



**Adirondack
Park Agency**

New York Land and Lakes Development, LLC

P2018-0123

Woodward Lake Subdivision

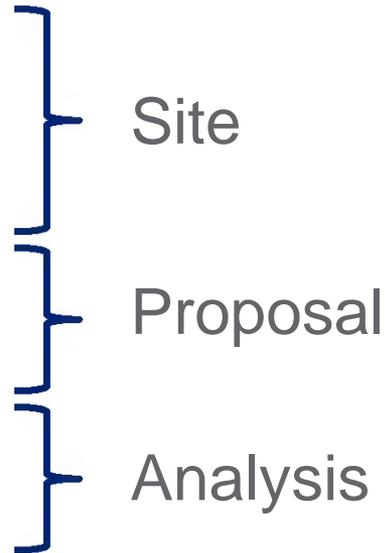
March 11, 2021

Review Team Panelists

- Ariel Lynch – review coordinator
- Aaron Ziemann – forest / soils
- Alicia Purzycki – engineering
- Leigh Walrath – aquatic resources
- Mary O'Dell – wildlife / habitat / wetlands
- Dan Kelleher – economic
- Sarah Reynolds – legal
- Mark Rooks – wildlife / habitat / wetlands (retired)
- Shaun LaLonde - engineering (retired)

Presentation Overview

- Jurisdiction
- Conclusions of Law
- Project Location
- Existing Development
- Site Resources & Constraints
- Proposed Subdivision
- Proposed Development
- Impact Analysis
- Alternatives Analysis
- Public Comment
- Review by Others
- Draft Permit Conditions
- Q & A



Jurisdiction

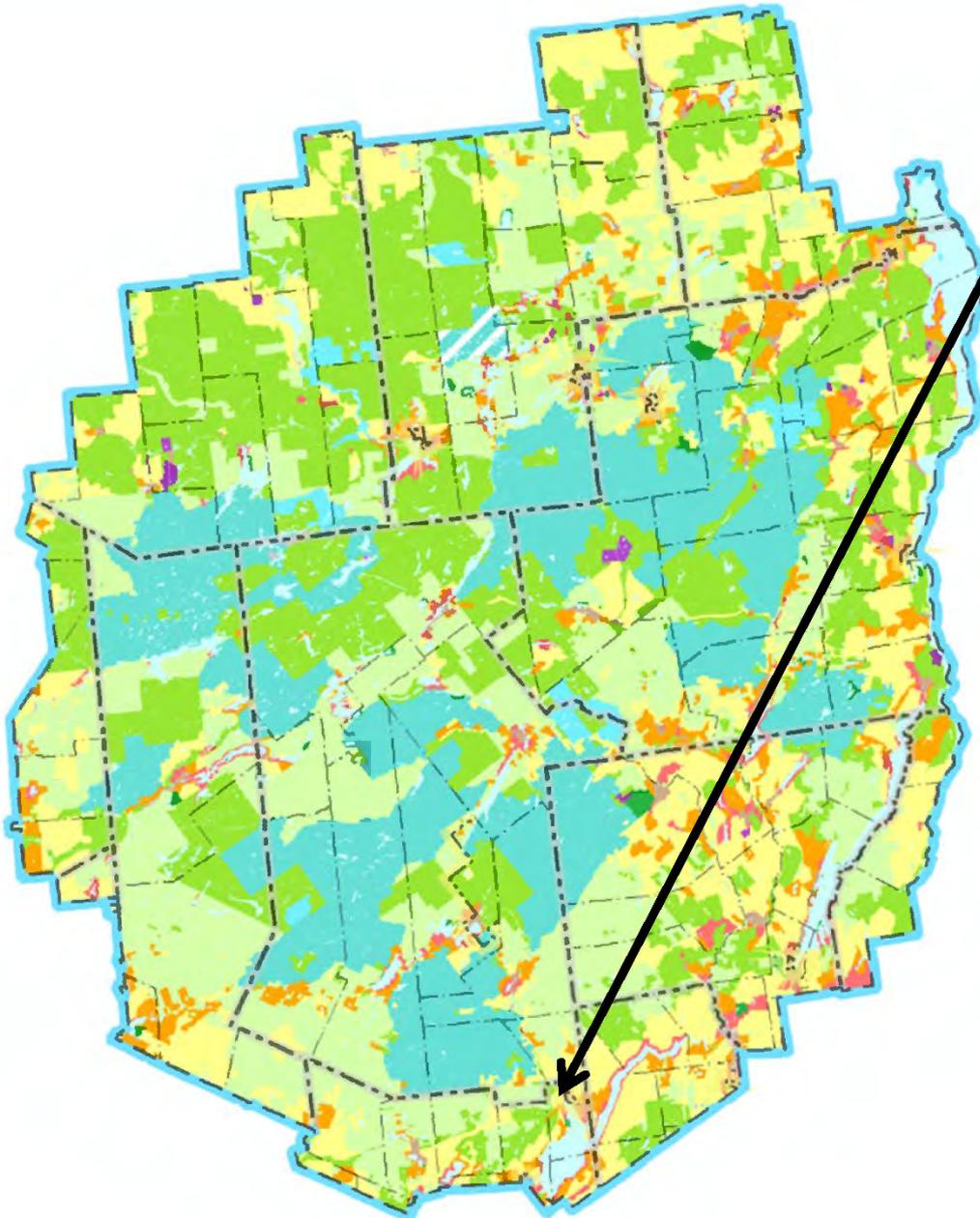
- APA Act § 809
 - Class A and B Regional Project
 - Subdivision in Rural Use
 - ≥ 20 residential lots
 - Non-shoreline lots < 7.35 ac
 - Involving wetlands
 - Subdivision in Resource Management
 - ≥ 2 residential lots
 - Involving wetlands
 - Single family dwellings in Resource Management

- Regulated Wetland Activity – 9 NYCRR Part 578
 - Subdivision involving wetlands

Conclusions of Law

- Development authorized:
 - Consistent with land use and development plan
 - Compatible with character description and purposes policies, and objectives of each land use area
 - Consistent with overall intensity guidelines
 - Complies with shoreline restrictions
 - No undue adverse impact on resources of the Park
 - Secures natural benefits of wetlands associated with the project
 - Compatible with the preservation of the entire wetland (i.e., no degradation or loss of any part of the wetland or its values)

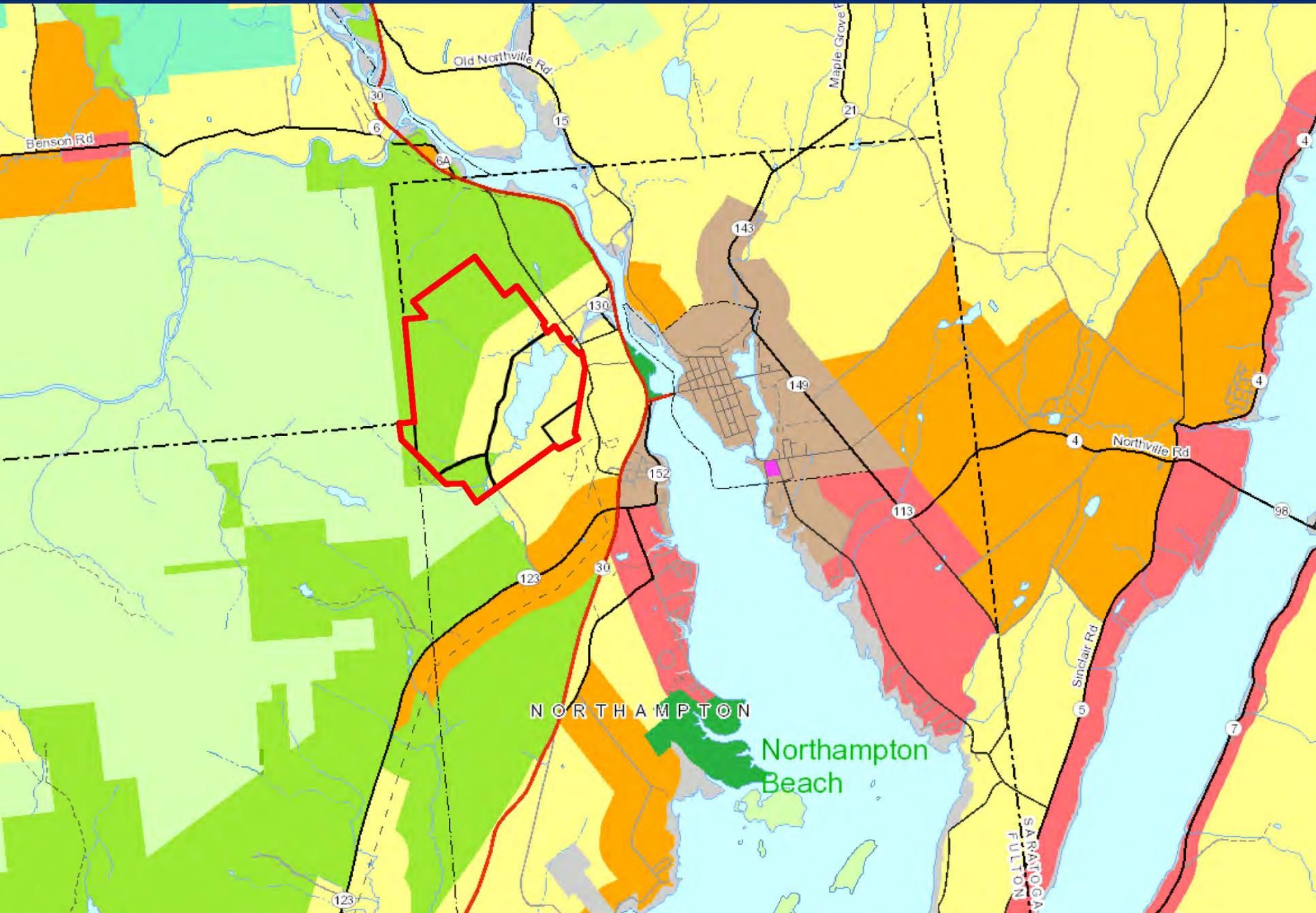
Project Location

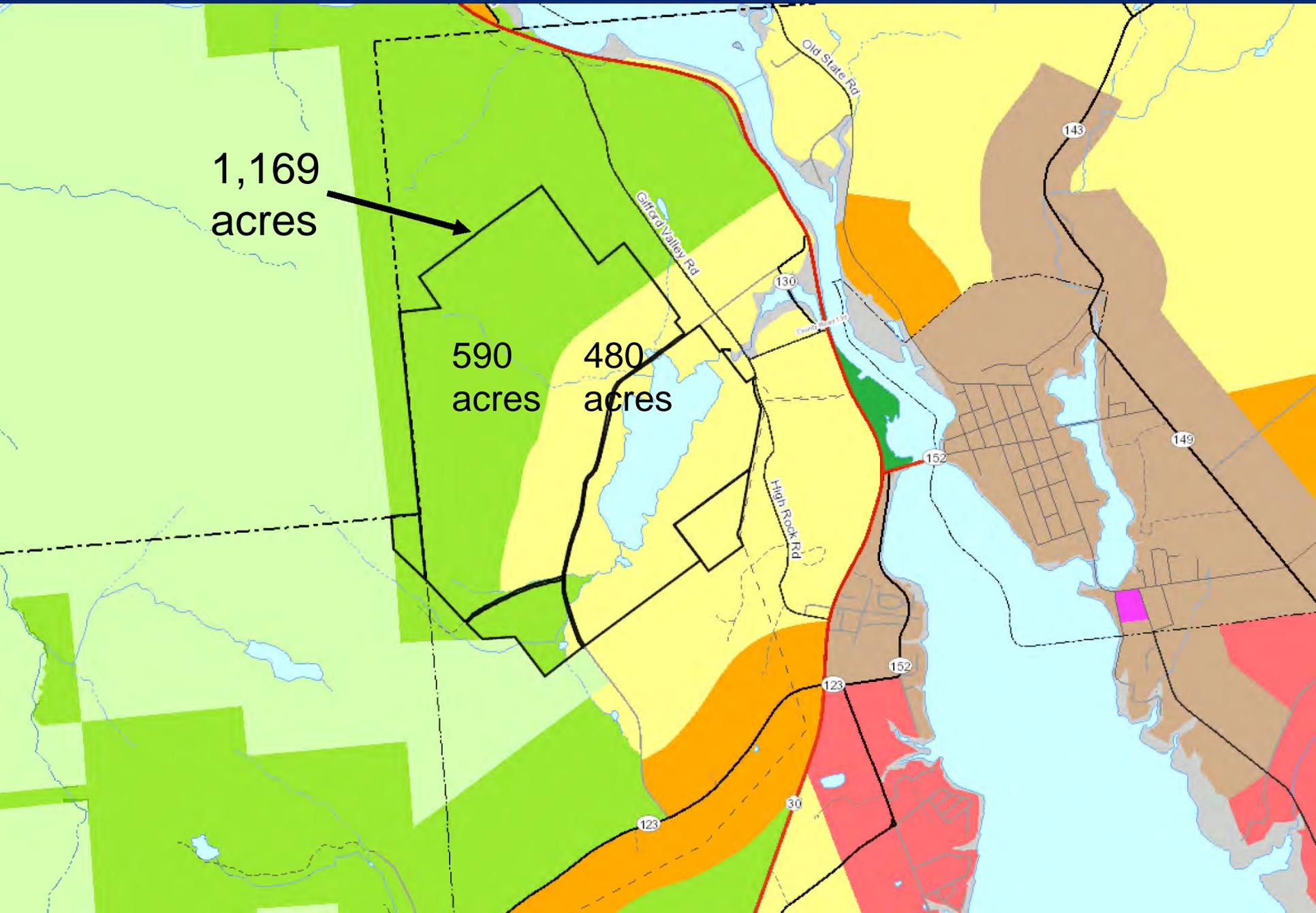


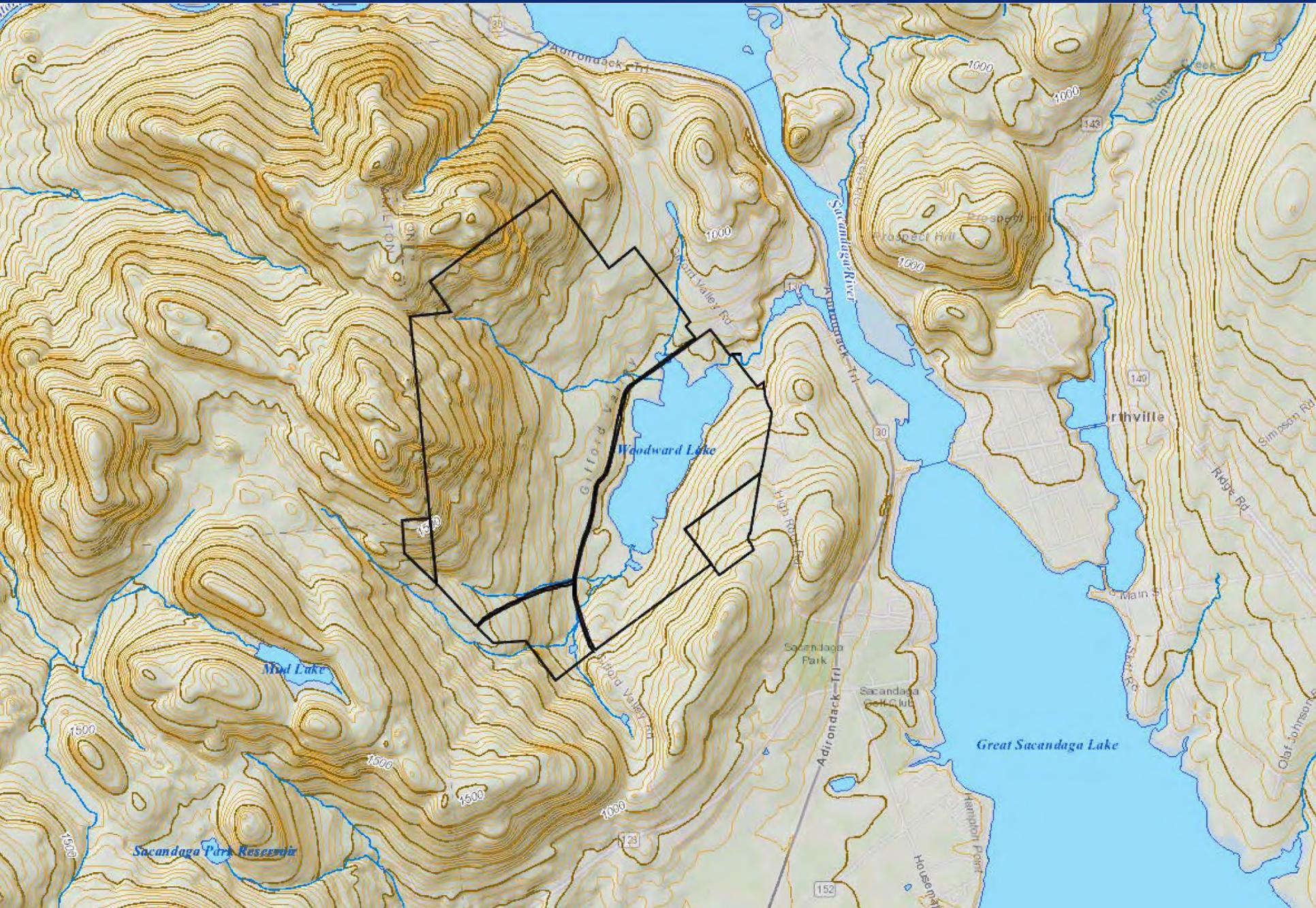
Project Location

Towns of
Northampton and
Mayfield

Fulton County







2018
Air Photo



2018
Air Photo

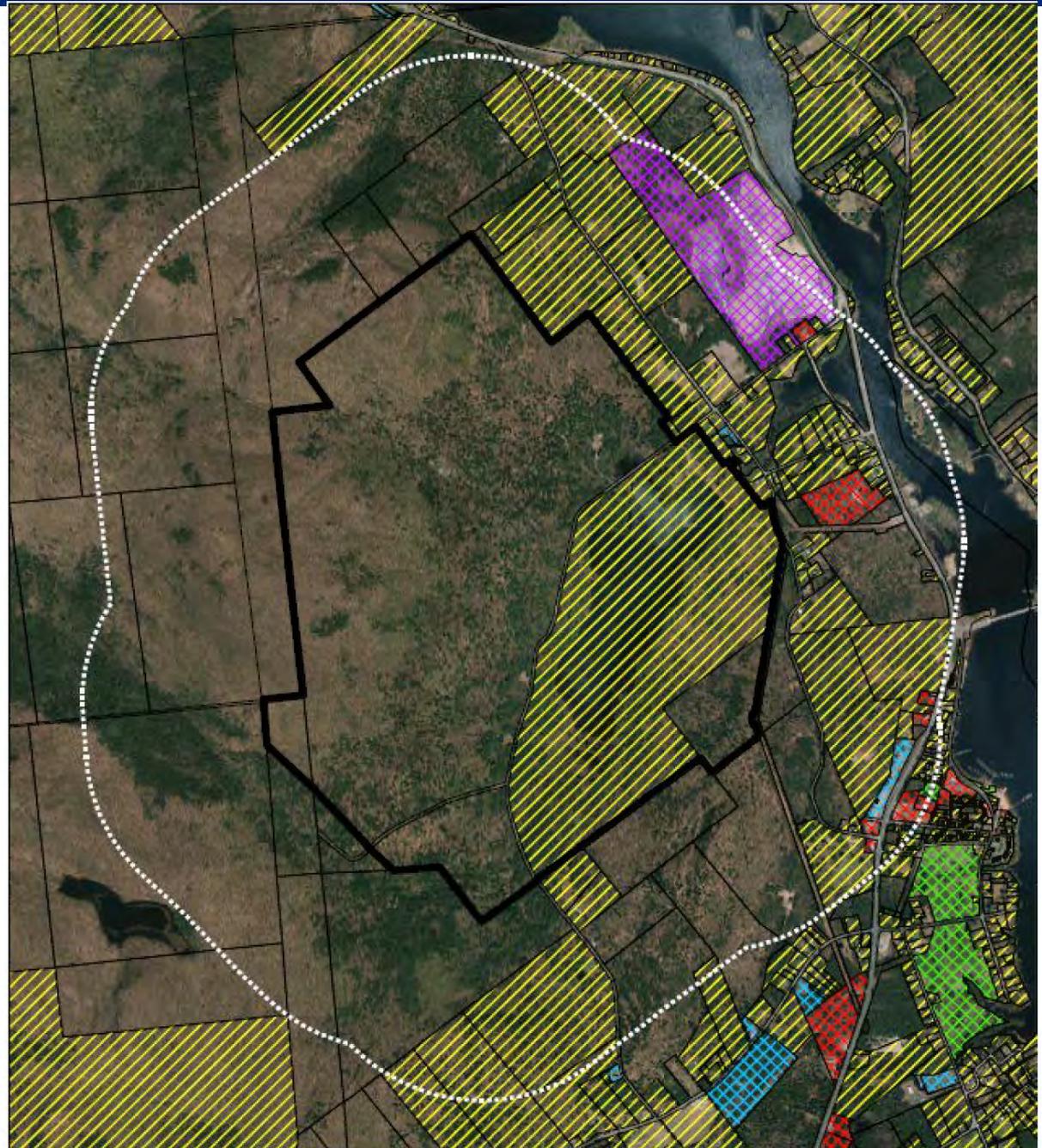


Land Use Within 1/2 Mile

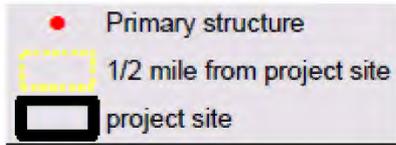
Tax parcel classification

-  2 - Residential
-  3 - Vacant
-  4 - Commercial
-  5 - Recreation and Entertainment
-  6 - Community Services
-  7 - Industrial
-  8 - Public Services
-  9 - Forest Lands Public & Private

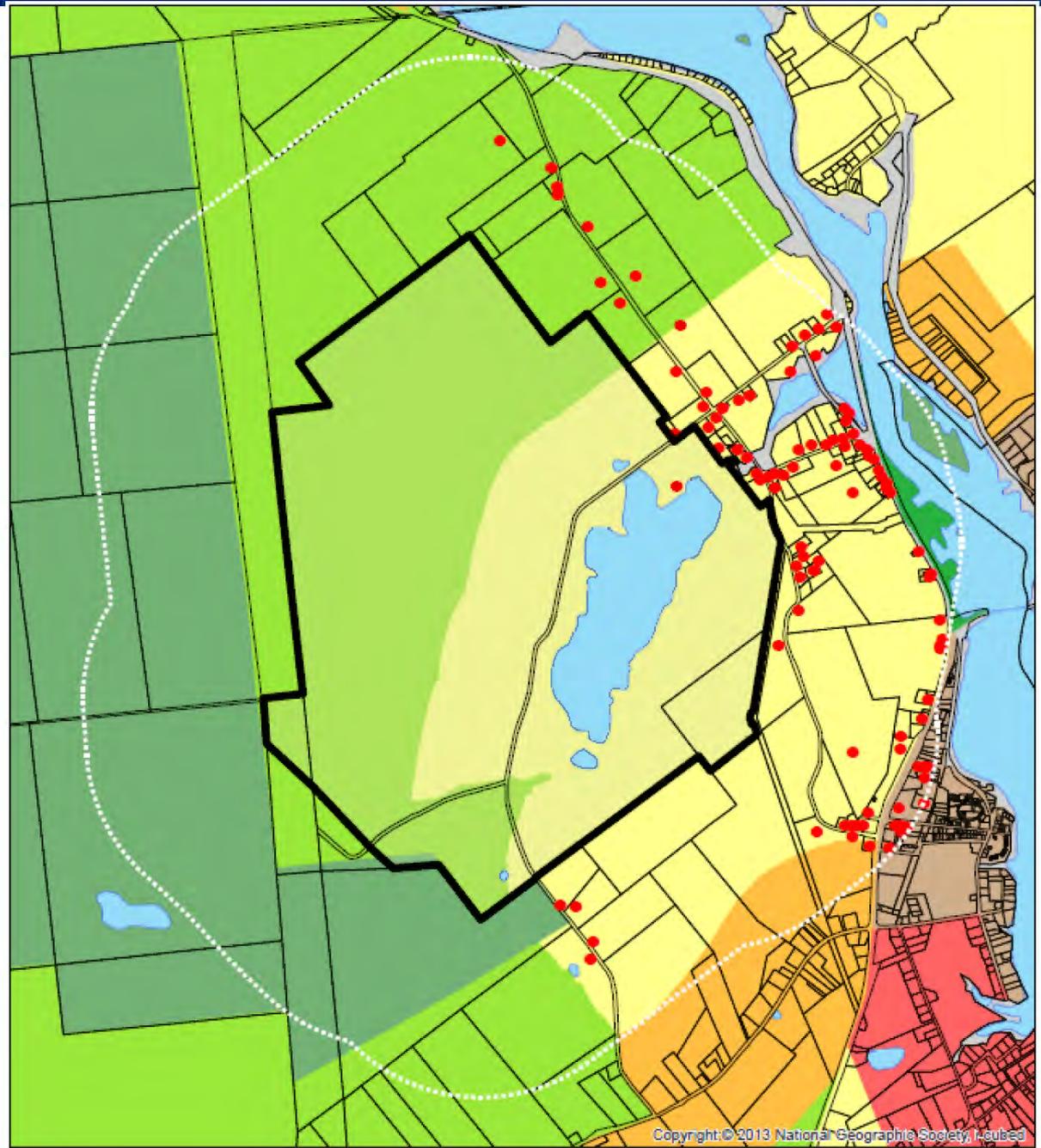
-  1/2 mile from project site
-  project site



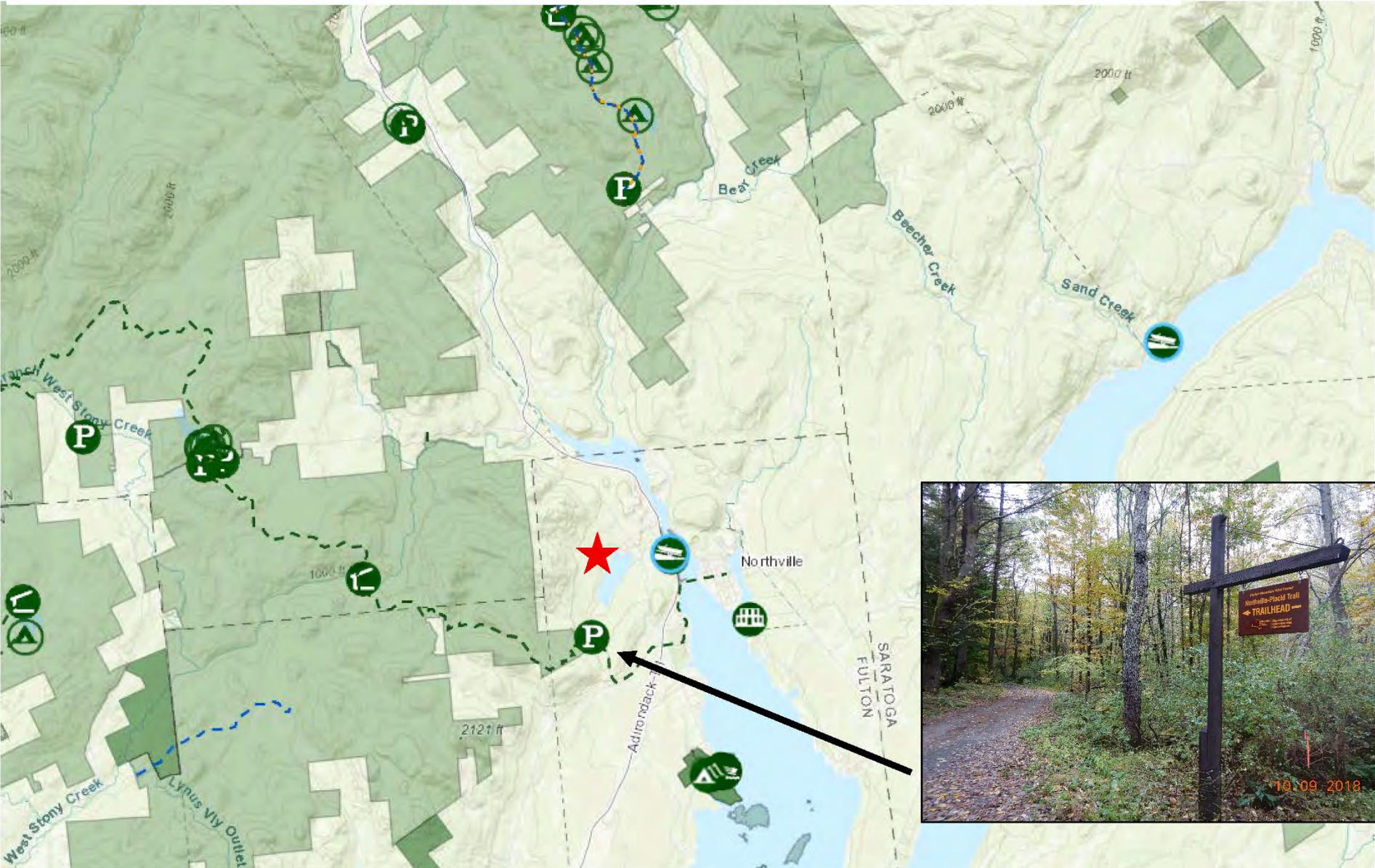
Primary Structures Within 1/2 Mile



Adirondack Park Land Use and Development Plan



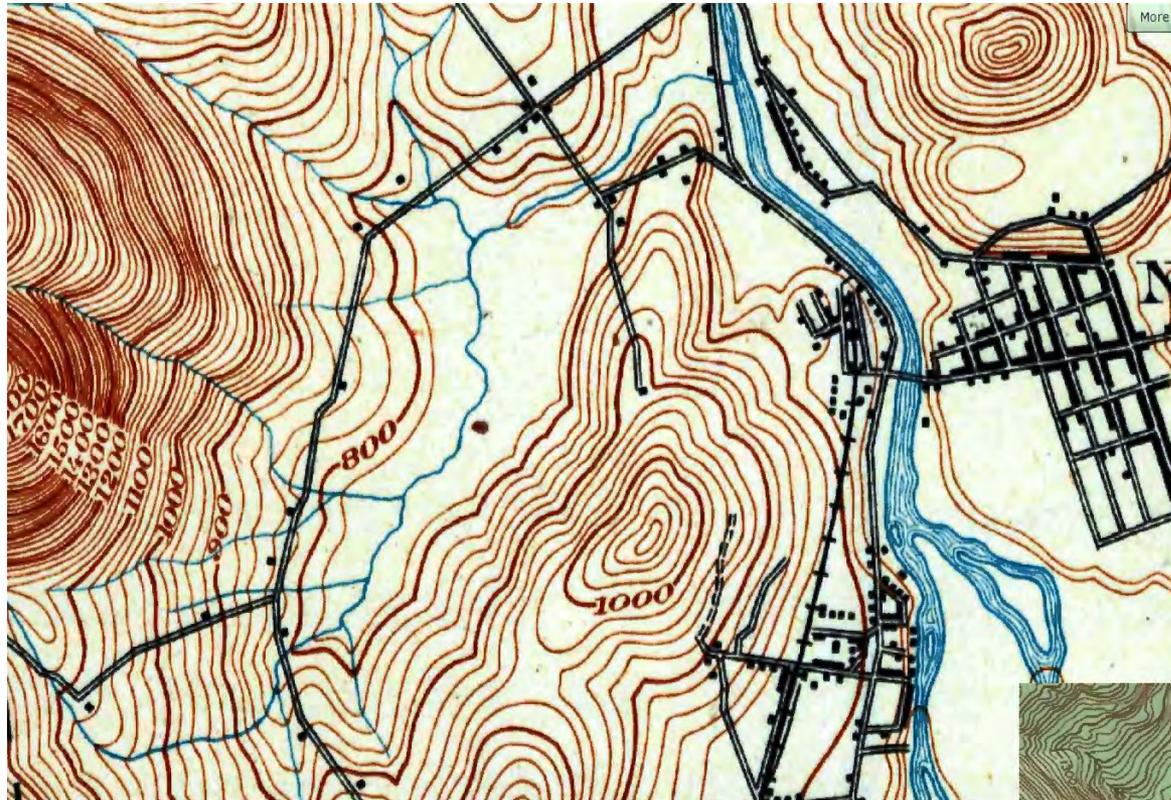
State Land / Recreation Assets



Existing Development

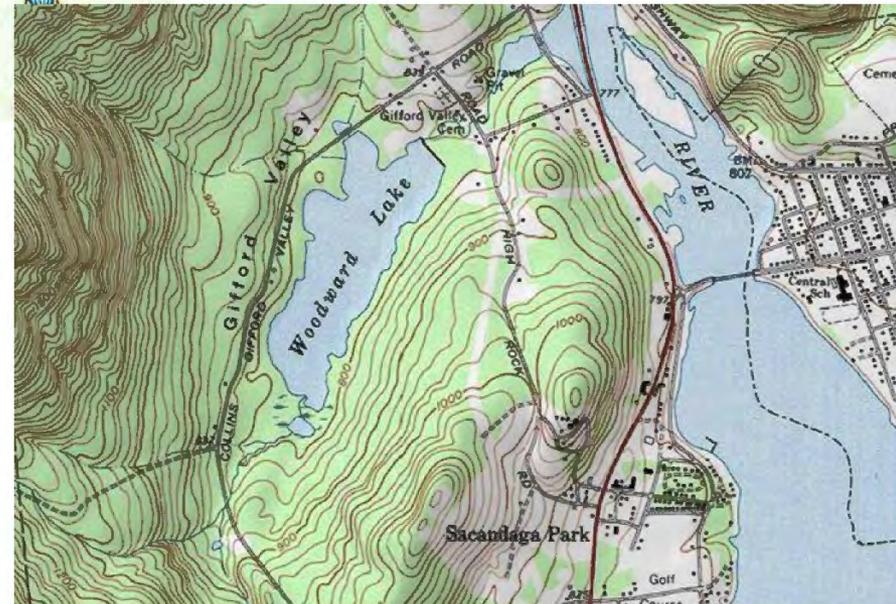
Site History

- Early 1900s – Donald Woodward owned the property
- ~1928 – dam constructed, creating Woodward Lake
- 1930s to 1980s – Winne family ownership
- 1996 – property logged and subdivided into 3 parcels:
 - ~700 ac on the west side of Collins-Gifford Valley Road,
 - ~300 ac including the lake, and
 - a parcel east of the utility corridor
- 1996 & 2001 – new owner purchased both larger parcels
- 1997 – dwelling and tennis court constructed
- 2018 – property sold to current owner
Woodward Lake Properties, LLC



1902 Map

Current Map



Existing Development

Town road

Dam

Single family dwelling
(clearing, driveway,
tennis court, dock)

Wood roads

Logging / skid roads



Collins-Gifford Valley Road



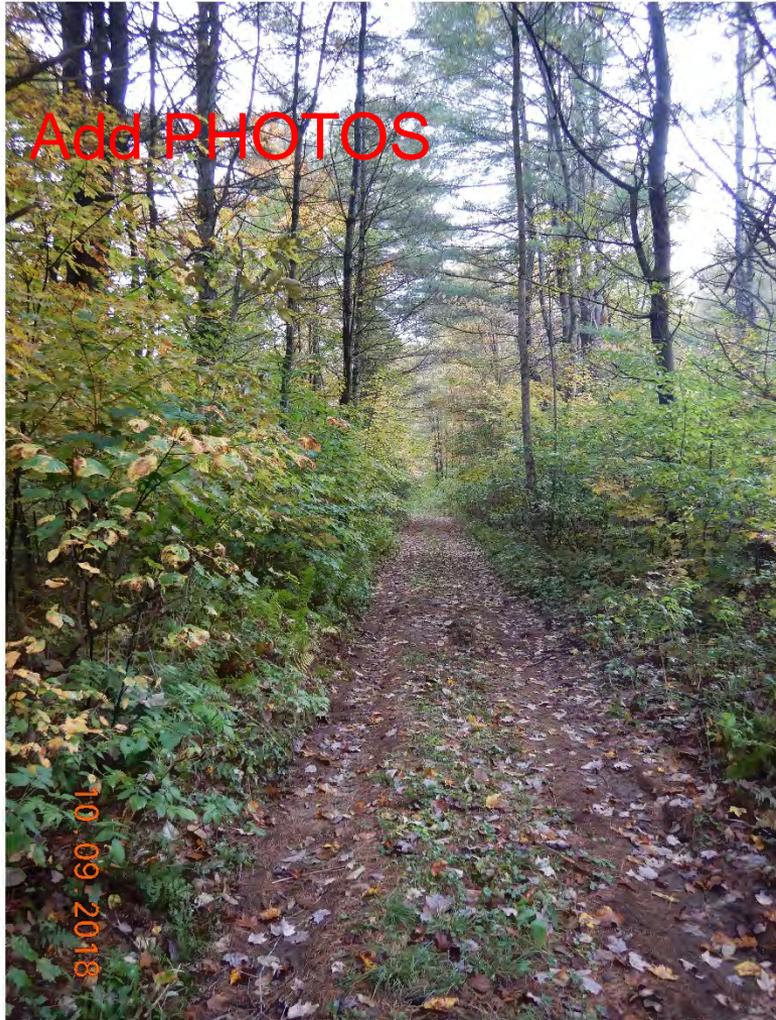
High Rock Road



Wood Roads



Logging Roads



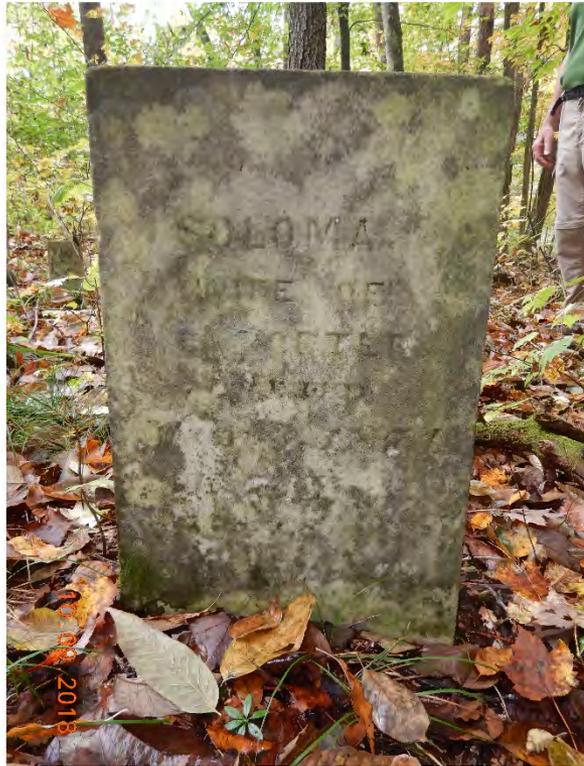
Utility Corridor (eastern property line)



Woodward Lake Dam



Cemetery



Property Uses – Past and Present



Site Resources and Constraints

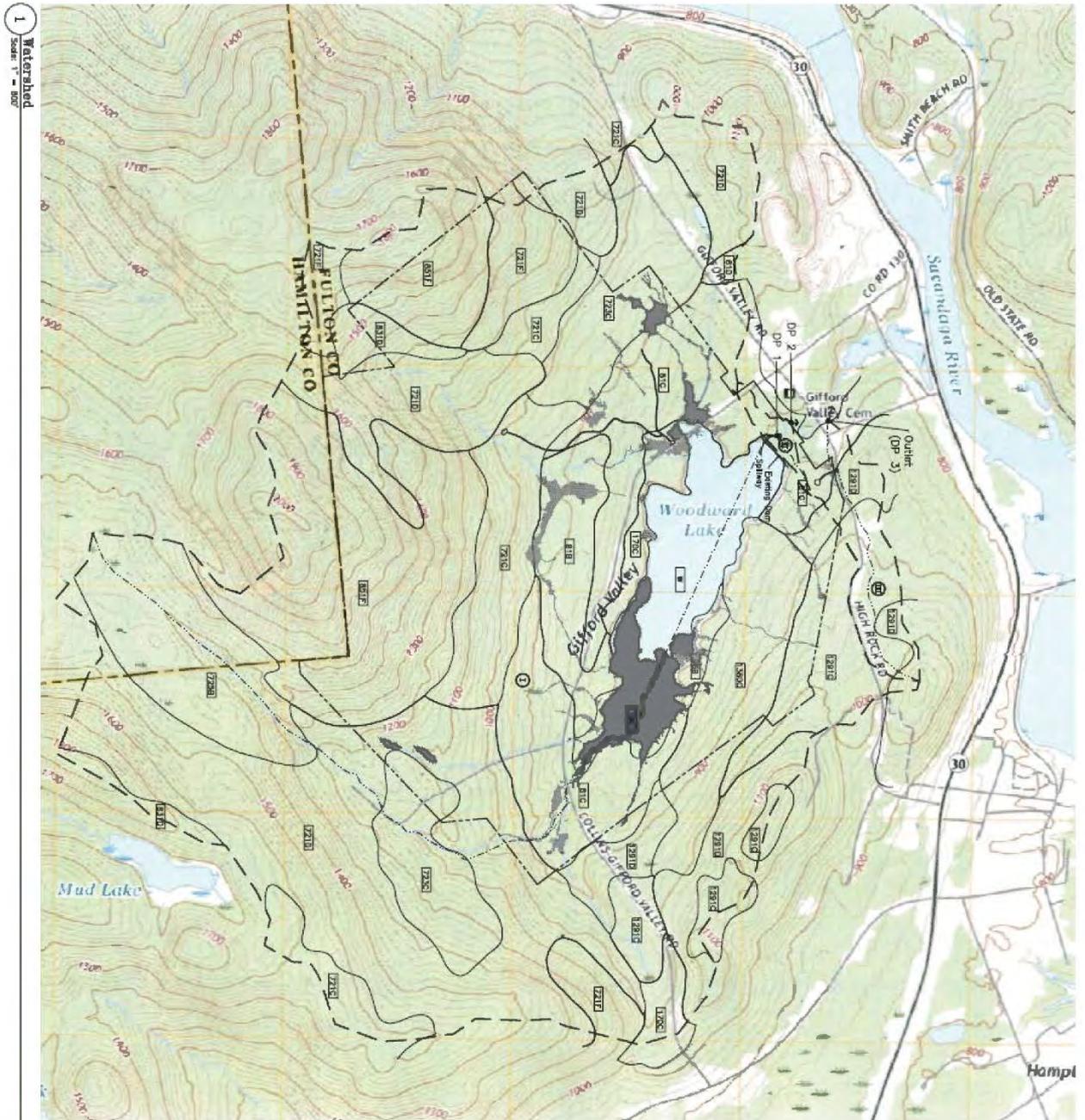
Woodward Lake Watershed

Watershed =
3.8 sq miles

Project Site =
1.8 sq miles

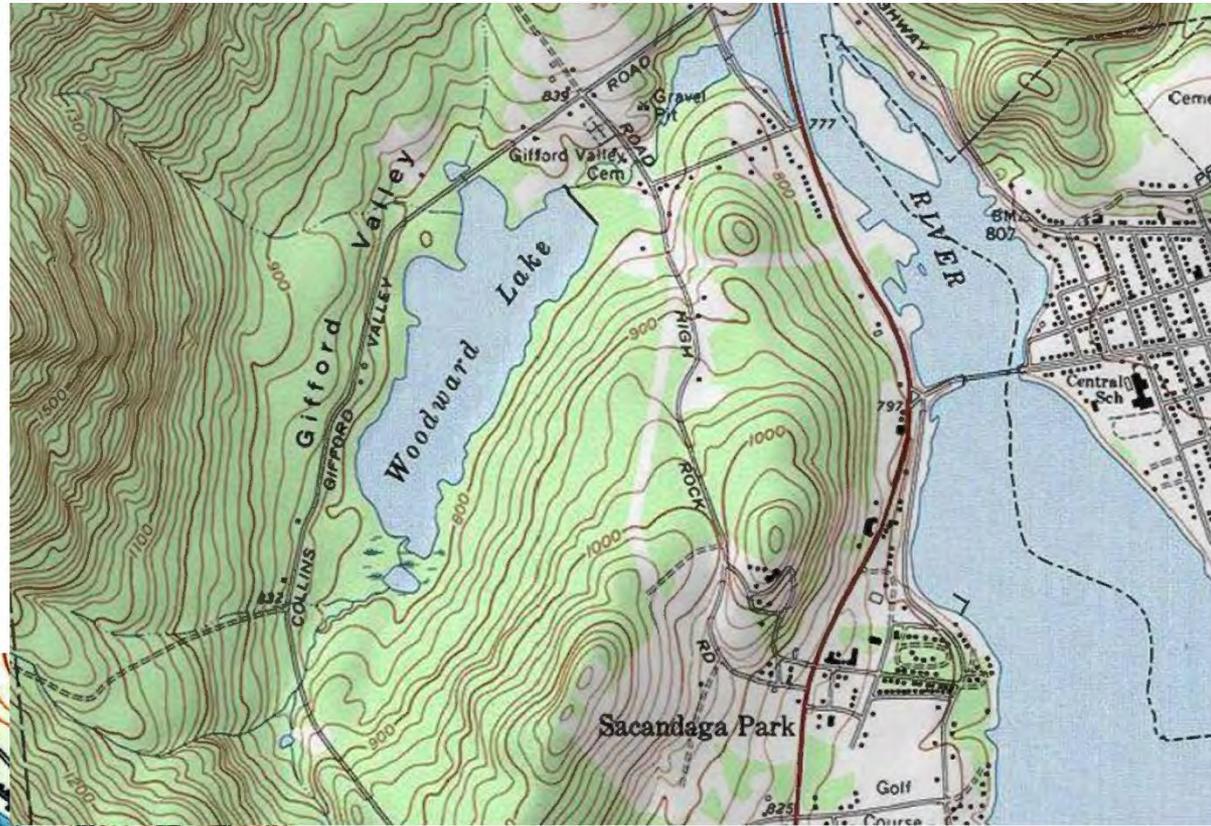
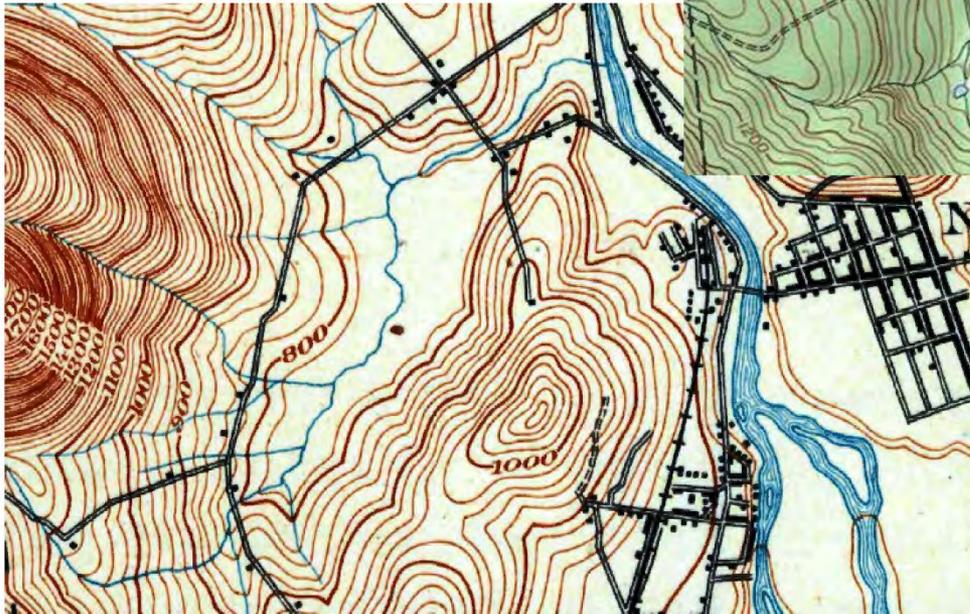
Forest Preserve
within watershed =
1.2 sq miles

