

Milton Public Works Facility Study Milton, Vermont

30 January 2004



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Facility Study

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General I

EXECUTIVE SUMMARY

In May 2003 the Town of Milton contracted with Dore and Whittier, Inc., to study the 20-year Public Works Facility needs and to consider the feasibility of three sites for this purpose. We considered the Ice House site beside Arrowhead dam, the Kienle Road property that houses the former fire station, and the Landfill site.

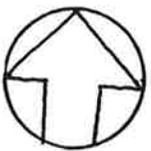
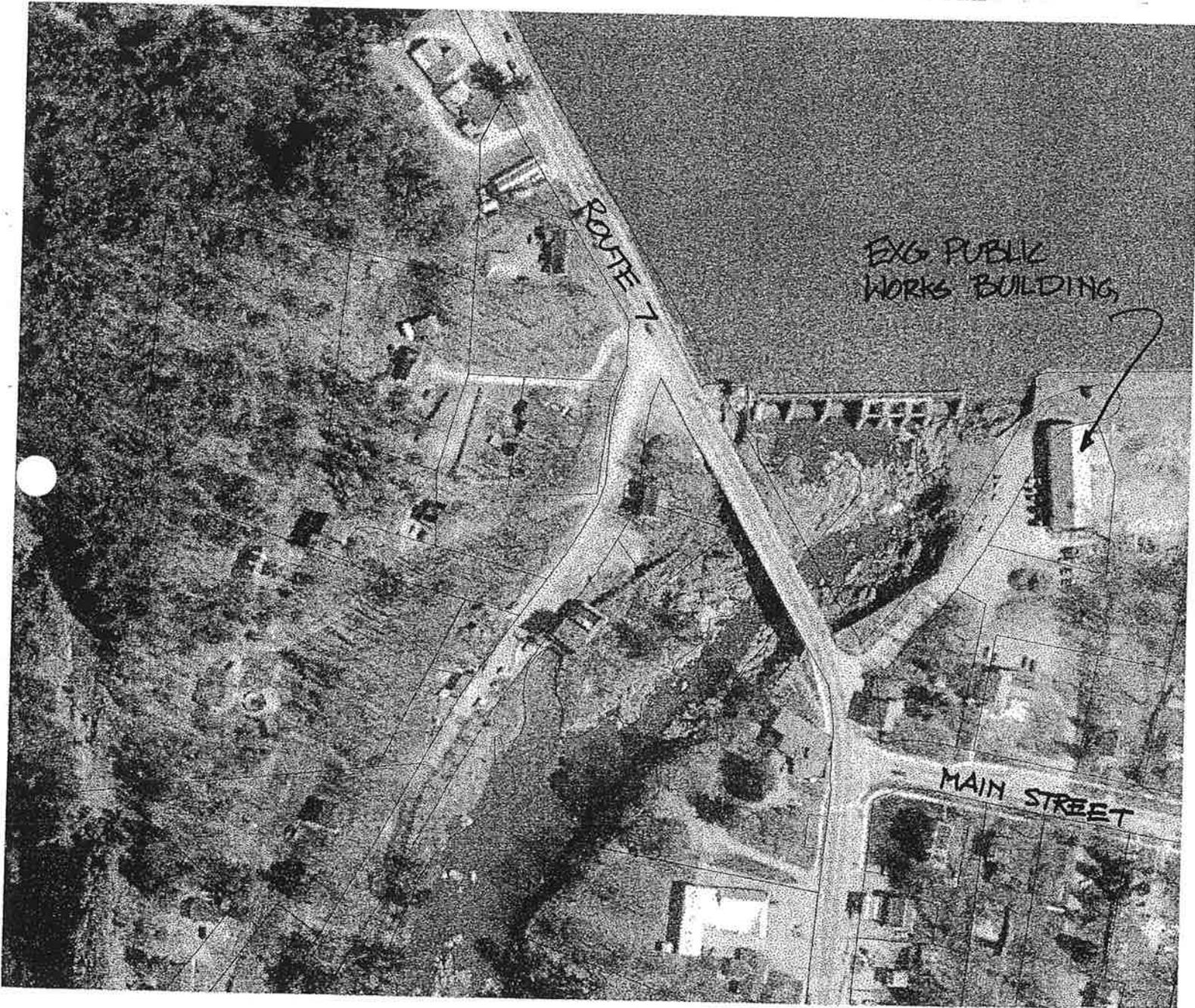
We met with representatives of the Town to establish projected needs, and we gathered information from other selected towns as a basis for considering Milton's needs relative to projected growth. We developed a conceptual layout of the facility including buildings and related site space for storage, parking, and maneuvering. Considering site characteristics, size, and environmental issues, we determined that the three initial sites do not appear suitable for development of a Public Works Facility for the Town. Detailed information is included in the report for each of these sites.

Based on these initial findings, we met again with representatives of the Town and agreed to consider other possible sites located on the Town's Bombardier property where the municipal building, rescue building, new fire station, and recreational uses are located. We considered six possible sites for a Public Works Facility on this property. These sites were evaluated based on cost, public safety, and functional proximity to the municipal building, recreational uses, and environmental issues. Cost comparisons are included in the report.

One of the Bombardier sites ("Scheme One") appears to be the most suitable overall in terms of the factors considered. This site is directly behind the new fire station and the rescue building, and it could utilize the driveway along the east side of the rescue building for truck access. Although this site, like most others, would necessitate relocation of a playfield, a Public Works Facility at this location appears to offer the lowest cost considering all factors.

