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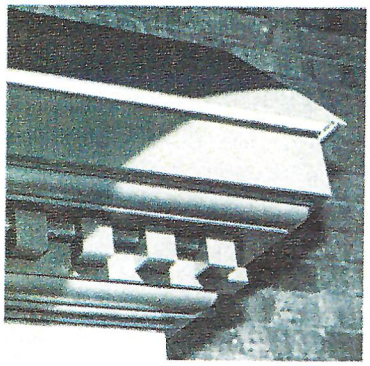

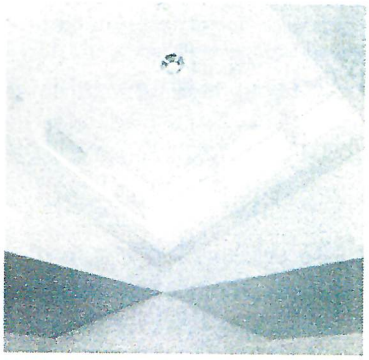

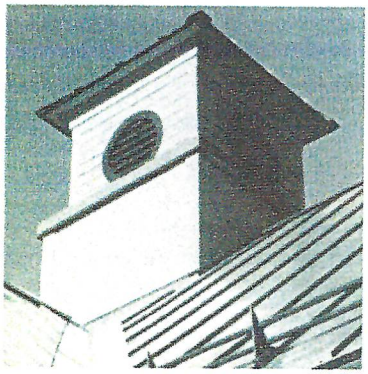

Wheelock Municipal Building

Wheelock, Vermont
Feasibility Study
October 3, 2014

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October 3, 2014

Mr. Stephen Amos, Selectman
Town of Wheelock
PO Box 1028
Lyndonville, Vermont 05851

Re: Town of Wheelock Municipal Facility

Dear Steve:

The following pages outline our findings regarding the Wheelock Municipal Building.

EHD was retained to prepare a design for a new combined Town Hall and Garage to serve the Town of Wheelock. The design was based on a program included in the 2012 meeting minutes from Ruggles Construction Consulting and sketches provided by Robert Smith. We developed a floor plan to be located on the adjoining parcel of land acquired by the Town for this project.

We retained the services of Don Marsh of Marsh Engineering to determine the appropriate systems for waste and water. After performing test pits on the site and in the area of the gazebo we determined that the high water table made an in-ground waste system unacceptable. A mound system is proposed for this project.

We met with you and other members of the committee on July 17 to review our findings. We also discussed preliminary pricing. At that time, we suggested a budget of approximately 1.2 to 1.5 million. This was contrasted with the $850,000 figure provided by Ruggco Inc for a previous design that included an addition to the existing Town Hall and a stand-alone Garage. We modified our design according to the comments received at the July 17 meeting.

After reviewing the Ruggco project we provided a comparison of the two projects and determined their relative costs were similar. However, the programs were decidedly different. We have included that comparison in this report.

In order to determine cost, we prepared a Scope of Work which generally outlines the necessary work to construct the project. We have assumed as part of the project that the design would comply with the requirements of the Vermont Commercial Energy Code (or better), the IBC 2012, the NFPA 101 – 2012 and the Vermont Access Rules and ADA. Other codes will be required including water supply and waste water regulations, the NFPA requirements for Municipal Records Storage, and the requirements for Repair Garages.

Our analysis of cost is based on two recent projects – one estimated by EHD and one public bid project that was similar. We also used a comparable RS Means analysis. While we find Means lacking in its relevance to local conditions we do find it useful as an order of magnitude comparison. In addition, we provided a Preliminary Scope of Work to Ruggco to prepare a schematic estimate. In comparing the several sources our projected costs were found to be fairly consistent. This formed the

basis of the order of magnitude cost numbers we have provided. Of course, these numbers assume construction in the spring of 2015 and do not contain any escalation.

To the suggested cost of construction we have added a contingency of 10% to offset any undiscovered conditions. This will be particularly important on this site where the potential for difficult subsoil conditions is high. We have also included a Development Expense line item to include such things as permit fees, professional fees, furniture, equipment, testing, special inspections, insurances, legal expenses and the like. The bottom line represents the Total Proposed Project Cost.

