

Hazardous Waste Facility Permit
Safety-Kleen Barre Service Center
EPA ID NO. VTD000791699
Facility Description
March 2022

APPENDIX B
FACILITY DESCRIPTION

APPENDIX B FACILITY DESCRIPTION

This section provides a general description of the Barre Service Center (BSC) and surrounding areas as required by the Vermont Hazardous Waste Management Regulations (VHWMR) and 40 CFR §§ 270.14(b)(1), (10), (11), and (19). Because the BSC is not located within an area listed in Appendix VI of 40 CFR § 264, the seismic standard of 40 CFR § 264.14(b)(11)(ii) does not apply.

B – 1.0 GENERAL FACILITY DESCRIPTION

Safety-Kleen, a wholly owned subsidiary of Clean Harbors Environmental Services, Inc., began operations in 1968 and is an international service-oriented company whose customers are primarily engaged in automotive repair, industrial maintenance, manufacturing, photo processing and dry cleaning. Safety-Kleen has operated the BSC since 1980 and leases the property from owner Esperanza C. Lague of Sun City Center, Florida.

The BSC typically operates Monday through Friday from 7:00 AM to 7:00 PM and provides waste management and recycling services to approximately 1400 businesses in Vermont, New York, and New Hampshire, the majority of which are small businesses. The BSC address is:

Safety-Kleen Systems, Inc.
23 West Second Street
Barre, VT 05641

The BSC is in the eastern portion of Washington County, Vermont in the City of Barre (see **Figure B-2** topographic map). The property covers approximately 1.4 acres (see **Figure B-5** site survey map) in an area zoned for industrial use (see **Figure B-3** zoning map), and Safety-Kleen is not aware of any property easements or title, deed, or zoning restrictions associated with the property that would restrict facility operations. The property is not located on Indian land; no critical habitat, public parks, schools, or oil/gas wells are located within one quarter mile of the property, and no injection or withdrawal wells are located within 1000 feet of the property boundary.

Municipal services: The BSC is served by the City of Barre municipal water distribution (see **Figure B-4**), sewer, and wastewater treatment systems. There are no storm drains on the facility site.

Climate: The Barre regional climate is characterized by average daily temperatures ranging from < -20 degrees Fahrenheit (F) to > 85 degrees F. The annual average rainfall for the area is 38 inches, and the annual average snowfall is approximately 80 inches. Wind direction in the Barre region is summarized in the following Wind Rose Table, with the predominant wind direction ranging from NNW to SSE.

Table B - 1
Wind Rose Direction/Speed Category
Barre, Vermont

Station: Montpelier, VT
 Annual Summary
 Data from the years: July 1996 - April 1999
 Total number of observations: 22890

PERCENTAGE OF TIME SUSTAINED WIND IS IN INDICATED SPEED/DIRECTION CATEGORY

DIR	SPEED CATEGORY (MPH)									ALL SPEEDS	AVE SPEED	
	<6	6-10	11-15	16-20	21-25	26-30	31-35	36-40	>40			
CALM	31.5	-	-	-	-	-	-	-	-	-	31.5	-
N	1.4	2.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.1	7.3
NNE	0.6	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	6.1
NE	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.0
ENE	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	4.8
E	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.6
ESE	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	6.4
SE	0.5	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	7.1
SSE	1.0	2.2	1.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	4.9	9.4
S	2.4	6.3	2.7	0.5	0.1	0.0	0.0	0.0	0.0	0.0	12.0	9.0
SSW	1.0	2.5	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.1	7.6
SW	0.7	1.5	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.9	8.3
WSW	0.5	1.5	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.6	8.6
W	1.0	2.5	1.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	4.8	9.0
WNW	0.9	3.5	2.1	1.0	0.3	0.0	0.0	0.0	0.0	0.0	7.9	10.8
NW	1.5	5.9	3.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	11.5	9.8
NNW	1.6	3.8	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	6.8	8.2
ALL	47.4	34.4	13.5	3.8	0.8	0.1	0.0	0.0	0.0	0.0	100.0	6.0

Wind direction observations were recorded to the nearest ten degrees.
 This summary was prepared by the Northeast Regional Climate Center.

Surface water: The BSC is located adjacent to the Stevens Branch of the Winooski River, but not within 1,000 feet of any stream or river used for commercial navigation; one-half mile of any lake, pond or reservoir used as a source for public drinking water; or within one-half mile of any federally designated wild or scenic river or any state-designated scenic river.

The topography at the BSC is relatively flat. The difference in surface elevation within the operational area of the facility is approximately four feet, and surface water run-off discharges to the Stevens Branch of the Winooski River, which generally flows NW. Since all wastes are stored indoors within secondary containment, runoff control is not required. The **Figure B-2**

topographic map shows the surface water features in the vicinity of the BSC.

100-Year Flood Plain: As designated on the Flood Insurance Rate Map (FIRM) for Washington County, Vermont (Panel 434 of 580, Effective Date March 19, 2013, of Barre City and Barre Town, see **Figure B-6**), the BSC is located within the 100-year flood plain. Because the facility is located within the 100-year flood plain, the Contingency Plan (included as **Appendix H**) includes specific procedures to be implemented when a 100-year flood event is predicted.

Traffic: West Second Street is a dead-end two-way road, which is approximately 14 feet wide at its narrowest point. This road is constructed of asphalt in accordance with the Vermont state construction standard (i.e., 80,000-pound capacity). A STOP sign located at the intersection of West Second Street and Route 302 is the only traffic control device in the vicinity of the facility. There are no truck stacking lanes in the vicinity of the facility, and vehicles traveling northwest on Route 302 must cross oncoming traffic to turn left (west) on to West Second Street. **Figure B-7** presents information on the traffic patterns and volumes in the vicinity of the BSC.

The BSC fleet of service vehicles normally includes two box trucks ranging in size from 23' to 32', one 3,000-gallon vacuum truck, one 3,700-gallon oil tank truck, and one sales van. In addition, Safety-Kleen operates tractor trailers and 6,000-gallon tank trucks from Safety-Kleen Recycle/Process Centers, and commercial vehicles operated by third-party transporters travel to the BSC once or twice per week to collect waste material and/or deliver fresh product material.

The BSC includes a paved parking area for company-owned, employee, and customer vehicles with sufficient additional space to allow for Safety-Kleen and third-party truck activity without interfering with off-site traffic.

Facility Structures: The BSC, which is surrounded by a security fence and access gate, includes the following structures (see **Figure B-1**, site plan):

- A 300-square foot metal shelter (Hazardous Waste Management Unit #5) is used to store containerized hazardous waste (ignitable waste, flammable waste, 10-day transfer waste) and product material.
- A 9,800-square foot office/warehouse building that contains two hazardous waste management units (HWMUs) for container storage (HWMU #3 and #4); the areas, which are described below, are also used to store non-hazardous wastes, product material,

universal waste, and 10-day transfer waste. The “return and fill station” dock (described below) is located withing HWMU #3 and includes a wet dumpster, a drum washing unit, and equipment for dispensing clean solvent.

