Twin Valley High School

Feasibility & Cost Estimate Report | *Wilmington, VT*

May 2016

Prepared for:

- TOWN OF WILMINGTON
  SCOTT MURPHY, TOWN MANAGER
  PO BOX 217
  WILMINGTON, VT 05363

Submitted by:

- Stevens & Associates, P.C.
- Jeffry D. Glassberg Real Estate Development Services
- John F. Penney Consulting Services, P.C.
- DEW Construction Corp

PROJECT #15-088

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I. Summary

A. Executive Summary

After the Wilmington & Whitingham voters approved the relocation of their high school students to Whitingham, the former Twin Valley High School building in Wilmington became vacant. Presently it remains vacant except for the administrative staff of The Windham Southwest Supervisory Union (WSSU), who rent a small portion of the building. There has been interest from several non-profit organizations for leasing space in the former building as well as the regional hospital's plan to build a clinic to be part of the campus. The Town of Wilmington hired Stevens & Associates to complete a feasibility study for determining if the building can be re-purposed into a self-sustaining, economically feasible enterprise.

Additional materials and information was made available by Breadloaf Architects and an active volunteer group, The Old School Enrichment Committee. A draft form of the best use of the building was compiled by Breadloaf Architects. Information and financial projections were gathered by The Old School Enrichment Committee to help determine the feasibility of the project.

The former Twin Valley High School is a sizable building with classrooms, cafeteria and gymnasium spaces. The original building is historic and it has ADA accessibility improvements that were made over the years. The building is located close to downtown but has little to no visibility on the main commercial street. The street itself is poorly defined with a large blank retaining wall at the entrance, the north side of the street a series of garage buildings, and the corner terminates into a large open parking lot. The building does look out over athletic fields and a brook to the south.

Purpose:

The purpose of the feasibility study is to identify a redevelopment strategy that leverages the former Twin Valley High School to enhance the Town's quality of life, improve the Town's economy, and understand any implications to the Town Grand List.

Needs:

The building use should add pedestrian activity to the town center. Ideally its uses should provide critical services, cultural amenities or recreational amenities. The project should enhance the character of the neighborhood.

- Activate and expand Downtown
- Provide critical services
- Offer cultural and recreational amenities
- Enhance the street and public space

The building can improve the economy by facilitating job creation and/or by providing housing for residents to shop downtown.

- Job creation
- Residents

The building can impact the town property taxes by being sold and adding to the grand list; by providing net rental income; or by the town assuming responsibility for operating costs and capital improvements. To create a net operating income the building will need to be sufficiently occupied with tenants capable of paying rents that can cover the fit up cost, operating costs and ongoing capital needs.

- Private Ownership
- Market Absorption/Demand
- Construction Subsidies
- Operating Cost
- Capital Need Cost

This project can cover building expenses with a modest rental rate of $12/sf. The funding to be provided initially by the WSWSU, the Town of Wilmington for an emergency shelter and a town meeting space, Twin Valley budgeted operational costs, and a long term mortgage of property. The mortgage opportunities include:

- VT Economic Development Authority (VEDA) Small Business Development Program
- US Dept. of Agriculture (USDA) Community Facility loan fixed for 30 years
- Wilmington Revolving Loan Fund $20k max. with low interest rate

Other funding sources would include:

- Community Development Block Grant for Demolition of the 1900's Building
- Economic Development Administration
- USDA Community Facilities Grant – Kitchen
- Wilmington Fund VT raised $13,500 for renovations

B. Programming

A shrinking school enrollment, concerns for quality education, tight budgets, and upward pressure on property taxes, led Wilmington to the difficult decision to merge their school district with Whitingham, and to close the Twin Valley High School. Faced with changing demographics and an unsustainable growth in education funding, the Vermont Legislature recently passed Act 46, creating incentives for school consolidation. Closing school buildings is one of the most difficult decisions local leaders and communities face. Once school consolidation takes place, communities such as Wilmington are faced with the challenge of repurposing former school buildings. The Twin Valley School is a community asset that cannot be left vacant posing security and safety risks, along with unforeseen liabilities to the town.

In completing this feasibility study and report, we have built upon the prior work of others, in a deliberate, inclusive process involving as many sectors of the community as possible. A number of options have been developed, with the pros and cons considered for each. Wilmington's situation is not unique, as other communities across the country have repurposed school facilities for a variety of uses including: municipal centers, medical centers, work force and senior housing, government offices, business incubators and office space. All of these uses were considered in light of the current needs and real estate market in Wilmington

Breadloaf's study established current uses and proposed uses for the building. The current and committed tenants for the re-purposed building are:

- Deerfield Valley Health Center
- Windham Southwest Supervisory Union
- State Social Service Agencies.

The proposed uses include:

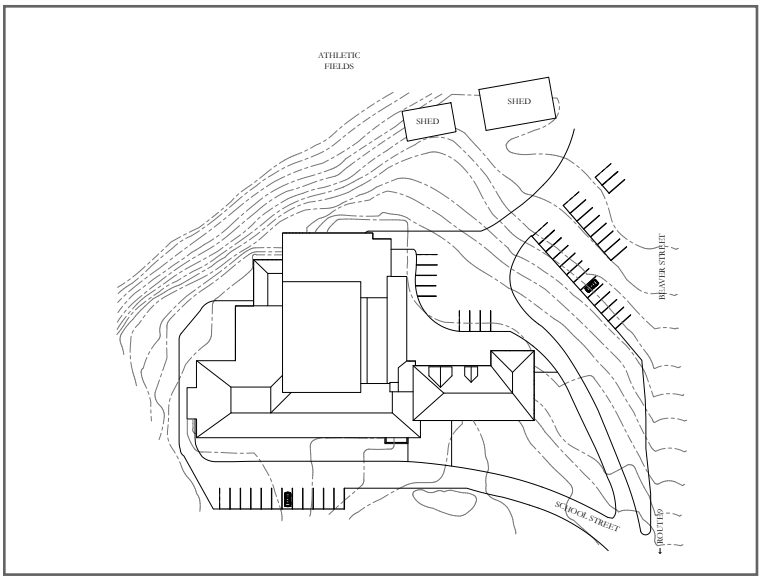
- Private / Government offices
- Small business incubator
- Community center
- Community groups
- Recreational use on site

Other building uses based on the market demand that would benefit the town were brought up at meetings with the Old School Enrichment Committee, the Wilmington School Board, the Twin Valley School board, Town Hall employees, the WSSU, and the Police Chief. Currently the Wilmington Town Hall and Police Station are located in the flood plain and are in need of more space. There is a demand for senior housing and mid - priced apartments, offices, child care, adult day care, and a fitness center.

II. Alternatives (Advantages / Disadvantages)

The focus of the alternatives study was to investigate various uses for the re-purposed high school. We strategized the layout of uses for the building in five different alternatives.

No Build Alternative

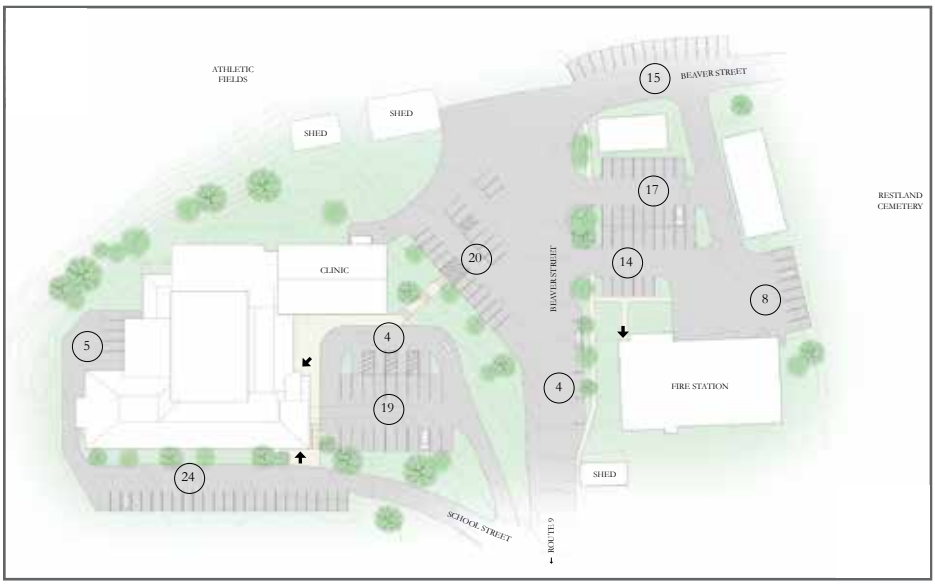


Most of the structure can be utilized as-is including the gymnasium, playing fields, classrooms and building fiber optic hub. Sections of the old school building would need to be renovated. Our preliminary capital improvements schedule lists the type of work and estimated costs associated with each. The capital improvements schedule is in the appendices section under A. No Build Alternative.

Advantages / Disadvantages

- The No Build Alternative is a base point of reference
- New uses, other than educational, would trigger various building and fire life-safety code upgrades

ALTERNATIVE A
Breadloaf's Old School Enrichment Center



For this alternative the 1900s portion of the building would be demolished. The remaining newer section has approximately 16,000SF of rentable space not including the gymnasium, locker rooms, mechanical rooms, foyers, and circulation. The total square footage is approximately 30,000 SF which if rented a 100% capacity at $12/SF would bring revenues of $192,000.

Currently the WSSU rents 2717 sq ft for $32,600 annually. According to WSSU, the operating expenses for the building from 7/1/14-6/30/15 were approximately $136,000. The building was primarily vacant but was required to be heated to prevent sprinkler systems and pipes from freezing.

Revenues not included are Gymnasium rentals, school rents, town use for emergency shelter, voting etc, special events. Also not included is land lease for SVMC. We also expect that SVMC would pay for part of the exterior building and site maintenance. A clinic for the Deerfield Valley Health Center would be built on site.

Advantages

- Demolition of the old school frees up space for an on-site medical clinic.
- The Community / Recreation center can serve as an emergency shelter out side of the flood plain.
- Interested tenants have been located for the majority of the rental spaces.

- Town ownership with rental income –vs- Private ownership with Community Center leased to the town.

Disadvantages

- The hospital strongly prefers a free standing medical clinic across the street and have reservation about this siting.
- A new façade will need to be designed when the old school is demolished.

ALTERNATIVE B
Rentable & Community Building

For this alternative the 1900s portion of the building will remain. This allows for more spaces available for rent. A portion of the building would be demolished to allow for parking and a road to surround the building. The community / recreation center would occupy the old gymnasium. Town Hall and the Police station would relocate to the renovated building. The clinic would be built across the street.

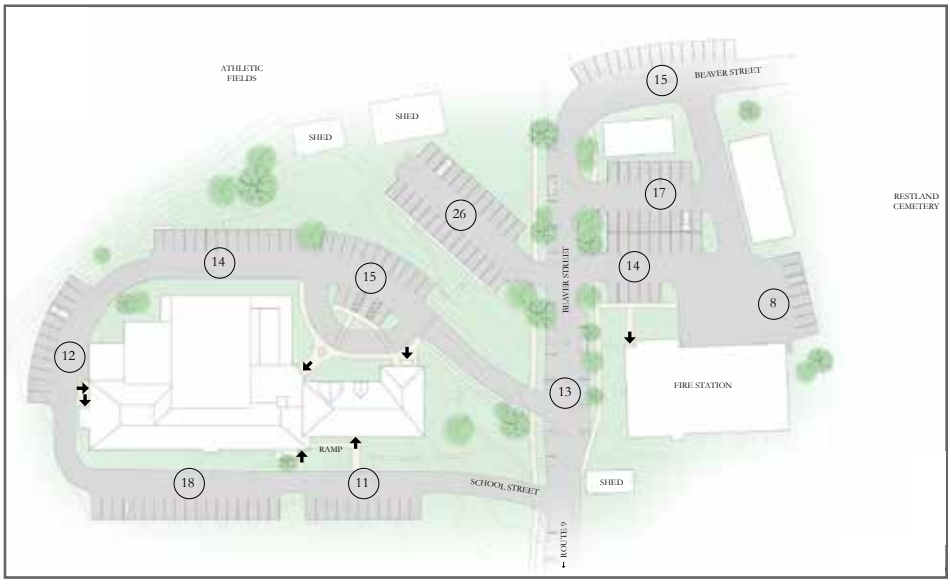
Advantages

- The hospital's strong preference for a free standing medical center is satisfied.
- The Community / Recreation center can serve as an emergency shelter outside of the flood plain.
- The historic entry portico is restored to the old school service as the town hall entry and enhancing street presence.
- The town hall and police station are afforded increased floor area and are located outside of the flood plain.
- A new entry atrium at the lower level creates a light filled entry with vehicular drop off.
- The building currently serving as the town hall and police station would be sold and return to the grand list.
- The town would take ownership and negotiate a land lease to the hospital for the medical clinic.

Disadvantages

- Interested tenants have been located for much of the rental spaces, with the remaining office space potentially available for human service organizations.

ALTERNATIVE C
Residential & Community Building



For this alternative the 1900s portion of the building will remain. A portion of the building would be demolished to allow for parking and a road to surround the building. The community / recreation center would occupy the old gymnasium. Town Hall and the Police station would relocate to the renovated building. The upper floors would be renovated for residences. The fire station would potentially be located across the street.

Advantages

- The Community / Recreation center can serve as an emergency shelter outside of the flood plain.
- The historic entry portico is restored to the old school service as the town hall entry and enhancing street presence.
- A mix of studio, one, and two bedroom apartments would target either seniors of work force housing for the Hermitage at midrange market rates.
- The town hall and police station are afforded increased floor area and are located outside of the flood plain.
- A new entry atrium at the lower level creates a light filled entry with vehicular drop off.
- The building would be divided into two condominiums with the town taking ownership of the ground floor, and a private entity owning and managing the apartments at the upper levels. The town would

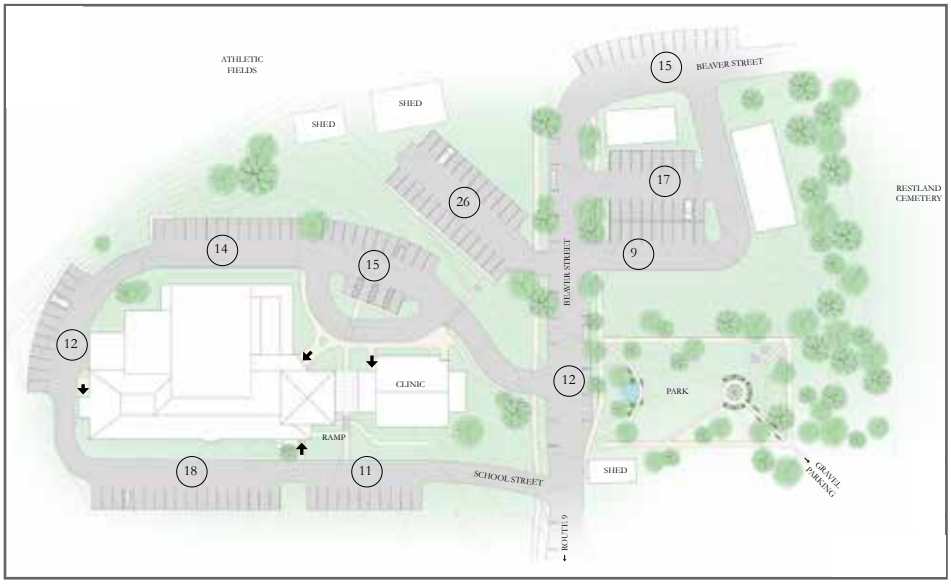
negotiate and land lease to the hospital for the medical center.

- The town would retain ownership of the existing town hall and rent a large portion to the Supervisory Union.

Disadvantages

- The Supervisory Union would need to relocate.

ALTERNATIVE D
Municipal Building



For this alternative the building would be the hub for all municipal entities. The 1900s portion would be demolished and a small addition would be constructed to allow for Town Hall to occupy that space of the ground and first floor. There will be a location for a freestanding clinic on site. A community park would be located across the street.

Advantages

- The hospital's strong preference for a free standing medical center is satisfied.
- The Community / Recreation center can serve as an emergency shelter outside of the flood plain.
- Interested tenants have been located for all of the rental spaces.
- The town hall and police station are afforded increased floor area and are located outside of the flood plain.
- The building currently serving as the town hall and police station would be sold and return to the grand list.
- A new entry atrium at the lower level creates a light filled entry with vehicular drop off.

Disadvantages

- The ability for future expansion of the free standing medical center is not met.
- A new façade will need to be designed when the old school is demolished.

III. Appendices

A. No Build Alternative

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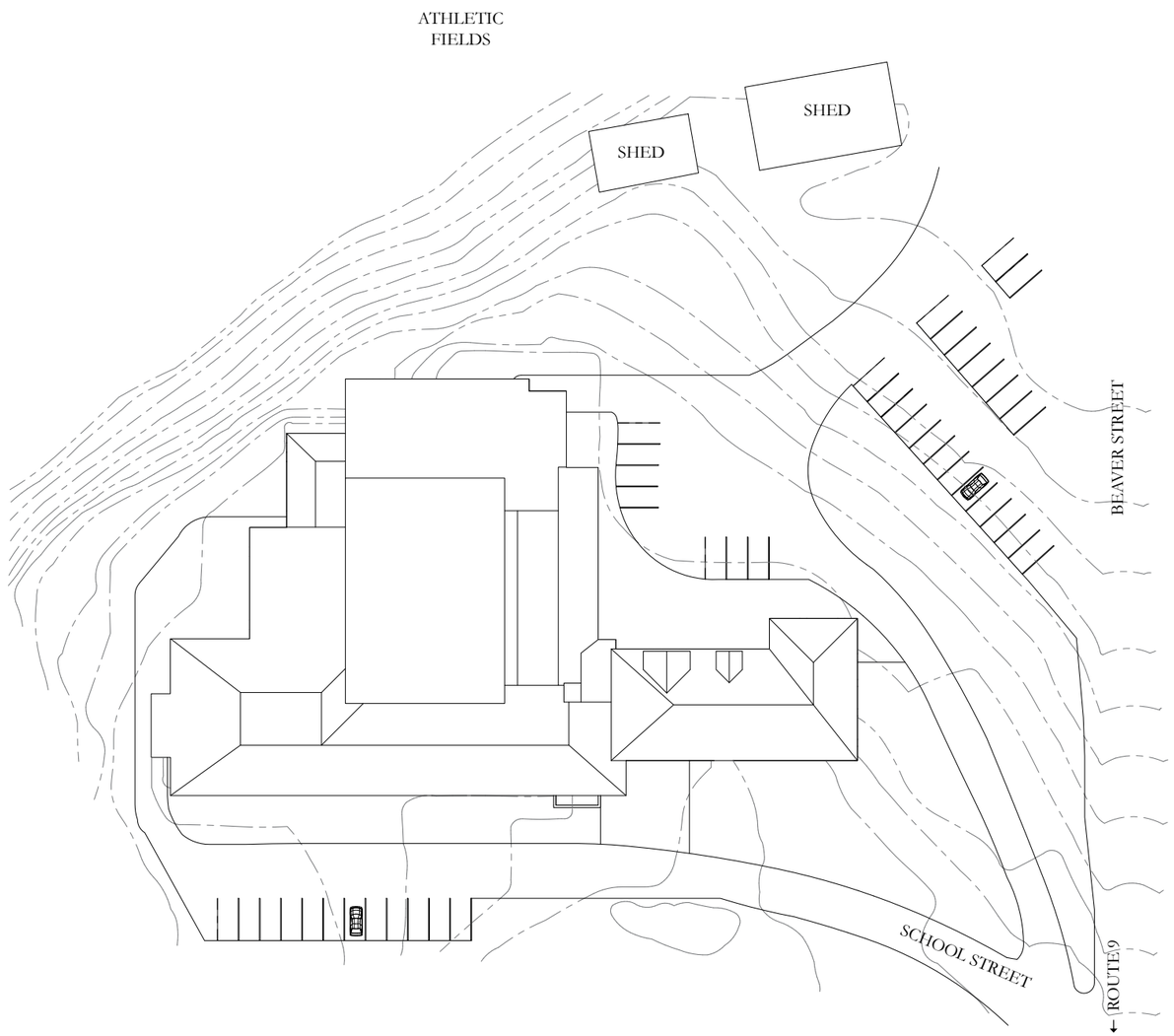
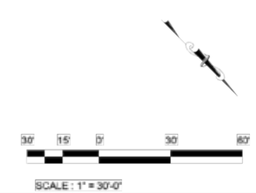
A. *No Build Alternative - Site Plan*





