



Town of Middleton Planning Board

Proposed Amendment to Article 7 of Middleton Zoning Ordinance

Summary: Completely revised and updated to reflect new Aquifer Conservation Overlay District NH Statutes. This amended Ordinance will completely replace Article 7 of the Zoning Ordinance.

AMENDED ARTICLE 7 AQUIFER CONSERVATION OVERLAY ZONING DISTRICT

- A. PURPOSE** To help maintain the quality of living in the Town of Middleton, as set forth in the Master Plan, the Town believes that an adequate water supply is indispensable to its citizens' health, welfare, and safety. Such an adequate supply is also essential to maintaining the ecological balance of the natural environment of the Town, an environment that the Town wishes to protect. These water resources are subject to an ever-increasing demand for new and competing uses. Thus, the Town declares and determines that such water resources, whether occurring above or below ground, constitute a precious, finite, and invaluable public resource. These resources should be protected, conserved, and managed in the interest of present and future generations. This Ordinance intends to preserve the water resources from contamination by regulating land uses that could contribute pollutants to designated wells and aquifers identified as being needed for present and future public water supply.
- B. AUTHORITY** The Town of Middleton hereby adopts this Ordinance pursuant to the authority granted under **RSA 674:16** as an Innovative Land Use Control in accordance with **RSA 674:21**. This Ordinance shall be administered, including the granting of conditional permits, by the planning board.
- C. SPECIAL CONDITIONS.** The following conditions shall apply to all uses in this District unless exempt under Article 7 Section H:
1. Any new or expanded uses that will render impervious more than 15 percent or more than 2,500 square feet of any lot, whichever is greater, must apply for a special exception. A stormwater management plan must also be prepared, which the planning board determines is consistent with New Hampshire Stormwater Manual Volumes 1-3,



Town of Middleton Planning Board

December 2008, NH Department of Environmental Services.

2. All regulated substances stored in containers with a capacity of five gallons or more must be stored in product-tight containers on an impervious surface designed and maintained to prevent flow to exposed soils, floor drains, and outside drains;
3. Facilities where regulated substances are stored, must be secured against unauthorized entry utilizing a door and gate that is locked when authorized Personnel are not present and must be inspected weekly by the facility owner;
4. Outdoor storage areas for regulated substances, associated material, or waste must be protected from exposure to precipitation and must be located at least 50 feet from surface water or storm drains, at least 75 feet from private wells, and outside the sanitary protective radius of wells used by public water systems;
5. Secondary containment must be provided for outdoor storage of regulated substances in regulated containers, and the containment structure must include a cover to minimize accumulation of water in the containment area and contact between precipitation and storage container(s);
6. Containers in which regulated substances are stored must be clearly and visibly labeled and must be kept closed and sealed when the material is not being transferred from one container to another;
7. Before any land-disturbing activities, all inactive wells on the property, not in use or properly maintained when the Plan is submitted, shall be considered abandoned and must be sealed per We 604 of the New Hampshire Water Well Board Rules.
8. Blasting activities shall be planned and conducted to minimize groundwater contamination. Excavation activities should be prepared and performed to mitigate adverse impacts on hydrology and the dewatering of nearby drinking water supply wells.
9. Sanitary wastewater discharge to septic and leaching systems shall conform to the regulations set forth in the New Hampshire Water Supply & Pollution Control Division Regulation;
10. All liquid or solid waste other than normal septic effluent shall be temporarily stored on-site and disposed of in a manner approved by the Planning Board;
11. Monitoring wells shall be established for all industrial and commercial uses utilizing or storing hazardous or toxic materials. The Planning Board shall determine the number, construction, and location of these wells. These wells shall be checked for compliance with the Interim Primary Drinking Water Regulations and Secondary Drinking Water Regulations as provided for in the Safe Drinking Water Act of 1977 or subsequent revisions. The checking of wells shall take place periodically as required by the Planning Board, and the results reported to the Planning Board and such other boards



Town of Middleton Planning Board

and officials as the Planning Board deems appropriate;

12. All transfers of petroleum from delivery trucks and storage containers over five gallons in capacity shall be conducted over an impervious surface having a positive limiting barrier¹ at its perimeter.
13. Use of pesticides, herbicides, animal manures, and other potentially dangerous leachables shall comply with **RSA 430:28, et seq.** and the NH Code of Administrative Rules. It must be stored in accordance with the Manual of Best Management Practices for Agriculture in New Hampshire, NH Department of Agriculture, Markets, and Food (June 2011) and any subsequent revisions. No fertilizer, except low phosphate, slow-release nitrogen fertilizer, or limestone, may be used on lawns or areas with grass. Storage of these materials shall not be outdoors;
14. Site review shall be required by the Planning Board when an industrial or commercial use is altered within this District to a service that involves the use, storage, or disposal of hazardous or toxic materials;
15. No more than **fifty (50) percent** of the buildable area of a lot shall be rendered impervious;
16. Stormwater drainage shall be handled according to the best management practices.

D. PERMITTED USES. All uses permitted by right in the base zoning district where the property lies are permitted in the Aquifer Conservation District unless they are Prohibited Uses or Special Exceptions. All uses must comply with the Special Conditions unless specifically exempt under Article 7 Section H.

E. PROHIBITED USES. The following uses are not permitted in the Aquifer Conservation District.

1. Storage of petroleum or related products, except within the buildings, to be heated by such products and in small quantities of several gallons for use in small engines, such as lawnmowers or rototillers.
2. Automobile service stations and junk or salvage yards.
3. The development or operation of gasoline stations.
4. Outdoor storage of road salt or other deicing chemicals or dumping of snow containing road salt or other deicing chemicals as a result of removal from other areas.
5. Disposal of liquid or leachable waters, including On-site disposal of septage

¹ A positive limiting barrier (PLB) is a depression (e.g., groove) in the surface of an otherwise level impervious area designed to impede the flow and contain spilled substances within the perimeter of the impervious area. PLBs are typically constructed and maintained to contain small spills or releases (five to fifteen gallons).



Town of Middleton Planning Board

generated off-site or sewer and septage lagoons except for one-unit residential subsurface sewage disposal systems.

6. Disposal of solid waste, including developing or operating a solid waste landfill
7. Disposal or storage of hazardous materials and wastes except
 - a. Household hazardous wastes may be stored at the residence where they intend to be used. This in no way implies that such storage may occur for commercial purposes.
 - b. Temporarily as necessary in the ordinary course of business. A permit and adequate containment facilities are required for such temporary storage.
8. Use of leach field degreasing materials.
9. Industrial use and discharge of process waters or other wastes generated by industrial uses.
10. Removal of Sand and gravel within ten (10) feet of the seasonal high-water table unless the Planning Board grants an exception in accordance with all Middleton Earth Excavation Regulations in effect and RSA 155-E:11.