- An enclosed tank farm consisting of three 15,000-gallon vertical aboveground storage tanks (ASTs); two are designated for used oil storage (Tanks #1 and #2) and one for spent hydrocarbon-based solvent (Tank #3, HWMU #1). Secondary containment for the three tanks is provided by a concrete dike system.
- One double-walled 12,000-gallon horizontal AST (Tank #4) used to store hydrocarbon-based solvent product.
- One double-walled 18,000-gallon frac tank (Tank #5) used to store non-hazardous Vacuum Service waste.
- A parking area for employee, visitor, and company vehicles.
- A transfer pad with a canopy where used oil is transferred from/to Safety-Kleen vehicles to/from Tank #1 and Tank #2, spent solvent is transferred from/to Safety-Kleen vehicles to/from Tank #3 (HWMU #1), and clean solvent is transferred from Safety-Kleen vehicles to Tank #4.

Note: **Figure B-1** (site plan) shows the 50’ property setback.

B – 2.0 DESCRIPTION OF WASTE MANAGEMENT ACTIVITIES

The BSC is permitted to accept, manage, and store certain hazardous wastes (see **Appendix A – Part A Application Form**) in four designated hazardous waste management units (HWMUs) as outlined in **Table B-2**; Safety-Kleen does not accept acutely hazardous, reactive, explosive, radioactive, or biologic wastes, collectively referred to by Safety-Kleen as “pass-by wastes.” All HWMUs are equipped with secondary containment systems [see **Appendix K** (Containers) and **Appendix L** (Tanks)]. Safety-Kleen does not manage any wastes in miscellaneous units as defined in 40 CFR § 260.10.

Table B-2

Permitted Hazardous Waste Management Units (HWMU)

HW Management Unit	Capacity (gal.)	Secondary Containment (gal.)	Material(s) Stored
15,000-gallon aboveground storage tank system (Tank #3, HWMU #1)	15,000	20,549	Spent aqueous- and hydrocarbon-based parts washing solvent
Tank #1 Tank #2	These 15,000-gallon above-ground tanks are for used oil storage only.		
Warehouse Container Storage Area (HWMU #3)	3,500	354	Spent immersion cleaner, non-ignitable dry-cleaning waste, spent antifreeze, non-ignitable 10-day transfer waste, non-ignitable on-site generated waste, spent oil filters, non-hazardous waste, recyclable material, and universal waste.
Flammable Storage Area (HWMU #4)	1,800	218	Ignitable waste, on-site generated waste, paint-related waste, and 10-day transfer waste; non-hazardous waste, and wastes exempt from regulation as hazardous waste may also be stored in this area.
Metal Shelter Storage Area (HWMU #5)	2,184	1,122	Ignitable waste, on-site generated waste, paint-related waste, and 10-day transfer waste; non-hazardous waste, and wastes exempt from regulation as hazardous waste may also be stored in this area.

All wastes accepted/generated, managed, and stored at the BSC are transported to off-site Safety-Kleen Recycle/Process Centers, Clean Harbors facilities, or to an appropriately permitted third-party facility for proper treatment or disposal.

Safety-Kleen's primary business activity is providing customers with parts washing units and the solvent products used in them (i.e., hydrocarbon- and aqueous-based parts washer solvent and immersion cleaner solvents). Safety-Kleen collects and manages the spent hydrocarbon-based solvent and provides reclaimed solvent product back to the customers on a scheduled basis. This "closed-loop" system allows the company to maintain control of the solvent, except when at the customer's place of business.

The BSC also accepts a variety of spent automotive and industrial wastes, either for storage at the facility or for management on a 10-day transfer basis as described below.

B – 2.1 Safety-Kleen Services

1. Parts Washer Services: The parts washer service entails leasing parts washing units to customers and, on a schedule specified in customer contracts, Safety-Kleen sales representatives cleaning and inspecting the units, and exchanging containers of spent solvent with containers of clean reclaimed solvent product. Parts washing units consist of a covered sink and attached apparatus used to circulate Safety-Kleen parts washer solvent from a connected container through a nozzle into the sink and back to the container. Each sales representative performs about 15 service visits per day, collecting containers of spent solvent in a box truck for transport to the Barre Service Center.

Safety-Kleen also offers solvent to customers who own their own parts washing units. This service, known as the Customer Owned Machine Service (COMS), only involves exchanging containers of spent solvent with containers of clean solvent product on a schedule specified in customer contracts.

- Hydrocarbon-based solvent - Spent parts washing solvent, received from customers in containers, is poured into the wet dumpster located on the return and fill station dock within HWMU #3 (see **Figure B-1**) and pumped to the hazardous waste management unit HWMU #1 storage tank. The 350-gallon wet dumpster and its associated piping and pumps are ancillary equipment to the HWMU #1 tank.

After spent solvent is pumped to the HWMU #1 tank, the emptied containers are cleaned individually using drum-washing equipment within the wet dumpster. Each drum is placed on the roller brushes within the unit, the unit lid is closed, and the unit is activated. Upon activation, the drum is rotated on the brushes to clean its exterior, as a steady stream of spent solvent (pumped from a reservoir within the unit) cleans the drum's interior. The spent solvent drains back into the reservoir and is automatically pumped to the HWMU #1 tank.

A screen basket located in the drum washing unit collects solid debris (e.g., sediment, metal pieces) removed from containers during drum washing process to protect the pump

that conveys spent solvent from the reservoir to the HWMU #1 tank. Once per day, the collected solids are manually removed from the basket and placed in the “branch debris” satellite accumulation container located near the return and fill station. The drum washer reservoir lid and all waste collection containers are kept closed when they are not in use.

The washed containers are refilled with clean solvent at the return and fill station dock using low pressure hose dispensers with automatic shut-off valves like those used at automotive service stations. Clean solvent is stored in Tank #4, a 12,000-gallon aboveground storage tank.

The concrete return and fill station dock is sealed, covered with iron grating, and sloped so spilled liquid flows to drain to a secondary containment sump (with a capacity of 844 gallons). The walls in this area are also sealed to six inches above the floor. Any significant accumulation of liquid in the containment sump is pumped into a container using a portable immersible pump, transferred to the wet dumpster, and ultimately pumped to the HWMU #1 tank; minor spills are cleaned up using absorbent material and transferred, along with any other solids removed from the secondary containment sump to the hazardous waste “branch debris” (return and fill waste) satellite accumulation container.

A small metal pan under the steel grate directly in front of the drum washing unit collects small drips from the drum-emptying and washing process. Any liquid collected in the drip pan is absorbed with absorbent pads and managed as branch debris as described above.

Spent solvent is removed from the HWMU #1, Tank #3 by tanker trucks and transported to a Safety-Kleen Recycle Center for recycling, typically through the “closed loop” system discussed above. Upon becoming full, the branch debris satellite accumulation drum is moved to HWMU #3 prior to being transported off site for proper disposal.

- Aqueous-based solvent - Aqueous-based solvent is blended at the BSC in drums which are provided to customers. Spent aqueous-based solvent received at the BSC may be transferred from the containers to the permitted hazardous waste storage tank (HWMU #1), or the containers of spent solvent may be placed in a permitted container storage area or managed on a 10-day transfer basis. Containerized spent aqueous-based solvent is

shipped off site for disposal.