Other private lands
within watershed =
0.8 sq miles



Woodward Lake

1902 Map

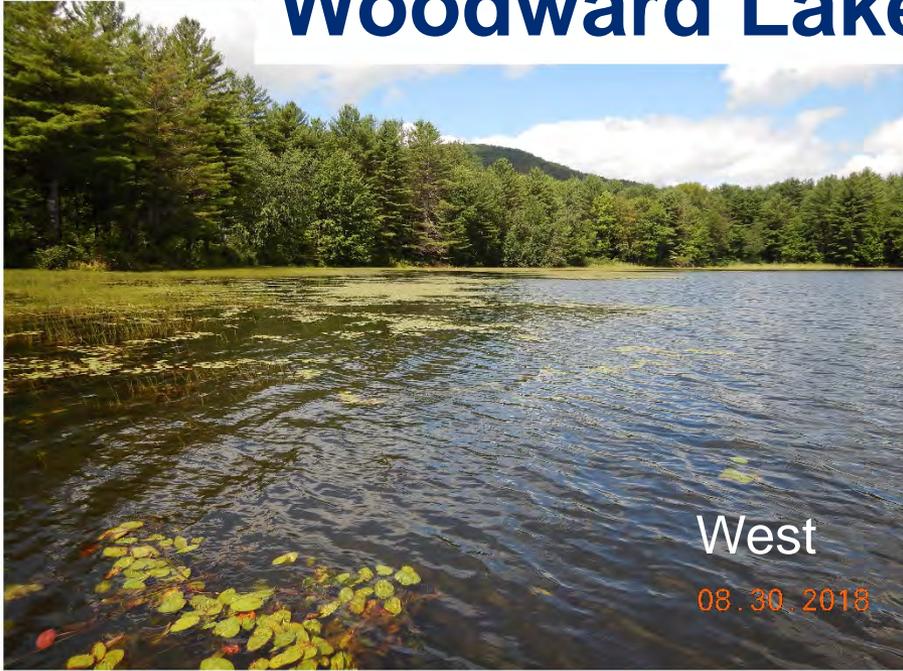


Current Map

Woodward Lake

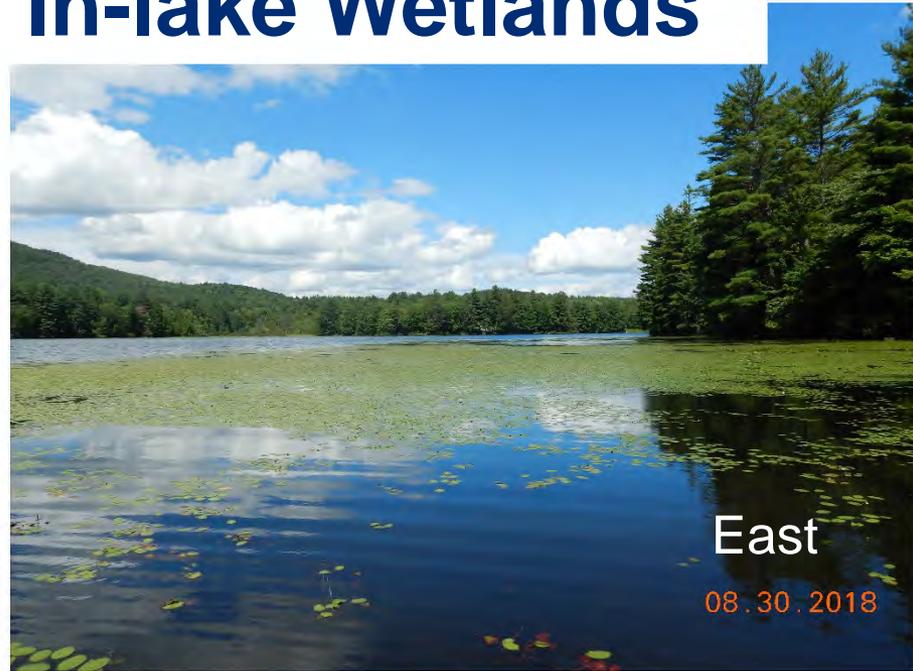


Woodward Lake: In-lake Wetlands



West

08.30.2018



East

08.30.2018



South

08.30.2018



North

08.30.2018

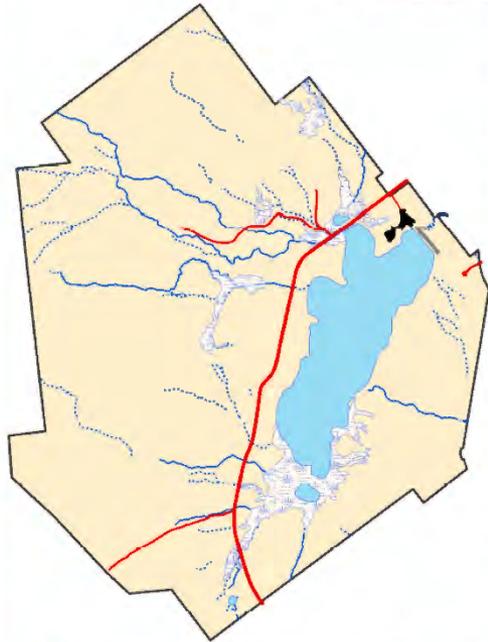
Wetlands



Streams

Stream length

48,482± linear feet (9.2± miles)



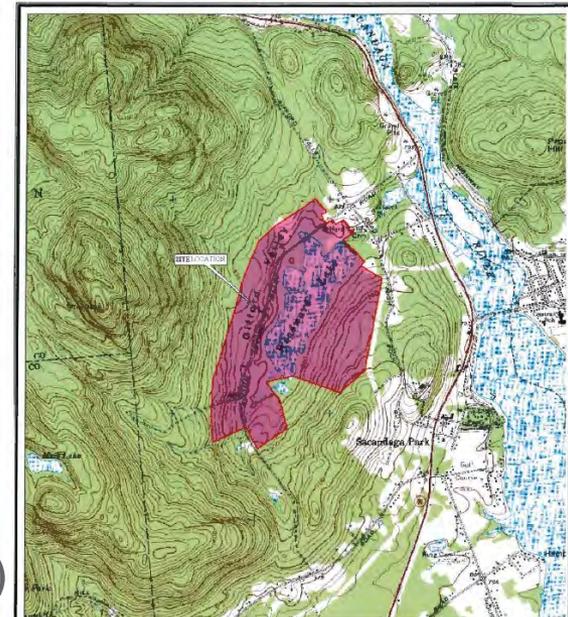
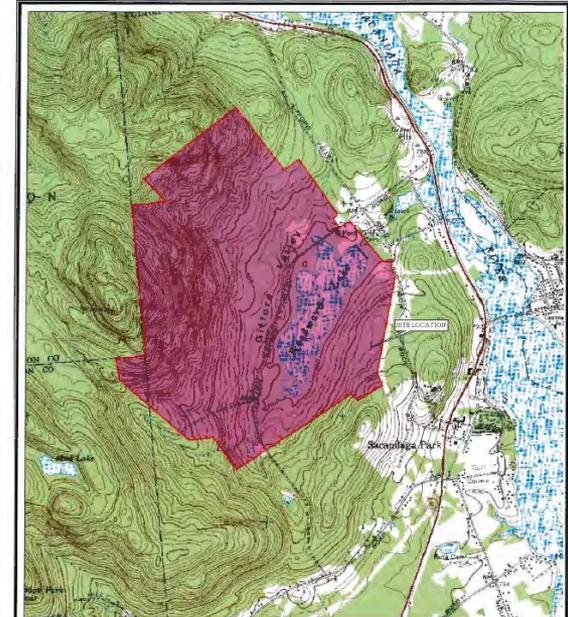
----- Intermittent Stream
——— Permanent Stream



Biological Survey

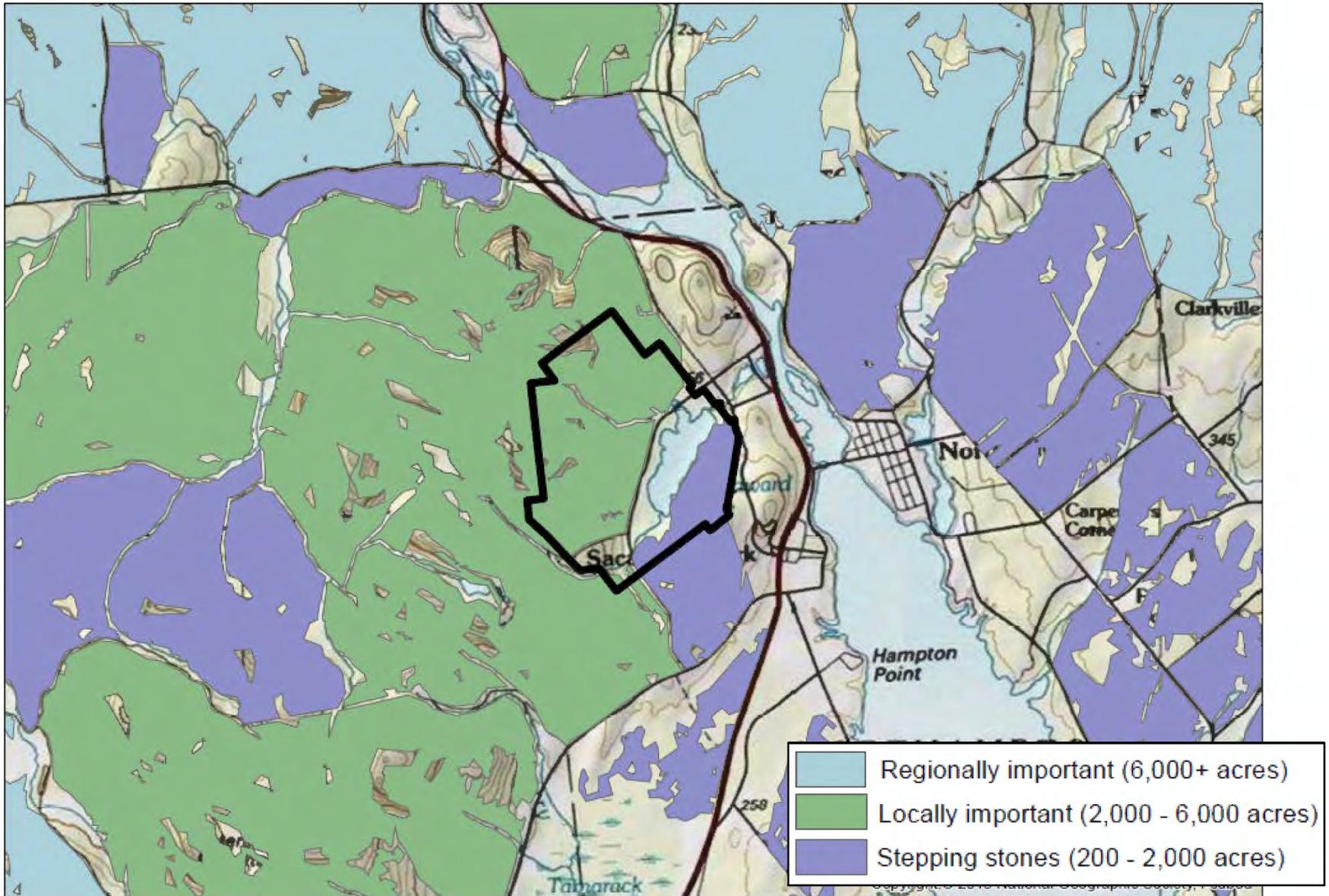
- Agency Consultation and Literature Search
- Field Survey
 - Ecological Communities / Vegetation
 - Wetland Delineation Information*
 - Flora and Fauna Inventory
 - Invasive Species
 - Habitat Connectivity
- Endangered and Threatened Species

Project
Site



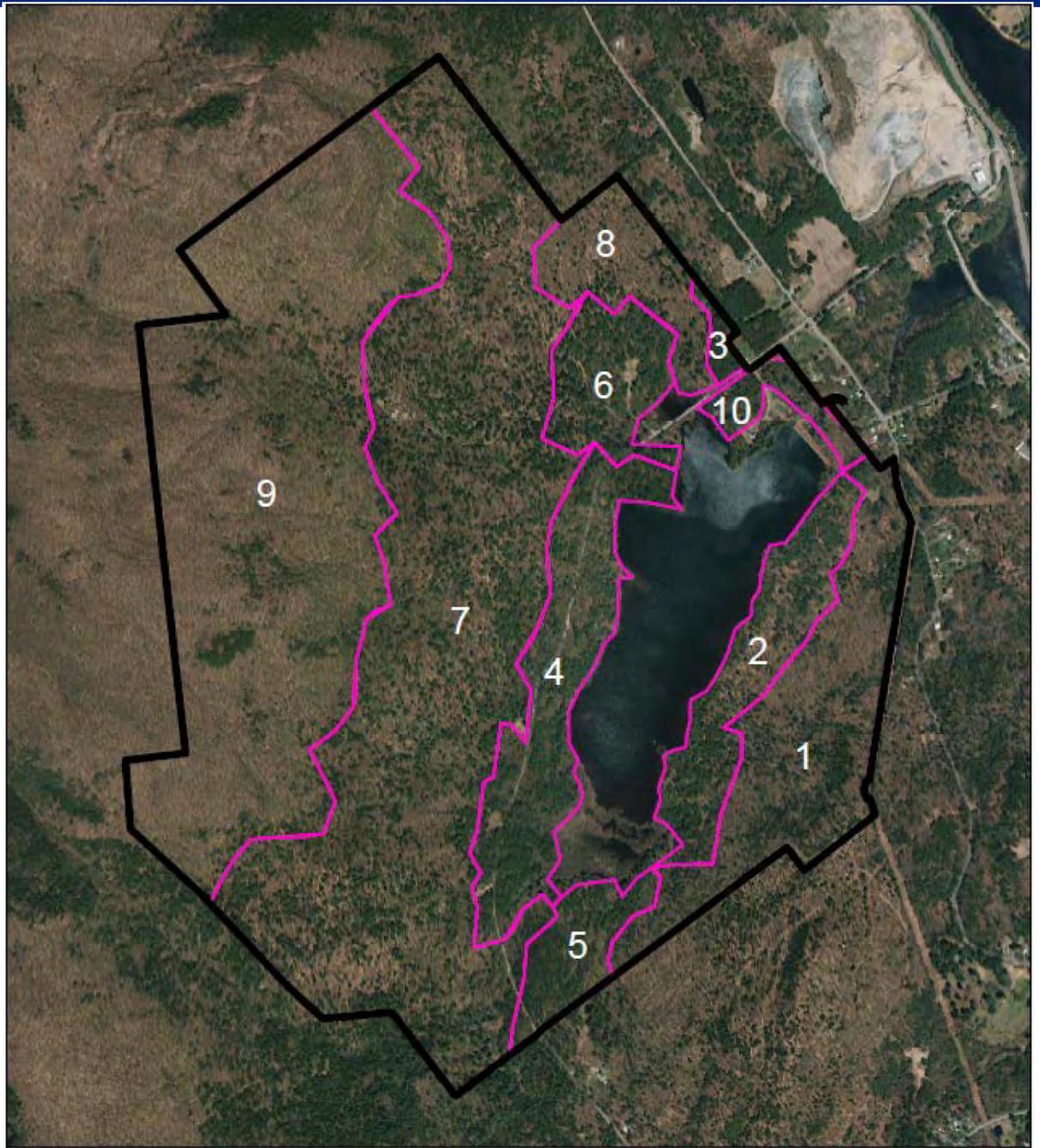
Review Area *
(aquatic resources)

Large Forest Blocks



Forest Stands

Logging / Skid Rds



Forest



Biological Survey: Agency Consultation and Literature Search

- NY Natural Heritage Program Database
- US Fish and Wildlife Service
- NY Breeding Bird Atlas
- NY Herpetological Atlas

Flora and Fauna Inventory

Species confirmed on site during multi-season field survey

194 species of flora identified:

- 32 tree species
- 30 shrub species
- 6 vine species
- 126 herbaceous plant species

105 species of fauna identified:

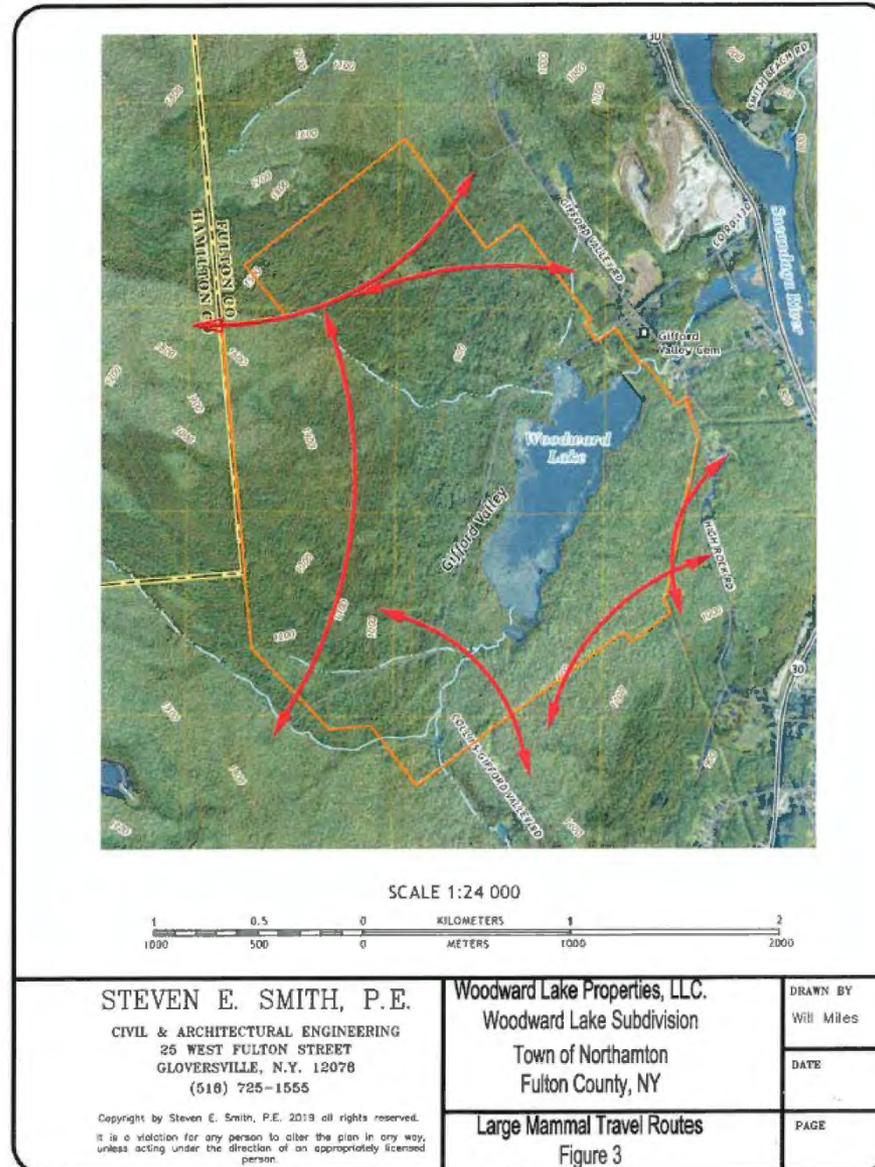
- 21 mammal species
- 67 bird species
- 13 amphibian/reptile species
- 4 fish species

+59 species anticipated

- 16 mammals
- 32 birds
- 11 amphibian/reptiles

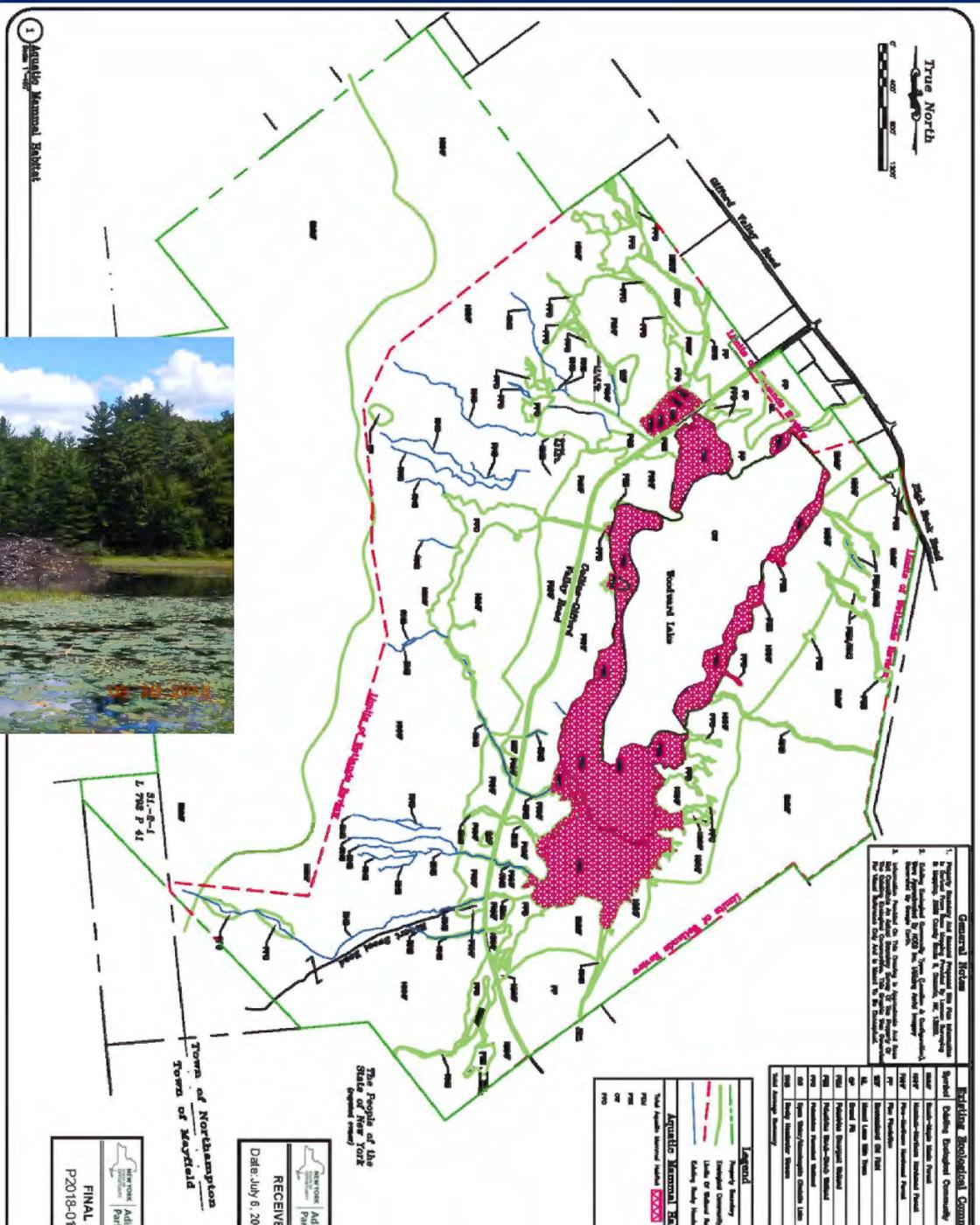
Large Mammal Travel Routes

Deer
Bear
Fox
Coyote
Fisher



Aquatic Mammal Habitat

- Beaver
 - Mink
 - Muskrat
 - Otter?
-
- Lake
 - Wetlands surrounding lake (in pink)
 - Stream corridors

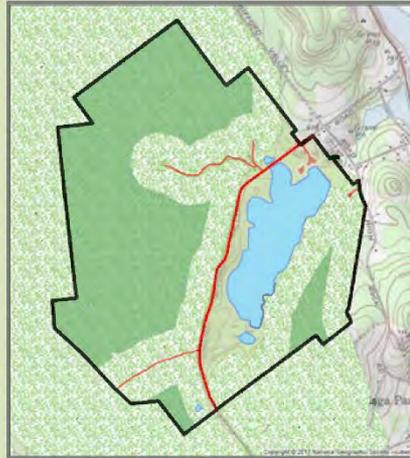


Flora and Fauna Inventory: Birds

Bird species: 67 observed + 32 expected/possible

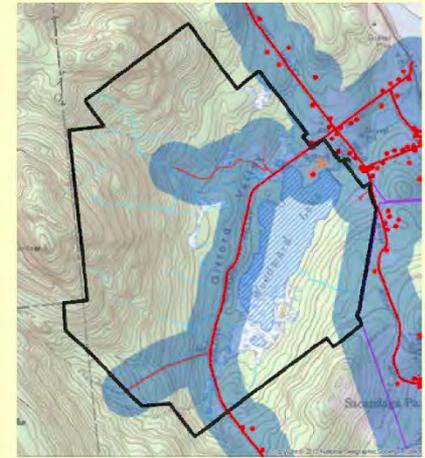
Interior forest dwelling songbirds and raptors: forested uplands

- Warblers
- Thrushes
- Vireos
- Woodpeckers
- Owls
- Hawks



Early successional associated songbirds: field / lawn / edge

- Sparrows
- Wrens
- Finches
- Robins
- Grackles



Over Woodward Lake

- Osprey

Soaring over property

- Bald eagle

Development associated species: lawn / roadside

- Starlings
- Mourning Doves

Birds: SGCN/Special Concern Species

NYS DEC Species of Greatest Conservation Need (SGCN)

- ✓ Northern goshawk (also SC)
- Louisiana waterthrush
- Wood thrush
- Black-throated blue warbler
- Scarlet tanager



Species of Special Concern

- Sharp-shinned hawk
- ✓ Great blue heron
- Cooper's hawk
- Common loon
- ✓ Osprey



Flora and Fauna Inventory: Songbird Surveys

Higher elevations (> 1,025 ft)

mostly mature successional hardwoods

less undergrowth

farther from roads / development

→ interior forest-dwelling songbirds

lower species richness (number of species)

Lower elevations:

greater habitat diversity

younger forests / edge habitat – more undergrowth

closer to lake (insect abundance)

→ early successional songbirds

higher species richness (number of species)

Waterfowl Habitat

Open water:
Ducks
Geese

Wetlands:
Kingbirds
Flycatchers
Swallows
Hérons



Flora and Fauna Inventory: Amphibian & Reptile Species

13 observed + 11 expected/possible



Green frog

Pickerel frog

Wood frog (B)

Spring peeper (B)

American toad

Garter snake

Eastern painted turtle

Spotted salamander (B)

Alleghany dusky salamander

Two-lined salamander

Northern spring salamander

Red eft/Red-spotted newt (B)

Redback salamander

Not observed:

Wood turtle (SC)

Eastern box turtle (SC)

Northern long-eared bat



- US Endangered species
- US Fish & Wildlife Service
 - historic county record indicates potential
- Biological Report
 - presence of suitable summer roosting habitat
 - unknown bat species using bat boxes on site
- No hibernacula within 5 miles
- No documented summer occurrences

→ No endangered species known to be present on the site

Invasive Species

- Throughout forest west of lake (some east of lake)
 - Tartarian honeysuckle (co-dominant)
 - Common buckthorn
 - Japanese barberry



- Within wetlands immediately adjacent to roads
 - Purple loosestrife
 - Common reed



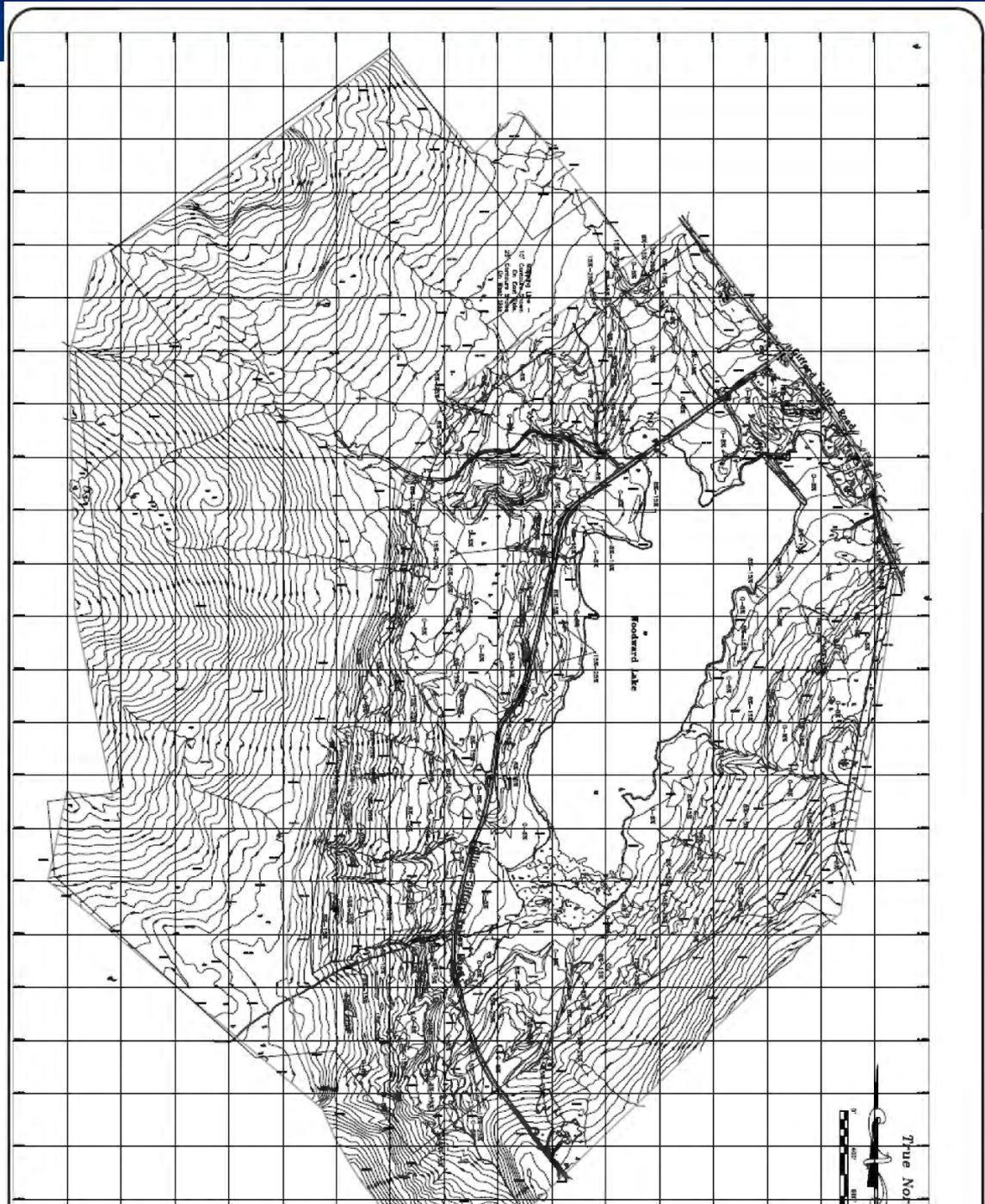
- Previously cleared areas along Collins-Gifford Valley Rd
 - Japanese knotweed (0.25-acre patch Lot 18)
 - Oriental bittersweet



- Banded mystery snail (lake only)

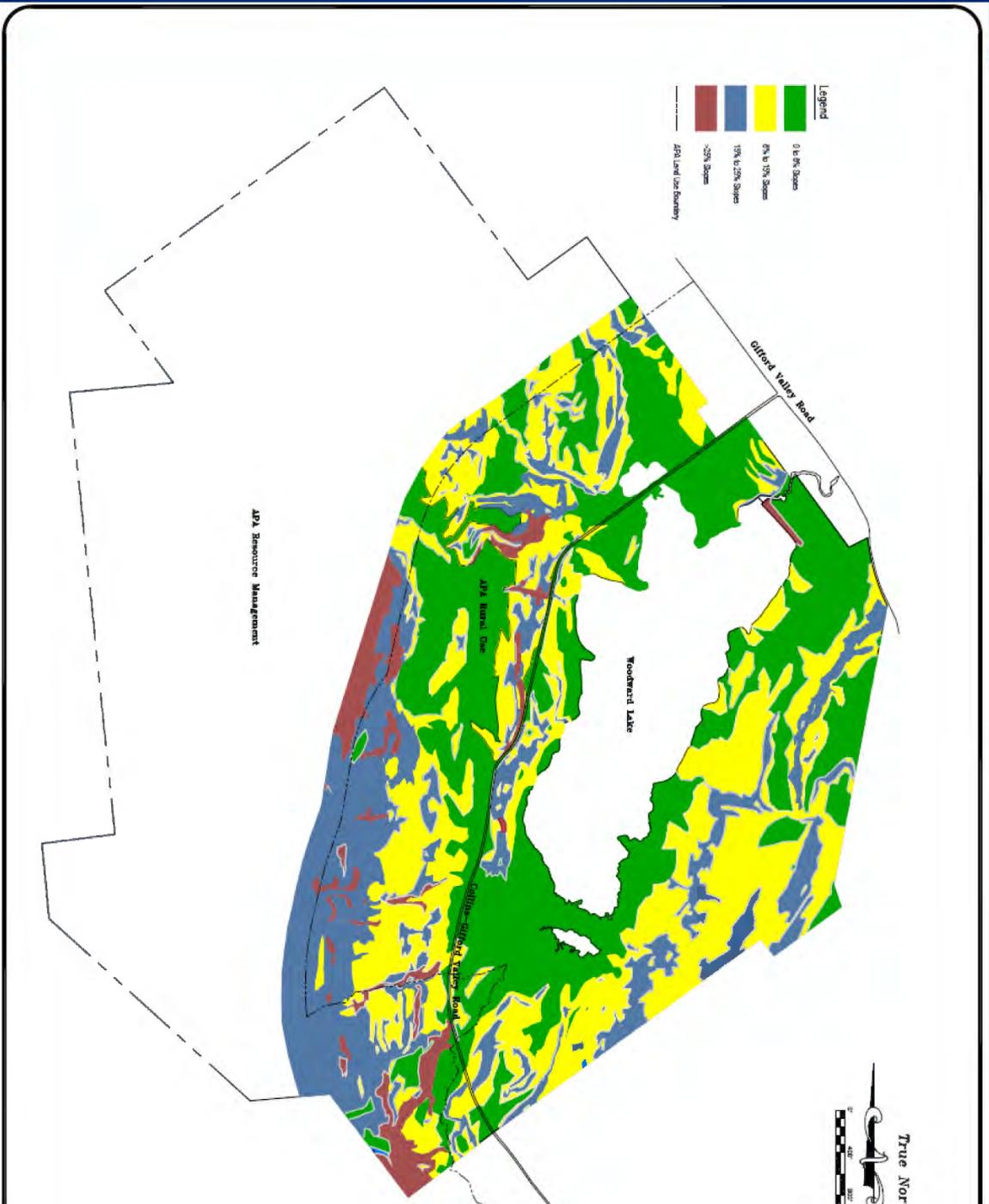
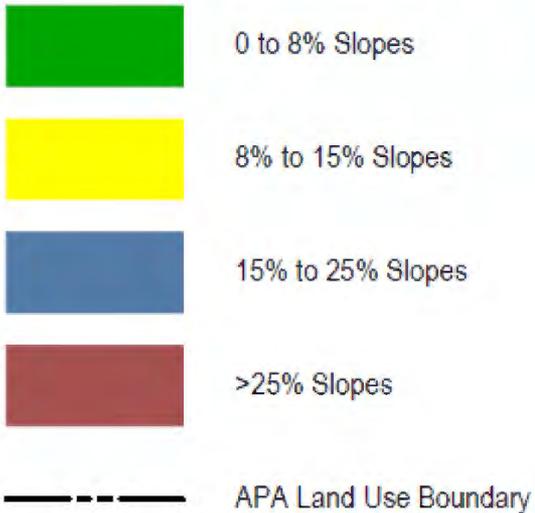


Slope Map with Major Contours



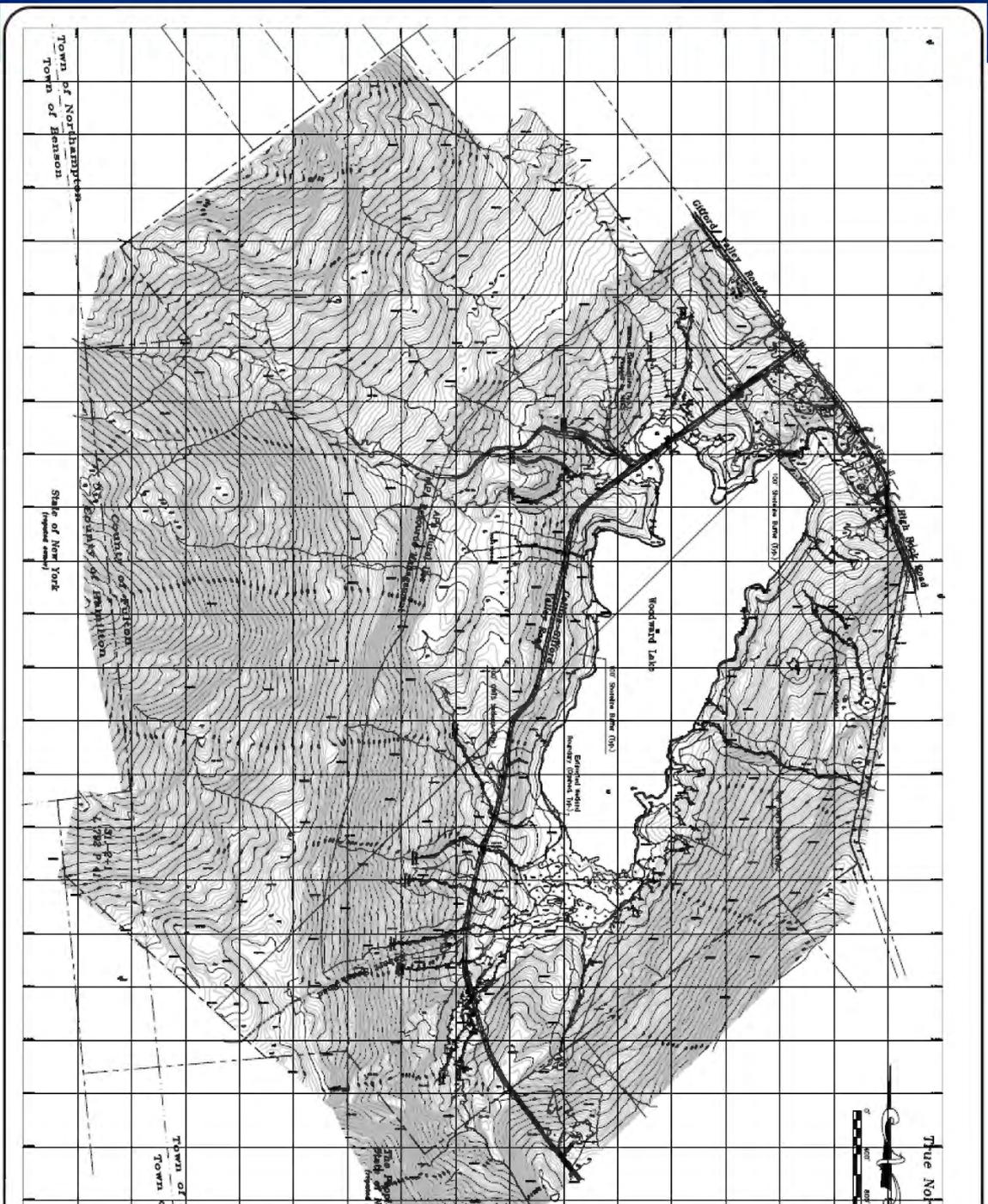
Slope Map With Colored Categories

Legend

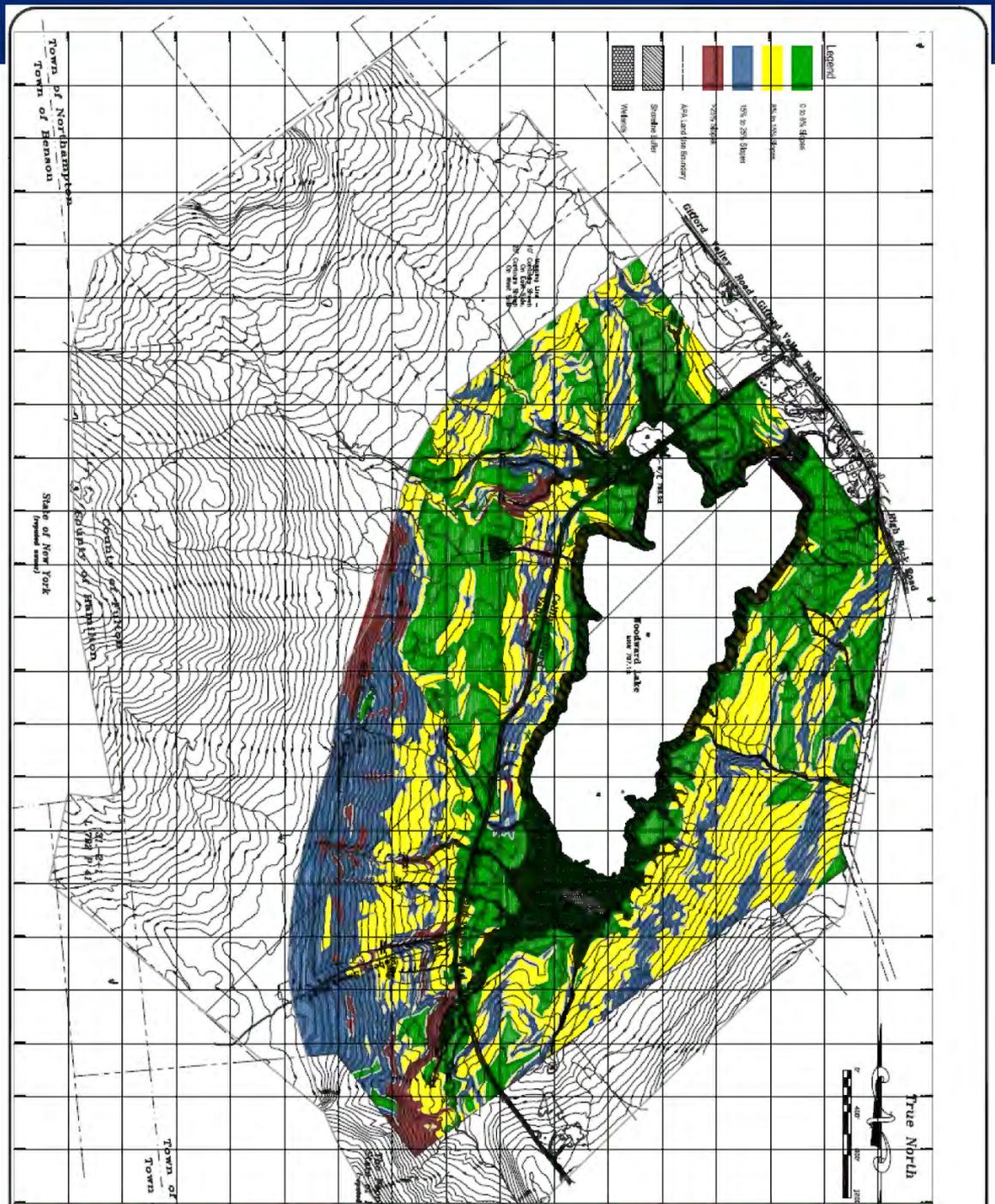
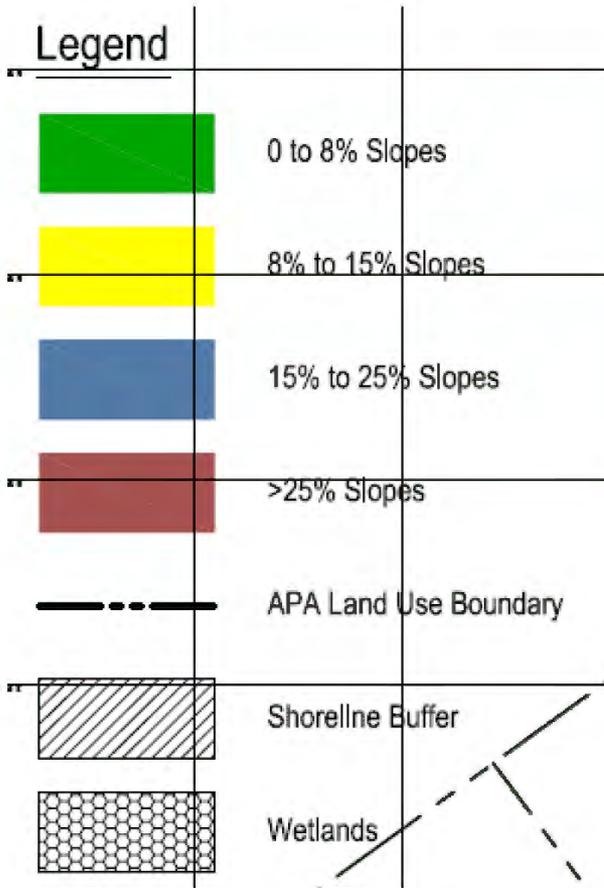


