ENVIRONMENTAL IMPACT EVALUATION

Mansfield Apartments Redevelopment
at the University of Connecticut

September 2022

RECORD OF ENVIRONMENTAL CONSIDERATION

Environmental Impact Evaluation of Mansfield Apartments Redevelopment at the University of Connecticut

Prepared for:
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This Environmental Impact Evaluation for the University of Connecticut Mansfield Apartments Redevelopment has been prepared by SLR International Corporation (SLR) for the Sponsoring Agency, the University of Connecticut University Planning, Design and Construction. The material and data in this report were prepared under the supervision and direction of the undersigned.

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ACRONYMS

APA	Aquifer Protection Area
APTC	All Points Technology Corporation
ASTM	American Society of Testing and Materials
AOC	Area of Concern
bgs	below ground surface
BMPs	best management practices
CAAA	Clean Air Act, as amended
CAM	Coastal Area Management
CEPA	Connecticut Environmental Policy Act
CFM	Certified Floodplain Manager
CFPA	Connecticut Park and Forest Association
CGS	Connecticut General Statutes
CNG	CT Natural Gas
CO	carbon monoxide
CO2	carbon dioxide
COC	constituents of concern
CT DEEP	Connecticut Department of Energy and Environmental Protection
CT DPH	Connecticut Department of Public Health
CT DOT	Connecticut Department of Transportation
CT SWF/LF	Connecticut Solid Waste Facility/Landfill
CUP	Central Utility Plan
CWF	Clean Water Fund
C&D Plan	Conservation and Development Plan
dBA	decibel level
DECD	CT Department of Economic and Community Development
DPS	UConn Division of Public Safety
EFH(A)	Essential Fish Habitat (Area)
EHS	Environmental Health & Safety
EIE	Environmental Impact Evaluation
EPA	United States Environmental Protection Agency
EPA SWMM	EPA's Stormwater Management Model
ESA	Endangered Species Act
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
ft	feet
GIS	geographic information system
GMP	Growth Management Principle
GP	general permit
H_2S	hydrogen sulfide

HAP	hazardous air pollutants
HDPE	high-density polyethylene
in	inch
ITE	Institute of Transportation Engineers
IPaC	USFWS Information for Planning and Consultation
Kg	kilogram
Kg/d	kilogram per day
kV	kilovolt
kWh	kilowatt-hour
LEED	Leadership in Energy and Environmental Design
LEP	Licensed Environmental Professional
LID	Low Impact Development
lb	pound
LGM	Locational Guide Map
LOS	Level of Service
LUS	Land Use Code
mg	milligram
mg/L	milligrams per liter
ml	milliliter
msl	mean sea level
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NAVD	Connecticut State Plane North American Datum 1983
NDDB	Natural Diversity Data Base
No.	number
NO2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOx	nitrogen oxides
NRC	National Research Council
NRCS	Natural Resources Conservation Service
O3	ozone
OHM	oil and hazardous materials
O&M	operation and maintenance
OPM	Office of Policy and Management
OSHA	Occupational Health and Safety Administration
OSTA	Office of the State Traffic Commission
PAH	polyaromatic hydrocarbons
Pb	lead
PCBs	polychlorinated biphenyls
PFA	Priority Funding Area
PM	particulate matter
ppm	parts per million
PWS	Professional Wetland Scientist
RCSA	Regulations of Connecticut State Agencies

REC	Recognized Environmental Condition
ROD	Record of Decision
RSS	Registered Soil Scientist
SCGD	Site Characterization Guidance Document
S&E	sedimentation and erosion
SF	square foot
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SITES	Sustainable Sites Initiative
SLR	SLR International Corporation
SO2	sulfur dioxide
STARS	Sustainability Tracking, Assessment & Rating System
SUP	Supplemental Utility Plant
SWPCP	Stormwater Pollution Control Plan
THPO	Tribal Historic Preservation Office
UPDC	University Planning, Design and Construction
UConn MP	University of Connecticut Campus Master Plan
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Survey
UST	underground storage tank
VP	vernal pool
VOC	volatile organic compounds
WPCF	water pollution control facility
WSP	WSP Global Inc.
WQF	water quality flow

EXECUTIVE SUMMARY

The University of Connecticut (the University or UConn) is planning a design-build project to redevelop the existing 270-bed apartment complex known as Mansfield Apartments located at 1 South Eagleville Road in Mansfield, Connecticut (Figure ES-1). Built between the 1940s to 1950s, the Mansfield Apartment complex has reached the end of its useful life as campus housing and requires renewal. To address this project purpose, three new apartment buildings are proposed, along with energy efficient utility service, modern stormwater management, and redesigned site access and parking over the 16-acre property site. The redeveloped site, largely located within existing developed footprint of the property, will continue to provide housing for UConn students and be owned and operated by the University. The University anticipates demolition to commence by January 2023, with new construction commencing by spring 2023, and an anticipated opening for the fall 2025 semester.

The Proposed Action primarily consists of the following elements:

- Demolition of the existing buildings, walks, and utilities, and preservation of existing loop road.
- Construction of a new student residential complex consisting of approximately 450,000 gross square feet (SF) and approximately 900 beds.
- Additional site improvements and surface parking of approximately 373 spaces are proposed, including an elevated parking deck on the western portion of the site.
- Utility and infrastructure improvements, including modernization of utility services, energy generation, and low impact development features for stormwater management.

Project Purpose: To expand and diversify the housing typologies available to UConn students by redeveloping the existing Mansfield Apartments within the existing development footprint, and constructing an environmentally sensitive, apartment-style residential complex. The project proposes to increase the number of beds compared to the existing complex while maintaining and enhancing access to transportation routes and respecting boundaries of adjacent open spaces areas.

Project Need: UConn's 2015-2035 Campus Master Plan identifies many existing residential buildings in need of renovation or redevelopment. The Master Plan identified Mansfield Apartments as a Mid-Term (2020-2025) “Potential Redevelopment Site” as the existing apartment complex, built between the 1940’s to 1950’s, is aged and past its useful life. Overall, there is an essential need for modernization and diversity of on the UConn campus, which affects near- and long-term University goals. In the near term, residential space is needed to house students who currently reside in other aging residential complexes, while in the long term, there is a need to improve and enhance residential experiences by introducing new housing typologies on the campus.

As the sponsoring agency for this state funded project, the University has prepared this Environmental Impact Evaluation (EIE) to further evaluate the potential environmental impacts of the proposed Mansfield Apartments redevelopment, hereafter referred to as the Proposed Action. Reasonable alternatives for the Proposed Action were considered, including a No Action Alternative, which is required to be carried forth in the Connecticut Environmental Policy Act (CEPA) process even if it does not meet the project purpose and need. The No Action Alternative serves as the baseline for comparison of impacts to the Proposed Action. The selection of a preferred site and the decision process that led to the development of a schematic design concept for the Proposed Action are summarized below:

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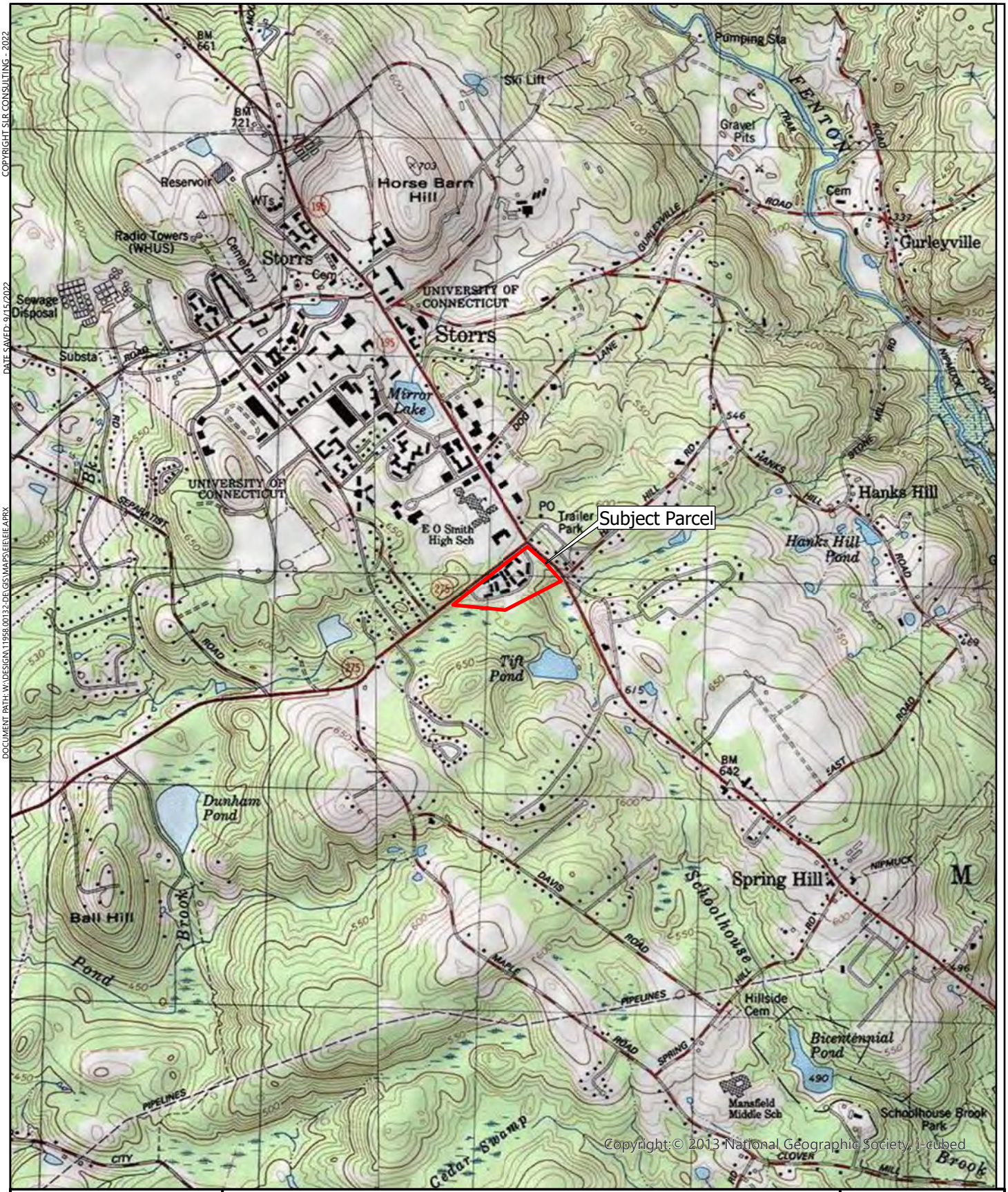