- Immersion cleaner - Safety-Kleen also offers immersion cleaner parts washing units for removing varnish and gum from carburetors and transmissions. These units include a submersible basket with an agitator and use a blend of petroleum naphtha and monoethanolamine solvent held in an affixed 16-gallon container. The BSC receives immersion cleaner in drums which are provided to customers. Containers of spent immersion cleaner solvent picked up from customers are stored in the permitted warehouse container storage area (HWMU #3, see **Figure B-1**) prior to shipment to a Safety-Kleen Recycle/Process Center for reclamation.
2. **Dry Cleaning Service:** Safety-Kleen offers a service for the collection of dry-cleaning wastes (i.e., filter cartridges, separator water, powder residue from diatomaceous earth or other powder filter systems, and still bottoms) contaminated with dry cleaning solvents (typically perchloroethylene, and to a lesser degree, petroleum naphtha). These hazardous wastes are accumulated in containers by customers and collected periodically by Safety-Kleen sales representatives for transport to the BSC. These containerized wastes are stored in the warehouse container storage area (HWMU #3) or in the flammable waste storage area (HWMU #4, see **Figure B-1**), as appropriate, prior to shipment to a Safety-Kleen Recycle/Process Center or a third-party facility for proper treatment or disposal. Dry cleaning wastes may also be managed on a 10-day transfer basis.
 3. **Paint-Related Waste Service:** Safety-Kleen's paint-related waste program serves automobile, industrial and manufacturing customers who conduct painting operations. Under this program, wastes containing various thinners and paints are accumulated in containers on the customer's premises. Safety-Kleen sales representatives collect these containers and transport them to the BSC for storage in the warehouse flammable storage area (HWMU #4) or metal shelter storage area (HWMU #5, see **Figure B-1**). These wastes are periodically shipped to a Safety-Kleen Recycle/Process Center or a third-party facility. Paint-related wastes may also be managed on a 10-day transfer basis.
 4. **Antifreeze Service:** Safety-Kleen's antifreeze program serves automobile and industrial customers who generate spent ethylene glycol-based antifreeze (regulated in Vermont under the VT08 hazardous waste code). In general, this containerized waste is managed in

accordance with the conditional exemption included under § 7-203(i) of the VHWMR. This waste is typically stored in the warehouse container storage area (HWMU #3, see **Figure B-1**) prior to shipment to a reclamation or processing facility. Antifreeze wastes may also be managed on a transfer basis (10-days for hazardous waste).

- 5. Used Oil Service:** Safety-Kleen's used oil collection program serves automotive and industrial customers. Used oil is typically collected by a 3,600-gallon tanker truck that returns to the Service Center and transfers collected used oil to the two 15,000-gallon aboveground storage tanks designated for used oil storage (Tanks #1 and #2, see **Figure B-1**). The used oil is removed from the tanks by tanker trucks and transported to a Safety-Kleen Refinery for refining/recycling.
- 6. Used Oil Filter Service:** Safety-Kleen provides a service to collect containers of oil filters and manages the filters in accordance with the conditional exemption included under § 7-203(o) of the VHWMR. Containers of used filters are stored in the warehouse container storage area (HWMU #3, see **Figure B-1**) prior to shipment to a recycling facility. Used filters may also be managed on a 10-day transfer basis.
- 7. Vacuum Waste Service:** Safety-Kleen's non-hazardous vacuum collection program serves automotive and industrial customers. Used oil and water, non-hazardous wastewater, and other non-hazardous wastes are collected by a 3,600-gallon vacuum tanker truck that returns to the BSC and transfers collected used oil and water to a 18,000-gallon, double-walled frac tank (Tank #5, see **Figure B-1**). The used oil and water mixture is removed from the frac tank by tanker trucks and transported to a third-party disposal facility which manages the used oil mixture in accordance with VHWMR Subchapter 8.
- 8. Non-Hazardous and RCRA Exempt Services:** Safety-Kleen assists its customers in the proper management and handling of a variety of non-hazardous and RCRA exempt materials. These materials include, but are not limited to, film, aluminum, single-use cameras, empty containers, silver recovery units, empty gas tanks, RCRA empty containers, and universal wastes as specified under Subchapter 9 of the VHWMR. These wastes, which are not accumulated speculatively, may be stored in the permitted container storage areas or in the general warehouse area (see **Figure B-1**). These materials may also be managed on a 10-day transfer basis in specified transfer areas.

9. 10-Day Transfer Waste: The BSC manages various non-core wastes (see **Appendix C** for definitions of core wastes and non-core wastes) from customers on a 10-day transfer basis. These wastes remain “in transportation” (i.e., are accompanied by and identified on an active uniform hazardous waste manifest) to a designated hazardous waste facility (i.e., a facility other than the BSC) that is specified on the manifest. Hazardous transfer wastes being held at the BSC may be held for up to 10 days provided they are managed in accordance with § 7-404 of the VHWMR (Transfer Facility Standards).

All transfer wastes are accepted for transport by Safety-Kleen in containers that meet DOT specifications (appropriate for the waste held) and are off-loaded into a permitted container management area at the BSC where they are held for 10 days or less (see **Figure B-1**).

Attachment B-1 lists the waste types commonly managed on a transfer basis at the BSC.

Hazardous wastes being managed on a 10-day transfer basis are distinguished from hazardous wastes accepted for storage at the BSC (i.e., the corresponding uniform hazardous waste manifests have been terminated upon receipt of the waste by the BSC) by markings on the container labels as specified in **Appendix K** (Containers). To ensure that transfer wastes are stored no longer than 10 days, each transfer container is: marked with the date of arrival at the BSC; assigned a unique tracking number; entered into the facility operating log; and tracked by arrival (and departure) date, as well as by the corresponding uniform hazardous waste manifest number or shipping document number.

To prevent proximate placement of incompatible 10-day transfer waste, the waste segregation practices specified in **Appendix G** (Preparedness) to prevent storing incompatible wastes together are followed for transfer wastes (i.e., segregation according to the DOT Segregation Table found in 49 CFR § 177.848).

Since 10-day transfer wastes are stored in permitted HWMUs (and count toward the maximum permitted capacity of these units), the closure cost estimate for the facility (see **Appendix I**) includes costs for the removal of wastes being managed on a transfer basis.

B – 2.2 Hazardous Wastes Generated by the BSC

Hazardous wastes are generated by the BSC through operational and maintenance activities. These wastes include, but may not be limited to: contaminated operational materials (e.g., contaminated sorbent used to clean-up spills); waste from used oil, solvent, and vacuum waste tank cleanouts; and residual waste removed from the return and fill station. These wastes are containerized, characterized according to the facility Waste Analysis Plan (see **Appendix C**), and managed in accordance with applicable regulations in either the warehouse container storage area (HWMU #3), the flammable storage area (HWMU #4) or the metal shelter storage area (HWMU #5).

B – 3.0 CORRECTIVE ACTION

As specified in the Vermont DEC correspondence dated November 17, 2004, and September 21, 2007 (see **Attachment B-2**), the BSC is not currently subject to active corrective action operating requirements.

B – 4.0 RELEVANCE TO OTHER FEDERAL LAWS

National Historic Preservation Act of 1996, 16 U.S.C. 470 et. Seq.