Critical Areas and Setbacks

100-foot buffer from:
lakes / ponds,
rivers / streams,
wetlands



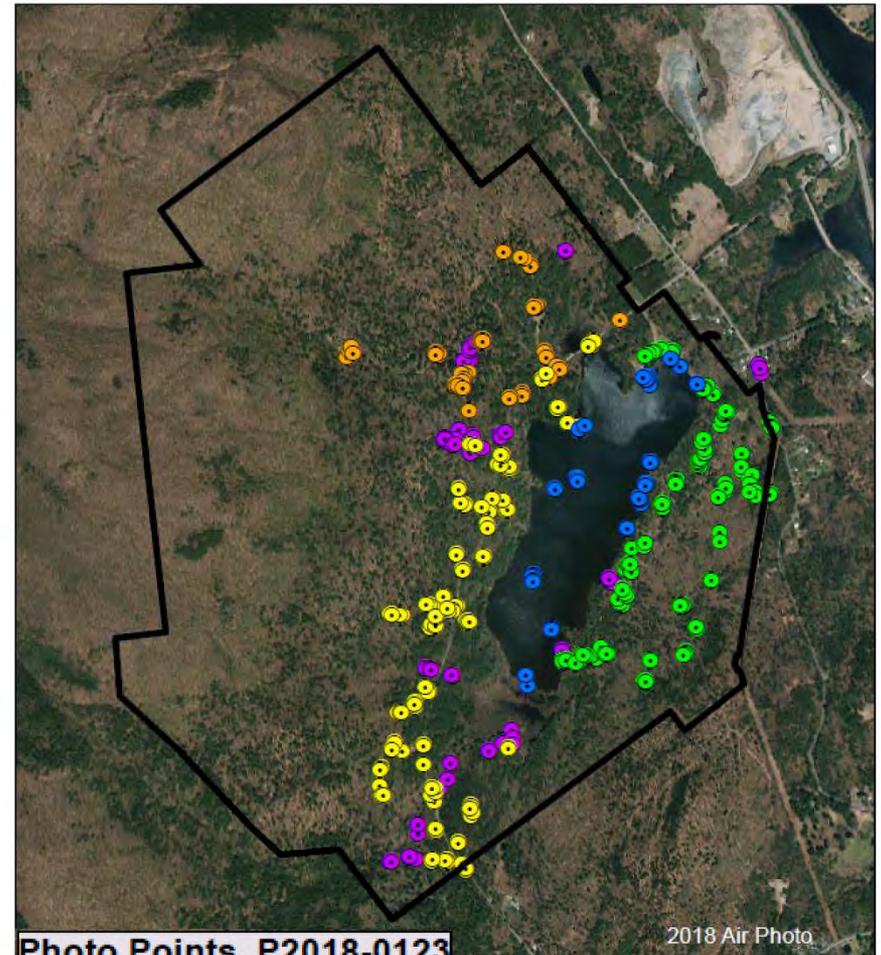
Site Limitations Composite Map



Site Limitations Composite Map



6 Site Visits



2018 Air Photo

Photo Points, P2018-0123

- 2018 - August 30
- 2018 - September 26
- 2018 - October 9
- 2018 - October 23
- 2019 - June 6

Proposed Subdivision

Subdivision Map

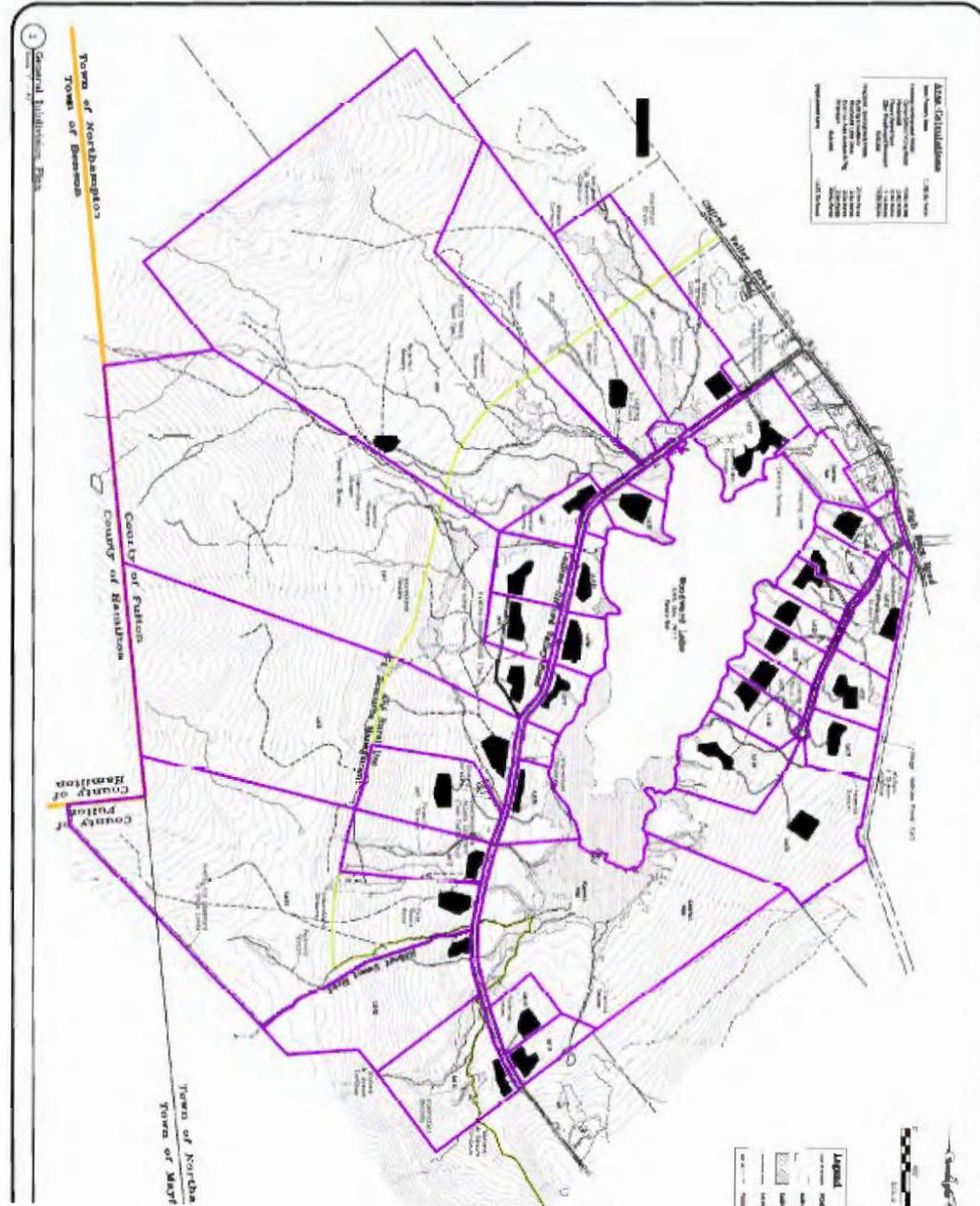
Subdivision of
1,169± acres

34 Lots

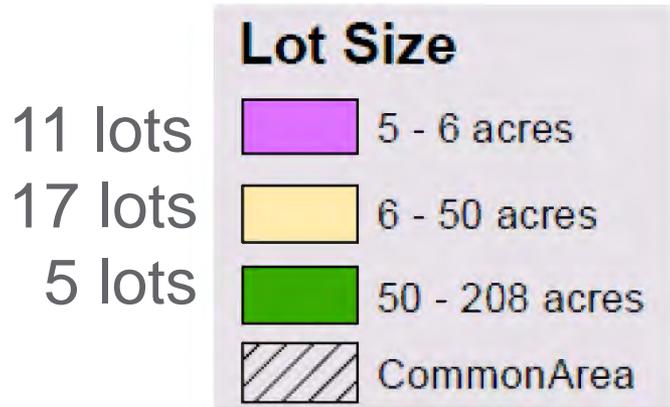
32 building lots
1 lot with existing dwelling
1 common lot

32 Building Lots

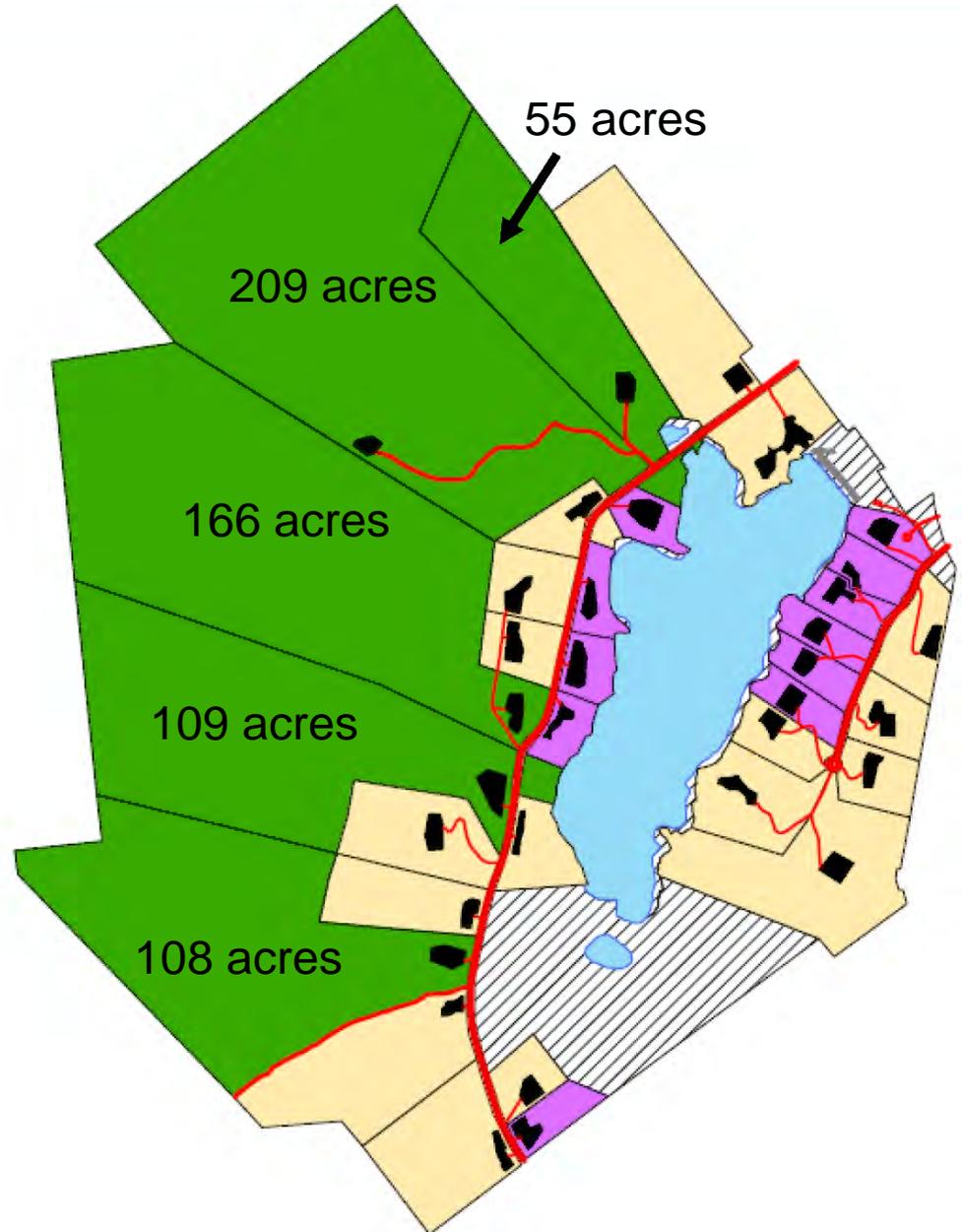
30 in Rural Use
2 in Resource Management



Lot size



Common Area Lot
189 acres



Overall Intensity Guidelines

Rural Use:

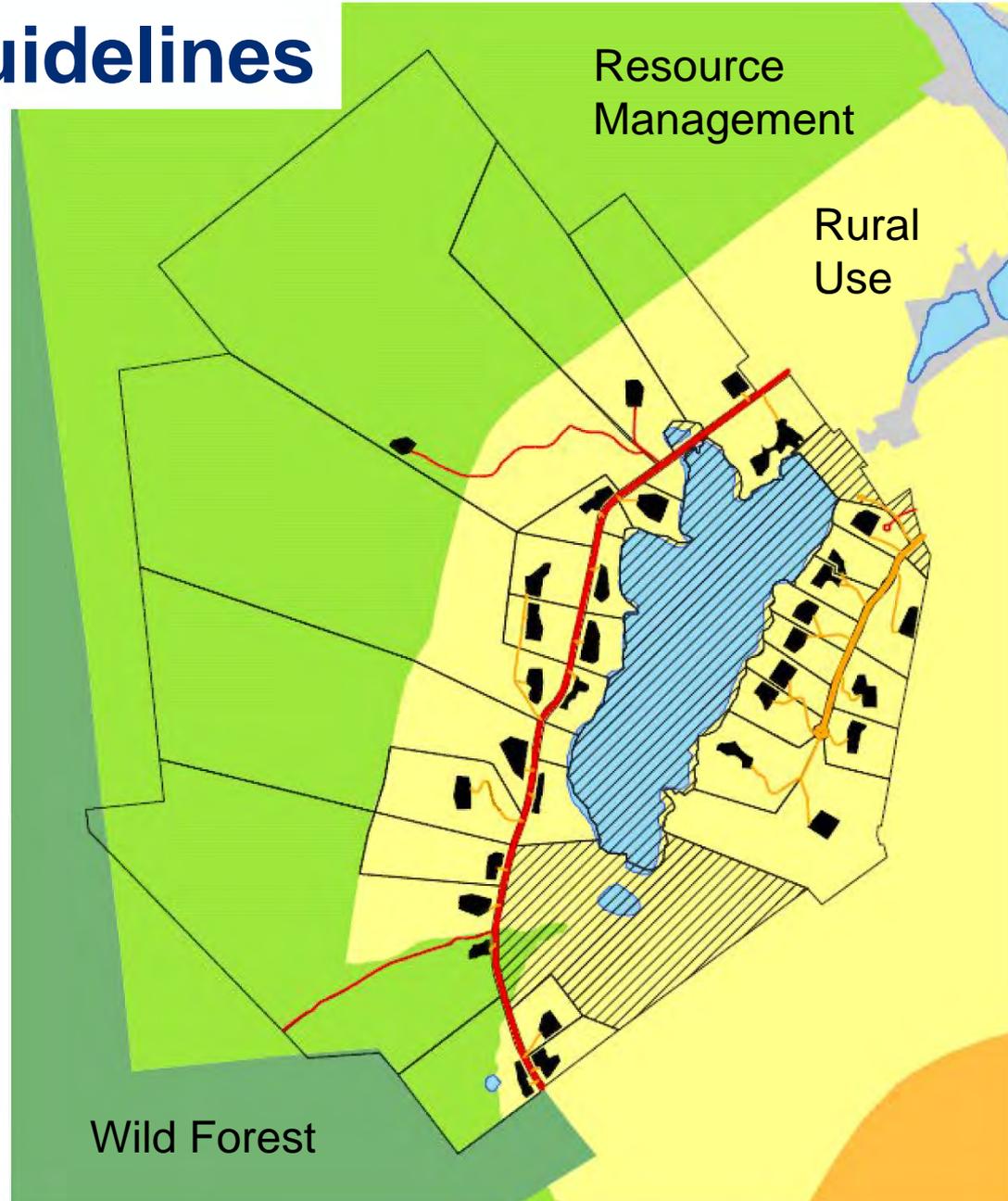
- 480 acres
- 56 potential PBs
- 1 existing PB (dwelling)
- 30 new PBs (dwellings)
- 25 PBs extinguished

Resource Management:

- 590 acres
- 14 potential PBs
- 2 new PBs (dwellings)
- 12 PBs extinguished

Woodward Lake

100 acres



Property Owners' Association

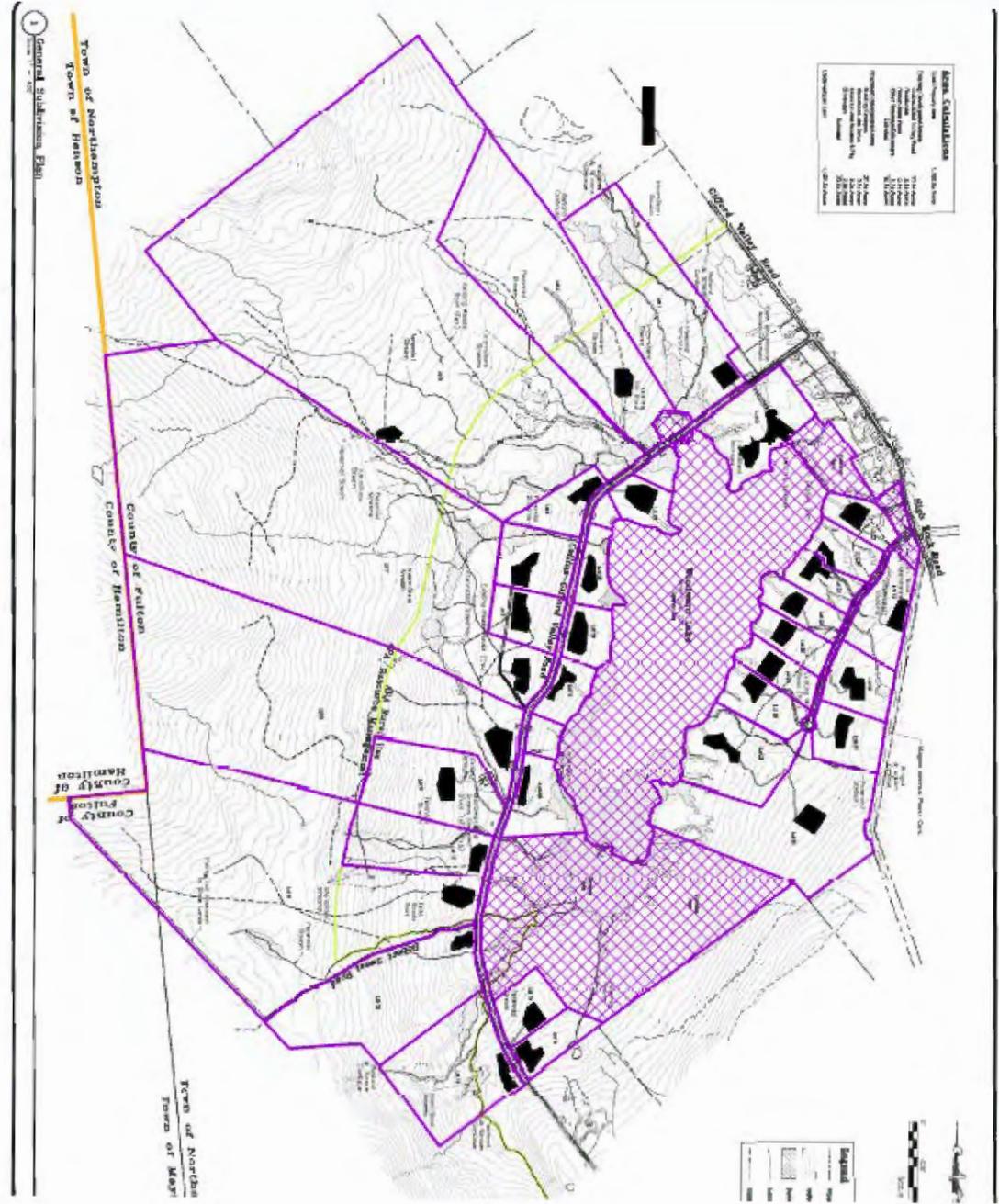
Common Area Lot (189 acres):

Subdivision Road (Woodward Lake Dr)

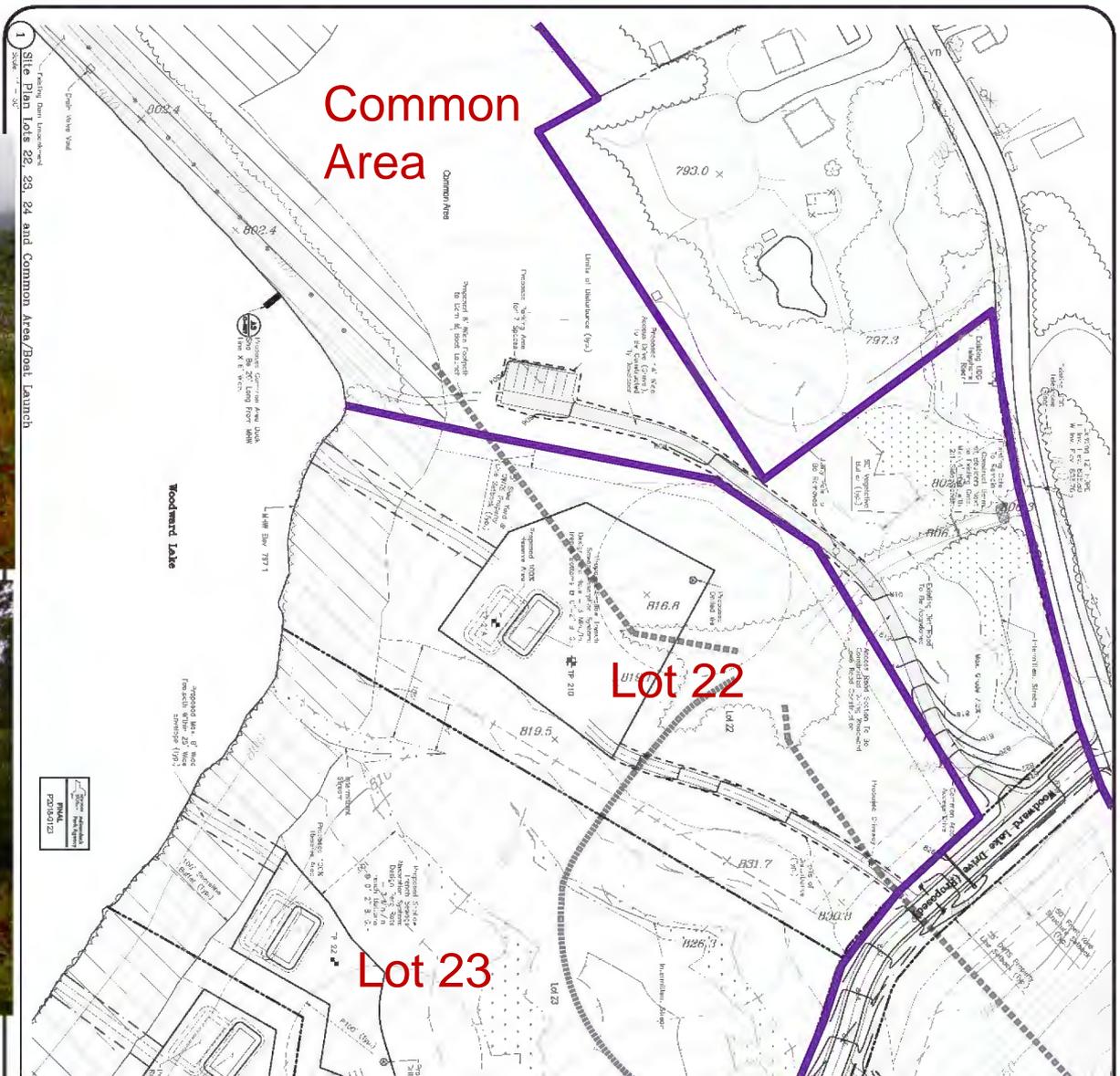
Woodward Lake & Dam

North end of lake – common lake access

South end of lake – large wetland complex



Common Area Lot – lake access



Easements

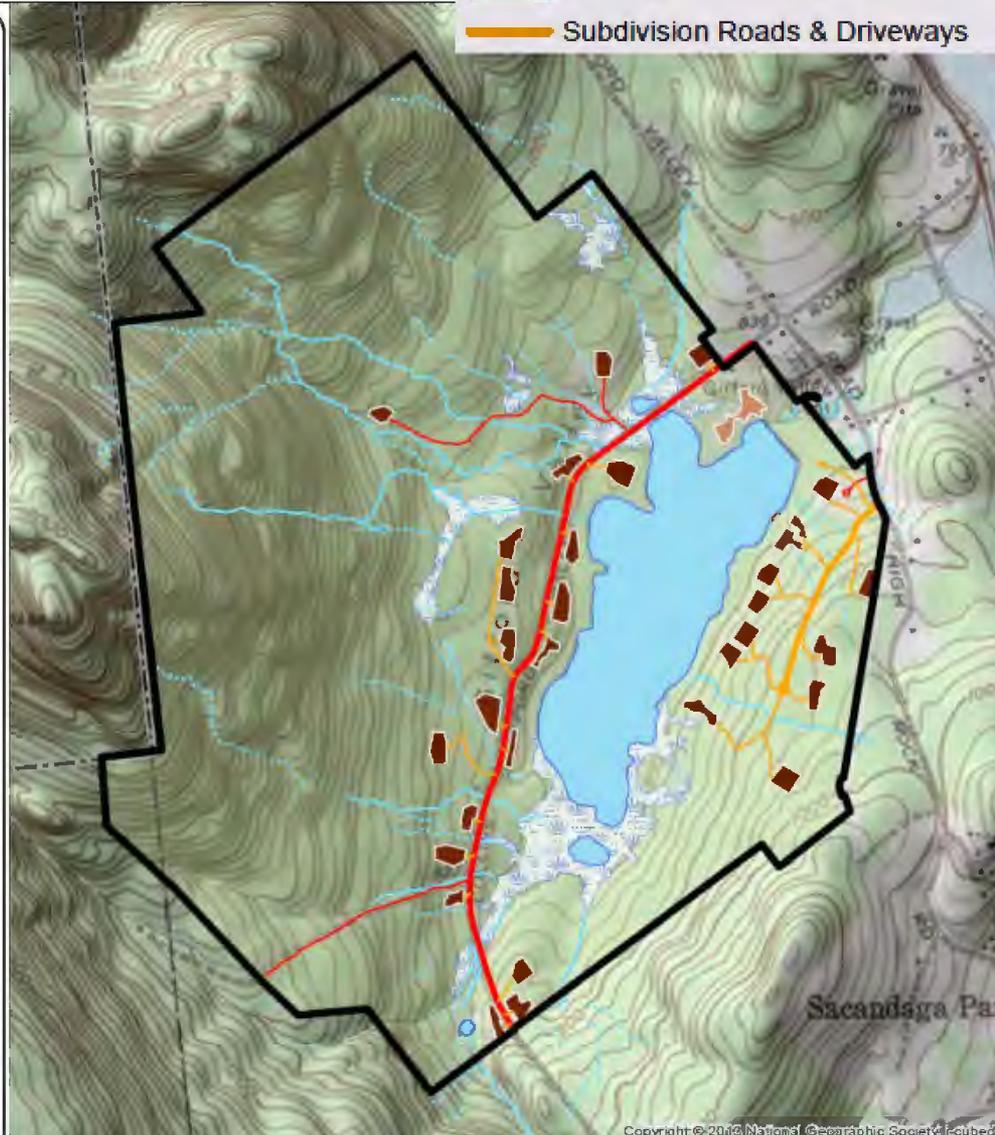
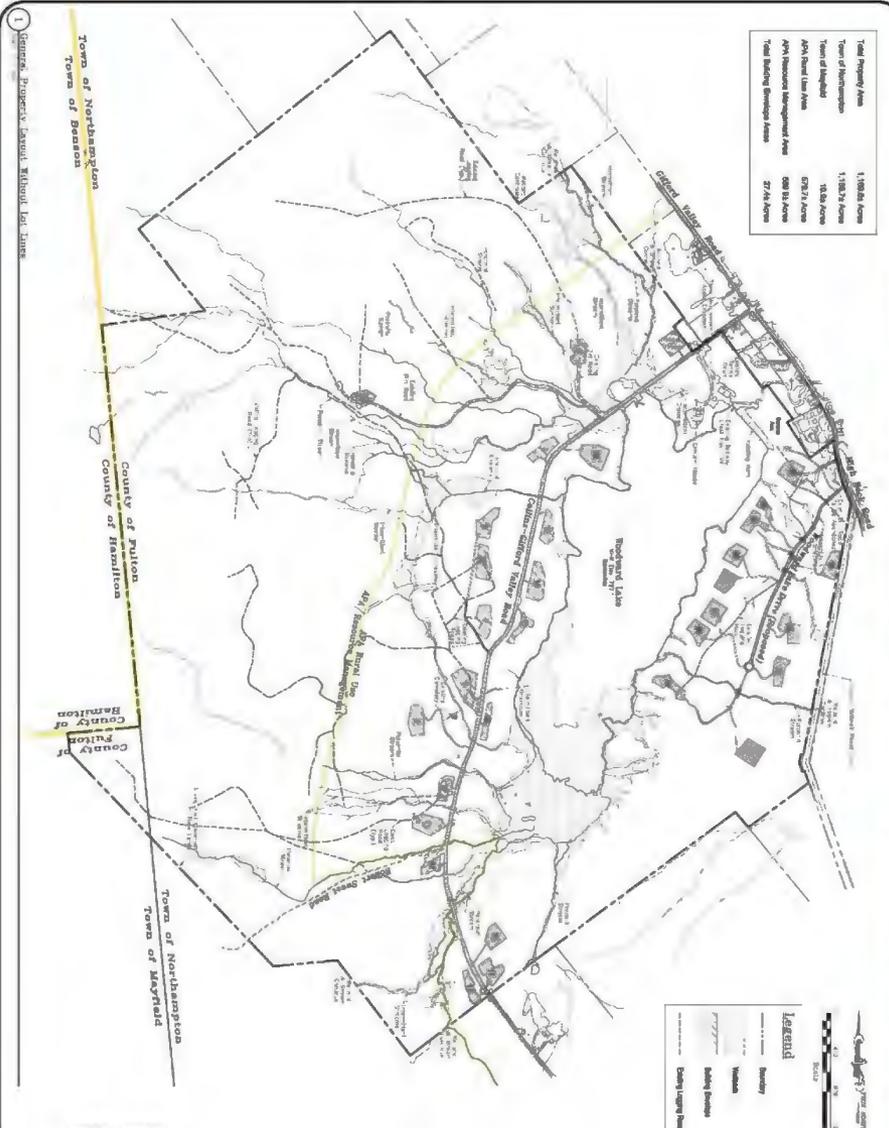
- Shared driveways (access and utilities)
- Cemetery access (Lot 9)
- Hiking access to State Land (Lot 11)
- Ingress / egress over Robert Sweet Road (Lot 12)
- Maintenance of Woodward Lake dam (Lot 21)
- Dry hydrant installation (Common Area Lot)

Proposed Development

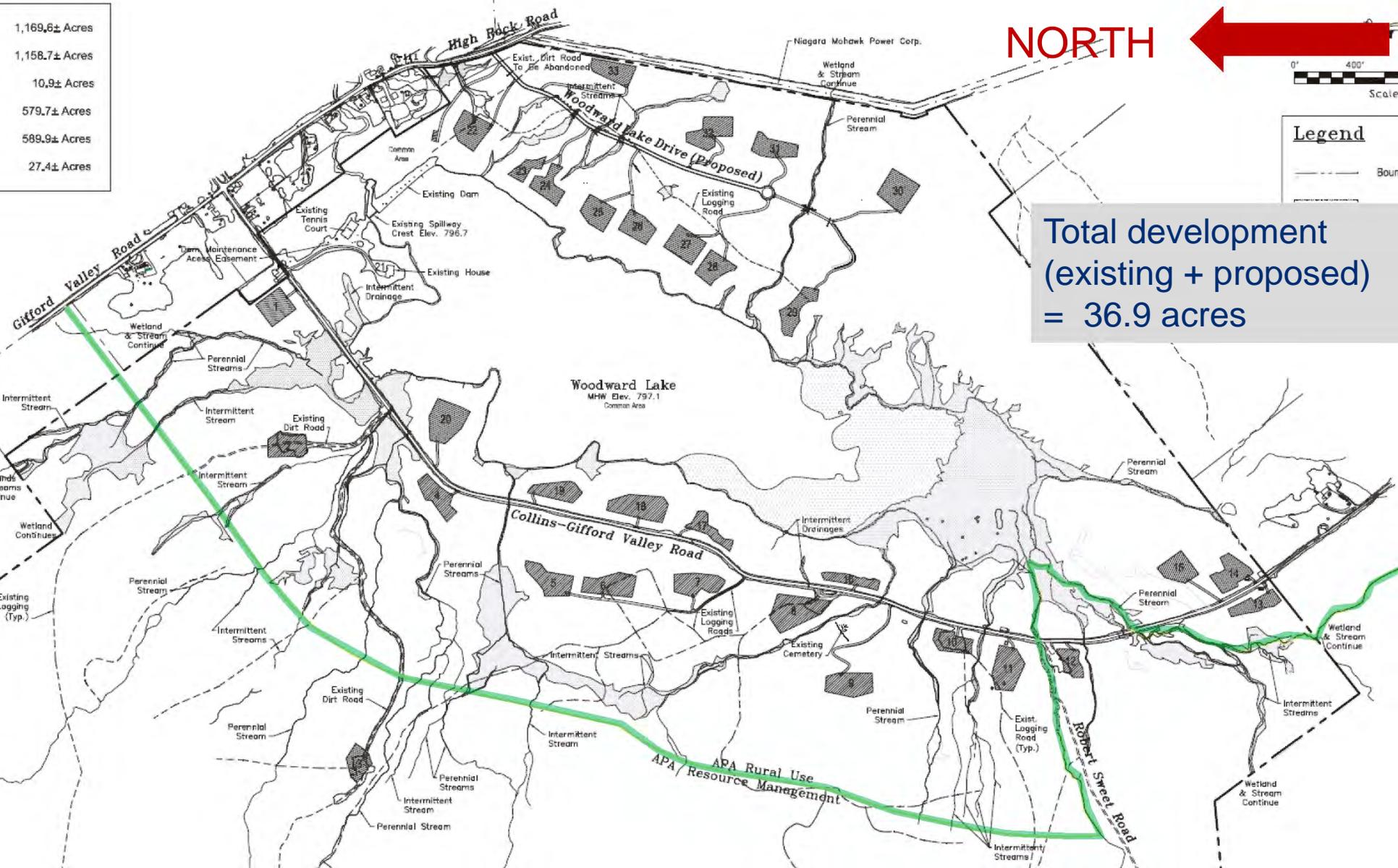
Development Envelopes

Alternative #6 - Proposed Woodward Lake Subdivision P2018-0123

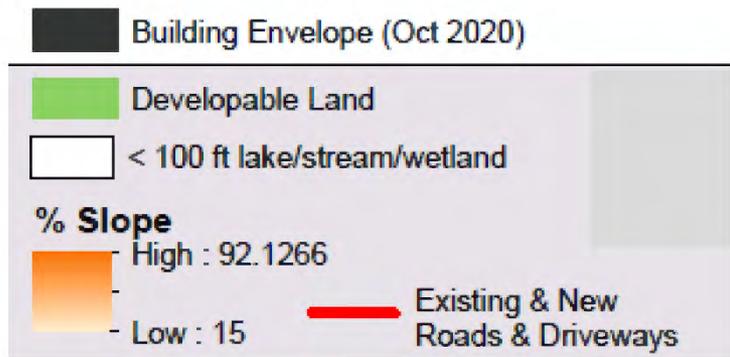
- Building Envelopes (new)
- Subdivision Roads & Driveways



Development Envelopes / Access (= 33.4 ac)



Development Envelopes / Access on Site Constraints Map (coarse scale)

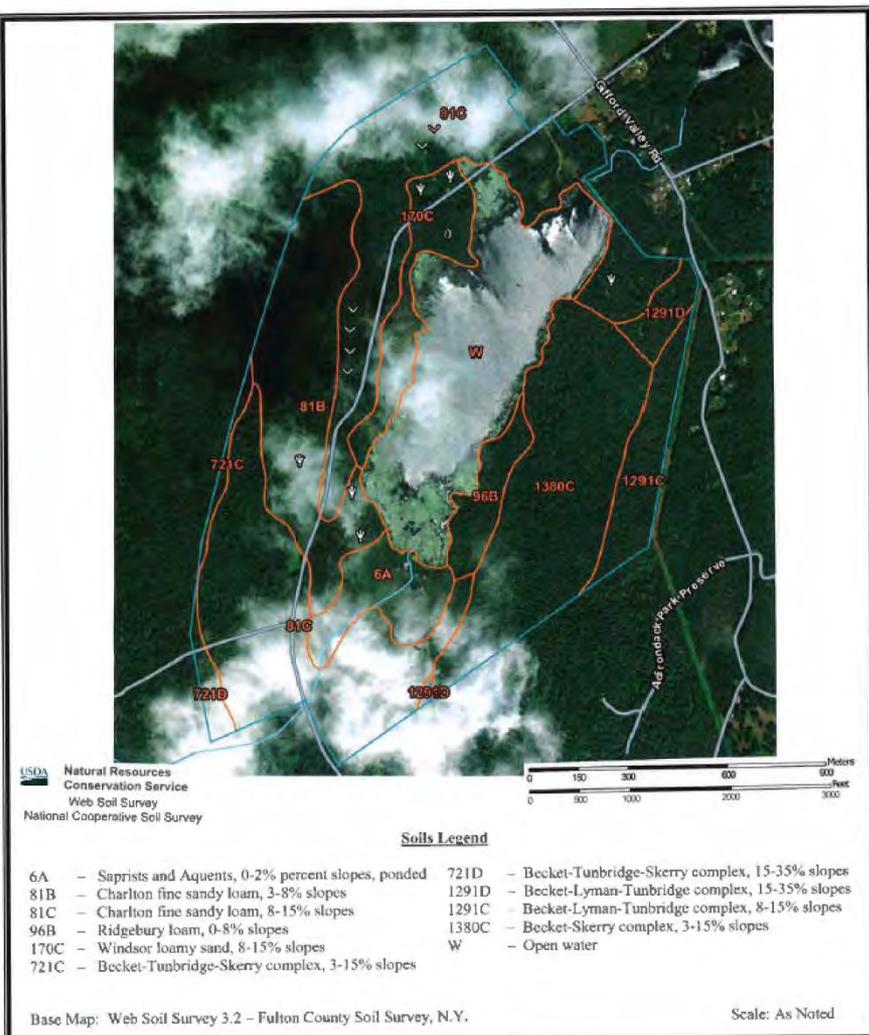


→ Site and Survey work / Project Plans (finer scale)

Site Design – Location

- Detailed topography, field-checked
 - Development envelopes avoid steep slopes (< 25%)
 - Absorption fields sited on appropriate slopes for soil type (< 15%)
 - Driveways have appropriate slopes (< 12% / < 15%)
 - Reduces erosion
 - Reduces potential visual impacts
- Wetland and stream delineation
 - Development envelopes and driveways avoid wetlands
 - Buffers to lake (100 ft min), wetlands (100 ft min), and streams (50 ft / 100 ft min)
 - Water quality protection
- Soils data
 - Used in stormwater calculations
 - Used to site wastewater systems

Soil Survey Map and Soils Investigation



Soil Profiles

(SHOW refers to Seasonal High Groundwater)

Peric Test Results & Soils Summary

Absorption System Design Criteria

C-402

Soil Profiles

(SHOW refers to Seasonal High Groundwater)

Test Pit #1A Date: 09/13/18 Slope: 2-5%
 0" - 18" Dk. Brown Loam, Root Layer to 5"
 8" - 40" Orange-Brown Fine Sandy Loam
 40" - 70" Gray Sand
 40" SHGW (Few Mottles)

Test Pit #1B Date: 09/13/18 Slope: 0-2%
 0" - 9" Brown Sandy Loam
 9" - 24" Orange-Brown Silty Sand/Fine Loamy Sand
 24" - 33" Gray Sand
 33" - 66" Stoney Dk. Gray Gravelly Sand
 66" Hardpan
 24" SHGW (Mottles)

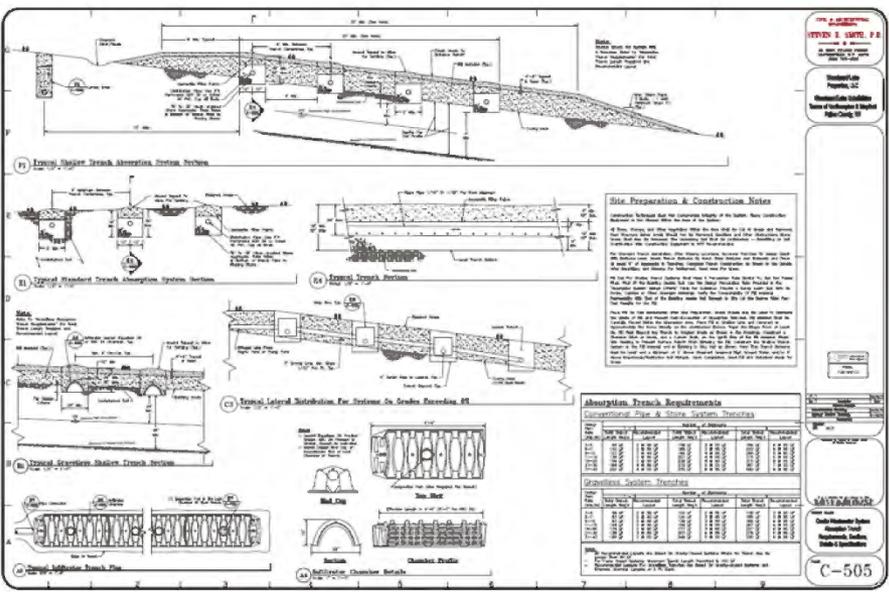
Peric Test Results & Soils Summary

Lot No.	Test Pit No.	Test Pit Depth	SHGW	Max. Slope of Existing Grade	Design Restriction	Absorption Trench System Allowable	Peric Test #1 Hole Depth (min/in)	Peric Test #1 Stabilized Rate	Peric Test #2 Hole Depth (min/in)	Peric Test #2 Stabilized Rate
1	20	72"	26"	8%	SHGW	Shallow	10"	3	10"	4
2	1A*	70"	40"	5%	SHGW	Shallow	24"	4	24"	5
2	1B	66"	24"	2%	SHGW	Shallow	24"	4	24"	5
3	2**	72"	>48"	2%	None	Standard	24"	3	24"	3

FIGURE 2 - SOIL SURVEY

Wastewater Treatment System Plans

Stormwater Pollution Prevention Plan (SWPPP)



Stormwater Pollution Prevention Plan

Prepared in accordance with NYS DEC General Permit GP-0-20-001

Woodward Lake Subdivision
Towns of Northampton & Mayfield
Fulton County, New York

Owner/Developer:
Woodward Lake Properties, LLC
297 River St., Suite 3
Oneonta, NY 13820
(607) 353-8066

Prepared by:
Steven E. Smith Civil & Architectural Engineering
25 West Fulton Street
Gloversville, NY 12078
(518) 725-1555

June 23, 2020

NEW YORK STATE
Adirondack
Park Agency
FINAL
P2018-0123

Site Design – Arrangement

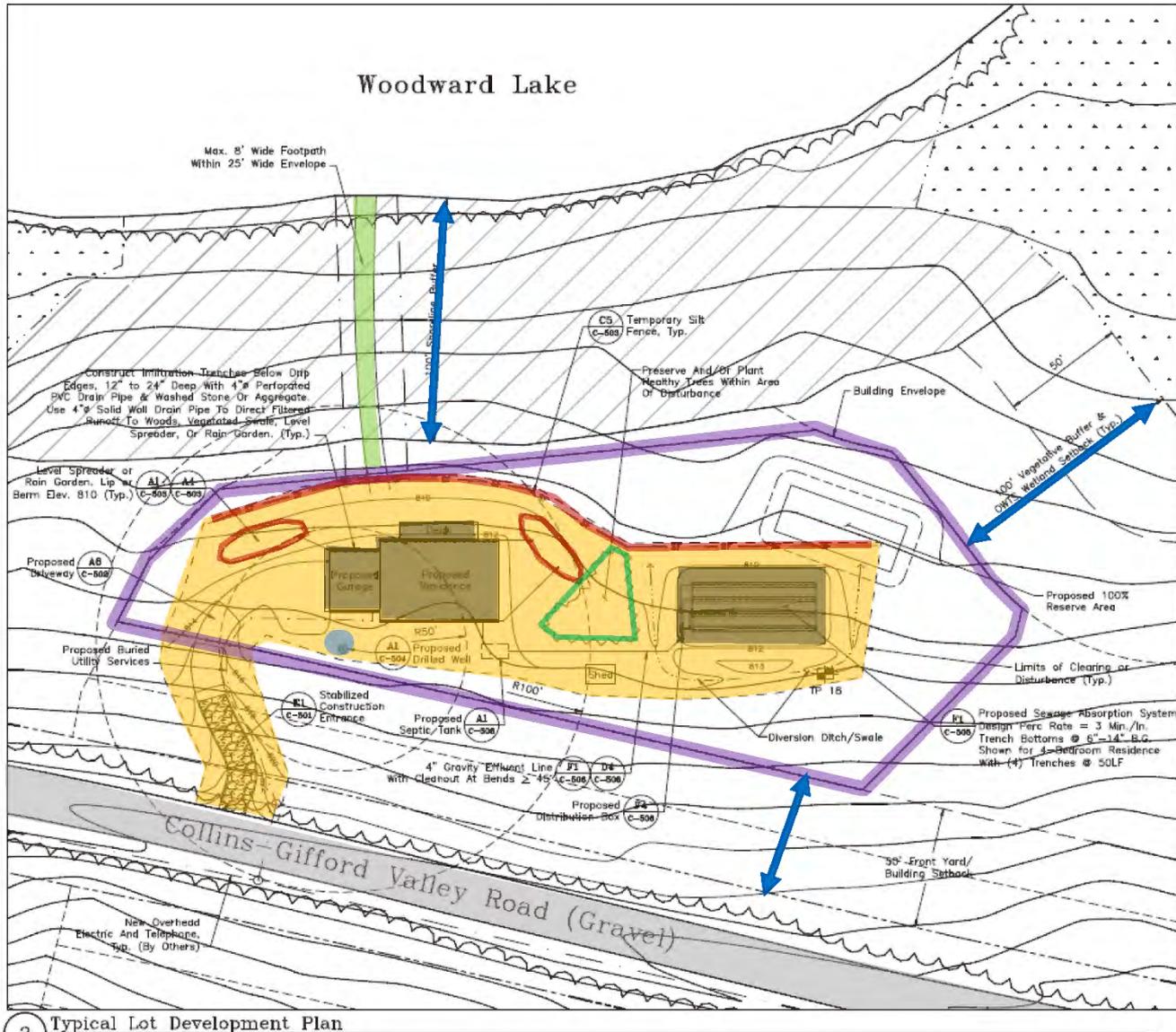
- Overlapped existing and proposed development
 - Wood roads for driveways / shared driveways
 - Development envelopes with existing clearings
 - Development close to road
- Did not maximize density or shoreline development
 - extinguishing 37 PBs
 - 15 non-shoreline lots
 - 18 shoreline lots exceed shoreline restrictions (width / setback)
- Proposal adjusted during review
 - Site visits
 - Staff requests