SLR

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SITE LOCATION

MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT

1 S EAGLEVILLE ROAD
MANSFIELD, CONNECTICUT

N

0 250

Feet

SCALE 1" = 2,000'

DATE 9/15/2022

PROJ. NO. 11958.00132

FIG. ES-1

Site Selection and Alternatives

The University of Connecticut 2015-2035 Campus Master Plan identifies many residential complexes in need of renovations and redevelopment. Mansfield Apartments was presented as one of these complexes, identified as a "Mid-Term (2020-2025) 'Potential Redevelopment Site.'" Before deciding upon the Preferred Alternative of redeveloping the site and maintaining the use as a residential complex, several alternative uses were considered for the subject property, including a mixed-use redevelopment, a parking garage, and a collegiate hockey arena.

Modifying the use of the Mansfield Apartments site was evaluated. Public engagement revealed no local support for a hockey arena on the site, and this potential use was discarded. In considering other potential uses, the University determined the most appropriate land use and essential need on the site would be housing in order to expand and diversify its residential typology offerings. As a result, the decision to maintain the existing use of the site for student housing was selected and advanced.

Preferred Alternative

The plan to redevelop and preserve the Mansfield Apartments site as a residential complex was derived through several considerations, high among them the University's commitment to providing affordable, high-quality on-campus housing that addresses the demand for a diversity of lifestyles and student preferences. The proposed action would supplant housing units in aging, less energy-efficient buildings that are beyond their useful life and allow them to be renovated or redeveloped without significant change to on-campus residency. In addition, maintaining the existing land use of the site is consistent with the Campus Master Plan. By constructing a new apartment complex within the general area of the existing development footprint, the University can also avoid the cumulative effects of developing upon a new site to satisfy its housing renewal goals, which could potentially cause greater environmental impacts. As shown through the following impact analysis, the current site appears to be well-situated with the means to provide adequate utilities, direct access to campus and downtown Storrs, onsite stormwater management and waste collection, and direct support from University operations and resources. By largely conforming the site redesign to the existing development footprint, providing adequate parking and access/egress, and mitigating increases in impervious area with redundant stormwater management measures, the Preferred Alternative is not anticipated to result in significant adverse impacts to surrounding social and environmental resources.

Impact Assessment Summary

Through the course of preparing the EIE, potential impacts of the Preferred Alternative to humans and the environment were considered, as well as the need to provide mitigation for any significant negative impacts of the proposed activity. Table ES-1 below summarizes the impact assessment, which is detailed in Section 3 of this report.

Table ES-1 Summary of Impacts from Preferred Alternative and Proposed Mitigation

Resource Category	Potential Impacts	Proposed Mitigation
Consistency with Planning	• The Proposed Action is consistent with the University Master Plan.	• No mitigation is required.
Geology, Topography, and Soils	• There are no unique geologic or topographic features on the Proposed Action Site. • There are no prime or statewide important farmland soils on site.	• No mitigation is required.
Water Resources and Floodplains	• No impact to 100-year floodplains or floodways. • An increase in impervious cover on site of approximately 2.15-acres has the potential to increase stormwater runoff.	• Increases in peak flow will be mitigated through the use of underground detention systems and infiltration of stormwater where possible. • The stormwater management system(s) for this project will be in accordance with the requirements of the CT DEEP General Permit for the Discharge of Stormwater and Dewatering from Construction Activities and be required to obtain a CT DEEP Flood Management Certification. • The project will adhere to the 2002 CT DEEP Erosion and Sedimentation Control guidelines. • Incorporation of Low Impact Development (LID) and green infrastructure measures into the site design coupled with new stormwater treatment trains will enhance water quality leaving the site.
Wetlands	• No temporary or permanent impacts are anticipated to onsite or offsite wetland resources; all proposed activities will take place entirely outside of wetland boundaries and greater than 200 feet from a delineated vernal pool.	• Vegetated buffer will be maintained and enhanced through native plantings to promote pollinators, habitat cover, and soil stabilization. • Lighting near project boundary with the Preserve will be Dark Sky compliant. • Comprehensive stormwater management and new treatment trains will enhance water quality leaving the project site, which impacts the Preserve.

Resource Category	Potential Impacts	Proposed Mitigation
Natural Communities, Flora and Fauna	• No rare or unique habitat is found within the natural areas of the Proposed Action Site, therefore no critical habitat areas would be lost or impacted. • Minor impacts possible within adjacent habitat consisting of forested edge with invasive species. • Adjoining Moss Sanctuary exists near the proposed action site – the project will preserve existing access, character, and function of the Preserve. • Proposed action located largely within the existing developed footprint of the site. Minor work is proposed in forest edge habitat including approximately 20,000 SF of vegetation clearing in the western project area to accommodate the new ingress and parking. • The design utilizes the existing developed footprint to the maximum extent practicable to avoid significant loss of tree canopy - over 90 percent of the existing forested edge surrounding the complex will be preserved under the proposed conditions.	• A vegetated buffer will be maintained and enhanced through native plantings to promote pollinators, habitat cover, and soil stabilization (guided by the SITES Certification for Sustainable Landscape Design process). • Lighting near project boundary with the Sanctuary will be Dark Sky compliant. • Comprehensive stormwater management and new treatment trains will enhance water quality leaving the project site and impacting the Preserve.
Noise	• Proposed use will be the same as existing (residential complex) use. No new types of noise impacts are anticipated, though greater numbers of residents and cars will likely result in greater noise volumes during certain times of day.	• No mitigation is required.

Resource Category	Potential Impacts	Proposed Mitigation
Air Quality/ Greenhouse Gases	• New emissions from stationary sources include a 500 kW diesel generator for emergency power. • Increased mobile source pollutant emissions may occur from additional vehicles traveling to/from the housing complex. However, a reduction in motor vehicle emission rates over the long term may occur due to improved automotive industry technology regionally.	• Energy-efficient fixtures will be used to reduce overall energy usage on site. • The installation of three ~500 kW fuel cell units is being considered as the primary electricity source to the development. The fuel cells produce electricity without combustion and do not emit significant levels of criteria pollutants including NOx, CO, and VOC. • Electric Vehicle charging stations will be provided on site.
Solid Waste	• Solid waste will be of similar type and amounts to that generated at the existing apartment complex per unit student.	• Trash and recycling collection on site will increase in frequency to match or exceed current removal rates.
Toxic and Hazardous Materials	• Asbestos-containing materials (ACM) were detected within existing buildings to be demolished under the Proposed Action. • The Phase I and Phase II Environmental Site Assessments (ESA) performed on site in 2022 identified two potential sources of soil and groundwater contamination on site with low to medium disturbance risk levels if excavation or groundwater extraction activities are to be conducted within these locations. Soils from these areas will not be reused onsite unless additional characterization is completed and determines that soils meet all applicable RSR criteria.	• The University will be responsible for ensuring a proper asbestos abatement contractor is selected, and demolition crews and other site contractors will need to comply with all relevant asbestos regulations when conducting site activities. • If contaminated groundwater is extracted, it will be properly disposed or discharged to the publicly owned treatment works (POTW) under a CT General Permit. • If signs of contamination in soils (staining, discoloring, odors or solid waste) are encountered during the construction activities, an environmental professional will be consulted. These materials would then be further characterized to determine appropriate reuse and/or disposal options.

