Environmental Impact Evaluation

University of Connecticut Main Accumulation Area

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- B Main Accumulation Area Facility Comparative Site Study (on CD)

Acronyms and Abbreviations

СЕРА	Connecticut Environmental Policy Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CL&P	Connecticut Light & Power
CNG	Connecticut Natural Gas
CO	Carbon Monoxide
CT NDDB	Connecticut Natural Diversity Database
CTDEEP	Connecticut Department of Energy and Environmental Protection
CUP	Central Utility Plant
dB/dBa	Decibel/A-weighted decibel
DNL/LDN/Ldn	Day Night Average Sound Level
EH&S	UConn Department of Environmental Health & Safety
EIE	Environmental Impact Evaluation
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
gpd	gallons per day
gpm	gallons per minute
HEEP	Hillside Environmental Education Park
HRSG	Heat Recovery Steam Generator
IWWA	Inland Wetlands and Watercourses Act



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Acronyms and Abbreviations

LEED	Leadership in Energy & Environmental Design
LEQ/Leq	Equivalent Noise Level
LID	Low Impact Development
MAA	Main Accumulation Area
mgd	million gallons per day
NAAQS	National Ambient Air Quality Standards
NCSS	National Cooperative Soil Survey
NEPA	National Environmental Policy Act
NO2	Nitrogen Dioxide
NRCS	Natural Resources Conservation Service
O ₃	Ozone
OPM	Office of Policy and Management
Pb	Lead
RCSA	Regulations of Connecticut State Agencies
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
THPO	Tribal Historic Preservation Officer
TMDL	Total Maximum Daily Loads
UConn	University of Connecticut
USACE	U.S. Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	Unites States Geologic Survey
WPCF	Water Pollution Control Facility
WSS	Web Soil Survey



Executive Summary

The University of Connecticut (University or UConn) proposes to construct a new centralized facility for the temporary storage of chemical, biological, and low-level radioactive wastes from the University's academic research and teaching laboratories and facility operations on the Storrs campus. The University's existing facility, known as the Main Accumulation Area (MAA), is currently located on Horsebarn Hill Road at the eastern limit of the campus (*Figure ES-1*). The proposed location for a new, upgraded MAA is on an area of the North Campus referred to as "Parcel G."

The University, as the sponsoring agency for this project, has prepared an Environmental Impact Evaluation (EIE) pursuant to the Connecticut Environmental Policy Act (CEPA) to further evaluate the potential environmental impacts of construction of a new MAA on North Campus Parcel G.

The Proposed Action consists of constructing a new MAA facility on the western portion of the North Campus Parcel G site, a wooded area located between the existing tennis courts along North Hillside Road and the former landfill parking lot, referred to as the "C Lot" (*Figure ES-2*). The site is also bounded on the west by an overhead electrical utility corridor and by the multi-purpose Celeron Trail to the south. The proposed facility would be accessed from North Hillside Road and the C Lot Driveway.

The proposed facility is anticipated to consist of an enclosed, building with state-of-the-art waste storage and handling areas. The proposed building would have an approximately 5,800 square foot footprint and would require an approximately 0.75-acre development footprint for sufficient vehicle circulation and parking.

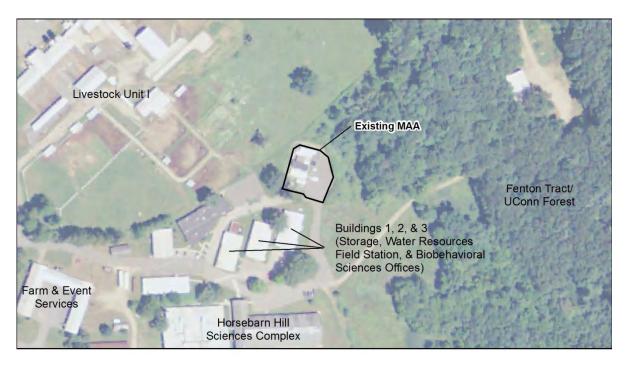


Figure ES-1. Location of Existing Main Accumulation Area





Figure ES-2. Location of Proposed Main Accumulation Area

The purpose of the Proposed Action is to address three identified needs: (1) public concern about the location of the existing facility within a public drinking water supply watershed, (2) more efficient use of space compared to that of the existing MAA facility, and (3) future waste generation and storage on the Storrs campus.

The University conducted a siting study in 2012 to identify and evaluate potential sites on the Storrs campus for an upgraded MAA. The 2012 siting study was led by an Advisory Committee consisting of representatives from the Town of Mansfield, Windham Water Works, local watershed organizations, the Connecticut Institute of Water Resources, and University of Connecticut staff from Public Safety, Environmental Policy, and Residential Life.

The UConn Office of Environmental Policy, working closely with the Siting Advisory Committee, University staff, and its consultant, identified and evaluated the alternative sites shown in *Figure ES-3* with respect to physical site constraints (e.g., slopes, wetlands, and soils), public health issues, public safety, and University planning initiatives.

- 1. No Action The No Action alternative assumes continued use of the existing MAA in its current location, without modification. The facility would continue to operate with the existing structures, facility layout, and operational procedures.
- New MAA at the Existing Site Under this alternative, the existing MAA would be closed and decommissioned, and a building with an approximately 5,800 square foot footprint would be constructed on the existing site. The overall site footprint would be expanded to approximately 0.75 acres to allow adequate vehicle circulation and parking.



- 3. North Campus Parcel G Site (Proposed Action)
- 4. F Lot Site The UConn F Lot is located north of North Eagleville Road and west of LeDoyt Road, situated adjacent to an electrical substation and near the UConn Public Safety complex. The proposed MAA would be located in the southeast corner of the parking lot, outside of the limits of the former ash landfill that underlies a large portion of the F Lot.
- 5. W Lot Site The W Lot is located near the northern gateway entrance to the Storrs campus, west of Route 195 and north of Husky Village. The proposed MAA would be located in the northwest corner of the parking lot. Access to the site would be from the existing W Lot entrance along Route 195, across from the northern leg of Horsebarn Hill Road.
- 6. North of Transfer Station Site This site is located north of the UConn Water Pollution Control Facility and solid waste transfer station, east of the Connecticut Light & Power (CL&P) electrical utility corridor, and south of the Celeron Trail.

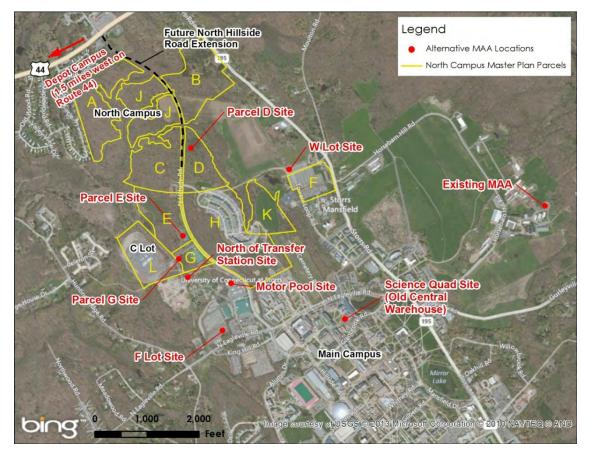


Figure ES-3. Alternative MAA Locations



A scoring matrix was developed in conjunction with the Advisory Committee as a semi-quantitative, multi-attribute rating and ranking tool designed to assist the Advisory Committee identify a ranked list of preferred sites. The evaluation criteria included consideration of ecological resources, public health, public water supplies, public safety/security and accessibility, land use and consistency with land use planning, cost and regulatory considerations, and traffic safety and circulation.

The North Campus Parcel G site was the highest-rated site overall, and was individually scored as the highest-rated site by 10 of the 11 Advisory Committee members. The lowest-rated site was the existing MAA facility location, i.e. the No Action alternative receiving the lowest overall score.

Based on the anticipated environmental impacts of the alternatives considered, a new MAA facility constructed on North Campus Parcel G is the preferred alternative evaluated in the subject EIE.

The Proposed Action would result in minor impacts to vehicle and pedestrian traffic on campus, loss of fragmented upland forest habitat, and minor increases in energy and utility usage. Potential construction-related impacts include temporary impacts to vehicle and pedestrian traffic, air quality, noise, hazardous materials and solid waste, and stormwater. Anticipated impacts and proposed mitigation measures to avoid, minimize, or offset potential adverse impacts are summarized in *Table ES-1*.

Resource Category	Impacts	Proposed Mitigation
Traffic, Parking, and Circulation	 Improved vehicle circulation, maneuverability, parking, and access/egress compared to that of the existing facility Minor increases in traffic and potential for truck/pedestrian conflicts along waste shipment routes resulting from redistribution of existing traffic associated with EH&S and commercial waste transport vehicles traveling to and from the MAA Larger, state-of-the art facility with greater waste storage capacity will address existing and future waste generation on campus, resulting in less frequent waste shipments from the MAA, less commercial waste transport vehicle traffic and potential for vehicle/pedestrian conflicts, and less frequent handling of wastes compared to No Action alternative 	 Restrictions on the timing of waste shipments and allowable truck routes to avoid periods and locations of high pedestrian activity on campus
Air Quality	No adverse impacts	None required
Noise	No adverse impacts	None required

Table ES-1. Summary of Impacts and Proposed Mitigation



Resource Category	Impacts	Proposed Mitigation
Water Resources	 No adverse impacts to surface water and groundwater quality or quantity No adverse impacts to flood hazard potential Increase in stormwater runoff and potential stormwater pollutant loading 	• Proposed stormwater management and facility design elements will reduce the potential for impacts associated with a release of chemicals or other hazardous materials to the environment (see <i>Utilities and Services</i>)
Wetlands and Watercourses	No adverse impacts	• Proposed stormwater management and facility design elements will reduce the potential for impacts associated with a release of chemicals or other hazardous materials to the environment (see <i>Utilities and Services</i>)
Wildlife and Vegetation	 No adverse impacts Loss of approximately 0.75 acres of fragmented upland forest habitat 	• Proposed stormwater management and facility design elements will reduce the potential for impacts associated with a release of chemicals or other hazardous materials to the environment (see <i>Utilities and Services</i>)
Cultural Resources	Parcel G contains potential areas of prehistoric value	Additional cultural resource investigation of Parcel G (Phase 1B Archaeological Reconnaissance Survey) prior to development and coordinate with the State Historic Preservation Office (SHPO) and the Tribal Historic Preservation Officers (THPOs) of the Mashantucket Pequot and Mohegan Tribes to ensure that historic, archaeological, and cultural resources are protected
Visual and Aesthetic Character	No adverse impacts	None required
Geology, Topography, and Soils	No adverse impacts	• Proposed facility design elements will reduce the potential for subsurface impacts associated with a release of chemicals or other hazardous materials to the environment (see <i>Hazardous Materials</i>)

Table ES-1. Summary of Impacts and Proposed Mitigation
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Resource Category	Impacts	Proposed Mitigation
Utilities and Services	 Adequate utility capacity is available The creation of impervious surfaces will cause increased stormwater runoff 	 Non-structural source controls and pollution prevention measures (parking lot sweeping, catch basin cleaning, drainage system and stormwater treatment system operation and maintenance, etc.) LID approaches such as drywells, rain gardens, vegetated swales, and other infiltration techniques to infiltrate runoff from the building roof and sidewalks or paved areas where regulated wastes will not be handled Runoff from loading areas or other locations where regulated wastes are handled will be directed to a stormwater collection system that can be effectively closed in the event of a spill. Such facilities will incorporate shut-off valves, impermeable liners, or other similar design features to reduce the potential for a release to the environment. Management strategies to reduce stormwater bacteria concentrations including filtration practices such as lined and underdrained bioretention systems or subsurface sand filters The facility design will incorporate spill containment measures to provide secondary and tertiary containment for regulated waste storage and handling areas, state-of-the-art security systems, and required training, inspections, and a contingency planning to meet applicable state and federal regulatory requirements The design will consider the Campus Sustainable Design Guidelines, which include specific measures for reduction of energy consumption on new construction projects on campus
Public Health and Safety	Sufficient public safety and emergency services are currently available to address the needs of the MAA	None required

Table ES-1. Summary of Impacts and Proposed Mitigation



Resource Category	Impacts	Proposed Mitigation
Hazardous Materials	 Larger, state-of-the art facility with greater waste storage capacity will address existing and future waste generation on campus, resulting in less frequent waste shipments from the MAA, less commercial waste transport vehicle traffic and potential for vehicle/pedestrian conflicts, and less frequent handling of wastes compared to No Action alternative No adverse impacts related to toxic or hazardous waste sites 	 Facility design and operation will incorporate secondary and tertiary spill containment for regulated waste storage and handling areas, state-of-the-art security systems, required training and inspections, and contingency planning to meet applicable state and federal regulatory requirements for safe operation of the facility. Use of "green chemistry" techniques and waste minimization at the point of generation will reduce or offset anticipated future increases in waste generation on campus.
Socioeconomics	 No adverse impacts Creation of short-term construction jobs 	None required
Land Use and Planning	 No adverse impacts - Proposed Action is consistent with existing land use and campus, local, regional, and state land use plans 	None required
	Construction Per	iod
Traffic, Parking, and Circulation	Minor, temporary disruptions to traffic in the immediate area of construction	Use of construction-phase traffic management measures to maintain efficient traffic operations during the construction period including construction phasing to minimize disruptions to traffic, signage, and detours.
Air Quality	Construction activities may result in short-term impacts to ambient air quality due to direct emissions from construction equipment and fugitive dust emissions	 Contractors will be required to comply with air pollution control requirements in UConn <i>Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors,</i> including reference to such requirements in contract documents. Ensure proper operation and maintenance of construction equipment. Limit idling of construction vehicles and equipment to three minutes. Implement traffic management measures during construction. Implement appropriate controls to prevent the generation and mobilization of dust.

Table ES-1. Summary of Impacts and Proposed Mitigation
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Resource Category	Impacts	Proposed Mitigation
Noise	Heavy construction equipment associated with site development may result in temporary increases in noise levels in the immediate area of construction	 Contractors will be required to comply with noise control requirements in UConn <i>Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors,</i> including reference to such requirements in contract documents. Ensure proper operation and maintenance of construction equipment. Construction contractors should make every reasonable effort to limit construction noise impacts.
Stormwater and Water Quality	Exposure of soil increases potential for erosion and sedimentation	• Use of appropriate erosion and sediment controls during construction, consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
Hazardous Materials and Solid Waste	 Temporary on-site storage and use of fuels and other materials associated with construction vehicles and equipment Asbestos-containing materials, lead-based paint or other hazardous materials associated with closure of the existing MAA facility Generation of solid waste including construction and demolition debris 	 Contractors will be required to comply with requirements for construction-related hazardous materials and solid waste in UConn <i>Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors,</i> including reference to such requirements in contract documents. Hazardous or regulated materials or subsurface contamination encountered during construction will be characterized and disposed of in accordance with applicable state and federal regulations. UConn will follow CTDEEP guidance for closure and decommissioning of the existing MAA, including removal of the existing structures and equipment, site characterization for any residual contamination, and associated cleanup. UConn will also follow applicable closure and decommissioning requirements of the Nuclear Regulatory Commission. Construction-related solid waste will be handled and disposed of in a manner that meets current regulations and University standards. Construction and demolition debris will be managed in accordance with applicable state and federal regulations and the University's contractor policies.



The following certificates, permits, and approvals are anticipated to be required for the Proposed Action. Additional certificates, permits, and approvals may be identified following the CEPA process, pending the final design of the project.

- CTDEEP Flood Management Certification required for activities affecting natural or manmade drainage facilities
- CTDEEP General Permit for Discharge of Stormwater and Dewatering Wastewater Associated with Construction Activities registration required if total site disturbance exceeds 1 acre
- Coordination with the State Historic Preservation Office (SHPO) and Tribal Historic Preservation Officers (THPOs) of the Mashantucket Pequot and Mohegan Tribes – required as a mitigation commitment in the Record of Decision for the North Hillside Road Extension EIS

The following permits have been issued or are pending for the proposed extension of North Hillside Road and associated development of the North Campus for the UConn Technology Park, including Parcel G, the site of the Proposed Action:

- CTDEEP Flood Management Certification (FM-201205381)
- CTDEEP Inland Wetlands & Watercourses, Water Quality Certification, and Water Diversion Permit (IW-201205383, WQC- 201205382, DIV- 201205385, Draft)
- United States Army Corps of Engineers Section 404 Individual Permit (File No. NAE-2004-3990, Permit Pending)

A scoping notice for the subject project appeared in the April 16, 2013 edition of the *Environmental Monitor* (*Appendix A*), beginning the 30-day scoping period. The scoping period ended on May 16, 2013. During the scoping period, a public scoping meeting was held on the UConn campus on May 1, 2013. Public oral comments were received during the public meeting from four Town of Mansfield residents. A summary of comments made at the public scoping meeting and copies of written comment letters received during the scoping period are provided in *Appendix A* of the subject EIE.

Formal notice of the availability of this EIE has been published in the *Hartford Courant*, the *Willimantic Chronicle*, and in the *Environmental Monitor*. An electronic copy of this document was also made available on the UConn Office of Environmental Policy website. The document was sent to the appropriate State agencies and the Town of Mansfield for review and comment.



1 Introduction

The University of Connecticut (University or UConn) proposes to construct a new centralized facility for the temporary storage of chemical, biological, and low-level radioactive wastes from the University's academic research and teaching laboratories and facility operations on the Storrs campus. The University's existing facility, known as the Main Accumulation Area (MAA), is currently located on Horsebarn Hill Road. To protect public health and the environment and to ensure regulatory compliance, the UConn Department of Environmental Health & Safety (EH&S) manages the wastes in compliance with local, state, and federal regulations, as well as University health and safety policies and procedures.

The existing MAA is adequate to serve the current needs of the University and meets or exceeds state and federal requirements for safety and environmental protection. However, space on the existing site is limited, resulting in poor circulation for waste transport vehicles, and its design is inconsistent with stateof-the-art MAA facilities at other comparable research institutions. The facility will also have difficulties meeting future needs without increasing the frequency of off-site waste shipments based on anticipated growth in undergraduate enrollment and planned research growth at the University. In addition, the existing MAA is located within the Fenton River watershed and the drainage basin of the Willimantic Reservoir, which is a public water supply. Although the facility has been operated safely since it was established in 1989, the University recognizes the public concern that remains about the location of the facility within the public water supply watershed.

To address these concerns, UConn convened an advisory committee consisting of representatives from the Town of Mansfield, Windham Water Works, local watershed organizations, the Connecticut Institute of Water Resources, and University of Connecticut staff from Public Safety, Environmental Policy, and Residential Life. The advisory committee conducted a siting study to identify and assess potential sites for an upgraded MAA facility. The study recommended a prioritized list of alternative sites, with the North Campus Parcel G site, located between the existing North Hillside Road and C Lot, identified as the preferred alternative.

The University has prepared an Environmental Impact Evaluation (EIE) to further evaluate the potential environmental impacts of construction of a new MAA on North Campus Parcel G, hereafter referred to as the Proposed Action, as well as other alternatives considered, including the existing location (i.e., the No Action alternative). The format and content of this EIE are based on the requirements of the Connecticut Environmental Policy Act (CEPA) (Connecticut General Statutes [CGS] Sections 22a-1 through 22a-1h, inclusive, and, where applicable, CEPA regulations Sections 22a-1a-1 through 22a-1a-12, inclusive, of the Regulations of Connecticut State Agencies [RCSA]). State funds would be used for the Proposed Action, which triggers the CEPA process. The University is the sponsoring agency of this project.

The central purpose of the CEPA process is for state agencies to determine whether or not a proposed action will have a "significant effect," which means substantial adverse impact on the environment (RCSA 22a-1a-1, Definitions). Agencies preparing an EIE must consider direct and indirect effects as well as cumulative impacts. The subject EIE includes a description of the Proposed Action; the purpose and need for the action; an evaluation of the direct and indirect effects and cumulative impacts of the



proposed action; identification of unavoidable adverse environmental effects; evaluation of alternatives; and a description of proposed mitigation measures.

1.1 Background

1.1.1 Description of Existing MAA

UConn established a centralized waste storage facility in 1989 to store chemical, biological, and low-level radioactive waste generated by the University's academic research and teaching laboratories and smaller amounts of waste from other campus operations such as UConn's motor pool. The facility is known as the "Main Accumulation Area" or "MAA" since wastes are transported from various "satellite accumulation areas" (i.e., points of generation) on campus and temporarily stored or "accumulated" at this centralized location prior to off-campus disposal.

The existing MAA is situated near the southeast corner of Horsebarn Hill Road at the eastern limits of the Storrs campus (*Figure 1-1*). The site previously housed a dog kennel before the facility was converted into the University's centralized waste storage facility in 1989 and expanded over time into the current MAA. The existing facility consists of approximately 1,500 square feet of permanent structures, 2,700 square feet of trailer storage surrounded by perimeter fencing with barbed wire and a locked gate, and a paved area for parking, truck access, and patrols (*Figure 1-2*). The total site area, including the existing buildings, fenced area, and the paved area around the facility, is approximately 0.43 acres.

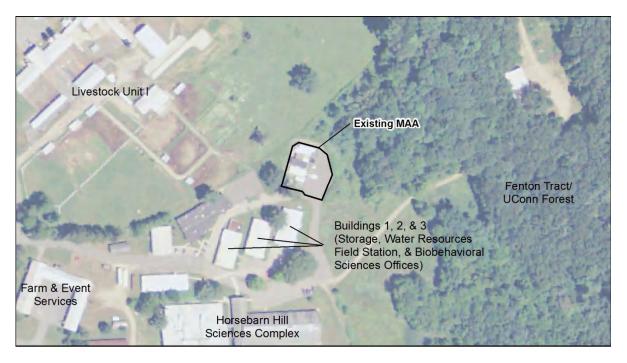


Figure 1-1. Location of Existing Main Accumulation Area





Old Supply Storage Trailers
 Old Chemical Waste Shed

4. Main Building (Chemical Laboratory and Low-Level Radioactive Waste Processing)

- 5. Biological Waste Storage
- 3. New Bulk Chemical Storage Shed

6. Radioactive Waste Storage Trailers

Figure 1-2. Existing Main Accumulation Area Facility

UConn EH&S personnel regularly collect regulated waste from the estimated 1,200 satellite accumulation areas on the Storrs campus and transport the waste via trucks to the MAA. Wastes are temporarily stored at the MAA and managed by EH&S to ensure environmental protection and regulatory compliance. The facility operations meet or exceed state and federal requirements for safety and environmental protection, including secondary containment, weekly inspections and documentation, contingency plans, container labeling, security, and personnel training. Since it was established in the late 1980s, the MAA has been operated safely, not having experienced a release, break-in, or other security threat. The existing MAA has sufficient capacity to serve the current needs of the campus.

Commercial waste haulers are hired for scheduled pickups at the MAA and transport the waste to the appropriate off-campus disposal facilities. The commercial transport trucks are regulated by the U.S. Department of Transportation and meet stringent hazardous waste transporter requirements. The storage of chemical hazardous wastes at the MAA is limited to 90 days or less, pursuant to state and federal hazardous waste (Resource Conservation and Recovery Act or RCRA) regulations. Chemical wastes are typically removed monthly, biological wastes are typically removed weekly or bi-weekly, and low-level radioactive wastes are typically removed every 12 to 15 months.

1.1.2 Previous Siting Studies

Over the past decade, UConn has evaluated options for relocating the MAA to another site on the Storrs campus in response to public concern about the location of the existing facility within the public drinking water supply watershed.

The University began evaluating options for relocating the existing MAA to a different on-campus site in 2003. With the help of a project advisory committee representing University and local stakeholders, UConn initially evaluated six alternative locations including the current location off Horsebarn Hill Road. The study report was completed in 2004 (SEA Consultants, Inc.) and identified a prioritized list of sites for the relocated MAA. Conceptual designs and layouts were prepared for the two highest-rated alternative sites: (1) adjacent to the Transfer Station and west of the Water Pollution Control Facility (WPCF), and (2) a parcel within the WPCF. The CEPA process was initiated for these sites, but the process was suspended when the sites became unavailable because a portion of the Transfer Station was



being used for construction staging associated with the landfill cap construction, and plans had been developed for potential expansion of the WPCF and construction of the Reclaimed Water Facility in the area west of the WPCF.

A new preferred alternative site for the relocated MAA was identified in 2007 to replace the two previous alternatives that had become unavailable. UConn met with the Connecticut Office of Policy and Management (OPM) and the Connecticut Department of Environmental Protection (now called the Department of Energy and Environmental Protection or CTDEEP) in June 2007 to discuss potential alternative sites near the two previous highest-rated sites and agreed to proceed with a site north of the Transfer Station. The CEPA process was initiated for the new site, but the process was suspended in 2008 due to public safety concerns.

The economic downturn in 2008 resulted in significant capital and operating budget cuts at the University, putting the MAA facility relocation efforts on hold. In 2012, UConn investigated the feasibility of relocating the MAA facility to the Depot Campus. However, because the Depot Campus is not contiguous with the Main Campus, under the federal hazardous waste regulatory program or Resource Conservation and Recovery Act (RCRA), hazardous waste generated on the Main Campus cannot be transported and stored on the Depot Campus without a change in regulatory status, which would entail a significantly greater compliance burden and liability to the University. This option was therefore eliminated from further consideration.

In the spring of 2012, UConn initiated a new MAA siting study by convening another advisory committee (MAA Siting Advisory Committee or Advisory Committee) to assist in identifying and evaluating potential MAA sites on the Storrs campus, review and discuss the criteria that are used to evaluate each site, and recommend a preferred alternative location for the facility by ranking each alternative site according to the criteria. Alternative MAA facility sites were independently rated and ranked by each member of the Advisory Committee using a semi-quantitative, multi-attribute scoring matrix and associated guidance document. The methods and results of the 2012 siting study are described in the *Main Accumulation Area Facility Comparative Site Study* report, which is included in the subject EIE as *Appendix B*. The 2012 study recommended a prioritized list of alternatives, with construction of a new MAA facility on the North Campus Parcel G site as the highest rated and preferred alternative. The 2012 siting study also serves as the basis for the analysis of alternatives described in *Section 2, Alternatives Considered*.

1.1.3 North Campus Master Planning and Previous Environmental Documents

The proposed site for the new MAA is located on a portion of the UConn campus known as the "North Campus," which encompasses the area north of North Eagleville Road and west of Route 195. The North Campus is currently accessible via North Hillside Road, which terminates near the entrance to the Charter Oak Apartments.

The construction of a roadway from North Eagleville Road to U.S. Route 44 and development of a research and technology park on the North Campus has been contemplated by the University since the



1970s. The proposed roadway construction and development of the North Campus has been the subject of several previous planning efforts and associated state and federal environmental documents.

In 1982, the non-profit entity called the University of Connecticut Educational Properties, Inc. (UCEPI) was formed to develop a research park on the North Campus. In 1987, the construction of an approximately 3,800 linear foot road, North Hillside Road, was reviewed in an EIE. After approval of the EIE by the Connecticut Office of Policy and Management (OPM) in 1988, the state began construction of what is now the existing North Hillside Road, which was completed in 1989. UConn and the Department of Economic and Community Development jointly sponsored another EIE to assess the purpose and need for a research and technology park on the North Campus. The EIE was released by the University in May 1994. The Connecticut Department of Transportation (CTDOT) began the roadway design following approval of the EIE by OPM in January 1995. However, design plans were halted at the sixty percent design stage.

In June 2000, UConn released the *Outlying Parcels Master Plan* (2000 Master Plan) (JJR, 2000), which included a master plan for development of the North Campus. The 2000 Master Plan identified a number of North Campus development parcels, including Parcel G, along with envisioned uses and maximum development scenarios for each parcel. An EIE was prepared in 2001 (Frederic R. Harris, Inc., 2001) for the North Campus development proposed in the 2000 Master Plan. OPM subsequently found the 2001 EIE to adequately comply with CEPA, but required that a "CEPA Comparative Evaluation" be conducted prior to the development of future North Campus parcels to compare the anticipated environmental impacts described in the 2001 EIE with the anticipated impacts of future site-specific projects. The subject EIE, which addresses the construction of a new MAA on North Campus Parcel G, meets and exceeds the requirements for a CEPA Comparative Evaluation in accordance with the conditions of the 2001 EIE approval by OPM.

In 2005, approximately \$6 million was appropriated by the federal government for the extension of North Hillside Road north to Route 44, requiring preparation of an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Similar to previous state environmental reviews, the EIS considered environmental impacts associated with the roadway extension and associated development of the North Campus by identifying a conceptual development envelope that included the original parcels identified in the 2001 EIE (FHWA, 2011). In October 2011, Connecticut Governor Dannel P. Malloy signed legislation (Public Act 11-57) approving the creation of a research and technology park at the UConn North Campus, known as the "UConn Technology Park." The General Assembly approved \$172.5 million in required start-up funding for the project. The Record of Decision (ROD) for the EIS was approved by the Federal Highway Administration in April 2012. Approval of the ROD was an important regulatory milestone, allowing subsequent creation of a new gateway entrance to the University and development of the UConn Technology Park on the North Campus.

A revised North Campus Master Plan was released in October 2012 (2012 Master Plan)(SOM, 2012). The 2012 Master Plan builds upon the previous planning efforts for the North Campus and creates a framework for future development of the UConn Technology Park. Relocation of the MAA to the North Campus is consistent with the technology uses envisioned for the UConn Technology Park. The planning process for the 2012 Master Plan identified Parcel G as the most likely potential site for a



relocated MAA facility within the UConn Technology Park. North Campus Parcels D and E were also considered in the 2012 master planning process as potential locations for the MAA facility.

1.2 Proposed Action

The Proposed Action consists of constructing a new MAA facility on the western portion of the North Campus Parcel G site, a wooded area located between the existing tennis courts along North Hillside Road and the former landfill parking lot, referred to as the "C Lot" (*Figure 1-3*). The site is also bounded on the west by an overhead electrical utility corridor and by the multi-purpose Celeron Trail to the south. The proposed facility would be accessed from North Hillside Road and the C Lot Driveway.



Figure 1-3. Location of Proposed Main Accumulation Area

The proposed facility is anticipated to consist of an enclosed building with state-of-the-art waste storage and handling areas, laboratory space, a control room, loading and unloading areas, and bathrooms. *Figure 1-4* depicts a typical interior floor plan of the proposed facility. The proposed building would have an approximately 5,800 square foot footprint and would require an approximately 0.75-acre development footprint for sufficient vehicle circulation and parking, as depicted conceptually in *Figure 1-3*. In addition to the new MAA facility, the 2012 North Campus Master Plan envisions other future technology-related uses for the balance of Parcel G.

The Proposed Action also includes closure and decommissioning of the existing MAA in accordance with CTDEEP guidance (CTDEEP, 2005a), which would entail removal of the existing structures and equipment, as well as site characterization for any residual contamination at the existing site and associated cleanup. The University would also follow applicable closure and decommissioning requirements of the Nuclear Regulatory Commission.



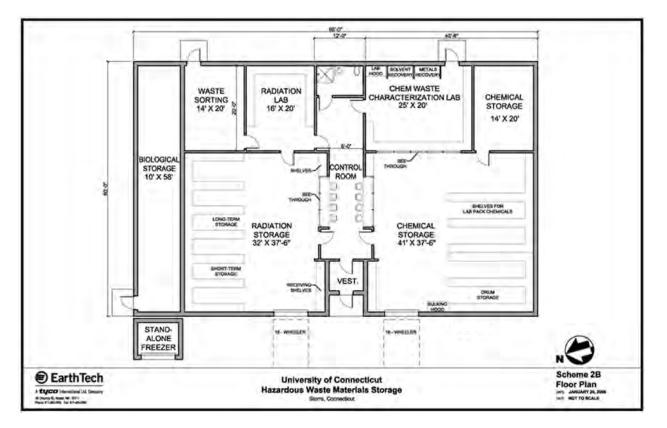


Figure 1-4. Typical Interior Floor Plan of the Proposed MAA

1.3 Purpose and Need

Public concern has existed for years about the proximity of the current MAA location to public drinking water supplies. The facility is located within the Fenton River watershed and the drainage basin of the Willimantic Reservoir, a public drinking water supply operated by the Windham Water Works. The site of the existing MAA is located approximately 3,500 feet west of the Fenton River and approximately 6 miles upstream of the Willimantic Reservoir. While the site is situated outside of the mapped Level A Recharge Area¹ of the Fenton Aquifer, public concern has existed about the relative proximity of the site (approximately 400 feet) to the mapped Level A Recharge Area since the Fenton River Wellfield draws water from the Fenton Aquifer and supplies drinking water to the University.