TWIN VALLEY | *Existing Site Plan*

AX-103
Date: MARCH 2016
Pro. No.: 15-088
Town of Wilmington

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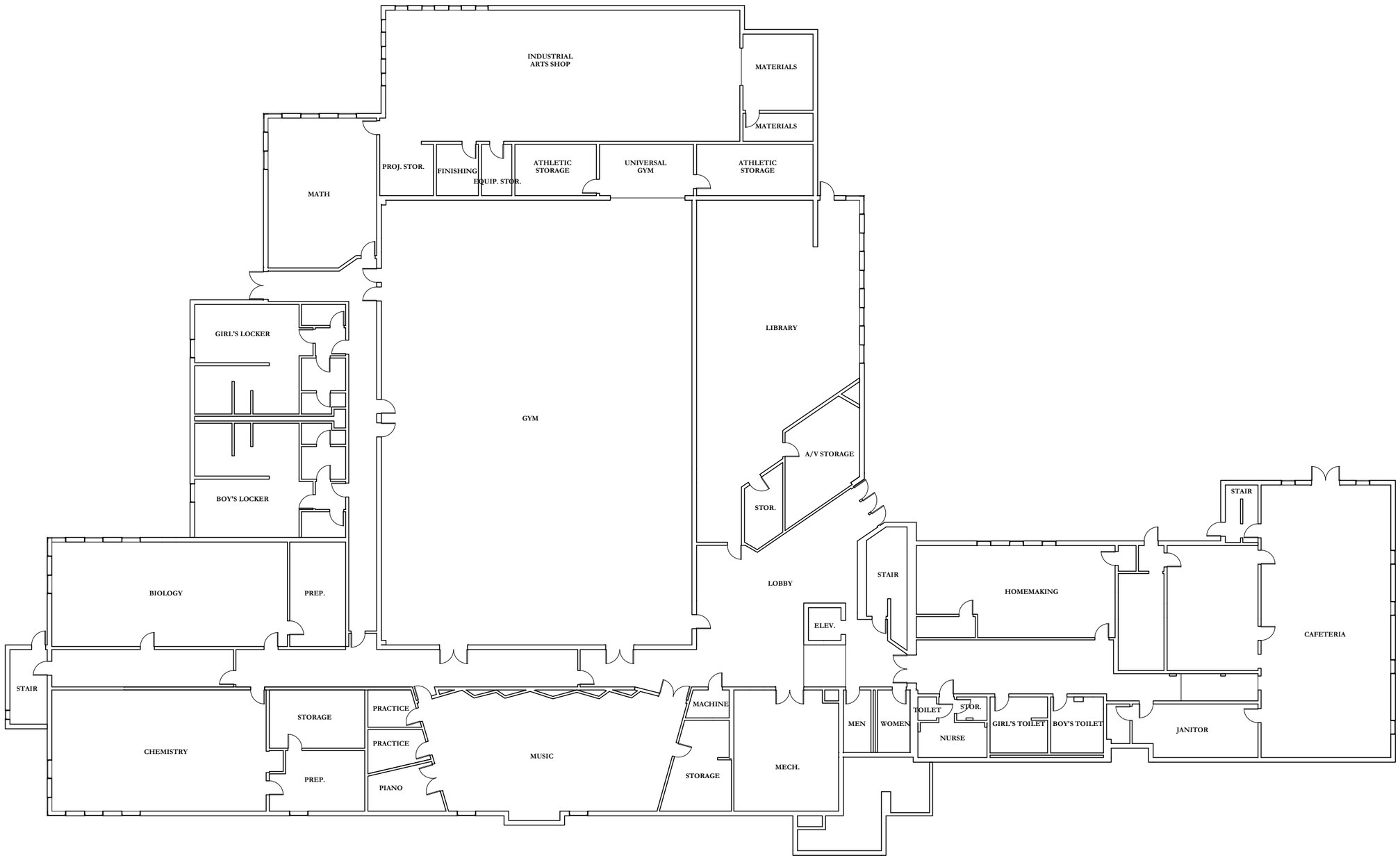
A. *No Build Alternative - Floor Plan*



TWIN VALLEY | *Existing Ground Floor Plan*

AX-100
Date: MARCH 2016
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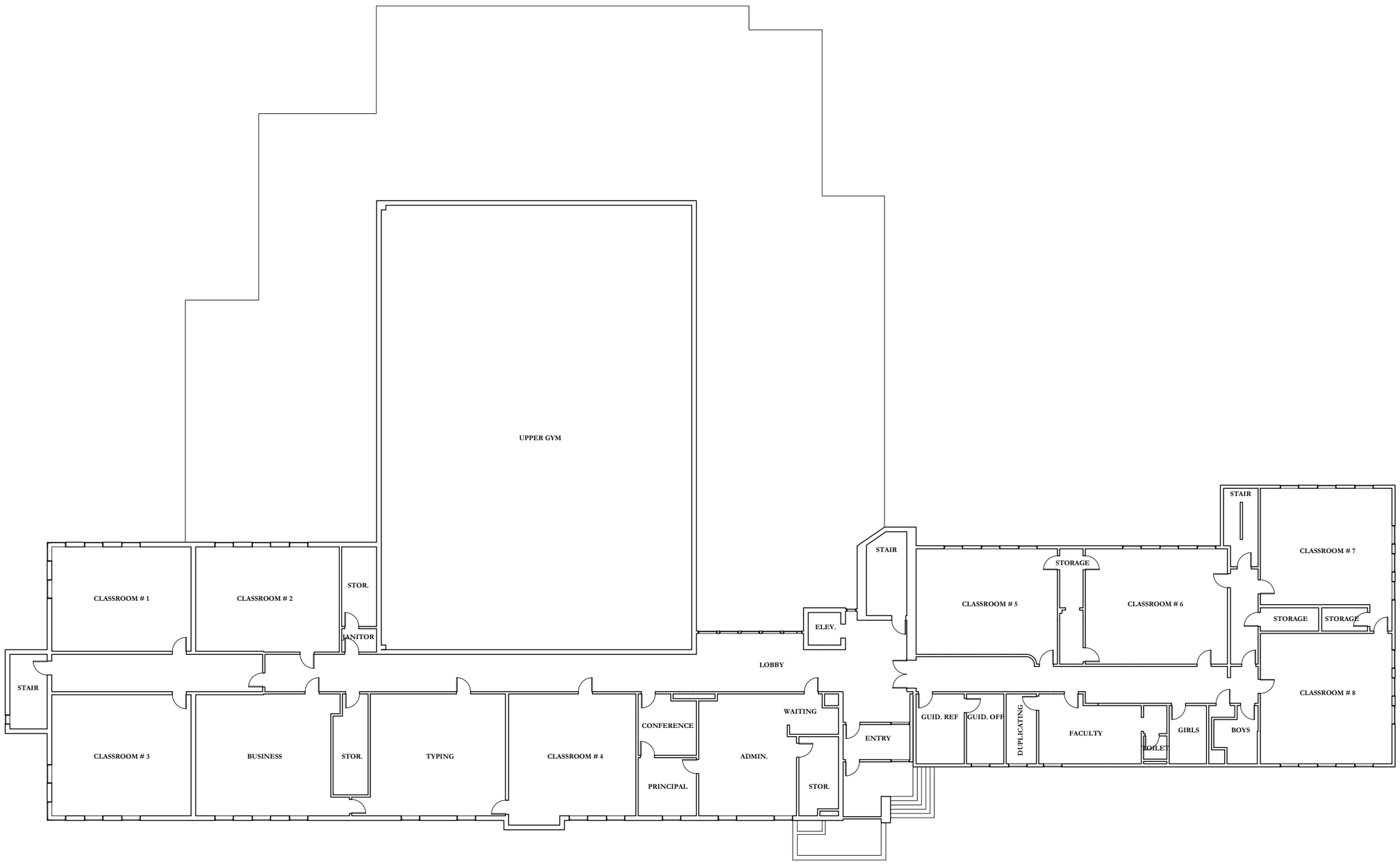

TWIN VALLEY | *Existing First Floor Plan*

AX-101
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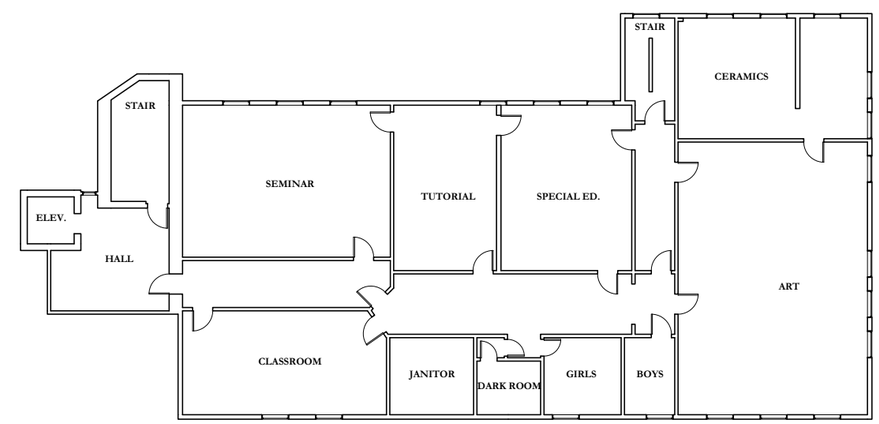

TWIN VALLEY | *Existing Second Floor Plan*

AX-102
Date: MARCH 2016
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Town of Wilmington - Twin Valley High School Building
Preliminary Capital Improvement Schedule

March 2016

Type of Work	Project	Year 1 Estimate	Year 5 Estimate	Year 10 Estimate	Year 15 Estimate
Site Work					
Asphalt Paving	Provide new top coat and repaint parking stripes.		8,855.00		
Handicapped Ramp	Construct handicapped ramp for north entrance(s) at first floor	41,205.00			
Masonry:					
Brick masonry	Rebuild a portion of the south wall brick veneer at the vocational tech wing, where water has entered from the roof. Unknown Concealed Condition	5,000.00			
EFIS	Repair EFIS at damaged areas.	2,150.00			
Wood, Plastics, & Composites:					
Structural Framing	Repair roof structure at vocational tech wing. Unknown Concealed Condition	15,000.00			
Exterior Soffit and Trim	Replace damaged or deteriorated wood and metal fascia and soffit trim.	28,187.00			
Siding	Repair vinyl siding at damaged areas.	2,000.00			
1981 School Stairs	Replace handrails and ballusters, and add guard rails for code compliance.	12,522.00			
1900 School Stairs	Replace handrails and ballusters, and add guard rails for code compliance. Replace doors & door hardware. Apply for variance for the stair landings.	8,528.00			
Interior Ramp	Add handrails at both sides of ramp to cafeteria.	3,354.00			
Thermal & Moisture Protection:					
Asphalt Roofing & Drains	Replace asphalt roofing, and add additional drains.	74,025.00			108,660.00
Membrane Roofing & Drains	Replace membrane roofing, tapered insulation, and add additional drains.		172,267.00		
Foundation Waterproofing & Drains	Install foundation drains and apply waterproofing at the north foundation wall of the old school.	11,030.00			
Slate Roofing	Annual slate roof inspection & maintenance at $3,000 per year.	3,000.00	3,375.00	3,796.88	4,271.49
Openings:					
Doors & Door Hardware	Upgrade exterior and interior doors and door hardware to comply with fire life safety code & ADA. Replace gym door trhesholds.	8,700.00			
1981 School Windows	Replace 61 windows in three phases		61,875.00	69,609.00	78,310.00
1900 School Windows	Replace or Restore 80 windows	120,000.00			
Skylights	Replace the library skylights.		13,760.00		
Finishes:					
Carpet, Wood floor refinishing, &Vinyl Composition Tile	Upgrade all floor finishes (excluding gymn and locker rooms) at old and new schools	193,292.00			
Painting	Paint interior throughout	145,479.00		172,545.00	
Gypsum Wall Board	Repair damaged gypsum board at science labs.	1,693.00			

Gypsum Ceiling Board	Repair damaged gypsum board at water damaged entry ceiling	2,460.00			
Acoustical Ceiling	Repair ceilings at corridors and at library ceilings	13,633.00			
Specialities:					
Lockers	Replace lockers at boys locker room	7,534.00			
Conveying Equipment:					
Elevator	Upgrade or replace existing elevator to meet ADA (doors not in compliance)	40,000.00			
Plumbing:					
Water Fountains	Replace water fountain or add ADA compliant water fountain	2,419.00			
Toilets & Accessories	Update toilets for full ADA compliance	102,555.00			
Heating Ventilating & Air Conditioning:					
Existing Boilers	Remove and dispose of existing boilers boilers		18,765.00		
New Boilers	Install new boilers and controls		155,239.00		
Climate Control	Install new building management system		37,125.00		
Undergound Oil Tank	Remove and dispose of underground oil tank.	85,150.00			
Above Grade Oil Tank	Install new above grade oil tank	13,300.00			
Electrical:					
Lighting	Upgrade lighting.throughout (at $6.50/sf)	346,450.00			
Fire Alarm	Up grade to a code compliant, addressable system	20,090.00			
Exit Devices	Update and add to existing exit lights,and horn strobes	25,000.00			
Magnetic Door Holds	Connect to fire alarm, disconnect from smoke detectors	10,000.00			
Contingency					
Subtotals:		1,343,756.00	471,261.00	245,950.88	191,241.49
10 Percent Contingency:		134,375.60	47,126.10	24,595.09	19,124.15
Totals:		1,478,131.60	518,387.10	270,545.97	210,365.64

Color legand:

Blue R S Means Cost Data
Green Breadloaf Corp.
Red Allowance
Purple JFP Consulting Services

Notes:

1. This capital improvements schedule is intended as a planning tool, describing order of magnitude construction costs.
2. A complete capital needs assessment is recommended as the next step for this project.
3. These capital needs and costs have been partially based on studies prepared by Dore & Whittier and by Breadloaf Corp.

B. Breadloaf's Old School Enrichment Center

B. *Breadloaf's Old School Enrichment Center - Site Plan*

PARKING			
ALTERNATIVE	REQUIRED	SHARED	PROVIDED
A			
CLINIC	26		
FITNESS CENTER	17		
COMMUNITY RECREATION CENTER	32		
GATHERING PLACE	9		
SUPERVISORY UNION	14		
RENTABLE SPACE	15		
A TOTAL:	**113**	**67**	**130**

TWIN VALLEY | *Proposed Site Plan A*

A-105
Date: FEBRUARY 2016
Pro. No.: 15-088
Town of Wilmington

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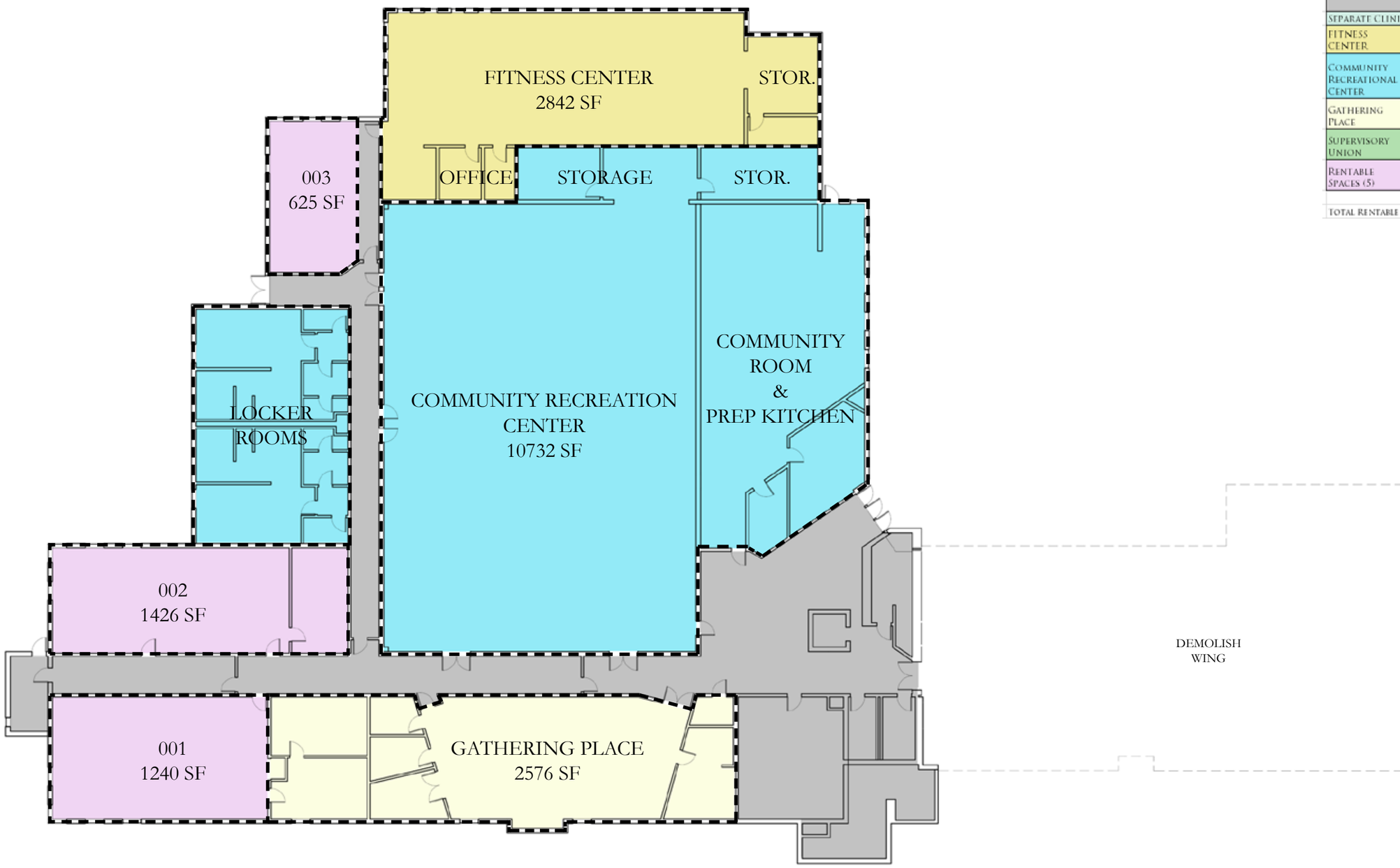
B. *Breadloaf's Old School Enrichment Center - Site Plan*