Resource Category	Potential Impacts	Proposed Mitigation
Public Health and Safety	• Existing UConn Public Health and Safety Services are equipped to handle the construction, operation, and management of the proposed redeveloped Mansfield Apartments in a similar manner to the existing complex, therefore no impacts to public health and safety are anticipated. • Water service updates including replacing an existing 8" water main with a 12" water main, and installing new hydrants and a proposed fire pump will increase the available volume and pressure for the new development.	• No mitigation is required.
Visual and Aesthetic Character	• The Proposed Action is consistent with the existing visual and aesthetic character of Mansfield Apartments as a residential complex.	• No mitigation is required.
Socioeconomics	• There would be no impact to Environmental Justice Communities. • Increased patronage of local establishments would be a benefit of the Proposed Action.	• No mitigation is required.
Traffic, Parking, and Circulation	• Based on the results of the operational analysis, there are no significant expected impacts to the roadway network due to the proposed Mansfield Apartments redevelopment. • Vehicle queuing conditions are improved under proposed conditions due to the relocation of the northeast egress to align with the Community Center ingress.	• The project will require state-level approval as a Major Traffic Generator pursuant to Sections 14-311 and 14-311c of the CGS. The Office of State Transportation Authority (OSTA) will review proposed traffic mitigation and/or traffic safety measures on the state highway system to confirm that project impacts have been mitigated.
Utilities	• All required utility service connections are present on site due to the existing Mansfield Apartments complex. Some updates to electricity capacity, sanitary service, water service, and stormwater drainage are proposed to accommodate the larger capacity required of these systems by the proposed, higher bed-count development.	• Proposed updates to services including electrical, sanitary, water, and stormwater drainage, designed to accommodate the increased demand of a larger residential complex, are described herein.

Resource Category	Potential Impacts	Proposed Mitigation
Energy Use and Conservation	• Potential for an increased energy demand to operate a larger residential complex than that existing on site.	• Sustainability/energy conservation measures (guided by the Leadership in Energy and Environmental Design (LEED) certification design standards) would potentially mitigate for some if not all increases in energy usage on site.
Cultural Resources	• Based upon coordination with SHPO, there are no aboveground historic resources or known archaeological resources on or eligible for the National Register of Historic Places within the Proposed Action's Area of Potential Effect (APE).	• No mitigation is required.
	Construction Period Impacts	
Traffic, Parking, and Circulation	• As onsite parking is utilized by residents of the Mansfield Apartments only, and there will be no residential capacity on the Proposed Action site during construction, there will be no parking impacts during construction. • Local use of the Moss Sanctuary will continue during construction with all other access other than that directly from the Proposed Action site maintained throughout construction.	• Existing access will be maintained to the Sanctuary from Birchwood Heights Road during construction with a relocated trailhead sign. The University will continue to coordinate with the Town to ensure no disruptions to traffic or Moss Sanctuary access are sustained throughout construction. • A construction logistics plans will be reviewed and approved by the University. Construction traffic will be regularly monitored and mitigated as needed. Use of nearby municipal roads by construction vehicles will not be permitted. Frequent updates will be provided to the Town.

Resource Category	Potential Impacts	Proposed Mitigation
Air Quality	• Potential construction air quality impacts from diesel exhaust, idling, and fugitive dust.	Mitigation of these impacts will be addressed through best management practices including: • Reducing exposed erodible earth area to the extent possible through appropriate construction phasing. Stabilization of exposed earth with grass, pavement, or other cover as early as possible. • Application of a stabilizing agent such as calcium chloride or water to the work areas and haul roads. • Covering, shielding, or stabilizing stockpiled material. • Use of covered haul trucks. • Limiting dust-producing construction activities during high wind conditions. • Rinsing construction equipment with water at a designated wash area near the entrance/exit to the construction site to minimize drag-out of sediment by construction equipment onto the adjacent roads. • Street sweeping of roads within the construction area.
Noise	• Potential for continuous and/or intermittent (impulse) noise during construction.	• Noise abatement measures during construction to include use of appropriate mufflers and restrictions on hours of operation. • Adherence to University *Contractor Environmental Health and Safety Manual* and Occupational Health and Safety Administration (OSHA) standards.
Stormwater and Water Quality	• Potential for soil erosion during construction.	• Preparation of a Stormwater Pollution Control Plan and deployment of Best Management Practices to avoid soil erosion during construction.

Resource Category	Potential Impacts	Proposed Mitigation
Natural Communities, Flora and Fauna	• Potential to impact natural habitat during breeding, fledging and other sensitive periods for wildlife. Site is not mapped as critical habitat or the locus of observed state listed flora and fauna • The existing ring road will maintain a buffer during construction and beyond between project site and Moss Sanctuary to the south.	• Sedimentation and erosion controls will be maintained during construction. • Limits of construction will be field marked to avoid encroachment into no-disturb areas (existing ring road demarcates majority of development footprint). • A contract arborist will be required to oversee the tree preservation and protection plan during construction.
Hazardous Materials and Solid Waste	• Potential risks are related to the generation of solid waste and hazardous materials during construction.	• If contaminated soils encountered during construction, a Hazardous Materials Management Plan and Health and Safety Plan, developed in accordance with OSHA guidelines, will be followed. • Construction waste containing solvents will be disposed by a licensed waste hauler. • Solid waste will be properly disposed.

1. INTRODUCTION

1.1 BACKGROUND

After several years of planning as part of broader reviews of the University's current student housing stock and future needs, a new modern apartment-style student housing complex is proposed at UConn's outdated Mansfield Apartments property.

UConn houses between 65 percent to 70 percent of its undergraduate students on campus each year, one of the highest on-campus residency rates in the nation. While that creates a vibrant campus and excellent student experience, the average age of UConn residence halls is about 50 years old. Some, like the Mansfield Apartments, at about 75 years old, are older and are outdated to a degree that the need for ongoing maintenance and upgrades outweigh their value as a housing option.

The long-planned proposal for the Mansfield Apartments site involves demolishing the 270-bed, townhouse-style complex and replacing it with denser and more modern units, which would include contemporary design and amenities more appealing and useful to today's students. The complex has been used exclusively as an isolation location during the COVID-19 pandemic, making redevelopment easier now than if it was fully occupied. The University's intention is to avoid reopening it in its current condition to the general student population. Creating facilities that are modern, up to date, and will best meet the needs of future students is essential not only to recruitment and retention efforts, but also to ensuring they have a residential environment that supports academic success.

UConn currently has 18 residential communities ranging from pre-war historically noteworthy buildings in the East Campus complex, to the Peter J. Werth Residence Tower which opened in 2016 in the Hilltop area. About two-thirds of the housing stock consists of traditional double or single units. Student interest in on-campus living has been historically strong, with about 11,000 to 12,000 students in the residence halls at Storrs in an average year. In a regular year, almost 60 percent of UConn's on-campus students are freshmen and sophomores, with those younger students most heavily concentrated in the traditional units with roommates. However, students at all levels have told the University that they prefer suites and apartment-style living because of the independence, community, and convenience they offer.

In addition to providing more modern housing, redeveloping the Mansfield Apartments site provides opportunities to increase and enhance community spaces inside and outside of buildings, which complements the University's academic planning. The COVID-19 pandemic, while forcing UConn to reduce occupancy as a safety and health measure, also offered unexpected lessons on ways that student housing can be designed to optimize students' physical wellbeing. Suites, apartment-style living and other kinds of housing that limited shared bathrooms provided more ability for students to distance and protect themselves and aligned with their preferences. The Mansfield Apartments site redevelopment fits with

the University's larger missions to ensure that capital projects complement the strategic plan, support student housing renewal, address deferred maintenance needs, and are achieved sustainably, including through net zero-carbon development on land it owns.

The redevelopment proposal would conform to Connecticut High Performance Building regulations and would be registered as a LEED (Leadership in Energy and Environmental Design) project, with the target of gaining the LEED Gold certification for environmentally conscious construction, design, and operational features. Additional sustainability measures toward a potential net-zero carbon goal will also be investigated.

1.2 PROJECT PURPOSE AND NEED

Project Purpose: To expand and diversify the housing typologies available to UConn students by redeveloping the existing Mansfield Apartments within the existing development footprint and constructing an environmentally sensitive, apartment-style residential complex. The project proposes to increase the number of beds compared to the existing complex while maintaining and enhancing access to transportation routes and respecting boundaries of adjacent open spaces areas.