F. USE BY SPECIAL EXCEPTION.

1. Uses permitted by Special Exception shall be the same as those in the base zoning district unless listed as prohibited in Article 7 Section E of this Ordinance or otherwise involved in one or more of the following:
 - a. Storage, handling, and use of regulated substances in quantities exceeding 55 gallons or 660 pounds dry weight at any one time, provided that an adequate spill prevention, control, and countermeasure (SPCC) plan, in accordance with Article 7 Section F, subsection 4, is approved by the local Fire Department, Health officer or Emergency Management officer.
 - b. Any use that will render more than 15 percent or 2,500 square feet of any lot impervious, whichever is greater.
 - c. Any activities that involve the blasting of bedrock.
2. In addition to the special exception requirements of **Article 32** of this Ordinance, the following information shall be provided to the Zoning Board of Adjustment during the Special Exception process:
 - a. An environmental impact study completed by a registered professional



Town of Middleton Planning Board

engineer with expertise in groundwater hydrology concluding that the use will impact the aquifer equal to or less than an average single-family dwelling.

3. Special Exceptions shall develop stormwater management and pollution prevention plans and include information consistent with Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators (US EPA, Feb 2009). The Plan shall demonstrate that the use will:

- a. Meet minimum stormwater discharge setbacks between water supply wells and constructed stormwater practices as found within the Innovative Land Use Planning Techniques: A Handbook for Sustainable Development, Section 2.1 Permanent (Post- Construction) Stormwater Management, (NHDES, 2008 or later edition)
- b. Minimize, through a source control plan that identifies pollution prevention measures, the release of regulated substances into stormwater;
- c. Stipulate that expansion or redevelopment activities shall require an amended stormwater plan and may not infiltrate stormwater through areas containing contaminated soils without completing a Phase I Assessment in conformance with ASTM E 1527-05, also referred to as All Appropriate Inquiry (AAI);
- d. Maintain a minimum of four feet of vertical separation between the bottom of a stormwater practice that infiltrates or filters stormwater and the average seasonal high-water table as determined by a licensed hydrogeologist, soil scientist, engineer, or other qualified professionals as determined by the Planning Board.

4. Special Exceptions using regulated substances shall submit a spill control and countermeasure (SPCC) plan to the Fire Chief, Health officer, or Emergency Management officer, who shall determine whether the Plan will prevent, contain, and minimize releases from ordinary or catastrophic events such as spills, floods or fires that may cause large releases of regulated substances. It shall include:

- a. A description of the physical layout and a facility diagram, including all surrounding surface waters and wellhead protection areas.
- b. Contact list and phone numbers for the current facility response coordinator(s), cleanup contractors, and all appropriate federal, State, and local agencies who must be contacted in case of a release to the environment.
- c. A list of all regulated substances in use and locations of use and storage;



Town of Middleton Planning Board

- d. A prediction of the direction, rate of flow, and total quantity of a regulated substance that could be released where experience indicates a potential for equipment failure.
 - e. A description of containment and diversionary structures or equipment to prevent regulated substances from infiltrating the ground.
 - f. List of positions within the facility that require training to respond to spills of regulated substances.
 - g. Prevention protocols must be followed after an event to limit future significant releases of any regulated substance.
4. In granting such approval, the Planning Board must determine that the proposed use will comply with the Special Conditions in Article 7 Section C and all applicable local, State, and federal requirements. The Planning Board may, at its discretion, require a performance guarantee or bond, in an amount and with surety conditions satisfactory to the Board, to be posted to ensure the completion of construction of any facilities required for compliance with the Special Conditions.

G. EXISTING NON-CONFORMING USES. Existing non-conforming uses may continue without expanding or changing to another non-conforming use. Still, they must comply with all applicable state and federal requirements, including Env-Wq 401 and Best Management Practices Rules.

H. EXEMPTIONS. The following uses are exempt from the specified provisions of this Ordinance as long as they comply with all applicable local, State, and federal requirements:

1. Any private residence is exempt from all Special Conditions;
2. Any business or facility where regulated substances are stored in containers with a capacity of fewer than five gallons is exempt from Article 7 Section C, Special Conditions, subsections 3 through 6;
3. Storage of heating fuels for on-site use or fuels for emergency electric generation provided that storage tanks are indoors on a concrete floor or have corrosion control, leak detection, and secondary containment in place, is exempt from Special Condition 3;
4. Storage of motor fuel in tanks attached to vehicles and fitted with permanent fuel lines to enable the fuel to be used by that vehicle is exempt from Special Conditions 3 through 6;
5. Storage and use of office supplies are exempt from Special Conditions 3 through 6;
6. The temporary storage of construction materials on a site where they are to be used is exempt



Town of Middleton Planning Board

from Special Conditions 3 through 6 if incorporated within the site development project within six months of their deposit on the site;

7. The sale, transportation, and use of pesticides as defined in RSA 430:29 XXVI is exempt from all provisions of this Ordinance;
8. Household hazardous waste collection projects regulated under NH Code of Administrative Rules Env-Hw 401.03(b)(1) and 501.01(b) are exempt from Special Conditions 3 through 6;
9. Underground and aboveground storage tank systems that comply with applicable state rules are exempt from inspections under Article 7 Section K of this Ordinance.

I. INCORRECTLY DESIGNATED AREAS. When the boundary of the Aquifer Conservation District is disputed, the Planning Board, at the complainant's expense and authorization, may engage a professional geologist or hydrogeologist to determine the precise location of the Aquifer Conservation District boundaries in the properties affected. A report of their findings shall be submitted to the Planning Board and shall include but not be limited to the following:

1. A revised soil map of the area in question prepared by a soil scientist qualified in hydrologic studies, along with a written report of their on-site field inspection and test boring data.
2. A revised hydrogeological map prepared by a Professional Geologist ("P.G.") or a Professional Engineer ("P.E."), including a written report.
3. The Planning Board may adjust the boundary of this District based on the evidence provided as set forth above. It shall reserve the right to withhold action of any plat pending the results of an on-site inspection by the Board or its appointed agent. It shall act to approve or disapprove the Plan within **sixty-five (65) days** of submission, or such further time as deemed necessary, but not to exceed an additional **ninety (90) days** as may be approved by the Board of Selectmen.

J. RELATIONSHIP BETWEEN LOCAL REQUIREMENTS, STATE AND Where the State and the municipality have existing requirements, the more stringent shall govern.

K. MAINTENANCE AND INSPECTION

1. For uses requiring planning board approval for any reason, a narrative description of maintenance requirements for structures required to comply with Special Conditions shall be recorded to run with the land on which such structures are located at the Registry of Deeds for Strafford County. The description so prepared shall comply with the requirements of RSA 478:4-a.
2. Inspections may be required to verify compliance with Special Conditions. Such inspections shall be performed by the Code Enforcement Office at reasonable times with prior notice to the landowner.
3. All properties in the Groundwater Protection District known to the designated agent⁴. as using or storing regulated substances in containers with a capacity of five gallons or more, except for facilities where all regulated substances storage is exempt from this Ordinance under Article 7 Section H, shall be subject to inspections under this Article.
4. The Town of Middleton may require a fee for compliance inspections. The property owner shall pay



Town of Middleton Planning Board

the fee. The Town of Middleton shall establish a fee schedule as provided for in RSA 41-9:a.

- L. ENFORCEMENT PROCEDURES AND PENALTIES.** Any violation of the requirements of this Ordinance shall be subject to the enforcement procedures and penalties detailed in RSA 676 or RSA 485-C.

APPROVED AND FORWARDED BY THE PLANNING BOARD



Town of Middleton Planning Board

Proposed Amendment to Zoning Ordinance.