Although the MAA has been operated safely since it was established in 1989, the University recognizes the public concern that remains about the location of the facility within the Fenton River watershed and the drainage basin of the Willimantic Reservoir. Furthermore, the Connecticut Council on Environmental Quality (CEQ) and OPM have recommended the relocation of the MAA outside of the public drinking water supply watershed (refer to the May 23, 2012 letter from CEQ, included in *Appendix A*).

¹ Level A mapping defines the land area contributing groundwater to the public water supply well field.



While the existing MAA meets or exceeds state and federal requirements for safety and environmental protection, several issues exist with the design of the current facility. The existing MAA design and site configuration reflects the evolution of the site from its previous use as a dog kennel to its current use as the University's centralized waste storage facility. Waste storage has been added and the facility upgraded over time in response to changes in the quantities and types of waste generated on the Storrs campus and to enhance security and working conditions at the facility. However, space is limited on the existing 0.43-acre site, which has resulted in less-than-ideal circulation and maneuverability for waste transport trucks and other vehicles. A newly constructed or relocated facility would benefit from a larger site area (0.75 acres) for improved vehicle circulation, including vehicle turn-around, parking, and access/egress. The existing MAA design is also not on par with state-of-the-art MAA facilities at other comparable research institutions.

Given the approximately 4,200 square feet of existing permanent structures and trailer storage and the current frequencies of waste pickup, the existing MAA is adequate to handle the quantities and types of wastes that are currently being generated at the Storrs campus. However, the existing facility will have difficulties meeting future needs without increasing the frequency of off-site waste shipments based on anticipated growth in undergraduate enrollment and planned research growth at the University, including the *Next Generation Connecticut* initiative and the planned extension of North Hillside Road and the creation of the UConn Technology Park on the North Campus.

Next Generation Connecticut is a proposal to significantly expand educational opportunities, research, and innovation in the science, technology, engineering, and math (STEM) disciplines at UConn over the next decade. The goals of this 10-year plan include hiring 259 new faculty (of which 200 will be in STEM), enrolling an additional 5,060 undergraduate students at the Storrs campus (of which 3,290 will be in STEM), building new STEM facilities and teaching laboratories, and upgrading aging infrastructure to accommodate new faculty and students.

The proposed UConn Technology Park is anticipated to attract technology-related facilities that will generate regulated waste. The first facility planned for the technology park, the Innovation Partnership Building, will be a University building on land owned by UConn. Therefore regulated wastes from this building can be consolidated with other campus wastes at the MAA. As development plans for other UConn Technology Park facilities become available, they will be reviewed to determine how those facilities' wastes must be managed to be in compliance with applicable regulations.

The Next Generation Connecticut initiative, and potentially the proposed UConn Technology Park, is expected to increase waste generation and the demand for regulated waste storage on the Storrs campus. Given current trends in waste generation on the Storrs campus and the Next Generation Connecticut projections of a 42% increase in undergraduate STEM students and an increase of 200 STEM faculty over the next 10 years, UConn EH&S anticipates an approximately 50% increase in the generation of both chemical and biological waste by 2020 (UConn EH&S, personal communication, August 8, 2013). The existing MAA is not adequately sized to meet these future estimates without increasing the frequency of waste removal from the MAA (i.e., greater than monthly for chemical waste and greater than weekly or bi-weekly for biological waste), which would increase operational costs.



The University is therefore evaluating the construction of a new, state-of-the-art MAA facility on North Campus Parcel G. The purpose of the facility is to address three identified needs: (1) public concern about the location of the existing facility within the public drinking water supply watershed, (2) more efficient use of space compared to that of the existing MAA facility, and (3) future waste generation and storage on the Storrs campus.

1.4 Public Participation and Agency Coordination

Public input and participation and coordination with local, regional, state, and federal agencies are major elements of the CEPA process. CEPA requires an early public scoping process to identify issues of concern related to the proposed action through coordination with interested persons and affected agencies. Scoping begins with the publication of a scoping notice in the *Environmental Monitor*, a semi-monthly online publication of the Council on Environmental Quality (CEQ) (<u>http://www.ct.gov/ceq</u>). The scoping includes a 30-day public comment period during which governmental agencies, as well as other organizations and the public, can submit comments on the proposed project and request a public scoping meeting. During the preparation of an EIE, the sponsoring agency must consider the issues raised and comments received during scoping.

A scoping notice for the subject project appeared in the April 16, 2013 edition of the *Environmental Monitor* (*Appendix A*), beginning the 30-day scoping period. The scoping period ended on May 16, 2013. During the scoping period, a public scoping meeting was held on the UConn campus on May 1, 2013. Public oral comments were received during the public meeting from four Town of Mansfield residents. During the 30-day scoping period, written comments were received from the Connecticut Department of Energy and Environmental Protection, the Mayor of the Town of Mansfield, the Connecticut Department of Public Health, and a Town of Mansfield resident. A summary of comments made at the public scoping meeting and copies of written comment letters received during the scoping period are provided in *Appendix A*.

Formal notice of the availability of this EIE has been published in the *Hartford Courant*, the *Willimantic Chronicle*, and in the *Environmental Monitor*. An electronic copy of this document was also made available on the UConn Office of Environmental Policy website. The document was sent to the following agencies and entities for review and comment:

- Council on Environmental Quality
- Connecticut Department of Energy and Environmental Protection
- Connecticut Department of Public Health
- Connecticut Department of Transportation
- Connecticut Commission on Culture and Tourism
- Connecticut Office of Policy and Management
- Town of Mansfield (with public copy available with Town Clerk)



2 Alternatives Considered

The Connecticut Environmental Policy Act (CEPA) requires state agencies undertaking an action that may result in potential significant effects on the environment to consider reasonable alternatives, particularly alternatives that might enhance environmental quality or avoid potential adverse environmental effects. Such alternatives include taking no action or substituting an action of a significantly different nature that would provide similar benefits with different environmental impacts, as well as the use of other sites controlled by or reasonably available to the sponsoring agency that would meet the stated purpose of the action.

This section compares the No Action alternative, the Proposed Action, and reasonable alternatives in light of their ability to meet the project purpose and need. The discussion of alternatives focuses on the alternative sites that were considered for an upgraded MAA facility during the 2012 siting study process. This section also describes potential environmental considerations associated with each alternative and the basis for selection of the preferred alternative, which is the Proposed Action in this EIE.

The No Action alternative (i.e., the baseline for analysis of impacts under CEPA) and Proposed Action are further evaluated in *Section 3, Existing Environment and Analysis of Impacts.*

2.1 No Action Alternative

The No Action alternative assumes continued use of the existing MAA in its current location, without modification. The facility would continue to operate with the existing structures, facility layout, and operational procedures, as described in *Section 1.1*. The No Action alternative would not fully address the identified needs for an upgraded waste storage facility for the Storrs campus, which relate to proximity relative to public drinking water supply, site location and configuration, and anticipated storage capacity demands.

The existing MAA is located within the Fenton River watershed and the drainage basin of the Willimantic Reservoir, which is a public drinking water supply. Despite the safe operation of the facility since it was established in 1989, leaving the MAA in its existing location would not address the public concern about the proximity of the current MAA location to public drinking water supplies.

In its current location and configuration, the existing MAA site has less-than-ideal circulation and maneuverability for waste transport trucks and other vehicles. Vehicle circulation, including vehicle turnaround, parking, and access/egress, would remain unchanged under the No Action alternative. These issues would be exacerbated in the future with the anticipated increase in regulated waste generation on campus.

The existing MAA will also have difficulties meeting future needs without increasing the frequency of off-site waste shipments based on anticipated growth in undergraduate enrollment and planned research growth at the University. The anticipated increase in waste generation would require an increase in the frequency of waste removal from the MAA, which would increase operational costs.



2.2 New MAA at the Existing Site

Construction of a new MAA at the location of the existing facility was also considered. Under this alternative, the existing MAA would be closed and decommissioned, and a new building with an approximately 5,800 square foot footprint would be constructed on the existing site. The overall site footprint would be expanded to approximately 0.75 acres to allow adequate vehicle circulation and parking, similar to the Proposed Action.

While this alternative would provide a more efficient use of space compared to that of the existing facility and meet future waste generation and storage needs, it would not address the public concern about the proximity of the current MAA location to public drinking water supplies.

2.3 Alternative Sites

As discussed in *Section 1.1*, the University conducted a siting study in 2012 to identify and evaluate potential sites on the Storrs campus for an upgraded MAA. The 2012 siting study was led by an advisory committee convened by UConn (MAA Siting Advisory Committee or Advisory Committee) and built upon previous siting evaluations conducted by the University since 2003. The 2012 siting study also considered the No Action alternative and an upgraded MAA at its current location. This section summarizes the methods and results of the 2012 siting study, which is documented in the *Main Accumulation Area Facility Comparative Site Study* report, referred to hereafter as the Siting Study Report. A copy of the Siting Study Report is provided in *Appendix B* of this EIE.

2.3.1 Identification and Preliminary Screening of Alternative Sites

A preliminary list of alternative sites was identified based on available sites that had been evaluated previously in the 2004 study and subsequent evaluations in 2007/2008. Additional potential sites were discussed by the Advisory Committee. Campus-wide GIS maps were used to screen on-campus locations and identify sites with minimal physical, environmental, and public safety constraints that could potentially accommodate a proposed upgraded MAA facility. The following criteria were considered in the initial identification and screening of potential sites:

- Sites located on UConn-owned land on the main Storrs campus. Sites located on UConn-owned land that is not contiguous with the main campus (i.e., Depot Campus, Spring Hill Farm, Spring Manor Farm) were not considered due to federal and state hazardous waste regulatory constraints associated with transport of hazardous waste between non-contiguous parcels (see the discussion under "Depot Campus Site" in Section 2 of the Siting Study Report). Sites on the North Campus, which is contiguous with the main campus, were considered as viable locations (the proposed UConn Technology Park parcels, UConn Motor Pool, UConn Architectural and Engineering Services Building, UConn Water Pollution Control Facility sites including the former incinerator building, north of the UConn Transfer Station, F Lot, etc.).
- Sites located outside of the core area of the campus. Sites located within the core area of the campus were considered in the 2004 study due to the close proximity to academic and



research laboratories and other waste generators. The Advisory Committee for the 2012 study discussed potential consideration of core campus sites such as the Old Central Warehouse at the Science Quad (see the discussion under "Science Quad Site, Old Central Warehouse" in Section 2 of the Siting Study Report). However, similar to the conclusions of the 2004 study, the Science Quad and other sites in or near the core campus were not recommended as suitable locations for the MAA facility due to the high population density and congestion in this area of the campus, which reduces emergency response effectiveness and increases potential for human health impacts and significant campus disruption in the event of an accidental release. For example, the I Lot adjacent to the UConn ice arena was also considered but discounted due to its close proximity to the residential neighborhood on Separatist Road, as well as existing and historical wetlands on and near the site. Sites within the core campus were therefore eliminated from further consideration.

• Sites located outside of the public water supply watershed. No new sites were considered within the Fenton River watershed or the drainage area associated with the Willimantic Reservoir due to public concerns about the proximity of the MAA facility location to public drinking water supplies. This criterion also eliminated much of the core campus, as well as sites east of Route 195.

The UConn Office of Environmental Policy, working closely with the Siting Advisory Committee, University staff, and its consultant, identified and evaluated the alternative sites shown in *Figure 2-1* with respect to physical site constraints (e.g., slopes, wetlands, and soils), public health issues, public safety, and University planning initiatives. Site visits of the most viable alternative sites were conducted by the Siting Advisory Committee. The advantages and disadvantages of each site were discussed and weighed qualitatively by the committee members and are summarized below.

As indicated previously, the Depot Campus was preliminarily considered as a potential site for the MAA. However, hazardous waste generated on the Main Campus cannot be transported and stored on the Depot Campus without UConn obtaining a RCRA treatment, storage, and disposal (TSD) permit under 40 CFR 270 and the corresponding state regulations because the two campuses do not meet the RCRA definition of "contiguous" sites. Since TSD facilities (also called TSDFs) have significantly greater regulatory compliance requirements, costs, and liability than hazardous waste generators that do not transport, store, or dispose of hazardous waste, it has been UConn's policy not to pursue TSDF status. It is also uncertain if the Connecticut Department of Energy and Environmental Protection (CTDEEP) would issue a TSDF permit to UConn. The Depot Campus was therefore eliminated from further consideration as a potential site for the relocated MAA facility.



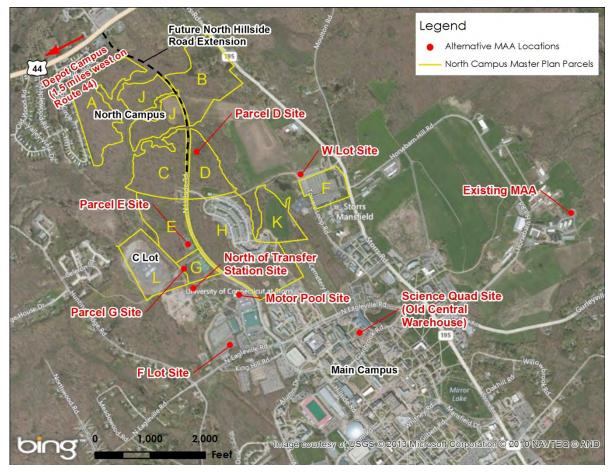


Figure 2-1. Preliminary Alternative Site Locations

The Old Central Warehouse, located at the Science Quad on the main portion of the campus, was considered and evaluated in the 2004 siting study. This location was considered due to its close proximity to academic and research laboratories and other waste generators, but was not recommended as one of the preferred MAA facility locations since it is located in a highly congested and populated area of campus, reducing emergency response effectiveness and increasing potential for human health impacts and significant campus disruption in the event of an accidental release. After consideration in the 2012 study, the Advisory Committee also dismissed the Science Quad site as a feasible alternative because the Old Central Warehouse will be demolished and replaced with a new building.

The Advisory Committee identified the UConn Motor Pool (i.e., University vehicle maintenance facility), which is located on the west side of North Hillside Road and north of the Central Warehouse, as a potential site for the relocated MAA facility. Construction of a MAA facility at the Motor Pool site would require relocation of the Motor Pool operations. Because relocation of the Motor Pool is highly speculative at this time, this site is not considered a feasible alternative and was eliminated from further consideration.

As described previously, North Campus Parcels D and E were initially considered in the UConn Technology Park master planning process as potential locations on the North Campus for the relocated MAA facility. The UConn Technology Park master planning process ultimately identified Parcel G as



the most likely potential site for a relocated MAA facility within the UConn Technology Park based on consideration of a number of factors including physical site constraints, environmental resources, and distance from the roadway to minimize vibration impacts on laboratory facilities caused by traffic along North Hillside Road. Parcels D and E were consequently eliminated from further consideration, with the selection of Parcel G as the preferred North Campus location for the MAA facility. Future technology-related development is planned for the North Campus Parcel G site with the creation of the UConn Technology Park, regardless of the location selected for an upgraded MAA.

The following alternatives were therefore retained for further detailed evaluation:

- 1. Site of Existing MAA see description of No Action alternative in Section 2.1
- 2. Site of Existing MAA, Upgraded Facility see description in Section 2.2
- 3. North Campus Parcel G Site see description of Proposed Action in Section 1.2
- 4. F Lot Site The UConn F Lot is located north of North Eagleville Road and west of LeDoyt Road, situated adjacent to an electrical substation and near the UConn Public Safety complex. The proposed MAA would be located in the southeast corner of the parking lot, outside of the limits of the former ash landfill that underlies a large portion of the F Lot, avoiding the need to disrupt the ash landfill liner system for construction of a new MAA.
- 5. W Lot Site The W Lot is located near the northern gateway entrance to the Storrs campus, west of Route 195 and north of Husky Village. The proposed MAA would be located in the northwest corner of the parking lot. Access to the site would be from the existing W Lot entrance along Route 195, across from the northern leg of Horsebarn Hill Road. The W Lot entrance and exit drives are configured to control traffic entering and exiting W Lot. A traffic light exists at the intersection of the W Lot driveway and Horsebarn Hill Road.
- 6. North of Transfer Station Site This site is located north of the UConn Water Pollution Control Facility and solid waste transfer station, east of the Connecticut Light & Power (CL&P) electrical utility corridor, and south of the Celeron Trail. This site was the preferred site for a new hazardous waste storage facility in 2008 but was eliminated from further consideration due to concerns of UConn Public Safety given the close proximity of the site to the Celeron Trail and Lot C and pedestrian traffic in this general area. Spring weekend, which has historically resulted in significant pedestrian traffic in this area, has not occurred in the last few years. As a result, public safety concerns have diminished, and the Siting Advisory Committee chose to consider this site in the preliminary evaluation.

2.3.2 Detailed Site Evaluation

The six alternatives described above were evaluated following an approach similar to the evaluation method used in the 2004 siting study. A scoring matrix was developed in conjunction with the Advisory Committee as a semi-quantitative, multi-attribute rating and ranking tool designed to assist the Advisory Committee identify a ranked list of preferred sites.



The evaluation criteria from the 2004 study were selected for use in the 2012 siting study, with some modifications. The following evaluation criteria and sub-criteria were considered in assessing a site's suitability for a MAA facility:

- Environmental/Ecological Proximity to plant and animal habitats, wetlands, & watercourses.
- Public Health Proximity to homes, student housing, day care, academic/classroom buildings, and healthcare buildings.
- Public Water Supplies Proximity to groundwater or surface water public water supplies.
- Public Safety/Security and Accessibility Does the site minimize potential for accidental damage, flooding damage, vandalism or terrorist threats, and allow for timely emergency response and minimize disruption of campus activity in the event of a waste release?
- Planning Consistency and Land Use Is the site location in conformance with plans for future use and/or preservation and conservation, and does it complement surrounding land uses?
- Cost and Regulatory Considerations Capital costs associated with facility design and construction, including site access or utility improvements. Does the site allow for appropriate waste handling systems (e.g., loading docks), site interior circulation, cost efficiencies associated with impacts on existing infrastructure, facilities, or land use, and cost efficiencies in labor and equipment? Will the site location trigger additional permitting (e.g., wetlands, flood management) or regulatory reporting requirements?
- Traffic Safety/Circulation Does the site location minimize pedestrian/vehicle conflicts, accommodate efficient waste vendor access and egress from the campus, and minimize distance traveled on campus roads for internal waste shipments (i.e., proximity to waste generators)?

The Advisory Committee members scored each of the six sites based on a numeric scale from 1 to 4 for each evaluation criterion and sub-criterion, with 1 reflecting the greatest potential impact and 4 reflecting the least potential impact. Scores could be assigned in half-point increments between 1 and 4 (i.e., 1.5, 2.5, and 3.5) for subjective evaluation criteria, at the discretion of each committee member, with the exception of the permitting sub-criterion, which was posed as a yes (1) or no (4) question.

Several of the evaluation criteria allowed for quantitative scoring using GIS mapping where potential impacts are associated with the proximity of the site to environmental resources, such as plant and wildlife habitat, wetlands and watercourses, and drinking water supplies or sensitive receptors, such as homes, student housing, day care, academic/classroom buildings, and healthcare facilities. Other evaluation criteria are inherently more subjective, and several factors were considered to determine an overall score. Advisory Committee members and staff from various UConn departments, including UConn Environmental Health & Safety, UConn Police and Fire Departments, and UConn Transportation Services identified factors to be considered by the Advisory Committee in assigning scores for some of the more subjective evaluation criteria. Weight factors were also assigned to each



evaluation criterion by the individual committee members. Details of the evaluation criteria, weight factors, and scoring rationale are presented in the 2012 Siting Study Report (*Appendix B*).

The results of the Advisory Committee scoring process are summarized in *Table 2-1*, including the average and range of scores assigned to each site. The sites are also ranked in order of priority based on their average score, with the highest average score corresponding to the highest-rated site. *Table 2-2* summarizes the weight factors that were assigned by the Advisory Committee members to the evaluation criteria and sub-criteria, which reflect the relative priorities and importance of various evaluation criteria in the advisory committee's decision-making process.

Alternative	Rank	Average Score	Score Range
North Campus Parcel G Site	1	362	327.5 - 390
W Lot Site	2	348	315.5 - 380
North of Transfer Station Site	3	327	212.5 - 390
F Lot Site	4	306	207.5 - 375
Site of Existing MAA, Upgraded Facility	5	261	200 - 337.5
Site of Existing MAA (No Action)	6	249	190 - 272.5

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Table	2-1.	Sile	SCOTING	Results

The North Campus Parcel G site was the highest-rated site overall, and was individually scored as the highest-rated site by 10 of the 11 Advisory Committee members. The W Lot site was the highest-rated site by one Advisory Committee member, slightly ahead of the Parcel G site, based on consideration of public safety/security and accessibility. Several Advisory Committee members scored the North of Transfer Station site as the highest-rated site (tied with the Parcel G site). However, other committee members scored this site as one of the lowest-rated sites due to public safety/security concerns, resulting in an overall rank of 3rd, slightly behind the W Lot site. The lowest-rated site was the existing MAA facility location, i.e. the No Action alternative receiving the lowest overall score. The Advisory Committee members assigned the public water supply evaluation criterion the highest average weight factor (23.6%), followed by the environmental/ecological criterion (13.8%) and traffic/safety and criculation (13.3%). Cost and regulatory considerations were assigned the lowest average weight (9.8%).

Table 2-2	Evaluation	Criteria	Weight Factors
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Evaluation Criteria	Average Weight	Range of Assigned Weights	
Environmental/Ecological	13.8%	5.0% - 20.0%	
Public Health	11.4%	5.0% - 20.0%	
Public Water Supplies	23.6%	5.0% - 35.0%	
Public Safety/Security and Accessibility	16.0%	5.0% - 40.0%	
Planning Consistency and Land Use	12.2%	5.0% - 30.0%	
Cost and Regulatory Considerations	9.8%	5.0% - 15.0%	
Traffic Safety/Circulation	13.3%	9.0% - 25.0%	



2.4 Environmental Review of Alternatives

This section provides a review of environmental considerations associated with each of the alternatives described in the previous section. *Table 2-3* presents a comparison of alternatives in terms of potential environmental effects and the ability of each alternative to meet the project purpose and need.

2.4.1 North Campus Parcel G Site

A new MAA constructed on North Campus Parcel G site was the highest-rated alternative from the 2012 siting study. This alternative meets the project purpose and need by relocating the MAA outside of the public drinking water supply watershed and by providing more efficient use of space than the existing facility and the ability to meet future waste generation and storage needs of the Storrs campus. The Parcel G site is also consistent with the planned UConn Technology Park land uses and North Campus Master Plan objectives. Although this alternative will require development of existing upland forest, Parcel G is already planned for development as part of the future UConn Technology Park regardless of whether it is used for a new MAA or another technology-related use. The site is also served by existing utilities and is centrally located between existing waste generators on the main campus and potential waste generators at the future UConn Technology Park on the North Campus.

The disadvantages of the Parcel G site are primarily related to public health and safety considerations. The site is generally located upwind of population centers based on prevailing wind directions² in the event of a fire or vapor cloud release. The site is also in relatively close proximity to pedestrian traffic associated with the Celeron Trail and C Lot, as well as adjacent to the Connecticut Light & Power (CL&P) overhead electrical utility lines. Soils on and downgradient of the Parcel G site have moderate to high infiltration potential, whereas soils adjacent to and downgradient of the existing MAA facility location and the W Lot site have lower infiltration potential, which poses a lower risk for soil or groundwater impacts in the unlikely event of a release from the facility's secondary containment systems. The Parcel G site is located outside of a public drinking water supply watershed and recharge areas for public water supply wells. Consequently, the site poses negligible risk to public water supplies.

The planned extension of North Hillside Road to Route 44 is anticipated to be completed prior to construction of a new MAA on the Parcel G site. However, in the event that the roadway extension is not completed prior to construction of a new MAA on Parcel G, commercial waste transport vehicles would be required to use North Eagleville Road (a high pedestrian traffic area) for waste shipments from the MAA. Following completion of the North Hillside Road extension, commercial waste transport vehicles would likely access and leave the MAA using the new gateway entrance to the campus on Route 44 and the North Hillside Road extension, thereby avoiding North Eagleville Road.

²Prevailing winds on the UConn, Storrs campus vary seasonally. Weather data is collected and maintained by the UConn Department of Natural Resources and the Environment (NRE) Water Resources Field Station, which is located near the existing MAA off of Horsebarn Hill Road. Weather data collected at this station indicate that the annual prevailing wind direction for 2011 and 2012 is from the west and southwest. Localized wind direction also varies at different points on the campus depending on a variety of factors such as topography, tree cover, buildings, etc. Additional information regarding the prevailing wind direction is provided in the 2012 Main Accumulation Area Facility Comparative Site Study report (in *Appendix B* of this EIE).



Table 2-3. Comparison of Alternatives

Considerations or Potential	Alternative					
Effects	Site of Existing MAA (No Action)	Site of Existing MAA (Upgraded Facility)	Parcel G Site	F Lot Site	W	
Meets the Project Purpose and Nee	ed?					
(1) Public concern about the location of the existing facility within the public drinking water supply watershed.	No	No	Yes	Yes	Yes	
(2) More efficient use of space compared to that of the existing MAA facility.	No	Yes	Yes	Yes	Yes	
(3) Future waste generation and storage capacity on the Storrs campus.	No	Yes	Yes	Yes	Yes	
Environmental Resources						
Traffic and Parking	Site has limited space and less-than- ideal circulation and maneuverability for waste transport trucks and other vehicles.	None	Commercial waste transport vehicles required to use North Eagleville Road (high pedestrian traffic area) for off-site waste shipments from the MAA in the event that the MAA is constructed prior to completion of the North Hillside Road extension to Route 44.	Loss of existing parking spaces (to accommodate new MAA), which are currently fully utilized.	Site is distant fro points of waste y longer transport There are no dire the W Lot from the Technology Park Campus, requirin roadways. A history of acci vehicles turning 195 exiting the V Loss of existing accommodate no currently fully ut	
Public Water Supply	Site is within a public water supply watershed.	Site is within a public water supply watershed.	Site is located outside of a public water supply watershed.	Site is located outside of a public water supply watershed.	Site is located out	
Ecological Resources	None	None	None	Site is within a mapped Natural Diversity Data Base (NDDB) area, which represents known locations of state listed species and significant natural communities. Site is located within 50 feet of Eagleville Brook.	supply watershed None	
Soils/Groundwater	Site soils are characterized as "Urban Land" or disturbed soils with unknown infiltration potential. Adjacent downgradient soils have low to moderate infiltration potential (Hydrologic Soil Group C).	Site soils are characterized as "Urban Land" or disturbed soils with unknown infiltration potential. Adjacent downgradient soils within 100 feet of the site have low to moderate infiltration potential (Hydrologic Soil Group C).	Site soils have moderate to high infiltration potential (Hydrologic Soil Group B).	Site soils and adjacent downgradient soils within 100 feet of the site are characterized as "Urban Land" with unknown infiltration potential.	Site soils are chai Land" with unkno Adjacent downgra moderate infiltrati (Hydrologic Soil C	

W Lot Site	North of Transfer Station Site
	Yes
	Yes
	Yes
nt from a majority of the iste generation, requiring port routes and times.	Would require widening of the existing access road to the UConn transfer station.
o direct access routes to om the proposed UConn Park on the North quiring use of internal accidents involving hing north onto Route he W Lot. ting parking spaces (to te new MAA), which are ly utilized. d outside of a public water shed.	Commercial waste transport vehicles required to use North Eagleville Road (high pedestrian traffic area) for waste shipments from the MAA in the event that the MAA is constructed prior to completion of the North Hillside Road extension to Route 44. The existing road leading to the site is used for access to the UConn transfer station and would provide secondary access to the UConn Reclaimed Water Facility. Site is located outside of a public water supply watershed. None
characterized as "Urban nknown permeability. vngradient soils have low to Itration potential Soil Group C).	Site soils have moderate to high infiltration potential (Hydrologic Soil Group B).



Table 2-3. Comparison of Alternatives

Considerations or Potential			Alternative			
Effects	Site of Existing MAA (No Action)	Site of Existing MAA (Upgraded Facility)	Parcel G Site	F Lot Site	W Lot Site	North of Transfer Station Site
Utilities	Utilities available and no utility conflicts.	Utilities available and no utility conflicts.	Utilities available and no utility conflicts.	An existing underground telecommunications line that runs below the F Lot would have to be avoided to accommodate the MAA.	An underground storm drainage line is located in the northwest corner of lot, which would have to be relocated or avoided.	Sewer force mains from the closed landfill and Celeron Apartments are located on-site, which would have to be relocated or avoided.
Public Health & Safety	Site has limited space and less-than- ideal circulation and maneuverability for waste transport and other vehicles. Site is distant from a majority of the points of waste generation, requiring longer transport routes and times. The site is located at the eastern limits of the campus away from population centers. Generally located downwind of population centers based on prevailing wind direction in the event of a fire or vapor cloud release.	Site is distant from a majority of the points of waste generation, requiring longer transport routes and times. Site is located at the eastern limits of the campus away from population centers. Generally located downwind of population centers based on prevailing wind direction in the event of a fire or vapor cloud release.	Site is located in close proximity to the Celeron Trail and the C Lot (pedestrian traffic) and the Connecticut Light & Power (CL&P) overhead electrical utility lines. Generally located upwind of population centers based on prevailing wind direction in the event of a fire or vapor cloud release.	Site is located close to the UConn Public Safety complex, potentially resulting in shutdown of the complex in the event of an incident at the MAA facility and disruption of campus-wide security Generally located upwind of population centers based on prevailing wind direction in the event of a fire or vapor cloud release. Site located near UConn and Connecticut Light & Power electrical substations The close proximity to the UConn Public Safety complex may provide potentially shorter response times in the event of an incident at the MAA facility that does not result in shutdown of the complex.	Site is distant from a majority of the points of waste generation, requiring longer transport routes and times. Generally located downwind of population centers based on prevailing wind direction in the event of a fire or vapor cloud release.	Site is located in close proximity to the Celeron Trail and the C Lot (pedestrian traffic) and the Connecticut Light & Power (CL&P) overhead electrical utility lines. Generally located upwind of population centers based on prevailing wind direction in the event of a fire or vapor cloud release.
State, Regional, Local & Campus Planning	Site is within a Balanced Priority Funding Area in State C&D Plan.	Site is within a Balanced Priority Funding Area in State C&D Plan.	Site is within a Balanced Priority Funding Area in State C&D Plan.	Site is within a Priority Funding Area in State C&D Plan.	Site is primarily within a Balanced Priority Funding Area in State C&D Plan.	Site is within a Balanced Priority Funding Area in State C&D Plan.
	Inconsistent with State C&D Plan's growth management principles related to water supplies given the type of use of the MAA facility and the location of the site within a public water supply watershed.	Inconsistent with State C&D Plan's growth management principles related to water supplies given the type of use of the MAA facility and the location of the site within a public water supply watershed.	Consistent with state, regional and local planning and the proposed UConn Technology Park land use and North Campus Master Plan.	Consistent with state, regional, local and campus planning.	Consistent with state, regional, local and campus planning.	Consistent with state, regional, local and campus planning.
Costs	The existing MAA will have difficulties meeting future needs without increasing the frequency of off-site waste shipments based on anticipated growth in undergraduate enrollment and planned research growth at the University. The anticipated increase in waste generation would require an increase in the frequency of waste removal from the MAA, which would increase operational costs.	Construction of a new MAA is estimated to cost between \$3 and \$5 million. Lower cost for waste removal than the No Action alternative due to larger waste storage capacity and less frequent waste removal from the facility.	Construction of a new MAA is estimated to cost between \$3 and \$5 million. Lower cost for waste removal than the No Action alternative due to larger waste storage capacity and less frequent waste removal from the facility.	Construction of a new MAA is estimated to cost between \$3 and \$5 million. Lower cost for waste removal than the No Action alternative due to larger waste storage capacity and less frequent waste removal from the facility.	Construction of a new MAA is estimated to cost between \$3 and \$5 million and could potentially require utility relocation. Lower cost for waste removal than the No Action alternative due to larger waste storage capacity and less frequent waste removal from the facility.	Construction of a new MAA is estimated to cost between \$3 and \$5 million. In addition, locating the MAA at this site would require widening of the existing access road and utility relocation. Lower cost for waste removal than the No Action alternative due to larger waste storage capacity and less frequent waste removal from the facility.



Legend: Potential advantages or benefits are shown in normal blue font. Potential neutral aspects are shown *in italic black font.* Potential disadvantages or adverse effects are shown in bold red font.