ALTERNATIVE A		
	EXISTING SF	PROVIDED SF
SEPARATE CLINIC		
FITNESS CENTER		2,842
COMMUNITY RECREATIONAL CENTER		10,732
GATHERING PLACE	2,576	2,576
SUPERVISORY UNION	2,668	5,011
RENTABLE SPACES (5)		5,176
TOTAL RENTABLE AREA:		26,337

TWIN VALLEY | *Proposed Ground Floor Plan A*

A-100
Date: FEBRUARY 2016
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Town of Wilmington

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B. *Breadloaf's Old School Enrichment Center - Site Plan*

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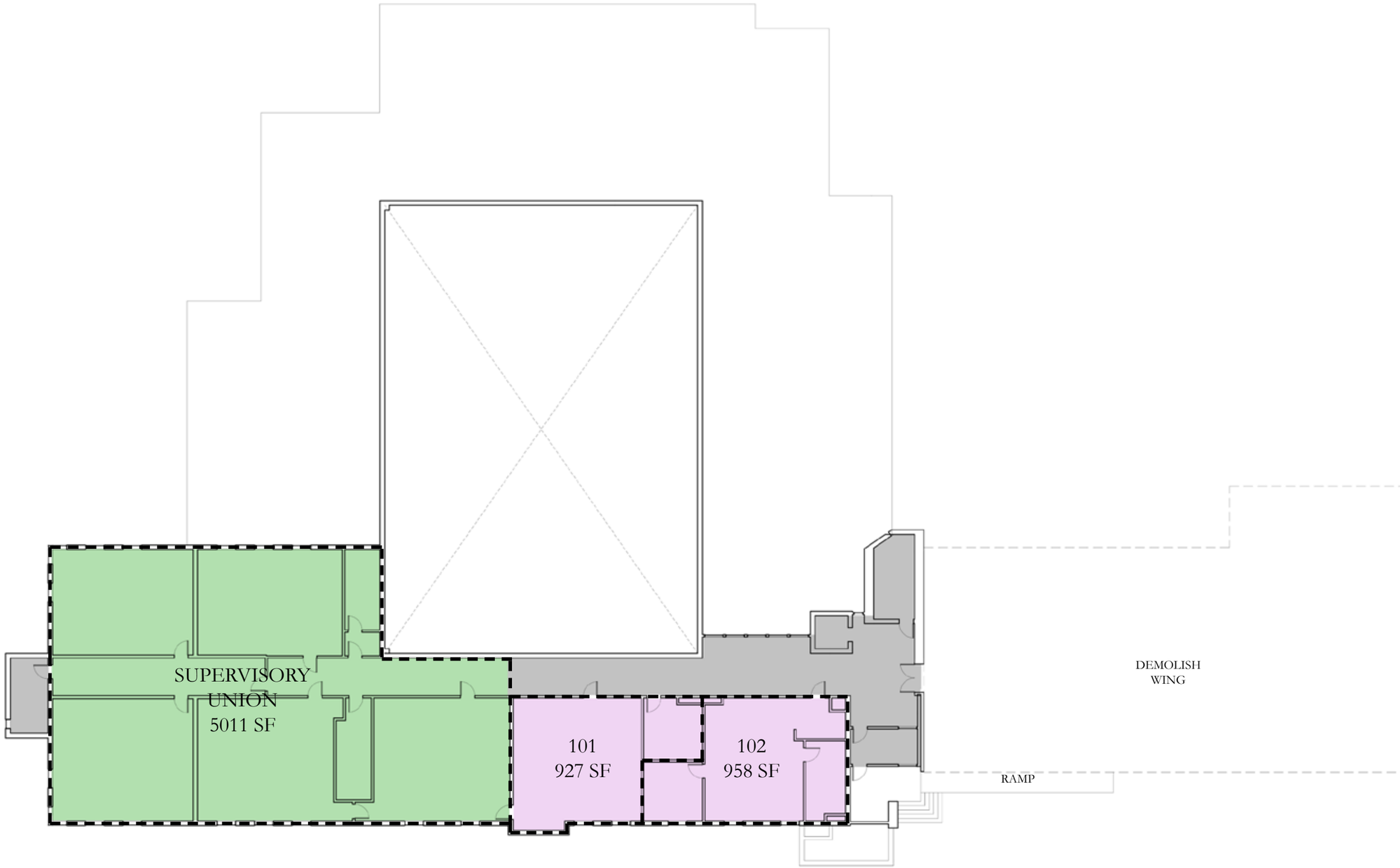

TWIN VALLEY | *Proposed First Floor Plan A*

A-101
Date: FEBRUARY 2016
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C. Rentable & Community Building

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PARKING			
ALTERNATIVE	REQUIRED	SHARED	PROVIDED
B			
CLINIC	26		
POLICE	19		
FITNESS CENTER	13		
COMMUNITY RECREATION CENTER	31		
CHILDREN'S DAY CARE	9		
GATHERING PLACE	8		
SUPERVISORY UNION	14		
TOWN HALL	16		
RENTABLE SPACE	18		
B TOTAL:	**154**	**77**	**171**

TWIN VALLEY | *Proposed Site Plan B*

A-106
Date: FEBRUARY 2016
Pro. No.: 15-088
Town of Wilmington

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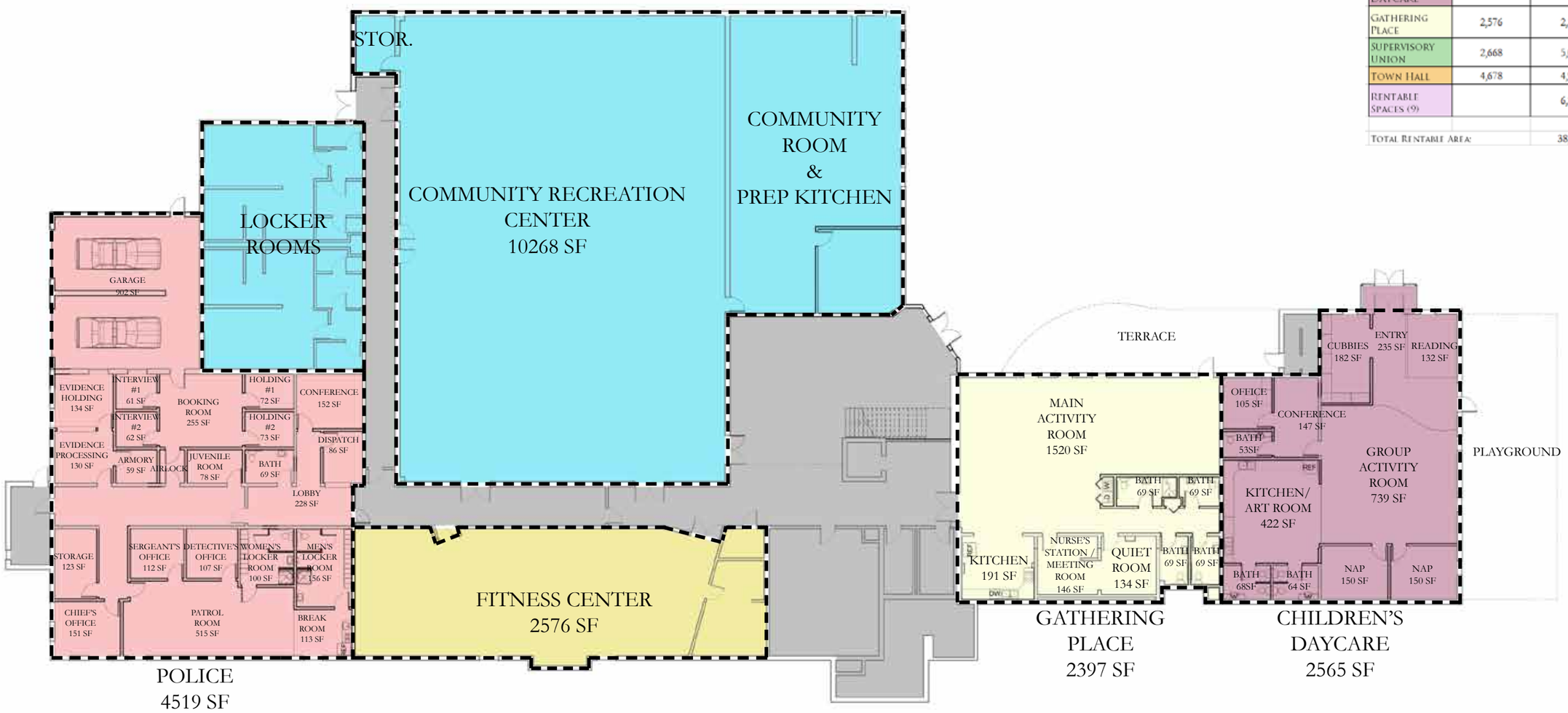
C. *Rentable & Community Building - Floor Plan*

ALTERNATIVE B		
	EXISTING SF	PROVIDED SF
SEPARATE CLINIC		
POLICE	953	4,519
FITNESS CENTER		2,189
COMMUNITY RECREATIONAL CENTER		10,268
CHILDREN'S DAYCARE		2,565
GATHERING PLACE	2,576	2,397
SUPERVISORY UNION	2,668	5,011
TOWN HALL	4,678	4,946
RENTABLE SPACES (9)		6,248
TOTAL RENTABLE AREA:		38,143



TWIN VALLEY | *Proposed Ground Floor Plan B*

A-100.1
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Pro. No.: 15-088
Town of Wilmington

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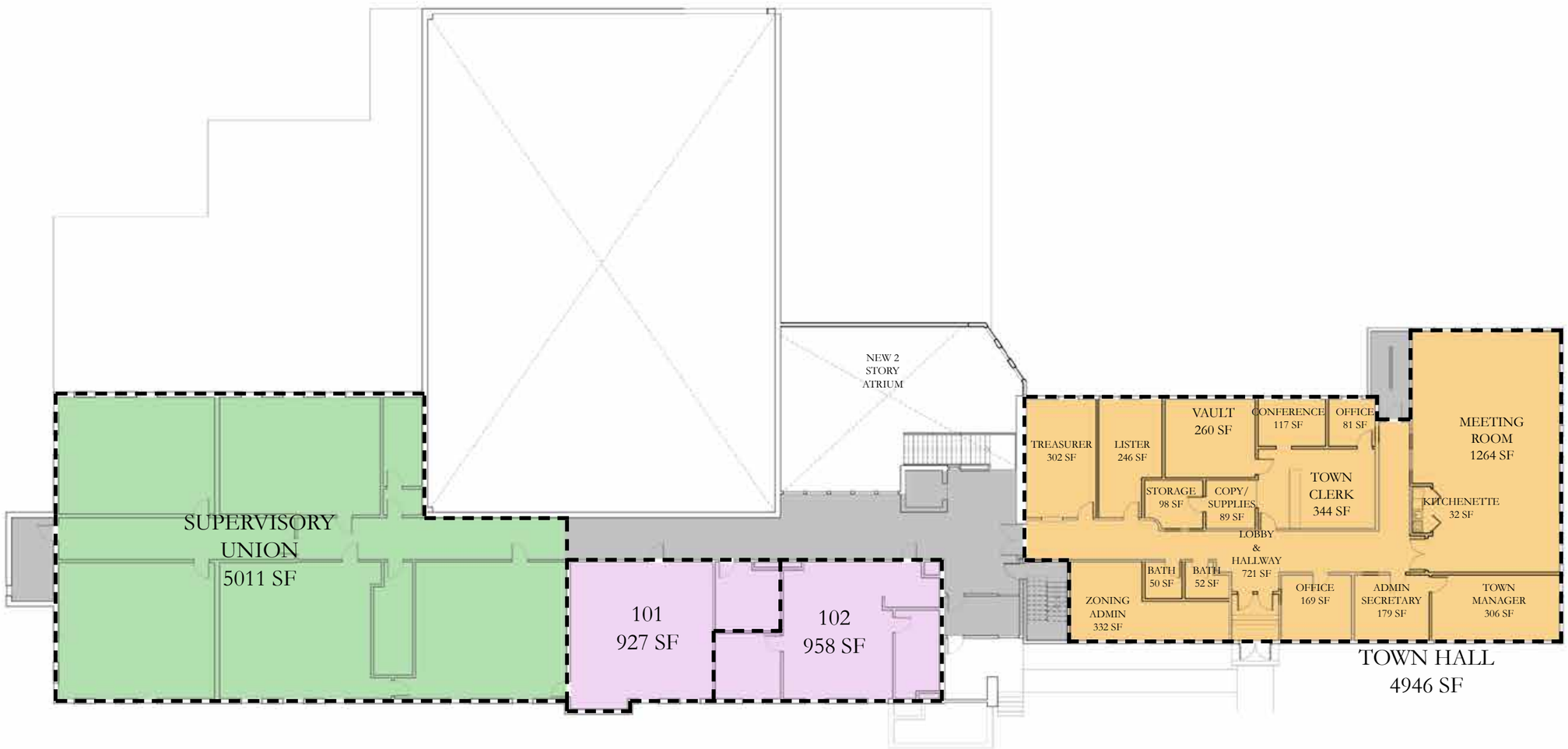
C. *Rentable & Community Building - Floor Plan*



TWIN VALLEY | *Proposed First Floor Plan B*

A-101.1
Date: FEBRUARY 2016
Pro. No.: 15-088
Town of Wilmington

STEVENS & ASSOCIATES, P.C.
SMART DESIGN FOR LIVABLE COMMUNITIES
ARCHITECTS | ENGINEERS | LANDSCAPE ARCHITECTS | PLANNERS
95 MAIN ST. | P.O. BOX 1586 | BRATTLEBORO, VT 05302
PHONE: 802-257-0129 | FAX: 802-258-3993

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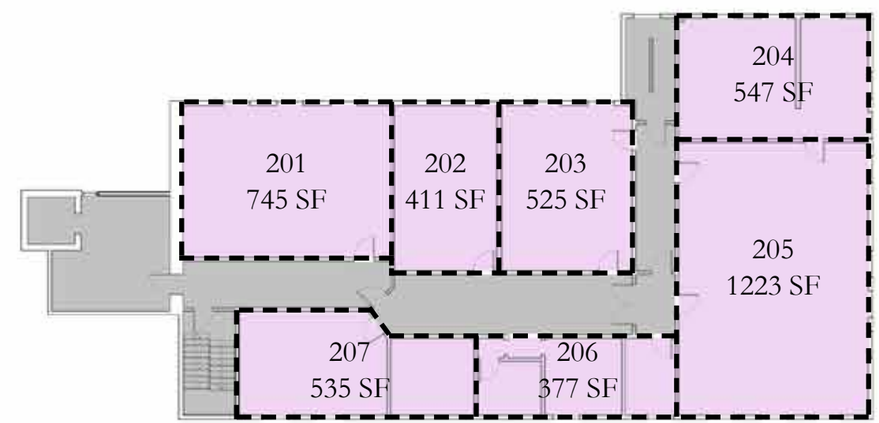
C. *Rentable & Community Building - Floor Plan*



TWIN VALLEY | *Proposed Second Floor Plan B*

A-102
Date: FEBRUARY 2016
Pro. No.: 15-088
Town of Wilmington

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D. Residential & Community Building

2/15/2016 3:34:36 PM

PARKING			
ALTERNATIVE	REQUIRED	SHARED	PROVIDED
C			
CLINIC	26		
POLICE	19		
COMMUNITY RECREATION CENTER	31		
GATHERING PLACE	9		
TOWN HALL	16		
APARTMENTS	25		
C TOTAL:	**126**	**66**	**163**

TWIN VALLEY | *Proposed Site Plan C*

A-107
Date: FEBRUARY 2016
Pro. No.: 15-088
Town of Wilmington

STEVENS & ASSOCIATES, P.C.
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ARCHITECTS | ENGINEERS | LANDSCAPE ARCHITECTS | PLANNERS
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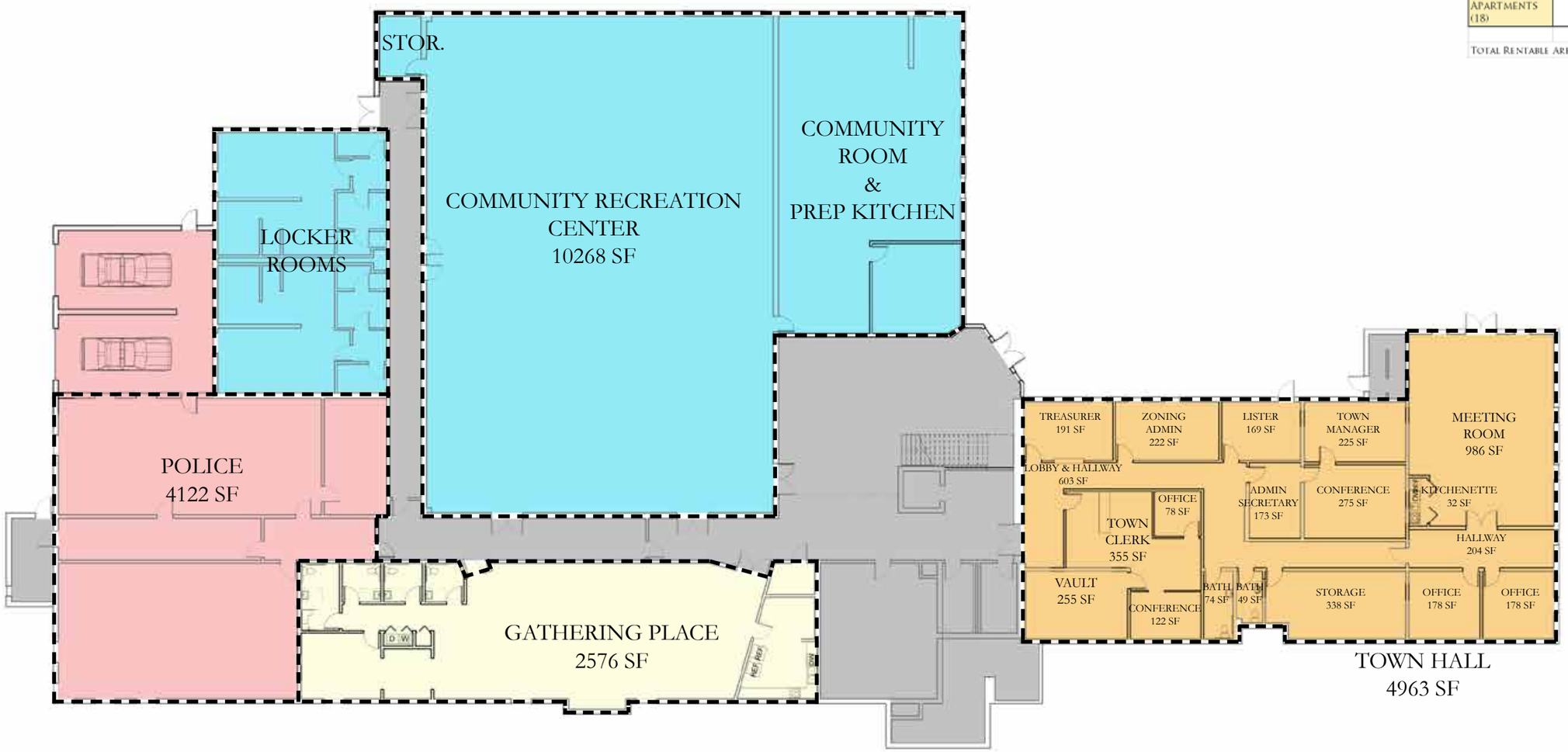
D. *Residential & Community Building - Floor Plan*

