APPENDIX I

27 ELM ST ASSESSMENT REPORT

TOWN OF MILFORD, NEW HAMPSHIRE FACILITY CONDITIONS ASSESSMENT



127 ELM ST, MILFORD NH



SEPTEMBER 10, 2020 TTG PROJECT NO. 5027

The H.L. Turner Group Inc.

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Milford, NH Facilities Assessments

"Permattach" Building 127 Elm Street – Milford, NH

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Milford Community Center.docx ttg 5027

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1.0 FACILITY AUDIT OVERVIEW

The building formerly occupied by the Permattach Diamond Tool Corporation is a oneand two-story pre-engineered metal building located at 127 Elm Street in Milford NH. According to parcel data found online the building or at least portions of it were first constructed in 1963. The building is made up of 3 separate metal building frames and the front entrance walls all face due south. The middle building frame contains a two story space at the front. The front end of this middle building contains offices on both levels. The western and eastern metal buildings are predominantly open inside and are both single story. All 3 buildings have low pitch gable roofs that pitch into each other. The roofs of the two outer buildings pitch into the sidewalls of the middle building which has a higher eave height. The easternmost building and the middle building have low pitch metal roofs. The westernmost building has a low pitch rubber membrane roof. The exterior walls consist of metal siding and brick or masonry block veneers. The front walls of all 3 building are faced with brick with that also wraps around the corner and continues down the sidewalls of the westernmost and the middle building. The westernmost building has a partial height concrete masonry unit (cmu) wall that changes to metal siding approximately 4' above the floor level. The remainder of the exterior walls of these buildings are faced with metal siding panels. The westernmost building has a cmu utility room addition with 8' walls and a corrugated metal low pitch shed roof. The middle building also has a wood frame structure attached to the rear wall. This structure has a gable roof with corrugated metal surface. This small structure is sided with vertical grooved plywood siding that has been painted.

The three structures comprise an approximately 30,000 sf building footprint in total. Each metal building is approximately 10,000 sf in area individually. The second floor of the middle building is approximately 5,000 sf in area.

There is parking located on the west, south, and east sides of the building, and there is an access drive around the back (north) side of the building. The building backs up to a knoll covered with pine trees.

LIMITATIONS: The H.L. Turner Group Inc. (TTG) has prepared this report for the Town of Milford, New Hampshire based on visual observations only and therefore did not involve destructive demolition, scientific testing or any other tests. The information/data in this report has been provided in general accordance with accepted Architectural and Engineering consulting practices and TTG makes no warrantee, either expressed or implied on the conclusions or cost estimates/opinions of probable costs provided.



2.0 SITE EVALUATION

OBSERVATIONS

The building is located on parcel 19-10 within the town of Milford. The lot is approximately 5.8 acres (252,458 sf) in area with 40,000 sf of asphalt paving. The south side of the site abuts a wooded sloping hill while the north side of the building is bordered by a small ridge that is wooded and descends down to a stream that connects to the nearby Souhegan River. The east end of the site opens onto the Keyes Park athletic fields. There is a gradual rise to the field level. The site is accessed on the west side by a narrow drive that descends down about 20' in elevation from Elm St. There is asphalt paving striped for parking on the west, south, and east sides of the building. The asphalt exhibits a large amount of cracking throughout all areas where it is located on the site. The site appeared to be dry and free of surface drainage problems at the time of the site visit. There were however remnants of a puddle along the southwest edge of the south side parking, and no catch basins or other sub-surface drainage components were observed. An overhead power line cuts across the parking lot on the south side of the building. There is a stone border around the perimeter of the building foundation that is approximately 5' wide.

RECOMMENDATIONS

The asphalt paving should be repaired or replaced. Parking lot layout and flow should be analyzed to achieve maximum efficiency and capacity. If possible the overhead power to the west edge of Keyes Park should be relocated underground. Surface run-off drainage should be analyzed and a means to handle the run-off should be designed if not currently existing. The site lacks exterior site lighting. There are building mounted lights that should be assessed and replaced as required. Adequate site lighting for safe movement through the parking lot should be installed.