Project Need: UConn's 2015-2035 Campus Master Plan identifies many existing residential buildings in need of renovation or redevelopment. The Master Plan identified Mansfield Apartments as a Mid-Term (2020-2025) "Potential Redevelopment Site" as the existing apartment complex, built between the 1940's to 1950's, is aged and past its useful life. Overall, there is an essential need for modernization and diversity of on the UConn campus, which affects near- and long-term University goals. In the near term, residential space is needed to house students who currently reside in other aging residential complexes; while in the long term, there is a need to improve and enhance residential experiences by introducing new housing typologies on the campus.

1.3 PROPOSED ACTION

The University of Connecticut is planning a design-build project to redevelop the Mansfield Apartments complex at 1 South Eagleville Road located on the UConn campus in Mansfield, Connecticut. The approximately 16-acre site is bounded by South Eagleville Road (SR-275) to the north, Storrs Road (SR-195) to the east, and Town open space known as the Albert E. Moss Sanctuary to the south and southwest (Figure 1.3-1). Within the parcel, an approximately 1-acre outparcel (Parcel E) exists in the northeastern portion of the Mansfield Apartment complex[1]. The existing 270-bed apartment complex includes fifteen, approximate 4,698-SF, student housing buildings that were constructed in 1951 for the University of Connecticut. This townhouse style complex is surrounded by paved parking areas. The facilities have reached the end of their useful life and the 16-acre property is proposed for redevelopment with three

[1] To allow for future use of this parcel directed by the town of Mansfield, the exiting terminus of the loop road will be shifted to the west and outside of Outparcel E limits

apartment buildings, site improvements and parking. The redeveloped site, largely within existing development footprint, will continue to provide housing for UConn students and be owned and operated by the University. The University anticipates demolition to commence in winter 2023, with new construction to occur in 2023 and a targeted opening date in fall 2025.

The Proposed Action primarily consists of the following elements:

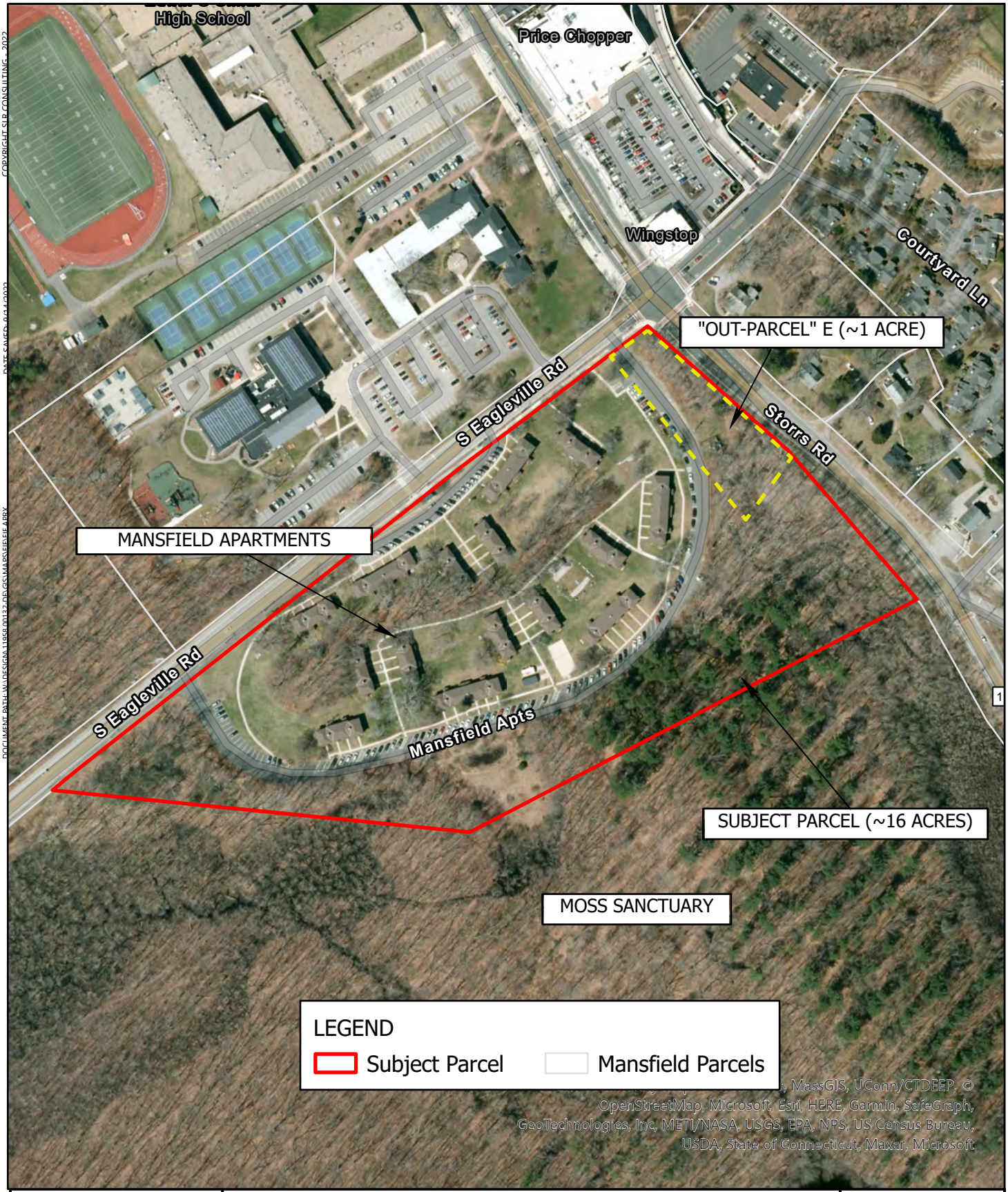
- Demolition of the existing buildings, walks, and utilities, the preservation of existing loop road.
- Construction of a new student residential complex consisting of approximately 450,000 gross SF and approximately 900 beds among 3 residential buildings.
- Additional site improvements and surface parking of approximately 373 spaces are proposed, with a stacked parking deck in the western portion of the site.
- Utility and infrastructure improvements specific to energy generation and stormwater management.
- 1-acre outparcel (Parcel E) east of the existing development will be ceded to the Town.

The University, as the sponsoring agency for this state-funded project, is preparing this Environmental Impact Evaluation (EIE) pursuant to the Connecticut Environmental Policy Act (CEPA) to further evaluate the potential environmental impacts of the proposed Mansfield Apartments Redevelopment Project. The format and content of this EIE are based on the requirements of the 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]). The purpose of the CEPA process is for state agencies to determine if a Proposed Action would have a "significant effect" on the environment. This 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.

Moss Sanctuary

Located immediately south of Mansfield Apartments is the 135-acre Albert E. Moss Forest, Wildflower, and Wildlife Sanctuary (the Sanctuary). The Sanctuary is owned and operated by the Town of Mansfield, with direct pedestrian access via the Mansfield Apartments. While the Sanctuary is a beloved fixture of both the University and the greater Storrs community and an important resource for hiking and other passive nature recreation activities, the University is committed to preserving the existing character, composition, and ecology of the Sanctuary. Although the proposed development constitutes a densification based on the number of potential residents housed annually on site, the redevelopment will

largely adhere to the existing development footprint and will maintain the current undeveloped buffer between the campus residential complex and the forested preserve. As discussed in Section 3 of this report, some improvements proposed on site in terms of stormwater management and LID are anticipated to have indirect benefit to the Moss Sanctuary through a reduction in untreated stormwater and contamination reaching the site via impervious surfaces within the adjacent housing complex. The existing housing complex, having been developed in the 1950s, lacks comprehensive stormwater management. As the proposed project will take place within the limits of the existing parcel, there are no conflicts with the established conservation restriction on Moss Sanctuary held by the Connecticut Park and Forest Association (CFPA).



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EXISTING CONDITIONS

MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT
1 S EAGLEVILLE ROAD
MANSFIELD, CONNECTICUT

N
0 250
Feet

SCALE 1" = 250'
DATE 9/14/2022
PROJ. NO. 11958.00132

FIG. 1.3-1

1.4 PUBLIC PARTICIPATION AND AGENCY COORDINATION

Public and agency coordination are integral components of the CEPA process. CEPA affords formal opportunities for public and agency input and participation. The first is during the early public scoping process, and the second is upon release of the EIE for public and agency review and comment. In preparing an EIE, coordination with resource agencies typically occurs to understand the nature, extent, and quality of regulated resources within the project area that could potentially be impacted by the Proposed Action. Specific agency coordination for this EIE included coordination with the State Historic Preservation Office (SHPO) as a project review cover form was submitted to SHPO on July 29, 2022. SHPO provided a formal determination of no effect to Uconn in a letter dated September 23, 2022. The SHPO project review cover form and response letter are provided in Appendix A of this EIE.