I understand from reading notes from a 2012 town meeting that there is little support for a building of a million dollars or more. In order to reduce the cost of this building a reduction in program or size requirements would need to be made.

Consideration could be given to utilizing the existing building for the Town Hall and either adding on or constructing a stand-alone garage. The issue with this is, as it typically is, is that the existing building does not appear to have been improved much in the last several years. The code implications would be significant – especially if the need for a 200 person assembly space were maintained. We would expect to perform a complete engineering and code review of the building before ultimately recommending that approach.

Either way, in order to get the cost down the program will need to be reduced.

If you have any questions about this letter or the attachments, please don't hesitate to contact me.

Sincerely,

Roy Ward, AIA
Principal

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Associates, PLLC
Architects

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Preliminary Scope of Work
New Building **September 15, 2014**

Town of Wheelock Municipal Building
Wheelock, Vermont

First Floor (not including porch): ..... 8,798 gsf
Total: ..... 8,960 gsf

Division 03 **Concrete**

- Provide continuous footings sized to meet soil loading capabilities to 5'-0" below grade.
- Retaining wall/foundation wall at north side where building is below grade.
- Provide fabric wrapped, gravel encased foundation drainage continuous around perimeter of footings.
- 8" thick concrete foundation walls.
- Provide reinforcing to meet code.
- Provide Stego Wrap 15 mil Class A vapor barrier with taped joints.
- Provide 6" concrete slab – reinforce or use fiber-cement sufficient to meet wheel loads.
- Provide housekeeping slabs for mechanical equipment.

Exterior:

- Provide 4" concrete sidewalk at porch.
- Provide ramp sidewalk as required (to be determined once site plan is done and final grades are configured).
- Provide 8' concrete apron slab at Garage.
- Full foundation walls under 5' x 5' exit slabs.

Division 04 **Masonry**

- 8" CMU (4) hour rated wall around vault.

Division 05 **Metals**

- Channel frames around overhead doors.
- 6" diam. bollards outside overhead doors.
- Provide miscellaneous metals including lintels and angles required for miscellaneous framing and penetrations.

Division 06 **Wood, Plastic & Composites**

- Provide plastic laminate counter and cabinets in Kitchen.
- Provide plastic laminate counter for transaction window.
- Provide shelving in Janitor and storage closets.
- Provide all interior trim including, but not limited to, door casings, baseboards, window casings, etc.
- Provide blocking in walls behind all wall mounted items including but not limited to door stops, cabinets, casework, grab bars, etc.
- Provide backer board for installation of electrical panels and telephone panels.
- Provide wood framing: 2x6 exterior walls, 2x4 interior walls except as noted.
- Provide strapping over interior cmu at vault.

Exterior:

- Provide column enclosures and trim on porch using non-combustible materials (pvc or Azek materials – or equivalent).
- Provide zip sheathing over exterior of the building. Tape all joints.
- Provide strapping over exterior insulation.
- Provide trusses for both roofs designed to meet snow loading and collateral load requirements.
- Provide (3) cupolas as shown - for venting.

Division 07 **Thermal and Moisture Protection**

General:

- Provide 2" (minimum R-10) rigid insulation from footing to bottom chord of truss.
- Install continuous 60 mil spray applied waterproofing to the outside of the foundation/ retaining wall.
- Provide minimum 2 ½" closed cell urethane spray foam in exterior wall stud bays.
- Provide 14" minimum loose fill blown-in cellulose insulation in ceiling with vapor barrier below.
- Provide air sealing of all joints and exterior perimeter conditions. (To be specified). Assure that air barrier around perimeter of the building is continuous (code requirement)
- Provide blower door testing to meet Energy Code requirements.
- Provide continuous ice and water shield over roof sheathing.
- Provide Architectural shingles over roof with ridge vents.
- Provide flashing at all transitions, including edge trims, etc.
- Provide fiber cement siding over the exterior with Azek or pvc trim.