This Act is not applicable to this facility since the property is not a designated site nor will existing operations affect any listed site.

Endangered Species Act, 16 U.S.C. 1531 et. Seq.

Continuing operations at this site will not affect any endangered species.

Wild and Scenic Rivers Act, 16 U.S.C. 1273 et. Seq.

Continuing operations at this site will not have a direct adverse impact any national wild and scenic river.

Coastal Zone Management Act, 16 U.S.C. 1451 et. Seq.

This act is not applicable since the facility is not located in a coastal zone.

Fish and Wildlife Coordination Act, 16 U.S.C. 661 et. Seq.

This act is not applicable since operation of the facility will not result in the impoundment, diversion, or modification of any body of water.

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ATTACHMENTS

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ATTACHMENT B-1
COMMON TYPES OF TRANSFER WASTE

ATTACHMENT B-1

EXAMPLES OF COMMON TRANSFER WASTES^{1, 2}

Non-automotive Waste Paint
Paint Solids
Paint Booth Filters
Aqueous Paint
Universal Waste Lamps
Universal Waste Batteries
Universal Waste Mercury Containing Devices
Gasoline
Gasoline Filters
Corrosive Cleaning Compounds
Printer Ink and Press Wash
Spill Cleanup Debris
Oil-Soaked Absorbents
Contaminated Soil
Industrial Oil
Refrigerant Oil
Fluorescent Light Ballasts
RCRA Empty Containers
Waste Water
Aerosol Cans
Electronic Equipment
Industrial Coolants

¹ For informational purposes only.

² Not intended to be all inclusive.

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ATTACHMENT B-2
SITE MANAGEMENT ACTIVITY COMPLETED DESIGNATION LETTERS



State of Vermont

RELAY SERVICE FOR THE HEARING IMPAIRED
1-800-253-0191 TDD->VOICE
1-800-253-0195 VOICE->TDD

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Waste Management Division
103 South Main Street, West Building
Waterbury, Vermont 05671-0404

Phone: 802-241-3885
Facsimile: 802-241-3296
brian.woods@anr.state.vt.us

November 17, 2004

Stephen D. Fleming
Safety-Kleen Systems Inc.
11923 Tramway Drive
Cincinnati OH 45241

RECEIVED

NOV 23 2004

SAFETY-KLEEN EHS
REMEDATION DEPT

RE: Groundwater Monitoring at Safety-Kleen Barre – Site #77-0095

Dear Mr. Fleming:

I have completed my review of the latest semiannual groundwater monitoring report for the Safety-Kleen Barre site, dated October 26, 2004. The report states that contaminants (1,2-dichlorobenzene [2 ug/L], cis-1,2-dichloroethene [4 ug/L], trans-1,2-dichloroethene [3 ug/L], and tetrachloroethylene [2 ug/L]) were present in the sample from one (monitoring well B-3) of the four monitoring wells included in the September 2004 sampling event, and that none of the contaminants were detected at a concentration above Vermont Groundwater Enforcement Standards. Review of historical data included with this report shows that monitoring well B-3 is the only well affected, and that no contaminants have been detected in samples from this location at concentrations above Groundwater Enforcement Standards for five consecutive sampling events.

In a letter from the Vermont Department of Environmental Conservation, Sites Management Section (VTDEC/SMS) dated October 1, 1990, monitoring at this site was to continue until one year (two rounds) of semiannual sampling results demonstrated contaminants present in concentrations below their respective Groundwater Enforcement Standards. This requirement has been met. Therefore, the site is now eligible for a Site Management Activity Completed (SMAC) designation.

In order for the VTDEC/SMS to issue a SMAC letter for this site, the following tasks need to be accomplished and documented:

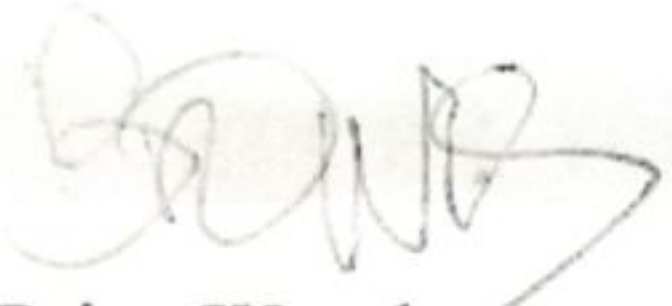
- The five existing groundwater monitoring wells at the site must be properly closed to eliminate possible conduits for contaminant migration into the subsurface. Proper well closure requires removal of the protective well cover, filling the wells with a grout material to prevent fluid migration in the borehole, and finishing to the surrounding grade. With shallow wells such as the ones at this site, it is encouraged that the well casings be removed prior to grouting of the well boreholes.
- A Notice to Land Records will need to be recorded at the Barre City offices providing notice of the status of the site and the presence of residual contamination. A sample land record notice is enclosed with this letter.

Upon completion of these two tasks the VTDEC/SMS will be able to issue a SMAC letter stating that no additional action is required at this site regarding groundwater contamination.

Please advise me in advance of the schedule for closure of the monitoring wells so that I may oversee that activity should I so choose. Please provide a draft of the proposed land record notice for my review and approval prior to filing.

Please contact me if you have any questions regarding this letter or the site in general.

Sincerely,



Brian Woods
Environmental Analyst

Enclosure

c: Melodie Carr, VTDEC

State of Vermont
Department of Environmental Conservation
Waste Management Division
103 South Main Street/West Building
Waterbury, VT 05671-0404
(802) 241-3491
FAX (802) 241-3296
George.desch@state.vt.us

AGENCY OF NATURAL RESOURCES

September 21, 2007

Steven Fleming
Safety-Kleen Inc
11923 Tramway Drive
Cincinnati OH 45241

RE: Site Management Activity Completed, Safety-Kleen Barre - SMS Site #77-0095

Dear Mr. Fleming:

The Sites Management Section (SMS) has reviewed the October 26, 2004 Semiannual Groundwater Monitoring Report – No. 2 for 2004 report for work conducted at the Safety-Kleen Barre site. The SMS has also reviewed historical information contained in the site file. Based on this review, the SMS can now make the following conclusions:

- In December 1985 two 10,000-gallon underground storage tanks used for the storage of spent mineral spirits were removed from the site by E.J. Flynn Engineering. Soil samples collected from the bottom of the excavation during the tank removal indicated the presence of contamination. In response to this discovery, a subsurface investigation was performed in June-July 1986. Five soil borings were drilled to the water table (minimum 15 feet depth), soil samples were collected, the borings converted to monitoring wells, and groundwater samples collected. Samples were analyzed for the presence of mineral spirits. Mineral spirits were detected in soil and groundwater in the immediate vicinity of the UST area (well B-4). A quarterly groundwater sampling program was initiated (Wang Engineering 1986).
- In October 30 1986 Safety Kleen reported a release of spent mineral solvent from the site. The release, which occurred in February 1986, was the result of a frozen pipeline. During repair of the pipeline approximately three to four gallons of mineral spirit solvent were released. Safety Kleen reported that all contaminated soil was removed and disposed of off-site (TRC PA+, September 1992; Safety-Kleen 1986).
- Groundwater samples collected from the site monitoring wells in July 1986 were analyzed for volatile organic compounds. Chloroform was detected in the samples from wells B-1 and B-4. 1,1-dichloroethane (18 ug/L), 1,1,1-trichloroethane (48 ug/L), trichloroethylene (26 ug/L) and tetrachloroethylene (9 ug/L) were detected in the sample from well B-3. Trichloroethylene and tetrachloroethylene were both detected at concentrations above their respective groundwater enforcement standards (5 ug/L and 0.7 ug/L respectively).
- In 1990 the VTDEC decreased the groundwater monitoring frequency to semiannually and established the cleanup goal for the site of one year of groundwater monitoring events (two consecutive semiannual events) where contaminants at any location did not exceed their respective groundwater enforcement standards (VTDEC 1990).
- Semiannual groundwater sampling has continued at the site through 2004. The results from the latest groundwater monitoring event, performed on September 16, 2004, show the following contaminants detected in the sample from well B-3: 1,2-dichlorobenzene (2 ug/L), cis-1,2-