The CEPA public scoping process commenced when the sponsoring agency, the University Planning, Design and Construction (UPDC), published a scoping notice in the Connecticut Council of Environmental Quality's semi-monthly online publication, the "Environmental Monitor" (https://www.ct.gov/ceq). This notice triggered a 30-day public comment period whereby agencies, organizations and the public were able to submit comments on the project. A formal public scoping meeting was elected to be held during this 30-day public scoping period by UPDC, which took place on March 10, 2022. The public scoping meeting may either automatically be held by the project sponsor without a formal requested, or a public scoping meeting may be requested by 25 or more individuals or by an agency or group representing 25 or more individuals.

The UDPC published the first of three scoping notices for the Mansfield Apartments Redevelopment Project in the Environmental Monitor on February 22, 2022. A scoping meeting was held virtually on March 10, 2022. Public scoping notices published in the Environmental Monitor and the project presentation given at the scoping meeting are presented in Appendix B of this EIE. The 30-day public comment period closed on March 24, 2022.

At the March 10, 2022, public scoping meeting, four written and/or oral comments from individuals were received, with additional written comments received during the 30-day public comment period ending March 24, 2022 from the Connecticut Department of Energy & Environmental Protection (CT DEEP), the Mansfield Planning and Zoning Commission, and the Mansfield Town Council. These comment letters are included in Appendix B of this EIE. The comments contained in those letters were considered and addressed during preparation of this EIE. Per CEPA regulations, UConn published a Post-Scoping Notice in the Environmental Monitor on June 21, 2022, providing responses to the submitted comments and detailing which comments would be further evaluated in the EIE. This Post-Scoping Notice is included in Appendix B of this EIE.

Notice of EIE availability for public/agency review and comment will be posted in the Environmental Monitor on October 4, 2022, and also made available on the UPDC website (https://updc.uconn.edu). A public meeting on the EIE will be held in a hybrid in-person/virtual event at the Dodd Center on the

University of Connecticut campus on November 7, 2022. In addition to the Town of Mansfield (Town Clerk's Office and Public Library), this EIE was sent to the following agencies for review and comment:

- Council on Environmental Quality
- Connecticut Commission on Culture and Tourism (SHPO)
- Connecticut Office of Policy and Management
- Connecticut Department of Energy & Environmental Protection
- Connecticut Department of Public Health, and
- Connecticut Department of Transportation

In accordance with the regulations of the CEPA Sections 22a-1a-1 to 22a-1a-12, the findings of the environmental review are presented herein. The UPDC contact for this project is:

Name: John Robitaille, AIA, CSI
Agency: University of Connecticut, University Planning, Design and Construction
Address: 3 Discovery Drive, Unit 6038, Storrs, Connecticut 06268
Fax: (860) 486-3117
E-mail: john.robitaille@uconn.edu

2. ALTERNATIVES ANALYSIS

CEPA requires consideration of a reasonable range of alternatives for actions that may have a potential significant impact on the environment. Two alternatives to the redevelopment of Mansfield Apartments to an updated student housing complex were evaluated in this EIE; a No Action Alternative (i.e., "do nothing") and the Proposed Action Alternative (i.e., the "preferred alternative"). These two alternatives are described in this chapter along with the on-campus locations and alternative concepts that were considered as part of the site selection and design development process that led to the selection of the Preferred Alternative.

2.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, the existing Mansfield Apartments would remain in operation as a 270-bed complex, constructed in the 1950s. While the complex provided apartment-style student housing for many decades, during the COVID-19 pandemic the complex was utilized as a quarantine facility. The buildings are outdated and lack many modern efficient design standards. This alternative would not take advantage of the opportunity to construct LEED-certified buildings with modern and sustainability-minded components such as electric-vehicle charging stations, photovoltaic panels, fuel cell power generation, geothermal energy production, and improved stormwater management systems.

2.2 ALTERNATIVE SITE CONCEPTS

The University of Connecticut 2015-2035 Master Plan identifies many residential complexes in need of renovations and redevelopment. Mansfield Apartments was presented as one of these complexes, identified as a "Mid-Term (2020-2025) 'Potential Redevelopment Site.'" Before deciding upon the Preferred Alternative of redeveloping the site but maintaining a residential complex on site, several alternative uses were considered for the site of Mansfield Apartments, including a mixed-use redevelopment, a parking garage, and a collegiate hockey arena.

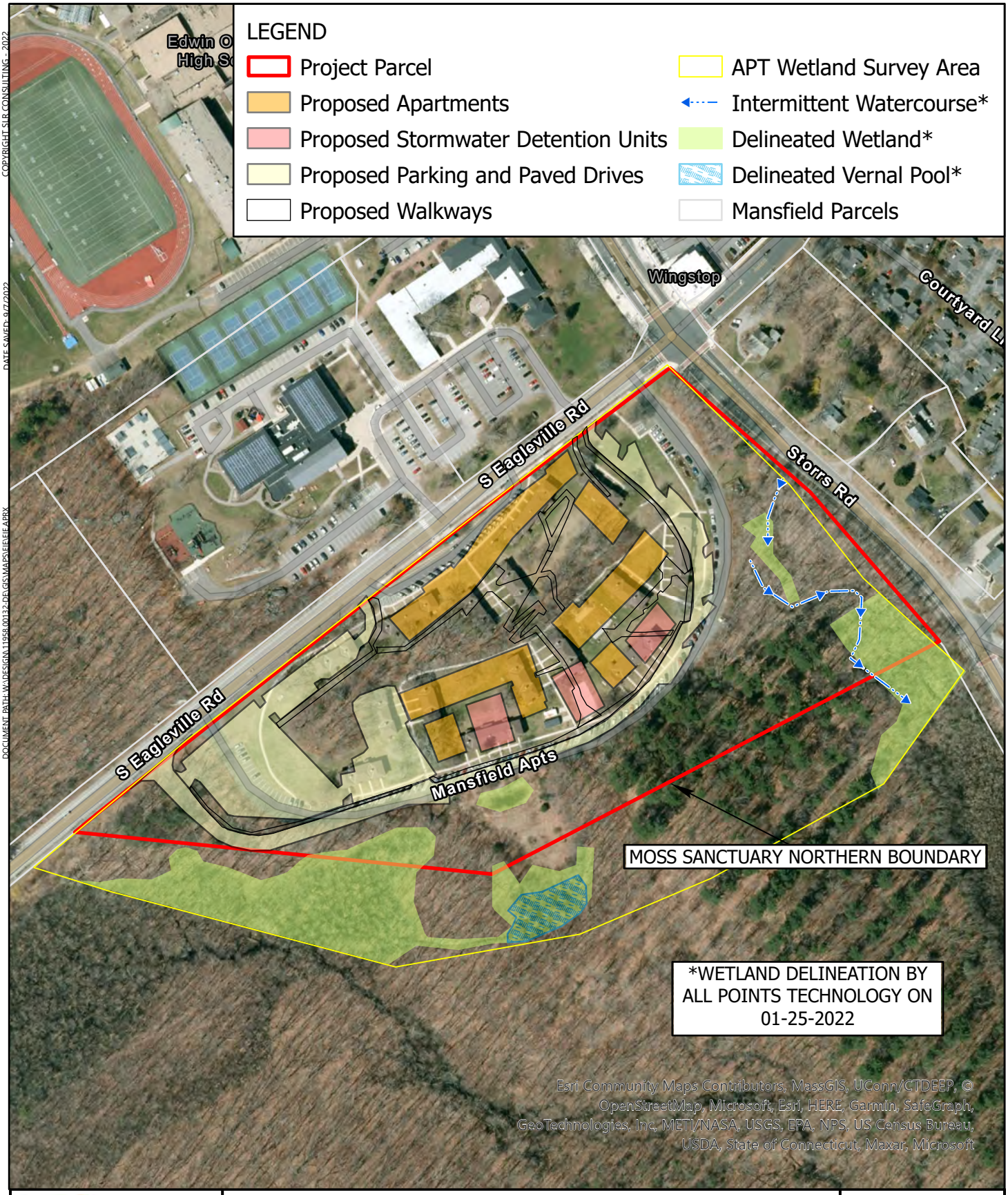
Opposition from the local community over the proposed redevelopment of the site as a hockey arena led to the abandonment of this concept. The other potential use for the site identified in the Master Plan were considered but not advanced given the consideration and need for housing diversity and the previous use of this site for campus housing.

2.3 PREFERRED ALTERNATIVE

The Preferred Alternative is described above under Section 1.3 Proposed Action and is represented by the pre-design site plan developed by Sasaki Architects, depicted in Figure 2.3-1. The site plan largely utilizes the existing Mansfield Apartment development footprint while providing an adequate amount and

diversity of housing to meet the University's anticipated demand for on-campus housing in the future. The site plan also accommodates the required surface parking capacity and onsite traffic circulation elements needed to ensure efficient site access/egress and site operations while avoiding and minimizing impacts to wetlands, woodlands, and other natural resources to the greatest extent possible. Overall, the Preferred Alternative concept meets the University's stated project purpose and need of redeveloping the site and providing addition housing diversity and is therefore carried forward for analysis in this EIE as the Proposed Action.