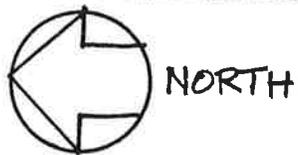
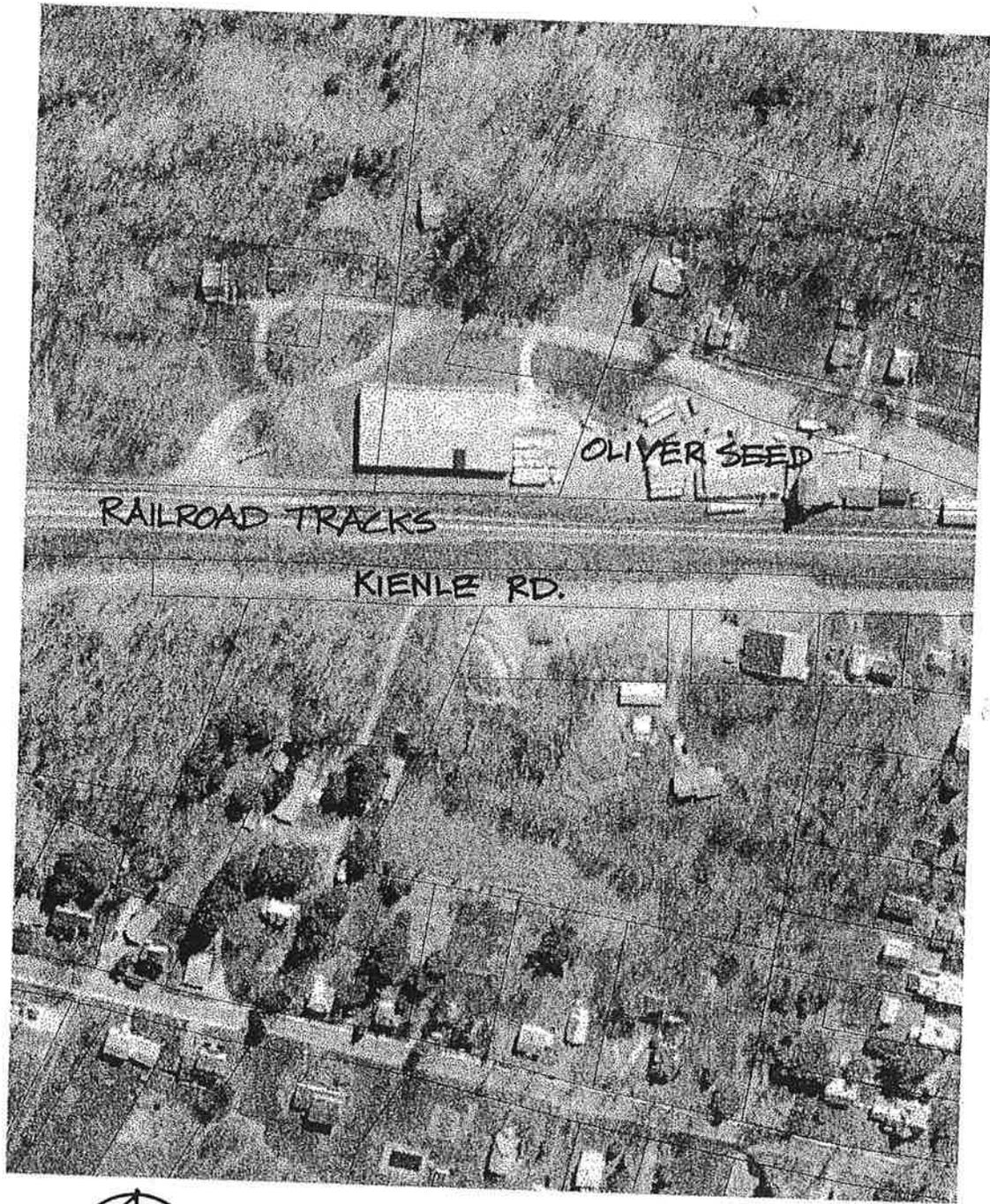
Existing Building Data II