Site Development on Building Lot

All* development / clearing within driveway limits and development envelope (*except paths to shoreline)

- Driveway limits: driveway and utilities
- Development envelope:
 - Single family dwelling
 - 3,000 sq ft footprint (max)
 - 40 ft height (max)
 - Accessory structures
 - 1,000 sq ft footprint (max combined)
 - 40 ft height (max)
 - On-site wastewater treatment system
 - On-site water supply
 - Stormwater Plan features

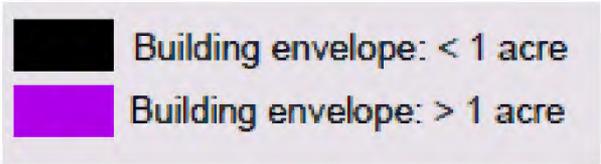
“Typical” Vacant Lot – with shoreline



Development Envelope size

< 1 acre: 24

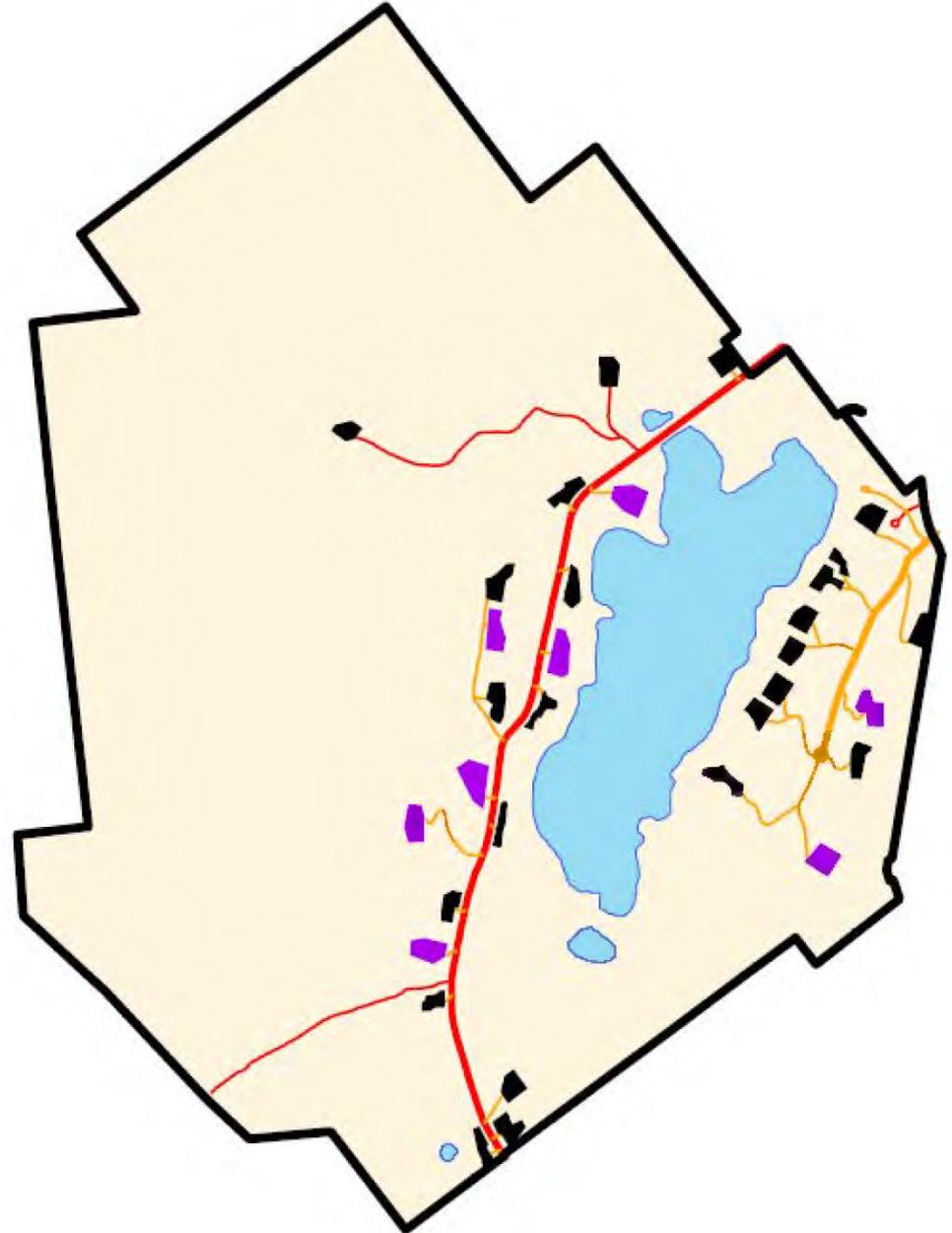
> 1 acre: 8



Size range for development envelope:

from 0.40± acres (Lot 23)

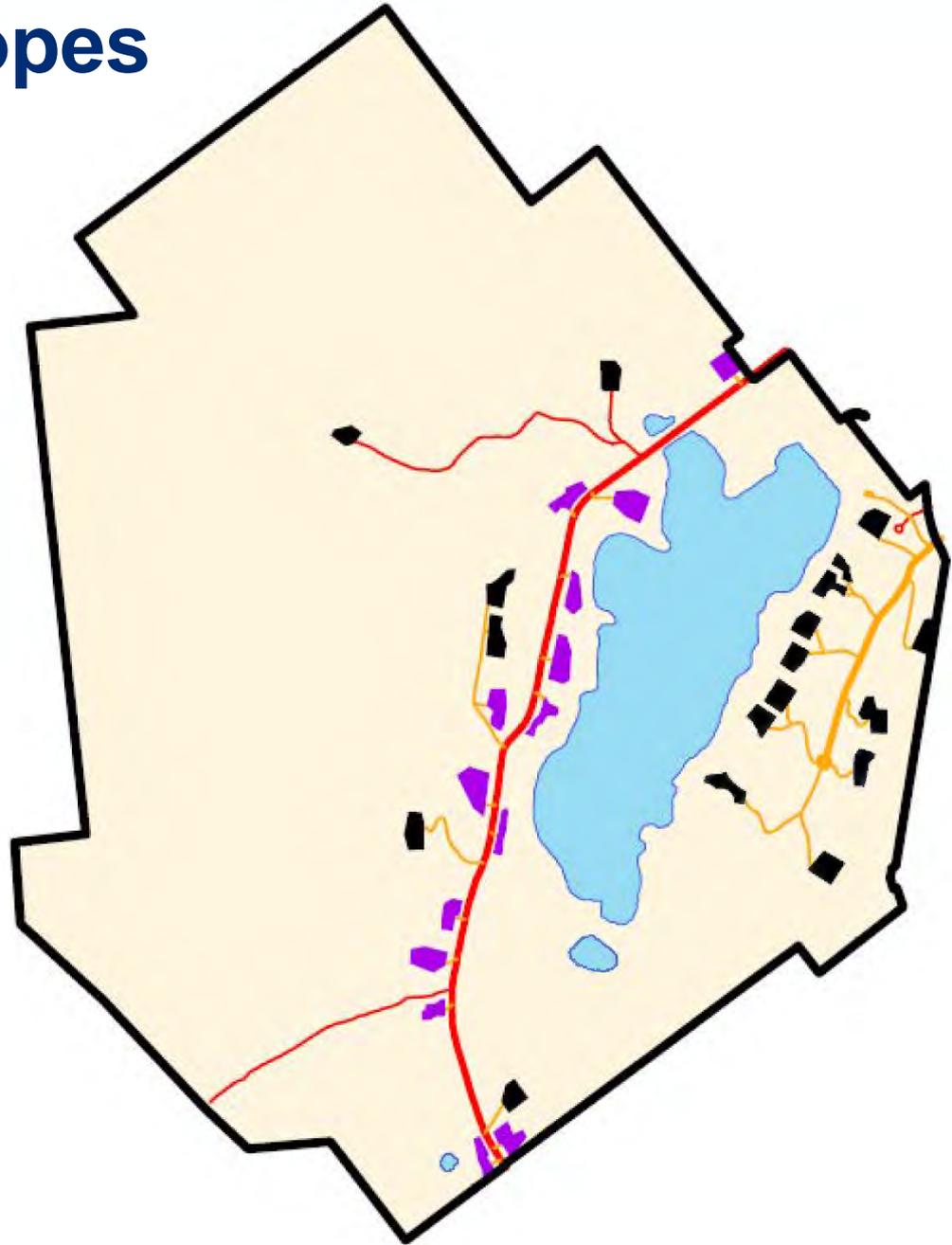
to 1.47± acres (Lot 8)



Development Envelopes < 75 ft of Town Road

14 lots

- Building envelope: > 75 ft of road
- Building envelope: < 75 ft of road



Shoreline Lots: Lake Access

18 shoreline lots

6 docks total

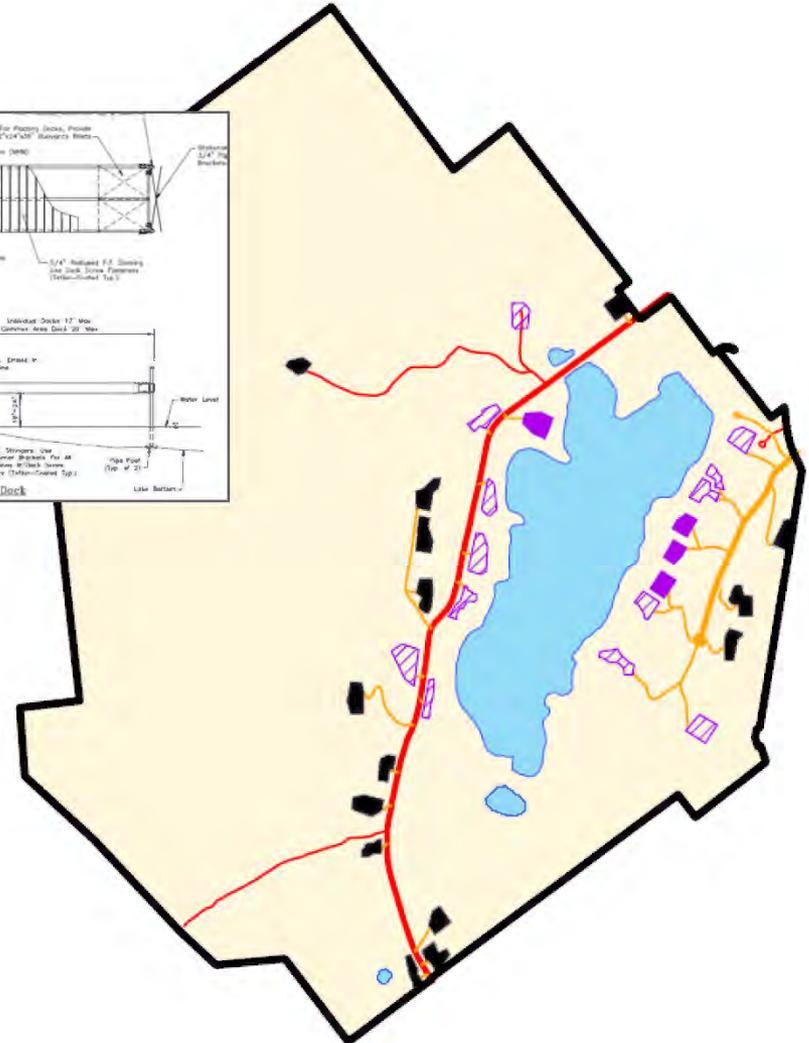
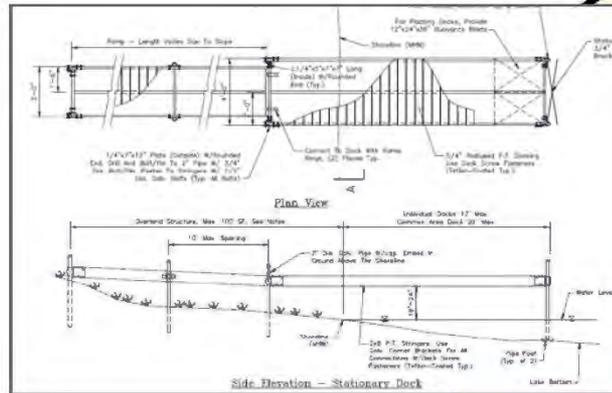
1 existing

1 common area

4 individual lots

shoreline access path

8 feet wide



-  Non-shoreline lot (no dock)
-  Shoreline lot: no dock allowed
-  Shoreline lot: dock allowed

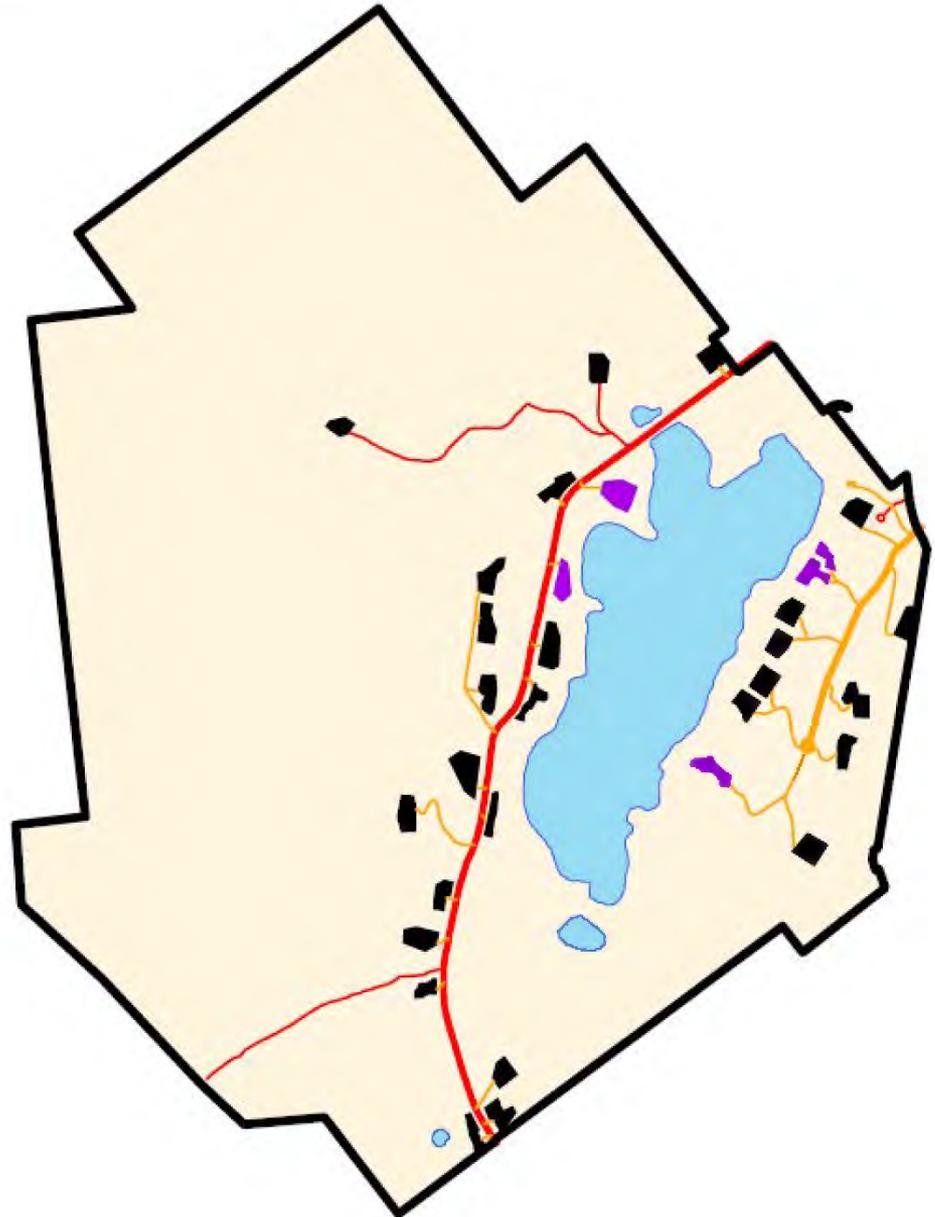
Shoreline Lots: Lake Setback

Envelopes set back
from lake / shoreline

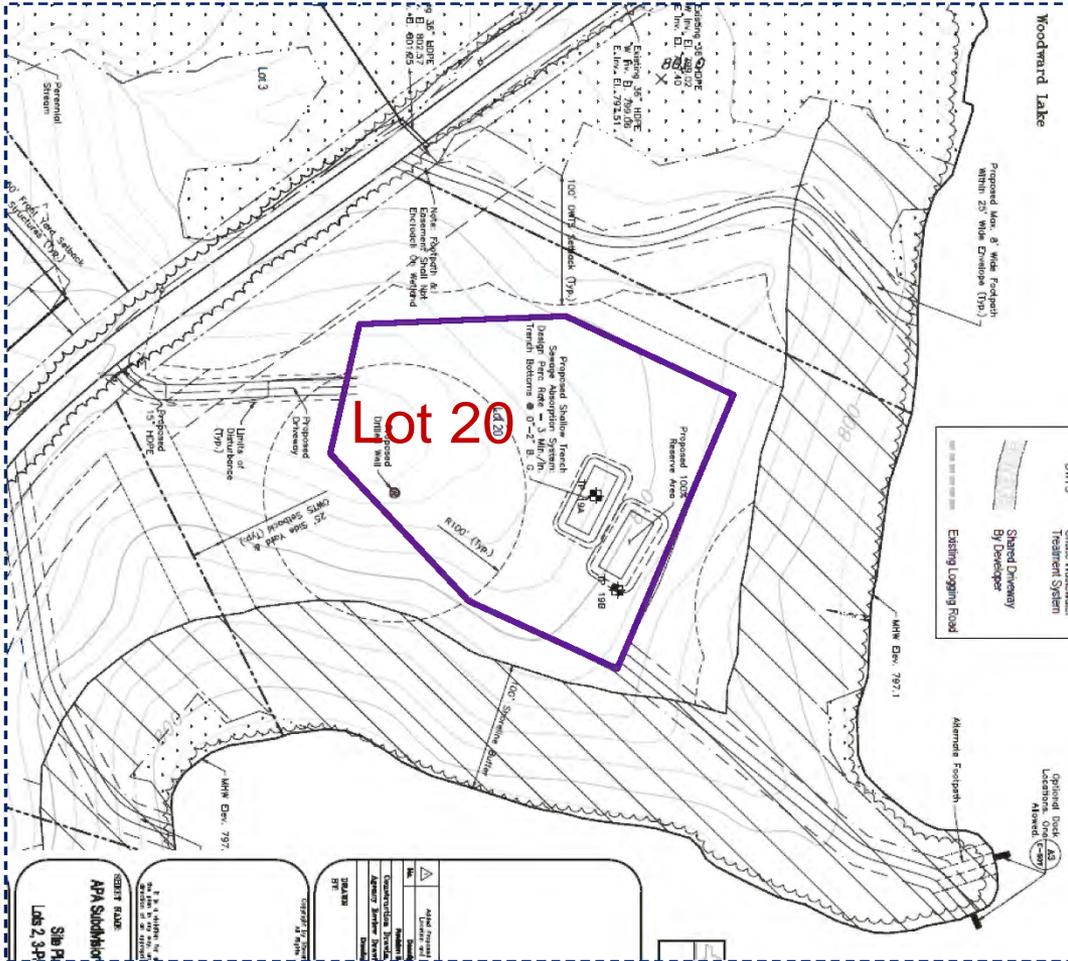
Shoreline structure setback
in Rural Use = 75 ft

28 lots \geq 150 ft
(double the min setback)

-  Building envelope: > 150 ft from lake
-  Building envelope: part < 150 ft of lake

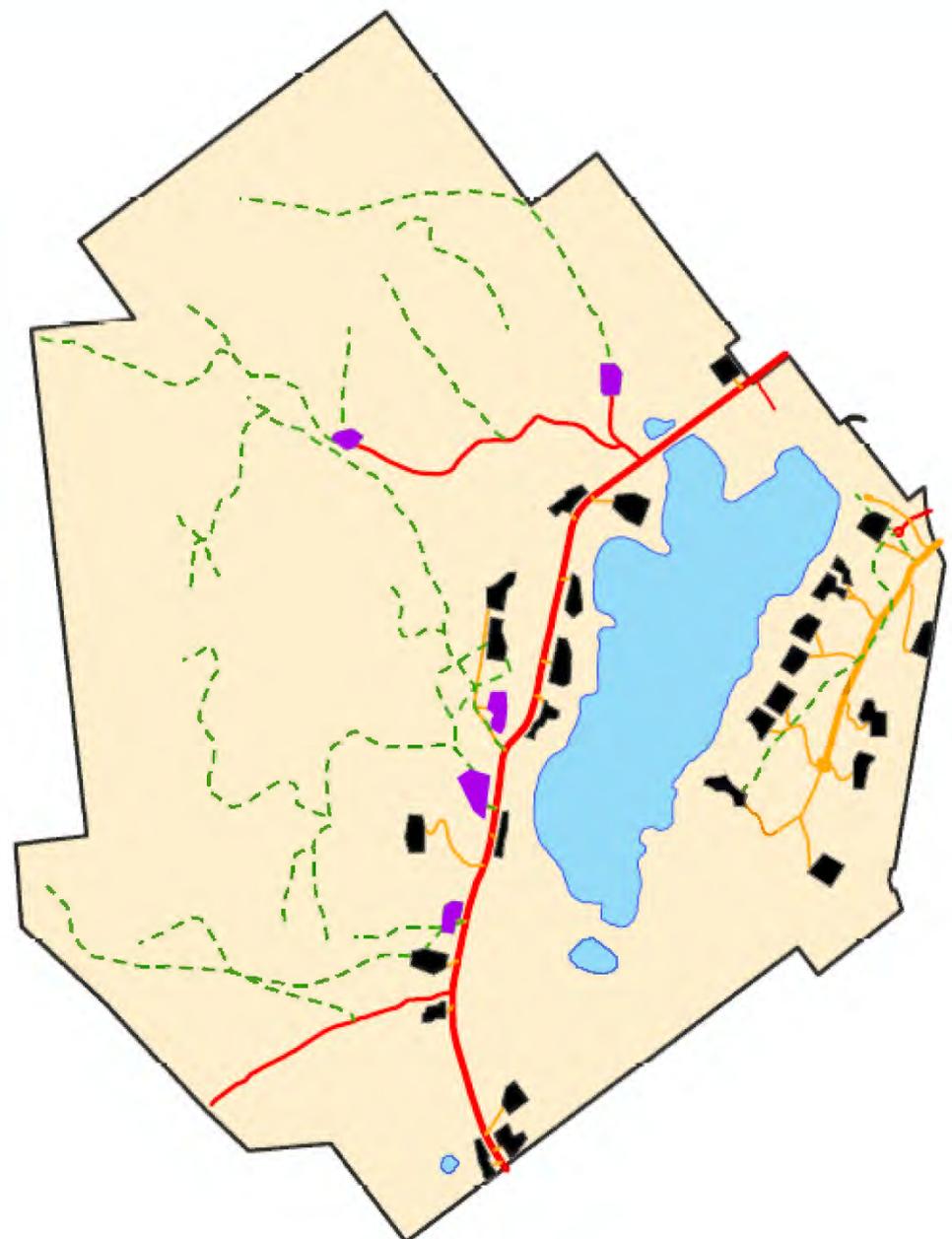


Shoreline Lot Example: Lot 20

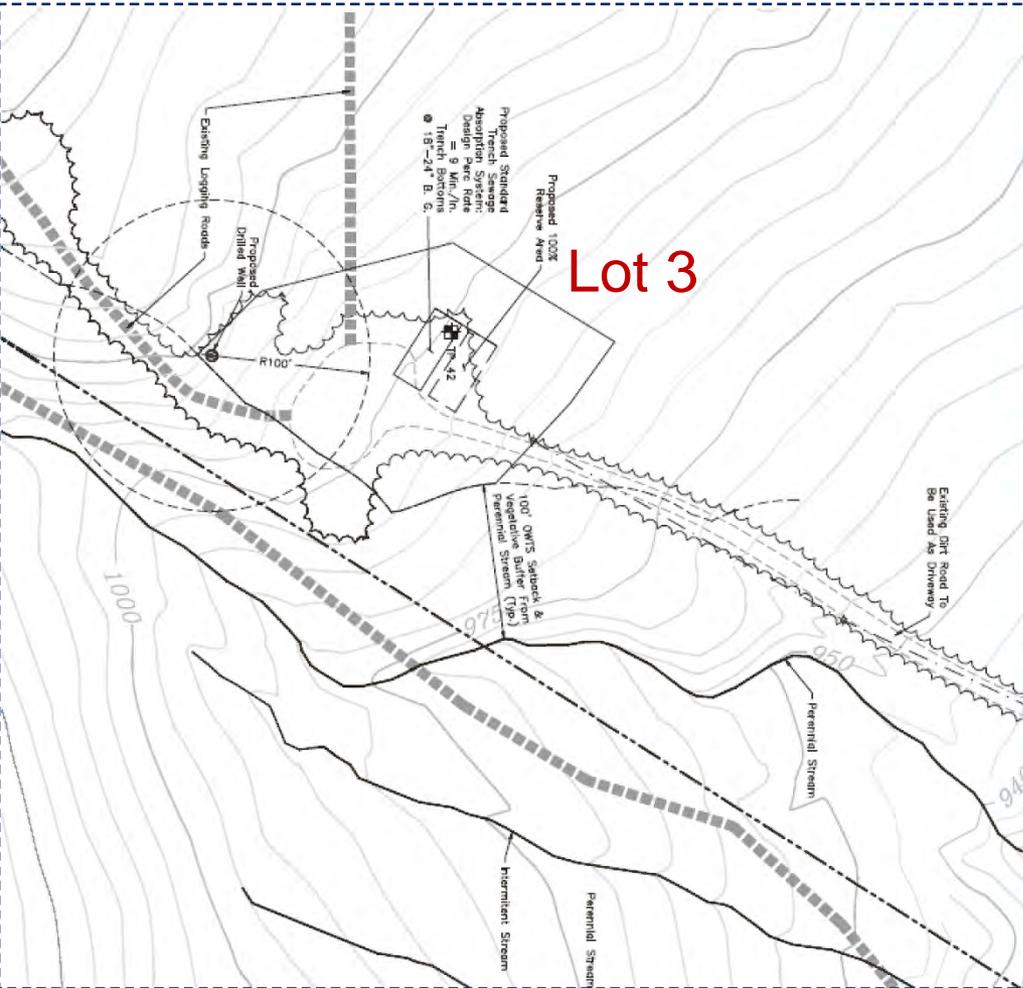


Driveway along existing route

-  driveway to envelope follows existing route
 -  driveway to envelope follows new route
 -  existing logging / skid roads
 -  new road / driveway
 -  existing road / driveway
- 0 0.125



Lot 3 (in gravel pit) in Resource Management



Lot 3



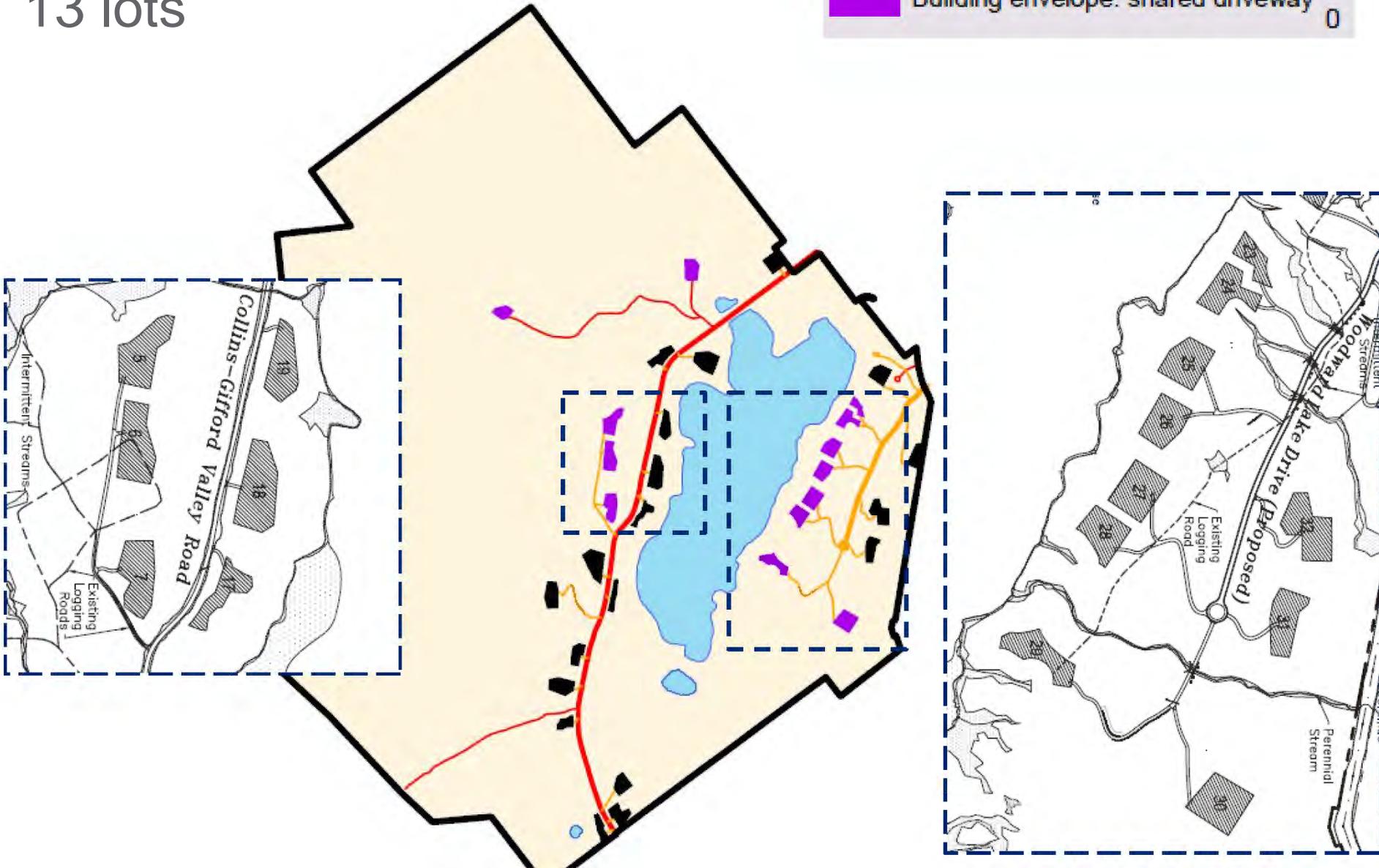
Insert PHOTO



Shared Driveways

13 lots

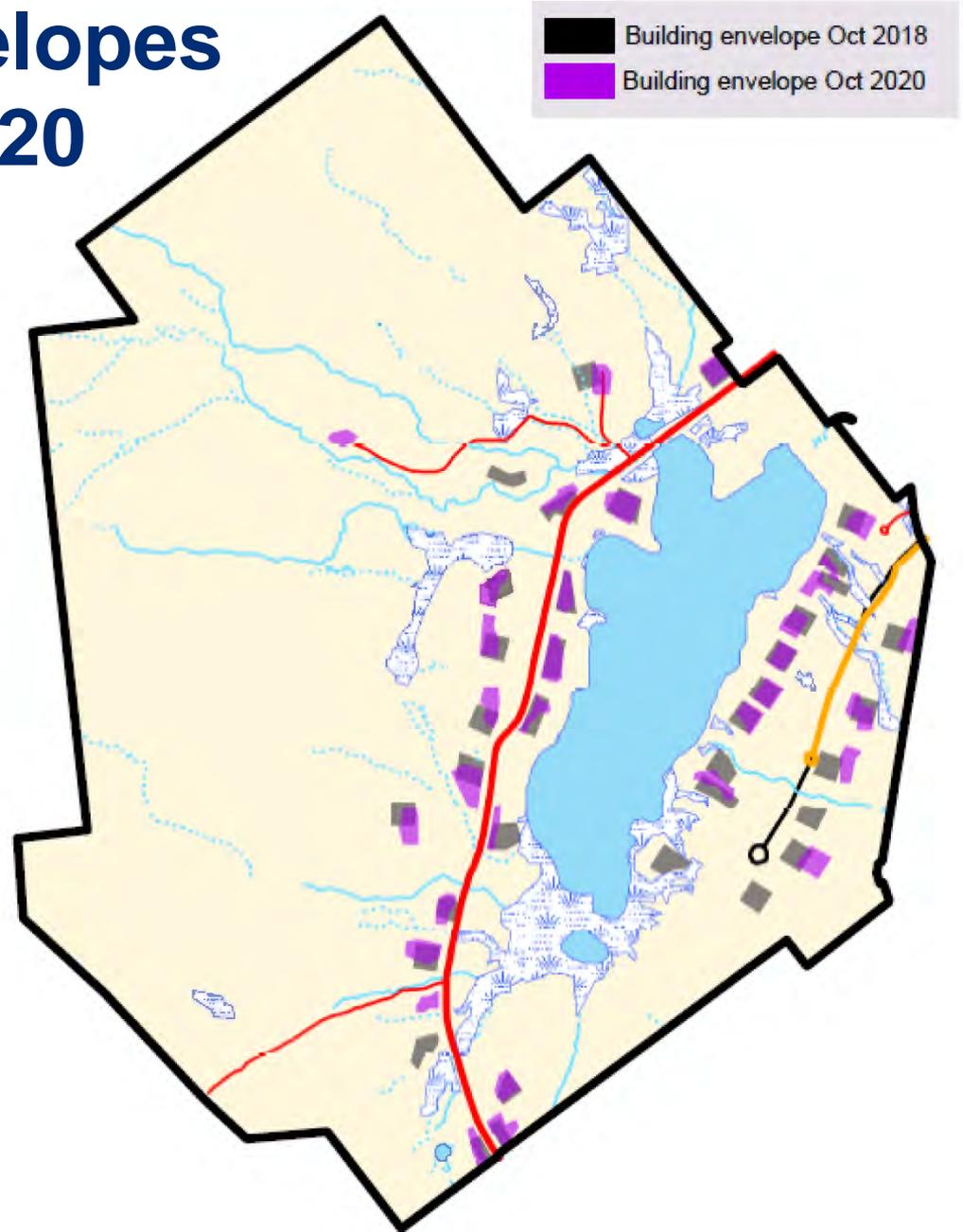
■ Building envelope: individual driveway
■ Building envelope: shared driveway



Development Envelopes Oct 2018 → Oct 2020

2018: 36 building lots

2020: 32 building lots



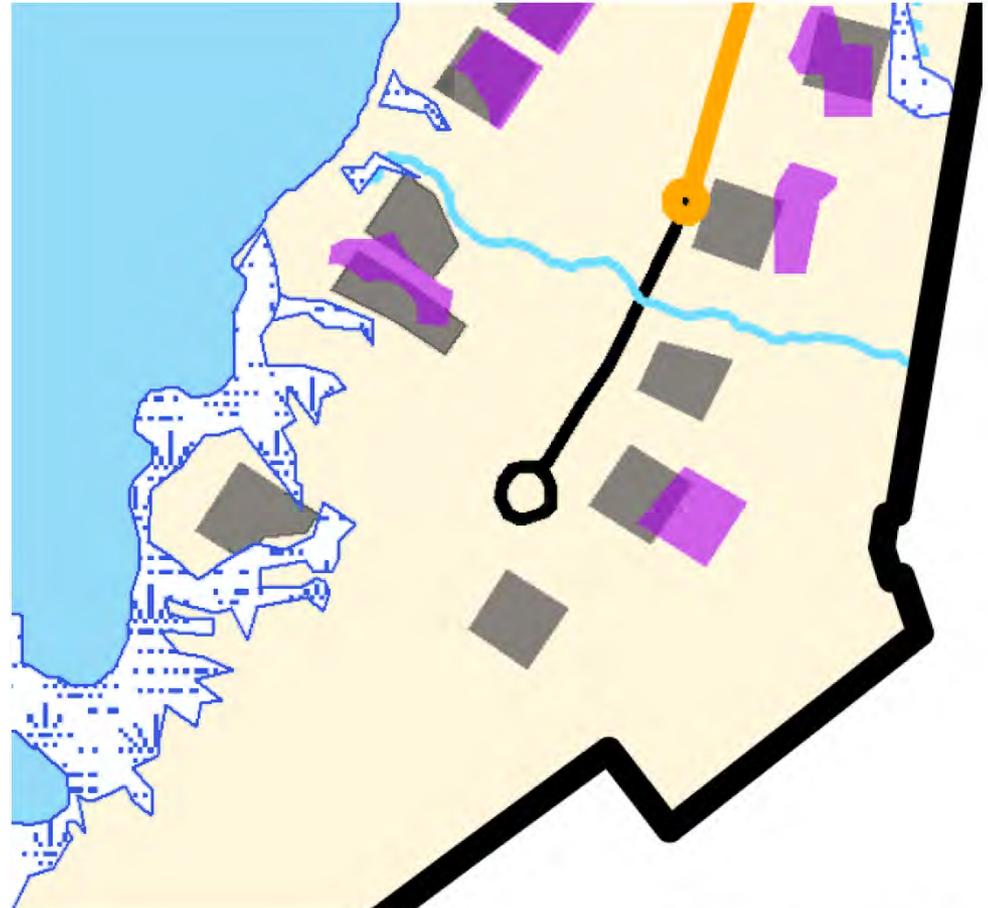
Changes in southeast corner

Four lots eliminated from south of permanent stream

Subdivision road length reduced from 3,000 ft to 2,000 ft

Lot surrounded by wetlands eliminated

Lots shifted to create 50-m-wide stream buffer



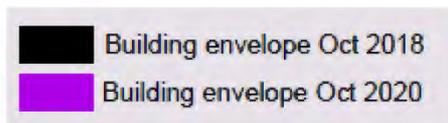
Change to Lot 3

Original location:

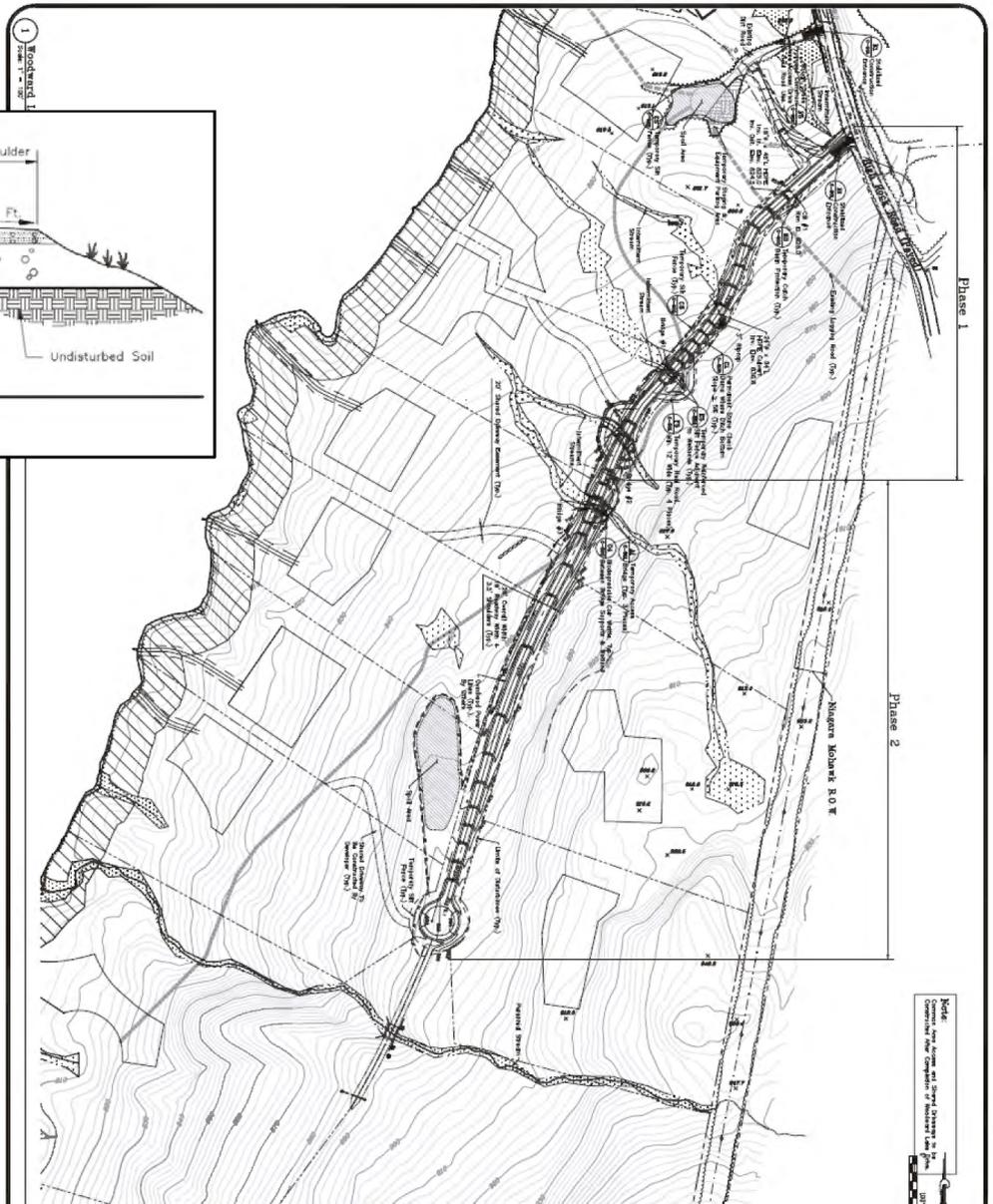
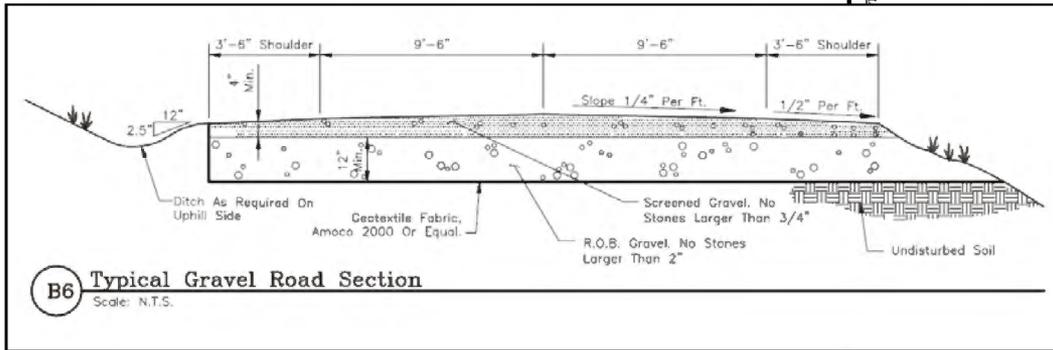
- Within the critical terrestrial habitat area of three wetlands
- Overlapped ~900 ft elevation large mammal travel route

New location:

- Existing gravel pit
- At end of existing wood road

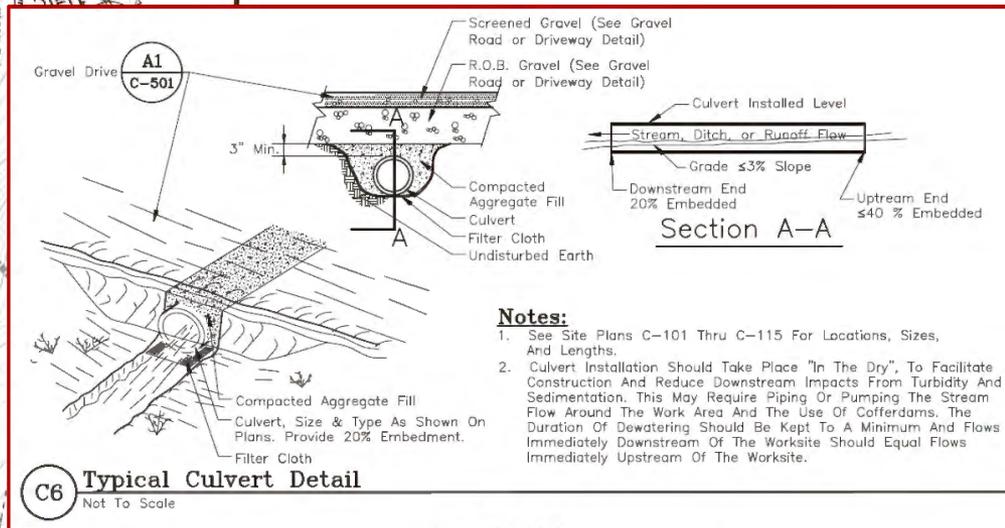
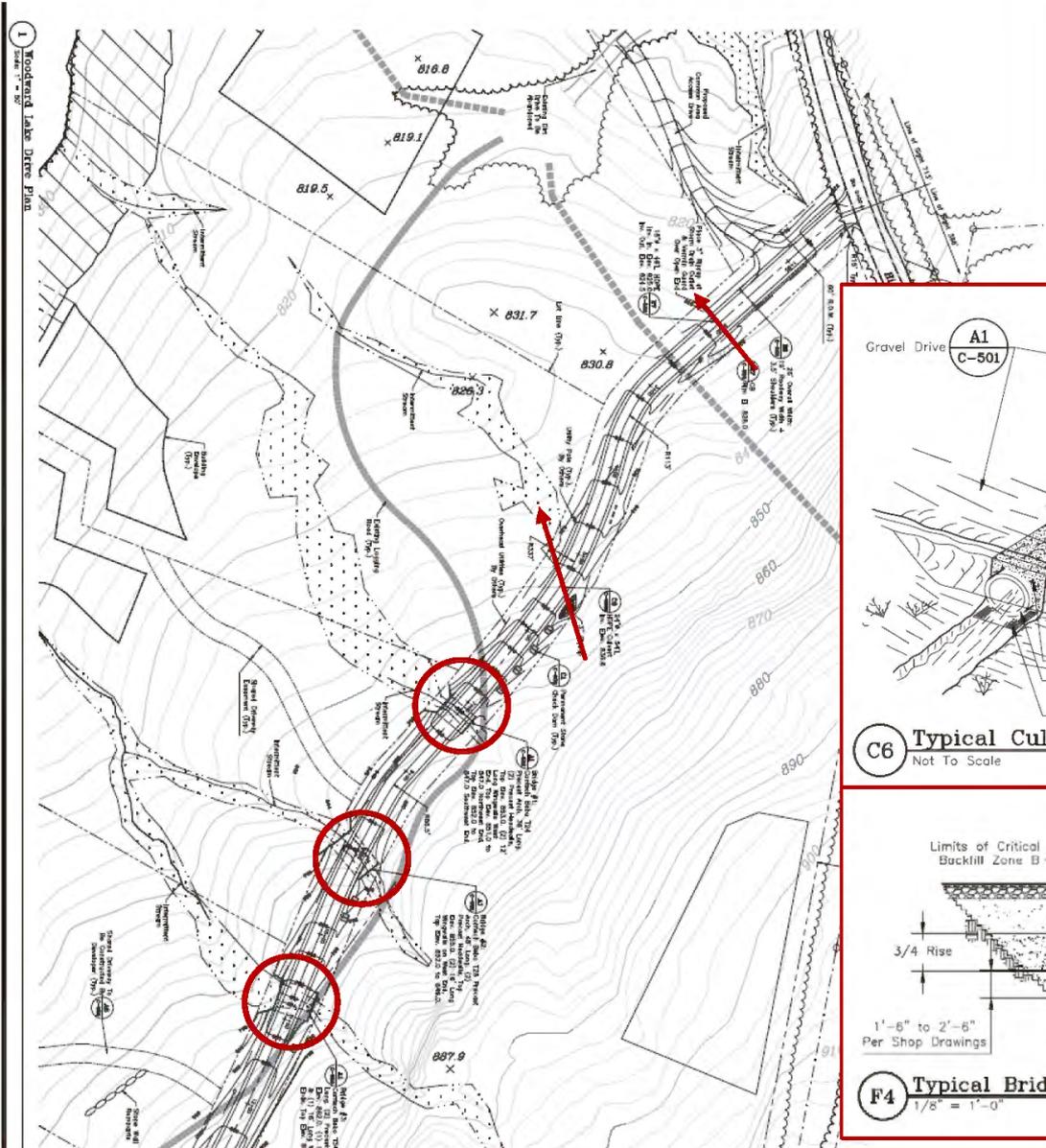


Subdivision Road: Woodward Lake Drive

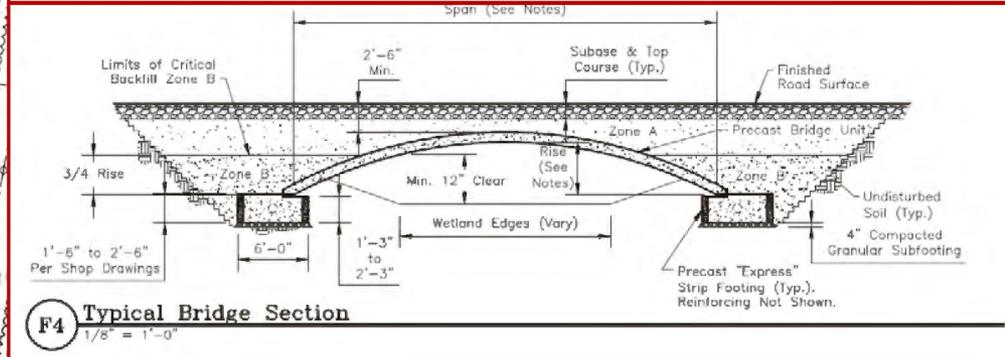


Note:
Contractor to verify all dimensions and locations of existing features in the field.