3.0 EXTERIOR WALL AND ROOF EVALUATION

OBSERVATIONS

Roofing

The roofing on the buildings are the typical metal roofing panels associated with preengineered metal buildings with the exception of the westernmost structure which is an EPDM (ethylene propylene diene) rubber membrane. There is metal trim around the entire roof perimeter along with aluminum gutters at the eave sides of the roofs. The roof insulation is fiberglass batt insulation which is applied just below the roof panels at the girt lines. There is a vinyl insulation liner or 'bagging' that holds the insulation in place. There were several spots where the liner was torn and insulation was hanging down. The easternmost building has a hole in the roof panel and daylight was visible through the opening. There was not any insulation visible from below in a portion of the westernmost building. There was a corrugated metal decking applied over the roof purlins which most likely indicates a rigid insulation was applied over the decking and covered with the membrane roof. The roof panels near the north end of the middle building exhibit rusting on the outer surface. The EPDM membrane roof appears to be in good shape. Due to the industrial use of the building there are many pieces of abandoned roof top mechanical units which means many roof penetrations with flashing joints that are prone to failure over time.

Exterior Walls

The exterior walls of the building are predominantly metal siding applied to horizontal metal support girts. There is batt insulation with the same vinyl liner applied within the girt bay. The vinyl liner is left exposed along most of the walls with the exception of the south facing walls where a framed partition was built in front of the vinyl liner. The south facing walls are brick veneer on the exterior with what appears to be an air gap and a gypsum sheathing over stud framed back up wall. The westernmost building appears to have a cmu back wall behind the brick. The westernmost building also has a cmu wall 4' above the slab around it's entire perimeter beyond the south facing brick veneer wall. The insulation and girts appear to stop above this wall. The brick is in disrepair in many spots due to moisture intrusion. There are locations at window openings in the building where it is possible to see down into the wall cavity and the brick is falling away from the back up wall. The brick on the sidewalls of the middle building where the two lower roofs tie in is has seen large amount of water running over its surface and is very stained from the moisture it sees. In general the metal siding throughout the building is in poor condition. There are many dents from apparent vehicle impacts and numerous penetrations for exhaust fans and other equipment that would require siding patches. The north wall of the building contains several large



overhead doors and openings into accessory structures that would require extensive patching and reconstruction if such items were removed as part of a renovation. At the walls of the middle building where they extend above the adjacent roofs surfaces there is a mixture of metal siding panels and what appear to be smooth possibly fiberglass panels. These upper wall locations along the middle building are very prone to leakage with two roof planes pitching into the vertical sidewalls. The flashing detail and condition as well as gutter set-up wasn't investigated at this time.

Framing/Structure

The roof framing consists of several metal building fabricated steel 'bents' located periodically along the length of the building frame. These bents also comprise the wall framing and continue down to the slab. There are secondary steel members called purlins or girts that frame between the bents and support the roof and wall siding panels. The exterior brick veneer is most likely supported by back up stud wall framing and sheathing with brick ties mortared into the brick joints. The back up wall and brick veneer was failing in several spots on the middle building exterior.

Windows/Doors

The majority of the windows are located on the south facing entrance walls of the building. All of the openings are boarded up currently. The windows are a mix of vinyl and wood units with most being double hung except for several sliding windows on the west and north walls of the westernmost building. The exterior personnel doors are mostly hollow metal flush panel doors with the exception of some 6 panel doors at the front entrances. There are several overhead sectional doors at each building.

RECOMMENDATIONS

Roofing

The EPDM roof membrane appears to be in good shape. The metal roofing panels were exhibiting rusting at portions of the middle building and might need to be replaced. There would be extensive roof patching required at removed equipment locations if the building (s) were to be salvaged. It should be noted that the roof form arrangement of the buildings is not conducive to the longevity of materials and the goes against the



concept of shedding water, snow, and ice away from building surfaces. The hole in the roof in the easternmost building should be fixed immediately.

Exterior Walls

As noted above the exterior walls would require extensive repair both to the metal siding and brick veneer should the building be re-used. The back up framing behind the brick veneer would require some partial demo of wall finishes to fully assess the repairs needed.