Icehouse Rd



NORTH

Kienle Rd Parcels



**Milton Public Works Facility Study
Existing Vehicles and Equipment**



Dump Trucks – Total of 5



One Ton Truck – Total of 1

**Milton Public Works Facility Study
Existing Vehicles and Equipment**

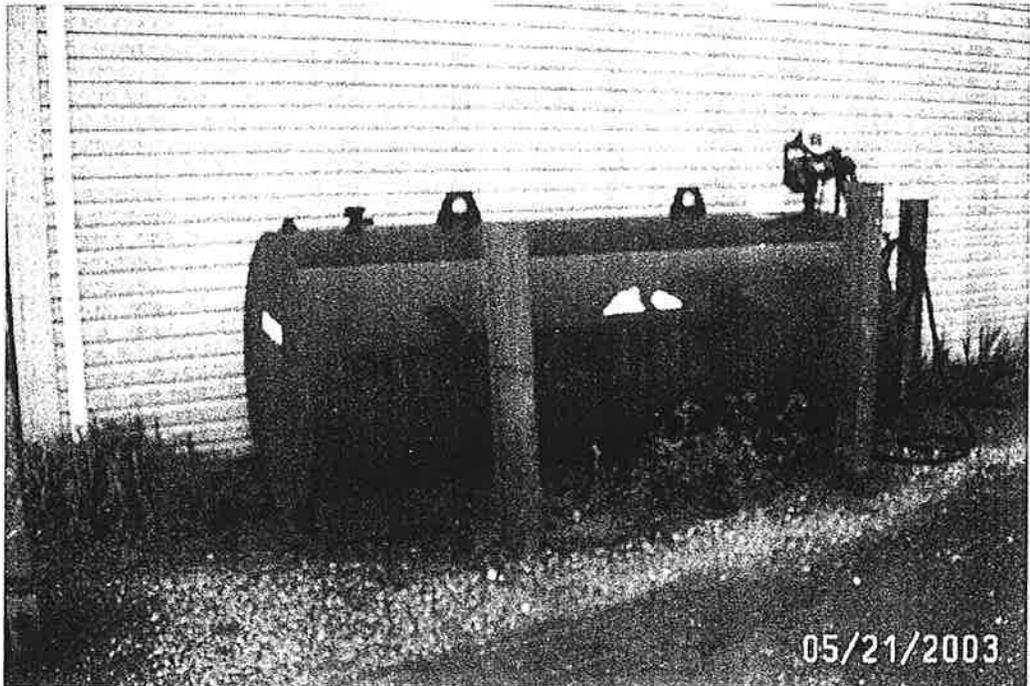


Grader – Total of 1



Excavator – Total of 1

**Milton Public Works Facility Study
Existing Vehicles and Equipment**

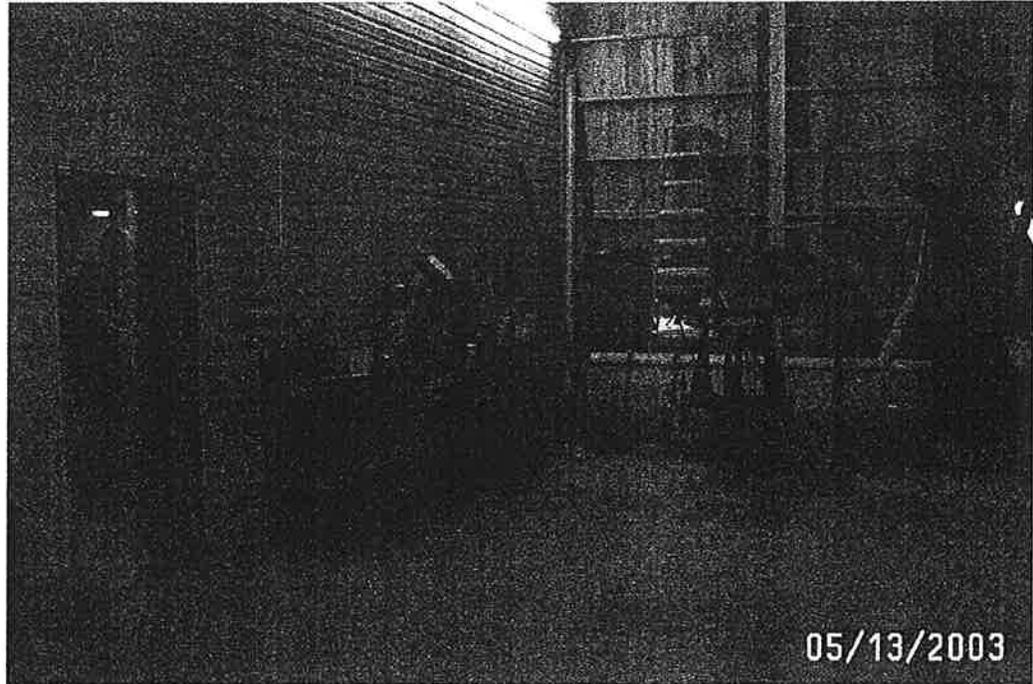


Truck Fuel Tank

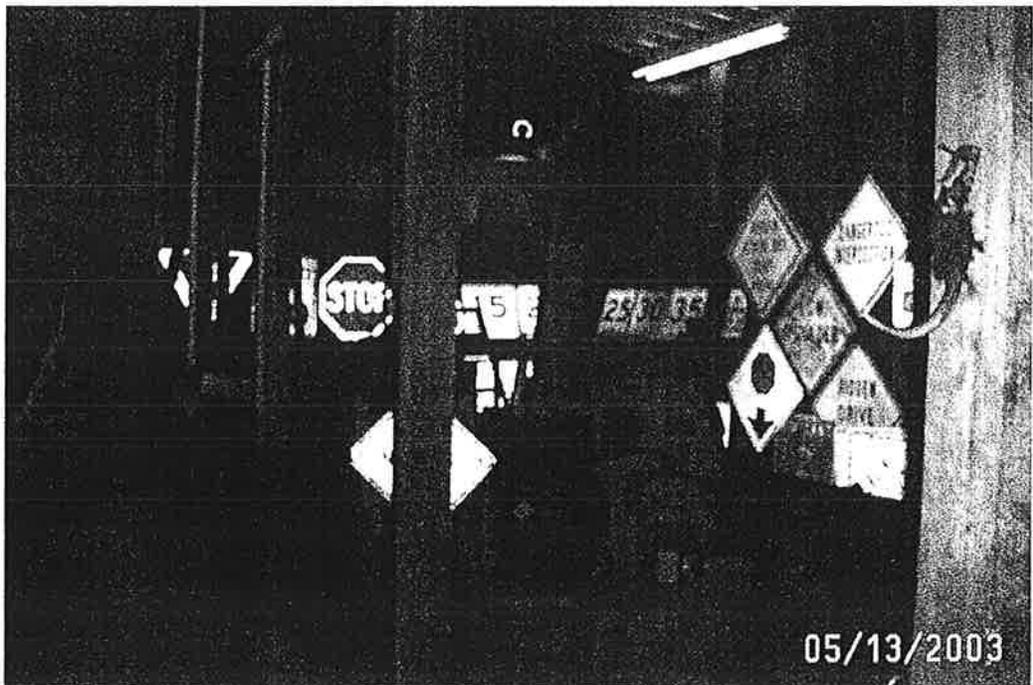


Snow Plows

Milton Public Works Facility Study
Existing Vehicles and Equipment

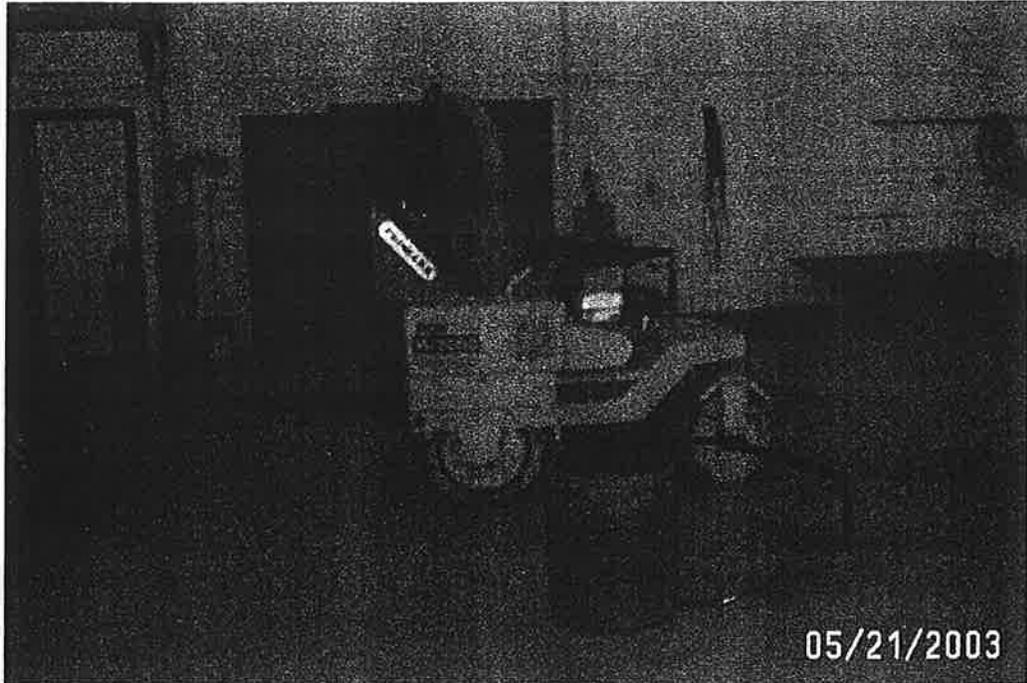


Cold Storage - Waste Oil and plows



Cold Storage – Road Signs

**Milton Public Works Facility Study
Existing Vehicles and Equipment**



Roller and Chipper – Total of 1 each

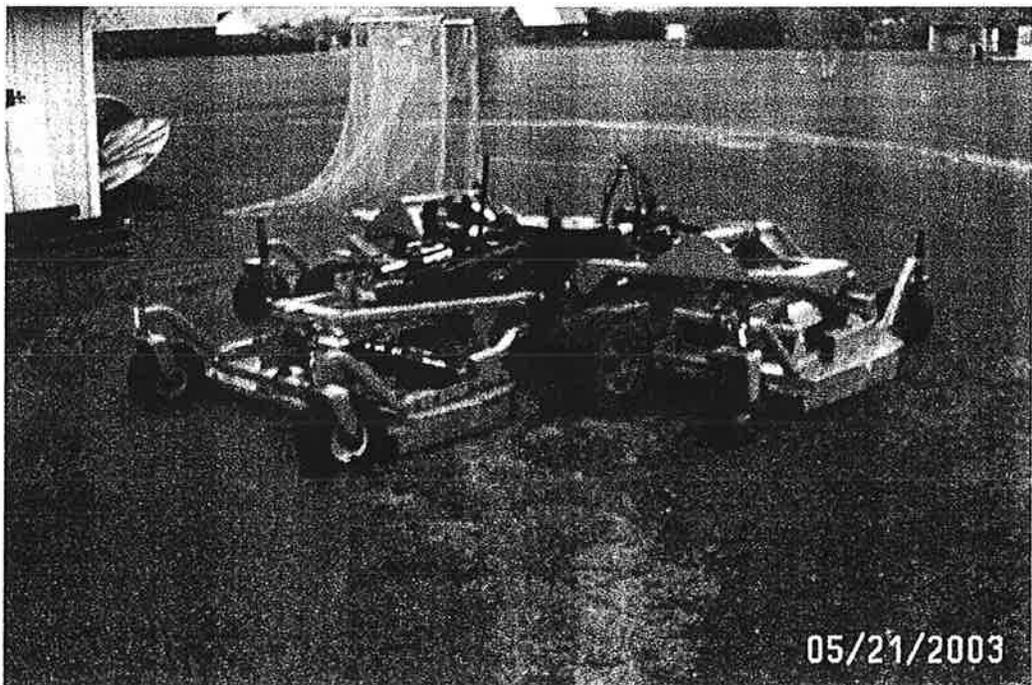


Bobcat Tractor with Accessories – Total of 1

**Milton Public Works Facility Study
Existing Vehicles and Equipment**



Buildings and General Services Tractor – Total of 1



Mower – Total of 1

**Milton Public Works Facility Study
Existing Vehicles and Equipment**



Fill Sand Storage



Gravel Storage

Public Works Facility Needs III

Highway Division Area Requirements - based on twenty year forecast									
Vehicles and Equipment									
Type of Vehicle	Number of Vehicles	Size of Bay or Area	Area Req'd. or bay size per Vehicle (SF)	Total Area Required (SF)	Enclosed Space	Heating Required	Open Shed	Outside Storage	Notes:
Dump Truck	5	16' X 50'	800	4000	X	X			(One bay to be maintenance Bay with 18' wide O.H. door
Grader	1	16' X 50'	800	800	X	possibly			
Excavator	1	16' X 50'	800	800	X	possibly			
Backhoe	1	16' X 30'	480	480	X	possibly			
One Ton Truck	1	14' X 20'	280	280	X	X			
Future Dump Truck	1	16' X 50'	800	800	X	X			
Future Sidewalk Plows	2	14' X 20'	280	560	X	possibly		X	
Pickup	1	-	-	-					
Parts Storage	-	-	-	100	X				
Waste Oil Storage	-	-	-	50	X				Area for 55 gallon drums
Subtotal				7870					
Materials Storage									
Type	Quantity	Size of Shed or Area	Area Required (SF)						
Salt	2,000 Tons/year	40' X 64'	2560		X				Assumes 2 loads per year
Road Sand	5,000 cu yds/year	40' X 64'	2560		X				Assumes 3 loads per year
Subtotal			5120						
Gravel		20' X 20'	400					X	Locate on Site
Top Soil		20' X 20'	400					X	Locate on Site
Backfill Sand		20' X 20'	400					X	Locate on Site
Fuel tank for Trucks	4000 gal	12' X 20'	240					X	Above ground tank (for truck fuel only)
Subtotal			1440						
Misc. Items									
Item	Quantity	Size of Area	Area Required (SF)						
Plows and Blades	12 plows	12' X 20'	240		X				
Signs and Road Barricades		12' X 20'	240				X		Locate in Cold Storage Shed
Subtotal			480						
Dumpster	6 cu yd	10' X 10'	100					X	Locate on Site
Generator	1	9' X 12'	108					X	To be located outside of Facility

Public Works Space - based on twenty year forecast					
Division	# of Personnel	Area per person	Area Required	Type of Office	
Highway	8	83	664	Shared	
	1	144	144	Superintendent - Private	
Subtotal	9		808		