Division 08 **Glass and Glazings/Openings**

- Provide 1 ¾" thick solid core wood doors in hollow metal frames with cylindrical lever lockset.
- Provide 1 hour rated doors from Town Garage into Mechanical Room and Road Foreman.
- Provide 2 hour rated doors from Town Garage into lobby and from Road Foreman into Corridor.
- Provide 1 hour rated door into Janitor Closet.
- Provide galvanized hollow metal doors and frames at exterior door openings.
- Provide 2" insulated metal overhead doors with glass lights as shown.
- Provide vault door into Vault.
- Provide Marvin Integrity all-Ultrex double hung windows.
- Provide transaction window at lobby into town clerk office similar to CR Lawrence. Provide bottom track and locks.

Division 09 **Finishes**

- Provide sheet linoleum and rubber base in Town Hall, Kitchen, Washrooms, Storage, Janitor Closet, Lister's Office, Town Clerk's office, Vault, lobby and Road Foreman office.
- Provide sealed concrete in mechanical room, town garage, shower and washroom off garage.
- Provide walk off mat in vestibule.
- Provide 5/8" drywall on wood studs throughout.
- Paint all walls.
- One hour rated walls are required around Janitor Closet.
- Two hour rated wall required to separate Town Garage and Office area.
- Provide furring channels and drywall around cmu vault enclosure.
- Provide acoustic ceiling tile in all Office areas below drywall.

Division 10 **Specialties**

- Provide allowance for signage (assume $1,000)
- Provide grab bars, soap and paper towel dispensers, trap wrap, toilet paper dispensers, sanitary napkin disposals and other toilet accessories as needed.
- Provide mirrors in washrooms.
- Provide fire extinguishers in accordance with NFPA 10.

Division 11 **Equipment**
- Provide installation of owner purchased equipment including but not limited to the following:
  - Kitchen equipment – range, range hood (residential – ducted), appliances (coordinate with plumbing and electrical requirements)

Division 12 **Furnishings**
- No Work

Division 13 **Special Construction**
- No Work

Division 14 **Conveying Equipment**
- No Work

Division 21 **Fire Suppression**
- No Work

Division 22 **Plumbing**
- Coordinate and install all plumbing required for all fixtures as indicated on drawings.
- Provide accessible fixtures for all bathrooms.
- Provide required floor drain in mechanical room.
- Provide trench drain in garage as indicated on drawings.
- Provide grease/oil/sand separator.

Division 23 **Heating, Ventilation & Air Conditioning**
- Provide cabinet unit heater in entry vestibule.
- Provide central air, heat and ventilation in office side.
- Provide unit heaters in garage.
- Provide exhaust for kitchen and washrooms with heat recovery unit.
- Provide ventilation in garage with CO censors.

Division 26 **Electrical**
Note: lighting distribution must meet energy code.
- Provide new service – minimum 200 amp. Confirm with loads.
- Provide metering.
- Provide power and data distribution
- Provide LED fixtures – recessed in office areas, suspended LED fixtures in garage.
- Provide surface mounted UL rated fixtures under canopy ceiling.
- Provide emergency lighting and illuminated exit signs.
- Provide hardwired/battery back-up smoke/CO detectors

Division 31 **Earthwork**
- Clear site as needed.
- Remove existing concrete pads and asphalt pads.
- Cut back bank as required and indicated on drawings.
- Provide drainage for site including fdn drains and new drive culvert to be installed.
- Provide erosion and silt control.
- Excavate undesirable soils to approximately 28" deep. Dispose unsuitable materials off site.
- Place 18" of compacted bank run gravel and 6" of ¾" crushed gravel in all areas to be paved.

Division 32 **Exterior Improvements**
- Pave site (2 ½" of type 2 and 1 ½" of type 3 pavement) and stripe parking areas in compliance with accessibility requirements
- Provide granite or concrete curbing as required (to be determined)
- Provide signage and painted arrows for traffic direction and accessibility identification.

Division 33 **Utilities**

- Provide new power to site.
- Provide new water service to site. Coordinate size with loads.
- Provide new mound septic system and connections including but not limited to pumping. (Carry additional $3,000 for pump timer controls).