Summary: Newly proposed Solar Ordinance

SOLAR ORDINANCE

A. PURPOSE

The purpose of this Ordinance is to accommodate solar energy collection systems and distributed generation resources in appropriate locations while protecting the public's health, safety, and welfare. The Town intends to facilitate the State and National goals of developing clean, safe, renewable energy resources in accordance with the enumerated policies of NH RSA 374-G and 362-F that, include national security and economic and environmental sustainability.

B. AUTHORITY

This solar collection system ordinance is enacted in accordance with NH RSA 674:17(I)(j) and the purposes outlined in NH RSA 672:1-III-a as amended.

C. APPLICABILITY

This Ordinance does not cover Solar installations designed to generate less than one kilowatt and is not connected to the electrical grid. However, they may be subject to other regulations.

- a. **Residential and Accessory Agricultural** – *The Town will permit rooftop solar installations of less than 15KW by right in all zoning districts. Ground-mounted solar systems that are 15KW or less and one thousand (1000) square feet or less will not need Planning Board approval but will require approval from the Planning Department's Building Inspector.*
- b. **Commercial** - *Any person seeking to construct or to conduct any Commercial Solar Energy System for commercial use as defined in Article 36 of this Ordinance, shall apply to the Planning Board for Site Plan Review in accordance with the requirements set forth in the Town Site Plan Review Regulations as well as a Conditional Use Permit. In addition, such applicant shall submit the information required in this Ordinance. If any property owner/s wishes to install a ground and/or pole-mounted Commercial Solar Energy System, they must come to the Planning Board for a Conditional Use Permit that shows they have met the conditions listed above, as well as any other conditions, such as protecting the view shed of neighbors and passersby's, which the Planning Board may feel necessary to be in the best interests of the town and abutting residents in light of the purposes of this Ordinance and the purposes of the zoning district(s) in which the property is located.*



Town of Middleton Planning Board

D. GENERAL DEFINITIONS

Solar Access – Space open to the sun and clear of overhangs or shade so as to permit the use of active and/or passive solar energy systems on individual properties.

Building Integrated Photo Voltaic (BIPV) Systems- a solar energy system that integrates photo voltaic modules into the building structure, such as solar shingles on the roof or the facade, which does not alter the relief of the roof.

Collective Solar – Solar Installations owned collectively through subdivision homeowner associations, co-housing, and other similar arrangements.

Net Metering – A billing mechanism authorized by NH RSA 362-A and corresponding regulations, credits solar customers for surplus electricity they generate and deliver back to the grid and allows them to pay only for their net electricity usage during the applicable billing cycle.

Qualified Solar Installer – A NH licensed electrician with specialized knowledge and corresponding skills related to the installation, construction, and operation of solar electrical equipment and who has received safety training on the hazards involved with solar installation.

Residential – as defined in Article 36 of this Ordinance.

Solar Energy – Radiant energy provided by the sun that can be collected in the form of heat or light by a solar collector.

Solar Skyscape Easement—A recorded easement pursuant to NH RSA 477:51 sufficient to create a Solar Skyscape easement.

Solar Storage Battery – A device that reserves energy for later consumption that is charged by a connected solar connection system.

Solar Thermal Systems - System which converts solar radiation to thermal energy; system directly heats water or other liquid using sunlight; used for such purposes as space heating, cooking, domestic hot water, and heating pool water.

Rated Nameplate Capacity – Maximum-rated alternating current ("AC") output of solar collection system based on the design output of the solar system.

Solar Land Coverage – is defined exclusively to calculate the footprint of the land area occupied by the components of a solar array. The Solar Land Coverage is the land area that encompasses all elements of the solar collection system, including but not limited to mounting equipment, panels, and ancillary components of the system. This definition does not include access roads or fencing. It is not to be interpreted as a measurement of impervious surface as it may be defined in this Ordinance.

Solar Collection System - Includes all equipment required to harvest solar energy to generate electricity. The Solar Collection System includes storage devices, power conditioning equipment, transfer equipment, and parts related to the functioning of those items. Solar Collection Systems include only equipment up to (but not including) the stage that connection is made to the utility grid or site service point.

Roof-Mounted System – A solar collection system that is structurally mounted to the roof of a building or other permitted structure, including limited accessory equipment associated with the system, which may be ground mounted. It is installed parallel to the roof with a few inches gap. If the rooftop is flat, then the racking system is installed so



Town of Middleton Planning Board

the solar array is aligned at an angle. For calculating array sizes or solar land coverage under the solar definitions in this section, roof-mounted portions shall not be included if the system comprises roof and ground-mounted systems.

Ground-Mounted System – A solar collection system and associated mounting hardware affixed to or placed upon (such as ballasted systems) the Ground, including but not limited to fixed, passive, or active tracking racking systems.

Commercial Carport Mounted System – Any solar collection system of any size installed on a carport's roof structure over a parking area.

E. USE DEFINITIONS:

Accessory Residential Solar: Any ground-mounted or roof-mounted solar collection system primarily for on-site residential use and consisting of one or more free-standing, Ground or roof-mounted solar arrays or modules, or solar-related equipment, intended to primarily reduce on-site consumption of utility power and with a rated nameplate capacity of 20 kW AC or less and that is less than 1000 square feet solar land coverage.

Community Solar: A commercial land use, per Article 36 of this Ordinance, that consists of one or more free-standing, ground-mounted solar collection systems regardless of nameplate capacity of up to 100 kW AC and less than 1 acre of solar land coverage and is intended for on-site consumption by a community group.

Accessory Agriculture Solar: Any ground-mounted or roof-mounted solar collection system designed to primarily reduce on-site consumption of utility power without a limit to the rated nameplate capacity or solar land coverage, provided the existing agricultural use is preserved during installation.

Primary Agriculture Solar: Any ground-mounted solar collection system that is partially used to reduce on-site consumption of utility power and with a rated nameplate capacity of up to 1 MW AC in size or has a solar land coverage in excess of 5 acres provided the existing agricultural use is preserved at the time of installation where the excess power is sold to the utility company.

Small Commercial Solar: A land use that consists of one or more free-standing, ground-mounted solar collection systems with a rated nameplate capacity of up to 1 MW AC and less than 5 acres in solar land coverage.

Large Commercial Solar: A land use consisting of one or more free-standing, ground-mounted solar collection systems with a rated nameplate capacity of between 1 MW and 5 MW and between 5 and 25 acres in solar land coverage.

Industrial Solar: A land use that consists of one or more free-standing, ground-mounted solar collection systems, regardless of nameplate capacity, between 5 acres and 50 acres in solar land coverage.

Utility Solar: A land use that consists of one or more free-standing, ground-mounted solar collection systems regardless of nameplate capacity over 50 acres in solar land coverage and less than 30 MW in rated nameplate capacity.

Solar Power Generation Station: Any solar collection system over 30 MW in nameplate capacity. In no case shall a Solar Power Generation Station exceed 150 acres.