Buildings and Grounds	5	83	415	Shared - Seasonal	
	1	144	144	Private	
Subtotal	6		559		
Water/Wastewater	4	83	332	Shared - Technicians	
	1	144	144	Private	
Subtotal	5		476		
Engineering	1	144	144	Private	
	2	83	166	Shared	
Subtotal	3		144		
Administration	2	83	166	Shared	
Subtotal	2		166		
Public Works Director	1	144	144	Private	
Subtotal	1		144		
Future Vehicle Maintenance Staff	2	83	166	Shared	
Subtotal	2		166		
Ancillary Spaces to be shared with all Divisions					
Large Conference Room	12	19	228		
Reception Area (based on number of visitors)	5	10	50		
Shared Plan Room			120		
Shared File Room			120		
Lunchroom			180		
Workroom			120		
Storage			100		
Toilets	28	7.5	210		
Subtotal			1128		
Total			3591		

Alan M. Brown

From: Dustin Keelty [dkeelty@town.milton.vt.us]

Sent: Tuesday, June 17, 2003 10:26 AM

To: abrown@doreandwhittier.com

Subject: Public Works Study

Sorry for taking so long to respond, I have been busy in the field and at home.

The list of equipment that I have obtained seems incomplete, but I can give it to you as I see it.

Water/Wastewater: minimum heating requirements

- Pickup truck
- Jetting trailer
- Emergency Response trailer (water breaks)
- Potential jet/vac truck

Buildings and Grounds: minimum heating requirements

- Pickup truck
- Equipment trailer
- Tractor
- 2 Riding mowers
- 2 walk behind mowers
- Bucket
- 12' power
- Rc
- Aerator
- York rake
- Straight blade
- Maintenance space
- Tools
- Power Equipment (chain saws, Weed wackers, misc. equip.)

This should give you an idea of the equipment we have. If you have any questions please respond. I am still working on the ortho photos of the other two sites.

Dustin.

Comparison with Existing Facilities

The Town of Milton's existing facilities are compared with the facility needs in the table below. Both facilities would not adequately house the new Department of Public Works facilities.

The Ice House has some vehicle, sand and salt as well as some cold storage. The building was built many years ago and does not meet the needs of a modern highway department including adequate vehicle storage, maintenance area, ventilation and lighting. The building does not comply with Americans Disability Act (ADA). Dore and Whittier did not perform a detailed code evaluation of the building, but due to it's age of the building, the existing building may not meet other applicable building code requirements. The existing building does not sit completely on land owned by the Town. The door yard also is on another property owner's land. Due to these factors, the required facility would not fit on the site.

The Kienle facility was the old fire house. It is currently being used for equipment storage and some minor maintenance. The building is in better shape than the Ice House, but it's size is not adequate for the Public Works Facility. The site is long and narrow and is divided by access to residential property behind the site. Due to the site size and required setbacks, the Public Works Facility would not fit on the site.