Permits

- Local Permitting – by Owner
- Fire Prevention permit – by Owner
- Operational Stormwater permit – by Owner
- Construction Stormwater permit – by Owner
- Waste Water and Waste Supply permit – by Owner
- VTrans Access permit (if required) – by Owner
- Electrical permit - by General Contractor
- Mechanical permit - by General Contractor

EHDanson Associates, PLLC
Tel: (802) 748-5239

Wheelock Municipal Building - Order of Magnitude Estimate

Recent Cost Examples

Fire Station:	5,800 sf	2013 cost estimate
	$863,000 without site work	
	$149 per square foot	
Town Garage:	7,085 sf	Recent Bid
	$924,000 - $1,100,000 Bid Range	
	$130 - $155 per square foot range	

RS Means Construction Cost Estimator: (not including site cost)

1 Story Fire Station:	**8,800** sf	
Low Range:	$104 sf	$915,200
Mid Range	$116 sf	$1,020,800
High Range	$145 sf	$1,276,000

Wheelock Municipal Building

Design dated 09/15/2014	8,798 sf		
Schematic Est by Ruggco (range of $140 - $150/sf)		$145	$1,275,710
Order of Magnitude SF Cost by EHD:			$1,222,420
Office:	4,089 sf	$155	$633,795
Garage:	4,709 sf	$125	$588,625

Estimated Construction Cost Subtotal:		**$1,250,000** average
Contingency:	10%	$125,000
Subtotal:		**$1,375,000**
Development Expenses (average estimate):	15%	$206,250
Estimated Project Cost Total:		**$1,581,250**

Development Expenses will include furnishing, equipment, permit fees, professional fees, all risk insurance, miscellaneous expenses, legal fees, etc.

Note: These costs are not exact and are intended only as a preliminary guide to possible project cost. Actual cost may vary greatly depending on many factors.

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July 22, 2014

Mr. Stephen Amos, Selectman
Town of Wheelock
PO Box 352
Lyndonville, Vermont 05851

Re: Town of Wheelock Municipal Facility

Dear Steve:

Thank you for taking the time to meet with Don Marsh and me last week to discuss your new facility. As we completed our discussion I reviewed the potential costs based on a preliminary evaluation of average costs around the country for similar projects. While those numbers in no way reflect a hard cost estimate based on a real take off they do represent an order of magnitude that is reasonable.

From our meeting I understood that our proposal was provided as a comparison to the proposal previously submitted by Ruggco. Since our meeting I have also reviewed Ruggco's proposal from January 2012 in order to determine the value of the comparison. From that proposal I developed a program analysis (attached) and would make the following observations.

Ruggco's proposal provided an addition to the existing town hall and a separate building for the town garage. Because of the elimination of the fire department bay I have excluded that in their proposal. Their design was based on a program statement that did not include a 200 person assembly space but did include a small board room in its place. Consequently, they have only included one bathroom and a smaller kitchenette. There is also no mechanical room so we must assume the heat will be provided off the existing system. Any construction within the existing building would likely trigger substantial code compliance improvements that have not been addressed in the proposal.

As a result of the Ruggco design being based on a lesser program the building is significantly smaller. An individual space comparison is attached for your convenience.

After doing some simple math based on average square foot costs we found that the overall building construction cost for Ruggco's proposal for both buildings would be in the range of $149 per square foot. Our recent proposal has a combined building value of approximately $156 per square foot. This is a realistic escalation since 2012.

I understand from reading notes from a 2012 town meeting that there is little support for a building of a million dollars. In order to reduce the cost of this building a reduction in program or size requirements would need to be made. Another alternative would be to consider the existing building as an opportunity to renovate (if it is structurally sound with adequate infrastructure) and possibly add on. The program would need to be vastly reduced for any addition in order to accommodate a modest budget.

If you have any questions about this letter or the attached program analysis, please let me know.