Framing/Structure

The steel frame elements appear to be in good shape and don't need immediate attention.

Windows/Doors

It is assumed based on quick visual survey that the all of the windows would need to be replaced. There are several broken sashes throughout the building and in general the windows appear to be at the end of their useful lifespan. It would also be recommended that all of the exterior doors be replaced in the event of a building re-use scenario. It is assumed that the majority of overhead door openings would be removed and need to be infilled with windows or wall construction.



4.0 INTERIOR SYSTEMS EVALUATION

OBSERVATIONS

Walls

There is a mix of cmu and stud and drywall system walls throughout the building. The two offices spaces at the front of the middle building contain the majority of the partitions within the building. There are dividing walls between the metal building frames that are full height cmu partitions. The majority of the interior walls within in the building beyond the office spaces appear to be painted cmu.

The gypsum wallboard and stud walls in the office areas are in varying states of disrepair and would need complete refurbishment.

Flooring

The first floor is a concrete slab on grade throughout. There is a second floor in the middle building that is framed with open web steel joists. The second floor decking looks to be mostly plywood. The steel joist are supported on steel beam and column framing, as well as load bearing cmu partitions along the dividing walls between metal building frames. The second floor footprint appears to extend over the entire width and approximately half the length of the middle building. This would equate to roughly 5,000 sf of floor area.

The concrete slabs on grade appear to be in good condition. The east and west building floor slabs are relatively clean and level. The middle building floor slab has numerous depressions, pits and a dock leveler at the rear of the building space. These depressions are assumed to have been built for specific industrial processes and would need to be leveled and in-filled in any re-use scenario. Slab moisture levels and below slab moisture prevention measures are not know at this time but can contribute to added and unforeseen costs in a renovation.

The finish flooring in the office areas are a mixture of carpet and vct. These floors are in complete dis-repair and would need to be replaced.

Ceiling

There is acoustical tile suspended ceiling mostly located within the office area of the middle building. This much like the floors is in poor condition. There is drywall ceiling at the open area behind the front offices at the first floor of the middle building. This is is fair condition with several patches needed. All other spaces do not have ceilings and are



exposed to the roof with the exception of a bathroom core in the middle of the easternmost building. The bathroom core has a wood joist frame cap, with most likely suspended ceiling within the bathrooms which were not able to be viewed.

Stairs

There second floor of the middle building is accessed by wood framed stairs. The stairs were in good condition but lacked proper guard rails and hand rails. Code compliant guard rails and had rails would need to be added.

Mezzanines

There is a small mezzanine at the north end of the middle building accessed by a wood framed stair.

Electrical

The lighting in the building appears to be suspended fluorescent tube shop style lighting in the majority of the spaces. There was recessed fluorescent lighting in the office areas. It is assumed all lighting fixtures would be demo'd and replaced with energy efficient LED fixtures. There are multiple panels throughout the building that would most likely not be needed with the switch to an assembly occupancy.

Plumbing Systems

There are several small toilet rooms throughout the building. These could presumably be relocated in a renovation, and the number of fixtures for an assembly type occupancy would most likely require the addition of toilet rooms with several fixtures in each. The current plumbing facilities would not be adequate for use as a community center building.

Fire Protection Systems

The building is equipped with automatic fire sprinklers. There was a fire protection equipment room that was not able to be accessed during the site visit.

Accessibility

The second floor space is not accessible. The first floor entrances of the building are on grade and accessible in their current condition. Accessible restrooms were not observed within the building during the site visit.

HVAC



The mechanical systems appeared to consist of unit heaters and air delivery ducts and terminals throughout. There were several air handlers on the roof of the easternmost building, and several condensers most likely associated with split system ac units on the ground outside the building at various spots. The gas service appears to enter the building at the north east corner of the building, while the water service appears to enter at the southwest corner of the building.

RECOMMENDATIONS

Walls

It is assumed that the majority of the non-load bearing partitions in the building would be removed in the event of the space being reconfigured. Notwithstanding most of the wall finished would need to be removed and re-applied to the current framed partitions just for access for new building systems.

Flooring

It is assumed all existing finish flooring would be removed and replaced. As mentioned previously applying certain finishes to existing concrete slabs can come with challenges based on moisture migration rates through the slab and underlying soil conditions.

