

LINCOLN BOARD OF SELECTMEN'S

APPROVED

MEETING MINUTES

MAY 10, 2021 – 5:30PM

LINCOLN TOWN HALL - 148 MAIN STREET, LINCOLN, NH

(THE RECORDING OF THIS MEETING CAN BE FOUND ON YOUTUBE)

Board of Selectmen Present: Chairman, OJ Robinson, and Selectman Jack Daly

Board of Selectmen Present via Zoom: Vice Chair, Tamra Ham

Staff Present: Town Manager Burbank, Fire Chief, Ron Beard, and Administrative Assistant, Jane Leslie

Staff Present via Zoom: DPW Director, Nate Hadaway

Public Present via Zoom Video Conferencing: Sam Kenney, Weston & Sampson Senior Project Engineer, Mary Conn, Paul Beaudin, and Jayne Ludwig

Public Present: *There was no public present*

I. CALL TO ORDER

Chairman Robinson called the meeting to order at 5:30 pm.

II. APPROVAL OF MEETING MINUTES FROM PREVIOUS MEETING

MOTION: "To approve the BOS meeting minutes of May 3, 2021 as amended."

Motion: Jack Daly

Second: Tamra Ham

All in favor.

MOTION: "To approve the Non-Public BOS meeting minutes of May 3, 2021 as presented."

Motion: Tamra Ham

Second: Jack Daly

All in favor.

MOTION: "To approve the BOS Work Session meeting minutes of May 4, 2021 as amended."

Motion: Tamra Ham

Second: Jack Daly

Motion carries.

Abstained: OJ Robinson

III. WATER TANK SITING ASSESSMENT DISCUSSION WITH WESTON & SAMPSON

Chairman Robinson opened up the discussion and explained that Weston & Sampson (W&S) recently completed their Water Storage Tank Siting Assessment (*see attached*) for the town, and was joining tonight's meeting to update the board on the assessment as well as answer any impending questions that the Selectmen may have.

W&S Engineer, Sam Kenney opened up the discussion and explained that he recently spoke with a Representative from the US Forestry Service (USFS) who had one of their colleagues visit and walk the site where the existing Loon Village water storage tank sits, as well as a visit to the proposed site up behind the Water Treatment Plant that includes Forestry Service land (*see Alternate Site 2b in W&S Assessment*). Kenney explained he has not heard back from the USFS on their thoughts about a storage tank on forestry land, although they did reach out to Kenney with some additional questions.

Kenney discussed the existing Indian Head Tank up on Route 3 by Franconia Notch State Park and explained that because the park sits on state land that is controlled by the Division of Natural & Cultural Resources (DNCR), and to some extent the NH-DOT (they have limited access right-of-way (Route 3), they would all be involved with any further use or considerations at that site. Kenney explained that the

different entities involved all have their own requirements, which are not difficult, but can often be time-consuming and expensive.

A discussion ensued on W&S's final recommendations, and Kenney explained that W&S has identified the Loon Village area as the area with the highest overall water deficit, and based on prior discussions with the town, Kenney explained that W&S focused their efforts on this area and pressure zone and determined that the assessment option, *Alternate 2b* (tank constructed near Water Treatment Plant and on US Forest Service land) is the recommended option for the siting of a tank within the Loon Village pressure zone, provided that the USFS provides formal written approval for use of this land.

Chairman Robinson commented about the original design at South Peak (approved Master Plan) that had the developer building a water tank on the developer's property, and verified with Kenney that W&S had looked at this as an *alternative* but determined that building a tank at a higher elevation on Forest Service Land would better provide the *entire* town and the development with both potable water and fire suppression. Kenney responded that this is correct, and explained that the reason why building a tank that serves Loon Village on the developer's land (and only serving Loon Village) could only be done with a 120' or taller water tank (would be high and very noticeable with limited construction options). A discussion ensued on the Loon Village Pressure Zone (the overall best option for the town) and why the Loon Village pressure zone is the most advantageous to the town (South Peak water pressure,)

Selectman Daly asked if the size of the water tank has taken into consideration the build-out of South Peak and other potential build-outs in town (e.g., hotels, large homes)? Kenney responded that they have, and the precise tank size has yet to be determined, however, all of their assumptions will eventually be finalized with the town.

There was a brief discussion about the Indian Head tank site, and Robinson questioned the limited options available with the Indian Head pressure zone and asked if it would be feasible to explore a "non-tank" solution, or a solution that involves a smaller tank at a lower elevation with pumps. Robinson feels that the Indian Head tank has sufficient capacity to supply Parkers Motel, the Landscaping Company, Indian Head and several residences (all above Boyce Brook area) with potable water, and noted that it is the fire suppression storage that is lacking in this area, and questioned if there is a possible solution using a smaller tank and/or pumps up in this area.

Sam Kenney explained that the town's options for gravity storage up at the Indian Head are limited, but definitely something that W&S could look more closely at along with non-portable fire sources, and/or changing how the Route 3 corridor works (creating new infrastructure, larger mains, or the addition of another pump station). Kenney acknowledges that there are additional options available for the town to consider and worth investigating. Town Manager Burbank asked the board if they wanted him to collaborate with W&S to work up a *scope* and *fee* for the next phase of this research up on Route 3? Robinson questioned whether they should be focusing on obtaining a site location and the Loon Village pressure zone (and working with the Forest Service), and put the Indian Head on a *temporary* hold for a short while and get through the engineering and permitting process for the South Peak tank which has a clearer path to success (and a higher priority), and then re-focus again on Indian Head. Kenney explained that the next step would be to wait for the Forest Service to render a report from their April 29th site visit, and reach out to the town with their initial opinion

The board thanked Mr. Kenney for attending tonight's meeting and answering the board's questions. *Sam Kenney departed the meeting.*

IV. BOARD OF SELECTMEN'S 2021 GOAL REVIEW

The board reviewed their 2021 Selectmen's Goals:

1. Water Meters & Water Rates:

The board agreed to leave this item on the list.

2. Village at Loon water pipe to the tank feeding Coolidge Falls & Clearbrook:

Chairman Robinson commented that this item should remain on the list, however, he noted that the board wanted to wait to see what they were going to do as far as a new tank, piping, or PRV (pressure reducing valve) in that zone (which the town is working on) therefore, until the town gets all necessary approvals, this can be set aside but remain on the list.

3. Sewer Issues (capacity & town growth) sewer upgrades and funding:

Chairman Robinson acknowledged that they are currently working on a sewer capacity study, and the board agreed to keep this item on the list.

4. Work on obtaining written agreements (defining responsibilities) for PORS (privately owned redistribution system):

Town Manager Burbank feels that this is something that the town is going to have to address for the PORS that are not clearly defined. This item will remain on the list.

5. Process and timeline to resolve water pressure issues, adding addition to the South Peak tank, additional tank at new location:

This item was discussed tonight and will remain on the list.

6. Main Street Crosswalk:

Town Manager Burbank explained that the last two (2) RRFB's (Rectangular Rapid Flashing Beacon) are being installed this year, and the town will have fulfilled its obligation to the State (flashing lights at all of the town's crosswalks). This item will remain on the list.

7. Public Parking/Riverfront Parking:

Town Manager Burbank suggested this item remain on the list.

8. Kanc Recreation Parking Area:

Chairman Robinson noted that this was discussed recently, and the board will be taking steps to make a final decision on this parking area soon.

9. Workforce Housing:

Chairman Robinson noted that the board had decided to leave this item on the list, although there are no immediate action items at this time.

10. Obtaining viable members to join town committees:

Chairman Robinson wants to leave this item on the list, although most of the seats have been filled. Town Manager Burbank added that the Planning Board is now hiring for a meeting minute recorder, as Brook Rose will no longer be doing the minutes due to time constraints and a busy schedule.