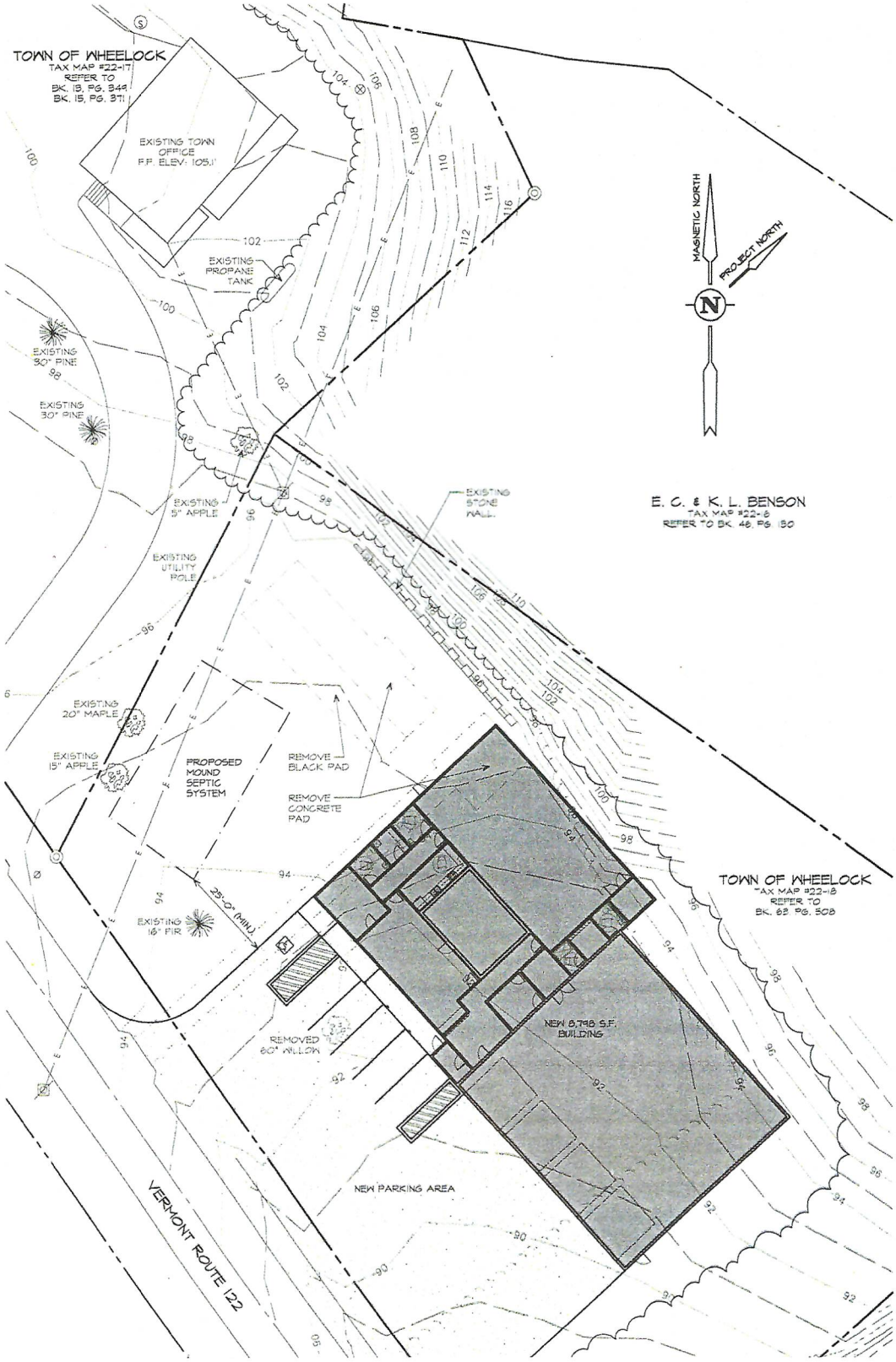
Sincerely,

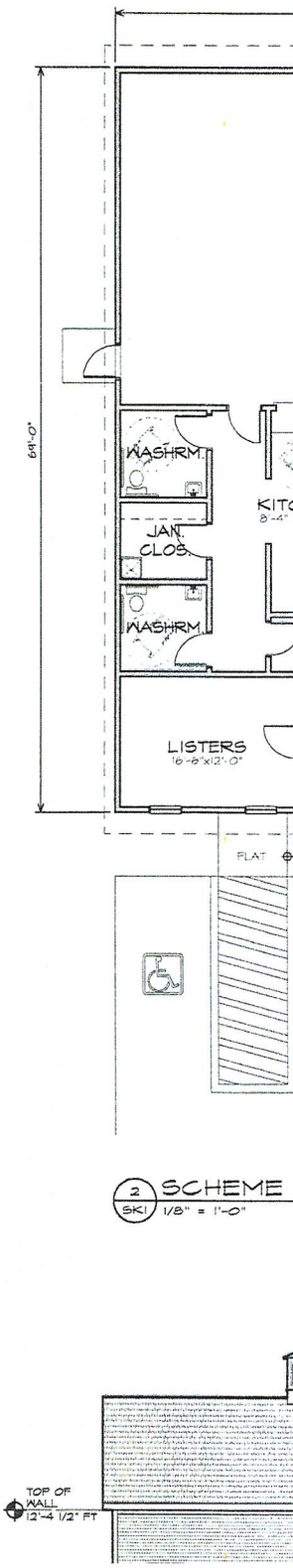
Roy Ward

Roy Ward, AIA
Principal

Wheelock Municipal Facility – Program Analysis

	Ruggco Proposal	EHD Proposal	2012 Program
Municipal Office:	Addition	Combined	
Space:			
Board Room	425 sf	0	0
Assembly (200 pers)	0	1700 sf (200 pers)	0
Chair Storage	0	77 sf	0
Vault	342 sf	411 sf	400 sf
Town Clerk	274 sf	612 sf	468 sf
Listers	99 sf	198 sf	196 sf
Kitchen	68 sf	145 sf	128 sf