Ceiling

Replace all finish ceilings.

Stairs

Address guardrail and handrail issues.

Electrical

A complete renovation of the electrical system would be anticipated. All lighting should be replaced, and power panels, and circuitry would most likely need to be re-worked.

Plumbing Systems

The current toilet facilities need to be renovated and likely additional central toilet rooms that are handicapped accessible would be needed.



Fire Protection Systems

Verification of the capacity of the existing system needs to be done. Reconfiguration and addition of branch piping, main lines and heads would be needed to serve a building renovation.

Accessibility

The second floor in its current square footage and if changed to an assembly use would be required to be wheel chair accessible. Accessibility would need to be provided through a lift or elevator.

HVAC

This much like other systems in the building would most likely see a full demo and rebuild to undergo a renovation and occupancy change.



5.0 SUMMARY AND RECOMMENDATIONS

It is apparent that the building has seen heavy use over the years. It's arrangement as 3 separate frames might present layout challenges for a new use. The interior column layout is not conducive to large open recreational spaces such as a gym, nor is the height of the frames adequate for a gym use. Metal building frames are typically clear span, but each of the three building frames has interior columns along the center ridge line. The roof volumes of 3 separate gables pitched towards each other is not a desirable layout from a water management standpoint. The building does not distinguish itself visually or stylistically and is also not deemed to be historically or culturally significant within the town of Milford. Low pitch gable roofed buildings are generally not pleasing visually or proportionally.

In addition the siting of the building may not prove viable once further site analysis and planning takes place. It is our opinion that any re-use of the building as part of a new community center would most likely involve a complete removal of the existing building facades and a majority of all the interior systems down to the steel building frames themselves. There are certainly project efficiencies and savings to be realized if the structures were to be re-used but it does not seem like the most viable option at the outset of the planning phase. However, re-use of the building will be considered during the planning phase. There may be opportunity to re-use a portion(s) of the building for compartmental programming such as classroom space or similar uses. The value of the Elm St property may very well be in the land itself though and it's adjacency to Keyes Park rather than the existing structure that sits on it.