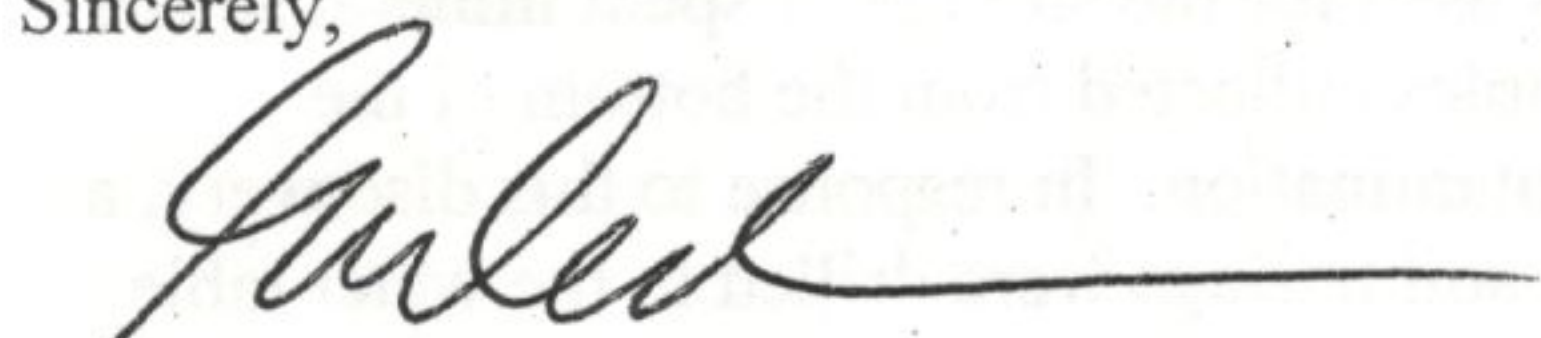
dichloroethene (4 ug/L), trans-1,2-dichloroethene (3 ug/L), and tetrachloroethylene (2 ug/L). These results were the fifth consecutive monitoring event where contaminants did not exceed any groundwater enforcement standards.

- The following sensitive environmental receptors were identified: the Stevens Branch, which borders the property on the north and eventually empties into the Winooski River; wetlands along the Stevens Branch and Winooski River; and residents and groundwater users within a four-mile radius of the site (TRC, 1992).
- The subject building and area are served by a municipal water supply, which is not at risk of contamination from this site. No unacceptable risk to human health and the environment is present due to any residual contamination remaining in the ground from the removed USTs.
- The five existing groundwater monitoring wells were properly closed in June 2005 to eliminate possible conduits for contaminant migration into the subsurface. This closure involved removal of the protective well cover, filling the wells with a grout material to prevent fluid migration in the borehole, and finishing to the surrounding grade (Submission of the Monitoring Well Closure Documentation letter, 9/19/2005).
- A Notice to Land Records has been recorded on February 15, 2005 (Volume # 220, Pages #509-510) at the City of Barre offices regarding the presence of residual contamination at the site.

Based on the above, the SMS is assigning this site a Site Management Activity Completed (SMAC) designation. This SMAC designation does not release Safety-Kleen, Inc., of any past or future liability associated with the petroleum contamination onsite. It does, however, mean that the SMS is not requesting any additional work in response to the 1985 UST removal and 1986 mineral spirits release.

Please contact me if you have any questions regarding this determination.

Sincerely,



George Desch, P.E.
Chief, Sites Management Section

- c: Barre City Board of Alderpersons
Marcey Mae Kelly, Barre City Health Officer
Don Wernecke, DEC Barre Regional Engineer (via electronic mail)
Joseph Basile, Basile Environmental Services

Hazardous Waste Facility Permit
Safety-Kleen Barre Service Center
EPA ID NO. VTD000791699
Facility Description
March 2022