11. Short-Term Rentals:

Town Manager Burbank explained that Granicus, a short-term rental company has revised their rates based on public feedback, and has begun focusing on a 90-day investment return for participants. Burbank explained that he will be participating in a zoom webinar sponsored by Granicus on Thursday detailing their 90-day investment return. Selectman Daly commented that he met with Dan Adams at the High School to discuss possibly recruiting a

student that may be interested in working with the town to track short-term rentals. Daly is waiting to hear back from Mr. Adams.

V. OLD/NEW BUSINESS

NEW BUSINESS:

Solid Waste Facility

DPW Director Hadaway explained to the board that he wanted to discuss some proposed changes to the Solid Waste Fee Schedule as follows:

Propane Bottles: Begin charging what it costs the town to dispose of them.

- Small propane (camp bottles) cost \$2 per bottle to dispose of.
- 20-35lb propane grill bottle cost \$3 per bottle to dispose of.
- 100 lb. propane bottle cost \$5 per bottle to dispose of.

Smoke Detectors: Hadaway explained it cost \$12 per smoke detector for disposal.

Mattress/Box Springs: Hadaway explained that currently they are charging \$0.05 per pound (minimum fee is \$10) and Hadaway would like a flat fee of \$10 for each mattress and box spring, as it is costing the town more money to dispose of these materials than the town is charging (Hadaway confirmed Plymouth and Thornton are both currently charging \$10 flat fees).

Selectman Ham explained that they need to discuss this jointly with Woodstock Board of Selectmen as this is a shared facility bound by an Intermunicipal Agreement. Ham suggested Jane Leslie reach out to Woodstock to see if Lincoln could join them for a brief joint discussion at *their* next scheduled meeting (Tuesday, May 18th at 5PM). Ham asked Hadaway to put his request in writing and submit it to both boards prior to next week's meeting so that they have a chance to review it. Hadaway added that John MacKay is doing a wonderful job at the facility and really organizing and cleaning things up.

Solid Waste Facility Security System

DPW Director Hadaway updated the board on the Transfer Station's new security system which has been installed and up-and-running. Hadaway explained that this is the same security system as the Kanc Rec which is monitored by the Police Department.

Water Intake and Drive

Chairman Robinson asked Hadaway if there has been any progress with the repairs at the water intake. Hadaway responded that things are progressing and they are beginning to see light at the end of the tunnel.

Kanc Rec Parking Area

Selectman Daly asked Director Hadaway if he was able to obtain any cost estimates for the additional parking options at the Kanc Rec? Hadaway responded that he has not had a chance, however, this is next on his project list. *DPW Director Hadaway departed the meeting.*

2020 Equalization Valuations Report (Department of Revenue Administration)

Chairman Robinson reviewed the report with the board (*see attached*). The total equalized assessed valuation (including utilities and railroads) is **\$1,148,101,483** which is used for the town's portion of the county tax/and any cooperative school district taxes; and, the total equalized assessed valuation (not including utilities and railroad) is **\$1,121,397,998** which is used to calculate the town's portion of the state education property tax.

State of New Hampshire NHDOT Annual Letter

Robinson reviewed a letter from NH-DOT District One office outlining their policies and procedures, emergency road closure information, along with other DOT related material.

Town Manager's Report

O'Brien's Way Plaque:

Town Manager Burbank updated the board on a request from Mike Dovholuk to erect a plaque on the corner of O'Brien's Way. Burbank explained that Doug Moorhead and the Interact Club will be taking this project on which pays tribute to Lincoln resident, Captain Thomas F. O'Brien, and purchasing and erecting the plaque for O'Brien's heroic actions during World War II. This plaque will be on the corner of Maple Street and O'Brien's Way.

Consumer Confidence Water Report:

Town Manager Burbank explained to the board that he would like a motion made so that the Consumer Confidence Water Report can be attached to the spring tax bill, and the following motion was made:

MOTION: "To attach the Consumer Confidence Report to the Spring tax bill."

Motion: Jack Daly

Second: Tamra Ham

All in favor.

There was a brief discussion on Title V-Taxation, Chapter 76 *Apportionment, Assessment and Abatement of Taxes*, Section 76:11 (*see attached*) and the criteria for mailing any attachments along with the tax bills. Robinson was of the opinion that this motion was not necessary for adding the water report but was fine with doing the same, although he would like clarification from town counsel on this matter as well as attaching the Short-Term Rental Ordinance to the tax bills.

Online LUPA

Town Manager Burbank updated the board that Planning Assistant, Lisa Peluso is currently working with Mark Galant on an online Land Use Planning Application (LUPA) for the town's website. Burbank explained that this document will be an online "fillable" form where all of the fields must be completed correctly, or it will not allow the applicant to print it. Burbank further explained that this form is a means to streamline the Land Use Planning Application process that the applicant will have to print out and either email, mail, or hand-deliver to Town Hall.

35 Goodbout Road – Raymond Correale

Town Manager Burbank informed the board that Chief Beard has issued a *Cease and Desist* to 35 Goodbout Road for: (1) building an addition onto his garage without a proper Land Use Authorization Permit; (2) building within the fifteen-foot (15') front and side setback areas, and, (3) within the Town's Right of Way for Goodbout Road. Burbank explained that Mr. Correale will have thirty (30) days (June 10, 2021) to take corrective action and remedy all of the previously stated issues.

Selectman Ham explained that when Mr. Correale had originally built his house and deck (on the front of the house), he had to appear before the ZBA for a variance because it was built within the setbacks (he was granted a variance). After appearing before the ZBA and being informed of the process, Mr. Correale proceeds to build an addition on to his garage (again without proper permitting) that extends into the setbacks and the Town's right-of-way. Ham further explained that as a result of this situation, he had to appear before the Board of Selectmen last year to discuss this matter and remedy it, and it now appears that Mr. Correale has failed to remove the addition and has now built a greenhouse on to the rear of the garage (without a permit).

The Landing Land Use Permits

Town Manager Burbank explained to the board that he has been waiting for new signed declarations and governing documents for the Landing which he received today, and everything is good to go and the town can now begin issuing Land Use Permits for the Landing. Burbank noted that there is in excess of twenty (20) commitments to property up at the Landing (subject to the Attorney General's approval) and the Planning Department is going to get even busier than they currently are. Town Manager Burbank also publicly thanked Mr. Joe Lynch, the Landing owner for all of his cooperation and collaboration throughout this process.

OLD BUSINESS:

Library Re-Opening

Chairman Robinson asked if the Library had plans on re-opening anytime soon? Burbank responded that the Library Trustees are going to be meeting soon to discuss their re-opening plans. Robinson asked that the board be updated on the status of the Library's re-opening plans at their next board meeting (May 24th).

Skip Sansoucy – Ski Area/Resort Assessing (proposed contract)

Robinson asked about the proposed assessing contract from Skip Sansoucy to add Loon Mountain (ski areas/resorts) to the town's current utilities assessing contract. Robinson explained that town's current Utilities Contract with Sansoucy is \$8k per year, and a new contract adding the assessing of Loon Mountain Ski Resort would cost the town \$19k (an additional \$11k) per year (5-year contract). Robinson asked the board what their thoughts were and if they had any suggestions. After a brief discussion, the board agreed that the town's current assessors (Commerford, Neider, Perkins) are doing a fair job as part of the broad scope, and the following motion was made:

MOTION: "To continue to have Commerford, Neider, Perkins assess everything within the town, except the utilities."

Motion: OJ Robinson

Second: Tamra Ham

All in favor.

Public Participation

Paul Beaudin commented that he did not hear any mention of trees, limbs, and brush during the Solid Waste Facility discussion earlier tonight, and noted that this is a costly expense to the town that the town does not get reimbursed for. Beaudin asked Robinson if this would be part of the joint BOS discussion. Robinson responded that the joint boards had discussed tree limbs and brush during their last meeting when they discussed Solid Waste fees, and both boards had agreed to *not* charge for brush. Beaudin commented that brush disposal should not be subsidized by the taxpayers, but it should be paid by the people who are disposing of their brush.