The plan to redevelop Mansfield Apartments to remain a campus residential complex was derived through several considerations, high among them the University's commitment to providing affordable, high-quality on-campus housing to students that meets the demand of a diversity of lifestyles and student preferences. The proposed action would eliminate less efficient buildings that are beyond their useful life, while increasing housing availability to support other campus housing modernization projects in the near future. In addition, maintaining the existing site use is consistent with the Campus Master Plan and would mean fewer burdens to achieve University and community consensus. By constructing a new apartment complex within the general footprint of the existing, the University could also avoid the cumulative effects of fulfilling growing housing demands by developing a new site which could potentially cause greater impacts to environmental resources. As shown through the following impact analysis, the current site appears to be well-situated with the means to provide adequate utilities, accessibility to campus and downtown Storrs, stormwater and waste management and other requirements to support the proposed action without causing additional stress to the natural resources and the local environment.



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PROPOSED CONDITIONS

MANSFIELD APARTMENTS REDEVLOPMENT
UNIVERSITY OF CONNECTICUT
1 SOUTH EAGLEVILLE ROAD
MANSFIELD, CONNECTICUT

N

0 250
Feet

SCALE	1" = 250'
DATE	9/7/2022
PROJ. NO.	11958.00132

FIG. 2.3-1

3. EXISTING ENVIRONMENT AND IMPACT EVALUATION

3.1.1 POTENTIALLY IMPACTED RESOURCES WITHIN PROJECT REGION

As required by CEPA, the authors of this EIE have performed a comprehensive evaluation of environmental and cultural resources with potential to be impacted by the Proposed Action. A two-step process was performed, beginning with the delineation of those resources considered to be significant in the project area, and those considered of no significance in the project area due to a lack of presence. Section 3.1.2 below outlines those resources of no significance to the subject project, while Table 3.1-1 presents an overview of those resources potentially impacted by the Proposed Action and thus further discussed in this section of the EIE. The site existing conditions and proximity to adjacent environmental resources including offsite wetlands and the Moss Sanctuary are shown on Figure 3.1-1.

3.1.2 ENVIRONMENTAL RESOURCES OF NO SIGNIFICANCE IN THE PROJECT AREA

Several environmental resources are not present on or near the Proposed Action Site and therefore would not be adversely affected by the project. These resources are briefly addressed below:

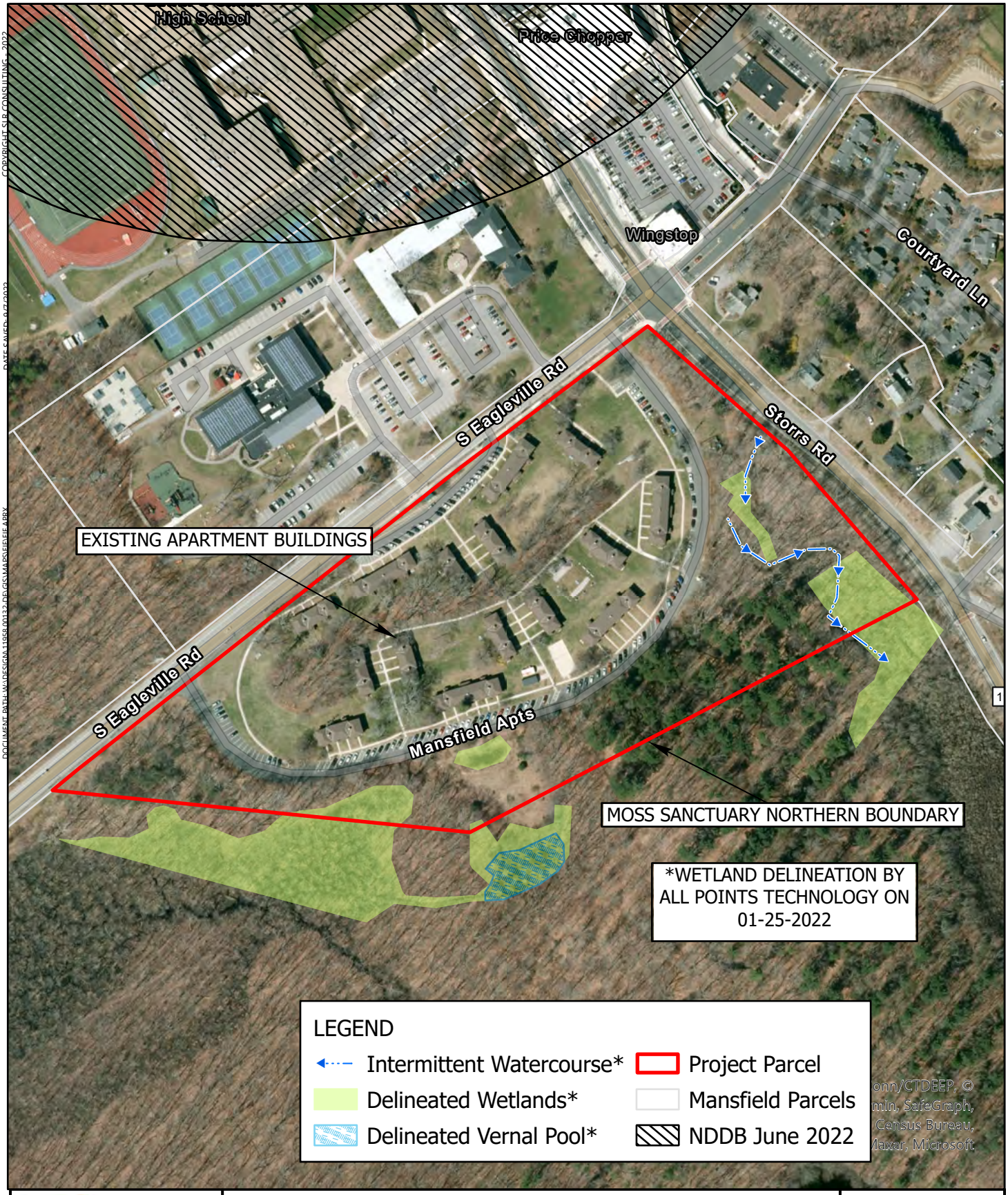
- **Wild and Scenic Rivers** – There are no waterbodies, particularly rivers with federal Wild and Scenic designation, within the Proposed Action Site. Therefore, the Proposed Action would not impact Wild and Scenic Rivers.
- **Navigable Waterways** - There are no navigable waterways within the Proposed Action Site, therefore, navigable waterways would not be adversely affected by the Proposed Action.
- **Coastal Resources** – The Proposed Action Site is located outside of the coastal boundary, as defined in CGS Section 22a-94(b). It is also located outside of the Connecticut Coastal Management Zone. Therefore, the Proposed Action is not subject to the Connecticut Coastal Management Act (CGS Sections 22a-90 through 22a-113c) and would not negatively impact coastal resources.
- **Prime and Statewide Important Farmland Soils and Active Agricultural Areas -** Soils on the Proposed Action Site do not meet the criteria for designation as Prime or Statewide Important Farmland soils. There are also no active agricultural farms on or adjacent to the Proposed Action Site. Therefore, the Proposed Action would have no adverse impact to these agricultural resources.
- **Federal Emergency Management Agency (FEMA) 100-year Floodplains and Floodways –** There are no mapped 100-year floodplains or floodways located on or adjacent to the Proposed Action Site. Therefore, there would be no adverse impacts to 100-year floodplains or floodways from the Proposed Action.
- **Aquifer Protection Areas (APA)** – The Proposed Action Site is not located within a designated drinking water aquifer protection area. The nearest protected APA (Fenton River) is located approximately 1 mile northeast of the project site. Therefore, the Proposed Action would not have a direct or indirect impact on a protected groundwater public drinking water supply.