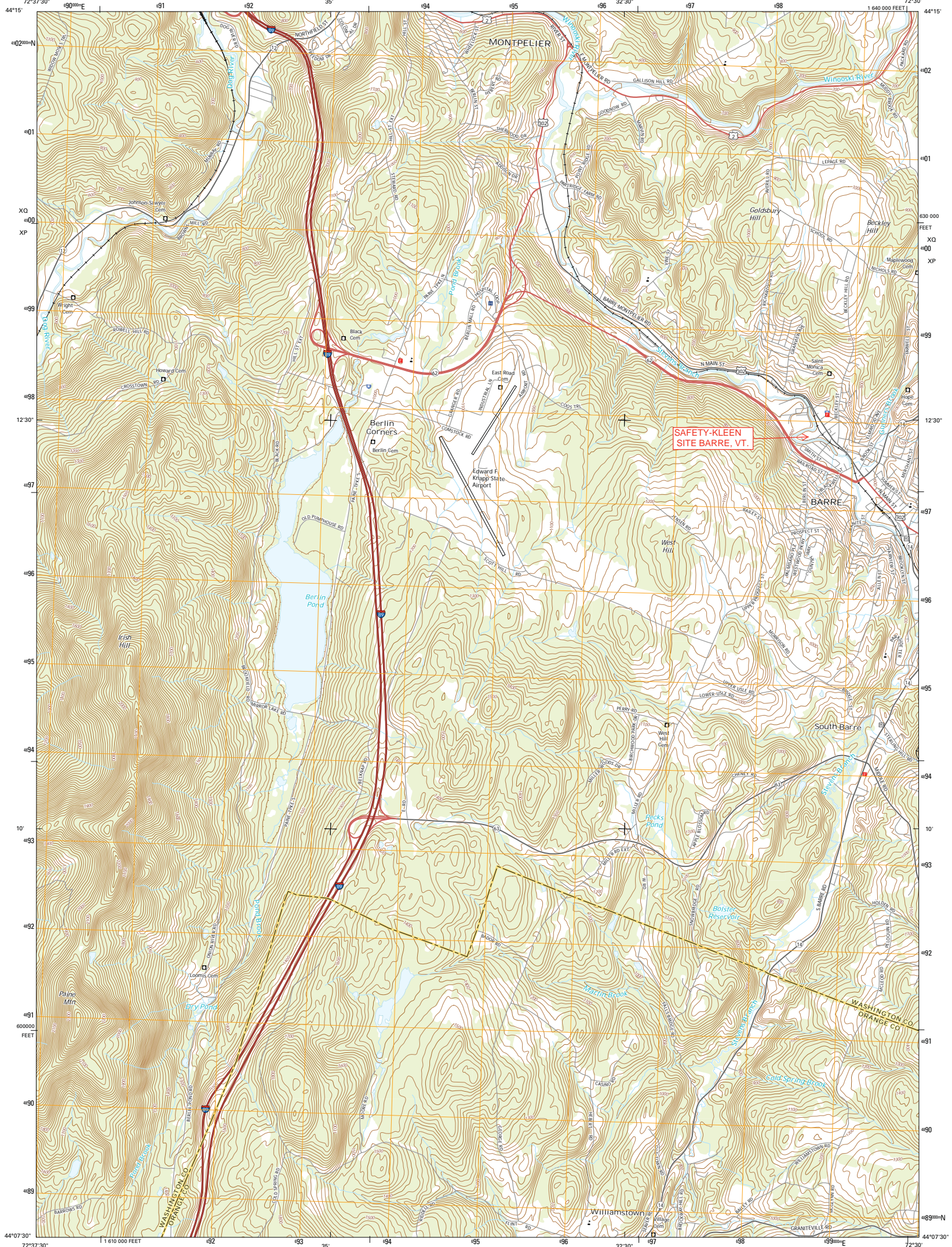
FIGURES



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



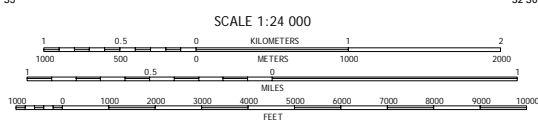
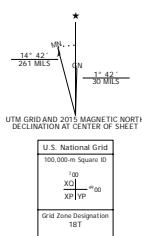
BARRE WEST QUADRANGLE
VERMONT
7.5-MINUTE SERIES



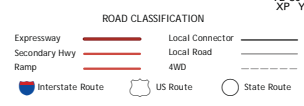
Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
1 000-meter grid: Universal Transverse Mercator, Zone 18T
10 000-foot ticks: Vermont Coordinate System of 1983

This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery: MAP, August 2014
Roads: HERE, ©2013 - 2014
Names: GNS, 2015
Hydrography: National Hydrography Dataset, 2014
Contours: National Elevation Dataset, 2011
Boundaries: Multiple sources; see metadata file 1972 - 2015