Jayne Ludwig commented that she agrees with Paul, and this should not be another additional expense put on the backs of the taxpayers, and if someone throws their brush out at the transfer station, they should have to pay for it (not the taxpayers). Selectman Daly questioned how you would go about measuring the different quantities of brush (residential, commercial). Beaudin responded that it could be weighed and charged either by the pound, or a flat rate. Daly agreed with discussing this at the next joint meeting.

Town Manager Burbank noted that he would get together with Director Hadaway to put something together to present to the two boards at the next meeting.

Paul Beaudin referenced the water discussion earlier tonight with W&S, and asked if South Peak will *not*

have to install a water tank in order to move forward? Chairman Robinson responded that this is not the case, and either it will be a cooperative effort installing the water tank, or, there will be dual tanks installed (if they refuse to collaborate). Robinson explained that South Peak is legally bound to fulfill their conditions of approval. Jayne Ludwig commented that she also has concerns and wants to make sure that the town does not allow South Peak to negate their 2006 responsibilities to build a storage tank and put the expense on to the tax payers.

VI. NON-PUBLIC Session Pursuant to RSA 91-A:3(III) (c,e) Personnel issue and legal litigation

MOTION: "To go into Non-public session pursuant to RSA 91-A:3 (III) (c,e) Personnel Issue and legal litigation"

Motion: OJ Robinson

Second: Jack Daly

All in favor.

The BOS went into Non-public session at 7:05 p.m.

MOTION: "To re-enter public session."

Motion: Tamra Ham

Second: Jack Daly

All in favor.

The Board reconvened public session at 8:07 p.m.

VII. ADJOURNMENT

With no further business to attend to, the Board made the following motion:

MOTION: "To adjourn."

Motion: OJ Robinson

Second: Jack Daly

All in favor.

The meeting adjourned at 8:08 p.m.


Respectfully Submitted,
Jane Leslie

Approval Date: May 24, 2021


Chairman O.J. Robinson


Tamra Ham


Jack Daly

April 16, 2021

100 International Drive, Suite 152, Portsmouth, NH 03801
Tel: 603.431.3937

Mr. Butch Burbank
Town Manager
Town Hall
148 Main Street
Lincoln, NH 03251

Re: **Water Storage Tank Siting Assessment – Loon Village and Indian Head Pressure Zones**

Dear Mr. Burbank:

The Town of Lincoln engaged Weston & Sampson to provide engineering services for the evaluation of a new water storage tank site for the Loon Village and Indian Head pressure zones within the water distribution system. The siting evaluation included an examination of results from hydraulic modeling, budgetary cost estimates of probable cost for each alternate, and a criteria-based ranking system for each water storage tank site in each of the pressure zones. As follows, we are pleased to provide a recommendation in the siting of water storage tanks in the Loon Village and Indian Head pressure zones to improve the town's storage capacity within the distribution system.

1.0 Existing System

1.1 Existing Water Storage Facilities

The town currently maintains three water storage facilities within the existing water distribution system. The distribution system contains three primary pressure zones, with each tank located within a different pressure zone. The Pollard tank is located in the town's Main Pressure Zone adjacent to Main Street, the Loon tank is located in the northeast adjacent to Loon Mountain and the Kancamagus Highway in the Loon Village Pressure Zone, while the Indian Head tank is located at the northwest extent of the distribution system adjacent to Route 3 in the Indian Head Pressure Zone. The town also maintains small, localized pressure zones including the South Peak pressure zone and the Landing pressure zone; however, these areas are geographically small, are supported by booster pumps and do not currently contain water storage facilities. A summary of the existing water storage facilities including their dimensions and storage volumes are listed in the table below:

Table 1: Existing Water Storage Facilities

Facility Name	Pollard	Loon	Indian Head
Pressure Zone	Main	Loon Village	Indian Head
Diameter (feet)	75	65	65 x 30*
Height (feet)	30	20	10
Nominal Storage Volume (gallons)	1,000,000	500,000	146,000
Approx. Storage Volume/Foot	33,050	24,840	14,600
Base Elevation (feet)	1058	1246	1256
Overflow Elevation (feet)	1088	1266	1266

*Indian Head Tank is rectangular in shape

2.0 Evaluation of Alternatives

2.1 General

In September 2020, Weston & Sampson completed a water storage assessment titled *Water Storage Assessment and Model Update* to identify storage deficiencies and future storage needs in each pressure zone throughout the distribution system. As a result of this analysis, it was determined that the Loon Village pressure zone has the greatest storage deficit of the three primary pressure zones and should be prioritized for installation of a new tank. It was also recommended that the town install a pressure reducing valve (PRV) to allow Loon Village to supplement the Main pressure zone (MPZ) during a fire flow event to increase the availability of storage volume available to the MPZ. A further examination of the hydraulic modeling for this feature was conducted in a separate memorandum presented to the town in February 2021. Following previous discussions, the town plans to install the PRV in Summer 2021. The Indian Head pressure zone was also assessed under the September 2020 storage assessment and was determined to have a storage deficit of 260,000 gallons and would be prioritized next for an increase in storage capacity.

As a continuation of the above efforts, Weston & Sampson has evaluated locations for the construction of water storage tanks within the Loon Village and Indian Head pressure zones. Prior to this report, Weston & Sampson met and discussed potential tank locations with the town in February 2021. Weston & Sampson presented a GIS map (Attachment A) to identify potential locations for a water storage tank site based on favorable ground elevations that would allow a proposed tank to match the existing pressure zone hydraulic gradelines.

The following report presents our assessment of sites in both the Loon Village and Indian Head pressure zones that were identified as favorable for potential construction of a new water storage tank. The evaluation was limited to a review of available published data, existing reports/plans, and one site visit to each site. Criteria for comparison includes site access/constraints, property ownership, system hydraulics and proximity to the distribution system, environmental impacts and permitting, local impacts, as well as probable cost. The following sections evaluate alternatives for storage within the Loon Village and Indian Head pressure zones.

2.2 Loon Village (LV) Tank Siting

LV Alternate 1

Site Access, Constraints, and Property Ownership

Alternate 1 is located on the existing Loon Village tank site. The site is readily accessible via the existing access road off Osseo Circle that extends into White Mountain National Forest (WMNF) land where the existing tank is located. The elevation of this site is favorable for construction of a new storage tank which can be sized to match the approximate ground elevation (1,220 feet) and height of the existing tank. Siting a tank next to the existing tank will require site clearing and/or grading as there is insufficient space to locate another tank adjacent to the existing tank without performing these tasks. The need for additional clearing and grading will also necessitate additional land use acquisition from the US Forestry Service (USFS) which maintains the WMNF. The use of this site has been granted to the town in the past but would



Photo 1-Access Drive off Osseo Circle

require a new approval by USFS to expand the scope of the site's use agreement. The USFS is planning to conduct an initial site walk on April 20, 2021 before offering formal comments to the town on the potential use for both this

site and site Alternate 2b (discussed further on in this report). It is assumed that this site is usable as a tank site since this would not require a change in the existing land usage.

Hydraulics and Proximity to Distribution System

The existing Loon Village tank site is in close proximity to the water distribution infrastructure within the Village of Loon area. An existing 10-inch water main and electrical utility are routed to the site from Osseo Circle on a separate easement than the access road pictured above. The area around the utilities has been overgrown with saplings and brush and would need to be cleared/improved if an additional tank is sited at this location.

The water main network within the Village of Loon is comprised of 8-inch asbestos cement (AC) water mains that are not owned by the town (although the town does assist with repairs and general maintenance). The existing pipe network is a limitation to inclusion of additional storage at the existing tank site for the following reasons:

- The town does not own the adjacent water mains. In the event of repair or replacement the town does not have full control over the infrastructure
- The existing 10-inch tank feed water main is located between condominium block 32 and 33 and then proceeds to the tank on a minimally maintained access path.
- The primary river crossing to this area (located east of the bridge to Loon Mountain) feature is a limitation to the flow available to the north side of the river within the Loon Village pressure zone during high demand periods.
- Additional storage located at the site significantly does not allow for diversification of storage within the distribution system and maintains the criticality of this site and adjacent water mains.