Town of Middleton Planning Board

Table of Permitted Solar Uses

	Zoning District					
	Sunrise Lake Village District SRL	Residential- Commercial /Industrial B-1	Rural Residential RR	Middleton 4 Corners M4C	Commercial	Industrial
Accessory Residential Solar	P	P	P	P	P	P
Community Solar	X	P	P	P	P	P
Accessory Agricultural Solar	X	P	P	P	P	P
Primary Agricultural Solar	X	X	CUP	P	P	P
Commercial Solar	X	x	CUP	CUP	P	P
Large Commercial Solar	X	X	X	CUP	CUP	CUP
Industrial Solar	X	X	X	X	CUP	CUP
Utility Solar	X	X	X	X	CUP	CUP
Solar Power Generation Station	X	X	X	X	X	CUP

P = Use permitted by right with building and electrical permit.

CUP = Use permitted by Conditional Use Permit.

X = Use prohibited.

Site plan review is required for all solar uses except for Accessory Residential Solar and Accessory Agricultural Solar, following the Site Plan Review Regulations.

F. SPECIFIC SOLAR SYSTEM REQUIREMENTS AND EXEMPTIONS:

- a. A ground-mounted Accessory Residential Solar system shall not exceed the building height described in Article 6, Section A, paragraph 4 of this Ordinance at any point and shall be located in the rear yard between the primary structure and the rear lot line.
- b. A Commercial Use, as defined in Article 36 of this Ordinance, carport-mounted solar collection systems over parking areas are permitted in all zones without a Conditional Use Permit. A site plan review is required in accordance with the Site Plan Review Regulations.
- c. Roof-mounted solar collection systems of any size are permitted in all zones without a conditional use permit.
- d. When adding solar panels to historic properties, it is recommended that the roof or ground-mounted solar panels be mounted in inconspicuous locations when possible and be screened to limit visibility.
- e. Municipal Systems: All solar collection systems for municipal use are exempt from land use regulations pursuant to NH RSA 674:54.
- f. Setbacks: Solar collection systems shall be considered structures, require building permits, and comply with building setback requirements from lot lines for the entire system – including the panels. Tracking systems shall measure the setback from the



Town of Middleton Planning Board

point and time where the array is closest to the lot line. No portion of a system may cross into the setback.

- g. Building Height: Roof-mounted solar collection systems shall be exempt from building height limitations.
- h. Lot Coverage: Ground-mounted solar collection systems shall not be considered part of the maximum required lot coverage limitations and shall not be considered impervious surfaces. Impervious surface limitations related to stormwater management for solar collection systems shall be addressed per this Ordinance.

G. ADDITIONAL PERMITTED SITES:

A. Solar Collection Systems of any size or type shall be permitted on the following sites if they remain Town-owned *municipal properties*:

1. School Facilities: Map 12 Lot 24.
2. Municipal Building: Map 12 Lot 24-1.
3. Fire Station: Map 12 Lot 21
4. Old Town Hall: Map 12 Lot 20.
5. Highway Garage: Map 12 Lot 20-1.
6. Highway Department: Map 45 Lot 36, Lot 37.
7. Highway Department Ridge Road Pit: Map 12 Lot 24-2
8. Highway Department Gravel Pit:
Town of New Durham Map 219 Lot 12

H. SOLAR COLLECTION SYSTEM CONDITIONAL USE PERMIT:

- A. The Planning Board encourages using tax maps, GIS, USGS, Google Earth, and other resources that provide enough detail to create a hand-drawn or computer-generated site plan for local land use board review. Engineers and Surveyors are required for larger projects or when critical environmental areas are present. Landscape architects or professional Landscapers may be engaged to address aesthetic concerns.
- B. All applications for a solar energy system conditional use permit shall be made to the Planning Board in accordance with the submission and procedural requirement for conditional use permits set forth in Article 33 of this Ordinance, as they may be amended, with the additional information as set forth in General Application Criteria below.

I. GENERAL APPLICATION CRITERIA:

A. System Layout Requirements

1. A detailed sketch or plan showing the installation area of the site.



Town of Middleton

Planning Board

2. A detailed sketch of any land clearing or grading required for the installation and operation of the system.
3. The location of all equipment to be installed on-site, including utility connection point(s), storage battery, and equipment structures and equipment. To the maximum extent practical, all wiring associated with the utility connection shall be underground.
4. All equipment and structure locations, except for utility connections, shall comply with required setbacks.

B. Equipment Specification

1. All proposed equipment or specifications must be included with the application.
2. Such information can be supplied via manufacturer specifications or detailed descriptions.

C. Emergency Response

1. Access to the site for emergency response shall be provided and detailed in the plan.
2. A narrative or manual for the municipal Fire Department detailing response guidance and disconnection locations necessary for fire response.
3. Additional industry guidance documents that provide information about safety procedures for specific equipment on site shall be provided as needed to ensure adequate public safety.
4. Contact information for the solar collection system owner/operator shall be posted on-site at the access way and provided and updated to the Town.

D. Natural Resource & Views/Viewsheds Impacts and Buffers

1. Solar collection systems shall be visually screened through the preservation of existing vegetation or a landscaped buffer in accordance with the following.
 - a. Plan: The buffering plan shall indicate the location, height, and spacing of existing vegetation to be preserved, areas where new planting will be required, and a statement that the buffering shall be maintained for the project's lifespan.
 - b. All solar systems shall have a visual buffer as required in the site plan review regulations from public ways and neighboring commercial/residential uses based on the viewsheds, contours of the land, and abutting land uses.
 - c. Areas within the viewshed of significant value as identified in the Master Plan shall include additional reasonable mechanisms to mitigate from a continuous and uninterrupted view of the system.

E. Fencing shall be installed per the National Electrical Safety Code with a height of not less than 2.13 m (7 ft). Additionally, "Wildlife Friendly Fencing" is encouraged.

F. Primary Agriculture Solar should minimize impacts on farmland activities and Prime Farmland Soils (as defined and delineated by soil survey and definition of



Town of Middleton Planning Board

NH NRCS). Dual-use arrangements (solar and farming activities) are encouraged where practical.

1. Land clearing shall be limited to what is necessary for the installation and operation of the system and to ensure sufficient all-season access to the solar resource, given the land's topography.
2. Following construction, cleared land areas must be restored with native species consistent with the site's use as a solar collection system (such as slow growth or low ground cover).
3. The Planning Board Development Regulations shall detail erosion control measures during construction.

G. ADDITIONAL REQUIREMENTS FOR LARGE COMMERCIAL, INDUSTRIAL, AND UTILITY (LC/IU) SOLAR:

1. A licensed NH Professional Engineer shall prepare, and stamp all submitted plans, reports, and documentation.
2. A detailed pre-construction and post-construction plan identifying existing vegetation and areas to be cleared with specific identification of locations of buffer areas adjacent to neighboring uses and public ways.
3. LC//U systems that disturb more than 10 acres of previously undisturbed land shall provide a natural resource inventory that details site conditions and habitat and mitigation efforts to reduce impacts to important species and habitats.
4. Efforts and practices that can provide for dual use of the site should be explored if feasible and encouraged where appropriate.
5. The applicant shall demonstrate effective stormwater infiltration, erosion control measures, and soil stabilization.

J. ELECTRICAL REQUIREMENTS.

1. The Electrical or Building Inspector shall approve all systems not connected to the grid, as required.
2. Grid-tied systems shall file a copy of a final approved interconnection with the Town prior to operation of the system.