2.4.2 W Lot Site

A new MAA constructed at the northwest corner of the W Lot was the second highest-rated alternative from the 2012 siting study. This alternative also meets the project purpose and need by relocating the MAA outside of the public drinking water supply watershed and meeting existing and future operational needs as described previously. The W Lot site is also generally located downwind of population centers based on prevailing wind direction in the event of a fire or vapor cloud release. Downgradient soils adjacent to the W Lot site have lower infiltration potential than the soils at the Parcel G site, but similar infiltration potential as the soils adjacent to and downgradient of the existing MAA site.

The primary disadvantages of the W Lot site are transportation-related. These include the loss of existing parking spaces, which are currently fully utilized, to accommodate a new MAA and access/egress. The site would be accessed from the existing W Lot entrance along Route 195, across from the northern leg of Horsebarn Hill Road. The W Lot entrance and exit drives are configured to control traffic entering and exiting the parking lot, as there is a history of accidents involving vehicles turning north onto Route 195 exiting the W Lot.

The W Lot site is also relatively distant from a majority of the points of waste generation, requiring longer transport routes and times, and there are no existing or planned direct access routes to the W Lot from the proposed UConn Technology Park on the North Campus. The University EH&S staff would not be allowed to transport hazardous waste along Route 44 or Route 195 north of campus, but instead would be required to use North Hillside Road, North Eagleville Road, and Route 195 for transport of waste between future waste generation sites at the UConn Technology Park and a MAA located at the W Lot since RCRA regulations restrict UConn waste collection vehicles to roadways along UConn property.

2.4.3 North of Transfer Station Site

Construction of a new MAA on a site located north of the UConn Water Pollution Control Facility and solid waste transfer station was the third highest-rated alternative from the 2012 siting study. Similar to the previous two alternatives discussed, the "North of Transfer Station" site also meets the project purpose and need. This site is located just south of Parcel G and the Celeron Trail and therefore shares some of the same advantages and disadvantages with the Parcel G site. The existing road leading to the site is used for access to the UConn sold waste transfer station and would provide secondary access to the UConn Reclaimed Water Facility. However, locating the MAA at this site would also require widening of the existing access road, increasing the cost of this alternative. Sewer force mains from the closed landfill and Celeron Apartments, which pass through this site, would have to be relocated or avoided, resulting in further costs.

2.4.4 F Lot Site

Construction of a new MAA on the F Lot site was the fourth highest-rated alternative from the 2012 siting study. This alternative fully meets the project purpose and need since, like the previously discussed sites, it is located outside of a public water supply watershed and meets existing and future operational needs. A new MAA on this site would be located at the southeast corner of the parking lot, outside of



the limits of the former ash landfill that underlies a large portion of the F Lot, avoiding the need to disrupt the ash landfill liner system (located 18 inches below the existing ground surface) for construction of the facility. The site is also centrally located between existing waste generators on the main campus and future waste generators at the proposed UConn Technology Park on the North Campus.

The F Lot site is located close to the UConn Public Safety complex, providing potentially short response times in the event of an incident at the MAA. However, an incident at the MAA could also potentially result in shutdown of the UConn Public Safety complex and disruption of campus-wide security. The site is also situated approximately 50 feet from Eagleville Brook, although the parking lot is sloped towards the west and not directly towards Eagleville Brook. The site is also a mapped CTDEEP Natural Diversity Data Base (NDDB) area, which represents known locations of state-listed species and significant natural communities.

The site is located near UConn and Connecticut Light & Power electrical substations. An underground electrical line was routed along the perimeter of the site, instead of across the middle of the site, to avoid the area potentially identified for the MAA. However, an existing underground telecommunications line located below the F Lot would need to be avoided to accommodate the MAA, adding to the cost of this alternative. This alternative would also result in the loss of existing parking spaces, which are currently fully utilized. As with other alternative sites, the F Lot Site is generally located upwind of population centers based on prevailing wind direction in the event of a fire or vapor cloud release.

2.4.5 Site of Existing MAA (No Action and Upgraded Facility)

The two alternatives involving the site of the existing MAA were the lowest rated alternatives from the 2012 siting study, with No Action alternative receiving the lowest overall score. Neither alternative, as described in *Sections 2.1 and 2.2*, fully meets the project purpose and need since the MAA would remain within a drinking water supply watershed under either scenario. Furthermore, the facility would have difficulty meeting the future waste generation needs of the campus in a cost-effective manner.

2.5 Preferred Alternative

Based on the alternatives considered, a new MAA facility constructed on North Campus Parcel G is the preferred alternative evaluated in this EIE. This alternative meets the project purpose and need by removing the facility from the public drinking water supply watershed, providing a more efficient use of space compared to that of the existing facility, and meeting future waste generation and storage needs of the Storrs campus. The Parcel G site was also the highest-rated alternative from the 2012 siting study, which reflects a balanced consideration by multiple University and community stakeholders of important factors and potential impacts including ecological resources, public health and safety, public water supplies, traffic and parking, planning consistency, and cost considerations. A new MAA facility constructed on North Campus Parcel G (i.e., the Proposed Action) and the No Action alternative are evaluated in greater detail in *Section 3, Existing Environment and Analysis of Impacts*.



3 Existing Environment and Analysis of Impacts

3.1 Environmental Resources of No Significance in the Project Area

Some environmental resources do not occur in the project area and consequently would not be affected by the Proposed Action. These resources, described below, are not included in the description of existing conditions or analysis of impacts in this EIE:

- Coastal Resources The project area is not within the Connecticut Coastal Management Zone. Therefore, the project will not affect coastal resources.
- Consistency with Connecticut Coastal Management Act The project area is located outside of the coastal boundary, as defined in C.G.S. Section 22a-94(b), and consequently is not subject to the provisions of the Connecticut Coastal Management Act, Sections 22a-90 through 22a-112.

3.2 Traffic, Parking, and Circulation

3.2.1 Existing Conditions

The North Campus Parcel G site is located off North Hillside Road and has direct access from the C Lot Driveway, which provides entry and exit to the C Lot parking area. UConn Transportation Services provides bus service between the C Lot and other portions of the Storrs campus. Pedestrian accommodations in the area include the Celeron Trail, which passes to the south of Parcel G, walkways around the existing C Lot parking area, and a walkway along the north side of the C Lot Driveway from the parking lot to North Hillside Road.

North Hillside Road is a campus roadway with a posted speed limit of 25 miles per hour. The roadway begins at North Eagleville Road and continues approximately 4,000 feet to the north, terminating just north of the entrance to the Charter Oak Apartments. A shared-use path is located along the east side of North Hillside Road, and on-street parking is located along portions of North Hillside Road. As described in *Section 1.1.3*, UConn plans to extend North Hillside Road north to Route 44 to create a new gateway entrance to the University and enable the creation of the UConn Technology Park on the North Campus.

Approximately 1,200 satellite accumulation areas (i.e., points of waste generation) are located throughout the UConn campus, with the majority of waste generators concentrated in the central portion of the campus (*Figure 3-1*). Regulated waste generated at these sites is picked up by UConn EH&S waste transport vehicles, which travel along campus, town, and state roadways to transport the waste from the satellite accumulation areas to the existing MAA, located off of Storrs Road (State Route 195) and directly accessed from Horsebarn Hill Road at the eastern edge of the campus.



Existing Roadway Network

Major roadways traveled by EH&S waste transport vehicles include, but are not limited to, the following roads:

- Storrs Road (Route 195)
- Hillside Road
- Main Campus internal roads Gilbert, Glenbrook, Auditorium, Mansfield Road
- North Eagleville Road
- Horsebarn Hill Road

Storrs Road (State Route 195) has a posted speed limit of 30 miles per hour in the vicinity of the campus and is classified by the Connecticut Department of Transportation (CTDOT) as a minor arterial roadway. This roadway begins at Route 66 to the south of the campus and continues north along the northeastern portion of the UConn campus to its intersection with Route 44 and ultimately to Route 74, approximately 0.7 mile north of Interstate 84 in the Town of Tolland. State Route 195 provides one travel lane in each direction with sidewalks on both sides of the roadway through the campus.

Hillside Road is a campus roadway with a posted speed limit of 25 miles per hour. This roadway begins north of South Eagleville Road at Hillside circle and continues to North Eagleville Road. Due to heavy pedestrian traffic, sidewalks are provided on both sides of the roadway with multiple crosswalks along its length.

Mansfield Road has a posted speed limit of 25 miles per hour and is classified by CTDOT as a state institution road as it is located on the UConn campus. Mansfield Road provides access to the internal campus roadways and parking lots.

North Eagleville Road (State Route 430) is a state road from the intersection with Separatist/Hunting Lodge Road east to Route 195. North Eagleville Road is a town road from Route 32 to the Separatist/Hunting Lodge Road intersection. North Eagleville Road has a single travel lane in each direction and a posted speed limit of 25 miles per hour in the vicinity of the campus. This roadway is classified by CTDOT as an urban minor arterial. The road serves as a main access roadway for the campus, with multiple internal campus roadways and parking lot driveways intersecting it along its length. A sidewalk exists on the north side of North Eagleville Road from Separatist Road east to the Hillside Road/North Hillside Road intersection. Sidewalks are located on both sides of North Eagleville Road between the Hillside Road/North Hillside Road intersection and Route 195. There are no sidewalks on the town portion of North Eagleville Road.

EH&S waste transport vehicles use four primary signalized intersections. The signals at these intersections provide exclusive pedestrian phasing to accommodate the high volume of pedestrian traffic on the UConn campus. The four signalized intersections are as follows:

- North Hillside Road and Hillside Road at North Eagleville Road
- Storrs Road (Route 195) at North Eagleville Road
- Storrs Road (Route 195) at Mansfield Road
- Storrs Road (Route 195) at Horsebarn Hill/Gurleyville Road



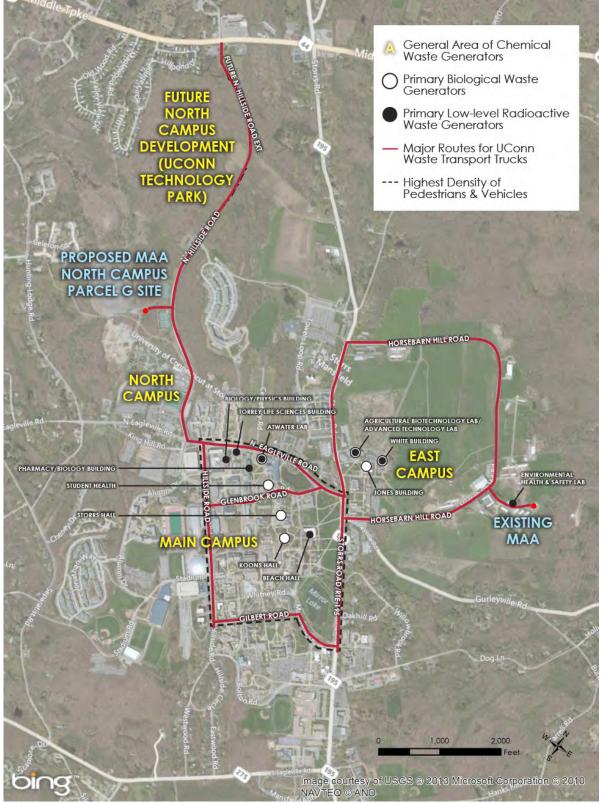


Figure 3-1. Campus Waste Generator Locations and UConn Waste Transport Vehicle Routes



Existing Pedestrian Activity and Facilities

Most pedestrian activity at UConn is concentrated within the internal campus roadways. Pedestrian facilities typically consist of unsignalized/mid-block crossings near campus buildings. Multiple high volume pedestrian crossings (at both signalized and mid-block locations) are located on Storrs Road and North Eagleville Road. Most roadways in and around the campus provide adequate pedestrian accommodations, including proper crosswalk placement/visibility, warning signs, accessible wheelchair ramps, and well-lighted sidewalks.

Pedestrian/vehicle interactions are common on the UConn campus, where there is a high density of centrally-located campus buildings and internal service roadways. A significant portion of campus student housing is located to the north and east of the main campus, requiring students to cross North Eagleville Road and Storrs Road to access classroom and other facilities on the main campus. *Figure 3-2* depicts the area of the campus with the highest density of pedestrians and vehicles, as well as the locations of pedestrian crossings along the major routes traveled by commercial waste transport vehicles to and from the existing MAA facility. North Eagleville Road and Hillside Road are the most common campus locations for vehicle/pedestrian incidents requiring response by the UConn Fire Department (Michael Makuch, Deputy Chief University of Connecticut Fire Department, email to Jason Coite, UConn Office of Environmental Policy, July 23, 2012).

Existing MAA Waste Transport Trips and Routes

EH&S uses two small box trucks (sometimes trailers) for daily pickup and transport of waste from satellite accumulation areas to the MAA. Waste pickups generally occur on an as-needed basis, upon request by the waste generators. Internal campus pickup routes are generally based on the closest access point to a building. The goal for a pickup at any given building is to minimize the distance between the satellite accumulation area within a building and the waste transport truck. Trucks are however limited by the location of egress to the desired building. Transport routes on any given day vary depending on requests received by EH&S. Multiple stops to collect compatible wastes are typically made before the truck returns to the MAA. The number of daily truck trips varies but is negligible compared to the overall traffic volume on the campus roadway network during the peak hour.

Commercial waste vendors are responsible for shipment of waste from the MAA to appropriate offcampus disposal facilities. Chemical wastes are typically removed monthly, biological wastes are typically removed weekly or bi-weekly, and low-level radioactive wastes are typically removed every 12 to 15 months. Waste vendor transport vehicles include vans, box trucks, 18-wheeled tractor trailers, and tanker trucks on rare occasions. UConn EH&S restricts the waste vendor shipment routes on campus based on the size of the waste transport vehicle. *Figure 3-2* shows the general waste vendor shipment routes to and from the existing MAA (red lines). Most commercial waste shipments are limited to Route 44 and Route 195, with the exception of Horsebarn Hill Road, and have little impact on internal campus traffic volume and circulation. Both roads are state-owned and are designed with much greater capacity than the internal campus road network.



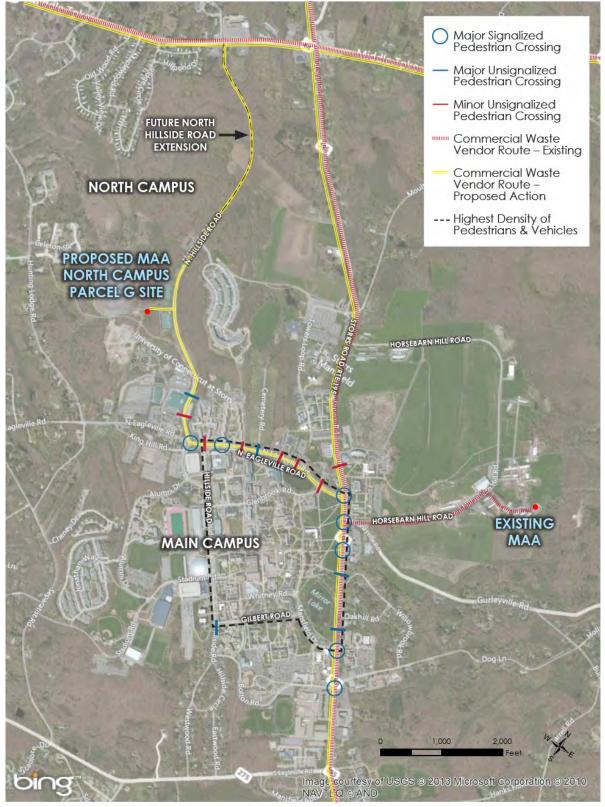


Figure 3-2. Commercial Waste Transport Vehicle Routes



3.2.2 Impact Evaluation

No Action Alternative

No significant short-term change to traffic operations or pedestrian movements is anticipated under the No Action alternative. Based on anticipated growth in undergraduate enrollment and planned research growth at the University, the existing MAA may not meet the future waste storage needs of the campus without increasing the frequency of off-site waste shipments to meet the additional demand for waste storage. Over time, an increase is anticipated in EH&S waste transport vehicle trips and vehicle trips associated with waste vendor shipments from the MAA. Even with this anticipated increase, the number of vehicle trips will remain negligible compared to the overall traffic volume on the campus roadway network during the peak hour.

Proposed Action

Construction of a new MAA facility on the North Campus Parcel G site will improve vehicle circulation, maneuverability, parking, and access/egress compared to that of the existing facility. North Hillside Road and the C Lot Driveway have adequate capacity and pedestrian facilities to safely accommodate the additional traffic associated with EH&S waste transport vehicles and commercial waste shipments, along with traffic associated with the C Lot and pedestrian access.

The Proposed Action will not measurably increase vehicle trips and, in the short-term, could actually reduce the number of vehicle trips associated with waste shipments by providing increased waste storage capacity and less frequent off-site waste shipments compared to that of the existing MAA. Relocating the MAA to the Parcel G site will not significantly change the internal EH&S waste transport routes on the campus, but will have the indirect effect of redistributing existing traffic associated with EH&S and commercial waste transport vehicles traveling to and from the MAA. Minor increases in traffic could occur in some areas due to this redistribution, but will not adversely impact traffic operations on campus. Redistribution of waste transport vehicles may increase the potential for truck/pedestrian conflicts along waste shipment routes (*Figure 3-2*), as discussed below.

The planned extension of North Hillside Road north to Route 44 will create a new entrance to the University and direct access to the future UConn Technology Park and the Parcel G site. Construction of the roadway extension is anticipated to begin in 2014, with completion anticipated by 2016. The planned extension of North Hillside Road to Route 44 is anticipated to be completed prior to construction of a new MAA on the Parcel G site. However, given the uncertainty in the timing of the roadway construction and relocation of the MAA, the potential indirect effects of the Proposed Action due to redistribution of existing waste transport vehicle traffic were evaluated under the following two scenarios, reflecting both short-term and long-term impacts:

 Potential Impacts without North Hillside Road Extension – Under this scenario, a new MAA would be constructed on Parcel G prior to completion of the North Hillside Road extension. This would result in a minor increase in commercial waste vendor trips through the main campus since it would require waste transport vehicles to access the MAA from North Eagleville Road. Such an increase in waste vendor trips would also result in a slight increase in the potential for vehicle/pedestrian interactions at unsignalized intersections compared to existing conditions. However, the number of off-site commercial waste shipments from the MAA is very small, varying from 3 to 5 shipments per month. Any increases would be similarly



small and not anticipated to cause adverse impacts. The pedestrian crossings on North Eagleville Road are well-marked, the roadway well-lighted, and the intersection geometry at North Hillside and North Eagleville Roads is adequate for truck movements.

Possible measures to reduce the potential for vehicle/pedestrian conflicts due to increased truck traffic through the campus include scheduling waste shipments for weekends or during off-peak classroom hours and limiting truck routes to major roads such as Route 44, Storrs Road (Route 195), the state-owned portion of North Eagleville Road and North Hillside Road.

 Potential Impacts with North Hillside Road Extension – Under this scenario, the North Hillside Road extension would be completed and a new MAA constructed on the Parcel G site. This scenario also considers future development of the UConn Technology Park. The proposed roadway extension will create a 2-lane, 32-foot wide road. The project design includes a paved pedestrian sidewalk on the east side of the roadway that will connect to the existing sidewalk to the south and the existing multi-use path on Route 44 to the north, and a separate bicycle lane within the curb line in each direction.

Completion of the roadway extension would provide commercial waste vendors with direct access to the MAA on the Parcel G site from the North Hillside Road connection at Route 44 (*Figure 3-2*). The vast majority of commercial waste transport vehicles would be accessing the MAA directly from Route 44 and North Hillside Road, essentially avoiding the major pedestrian crossings along North Eagleville Road. Waste transporters accessing the campus from the south on Route 195 could also use the North Hillside connection at Route 44, avoiding North Eagleville Road.

Future restrictions on the timing of waste shipments and allowable truck routes (e.g., Route 44, Storrs Road and North Hillside Road) are recommended to avoid periods and locations of high pedestrian activity on campus. Such restrictions will also minimize potential impacts associated with potential increases in waste transport traffic on the campus due to anticipated growth in undergraduate enrollment and planned research growth at the University.

Minor increases in traffic associated with UConn and commercial waste transport vehicles are anticipated in the future, regardless of the location of the MAA, given anticipated growth in undergraduate enrollment and planned research growth at the University. Given the location of the Parcel G site between existing waste generators on the main campus and potential waste generators at the future UConn Technology Park that may use the UConn MAA, the Proposed Action will help offset potential impacts associated with these minor increases by reducing the frequency of off-site waste shipments, reducing the overall frequency of waste handling, providing direct access to the technology park from North Hillside Road, reducing waste vehicle trips along North Eagleville Road and reducing the potential for vehicle/pedestrian conflicts, and increasing the overall efficiency of internal waste deliveries.



3.3 Air Quality

Under the authority of the U.S. Clean Air Act, as amended (CAAA), the U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for concentrations of six air pollutants: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone, particulate matter ten microns or smaller in diameter (PM₁₀, includes particulate matter 2.5 microns or smaller, PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb). Primary standards are established to protect public health; secondary standards are established to protect plants and animals and to prevent economic damage.

Connecticut adopted the national standards, listed in *Table 3-1*, and subsequently developed a State Implementation Plan (SIP) to attain and maintain these standards. CTDEEP has 21 active pollutant monitoring stations across the state. Monitoring data is used to determine compliance with the EPA primary and secondary air quality standards and to evaluate the effectiveness of pollution control and abatement strategies.

This section addresses existing air quality and potential environmental consequences associated with the Proposed Action and No Action alternative, including both regional (i.e., mesoscale) and local (or microscale) potential air quality impacts associated with mobile and stationary sources of air pollutants. Mobile sources of air pollutants consist of vehicles and construction equipment. Stationary sources include boilers, generators and other fuel-burning equipment. A discussion of existing conditions and potential air quality impacts are presented in the following section.

Pollutant		Primary/ Secondary	Averaging Time	Level	Form	
Carbon Monoxide (CO)		Drimony	8-hour	9 ppm	Not to be exceeded more than once	
		Primary	1-hour	35 ppm	per year	
Lead (Pb)		Primary and secondary	Rolling 3 month average	0.15 μg/m3 (1)	Not to be exceeded	
Nitrogen Dioxide (NO ₂)		Primary	1-hour	100 ppb	98th percentile, averaged over 3 years	
		Primary and secondary	Annual	53 ppb (2)	Annual Mean	
Ozone (O ₃)		Primary and secondary	8-hour	0.075 ppm (3)	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years	
Particle Pollution		Primary and secondary	Annual	15 μg/m³	annual mean, averaged over 3 years	
	PM _{2.5}		24-hour	35 μg/m³	98th percentile, averaged over 3 years	
	PM ₁₀	Primary and secondary	24-hour	150 μg/m³	Not to be exceeded more than once per year on average over 3 years	
Sulfur Dioxide (SO ₂)		Primary	1-hour	75 ppb (4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
		Secondary	3-hour	0.5 ppm Not to be exceeded more that per year		
Source: EPA	National	Ambient Air Quality	Standards (NAAQS) a	s of October 2011,	http://www.epa.gov/air/criteria.html.	
Notes:						
(1) Final rule	signed Oc	tober 15, 2008. The 1	978 lead standard (1.	5 µg/m³ as a guarterl	ly average) remains in effect until one	

Table 3-1	National Ambien	t Air Quality	Standards
	National Amplen	t All Quality	Stanuarus



year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

(2) The official level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.

(3) Final rule signed March 12, 2008. The 1997 ozone standard (0.08 ppm, annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years) and related implementation rules remain in place. In 1997, EPA revoked the 1-hour ozone standard (0.12 ppm, not to be exceeded more than once per year) in all areas, although some areas have continued obligations under that standard ("anti-backsliding"). The 1-hour ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1.

(4) Final rule signed June 2, 2010. The 1971 annual and 24-hour SO_2 standards were revoked in that same rulemaking. However, these standards remain in effect until one year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.

3.3.1 Existing Conditions

The State of Connecticut is divided into designation areas by pollutant for air quality planning purposes. Each district is assigned an attainment or non-attainment status with respect to the NAAQS. The UConn campus is located within the Eastern Connecticut Intrastate Air Quality Control Region (AQCR 041) and the Greater Connecticut Area designation areas, depending on the pollutant designation.

The project site is located in non-attainment areas for ozone and is located in unclassified or attainment air quality designation areas for the other criteria pollutants: CO, NO₂, Pb, SO₂, PM_{2.5}, and PM₁₀ *(Table 3-2).* The Eastern Connecticut Intrastate Air Quality Control Region designation area is a maintenance area for CO, meaning that it was previously in nonattainment but currently meets the NAAQS.

Pollutant	Designation Area	Designation/Classification	
Carbon Monoxide	Eastern Connecticut Intrastate Air Quality Control Region	Attainment	
Lead	Entire State	Unclassifiable/Attainment	
Nitrogen Dioxide	State of Connecticut	Unclassifiable/Attainment	
Ozone (8-Hour Standard)	Greater Connecticut	Nonattainment; Marginal	
PM _{2.5} (24-hour NAAQS and Annual NAAQS)	Tolland County	Unclassifiable/Attainment	
PM ₁₀	Rest of State (Outside City of New Haven)	Unclassifiable	
Sulfur Dioxide	Eastern Connecticut Intrastate Air Quality Control Region	Better than National Standards	

Table 3-2. Air Quality Designation Area and Classification for Criteria Pollutants

Source: Title 40 Code of Federal Regulations (CFR) Part 81, Designation of Areas for Air Quality Planning Purposes.

The ambient ozone concentrations at a given location are less dependent on the amount of local emissions than on meteorological conditions, especially wind direction, temperature, and the amount of sunlight. The most recent *Annual Report on Air Quality in New England* was released for data collected in 2011. The ozone standard is that the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm. Therefore, if the fourth-highest concentration exceeds the standard concentration in 2011, it does not indicate whether the station exceeds the NAAQS. The ozone monitoring station in Tolland County



is located at the Shenipsit State Forest in Stafford, Connecticut. The 3-year average between 2009 and 2011 of the monitoring station's fourth-highest 8-hour concentration was 0.074 ppm *(Table 3-3)*, which is less than the standard of 0.075 ppm (EPA, 2012; EPA, 2011; EPA, 2010).

Location	Averaging Time	NAAQS	Fourth-High	3-year		
LOCATION			2009	2010	2011	Average
Shenipsit State Forest, Stafford	3-year average of the fourth-highest daily maximum 8-hour average ozone concentration	< 0.075 ppm	0.074	0.079	0.068	0.074 ppm

Table 3-3	Pollutant Da	ta for Ozone
	i onatant Da	

Stationary Sources

Under the Clean Air Act Amendments of 1990, major sources of air pollution are required to obtain a Title V operating permit, which is administered in Connecticut by the CTDEEP Bureau of Air Management. The University campus at Storrs is considered a major source because it has the potential to emit pollutants in excess of thresholds established for regulated air pollutants. Fuel burning equipment is the major stationary source of air emissions on the campus. There are currently no direct stationary sources of air pollutants (e.g., fuel burning sources such as emergency generators) at the existing MAA or currently on the Parcel G site.

Mobile Sources

Mobile sources of air pollutants on the UConn Campus include vehicles and service equipment. The air quality of mobile sources is considered on a regional, or mesoscale, level in the context of the SIP. The CAAA requires that each state submit a SIP for attainment of the NAAQS to the EPA. The 1977 and 1990 CAAA require comprehensive plan revisions for areas where one or more of the standards have yet to be attained. Since the entire state was designated as a nonattainment area for 8-hour ozone, a SIP has been submitted to EPA documenting the necessary measures to achieve attainment status for ozone. In the SIP and SIP revision, Connecticut has demonstrated that it has met all requirements mandated by the CAAA for moderate 8-hour ozone nonattainment areas.

At the local, or microscale level, concern with mobile sources of air pollution focus on increased emissions from greater vehicle volumes or increases in vehicle congestion, especially at intersections, where delays can lead to vehicle queuing and idling.

UConn EH&S personnel regularly collect regulated waste from the estimated 1,200 satellite accumulation areas on the Storrs campus and transport the waste via trucks to the MAA facility. Commercial waste transport vehicles transport the waste from the MAA to off-site disposal facilities approximately monthly for chemical wastes, weekly or bi-weekly for biological wastes, and every 12 to 15 months for low-level radioactive wastes.



3.3.2 Impact Analysis

Stationary Sources

Under the No Action alternative, there would continue to be no direct stationary sources of air pollution at the existing MAA. The building would continue to be served by electricity provided by the central campus utilities or CL&P. Given the small size of the existing MAA facilities, emissions attributable to the MAA from these indirect stationary sources are not regionally significant.

Construction of a new, state-of-the-art MAA facility may involve the installation and operation of stationary sources of air emissions such as natural gas-fired heaters. The facility would be served by electricity provided by the central campus utilities or CL&P. A backup emergency generator is not anticipated to be necessary for the facility. A stationary source permit from the CTDEEP Bureau of Air Management, pursuant to section 22a-174-3 of the Regulations of Connecticut State Agencies, is not required since the increase in stationary source emissions would be significantly less than 15 tons per year of any particular air pollutant. Direct air quality impacts associated with stationary sources are not anticipated to create or contribute to exceedances of NAAQS for CO.

No adverse air quality impacts from stationary sources are anticipated as a result of the Proposed Action.

Mobile Sources

As described in *Section 2*, relocating the MAA to the Parcel G site will have the indirect effect of redistributing existing traffic associated with EH&S and commercial waste transport vehicles traveling to and from the MAA. Minor increases in traffic could occur due to this redistribution. Minor increases in traffic associated with UConn and commercial waste transport vehicles are also anticipated in the future, regardless of the location of the MAA, as a result of anticipated growth in undergraduate enrollment and planned research growth at the University. Due to the existing capacity in the traffic network near the project site and elsewhere on campus, and the minor anticipated increase in traffic, neither the No Action alternative nor the Proposed Action is expected to increase traffic delays at nearby intersections or vehicle emissions above acceptable levels.

An air quality analysis was previously conducted in support of a Final Environmental Impact Statement for extension of North Hillside Road (FHWA, 2011) to evaluate the potential air quality impacts associated with the proposed roadway extension and development of the North Campus for technologyrelated uses, including Parcel G. The analysis considered three intersections: Storrs Road and South Eagleville Road, Storrs Road and Route 44, and Route 44 and North Hillside Road. The results of the analysis demonstrated that the maximum one-hour and eight-hour CO concentrations at the subject intersections are estimated to be well below the Connecticut and Federal CO standard of 35 and 9 ppm, respectively.

No adverse traffic-related air quality impacts are anticipated as a result of the No Action or Proposed Action alternatives. Temporary, construction-related air quality impacts and associated mitigation are discussed in *Section 3.16, Construction Impacts.*



3.4 Noise

3.4.1 Existing Conditions

CTDEEP has established Noise Zone Standards for the evaluation of noise generated by adjacent noise zones (RCSA 22a-69-1 through 22a-69-7.4). The standards establish three noise zones based on land use, placing limits within each class on the allowable amount of noise to be emitted by a source in an adjacent noise zone. *Table 3-4* describes the various classes, with Class A being the most noise-sensitive of the three types and Class C being the least sensitive.

Class	Description of Noise Zone	Emitter to Designated Receptor (dBA)				
	Description of Noise Zone	С	В	A/Day	A/Night	
A	Single and multiple family homes, hotels, prisons, hospitals, religious facilities, cultural activities, forest preserves, and land intended for residential or special uses requiring such protection.	62	55	55	45	
В	Retail trade, personal, business and legal services, educational institutions, government services, amusements, agricultural activities, and lands intended for such commercial or institutional uses.	62	62	55	45	
С	Manufacturing activities, transportation facilities, warehousing, military bases, mining, and other lands intended for such uses.	70	66	61	51	

Table 3-4. Connecticut Noise Zones and Standards

The UConn campus is classified as a Class B Noise Zone. According to RCSA Section 22a-69-3.5, a Class B emitter shall not emit noise exceeding Leq³ levels of 55 dBA⁴ (daytime) or 45 dBA (nighttime) to an adjacent Class A Noise Zone, or 62 dBA at any time to an adjacent Class B or C Noise Zone.

The site of the existing MAA is located at the end of a service road off of Horsebarn Hill Road to the east of State Route 195 on the East Campus portion of the UConn campus, which is mostly dedicated to agricultural education. The 440-acre Fenton Tract of the UConn Forest is adjacent to the site on the east. The Horse Unit II and Livestock Unit I buildings and associated pastures are located to the north and agriculture-related development, research buildings, assorted outbuildings, and barns are located to the south and west of the existing facility. The noise environment at the existing MAA is dominated by traffic and operational noise associated with the MAA itself and the surrounding agricultural and educational uses.

³ The Leq, or Equivalent Level, is the steady-state noise level for a given time period that has the same acoustic energy as the fluctuating noise levels observed during that time period. The Leq can be evaluated over different time periods including one hour (expressed as a one-hour Leq or Leq(h)) or 24 hours (expressed as a 24-hour Leq or Leq(24)).