Subdivision Road: culverts and bridges

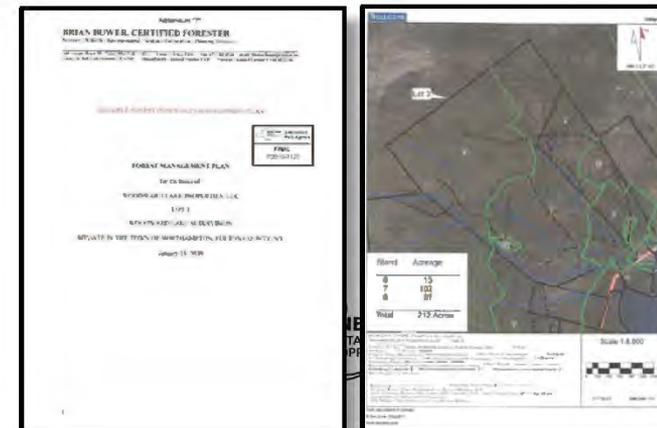
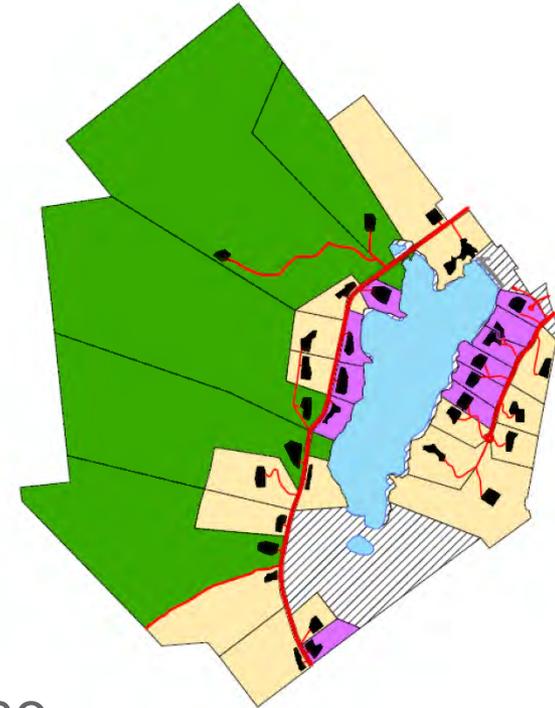


- Notes:**
1. See Site Plans C-101 Thru C-115 For Locations, Sizes, And Lengths.
 2. Culvert Installation Should Take Place "In The Dry", To Facilitate Construction And Reduce Downstream Impacts From Turbidity And Sedimentation. This May Require Piping Or Pumping The Stream Flow Around The Work Area And The Use Of Cofferdams. The Duration Of Dewatering Should Be Kept To A Minimum And Flows Immediately Downstream Of The Worksite Should Equal Flows Immediately Upstream Of The Worksite.



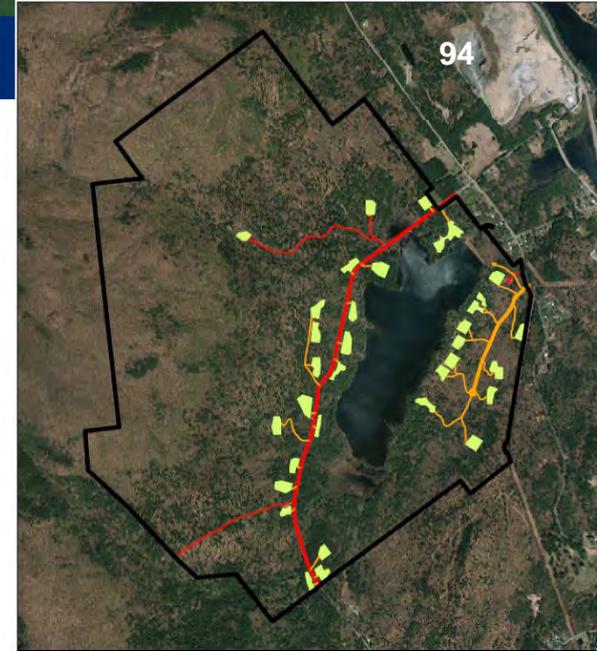
Forest Management Plan

- Forest Management Plan
 - Developer will prepare for 5 lots > 50 ac
 - management objective: forest health / timber harvest
 - Requires Agency approval
 - Follow NYS BMPs
 - Retain vegetation / duff in sensitive buffers
 - Landowner may modify to suit their goals
 - maple sugaring, wildlife management, no management etc.
 - Forest Management is optional



Restricted vegetation removal

- Forest Management Plan
- No trees or woody vegetation cut / trimmed / removed from outside the development envelopes & limits of disturbance
 - Except: 2 cords wood / 1 yr for personal use
 - Except: implementing Forest Management Plan
 - Except: dam maintenance
 - Except: as shown on plans (shoreline access, subdivision road, hiking trail)
 - Except: maintenance of existing clearings / paths / roads
 - Only 1 wetland crossing on Lot 7
 - Except: removal of dead, diseased, damaged trees – safety or health hazard



Restricted vegetation removal

- Forest Management Plan
- No trees or woody vegetation cut / trimmed / removed from outside the development envelopes & limits of disturbance
- In addition, no woody or herbaceous vegetation or duff may be cut / trimmed / removed from sensitive buffers
 - Within 100 ft of MHWL Woodward Lake
 - Within 100 ft of all APA-regulated wetlands
 - Within 35 ft of all streams



Impact Analysis

Does the proposed development have resource impacts?

- To water resources (lake/streams/wetlands)?
- To habitat/wildlife?
- To forest resources?
- To rural character?

→ Staff's analysis: no undue adverse impacts

Impacts to Water Resources?

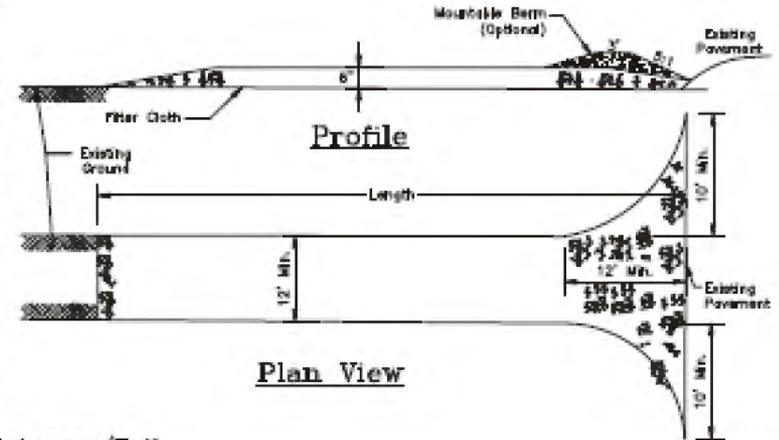
- Within the envelopes / limits of clearing
 - Erosion and sediment control during construction
 - Engineered wastewater treatment systems
 - Low impact development features for stormwater management
- Between the envelopes and water resources
 - Setbacks to lake, streams, wetlands (\geq the minimum)
 - Vegetated buffers: all vegetation and duff retained
- Within Woodward Lake
 - Limits to boat motors
 - Limits to dock locations / dimensions
 - Invasive species signage
- Wetland considerations

→ No undue adverse impacts to water resources

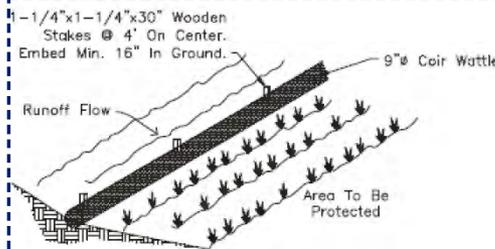
Within Envelopes: Erosion and Sediment Control

Construction Specifications

1. Stone Size - Use 1-4 Inch Stone, or Reclaimed or Recycled Concrete Equivalent.
2. Length - Not Less Than 50 Feet (Except on a Single Residence Lot Where a 30 Foot Minimum Length is Allowed).
3. Thickness - Not Less Than 6 Inches.
4. Width - 12-Foot Minimum, But Not Less Than The Full Width at Points Where Ingress or Egress Occurs, 24-Foot If Single Entrance to Non-Residential Site.
5. Geotextile - Will be Placed Over The Entire Area Prior to Placing of Stone.
6. Surface Water - All Surface Water Flowing or Diverted Toward Construction Entrances Shall be Piped Beneath The Entrance, If Piping is Impractical, a Moundable Berm With Six Slopes Will be Permitted.
7. Maintenance - The Entrance Shall be Maintained in a Condition Which Will Prevent Tracking or Flowing of Sediment Onto Public or Private Rights-of-Way. All Sediment Spilled, Clogged, Washed or Tracked Onto Public or Private Rights-of-Way Must Be Removed Immediately.
8. When Washing is Required, It Shall be Done on an Area Stabilized With Stone And Which Drains Into an Approved Sediment Trapping Device.
9. Periodic Inspection And Needed Maintenance Shall be Provided After Each Rain.



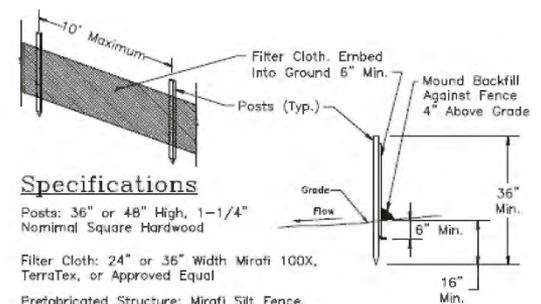
C1 Stabilized Construction Entrance/Exit
Scale: Not to Scale



Notes:

1. Coir Wattles Shall Consist of Coir Twine Exterior Netting With Knotted Junctions and Shall Have An Inner Core of Double Cleaned Unsorted Coir Fiber. Wattles Shall Be Biodegradable and As Produced By GEI Works or Equal.
2. Install by Placing Wattle in a Shallow Trench At Edge of Wetland or Area to Be Protected, and Stake at 4' O.C.
3. Maintenance Shall Be Performed As Needed And Material Removed When Sediment Accumulates to No More Than 3" Below the Top of the Wattle.

C4 Typical Coir Wattle Detail
Not To Scale



Specifications

Posts: 36" or 48" High, 1-1/4" Nominal Square Hardwood

Filter Cloth: 24" or 36" Width Mirafi 100X, TerraTex, or Approved Equal

Prefabricated Structure: Mirafi Silt Fence, Hanes Geo Components, or Approved Equal

Notes:

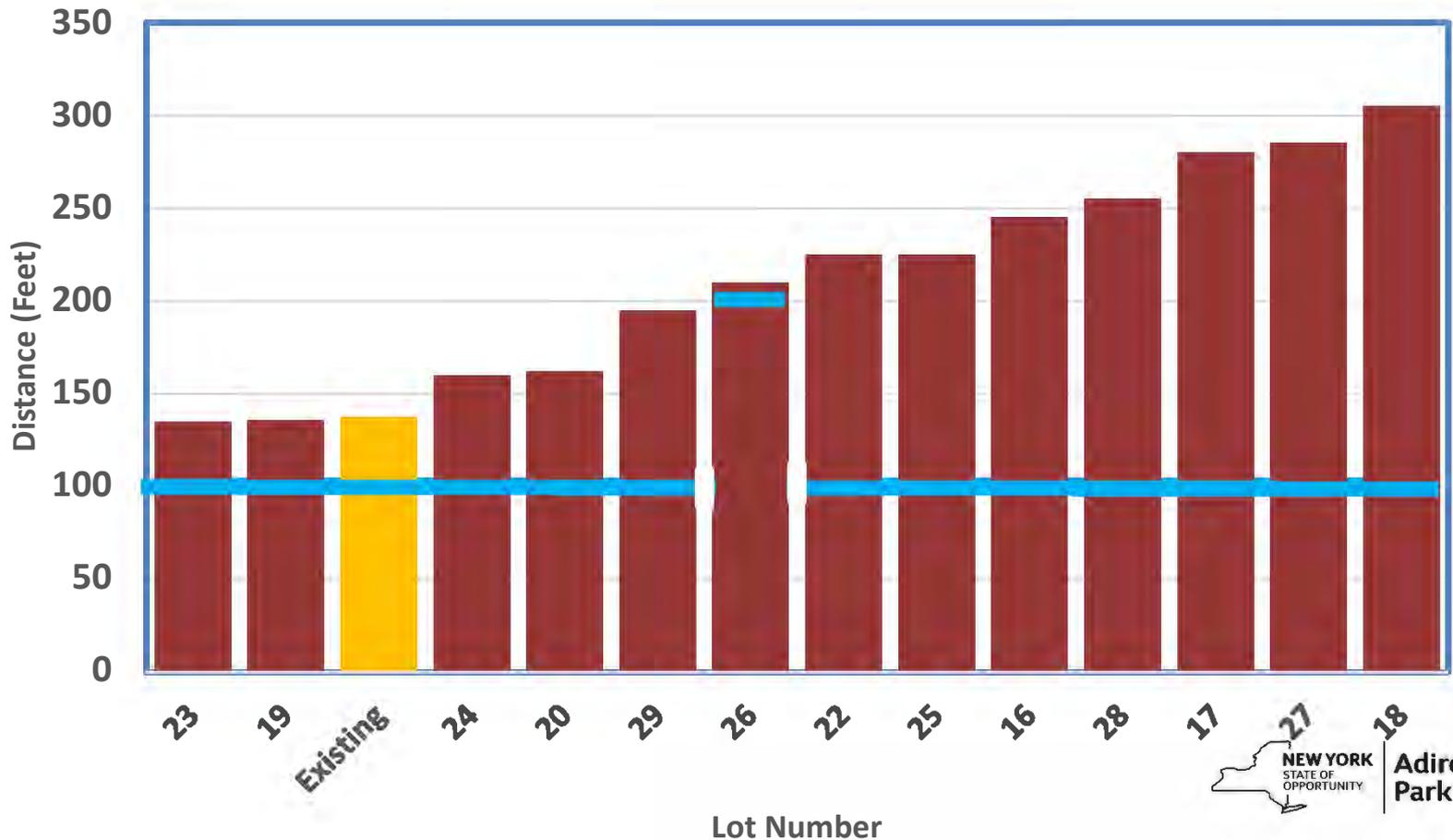
Filter Cloth To Be Fastened Securely To Posts With Staples. When Two Sections Of Filter Cloth Adjoin Each Other They Shall Be Overlapped By 6". Folded, and Stapled. Maintenance Shall Be Performed As Needed And Material Removed When "Bulges" Develop In The Silt Fence.

C5 Typical Silt Fence Detail
Not To Scale

Within Envelopes: Engineered WWTS

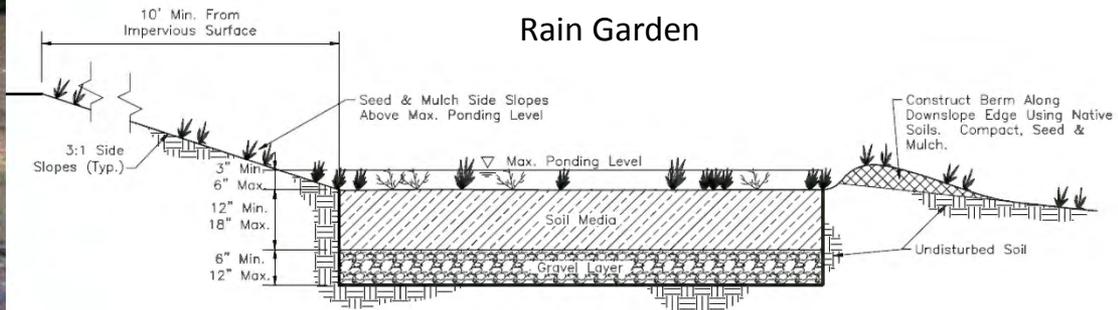
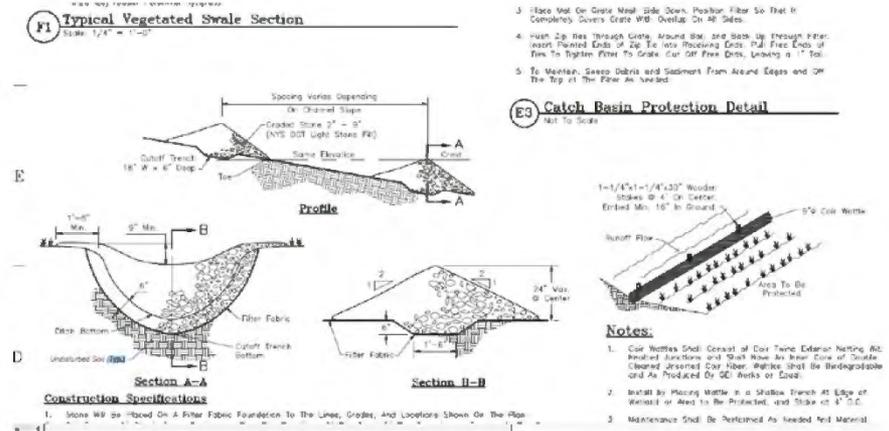
Minimum 100 ft from all wetlands, streams, water bodies

Edge of OSWWTS Leach Field to Woodward Lake

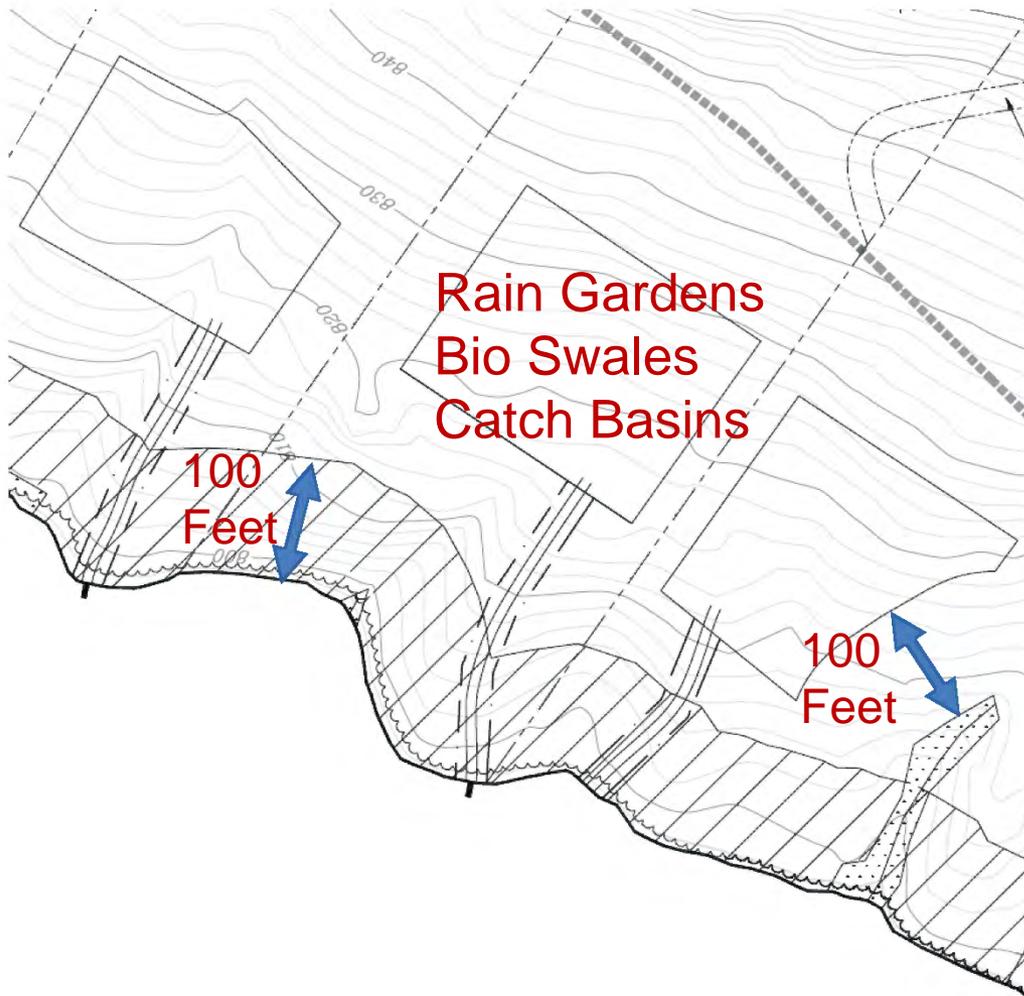


Within Envelopes: Stormwater Management

Low impact development features: vegetated swales, catch basins, level spreaders, and rain gardens → reduce runoff



Outside Envelopes: Setbacks / Undisturbed Buffers



Building envelopes:

- ≥ 100 feet from lake,
- ≥ 100 feet from wetlands,
- ≥ 100 feet from permanent streams
- ≥ 50 feet from intermittent streams

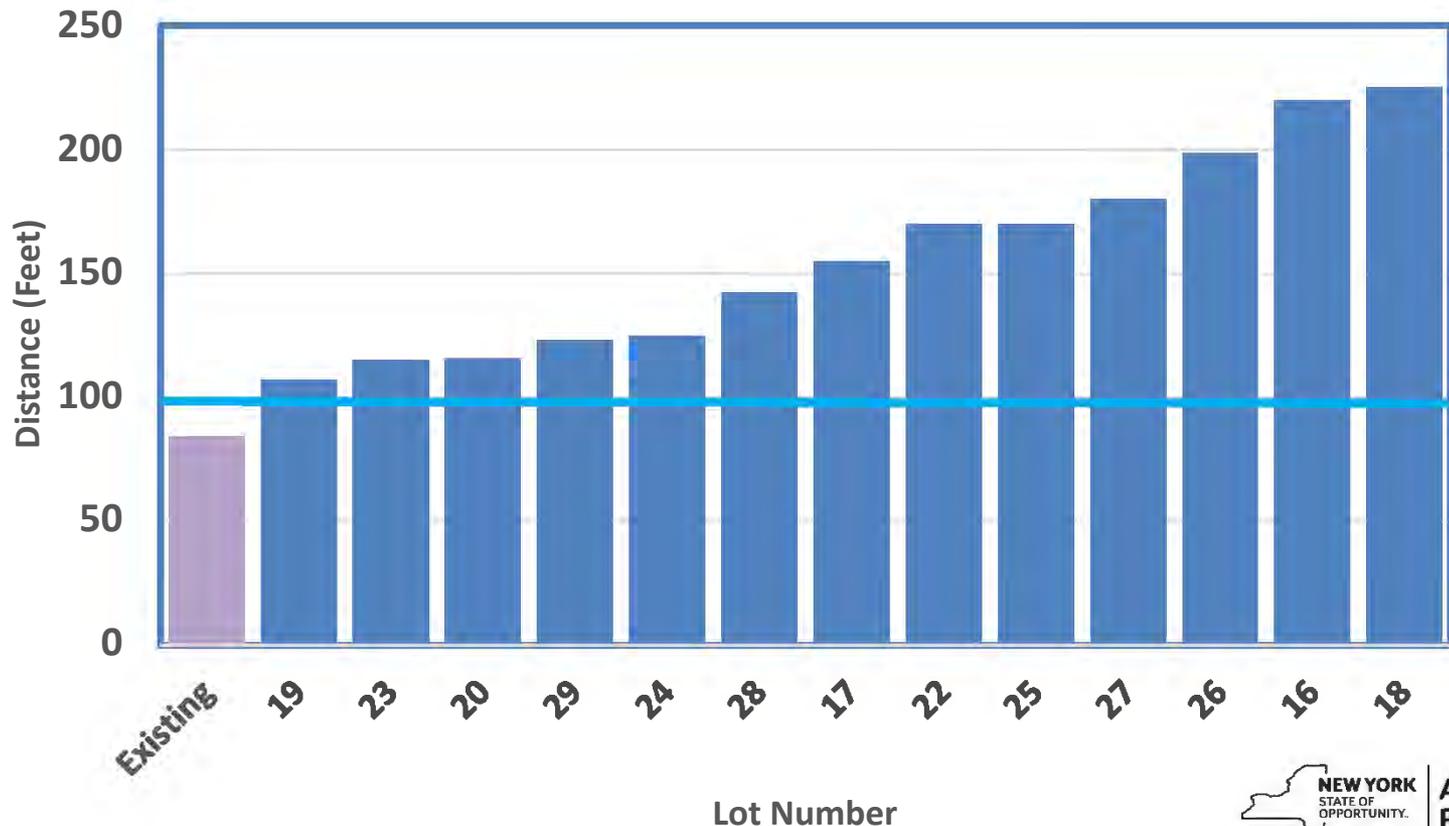
No cutting vegetation / removal of duff:

- ≤ 100 feet from lake,
- ≤ 100 feet from wetlands,
- ≤ 35 feet from streams

Vegetated Buffer to Lake

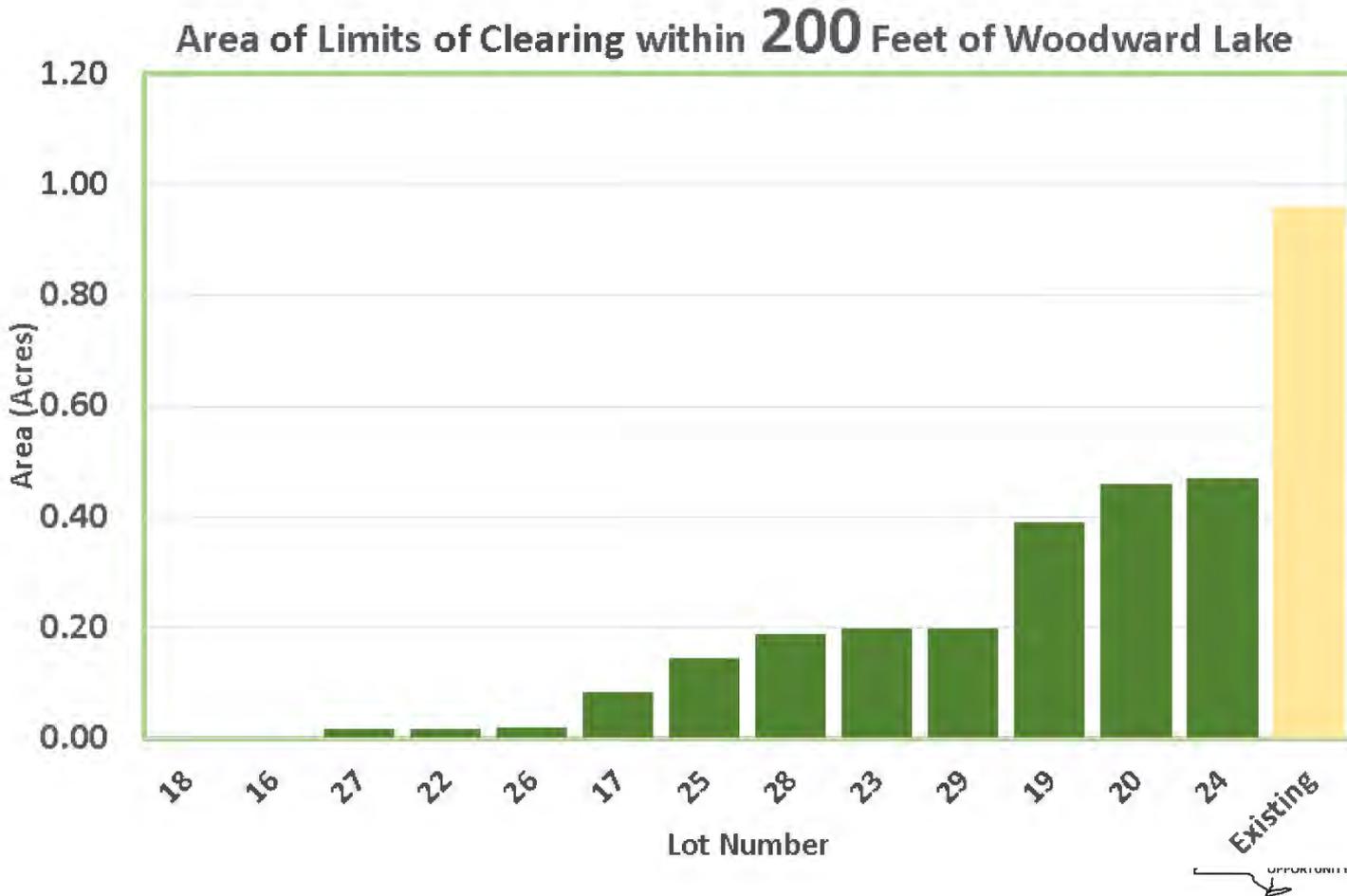
75 ft minimum = shoreline structure setback in Rural Use
 100 ft minimum = requested for this project by staff

Edge of Limits of Clearing to Woodward Lake



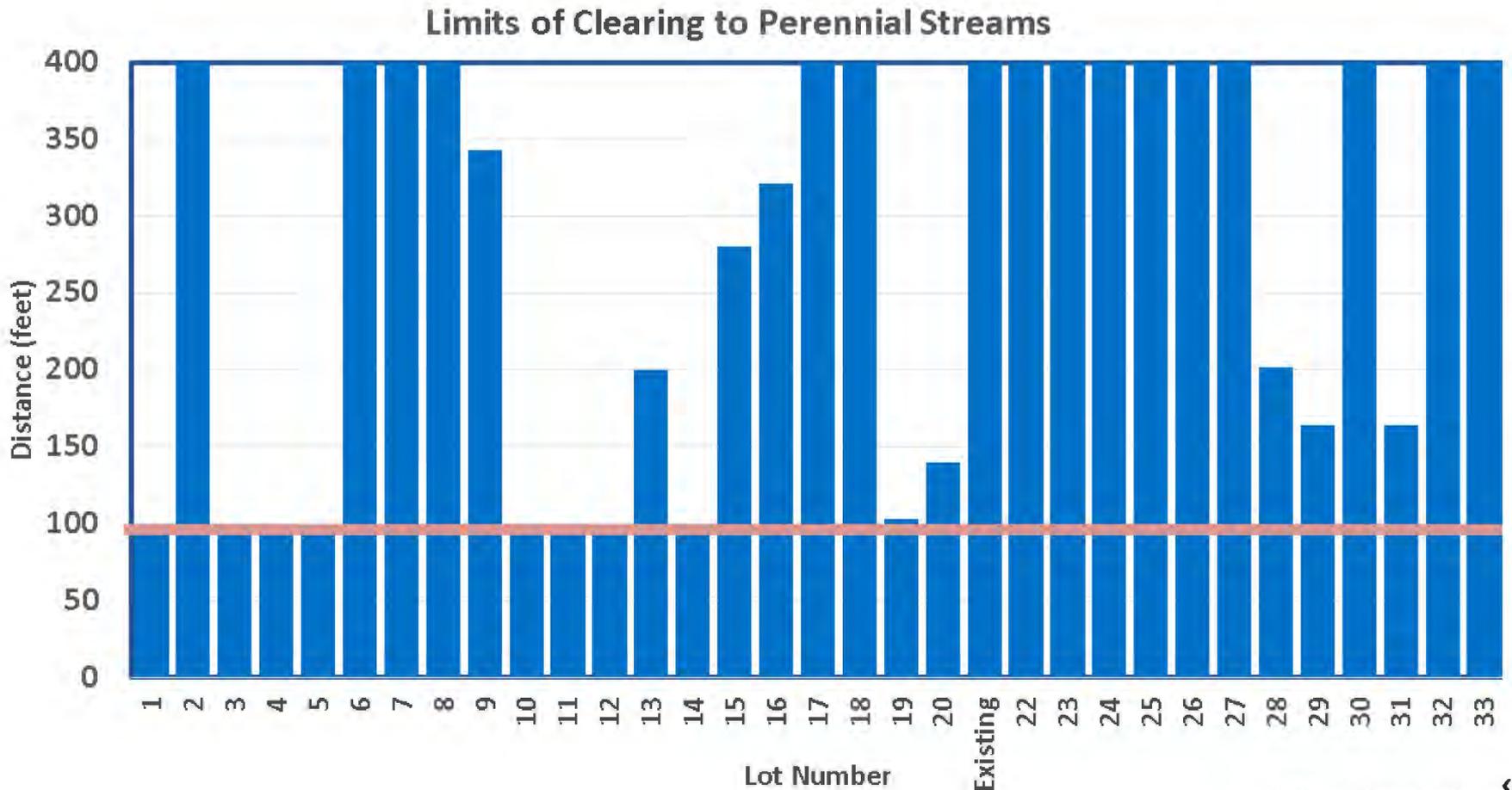
Minimal Clearing Within 200 ft of Lake

Total: 3.16 acres (including 0.96 acres from existing development)



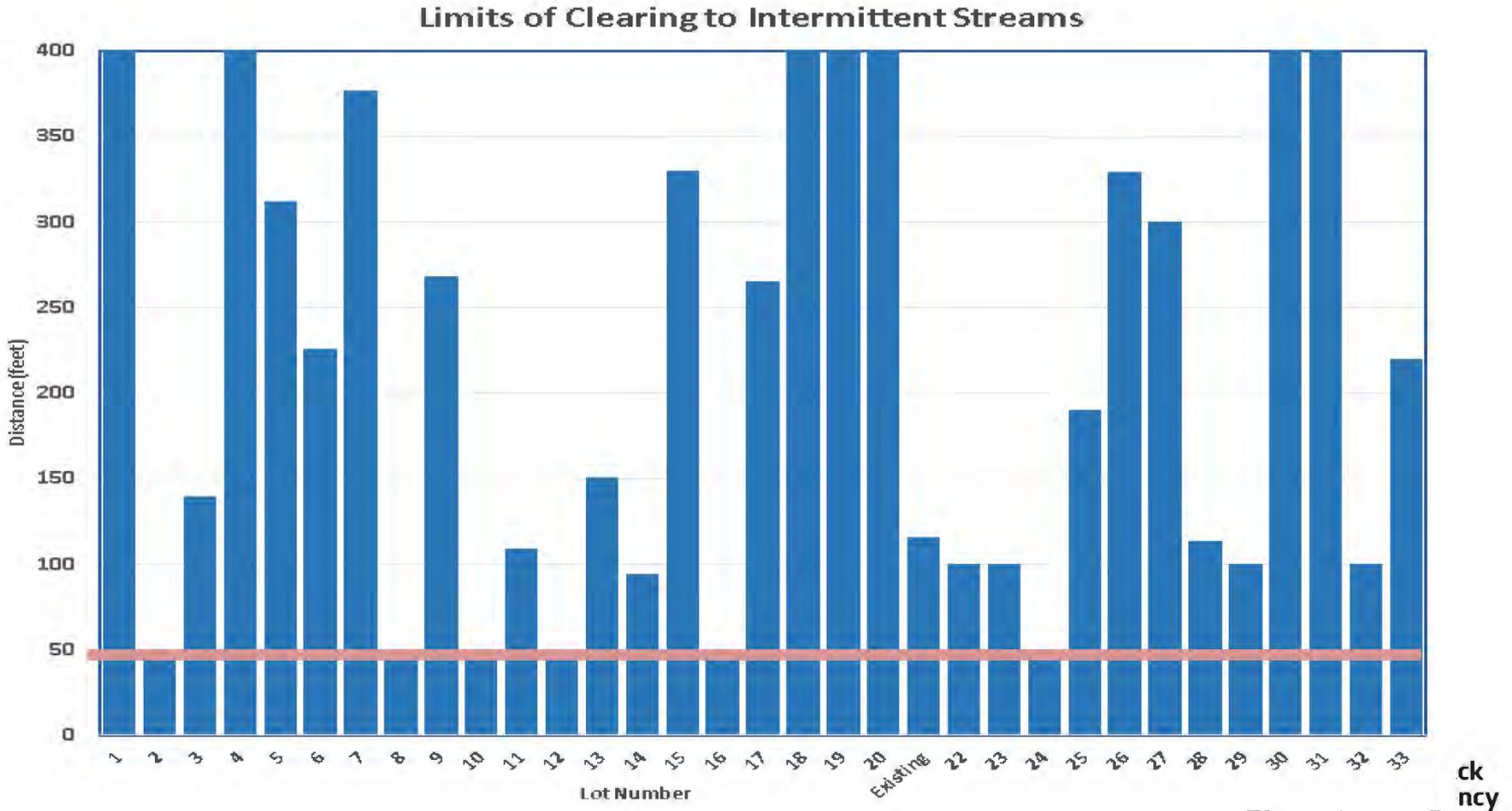
Vegetated buffer to permanent streams

Minimum: 100 ft -- often exceeded



Vegetated buffer to intermittent streams

Minimum: 50 ft -- often exceeded

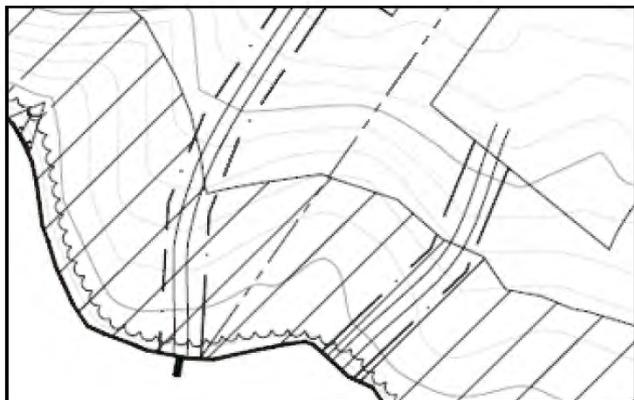


Within Woodward Lake

Motorized watercraft:
low thrust electric motors only

Clean Drain & Dry signage
on Common Area Lot

Docks allowed only where no
wetland vegetation exists



PROTECT YOUR WATERS!
Prevent the Spread of Invasive Species
Invasive Plants and Animals Can Impact Boating, Fishing, Swimming and the Environment

REMOVE any visible mud, plants, fish or animals before transporting equipment.

ELIMINATE water from equipment before transporting.

CLEAN & DRY anything that comes into contact with water (boats, trailers, waders, equipment, dogs, etc.).

NEVER release plants, fish or animals into a body of water unless they came out of that body of water.

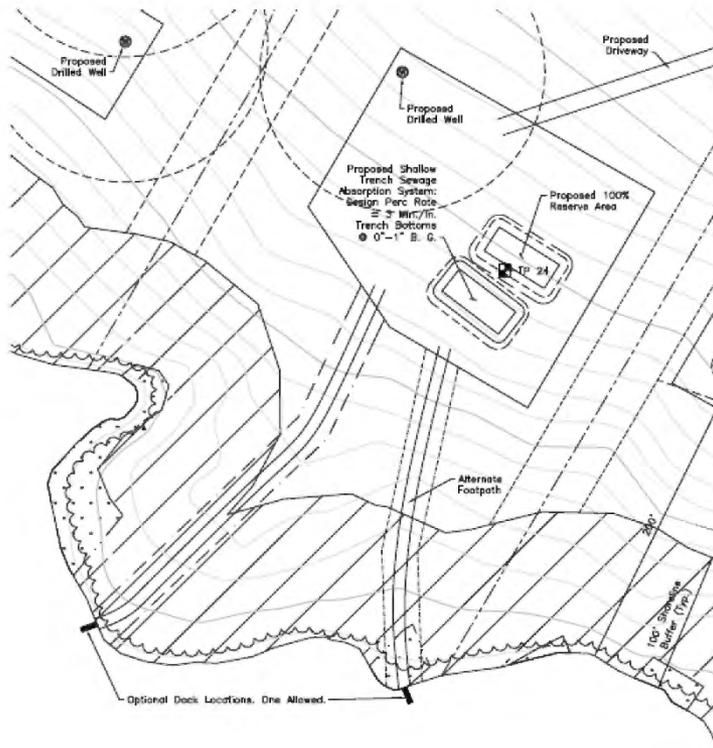
STOP AQUATIC HITCHHIKERS!
www.ProtectYourWaters.net

For further information scan this QR code with a smartphone, or visit:
www.dec.ny.gov/animals/48221.html

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 625 BROADWAY, ALBANY, NY 12233-4753
www.dec.ny.gov

Changes Made To Protect Wetlands

Lot 25 example: dock placement



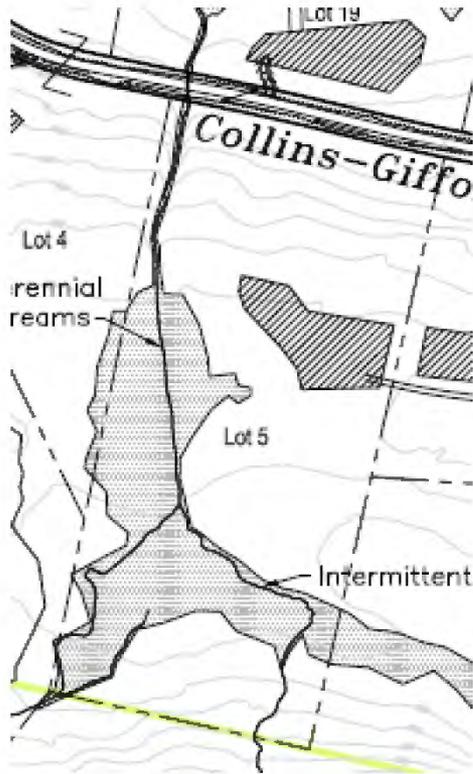
Feb 2020 Plans



Oct 2020 Plans

Changes Made To Protect Wetlands

Lot 5 example: lot lines



Feb 2020 Plans



Oct 2020 Plans

Impacts to Water Resources?

- Within the envelopes / limits of clearing
 - Erosion and sediment control during construction
 - Engineered wastewater treatment systems
 - Low impact development features for stormwater management
- Between the envelopes and water resources
 - Setbacks to lake, streams, wetlands (\geq the minimum)
 - Vegetated buffers: all vegetation and duff retained
- Within Woodward Lake
 - Limits to boat motors
 - Limits to dock locations / dimensions
 - Invasive species signage
- Wetland considerations

→ No undue adverse impacts to water resources

Impacts to Habitat / Wildlife?