QUADRANGLE LOCATION

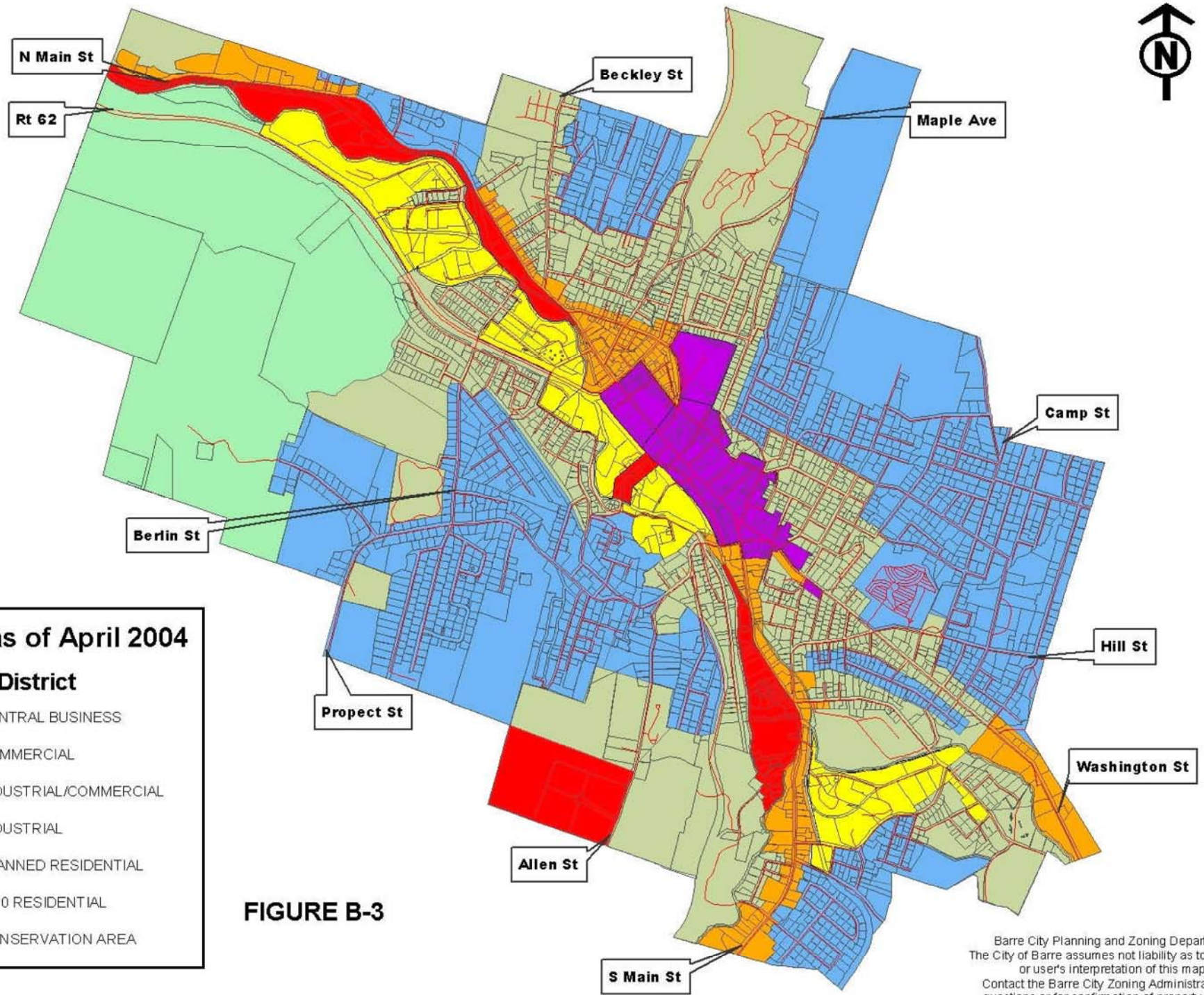


1	2	3
4	5	6
7	8	

ADJOINING QUADRANGLES

BARRE WEST, VT
2015

FIGURE B-2



Zoning as of April 2004

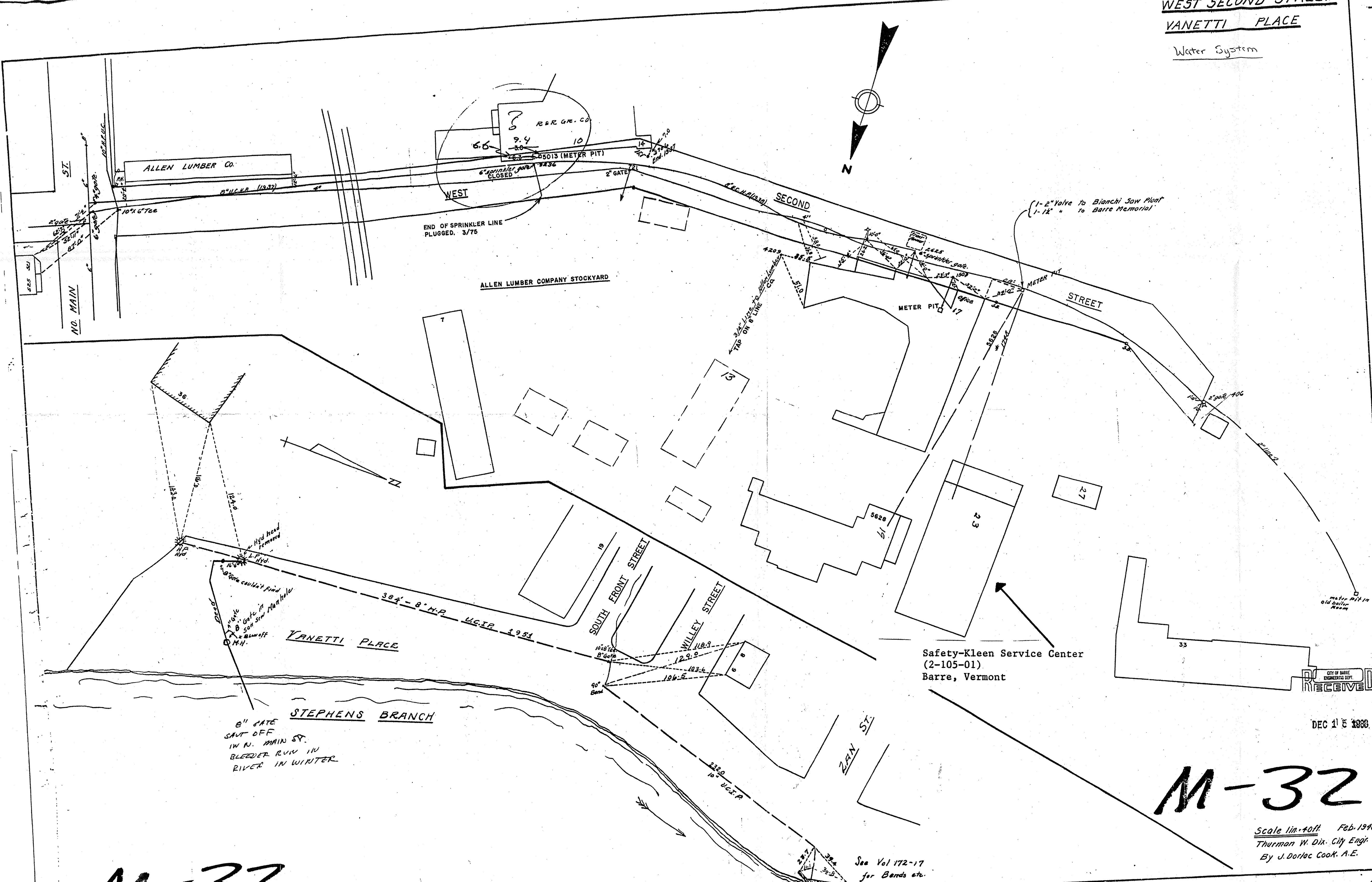
Zoning District

- CENTRAL BUSINESS
- COMMERCIAL
- INDUSTRIAL/COMMERCIAL
- INDUSTRIAL
- PLANNED RESIDENTIAL
- R-10 RESIDENTIAL
- CONSERVATION AREA

FIGURE B-3

Barre City Planning and Zoning Department
 The City of Barre assumes not liability as to accur
 or user's interpretation of this map.
 Contact the Barre City Zoning Administrator wit
 questions or for confirmation of property zoning

WEST SECOND STREET
VANETTI PLACE
Water System



8" GATE
SAV OFF
IN N. MAIN ST.
BLEEDER RUN IN
RIVER IN WINTER

Safety-Kleen Service Center
(2-105-01)
Barre, Vermont

CITY OF BARRE
ENGINEERING DEPT.
RECEIVED

DEC 15 1988

M-32

Scale 1 in. = 40 ft. Feb. 1940
Thurman W. Dix, City Engr.
By J. Dorlac Cook, A.E.

WATER SUPPLY MAP
FIGURE B-4

M-32

See Vol 172-17
for Bonds etc.

M.32

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was Vermont State Plane, FIPSZONE 4400. The horizontal datum was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NIMS-12
National Geodetic Survey
SSM-C-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from Vermont digital orthophotography, provided by the Vermont Mapping Program, Department of Taxes. These data were produced at a scale of 1:5000 from photography dated 1995-1999.

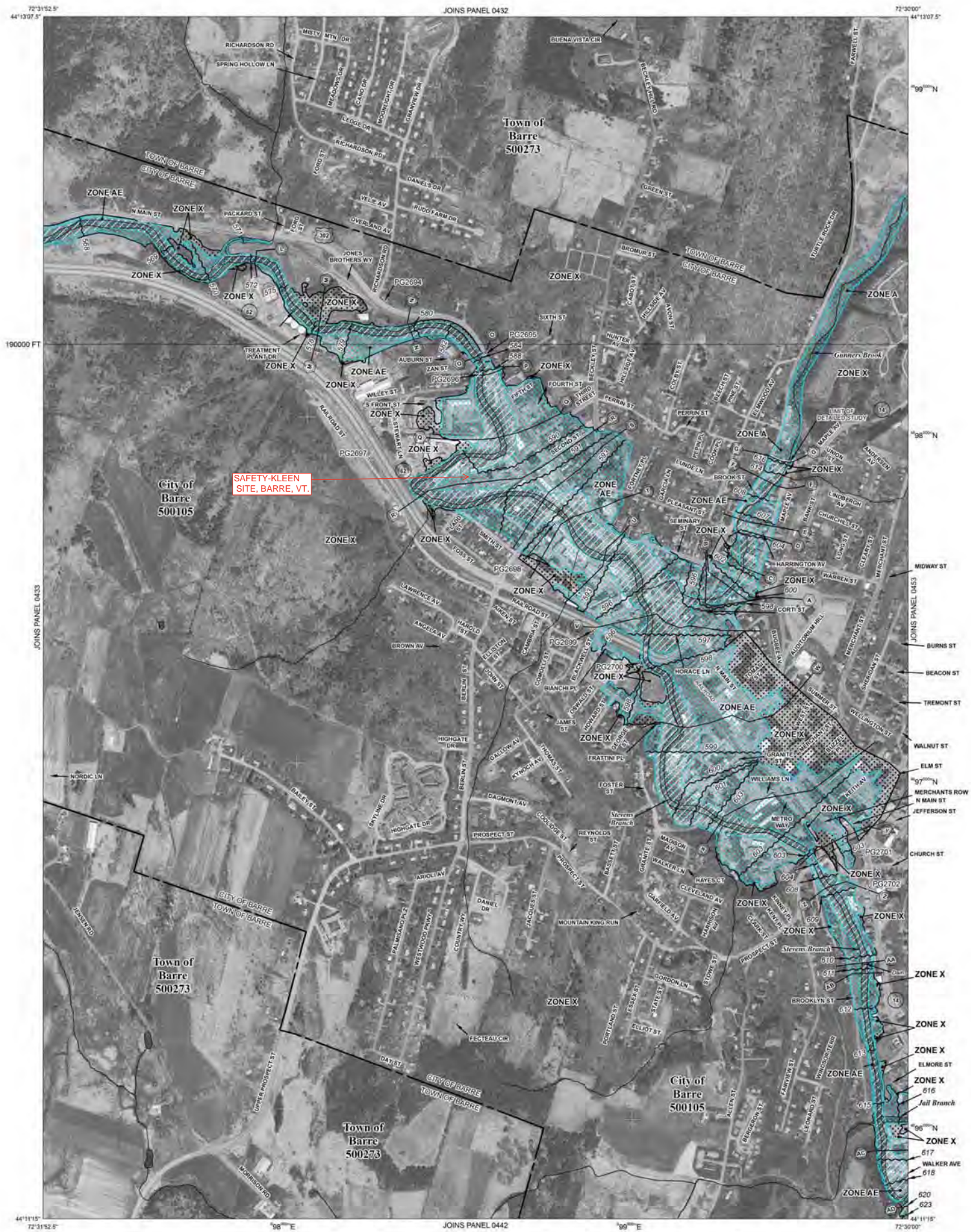
This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMIX) at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business>.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