⁴ The unit typically used to describe sound levels perceptible to humans is the A-weighted decibel (dBA). The A-weighting attempts to approximate the human ear's sensitivity to sounds of varying frequencies and pitch. The decibel is a logarithmic unit of measure. For instance, a 10-decibel change in noise level is perceived as a doubling or halving of loudness. A 3-dB change would be barely perceivable for most people.



The North Campus Parcel G site is primarily wooded. The existing noise environment of the site is dominated by traffic along North Hillside Road and the C Lot Driveway; the adjacent tennis courts and nearby C Lot, Charter Oak Apartments, and UConn Water Pollution Control Facility and Solid Waste Transfer Station; and to a lesser extent by traffic on more distant surrounding roads including Route 44 to the north, Route 195 to the east, North Eagleville Road to the south, and Hunting Lodge Road to the west.

3.4.2 Impact Evaluation

The potential for noise-related impacts was evaluated in terms of potential changes in ambient noise levels and consistency of the alternatives with the land uses and noise environment in the surrounding area.

No Action Alternative

Under the No Action alternative, no measurable change will occur to the existing noise environment at or near the site of the existing MAA. The existing MAA facility operations are consistent with the allowable noise based on the adjacent Class B Noise Zone land uses. No adverse noise impacts are anticipated.

Proposed Action

The Proposed Action is consistent with the existing land uses in the vicinity of Parcel G and is not expected to exceed the Class B emitter levels based on the nature of the proposed site activities. No direct or indirect noise-related impacts are anticipated to result from the Proposed Action.

As discussed in *Section 1* and the North Campus Master Plan (2012), the North Campus area, including Parcel G, is proposed for future development of the UConn Technology Park. In addition to a new MAA, the master plan proposes potential development of the eastern portion of the Parcel G site with technology-related uses or facilities that could replace the existing tennis courts.

Certain research laboratories that may be located in the future UConn Technology Park could house vibration-sensitive research equipment that would require setbacks from major roads; the most sensitive equipment can require up to 295-foot setbacks (SOM, 2012). The western portion of the Parcel G site, where the new MAA is proposed, is located relatively distant from the remainder of the North Campus development parcels. Access to the Parcel G site is available directly from the C Lot Driveway, avoiding the need for a new access road. Furthermore, any future facilities that will house noise or vibration-sensitive equipment will be sited sufficiently far from the MAA and existing North Campus roads to avoid traffic-related noise or vibration impacts. Consequently, the Proposed Action is consistent with possible noise or vibration-sensitive uses or facilities at the future UConn Technology Park.

Noise impacts from the Proposed Action would be most noticeable during construction; however, construction noise is exempt from the Connecticut noise regulations per RCSA 22a-69-1. Construction-related noise is addressed in *Section 3.16, Construction Impacts*.



3.5 Water Resources

3.5.1 Existing Conditions

Surface Water Resources

Existing MAA Site

The site of the existing MAA is located within the Fenton River watershed (approximately 3,500 feet west of the Fenton River and separated from the river by the 440-acre Fenton Tract of the UConn Forest) and the drainage basin of the Willimantic Reservoir, which is located approximately six miles downstream of the site and is owned and operated by the Windham Water Works. The surface waterbody closest to the existing MAA is Roberts Brook, which is located approximately 800 feet south of the facility. Roberts Brook flows easterly before joining the Fenton River.

Inland and coastal waters in Connecticut are assigned a Water Quality Classification based on Connecticut's *Water Quality Standards* (CTDEEP, 2011). These classifications define designated uses that a waterbody can support. According to the Water Quality Classifications, Roberts Brook has a water quality classification of Class AA. Designated uses for Class AA waters are as existing or proposed drinking water supplies; habitat for fish and other aquatic life and wildlife; recreation; and water supply for industry and agriculture.

The existing site is relatively flat and paved. Stormwater runoff from the site flows east-southeast toward a wooded area associated with the Fenton Tract of the UConn Forest. *Figure 3-3* depicts the existing MAA and nearby surface water resources.

North Campus Parcel G Site

The North Campus Parcel G site is located in the Eagleville Brook watershed, a subregional basin within the larger Willimantic River watershed. The site is located just south of the drainage divide between the Cedar Swamp Brook and Eagleville Brook watersheds. The drainage divide, which had historically bisected the Parcel G site, currently follows the southern edge of the C Lot Driveway along the northern limit of the project site as a result of construction of the C Lot Driveway. The topography on the project site slopes to the west, toward the southern limit of the closed UConn landfill as shown in *Figure 3-3*. The project site is situated approximately 0.3 miles north of Eagleville Brook, which begins near Eagleville Road and the main campus, flows southwest (underground in some reaches), and eventually joins King's Brook before reaching Eagleville Pond, an impoundment of the Willimantic River.

Inland waters in Connecticut are assigned a Water Quality Classification based on Connecticut's *Water Quality Standards* (CTDEEP, 2011). According to the Water Quality Classifications, the segment of Eagleville Brook downgradient of the project site has a water quality classification of Class A. Designated uses include potential drinking water supplies, habitat for fish and other aquatic life and wildlife, recreation, and industrial and agricultural water supply.



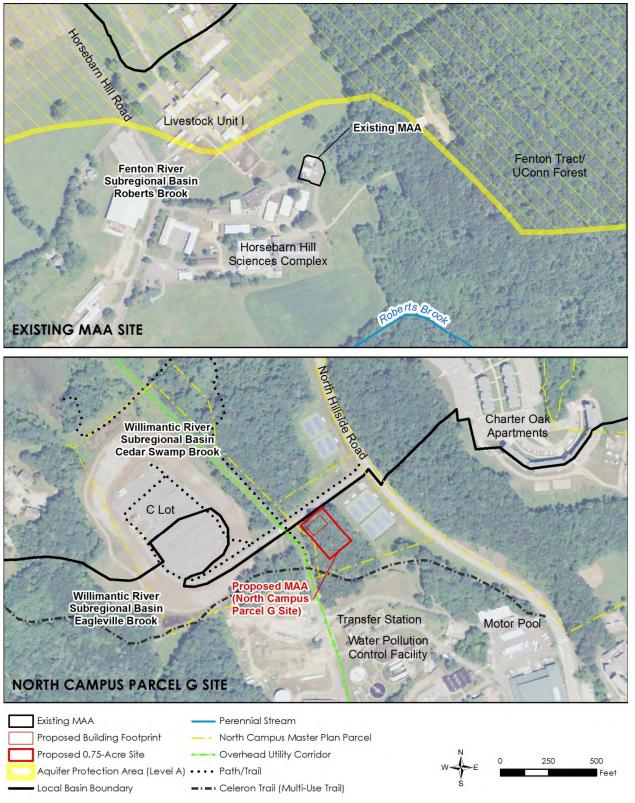


Figure 3-3. Water Resources



The segment of Eagleville Brook downgradient of the project site is included in the CTDEEP 2010 303(d) list⁵ as an impaired waterbody for recreation due to elevated bacteria (*Escherichia coli*) levels. In the *2012 State of Connecticut Integrated Water Quality Report* (CTDEEP, 2012), this segment of Eagleville Brook is listed as not supporting aquatic life or recreational activities. The report notes the possible causes of the impairment as permitted and non-permitted stormwater, insufficient septic systems, agricultural activity, nuisance wildlife/pets, and landfills.

Eagleville Brook was also included on the CTDEEP 2004 List of Connecticut Waterbodies Not Meeting Water Quality Standards due to not meeting the aquatic life criteria contained in Connecticut's Water Quality Standards. As a result, a Total Maximum Daily Load (TMDL) analysis was approved for Eagleville Brook. on February 8, 2007. The analysis identified the most probable cause of the aquatic life impairment in Eagleville Brook as a complex array of pollutants transported by stormwater. Since the impairment cannot be attributed to a specific pollutant, impervious cover was used as a surrogate measure for pollutants transported by stormwater. For the segment of Eagleville Brook on the UConn campus, the TMDL identified a goal of 59% reduction in impervious cover (compared to 2007 conditions), accomplished by improved stormwater management within the watershed (CTDEEP, 2007b). This TMDL goal does not preclude new development, but instead means that new development should implement stormwater management controls to maintain current site hydrology, resulting in effectively no net increase in impervious cover in the watershed. The adaptive management strategy identified includes reducing impervious cover where practical, disconnecting impervious cover from the surface waterbody, minimizing additional disturbance to maintain existing natural buffering capacity and installing engineered BMPs to reduce the impact of impervious cover on receiving water hydrology and water quality.

A watershed-based management plan was developed for Eagleville Brook in June 2011, *Eagleville Brook Watershed Management Plan* (Dietz & Arnold, 2011) by the Center for Land Use Education and Research, University of Connecticut Cooperative Extension. The watershed management plan provides a framework and recommendations for implementing the Eagleville Brook TMDL. No site-specific stormwater retrofit concepts were identified for the Parcel G site since the site is primarily undeveloped. However, the plan recommended a variety of Low Impact Development (LID) stormwater retrofits at other developed sites within the Eagleville Brook watershed such as bioretention, rain gardens, grass swales, sand filters, and gravel wetlands.

Eagleville Brook is also included in the *Connecticut Statewide Bacteria TMDL* (2012) for impairments to recreation use. The impairments are due to elevated fecal indicator bacteria concentrations, with more frequent exceedances during wet weather rather than during dry weather events, further indicating a stormwater runoff-related management need for the watershed.

Groundwater Resources

Existing MAA Site

Similar to surface waters, groundwater in Connecticut is also classified according to the Connecticut *Water Quality Standards* (CTDEEP, 2011). The quality of groundwater beneath the site of the existing

⁵ The term "303(d) list" refers to the list of impaired and threatened waters (stream/river segments, lakes) under Section 303(d) of the Clean Water Act that states are required to submit for EPA approval every two years.



MAA is classified by CTDEEP as GAA (*Figure 3-4*). Class GAA groundwater is groundwater used, or which may be used, for public supplies of water suitable for drinking without treatment; groundwater in the area that contributes to a public drinking water supply well; and groundwater in areas that have been designated as a future water supply by a water utility. The site is located approximately 400 outside of the mapped Level A Recharge Area of the Fenton Aquifer, which draws water from the Fenton Aquifer and supplies drinking water to the University. Level A mapping defines the land area contributing groundwater to the public water supply well field.

North Campus Parcel G Site

The quality of groundwater beneath the North Campus Parcel G site is classified by CTDEEP as GA (*Figure 3-4*). Class GA groundwater is groundwater within the area of existing private water supply wells or an area with the potential to provide water to public or private water supply wells. Class GA groundwater is presumed suitable for drinking or other domestic uses without treatment (CTDEEP, 2011).

Groundwater beneath the former UConn solid waste landfill and chemical pits, located downgradient and west of the project site, is classified as "GA, GAA - May Not Meet Current Standards." Such groundwater may not meet the GA or GAA water quality standards, which presume that groundwater is suitable for drinking without treatment. However, CTEEP's goal is to restore groundwater in this area to background quality. Groundwater beneath the area south of the project site, in the vicinity of the UConn Transfer Station and Water Pollution Control Facility, is classified as Class GB. Class GB groundwater is groundwater within a historically highly urbanized area or an area of intense industrial activity and where public water supply service is available. Such ground water may not be suitable for human consumption without treatment due to waste discharges, spills or leaks of chemicals or land use impacts.

Flood Hazard Potential

Floodplains, which are areas that would be impacted by floodwaters of some depth, are delineated by the Federal Emergency Management Agency (FEMA). According to the FEMA Flood Insurance Rate Map (FIRM) for Town of Mansfield, Tolland County, Connecticut (Community-Panel No. 090128 0005 C) (effective January 2, 1981), neither the existing MAA nor the North Campus Parcel G site are located within a mapped flood hazard area.

On April 9, 2013, CTDEEP issued approval of a Flood Management Certification (FM-201205381) for extension of North Hillside Road and subsequent development of the North Campus, including Parcel G. The North Campus Parcel G site is also part of a pending CTDEEP Diversion Permit application for the North Hillside Road extension (Application No. DIV-201205385), which is subject to the Water Diversion Act since the proposed project involves the collection of stormwater runoff from an area greater than 100 acres.



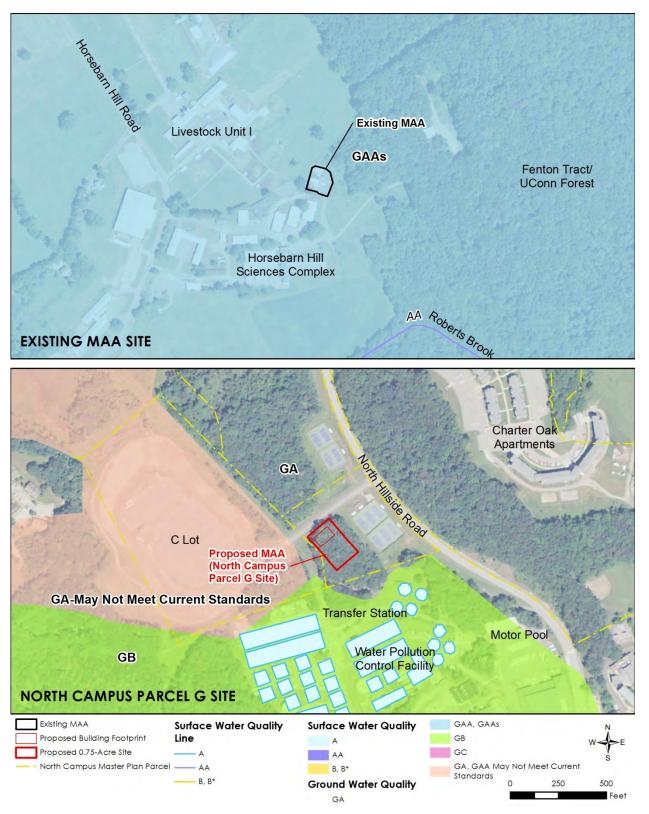


Figure 3-4. Water Quality Classifications



3.5.2 Impact Evaluation

Surface Water and Groundwater Resources

No Action Alternative

No changes are proposed in facility operations at the existing MAA under the No Action alternative. Existing operational controls and safety measures would remain unchanged, and stormwater from the site would continue to discharge to the adjacent wooded area as untreated surface runoff. The facility would remain located within the public water supply watershed of the Willimantic Reservoir, and in close proximity but outside of the mapped Level A Recharge Area of the Fenton Aquifer. The potential for impacts to surface water and groundwater resources would also remain unchanged in the unlikely event of a release of chemicals or other hazardous materials to the environment. It should be noted that the existing MAA has been operated safely and has never experienced a release since it was established in 1989.

Proposed Action

The Proposed Action would result in the development of approximately 0.75 acres of presently wooded land for the creation of a new waste storage facility, including impervious surfaces associated with the facility building, parking, vehicle circulation areas, and driveway. The Parcel G site would remain within and contribute runoff to the Eagleville Brook watershed system.

As described in *Section 3.11, Utilities and Services,* impervious surfaces serve as accumulation areas for stormwater pollutants, eliminate vegetation that would otherwise intercept precipitation and attenuate pollutants, and increase the quantity and rate of stormwater runoff by preventing infiltration. The stormwater management system for the new MAA will be consistent with the conditions and requirements of the CTDEEP Flood Management Certification (FM-201205381) and Diversion Permit (when it is issued), in addition to other pending permit applications for the North Hillside Road extension and North Campus development. As described in *Section 3.11,* stormwater management measures for the site will consist of a combination of LID techniques and conventional stormwater management controls, the ability to effectively close the stormwater management strategies to address the effective impervious cover goals in the *Eagleville Brook Watershed Management Plan* (Dietz & Arnold, 2011) and the *Connecticut Statewide Bacteria TMDL*.

The facility design will also incorporate spill containment measures to provide secondary and tertiary containment for regulated waste storage and handling areas, state-of-the-art security systems, and required training, inspections, and contingency planning to meet applicable state and federal regulatory requirements for safe operation of the facility.

The proposed stormwater management and facility design elements will reduce the potential for impacts associated with a release of chemicals or other hazardous materials to the environment. The Proposed Action is therefore not anticipated to result in adverse direct or indirect impacts to surface water or groundwater resources.



Flood Hazard Potential

Neither the No Action alternative nor the Proposed Action will affect flood hazard potential since both the existing MAA and the North Campus Parcel G sites are located outside of mapped flood hazard areas.

3.6 Wetlands and Watercourses

Inland wetlands and watercourses are regulated in the State of Connecticut by CGS, Chapter 440, Sections 22a-36 to 22a-45 (Inland Wetlands and Watercourses Act (IWWA)). Wetlands are defined as soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey. Watercourses are defined as rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private. Intermittent watercourses are identified by the presence of a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation.

Wetland and watercourse resources identified on property owned by the University of Connecticut are regulated by the CTDEEP through the State Inland Wetlands and Watercourses Permit program.

The October 2011 *Final Environmental Impact Statement, North Hillside Road Extension* (October 2011 EIS) details the sequence of wetland investigations and delineations that have been conducted at the North Campus since 1994. The most recent wetland investigation and delineation of the North Campus involving Parcel G was performed in 2006. No wetland investigations or delineations are known to exist in the vicinity of the existing MAA.

A wetland scientist and registered professional soil scientist with Fuss & O'Neill, Inc. investigated the existing MAA and North Campus Parcel G for the presence of wetland resources on July 28, 2013. The field investigation focused on the existing and proposed development footprints associated with the No Action and Proposed Action alternatives and areas within 100-feet of each footprint. Web Soil Survey (WSS) soil data and information produced by the National Cooperative Soil Survey (NCSS) and provided by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) was reviewed and utilized as part of the investigation. A formal delineation of the existing wetland resource areas within the subject areas was not performed as part of the field investigation. Details regarding the 2013 field investigation as well as information pertaining to Parcel G from previous wetland investigations are provided below.



3.6.1 Existing Conditions

Existing MAA Site

The existing MAA is located east of the southeast corner of Horsebarn Hill Road. Developed areas associated with the UConn campus are located west of the facility. Agricultural fields, scrub-shrub, and forested areas are located north, east, and southeast of the facility. The topography of the existing facility and adjacent areas trend to the east-southeast toward a palustrine (marsh) wetland resource area located within approximately 50 feet of the facility.

The NRCS soil survey map of the existing facility and adjacent areas was found to be consistent with soil profiles examined during the July 2013 field investigation. The existing facility is classified as Urban Land, where 85 percent of the soil surface has been altered or obscured by earth work and structures. Soils located north, east, and southeast of the facility are similar to the Woodbridge series, consisting of coarse-loamy, moderately well drained upland soils derived from lodgement till parent material. Moderately well drained soils east of the facility transition to poorly drained and very poorly drained wetland soils similar to the Ridgebury, Leicester and Whitmans soils series. Wetland soils within 100 feet of the facility consist of coarse-loamy mineral soils derived from lodgement till parent material.

The wetland east of the facility is part of a large wetland resource system that extends north and south of the focus area (Figure 3-5). The wetland drains south toward Roberts Brook, a perennial watercourse and tributary to the Fenton River. Within 100 feet of the site, the wetland includes palustrine forest, scrubshrub, and emergent wet meadow cover types. Groundwater discharge was observed from the hillside east of the facility during the July 2013 investigation. Pockets of shallow ponded water were noted within depressions in forested portions of the wetland. Sand and gravel fill piles were noted within the forested portion of the wetland, which indicate historic wetland disturbances. Dominant vegetation within the wetland forest includes: red maple (*Acer rubrum*), green ash (*Fraxinus pennsylvanica*), ironwood (Carpinus caroliniana), winterberry (Ilex verticillata), Virginia creeper (Parthenocissus guinguefolia), oriental bittersweet (*Celastrus orbiculatus*), muliflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), skunk cabbage (Symplocarpus foetidus), jewelweed (Impatiens capensis), cinnamon fern (Osmunda cinnamomea), sensitive fern (Onoclea sensibilis), jack-in-the-pulpit (Arisaema triphyllum), and poison ivy (Toxicodendron radicans). Dominate vegetation in scrub-shrub portions of the wetland includes: multiflora rose, brambles (rubus spp.), Japanese barberry, and oriental bittersweet. Dominate herbaceous species in emergent portions of the wetland include: common reed (Phragmites australis), sensitive fern, milkweed (Asclepias sp.), goldenrod (Solidago spp.), and thistle (Cirsium spp.).

North Campus Parcel G Site

The proposed MAA facility would be located west of the existing tennis courts on Parcel G in an undeveloped portion of the parcel that is dominantly vegetated with mature deciduous forest. The topography slopes toward the west in the vicinity of the development footprint and adjacent areas.



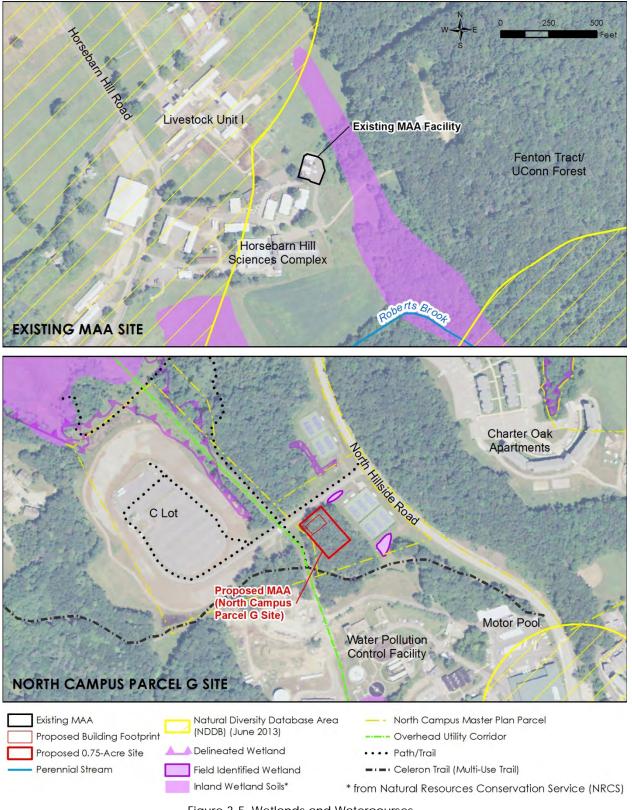


Figure 3-5. Wetlands and Watercourses



The NRCS soil map of the Parcel G site and adjacent areas was found to be generally consistent with soil profiles examined during the July 2013 field investigation. The area of the proposed development footprint was found to be similar to the well-drained Canton and Charlton soil series, consisting of coarse-loamy over sandy-skeletal soils derived from a loamy mantle over sandy till. Areas adjacent to the C Lot Driveway and tennis courts consist of Udorthents, smoothed soils, which are well drained to moderately well drained soils where two or more feet of the original soil surface has been altered by filling, excavation or grading activities. A narrow, man-made drainage swale extends along a portion of the northwest perimeter of the tennis courts on Parcel G. Soils within the swale are classified as Aquents, where redox features were observed within 12-inches of the soil surface. A previously identified and delineated man-made drainage feature is located north of the C Lot Driveway; soils within the swale are classified as Aquents. Satellite imagery⁶ indicates that the man-made drainage swale on Parcel G did not exist prior to 2006 (*Figure 3-5*). It appears to have been created in association with construction of the C Lot Driveway. It functions to receive overland flow from the surrounding uplands and discharge surface water to the upland forest. The swale contained shallow ponded water at the time of the inspection. The swale is vegetated with a variety of hydrophytic emergent vegetation, dominated by: pointed broom sedge (Carex scoparia), soft rush (Juncus effuses), Fox Sedge (Carex vulpinoidea), and shallow sedge (Carex lurida).

The man-made wetland north of the C Lot Driveway receives stormwater from the surrounding developments. The man-made wetland is within 100 feet of the proposed MAA facility and vegetated primarily with the invasive plant species common reed and cattail (*Typha sp.*).

3.6.2 Impact Evaluation

No Action Alternative

No direct or indirect impacts to wetlands resource are anticipated under the No Action alternative. Stormwater from the site would continue to discharge to the adjacent wetland area as untreated surface runoff. The potential for impacts to the adjacent wetlands, Roberts Brook, or the Fenton River would also remain unchanged in the unlikely event of a release of chemicals or other hazardous materials to the environment. However, no releases have previously occurred since the facility was established in 1989.

Proposed Action

The drainage swale adjacent to the tennis courts on Parcel G is located outside of the proposed footprint of the development area for the proposed MAA facility; therefore no direct impacts to this wetland are anticipated as a result of the Proposed Action. No direct or indirect impacts to wetland resources are anticipated due to the facility operations given the proposed stormwater controls and other facility design elements that will significantly reduce the potential for a release of chemicals or other hazardous materials to the environment.

⁶ Google Earth version 7.1.1.1888, released July, 17, 2013



3.7 Wildlife and Vegetation

An Environmental Scientist with Fuss & O'Neill, Inc. investigated the existing MAA and North Campus Parcel G site on July 28, 2013 to document existing vegetation and wildlife. The 2013 field investigation focused on the existing and proposed development footprints and areas within 100 feet of each site (referred to as the Study Areas). Natural resources information obtained from Connecticut Environmental Conditions Online (CTDEEP & CLEAR, 2013) was utilized as part of the investigation. Key habitat types identified within the Study Areas correspond to habitat classifications defined in *Connecticut's Comprehensive Wildlife Conservation Strategy* (CWCS) (CTDEEP and Terwilliger Consulting, Inc., 2005). In addition, information was reviewed from the October 2011 *Final Environmental Impact Statement, North Hillside Road Extension* (FHWA, 2011), which summarizes previous vegetation and wildlife investigations conducted at the North Campus since 1994. Details regarding the 2013 field investigation as well as information pertaining to Parcel G from previous investigations are provided below.

3.7.1 Existing Conditions

Existing MAA Site

The existing MAA is located east of the southeast corner of Horsebarn Hill Road. Developed areas associated with the UConn campus are located west of the facility. Agricultural fields, mown lawn, scrub-shrub, and forested areas are located north, south and east of the facility. The topography of the existing facility and adjacent areas trend to the east-southeast toward a wetland area located within $50 \pm$ feet east of the facility.

The majority of the existing MAA facility Study Area consists of impervious surfaces, including asphalt, building structures, and concrete. Pervious areas include a gravel access drive behind the facility and gravel portions within the interior. Based on field observations, the facility footprint does not provide substantial wildlife habitat. The dominant ecological habitat types within the Study Area include: Upland Herbaceous, Upland Shrub, Shrub Inland Wetland, and Forest Inland Wetland. A brief summary description of each of these habitats is provided below:

- The areas classified as <u>Upland Herbaceous</u> habitat are composed of regularly mowed lawn and field areas dominated by ragweed (*Ambrosia trifida*), thistle (*Cirsium spp.*), pokeweed (*Phytolacca americana*), sensitive fern (*Onoclea sensibilis*) and various species of goldenrod (*Solidago spp.*) and asters (*Asteraceae*). Upland Herbaceous areas are located north and south of the facility.
- The <u>Upland Shrub</u> habitat adjacent to the eastern edge of the facility is dominated by a dense growth of invasive plant species Japanese knotweed (*Polygonum cuspidatum*), multiflora rose (*Rosa multiflora*) and oriental bittersweet (*Celastrus orbiculatus*) as well as sensitive fern, milkweed (*Asclepias sp.*), goldenrod, thistle and asters. This area has been disturbed by historic filling, grading and clearing activities.
- <u>Shrub Inland Wetland</u> habitat is located on a hillside seep east of the facility and is similar to the Upland Shrub habitat described above due to historic grading and clearing activities. The shrub inland wetland is dominated by brambles (*Rubus spp.*), sensitive fern, milkweed, goldenrod,



thistle and asters and invasive plant species multiflora rose, Japanese barberry (*Berberis thunbergii*), common reed (*Phragmites australis*), and oriental bittersweet.

• The <u>Inland Wetland Forest</u> east of the hillside seep is dominated by red maple (*Acer rubrum*), green ash (*Fraxinus pennsylvanica*), ironwood (*Carpinus caroliniana*), winterberry (*Ilex verticillata*), Virginia creeper (*Parthenocissus quinquefolia*), oriental bittersweet, muliflora rose, Japanese barberry, skunk cabbage (*Symplocarpus foetidus*), jewelweed (*Impatiens capensis*), cinnamon fern (*Osmunda cinnamomea*), sensitive fern, jack-in-the-pulpit (*Arisaema triphyllum*), and poison ivy (*Toxicodendron radicans*). Shallow pockets of surface water were observed within wetland. No potential vernal pool habitat was identified within the Study Area.

Direct wildlife observations within the Study Area were limited to eastern cottontail (*Sylvilagus floridanus*), grey squirrel (*Sciurus carolinensis*) and northern cardinal (*Cardinalis cardinalis*). A turkey (*Meleagris gallopavo*) feather was found east of the Upland Herbaceous habitat north of the facility. Wood frogs (*Rana sylvatica*), an obligate vernal pool species, were heard chorusing from the Forested Inland Wetland beyond the limits of the Study Area. Evidence of white tailed deer (*Odocoileus virginianus*) brows was also noted within Forested Inland Wetland within the Study Area. Other wildlife species may be present but were not directly observed, nor was direct or indirect evidence of other species observed during the July 28, 2013 site visit.

Information regarding Connecticut State listed endangered, threatened, and special concern plant and animal species is maintained by the Connecticut Natural Diversity Database (CT NDDB) in accordance with CGS Sections 26-306-4 through 26-306-6. Mapping provided by the CT NDDB identifies general areas of concern for known occurrences of State- and Federally-listed endangered, threatened and special concern species and significant natural communities. Current CT NDDB mapping, dated June 2013 (*Figure 3-5*), indicates that areas of concern exist in and adjacent to the Study Area, but outside of the footprint of the existing MAA facility and immediate surrounding area.

North Campus Parcel G Site

As described previously in the subject EIE, the western portion of North Campus Parcel G is undeveloped, while tennis courts are located on the eastern portion of Parcel G. Parcel G is bounded to the north by the C Lot Driveway, to the east by North Hillside Road, and to the west by an overhead electrical utility corridor. The proposed MAA facility would be located west of the existing tennis courts within the undeveloped portion of the parcel. The topography slopes toward the west in the vicinity of the development footprint and adjacent areas.

The tennis courts, C Lot Driveway, and adjacent mowed areas do not provide substantial wildlife habitat. Based on field observations, the dominant habitat types within the Study Area are Upland Forest and Intensively Managed utility right-of-way. A brief summary description of these habitats is provided below:

• The undeveloped portion of Parcel G consists of mature <u>Upland Forest</u>. Mature Upland Forest habitat is also located north and west of Parcel G. Areas classified as Upland Forest within the Study Area are dominated by red oak (*Quercus rubra*), red maple, hickory (*Carya spp.*), eastern white pine, white ash (*Fraxinus americana*) ironwood, hornbeam (*Ostrya virginianan*), mapleleaf viburnum (*Viburnum acerifolium*), lowbush blueberry (*Vaccinium angustifulium*), Virginia creeper,



oriental bittersweet, New York fern (*Thelypteris noveboracensis*), lady fern(*Athyrium filix-femina*), Canada mayflower (*Maianthemum canadense*), wintergreen (*Chimaphila maculate*), rattlesnake plantain (*Goodyera tesselata*), and Christmas fern (*Polystichum acrostichoides*). Invasive plant species glossy buckthorn (*Rhamnus frangula*) was noted growing along the north side of the C Lot Driveway.

• An overhead electrical utility corridor is located west of the proposed development boundary and extends north and south of Parcel G. The ecological habitat within the corridor is classified as <u>Intensively Managed</u> in the CWCS. The following dominant species were documented within the Intensively Managed portions of the Study Area: glossy buckthorn, brambles, sweet-fern (*Comptonia peregrina*), mapleleaf viburnum, mullein (*Verbascum thapsus*), birdfoot trefoil (*Lotus corniculatus*), cow vetch (*Vicia cracca*) and various species of goldenrod and aster.

Direct wildlife observations within the Study Area included white-tailed deer, groundhog (*Marmota monax*), grey squirrel, northern cardinal, and red-tailed hawk (*Buteo jamaicensis*). A groundhog den was observed on Parcel G within the Upland Forest. Other wildlife species may be present but were not directly observed, nor was direct or indirect evidence of other species observed during the July 28, 2013 site visit.

Current NDDB mapping, dated June 2013 (*Figure 3-5*), indicates that no identified areas of concern exist within the Study Area. The nearest CT NDDB identified area of concern is located approximately 700 feet southeast of the Study Area.