ALTERNATIVE C		
	EXISTING SF	PROVIDED SF
SEPARATE CLINIC		
POLICE	953	4,122
COMMUNITY RECREATIONAL CENTER		10,268
GATHERING PLACE	2,576	2,576
TOWN HALL	4,678	4,963
APARTMENTS (18)		13,953
TOTAL RENTABLE AREA:		35,882



TWIN VALLEY | *Proposed Ground Floor Plan C*

A-100.2
Date: FEBRUARY 2016
Pro. No.: 15-088
Town of Wilmington

STEVENS & ASSOCIATES, P.C.
SMART DESIGN FOR LIVABLE COMMUNITIES
ARCHITECTS | ENGINEERS | LANDSCAPE ARCHITECTS | PLANNERS
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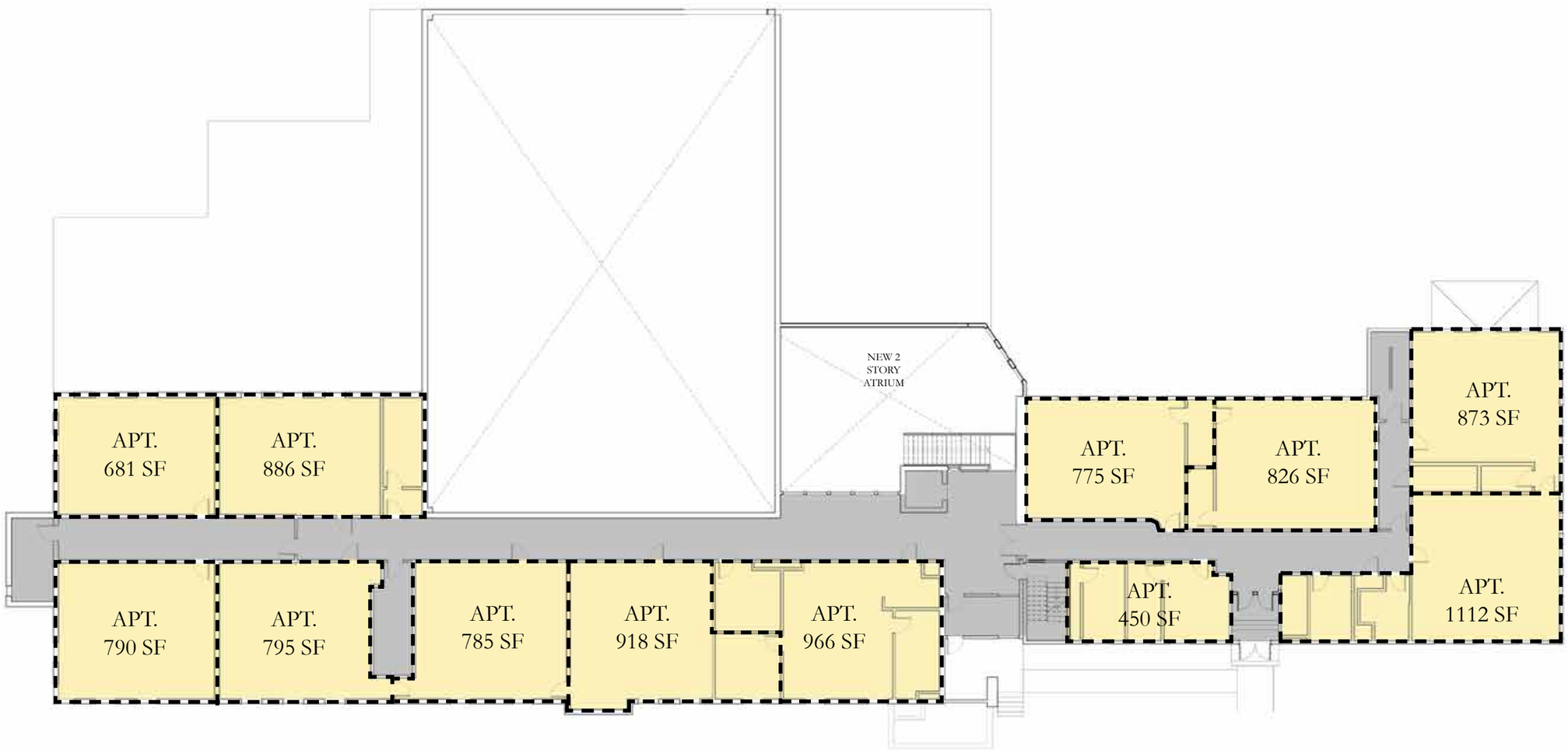
D. *Residential & Community Building - Floor Plan*



TWIN VALLEY | *Proposed First Floor Plan C*

A-101.2
Date: FEBRUARY 2016
Pro. No.: 15-088
Town of Wilmington

STEVENS & ASSOCIATES, P.C.
SMART DESIGN FOR LIVABLE COMMUNITIES
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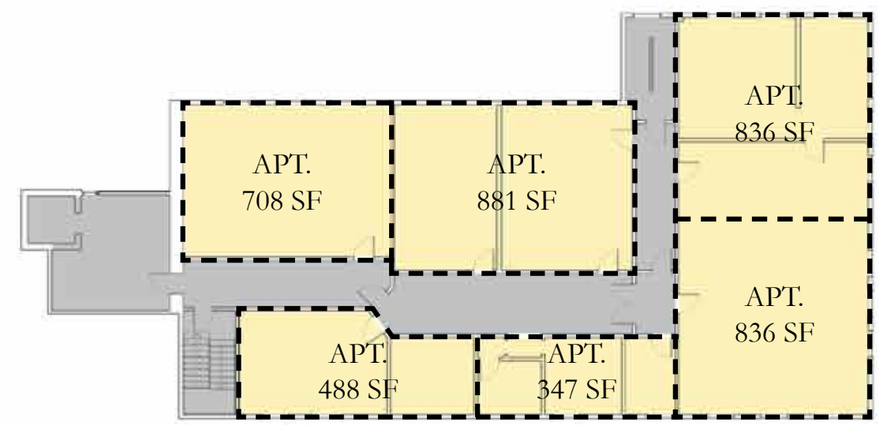
D. *Residential & Community Building - Floor Plan*



TWIN VALLEY | *Proposed Second Floor Plan C*

A-102.1
Date: FEBRUARY 2016
Pro. No.: 15-088
Town of Wilmington

STEVENS & ASSOCIATES, P.C.
SMART DESIGN FOR LIVABLE COMMUNITIES
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E. Municipal Building

D. *Municipal Building - Site Plan*

PARKING			
ALTERNATIVE	REQUIRED	SHARED	PROVIDED
D			
CLINIC	26		
POLICE	19		
COMMUNITY RECREATION CENTER	25		
GATHERING PLACE	9		
SUPERVISORY UNION	14		
TOWN HALL	20		
D TOTAL:	**113**	**54**	**149**

TWIN VALLEY | *Proposed Site Plan D*

A-108
Date: MARCH 2016
Pro. No.: 15-088
Town of Wilmington

STEVENS & ASSOCIATES, P.C.
SMART DESIGN FOR LIVABLE COMMUNITIES
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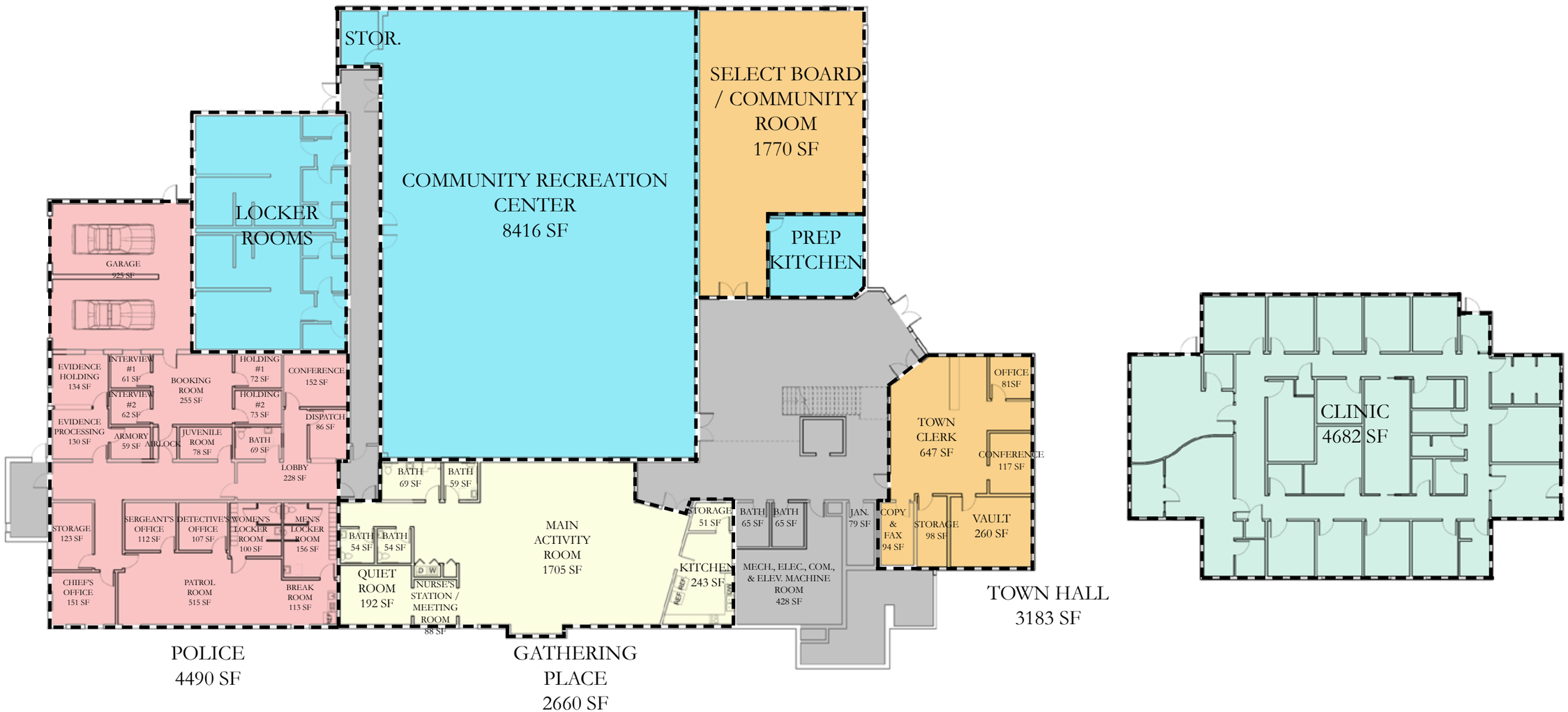
D. *Municipal Building - Floor Plan*

ALTERNATIVE D		
	EXISTING SF	PROVIDED SF
SEPARATE CLINIC		
POLICE	953	4,490
COMMUNITY RECREATIONAL CENTER		8,416
GATHERING PLACE	2,576	2,660
TOWN HALL	4,678	6,118
SUPERVISORY UNION		5,011
TOTAL RENTABLE AREA:		26,695



TWIN VALLEY | *Proposed Ground Floor Plan D*

A-100.3
Date: MARCH 2016
Pro. No.: 15-088
Town of Wilmington

STEVENS & ASSOCIATES, P.C.
SMART DESIGN FOR LIVABLE COMMUNITIES
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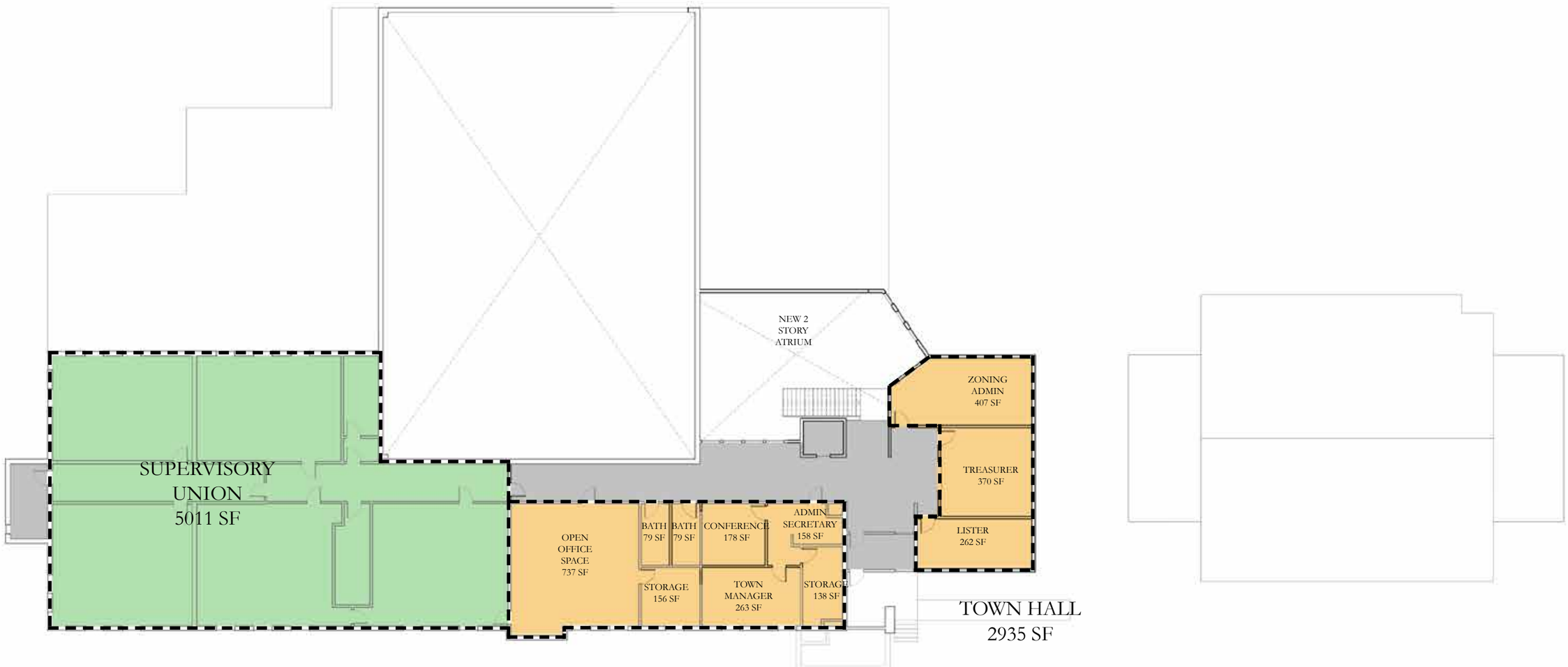
D. *Municipal Building - Floor Plan*



TWIN VALLEY | *Proposed First Floor Plan D*

A-101.3
Date: MARCH 2016
Pro. No.: 15-088
Town of Wilmington

STEVENS & ASSOCIATES, P.C.
SMART DESIGN FOR LIVABLE COMMUNITIES
ARCHITECTS | ENGINEERS | LANDSCAPE ARCHITECTS | PLANNERS
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Town of Wilmington - Twin Valley High School Building

Option "D"

Preliminary Capital Improvement Schedule

April 2016

Type of Work	Project	Year 1 Estimate	Year 5 Estimate	Year 10 Estimate	Year 15 Estimate
Site Work					
Handicapped Ramp	Construct handicapped ramp for north entrance(s) at first floor	41,205.00			
Masonry:					
EFIS	Repair EFIS at damaged areas.	2,150.00			
Wood, Plastics, & Composites:					
Exterior Soffit and Trim	Replace damaged or deteriorated wood and metal fascia and soffit trim.	28,187.00			
1981 School Stairs	Replace handrails and ballusters, and add guard rails for code compliance.	12,522.00			
Thermal & Moisture Protection:					
Asphalt Roofing & Drains	Replace asphalt roofing, and add additional drains.	74,025.00			108,660.00
Membrane Roofing & Drains	Replace membrane roofing, tapered insulation, and add additional drains.		172,267.00		
Openings:					
Doors & Door Hardware	Upgrade exterior and interior doors and door hardware to comply with fire life safety code & ADA. Replace gym door trhesholds.	8,700.00			
1981 School Windows	Replace 61 windows in three phases		61,875.00	69,609.00	78,310.00
Skylights	Replace the library skylights.		13,760.00		
Finishes:					

Specialities:					
Lockers	Replace lockers at boys locker room	7,534.00			
Conveying Equipment:					
Elevator	Replace existing elevator to meet ADA	75,000.00			
Plumbing:					
Water Fountains	Replace water fountain or add ADA compliant water fountain	2,419.00			
Toilets & Accessories	Update toilets for full ADA compliance	102,555.00			
Heating Ventilating & Air Conditioning:					
Existing Boilers	Remove and dispose of existing boilers boilers		18,765.00		
New Boilers	Install new boilers and controls		155,239.00		
Climate Control	Install new building management system		37,125.00		
Undergound Oil Tank	Remove and dispose of underground oil tank.	85,150.00			
Above Grade Oil Tank	Install new above grade oil tank	13,300.00			
Electrical:					
Fire Alarm	Up grade to a code compliant, addressable system	20,090.00			
Exit Devices	Update and add to existing exit lights,and horn strobes	25,000.00			
Magnetic Door Holds	Connect to fire alarm, disconnect from smoke detectors	10,000.00			
Contingency					
Subtotals:		507,837.00	459,031.00	69,609.00	186,970.00
10 Percent Contingency:		50,783.70	45,903.10	6,960.90	18,697.00
Totals:		558,620.70	504,934.10	76,569.90	205,667.00

Color legand:

Blue R S Means Cost Data
Green Breadloaf Corp.
Red Allowance
Purple JFP Consulting Services

Notes:

1. This capital improvements schedule is intended as a planning tool, describing order of magnitude construction costs.
2. A complete capital needs assessment is recommended as the next step for this project.
3. These capital needs and costs have been partially based on studies prepared by Dore & Whittier and by Breadloaf Corp.

John F. Penney Consulting Services, P.C.
HVAC, Plumbing & Fire Protection Engineering
Commissioning & TAB Services

PO Box 10 • 231 So. Main Street • Chester, Vermont 05143
Phone/Fax 802.875.2010 • e-mail: info@jfpcs.com

Twin Valley High School Building

Mechanical Systems May 3, 2016

The Twin Valley High School has an oil-fired hydronic boiler system which serves the entire facility. The original building, a three-story wood structure built in the early 1900's, is heated by baseboard radiation. Control of the baseboard is limited to only a few thermostats for the building. Some non-electric, self-contained valves were installed to help with individual room control. An air distribution system was installed to provide ventilation air to the classrooms. The ventilation system is scheduled by time clock to operate during occupied hours.

The 1950's wing, which includes a gym, locker rooms, administrative offices, classrooms, and a mechanical room, is also heated with a hydronic system. The classrooms and administrative areas have hydronic baseboard radiation. The gym and locker rooms are heated and ventilated by roof mounted air handlers and cabinet heaters. Several air handling units were installed to provide ambient air cooling and ventilation. Controls are an improvement over the original building but are now in need of an upgrade. The building management system that currently exists is now obsolete and would need to be replaced.

The boiler plant consists of two 2,400 MBH boilers with a total capacity of roughly 4,800 MBH. From our block load profile, it appears that the boiler plant offers 100% redundancy. The boilers are controlled by a hot water reset control which looks relatively new and offers some efficiency to the boiler operation. Pumps are constant speed and may be near the end of their useful lives. It appears an indirect-fired water heater was the original service hot water system and may have been used during the school year. A new oil-fired water heater has been installed and likely provides the current service water heating for the building.