6.0 PHOTOS



View from west



View of from south





View from east



View of north side of easternmost building





View from north of middle building

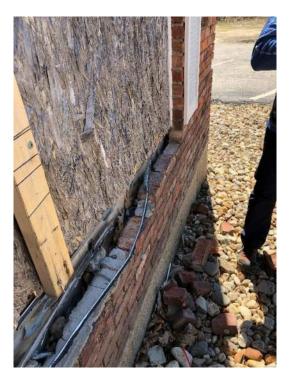


View from north of western building





View of typical pavement condition

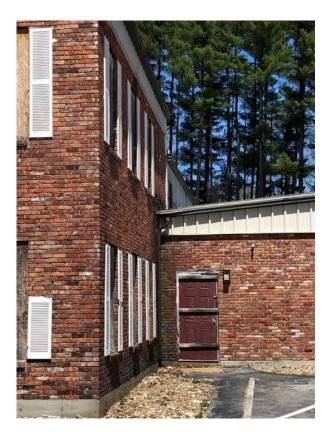


View of failing brick veneer and back up wall below a window opening





View of overhead power and view out to Keyes Park



View of roof pitching into sidewall



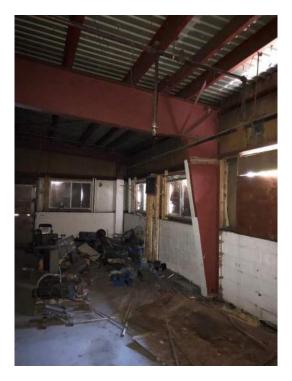


View of brick damage at interior corner



View out to Keyes Park from east end of 127 Elm St property



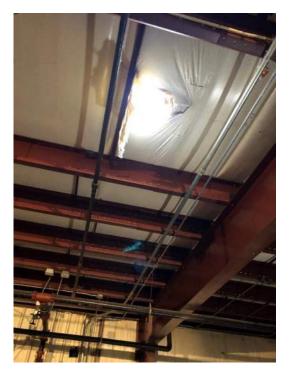


