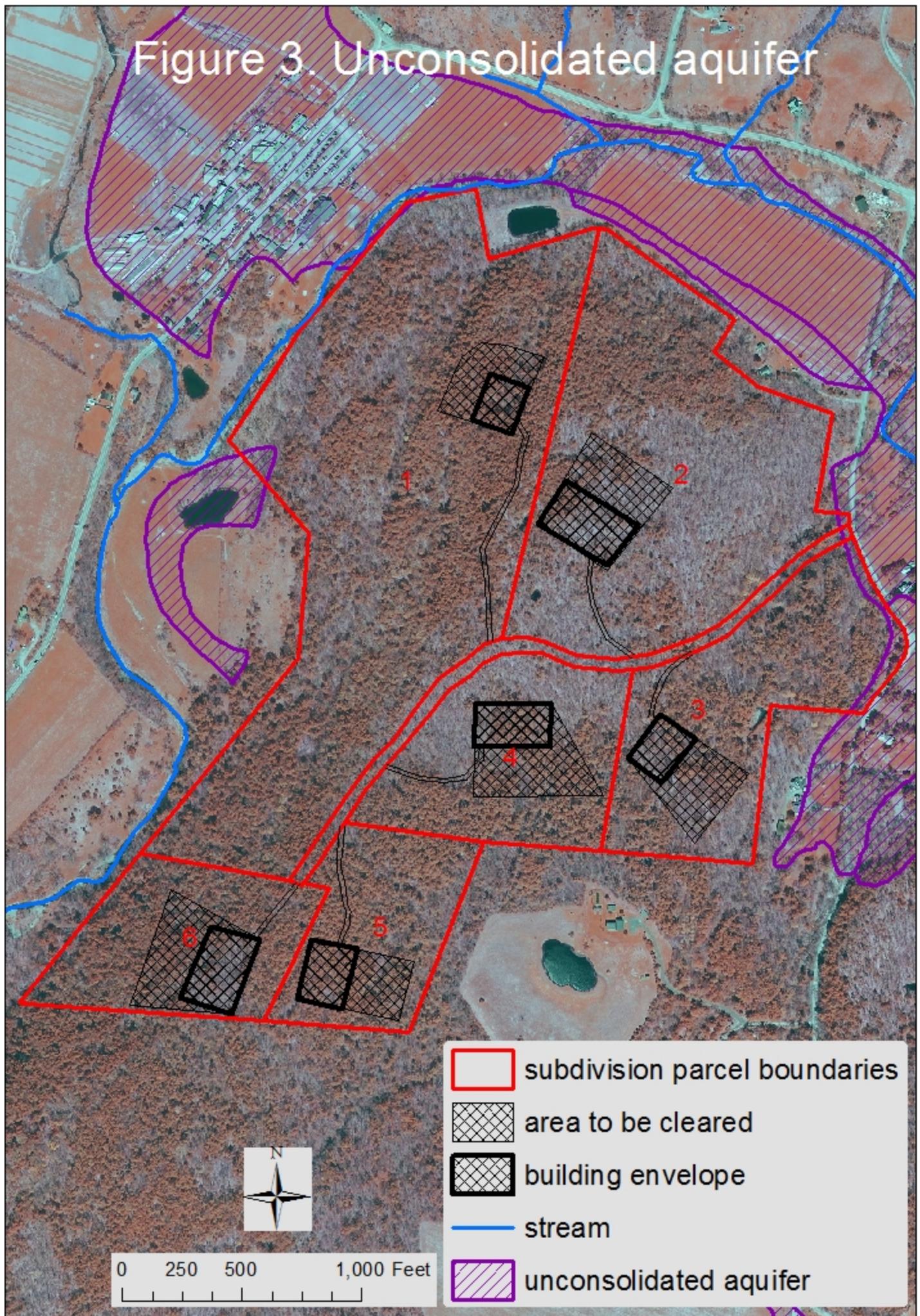


Figure 4. (your design)