The existing tank site was assessed in the hydraulic model using an additional 450,000-gallon tank to operate in conjunction with the existing tank. The sizing of the tank accounts for the 409,000-gallon storage deficit for Loon

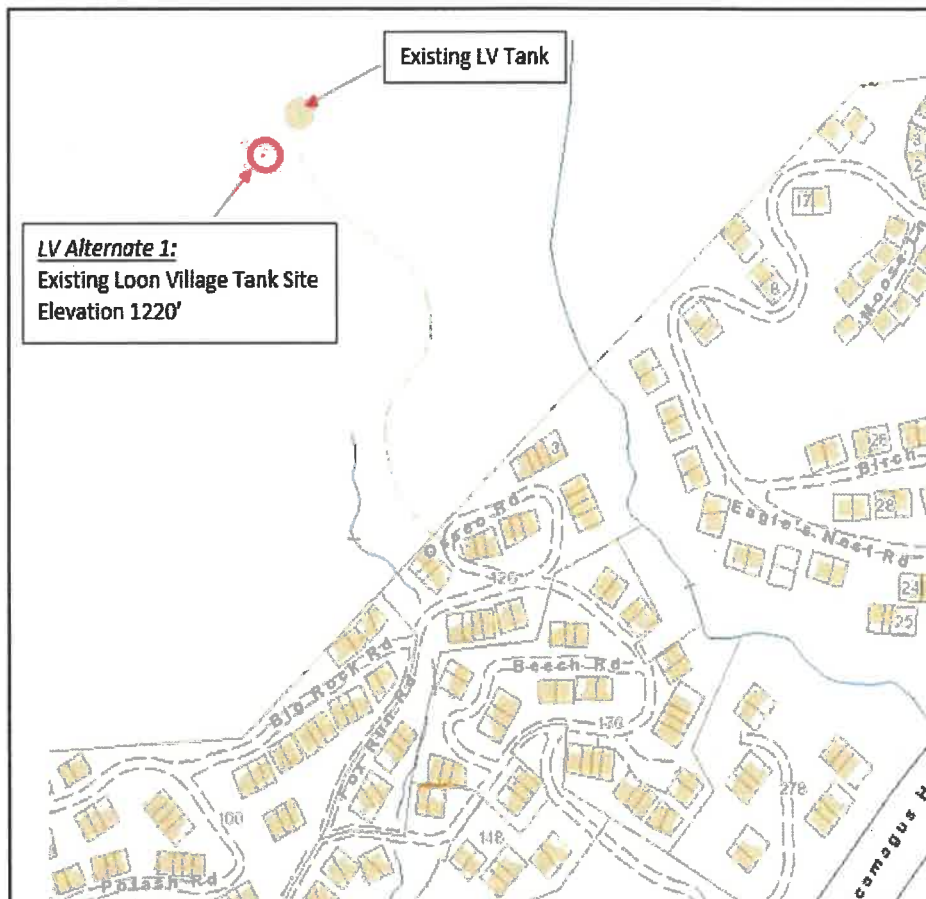


Figure 1 - Locus Map Loon Village Alternate 1

Village identified in the storage assessment report as well as 10% additional capacity to account for future growth in water demand. The preliminary modeling effort indicated that:

- The Loon Village tanks provide benefit to the MPZ during a fire flow event, however;
- Due to the piping restrictions within the Village of Loon area there was little improvement shown for available fire flow within the Loon Village pressure zone during a fire event indicating that additional storage at this location will not greatly benefit available fire flow within the town's water system. This was measured by comparing previous hydrant flow test locations and values against available fire flow with additional storage modeled at this location

As discussed previously with the town, the existing tank site would benefit from the construction of a new 12-inch transmission main routed from the vicinity of the Water Treatment Plant to the Loon Village tank site. The hydraulic model indicates that the new 12-inch main significantly reduces hydraulic limitations within the pressure zone. However, this feature would carry significant cost to construct and would require a crossing of the east branch of the Pemigewasset River resulting in significant permitting/construction effort to complete. The existing river crossing is encased in concrete beneath the river bottom. Recent storm events such as Hurricane Irene have contributed to scour of the river bottom and necessitated other water system modifications such as the lowering of the WTP intake. The existing crossing may be vulnerable to future storm events as the pipe and concrete encasement become more exposed in the river and may benefit from replacement or additional redundancy.

Environmental Permitting and Local Impacts

Use of the site will require, at a minimum, input and approval from the USFS, US Department of Wildlife, and the NH Department of Environmental Services (DES). While a significant permitting effort is anticipated, it is expected that approval can ultimately be obtained due to the use of the existing site for water storage purposes. The town will have additional information on the site's viability following a preliminary USFS site walk on April 20, 2021 to look at both this site and the Alternate 2b site discussed below. Additional information on the conditional use of either site will be available after this site walk. If additional water main upgrades are considered part of this tank siting effort additional permitting will be required including a full Wetlands Permit to address the river crossing. Additional coordination will be required with NH Department of Transportation (DOT) as Route 112/Kancamagus Highway will also be impacted by the installation. No major local impacts are expected due to use of this site as the tanks are set back from the road and beneath the surrounding tree line. While installation of a second tank at this location will also increase water residence time within the tanks, the storage assessment shows that the town's water usage within this pressure zone will still meet the AWWA recommended three-to-five-day turnover.



Photo 2-Existing Loon Village Tank

Probable Costs

An opinion of probable costs for this option are shown in the table below. These costs include the cost of a dedicated 12-inch water main from the town's WTP to the tank sites to reduce the reliance on the existing 8-inch mains within the Village of Loon increase the hydraulic benefit of the tank to the water system.

Table 2 – Loon Village Alternate 1 Costs

Option	Item	Units	Unit Cost	Cost
LV 1	450,000 gallon tank	1	\$ 950,000	\$ 950,000
	Site work/appurtenances	1	\$ 250,000	\$ 250,000
	Electrical/instrumentation	1	\$ 40,000	\$ 40,000
	Tank Mixer & Install	1	\$ 40,000	\$ 40,000
	12-inch WM - Westwood Dr to Tank Site (LF)	7500	\$ 250	\$ 1,875,000
	12-inch WM - River & Route 112 Crossing (LF)	450	\$ 1,200	\$ 540,000
	Permitting	1	\$ 50,000	\$ 50,000
	Land Acquisition / Easements	1	\$ 100,000	\$ 100,000
	Engineering	1	\$ 500,000	\$ 500,000
	Contingency (30%)	1	N/A	\$ 1,303,500
	Option 1 Total			\$ 5,648,500

Summary

this site has the following advantages:

- *The tank site is already accessible via an existing access road.* This location is adjacent to the existing Loon Village Tank and can be accessed via the existing access road off Osseo Circle.
- *An existing access road and tank structure already exist on the WMNF land.* Although the tank is located on WMNF land, negotiations to build another tank adjacent to the existing tank are expected to be positive as a new tank is an expansion of existing site use and not a new location/impact.

This site has the following disadvantages:

- *Water main limitations.* The existing pipe network is not fully owned by the town and is undersized to support two tanks at this location. Upgrades to the pipe network may require construction of an additional transmission main and river crossing to adequately support two tanks on this site. Either alternative is disadvantage to the use of this site.
- *Clearing of land adjacent to the Loon tank.* The existing site requires additional clearing/acquisition of land.
- *High project cost.* Inclusion of the water main upgrades significantly increases project cost.

LV Alternate 2a

Site Access, Constraints, and Property Ownership
Tank site alternate 2a is located adjacent to the existing water treatment plant off Westwood Drive. This tank site is located on developer land that is owned by CRVI South Peak, TRS Inc. The proposed site is also located on the same parcel as the WTP with an access road/snowmobile trail accessible from the WTP parking area and seen in the adjacent photograph. This access path forms the basis of a tank access road, but any tank site will require approximately 700 feet of additional access drive to be constructed bearing south towards higher ground elevations. The creation of this access road will require tree clearing and grubbing of a forested area as shown in Photos 3 and 4.