Several air handling units serve the 1950's wing. The gym, locker rooms, and classrooms are served by newer rooftop equipment. There are several original air handlers located throughout the facility that are arranged as ventilation units with 100% outdoor air. More efficient ventilation methods should be considered.

In order to upgrade the facility to housing or to municipal offices, police, school supervisory, and community space, much could be done to reduce the size of the mechanical systems. Changing from classrooms to these alternative uses could reduce the size of the boiler plant by as much as 50%. Improvements to the building envelope, especially the 1900's building, could reduce the boiler size further.

The 10,000 gallon underground storage tank has exceeded its useful life. State regulations require reporting and monitoring records to be kept. According to an earlier report, the tank was installed in 1981. The oil tank should be considered for replacement or a different approach should be discussed. One option may be an indoor storage tank system. LP gas could also be considered.

Any recommendations to replace or upgrade the mechanical systems should first include improvements to the building envelope. Mechanical systems appear substantially large for the proposed new building use because classrooms require larger ventilation volumes than offices or housing.

Generally, the boiler plant and distribution system can be kept running for some time. Eventually, repairs and energy costs will begin to rise. A building of the use group proposed and one that conforms to the current Vermont Commercial Energy Code for building envelope could require a boiler plant 1/4 the size of the current plant. Adding better zone control and an energy management control system would reduce energy costs by more than 50%. By renovating sections of the building, each area can be upgraded without too many changes to the boiler plant leaving the boiler plant as one of the final upgrades.

Recommendations based on the plan to house the town offices, police department, community center, supervisory union, and gathering place in the 1950's wing and demolishing the original building and to construct a new Health Center Building would be as follows:

1950's Building: The boiler system could remain as the primary heating plant for some time. With annual maintenance, the life of the equipment could be extended five to ten years. A smaller oil storage tank system could be considered given the reduced area to heat. Replacement of the underground oil tank should be included in the renovation of the facility.

The following upgrades are recommended for each area:

Town Hall: A split-system fan coil unit with hydronic heating and DX cooling would serve the second floor area of the Town Hall. Ventilation would be provided from a new roof mounted heat recovery ventilator which would serve both the ground and first level. Baseboard radiation would provide additional zoning and temperature control within the spaces. Each of the first floor areas designated for the Town Hall would also have split-system fan coil units with roof mounted air cooled condensers for cooling. Air source heat pumps could be used in lieu of hydronic fan coil units as an alternate. The roof mounted heat recovery unit would provide distributed ventilation to the area.

Police: The area to serve the police department could also be heated and cooled by hydronic fan coil units with DX cooling similar to the Town Hall. Hydronic baseboard radiation could be installed to provide additional zone control. An air source heat pump system could be used as an alternative. Currently this area is ventilated by a roof mounted air handling unit. This system could remain and be rebalanced to a low volume.

Supervisory Union: The Supervisory Union could continue to utilize the baseboard radiation and ventilation systems that exist. If upgrading the area is planned, one or two fan coil units with DX cooling could be installed to provide central cooling. The existing ventilation system could continue in service or a new heat recovery ventilator could be roof mounted to serve the area.

Gathering Place: A small air handling unit with economizer cooling, hydronic heating, and the option for DX cooling could serve the Gathering Place. We would recommend a small air handler in order to provide demand control ventilation and ambient air cooling with an economizer. Economizer cooling and demand control ventilation offer the best economic approach to the HVAC needs of the space where larger groups assemble.

Community Recreation Center: The Community Recreation Center or gym is served by an air handling unit that provides heating and ventilation. Ventilation air is exhausted through the locker rooms providing makeup air for the locker room exhaust. The existing systems could be refurbished and continue to provide the heating and ventilation needs for the space.

Community Room: The Community Room is serviced by an existing air handling unit that provides heating and ventilation to the space. Similar to the gym, the Community Room could continue to use the existing system. If mechanical cooling is programmed for the space, the air handling unit could be replaced with another that would include a remote air cooled condenser. We recommend demand control ventilation for assembly room occupancies.

Common Spaces: We recommend heating with cabinet unit heaters and baseboard radiation in common spaces such as corridors, lobbies, public toilet rooms, and stair wells. Some ventilation is required for the common areas. We also recommend outlets from the existing ventilation system continue to serve the corridors and lobby.

All spaces above would utilize the existing boiler plant. The upgrades to consider in the boiler plant are a new pumping system that includes variable speed drives to save energy. The boilers, although larger than necessary for the building, could continue to remain in service for another five years or more. Replacement of the underground oil tank will be necessary. If space can be allocated, oil tanks could be installed in the building. This would reduce the cost of replacing the current oil tank with another underground tank. Condensing gas-fired boilers should be considered when the replacement of the boilers is necessary.

Controls for the entire facility could be kept simple. A building management system would be desirable but not required. The Central Plant and each area of the facility could be economically controlled with stand-alone programmable thermostats.

Clinic: This area should be fitted with a VAV air handling system that can meet the requirements for the heating/cooling zone control and ventilation needs of a clinic. The boiler system in the other facility does have more than ample capacity to provide the heating needs of the clinic. If the utilities are to be separated from the municipal, we recommend the clinic have its own boiler system.

Respectfully submitted,

John F. Penney, P.E.

Twin Valley High School - Conversion - Feasibilty Study - Option "D"
Conceptual Design - Construction Cost Estimate - May 06, 2016
Stevens & Associates, P.C., 95 Main St, Brattleboro, VT, 802-257-9329

Job size 30015 SF

Notes

-No deferred maintenance or capitol improvements. This refers to "Option D" Capital Improvement Schedule, dated April 2016 by Stevens & Associates.

-No building code or siesmic building improvements, other than the new sprinkler system and normal electrical emergency & exit lights with minimal changes to the existing fire alarm system.

-No exterior facade improvements at the existing.

-This estimate generally assumes the existing plumbing and electrical systems main trunk lines are not altered but the laterals and terminal devices & lighting are altered within the existing spaces to provide the new design useage.

-This estimate includes a new wet pipe sprinkler system at all areas, based upon the assumption that the relocated water service will provide adequate pressure and flow. No water storage tanks or fire pumps are included.

-The HVAC estimate by JFPCS is incorporated within this estimate. It does not include the cost for the "Clinic" as we understand this work is not to be included.

-For a project of this nature & type we expect a construction duration of 8 to 9 months of continous non-phased work.

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
1 - DEMO 1900 BLDG										
	2.200		**DEMOLITION**							
		2.240	*Building Removal*							
			Demo Building-Wood Shell	176,000.00 cf	-	-	52,800	-	0.30	52,800
			Demo Building-Conc-Footings & Walls-To 8' High	114.00 cy	-	-	18,810	-	165.00	18,810
			Demo Building-Conc-Slab On Grade	69.00 cy	-	-	10,350	-	150.00	10,350
			Demo Building-Dump Fee's	430.00 cy	-	-	10,750	-	25.00	10,750
			Demo Building-Hazardous-No Abatement	0.00 ls	-	-	0	-	0.00	0
			Demo Building-Exist-Ext Wall-Upgrades	0.00 sf	-	-	0	-	0.00	0
			Building Removal				*92,710*			*92,710*
			DEMOLITION				**92,710**			**92,710**
	15.000		**MECHANICAL**							
		15.500	*HVAC*							
			HVAC-UG Oil Tanks-Remove & New 550 Gal	1.00 ls	-	-	130,766	-	130,766.00	130,766
			HVAC				*130,766*			*130,766*
			MECHANICAL				**130,766**			**130,766**
	16.000		**ELECTRICAL**							
		16.001	*Electrical*							
			Electrical-New-MDP-600 Amps & Feeds	1.00 ls	-	-	30,000	-	30,000.00	30,000
			Electrical				*30,000*			*30,000*
			ELECTRICAL				**30,000**			**30,000**
			1 - DEMO 1900 BLDG				**253,476**			**253,476**

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
2 - MAIN SITE WORK										
	2.000		**SITEWORK**							
		2.002	*Site Demolition*							
			Site Demo-Asphalt & Walks	21,445.00 sf	-	-	21,445	-	1.00	21,445
			Site Demolition				*21,445*			*21,445*
		2.025	*Asphalt Paving*							
			Asphalt-New Parking & Subbase	44,525.00 sf	-	-	222,625	-	5.00	222,625
			Asphalt Paving				*222,625*			*222,625*
		2.041	*Storm Drainage*							
			Storm Drainage	1.00 ls	-	-	15,000	-	15,000.00	15,000
			Storm Drainage				*15,000*			*15,000*
		2.140	*Lawns*							
			Lawns-Topsoil & Seed	29,450.00 sf	-	-	30,923	-	1.05	30,923
			Lawns				*30,923*			*30,923*
		2.172	*Water System*							
			Water-Relocate Existing	120.00 lf	-	-	18,000	-	150.00	18,000
			Water System				*18,000*			*18,000*
		2.174	*Sanitary System*							
			Sewer-Relocate Existing	120.00 lf	-	-	9,000	-	75.00	9,000
			Sanitary System				*9,000*			*9,000*
		2.175	*Electrical*							
			Electrical-Relocate Existing	100.00 lf	-	-	10,000	-	100.00	10,000
			Electrical-Site-Lighting	1.00 ls	-	-	30,000	-	30,000.00	30,000
			Electrical				*40,000*			*40,000*
		2.180	*Hardscape*							
			Hardscape-Walks	5,435.00 sf	-	-	32,610	-	6.00	32,610
			Hardscape-Stairs	1.00 ls	-	-	10,000	-	10,000.00	10,000
			Hardscape				*42,610*			*42,610*
		2.183	*Retaining Walls*							
			Retain Walls	190.00 lf	-	-	38,000	-	200.00	38,000
			Retaining Walls				*38,000*			*38,000*
		2.190	*Landscape Plantings*							
			Landscape Plantings	1.00 ls	-	-	15,000	-	15,000.00	15,000
			Landscape Plantings				*15,000*			*15,000*
			SITEWORK				**452,603**			**452,603**
			2 - MAIN SITE WORK				**452,603**			**452,603**

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
3 - DEMO IND ARTS										
	2.200		**DEMOLITION**							
		2.240	*Building Removal*							
			Demo Building-Steel Shell	35,312.00 cf	-	-	14,125	-	0.40	14,125
			Demo Building-Conc-Footings & Walls-To 4' High	40.00 cy	-	-	6,600	-	165.00	6,600
			Demo Building-Conc-Slab On Grade	35.00 cy	-	-	5,250	-	150.00	5,250
			Demo Building-Dump Fee's	90.00 cy	-	-	2,250	-	25.00	2,250
			Demo Building-Hazardous-No Abatement	0.00 ls			0	-		
			Demo Building-Exist-Ext Wall-Upgrades	2,624.00 sf			52,480		20.00	52,480
			Building Removal				*80,705*			*80,705*
			DEMOLITION				**80,705**			**80,705**
			3 - DEMO IND ARTS				**80,705**			**80,705**

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
4 - ATRIUM & COMMONS										
	2.000		**SITEWORK**							
		2.071	*Building Earthwork*							
			Building-Excavate/Backfill/Slab Prep	1.00 ls	-	-	1,500	-	1,500.00	1,500
			Building Earthwork				*1,500*			*1,500*
			SITEWORK				**1,500**			**1,500**
	2.200		**DEMOLITION**							
		2.250	*Interior Demolition*							
			Demo-Interior Renovations	3,821.00 sf		-	26,747		7.00	26,747
			Demo-Interior Renovations	510.00 sf	-	-	1,530	-	3.00	1,530
			Interior Demolition				*28,277*			*28,277*
			DEMOLITION				**28,277**			**28,277**
	3.000		**CONCRETE**							
		3.100	*Concrete-Building*							
			Concrete-Ftgs/Walls/SOG/SOD	22.00 cy	-	-	11,000	-	500.00	11,000
			Concrete-Building				*11,000*			*11,000*
			CONCRETE				**11,000**			**11,000**
	4.000		**MASONRY**							
		4.110	*Face Brick*							
			Masonry-Veneer-Brick	498.00 sf	-	-	11,952	-	24.00	11,952
			Face Brick				*11,952*			*11,952*
		4.200	*Concrete Block*							
			Masonry-CMU- 8"-Int Walls	1,050.00 sf	-	-	21,000	-	20.00	21,000
			Concrete Block				*21,000*			*21,000*
			MASONRY				**32,952**			**32,952**
	5.000		**METALS**							
		5.110	*Structural Steel*							
			Structural Steel-Erected-10.50#/Sqft	1,030.00 sf	-	16,749	4,066	-	20.21	20,815
			Structural Steel			*16,749*	*4,066*			*20,815*
		5.500	*Misc. Metals*							
			Misc Metals-General	4,851.00 sf	-	-	4,851	-	1.00	4,851
			Misc Metals-Steel Stairs-Pan Type	21.00 rs	-	-	15,750	-	750.00	15,750

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			Misc. Metals				*20,601*			*20,601*
			METALS			**16,749**	**24,667**			**41,416**
	6.000		**WOOD & PLASTICS**							
		6.100	*Wood Framing*							
			Rough Carpentry	4,851.00 sf	-	-	7,277	-	1.50	7,277
			Wood Framing				*7,277*			*7,277*
		6.640	*Interior Millwork*							
			Interior Wood Trim	4,851.00 sf	1,455	3,114	-	-	0.94	4,570
			Interior Millwork		*1,455*	*3,114*				*4,570*
		6.700	*Cabinets-Shelves*							
			Cabinets & Built Ins	0.00 lf	-	-	0	-	0.00	0
			WOOD & PLASTICS		**1,455**	**3,114**	**7,277**			**11,846**
	7.000		**THERM. & MOIST. PROTECT**							
		7.240	*Fireproofing*							
			Spray Fireproof-Structural Steel	1,030.00 sf	-	-	4,120	-	4.00	4,120
			Fireproofing				*4,120*			*4,120*
		7.520	*Membrane Roofs*							
			Membrane Roofs-W/ Rigid	1,030.00 sf	-	-	15,450	-	15.00	15,450
			Membrane Roofs				*15,450*			*15,450*
		7.821	*Fiberglass Shingle*							
			Shingle Roof-Architectural	0.00 sf	0	0	-	-	0.00	0
			THERM. & MOIST. PROTECT				**19,570**			**19,570**
	8.000		**DOORS & WINDOWS**							
		8.005	*Doors General*							
			DFH-Man Doors-To 3070	5.00 ea	-	-	6,250	-	1,250.00	6,250
			DFH-Man Doors-To 3070	3.00 ea	-	-	3,750	-	1,250.00	3,750
			Doors General				*10,000*			*10,000*
		8.410	*Aluminum Storefront*							
			Alum-Doors-To 3070-With Hardware	4.00 ea	-	-	14,000	-	3,500.00	14,000
			Alum-WIndows-EW-At 20 %	126.00 sf			6,300	-	50.00	6,300
			Aluminum Storefront				*20,300*			*20,300*
			DOORS & WINDOWS				**30,300**			**30,300**
	9.000		**FINISHES**							
		9.200	*Partitions*							
			LGMS x GWB-Ext Walls	624.00 sf	-	-	8,736	-	14.00	8,736
			LGMS x GWB-Int Walls	0.00 sf	-	-	0	-	0.00	0
			LGMS x GWB-Int Walls	0.00 sf	-	-	0	-	0.00	0
			Partitions				*8,736*			*8,736*
		9.510	*Finish Ceilings*							
			ACT-Ceilings-2 x 4-Tegular	3,821.00 sf	-	-	15,284	-	4.00	15,284

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
		9.510	*Finish Ceilings*							
			ACT-Ceilings-2 x 4-Tegular	510.00 sf	-	-	2,040	-	4.00	2,040
			Finish Ceilings				*17,324*			*17,324*
		9.860	*Finish Flooring*							
			Finish Flooring-Carpet & Resilient	3,821.00 sf			15,284	-	4.00	15,284
			Finish Flooring-Carpet & Resilient	510.00 sf			2,040	-	4.00	2,040
			Finish Flooring				*17,324*			*17,324*
		9.990	*Painting*							
			Finish Paint	4,851.00 sf	-	-	14,553	-	3.00	14,553
			Finish Paint	510.00 sf	-	-	1,530	-	3.00	1,530
			Painting				*16,083*			*16,083*
			FINISHES				**59,467**			**59,467**
	10.000		**SPECIALTIES**							
		10.999	*Specialties*							
			Specialties	4,851.00 sf			4,851	-	1.00	4,851
			Specialties	510.00 sf			128	-	0.25	128
			Specialties				*4,979*			*4,979*
			SPECIALTIES				**4,979**			**4,979**
	12.000		**FURNISHINGS**							
		12.800	*Loose Furnishings-FF & E*							
			Furnishings-Loose-By Owner	0.00 ls	-	-	0	-	0.00	0
			Furnishings-Loose-By Owner	0.00 ls				-		
	14.000		**CONVEYING SYSTEM**							
		14.200	*Elevators*							
			Elevator-Hydraulic-Passenger	2.00 st	-	-	70,000	-	35,000.00	70,000
			Elevators				*70,000*			*70,000*
			CONVEYING SYSTEM				**70,000**			**70,000**
	15.000		**MECHANICAL**							
		15.300	*Sprinkler*							
			Sprinkler-New	4,851.00 sf	-	-	16,979	-	3.50	16,979
			Sprinkler-New	510.00 sf	-	-	1,785	-	3.50	1,785
			Sprinkler				*18,764*			*18,764*
		15.400	*Plumbing*							
			Plumbing	4,851.00 sf	-	-	24,255	-	5.00	24,255
			Plumbing	510.00 sf	-	-	1,530	-	3.00	1,530
			Plumbing				*25,785*			*25,785*
		15.500	*HVAC*							
			HVAC-W/ Cooling	4,851.00 sf	-	-	38,808	-	8.00	38,808
			HVAC-W/ Cooling	510.00 sf	-	-	4,080	-	8.00	4,080

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			HVAC				*42,888*			*42,888*
			MECHANICAL				**87,437**			**87,437**
	16.000		**ELECTRICAL**							
		16.001	*Electrical*							
			Electrical	4,851.00 sf	-	-	38,808	-	8.00	38,808
			Electrical	510.00 sf	-	-	4,080	-	8.00	4,080
			Electrical				*42,888*			*42,888*
			ELECTRICAL				**42,888**			**42,888**
			4 - ATRIUM & COMMONS		**1,455**	**19,863**	**420,312**			**441,631**