THE 1% ANNUAL FLOOD (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, AR1, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently determined. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE AR1 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
Base Flood Elevation line and value; elevation in feet
Base Flood Elevation value where uniform within zone; elevation in feet

* Referenced to the North American Vertical Datum of 1988

⊕ Cross section line
⊖ Transsect line
87°07'45", 32°22'30"

76°N
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
1000-meter Universal Transverse Mercator grid values, zone 18
600000 FT
5000-foot grid values: Vermont State Plane coordinate system (FIPSZONE 4400), Transverse Mercator projection

DX5510 x
Bench mark (see explanation in Notes to Users section of this FIRM panel)
● M1.5
River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index.

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
March 19, 2013

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-639-6635.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

FIGURE B-6

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0434E

FIRM

FLOOD INSURANCE RATE MAP

WASHINGTON COUNTY, VERMONT (ALL JURISDICTIONS)

PANEL 434 OF 580
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

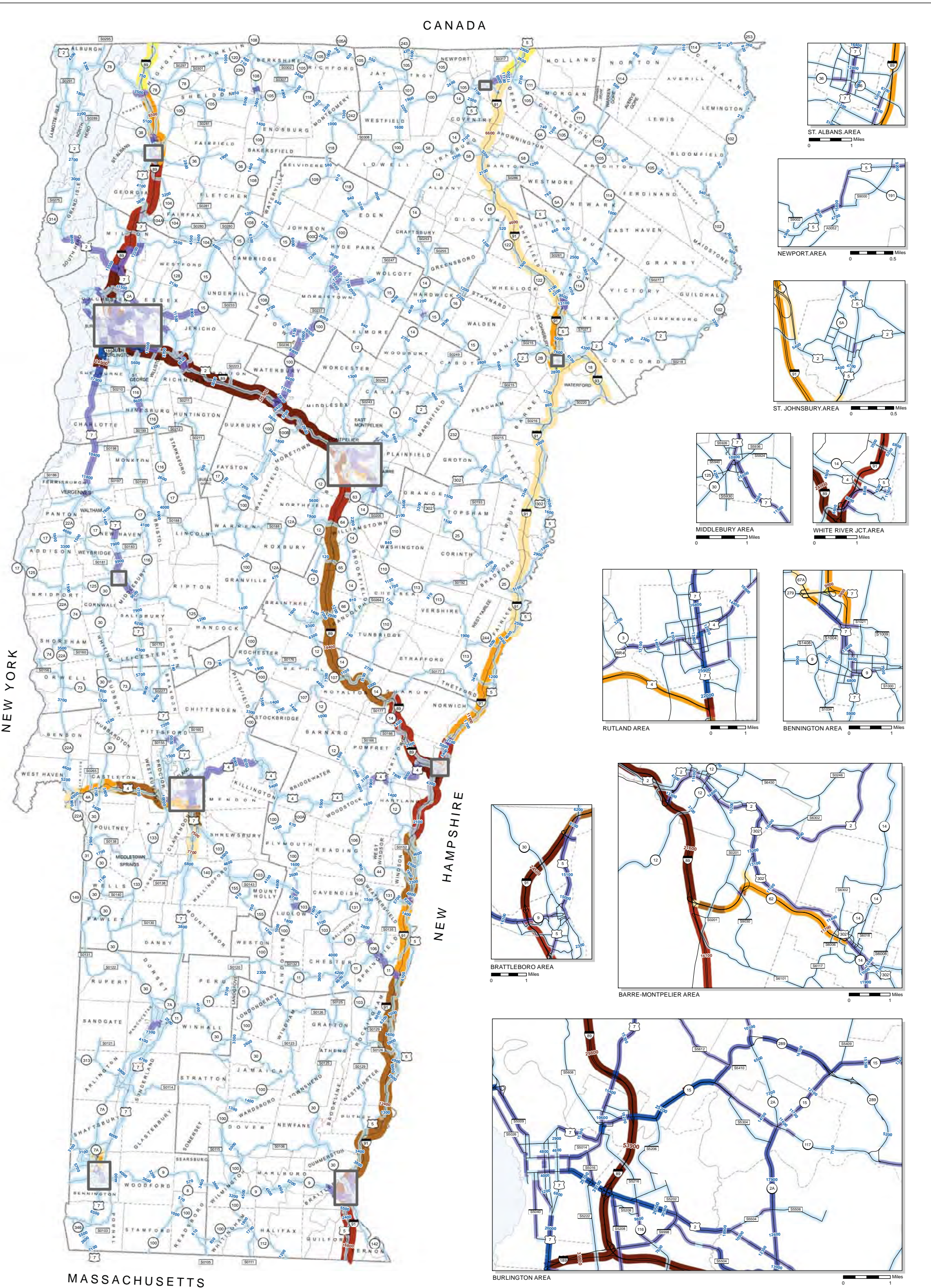
COMMUNITY	NUMBER	PANEL	SUFFIX
BARRE, CITY OF	500105	0434	E
BARRE, TOWN OF	500273	0434	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
50023C0434E

EFFECTIVE DATE
MARCH 19, 2013

Federal Emergency Management Agency



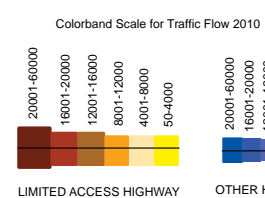
NEW YORK

NEW HAMPSHIRE

MASSACHUSETTS

STATE OF VERMONT 2010 TRAFFIC FLOW MAP

Annual Average Daily Traffic (AADT)



- INTERSTATE
- U.S. ROUTE
- VERMONT ROUTE
- MINOR ARTERIAL OR COLLECTOR



Map produced by:
Mapping Unit
Vermont Agency of Transportation
1 National Life Drive
Montpelier, VT 05633
August 2011

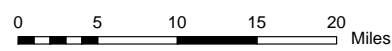


FIGURE B-7