Photo 3 - Site Access from WTP

The original South Peak tank design plans titled *South Peak Resort South Mountain Booster Pump Station / Water Storage Tank* by Horizons Engineering dated March 2008 indicated that this site was originally reserved for construction of a storage tank. The original purpose of this proposed tank was to serve the South Peak development only. However, this study assessed this siting option to determine if there is a mutual benefit for both Loon Village and the South Peak pressure zones. A major advantage to siting a tank at this location is the availability to service multiple pressure zones including the South Peak area which is not an option under Alternate 1 discussed above. A partnership with the South Peak developers may allow the town to leverage both funding and land access for construction of a storage tank that serves both the Loon Village and South Peak pressure zones.

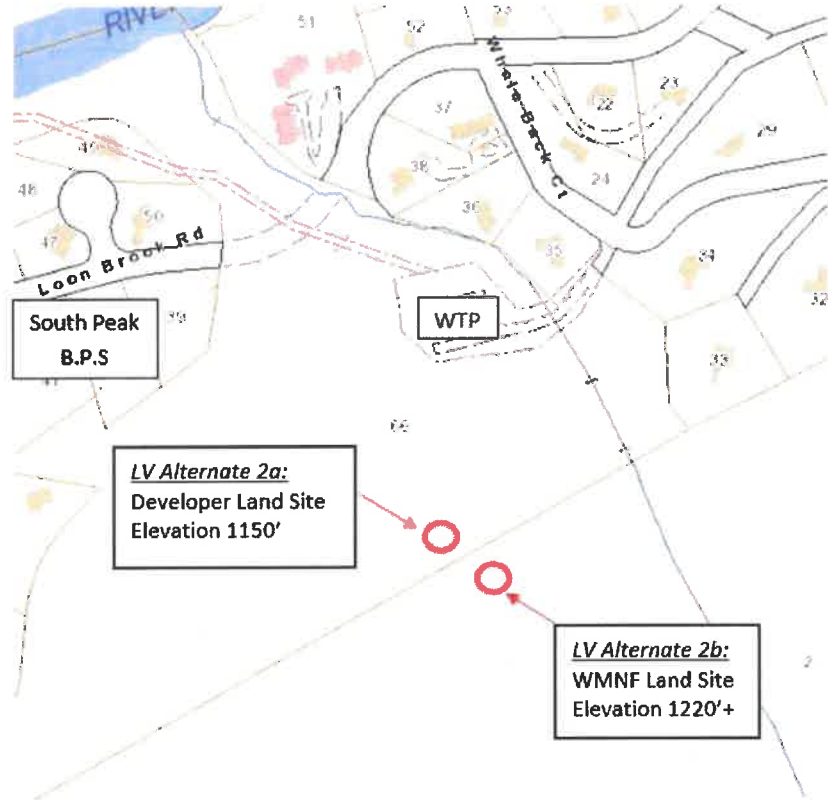


Figure 2 - Locus Map Loon Village Alternate 2a and 2b

Hydraulics and Proximity to Distribution System

This potential tank site located on developer land was originally selected to serve the South Peak pressure zone at a hydraulic gradeline of approximately 1,185 feet and a site ground elevation of 1,147 feet per the 2008 water storage tank plans. The existing Loon Village hydraulic gradeline is at an elevation of 1,266 feet which would require a tank height of approximately 120 feet to serve both pressure zones. This option is not ideal from a construction feasibility standpoint as the tank would rise well above the surrounding trees and the town would be limited in tank style options which are more expensive (for example a concrete tank cannot be constructed at an overall height of 120 feet).

The hydraulic model was used to analyze the impacts to the distribution system if a 450,000-gallon tank was constructed at this location. Note that if the tank is ultimately constructed to serve both the Loon Village and South Peak pressure zones additional volume may be required. The preliminary modeling effort indicated:

- The tank was found to have a significant benefit to fire flow within the Loon Village pressure zone compared with Alternate 1.
- The MPZ (via the proposed PRV between the two pressure zones) also showed significant improvement to available fire flow during a fire flow event compared to Alternate 1. The model indicated that the Pollard tank saw little to no drop in water elevation with both the existing Loon Village tank and the proposed tank at South Peak supplementing the MPZ during a fire.
- 20 psi was maintained within the MPZ at the suction side of Boyce Brook pump station throughout a fire flow event. This pressure is difficult to maintain under existing system conditions and also exhibits the benefit of a tank at this location.

- With the PRVs reinstated in the existing vaults on Crooked Mountain Road, the South peak pressure zone has no fire flow availability. A tank at this location provides this protection within the pressure zone that is currently fed by a domestic booster station.

This proposed tank site is not immediately adjacent to the existing distribution system and will require the installation of new water main. For cost comparison of the tank siting alternatives, it is assumed that approximately 900 feet of new 12-inch water main will be required to connect the tank site to the Loon Village pressure zone located adjacent to the WTP. Less than 100 feet of water main will be required to connect the proposed tank site to the South Peak pressure zone. The connection to the South Peak pressure zone will require a PRV to reduce the gradeline and provide lower pressure to the South Peak development area. Without a PRV between the proposed Loon Village tank and the South Peak system, pressures within the South Peak area would be 115 – 136 psi based on ground elevations of 950 – 1,000 feet. Confirming operational conditions of the



Photo 4 - View of Area Towards WTP

PRV are outside the scope of this report and will need to be determined during final design if this site is ultimately selected for construction of a tank. A tank at this location may also require an altitude valve to assist with consistently being able to fill and turn over the existing Loon Village tank located on the north side of the river. This tank site has the additional advantage of being sited on the south side of the river which increases the overall flexibility and redundancy of the Loon Village system while reducing the criticality of the existing tank site. Final hydraulics of this tank site will need to be examined further to ensure optimal operation of the MPZ, Loon Village, and South Peak pressure zones and infrastructure as this location is adjacent to the boundary between all three zones.

Environmental Permitting and Local Impacts

Use of the site will require, at a minimum, input and approval from NH Fish & Game and DES. While a significant permitting effort is anticipated, it is expected that approval can ultimately be obtained due to the use of private lands and the public benefit for construction of the tank. The clearing required to construct the access road will likely fall beneath the thresholds of an Alteration of Terrain permit but may require environmental permitting through DES and other agencies. Previous construction projects within this area have been impacted by the presence of the long-eared bat which is a protected species. If this site is selected by the town, it may be beneficial to initiate preliminary discussions with permitting agencies to try to minimize any construction scheduling impacts. The use of this site carries major local impact due to the height of a proposed tank extending well above the surrounding tree line.

Probable Costs

The probable costs for this option are shown in the table below. A 750,000-gallon tank is estimated for the site to account for the storage needs to serve the Loon Village and South Peak pressure zones. This sizing will need to be assessed and finalized prior to siting a tank at this location. Additional cost is carried for the tank construction due to the significant height of the structure which will require either a concrete pedestal or an elevated spheroid style construction.

