

This is EXHIBIT A, consisting of 7 pages, referred to in and part of the Agreement between OWNER and Engineer for Professional Services dated when signed by OWNER.

Engineer's Services

Article 1 of the Agreement is supplemented to include the following agreement of the parties.

Engineer shall provide Basic and Additional Services as set forth below.

PART 1 – BASIC SERVICES

Study and Report Phase

Background:

The Town of Waitsfield, population 1,844, is located in Washington County, Vermont, on the Mad River. In alignment with the Town Plan, Waitsfield desires to find infrastructure solutions to address affordable housing needs, to attract people to move to and reside in Waitsfield, to invest in residential development, to encourage compact development and to provide opportunities for businesses in the Village areas that encourage investors and entrepreneurs. In addition, the Town desires to address the protection of defined wetlands and critical habitats to ensure a healthy watershed with clean water, and to address the growing climate crisis.

The primary focus of this study is Waitsfield Village (Village Residential, Business Districts) and lands to the north of the Village as far as the Town Gravel pit, and Irasville and lands to the south of Irasville to the town-owned Munn property. Waitsfield has a Designated Village Center and a Community Water System that was constructed in 2012, providing potable water to approximately 50% of the potential connections in an area roughly contiguous with the Designated Village Center and Village Residential Districts.

All wastewater treatment in the study area is accomplished in septic systems. There is no municipal wastewater management. In 2014, the town introduced a Wastewater Loan program which has resulted in five wastewater system upgrades.

The purpose of this current study is to evaluate the need for and feasibility of providing wastewater service and water service to the communities in the service area identified above.

Engineer's scope of services shall include:

Task 1: Preliminary Research

DuBois & King, Inc., (D&K) will research on-line state databases for existing wastewater permitting within the service area. Permits issued since 2009 will be tabulated and added to the list prepared in the January 25, 2011 study. The permit records will be used to identify the addresses of newly-permitted wastewater systems and subsequently to update the study basemap (see Task 2).

D&K will also complete a peer review of the 2011 Assessment of Wastewater Options report prepared by Stone Environmental, Inc. and the August 2004 Facilities Plan prepared by Phelps Engineering, Inc. pertaining to wastewater disposal in Waitsfield.

Task 2: Review Existing Septic Conditions

D&K will develop a GIS basemap for the project using available information such as aerial imagery, Town parcel mapping, LiDAR survey information, USGS soil mapping, and GIS mapping of other layers such as drinking water well locations, wetlands, and floodways. It is assumed that an electronic copy of Figure 4 from the 2011 report will be provided to D&K in a format that is editable in GIS or CAD, for inclusion of the well locations, well shields and existing septic system mapping records in the basemap. No topographic survey or other fieldwork is included at this time.

On the basemap, D&K will map the potential wastewater service area for the study for Town review and concurrence.

Information from the State permitting records on septic systems that were permitted since 2009 will be incorporated into the basemap. For properties that do not have state permits, the Agency of Natural Resources' private wells database will be used to estimate the age of existing septic systems.

A narrative summary of septic system ages within the potential wastewater service area will be prepared along with the basemapping depicting approximate septic system locations and ages (where available).

Task 3: Soil Suitability and Development Potential Review

D&K will review the suitability of land in the potential wastewater service area with respect to soils and other constraints for which GIS mapping is available, such as river corridors, wetlands, wildlife habitats, floodways, well shields, and other natural resources. Record drawings of the existing Town water system will be used to create a water distribution system GIS layer to be added to the basemap.

Town water system representatives will provide D&K with the physical addresses of all properties currently connected to the water system, and D&K will use that information to update the GIS mapping accordingly. D&K will analyze the water service area and evaluate the potential for development within the potential wastewater service area with the existing well shields removed. The analysis of development potential is not intended to be a full buildout analysis, but will include a review of existing lot sizes on lots with private wells compared to the minimum lot sizes allowable by current zoning.

Task 4: Needs Assessment

Using the basemap information, D&K will conduct a spatial analysis of the parcels in the potential wastewater service area to evaluate the suitability of the soil conditions for on-site septic systems and the area available for on-site septic systems (accounting for known environmental constraints and property line setbacks). This analysis will be used to identify lots that may have issues providing sufficient space for future replacement of their septic systems. The existing septic conditions identified in Task 2 will be used to show the remaining life expectancy of existing septic systems based

on industry-recognized typical lifespans. Areas of potential overlapping influence between existing water supply wells and septic systems will also be identified. The data will be used to estimate the wastewater needs (in gallons per day) for the potential wastewater service area to facilitate sizing of wastewater collection system piping and treatment and disposal system sizing. The existing wastewater needs will also be expressed in terms of Equivalent Residential Units (ERUs).