Typical metal building frame - bents and roof purlins



Metal building frame @ easternmost building showing columns along ridge line



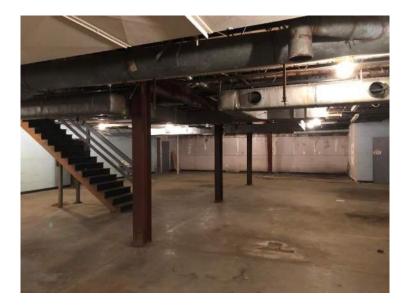


Daylight through hole in insulation, vinyl layer and roof panel



Typical roof insulation with vinyl facing and support strapping





Wood stairs to second floor in middle building



View of slab in middle building showing multiple levels





View of knoll / ridge at north side of site sloping down to stream



7.0 APPENDIX – SITE INFORMATION

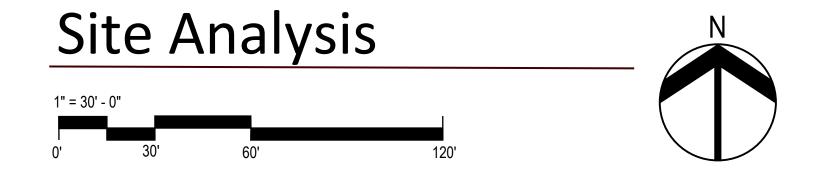


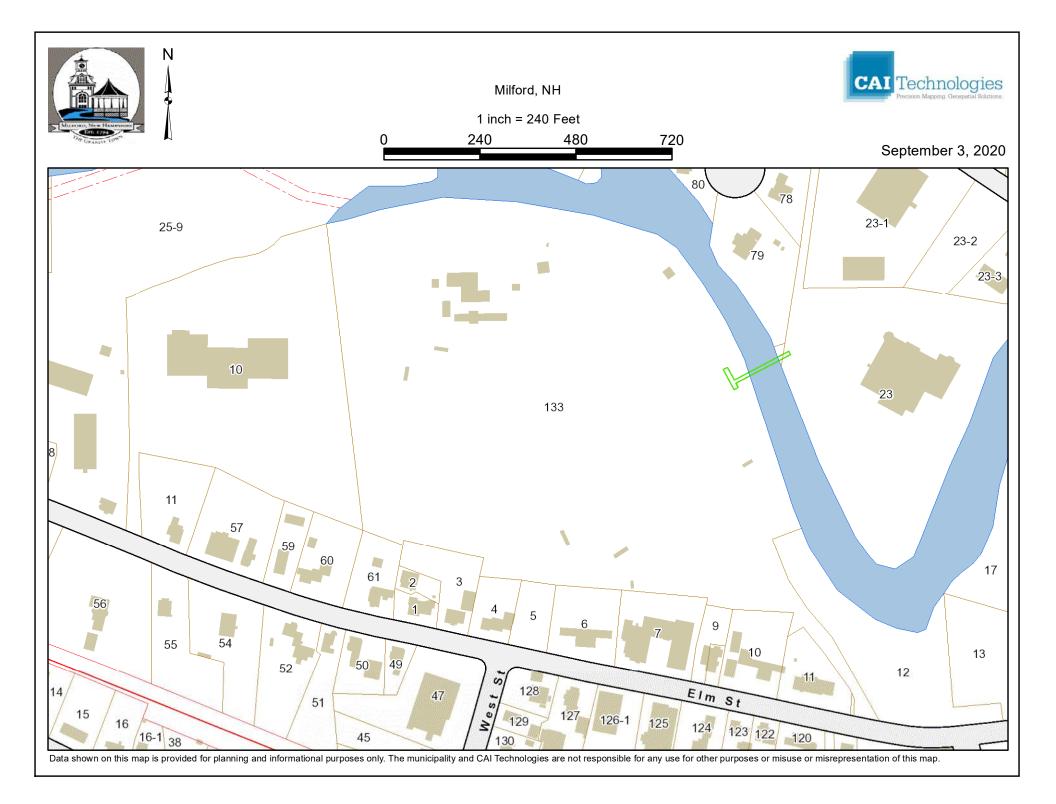


Milford, New Hampshire

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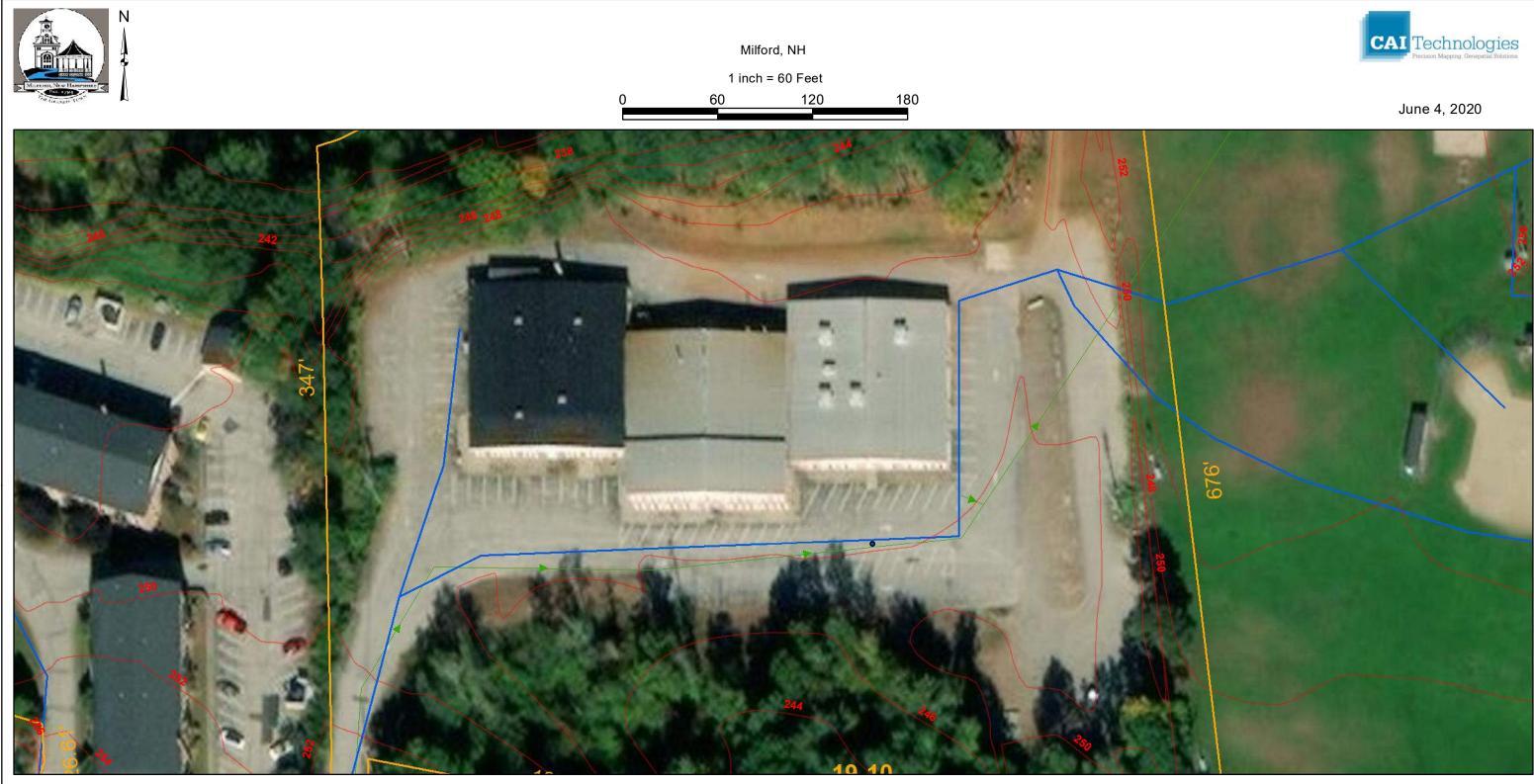