3.7.2 Impact Evaluation

No Action Alternative

No direct or indirect impacts to wildlife or vegetation are anticipated under the No Action alternative. Stormwater from the site would continue to discharge to the adjacent wetland area as untreated surface runoff. The potential for impacts to the adjacent wildlife habitats would also remain unchanged in the unlikely event of a release of chemicals or other hazardous materials to the environment. However, no releases have previously occurred since the facility was established in 1989.

Proposed Action

Development of the proposed MAA facility on Parcel G would result in the loss of approximately 0.75 acres of mature Upland Forest habitat. However, un-fragmented continuous tracks of mature forest are located to the north, west, and east of Parcel G, including the approximately 64-acre Hillside Environmental Education Park (HEEP) conservation area north and west of the former UConn landfill and approximately 100 acres of additional upland forest and wetlands that are proposed as conservation land on the North Campus as part of the mitigation associated with the North Hillside Road extension and subsequent development of the North Campus. Loss of this relatively small, fragmented upland forest on the Parcel G site is not anticipated to have a significant adverse impact to existing wildlife.

Similar to the No Action alternative, no direct or indirect impacts to wildlife or vegetation are anticipated due to the facility operations given the proposed stormwater controls and other facility design elements that will significantly reduce the potential for a release of chemicals or other hazardous materials to the environment.



3.8 Cultural Resources

3.8.1 Existing Conditions

Existing MAA Site

There are no known historical or archaeological sites located at or in the vicinity of the existing MAA according to the National Register of Historic Places (NRHP). The Farwell Barn and the "University of Connecticut Historic District, Connecticut Agricultural School" are the only two sites on the UConn campus listed on the NRHP.

North Campus Parcel G Site

The following cultural resource surveys have been completed along the corridor of the proposed North Hillside Road extension in support of previous environmental reviews: (1) Phase 1A Archaeological Survey of the North Campus area (PAST, 1987), consisting of a literature search and sensitivity study, and (2) Phase 1B (field investigation) and Phase 2 (site evaluation) Archaeological Surveys (Lavin, Lucianne and Marc Banks, 2005 & 2006). The survey findings indicated that construction of the North Hillside Road extension will not result in significant impacts to historical or archaeological resources. However, the Phase 1A Archaeological Survey identified potential areas of prehistoric value on several of the North Campus parcels, including Parcel G. The Phase 1B and Phase 2 archaeological surveys were limited to the roadway corridor and did not evaluate Parcel G.

3.8.2 Impact Evaluation

No Action Alternative

The No Action alternative would result in no impacts to cultural resources since there are no known historical or archaeological resources in the vicinity of the existing MAA. No ground disturbance or alteration of existing structures is proposed as part of the No Action alternative.

Proposed Action

Since Parcel G contains potential areas of prehistoric value, development of this parcel requires additional archaeological surveys prior to construction to determine if development activities would impact cultural resources. Consistent with the mitigation commitments in the Record of Decision (ROD) for the North Hillside Road Extension EIS, dated April 4, 2012, UConn will conduct additional cultural resource investigation of Parcel G (Phase 1B Archaeological Reconnaissance Survey) prior to development and will coordinate with the State Historic Preservation Office (SHPO) and the Tribal Historic Preservation Officers (THPOs) of the Mashantucket Pequot and Mohegan Tribes to ensure that historic, archaeological, and cultural resources are protected. The SHPO and/or TPHOs may require UConn to conduct additional archaeological investigations, including Phase 2 and Phase 3 (data recovery) surveys to further evaluate the presence of archaeological resources on Parcel G.



3.9 Visual and Aesthetic Character

3.9.1 Existing Conditions

Existing MAA Site

The existing MAA is situated near the southeast corner of Horsebarn Hill Road at the eastern limits of the Storrs campus. The visual environment of the surrounding area is dominated by agricultural land and several administrative and academic buildings. Livestock Unit I is located to the northwest, the Fenton Tract of the UConn Forest is located to the east, and the Horsebarn Hill Sciences Complex is located to the south of the site.

The site previously housed a dog kennel before the facility was converted into the University's centralized waste storage facility in 1989, and expanded over time into the current MAA facility. The existing facility consists of approximately 1,500 square feet of permanent structures; 2,700 square feet of trailer storage surrounded by perimeter fencing with barbed wire and a locked gate; and a paved area for parking, truck access, and patrols. *Figure 1-2* illustrates the visual appearance of the existing MAA facility.

North Campus Parcel G Site

The site of the proposed MAA is situated on the western portion of North Campus Parcel G, which is characterized by a fragmented wooded upland forest surrounded by developed land uses. The adjacent development includes an overhead electrical utility corridor to the west, the C Lot and C Lot Driveway to the north and northwest, tennis courts and North Hillside Road to the east, and the Celeron Trail, UConn Transfer Station, and UConn WPCF to the south. No scenic roads⁷ are located adjacent to the proposed site. Photographs in *Figures 3-6 through 3-8* illustrate the existing aesthetic and visual conditions of the project site and surrounding area.



Figure 3-6. Site of Proposed MAA on North Campus Parcel G Looking Southeast

⁷ State-designated scenic highway must abut significant natural or cultural features such as agricultural land or historic buildings and structures which are listed on the National or State Register of Historic Places, or afford vistas of marshes, shoreline, forests with mature trees, or other notable natural or geologic feature which singularly or in combination set the highway apart from other state highways as being distinct (CTDOT, 2013).





Figure 3-7. Site of Proposed MAA on North Campus Parcel G Looking Southwest



Figure 3-8. C Lot and C Lot Driveway Looking East Toward Parcel G

3.9.2 Impact Evaluation

No Action Alternative

No change to the existing visual environmental would result under the No Action alternative. However, the appearance of the existing MAA is inconsistent with the visual character of similar, modern waste storage facilities, such as those of MAAs at peer universities (*Figures 3-9 and 3-10*).

Proposed Action

The Proposed Action would result in a change to the overall visual and aesthetic character of the Parcel G site. The facility would be likely visible from North Hillside Road developments immediately north of



Parcel G. A limited view of the facility would exist from developed areas south of the site, including the Celeron Trail, as a wooded buffer would be maintained along the southern portion of Parcel G. However, the design and exterior appearance of the facility would be consistent with the nearby existing University and industrial land uses (e.g., C Lot, overhead electrical utility corridor, and UConn Transfer Station and WPCF) as well as with the research and technology uses of the future UConn Technology Park. Although a final design of the facility has not been prepared, it is anticipated to have a visual appearance similar to that of central waste storage facilities at peer universities, as shown in the photos in *Figures 3-9 and 3-10.* Consequently, no direct or indirect impacts to visual resources are anticipated as a result of the Proposed Action.



Figure 3-9. MAA Facility – University of Vermont Main Campus



Figure 3-10. MAA Facility – Cornell University Tech Park



3.10 Geology, Topography, and Soils

3.10.1 Existing Conditions

Existing MAA Site

The existing MAA is located on a relatively flat site sloping easterly toward the Fenton Tract of the UConn Forest. Soils in the area are designated by the Natural Resources Conservation Service (NRCS) as primarily Urban Land (*Figure 3-11*). These soils have been influenced by site development, including filling and grading, and are mostly covered by paved areas, buildings, and/or other structures making the soil properties varied and unknown. The soils adjacent to the site, downgradient to the east, are Woodbridge fine sandy loam (3 to 8% slopes) with an estimated saturated hydraulic conductivity of 0.0 to 0.2 inches per hour (in/hr), which is very low to moderately high infiltration potential with a Hydrologic Soil Group (HSG) classification of "Group C." Group C soils have low infiltration rates when thoroughly wet and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine texture. These soils generally have a low rate of water transmission. Beneath the soil layer, surficial materials on the site are mapped as till which is generally less than 50 feet thick. No Prime Farmland Soils or Soils of Statewide Importance are present on the site of the existing MAA (*Figure 3-11*).

North Campus Parcel G Site

The North Campus Parcel G Site is relatively flat and generally slopes to the southwest toward the southern limit of the former UConn landfill (including the south leachate interceptor trench and south detention pond) and the existing C Lot. Soils on the site are designated by the NRCS as primarily Canton and Charlton soils (3 to 8% slopes, very stony) with saturated hydraulic conductivity of 0.57 to 5.95 inches per hour, which is considered well drained *(Figure 3-11)*. The HSG of Canton and Charlton soils is identified as "Group B." Group B soils have moderate infiltration rates when thoroughly wet and consist chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. These soils generally have a moderate rate of water transmission. There are no areas of Prime Farmland Soils or Soils of Statewide Importance within or adjacent to the site.

Beneath the soil layer, surficial materials on the site are mapped as thick till. The depth to bedrock in this area is typically 0 to 20 feet below grade surface with the metamorphic fabric striking northerly and predominant fractures dipping to the west.

3.10.2 Impact Evaluation

The No Action alternative would have no adverse impacts on topography, soils or geologic features as existing conditions would remain unchanged.

No soils or geologic features of national, state, or local importance or farmland soils are located within the area of proposed development under the Proposed Action. Some grading would be required to construct a new MAA facility on the Parcel G site. No direct or indirect impacts to geology or farmland soils are anticipated as a result of the construction of the facility.



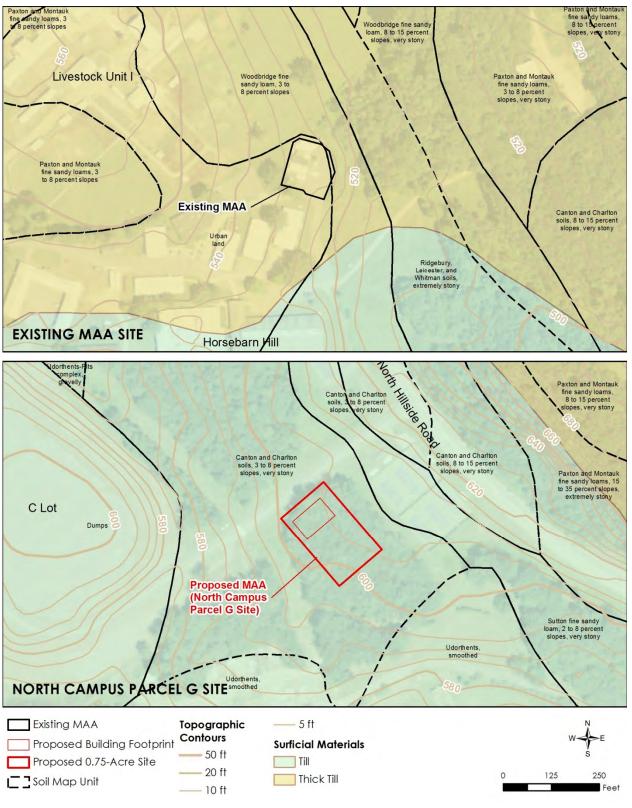


Figure 3-11. Geology, Topography and Soils



The facility design will incorporate spill containment measures to provide secondary and tertiary containment for regulated waste storage and handling areas, state-of-the-art security systems, and required training, inspections, and contingency planning to meet applicable state and federal regulatory requirements for safe operation of the facility, as described in *Section 3.13, Hazardous Materials* and elsewhere in the subject EIE.

The USGS was contacted for their opinion on potential impacts of the MAA related to the landfill closure at Lot C. They provided the contact at Haley & Aldrich to comment on the potential impacts. According to Haley & Aldrich, it is also unlikely that the proposed MAA would affect the former landfill structures or remediation systems or that leachate from the former landfill would affect the site of the proposed MAA (Haley & Aldrich, Inc., personal communication, July 31, 2013).

The proposed facility design elements will reduce the potential for subsurface impacts associated with a release of chemicals or other hazardous materials to the environment. The Proposed Action is therefore not anticipated to result in adverse direct or indirect impacts to soils, groundwater, or geology.

Construction-phase soil erosion and sedimentation controls are addressed in *Section 3.16, Construction Impacts.*

3.11 Utilities and Services

3.11.1 Existing Conditions

Electrical and Emergency Power, Natural Gas, Steam, and Chilled Water The Central Utility Plant (CUP), located at 189 Auditorium Road, provides the campus with electricity, steam for heating and hot water in campus buildings, and chilled water for cooling needs. The CUP is comprised of three separate buildings: a co-generation ("co-gen") plant, a boiler plant, and a chiller plant. The University generates electricity from the co-gen plant's three 7.5-megawatt turbines, the exhaust from which provides thermal energy that powers three heat recovery steam generators (HRSG). The three HRSGs produce high pressure (600 – 650 psi) steam, which is used to power a 5-MW electric generator, and low pressure (125 psi) steam, which is used to heat campus buildings during cold months and to power three chillers that supply chilled water to campus during warmer months. The boiler plant generates steam to supplement the HRSGs for campus heat. The CUP's chilled water plant produces chilled water (~ 50° F) for distribution in a closed-loop system to approximately 30 buildings in the central portion of campus. The chilled water is primarily used for building air conditioning, but also has applications in once-through process cooling for some research equipment. The central chiller plant currently has a cooling capacity of 10,000 tons. Buildings that are not serviced by this central chiller plant are served by the University's south chiller plant, have individual chillers, or use window or rooftop air conditioning units. The CUP's turbines, boilers, and chillers are fueled by natural gas that is provided by Connecticut Natural Gas (CNG), with fuel oil as a back-up fuel source for the turbines and boilers. The campus is connected to the electrical transmission system of Connecticut Light and Power (CL&P), which provides auxiliary electricity supply for the campus.

The existing MAA is connected to the campus-wide electrical system. The waste storage structures are served by electric heating and cooling systems; no natural gas service is available to the facility. The



existing MAA consists of 1,500 square feet of permanent structures and 2,700 square feet of trailer storage. The electrical demand of these structures is insignificant compared to the total campus energy, heating, and cooling demands.

The North Campus Parcel G site is not currently served by utilities, although electrical and natural gas are available along the North Hillside Road corridor. A 6-inch natural gas main is provided by CNG. Chilled water and steam are not available in the vicinity of the project site.

Energy Use and Conservation

UConn has several ongoing energy efficiency and sustainability initiatives at the Storrs campus:

- *Campus Sustainable Design Guidelines (JJR and SmithGroup, 2004)* The Guidelines include specific measures for reduction of energy consumption on new construction projects on campus including:
 - o Planning sustainable sites
 - o Safeguarding water
 - Conserving materials and resources
 - o Improving energy efficiency
 - Enhancing indoor environmental quality
- Sustainable Design & Construction Policy⁸ Adopted in 2007, the policy requires new building construction or renovation projects entering the pre-design planning phase to meet the Leadership in Energy & Environmental Design (LEED) Silver rating as a minimum performance standard for any building construction or renovation project, and whenever the estimated total project cost exceeds \$5 million, excluding the cost of equipment other than building systems.
- UConn Climate Action Plan⁹ The University is striving towards a carbon neutral campus by the year 2050. The UConn Climate Action Plan focuses on strategies for reducing greenhouse gas emissions from the University. Progress is being tracked through an annual greenhouse gas inventory.
- Renewable Energy Strategic Plan¹⁰ The *Preliminary Feasibility Study and Strategic Deployment Plan for Renewable & Sustainable Energy Projects* identifies and assesses target locations for the development of 12 demonstration-scale renewable and sustainable energy projects for the following technologies: solar thermal, solar photovoltaic, wind, fuel cells, geothermal, and biofuels.

⁸ <u>http://www.ecohusky.uconn.edu/SDCpolicy.htm</u>

⁹ http://www.ecohusky.uconn.edu/pcc/climateactionplan.html

¹⁰ <u>http://www.ecohusky.uconn.edu/docs/energy/Final%20Renewable%20Deployment%20PlanMCr.pdf</u>



 "Relamping" Campaign¹¹ - UConn expects a dramatic drop in its electricity demand due to an extensive lighting system upgrade campaign targeting 67 buildings on campus. These upgrades will increase energy efficiency, decrease overall energy use, and reduce greenhouse gas emissions.

Sanitary Sewer

UConn owns, operates, and maintains its own sanitary sewer system and Water Pollution Control Facility (WPCF) located off of LeDoyt Road. The sewer service area includes the Main Campus, the Depot Campus, and some non-University owned properties surrounding campus (residential properties, apartment complexes, commercial properties, Town of Mansfield owned properties).

The WPCF capacity is currently 3.0 million gallons per day (mgd) with a peak flow capacity of 7.2 mgd. Although the WPCF is permitted to discharge an average of 3.0 mgd, the average daily discharge has been between 0.62 mgd and 1.53 mgd for the August 2010 and April 2010 quarters, respectively, which are the most recently reported values. The maximum daily flow for 2009 and 2010 has ranged from 1.11 mgd (for the quarter ending July 2009) to 4.35 mgd (for the quarter ending April 2010) (Milone & MacBroom, Inc., 2011b).

The University recently opened a separate water treatment facility to provide tertiary treatment to effluent from the WPCF. This "Reclaimed Water Facility" (RWF) produces high-quality reclaimed water for use in non-potable applications such as heating and cooling.

The existing MAA is served by a sanitary sewer line that connects to a force main from the Horsebarn Hill Lift Station. Wastewater flows from the existing MAA were estimated based on the existing 1,500 square foot permanent structure, which has laboratory space and a restroom. Wastewater discharge estimates are based on the *Connecticut Public Health Code Regulations and Technical Standards for Subsurface Sewage Disposal Systems* (2011). The total estimated wastewater discharge from the existing building is approximately 15 gpd, with a projected peak flow of approximately 0.05 gallons per minute (gpm).

The North Campus Parcel G site is currently undeveloped and therefore has no existing wastewater generation. A 15-inch sanitary sewer force main exists near the site, situated approximately parallel to the Celeron Trail along the southern edge of Parcel G. A gravity sanitary sewer connection exists to a shed located on the north side of the tennis courts on Parcel G.

Water (Domestic and Fire Protection)

UConn manages water supplies from the Fenton River and Willimantic River wellfields, which serve the Storrs campus as well as portions of the Town of Mansfield. Average daily demand in 2010 was 1.29 million gallons per day (mgd) and peak daily demand in 2010 was 2.23 mgd. The supply and distribution system also includes a water treatment facility at each wellfield, three booster pumping stations, six water storage tanks, and 36 miles of water transmission and distribution mains (Milone & MacBroom, 2011a).

¹¹ <u>http://ecohusky.uconn.edu/energy/relamping.html</u>



The existing MAA uses an estimated 15 gpd of water for bathrooms and laboratory facilities based on the sanitary sewer generation estimate described in the previous section. The water demand of the existing MAA is inconsequential compared to the total campus demand. No demand for water presently exists at the North Campus Parcel G site since the site is currently undeveloped.

The need for reducing withdrawals from the Fenton River wells during periods of low in-stream flow was concluded in the *Long Term Impact Analysis of the University of Connecticut's Fenton River Water Supply Wells on the Habitat of the Fenton River* ("Fenton River Study") (Warner et al., 2006). Following the Fenton River Study, a similar study was performed for the hydrogeologic capability of the Willimantic River Wellfield to supply its registered withdrawal, *An Analysis of the Impact of the University of Connecticut Water Supply Wells on the Fisheries Habitat of the Willimantic River* ("Willimantic River ("Willimantic River Study") (Milone & MacBroom, 2010). The two studies concluded that the existing wellfields had likely reached their limits for public water supply. UConn's 2011 *Water Supply Plan* also recognized that the Fenton River supply would likely be limited during some summer and fall months to much lower withdrawals than the diversion registration allowed for, and that additional supply sources would be needed in the future (Milone & MacBroom, 2012).

In order to enable growth of the University and the surrounding area consistent with University and Town planning objectives, UConn and the Town of Mansfield conducted an evaluation of alternatives that would meet future combined water supply needs. The evaluation was documented in the CEPA *Environmental Impact Evaluation (EIE), Potential Sources of Water Supply* (Milone & MacBroom, 2012). The preferred alternatives identified in the EIE were interconnection with the Connecticut Water Company, Metropolitan District Commission, and/or the Windham Water Works. In August 2013, the UConn Board of Trustees endorsed the Connecticut Water Company as the University's preferred alternative to supplement the long-term water needs of the campus and those portions of the Storrs community served by the University water system. Connection with the Windham Water Works was identified as a backup source.

Stormwater/Drainage

Stormwater discharges from the site of the existing MAA as overland runoff. The site has no structural storm drainage systems. The site generally slopes to the east-southeast, and stormwater runoff from the site flows toward a wooded area associated with the Fenton Tract of the UConn Forest. The existing MAA is located in the Fenton River subregional basin within the Roberts Brook watershed *(Figure 3-3)*.

The North Campus Parcel G site is currently undeveloped and therefore has no structural storm drainage systems. The storm drainage system along North Hillside Road adjacent to Parcel G consists of a traditional collection system of catch basins, manholes, stone-lined drainage swales on the upgradient side of the road, and a drainage pipe network that discharges to the adjacent wetlands. Catch basins and storm drainage pipes located along the C Lot Driveway collect and convey runoff from the driveway north towards wetlands associated with Cedar Swamp Brook. The project site is located in the Willimantic River subregional basin and the Eagleville Brook watershed. The drainage divide between the Cedar Swamp Brook watershed and the Eagleville Brook watershed is located to the north of Parcel G along the southern edge of the C Lot Driveway.



As discussed in *Section 3.5*, Eagleville Brook is listed as an impaired water body by CTDEEP. Total Maximum Daily Loads (TMDL) for impervious cover and bacteria have been developed for Eagleville Brook, requiring improved stormwater management for existing and proposed development within the watershed. A recently approved CTDEEP Flood Management Certification (FM-201205381) and other pending state and federal permits associated with the North Hillside Road extension will require the use of Low Impact Development (LID) and green infrastructure approaches to stormwater management for future development of the North Campus parcels.

Telecommunications

Telecommunications services, including internet and telephone, are available at the existing MAA and are also available in the vicinity of the North Campus Parcel G site.

3.11.2 Impact Evaluation

Electrical and Emergency Power, Natural Gas, Steam, and Chilled Water Potential energy consumption of the Proposed Action is likely to be similar or slightly greater than under the No Action alternative. Under the Proposed Action, the extension of gas, water, sewer, electric, and telecommunication utility lines will occur to serve a new MAA on the Parcel G site. The increase in electrical, natural gas, steam and chilled water demand compared to existing conditions are anticipated to be minor, if any. The existing capacity of the UConn CUP/CNG and CL&P systems are sufficient to meet the demand.

Energy Use and Conservation

Under the No Action alternative, energy demand at the existing MAA would remain unchanged. The Proposed Action is anticipated to result in a slight increase in energy demand to serve the proposed MAA facility, which is larger than the existing MAA facility and includes more sophisticated building systems. The proposed facility will also incorporate modern, energy efficient lighting, HVAC, and other building systems, which will tend to offset the increased energy demand due to the larger size of the facility. The increase in energy demand, if any, would be minor and would not affect the ability of UConn to meet its sustainability goals.

The Proposed Action will consider the *Campus Sustainable Design Guidelines* (JJR and SmithGroup, 2004), which include specific measures for reduction of energy consumption on new construction projects on campus. Although the Sustainable Design & Construction Policy may not apply to this project since the construction costs are anticipated to be less than \$5 million, the project will use comprehensive approaches to energy efficiency in the design of the new MAA building.

Sanitary Sewer

Under the No Action alternative, wastewater flows to the sanitary sewer system and wastewater treatment plant would remain similar to existing levels, which are estimated at 15 gpd. The projected wastewater flows associated with the proposed facility were estimated based on an approximately 5,800 square foot industrial-use building. The conceptual interior floor plan of the proposed MAA includes laboratory space and one restroom. Wastewater discharge estimates are based on the *Connecticut Public Health Code Regulations and Technical Standards for Subsurface Sewage Disposal Systems* (2011). The total estimated wastewater discharge from the facility is approximately 60 gpd, with a projected peak flow of



approximately 0.21 gallons per minute (gpm). Typical flows reported for the UConn WPCF are between 0.62 mgd and 1.53 mgd (Milone & MacBroom, 2011b), and the facility is permitted for up to 3.0 mgd.

Therefore, the WPCF has sufficient capacity for the anticipated minor increase in sanitary wastewater flows from the proposed MAA facility.

Water (Domestic and Fire Protection)

No significant change to the existing water demand is anticipated under the No Action alternative. Similar to wastewater and sanitary sewer demand, the Proposed Action is expected to result in a minor increase in water demand at the proposed MAA due to the larger building size and greater number of staff compared to that of the existing MAA. The estimated water demand from the proposed MAA is approximately 60 gpd, which is roughly equivalent to the estimated water supply infrastructure on campus, combined with the University's existing and additional future water supply sources, is sufficient to accommodate this minor increase in water demand.

Stormwater/Drainage

Under the No Action alternative, stormwater from the existing MAA would continue to discharge to the adjacent wooded area as untreated surface runoff, and the facility would remain located within the public water supply watershed of the Willimantic Reservoir. The potential for impacts to surface water resources would also remain unchanged in the unlikely event of a release of chemicals or other hazardous materials to the environment. It should be noted that the existing MAA has been operated safely and has never experienced a release since it was established in 1989.

The stormwater management system for the new MAA will be consistent with the guidelines contained in the CTDEEP *Connecticut Stormwater Quality Manual* (as amended) and the requirements of the CTDEEP Flood Management Certification (FM-201205381) and other pending permit applications for the North Hillside Road extension and North Campus development, including CTDEEP Water Diversion Permit, Inland Wetlands and Watercourses Permit, and 401 Water Quality Certification in addition to a Section 404 Army Corps of Engineers individual permit. As a condition of these permits, design plans for development of Parcel G, including the proposed MAA, will be submitted to the CTDEEP for review and approval prior to the start of construction. The stormwater management system will also incorporate construction and post-construction management strategies to address the bacteria exceedances identified in both the Eagleville Brook Watershed Management Plan (Dietz & Arnold, 2011) and the Connecticut Statewide Bacteria TMDL.

The stormwater management measures for the site will consist of a combination of source controls, pollution prevention, LID and conventional structural stormwater management practices, and spill containment. The stormwater management strategy for the site will incorporate the following key elements:

• Non-structural source controls and pollution prevention measures (parking lot sweeping, catch basin cleaning, drainage system and stormwater treatment system operation and maintenance, etc.) will be implemented after construction of the proposed facility.



- LID approaches such as drywells, rain gardens, vegetated swales, and other infiltration techniques to infiltrate runoff from the building roof and sidewalks or paved areas where regulated wastes will not be handled. The soils at the North Campus Parcel G site have moderate to high infiltration potential (Hydrologic Soil Group B). Site-specific testing is required to verify the suitability of the soils and subsurface conditions to support stormwater infiltration.
- Runoff from loading areas or other locations where regulated wastes will be handled will be directed to a stormwater collection system that can be effectively closed in the event of a spill, so that it is contained prior to discharge to the ground or the larger stormwater system. Such facilities will incorporate shut-off valves, impermeable liners, or other similar design features to reduce the potential for a release to the environment.
- The stormwater system design will incorporate management strategies to address the bacteria exceedances identified in both the Eagleville Brook Watershed Management Plan (Dietz & Arnold, 2011) and the Connecticut Statewide Bacteria TMDL, including filtration practices such as lined and underdrained bioretention systems or subsurface sand filters, both of which are effective at reducing stormwater bacteria concentrations without relying on infiltration.

The facility design will also incorporate spill containment measures to provide secondary and tertiary containment for regulated waste storage and handling areas, state-of-the-art security systems, and required training, inspections, and contingency planning to meet applicable state and federal regulatory requirements for safe operation of the facility.

The proposed stormwater management and facility design elements will reduce the potential for impacts associated with a release of chemicals or other hazardous materials to the environment. The Proposed Action is therefore not anticipated to result in adverse direct or indirect impacts related to stormwater drainage or surface water and groundwater resources.

Telecommunications

Telecommunication services are available to the existing MAA and in the vicinity of the North Campus Parcel G site. Therefore, no impacts are anticipated as a result of the No Action alternative or Proposed Action.

3.12 Public Health and Safety

3.12.1 Existing Conditions

The UConn Division of Public Safety maintains campus fire, police, and ambulance services for the protection of life and property at the Storrs campus. UConn Public Safety personnel also respond to some local town emergencies and members of the UConn Police Department are appointed special constables within the Town of Mansfield. The police and fire departments are co-located on campus at 126 North Eagleville Road. The campus has a state-of-the-art Emergency 911 center and a system of emergency phones is located throughout the campus.



The UConn Police Department is an organized police department with the same authority and responsibilities as any municipal police department within the State of Connecticut. The UConn Police Department currently has 51 police officers at the main campus in Storrs. They are on duty 24 hours a day throughout the year and patrol the campus on foot, and in both marked and unmarked police vehicles. UConn police officers are responsible for enforcing all of the laws of the State of Connecticut, both criminal and motor vehicle.

The UConn Police Department also operates the University Alert Notification System which provides a number of ways in which the University may contact the community in the event of an emergency. The components of the University Alert Notification System include website alerts, email, voice mail, outdoor sirens and Code Blue Phone Kiosks.

The 2011 Annual Security Report for the Storrs campus published by the UConn Division of Public and Environmental Safety shows that the majority of campus crimes involve burglary and liquor and drug violations (UConn, 2011).

The UConn Fire Department is a fully operational department providing 24/7 response from the Public Safety Building on North Eagleville Road. The fleet includes two engines, a tower ladder, four basic life support ambulances, a pair of hazardous materials response vehicles, a decontamination trailer and numerous support vehicles. The Fire Department responds to all emergencies and performs routine duties. These duties include, but are not limited to, fire code inspections in academic and residential buildings and approving an open-flame permit at a new construction site. All of the firefighters are Hazardous Material trained to technician level.

The Mansfield Fire Department provides first responder services for incidents within Mansfield and outside of the University campus and also provides backup for the UConn Fire Department. The Mansfield Fire Department is a full-service fire and rescue department, consisting of both career and volunteer members divided among three stations. The department responds to as many as 2000 emergency calls per year including fires, medical incidents, service calls, and hazardous conditions incidents, including hazardous materials incidents (Mansfield Fire Department, 2013).

Medical services that are available to UConn students, faculty, and staff include:

- UConn Student Health Services Student Health Services is located on-campus and provides numerous basic health services for UConn students, including clinic, advice nurse, community response, mental health, laboratory, radiology, orthopedic, allergy, nutrition, pharmacy, and physical activity counseling services.
- Windham Community Memorial Hospital UConn is located approximately 9 miles from this facility, which offers emergency services, inpatient and outpatient care, and other services.
- Natchaug Hospital This facility provides adult and adolescent psychiatric and substance abuse treatment services.
- Rockville General Hospital UConn is located approximately 15 miles from this facility.



 Manchester Memorial Hospital – UConn is located approximately 18 miles from this facility, which offers emergency services, inpatient and outpatient care, and other services.

The UConn EH&S provides comprehensive health and safety services for the University community. EH&S develops and administers policies and procedures to present personal injury and maintain regulatory compliance in the areas of biological, chemical, occupational and radiation safety. Training chemical, biological, radiation, and general laboratory safety, as well as occupational safety, is offered to the University community by EH&S. In addition, EH&S operates the existing MAA and provides regulated waste management for the campus. A more detailed description of regulated waste management can be found in *Section 3.13, Hazardous Materials*.

3.12.2 Impact Evaluation

The University has sufficient public safety and emergency services to address the needs of an MAA under either the No Action or Proposed Action alternative. For each alternative, timely emergency response is possible and the Proposed Action is not anticipated to place a burden on the capacity of UConn Police or Fire Departments. Specific emergency response procedures are described in the facility's contingency plan and involve significant coordination between EH&S, the UConn Police Department, and both the UConn and Mansfield fire departments. In the unlikely event of a release of regulated waste during transport of waste to or from the MAA by UConn or commercial waste transport vehicles, the first responder responsibilities are dictated by the jurisdiction of the release location (i.e., Town of Mansfield or University property), although the response procedures would be similar regardless of the first responder.

Although the existing emergency response capabilities are adequate for both the existing and proposed MAA facilities, the UConn Fire Department indicated during the 2012 siting study that threat to public health and safety is an important factor in determining the timeliness in responding to a hazardous material release emergency. Remote locations or those removed from vulnerable natural resources provide cushion to allow for measured and efficient response and later, cleanup. Although a release from the existing MAA facility has not occurred since the facility was established, a leak or fume release at the proposed location would have greater potential for public impact than the existing location due to the proximity of larger numbers of people in the vicinity of or downwind¹² of the facility, as discussed in *Section 2, Alternatives Considered.* This could increase human exposure in a shorter time and could increase potential interruption to daily campus operations. These factors increase the pressure to perform emergency response and mitigation faster, which may involve greater risk to first responders.