Existing Facility		Approx. Size of Existing Facility	Available Area (SF)	Area Needed (SF)	Difference (SF)	Note:
Ice House Facility	vehicle, sand and salt storage	141' X 50'	7,050	12,270	5,220	Salt and Sand Storage needs to be enclosed due to future environmental requirements
	Cold Storage	40' X 24'	960	2,304	1,344	
	Office Space	(2) 15' X 20'	600	2,805	2,205	
Total Difference					8,769	Shortfall
Kienle Facility	vehicle, sand and salt storage	76' X 50'	3,800	12,270	8,470	Existing Facility has some exterior storage but not interior storage req'd by State environmental Requirements Cold Storage is part of vehicle storage above
	Cold Storage	see vehicle stor.		2,304	2,304	
	Office Space		0	2,805	2,850	
	Total Difference					

Growth and Comparisons with Other Towns IV

Population and Road Growth

The Town of Milton is projected to grow both in population and miles of roads. The following assumptions are being used for this study:

Milton's population is expected to grow from 1.3% to 2.6% per year over a 20 year period (according to Milton's 2002 Growth Management Study). Copies of pages from the Town of Milton, Vermont 2003 Comprehensive Plan are attached.

Dore and Whittier has assumed the level of service for plowing of town roads to be 1 plow truck for every 20 miles. This is based on the current level of service.

Comparison with Other Towns

Dore and Whittier selected the Towns of Colchester, South Burlington and Hartford to compare with the Town of Milton. These towns are similar in population and total town road lengths. Colchester and South Burlington are close to Milton and are experiencing similar growth. The Town of Hartford was selected due to similar growth and to provide a comparison outside Chittenden County:

This Comprehensive Plan is consistent with the Regional Plan adopted by the Chittenden County Regional Planning Commission in October of 2001. This plan, as implemented, will not adversely affect the implementation of the Plans of the Towns which border Milton including Colchester, Essex and Westford in Chittenden County; South Hero and Grand Isle in Grand Isle County; and Georgia and Fairfax in Franklin County.

Within its larger regional context, Milton is a transitional community that combines elements from many of its neighboring municipalities. While Milton contains a vast supply of housing typical of some of the suburbs of Burlington, it also still contains several farms. In addition, the industrial base has expanded with the location of Husky Injection Molding Systems, Inc. into the community. Milton's vast shoreline bears similarities to its adjacent neighbors of South Hero and Grand Isle across Lake Champlain.

Future land uses proposed in Town land use plans for those areas that adjoin Milton were analyzed. It was found that while some of the specifics varied, the proposed uses at municipal borders were compatible. It is recommended to continue to work with surrounding communities to develop mutually acceptable visions and plans for the borders of each Town.

POPULATION PROFILE

Existing Conditions

Milton and the nearby Towns of Colchester, Essex, and Georgia have experienced a substantial degree of growth since 1980. As shown in the following table from Milton's 2002 Growth Management Study, the population of this four town area grew from 36,668 in 1980 to 49,466 in 2000. This represents a 1.7% annual growth rate for the 1980's and a 1.3% growth rate for the 1990's. Over this same 20 year period, Milton's population grew from 6,829 to 9,479. This represents a 2.1% annual growth rate for the 1980's and a 1.2% growth rate for the 1990's.

Table 1: Population Increase and Historic Rates of Growth

	1980	1990	2000	Annual % Increase	
				1980-90	1990-00
Milton	6,829	8,404	9,479	2.1	1.2
Colchester	12,629	14,731	16,986	1.6	1.4
Essex	14,392	16,498	18,626	1.4	1.2
Georgia	2,818	3,753	4,375	2.9	1.5
4-Town Area	36,668	43,386	49,466	1.7	1.3
Chittenden Co.	115,534	131,761	146,571	1.3	1.1
Vermont	511,456	562,758	608,827	1.0	0.8

Population Projections

The population projections in this plan are taken from Milton's 2002 Growth Management Study. An annual rate of 1% is used as the projection of Chittenden County population growth. Two projections are provided for Milton over the 20 year period - a "mean" projection of 1.3% per year and a "high" projection of 2.6% per year. The latter growth rate might occur due to Husky related growth. For both "mean" and "high" projections, growth rates are slightly higher in the initial 5-year period and decline over time.

Table 2: Milton and Chittenden County Population Projections

Year	Town of Milton				Chittenden County	
	"Mean" Projection		"High" Projection		Annual % Increase	Total Population
	Annual % Increase	Total Population	Annual % Increase	Total Population		
2000	--	9,479	--	9,479	--	146,571
2005	1.4	10,161	2.8	10,882	1.2	155,579
2010	1.3	10,839	2.6	12,372	1.1	164,326
2015	1.3	11,562	2.6	14,066	1.1	173,565
2020	1.2	12,273	2.4	15,837	1.0	182,419

Using the "mean" projection, Milton's share of total county population increases from 6.5% in 2000 to 6.7% in the year 2020. It increases to 8.7% using the "high" projection.

Summary of Road Growth at the Town of Milton

(from Milton's Town Clerk)

Year.	# of Miles Added
2002	1.77 mi.
2001	1.08 mi.
2000	0.0667 mi.
1999	0.04 mi.
1998	1.6 mi.
1997	0.376 mi.
1996	0.55 mi.
1995	0.68 mi.
1994	0.81 mi.
1993	0 mi.
1992	0.27 mi.
1991	2.73 mi.
1990	0.2 mi.

Average Yearly Increase

(over 13 years) ** 0.78 mi.

** Note: higher increases in 2001 and 2002)

Length of Roads Comparison

(from Vermont Directory of Municipal Officials)

Town	Total Length of Roads as of 2003
Milton	103.06 mi.
Springfield	125 mi.
Morristown	98.9 mi.
So. Burlington	68.66 mi.
Burlington	92.7 mi.
Colchester	86.59 mi.
Hartford	139.2 mi.
Fairfield	106.98 mi.
Danville	120 mi.
Chester	97 mi.

Projected Population Growth

From Town of Milton's 2003 Comprehensive Plan

Year	Town of Milton				Chittenden County	
	Mean Projection		High Projection		Annual % Increase	Total Population
	Annual % Increase	Total Population	Annual % Increase	Total Population		
2000	-	9,479	-	9,479	-	146,571
2005	1.4	10,161	2.8	10,882	1.2	155,579
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2020	1.2	12,273	2.4	15,837	1.0	182,419

Projected Road Growth

Year	Assumed Annual mileage Increase	Total Miles of Road
2003	-	103
2004	0.8	103.8
2005	0.8	104.6
2010	0.8	108.6
2020	0.8	112.6

Plow Truck's Required

Assumption:

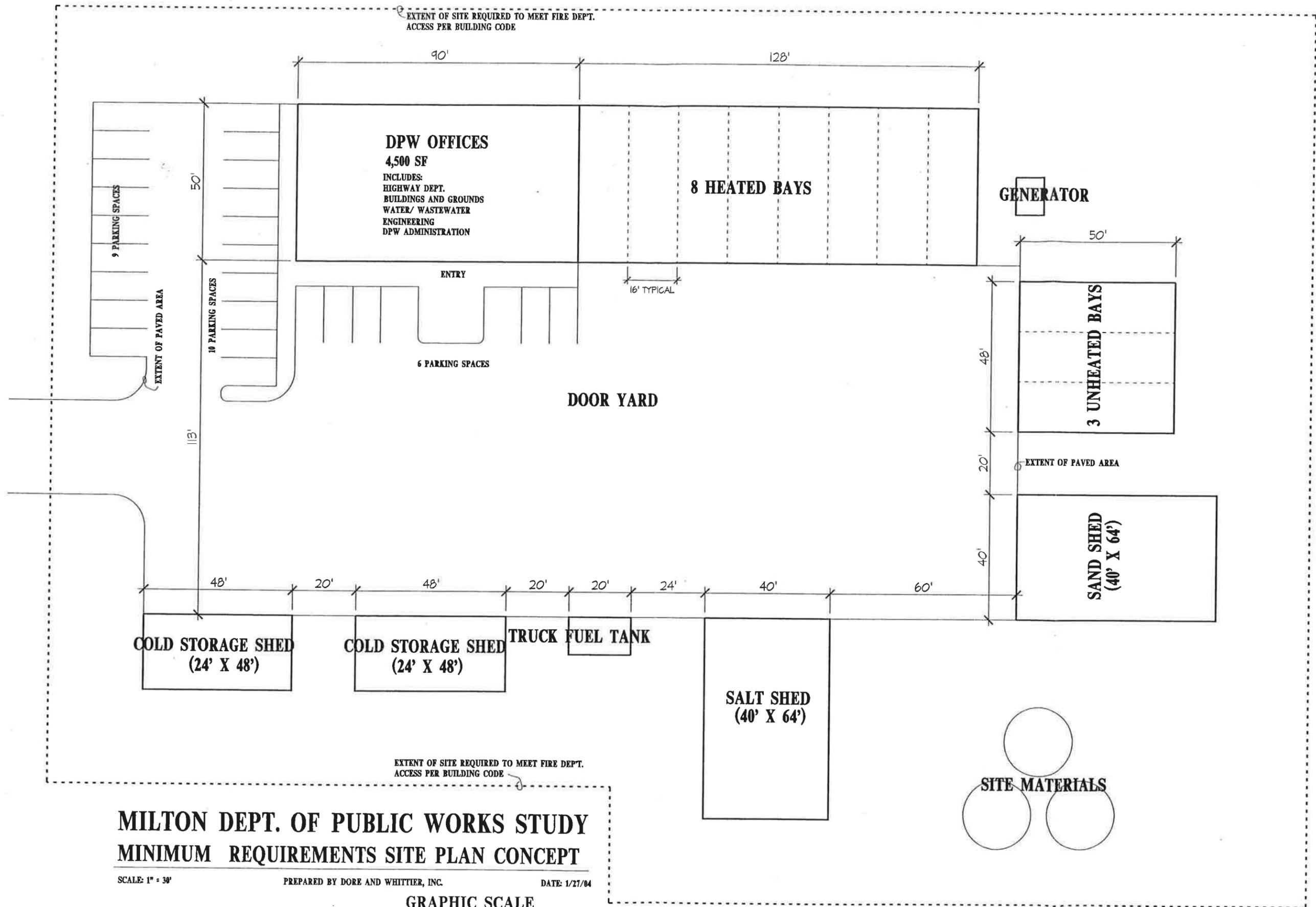
Current Level of Service is 1 plow truck for every 20 miles of Road

Year	Total Miles of Road	Number of Trucks
2003	103	5.15
2005	104.6	5.23
2010	108.6	5.43
2020	112.6	5.63

Public Works Facility Comparisons			
	So. Burlington	Colchester	Hartford
Contact	Bruce Hoar - 658-7961	Brian Osbourne - 655-0823	Richard Menge - (802) 295-3622
Number of Maintenance Vehicles	(6) Plow Trucks - 35,000 GVW	(6) Plow Trucks - 35,000 GVW	(6) Plow Trucks - 35,000 GVW
Other Type of Vehicles	(1) Draw excavator (3) Front end loaders (1) Road grader (1) Street sweeper (1) Road side mower (2) Sidewalk tractors (8) pickup trucks incl. (2) one ton trucks (1) Snow Blower Trailers Trackless Plow	(1) Draw excavator (1) Front end loader (1) Road grader (1) Street sweeper (1) Road side mower (2) Sidewalk tractors (8) pickup trucks incl. (3) one ton trucks Trailers (1) Garage service vehicle (panel truck)	(1) track excavator (2) Front end loader (1) Road grader (1) Street sweeper (2) Highway mowers (1) Sidewalk Plow (2) pickups (2) 1 ton dump trucks
How many miles per plow truck?	9 miles (4.5 to 5 hours turnaround time)	15 to 20 miles per plow truck (main trucks) 16' wide by 30' to 50' long - note: they do not store vehicles in a heated covered space	17.5 miles done by (6) plow trucks and 2 pickup trucks
What is a typical bay space used?	20' wide by 60' long		17' wide by 63' long - trucks are stored end to end
Amount of Salt used per year?	Total of 2,000 tons per year. Loads are delivered 20 to 30 times/year. They can get material with-in 12 to 24 hours	Total of 2,000 tons per year. Loads are delivered 20 to 30 times/year. They can get material with-in 12 to 24 hours	3,000 tons per year. They store up to 1000 tons on site.
Amount of Sand used per year?	small amount - 14 cu yds	3,500 tons, sand must be covered per EPA, should be purchased all at once	5,800 cu yards per year. They store up to 3,000 cu yards in one shed.
Do you use Chloride	no	not used anymore	they use some ice ban chemicals
What type of fuel is used for the trucks?	Diesel	Diesel	Diesel
How is your facility heated?	Natural gas unit heaters. No waste oil furnace.	Natural gas unit heaters with waste oil furnace backup. Facility was built in 70's-80's.	some oil and propane
How many are employed at Facility	Total Dept. = 22	16 to 18 total year round employees with 11 Highway employees (3 seasonal), 3 Maintenance employees, 8 Buildings and Grounds (4 seasonal)	8 Highway Dept., 3 Water Dept. 8 Wastewater Dept., 1 super for water, wastewater, 3 Solid Waste, 8 parks and Rec.
How many require offices	5 offices	5 administration (Work in Town Office) (1 seasonal)	3 offices, plan room, billing room, admin asst.