- Edge effects
 - significant overlap between existing and proposed
- Interior forest
 - minimal impacts to area-sensitive songbirds
 - minimal impacts to wide-ranging species
- Travel routes
 - Large mammal travel routes substantially avoided
 - Stream corridors provided
 - Vegetative buffers
 - Appropriate culverts / bridges
- Pool-breeding amphibians
 - upland area surrounding wetlands conserved

→ No undue adverse impacts to habitat / wildlife



Edge and Edge Effects

- **Edge** = the portion of an ecosystem or habitat near its perimeter, where influences of the surroundings prevent development of interior/core-area environmental conditions (Forman 1995).
- **Edge Effects** = the negative influence (e.g., such as the profound modification of biological and physical conditions) of habitat or ecosystem edge on interior conditions of habitat or on associated species (Meffe and Carroll 1997, Lindenmayer and Franklin 2002).

Edge Effects

Songbirds and small mammals

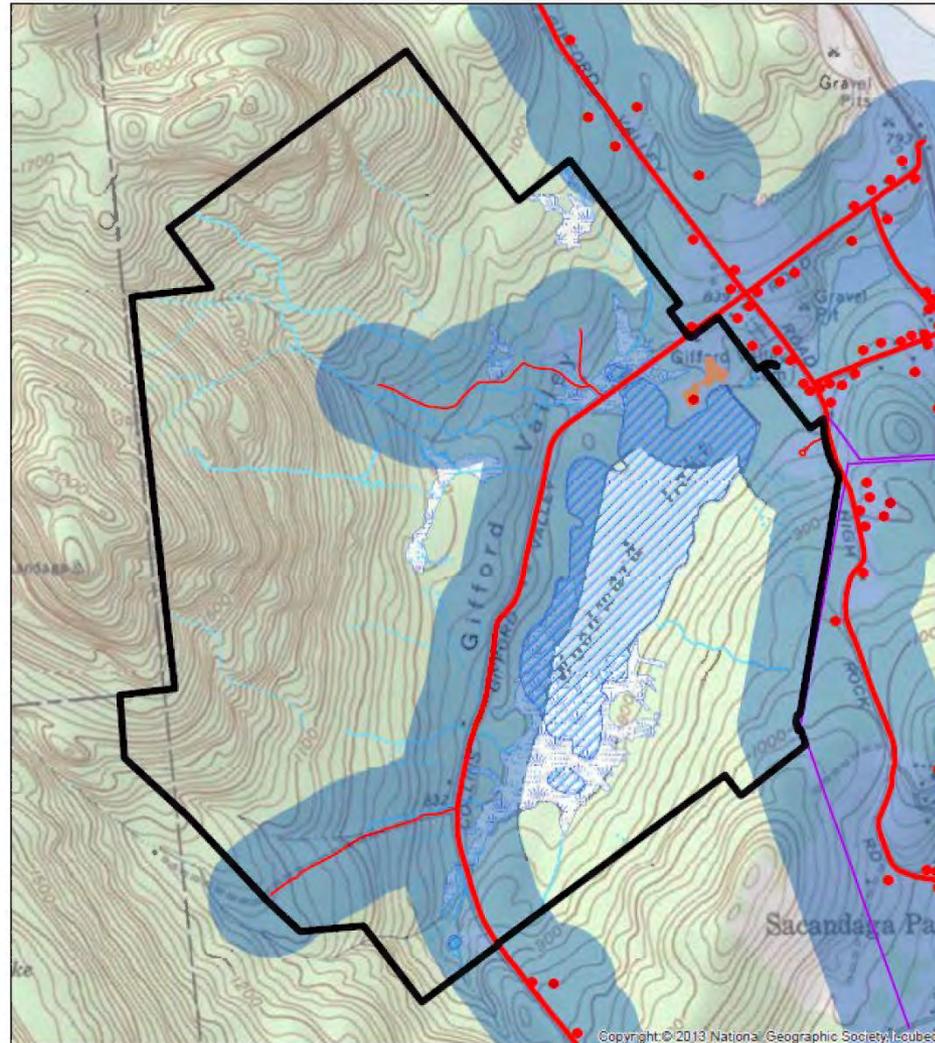
- Distance of edge effects
 - Adirondack songbirds: 200 m
 - Adirondack small mammal: 150 - 250 m

Species with larger home ranges

- Edge effects minimized
 - Retain large areas unfragmented forest
 - Conserve large proportion of suitable habitat
 - Avoid identified travel routes and riparian corridors
 - Retain connectivity of remaining habitat patches

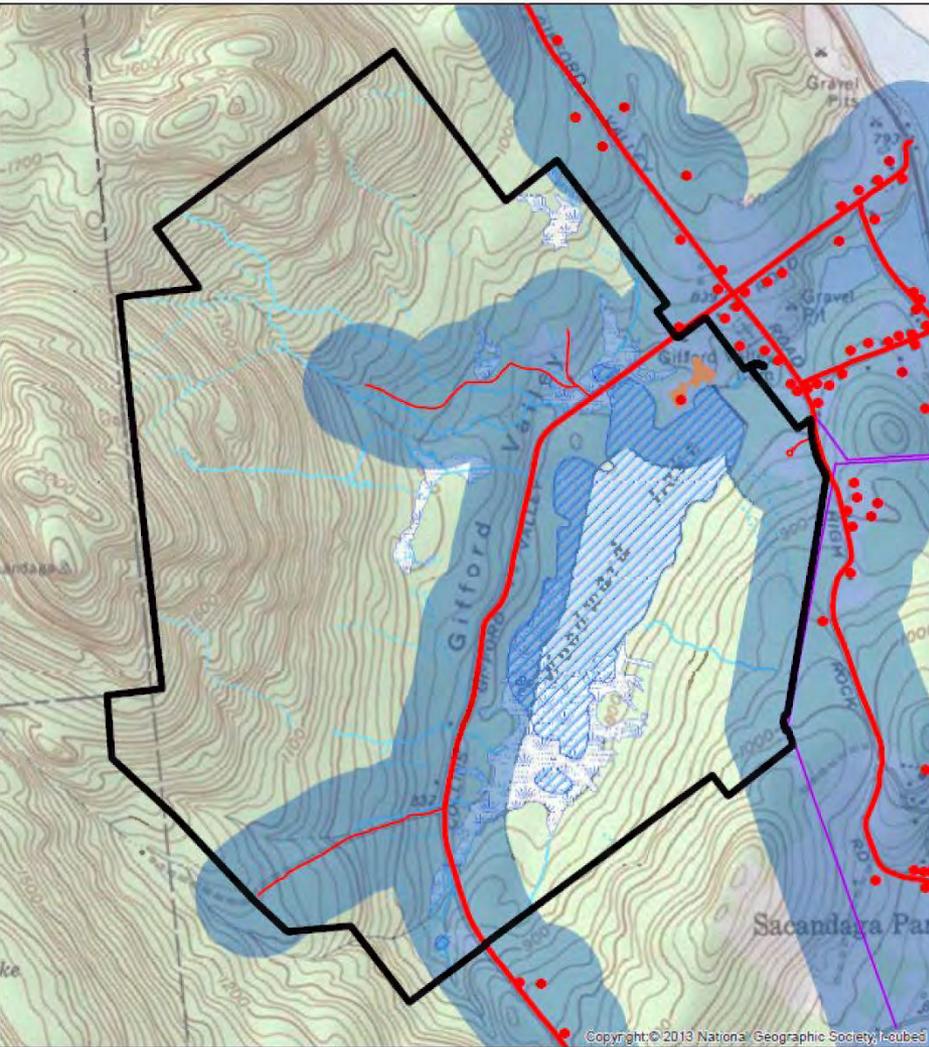
Edge Effects

Existing Development



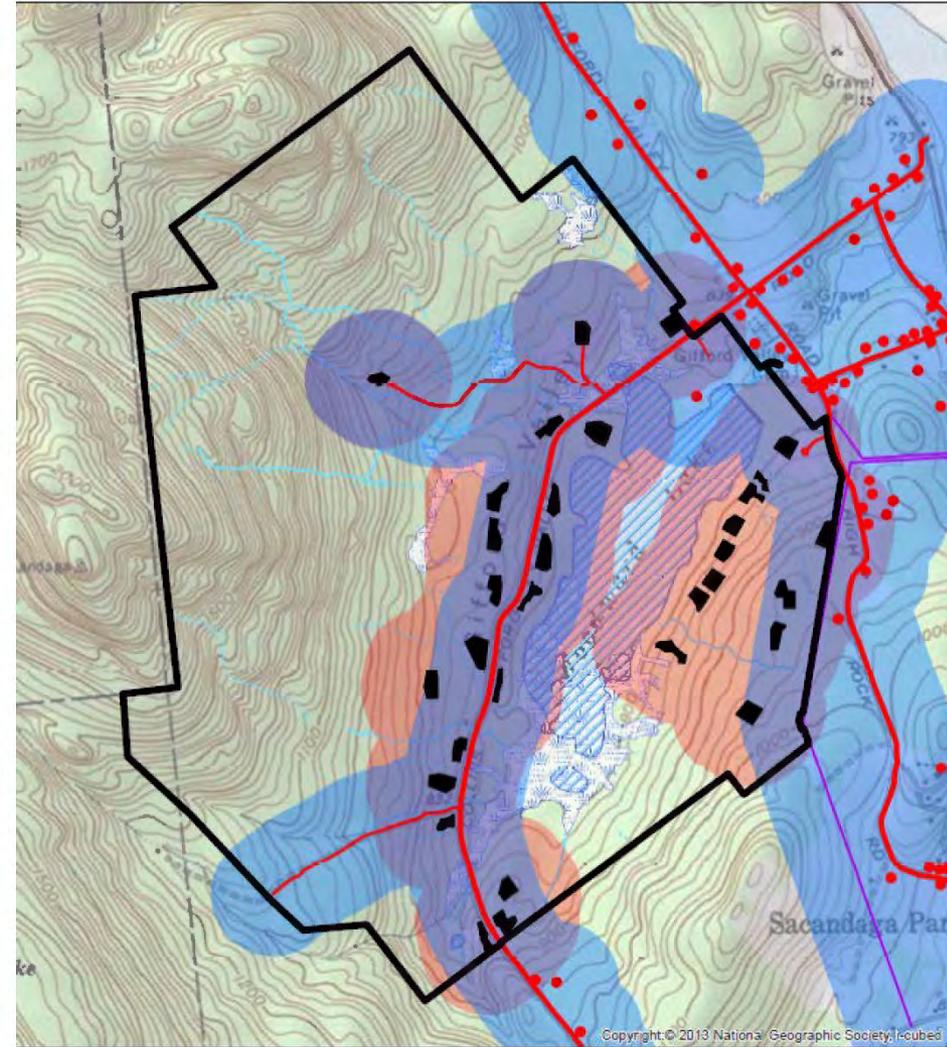
Edge Effects

Existing Development



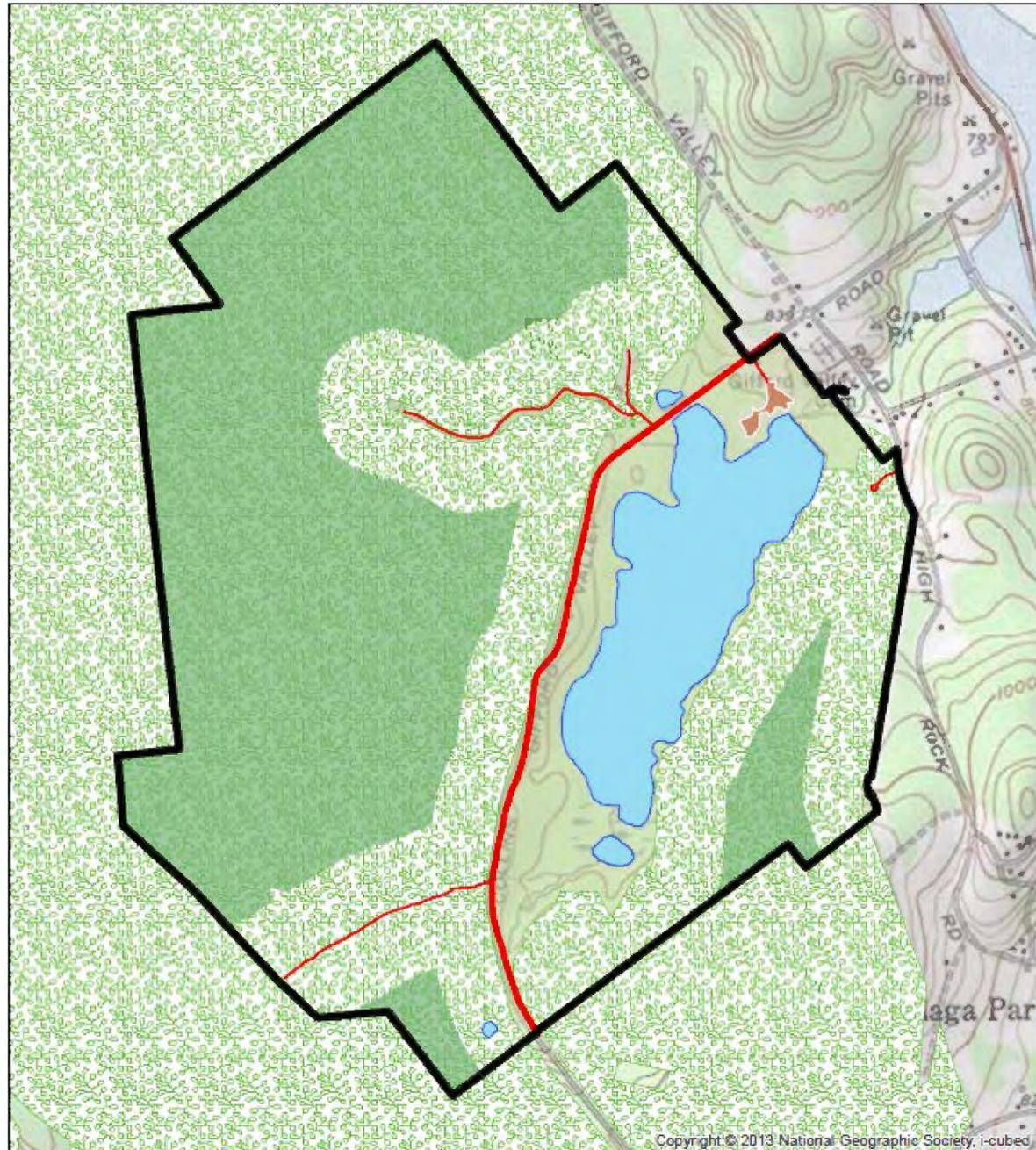
Edge Effects

Existing and Proposed Dev.

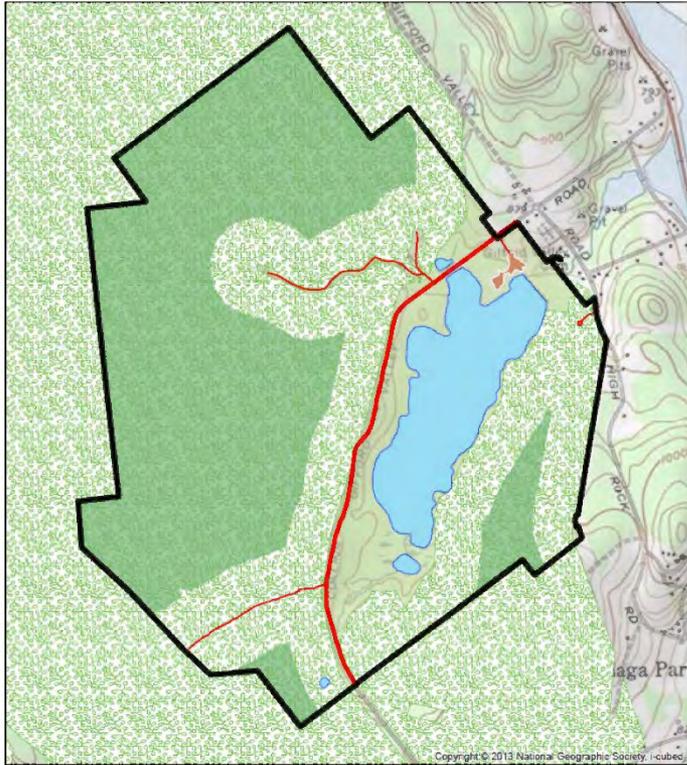


New edge effects of proposed development = 153± acres

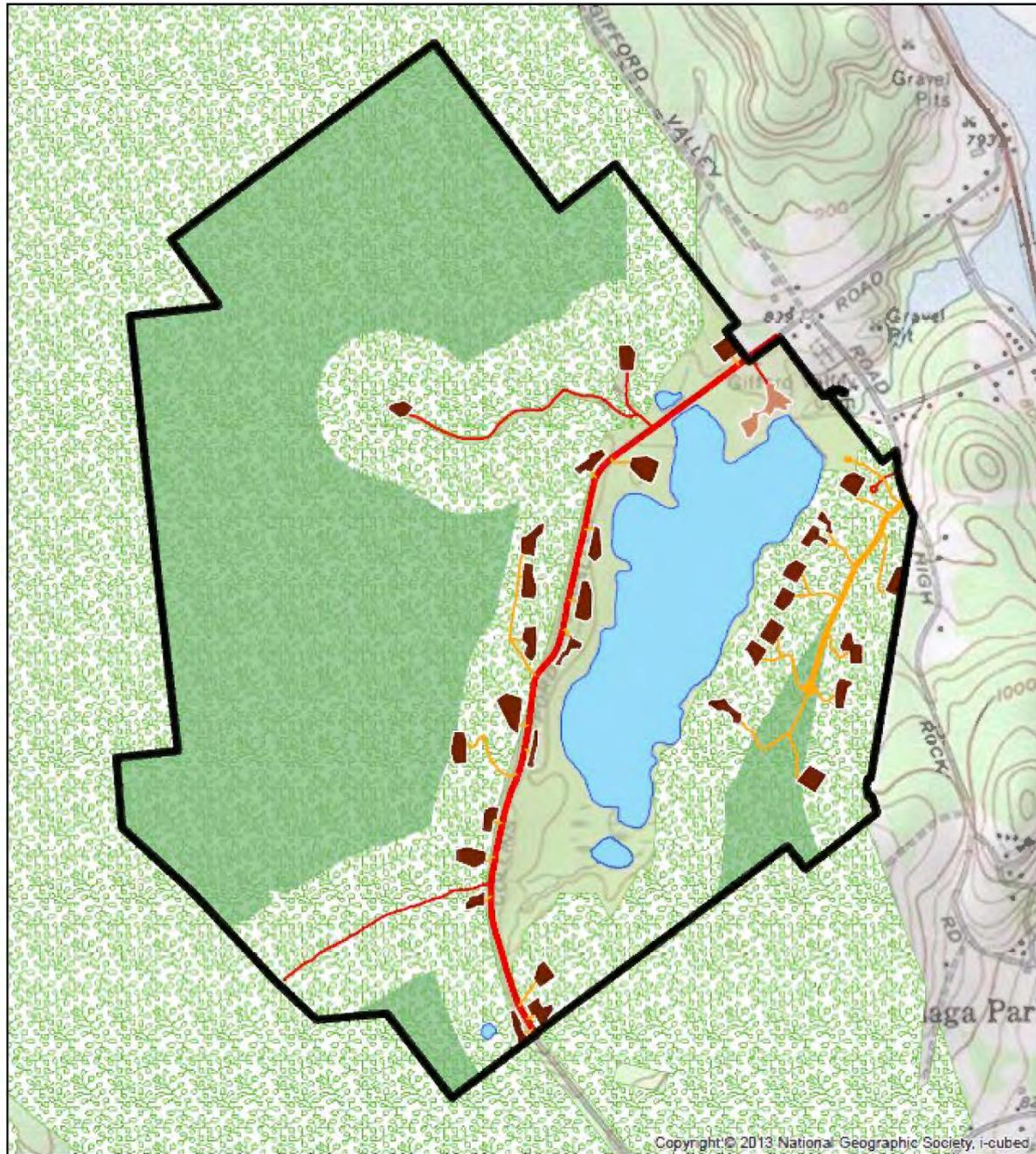
Interior Forest



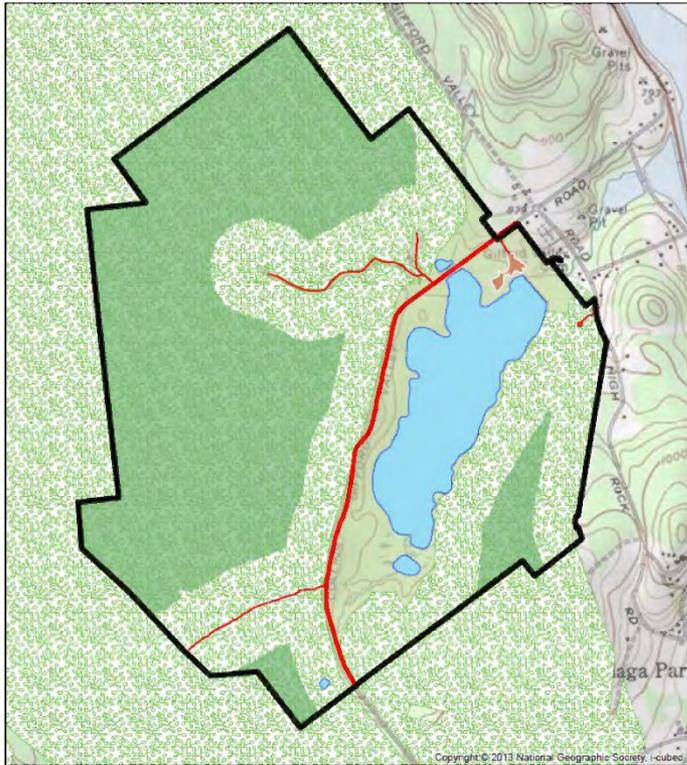
Interior Forest



-  Forest Blocks
-  Interior Forest (> 200 m from edges)

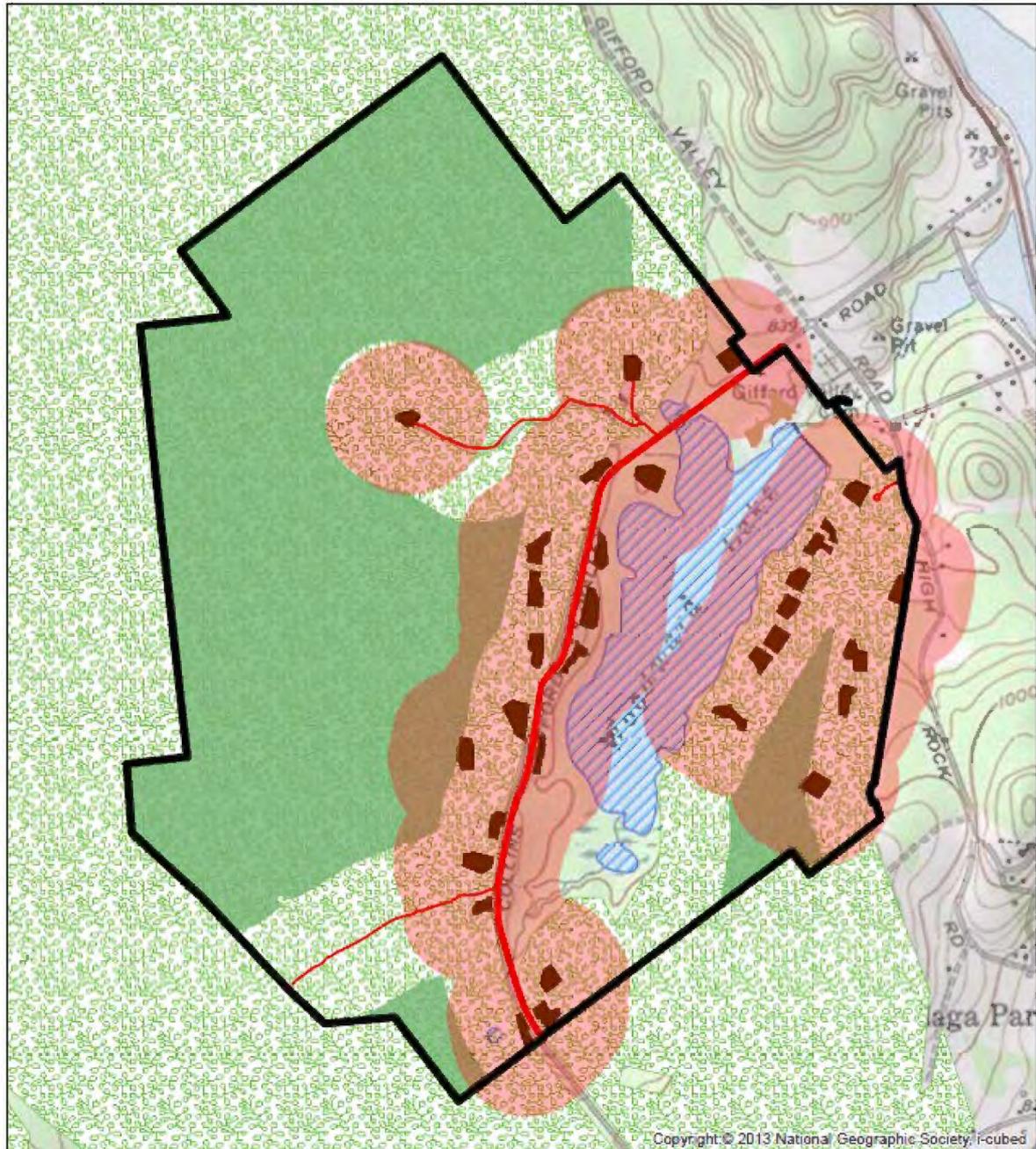


Interior Forest

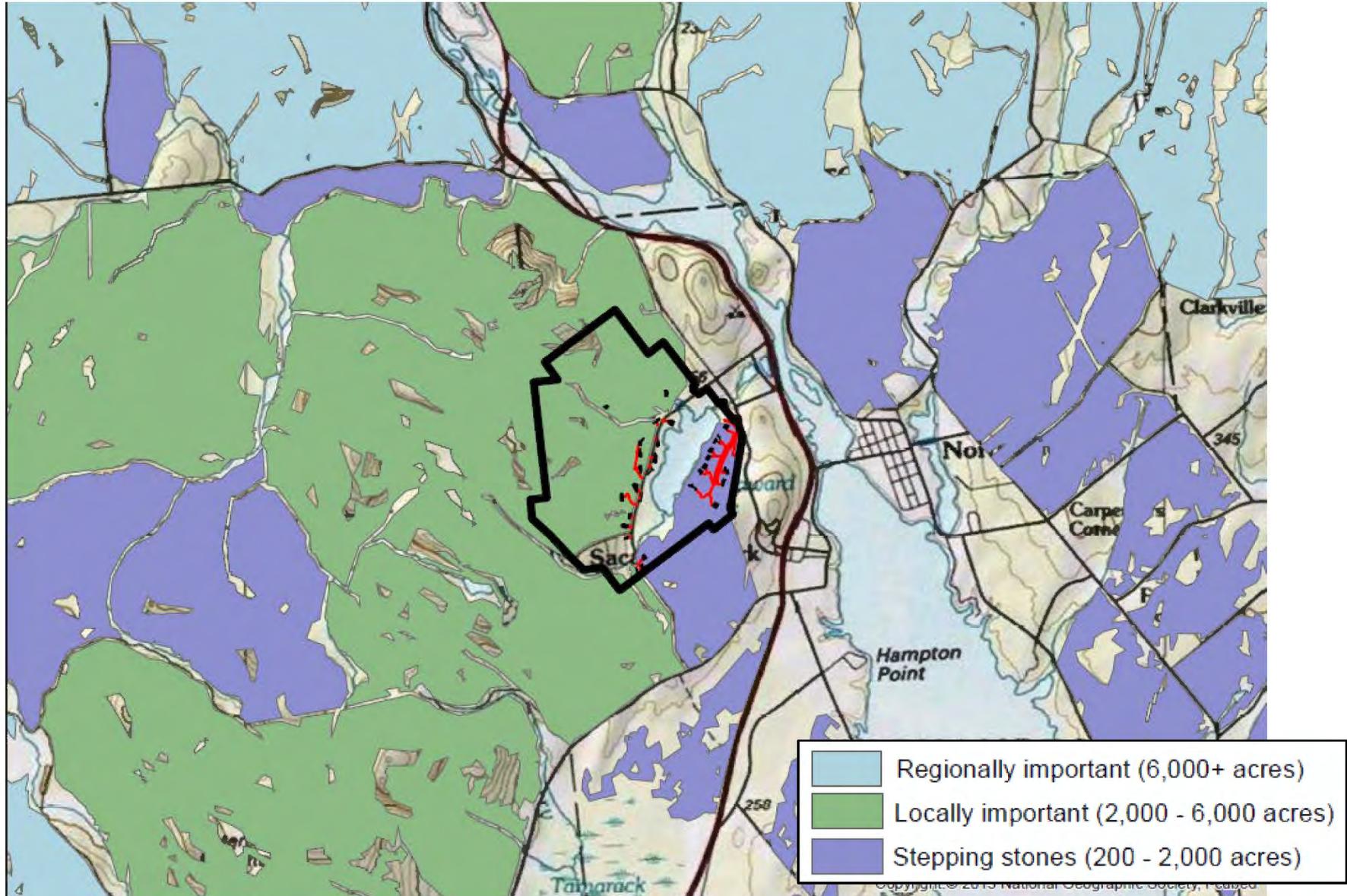


-  Forest Blocks
-  Interior Forest (> 200 m from edges)

New edge effects within interior forest = 64± acres



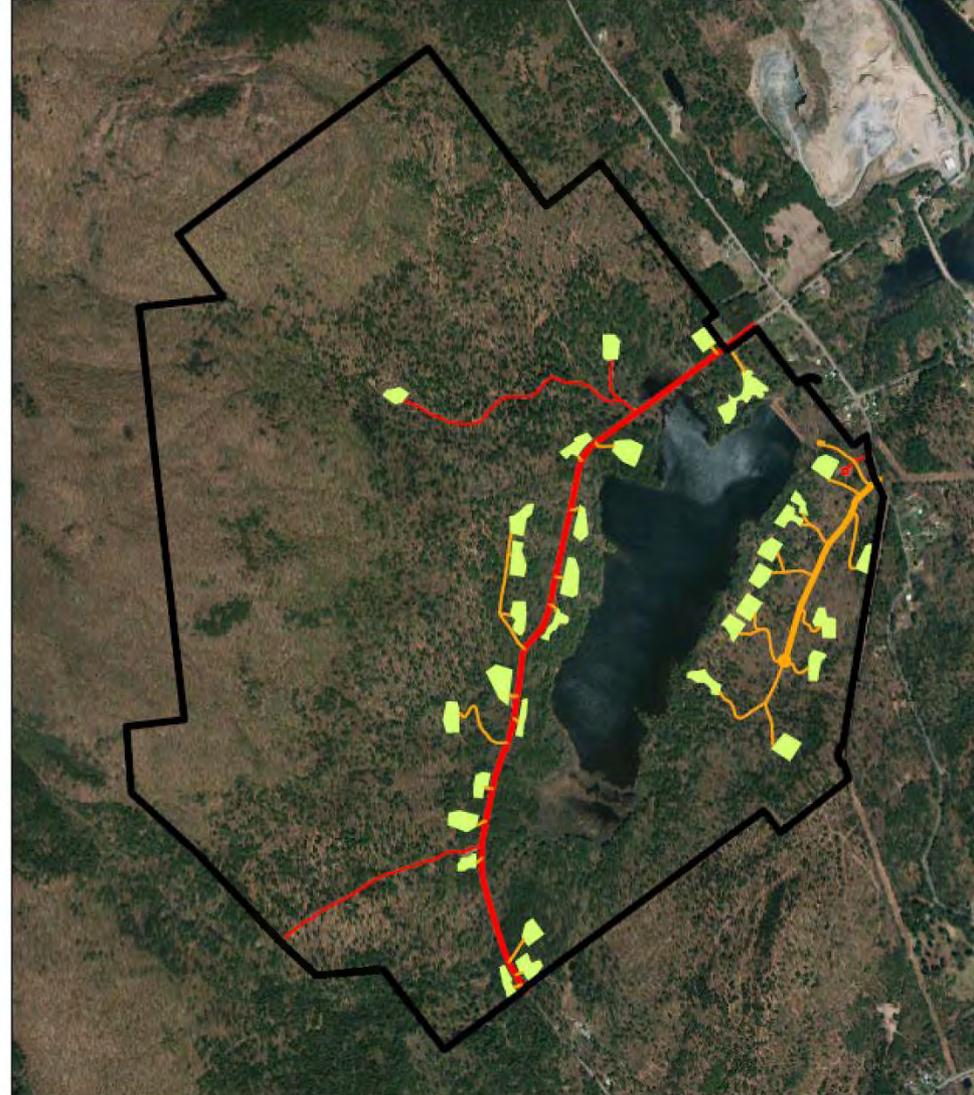
Large Forest Blocks



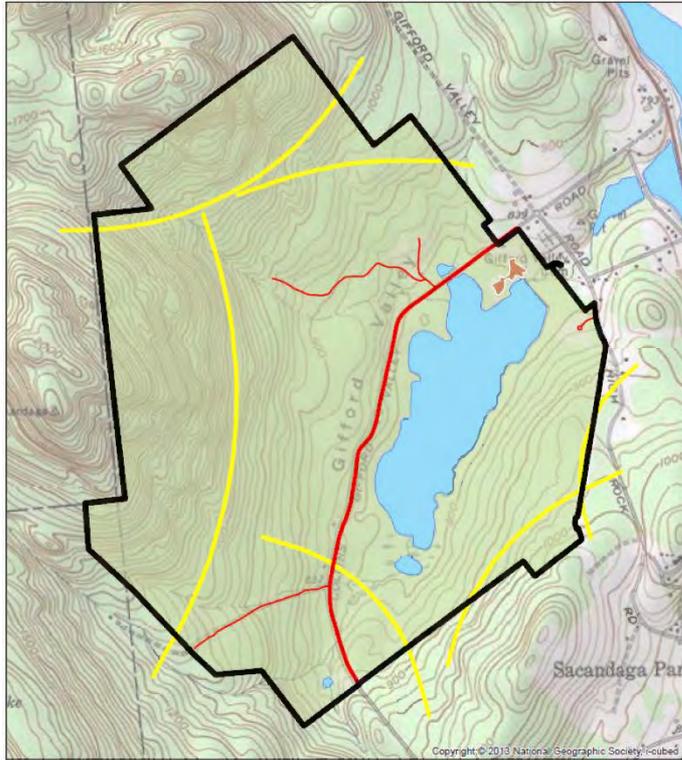
Existing



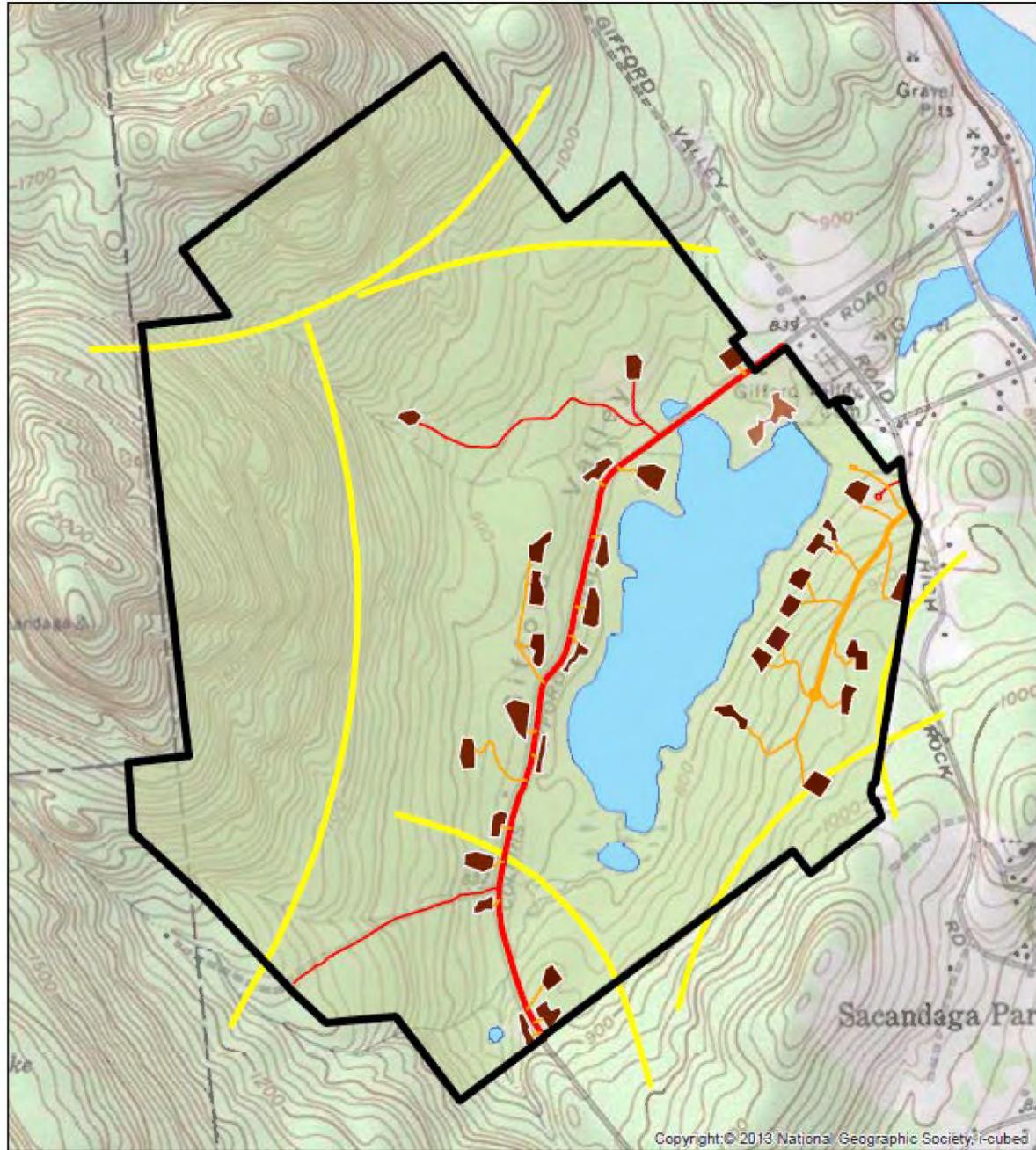
Proposed



Large Mammal Travel Routes

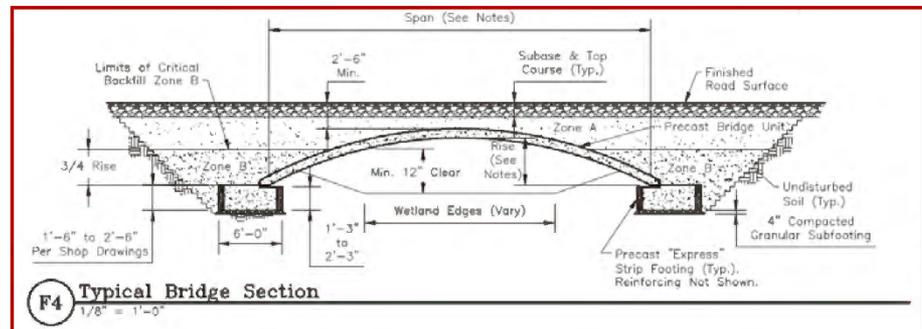
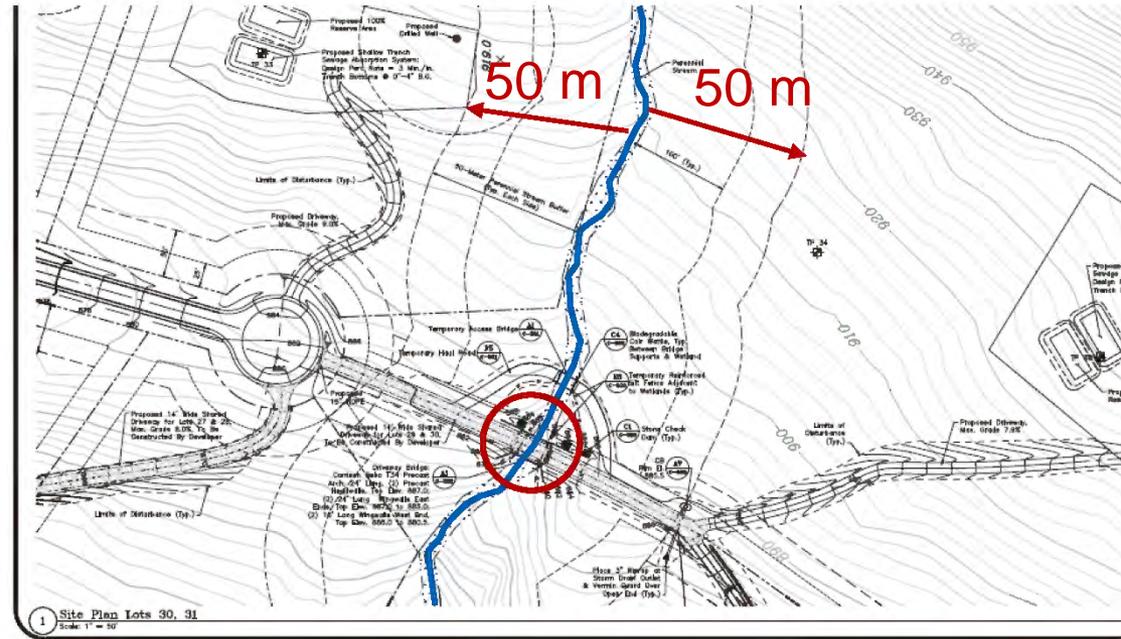


— Large Mammal Travel Routes



Riparian habitat / corridors

- 100-ft minimum undisturbed buffer surrounding wetlands, for amphibians
- 167-ft minimum (50-m) undisturbed buffer for perennial stream E of lake, for wildlife
- Bottomless arch bridges for riparian corridors, for fish, amphibians, aquatic mammals



Pool-breeding Amphibians

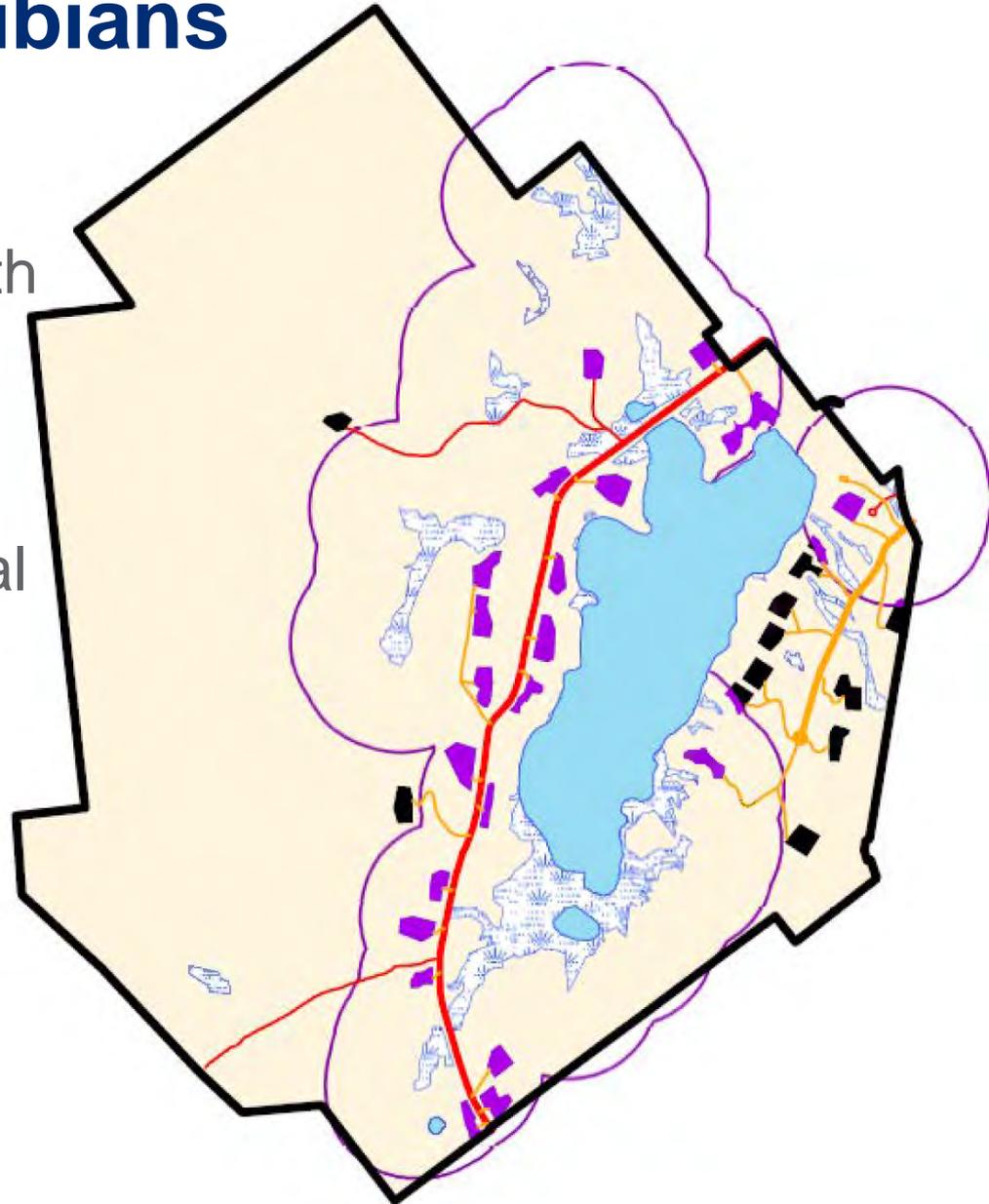
Critical Terrestrial Zone
within 750 feet of wetlands with
pool-breeding amphibians

Goal:

Leave 75% of critical terrestrial
zone unfragmented with
undisturbed ground cover
(disturb < 25%)

Analysis:

Subdivision proposal meets
this goal



Impacts to Habitat / Wildlife?

- Edge effects
 - significant overlap between existing and proposed
- Interior forest
 - minimal impacts to area-sensitive songbirds
 - minimal impacts to wide-ranging species
- Travel routes
 - Large mammal travel routes substantially avoided
 - Stream corridors provided
 - Vegetative buffers
 - Appropriate culverts / bridges
- Pool-breeding amphibians
 - upland area surrounding wetlands conserved

→ No undue adverse impacts to habitat / wildlife



Impacts to Forest Resources?