¹² Prevailing winds on the UConn, Storrs campus vary seasonally. Weather data is collected and maintained by the UConn Department of Natural Resources and the Environment (NRE) Water Resources Field Station, which is located near the existing MAA off of Horsebarn Hill Road. Weather data collected at this station indicate that the annual prevailing wind direction for 2011 and 2012 is from the west and southwest. Localized wind direction also varies at different points on the campus depending on a variety of factors such as topography, tree cover, buildings, etc. Additional information regarding the prevailing wind direction is provided in the 2012 Main Accumulation Area Facility Comparative Site Study report (in *Appendix B* of this E1E).



Under the No Action alternative, response times from the Public Safety Building would be longer in the event of an emergency at the existing MAA, but the MAA is located in an area of lower population density (see *Figure 3-12*). In contrast, the site of the proposed MAA on North Campus Parcel G is closer to the UConn Public Safety Building, but more proximal to more densely populated areas of the campus.

3.13 Hazardous Materials

3.13.1 Existing Conditions

Regulated Waste Management

Hazardous wastes are defined by their corrosive, reactive, ignitable, or toxic characteristics that can potentially harm human health or the environment when improperly managed. Hazardous waste generation, treatment, storage, and disposal is regulated under the Federal Resource Conservation and Recovery Act (RCRA). The disposal of hazardous waste is regulated pursuant to sections 22a-449(c)-11 and 22a-449(c)-100 through 22a-449(c)-110 of the Regulations of Connecticut State Agencies.

UConn generates chemical, biological, and low-level radioactive wastes from the University's academic research and teaching laboratories and certain facility operations on the Storrs campus. These wastes are managed by EH&S in compliance with local, state, and federal regulations, as well as University health and safety policies and procedures. Since 1989, the University has maintained a centralized facility, the existing MAA, for the temporary storage of these regulated wastes.

EH&S personnel regularly collect regulated waste from the estimated 1,200 satellite accumulation areas on the Storrs campus and transport the waste via trucks to the MAA facility. Wastes are temporarily stored at the MAA facility and managed by EH&S. In 2012, a total of approximately 160,000 pounds of chemical waste and 50,000 pounds of biological waste were temporarily stored at the MAA (UConn EH&S, personal communication, August 8, 2013). The storage of chemical hazardous wastes at the MAA facility is limited to 90 days or less, pursuant to state and federal hazardous waste regulations. Commercial waste haulers are hired for scheduled pickups at the MAA facility and transport the waste to the appropriate off-campus disposal facilities. The commercial waste transport vehicles are regulated by the U.S. Department of Transportation and meet stringent hazardous waste transporter requirements. UConn imposes restrictions on the routes that waste vendors are allowed to take on campus depending on the size of the vehicle. Chemical wastes are typically removed monthly, biological/medical wastes are typically removed every 12 to 15 months.

The existing MAA is designed and operated to provide secondary containment for waste container storage and handling, weekly inspections and documentation, contingency plans, and security measures. EH&S also maintains a Hazard Communication Program in accordance with the Department of Labor, Occupational Safety and Health Administration's Hazard Communication Standard (29 CFR 1910.1200). The program outlines protocols for labeling of hazardous chemicals, Material Safety Data Sheets (MSDS), training, and contractor work. Since it was established in the late 1980s, the MAA facility has been operated safely, not having experienced a release, break-in, or other security threat.



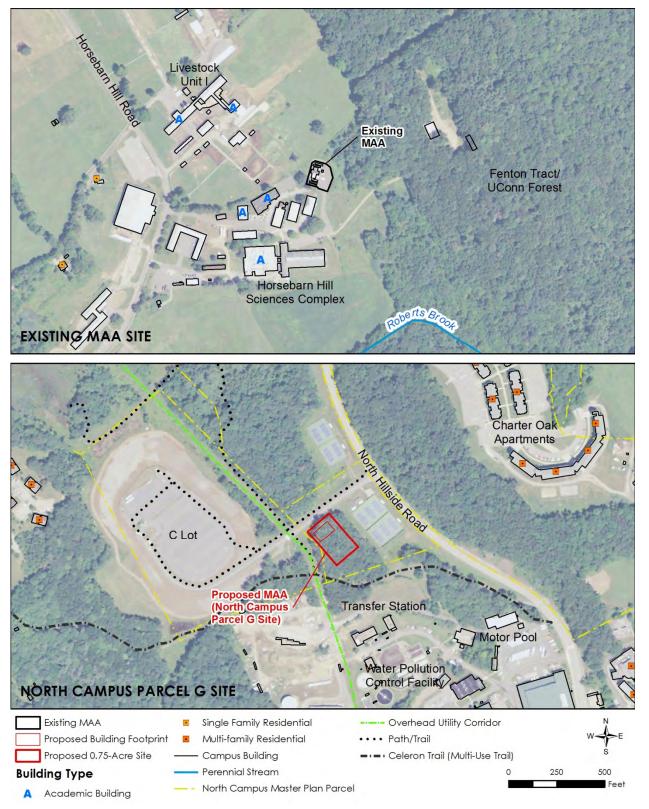


Figure 3-12. Populated Areas Near the Existing and Proposed MAA Sites



While the existing MAA meets or exceeds state and federal requirements for safety and environmental protection, several issues exist with the design of the current facility, as described in *Section 1.3, Purpose and Need.* Space is limited on the existing 0.43-acre site, which has resulted in poor circulation and maneuverability for waste transport trucks and other vehicles and inefficient vehicle circulation, parking, and access/egress. Given the approximately 4,200 square feet of existing permanent structures and trailer storage and the current frequencies of waste pickup, the existing MAA is adequate to handle the quantities and types of wastes that are currently being generated at the Storrs campus. However, the existing facility will have difficulties meeting future needs without increasing the frequency of off-site waste shipments based on anticipated growth in undergraduate enrollment and planned research growth at the University.

Toxic or Hazardous Waste Sites

Hazardous materials or other subsurface environmental conditions could be encountered during the construction of a new MAA facility on the North Campus Parcel G site. A review of available information on the Parcel G site and nearby properties (site history and federal, state, and local environmental databases) indicates that no identified environmental conditions such as spills or releases of hazardous materials have been identified at or in the immediate vicinity of the project site. Several sites in the surrounding area have experienced historical releases of hazardous materials or related environmental conditions including the UConn Motor Pool and WPCF, the former UConn solid waste landfill and chemical pits, a former dry cleaner on North Eagleville Road, and several underground storage tanks located on campus. All potentially contaminated sites identified are located downgradient of the Parcel G site (EDR, 2013).

3.13.2 Impact Evaluation

The No Action alternative would not improve upon the site circulation and layout of the existing facility. The existing facility also will likely not meet future needs based on anticipated growth in undergraduate enrollment and planned research growth at the University, which will increase waste generation and the demand for regulated waste storage on the Storrs campus.

Construction of a new MAA facility on the North Campus Parcel G site will provide a larger site for improved vehicle circulation, including vehicle turn-around, parking, and access/egress. The proposed facility is expected to meet the future waste management needs of the University. The Proposed Action will provide a larger, state-of-the-art facility with greater waste storage capacity, thereby reducing the frequency of off-site waste shipments, reducing the potential for vehicle/pedestrian conflicts, and reducing the frequency of waste handling compared to that of the existing MAA.

The University also promotes the use of "green chemistry"¹³ techniques and waste minimization at the point of generation, which will reduce or offset anticipated future increases in waste generation on campus. The facility design will incorporate spill containment measures to provide secondary and tertiary containment for regulated waste storage and handling areas, state-of-the-art security systems, and

¹³ Green Chemistry is the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances. More information on green chemistry is available at <u>http://www2.epa.gov/green-chemistry</u>.



required training, inspections, and contingency planning to meet applicable state and federal regulatory requirements for safe operation of the facility.

No impacts related to toxic or hazardous waste sites are anticipated as a result of the Proposed Action. Potential impacts associated with closure of the existing MAA are discussed in *Section 3.16, Construction Impacts.*

3.14 Socioeconomics

3.14.1 Existing Conditions

Economy, Employment, and Income

The University currently employs three EH&S staff at the existing MAA to perform duties associated with the operation of the MAA, including hazardous waste pickup from generator sites, chemical testing in the on-site laboratory, and general management and oversight of facility operations. The facility does not generate income for the University nor does it contribute significantly to the local or regional economy.

Environmental Justice

According to the CTDEEP Environmental Justice Program, "Environmental Justice" means that all people should be treated fairly under environmental laws regardless of race, ethnicity, culture or economic status. CTDEEP's Environmental Justice Policy and the supporting regulations, Section 22a-20a of the CGS, ensure that Environmental Justice Communities are provided enhanced notice and opportunities for public participation in certain permitting processes. The Environmental Justice Policy states that no segment of the population should, because of its racial or economic makeup, bear a disproportionate share of the risks and consequences of environmental pollution or be denied equal access to environmental benefits.

Environmental Justice Communities are defined under the Environmental Justice Policy as:

- United States census block groups, as determined in accordance with the most recent United States census, for which 30% or more of the population consists of low income persons who are not institutionalized and have an income below two hundred percent of the federal poverty level, or
- Distressed municipalities.

The Town of Mansfield is not identified on the current (last revised in August 2012) Distressed Municipalities List maintained by CTDEEP. The most recent poverty data (2000 U.S. census) available for the Storrs campus indicates that the existing MAA is located within a census block group (090138811001) with 4.0% of persons below poverty. North Campus Parcel G is located within a census block group (090138813002) with 58.8% of persons below poverty. This is likely reflective of the large student population in Mansfield associated with the University who would be expected to have a much lower annual income compared to the non-student population. Consequently, most of the Town of Mansfield located west of Route 195 is considered below the poverty level for this reason. As such, the North Campus Parcel G site is not considered to be located in an Environmental Justice Community.



3.14.2 Impact Evaluation

Economy, Employment, and Income

Existing EH&S staffing levels are anticipated to be sufficient for the new MAA under the Proposed Action. Regardless of the location of the MAA, additional EH&S staff may be needed in response to future increases in waste generation on the campus as a result of anticipated increases in student enrollment and planned research growth at the University. Under the Proposed Action alternative, short-term construction jobs would be created to construct the new MAA and decommission the existing MAA.

Environmental Justice

No impacts to Environmental Justice Communities are anticipated as a result of either the No Action or Proposed Action alternatives.

3.15 Land Use Planning

This section describes the existing land uses in the project area and the local, regional, and state land use plans and policies that apply to the project area. Consistency of the Proposed Action with these land use plans and policies is also evaluated.

3.15.1 Land Use and Zoning in the Project Area

The existing MAA is located off of Horsebarn Hill Road to the east of State Route 195 on the UConn East Campus, which is primarily dedicated to agricultural education. The 440-acre Fenton Tract of the UConn Forest is adjacent to the site on the east, and the Horse Unit II and Livestock Unit I buildings and associated pastures are situated to the north. The "Biobehavioral Sciences Complex," which consists of approximately 25 acres of agriculture-related development, research buildings, assorted outbuildings, and barns are located to the south and west of the existing MAA.

The site of the proposed MAA is situated on the western portion of North Campus Parcel G, which is characterized by a fragmented wooded upland forest surrounded by developed land uses. The adjacent development includes an overhead electrical utility corridor to the west, the C Lot and C Lot Driveway to the north and northwest, tennis courts and North Hillside Road to the east, and the Celeron Trail, UConn Transfer Station, and UConn WPCF to the south. The proposed extension of North Hillside Road north to Route 44 will enable the creation of the UConn Technology Park on the North Campus.

Although UConn is not subject to specific local zoning requirements, the University strives to be consistent with local zoning goals and objectives whenever possible. The majority of the Storrs main campus, including the site of the existing MAA, is zoned "Institutional," which permits buildings and facilities owned and/or operated by the State of Connecticut or federal government (Town of Mansfield, 2011). The "Institutional" zone permits facilities involving the transportation of hazardous or radioactive materials from other sites to a storage, processing or disposal facility. The existing MAA facility is therefore consistent with permitted uses in this zone.



The North Campus is zoned "Research & Development Limited Industrial Zone" (RD/LI). According to the Town of Mansfield Zoning Regulations, all proposed developments within the RD/LI Zone involving the use of hazardous materials should have a management plan regarding the proposed use, generation, transportation, storage or disposal of hazardous materials (Town of Mansfield, 2011). The Proposed Action is consistent with the existing land use surrounding the North Campus Parcel G site and the RD/LI zoning of the North Campus.

3.15.2 Local and Regional Land Use Planning

Mansfield Plan of Conservation and Development (2006)

The *Mansfield Plan of Conservation and Development* (Mansfield POCD) documents the community's land use characteristics and establishes a consistent and coordinated land use philosophy and regulatory framework for managing the Town's future physical, economic and social environment. The Mansfield POCD specifies policy goals, objectives and land use recommendations designed to protect and promote the overall health, welfare and safety of existing and future residents. The overall policy goals include:

- To strengthen and encourage an orderly and energy-efficient pattern of development with sustainable balance of housing, business, industry, agriculture, government and open space and a supportive infrastructure of utilities, roadways, walkways and bikeways and public transportation services.
- To conserve and preserve Mansfield's natural, historic, agricultural and scenic resources with emphasis on protecting surface and groundwater quality, important greenways, agricultural and interior forest areas, undeveloped hilltops and ridges, scenic roadways and historic village areas.
- To strengthen and encourage a mix of housing opportunities for all income levels.
- To strengthen and encourage a sense of neighborhood and community throughout Mansfield.

The Mansfield POCD includes recommendations designed to protect the Willimantic Reservoir drainage basin and the State-designated aquifer protection areas for University of Connecticut wellfields in the Willimantic and Fenton Rivers. The Mansfield POCD recommends low-density residential development (minimum lot size of 90,000 square feet) in designated aquifer areas and most of the area within the Willimantic Reservoir drainage basin.

The No Action alternative (i.e., the existing MAA in its current location) is inconsistent with the water supply-related land use recommendations of the Mansfield POCD, which recommends low-density residential development in designated aquifer areas and within the Willimantic Reservoir drainage basin. Conversely, relocating the MAA to the North Campus Parcel G site is consistent with the Mansfield POCD since the MAA facility would be located outside of the public drinking water supply watershed. The Mansfield POCD contains no restrictions on such facilities at the proposed North Campus location.

Windham Region Land Use Plan (2010)

The Town of Mansfield is located within the planning region of the Windham Region Council of Governments (WINCOG). The *Windham Region Land Use Plan 2010* (Windham Regional Plan) identifies nine general regional goals:



- 1. Development, especially intensive development, should be concentrated in areas where there is public water and sewer, public transportation service and facilities, sidewalks, schools, and other community infrastructure.
- 2. Safe, comfortable, high-quality housing should be available to all residents of the region at a cost they can afford.
- 3. Public transportation should be promoted and expanded
- 4. Energy-efficient development should be encouraged within the region
- 5. Economic growth should be focused in areas with existing public infrastructure.
- 6. The heritage of the Region should be preserved.
- 7. Development in the Windham Region should not degrade water quality.
- 8. Wildlife habitats should be preserved because they are critical to the health of our natural environment and are the foundation of ecological communities.
- 9. Municipal land use controls should foster and create strong, cohesive community centers and discourage expansion into valuable farmland and woodland.

According to the Windham Regional Plan, the existing MAA is located in a Priority Preservation Area. The general policy for preservation areas is that they should be permanently protected from any immediate and potential negative impacts to the resource, including the recommendation that structural development should be avoided except as directly consistent with preservation values. Although the No Action alternative does not involve new construction, the location of the existing MAA in a preservation area is generally inconsistent with the plan's preservation goal of protecting the area from potential negative impacts to environmental resource.

Much of the UConn Storrs campus is identified as a Regional Center in the Windham Regional Plan. According to the plan, Regional Centers are the highest priority for all forms of redevelopment and development including commercial, urban-density residential, and industrial. The North Campus Parcel G site is located with the Regional Center area. The Proposed Action is consistent with the general and site-specific planning goals of the Windham Regional Plan.

3.15.3 Campus Land Use Planning

Storrs Campus Master Plan Update (2006)

The University of Connecticut Storrs Campus Master Plan Update (Master Plan Update) was developed as a result of significant changes to the physical campus setting since the 1998 University of Connecticut Campus Master Plan. The focus of the Master Plan Update was on the Central Campus, South Campus, West Campus, Research, East Campus, and North Campus neighborhoods. However, more specific land use planning documents are applicable to the site of the existing MAA (East Campus Plan of Conservation and Development) and the North Campus Parcel G site (North Campus Master Plan), which are discussed below.

North Campus Master Planning Documents (2000 and 2012)

In June 2000, UConn released the *Outlying Parcels Master Plan* (2000 Master Plan) (JRR, 2000), which included a master plan for development of the North Campus. The 2000 Master Plan identified a number of North Campus development parcels, including Parcel G, along with envisioned uses and maximum development scenarios for each parcel.



A revised North Campus Master Plan was released in October 2012 (2012 Master Plan) (SOM, 2012). The 2012 Master Plan builds upon the previous planning efforts for the North Campus and creates a framework for future development of the UConn Technology Park, which is envisioned to house industry partners and entrepreneurs to advance science and manufacturing, using a collaborative approach with the University. Relocation of the MAA to the North Campus is consistent with the technology uses envisioned for the UConn Technology Park. The planning process for the 2012 Master Plan identified Parcel G as the most likely potential site for a relocated MAA facility within the UConn Technology Park (*Figure 3-13*).



Figure 3-13. North Campus Master Plan Proposed Energy Research Neighborhood (North Campus Master Plan, 2012)

East Campus Plan of Conservation and Development (2004)

UConn's East Campus consists of 886 acres, contiguous to the University's academic core. It is located between Route 195 and the Fenton River (from west to east), and between Old Turnpike Road and Gurleyville Road (from north to south). Several important objectives are identified in the *East Campus Plan of Conservation and Development* (East Campus Plan):

- Maintain the existing agricultural character and development patterns.
- Consult applicable State of Connecticut guidelines for aquifer, watershed, and conservation zones.
- Protect sensitive and unique environmental features.
- Preserve the overall existing visual character.
- Maintain the existing land use pattern of building clusters.



 Locate future growth and expansion in areas where development, utilities, and vehicular access already occur.

The existing MAA is located on the East Campus in the Biobehavioral Sciences Complex, which consists of approximately 25 acres of agriculture-related development, agriculture-related research buildings, assorted outbuildings, and barns. Many of these buildings are either temporary in their construction methods, trailers, and/or are in poor condition.

According to the East Campus Plan, the Biobehavioral Sciences Complex area should continue to retain, replace, and expand existing University-related agriculture research and education uses. The plan identifies several conservation objectives, including the consultation of applicable state guidelines for aquifer, watershed, and conservation zones. The East Campus Plan also recommends possibly relocating the existing MAA. The Proposed Action is consistent with these East Campus Plan objectives and recommendations.

3.15.4 State Conservation and Development Plan

The state-wide land use conservation and development plan, *Conservation and Development Policies: The Plan for Connecticut, 2013-2018* (State C&D Plan), provides the policy and planning framework for administrative and programmatic actions and capital and operational investment decisions for state government (OPM, 2013). It outlines broad-based growth management principles designed to encourage sustainable development that balance human needs with conservation of environmental and socioeconomic resources. The State C&D Plan reflects a desire to avoid land use trends that encourage sprawl and the subsequent disproportionate consumption of land and resources that results. The Plan uses growth management principles to encourage the revitalization of areas with existing infrastructure and capacity to support growth and the development of currently undeveloped areas that is consistent with long-term sustainability of the state's resources.

The Locational Guide Map (LGM) spatially interprets the growth management principles contained in the Plan, with respect to each area's potential to fulfill and to balance the conservation and development priorities of the state. The LGM is used with the State C&D Plan to provide a basis for state agencies to evaluate funding decisions for projects that are considered "growth-related" as defined in section Connecticut General Statutes (C.G.S.) 16a-35c. The major categories of the LGM are:

- Priority Funding Areas areas classified by areas that include Urban Area or Urban Cluster (based on the 2010 Census), boundaries that intersect a ½ mile buffer surrounding existing or planned mass-transit stations, existing or planned sewer service and/or water service, and local bus service.
- Balanced Priority Funding Areas areas that meet the criteria of both Priority Funding Areas and Conservation Areas.
- Village Priority Funding Areas traditional village centers located in the state's more rural municipalities, intended to recognize the unique characteristics and needs of these areas.



- Conservation Areas include core forest areas, existing or potential drinking water supply watersheds, Aquifer Protection Areas, wetland soils, agricultural soils, Hurricane Inundation Zones or 100 year Flood Zones, Critical Habitats, and locally important conservation areas.
- Undesignated Areas typically rural in nature and lack the criteria necessary for being delineated as either Priority Funding Areas or Conservation Areas.

According to the State C&D Plan's LGM, the existing MAA is located within a Balanced Priority Funding Area since the site is located within a water supply watershed and due to the existing availability of water and sewer services. The goal for Balanced Priority Funding Areas is a balanced consideration of factors in determining the extent to which it is consistent with the policies of the State C&D Plan. Although the existing MAA has been operated safely since it was established in 1989, the location of the site within a public drinking water supply watershed is inconsistent with the State C&D Plan's growth management principle to protect and ensure the integrity of environmental assets critical to public health and safety, including ensuring a safe and adequate drinking water supply.

The North Campus Parcel G site is also located within a Balanced Priority Funding Area since the area is classified as an Urban Area or Urban Cluster (based on the 2010 Census); has existing sewer service, water service, and local bus service; and has environmental sensitivity due to the presence of natural resources on portions of the North Campus. However, the site is located outside of a public drinking water supply watershed. The Proposed Action is consistent with the growth management principles of the State C&D Plan.

3.16 Construction Impacts

The Proposed Action could result in temporary impacts associated with construction of a new MAA on the North Campus Parcel G site and closure of the existing MAA. Potential construction-period impacts are related to traffic, hazardous materials, solid waste, air quality, noise, and stormwater. Measures will be implemented during construction to avoid or minimize potential impacts. Such measures will be incorporated as requirements in the construction specifications or as best management practices (BMPs). In addition, contractors will be required to follow the measures outlined in the UConn *Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors* manual (UConn, 2012).

Traffic

Construction of the proposed MAA may result in traffic disruption along North Hillside Road in the vicinity of the C Lot driveway entrance and along the C Lot driveway due to lane closures and/or construction vehicles accessing the site. There may also be short-term traffic impacts in the vicinity of the existing MAA along Horsebarn Hill Road associated with removal and/or demolition of the existing structures. These impacts would be short-term, lasting only during construction. Significant project-related traffic disruptions are not anticipated. However, potential traffic-related construction impacts would be mitigated by implementing appropriate traffic management measures, which would maintain efficient traffic operations during the construction period. These measures may include construction phasing to minimize disruptions to traffic, signage, detours, and police officers to direct traffic and assist with pedestrian street crossings as needed.



Air Quality

Potential construction-related air quality impacts are associated with the use of diesel-powered construction vehicles. Emissions from diesel equipment include carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter (PM₁₀ and PM_{2.5}). Emissions from construction equipment are anticipated to be significantly less than the total emissions from other industrial and transportation sources in the region, and therefore, are expected to be insignificant with respect to compliance with the NAAQS. However, potentially localized air quality impacts could occur as a result of diesel exhausts from construction equipment in the vicinity of the project site.

Potential air quality impacts from diesel exhausts would be avoided or limited by proper operation and maintenance of construction equipment, and prohibition of excessive idling of engines. Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies limits the idling of mobile sources to three minutes. Contractors will be responsible for maintaining construction equipment and compliance with the air pollution control measures in the University's *Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors* manual.

Fugitive dust emissions can occur during ground excavation, material handling and storage, movement of equipment, and transport of material to and from the project site. The potential for fugitive dust emissions is the greatest during periods of intense construction activity and during windy and/or dry weather conditions. Potential air quality impacts from fugitive dust would be addressed through a variety of mitigation measures incorporated into contract specifications for the project, including:

- Reducing exposed erodible earth area to the extent possible through appropriate construction phasing.
- Stabilizing exposed earth with grass, pavement, or other cover as early as possible.
- Application of stabilizing agent (i.e., calcium chloride, water) to the work areas and haul roads.
- Covering, shielding, or stabilizing stockpiled material as necessary.
- Use of covered haul trucks.
- Limiting dust-producing construction activities during high wind conditions.
- Rinsing of construction equipment with water or any other equivalent method to minimize drag-out of sediment by construction equipment onto the adjacent roads.
- Street sweeping of roads within construction areas.

Noise

Construction activities are a potential source of short-term noise impacts. It is difficult to reliably predict the sound levels that may occur at a particular receptor or group of receptors as a result of construction activity. Heavy construction equipment is the principal source of noise during construction activity, and the pattern of heavy equipment use is constantly changing during construction. For the most part, construction activity would occur during daytime hours when higher sound levels are generally more tolerable at nearby receptors, and there is only limited residential land use in the project area. In addition, any adverse noise impacts due to construction activities would be temporary in nature, and no single receptor is expected to be exposed to high sound levels due to construction for an extended period of time.



Construction noise is exempt from Connecticut's Noise Regulations contained in section 22a-69-1 through 22a-69-7.4 of the RCSA. However, in compliance with the UConn contractor guidance discussed above, contractors at the University are required to comply with OSHA's Noise Standard, 29 CFR 1910.95 and CT DEEP's regulations on the Control of Noise, 22a-69-1 through 7. Contractors would be asked to cease work activities when noise levels to UConn employees or students are expected to meet or exceed OSHA's Action Level of 85 dBA (8-hour TWA). Activities would be allowed to resume when engineering or work practice controls reduce the level of noise below OSHA requirements. Should this not be feasible, work must be scheduled for a time when UConn employees, students are not impacted. Additional project-specific noise reduction measures or restrictions may also be required to minimize disruption to teaching and learning activities.

Stormwater

Construction activity is a potential source of stormwater and water quality impacts from erosion and sedimentation. The construction phase of the project would be subject to the CTDEEP *General Permit for the Discharge of Stormwater and Dewatering Wastewater Associated with Construction Activity* if the area of site disturbance exceeds 1 acre. Construction activities shall also comply with the *Connecticut Guidelines for Erosion and Sedimentation Control*, as amended. Erosion and sedimentation control measures will be implemented for the construction of a new MAA on the North Campus Parcel G site and for the removal/demolition of the structures at the existing MAA during closure of the existing facility. The proposed controls may include protection of existing storm drains, temporary vegetative cover, perimeter sediment barriers such as silt fence, straw bales, and coir logs, temporary sediment basins, and anti-tracking pads at construction entrances.

Hazardous Materials

Construction of the proposed MAA on Parcel G may result in the temporary on-site storage of fuel, petroleum, oil, or other similar materials associated with construction vehicles and equipment. Closure of the existing MAA also has the potential to generate Connecticut regulated and RCRA hazardous waste potentially including asbestos-containing materials, lead-based paint or other hazardous materials. Contractors will be required to store and dispose of such materials in accordance with applicable state and federal requirements and regulations. Contractors will be required to comply with requirements for construction-related hazardous materials in *UConn Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors.* Reference to such requirements will be included in the contract documents.

The University requires that an asbestos inspection be performed by a licensed and certified asbestos inspector prior to any renovation or demolition activities, including installation or repair work. Although not anticipated, any necessary asbestos abatement would comply with applicable state and federal regulations. Additionally, testing of paint on existing MAA structures will be conducted by a CTDPH certified inspector prior to removal or demolition of the structures. If lead-based or lead-containing paint is identified, work will be performed using lead-safe work practices and by workers with appropriate OSHA training. Hazardous waste, asbestos, lead-based or lead-containing paint or lead-containing paint or lead-containing construction activities will be appropriately characterized and disposed of in accordance with applicable state and federal regulations.



CTDEEP has prepared a draft guidance document (CTDEEP, 2005a) for the closure of facilities that store RCRA hazardous wastes for less than 90 days in accordance with Section 22a-449(c)-102(a)(2)(K) of the Regulations of Connecticut State Agencies, incorporating 40 CFR 265.111, 40 CFR 265.113(a), (b) and (c), and 40 CFR 265.114. The guidance outlines the following steps for closure of such facilities:

- Characterize any residual contamination by developing a list of constituents of concern (COCs)

 a list of all hazardous constituents that were ever stored at the facility.
- 2. Determine if structures and/or soils are contaminated.
- 3. Determine the extent of contamination in soils that needs to be cleaned up (as applicable).
- 4. Decontaminate or remove and dispose of all contaminated equipment, structures and soils measured to be in excess of the media closure criteria.
- 5. Verify that the cleanup is complete by sampling in accordance with the Sampling and Analysis Guidance included in the guidance document
- 6. Backfill all excavations with compacted clean soil.

Following removal or waste stored at the facility, UConn will adhere to the CTDEEP guidance for closure and decommissioning of the existing MAA, including removal of the existing structures and equipment, site characterization for any residual contamination, and associated cleanup. The University will also follow applicable closure and decommissioning requirements of the Nuclear Regulatory Commission.

Solid and Regulated Waste

Land clearing debris from the site preparation at Parcel G and waste other than clean fill (natural soil, rock, brick, ceramics, concrete and asphalt paving fragments) resulting from the removal or demolition of structures at the existing MAA will be recycled, reused, and/or disposed of at a permitted landfill or other solid waste facility in accordance with applicable regulatory requirements and the University policy regarding waste recycling by contractors. The University's *Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors* manual outlines the University's policy for contractor recycling, including materials that must be recycled, collection and disposal of solid waste, and proper treatment or disposal of hazardous and regulated waste.

No contamination is believed to be present on the North Campus Parcel G site. Therefore, generation and disposal of hazardous or toxic substances (i.e., contaminated soil or groundwater) is not anticipated as a result of site clearing, demolition, and/or construction activities. Hazardous materials or subsurface contamination encountered during construction will be characterized and disposed of in accordance with applicable state and federal regulations.



4 Summary of Impacts

Based upon the findings presented in *Section 3, Existing Environment and Analysis of Impacts*, this section summarizes unavoidable adverse impacts associated with the proposed project, irreversible and irretrievable commitments of resources, and mitigation measures to reduce or minimize potential impacts associated with the Proposed Action.

4.1 Unavoidable Adverse Impacts

The preceding sections of this EIE have analyzed the potential for "significant effects" (i.e., substantial adverse impacts on the environment) associated with the Proposed Action. Anticipated minor impacts associated with the Proposed Action are summarized in *Table 4-1*. Design elements and best management practices would be incorporated into the Proposed Action, as described in *Sections 1 and 3*, to avoid, minimize, or mitigate potential impacts. The only unavoidable <u>adverse</u> impacts anticipated with the Proposed Action are related to the construction phase of the project. Construction-related impacts to traffic, air quality, noise, hazardous materials, solid waste, and stormwater are unavoidable but are temporary in nature and will be mitigated through the use of best management practices during construction *(see Section 3.16 and Section 4.4)*.

4.2 Irreversible and Irretrievable Commitments of Resources

Irreversible and irretrievable commitment of resources associated with the Proposed Action consist of resources that remain committed to a project through its lifespan (i.e., irreversible commitment) or those that are consumed or permanently impacted during project construction and operation as a result of the Proposed Action (i.e., irretrievable commitment).

Irreversible and irretrievable resources that would be committed to the Proposed Action include energy (electric and natural gas), construction materials, land, human labor, and finances:

- Energy Energy will be consumed for project construction, and operation of the proposed facility may require more energy than is currently used at the existing MAA.
- Construction Materials A variety of construction materials will be utilized to construct the proposed building and site features. Some materials used in the construction of a new MAA and decommissioning of the existing facility may be reused or recycled.
- Land The land on the Parcel G site will be developed, and commitment of the site to this use will preclude the possibility of other uses in the foreseeable future. Note that regardless of the location of the MAA, future development of Parcel G is anticipated as part of the future UConn Technology Park.
- Human Labor The dedication of human labor to the construction and operational phases of the project represents an irretrievable expenditure of time and production that cannot be used for other purposes.
- Financial The expenditures required represent funds that, once committed, are no longer available for other purposes and once spent, cannot be regained.



4.3 Indirect and Cumulative Impacts

CEPA requires that the sponsoring agency consider the indirect or secondary impacts and cumulative impacts of its actions. Secondary or indirect impacts are effects of an action that are removed in time or distance from the action itself. Cumulative impacts are those that result from the incremental impact of a proposed action when added to other past, present or reasonably foreseeable future actions of the agency (i.e., UConn).

Indirect Impacts

There are two possible types of secondary or indirect effects – induced growth (or growth influencing) and encroachment-alteration. The University anticipates increases in waste generation associated with anticipated increases in student enrollment and planned research growth on the Storrs campus. The increase in waste generation is anticipated to occur regardless of the location or design of the MAA; therefore, no induced growth impacts are anticipated as a result of the Proposed Action.