Public Works Facility Comparisons		
	So. Burlington	Hartford
Projected growth in Population (10 years, 20 years)	Average 1.5% annual population growth	unknown
Projected growth in Roads (10 years, 20 years)	1 1/2 mile per year	
Anticipated number of trucks (10 years, 20 years)	trucks would increase when miles are increased	
Anticipated employees (10 years, 20 years)	expand to 26	
Has the town/city done any studies?	No	only replacement of trucks are planned at this time add one highway personnel per year for the next three years
Comments	<p>Colchester did a feasibility study recently.</p> <p>Town of Colchester could not economically justify a heated garage for storing vehicles. Cold Storage is more the norm. Colchester balances needs with what the community will support.</p> <p>Storm water regulations are changing considerably and will impact any new Public Works Facilities.</p> <p>Most important consideration is the cycle time adequate for Milton. This will determine # of plow trucks</p>	<p>No. They have recently built a new facility</p> <p>They have recently built a new facility. Size of admin, toilets, lunchroom and parts storage was about 68'X 63'. See above for size of bays.</p> <p>Richard said the Highway Dept. used to have 17 employees and now have only 8. This was due to cost cutting measures by the Town to meet it's budget.</p>

Minimum Site Requirements and Site Options V



**MILTON DEPT. OF PUBLIC WORKS STUDY
MINIMUM REQUIREMENTS SITE PLAN CONCEPT**

SCALE: 1" = 30'

PREPARED BY DORE AND WHITTIER, INC.

DATE: 1/27/04

GRAPHIC SCALE



SCALE: 1" = 30'



1795 WILLISTON RD. STE. 200, SOUTH BURLINGTON, VT 05403
PHONE: 802.863.1428 FAX: 802.863.6955

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PHONE: 978.499.2999 FAX: 978.449.2944

1400 HANCOCK ST. QUINCY, MA 02169
PHONE: 617.471.2897 FAX: 617.471.2516

WWW.DOREANDWHITTIER.COM

Milton Public Works Facility Study

Zoning Regulations at selected Sites

1. Ice House Site

- Old Towne Residential/ Commercial (M5) District
- Mainly residential uses and some limited commercial uses
- Permitted Uses – Professional Services
- Setbacks:
 - Front yard: 20'
 - Side yard: 10'
 - Rear yard: 10'
- Minimum Road Frontage: 80'
- Building Coverage: 40%
- Maximum Lot Coverage: 50%

2. Kienle Road Site

- Light Industrial (I1) District
- Research and development, wholesale distribution, assembly and other uses that do not require excessive space and will not create noise, odors, dust and other local disturbances
- Permitted Uses – Public warehousing
- Conditional Uses – Professional Services
- Setbacks:
 - Front yard: 25'
 - Side yard: 25'
 - Rear yard: 25'
- Minimum Road Frontage: 100'
- Maximum Lot Coverage: 50%

3. Landfill Site

- Checkerberry (M4) District
- Mix of residential, commercial and limited industrial uses
- Permitted Uses – public warehousing, professional services
- Conditional Uses – enclosed outdoor storage, construction and agricultural equipment sales and service
- Setbacks:
 - Front yard: 20'
 - Side yard: 10'
 - Rear yard: 10'
- Minimum Road Frontage: 100'
- Building Coverage: 40%
- Maximum Lot Coverage: 60%

4. Bombardier Site

- Milton Crossroads Marketplace Municipal/Recreation M3
- Purpose is to allow for institutional establishments and recreational facilities
- Permitted Uses – institutional establishments, outdoor recreation
- Setbacks:
 - Front yard: 0 to 20'
 - Side yard: 0'
 - Rear yard: 0'
- Minimum Road Frontage: 0'
- Maximum Lot Coverage: 80%

Site Work Estimates and Comparisons

Estimated Site Costs *	Bombardier Site								
	Ice House Site	Kienle Road Site	Landfill Site	Scheme 1	Scheme 2	Scheme 3	Scheme 4	Scheme 5a	Scheme 5b
Clear Cutting	\$0	\$14,000	\$10,000						
Existing Building Demolition	\$100,000	\$50,000	\$0	\$0					\$1,000
Relocation of Playfields	NA	NA	NA	\$5,000	\$10,000	NA	NA	\$10,000	\$2,000
Sitework and Road Excavation	\$200,000	\$180,000	\$200,000	\$200,000	\$230,000	\$230,000	\$250,000	\$220,000	\$230,000
Site Paving	\$180,000	\$160,000	\$200,000	\$120,000	\$160,000	\$160,000	\$200,000	\$150,000	\$150,000
Landscaping Allowance	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Hazardous Material Removal									
Allowance									
Required Purchase of adjacent sites	unknown	unknown	unknown	NA	NA	NA	NA	NA	NA
Subtotal	\$495,000	\$419,000	\$425,000	\$340,000	\$415,000	\$405,000	\$465,000	\$395,000	\$398,000
General Requirements @ 5%	\$24,750.00	\$20,950.00	\$21,250.00	\$17,000.00	\$20,750.00	\$20,250.00	\$23,250.00	\$19,750.00	\$19,900.00
Total	\$519,750	\$439,950	\$446,250	\$357,000	\$435,750	\$425,250	\$488,250	\$414,750	\$417,900

Estimated Total Costs per Site	Bombardier Site								
	Ice House Site	Kienle Road Site	Landfill Site	Scheme 1	Scheme 2	Scheme 3	Scheme 4	Scheme 5a	Scheme 5b
Estimated Building Costs	\$1,286,388	\$1,286,388	\$1,286,388	\$1,314,029	\$1,314,029	\$1,314,029	\$1,314,029	\$1,314,029	\$1,314,029
Estimated Site Costs	\$519,750	\$439,950	\$446,250	\$357,000	\$435,750	\$425,250	\$488,250	\$414,750	\$417,900
Total	\$1,806,138	\$1,726,338	\$1,732,638	\$1,671,029	\$1,749,779	\$1,739,279	\$1,802,279	\$1,728,779	\$1,731,929

Note: Buildings proposed on Bombardier site are estimated to cost more than at other sites due to higher quality materials and steeper pitched roofs in order to match the appearance of the existing Municipal Building and Fire Station

NA = not applicable

* Estimates assume a construction start or sometime in early 2004
Add an average inflation rate of 3% per year

Costs of permitting, design fees, clerk or construction manager, testing, furnishings and equipment and legal costs are not included in these estimates

Review of Options VI

Milton Public Works Facility Study

Summary of Options

Site	Location	Pros	Cons
Ice House Site	Located near dam, south end of Arrowhead Lake	<ol style="list-style-type: none"> 1. Land currently owned by Town 2. DPW facility currently housed at site 3. Centrally located 	<ol style="list-style-type: none"> 1. Insufficient area for facility. Existing buildings do not currently lie completely on Town's land 2. Additional land needed 3. Existing buildings would have to be demolished and disposed 4. Material storage is close to river and will need future environmental permitting 5. Does not meet zoning requirements
Kienle Road Site	Located at old fire station at Kienle Rd.	<ol style="list-style-type: none"> 1. Land currently owned by Town 2. Centrally located 	<ol style="list-style-type: none"> 1. Insufficient area for facility. It is a long and narrow site 2. Additional land would need to be purchased 3. Existing buildings would have to be demolished and disposed. 4. Does not meet zoning req'ts. 5. Residential area located at back of site
Landfill Site	Located at entrance to old landfill and Chittenden County Solid Waste transfer station	<ol style="list-style-type: none"> 1. Land currently owned by Town 2. Access to primary road (US7) 	<ol style="list-style-type: none"> 1. Insufficient area for facility due to unknown subsurface conditions (old landfill) 2. Possibility of mitigation of hazardous materials from old landfill 3. Relocation of CSWD transfer station may be required 4. There would be poor access if facility was located father back on site

Note: All three sites noted above are remote from the primary needs for Buildings and Grounds from other sites owned by the Town.