K. GLARE.

An index measures glare and is required.

1. All proposed solar collection systems except for Accessory Residential Solar systems shall notify the Regional Federal Aviation Authority (FAA) Office and the local airport operator to inform the FAA operator about the proposed project and



Town of Middleton

Planning Board

public hearing dates so that the agency can determine if the project presents any safety or navigational problems, especially if large.

2. A statement or study detailing potential significant glare onto abutting structures and roadways estimating the interaction of sun to panel angle, time of year, and visibility locations.
3. The Planning Board may require reasonable mitigation based on the above information. Mitigation may include the angle of panels, details on the anti-reflective nature of the panel coating, or any additional specific screening to minimize resulting impacts.
4. Mitigation through anti-reflective coatings shall have an index of refraction equal to or less than 1.30.

L. NOISE.

1. Estimates of equipment noise on the site based on equipment specification materials (such as inverters).
2. Noise levels at the property line shall be reasonable given the facility's location, with due consideration to the surrounding land uses and zone.

M. STORMWATER.

1. Ground-mounted systems that are required to secure a New Hampshire Department of Environmental Services Alteration of Terrain (AoT) Permit in accordance with NH RSA 485:17 shall apply for such permit. Receipt of the AoT permit shall be a condition precedent to any approval issued by the Planning Board for such a system.
 - a. The final Permit issued by NH DES shall be incorporated by reference into the final Town approval. It shall be enforceable by the Town in accordance with this zoning ordinance.
 - b. No further local review of stormwater and erosion control shall be required where a project is required to secure the NH DES AoT Permit.
2. Ground-mounted systems not requiring NH DES AoT Permit. Where a ground-mounted system does not require an AoT permit, the following shall apply:
 - a. If ground-mounted systems require land clearing and grubbing of mature forested cover to accommodate more than 30% of the solar land coverage area (provided such area of clearing and grubbing is also larger than 1 acre), the proposed system shall include a management plan for stormwater that is directly related to the impact of the solar collection system.
 - b. Ground-mounted systems where the solar land coverage area is larger than 1 acre and located on slopes greater than 5% shall include a management plan for stormwater.
3. The stormwater management plan shall include the following.



Town of Middleton Planning Board

- a. The stormwater study shall consider the nature of the solar panel installation and how the spacing, slope, and row separation can enhance stormwater infiltration. Percolation tests or site-specific soil information may be provided to demonstrate that recharge can be achieved without engineered solutions.
 - b. Additional information shall calculate the potential for concentrated runoff flows due to the panels, slope, soil type, and the impacts of other true impervious areas (such as equipment pads and roadways).
4. Required for all systems:
- a. All ground-mounted systems shall be constructed in accordance with NH DES and UNH Cooperative Extension Best Management Practices for erosion and sedimentation control during the pre-construction, construction, and post-construction restoration period.
 - b. Post-construction: To enhance natural stormwater management, site conditions, and plantings, shall ensure that soil compaction areas have been restored to more natural conditions. Plantings shall be native species and are recommended to be beneficial habitats to songbirds, pollinators, and/or foraging specifics to maintain a healthy surface and subsurface habitat that can attenuate stormwater on the site.
 - c. All plans shall include a stormwater Operation and Maintenance Plan for incidental and Non-Incidental Disturbances and shall have an Operations and Maintenance (O&M) Plan to ensure that systems function as designed.

M. LIGHTING.

On-site lighting shall comply with Development Regulations, Article 5.6.

N. BUFFER PLAN.BUFFER

All applications shall submit a detailed buffering plan demonstrating how the proposed ground-mounted solar installation will be incorporated into the local landscape to provide adequate screening along public ways and from abutting views. The use of evergreens is strongly recommended. The use of existing or created topography is encouraged to reduce visual impacts.

O. ABANDONMENT AND DECOMMISSIONING.

1. Solar Collection Systems shall be deemed to be abandoned if operations have been discontinued for more than 12 months without the written consent of the Town (such as for reasons beyond the control of the owner/operator). An abandoned system shall be removed, and the site restored within 12 months of abandonment.
2. The Planning Board shall require the applicant to post a surety in an amount approved by the Board to guarantee that an abandoned system is removed and the site restored within the required 12-month timeframe. A licensed NH Professional



Town of Middleton Planning Board

Engineer, approved by the Planning Board, shall calculate said surety amount for review and approval by the Board that secures the guarantee of satisfactory removal and restoration for the Town. This calculation work shall be at the expense of the applicant/owner.

X. REQUIREMENTS FOR GRANTING A CONDITIONAL USE PERMIT (CUP):

Criteria:

1. Standards of Review: Following a fully noticed public hearing on the proposed use, the Planning Board may issue a Conditional Use Permit if it finds, based on the information and testimony submitted concerning the application, that:
 - a. The use is authorized explicitly by the Table of Principal and Accessory Uses as a conditional use as described under **Use Definitions** of this Solar Ordinance.
 - b. The development in its proposed location will comply with all applicable requirements of the Site Plan Review Regulations not otherwise covered in this section and specific conditions established by the Planning Board.
 - c. The use will not materially endanger the public health or safety.
 - d. Required adequate screening shall be installed and maintained during the operative lifetime of the Solar Collection System Conditional Use Permit. The applicant shall sign an agreement with the Planning Board, which shall run with the land for screening to be maintained until the system is removed and the property restored.
 - e. In granting a conditional use permit according to this section, the Planning Board may impose any reasonable conditions or restrictions deemed necessary to carry out the intended purpose of this Ordinance.

Y. SITE PLAN REVIEW REGULATIONS APPLICABLE.

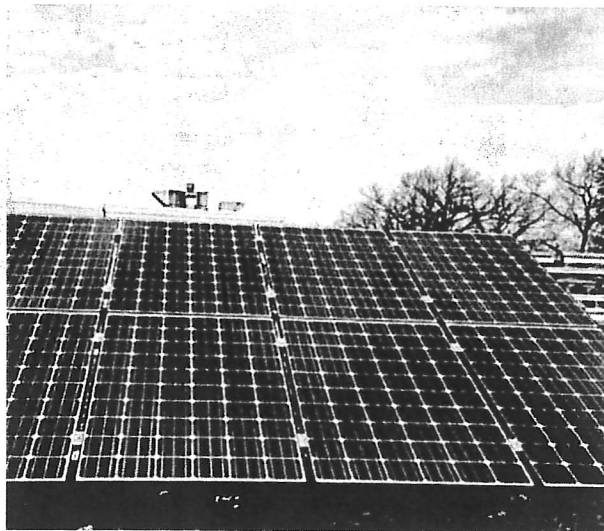
1. The specific requirements for a Conditional Use Permit shall preempt any similar requirement in the Site Plan Review Regulations.