Task 5: Concept Plans

With input from potential funding agencies and the Town, D&K will complete a desktop/narrative review of the potential feasibility and suitability of using a Community Wastewater Loan Fund Program (similar to a previous program implemented by the Town) to meet the Town's water and wastewater needs and to support housing and commercial development in the study area.

Conceptual plans will be developed using the GIS basemap for the following water and wastewater alternatives:

- A centralized sewer system to serve the Irasville and Waitsfield Village Districts. This will be largely based on the previous collection system plans developed by Phelps Engineering, Inc., updated to reflect current conditions (including the existing water distribution system) and to reflect the wastewater needs identified in Task 4. The plan will include an updated proposed collection system, an in-ground leachfield at the Munn site, and treatment alternatives including approximate footprint of septic tanks, a sand filtration system (to double the disposal capacity), and tertiary treatment (to quintuple the disposal capacity).
- Decentralized and clustered wastewater system alternatives for wastewater capacity within the potential service area. The plans will include sewer collection system concepts for three to four decentralized and clustered system alternatives, potentially including new disposal fields in well-suited soils, adding pre-treatment to existing wastewater systems, and expanding existing leachfields.
- Potential opportunities to collocate water mains and services in conjunction with wastewater infrastructure. Locations of the potential water mains will be depicted on GIS mapping of the centralized and decentralized/clustered wastewater collection systems.
- Enabling the connection of properties not currently served to the water system to enable the use of the cleared land for on-site wastewater systems and to manage the water utility costs by increasing the customer base. Plans will illustrate the potential leachfield conceptual layouts on the newly-unencumbered land.

The GIS-based plans for these alternatives will be developed in sufficient detail to support conceptual-level cost opinions.

Task 6: Wetlands and Habitat Protection

D&K will review the existing wetland mapping provided by the Town and coordinate with Dori Barton to incorporate the mapping into the project basemap. Wildlife habitat GIS layers from the Vermont Open Geodata Portal will also be brought into the basemap.

A desktop Natural Resources review will be conducted using tools such as ANR's Natural Resource Atlas and Biofinder Mapper in order to identify important ecological features such as riparian areas, significant natural communities, Rare, Threatened, and Endangered species, and areas mapped as Highest Priority by Vermont Conservation Design. D&K's Field Naturalist will then conduct a site visit

during the growing season in order to map and describe valuable habitat features. This site review will include an assessment of the natural community and landscape scales, providing recommendations for maintaining an ecologically-functional landscape with consideration for climate change and land-use changes. The resulting memo will include recommendations for maintaining wetland integrity and enhancing wetland functionality in the project area, as well as recommendations for the use of native plants to increase the watershed's ecological resiliency and habitat value. Further evaluation of environmental considerations will be required in an Environmental Information Document if the Town chooses to move forward with the preferred alternative.

Task 7: Alternatives Analysis

Based on the conceptual plans developed in Task 5, D&K will provide an analysis of the capacity for each alternative to meet the existing water and wastewater needs identified in Task 4, and to accommodate new growth and development within the service area, as generally described below.

- The capacity of a centralized sewer system with a disposal field at the Munn site to serve the existing wastewater needs (to replace aging wastewater systems and provide capacity to replace leachfields with insufficient area or unsuitable soils for a complying wastewater system) in the Irasville and Waitsfield Village Districts, and to meet the community needs for growth and infill development. The analysis will also include the ability of the disposal field at the Munn site to meet the wastewater needs with filtration (which allows up to a two-fold increase in application rate) and with tertiary treatment (which potentially allows quintupling of the application rate).
- Based on State wastewater permitting records, decentralized and clustered wastewater system alternatives for wastewater capacity within the potential service area will be compared to the existing wastewater needs and capacity to support growth. This desktop analysis will include estimating the effect of potential wastewater pretreatment alternatives to increase existing leachfield capacities or downsize existing septic systems, as well as the potential to physically expand existing leachfields to provide additional wastewater disposal capacity. Currently undeveloped sites with well-suited soils for leachfields will also be considered in this analysis.
- The ability of lands currently encumbered by well shields to provide wastewater disposal capacity will be estimated and compared to the community's current and future wastewater needs.