Table 3 – Loon Village Alternate 2a Costs

Option	Item	Units	Unit Cost	Cost
LV 2a	750,000 gallon tank	1	\$ 2,000,000	\$ 2,000,000
	Site work/appurtenances	1	\$ 400,000	\$ 400,000
	Access Road & clearing (LF)	800	\$ 150	\$ 120,000
	Electrical/instrumentation	1	\$ 120,000	\$ 120,000
	Tank Mixer & Install	1	\$ 40,000	\$ 40,000
	12-inch WM - Tank to Loon Village PZ (LF)	900	\$ 200	\$ 180,000
	12-inch WM - Tank to South Peak PZ (LF)	100	\$ 200	\$ 20,000
	South Peak PRV	1	\$ 50,000	\$ 50,000
	Permitting	1	\$ 30,000	\$ 30,000
	Land Acquisition / Easements	1	\$ 10,000	\$ 10,000
	Engineering	1	\$ 300,000	\$ 300,000
	Contingency (30%)	1	N/A	\$ 981,000
	Option 2a Total			\$ 4,251,000

Summary

This site has the following advantages:

- *This site exists on developer land and was originally reserved for construction of a storage tank.* Negotiation will be required with the developer to reach a mutual agreement. However, the land has previously been reserved for this purpose.
- *The tank will be able to serve multiple pressure zones.* The tank site is beneficial in that it provides an opportunity to serve both the Loon Village and South Peak pressure zones. The town may be able to secure private developer funds to assist with construction of the tank due to the benefit to the South Peak development. Through installation of a PRV between Loon Village and the MPZ, this storage would also be available to the MPZ during a fire flow event.

This site has the following disadvantages:

- *Site elevation requires construction of a tall tank.* A tank at the developer provided location would be significant in height to match the Loon Village gradeline and would result in local aesthetic impacts. The required height will also limit the town's options regarding the style of tank construction.
- *Site access.* Initial access exists from the WTP parking area; however, an access road will need to be extended to the proposed tank site. Extending the road will require extensive clearing to construct on a severely sloped hillside. The town could also explore a connection to the existing water main in Hemlock Drive which may provide a more hydraulically beneficial connection point. However, it is likely that an easement would be required from a private homeowner to complete the connection.
- *Water Main Installation.* This site is not located adjacent to the existing distribution system and will require cross-country installation of approximately 1,000 feet of new water mains to connect the tank to both the Loon Village and South Peak pressure zones.

LV Alternate 2b

Site Access, Constraints, and Property Ownership

Alternate 2b is located adjacent to the site discussed under Alternate 2a but located further upslope within the WMNF (boundary line shown in brown on the above figure). This site has equivalent access benefits and concerns as Alternate 2a and will require a longer access road and additional water main. Siting a tank at this location will require approval from the USFS. The main benefit for siting a tank on forestry land is to obtain a higher ground

elevation and thus require a shorter tank to match the existing Loon Village hydraulic gradeline thereby reducing tank construction costs.

Hydraulics and Proximity to Distribution System

Alternate 2b would be located further upslope from Alternate 2a and could be designed to serve both the Loon Village and South Peak pressure zones as discussed under Alternate 2a. By locating the tank at a higher ground elevation, a shorter tank can be constructed however a longer access road will be required. This option is beneficial compared to Alternate 2a as it allows the town to reduce the height of the proposed tank and does not limit the style of construction as previously discussed. Reducing the tank height also allows the proposed tank to better match the storage gallons/foot within the existing Loon Village tank. Construction of a tall tank with low storage volume per foot could result in operational inflexibility when located close to the WTP.

Similar to Alternate 2a additional water mains will be constructed to connect the tank to the Loon Village and South Peak pressure zones. For cost comparison of the tank site alternatives, it is assumed that an additional 400 total feet of water main is required for this alternative. A tank sited at this location will have similar hydraulic benefits to the distribution system as discussed in Alternate 2a.

Environmental Permitting and Local Impacts

Use of the site will require, at a minimum, input and approval from USFS, NH Fish & Game and DES. Alternate 2b requires a significant permitting effort to receive ultimate approval from the USFS and other reviewing agencies. The exact length and orientation of the access road will need to be designed to keep the clearing area below the thresholds of an Alteration of Terrain permit. The use of this site carries a lower local impact to residents by allowing a tank to be constructed below the surrounding tree line. This option also has a potential benefit to the town by allowing for future development and growth within the South Peak area by supporting the water infrastructure within this pressure zone.

Probable Costs

The probable costs for this option are shown in the table below. A 750,000-gallon tank is estimated for the site to account for the storage needs within South Peak pressure zone. This sizing will need to be assessed and finalized prior to siting a tank at this location.

Table 4 – Loon Village Alternate 2b Costs

Option	Item	Units	Unit Cost	Cost
LV 2b	750,000 gallon tank	1	\$ 1,100,000	\$ 1,100,000
	Site work/appurtenances	1	\$ 400,000	\$ 400,000
	Access Road & clearing (LF)	1200	\$ 150	\$ 180,000
	Electrical/instrumentation	1	\$ 160,000	\$ 160,000
	Tank Mixer & Install	1	\$ 40,000	\$ 40,000
	12-inch WM - Tank to Loon Village PZ (LF)	1100	\$ 200	\$ 220,000
	12-inch WM - Tank to South Peak PZ (LF)	1200	\$ 200	\$ 240,000
	South Peak PRV	1	\$ 50,000	\$ 50,000
	Permitting	1	\$ 50,000	\$ 50,000
	Land Acquisition / Easements	1	\$ 35,000	\$ 35,000
	Engineering	1	\$ 300,000	\$ 300,000
	Contingency (30%)	1	N/A	\$ 832,000
	Option 2b Total			\$ 3,607,000

Summary

This site has the following advantages:

- *Site elevation is more favorable than Alternate 2a.* Siting the tank north of alternate 2a in WMNF land provides a higher ground elevation and allows for construction of a shorter tank, thereby reducing tank construction costs.
- *Site access can be achieved largely through developer land.* Negotiation will be required with the developer to reach a mutual agreement.
- *The tank will be able to serve multiple pressure zones.* The tank site is beneficial in that it provides an opportunity to serve both the Loon Village and South Peak pressure zones. The town may be able to secure private developer funds to assist with construction of the tank due to the benefit to the South Peak development. Through installation of a PRV between Loon Village and the MPZ, this storage is also available to the MPZ during a fire flow event.

This site has the following disadvantages:

- *Site access.* Initial access exists from the WTP parking area; however, an access road will need to be extended to the proposed tank site. Extending the road will require extensive clearing to construct.
- *Water Main Installation.* This site is not located adjacent to the existing distribution system and will require cross-country installation of approximately 1,400 feet of new water mains to connect the tank to both the Loon Village and South Peak pressure zones.
- *The site is on WMNF land and will require negotiation.* The town will need to discuss tank siting permissions with the forestry service to site a tank at this location. It is also anticipated that this site will require extensive permitting to receive approval.

2.3 Indian Head (IH) Tank Siting

IH Alternate 1

Site Access, Constraints, and Property Ownership

Site Alternate 1 is located adjacent to the existing Indian Head tank site abutting the NH Route 3 right of way. The existing tank is located on New Hampshire Department of Natural and Cultural Resources (DNCR) land and is located south of the Flume Visitor's Center access road. The town has an agreement with DNCR dating back to March 1980 that outlines the terms of siting water distribution facilities on DNCR land. For the site to be used for construction of a new tank additional negotiations and discussions with DNCR and potentially the DOT Right of Way Bureau are required. The initial project intent was discussed with DNCR on March 18, 2021 to introduce the agency to the potential project and solicit feedback. An internal meeting was held by DNCR on April 7th to discuss the site. DNCR indicated that the Franconia Notch State park land is encumbered by restrictions of the Land and Water Conservation Fund (LCWF). This will require additional coordination, negotiation, and support from the National Parks Service for the project. The process has been indicated to be complicated, time consuming, and expensive and may require the town to fund suitable replacement land for the site used by the water storage tank.



Photo 5 - Existing Indian Head Tank Site (looking north)

Access to the site is readily obtained by the adjacent NH Route 3, although no on-site parking or turn-out is available. There is also pavement remaining from the old alignment of Route 3 and an adjacent snow mobile trail on the east side of the tank. The tank has an 8-inch overflow that is routed to a brook to the east of the tank site. To keep the existing 146,000-gallon IH tank in service during construction a new storage tank would need to be constructed adjacent to the exist tank. The extents of the site clearing do not allow for construction of a new tank without additional clearing and potentially expanding the tank site agreement area with DNCR. The town may be able to approach negotiations with DNCR by discussing this tank addition as an improvement to the existing distribution system and an expansion to the storage capacity of the existing site. The town has previously noted ongoing issues with water supply and availability at the nearby Flume Visitor Center. Part of a future negotiation with DNCR may include installation of additional water main and a small pump station to provide service to the Flume Visitor's Center if this is agreed to provide a mutual benefit to the town and DNCR.