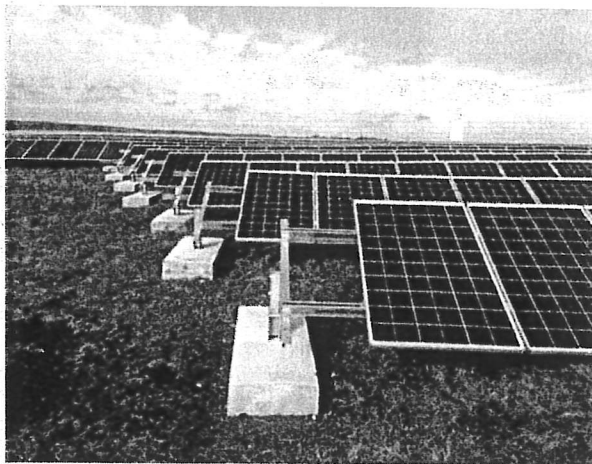
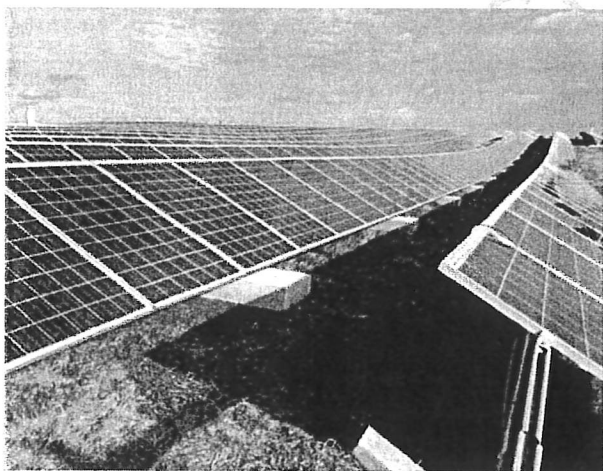
Town of Middleton Planning Board

Appendix:

This appendix includes images and information about several types of solar installations and equipment.



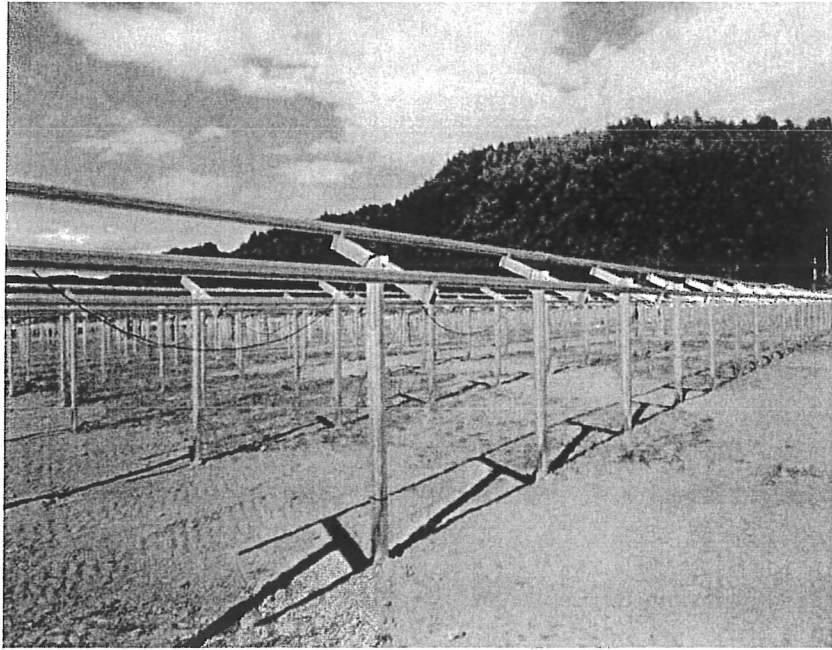
Completed installation showing gaps between panels



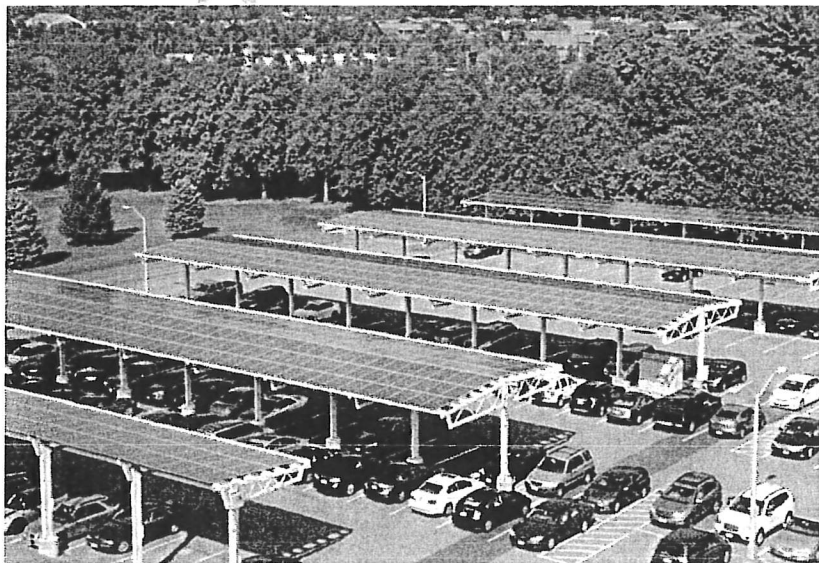
Ballasted system, showing the distance between rows and the ballast blocks.



Town of Middleton Planning Board



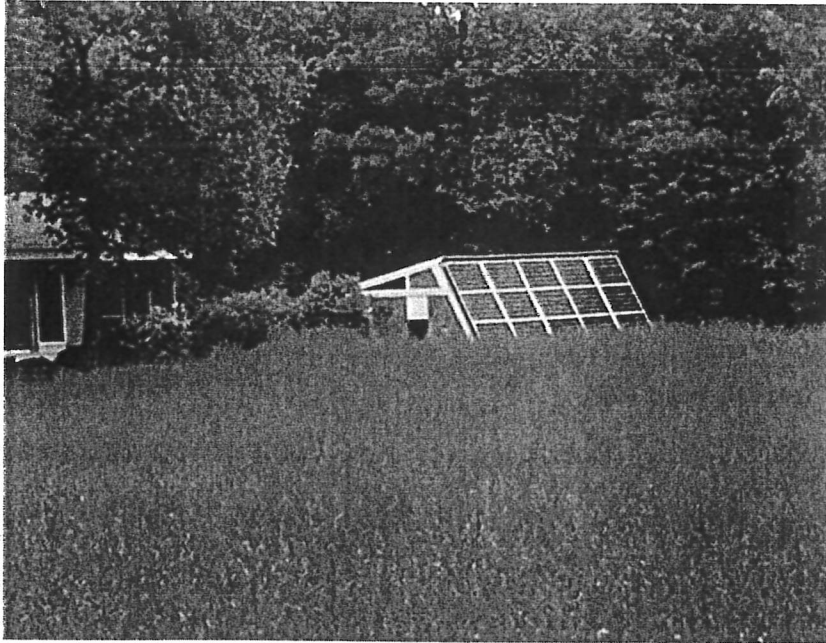
Racking equipment – before panel installation.