Washrooms	48 sf (no longer meets code) – one room	128 sf (2 rooms)	64 sf (one room – not adequate for assembly)
Entry	42 sf	200 sf (serves as break out space for assembly)	0
Mechanical	0	114 sf	0
Subtotal	1298 sf	3585 sf	
Common areas	454 sf (26%)	900 sf (20%)	
Total:	1752 sf	4485 sf	1800 – 1900 sf
Garage:	3988 sf (no fire bay)	4436 sf	4000 sf
Total Combined Area	**5740 sf**	**8921 sf**	**5800 – 5900 sf**





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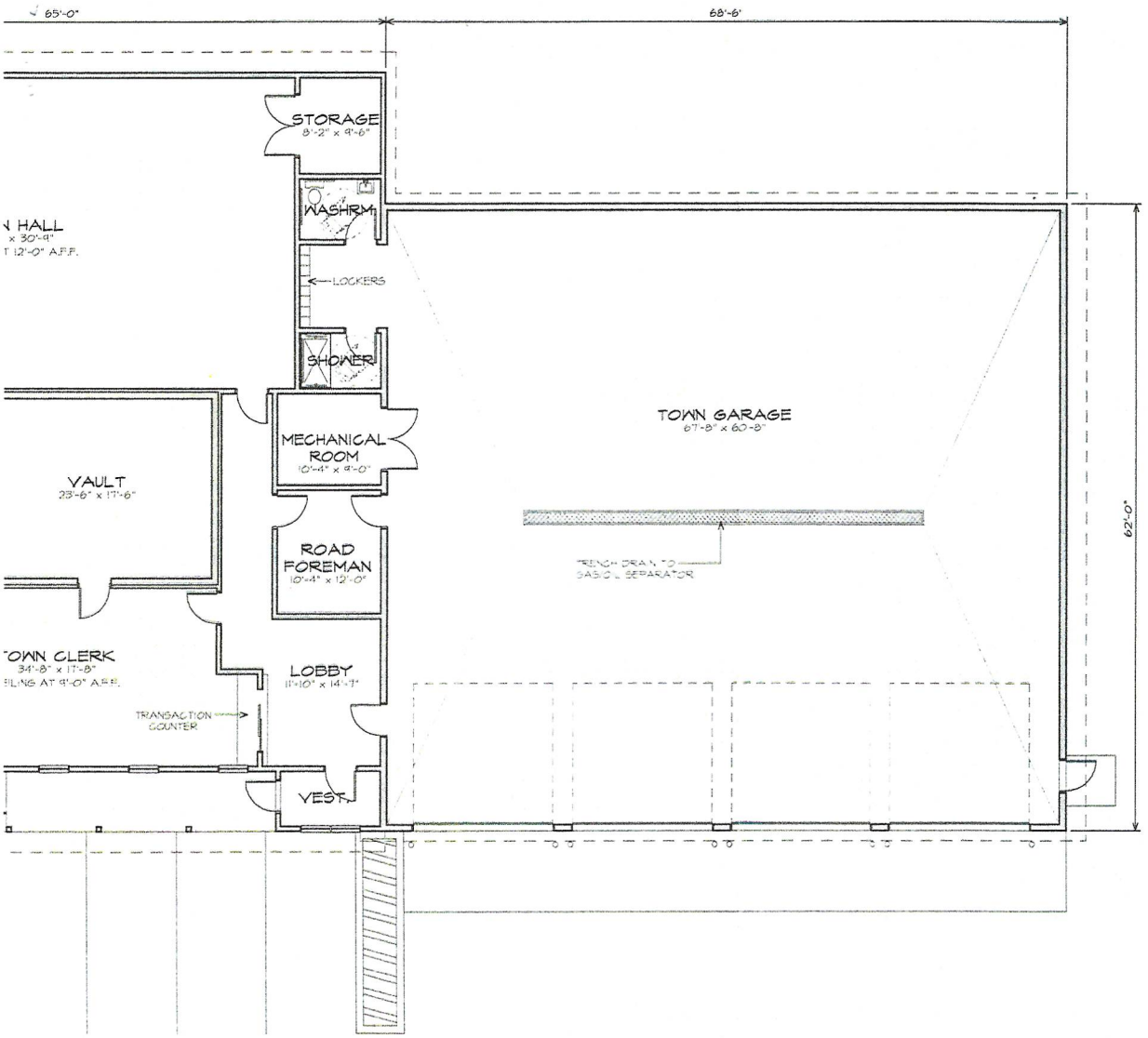