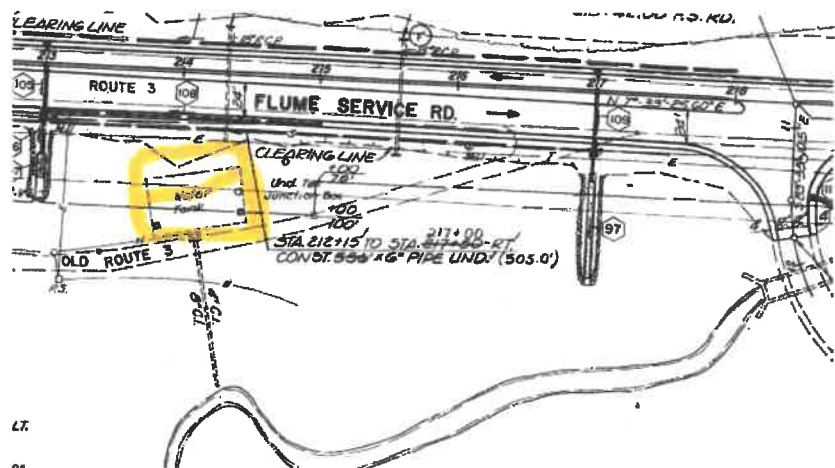


Figure 3 – Plan of Existing Indian Head Tank Site

Hydraulics and Proximity to Distribution System

As determined in the previous storage assessment report prepared by Weston & Sampson, the Indian Head pressure zone was found to have a storage deficit of approximately 260,000 gallons. To account for the existing storage deficit, a 10% contingency and growth factor, and the replacement of the existing 146,000-gallon tank, it was determined that a 450,000-gallon tank would be needed to adequately serve the IH pressure zone. A preliminary hydraulic modeling effort was conducted using a 450,000-gallon storage volume at the existing pressure zone hydraulic gradeline line of 1,266 feet and indicated the following:

- An increase in tank volume in the Indian Head pressure zone would provide marginal benefit to fire flow in both Indian Head and the Main pressure zone through the existing PRV station at Boyce Brook. This benefit would be largely restricted to the northern section of NH Route 3

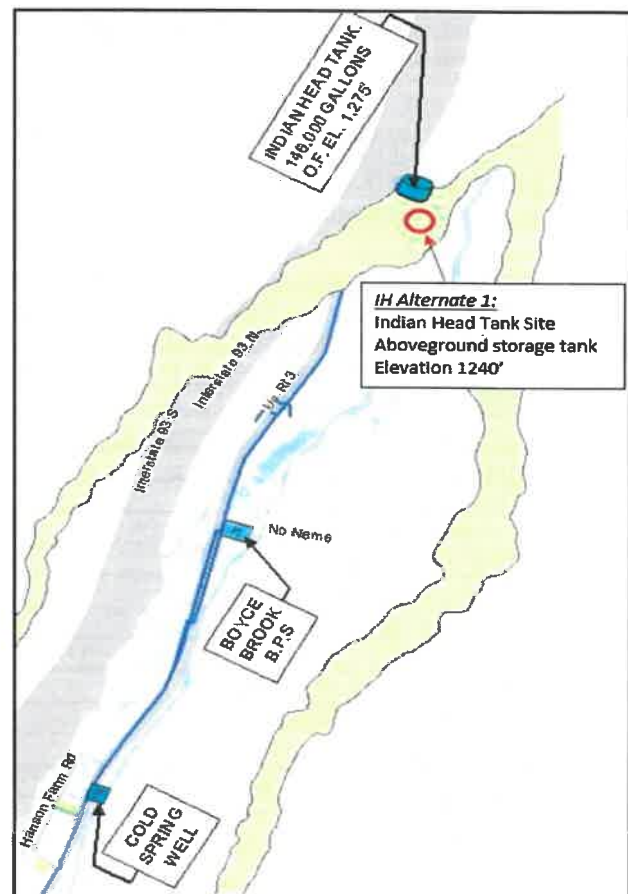


Figure 4 - Locus Map Indian Head Alternate 1

- Additional SCADA control will likely be required to keep the Boyce Brook pump station from running while the adjacent PRV from IH to the MPZ is open. This will prevent circular pumping and allow the tank volume to be available to supplement the MPZ and northern NH Route 3 area during a fire flow event.
- Approximately 1,500 linear feet of new water main and a pump station would be required to provide water service to the Flume Visitor's Center. The exact design criteria of this pump station are outside the scope of this report and would need to be determined at a later date.

The site is located immediately adjacent to the distribution system and the existing water main that extends to the site from the Boyce Brook Pump Station. Minimal water main improvements will be required to connect a proposed tank at this site to the existing distribution system. Additional water main would be required to service the Flume Visitor's Center if part of an agreement between the town and DNCR.

Environmental Permitting and Local Impacts

Unlike the sites discussed for Loon Village, use of the site will require input and approval from DNCR and DOT. Based on experience similar negotiations for site usage with both agencies can take up to two years to formally complete. Dependent on the proposed siting of the tank additional review by DES and other agencies may be required due to wetland impacts. A wetlands permit may also be required if a future project includes extension of water main to the Flume as a brook crossing is required to complete this effort. The use of this site carries a minimal anticipated local impact to residents by allowing a tank to be constructed on the existing tank site.

Probable Costs

The probable costs for this option are shown in the table below. A 450,000-gallon tank is estimated for the site to account for the storage needs within the Indian Head pressure zone. This costing option also includes placeholder costs for providing service to the Flume Visitor's Center.

Table 5 – Indian Head Alternate 1 Costs

Option	Item	Units	Unit Cost	Cost
IH 1	450,000 gallon tank	1	\$ 1,000,000	\$ 1,000,000
	Site work/appurtenances	1	\$ 250,000	\$ 250,000
	Electrical/instrumentation	1	\$ 40,000	\$ 40,000
	Tank Mixer & Install	1	\$ 40,000	\$ 40,000
	12-inch WM - NH 3 to Site (LF)	200	\$ 350	\$ 70,000
	Permitting	1	\$ 50,000	\$ 50,000
	Land Acquisition / Easements	1	\$ 100,000	\$ 100,000
	Engineering	1	\$ 300,000	\$ 300,000
	Contingency (30%)	1	N/A	\$ 555,000
	Option 1 Total			\$ 2,405,000
	8-inch WM - to Flume with Brook Crossing (LF)	1500	\$ 250	\$ 375,000
	Booster Pump Station for Flume	1	\$ 200,000	\$ 200,000
	Engineering & Permitting	1	\$ 120,000	\$ 120,000
	Contingency (30%)	1	N/A	\$ 208,000
	Option 1 Total w/ Extension to Flume			\$ 3,308,000

This site has the following advantages:

- *The proposed site is readily accessible.* The existing site is located adjacent to NH Route 3 and is currently used for siting of a water storage tank.
- *This site is near the existing water distribution system.* Water main already exists at the tank site and will allow the proposed tank to easily connect.
- *Site elevation.* Siting a tank at this location allows for the existing hydraulic gradeline of the Indian Head system to be maintained without construction of a tank with significant height.

This site has the following disadvantages:

- *This site exists on DNCR land and will require negotiation with both DNCR, National Park Service and DOT.* The town has an existing agreement for the Indian Head Storage Tank site with DNCR however, terms will need to be re-discussed for the construction of an additional tank. DOT will also have requirements for tank siting and access if use of the site is allowed.
- *Probable cost.* As indicated by DNCR the cost to use encumbered land through the LWCF will be time consuming and costly.
- *Service to the Flume.* If required by DNCR for ultimate use of the site may request the town to construct and maintain additional infrastructure.