Table 3.1-1 Environmental and Cultural Resources Potentially Impacted by the Proposed Action

Potential Impacts	Potential Impacts		Comments
	Yes	No	
Consistency with Planning		X	• The Proposed Action is consistent with the State Plan of Conservation and Development, Town of Mansfield Planning and Zoning, and the University Master Plan.
Geology, Topography and Soils		X	• There are no unique geologic or topographic features on the Proposed Action Site. • There are no prime or statewide important farmland soils on site.
Water Resources and Floodplains		X	• No impact to 100-year floodplains or floodways. • Stormwater runoff from the site is anticipated to decrease due to implementation of green infrastructure and low-impact development (LID) measures. • Water quality leaving the site is anticipated to improve compared to existing conditions with the implementation of green infrastructure and LID measures.
Wetlands	X		• No temporary or permanent impacts are anticipated to any on or offsite wetland resources which are located outside of the proposed redevelopment area and will be fully avoided with comprehensive sedimentation and erosion control measures. • Further, all proposed activities will take place entirely outside of wetland boundaries and greater than 200 feet from a vernal pool, identified off-site to the south in spring 2022.
Natural Communities, Flora and Fauna	X		• No rare or unique habitat is found within the natural areas of the Proposed Action Site, therefore no critical habitat areas would be lost or impacted. • Minor impacts possible within adjacent habitat consisting of forested edge with invasive species; the project will involve the removal of invasive species and restoration of native flora at the Proposed Action site. • Adjoining Moss Sanctuary exists near the proposed action site – the project will preserve existing access, character, and function of the Preserve.
Noise	X		• Proposed use will be same as existing (residential complex) use. No new types of noise impacts anticipated, though greater numbers of residents and cars will likely result in greater noise volumes during certain times of day.
Air Quality	X		• New emissions from stationary sources include a 500 kW diesel generator for emergency power. • Energy-efficient fixtures will be used to reduce energy usage. • The installation of three ~500 kW fuel cell units is being considered (serving as the primary electricity source to the development). The fuel cells would produce electricity without combustion using the existing natural gas service and do not emit significant levels of criteria pollutants including NOx, CO, and VOC.
Solid Waste		X	• Solid waste generated at redeveloped Mansfield Apartments would be of similar type and amounts to that generated at the existing apartment complex per unit student. The trash and recycling collection is anticipated to increase to accommodate the increase in students on the property.

Potential Impacts	Potential Impacts		Comments
	Yes	No	
Toxic and Hazardous Materials	X		• SLR identified one recognized environmental condition (REC) and one area of concern (AOC) in associated with the site. • Soils from these areas should not be reused onsite unless additional characterization is completed and determines that soils meet all applicable RSR criteria. • If groundwater is extracted from these areas, it would either need to be properly disposed or discharge to the publicly owned treatment works (POTW) under a CT General Permit.
Public Health and Safety	X		• Existing UConn Public Health and Safety Services are equipped to handle the construction, operation, and management of the new ice hockey arena, therefore no impacts to public health and safety are anticipated. • Water service updates including replacing an existing 8" water main with a 12" water main and installing new hydrants and a proposed fire pump will increase the available volume and pressure for the new development.
Visual and Aesthetic Character		X	• The Proposed Action is consistent with the existing visual and aesthetic character of Mansfield Apartments as a residential complex.
Socioeconomics		X	• There would be no impact to Environmental Justice Communities. • Increased patronage of local establishments would be a benefit of the Proposed Action.
Traffic, Parking and Circulation	X		• Based on the results of the operational analysis, there are no significant expected impacts to the roadway network due to the proposed Mansfield Apartments redevelopment. • Vehicle queuing conditions are improved under proposed conditions due to the relocation of the northeast egress to align with the Community Center ingress. • The project will require a Major Traffic Generator Certificate pursuant to Sections 14-311 and 14-311c of the CGS. OSTA will review proposed traffic mitigation and/or traffic safety measures on the state highway system to confirm that project impacts have been mitigated.
Utilities		X	• Proposed updates to services including electrical, sanitary, water, and stormwater drainage, designed to accommodate the increased demand of a larger residential complex, are described herein.
Energy Use and Conservation	X		• Sustainability/energy conservation measures (guided by the LEED certification design standards) would potentially mitigate for some if not all increases in energy usage on site.
Cultural Resources		X	• Based upon coordination with SHPO, there are no aboveground historic resources or known archaeological resources on or eligible for the National Register of Historic Places within the Proposed Action's Area of Potential Effect (APE).

Potential Impacts	Potential Impacts		Comments
	Yes	No	
	Construction Period Impacts		
Traffic, Parking, and Circulation		X	• As onsite parking is utilized by residents of the Mansfield Apartments only, and there will be no residential capacity on the Proposed Action site during construction, there will be no parking impacts during construction. • Local use of the Moss Sanctuary will continue during construction with all other access other than that directly from the Proposed Action site maintained throughout construction. • A construction logistics plans will be reviewed and approved by the University. Construction traffic will be regularly monitored and mitigated as needed. Use of nearby municipal roads by construction vehicles will not be permitted. Frequent updates will be provided to the Town.
Air Quality	X		• Potential construction air quality impacts from diesel exhaust, idling, and fugitive dust will be mitigated through construction best management practices (BMPs).
Noise	X		• Potential continuous and/or intermittent (impulse) noise during construction will be mitigated through construction BMPs.
Stormwater and Water Quality	X		• Potential soil erosion during construction will be mitigated through construction BMPs.
Natural Communities, Flora and Fauna	X		• Potential to impact natural habitat during breeding, fledging and other sensitive periods for wildlife will be mitigated through sedimentation and erosion (S&E) controls, clear demarcation of construction and no-disturb zones, and contract arborist to oversee tree preservation and protection plan during construction.
Hazardous Materials and Solid Waste	X		• Potential risks related to the generation of solid waste and hazardous during construction will be mitigated through adherence to the Hazardous Materials Management Plan and Health and Safety Plan developed in accordance with OSHA guidelines.



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EXISTING CONDITIONS

MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT
1 S EAGLEVILLE ROAD
MANSFIELD, CONNECTICUT

N
0 250
Feet

SCALE 1" = 250'
DATE 9/12/2022
PROJ. NO. 11958.00132

FIG. 3.1-1

3.2 CONSISTENCY WITH PLANNING

3.2.1 STATE CONSERVATION AND DEVELOPMENT POLICIES PLAN

The Proposed Action, which constitutes reuse of land for redevelopment, and addresses educational needs, is consistent with Connecticut's 2018-2023 Conservation and Development Policies Plan (State C&D Plan) (Connecticut Office of Policy and Management, 2022). Consistency with the State C&D Plan is required because the Proposed Action would use state funds of more than $200,000 to develop/improve real property, which triggers a consistency determination under CGS Sec. 16a-31(a). This classifies the Proposed Action as a growth-related project, as defined in the State C&D Plan.

Review of the Locational Guide Map (LGM) in the State C&D Plan revealed that the Proposed Action Site is located entirely within a Priority Funding Area (PFA). The LGM identifies priority funding areas for state agencies, which have conditions to guide development and to outline the requirements to use state funds to build projects within these areas.

The Proposed Action is consistent with the State C&D Plan as shown by its applicability/conformity with several of the principles and policies outlined in the State C&D Plan. One of the seven Smart Growth Principles defined by Public Act 09-230 is promoted by this project: Redevelopment of existing infrastructure and resources.

The Proposed Action is also in conformity with three of the six Growth Management Principles (GMP) that are the foundation of the State C&D Plan. GMP# 1, 2, and 3 are supported by the Proposed Action as described below.

- GMP#1 (Redevelop and Revitalize Regional Centers and Areas with Existing or Currently Planned Physical Infrastructure): The location of the Proposed Action is within a developed university campus area with existing public water, sewer, and transit. The Proposed Action would redevelop an existing, outdated residential complex to revitalize and enhance on-campus housing opportunities for the UConn student community, while remaining within the footprint of a previously developed portion of campus.

- GMP#2 (Expand Housing Opportunities and Design Choices to Accommodate a Variety of Household Types and Needs): Polls of the University's student population have identified the need for an increase in on-campus housing topologies to accommodate today's student needs and preferences. The Proposed Action would provide new residence options including suites, apartment-style living and other kinds of housing that limit shared bathrooms, providing more ability for students to distance and protect themselves during the ongoing pandemic, while aligning with their preferences.

- GMP#3 (Concentrate Development Around Transportation Nodes and Along Major Transportation Corridors to Support the Viability of Transportation Options): The Proposed Action is located within a campus transportation hub, providing direct access to the campus shuttle network and encouraging the use of a variety of transportation modes including public transportation, walking, and biking.

3.2.2 LOCAL ZONING AND PLANNING

As a state institution, the University of Connecticut is not subject to the municipal zoning regulations of the Town of Mansfield. However, the Proposed Action is consistent with future land use designations identified by the Town of Mansfield in its Plan of Conservation and Development (Mansfield POCD) (Town of Mansfield, 2015). On future land use mapping within the Mansfield POCD, the Proposed Action Site is designated for medium- to high-density institutional/mixed-use. The proposed residential redevelopment is consistent with this designation. The Mansfield POCD Future Land Use map shows the Proposed Action site as "Compact Residential," which includes "…higher density residential development… appropriate… based on existing or potential access to public water and sewer infrastructure and proximity to areas of activity such as the Uconn campus…[and] where walking and access to transit are more available than in the rural parts of town." All components of the Proposed Action are consistent with the Mansfield POCD's intended use for this area.

The Mansfield POCD also outlines the importance that Compact Residential development/redevelopment plans address various Sustainability Principles including minimizing and mitigating impacts to natural systems and resources, promoting resource conservation and reuse, enhancing connectivity, and clustering development to preserve open space. As a redevelopment which aims to increase residential density within the footprint of an existing residential complex, the Proposed Action avoids the potential to expand development into previously undeveloped or non-residential locations and will also provide connectivity improvements such as walking and bike paths to connect to other parts of campus and town. Additionally, the proposed buildings will be LEED-certified, promoting energy conservation, and proposed drainage improvements on site will lessen the burden of stormwater runoff on site compared to existing conditions.