Task 8: Cost Opinions

For each conceptual plan, D&K will develop conceptual-level Opinion of Probable Construction Costs (OPCC). A Project Cost Summary for each alternative will also be developed including the OPCC, contingency, and related allowances for costs such as design, permitting, bid, and construction phase engineering. The total project costs and potential funding scenarios will be summarized in terms of potential water and sewer user rates.

Conceptual-level OPCCs to be developed for the potential alternatives are expected to include:

- Updated costs for the centralized sewer system with the Munn site disposal field, and levels of treatment including septic tanks, sand filtration, and tertiary treatment.
- OPCCs for three to four decentralized and clustered system alternatives, potentially including new disposal fields in well-suited soils, adding pre-treatment to existing wastewater systems, and expanding existing leachfields.

- OPCCs for the combined approach of connecting properties to the water system and providing decentralized and clustered disposal sites on the newly-unencumbered land.

Task 9: Meetings

Meetings for the project are expected to include:

- A 30% completion committee meeting to review the research findings, basemapping, and assessment of the Town's needs.
- A 60% completion committee meeting to review the alternatives for addressing the Town's water and wastewater needs.
- A 90% completion meeting to review a draft feasibility study report.
- One public meeting to present the findings and recommendations of the feasibility study (potentially to be hosted by the Town Planning Commission).

Task 10: Summary Report

The Engineer will develop a Water and Wastewater Feasibility Study Report to compile the results and summarize the findings and recommendations from Tasks 1 through 9. The report can serve as the basis for a subsequent Preliminary Engineering Report if feasible alternatives are identified that the Town wishes to proceed with.

In accordance with funding agency requirements, the feasibility study report will include the first five sections of a Preliminary Engineering Report, which includes:

- PROJECT PLANNING
 - Location
 - Environmental Resources Present
 - Population Trends
 - Community Engagement
- EXISTING FACILITIES
 - Location Map
 - History
 - Condition of Existing Facilities
 - Financial Status of any Existing Facilities
 - Water/Energy/Waste Audits
- NEED FOR PROJECT
 - Health, Sanitation, and Security
 - Aging Infrastructure
 - Reasonable Growth
- ALTERNATIVES CONSIDERED
 - Description
 - Design Criteria
 - Map
 - Environmental Impacts
 - Land Requirements

- f. Potential Construction Problems
- g. Sustainability Considerations
 - i. Water and Energy Efficiency
 - ii. Green Infrastructure
 - iii. Other
- h. Cost Estimates

5. SELECTION OF AN ALTERNATIVE

- a. Life Cycle Cost Analysis
- b. Non-Monetary Factors

As such, if the Town elects to move forward with a Preliminary Engineering Report (PER) for the preferred alternative, the feasibility study can be appended to include the preliminary project design, project schedule, permit requirements, sustainability considerations, total OPCC, and annual operating budget. These services are not included in the current scope of work.

The Engineer will submit one (1) printed copy and an electronic copy of the draft report to OWNER and an electronic copy to the VT DEC for review. After addressing comments on the draft report, the Engineer will provide one (1) hard copy and an electronic copy of the final report to the OWNER and an electronic copy to the VT DEC. The following GIS data will be developed in the feasibility study and the Geodata will be provided to the Town at the completion of the feasibility study report:

- Existing water distribution system piping.
- Lots connected to the existing water system.
- Lots with existing State-permitted leachfields.
- Other data derivatives generated in the GIS analysis as requested by the Town.

Engineer's services under the Study and Report Phase will be considered complete on the date when Engineer has delivered to the OWNER the final Reports.

Preliminary Design Phase

Preliminary Design Phase Services are NOT PROVIDED, but can be incorporated via amendment.

Final Design Phase

Final Design Phase Services are NOT PROVIDED, but can be incorporated via amendment.

Bidding or ~~Negotiating~~ Phase

Bidding Phase Services are NOT PROVIDED, but can be incorporated via amendment.

A1.05 Construction Phase

Construction Phase Services are NOT PROVIDED, but can be incorporated via amendment.

PART 2 – ADDITIONAL SERVICES

Additional Services are NOT PROVIDED, but can be incorporated via amendment.