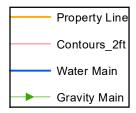






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127 ELM ST

Location	127 ELM ST	Mblu	19/ 10/ / /
Owner	MILFORD, TOWN OF	Assessment	\$532,900
Appraisal	\$532,900	PID	1821

Building Count 1

Current Value

Appraisal							
Valuation Year Improvements Land Total							
2016	\$324,700	\$208,200	\$532,900				
	Assessment						
Valuation Year Improvements Land Total							
2016	\$324,700	\$208,200	\$532,900				

Owner of Record

Owner	MILFORD, TOWN OF	Sale Price	\$190,000
Co-Owner		Certificate	
Address	1 UNION SQ	Book & Page	8816/0476
	MILFORD, NH 03055	Sale Date	12/17/2015
		Instrument	35

Ownership History

Ownership History								
Owner Sale Price Certificate Book & Page Instrument Sale Date								
MILFORD, TOWN OF	\$190,000		8816/0476	35	12/17/2015			
127 ELM ST LLC	\$625,000		8339/0377	40	08/05/2011			
MAYO TWO, LLC	\$1,092,933		7950/1674	40	02/20/2008			
MAYO NINE LLC	\$850,000		7304/2559	00	08/25/2004			
PERMATTACH DIAMOND TOOL CORP	\$0	1	0000/0000		01/01/1900			

Building Information

Building 1 : Section 1

Year Built:

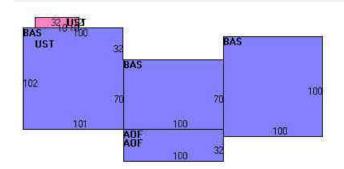
Living Area:	33,670
Replacement Cost:	\$1,192,587
Building Percent Good:	20
Replacement Cost	
Less Depreciation:	\$238,500

Field Description				
STYLE	Light Industrial			
MODEL	Industrial			
Grade	Below Average			
Stories:	2			
Occupancy	4.00			
Exterior Wall 1	Pre-finsh Metl			
Exterior Wall 2	Br/St Vaneer			
Roof Structure	Gable/Hip			
Roof Cover	Metal/Tin			
Interior Wall 1	Minim/Masonry			
Interior Wall 2				
Interior Floor 1	Concr-Finished			
Interior Floor 2				
Heating Fuel	Gas			
Heating Type	Hot Air-no Duc			
АС Туре	None			
Struct Class				
Bldg Use	IND WHSES			
Total Rooms				
Total Bedrms				
Total Baths				
Usrfld 218				
data input	VS			
1st Floor Use:				
Heat/AC	NONE			
Frame Type	STEEL			
Baths/Plumbing	AVERAGE			
Ceiling/Wall	NONE			
Rooms/Prtns	AVERAGE			
Wall Height	12.00			
% Comn Wall				

Building Photo

(http://images.vgsi.com/photos/MilfordNHPhotos/\00\00\82\16.jpg)

Building Layout



(http://images.vgsi.com/photos/MilfordNHPhotos//Sketches/1821_1947.jpg

	Building Sub-Areas (sq ft)				
Code	Code Description		Living Area		
BAS	First Floor	27,270	27,270		
AOF	Office, (Average)	6,400	6,400		
UST	Utility, Storage, Unfinished	440	0		
		34,110	33,670		

Extra Features

►

Code	Description	Size	Value	Bldg #	Comment
SPR	SPRINKLER	38270.00 S.F.	\$23,000	1	
A/C	AIR CONDITION	6400.00 S.F.	\$3,800	1	
CLR1	COOLER	1160.00 S.F.	\$17,900	1	

Land

Land Use		Land Line Valua	tion
Use Code	9031	Size (Acres)	5.8
Description	MUNICPAL MDL-96	Frontage	
Zone	С	Depth	
Neighborhood	105	Assessed Value	\$208,200
Alt Land Appr	No	Appraised Value	\$208,200
Category			

Outbuildings

	Outbuildings						<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #	Comment
PAV	PAVING	01	ASPHALT	40000.00 S.F.	\$40,000	1	
SHD	SHED	01	FRAME/MSNRY	100.00 S.F.	\$800	1	
FN	FENCE	02	5' CHAIN	90.00 L.F.	\$700	1	

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