Milton Public Works Facility Study

Summary of Options

Bombardier Site			
Scheme	Location	Pros	Cons
Scheme One	Behind the existing Municipal Building and Fire and Rescue Station	<ol style="list-style-type: none"> 1. Close proximity to Municipal Building 2. Security is good with police station next door 3. Keeps Town municipal functions together 4. Keeps recreation functions together 5. Allows future expansion 	<ol style="list-style-type: none"> 1. Soccer field will have to be relocated near existing Playground. (as shown on Pinkham Engineering Site Plan).
Scheme Two	West side of site (current Little League Fields)	<ol style="list-style-type: none"> 1. Allows access to existing drive 2. Location is less visible 	<ol style="list-style-type: none"> 1. Two Little League fields would be relocated near existing Playground. 2. Possible pedestrian and auto/truck conflicts between recreation users and DPW . 3. Breaks up recreational uses
Scheme Three	Located at south of existing Men's Softball field. The town is currently clearing land for multiple small playing fields.	<ol style="list-style-type: none"> 1. Location is isolated and less visible 	<ol style="list-style-type: none"> 1. Possible pedestrian and auto/truck conflicts between recreation users and DPW . 2. Long access drive required 3. Fields currently being constructed would need to be relocated. 4. Breaks up recreational uses
Scheme Four	Located at west side of site and south of existing little league fields.	<ol style="list-style-type: none"> 1. Location is isolated and less visible 	<ol style="list-style-type: none"> 1. Possible auto/truck conflicts between DPW and recreation users getting to the facility. 2. Long access drive required 3. Very close to wetlands area. Permitting may be difficult. Expansion capabilities may be limited.

Bombardier Site			
Scheme	Location	Pros	Cons
Scheme Five A	Located at east side of site and south of existing tennis courts and playground	1. Location is isolated and less visible	1. Existing tennis courts and playground would have to be relocated. 2. Near residential area
Scheme Five B	Located at east side of site and north of existing tennis courts and playground	1. Location is isolated and less visible	1. Existing horseshoe pits, shed, picnic pavilion and volleyball would have to be relocated. 2. Near residential area

Appendix VII



1795 WILLISTON RD, STE. 5 200 S. BURLINGTON, VT 05403
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1400 HANCOCK STREET QUINCY, MA 02169
 Phone: (617) 471-2897 Fax: (617) 471-2516

29 WATER STREET, SUITE 304 NEWBURYPORT, MA 01950
 Phone: (978) 499-2999 Fax: (978) 499-2944

MEETING NOTES

DATE OF MEETING: 13 May 2003

PROJECT: Milton Public Works Facility Study
 Project No. 03-451

SUBJECT: Initial Meeting with the Town of Milton, Public Works Department

ATTENDING: Dustin Keelty Building and General Grounds Superintendent
 Norman Smith Division of Highways
 Al Russell Dore and Whittier, Inc.
 Alan Brown Dore and Whittier, Inc.

1. Dustin Keelty and Norman Smith provided the following information with regards to current and future needs for the Division of Highways.

A. Facility should house the following vehicles

Vehicle Type	Quantity	Storage Requirement
Dump trucks	5	Housed and heated
One ton truck	1	Housed and heated
Tandem truck (future)	1	Housed and heated
Backhoe	1	Housed
Grader	1	Housed
Excavator	1	Housed
Pickup	1	Does not need to be housed or heated

B. Minor repairs are currently performed on site. More extensive repairs to vehicles may be possible in the future with the cost of repairs off-site increasing. Other Town departments could utilize the repair shop (i.e. police vehicles) including vehicle inspections.

C. The new facility should have a welding area and hood. Regular welding done in repair area now.

D. One of the truck bays should be a drive through.

E. Waste oil is currently stored in 55 gal containers in cold storage area. This would be the same in a new facility.

F. An area will be required for parts storage.

G. An air compressor will be required. This should be located in a separate room from the repair area due to noise. Existing compressor is in maintenance bay.

H. They currently utilize 2,000 tons of salt and 5000 cubic yards of sand on the Town roads per year. All this material must be covered. They purchase the sand as they need it and purchase and have salt delivered approximately 3 times a year. Town does not augment

with liquid chloride. Deliveries of salt are by tractor-trailer trucks.

- I. The town will need space for other maintenance materials such as gravel.
 - J. The Town of Milton currently maintains approximately 115 miles of road (it was 95 miles in 1989). It is expected that the number of miles maintained will increase.
 - K. The Town of Milton's population was 8,500 in 1990. The current population is approximately 10,000 in 2003.
 - L. The Division of Highways would like to have a truck wash, possibly inside a building. All Town vehicles could use this facility.
 - M. The new facility dooryard will be fenced with gates for security purposes.
 - N. A generator will be required to provide emergency power. The generator should be located outside of the Maintenance Building.
2. The overall goal is to house all Divisions of the Town's Public Works under one roof.
3. The new Public Works Facility should accommodate the following:

The total number of personnel is:

Highway Dept.	6
Buildings and Grounds	5
Water/Wastewater	2 to 3
Engineering	1
Administration	1

The following personnel will require offices:

Highway Superintendent
Building and Grounds Superintendent
Water Wastewater Superintendent
Engineer
Administrator
Public Works Director
Future Maintenance Director

All other personnel can be in shared office spaces.

A conference room for up to 12, a lunchroom and an area for storage will be needed.

4. Dustin Keelty is preparing orthographic photo/site plans to be used for the study. He gave draft copies to the Architects.

The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes. After 10 days, we will accept these minutes as an accurate summary of our discussion and enter them into the permanent record of this project.

Sincerely,

DORE AND WHITTIER, INC.

Architects Project Managers



Alan M. Brown, AIA.
Project Manager

c ARR, RJD, GOJ, File



DORE AND WHITTIER, INC.
Architects • Project Managers

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MEMORANDUM

DATE: May 15, 2003 **OFFICE:** VT MA
MEMO TO: File **COPY:** ARR
FROM: Alan Brown *Alan Brown*
PROJECT: Milton Public Works Facility Study
PROJECT #: 03-451
SUBJECT: Truck Usage Information from AOT

I talked with Gil Newbury and George Ducell from AOT District 8 at St. Albans. They told me that AOT uses (as a rule of thumb) one plow truck for every 13 miles. This would mean a 26 mile round trip before they would begin to plow the same stretch of road again. They both thought that length of travel for a plow truck for local Town Roads would be longer, at approximately 30 miles (60 miles round trip). It all depends on the Town of Milton's level of service and coverage time. These factors would have to be determined by the Town.

As far as both Gil and George know, there is no definitive, written guideline for determining length of road per plow truck.