Town of Middleton Planning Board

Commercial Carport Mounting



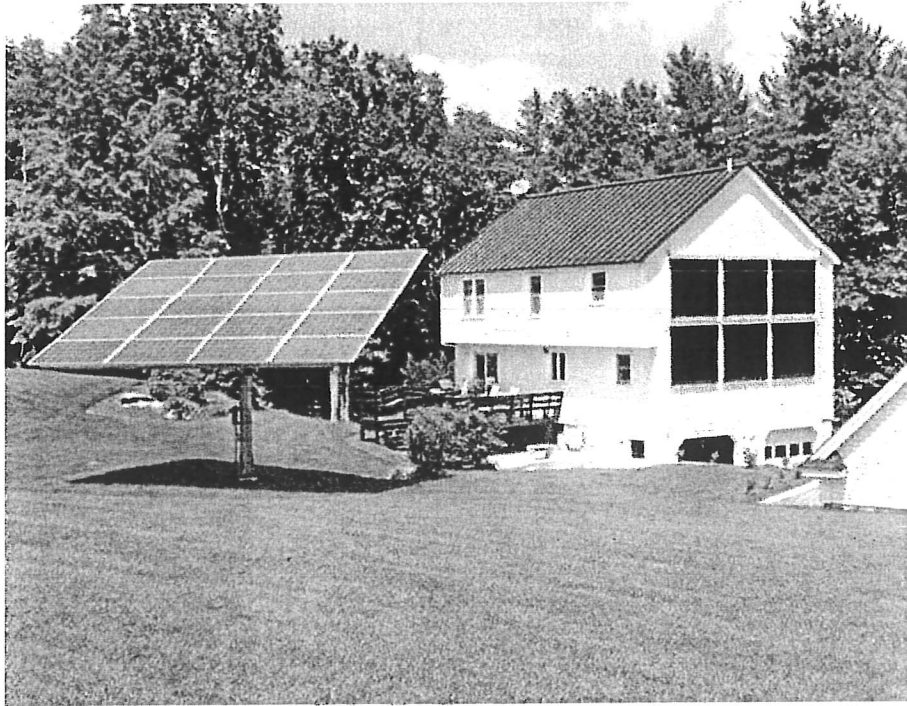
Residential Ground mounted system.





Town of Middleton Planning Board

Pole-mounted system – agricultural site.

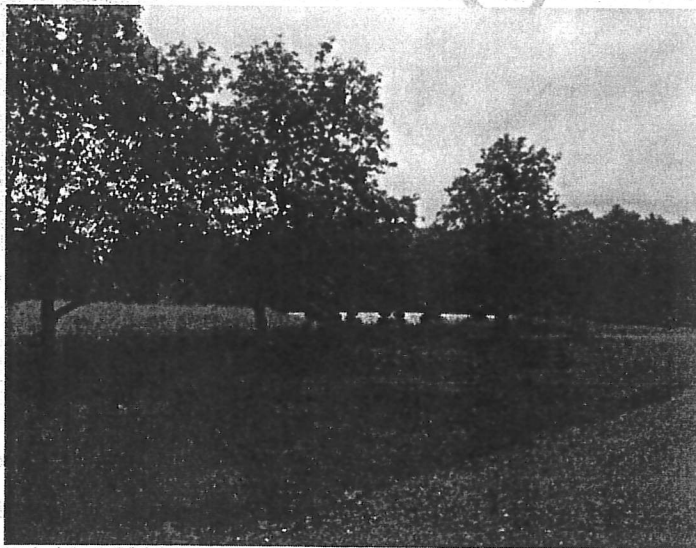


Tracker Mounted Residential System: Courtesy Revision Energy

Note: Examples of buffered systems:



Town of Middleton Planning Board





Town of Middleton Planning Board



Great Hill Farm barn in Tamworth

Not Used



Town of Middleton Planning Board

IMPACT ORDINANCE STRUCTURE

A. PURPOSE The following ordinance shall govern the assessment of impact fees for public capital facilities to accommodate increased demand on the capacity of these facilities due to new development. This ordinance is authorized by RSA 674:16 and 674:21, as an innovative land use control to: promote public health, safety, convenience, welfare, and prosperity; ensure that adequate and appropriate public facilities are available and provide for the harmonious development of the Town of Middleton and its environs.

B. AUTHORITY

- (1) Impact fees may be assessed for new development to compensate the Town of Middleton and the Middleton School District for a proportionate share of the cost of the capital facility needs occasioned by new development. Any person who seeks a building permit for new development may be required to pay an impact fee in the manner set forth herein.
- (2) The Planning Board may, as a condition of approval of any subdivision or site plan, and when consistent with applicable Board regulations, require an applicant to pay an impact fee for the applicant's proportional share of public facilities **affected** by the development.
- (3) Nothing in this section shall be construed to limit the authority of the Planning Board or the Town to require exactions for off-site improvements, other conditions of approval, or to assess other fees governed by other statutes, ordinances, or regulations.
- (4) Before assessing an impact fee for one or more of the public facilities enumerated above, the Planning Board shall have adopted such studies or methodologies and related fee schedules that provide for a process or method of calculating the proportionate share of capital improvement costs that are attributable to new development. Such calculations shall reasonably reflect the capital cost associated with the increased demand placed on capital facility capacity by new development.

C. DEFINITIONS



Town of Middleton Planning Board

Impact Fee: A fee or assessment imposed by the Town of Middleton upon development, including subdivision, building construction, or other land-use change, to help meet the needs occasioned by the development for the construction or improvement of capital facilities owned by Town of Middleton District, including but not limited to; stormwater, drainage, and flood control facilities; public road systems and rights-of-way; Town office facilities; public school facilities; public safety facilities; solid waste collection, transfer, recycling, processing, and disposal facilities; and public recreation facilities, not including public open space.

Fee Payer: The applicant for the issuance of a building permit that creates new development.

Capital Facilities: Facilities and associated structures, included by not limited to water treatment and distribution facilities; wastewater treatment and disposal facilities; sanitary sewers; stormwater, drainage, and flood controls facilities; public road systems and rights-of-way; municipal office facilities; public school facilities; public safety facilities solid waste collection, transfer, recycling, processing, and disposal facilities; public library facilities; and public recreational facilities not including public open space. *(Town of Milton)*

New Development Construction: The creation of a new dwelling unit, or units in the habitable portion of a residential building; or the conversion of a legally existing use, or additions thereto, which - would result in a net increase in the number of dwelling units; or construction resulting in a new non-residential building or a net increase in the floor area of any non-residential building; or the conversion of a lawful existing use to another use if such change would result in a net increase in the demand on public capital facilities that are the subject of impact fee assessment; however, new development shall not include the replacement of an existing manufactured housing unit or the reconstruction of a structure that has been destroyed by fire or natural disaster where there is no change in size, density, or type of use that would increase the demand on capital facilities for which impact fees are assessed.

Off-Site Improvements: improvements mean those improvements that are necessitated by a development, but which are located outside the boundaries of a property that is subject to a subdivision plat or site plan approval by the Planning Board.



Town of Middleton

Planning Board

Public Open Space: means a parcel of land essentially unimproved and available to the public only for passive recreational uses such as walking, sitting, picnicking, table games, natural resource conservation, and similar uses. Town parks that do not include "public recreation facilities" constitute public open spaces within the meaning of this Article.

Public Recreation Facilities: means the land and facilities owned or operated by the Town of Middleton, other than public open space, which is designed for the conduct of recreational sports or other active leisure time uses of an organized nature, which includes equipment or substantial improvements to the land to provide active indoor or outdoor public recreation programs.