IH Alternate 2

No readily apparent alternate site was identified within the IH pressure zone for construction of a gravity storage tank. If storage is required within IH and use of the Alternate 1 site is not an option, the town can consider the use of ground storage. The primary benefit of this approach is that a tank can be sited at any location pending land access agreements for the town. The primary drawback is that ground storage requires pumping to maintain the hydraulic gradeline and increases long-term operating and maintenance costs. After discussions with the town, this option is initially seen as a secondary alternative only and was not examined further at this time.

3.0 Alternative Analysis

3.1 General

A decision matrix analysis was used to prioritize the recommended alternatives. An explanation of the scoring categories for the matrix is described below. All categories were ranked on a level from 5 to 1, with level 5 being the most advantageous. Therefore, the higher the score, the more advantageous the alternative. Similarly, the weighting factor for each category is from 5 to 1, with 5 representing a more important category. Overall benefit to the water system was given the highest weighting factor, followed by estimated capital cost. The advantages and disadvantages to each alternative described in this report were used to determine the scoring of each alternative. The full alternatives matrix is shown on the following page of this report and the results are summarized below.

3.2 Loon Village Tank Siting

Within Loon Village pressure zone, three potential locations for a water storage tank were evaluated based on a site assessment, review of existing records, and brief hydraulic modeling effort. The alternates, as discussed above, included one site at the existing Loon Village Tank and two potential sites adjacent to the existing water treatment plant. The criteria ranking determined the following:

1. Alternate 2b (score of 68) – this was determined to be the optimal location of the three sites assessed during this report.
2. Alternate 2a (score of 62) – ranked second of the three site alternatives. Primary limitation of this option is the need to construct a tank with significant height which adds to cost, reduces construction options, and has an adverse aesthetic appeal.
3. Alternate 1 (score of 50) – ranked third in the alternatives. Primary limitation is the existing water main network and the high associated cost to perform significant water main improvements to strengthen the overall distribution system between the WTP and tank site.

3.3 Indian Head Tank Siting

Within Indian Head pressure zone only Alternate 1 was assessed based on each design criteria. Alternate 2 (ground storage) was given average scores as the exact siting and limitations of the proposed site are unknown. The criteria ranking system would indicate that the addition of storage on the existing tank site is a favorable alternative for the town and scored similarly to the Loon Village Alternate 2a and 2b sites.

Table 6
Water Storage Tank Site Alternatives Matrix

No.	Alternative Description	Rating / Score	Site Access	Estimate of Probable Cost	Environmental / Local Impacts & Permitting	Proximity to Distribution System	Benefit to Distribution System	Property/ Land Ownership	TOTAL
WEIGHT			3	4	2	3	5	2	
LV 1	Existing Loon Village Tank Site	RATING	4	1	2	3	3	3	
		SCORE	12	4	4	9	15	6	50
LV 2a	South Peak - Developer Land	RATING	2	3	2	3	5	3	
		SCORE	6	12	4	9	25	6	62
LV 2b	South Peak - White Mountain National Forest Land	RATING	2	4	4	3	5	2	
		SCORE	6	16	8	9	25	4	68
IH 1	Indian Head Existing Tank Site	RATING	4	3	3	5	3	2	
		SCORE	12	12	6	15	15	4	64
IH 2	Indian Head Underground Storage Option	RATING	3	2	3	3	3	3	
		SCORE	9	8	6	9	15	6	53

WEIGHT 5-most important, 1-least important

RATING 5-most beneficial, 1-least beneficial

SCORE = WEIGHT x RATING (The higher the total score the more advantageous the alternative)

P:\NH\Lincoln NH\2210014 WST Siting Assessment\Alternatives Matrix.xls\FINAL DRAFT

4.0 Recommendations / Conclusions

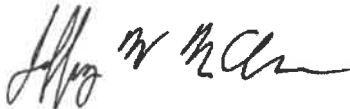
Three potential water storage tank sites were assessed within the Loon Village pressure zone based on site access, physical constraints, land ownership, hydraulic benefit, proximity to distribution system, environmental/local impacts, and probable costs. A ranking system was developed to weight the advantages and disadvantages of each site and produce an overall recommendation to the town. From the ranking system it was determined that Alternate 2b (tank constructed near WTP on USFS land) is the recommended option for siting of a tank within the Loon Village pressure zone provided USFS provides formal approval for use of the land. From prior discussions with the town, it is understood that additional storage within the Loon Village pressure zone should be prioritized over the other primary pressure zones.

An assessment was also performed on the existing Indian Head tank site based on the same criteria and ranking system discussed above. It is recommended that the town continue to move forward with preliminary discussions with both DNCR and DOT regarding potential use of this site for construction of additional storage within the Indian Head pressure zone. Based on prior discussions with the town it is understood that construction of storage within this pressure zone is a lower priority than additional storage within Loon Village.

We would like to thank you and Nate Hadaway, Director of Public Works, for your assistance, time, and consideration during this study. Jeffrey C. Provost, P.E. and Samuel H. Kenney, P.E. both assisted with the development of this report.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.



Jeffrey W. McClure, P.E.
Senior Associate

Attachment A – Elevation Map for Loon Village and Indian Head Tank Siting

P:\NH\Lincoln NH\2210014 WST Siting Assessment\Lincoln NH - WST Siting Study.docx



Lindsey M. Stepp
Commissioner

Carolyn J. Lear
Assistant Commissioner

State of New Hampshire Department of Revenue Administration

109 Pleasant Street
PO Box 487, Concord, NH 03302-0487
Telephone (603) 230-5000
www.revenue.nh.gov



MUNICIPAL & PROPERTY
DIVISION
James P. Gerry
Director

Samuel T. Greene
Assistant Director

RECEIVED
APR 22 2021

BY: *[Signature]*

April 21, 2021

TOWN OF LINCOLN
OFFICE OF SELECTMEN
148 MAIN STREET, PO BOX 25
LINCOLN, NH 03251

Dear Selectmen/Assessing Officials,

This is your official notification of the 2020 Total Equalized Valuations. We used your municipality's weighted mean ratio to calculate these valuations.

We calculated two equalized figures for your municipality. The "Total Equalized Valuation Including Utilities and Railroads" is used for your portion of the county tax and your portion of any cooperative school district taxes. The "Total Equalized Valuation Not Including Utilities and Railroad" is used to calculate your portion of the state education property tax. We adjusted your modified assessed valuation as reported on your 2020 MS-1 to bring the valuation to fair market value.

	Including Utility Valuation and Railroad Monies Reimbursement	Not Including Utility Valuation and Railroad Monies Reimbursement
Town Name: Lincoln		
2020 Modified Local Assessed Valuation	\$854,664,109	\$834,743,309
+ D.R.A. Inventory Adjustment	\$290,991,648	\$284,208,963
= 2020 Equalized Assessed Valuation	\$1,145,655,757	\$1,118,952,272
+ Equalized Payment in Lieu of Taxes	\$2,445,726	\$2,445,726
+ Equalized Railroad Tax	\$0	\$0
= 2020 Total Equalized Valuation	\$1,148,101,483	\$1,121,397,998
2020 Equalized Assessed Valuation	\$1,145,655,757	
+ Adjustment RSA 31-A (Shared Revenues)	\$0	
= Base Valuation for Debt Limits	\$1,145,655,757	

You have the right to appeal these valuations to the N.H. Board of Tax and Land Appeals within 30 days of the date of this letter. Call our office to discuss any concerns or questions you may have at (603) 230-5950. We will continue working with you to resolve any issues but please be advised that the appeal period will not be extended.

We have enclosed informational sheets that show how each of the figures were calculated.

Sincerely,

Linda C. Kennedy

Linda C. Kennedy, Manager
Equalization Bureau

TDD Access: Relay NH 1-800-735-2964

Individuals who need auxiliary aids for effective communication in programs and services of the Department of Revenue Administration are invited to make their needs and preferences known to the Department.