Relocating the MAA to the Parcel G site will have the indirect effect of redistributing existing traffic associated with EH&S and commercial waste transport vehicles traveling to and from the MAA. Minor increases in traffic could occur in some areas due to this redistribution, in addition to the potential for truck/pedestrian conflicts along waste shipment routes. However, given these minor changes compared to the No Action alternative, no significant indirect impacts to traffic or circulation are anticipated. Restrictions on the timing of waste shipments and allowable truck routes (e.g., Route 44, Storrs Road and North Hillside Road) are recommended to avoid periods and locations of high pedestrian activity on campus. Such restrictions will also minimize potential impacts associated with potential increases in waste transport traffic on the campus due to anticipated increases in student enrollment and planned research growth at the University.

Indirect or secondary effects associated with encroachment-alteration can result in long-term degradation to a resource. The proposed project site is not located in an area of sensitive natural resources (e.g., wetlands, watercourses, threatened or endangered species), nor is the project anticipated to significantly affect the transportation or utility infrastructure in the area. Therefore, no adverse indirect effects associated with encroachment-alteration are anticipated as a result of the Proposed Action.

Cumulative Impacts

Potential cumulative impacts can occur to those resources for which direct or indirect impacts from the Proposed Action are anticipated. Cumulative impacts of the development of Parcel G were identified as part of the North Hillside Road Extension FEIS (FHWA, 2011), which included analysis of impacts due to the roadway extension and also the development of the North Campus parcels.

Based on the analysis in *Section 3* of the subject EIE, the Proposed Action has the potential for cumulative impacts to cultural resources since Parcel G contains potential areas of prehistoric value, as identified in the FEIS. Additional archaeological investigations are necessary prior to development of Parcel G, in addition to Parcels A, C, J, and E (see *Figure 2-1* for parcel locations), to determine if cultural resources are present and if development activities could impact identified cultural resources. Further archaeological surveys may also be required prior to development of Parcel H since the limits of



previous archaeological studies did not fully encompass the boundaries of this parcel. Parcel F contains two state-listed historic structures. The conceptual North Campus development plan calls for those structures to remain, so no impact to historic resources is anticipated. The University will coordinate with the State Historic Preservation Office (SHPO) and appropriate Tribal Historic Preservation Officers (THPOs) to ensure that historic, archaeological, and cultural resources are protected prior to development of Parcel G and other North Campus development parcels.

Minor increases in traffic associated with UConn and commercial waste transport vehicles are anticipated in the future, regardless of the location of the MAA, given planned research growth at the University. Considering the location of the Parcel G site between existing waste generators on the main campus and potential waste generators at the future UConn Technology Park on the North Campus, the Proposed Action will help offset potential impacts associated with these minor increases by reducing the frequency of off-site waste shipments, providing direct access to the technology park from North Hillside Road, reducing waste vehicle trips along North Eagleville Road, and increasing the overall efficiency of internal waste deliveries.

Other resources are likely to experience minor increased use or consumption, but the impact analysis in *Section 3* does not indicate significant adverse effects to those resources under the Proposed Action. Therefore, cumulative impacts are not anticipated.

4.4 Summary of Impacts and Mitigation Measures

Mitigation measures have been identified to reduce or offset potential adverse impacts associated with the proposed project. These are summarized in *Table 4-1* by resource category as described in *Section 3* of this EIE. For resource categories for which no mitigation is proposed, the impact evaluation has determined that either the impacts are insignificant, requiring no mitigation, or that there will be no adverse impacts resulting from the proposed project.



Resource Category	Impacts	Proposed Mitigation
Traffic, Parking, and Circulation	 Improved vehicle circulation, maneuverability, parking, and access/egress compared to that of the existing facility Minor increases in traffic and potential for truck/pedestrian conflicts along waste shipment routes resulting from redistribution of existing traffic associated with EH&S and commercial waste transport vehicles traveling to and from the MAA Larger, state-of-the art facility with greater waste storage capacity will address existing and future waste generation on campus, resulting in less frequent waste shipments from the MAA, less commercial waste transport vehicle traffic and potential for vehicle/pedestrian conflicts, and less frequent handling of wastes compared to No Action alternative 	Restrictions on the timing of waste shipments and allowable truck routes to avoid periods and locations of high pedestrian activity on campus
Air Quality	No adverse impacts	None required
Noise	No adverse impacts	None required
Water Resources	 No adverse impacts to surface water and groundwater quality or quantity No adverse impacts to flood hazard potential Increase in stormwater runoff and potential stormwater pollutant loading 	• Proposed stormwater management and facility design elements will reduce the potential for impacts associated with a release of chemicals or other hazardous materials to the environment (see <i>Utilities and Services</i>)
Wetlands and Watercourses	No adverse impacts	 Proposed stormwater management and facility design elements will reduce the potential for impacts associated with a release of chemicals or other hazardous materials to the environment (see Utilities and Services)
Wildlife and Vegetation	 No adverse impacts Loss of approximately 0.75 acres of fragmented upland forest habitat 	• Proposed stormwater management and facility design elements will reduce the potential for impacts associated with a release of chemicals or other hazardous materials to the environment (see <i>Utilities and Services</i>)

Table 4-1	Summary of	Impacts and	Proposed	Mitigation
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Resource Category	Impacts	Proposed Mitigation
Cultural Resources	Parcel G contains potential areas of prehistoric value	Additional cultural resource investigation of Parcel G (Phase 1B Archaeological Reconnaissance Survey) prior to development and coordinate with the State Historic Preservation Office (SHPO) and the Tribal Historic Preservation Officers (THPOs) of the Mashantucket Pequot and Mohegan Tribes to ensure that historic, archaeological, and cultural resources are protected
Visual and Aesthetic Character	No adverse impacts	None required
Geology, Topography, and Soils	No adverse impacts	• Proposed facility design elements will reduce the potential for subsurface impacts associated with a release of chemicals or other hazardous materials to the environment (see <i>Hazardous Materials</i>)

Table 4-1. Summary of Impa	acts and Proposed Mitigation
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Resource Category	Impacts	Proposed Mitigation
Utilities and Services	 Adequate utility capacity is available The creation of impervious surfaces will cause increased stormwater runoff 	 Non-structural source controls and pollution prevention measures (parking lot sweeping, catch basin cleaning, drainage system and stormwater treatment system operation and maintenance, etc.) LID approaches such as drywells, rain gardens, vegetated swales, and other infiltration techniques to infiltrate runoff from the building roof and sidewalks or paved areas where regulated wastes will not be handled Runoff from loading areas or other locations where regulated wastes are handled will be directed to a stormwater collection system that can be effectively closed in the event of a spill. Such facilities will incorporate shut-off valves, impermeable liners, or other similar design features to reduce the potential for a release to the environment. Management strategies to reduce stormwater bacteria concentrations including filtration practices such as lined and underdrained bioretention systems or subsurface sand filters The facility design will incorporate spill containment measures to provide secondary and tertiary containment for regulated waste storage and handling areas, state-of-the-art security systems, and required training, inspections, and a contingency planning to meet applicable state and federal regulatory requirements The design will consider the Campus Sustainable Design Guidelines, which include specific measures for reduction of energy consumption on new construction projects on campus
Public Health and Safety	Sufficient public safety and emergency services are currently available to address the needs of the MAA	None required

Table 4-1. Summa	ary of Impacts and	Proposed Mitigation



Resource Category	Impacts	Proposed Mitigation
Resource Category Hazardous Materials	 Impacts Larger, state-of-the art facility with greater waste storage capacity will address existing and future waste generation on campus, resulting in less frequent waste shipments from the MAA, less commercial waste transport vehicle traffic and potential for vehicle/pedestrian conflicts, and less frequent handling of wastes compared to No Action alternative No adverse impacts related to toxic or hazardous waste sites 	 Proposed Mitigation Facility design and operation will incorporate secondary and tertiary spill containment for regulated waste storage and handling areas, state-of-the-art security systems, required training and inspections, and contingency planning to meet applicable state and federal regulatory requirements for safe operation of the facility. Use of "green chemistry" techniques and waste minimization at the point of generation will reduce or offset anticipated future increases in waste generation on campus.
Socioeconomics	 No adverse impacts Creation of short-term construction jobs 	None required
Land Use and Planning	 No adverse impacts - Proposed Action is consistent with existing land use and campus, local, regional, and state land use plans 	None required
	Construction Per	iod
Traffic, Parking, and Circulation	Minor, temporary disruptions to traffic in the immediate area of construction	Use of construction-phase traffic management measures to maintain efficient traffic operations during the construction period including construction phasing to minimize disruptions to traffic, signage, and detours.
Air Quality	Construction activities may result in short-term impacts to ambient air quality due to direct emissions from construction equipment and fugitive dust emissions	 Contractors will be required to comply with air pollution control requirements in UConn <i>Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors,</i> including reference to such requirements in contract documents. Ensure proper operation and maintenance of construction equipment. Limit idling of construction vehicles and equipment to three minutes. Implement traffic management measures during construction. Implement appropriate controls to prevent the generation and mobilization of dust.

Table 4-1	Summary of I	mnacts and	Proposed	Mitigation
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Resource Category	Impacts	Proposed Mitigation
Noise	Heavy construction equipment associated with site development may result in temporary increases in noise levels in the immediate area of construction	 Contractors will be required to comply with noise control requirements in UConn <i>Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors,</i> including reference to such requirements in contract documents. Ensure proper operation and maintenance of construction equipment. Construction contractors should make every reasonable effort to limit construction noise impacts.
Stormwater and Water Quality	Exposure of soil increases potential for erosion and sedimentation	• Use of appropriate erosion and sediment controls during construction, consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
Hazardous Materials and Solid Waste	 Temporary on-site storage and use of fuels and other materials associated with construction vehicles and equipment Asbestos-containing materials, lead-based paint or other hazardous materials associated with closure of the existing MAA facility Generation of solid waste including construction and demolition debris 	 Contractors will be required to comply with requirements for construction-related hazardous materials and solid waste in UConn <i>Environmental, Health, and Safety Policies, Regulations, and Rules for Construction, Service, and Maintenance Contractors,</i> including reference to such requirements in contract documents. Hazardous or regulated materials or subsurface contamination encountered during construction will be characterized and disposed of in accordance with applicable state and federal regulations. UConn will follow CTDEEP guidance for closure and decommissioning of the existing MAA, including removal of the existing structures and equipment, site characterization for any residual contamination, and associated cleanup. UConn will also follow applicable closure and decommission. Construction-related solid waste will be handled and disposed of in a manner that meets current regulations and University standards. Construction and demolition debris will be managed in accordance with applicable state and federal regulations and the University's contractor policies.

Table 4-1. Summary	of Impacts and P	roposed Mitigation
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5 Costs and Benefits

Short-term and long-term economic, social, and environmental costs and benefits are summarized in this section for the No Action alternative and the Proposed Action. Costs and benefits associated with a project may be both quantifiable (tangible) and non-quantifiable (intangible).

Costs

The No Action alternative would result in no short-term increase in costs since the facility operations at the existing MAA would remain unchanged. However, waste generation on the UConn campus is anticipated to increase based on anticipated growth in undergraduate enrollment and planned research growth at the University. The existing MAA is not adequately sized to meet the projected future waste storage demands without increasing the frequency of waste removal from the MAA (i.e., greater than monthly for chemical waste and greater than weekly or bi-weekly for biological waste), which would result in increased operational costs.

Construction of a new MAA on the North Campus Parcel G site is estimated to cost between \$3 million and \$5 million, which is based on a detailed cost estimate for the proposed MAA building prepared by EarthTech in 2007. The 2007 cost estimate was adjusted to 2013 dollars and includes estimated costs for site work, decommissioning and closure of the existing MAA, and administrative costs (insurance, legal fees, construction management, etc.). Estimated construction costs will be refined during project design. Operational costs associated with a new MAA are anticipated to be comparable to those of the existing facility since existing EH&S staffing levels are anticipated to remain unchanged, and potential increases in energy usage to support a larger facility will likely be offset by more modern, energy-efficient building systems.

Benefits

Under the No Action alternative, the University would avoid the capital expenditure associated with construction of a new MAA and closure of the existing facility. However, the No Action alternative would not meet the basic project objective of more efficient use of space compared to that of the existing facility and future waste generation and storage need of the Storrs campus. It also would not address the public concern about the location of the existing MAA within the public drinking water supply watershed.

Construction of a new MAA on the North Campus Parcel G site would provide the needed improvements in vehicle circulation, parking, and access/egress, and would provide the University with a state-of-the-art MAA facility on par with those of comparable research institutions for improved public safety and environmental protection. A larger, modern MAA facility would also address the future waste management needs of the campus and avoid substantial increases in the frequency of off-site waste shipments, which would occur under the No Action alternative. Relocating the MAA outside of the public drinking water supply watershed would address the public concern about the location of the existing MAA and would reduce the risk to public water supplies. The Proposed Action would also contribute to additional construction-related employment.



6 Potential Certificates, Permits, and Approvals

Table 6-1 lists the certificates, permits, and approvals that are anticipated to be required for the Proposed Action. Additional certificates, permits, and approvals may be identified following the CEPA process, pending the final design of the project.

Certificate/Permit/ Approval	Category	Reviewing Agency	Comments
Flood Management Certification	Stormwater	CTDEEP	Required for activities affecting natural or man- made drainage facilities
General Permit for Discharge of Stormwater and Dewatering Wastewater Associated with Construction Activities	Stormwater	CTDEEP	Registration required if total site disturbance exceeds 1 acre
Coordination with the State Historic Preservation Office (SHPO) and Tribal Historic Preservation Officers (THPOs) of the Mashantucket Pequot and Mohegan Tribes	Cultural Resources	SHPO and THPOs	Required as a mitigation commitment in the Record of Decision for the North Hillside Road Extension EIS

Table 6-1. List of Required Certificates,	Permits and Annrovals
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Table 6-2 lists permits that have been issued or are pending for the proposed extension of North Hillside Road and associated development of the North Campus for the UConn Technology Park, including Parcel G, the site of the Proposed Action. UConn will adhere to the applicable conditions contained in the final permits for the North Hillside Road extension for the planning and development of the Parcel G site.

Table 6-2. Permits for the North Hillside Road Extension Project
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Permit	Permit Number
CTDEEP Flood Management Certification	FM-201205381
CTDEEP Inland Wetlands & Watercourses, Water	IW-201205383, WQC- 201205382,
Quality Certification, and Water Diversion Permit	DIV- 201205385 (Draft)
United States Army Corps of Engineers Section 404	File No. NAE-2004-3990 (Permit
Individual Permit	Pending)



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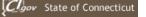
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Appendix A

Scoping Documents

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Governor Dannel P. Malloy

the Connecticut Environmental Policy Act and for notices of proposed transfers of state land

April 16, 2013

Scoping Notices

- 1. Runway Safety Area Project, Igor I. Sikorsky Airport, Stratford
- 2. NEW! Connecticut State Police Firearms Training Facility, Glastonbury
- 3. NEW! Library Lane and George Washington Turnpike Water Main Project, Burlington
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Post-Scoping Notices: Environmental Impact Evaluation Not Required

- 1. Route 69, New Haven Rd., Water Main, Prospect and Beacon Falls
- 2. NEW! Spring Hill Reliability Improvement Project, Norwalk and New Canaan
- 3. NEW! Windham Regional Transit Bus Facility Project #474-073, Mansfield

Environmental Impact Evaluations

- 1. Quinebaug Regional Technical Park, Putnam
- 2. Eastern Connecticut State University Master Plan Update, Willimantic, Mansfield

State Land Transfers

No State Land Transfer Notice has been submitted for publication in this edition.

The next edition of the Environmental Monitor will be published on May 7, 2013.

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Scoping Notices

"Scoping" is for projects in the earliest stages of planning. At the scoping stage, detailed information on a project's design, alternatives, and environmental impacts does not yet exist. Sponsoring agencies are asking for comments from other agencies and from the public as to the scope of alternatives and environmental impacts that should be considered for further study. Send your comments to the contact person listed for the project by the date indicated.

The following Scoping Notices have been submitted for review and comment.

1. Notice of Scoping for Runway Safety Area Project, Igor I. Sikorsky Memorial Airport

Municipality where proposed project might be located: Stratford, CT

Address of Project Location: Sikorsky Airport and immediate vicinity

Background:

This project was subject to previous environmental studies, including a Draft Environmental Impact Statement (DEIS)/Environmental Impact Evaluation (EIE), which led to a Final Environmental Impact Statement (FEIS) and a written re-evaluation of the EIS in 2011. These documents evaluated the project's scope, alternatives and environmental impacts. The documents were made available for public review and were the subject of public hearings. The purpose of this Public Scoping notice and subsequent meeting is to satisfy the Connecticut Environmental Policy Act (CEPA) requirements for providing public opportunity to comment on the project.

Project Description:

The Connecticut Department of Transportation (CTDOT) and the City of Bridgeport are proposing to construct improvements to the Runway Safety Area (RSA) adjacent to Runway 24 at the Igor I. Sikorsky Memorial Airport (BDR), in Stratford, Connecticut. A partial relocation of State Route (SR) 113 is required to accommodate the RSA improvements. These safety improvements include the construction of an Engineered Material Arresting System (EMAS) beyond the Runway 24 threshold. The proposed improvements also include the rehabilitation of existing Runway 6-24. A congressional mandate has been issued requiring completion of the airport safety improvements by December 2015. There will also be a reduction in flooding of Route 113, and improved stormwater management and treatment as a result of the project.

The proposed project includes the following activities within the airport proper:

- Construction of an RSA that is 500 feet in width (250 feet on either side of the runway centerline) by 300 feet in length, including installation of an EMAS (100 feet in width by 300 feet in length);
- Installation of new runway edge lights on Runway 6-24;
- Relocation of Runway End Identifier Lights (REILS);
- Construction of a new connector taxiway (35 feet in width by 300 feet in length) from Taxiway A to Runway 24 and demolition of the existing connector Taxiway D at the intersection of Runways 6-24 and 11-29;
- Removal of the existing blast fence located adjacent to Runway 24;
- Installation of new Airport Security Fence;
- Construction of a Turn Around for Runway 6;
- Rehabilitation and removal of pavement (reduction in width) on Runway 6-24;
- Relocation of the Visual Approach Slope Indicator (VASI) and Precision Approach Path Indicator (PAPI) visual landing aids on Runways 6 and 24; and
- The construction of wetland mitigation and listed species mitigation areas.

The proposed project includes the following activities within the vicinity of Route 113:

- Construction of a realigned segment of Route 113 including an improved stormwater drainage system and multi-use path (to accommodate the RSA);
- Relocation of all underground utilities from the existing Route 113 right-of-way to the proposed rightof-way;
- Closure and removal of the abandoned segment of Route 113;
- Delineation, removal and disposal of existing Raymark Superfund Site waste materials within the vicinity
 of the realigned Route 113;
- Construction of a new tidal channel to convey treated stormwater runoff and tidal flows;
- · Wetland mitigation activities including restoration and enhancement areas; and
- Creation and enhancement of several listed species mitigation areas.

Project Maps: Click here to view a map of the project area.

Click here to view proposed construction features.

Written comments from the public are welcomed and will be accepted until the close of business on: Thursday April 18, 2013

There will be a Public Scoping Meeting for this project at:

DATE: April 3, 2013

TIME: 7:00 pm

PLACE: Stratford Hotel and Conference Center, 225 Lordship Boulevard, Stratford, CT 06615

NOTES: The meeting location is accessible to persons with disabilities. Deaf and hearing impaired persons wishing to attend this meeting and requiring an interpreter may make arrangements by contacting the Department's Office of Communication at 860-594-3062 (voice only) at least five days prior to the meeting.

Written comments should be sent to:

Name: Mr. Mark W. Alexander, Transportation Assistant Planning Director

Bureau of Policy and Planning

Agency: Connecticut Department of Transportation

Address: 2800 Berlin Turnpike

Newington, CT 06131

Fax: 860-594-3028

E-Mail: dot.environmentalplanning@ct.gov

If you have questions about the public meeting, or other questions about the scoping for this project, contact:

 Name:
 Mr. Richard B. Armstrong, Transportation Principal Engineer

 Agency:
 Bureau of Engineering and Construction

 Connecticut Department of Transportation

Address: 2800 Berlin Turnpike Newington, CT 06131

Phone: 860-594-3187

E-Mail: richard.armstrong@ct.gov

2. Notice of Scoping for the Connecticut State Police Firearms Training Facility Relocation

Municipality where proposed project might be located: Glastonbury

Address of Possible Project Location: Easterly end point of Toll Gate Road.

Project Description: The Department of Emergency Services and Public Protection (DESPP), Division of State Police (CSP) is proposing to relocate its existing Firearms Training Facility and Program located on Nod Road in Simsbury to a site in Glastonbury. The proposed site is generally situated along Route 2 adjacent to the Department of Energy and Environmental Protection's (DEEP) Public Shooting Range, located within the Meshomasic State Forest (see project location figures). A land transfer between DESPP and DEEP would occur as part of this project. The exact parcel configuration and project layout is to be determined during design; however, the estimated maximum acreage needed for the project is approximately 30 acres with the potential for less.

The project proposes to maintain and improve the CSP Firearms Training Program to benefit DESPP's critical needs. Other state, federal, international, and host community law enforcement agencies would also utilize this facility as part of the inter-relationships DESPP has with various agencies.

The following are the major facility elements associated with this relocation project:

• Approximately 55,000 gross square feet (GSF) multipurpose training building(s). This building (or combinations of smaller buildings) would contain: classrooms to hold up to approximately 100 troopers and/or cadets; firearms simulator room; open area training room; indoor active-shooter training; gun cleaning and smithing; file storage room; staff offices; firearms vault; ammunition storage vault; recruit/staff kitchen and dinning area; reloading area; target storage area; bathrooms with lockers and showers; and a garage.

- 2 Range Control Towers (approximately 1 story high)
- 1 Qualifying Pistol Range (approximately 200 ft x 170 ft)
- 1 Active Shooter Training Range (approximately 200 ft x 170 ft)
- 1 Rifle Range (approximately 300 yd x 50 yd)
- 1 Shotgun Rifle Range (approximately 100 yd x 30 yd)
- Approximately 125 parking spaces
- · Well and septic systems, telecom, and electrical utilities

Project Maps: Click here to view a figure of the general project location and click here to view an aerial of the project site.

Written comments from the public are welcomed and will be accepted until the close of business on: <u>May 16, 2013</u>.

There will be a Public Scoping Meeting for this project at:

DATE: Thursday, May 9, 2013

TIME: 7:00 PM

PLACE: Town Hall-Council Chambers, 2155 Main Street, Glastonbury, CT NOTES: Doors open at 6:30 PM; meeting starts at 7:00 PM and will conclude after public comments. On Behalf of DESPP, written comments are to be sent to the following participating agency contact: Jeff Bolton, Supervising Environmental Analyst Name: Agency: Department of Construction Services Address: 165 Capitol Avenue, Room 482 Hartford, Connecticut 06106 (860) 713-7250 Fax: E-Mail: jeffrey.bolton@ct.gov If you have questions about the public meeting, or other questions about the scoping for this project, contact: Lt. J. Paul Vance, Public Information Officer Name: Agency: Department of Emergency Services and Public Protection & the Connecticut State Police Address: 1111 Country Club Road Middletown, Connecticut 06457 Phone: (860) 685-8230 Fax: (860) 685-8301 E-Mail: pio.dps@po.state.ct.us The agency expects to release an Environmental Impact Evaluation for this project, for public review and comment, in August 2013. Other information: What is Scoping? (CEQ Website) What to Expect at a Scoping Meeting (CEQ Website) What is CEPA? (OPM Website) 3. Notice of Scoping for Library Lane and George Washington Turnpike Water Main **Project STEAP Grant** Municipality where proposed project might be located: Burlington Address of Possible Project Location: Library Lane and George Washington Turnpike Project Description: The purpose of this project is to install two segments of 8 inch ductile iron water main: from the intersection of Route 4 and Library Lane 900 feet north along Library Lane, and on George Washington Turnpike from the intersection with Thompsons Way approximately 900' southeast to the intersection with Cornwall Road. This project has been awarded a STEAP grant and will provide water supply to businesses within Burlington's central business zone. The Torrington Water Company will provide the water supply, oversee this project and will own and maintain this extension when the project is completed. Project Map: Click here to view a map of the project area. Written comments from the public are welcomed and will be accepted until the close of business on: Friday May 17, 2013 Any person can ask the sponsoring agency to hold a Public Scoping Meeting by sending such a request to the address below. If a meeting is requested by 25 or more individuals, or by an association that represents 25 or more members, the sponsoring agency shall schedule a Public Scoping Meeting. Such requests must be made by April 26, 2013. Written comments and/or requests for a Public Scoping Meeting should be sent to: Name: Mr. Eric McPhee Agency: Department of Public Health Drinking Water Section Address: 410 Capitol Avenue, MS #51WAT PO Box 340308

Hartford, CT 06134-0308

860-509-7359

Fax:

E-Mail: Dph.sourceprotection@ct.gov

If you have questions about the public meeting, or other questions about the scoping for this project, contact:

Name:	Ms. Sara Rossetti-Nichols	
Agency:	: Department of Public Health	
	Drinking Water Section	
Address	410 Capitol Avenue, MS #51WAT	
	PO Box 340308	
	Hartford, CT 06134-0308	
Phone:	860-509-7333	
Fax:	860-509-7359	
E-Mail:	Sara Rossetti-Nichols@ct.gov	

4. Notice of Scoping for UConn Main Accumulation Area

Municipality where proposed project might be located: Mansfield

Address of Possible Project Location: UConn North Campus Parcel G Site located between the existing North Hillside Road and C Lot on the University of Connecticut Storrs Campus, Mansfield, Connecticut

Project Description: UConn proposes to construct a new centralized facility for the temporary storage of chemical, biological/medical, and low-level radioactive wastes from the University's academic research and teaching laboratories and facility operations on the Storrs campus. The University's existing facility, known as the Main Accumulation Area (MAA), is located within the Fenton River watershed and the drainage basin of the Willimantic Reservoir, which is a public water supply. Although the facility has been operated safely since it was established in 1989, the University recognizes the public concern that remains about the location of the facility within the public water supply watershed.

The existing MAA facility, which is currently located on Horsebarn Hill Road, is sufficient to serve the current needs of the University and meets or exceeds state and federal requirements for safety and environmental protection. To protect public health and the environment and to ensure regulatory compliance, these wastes are managed by the UConn Department of Environmental Health & Safety (EH&S) in compliance with local, state, and federal regulations, as well as University health and safety policies and procedures. However, space on the existing site is limited, resulting in poor circulation for waste transport vehicles, its design is inconsistent with state-of-the-art MAA facilities at other comparable research institutions, and the facility will likely not meet future needs based on planned research growth at the University.

To address these concerns, UConn convened an Advisory Committee consisting of representatives from the Town of Mansfield, Windham Water Works, local watershed organizations, the Connecticut Institute of Water Resources, and University of Connecticut staff from Public Safety, Environmental Policy, and Residential Life. The Advisory Committee conducted a siting study to identify and assess potential sites for an upgraded MAA facility. The study recommended a prioritized list of alternative sites, with the North Campus Parcel G site, located between the existing North Hillside Road and C Lot, being the preferred alternative. An Environmental Impact Evaluation will be prepared to further evaluate the preferred site as well as other alternatives considered, including the existing location (i.e., the No Action alternative).

Project Map: Click here to view a map of the project area.

Written comments: from the public are welcomed and will be accepted until the close of business on: May 16.2013

There w	ill be a Public Scoping Meeting for this project at:	
Date:	Wednesday, May 1, 2013	
Time:	7:00 p.m. (Doors will be open at 6:00 p.m. to allow review of informational materials.)	
Place:	Room 146, UConn Bishop Center; One Bishop Circle; Storrs, CT	
Written	comments should be sent to:	
Name:	Jason Coite	
Agency:	gency: UConn - Office of Environmental Policy	
Address:	31 LeDoyt Road, U-3055; Storrs, CT 06269	
Fax:	860-486-5477	
E-Mail:	jason.coite@uconn.edu	

If you have questions about the Public Scoping Meeting, or other questions about the scoping for this project, please contact Mr. Coite as directed above.

UConn expects to release an Environmental Impact Evaluation for this project, for public review and comment, in September 2013.

Post-Scoping Notices: Environmental Impact Evaluation Not Required

This category is required by the October 2010 revision of the <u>Generic Environmental Classification Document</u> for State Agencies. A notice is published here if the sponsoring agency, after publication of a scoping notice and consideration of comments received, has determined that an Environmental Impact Evaluation (EIE) does not need to be prepared for the proposed project.

The Following Post-Scoping Notices have been submitted for publication in this edition.

1. Post-Scoping Notice for Route 69, New Haven Rd., Water Line

Municipalities where project will be located: Prospect/Beacon Falls

CEPA Determination: On February 5, 2013 the Department of Public Health (DPH) published a <u>Notice of</u> <u>Scoping</u> to solicit public comments for this project in the *Environmental Monitor*.

The Department of Energy and Environmental Protection provided <u>comments dated March 7, 2013</u>. Based upon the DPH's environmental assessment of this project including all comments received, it has been determined that the project does not require the preparation of Environmental Impact Evaluation (EIE) under the Connecticut Environmental Policy Act (CEPA). The DPH will coordinate with the United States Environmental Protection Agency and the Town of Prospect to ensure that the recommendations by the DEEP and DPH will be implemented.

The agency's conclusion is documented in a <u>Memorandum of Findings and Determination</u> and an <u>Environmental</u> <u>Assessment Checklist</u>.

If you have questions about the project, you can contact the agency at:

Name:	Mr. Eric McPhee	
Agency:	Department of Public Health	
	Drinking Water Section	
Address:	450 Capitol Avenue, MS #51WAT	
	P O Box 340308	
	Hartford, CT 06134-0308	
Phone:	860-509-7333	
Fax:	860-509-7359	

E-Mail: DPH.sourceprotection@ct.gov

What happens next: The DPH expects the project to go forward. This is expected to be the final notice of the project to be published in the *Environmental Monitor*.

2. Post-Scoping Notice for the Spring Hill Reliability Improvement Project

Municipality where project will be located: Norwalk and New Canaan

CEPA Determination: On January 8, 2013 the Department of Public Health (DPH) published a <u>Notice of</u> <u>Scoping</u> to solicit public comments for this project in the *Environmental Monitor*.

Based on the DPH's environmental assessment of this project which includes <u>comments provided by the</u> <u>Department of Energy & Environmental Protection</u> (DEEP) on February 7, 2013, it has been determined that the project does not require the preparation of Environmental Impact Evaluation under CEPA. The DPH will coordinate with Norwalk First Taxing District (NFTD) to ensure that the recommendations by the DEEP will be implemented.

The agency's conclusion is documented in a <u>Memorandum of Findings and Determination</u> and an <u>Environmental Assessment Summary</u> including the following attached correspondence: <u>2013-02-22 Norwalk</u> <u>FTD</u>, 2013-03-08 Norwalk FTD Final Report, 2013-3-20 DPH Correspondence email, 2013-03-22 Norwalk FTD response to DPH comments, 2013-03-26 Norwalk FTD-DPH correspondence email

If you have questions about the project, you can contact the agency at:

Name:	Mr. Eric McPhee	
Agency:	Department of Public Health	
	Drinking Water Section	
Address:	450 Capitol Avenue, MS #51WAT	
	P O Box 340308	
	Hartford, CT 06134-0308	
Phone:	860-509-7333	
Fax:	860-509-7359	
E-Mail:	dph.sourceprotection@ct.gov	

What happens next: The DPH expects the project to go forward. This is expected to be the final notice of the project to be published in the *Environmental Monitor*.

3. Post-Scoping Notice for Windham Region Transit District : Bus Garage and Administration Building

Municipality where project will be located: Mansfield

CEPA Determination: On November 6, 2012, the Connecticut Department of Transportation (CTDOT) published a <u>Notice of Scoping</u> to solicit public comments for this project in the *Environmental Monitor*. The CTDOT has received comments from the <u>Department of Energy</u> and <u>Environmental Protection</u> and from the <u>Department of Public Health</u>. The CTDOT has taken those comments into consideration and has concluded that the project does not require the preparation of Environmental Impact Evaluation under CEPA.

The agency's conclusion is documented in an Environmental Assessment Checklist and a Memo of Findings and Determination.

If you ba	ve questions about the project, you can contact the agency at:	
Name:		
Agency:	Bureau of Policy and Planning	
	Connecticut Department of Transportation	
Address:	2800 Berlin Turnpike	
	Newington, CT 06131	
Phone:		
Fax:	860-594-3028	

E-Mail: dot.environmentalplanning@ct.gov

What happens next: The CTDOT expects the project to go forward. This is expected to be the final notice of the project to be published in the *Environmental Monitor*.