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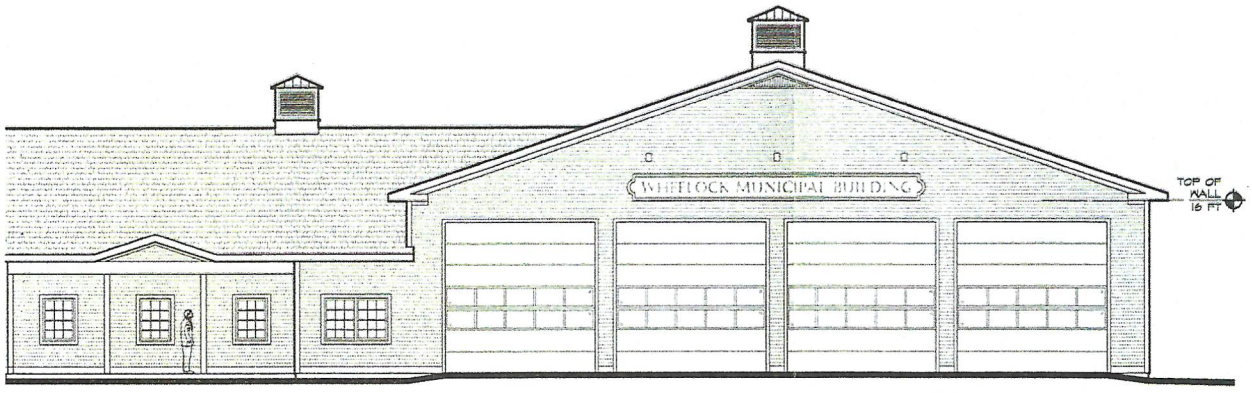

UTH ELEVATION

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PROPOSED NEW FACILITY for:

TOWN of WHEELOCK
MUNICIPAL BUILDING

VERMONT ROUTE 122
WHEELOCK, VERMONT

SCALE	AS NOTED
DATE	9/15/2014
DRAWN BY	ADFN

NUMBER	DATE	REVISION

DRAWING NAME
SCHEME "A" SITE PLAN,
FLOOR PLAN & ELEVATION

SHEET NUMBER

SK1

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LETTER OF TRANSMITTAL

To: **Town of Wheelock**
921 Burroughs Road
Wheelock, VT 05851-8633

Date: October 8, 2014
Attn: Stephen Amos
Re: **Municipal Facility**

WE ARE SENDING YOU: Originals

VIA: Mailed

COPIES	DATE	NUMBER	DESCRIPTION
1	10/02/2014	1	Feasibility Study

These are transmitted as: N/A

Comments:

CC: _____ Signed: Roy Ward

If enclosures are not as noted, kindly notify us at once.