- Largest 5 lots (all well > 50 acres)
 - Forest Management Plans provided to landowner
 - Landowner choice if / how to manage forest
- Vegetative cutting restrictions
 - Outside envelopes / limits of disturbance
 - Within sensitive areas (lake/streams/wetlands)
- Parcelization, not fragmentation



→ No undue adverse impacts to forest resources

Parcelization Not Fragmentation

Parcelization:

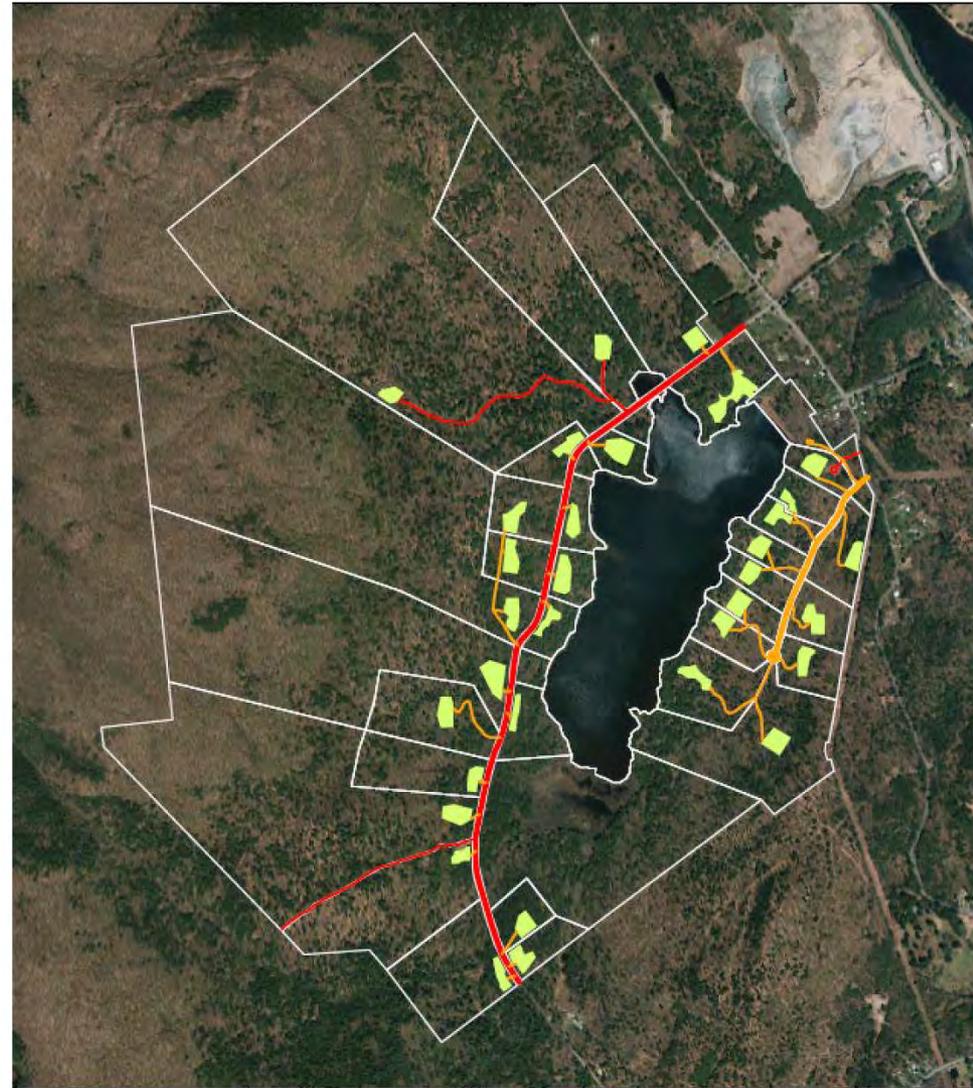
Property subdivided
From single to multiple
ownerships

Fragmentation:

Portions of landscape
converted to new uses

This proposal:

630 acres of contiguous forest
will be in 5 ownerships



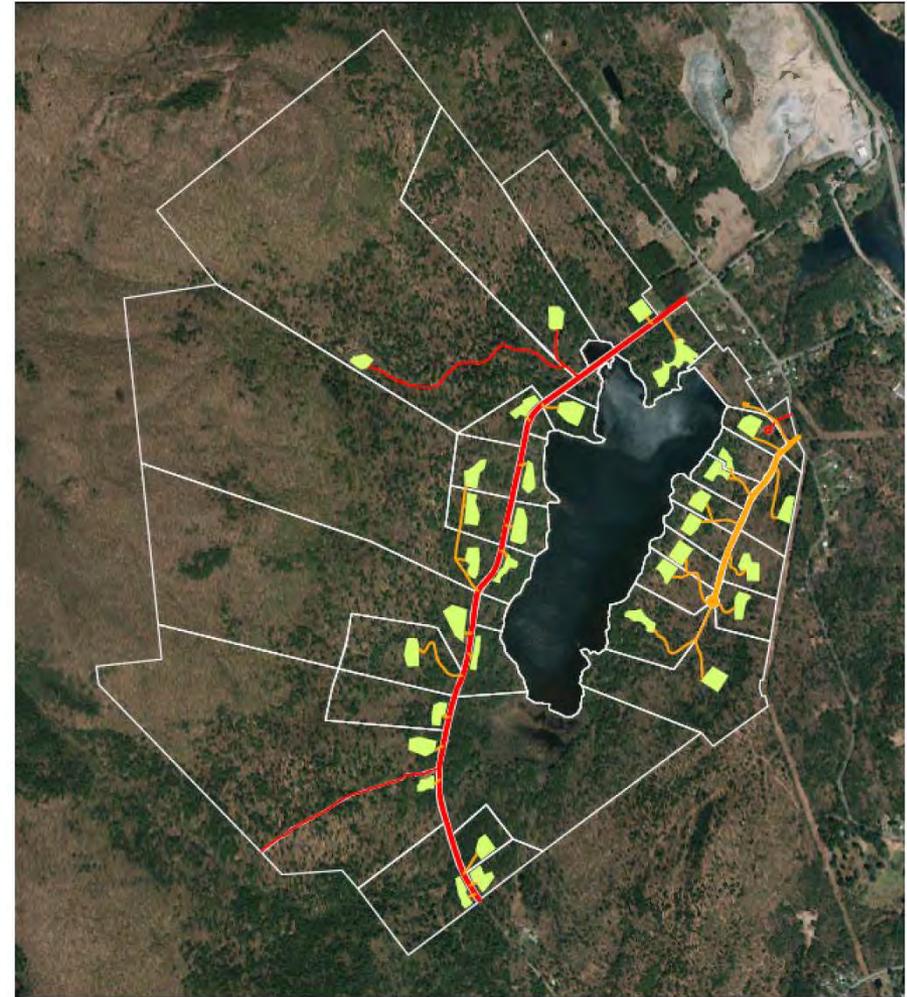
Parcelization

Advantages

- Diversity of management
- Diversity of habitat
- Avoid disagreement of group ownership, leading to mismanagement or lack of management

Disadvantages

- Responding to forest health / landscape-scale management objectives



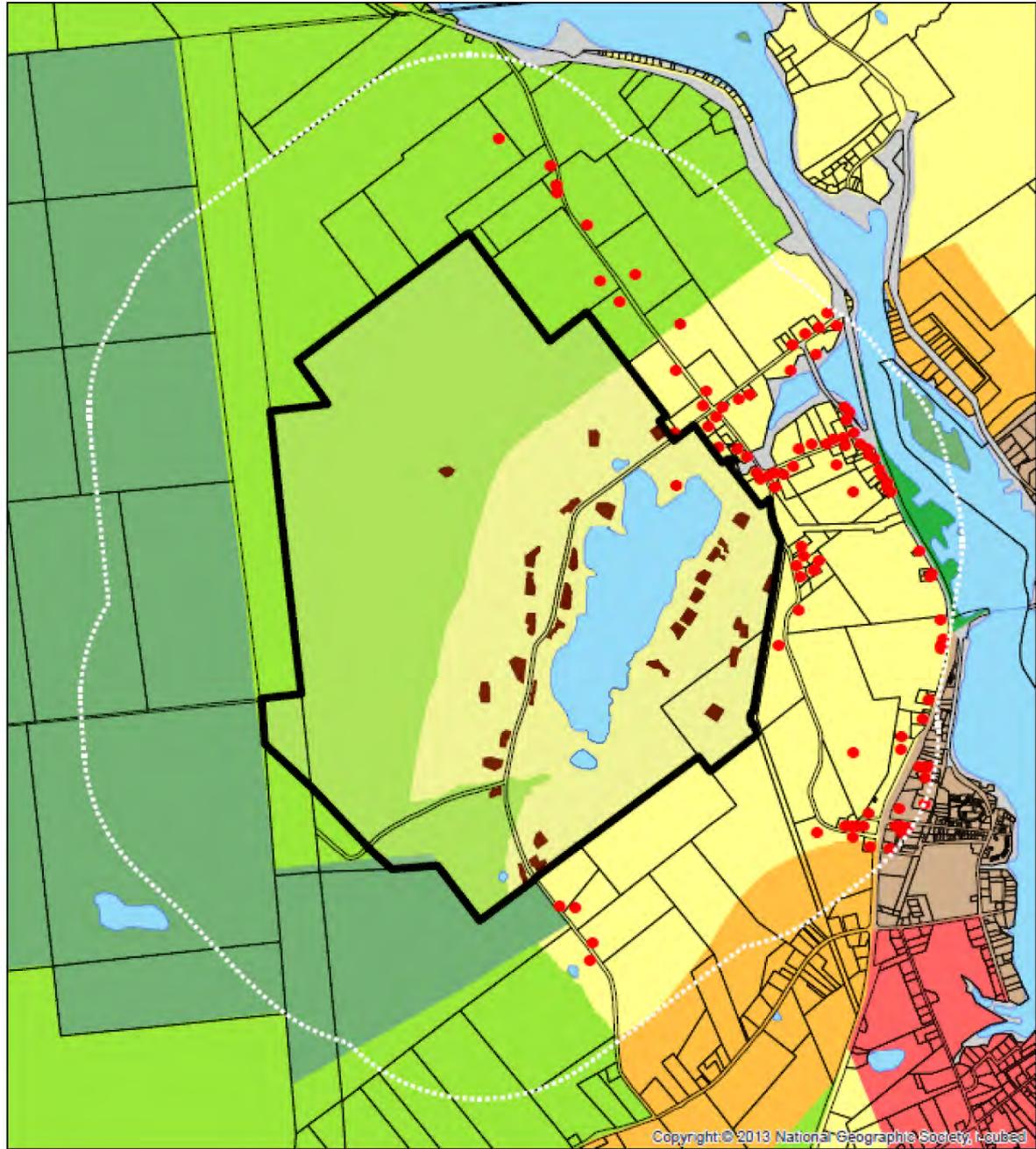
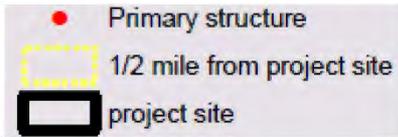
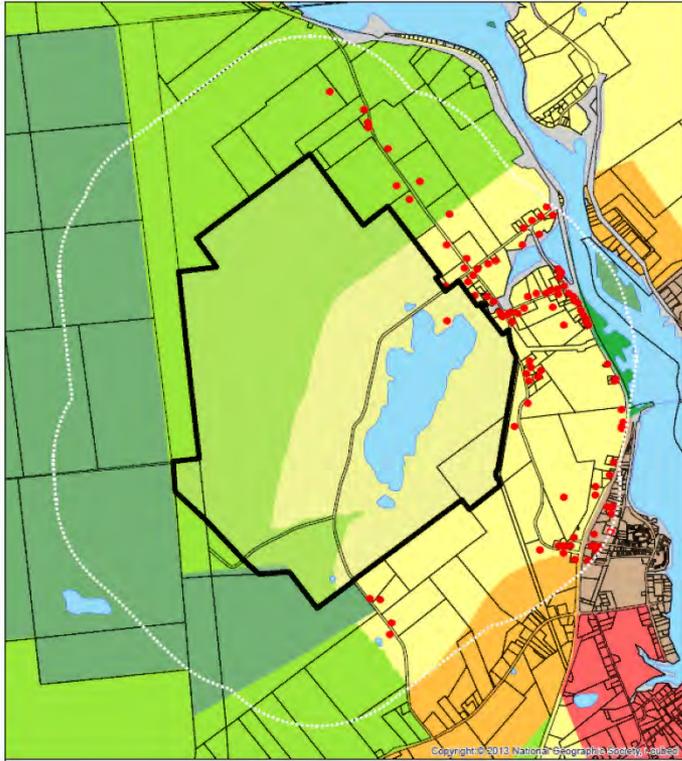
Most importantly:
western lands will be maintained as forest in perpetuity

Impacts to Rural Character?

- Noticeable changes:
 - New overhead utilities along Collins-Gifford Valley Rd
 - New driveway entrances along Collins-Gifford Valley Rd
 - New road cut off High Rock Rd (for subdivision road)
- Vegetated buffer retained outside envelopes, along roadside
- Structure color restricted when envelopes close to road
- Density far less than maximum potentially allowed
- Most envelopes (and all eastern lots) not visible from public areas

→ No undue adverse impacts to rural character

Primary Structures Within 1/2 Mile



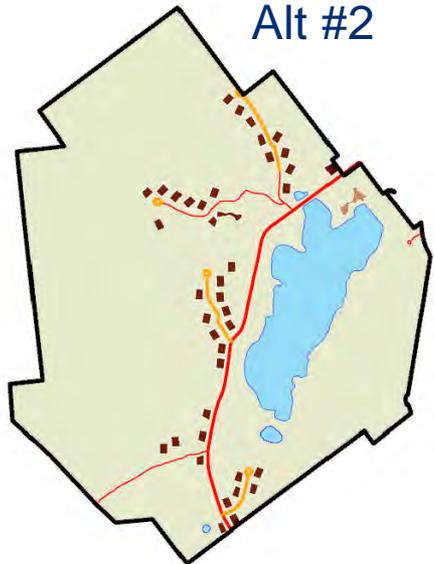
Alternatives Analysis

Alternatives Analysis

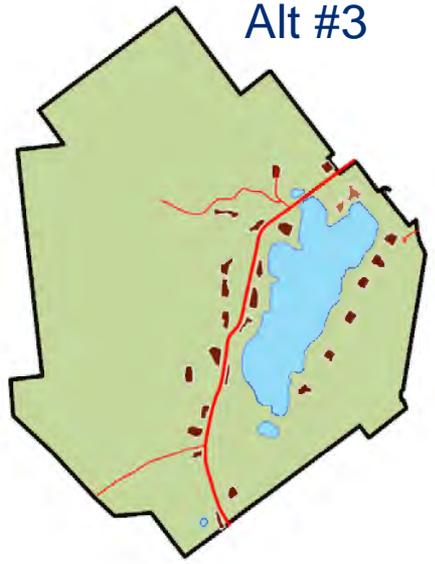
Alt #1



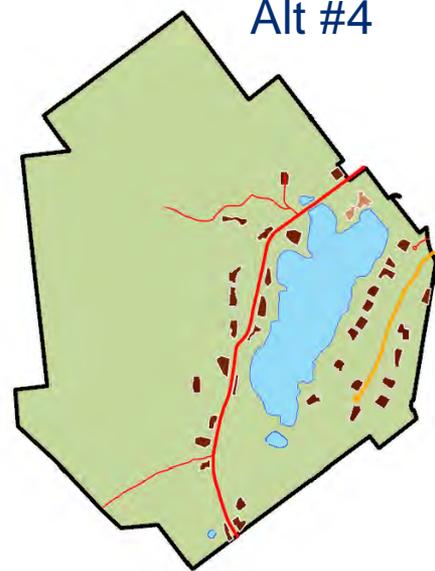
Alt #2



Alt #3



Alt #4



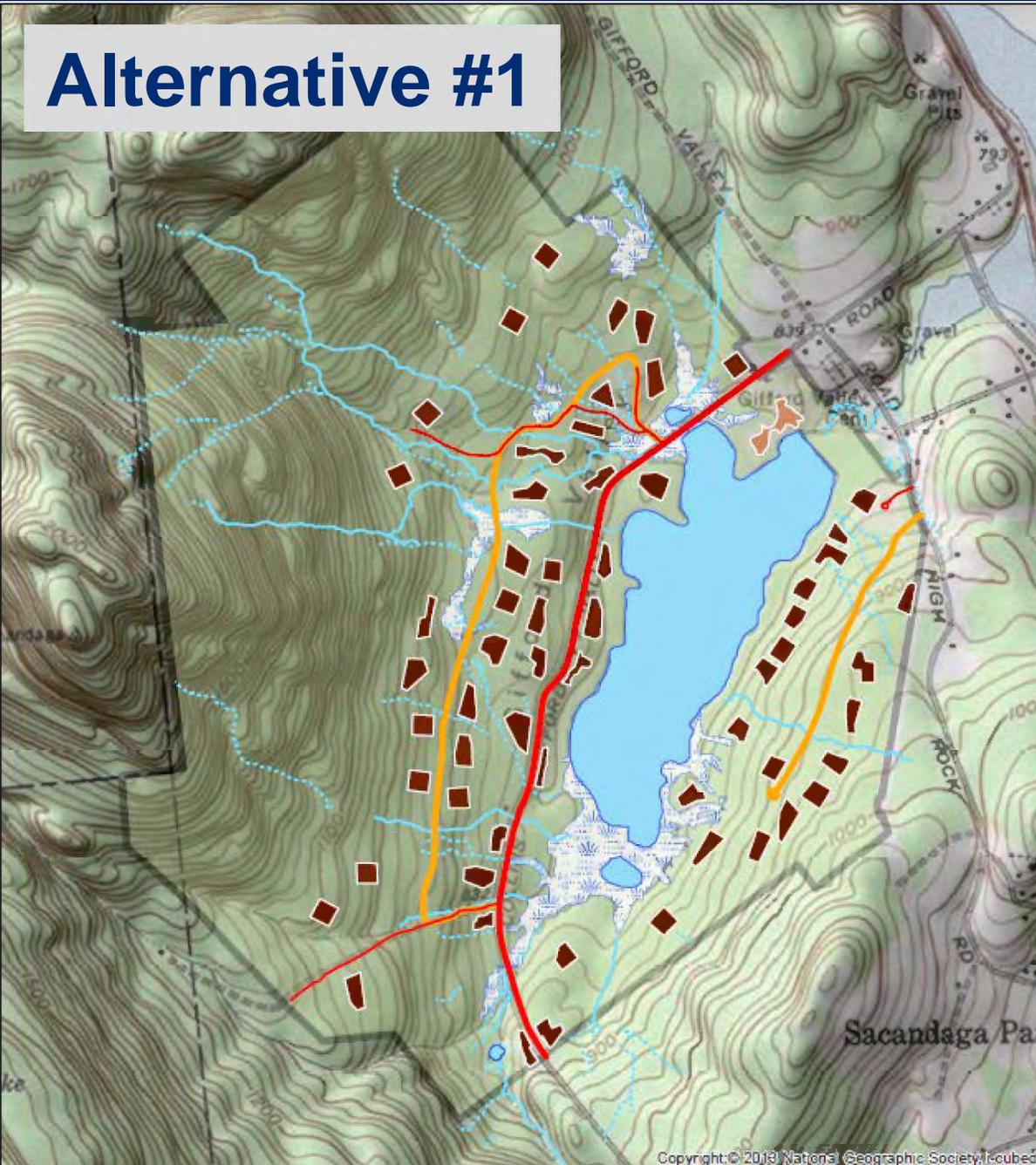
Alt #5



Alt # 6: Proposal



Alternative #1



Applicant's Title:
Conventional Style
Subdivision

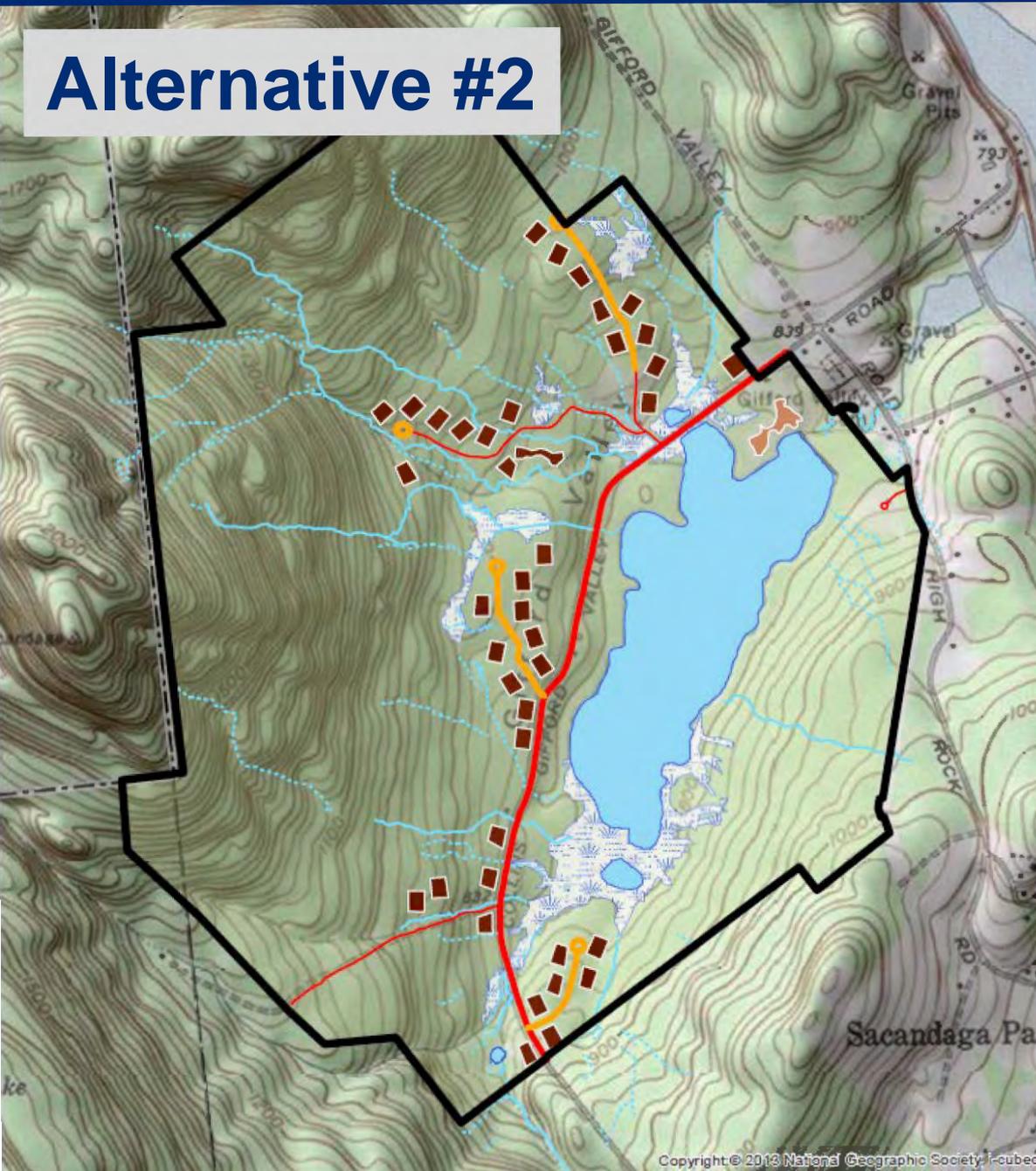
60 new building
envelopes (1 dwelling
each)

2± miles new road
(10,560± ft)

Alternative #1
Woodward Lake Subdivision
P2018-0123

- Building Envelopes (new)
- Subdivision Roads

Alternative #2



Applicant's Title:
Traditional
"Conservation"
Subdivision

41 new envelopes

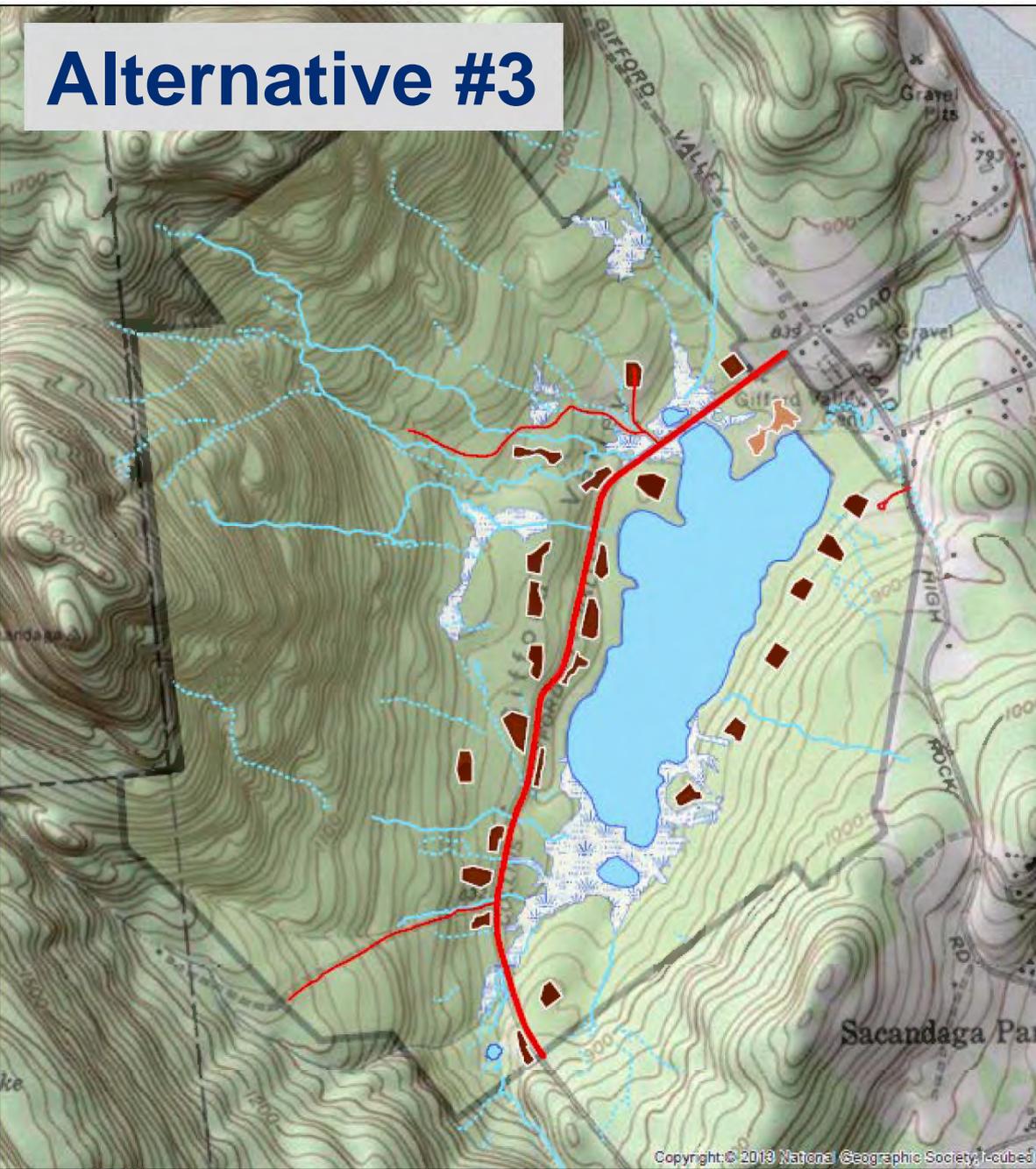
7,200± ft new roads

Small lots with
balance of property
owned in common

Alternative #2
Woodward Lake Subdivision
P2018-0123

-  Building Envelopes (new)
-  Subdivision Roads

Alternative #3



Applicant's Title: No New Road Construction

25 new envelopes

No new roads / Minimal developer costs

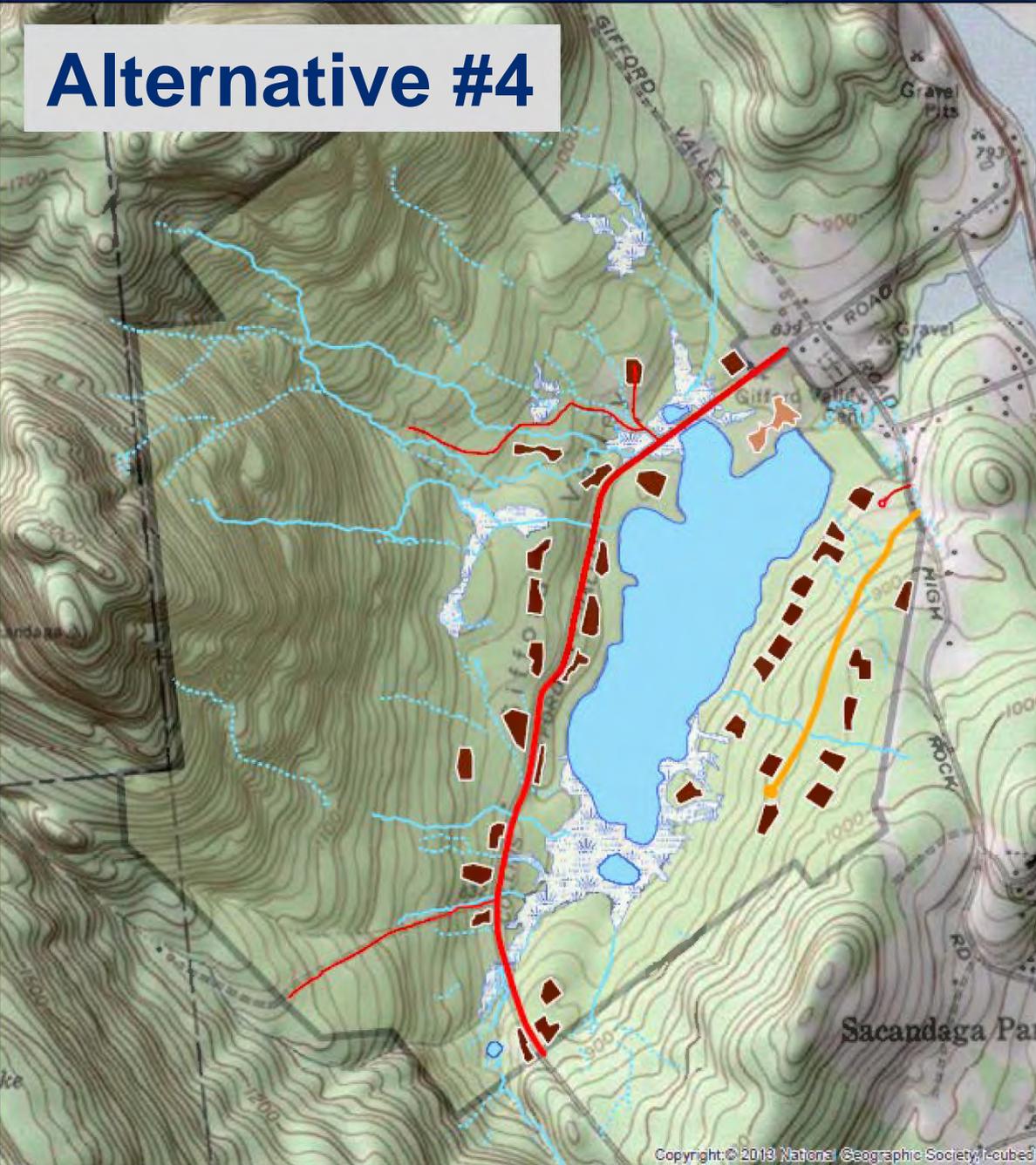
Flag lots with individual driveways

Alternative #3
Woodward Lake Subdivision
P2018-0123

-  Building Envelopes (new)
-  Subdivision Roads

ack
ency

Alternative #4



Applicant's Title:
 Modified
 "Conservation"
 Subdivision
 (Feb 2020 Proposal)

36 new envelopes

3,000± ft new road

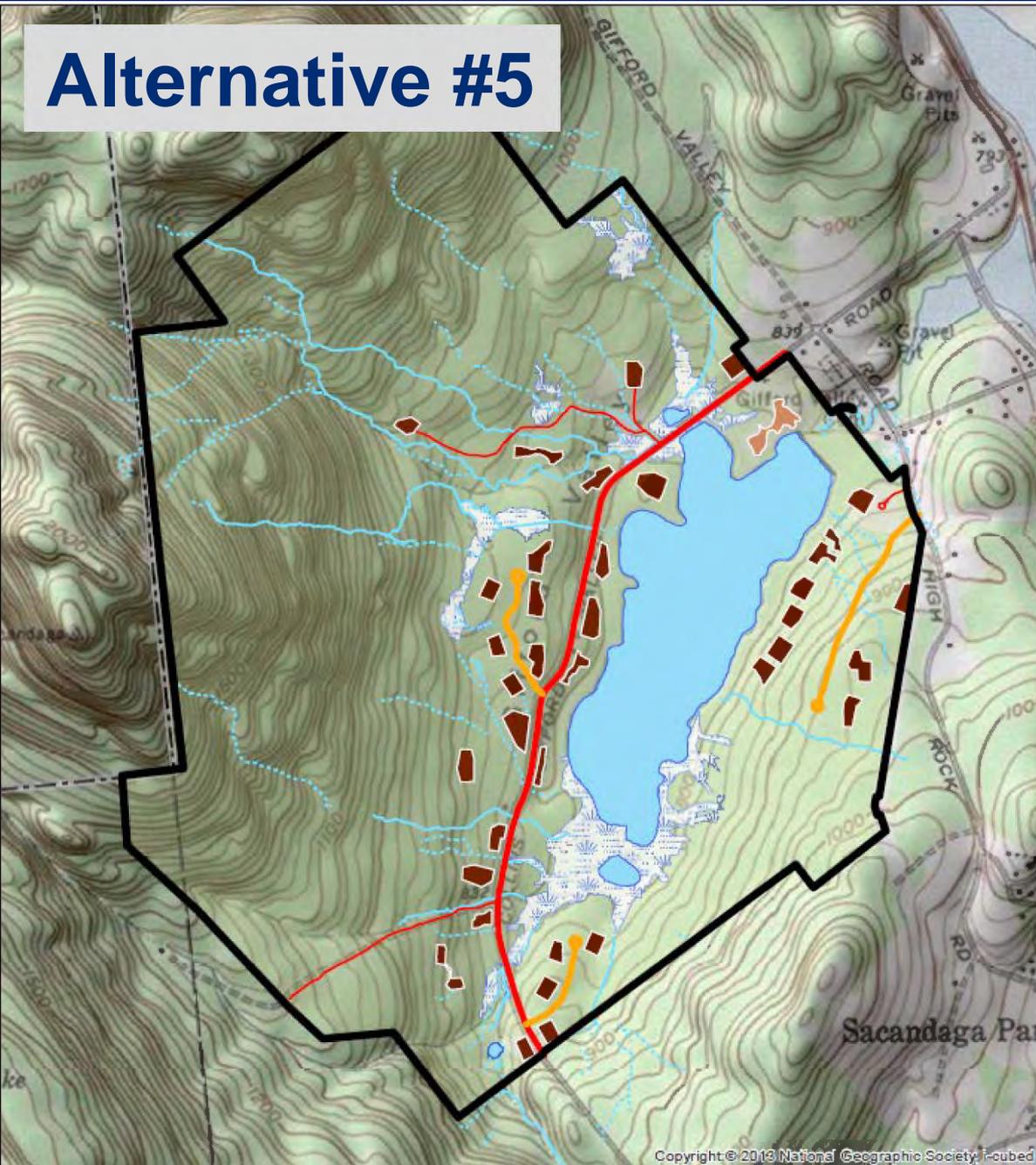
5 lots > 50 acres
 = 636 acres combined

Common Lot = 171 ac

Alternative #4
 Woodward Lake Subdivision
 P2018-0123

- Building Envelopes (new)
- Subdivision Roads

Alternative #5



No development in SE
(July 2020 Alternative)

“lost” lots relocated to
west side of lake

37 new envelopes

2,100± ft new road (E)
2,200± ft new road (W)

Alternative #5
Woodward Lake Subdivision
P2018-0123

-  Building Envelopes (new)
-  Subdivision Roads

k
icy

Alternative #6 = Proposed

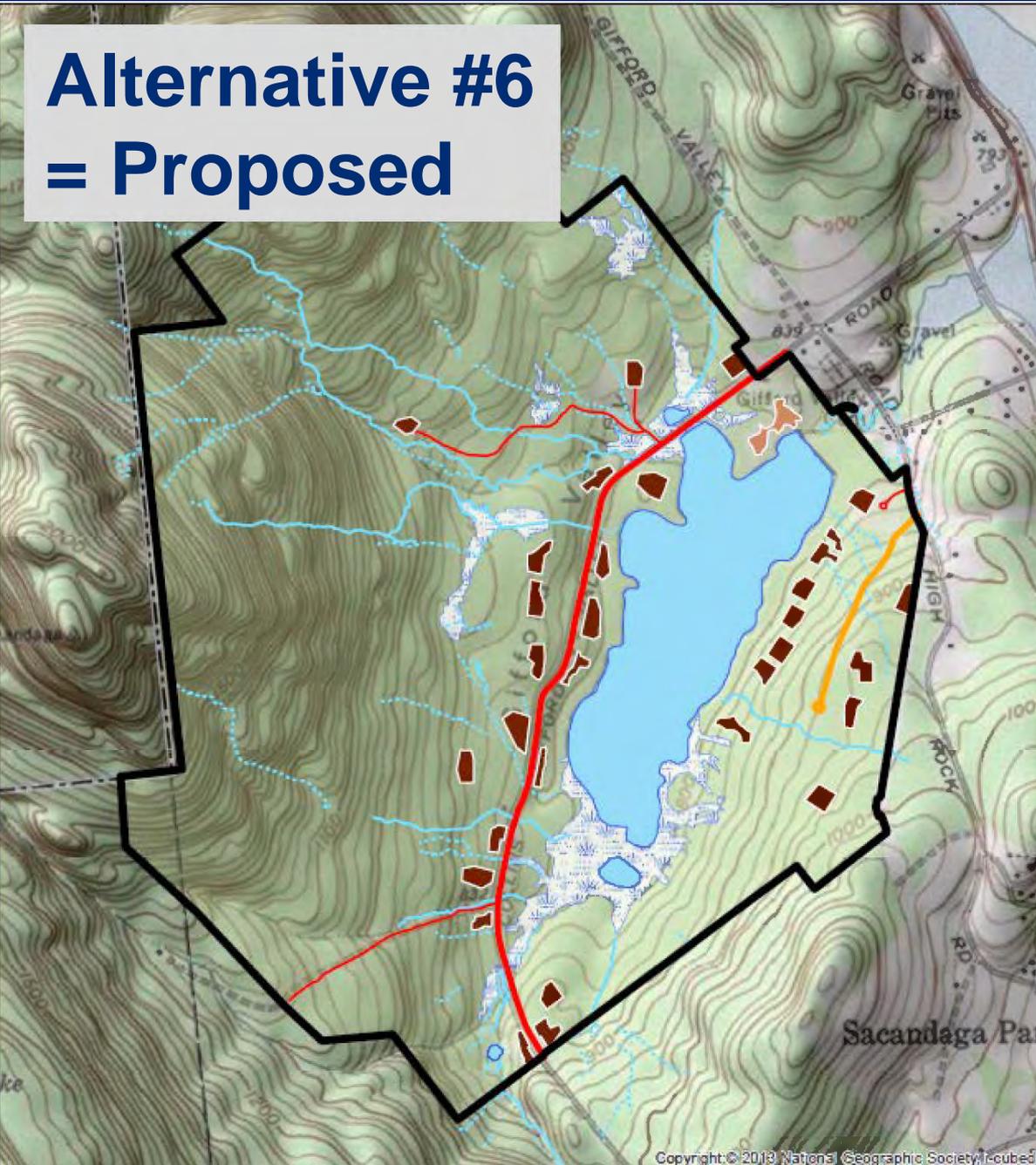
Current Proposal
(October 2020)

32 new envelopes

2,000± ft new road (E)