EIE Notices

After Scoping, an agency that wishes to undertake an action that could significantly affect the environment must produce, for public review and comment, a detailed written evaluation of the expected environmental impacts. This is called an Environmental Impact Evaluation (EIE).

The following EIEs have been submitted for publication in this edition.

1. Notice of EIE for the Quinebaug Regional Tech Park

Municipality where project is proposed: Putnam

Address of Possible Project Location: Land adjacent to I-395 on the west bank of the Quinebaug River

Project Description: This Environmental Impact Evaluation (EIE) has been prepared for the Proposed Action on behalf of the Department of Economic and Community Development (DECD) which is the sponsoring agency and cooperating state agencies the Department of Transportation (DOT) and Department Social Services (DSS).

The Proposed Action is the construction of a new vehicular bridge at the intersection of Kennedy Drive and the I-395 Southbound off ramp at Exit 95 and a new regional YMCA facility. The purpose of the bridge is to provide access to a 267± acre site that is targeted for economic development, which would be an indirect or secondary consequence of the new bridge. The DSS is providing a portion of the funding needed to construct the YMCA facility which will include a 48,000± square foot (SF) building, surface parking, and athletic fields. By providing improved access to the Site, the new bridge has the potential for creating secondary actions that, in addition to the YMCA construction, include the development of the Quinebaug Regional Technical Park (QRTP), a light industrial type of development focused on "green technologies". A significant portion of the QRTP will be set

aside for conservation to protect rare species habitat, wetlands, floodplains, farmland soils and a portion of the proposed Aquifer Protection Area (APA).

Three site development alternatives were evaluated in an iterative process that evolved through the analysis of environmental constraints. It is estimated that with the new zoning regulations being drafted, the environmental and physical constraints of the site, the preferred alternative would be approximately 20 building lots of 7 - 8 acres in size that would each be capable of supporting up to 70,000 square feet of such development in addition to the YMCA.

Project Map: Click here to view a map of the project area.

Comments on this EIE will be accepted until the close of business on: April 22, 2013.

A copy of this EIE will be available for public review starting March 8, 2013 at:

The Putnam Town Clerk, 126 Church Street, Putnam, CT, 06260

The Putnam Public Library, 225 Kennedy Dr Putnam, CT, 06260

It also will be available at the following website starting March 8, 2013:

http://www.gza.com/quinebaug-regional-technical-park-environmental-impact-evaluation

There is no public hearing scheduled for this EIE. The agency will hold a public hearing if 25 or more persons or an association that has at least 25 members requests a hearing. A public hearing request must be made no later than March 18, 2013.

To request a public hearing contact:

Name:	Nelson Tereso, Project Manager
Agency:	Department of Economic and Community Development Office of Financial & Technical Review
Address:	505 Hudson Street Hartford, CT 06106
E-Mail:	nelson.g.tereso@ct.gov
Phone:	860-270-8213

Send your comments about this EIE to:

 Name: Mark Hood
 Agency: Department of Economic and Community Development
 Address: 505 Hudson Street Hartford, CT 06106
 E-Mail: mark.hood@ct.gov

2. Notice of EIE for the Eastern Connecticut State University 2008 Campus Plan Update

Municipalities where project is proposed: Windham (Willimantic) and Mansfield

Address of Possible Project Location: 83 Windham Street, Windham, CT (see Project Location figures)

Project Description: The Eastern Connecticut State University Campus Master Plan is part of an update to the master plan first prepared in 1992 and revised in 1997. The Plan is a baseline for future campus development and funding requests to the Board of Regents. The Plan update for Eastern is a guide for incremental growth that responds to stated needs, planned expansions, and changes in facilities needs. Eastern is comprised two campuses: the Main Campus, located south of Route 6; and the Mansfield Campus which consists of athletic facilities, located north of the Route 6 within walking distance of the main campus.

The Plan is a ten-year comprehensive physical development plan to enhance the academic, residential, and community life of the campus. It identifies new building and renovation projects that should be made by the target year 2017; with the understanding that all projects may not be accomplished over the ten-year period.

The full Plan can be viewed online here: <u>http://www.ct.gov/dcs/cwp/view.asp?a=4224&Q=520014&PM=1</u>

Project Map(s): (1) <u>General Location figure (2) Campus Master Plan figure</u>

Comments on this EIE will be accepted until the close of business on: April 19, 2013

The public can view a copy of this EIE at: http://www.ct.gov/dcs/cwp/view.asp?a=4224&Q=520014&PM=1

Any person can ask the sponsoring agency to hold a Public Hearing on this EIE by sending such a request to the address below by March 15, 2013. If a hearing is requested by 25 or more individuals, or by an association that represents 25 or more members, the Sponsoring and Participating Agencies will schedule a Public Hearing.

Send your comments about this EIE to:

Keith Epstein, AIA	
Director of Capital Projects	
Connecticut Board of Regents	
61 Woodland Street	
Hartford, Connecticut 06105	
860-493-0059	
epsteink@ct.edu	

If you have questions about requesting a public hearing, or where you can review this EIE, or similar matters, please contact:

Name:	Jeff Bolton
Title:	Supervising Environmental Analyst
Agency:	Connecticut Department of Construction Services
Address:	165 Capitol Avenue, Room 482
	Hartford, Connecticut 06106
Phone:	860-713-5706
E-Mail:	jeffrey.bolton@ct.gov

Other information: http://www.easternct.edu/

State Land Transfer Notices

Connecticut General Statutes <u>Section 4b-47</u> requires public notice of most proposed sales and transfers of state-owned lands. The public has an opportunity to comment on any such proposed transfer. Each notice includes an address where comments should be sent. <u>Read more about the five-step process...</u>

No State Land Transfer Notice has been submitted for publication in this edition.

The Adobe Reader is necessary to view and print Adobe Acrobat documents, including some of the maps and illustrations that are linked to this publication. If you have an outdated version of Adobe Reader, it might cause pictures to display incompletely. To download up-to-date versions of the free software, click on the Get Acrobat button, below. This link will also provide information and instructions for downloading and installing the reader.

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DRAFT MEETING MINUTES CEPA Public Scoping Meeting on the UConn Main Accumulation Area

UConn Bishop Center, Rm 146 One Bishop Circle, Storrs, CT May 1, 2013

Members Present: not applicable

UConn Staff Present: Richard Miller, UConn Director of Environmental Policy Jason Coite, UConn Environmental Compliance Professional

The public scoping meeting was called to order at 7:00 p.m. by Richard Miller

Opening Remarks

Mr. Miller introduced Mr. Erik Mas of Fuss & O'Neill, Inc. Mr. Mas presented the University's proposed action; the purpose of the scoping meeting; an overview and background of the main accumulation area; the CEPA process and EIE considerations; the purpose and need for the proposed action; the results of the Siting Advisory Committee work; the alternative sites; the proposed schedule; and contact information for scoping comments.

Public Comments

Four individuals presented comments.

Meg Reich, Mansfield resident

Mrs. Reich stated that the Siting Advisory Committed studied multiple sites, that the EIE is expected to focus on Parcel G as the preferred site, and that the preferred site of a similar EIE started by UConn several years ago had been repurposed before the EIE could be finished. Mrs. Reich also asked, if the preferred Parcel G site evaluated in this EIE were to become unavailable, would the other sites ranked by the Committee be included in the EIE and be considered as potential alternative sites for the MAA?. [Mr. Mas responded that the other sites ranked by the Committee would be included in the EIE and that the other ranked sites would be considered for the MAA if the preferred Parcel G site were to become unavailable.]

Detricia Suprenant, Mansfield resident

Ms. Suprenant asked what was the EH&S department to which Mr. Mas referred to in his scoping presentation. [Mr. Mas responded that EH&S referred to Environmental Health & Saftey, the UConn department which oversees the operation of the MAA.]

Ms. Suprenant stated that she has not been informed as to whether the Tech Park could include BioSafety Level 3 or 4 facilities, and asked if the proposed MAA would be designed to meet all Homeland

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Security requirements, if the budget was enough to construct a MAA facility compliant with Homeland Security requirements, and if upgrades had been made to the existing MAA so that it was compliant with Homeland Security requirements. [*Mr. Mas responded that the MAA would be designed and constructed in accordance with all prevailing regulations, including Homeland Security as applicable. Mr. Miller responded that several upgrades had been made to the existing MAA in recent years, though it is uncertain if those upgrades were made in response to any applicable Homeland Security requirements.]*

Ms. Suprenant asked if Fuss & O'Neill's scoping presentation would be available on-line. [Mr. Coite responded that the presentation would be on OEP's MAA website.]

□ Ed Smith, Mansfield resident

Mr. Smith provided written comments.

Mr. Smith asked what the cost difference was between the no action alternative versus a new facility. [Mr. Mas responded that there was essentially no additional cost for the no action alternative, which would be to keep the existing facility at its current location, and that the cost for a new facility, regardless of the site selected, is estimated at \$3-\$5 million.]

Mr. Smith asked if there were any cost savings for constructing a new facility at the existing location versus relocating the facility elsewhere on campus. [Mr. Mas responded that there were no significant cost savings for a new building at the existing location versus building new elsewhere.]

Mr. Smith asked if salt was stored at the existing facility and stated that salt is routinely applied to the ground within water supply watersheds and that salt had been the highest test result for water from the reservoir for Windham Waterworks, for which he had previously been a Commission member. [Mr. Mas responded that salt could be kept at the MAA.]

Mr. Smith stated that he had toured the existing MAA several times. Mr. Smith asked if *E. coli* was stored there, and stated that geese are a large source of *E. coli* found in drinking water reservoirs. [*Mr. Mas responded that potential waste source of E. coli bacteria, such as biological wastes, could be stored at the MAA.*]

Mr. Smith stated that the public health concerns presented about the existing MAA being located in a drinking water supply are false and insignificant compared to the salt, *E. coli* from geese, and other unmonitored sources of contamination in watersheds.

Mr. Smith stated that the money needed to relocate the MAA would be better spent on things that are more proactive to preserving drinking water quality, such as purchasing lands within a drinking water watershed as done in New York State for the New York City water supplies, annual funding state labs to analyze private drinking water samples, or sponsoring youth groups to patrol watersheds in order to identify actual sources of pollution.

Mr. Smith stated that the UConn MAA facility has been operated safely since it was constructed and that it is managed by trained professionals. He indicated that in the event that a gallon of gasoline were spilled at the MAA beyond all of its containment, UConn would respond by quickly removing any impacted soil before it could ever be a problem for the drinking water supply, and this type of oversight

and responsiveness by trained professionals would not necessarily occur for similar spills elsewhere in the watershed.

Mr. Smith asked if waste oil or waste gasoline were kept at the existing MAA and asked who monitors the gas stations and tanker trucks transporting gasoline [Mr. Mas responded that waste oil or waste gasoline could be kept at the MAA.]

Mr. Smith stated that radiological and medical facilities have to store similar wastes and that staff at those facilities have less training than the professionals at UConn managing the MAA wastes. Mr. Smith described a situation in which a lead box found at EO Smith High School was identified as a radioactive hazard with the help of trained UConn EH&S staff.

Mr. Smith asked how long the UConn chemical pits had been operated. Mr. Smith stated that to his knowledge only one residential well had tested for a contaminant above a Maximum Contaminant Level (MCL).

□ Alison Hilding, Mansfield resident

Mrs. Hilding stated that the scoping meeting should have been published in the "UConn Community Update," which has a circulation of approximately 8000 recipients. [Mr. Miller responded that the MAA Siting Advisory Committee's findings were reported in a recent issue of the Community Update.]

Mrs. Hilding stated that a term more specific and descriptive than "MAA" should be used.

Mrs. Hilding asked, in relation to an alternative site at F-lot, if the electrical substation would have to be expanded should UConn's electrical demand grow.

Mrs. Hilding asked if fire concerns for the MAA had been reviewed.

Mrs. Hilding requested that future MAA maps depict the chemical pits that were associated with the UConn landfill.

Mrs. Hilding asked that Haley & Aldrich, Inc. and Carole Johnson of USGS be consulted on Parcel G's proximity to the landfill and the potential effects on local groundwater and stated that the UConn Water/Wastewater Advisory Committee did not consult with H&A or USGS when it approved a sewer connection in the vicinity of the landfill. [Mr. Coite responded that H&A and USGS would be contacted as part of the EIE.]

Mrs. Hilding stated that neither the portion of North Eagleville Road west of the Hunting Lodge Road intersection nor Bone Mill Road should be used by trucks transporting material from the MAA.

Mrs. Hilding asked when the North Hillside Road extension is completed and when new facilities are constructed in the Tech Park, would that increase the amount of waste accumulated in the MAA and, if so, to what level and how would that increased volume be planned for. [*Mr. Coite responded that the new MAA to be evaluated in the EIE will be based on footprint and layout conceived in 2007, and that should the amount of waste managed by the MAA increase over time, then the amount of bulk pick-ups from the MAA would increase accordingly.*]

Mrs. Hilding asked if the MAA would be accepting waste from the proposed UConn Health Center facility in the Storrs Center development. [Mr. Coite indicated that since the Storrs Center development is not on UConn property, moving their waste into the UConn MAA would not be possible because it would not be compliant with RCRA regulations requiring contiguity.]

Mrs. Hilding asked if the UConn Health Center's MAA was subject to an EIE and how the health center's regulated waste was currently being managed.

Mrs. Hilding asked how the Siting Committee differentiated between the Parcel G site and the site that is North of the Transfer Station, which are located in relatively close proximity to each other. [Mr. Mas responded that the sites were primarily differentiated by their separating distances to wetlands and public areas like the Celeron trail, as well as each site's accessibility.]

Mrs. Hilding asked if a scenario in which a vehicle transporting waste crashed into the UConn wastewater treatment plant had been considered.

Mrs. Hilding asked if Parcel G's proximity to Motor Pool and trucks transporting fuel to Motor Pool had been considered.

Mrs. Hilding asked if the UConn police station would have to be expanded.

Mrs. Hilding asked if Parcel G's proximity to Eagleville Brook and Cedar Swamp Brook had been considered. [*Mr. Mas responded that the Siting Committee reviewed proximity to wetlands and watercourses. Mr. Coite responded that the EIE would continue that review.*]

Mrs. Hilding asked if there would be restrictions on the type of permissible use for buildings near the MAA.

<u>Action</u> Not Applicable

The scoping meeting ended at approximately 8:20 PM.

FZER QL ENVIRON

STATE OF CONNECTICUT

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION

OFFICE OF ENVIRONMENTAL REVIEW

79 ELM STREET, HARTFORD, CT 06106-5127

То:	Jason Coite - Environmental Compliance Analyst UConn - Office of Environmental Policy, 31 LeDoyt Road, U-3055, Storrs, CT	
From:	David J. Fox - Senior Environmental Analyst	Telephone: 860-424-4111
Date:	May 16, 2013	E-Mail: david.fox@ct.gov
Subject:	UConn Main Accumulation Area	

The Department of Energy & Environmental Protection has received the Notice of Scoping for the Environmental Impact Evaluation (EIE) to be prepared for construction of a new centralized facility for the temporary storage of chemical, biological, medical and low-level radioactive waste at the Storrs campus. The following commentary is submitted for your consideration during preparation of the document.

Previous scoping processes in 2004 and 2008 as well as the recent advisory committee alternatives analysis have adequately identified issues that should be addressed in the EIE. The 2001 *Final Environmental Impact Statement, North Hillside Road Extension* catalogued the environmental and ecological resources of the North Campus area, including this site. The *Comparative Site Study* that resulted from the thorough evaluation of alternative sites on the campus considered these environmental and ecological resources in proximity to the site. Therefore, our comments are limited to the management of stormwater at the proposed facility.

The preferred site for the storage facility sits on the drainage divide between Eagleville Brook to the south and Cedar Swamp Brook to the north. Eagleville Brook was included on the 2004 List of Connecticut Waterbodies Not Meeting Water Quality Standards due to not meeting the aquatic life criteria contained in Connecticut's Water Quality Standards. As a result, a Total Maximum Daily Load (TMDL) analysis was completed for Eagleville Brook on February 8, 2007 that established the percent of impervious cover (IC) throughout the watershed that must be achieved to meet the aquatic life criteria and attain the designated aquatic life uses. A goal of 59% reduction in IC for this Eagleville Brook sub-watershed area is to be accomplished by improved stormwater management. New development is not prohibited by this TMDL; rather, development plans should implement stormwater management controls to maintain current site hydrology resulting in effectively no net increase in IC in the watershed. The adaptive management strategy identified includes reducing IC where practical, disconnecting IC from the surface waterbody, minimizing additional disturbance to maintain existing natural buffering capacity and installing engineered BMPs to reduce the impact of IC on receiving water hydrology and water quality.

Cedar Swamp Brook was assessed by CT DEEP and included in the list of impaired waters within the 2012 State of Connecticut Integrated Water Quality Report. Cedar Swamp Brook, along with Eagleville Brook are included in the Connecticut Statewide Bacteria TMDL (2012)

for impairment to recreation use. The impairments are due to elevated fecal indicator bacteria concentrations. Analysis of the DEEP monitoring data reveals more frequent exceedences during wet weather rather than during dry weather events, indicating a stormwater runoff-related management need for each of these watersheds.

The site is located at Parcel G of the North Campus technology park, which is presently part of the diversion permit application for the North Hillside Road extension (Application No. DIV - 201205385). The conceptual plan for the permit depicts a 45,000 sq.ft. building footprint occupying Parcel G, with runoff being conveyed northerly via a water quality swale to a stormwater management basin at Parcel F.

The stormwater collection system for the main accumulation area should be described, at least on a conceptual basis in the EIE. Factors which should be considered in its design include:

- The system should be in compliance with the parameters of the diversion permit (when it is issued) as well as the flood management certification (FM-201205381) For example, construction should be confined to the specified building and parking/driving envelopes.
- Any runoff from loading areas or other locations where a spill may occur should be directed to a stormwater collection system that can be effectively closed in the event of a spill, so that it is contained prior to discharge to the ground or the larger stormwater system.
- LID techniques may be employed for clean runoff, such as rain gardens for roof runoff or pervious pavement for walkways where hazardous material will not be handled.
- Pollution prevention measures should include regular parking lot sweeping and catch basin cleaning, along with drainage system inspections and management at the site.
- The system should incorporate construction and post-construction management strategies to address the bacteria exceedences identified in both the *Eagleville Brook Watershed Management Plan* (2011) and the *Connecticut Statewide Bacteria TMDL*.

As required by the diversion permit, construction plans for development of Parcel G must be submitted to the Department for review and construction cannot commence without written approval from the Department.

Thank you for the opportunity to review this proposal. If there are any questions concerning these comments, please contact me.

cc: Robert Hannon, DEEP/OPPD Doug Hoskins, DEEP/IWRD Eric Thomas, DEEP/WPSD

TOWN OF MANSFIELD

Elizabeth Paterson, Mayor

AUDREY P. BECK BUILDING FOUR SOUTH EAGLEVILLE ROAD MANSFIELD, CT 06268-2599 (860) 429-3336 Fax: (860) 429-6863

May 13, 2013

Mr. Jason Coite UConn Office of Environmental Policy 31 LeDoyt Road, U-3055 Storrs, Connecticut 06269

Subject: Relocation of Main Accumulation Area

Dear Mr. Coite:

On behalf of the Mansfield Town Council and Conservation Commission, I would like to offer the Town's strong support for the University's efforts to relocate the Main Accumulation Area. As you know, the current facility is located in close proximity to the Level A Aquifer Protection Area for the University's Fenton River wellfields and is within the watershed for the Willimantic Reservoir, which is the source of the public drinking water supplied by Windham Water Works to Windham and southern Mansfield.

The location of the current facility within a public water supply watershed has been a significant cause of concern for town residents and agencies for many years. While we understand that the facility has been adequately maintained and has not had any releases since its inception, the potential hazard and impacts of a release on the public drinking water supply cannot be understated.

We anticipate that the current environmental impact evaluation (EIE) for this project will lead to the successful relocation of the facility outside of the public water supply watershed. To that end, we encourage the University to complete the EIE process and to dedicate the necessary financial resources to the relocation project to ensure its implementation.

If there is anything that the Town can do to assist with the EIE process, please contact Matthew Hart, Town Manager, at 860 429-3336.

Sincerely,

Elizabeth Patersan

Elizabeth Paterson Mayor

Cc: Town Council Conservation Commission Susan Herbst, President Michael Kirk, Deputy Chief of Staff Richard Miller, Director of Environmental Policy STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

Jewel Mullen, M.D., M.P.H., M.P.A. Commissioner



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

May 13, 2013

Jason Coite UConn Office of Environmental Policy 31 LeDoyt Road, U-3055 Storrs, CT 06269

Re: Notice of Scoping for the UConn Main Accumulation Area

Dear Mr. Coite:

The Department of Public Health Drinking Water Section's Source Water Protection Unit has reviewed the above Notice of Scoping. Please refer to the attached report for our comments.

If you have any questions regarding these comments, please call Pat Bisacky of this office at (860) 509-7333.

Sincerely,

Eric McPhee Supervising Environmental Analyst Drinking Water Section

Cc: James Hooper, Windham Water Works Lori Mathieu, Public Health Section Chief, DPH Drinking Water Section



Phone: (860) 509-7333 • Fax: (860) 509-7359 • VP: (860) 899-1611 410 Capitol Avenue, MS#51WAT, P.O. Box 340308 Hartford, Connecticut 06134-0308 www.ct.gov/dph Affirmative Action/Equal Opportunity Employer

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

Jewel Mullen, M.D., M.P.H., M.P.A. Commissioner



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

MEMORANDUM

TO:	Eric McPhee, Supervising Environmental Analyst
FROM:	Patricia Bisacky, Environmental Analyst 3
DATE:	May 13, 2013
SUBJECT:	Notice of Scoping for UConn Main Accumulation Area
DPH PROJECT #:	2013-0152
TOWN:	Mansfield

The Source Water Protection Unit of the Department of Public Health (DPH) Drinking Water Section (DWS) has reviewed the Notice of Scoping for the UConn Main Accumulation Area. UConn proposes to construct a new centralized facility for the temporary storage of chemical, biological/medical, and low-level radioactive wastes from the University's academic research and teaching laboratories and facility operations on the Storrs campus. The University's existing facility, known as the Main Accumulation Area (MAA), is located within the Fenton River watershed and the drainage basin of the Willimantic Reservoir, a source of public drinking water for the customers of Windham Water Works (PWSID# CT1630011).

The DWS has the following comments regarding this Notice of Scoping:

- The DWS supports the relocation of the potential sources of contamination that are stored at UConn's active MAA from the public drinking water supply watershed to another facility outside of a public drinking water supply source water area.
- The Environmental Impact Evaluation for this proposal should include an evaluation of potential impacts to the public drinking water supply and proposed mitigation measures due to the decommissioning of the existing facility.



Phone: (860) 509-7333 • Fax: (860) 509-7359 • VP: (860) 899-1611 410 Capitol Avenue, MS#51WAT, P.O. Box 340308 Hartford, Connecticut 06134-0308 www.ct.gov/dph Affirmative Action/Equal Opportunity Employer Anti-UConn eco-activists are again raising concerns about UConn's 90-day hazardous waste storage facility. UConn is considering either upgrading the facility at its current location or moving it and thus provided the public with an open house. Mike Westerfield there stated that if an accident happened, "It could represent a major public health hazard" by contaminating the drinking water provided by the Windham Water Works (WWW).

Having served for 10 years as a member of the Windham Water Commission (WWC) that oversees the WWW and having investigated potential threats within the watershed, I entirely disagree with Mr. Westerfield's alarmism. Because UConn runs a very safe and professional facility, has never had a spill, has bermed impervious floors, has various alarms to allow them to respond should a spill ever occur and additionally ships out nearly all wastes within 4 to 6 weeks so that only small amounts are ever on site - even in a 'worst case scenario' the WWW reservoir will never be threatened by a spill there.

While Chronicle readers focus on UConn's <u>potential</u> impact to our drinking water, <u>actual</u> threats go ignored. Thousands of homeowners who live in the same watershed yet far closer to the WWW reservoir regularly use chemicals that are as noxious as nearly anything at the UConn facility. Pesticides, gasoline, oil, solvents, fertilizers and heavy metals are all found in the garages, basements and sheds of most homes. Unfortunately homeowners have little training in properly disposing of these chemicals while UConn's hazmat facility professionals have extensive skills and training.

Local homeowners are supposed to dispose of their unused hazardous wastes at the public hazmat in Willington, off Ruby Road, every other Saturday – but the staff there told me that only a small percentage actually do this. Where are these hazardous wastes being disposed of then? In a survey of high school students I learned that approximately 1 in 3 students lived in a home where one or more family members improperly dumped hazardous chemicals or where there was clear evidence of a hazardous waste spill in their back yards (oil or gas stains on the ground). No wonder soluble hazardous chemicals now show up in so many residential wells. Your neighbor pouring old gas on the ground in his back yard a year ago or that jug of septic degreaser you poured down your toilet 20 years ago are likely sources of MTBE or TCE should they appear in your well water.

How about the homeowners who dispose of their spent rechargeable batteries by throwing them in the trash? Trash is incinerated which causes some of the heavy metals in rechargeable batteries to exit through the smokestack – some of which then falls back to earth via dry or wet precipitation. How about the Midwestern coal burning power plants that use coal laced with mercury and cadmium and which descends on Connecticut in high enough amounts that deer livers and many fish are placed under limited consumption advisories by our D.E.P.? Seems odd that the institution which has trained many of the scientists, educators and public officials who are confronting this real threat should be made a local 'boogie man' for a facility that has done a perfect job of making sure that toxic wastes from UConn are properly and safely disposed of. The one chemical showing up in the WWW reservoir that is significantly above the natural 'background' rate is sodium chloride. This is salt, one of many common household chemicals temporarily stored at UConn's hazmat facility. Town and state highway crews annually dump tons of it on roads throughout the WWW watershed in winter. It has been implicated in the contamination of numerous wells and research clearly shows negative impacts on freshwater stream organisms as well as on human health. Where is the alarm?

Does anyone even talk about former landfills that sit immediately adjacent to the WWW distribution (Willimantic Reservoir) and storage (Mansfield Hollow Lake) reservoirs? Iron laden leachate regularly seeps from both sites. I believe the WWW does a good job monitoring these 'threats' and there is no evidence showing they have negatively impacted our drinking water in any degree (I drink the water from the WWW with complete confidence) – but there is not a shred of evidence that even hints that any leachate, harmless or dangerous has ever found its way into the WWW reservoirs from UConn which is 10 miles upstream. (The Chronicle has now stated twice that the UConn facility is 7 miles from the WWW reservoir. But since water does not travel "as the crow flies", instead flowing downhill following existing stream channels, the Chronicle would be more accurate in quoting a distance of 10 miles. But even if it were only half a mile I would still say the threat is insignificant.)

Another way to put it in context, a farmer within half a mile of the WWW reservoir dumped on the ground over 5 tons per acre of fertilizers, herbicides and pesticides so as to be able to harvest his crop. But if a worker at the UConn hazmat facility accidentally dropped a gallon of any one of these chemicals outside their building it would constitute a hazardous waste spill (even though it would be immediately cleaned up) and might make headlines given the eco-activists propensity for dramatizing things that happen at UConn.

I'm tired of having UConn so often portrayed as a bad neighbor by the same people who have knowingly misled Chronicle readers in the past. The two 'organizations' that continue to smear UConn's name are Citizens For Responsible Growth (CFRG) and the Naubesatuck Watershed Council (NWC). Both provided quotes in the Nov. 21st Chronicle. Yet it was NWC folk who earlier twisted data concerning normal background radiation in Connecticut's waters and tried to imply it was UConn's fault as well as made numerous false statements such as that the hazmat facility had not gotten proper permits and was exempt from regulations (see

http://www.state.nv.us/nucwaste/news2000/nn10909.htm). hBoth 'organizations' have selective memberships and closed meetings. Since Freedom of Information (FOI) rules do not apply to them, they are free to hide their biases from the public. I am limited to responding to their statements carried in the Chronicle. In doing so and following the exposure of numerous of their untruths via exchanges of letters to the editor in which they were unable to rebut my statements - they responded with malicious letters to my employer in an attempt to harm and silence me. Yet they claim UConn is a bully and not open to the public?

UConn, the WWW and WWC are all bound by FOI regulations and all allow for full public input. Every time I have ever attempted to tour a UConn facility (three times at the hazmat facility – once unannounced) or get help from staff or administrators there I have been treated professionally and honestly. And every time I have attempted to attend meetings of CFRG or NWC (or have asked members in leadership positions polite questions) I have been thrown out, denied, threatened, ignored or mocked. I am dismayed that these latter voices continue to be given substantial press when it comes to debates concerning local environmental factors affecting our drinking water.

The truth is that UConn is a terrific neighbor and does not deserve most of the bad environmental press it has so often received these last several years. The Chronicle ought to have UConn's director of environmental policy Richard Miller write a weekly column in which he is allowed to present accurate and helpful information on local environmental issues. UConn professor Paul Stake does the very same thing with gardening and landscaping information. Additionally the Chronicle ought to make it a policy of contacting the WWC chairman Mike Callahan for his response to any issue regarding impacts to Willimantic's drinking water. Under Mr. Callahan's wise leadership (as well as the excellent WWW staff) the water quality of Willimantic drinking water went from being a local joke to a now widely recognized 'best in Connecticut' product. Chronicle readers would be much better served than to have biased activists, most of whom know very little about hydrology, engineering or environmental science, carry such weight on drinking water issues.

Edmund J. Smith November 28, 2003 Mansfield Center 450-1015

- Former 10-year member of the WWC
- Connecticut teacher selected and sponsored by the Connecticut Environmental Health Association to attend the 2003 American Groundwater Institute Teacher Seminar
- Citizens Water Quality Monitoring program participant
- 8th grade science teacher at Two Rivers Magnet Middle School in East Hartford but formerly having taught at Edwin O. Smith High School where I and my students regularly studied the water quality of the Fenton River using SEARCH protocols
- Connecticut Aquatic Resource Educator D.E.P. certified instructor



Barbara C. Wagner Chair

M. Howard Beach

Janet P. Brooks

Liz Clark

Bruce R. Fernandez

Karyl Lee Hall

Richard Sherman

Karl J. Wagener Executive Director STATE OF CONNECTICUT

COUNCIL ON ENVIRONMENTAL QUALITY

May 23, 2012

Dr. Susan Herbst President University of Connecticut Gulley Hall 352 Mansfield Road, Unit 2048 Storrs, CT 06269-2048

RE: Hazardous Waste Storage Facility

Dear Dr. Herbst:

I am writing on behalf of the Council to offer its recommendation regarding the University's proposal to identify the best site for its hazardous waste storage facility.

The Council commends your decision to initiate a new environmental impact evaluation to aid in site selection. The Council, which has been following the University's efforts to find the ideal site for many years, recommends that the new evaluation begin with the goal of relocating the facility out of the watershed of the Windham Water Works. While the existing site needs to be evaluated as the no-action alternative, the new evaluation should state that the project's purpose and need is to find the best site outside of the drinking water watershed and to relocate the facility at that site.

If the new evaluation were to give equal weight to the existing site, the Council predicts that the existing site would not be a preferred site when compared to well-chosen alternatives. However, if the range of alternatives is too restricted, then the Council can anticipate an outcome where the facility remains at its current location, which is far from ideal. Starting with the goal of relocating the facility to a better site would give more impetus to the selection of solid, realistic and better alternatives.

As you know, it is not just this Council that has recommended the relocation of the storage facility. The Office of Policy and Management has communicated repeatedly that the facility is not in conformance with the State Conservation and Development Policies Plan and could not be built today where it currently stands. The University's own master plan for the east campus recommends consideration of relocating the facility. When the Council learned at its public forum held last July in Mansfield that there was no current plan to relocate the facility, despite numerous past pledges and projects to do so, it was surprised. The subsequent announcement of a new evaluation was welcome news. Again, it is important to begin the evaluation with the goal of relocating the facility. The Council offers this recommendation with considerable knowledge of the project. The Council held public meetings on campus and visited the storage facility several years ago. It recently received comments from citizens about the project and has received information about the project's status from OEP Director Richard Miller. The Council makes this recommendation pursuant to CGS Section 22a-12(b), which authorizes it to offer advisory recommendations to other agencies regarding proposed construction projects.

Thank you for your consideration of this recommendation. If you or your staff have any questions, please do not hesitate to contact me.

Sincerely,

Karl J. Wagener Executive Director

> 79 Elm Street, Hartford, CT 06106 Phone: (860) 424-4000 Fax: (860) 424-4070 http://www.ct.gov/ceq



Appendix B

Main Accumulation Area Facility Comparative Site Study (on CD)