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
5 - TOWN HALL										
	2.000		**SITEWORK**							
		2.071	*Building Earthwork*							
			Building-Excavate/Backfill/Slab Prep	2,176.00 sf		-	10,880		5.00	10,880
			Building Earthwork				*10,880*			*10,880*
			SITEWORK				**10,880**			**10,880**
	2.200		**DEMOLITION**							
		2.250	*Interior Demolition*							
			Demo-Interior Renovations	1,752.00 sf	-	-	5,256	-	3.00	5,256
			Interior Demolition				*5,256*			*5,256*
			DEMOLITION				**5,256**			**5,256**
	3.000		**CONCRETE**							
		3.100	*Concrete-Building*							
			Concrete-Ftgs/Walls/SOG/SOD	45.00 cy	-	-	22,500	-	500.00	22,500
			Concrete-Building				*22,500*			*22,500*
			CONCRETE				**22,500**			**22,500**
	4.000		**MASONRY**							
		4.110	*Face Brick*							
			Masonry-Veneer-Brick	1,622.00 sf	-	-	38,928	-	24.00	38,928
			Face Brick				*38,928*			*38,928*
		4.200	*Concrete Block*							
			Masonry-CMU- 8"-Int Walls	744.00 sf	-	-	14,880	-	20.00	14,880
			Concrete Block				*14,880*			*14,880*
			MASONRY				**53,808**			**53,808**
	5.000		**METALS**							
		5.110	*Structural Steel*							
			Structural Steel-Erected-10.50#/Sqft	2,176.00 sf	-	35,384	8,589	-	20.21	43,974
			Structural Steel			*35,384*	*8,589*			*43,974*
		5.500	*Misc. Metals*							
			Misc Metals-General	2,176.00 sf	-	-	2,176	-	1.00	2,176
			Misc. Metals				*2,176*			*2,176*
			METALS			**35,384**	**10,765**			**46,150**
	6.000		**WOOD & PLASTICS**							
		6.100	*Wood Framing*							
			Rough Carpentry	2,176.00 sf	-	-	3,264	-	1.50	3,264

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			Wood Framing				*3,264*			*3,264*
		6.640	*Interior Millwork*							
			Interior Wood Trim	2,176.00 sf	653	1,397	-	-	0.94	2,050
			Interior Millwork		*653*	*1,397*				*2,050*
		6.700	*Cabinets-Shelves*							
			Cabinets & Built Ins	10.00 lf	-	-	3,000	-	300.00	3,000
			Cabinets & Built Ins	0.00 lf	-	-	-	-	0.00	0
			Cabinets-Shelves				*3,000*			*3,000*
			WOOD & PLASTICS		**653**	**1,397**	**6,264**			**8,314**
	7.000		**THERM. & MOIST. PROTECT**							
		7.240	*Fireproofing*							
			Spray Fireproof-Structural Steel	2,176.00 sf	-	-	8,704	-	4.00	8,704
			Fireproofing				*8,704*			*8,704*
		7.520	*Membrane Roofs*							
			Membrane Roofs-W/ Rigid	2,176.00 sf	-	-	32,640	-	15.00	32,640
			Membrane Roofs				*32,640*			*32,640*
		7.821	*Fiberglass Shingle*							
			Shingle Roof-Architectural	0.00 sf			-	-		
			THERM. & MOIST. PROTECT				**41,344**			**41,344**
	8.000		**DOORS & WINDOWS**							
		8.005	*Doors General*							
			DFH-Man Doors-To 3070	11.00 ea	-	-	13,750	-	1,250.00	13,750
			DFH-Man Doors-To 3070	8.00 ea	-	-	10,000	-	1,250.00	10,000
			Doors General				*23,750*			*23,750*
		8.320	*Vault Doors*							
			Vault Door-Class 5-36" x 84"	1.00 ea	720	6,420	-	-	7,140.00	7,140
			Vault Doors		*720*	*6,420*				*7,140*
		8.410	*Aluminum Storefront*							
			Alum-Doors-To 3070-With Hardware	0.00 ea	-	-	0	-	0.00	0
			Alum-WIndows-EW-At 20 %	406.00 sf			20,300	-	50.00	20,300
			Aluminum Storefront				*20,300*			*20,300*
			DOORS & WINDOWS		**720**	**6,420**	**44,050**			**51,190**
	9.000		**FINISHES**							
		9.200	*Partitions*							
			LGMS x GWB-Ext Walls	2,028.00 sf	-	-	28,392	-	14.00	28,392
			LGMS x GWB-Int Walls	2,304.00 sf	-	-	13,824	-	6.00	13,824
			LGMS x GWB-Int Walls	2,292.00 sf	-	-	13,752	-	6.00	13,752
			Partitions				*55,968*			*55,968*
		9.510	*Finish Ceilings*							
			ACT-Ceilings-2 x 4-Tegular	2,176.00 sf	-	-	8,704	-	4.00	8,704

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
		9.510	*Finish Ceilings*							
			ACT-Ceilings-2 x 4-Tegular	1,752.00 sf	-	-	7,008	-	4.00	7,008
			Finish Ceilings				*15,712*			*15,712*
		9.860	*Finish Flooring*							
			Finish Flooring-Carpet & Resilient	2,176.00 sf			8,704	-	4.00	8,704
			Finish Flooring-Carpet & Resilient	1,752.00 sf	-	-	7,008	-	4.00	7,008
			Finish Flooring				*15,712*			*15,712*
		9.990	*Painting*							
			Finish Paint	2,176.00 sf	-	-	6,528	-	3.00	6,528
			Finish Paint	1,752.00 sf	-	-	5,256	-	3.00	5,256
			Painting				*11,784*			*11,784*
			FINISHES				**99,176**			**99,176**
	10.000		**SPECIALTIES**							
		10.999	*Specialties*							
			Specialties	2,176.00 sf			2,176	-	1.00	2,176
			Specialties	1,752.00 sf	-	-	1,752	-	1.00	1,752
			Specialties				*3,928*			*3,928*
			SPECIALTIES				**3,928**			**3,928**
	12.000		**FURNISHINGS**							
		12.800	*Loose Furnishings-FF & E*							
			Furnishings-Loose-By Owner	0.00 ls	-	-	0	-	0.00	0
	15.000		**MECHANICAL**							
		15.300	*Sprinkler*							
			Sprinkler-New	2,176.00 sf	-	-	7,616	-	3.50	7,616
			Sprinkler-New	1,752.00 sf	-	-	6,132	-	3.50	6,132
			Sprinkler				*13,748*			*13,748*
		15.400	*Plumbing*							
			Plumbing	2,176.00 sf	-	-	10,880	-	5.00	10,880
			Plumbing	1,752.00 sf	-	-	17,520	-	10.00	17,520
			Plumbing				*28,400*			*28,400*
		15.500	*HVAC*							
			HVAC-W/ Cooling	2,176.00 sf	-	-	68,914	-	31.67	68,914
			HVAC-W/ Cooling	1,752.00 sf	-	-	55,486	-	31.67	55,486
			HVAC				*124,400*			*124,400*
			MECHANICAL				**166,548**			**166,548**
	16.000		**ELECTRICAL**							
		16.001	*Electrical*							
			Electrical	2,176.00 sf	-	-	32,640	-	15.00	32,640
			Electrical	1,752.00 sf	-	-	17,520	-	10.00	17,520

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			Electrical				*50,160*			*50,160*
			ELECTRICAL				**50,160**			**50,160**
			5 - TOWN HALL		**1,373**	**43,201**	**514,679**			**559,253**
6 - COMMUNITY ROOM										
	2.200		**DEMOLITION**							
		2.250	*Interior Demolition*							
			Demo-Interior Renovations	1,593.00 sf		-	4,779		3.00	4,779
			Interior Demolition				*4,779*			*4,779*
			DEMOLITION				**4,779**			**4,779**
	6.000		**WOOD & PLASTICS**							
		6.700	*Cabinets-Shelves*							
			Cabinets & Built Ins	0.00 lf	-	-	0	-	0.00	0
	8.000		**DOORS & WINDOWS**							
		8.005	*Doors General*							
			DFH-Man Doors-To 3070	3.00 ea	-	-	3,750	-	1,250.00	3,750
			Doors General				*3,750*			*3,750*
			DOORS & WINDOWS				**3,750**			**3,750**
	9.000		**FINISHES**							
		9.200	*Partitions*							
			LGMS x GWB-Int Walls	0.00 sf	-	-	0	-	0.00	0
		9.510	*Finish Ceilings*							
			ACT-Ceilings-2 x 4-Tegular	1,593.00 sf	-	-	6,372	-	4.00	6,372
			Finish Ceilings				*6,372*			*6,372*
		9.860	*Finish Flooring*							
			Finish Flooring-Carpet & Resilient	1,593.00 sf	-	-	6,372	-	4.00	6,372
			Finish Flooring				*6,372*			*6,372*
		9.990	*Painting*							
			Finish Paint	1,593.00 sf	-	-	4,779	-	3.00	4,779
			Painting				*4,779*			*4,779*
			FINISHES				**17,523**			**17,523**
	10.000		**SPECIALTIES**							
		10.999	*Specialties*							
			Specialties	1,593.00 sf	-	-	1,593	-	1.00	1,593
			Specialties				*1,593*			*1,593*

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			SPECIALTIES				**1,593**			**1,593**
	12.000		**FURNISHINGS**							
		12.800	*Loose Furnishings-FF & E*							
			Furnishings-Loose-By Owner	0.00 ls	-	-	0	-	0.00	0
	15.000		**MECHANICAL**							
		15.300	*Sprinkler*							
			Sprinkler-New	1,593.00 sf	-	-	5,576	-	3.50	5,576
			Sprinkler				*5,576*			*5,576*
		15.400	*Plumbing*							
			Plumbing	1,593.00 sf	-	-	7,965	-	5.00	7,965
			Plumbing				*7,965*			*7,965*
		15.500	*HVAC*							
			HVAC-W/ Cooling	1,593.00 sf	-	-	12,744	-	8.00	12,744
			HVAC				*12,744*			*12,744*
			MECHANICAL				**26,285**			**26,285**
	16.000		**ELECTRICAL**							
		16.001	*Electrical*							
			Electrical	1,583.00 sf	-	-	12,664	-	8.00	12,664
			Electrical				*12,664*			*12,664*
			ELECTRICAL				**12,664**			**12,664**
			6 - COMMUNITY ROOM				**66,594**			**66,594**

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
7 - COMM REC CENTER										
	2.200		**DEMOLITION**							
		2.250	*Interior Demolition*							
			Demo-Interior Renovations	7,470.00 sf		-	14,940		2.00	14,940
			Interior Demolition				*14,940*			*14,940*
			DEMOLITION				**14,940**			**14,940**
	6.000		**WOOD & PLASTICS**							
		6.700	*Cabinets-Shelves*							
			Cabinets & Built Ins	0.00 lf	-	-		-		
	8.000		**DOORS & WINDOWS**							
		8.005	*Doors General*							
			DFH-Man Doors-To 3070	8.00 ea	-	-	10,000	-	1,250.00	10,000
			Doors General				*10,000*			*10,000*
			DOORS & WINDOWS				**10,000**			**10,000**
	9.000		**FINISHES**							
		9.200	*Partitions*							
			LGMS x GWB-Int Walls	0.00 sf	-	-	0	-	0.00	0
		9.510	*Finish Ceilings*							
			ACT-Ceilings-2 x 4-Tegular	1,771.00 sf	-	-	7,084	-	4.00	7,084
			Finish Ceilings				*7,084*			*7,084*
		9.710	*Wood Flooring*							
			Wood Flooring-Refinish	5,699.00 sf	-	-	15,672	-	2.75	15,672
			Wood Flooring				*15,672*			*15,672*
		9.860	*Finish Flooring*							
			Finish Flooring-Carpet & Resilient	1,771.00 sf			7,084	-	4.00	7,084
			Finish Flooring				*7,084*			*7,084*
		9.990	*Painting*							
			Finish Paint	7,470.00 sf	-	-	22,410	-	3.00	22,410
			Painting				*22,410*			*22,410*
			FINISHES				**52,250**			**52,250**
	10.000		**SPECIALTIES**							
		10.999	*Specialties*							
			Specialties	7,470.00 sf			5,603	-	0.75	5,603
			Specialties				*5,603*			*5,603*

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			SPECIALTIES				**5,603**			**5,603**
	11.000		**EQUIPMENT**							
		11.404	*Commercial Kitchen*							
			Kitchen Equipment-Coffee & Snacks	1.00 ls	-	-	2,500	-	2,500.00	2,500
			Commercial Kitchen				*2,500*			*2,500*
			EQUIPMENT				**2,500**			**2,500**
	12.000		**FURNISHINGS**							
		12.800	*Loose Furnishings-FF & E*							
			Furnishings-Loose-By Owner	0.00 ls	-	-	0	-	0.00	0
	15.000		**MECHANICAL**							
		15.300	*Sprinkler*							
			Sprinkler-New	7,470.00 sf	-	-	26,145	-	3.50	26,145
			Sprinkler				*26,145*			*26,145*
		15.400	*Plumbing*							
			Plumbing	7,470.00 sf	-	-	22,410	-	3.00	22,410
			Plumbing				*22,410*			*22,410*
		15.500	*HVAC*							
			HVAC-W/ Cooling	7,470.00 sf	-	-	77,202	-	10.34	77,202
			HVAC				*77,202*			*77,202*
			MECHANICAL				**125,757**			**125,757**
	16.000		**ELECTRICAL**							
		16.001	*Electrical*							
			Electrical	7,470.00 sf	-	-	74,700	-	10.00	74,700
			Electrical				*74,700*			*74,700*
			ELECTRICAL				**74,700**			**74,700**
			7 - COMM REC CENTER				**285,750**			**285,750**

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
8 - GATHERING PLACE										
	2.200		**DEMOLITION**							
		2.250	*Interior Demolition*							
			Demo-Interior Renovations	0.00 sf	-	-	0	-	0.00	0
	6.000		**WOOD & PLASTICS**							
		6.700	*Cabinets-Shelves*							
			Cabinets & Built Ins	0.00 lf	0	0	0	-	0.00	0
	8.000		**DOORS & WINDOWS**							
		8.005	*Doors General*							
			DFH-Man Doors-To 3070	0.00 ea	-	-	0	-	0.00	0
	9.000		**FINISHES**							
		9.200	*Partitions*							
			LGMS x GWB-Int Walls	0.00 sf	-	-	0	-	0.00	0
		9.510	*Finish Ceilings*							
			ACT-Ceilings-2 x 4-Tegular	0.00 sf	-	-	0	-	0.00	0
		9.860	*Finish Flooring*							
			Finish Flooring-Carpet & Resilient	0.00 sf	-	-	0	-	0.00	0
		9.990	*Painting*							
			Finish Paint	0.00 sf	-	-	0	-	0.00	0
	10.000		**SPECIALTIES**							
		10.999	*Specialties*							
			Specialties	0.00 sf	-	-	0	-	0.00	0
	11.000		**EQUIPMENT**							
		11.404	*Commercial Kitchen*							
			Kitchen Equipment	0.00 sf	-	-	0	-	0.00	0
	12.000		**FURNISHINGS**							
		12.800	*Loose Furnishings-FF & E*							
			Furnishings-Loose-By Owner	0.00 ls				-		
	15.000		**MECHANICAL**							
		15.300	*Sprinkler*							
			Sprinkler-New	2,403.00 sf	-	-	8,411	-	3.50	8,411
			Sprinkler				*8,411*			*8,411*
		15.400	*Plumbing*							
			Plumbing	0.00 sf	-	-	0	-	0.00	0
		15.500	*HVAC*							
			HVAC-W/ Cooling	2,403.00 sf	-	-	63,800	-	26.55	63,800

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			HVAC				*63,800*			*63,800*
			MECHANICAL				**72,210**			**72,210**
	16.000		**ELECTRICAL**							
		16.001	*Electrical*							
			Electrical	0.00 sf	-	-	0	-	0.00	0
			8 - GATHERING PLACE				**72,210**			**72,210**

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
9 - SUPERVISORY UNON										
	2.200		**DEMOLITION**							
		2.250	*Interior Demolition*							
			Demo-Interior Renovations	4,783.00 sf		-	9,566		2.00	9,566
			Interior Demolition				*9,566*			*9,566*
			DEMOLITION				**9,566**			**9,566**
	6.000		**WOOD & PLASTICS**							
		6.700	*Cabinets-Shelves*							
			Cabinets & Built Ins	0.00 lf	-	-	0	-	0.00	0
	8.000		**DOORS & WINDOWS**							
		8.005	*Doors General*							
			DFH-Man Doors-To 3070	1.00 ea	-	-	1,250	-	1,250.00	1,250
			Doors General				*1,250*			*1,250*
			DOORS & WINDOWS				**1,250**			**1,250**
	9.000		**FINISHES**							
		9.200	*Partitions*							
			LGMS x GWB-Int Walls	0.00 sf	-	-	0	-	0.00	0
		9.510	*Finish Ceilings*							
			ACT-Ceilings-2 x 4-Tegular	4,783.00 sf	-	-	19,132	-	4.00	19,132
			Finish Ceilings				*19,132*			*19,132*
		9.860	*Finish Flooring*							
			Finish Flooring-Carpet & Resilient	4,783.00 sf			19,132	-	4.00	19,132
			Finish Flooring				*19,132*			*19,132*
		9.990	*Painting*							
			Finish Paint	4,783.00 sf	-	-	14,349	-	3.00	14,349
			Painting				*14,349*			*14,349*
			FINISHES				**52,613**			**52,613**
	10.000		**SPECIALTIES**							
		10.999	*Specialties*							
			Specialties	4,783.00 sf			2,392	-	0.50	2,392
			Specialties				*2,392*			*2,392*
			SPECIALTIES				**2,392**			**2,392**
	11.000		**EQUIPMENT**							
		11.404	*Commercial Kitchen*							
			Kitchen Equipment-Coffee & Snacks	0.00 ls	-	-	0	-	0.00	0

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
	12.000		**FURNISHINGS**							
		12.800	*Loose Furnishings-FF & E*							
			Furnishings-Loose-By Owner	0.00 ls				-		
	15.000		**MECHANICAL**							
		15.300	*Sprinkler*							
			Sprinkler-New	4,783.00 sf	-	-	16,741	-	3.50	16,741
			Sprinkler				*16,741*			*16,741*
		15.400	*Plumbing*							
			Plumbing	4,783.00 sf	-	-	9,566	-	2.00	9,566
			Plumbing				*9,566*			*9,566*
		15.500	*HVAC*							
			HVAC-W/ Cooling	4,783.00 sf	-	-	115,600	-	24.17	115,600
			HVAC				*115,600*			*115,600*
			MECHANICAL				**141,907**			**141,907**
	16.000		**ELECTRICAL**							
		16.001	*Electrical*							
			Electrical	4,783.00 sf	-	-	47,830	-	10.00	47,830
			Electrical				*47,830*			*47,830*
			ELECTRICAL				**47,830**			**47,830**
			9 - SUPERVISORY UNON				**255,557**			**255,557**

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
91 - POLICE DEPARTMT										
	2.000		**SITEWORK**							
		2.071	*Building Earthwork*							
			Building-Excavate/Backfill/Slab Prep	856.00 sf		-	4,280		5.00	4,280
			Building Earthwork				*4,280*			*4,280*
			SITEWORK				**4,280**			**4,280**
	2.200		**DEMOLITION**							
		2.250	*Interior Demolition*							
			Demo-Interior Renovations	3,621.00 sf		-	21,726		6.00	21,726
			Interior Demolition				*21,726*			*21,726*
			DEMOLITION				**21,726**			**21,726**
	3.000		**CONCRETE**							
		3.100	*Concrete-Building*							
			Concrete-Ftgs/Walls/SOG/SOD	27.00 cy	-	-	13,500	-	500.00	13,500
			Concrete-Building				*13,500*			*13,500*
			CONCRETE				**13,500**			**13,500**
	4.000		**MASONRY**							
		4.110	*Face Brick*							
			Masonry-Veneer-Brick	720.00 sf	-	-	17,280	-	24.00	17,280
			Face Brick				*17,280*			*17,280*
		4.200	*Concrete Block*							
			Masonry-CMU- 8"-Ext Walls	720.00 sf	-	-	11,520	-	16.00	11,520
			Concrete Block				*11,520*			*11,520*
			MASONRY				**28,800**			**28,800**
	5.000		**METALS**							
		5.110	*Structural Steel*							
			Structural Steel-Erected-10.50#/Sqft	856.00 sf	-	13,920	3,379	-	20.21	17,299
			Structural Steel			*13,920*	*3,379*			*17,299*
		5.500	*Misc. Metals*							
			Misc Metals-General	856.00 sf	-	-	856	-	1.00	856
			Misc. Metals				*856*			*856*
			METALS			**13,920**	**4,235**			**18,155**
	6.000		**WOOD & PLASTICS**							
		6.100	*Wood Framing*							
			Rough Carpentry	4,477.00 sf	-	-	6,716	-	1.50	6,716