5 lots > 50 acres =
646 acres combined

Common Lot = 189 ac

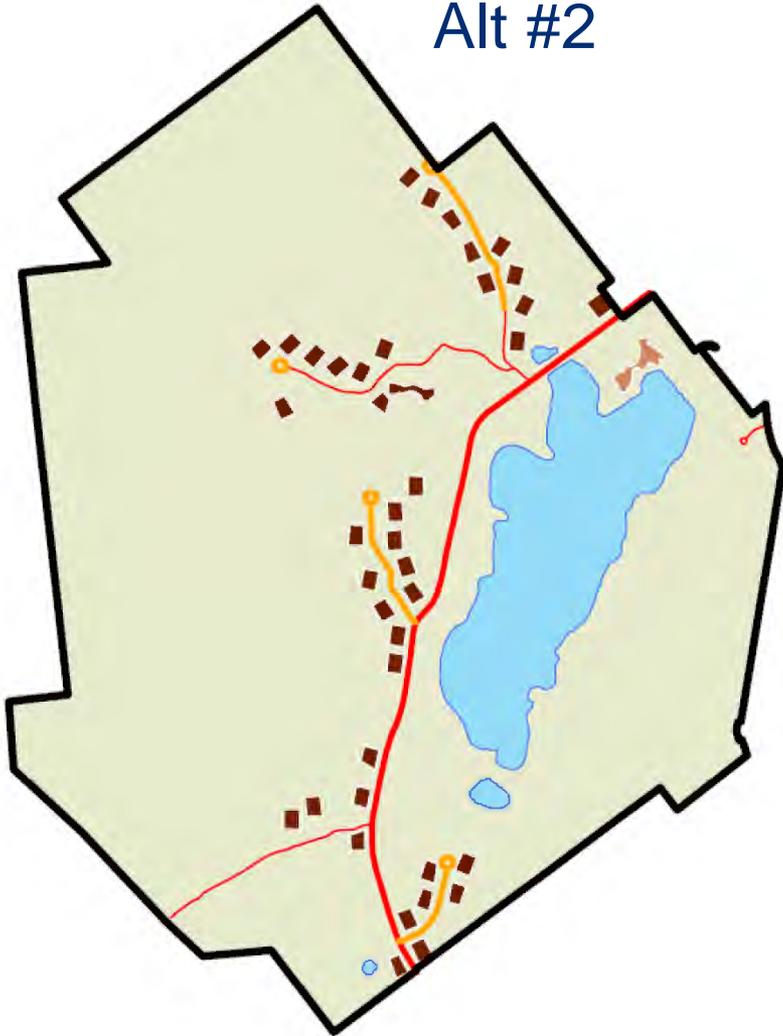


Alternative #6 - Proposed
Woodward Lake Subdivision
P2018-0123

- Building Envelopes (new)
- Subdivision Roads

Alternatives Analysis

Alt #2

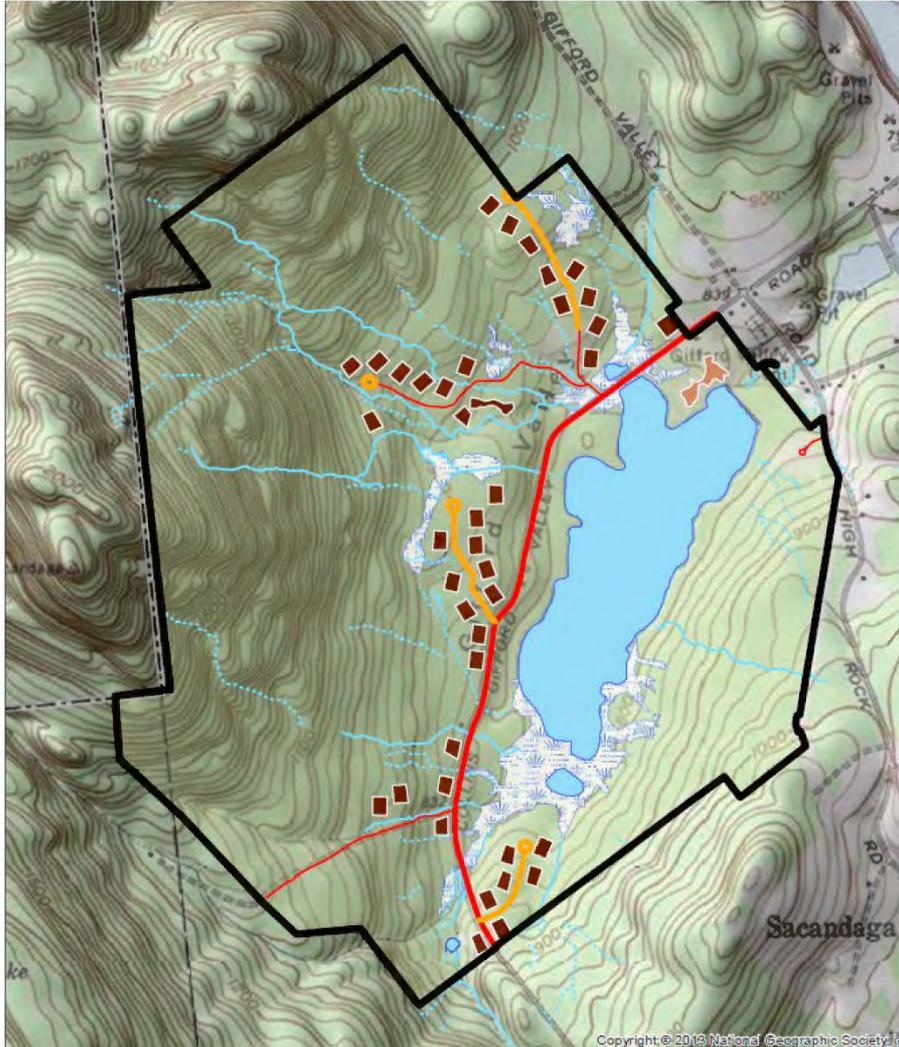


Alt #6: Proposal

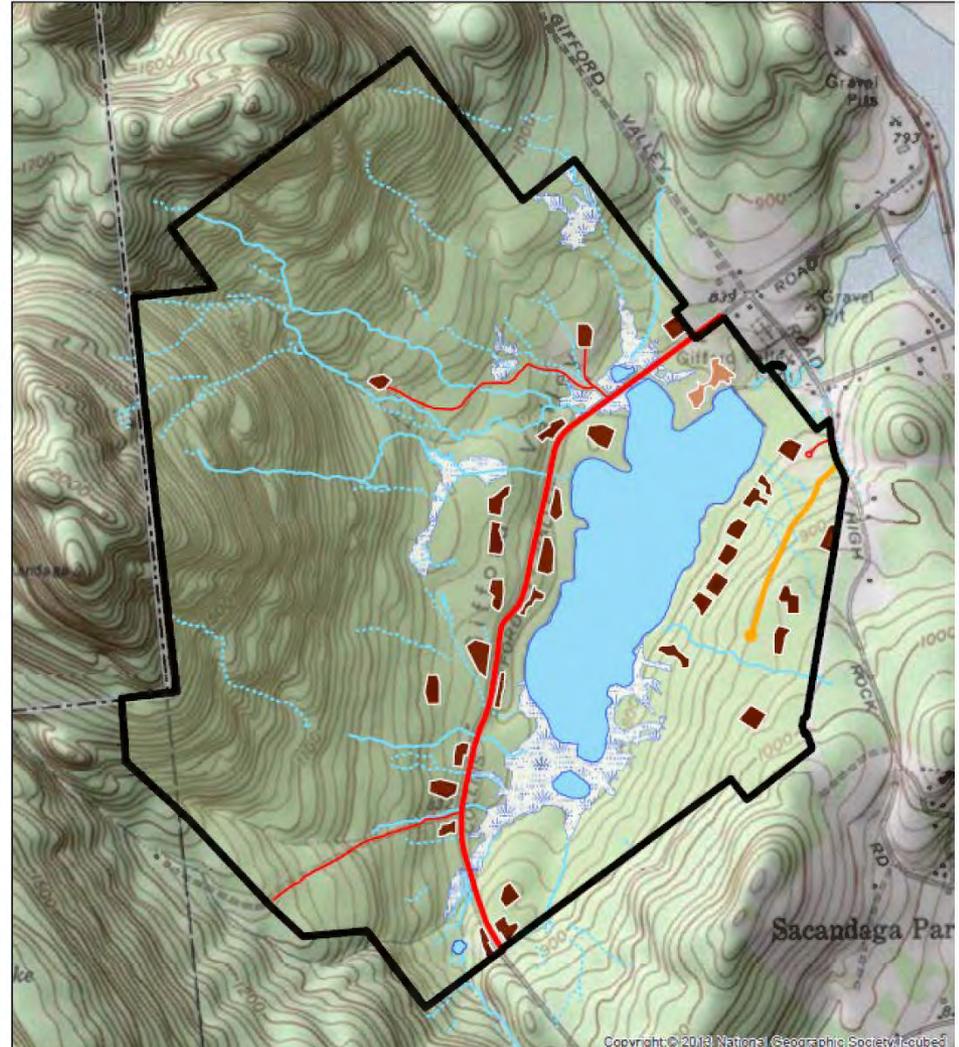


Wetlands

Alt #2



Alt #6 - Proposal



Site Constraints

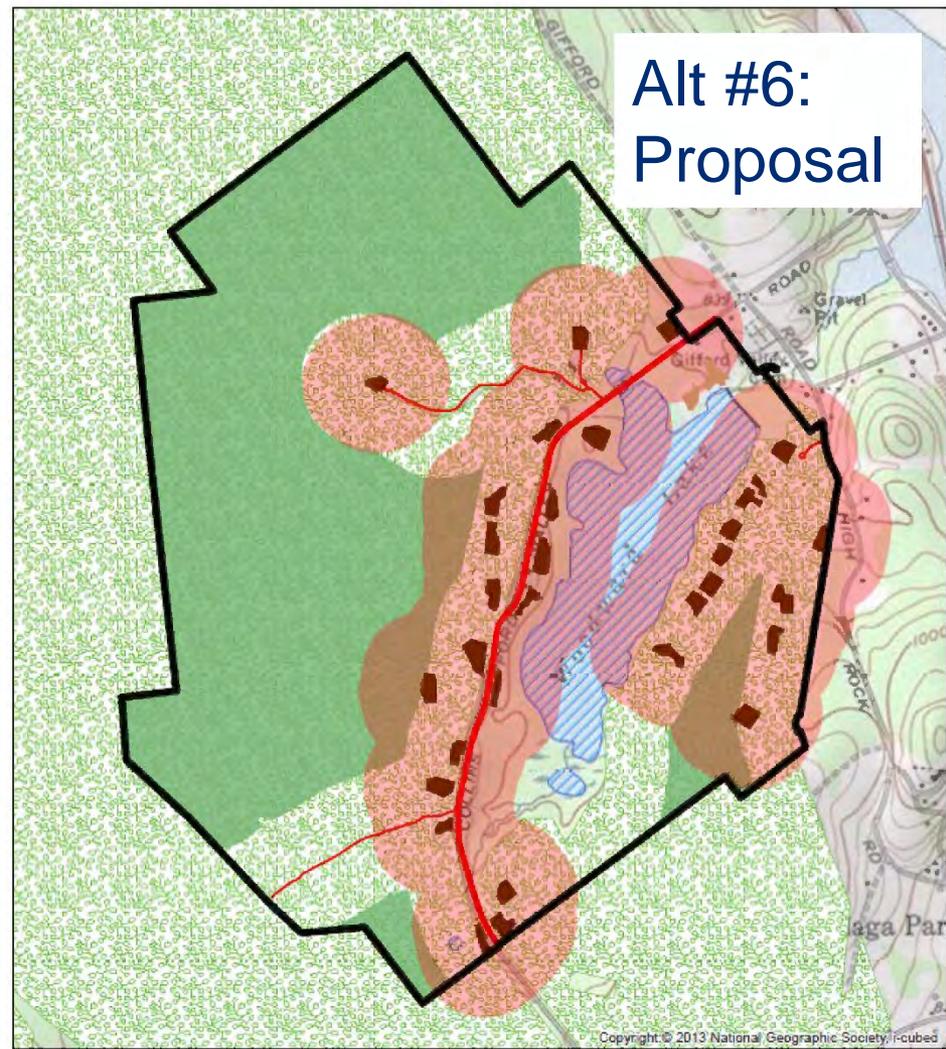
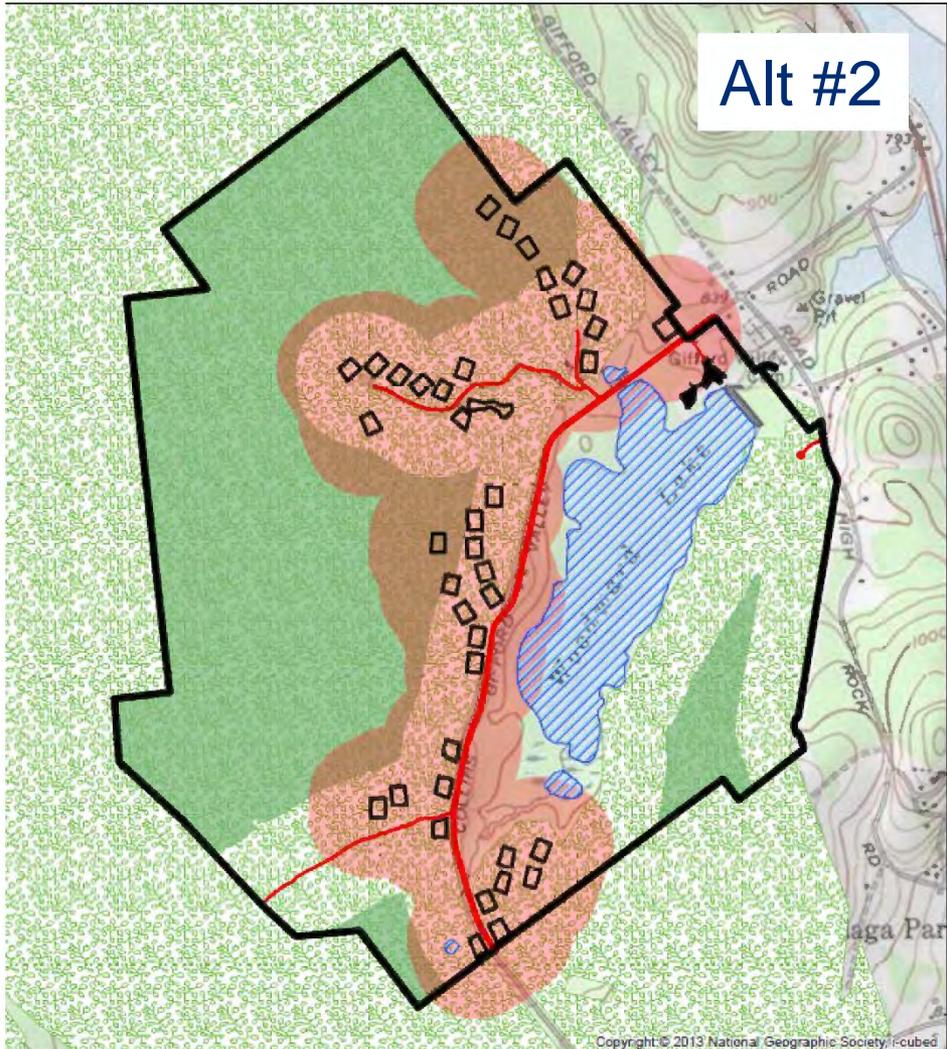
Alt #2



Alt #6 - Proposal



Interior Forest

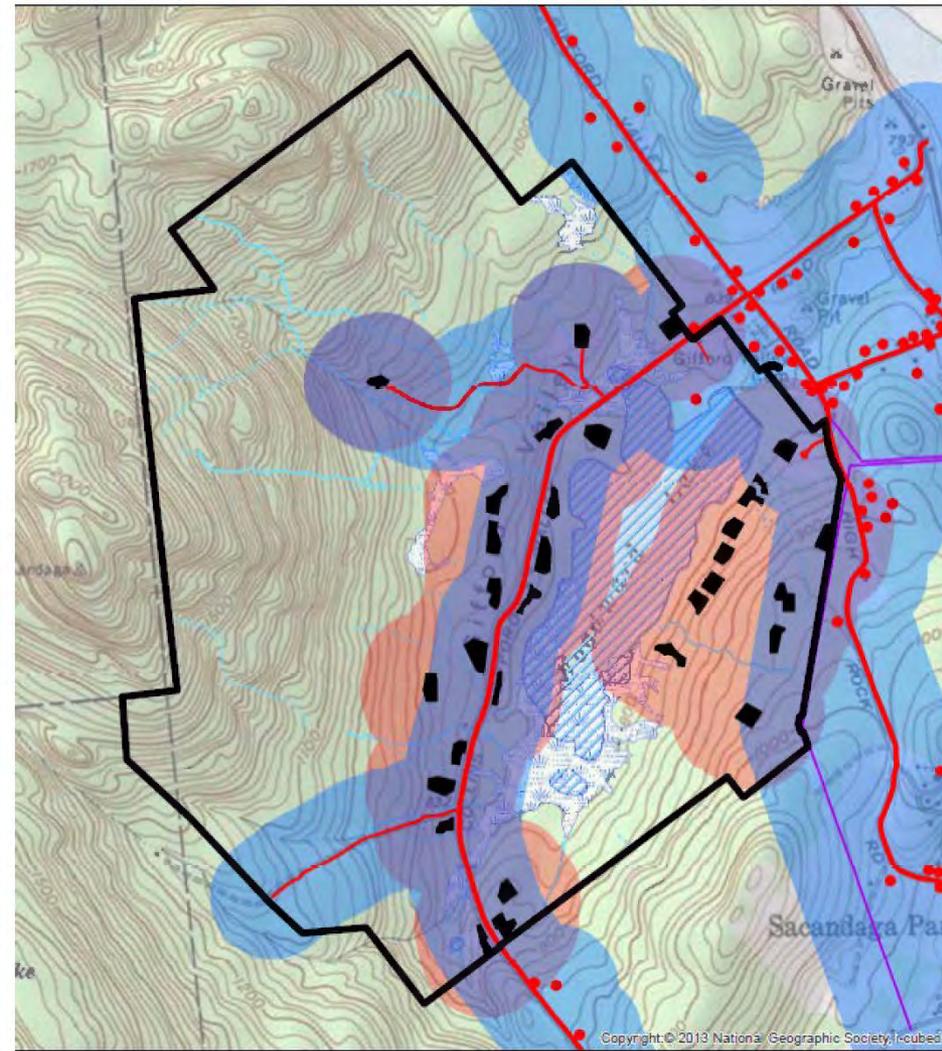
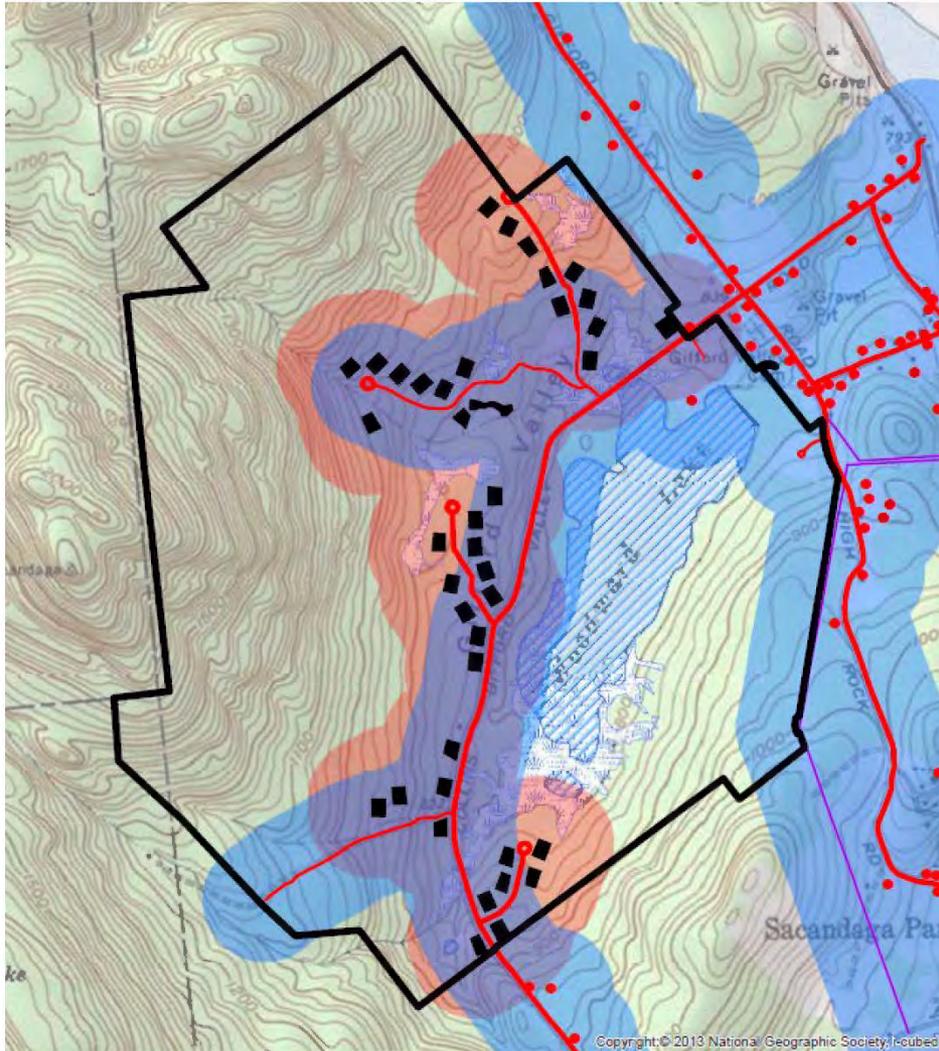


Edge Effects

Existing and Alt #2

Edge Effects

Existing and Proposed



Public Comment

Multiple Public Comment Periods

➤ Public Notice

- August 22, 2018: part 1 of application received
 - Comment period ended September 28, 2018
 - 9 letters received
- February 19, 2020: application received
 - No formal comment period, comments accepted
 - 9 letters received
- December 14, 2020: application complete
 - Comment period ended January 15, 2021
 - 19 letters received

Public Comment Letters Received

- Comment Letters: 2018 – 2021
 - 37 letters received from 27 unique senders
 - 32 letters opposed to the project
 - 1 letter with advisory comment
 - 1 letter critical of the permit application
 - 2 letters commenting on how another comment was posted
 - 1 letter applauding issuance of a NIPA
 - Applicant's letter responding to comments

Comment Letter Topics

- APA Act character description
- APA Act purposes, policies, and objectives
- Conservation design
 - Large-scale subdivision application
 - Conservation Design Bill
- Ownership / protection of undeveloped land
- Arrangement of development
- Scale of development
- Specific resource impacts (water quality, wildlife)
- Alternative #2

APA Act character description

APA Act purposes, policies, and objectives

Comments

- Not consistent with APA Act (RU / RM)
- Development undermines basic purposes of RU and RM: to “provide the essential open space atmosphere that characterizes the Park”

Rural Use: Character Description

- “Rural use areas, delineated in yellow on the plan map, are those areas where natural resource limitations and public considerations necessitate fairly stringent development constraints. These areas are characterized by substantial acreages of one or more of the following: fairly shallow soils, relatively severe slopes, significant ecotones, critical wildlife habitats, proximity to scenic vistas or key public lands. In addition, these areas are frequently remote from existing hamlet areas or are not readily accessible.
- Consequently, these areas are characterized by a low level of development and variety of rural uses that are generally compatible with the protection of the relatively intolerant natural resources and the preservation of open space. These areas and the resource management areas provide the essential open space atmosphere that characterizes the park.”

- APA Act §805(3)(f)(1)



Rural Use: Purposes, Policies, and Objectives

- “The basic purpose and objective of rural use areas is to provide for and encourage those rural land uses that are consistent and compatible with the relatively low tolerance of the areas' natural resources and the preservation of the open spaces that are essential and basic to the unique character of the park. Another objective of rural use areas is to prevent strip development along major travel corridors in order to enhance the aesthetic and economic benefit derived from a park atmosphere along these corridors.
- Residential development and related development and uses should occur on large lots or in relatively small clusters on carefully selected and well designed sites. This will provide for further diversity in residential and related development opportunities in the park.”

- APA Act §805(3)(f)(2)



Adirondack
Park Agency

Resource Management: Character Description

- “Resource management areas, delineated in green on the plan map, are those lands where the need to protect, manage and enhance forest, agricultural, recreational and open space resources is of paramount importance because of overriding natural resource and public considerations. Open space uses, including forest management, agriculture and recreational activities, are found throughout these areas.
- Many resource management areas are characterized by substantial acreages of one or more of the following: shallow soils, severe slopes, elevations of over twenty-five hundred feet, flood plains, proximity to designated or proposed wild or scenic rivers, wetlands, critical wildlife habitats or habitats of rare and endangered plant and animal species.
- Other resource management areas include extensive tracts under active forest management that are vital to the wood using industry and necessary to insure its raw material needs.
- Important and viable agricultural areas are included in resource management areas, with many farms exhibiting a high level of capital investment for agricultural buildings and equipment. These agricultural areas are of considerable economic importance to segments of the park and provide for a type of open space which is compatible with the park's character. .”

- APA Act §805(3)(g)(1)



Resource Management: Purposes, Policies, and Objectives

- “The basic purposes and objectives of resource management areas are to protect the delicate physical and biological resources, encourage proper and economic management of forest, agricultural and recreational resources and preserve the open spaces that are essential and basic to the unique character of the park. Another objective of these areas is to prevent strip development along major travel corridors in order to enhance the aesthetic and economic benefits derived from a park atmosphere along these corridors.
- Finally, resource management areas will allow for residential development on substantial acreages or in small clusters on carefully selected and well designed sites.” - APA Act §805(3)(g)(2)

RU and RM: Compatible Uses

- “The **primary uses** on the classification of compatible uses list for each land use area... are those ***uses generally considered compatible with the character, purposes, policies and objectives of such land use area, so long as they are in keeping with the overall intensity guideline for such area.***
- The **secondary uses** on such list are those which ***are generally compatible with such area depending upon their particular location and impact upon nearby uses and conformity with the overall intensity guideline for such area.*** - APA Act §805(3)(a)
- Single Family Dwellings:
 - Rural Use: Primary; Resource Management: Secondary
- Forestry Uses:
 - Rural Use: Primary; Resource Management: Primary

APA Act character description

APA Act purposes, policies, and objectives

Analysis – Rural Use

- Up to 35.4± acres of 479.7± acres allowed to be developed for residential use
 - Primary compatible use
- No development on remaining 444.3± acres; forestry uses allowed under approved Forest Management Plan
 - Primary compatible use
- 30 principal building rights used
 - 25 principal building rights extinguished
- Rural character of road corridors maintained
- Fits within or exceeds the review standards of decades of APA approvals of subdivisions on Rural Use lands

APA Act character description

APA Act purposes, policies, and objectives

Analysis – Resource Management

- Up to 1.6± acres of 589.9± acres allowed to be developed for residential use
 - Secondary compatible use
- No development on remaining 588.3± acres; forestry uses allowed under approved Forest Management Plan
 - Primary compatible use
- 2 principal building rights used
 - 12 principal building rights extinguished
- Rural character of road corridors maintained
- Fits within or exceeds the review standards of decades of APA approvals of subdivisions on Resource Management lands

Conservation Design / CD Bill

Comments

- Developers should work with the APA to use existing APA rules to achieve “conservation development”
- Project not in accordance with principles of conservation design
- New application not working
- Need for legislative intervention

Sustainable Development

- Roots go back to Ian McHarg and the environmental design movement of the late 60s and early 70s
 - Led to creation of **the APA and the Adirondack Park Land Use and Development Plan**
- Numerous more recent movements and methodologies; examples include:
 - Landscape Urbanism (Harvard – Graduate School of Design)
 - New Urbanism (Duany, Calthorpe, Plater-Zyberk)
 - Finding Lost Space (Trancik)
 - Sustainable Urbanism (Farr)
 - Smart Growth (Smart Growth America)
 - **Conservation Subdivision Design (Arendt)**

Conservation Design – Background

Conventional Residential Developments

“All the land is divided into houselots and streets, with the only open space typically being undevelopable wetlands, steep slopes, floodplains, and stormwater management areas.”

- “All the land has been paved over, built upon, or converted into lawns or backyards.”

Alternative: Conservation Subdivision Design

Residential developments where “half or more of the buildable land area is designated as undivided, permanent open space.”

- “...Without reducing overall density”
- Open space owned “typically by a homeowners’ association or a local land trust.”

Conservation Design Example – Site B

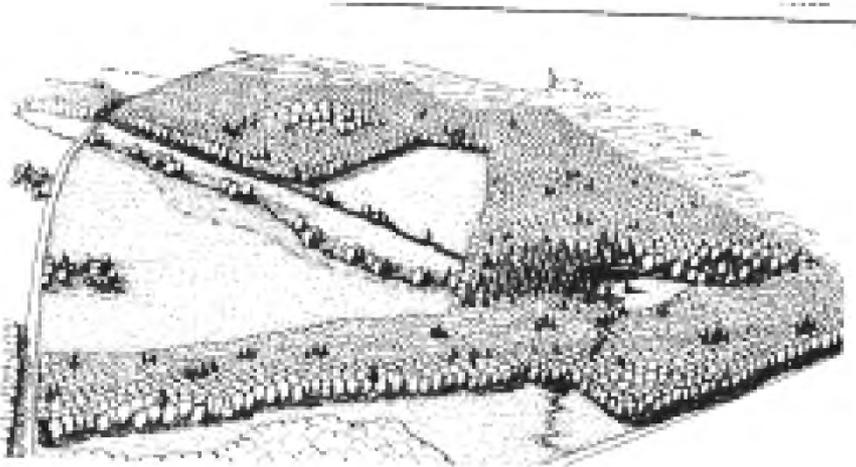


Figure 7B-1. Site B: Before Development

Conventional subdivision:



Figure 7B-2. Site B: Yield Plan

- Foothills of the Berkshires in MA
- 70 acres
- Mostly wooded, stream with associated wetlands

Arendt, Randall G. (1996). Conservation Design for Subdivisions. Washington, DC: Island Press

Conservation Design Example – Site B



Figure: 7B-9. Site B: Drawing in the Lot Lines

Final conservation design layout:

- 35 dwelling lots
- 70-acre site
 - 33 acres to be developed
 - 37 acres open space

Arendt, Randall G. (1996). Conservation Design for Subdivisions. Washington, DC: Island Press

2019-2020 Conservation Design Bill

Resource Management

75% of project sites must be set aside as non-developable

Rural Use

55% of project sites must be set aside as non-developable

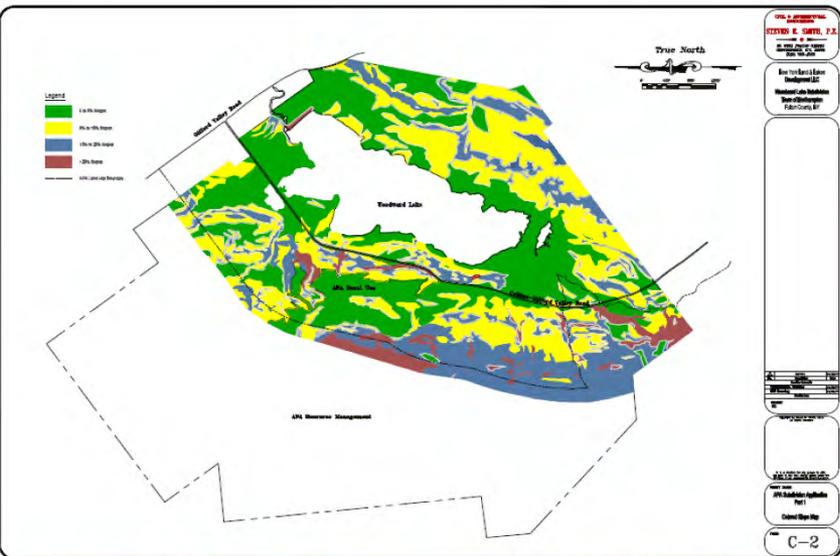
Low Intensity Use

40% of project sites must be set aside as non-developable

- The non-developable “open space” percentage must:
 - allow for forestry, agricultural, and recreational uses, and
 - “to the greatest extent possible,” be located outside of all residential lots, contain “the important ecological areas of the property,” and be “designed to protect the ecology and open space of the Park.”

Conservation Design Applied to P2018-0123

Conservation Subdivision Design



Total Project Site: 1,069.6± acres

Wetlands 160± acres

Steep slopes 307.6± acres

TOTAL 467.6± acres

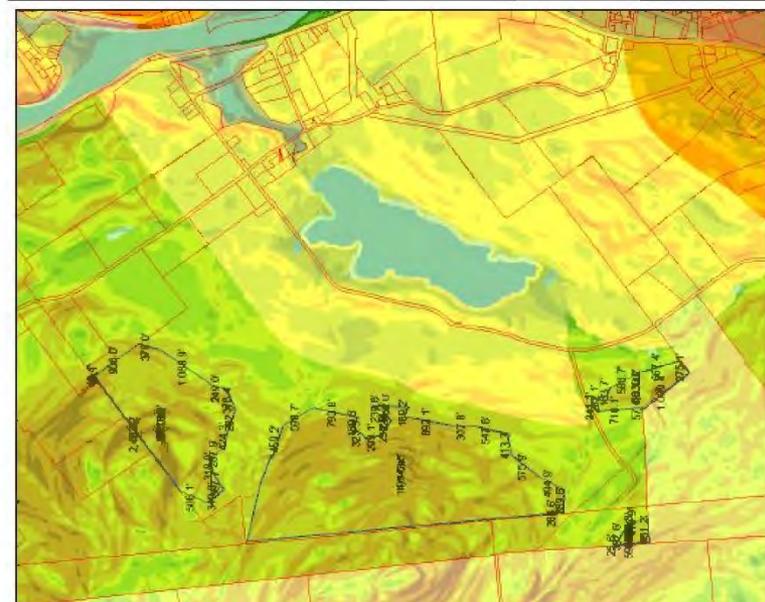
Buildable Land Area:

$1069.6 - 467.6 = 602\pm$ acres

50% open space 301± acres

- 151 acres as woodlands, meadows, or farm fields
- 150 acres as more intensively managed open spaces

50% developable 301± acres



Conservation Design Compared to P2018-0123

Conservation Subdivision Design:

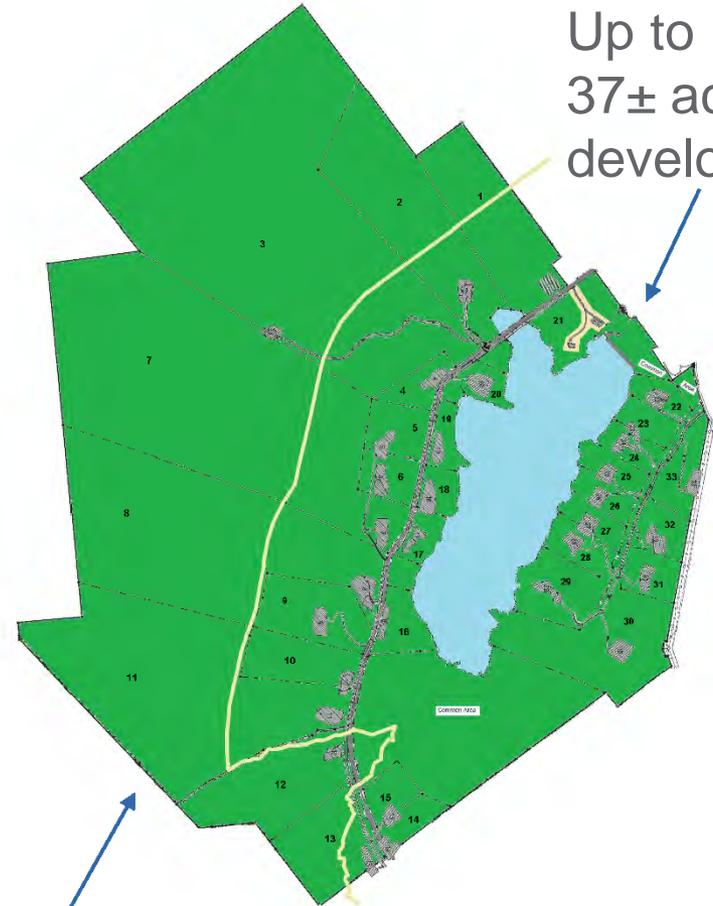
Up to
301± acres
developed



758± acres no development,
limited cutting, "typically" held
in common ownership

P2018-0123:

Up to
37± acres
developed



1,032± acres no development,
limited cutting, not all held in
common ownership

2019-2020 CD Bill Compared to P2018-0123

2019-2020 CD Bill:

**open space commonly owned “to the greatest extent possible”*

Rural Use (479.7 acres)

55% open space (no development, forest man ok) = 263.8 acres

Resource Management (589.9 acres)

75% open space (no development, forest man ok) = 442.4 acres

P2018-0123:

**not all open space commonly owned*

Rural Use (479.7 acres)

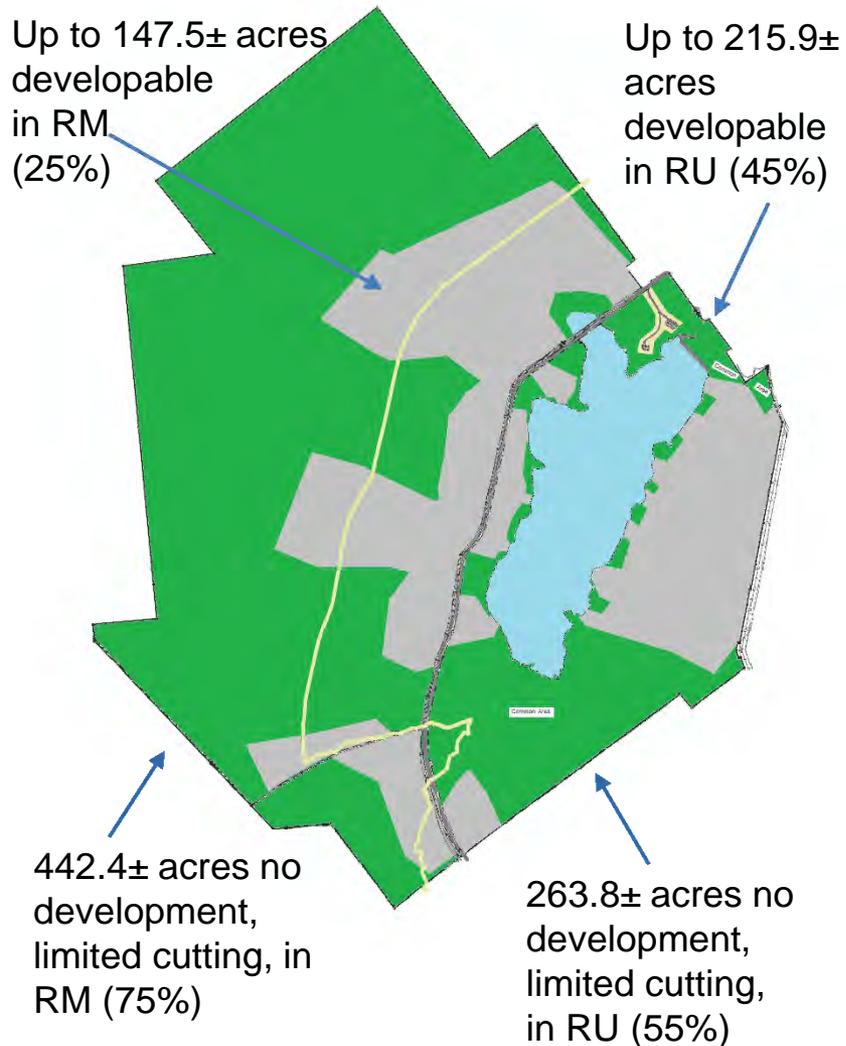
92.6% open space (no development, forest man only) = 444.3 acres

Resource Management (589.9 acres)

99.7% open space (no development, forest man only) = 588.3 acres

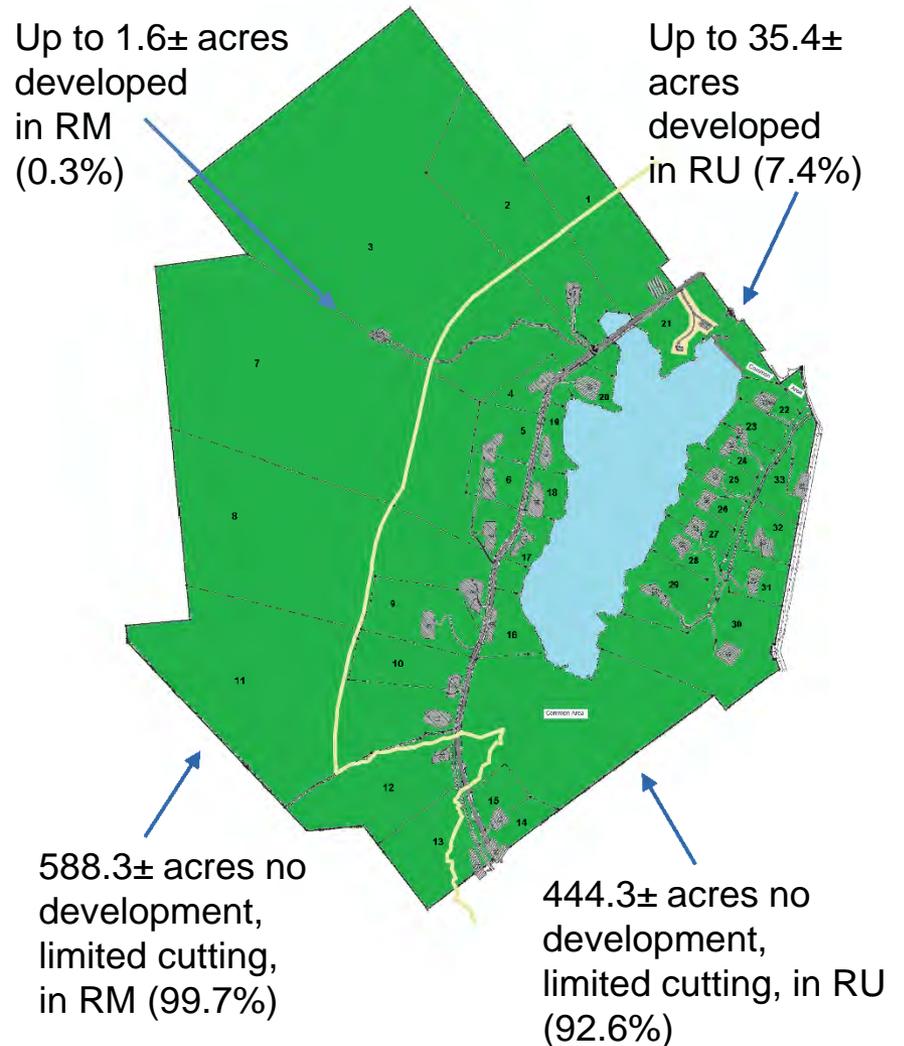
2019-2020 CD Bill Compared to P2018-0123

2019-2020 CD Bill Standards:



*Non-developable lands commonly owned

P2018-0123:



*Non-developable lands in multiple ownerships

Conservation Design / CD Bill

Analysis

- Since 1973, the Agency has been required to ensure against impacts to the **natural, scenic, aesthetic, ecological, wildlife, historic, recreational, and open space resources** of the Park before approving a subdivision.
- Conservation subdivision design was created as an improvement over conventional zoning laws that only restricted development on wetlands, steep slopes, floodplains, and stormwater management facilities.

Conservation Design / CD Bill

Analysis

- Review and analysis of potential habitat and other site constraints prior to development of a subdivision proposal
 - *The APA has long encouraged this; it is now mandated for “large-scale” subdivisions, including P2018-0123*
- Setting aside a percentage of project sites as non-developable
 - *For many years, APA approvals have far exceeded the standards established under both conservation design and last year’s legislative proposal*
- With the non-developable lands often owned by HOA or some other form of common ownership
 - *Agency staff review indicates that, on balance, ownership under a single entity is not necessary here*

Ownership / protection of undeveloped land

Comments

- Various opinions on best ownership pattern for forestry / forest health (one parcel vs. multiple parcels)
- Desire for lasting protection of undeveloped land
 - Single ownership
 - Conservation easement / state acquisition
 - HOA protection lasts only as long as the HOA

Analysis

- Outside envelopes: only tree / woody veg removal is for forestry / personal wood
- Five owners of 630± ac → diversity of management, forest ages, types
- Enforcement of protections of undeveloped land is easier through court orders enforcing APA conditions than through civil litigation
- HOAs, LLCs, etc may fail or disband over time, leaving land subject to seizure for failure to pay taxes

Ownership / protection of undeveloped land [continued]

- Use patterns of 630±-acre contiguous forest
 - Single owner: can be accessed by owner and owner's guests
 - HOA owner: can be accessed by owners of all 32 parcels and their guests
 - Individual ownership of 5 large lots: Individual portions can be accessed by owners of 5 lots and their guests

- General parcelization concerns do not apply to this site
 - Parcelization ≠ future re-subdivisions
 - Parcelization ≠ new development, fragmentation

Arrangement of development

Comments

- Spatial pattern of development more important than density
 - Ecological influence beyond development envelopes
- Project does not concentrate development to the greatest extent practicable
- Limit shoreline development by clustering lots and structures on either side of the lake

Analysis

- Spatial pattern of development is important
 - Large overlap between edge effects of existing and proposed development
- Land with best soils/slope surrounding lake
- No undue adverse impact to the site's resources

Scale of development

Comments

- Plan is too large
- Plan fragments the land
- Urban sprawl moving into an Adirondack wilderness
- Cumulative impact of development / sprawl
- This type of development doesn't belong in Adirondack Park

Analysis

- Proposal far less than mathematical maximum for RU and RM land use areas
- Fits landscape context of surrounding RU and RM land
- Fragmentation reduced by: keeping proposed development close to existing development, using existing wood roads and clearings, sharing some driveways, leaving corridors and buffers between development

Specific resource impacts

Comments

- Water quality
 - development/lots surrounding the lake
- Wildlife
 - disruption to large mammal movement
 - Impacts to amphibians, amphibian migration
 - nuisance bears attracted to residences

Analysis

- Addressed earlier in Impact Analysis section
- Location of development and careful plans will protect water quality, wildlife, and habitat

Alternative #2

Comments

- Alternative #2 is in the right direction / conservation design
- Eliminates new road construction east of lake
- Maintains large blocks of un-subdivided forest
- Should be improved further (reduce number of lots)

Analysis

- Development locations on steeper sites, shallower soils
- Development encroaches on wetlands, amphibian habitat, water courses, and interior forest
- Not viable for the applicant

Review by Others

NYS Office of Parks, Recreation and Historic Preservation (OPRHP)

- September 25, 2018
 - No Impact to archeological / historic resources

- September 23, 2020
 - Avoid cemetery and foundation on Lot 9
 - No Impact to archeological / historic resources

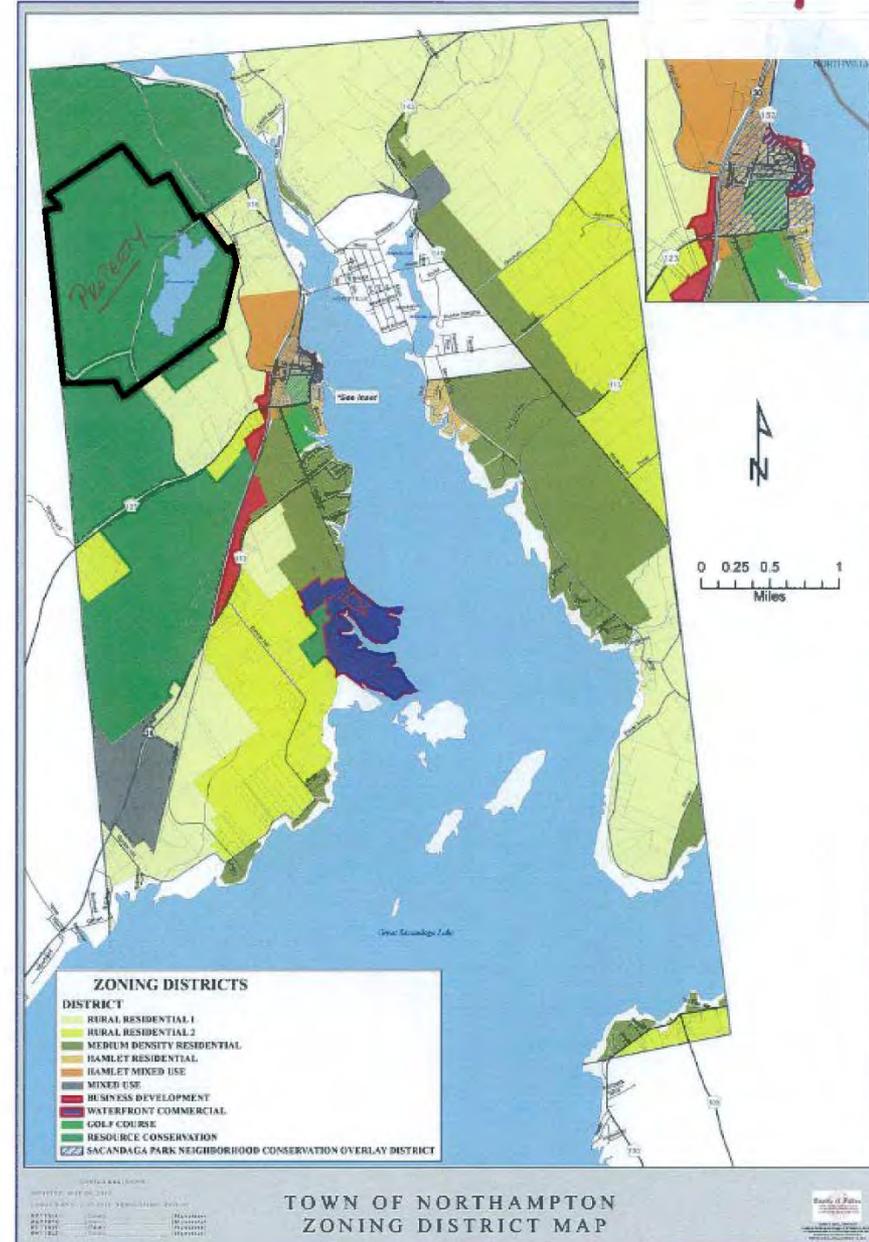
- March 2, 2021
 - Avoid cemetery on Lot 9
 - Avoid foundations on Lots 9, 11, and 14
 - No Impact to archeological / historic resources

Town of Northampton

- 1,128 acres in Northampton
 - 96% of 1,169-acre site

- “Resource Conservation” District
 - Density: 45 acres / PB
 - Total allowable PBs: 25
 - Minimum lot size: 5 acres

- Area variance granted by Town ZBA - June 2018
 - Density: 30 acres / PB
 - Total allowable PBs: 37.6



Town of Northampton

- September 2, 2020: Public Hearing
 - 3 speakers, all adjoining landowners
 - their concerns:
 - continued access over Robert Sweet Road
 - hiking easement be well marked
 - property value increase, fixed income
 - underground water supply

- September 2, 2020: Preliminary subdivision plat approved

- December 2, 2020: Final subdivision plat approved

Review by Others

- NYS Department of Health
 - Not a Realty Subdivision
 - No review

- NYS Department of Environmental Conservation
 - Will review Stormwater Plan
 - Will review stream crossings

- US Army Corps of Engineers
 - Accepted wetland delineation
 - Development under review

**Staff
Recommendation:
Approve with
Conditions**

Conclusions of Law

- Development authorized:
 - ✓ Consistent with land use and development plan
 - ✓ Compatible with character description and purposes policies, and objectives of each land use area
 - ✓ Consistent with overall intensity guidelines
 - ✓ Complies with shoreline restrictions
 - ✓ No undue adverse impact on resources of the Park
 - ✓ Secures natural benefits of wetlands associated with the project
 - ✓ Compatible with the preservation of the entire wetland (i.e., no degradation or loss of any part of the wetland or its values)

Draft Permit Conditions

- No further subdivision or construction of additional PBs
- Development limited to locations/dimensions on plans
- Lake: no boathouses, limit to boat motors, dock locations
- Site trees and vegetation:
 - FMPs required - 5 largest lots
 - vegetation removal restricted - all lots, outside envelopes, within sensitive buffers
- Outdoor lighting: downward and shielded
- Building color: lots near town road and shoreline
- Invasive species spread prevention: movement / introduction
- Infrastructure construction
- Stormwater / Erosion & Sediment Control



**Adirondack
Park Agency**

New York Land and Lakes Development, LLC

P2018-0123

Woodward Lake Subdivision

March 11, 2021