D. ASSESSMENT METHODOLOGY

Computation: Before assessing an impact fee required by the Planning Board for one or more of the public capital facilities listed above, the Planning Board shall adopt such studies or methodologies and related fee schedules that provide for a process or method of calculating the proportionate share of capital improvement costs that are attributable to new development. Such calculations shall reasonably reflect the capital cost associated with the increased demand placed on capital facility capacity by new development.

Proportionality: The amount of the impact fee shall be calculated by the Planning Board to be a proportional share of municipal capital improvement costs that are reasonably related to the capital needs created by the development and to the benefits accruing to the development from the capital improvements financed by the fee.

Conversion or Modification of Use: In the case of new development created by conversion or modification of an existing use, the impact fee shall be based upon the net increase in the impact fee assessed for the new use as compared to the highest impact fee that was or would have been assessed for the previous use in existence on or after the effective date of this ordinance.

Existing Deficiencies: Upgrading of existing facilities and infrastructures, the need for which is not created by new development, shall not be paid for by impact fees.

E. ADMINISTRATION

(1) Accounting:



Town of Middleton

Planning Board

- a. In accordance with RSA 673:16, II and RSA 674:21, V(c), impact fees shall be accounted for separately, shall be segregated from the Town's general fund, may be spent upon order of the Board of Selectmen, and shall be used solely for the capital improvements for which it was collected, or to recoup the cost of capital improvements made in anticipation of the needs which the fee was collected to meet.
 - b. If bonds or similar debt instruments have been or will be issued by the Town of Middleton or the Middleton School District for the funding of capital improvements that are the subject of impact fee assessment, impact fees from the appropriate related capital facility impact fee accounts may be applied to pay debt service on such bonds or similar debt instruments.
 - c. The Town Treasurer shall record all fees paid, by date of payment and the name of the person making payment, and shall maintain an updated record of the current ownership, tax map, and lot reference number of properties for which fees have been paid under this Ordinance, for each building permit so affected for at least nine (9) years from the date of receipt of the impact fee payment associated with the issuance of each permit.
 - d. Impact fees collected may be spent from time to time by order of the Board of Selectmen and shall be used solely for the reimbursement of the Town and the School District for the cost of public capital improvements for which they were collected, or to recoup the cost of capital improvements made by the Town or School District in anticipation of the needs for which the impact fee was collected.
 - e. If bonds or similar debt instruments have been or will be, issued by the Town or the School District for the funding of capacity-related facility improvements, impact fees may be transferred to pay debt service on such bonds or similar debt instruments.
 - f. At the end of each fiscal year, the Town Treasurer shall make a report to the Board of Selectmen, giving a particular account of all impact fee transactions during the year. Additional reporting shall be made to NH DRA and IRS.
- (2) **Assessment:** All impact fees imposed under this section shall be assessed at the time of planning board approval of a subdivision, site plan, or change of use as per the Planning Board approved Schedule of Fees. When no planning board approval is required or has been made.



Town of Middleton

Planning Board

- (3) before the adoption or amendment of this ordinance, impact fees shall be assessed prior to, or as a condition for, the issuance of a building permit or other appropriate permission to proceed with the development as determined by the Board of Selectmen.
- (4) **Security:** In the interim between assessment and collection, the Board of Selectmen may require developers to post bonds, issue letters of credit, accept liens, or otherwise provide suitable measures of security to guarantee future payment of assessed impact fees.
- (5) **Collections:** Impact fees shall be collected as a condition for the issuance of a certificate of occupancy. If no certificate of occupancy is required, impact fees shall be collected when the development is ready for its intended use. The collection of impact fees shall be the responsibility of the Code Enforcement Officer. In projects where off-site improvements are to be constructed simultaneously with a project's development, and where the Town has appropriated the necessary funds to cover such portions of the work for which it will be responsible, the Town may advance the time of collection of the impact fee to the issuance of a building permit. Nothing in this section shall prevent the Board of Selectmen, with the review by the Planning Board, and the assessed party from establishing an alternate, mutually acceptable schedule of payment.
- (6) **Refund of Fees Paid:** The current owner of record of property for which an impact fee has been paid shall be entitled to a refund of that fee, plus accrued interest under the following circumstances:
 - (a) When either the full or partial portion of the impact fee, whichever is applicable, has not been encumbered or legally bound to be spent for the purpose for which it was collected within six (6) years from the date of the full and final payment of the fee; or
 - (b) When the Town of Middleton, or in the case of school impact fees, the Middleton School District, has failed, within the period of six (6) years from the date of the full and final payment of such fee, to appropriate their proportionate non-impact fee share of related capital improvement costs.

F. APPEALS:

- (1) A party aggrieved by a decision made by the Code Enforcement Officer relating to administrative decisions in the assessment or, collection of



Town of Middleton

Planning Board

- (2) impact fees authorized by this Section may appeal such decision to the Planning Board.
- (3) A party aggrieved by a decision of the Planning Board under this Article may appeal such decision to the Superior Court as provided by RSA 677:15, as amended.

G. WAIVERS:

The Planning Board may grant full or partial waivers of impact fees where the Board finds that one or more of the following criteria are met concerning the public capital facilities for which impact fees are normally assessed.

- (a) An applicant may request a full or partial waiver of school impact fees for those residential units that are lawfully restricted to occupancy by senior citizens aged 62 or over in a development that is also maintained in compliance with the provisions of RSA 354-A: 15, Housing For Older Persons. The Planning Board may waive the school impact fee assessments on such age-restricted units where it finds that the property will be bound by lawful deeded restrictions on occupancy by senior citizens age 62 or over for at least 20 years. Upon expiration of the specified waiver period, any proposed change in use or conversion of residential units from age-restricted occupancy may be subject to an assessment of impact fees.
- (b) A person may request a full or partial waiver of impact fees for construction within a subdivision or site plan approved by the Planning Board before the effective date of this ordinance. Before granting such a waiver, the Planning Board must find that the proposed construction is entitled to the four-year exemption provided by RSA 674:39, according to that statute. This waiver shall not apply to phases of a phased development project where active and substantial development, building, and construction have not yet occurred in the phase in which construction is proposed. The Planning Board may agree to waive all or part of an impact fee assessment and accept in lieu of a cash payment, a proposed contribution of real property or facility improvements of equivalent value and utility to the public. Before acting on a request for a waiver of impact fees under this provision that would involve a contribution of real property or the construction of capital facilities, the Planning Board shall submit a copy of the waiver request to the Board of Selectmen for its review



Town of Middleton

Planning Board

- (c) and consent and hold a public hearing prior to its acceptance of the proposed contribution. The value of contributions or improvements shall be credited only toward facilities of like kind, and may not be credited to other categories of impact fee assessment. The applicant shall pay all costs incurred by the Town for the review of such proposal, including consultant and counsel fees.

H. ADDITIONAL ASSESSMENTS

Payment of the impact fee under this article does not restrict the Town or the Planning Board from requiring other payments from an applicant, including such payments relating to the cost of the extensions of water and sewer mains or the construction of roads or streets or other infrastructure and public capital facilities specifically benefiting the development as required by the subdivision or site plan review regulations, or as otherwise authorized by law.