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			Wood Framing				*6,716*			*6,716*
		6.640	*Interior Millwork*							
			Interior Wood Trim	4,477.00 sf	1,343	2,874	-	-	0.94	4,217
			Interior Millwork		*1,343*	*2,874*				*4,217*
		6.700	*Cabinets-Shelves*							
			Cabinets & Built Ins	50.00 lf			15,000	-	300.00	15,000
			Cabinets-Shelves				*15,000*			*15,000*
			WOOD & PLASTICS		**1,343**	**2,874**	**21,716**			**25,933**
	7.000		**THERM. & MOIST. PROTECT**							
		7.240	*Fireproofing*							
			Spray Fireproof-Structural Steel	856.00 sf	-	-	3,424	-	4.00	3,424
			Fireproofing				*3,424*			*3,424*
		7.520	*Membrane Roofs*							
			Membrane Roofs-W/ Rigid	856.00 sf	-	-	12,840	-	15.00	12,840
			Membrane Roofs				*12,840*			*12,840*
		7.821	*Fiberglass Shingle*							
			Shingle Roof-Architectural	0.00 sf			-	-		
			THERM. & MOIST. PROTECT				**16,264**			**16,264**
	8.000		**DOORS & WINDOWS**							
		8.005	*Doors General*							
			DFH-Man Doors-To 3070	25.00 ea	-	-	31,250	-	1,250.00	31,250
			Doors General				*31,250*			*31,250*
		8.360	*Overhead Doors*							
			Overhead Doors-At Sallyport	2.00 ea	-	-	4,000	-	2,000.00	4,000
			Overhead Doors				*4,000*			*4,000*
		8.410	*Aluminum Storefront*							
			Alum-Doors-To 3070-With Hardware	2.00 ea	-	-	7,000	-	3,500.00	7,000
			Alum-WIndows-EW-At 20 %	144.00 sf			7,200	-	50.00	7,200
			Aluminum Storefront				*14,200*			*14,200*
			DOORS & WINDOWS				**49,450**			**49,450**
	9.000		**FINISHES**							
		9.200	*Partitions*							
			LGMS x GWB-Ext Walls	0.00 sf	-	-	0	-	0.00	0
			LGMS x GWB-Int Walls	6,180.00 sf	-	-	37,080	-	6.00	37,080
			Partitions				*37,080*			*37,080*
		9.510	*Finish Ceilings*							
			ACT-Ceilings-2 x 4-Tegular	4,477.00 sf	-	-	17,908	-	4.00	17,908
			Finish Ceilings				*17,908*			*17,908*
		9.860	*Finish Flooring*							
			Finish Flooring-Carpet & Resilient	4,477.00 sf			17,908	-	4.00	17,908

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			Finish Flooring				*17,908*			*17,908*
		9.990	*Painting*							
			Finish Paint	4,477.00 sf	-	-	13,431	-	3.00	13,431
			Painting				*13,431*			*13,431*
			FINISHES				**86,327**			**86,327**
	10.000		**SPECIALTIES**							
		10.999	*Specialties*							
			Specialties	4,477.00 sf			4,477	-	1.00	4,477
			Specialties				*4,477*			*4,477*
			SPECIALTIES				**4,477**			**4,477**
	12.000		**FURNISHINGS**							
		12.800	*Loose Furnishings-FF & E*							
			Furnishings-Loose-By Owner	0.00 ls				-		
	13.000		**SPECIAL CONSTRUCTION**							
		13.001	*Special Construction*							
			Special-Radio & Transmission	0.00 ls	-	-	0	-	0.00	0
			Special-Bullet Proof-Entry Area	200.00 sf	-	-	8,000	-	40.00	8,000
			Special-Doors & Windows-Secure	1.00 ls	-	-	10,000	-	10,000.00	10,000
			Special Construction				*18,000*			*18,000*
			SPECIAL CONSTRUCTION				**18,000**			**18,000**
	15.000		**MECHANICAL**							
		15.300	*Sprinkler*							
			Sprinkler-New	3,621.00 sf	-	-	12,674	-	3.50	12,674
			Sprinkler-New	856.00 sf	-	-	2,996	-	3.50	2,996
			Sprinkler				*15,670*			*15,670*
		15.400	*Plumbing*							
			Plumbing	4,477.00 sf	-	-	49,247	-	11.00	49,247
			Plumbing				*49,247*			*49,247*
		15.500	*HVAC*							
			HVAC-W/ Cooling	3,621.00 sf	-	-	88,807	-	24.53	88,807
			HVAC-W/ Cooling	856.00 sf	-	-	20,994	-	24.53	20,994
			HVAC				*109,800*			*109,800*
			MECHANICAL				**174,717**			**174,717**
	16.000		**ELECTRICAL**							
		16.001	*Electrical*							
			Electrical	3,621.00 sf	-	-	54,315	-	15.00	54,315
			Electrical	856.00 sf	-	-	12,840	-	15.00	12,840
			Electrical-Data & Security	4,477.00 sf	-	-	26,862	-	6.00	26,862

Sort Field	Group	Phase	Description	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Total Cost/Unit	Total Amount
			Electrical				*94,017*			*94,017*
			ELECTRICAL				**94,017**			**94,017**
			91 - POLICE DEPARTMT		**1,343**	**16,794**	**537,508**			**555,645**
93 - ALL WORK AREAS										
	2.200		**DEMOLITION**							
		2.240	*Building Removal*							
			Demo Building-Hazardous-No Abatement	0.00 ls			0			
	15.000		**MECHANICAL**							
		15.300	*Sprinkler*							
			Sprinkler-Fire Pumps	0.00 ea	-	-	0	-	0.00	0
			Sprinkler-Water Storage Tanks	0.00 ea	-	-	0	-	0.00	0
		15.500	*HVAC*							
			HVAC-Central Mechanical Systems	1.00 ls	-	-	249,234	-	249,234.00	249,234
			HVAC				*249,234*			*249,234*
			MECHANICAL				**249,234**			**249,234**
	16.000		**ELECTRICAL**							
		16.001	*Electrical*							
			Electrical	1.00 ls	-	-	60,000	-	60,000.00	60,000
			Electrical				*60,000*			*60,000*
			ELECTRICAL				**60,000**			**60,000**
	17.000		**ALLOWANCES**							
		17.100	*Allowances*							
			MEP-Infrastructure-Repairs & Upgrades	0.00 ls	-	-	0	-	0.00	0
			93 - ALL WORK AREAS				**309,234**			**309,234**

Estimate Totals

Description	Amount	Totals	Rate	Cost per Unit
	3,332,658	*3,332,658*		
Builder GC's & GR's	332,743		10.000 %	
Pre Construction Cost				
Building Permits - By Others				
Escalate Beyond 2016				
Estimate Contingency	366,540		10.000 %	
Builder Construct Contingency	173,800		3.907 %	
Owner Contingency				
Construction Cost	*873,083*	*4,205,741*		
Builder P & P Bond	42,256		0.950 %	
Builder Insurances	28,912		0.650 %	
Insurances	*71,168*	*4,276,909*		
A & E Design Fee's - By Others				
Builder OHD & Profit	171,076		4.000 %	
Total Fee's	*171,076*	*4,447,985*		
Total		***4,447,985***		***148.2 /SF***

CONSTRUCTION COST DATA

Project: Twin Valley HS
Engineer: JFP | Date: 05-May-16
Department: | Est.:
Subject: Central Mechanical Systems
Sheet 1 of 1

John F. Penney Consulting Services, P.C.
HVAC, Plumbing & Fire Protection Engineering
Commissioning & TAB Services
PO Box 10 • 231 So. Main Street • Chester, Vermont 05143
Phone/Fax 802.875.2010 • e-mail: info@jfpcs.com

		Quantity		Material		Labor		Total	
Number	**Item**	**No. Units**	**Unit Meas.**	**Unit**	**Total**	**Unit**	**Total**	**Cost**	
	Demolition		Man hours						
23 05 05.10 0360	boilers	2	each	3450	6900.00	3450	6900.00	13800.00	
22 05 05.10 2186	pumps	2	each	320	640.00	320	640.00	1280.00	
	piping	100	LF	2.98	300.00	2.98	300.00	600.00	
	Miscellaneous	1		500	500.00	500	500.00	1000.00	
									$16,680
	New work								
23 52 23.30 3060	Boilers	2	each	26500	53000.00	6100	12200.00	65200.00	
D3020 330 1020	Pumps	2	each	12800	25600.00	4425	8850.00	34450.00	
22 11 13.48 9060	Piping	200	LF	8.35	1670.00	8.35	1670.00	3340.00	
	Boiler Specialties	1	Allowance	10000	10000.00	5000	5000.00	15000.00	
	Boiler Controls	1	Allowance	10000	10000.00	10000	10000.00	20000.00	
									$137,990
	Building Mangement Sys	5500	SF	3	16500.00	3	16500.00	33000.00	$33,000
									$187,670
	Remove and dispose of Oil Tank	1	Allowance	20000	20000.00	1500	1500.00	21500.00	
3 13.13 6330	Underground Oil Tank 10 K gal	1	each	27700	27700.00	950	950.00	28650.00	
	Oil tank specialties	1	Allowance	25000	25000.00	10000	10000.00	35000.00	
									$85,150
23 13 23.16 3060	Above Gng Oil Tank 550 gal	2		3100	6200.00	300	600.00	6800.00	
	Oil Tank Specialties and Piping	1	Allowance	5000	5000.00	1500	1500.00	6500.00	
									$13,300
	Sub Total				**209010.00**		**77110.00**	**286120.00**	
	Overhead	10 %			20900.00		7710.00	28610.00	
	Profit	15 %			34490.00		12720.00	47210.00	
	Contingency	5 %			13220.00		4880.00	18100.00	
	Total				**$277,600.00**		**$102,400.00**	**$380,000.00**	

CONSTRUCTION COST DATA

Project: Twin Valley High School
Engineer: Date: 5/5/16
Department: Est.:
Subject: Town Hall
Sheet 1 of 1

John F. Penney Consulting Services, P.C.
HVAC, Plumbing & Fire Protection Engineering
Commissioning & TAB Services
PO Box 10 • 231 So. Main Street • Chester, Vermont 05143
Phone/Fax 802.875.2010 • e-mail: info@jfpcs.com

		Quantity			Material		Labor	Total
Number	**Item**	**No. Units**	**Unit Meas.**	**Unit**	**Total**	**Unit**	**Total**	**Cost**
D 3040 124 1050	Fan Coil Units	4	EA	5900	23600.00	7050	28200.00	51800.00
328236.1	Finned Tube Radiation	155	LF	18.497	2870.00	14.548	2260.00	5130.00
	Misc Piping	6117	SF	1.5	9180.00	1.5	9180.00	18360.00
	Controls	6117	SF	1.5	9180.00	1.5	9180.00	18360.00
	Sub Total				**$44,830.00**		**$48,820.00**	**$93,650.00**
	Overhead	10 %			$4,480.00		$4,880.00	$9,370.00
	Profit	15 %			$7,400.00		$8,060.00	$15,450.00
	Contingency	5 %			$2,840.00		$3,090.00	$5,920.00
	Total				**$59,600.00**		**$64,900.00**	**$124,400.00**

CONSTRUCTION COST DATA

Project: Twin Valley High School
Engineer: Date: 5/5/16
Department: Est.:
Subject: Supervisory Union
Sheet 1 of 1

John F. Penney Consulting Services, P.C.
HVAC, Plumbing & Fire Protection Engineering
Commissioning & TAB Services
PO Box 10 • 231 So. Main Street • Chester, Vermont 05143
Phone/Fax 802.875.2010 • e-mail: info@jfpcs.com

		Quantity			Material		Labor	Total
Number	**Item**	**No. Units**	**Unit Meas.**	**Unit**	**Total**	**Unit**	**Total**	**Cost**
D 3040 124 1050	Fan Coil Units	4	EA	5900	23600.00	7050	28200.00	51800.00
328236.1	Finned Tube Radiation	155	LF	18.497	2870.00	14.548	2260.00	5130.00
	Misc Piping	5011	SF	1.5	7520.00	1.5	7520.00	15040.00
	Controls	5011	SF	1.5	7520.00	1.5	7520.00	15040.00
	Sub Total				**$41,510.00**		**$45,500.00**	**$87,010.00**
	Overhead	10 %			$4,150.00		$4,550.00	$8,700.00
	Profit	15 %			$6,850.00		$7,510.00	$14,360.00
	Contingency	5 %			$2,630.00		$2,880.00	$5,500.00
	Total				**$55,100.00**		**$60,400.00**	**$115,600.00**

CONSTRUCTION COST DATA

Project: Twin Valley High School
Engineer: Date: 5/5/2016
Department: Est.:
Subject: Gathering Place
Sheet 1 of 1

John F. Penney Consulting Services, P.C.
HVAC, Plumbing & Fire Protection Engineering
Commissioning & TAB Services
PO Box 10 • 231 So. Main Street • Chester, Vermont 05143
Phone/Fax 802.875.2010 • e-mail: info@jfpcs.com

		Quantity			Material		Labor	Total
Number	**Item**	**No. Units**	**Unit Meas.**	**Unit**	**Total**	**Unit**	**Total**	**Cost**
D30401281110	Fan Coil Units	1	EA	12200	12200.00	19900	19900.00	32100.00
	Misc Piping	2660	SF	1.5	3990.00	1.5	3990.00	7980.00
	Controls	2660	SF	1.5	3990.00	1.5	3990.00	7980.00
	Sub Total				**$20,180.00**		**$27,880.00**	**$48,060.00**
	Overhead	10 %			$2,020.00		$2,790.00	$4,810.00
	Profit	15 %			$3,330.00		$4,600.00	$7,930.00
	Contingency	5 %			$1,280.00		$1,760.00	$3,040.00
	Total				**$26,800.00**		**$37,000.00**	**$63,800.00**

CONSTRUCTION COST DATA

Project: Twin Valley High School
Engineer: Date: 5/5/2016
Department: Est.:
Subject: Community Rec Center
Sheet 1 of 1

John F. Penney Consulting Services, P.C.
HVAC, Plumbing & Fire Protection Engineering
Commissioning & TAB Services
PO Box 10 • 231 So. Main Street • Chester, Vermont 05143
Phone/Fax 802.875.2010 • e-mail: info@jfpcs.com

		Quantity			Material		Labor	Total
Number	**Item**	**No. Units**	**Unit Meas.**	**Unit**	**Total**	**Unit**	**Total**	**Cost**
	Refurbish Existing Equipment	8300	SF	2.5	20750.00	2.5	20750.00	41500.00
	Controls	8300	SF	1	8300.00	1	8300.00	16600.00
	Sub Total				**$29,050.00**		**$29,050.00**	**$58,100.00**
	Overhead	10 %			$2,910.00		$2,910.00	$5,810.00
	Profit	15 %			$4,790.00		$4,790.00	$9,590.00
	Contingency	5 %			$1,840.00		$1,840.00	$3,680.00
	Total				**$38,600.00**		**$38,600.00**	**$77,200.00**

CONSTRUCTION COST DATA

Project: Twin Valley High School
Engineer: Date: 5/5/2016
Department: Est.:
Subject: Clinic
Sheet 1 of 1

John F. Penney Consulting Services, P.C.
HVAC, Plumbing & Fire Protection Engineering
Commissioning & TAB Services
PO Box 10 • 231 So. Main Street • Chester, Vermont 05143
Phone/Fax 802.875.2010 • e-mail: info@jfpcs.com

		Quantity			Material		Labor	Total
Number	**Item**	**No. Units**	**Unit Meas.**	**Unit**	**Total**	**Unit**	**Total**	**Cost**
D30401161010	RTU	1	EA	38700	38700.00	9100	9100.00	47800.00
D30401341020	VAV System	12	EA	1675	20100.00	2100	25200.00	45300.00
D30201301020	Condensing Boiler	1	EA	9650	9650.00	5975	5975.00	15630.00
232123.1314	Pump 1hp	2	EA	3950	7900.00	201	402.00	8300.00
	Controls	4682	SF	2.5	11705.00	2.5	11705.00	23410.00
	Misc Labor & Parts	4682	SF	2	9364.00	2	9364.00	18730.00
	Sub Total				**$97,420.00**		**$61,750.00**	**$159,170.00**
	Overhead	10 %			$9,740.00		$6,170.00	$15,920.00
	Profit	15 %			$16,070.00		$10,190.00	$26,260.00
	Contingency	5 %			$6,160.00		$3,910.00	$10,070.00
	Total				**$129,400.00**		**$82,000.00**	**$211,400.00**

CONSTRUCTION COST DATA

Project: Twin Valley High School
Engineer: Date: 5/5/2016
Department: Est.:
Subject: Police Station
Sheet 1 of 1

John F. Penney Consulting Services, P.C.
HVAC, Plumbing & Fire Protection Engineering
Commissioning & TAB Services
PO Box 10 • 231 So. Main Street • Chester, Vermont 05143
Phone/Fax 802.875.2010 • e-mail: info@jfpcs.com

		Quantity			Material		Labor	Total
Number	**Item**	**No. Units**	**Unit Meas.**	**Unit**	**Total**	**Unit**	**Total**	**Cost**
D30401241050	Fan Coil Units	4	EA	5900	23600.00	7050	28200.00	51800.00
238236.1013	Finned Tube Radiation	114	LF	18.3	2086.00	14.54	1658.00	3744.00
	Misc Piping	4519	SF	1.5	6778.50	1.5	6778.50	13557.00
	Controls	4519	SF	1.5	6778.50	1.5	6778.50	13557.00
	Sub Total				**$39,240.00**		**$43,420.00**	**$82,660.00**
	Overhead	10 %			$3,920.00		$4,340.00	$8,270.00
	Profit	15 %			$6,470.00		$7,160.00	$13,640.00
	Contingency	5 %			$2,480.00		$2,750.00	$5,230.00
	Total				**$52,100.00**		**$57,700.00**	**$109,800.00**

5/17/16

Twin Valley High School Redevelopment - Plan D

1. Project Summary

Gross Square Feet			31,976	
	Municipal S.F.		19,024	59%
	Apartment S.F.		-	0%
	Office/Commercial S.F.		-	0%
	Other Non Profit S.F.		7,671	24%
	Common		5,281	17%
	Net Leasable		26,695	
Total Development Cost		$	6,399,936	
	Cost Per Sq. Ft.	$	200	
Stabilized Operations - Year 3				
	Municipal Occupancy		100%	
	Other Non Profit Occupancy		100%	
Gross Income		$	171,408	
	Per Leaseable Square Foot	$	6.42	
Operating Expenses		$	148,592	
	Per Leaseable Square Foot	$	5.57	no property taxes
Net Operating Income (NOI)		$	22,816	
Municipal Debt Service Payment		$	345,869	
Cash Flow after Debt Service & Reserves		$	13,834	
Debt Coverage Ratio			1.04	
Aggregate Reserve Balances		$	317,903	

Twin Valley High School Redevelopment - Plan D

5/17/16

2. Sources & Uses - Summary

Uses of Funds			%
Acquisition	$	9,000	0%
Hard Costs	$	4,952,919	77%
Architectural, Engineering & Permits	$	560,763	9%
Other Soft Costs	$	131,171	2%
Reserves, Financing Costs & Carrying Charges	$	123,825	2%
Operating & Lease Up Reserves	$	250,790	4%
Owner's Contingency	$	371,469	6%
Total	$	6,399,936	

Sources of Funds			
Federal Historic Tax Credit Equity	$	-	0%
State Historic Tax Credit Equity	$	-	0%
Sale of Municipal Building - Proceeds	$	250,000	4%
Hard Debt	$	6,111,436	95%
Soft Debt	$	-	0%
Grants	$	38,500	1%
GAP			0%
Total	$	6,399,936	

Twin Valley High School Redevelopment - Plan D

5/17/16

3. Operating Cash Flow - Summary

	2017 1	2018 2	2019 3	2020 4	2021 5
Occupancy Percentage					
Municipal	100%	100%	100%	100%	100%
Other Non-Profit Entities	100%	100%	100%	100%	100%
Ground Rents & Other	100%	100%	100%	100%	100%
Gross Rents					
Municipal	34,700	35,394	36,102	36,824	37,560
Other Non-Profit Entities	92,052	93,893	95,771	97,686	99,640
Ground Rents & Other	38,000	38,760	39,535	40,326	41,132
Gross Income	164,752	168,047	171,408	174,836	178,333
Total Operating Expenses	142,822	145,679	148,592	151,564	154,595
NOI	21,930	22,368	22,816	23,272	23,737
TOWN BOND PAYMENT	180,287	345,869	345,869	345,869	345,869
Annual Debt Service - Must Pay Debt	180,287	345,869	345,869	345,869	345,869
Debt Coverage Ratio	1.12	1.06	1.04	1.05	1.04
Capital Reserve	-	-	8,982	4,982	9,593
Cash Flow After Debt Service & Reserves	21,930	22,368	13,834	18,290	14,145
Reserves					
Deficit/Lease Up and Opserating Reserves	250,790	272,719	295,088	317,903	341,175
Capital Reserve	-	-	8,982	4,982	9,593
(Use)/Addition	21,930	22,368	13,834	18,290	14,145
Aggregate Reserve Balances - Exclusive Of Earnings	272,719	295,088	317,903	341,175	364,913

Twin Valley High School Redevelopment - Plan D

2.1 Sources & Uses of Funds

5/17/2016

		%	Cost/sf	Notes
Sources:			31,976	
Equity Investment				
Sale of Municipal Building - Proceeds	250,000	4%		Estimate
		0%		
Grants & Rebates				
Community Development Block Grant		0%		N/A
Wilmington Fund	13,500	0%		Allowance
Windham Economic Development		0%		Potential Availability?
Efficiency Vt	25,000	0%		Estimate
Debt				
Municipal Bond Issued	6,111,436	95%		25 year bond
Total Sources:	**6,399,936**		**200**	
Uses:				
Acquisition				
Buildings	-	0%		No Acquisition Cost
Land	-	0%		No Acquisition Cost
Closing Costs	5,000	0%		allowance
Appraisal - As-is		0%		n/a
Appraisal - As renovated	4,000	0%		Lender Requirement
Total Acquisition Cost	**9,000**	0%	**0**	
Architectural, Engineering & Permits				
Architecture & Structural Engineering	321,940	5%		6.5% of Construction
Civil Engineering	45,000	1%		Allowance
Engineering - Electrical & Mechanical	123,823	2%		2.5% of Construction
Landscape Architecture	15,000	0%		Allowance
Energy Modeling	10,000	0%		
IT & Security Design	15,000	0%		
LEED Certification	-	0%		
Commissioning	15,000	0%		Allowance
Design Contingency	15,000	0%		
Total Design & Permitting	**560,763**	9%	**18**	
Other Soft Costs				
Legal/Accounting	25,000	0%		Allowance
Clerk of the Works	25,000	0%		Allowance
Environmental Assessment	5,000	0%		Lender Requirement
Permitting Fees	36,171	1%		See schedule 2.6
Property Manager	-	0%		N/A
Marketing	-	0%		N/A
Testing	15,000	0%		Structure, Concrete, etc.
Soft Contingency	25,000	0%		Allowance
Total Other Soft Costs	**131,171**	2%	**4**	
Reserves, Financing Costs & Carrying Charges				
Reserves				
Operating Reserve	25,000	0%		Allowance
Capital Repair Reserve	225,790	4%		See Capital Reserve Schedule - Years 10 & 15@ 80%
Financing				
Construction Period Interest (8 months)	54,450	1%		Allowance at 3%, 8 month const period per DEW
Loan Fees & Expenses	40,000	1%		Lender Inspections @$15k; Fees & legal @ $25k
Carrying				
Taxes during Construction	-	0%		
Utilities, Maintenance and Security	8,000	0%		8 months @ $1k/month
Builder's Risk & GL Insurance	21,375	0%		9 months @ $3500 & $40,000 per annum
Total Soft Costs	**374,615**	6%	**12**	
Hard Costs				
Site Work, Demolition & Renovation	3,332,658	52%	**104**	Per DEW 5/6/16 Estimate
Construction Management Fee	171,076	3%	**5**	Per DEW 5/6/16 Estimate - 4% of base cost
Payment & Performance Bonds /Insurance	71,168	1%	**2**	Per DEW 5/6/16 Estimate
Contingencies	873,083	14%	**27**	Per DEW 5/6/16 Estimate - 14% of base cost
Capital Repairs - Year 5	504,934	8%		See Schedule 2.1.2 CONFIRM _ DEW SAYS NO CAP IMP
Total Hard Costs	**4,952,919**	77%	**155**	
Owner's Contingency	**371,469**	6%	**12**	7.5% of Hard Costs - which include 14%
Total Project Costs:	**6,399,936**	100%	**200**	
Total Over/(Under)	**-**	0%		

Twin Valley High School Redevelopment - Plan D
2.1.2 Preliminary Capital Improvement Schedule

5/17/16

Type of Work	Project	Year 1 Estimate	Year 5 Estimate	Year 10 Estimate	Year 15 Estimate
Site Work					
Handicapped Ramp	Construct handicapped ramp for north entrance(s) at first floor	41,205.00			
Masonry:					
EFIS	Repair EFIS at damaged areas.	2,150.00			
Wood, Plastics, & Composites:					
Exterior Soffit and Trim	Replace damaged or deteriorated wood and metal fascia and soffit trim.	28,187.00			
1981 School Stairs	Replace handrails and ballusters, and add guard rails for code compliance.	12,522.00			
Thermal & Moisture Protection:					
Asphalt Roofing & Drains	Replace asphalt roofing, and add additional drains.	74,025.00			108,660.00
Membrane Roofing & Drains	Replace membrane roofing, tapered insulation, and add additional drains.		172,267.00		
Openings:					
Doors & Door Hardware	Upgrade exterior and interior doors and door hardware to comply with fire life safety code & ADA. Replace gym door trhesholds.	8,700.00			
1981 School Windows	Replace 61 windows in three phases		61,875.00	69,609.00	78,310.00
Skylights	Replace the library skylights.		13,760.00		
Finishes:					
Specialities:					
Lockers	Replace lockers at boys locker room	7,534.00			
Conveying Equipment:					
Elevator	Replace existing elevator to meet ADA	75,000.00			
Plumbing:					
Water Fountains	Replace water fountain or add ADA compliant water fountain	2,419.00			
Toilets & Accessories	Update toilets for full ADA compliance	102,555.00			
Heating Ventilating & Air Conditioning:					
Existing Boilers	Remove and dispose of existing boilers boilers		18,765.00		
New Boilers	Install new boilers and controls		155,239.00		
Climate Control	Install new building management system		37,125.00		
Undergound Oil Tank	Remove and dispose of underground oil tank.	85,150.00			
Above Grade Oil Tank	Install new above grade oil tank	13,300.00			
Electrical:					
Fire Alarm	Up grade to a code compliant, addressable system	20,090.00			
Exit Devices	Update and add to existing exit lights,and horn strobes	25,000.00			
Magnetic Door Holds	Connect to fire alarm, disconnect from smoke detectors	10,000.00			
Contingency					
Subtotals:		507,837.00	459,031.00	69,609.00	186,970.00
10 Percent Contingency:		50,783.70	45,903.10	6,960.90	18,697.00
Totals:		558,620.70	504,934.10	76,569.90	205,667.00
		carried in DEW Est	carried in Dev Budget	carried at 80% in Dev Budget	

Color legand:

Blue R S Means Cost Data
Green Breadloaf Corp.
Red Allowance
Purple JFP Consulting Services

Notes:

1. This capital improvements schedule is intended as a planning tool, describing order of magnitude construction costs.
2. A complete capital needs assessment is recommended as the next step for this project.
3. These capital needs and costs have been partially based on studies prepared by Dore & Whittier and by Breadloaf Corp.

17-May-16 **Twin Valley High School Redevelopment - Plan D**
Loan Schedule & Amortizations

Must Pay Debt

Municipal Bond Issued

PRINCIPAL	6,111,436
INTEREST	2.95%
AMORTIZATION PERIOD	25
INTEREST ONLY PERIOD	1
MONTHLY PAYMENT	28,822
ANNUAL PAYMENT	345,869

YEAR	0	1	2	3	4	5	6	7	8	9	10
BEGINNING BALANCE		6,111,436	6,111,436	5,943,597	5,770,739	5,592,713	5,409,362	5,220,530	5,026,051	4,825,756	4,619,472
ENDING BALANCE	6,111,436	6,111,436	5,943,597	5,770,739	5,592,713	5,409,362	5,220,530	5,026,051	4,825,756	4,619,472	4,407,020
PRINCIPAL			167,839	172,858	178,027	183,350	188,833	194,479	200,295	206,284	212,452
INTEREST		180,287	178,030	173,011	167,843	162,519	157,037	151,390	145,575	139,586	133,417
TOTAL PAID		180,287	345,869	345,869	345,869	345,869	345,869	345,869	345,869	345,869	345,869

Twin Valley High School Redevelopment - Plan D

5/17/2016

2.6 Permit Fee Schedule

Name	Basis	Amount	Comments
Town of Wilmington Fees			
Town Zoning Fee			
Change of Use		$ 61.00	
Construction Fee		$ 3,200.00	based on 32,000 square feet
Hearing Fee		$ 75.00	Confirmed
Certificate of Occupancy		$ 100.00	Allow
Sign Fee		$ 200.00	Allow
Total Zoning Fees		**$ 3,575.00**	
Wastewater Connection & Allocation Fee		**$ 105.00**	
Total Town Fees		**$ 3,680.00**	
State of Vermont Fees			
Life Safety Permit			
Building Permit	.0055 Fee to DPS	$ 27,241.06	
Electrical			in trade
Plumbing			in trade
Elevator			in trade
HVAC			incl above
Sprinkler			incl above
Fire Alarm			
Water & Wastewater Permit		$ 5,000.00	Minor Amendment
Act 250		$ -	Exempt
Stormwater		$ 250.00	
Other			
Total State Fees		**$ 32,491.06**	
Total Permit Fees		**$ 36,171.06**	

Twin Valley High School Redevelopment - Plan D

3.1 Cash Flow Pro Forma

5/17/2016

	Pro Forma	Projection 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
General Assumptions											
Gross Square Footage	31,976										
Leased Square Footage	26,695										
Efficiency	83%										
Income - Rate of Increase	2%										
Lease Up Occupancy % Assumptions											
Municipal		*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
Other Non-Profit Entities		*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
Ground Rents & Other		*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
Income ***See 3.2 Rent Schedule***											
Municipal	34,700	34,700	35,394	36,102	36,824	37,560	38,312	39,078	39,859	40,657	41,470
Other Non-Profit Entities	92,052	92,052	93,893	95,771	97,686	99,640	101,633	103,666	105,739	107,854	110,011
Ground Rents & Other	38,000	38,000	38,760	39,535	40,326	41,132	41,955	42,794	43,650	44,523	45,414
CAM Recovery		-	-	-	-	-	-	-	-	-	-
Total Revenue	**$164,752**	**$164,752**	**$168,047**	**$171,408**	**$174,836**	**$178,333**	**$181,900**	**$185,538**	**$189,248**	**$193,033**	**$196,894**

	Pro Forma		Projection 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
			1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Expenses		Per S.F.										
Recoverable			-	-	-	-	-	-	-	-	-	-
Elevator Maint & Inspections	3,500	0.11	3,500	3,570	3,641	3,714	3,789	3,864	3,942	4,020	4,101	4,183
HVAC Maintenance & Repairs	6,395	0.20	6,395	6,523	6,654	6,787	6,922	7,061	7,202	7,346	7,493	7,643
Insurance - Prop & Liability	10,000	0.31	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951
Janitorial & Cleaning Supplies - Comm/Muni	18,000	0.56	18,000	18,360	18,727	19,102	19,484	19,873	20,271	20,676	21,090	21,512
Landscaping & Grounds	4,500	0.14	4,500	4,590	4,682	4,775	4,871	4,968	5,068	5,169	5,272	5,378
Maintenance & Repairs - General	18,720	0.59	18,720	19,094	19,476	19,866	20,263	20,668	21,082	21,503	21,933	22,372
Property Management	-	-	-	-	-	-	-	-	-	-	-	-
Recycling & Waste	2,400	0.08	2,400	2,448	2,497	2,547	2,598	2,650	2,703	2,757	2,812	2,868
Snow Removal	15,000	0.47	15,000	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926
Sprinkler/Security/Fire Alarm	13,500	0.42	13,500	13,770	14,045	14,326	14,613	14,905	15,203	15,507	15,817	16,134
Storm Water Fees	1,000	0.03	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195
Telephone/Data	2,400	0.08	2,400	2,448	2,497	2,547	2,598	2,650	2,703	2,757	2,812	2,868
Utilities - Electric (common)	7,994	0.25	7,994	8,154	8,317	8,483	8,653	8,826	9,003	9,183	9,366	9,554
Utilities - Heat	22,000	0.69	22,000	22,440	22,889	23,347	23,814	24,290	24,776	25,271	25,777	26,292
Utilities - Water & Sewer	4,913	0.18	4,913	5,011	5,112	5,214	5,318	5,424	5,533	5,644	5,756	5,872
Window Washing	2,500	0.08	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988
Taxes		-	-	-	-	-	-	-	-	-	-	-
Sub-Total Recoverable Expenses	**132,822**	4.15	**132,822**	**135,479**	**138,188**	**140,952**	**143,771**	**146,647**	**149,579**	**152,571**	**155,622**	**158,735**
	Per Leasable SF	4.98										

	Pro Forma		Projection									
			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
			1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Non- Recoverable												
Adminstrative Costs & Supplies	2,500	0.08	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988
Advertising & Communications	-	-	-	-	-	-	-	-	-	-	-	-
Professional Services	2,500	0.08	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988
Contingency	5,000	0.16	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975
Sub-Total Non- Recoverable Expenses	**10,000**	$ 0.31	**10,000**	**10,200**	**10,404**	**10,612**	**10,824**	**11,041**	**11,262**	**11,487**	**11,717**	**11,951**
	Per Leasable SF	0.37										
Total Operating Expenses	**142,822**		**142,822**	**145,679**	**148,592**	**151,564**	**154,595**	**157,687**	**160,841**	**164,058**	**167,339**	**170,686**
Net Operating Income			**21,930**	**22,368**	**22,816**	**23,272**	**23,737**	**24,212**	**24,696**	**25,190**	**25,694**	**26,208**
Other Expenses/Reserves												
Reserve for Replacement @ $.75/sf	23,982	0.75	-	-	8,982	4,982	9,593	11,991	11,991	11,991	11,991	11,991
Total Expenses	**166,804**		**142,822**	**145,679**	**157,574**	**156,546**	**164,188**	**169,678**	**172,832**	**176,049**	**179,330**	**182,677**
EBITDA	**(2,052)**		**21,930**	**22,368**	**13,834**	**18,290**	**14,145**	**12,221**	**12,705**	**13,199**	**13,703**	**14,217**
TOWN BOND PAYMENT	**100%**		180,287	345,869	345,869	345,869	345,869	345,869	345,869	345,869	345,869	345,869
Debt Service			180,287	345,869	345,869	345,869	345,869	345,869	345,869	345,869	345,869	345,869
Total Current Pay Debt Service			**180,287**	**345,869**	**345,869**	**345,869**	**345,869**	**345,869**	**345,869**	**345,869**	**345,869**	**345,869**
Debt Coverage Ratio			*1.12x*	*1.06x*	*1.04x*	*1.05x*	*1.04x*	*1.04x*	*1.04x*	*1.04x*	*1.04x*	*1.04x*
Cash Flow After Debt Service & Reserves			**21,930**	**22,368**	**13,834**	**18,290**	**14,145**	**12,221**	**12,705**	**13,199**	**13,703**	**14,217**
Net Cash Flow from Operations			**21,930**	**22,368**	**13,834**	**18,290**	**14,145**	**12,221**	**12,705**	**13,199**	**13,703**	**14,217**
Total Distributions			**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net Cash Flow, After Distributions			**21,930**	**22,368**	**13,834**	**18,290**	**14,145**	**12,221**	**12,705**	**13,199**	**13,703**	**14,217**
Cumulative Cash Flow			**21,930**	**44,298**	**58,132**	**76,422**	**90,566**	**102,787**	**115,493**	**128,692**	**142,395**	**156,612**
Cash Reserves												
Opening Reserve Balance			**250,790**	272,719	295,088	317,903	341,175	364,913	389,125	413,821	439,011	464,706
Capital Reserve			-	-	8,982	4,982	9,593	11,991	11,991	11,991	11,991	11,991
(Use)/Addition			21,930	22,368	13,834	18,290	14,145	12,221	12,705	13,199	13,703	14,217
Aggregate Reserve Balances - Exclusive Of Earnings			**272,719**	**295,088**	**317,903**	**341,175**	**364,913**	**389,125**	**413,821**	**439,011**	**464,706**	**490,914**

5/17/2016 Twin Valley High School Redevelopment - Plan D

3.2 Income & Rent Schedule

Unit #	Unit Type	Size (s.f.)	Description	Monthly Rent, not incl Elec	Annual Rent	Notes
Ground Floor						
01	Municipal	4,490	Police Station	$ -	$ -	
02	Municipal	8,416	Community & Recreation Center		$ -	
03	Municipal	3,183	Town Hall	$ -	$ -	see below
04	Non-Profit	2,660	Gathering Place	$ 2,660	$ 31,920	$12/sf
First Floor						
101	Non-Profit Offices	5,011	WSSU Office	$ 5,011	$ 60,132	$12/sf
102	Municipal	2,935	Town Hall	$ 2,892	$ 34,700	= to current occupancy cost
Total S.F & Annual Rents		**26,695**			**$ 126,752**	
		31489	4,794			

Other Income					
	Unit	**#**	**Monthly**	**Annual**	**Notes**
Land Rents					
	Recreation Field	TVSD		$ 9,000	SWAG - 9 months @ $1k/month
	Building footprint & parking	SWVMC		$ 20,000	per 3/15 appraisal $10k + $10k parking
Ground Floor					
	Locker Rooms & Rec. Center	TVSD		$ 9,000	SWAG - 9 months @ $1k/month
	Total Annual Other Income			**$ 38,000**	
	Aggregate Annual Income			**$ 164,752**	