The Mansfield Apartments Redevelopment is located in an already developed area on campus, which is consistent with the Mansfield POCD's, Goal 8.1, Strategy D, Action 1: "Encourage UConn to focus development and non-agricultural activities in the Core Campus, North Campus and Depot Campus areas."

3.2.3 UNIVERSITY PLANNING

The Proposed Action is consistent with UConn's future planning, as shown in the University of Connecticut Campus Master Plan (UConn MP) (Skidmore, Owings, and Merrill, LLP, May 2015). The Master Plan identified Mansfield Apartments as a Mid-Term (2020-2025) "Potential Redevelopment Site" as the existing apartment complex, built between the 1940's to 1950's, is aged and past its useful life. Overall,

there is a strong need for modernization of housing options on the UConn campus, which affects long- and short-term University on-campus housing goals. In the short term, residential space is needed to house students who currently reside in other aging residential complexes, while in the long term, there is a need to modernize residential experiences and introduce new housing typologies on the campus.

3.3 GEOLOGY, TOPOGRAPHY AND SOILS

3.3.1 EXISTING CONDITIONS

The Proposed Action site is located within the eastern uplands in Mansfield, Connecticut, with approximate coordinates of 41.799928, -72.242459. The land surface along the western portion of the Site is at an elevation of approximately 640 feet above mean sea level (ft msl) and the land surface along the eastern portion of the Site is at an elevation of approximately 620 ft msl. The elevation of the Site slopes from the west to the east/southeast with an elevation decrease of approximately 20 feet.

Bedrock at the Site is mapped as Hebron Gneiss, an interlayered dark-gray schist and greenish-gray, fine to medium grained calc-silicate gneiss (Rodgers, 1985). Large bedrock outcrops have been observed on the southwestern portion of the site, along South Eagleville Road. During the Phase II investigation (performed by WSP in July 2022), bedrock was encountered between 2 ft feet below ground surface (bgs) (UST-1) to 13 ft bgs (UST-6).

Surficial material underlying the site is mapped as till. Till is in areas of bedrock outcrops. Upper till is loose to moderately compact, generally sandy, and commonly stony (Stone et. al., 1992). Soils underlying the site are mapped as urban influenced which are soils comprised of human-altered materials in areas of high population density in a largely built environment (USDA, 2007). Soils encountered during the 2022 Phase II Investigation mainly consisted of fine to coarse sand and gravel with some silt and clay materials. The thickness of the overburden was variable and dependent on the depth to bedrock and visibly large bedrock outcrops. Groundwater was observed between 7 to 13 ft bgs throughout the Site.

According to Natural Resource Conservation Service (NRCS) Web Soil Survey mapping (accessed July 20, 2022), the majority of onsite soils are well-drained, upland soils. Udorthents-Urban land complex soils (306) constitute the fill material beneath the developed portion of the site that hosts buildings and paved areas, as well as a narrow corridor of trees bisecting the center of the residential complex from west to east (Figure 3.3-1). Other upland soils on site include Gloucester gravelly sandy loam (59C), 3 to 15 percent slopes, extremely stony south and east of the developed portion of the parcel; and Nipmuck-Brookfield complex (72C), 3 to 15 percent slopes, very rocky, bordering the developed portion of the site to the west and extending to South Eagleville Road. Wetland soils include Catden and Freetown soils (18), 0 to 2 percent slopes, bordering the developed portion of the site in a small area to the southwest, and Timakwa and Natchaug soils (17), 0 to 2 percent slopes in the very southeastern portion of the subject parcel, beginning approximately 300 feet from the edge of developed site features along Brookside Road. Refer to Figure 3.3-1 for the NRCS soils map of the site.

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EXISTING CONDITIONS

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UNIVERSITY OF CONNECTICUT
1 SOUTH EAGLEVILLE ROAD
MANSFIELD, CONNECTICUT

N
0 250
Feet

SCALE 1" = 250'
DATE 8/23/2022
PROJ. NO. 11958.00132

FIG. 3.3-1

3.3.2 IMPACT EVALUATION

3.3.2.1 No Action Alternative

Under the No Action Alternative, there would be no change to the existing geology, topography, or soils on the site as no redevelopment would take place.

3.3.2.2 Proposed Action

As the Proposed Action Site is already fully developed, Phase 1 of construction would involve the demolition of existing buildings, removal of asphalt along existing roadways and parking areas to be redeveloped, and excavation of some existing topsoil and other unsuitable soils and rock from the grassed area in the western portion of the project area where a proposed paved parking lot will be located. The unsuitable materials would be replaced by engineered fill or other fill materials suitable for construction. Redevelopment of the Mansfield Apartments is not expected to impact any important soils or significant geologic features directly or indirectly. A site grading plan would be developed that appropriately accommodates all building and parking infrastructure and would ensure efficient site operations and functioning. A soil erosion and sedimentation control plan and stormwater management plan would also be developed and adhered to by the contractor throughout the construction phase until the site has stabilized. The measures and best management practices in those plans would minimize potential offsite impacts attributed to sediment laden construction site runoff.

3.4 WATER RESOURCES AND WATER QUALITY

3.4.1 EXISTING CONDITIONS

The Proposed Action site is located within the Natchaug regional drainage basin, the Fenton River subregional drainage basin, local basin number 3207-14, and the Thames major drainage basin. The site sits within the lower portion of the 34.4-square-mile Fenton River subwatershed, which extends south from Union, Connecticut to Mansfield. The site drains from north to south; drainage leaving the site flows south then east approximately 0.2-mile to Bundys Brook, which confluences with the Fenton River approximately 1.2 miles to the east. The Fenton River, which flows approximately 2.8 miles south to drain to the Natchaug River. The Natchaug River drains to the Shetucket River which continues to flow south until its confluence with the Thames River in Norwich, approximately 15 miles north of its mouth at Long Island Sound.

The nearest surface-water body is Tift Pond, located approximately 400 feet south of the southern property boundary, within the adjacent Moss Sanctuary. A tributary to Tift Pond is located approximately 500 feet southeast of the Site. Tift Pond has a CT DEEP water-quality classification of “AA”, indicating

surface waters suitable for existing or proposed drinking water supply, fish and wildlife habitat, recreational use, agricultural and industrial supply.

Based on the topography of the area and local surface water, the general direction of groundwater flow beneath the site is presumed to be from the west to the east/southeast. Groundwater beneath the title has a CT DEEP groundwater quality classification of "GAA" (CT DEEP, 2017). Class GAA designated uses include "ground water that is tributary to a public water supply reservoir."

Under existing conditions, the site contains approximately 3.35 acres of impervious cover, comprising the buildings and appurtenances, as well as all paved roads and parking areas. The effective impervious area of the site has been estimated at approximately 1.66 acres and consists of portions of the ring road and roof drainage which are directly connected to the stormwater system. Much of the flow from the ring road sheets into adjacent wooded areas.

The existing drainage system currently discharges just under half of the stormwater runoff from the site into a bio-retention pond located in the southwestern portion of the site while the remaining area discharges to a drainage channel located on the southeastern portion of the site. The existing bio-retention pond has an emergency overflow spillway that discharges any overflows from the pond to the south, and ultimately to Tift Pond. The discharge from Tift Pond runs to the east and north where it converges with the drainage channel from the southeastern portion of the site before crossing below Route 195 into Bundy Brook and eventually to the Fenton River.

3.4.2 IMPACT EVALUATION

3.4.2.1 No Action Alternative

Under the No Action Alternative, stormwater from the existing Mansfield Apartments complex would continue to leave the site untreated from the approximately 1.69 acres of impervious surface not directly connected to the existing stormwater system. Currently, even the portion of stormwater flowing across the 1.66 acres of effective impervious area on site which is conveyed to an existing detention basin is likely not meeting the most up-to-date statewide stormwater treatment standards (per the 2004 Connecticut *Stormwater Quality Manual*), as the existing stormwater infrastructure dates to an earlier period that lacked the stormwater analysis, design, and implementation. The remaining stormwater would continue to leave the site by overland flow, without infiltration, and at relatively high velocity. This stormwater may contain contaminates that pose risks to biodiversity and aquatic resources as it enters wetlands and waterways untreated. Only limited green infrastructure currently exists on the site including a rain garden retrofitted from a paved driveway runoff. Adverse impacts to water quality, surface waterbodies, and groundwater may occur under the No Action Alternative.

3.4.2.2 Proposed Action

The proposed project will increase the amount of impervious coverage by approximately 2.15 acres due the increases in both building coverage and additional parking areas. Increases in peak flow will be mitigated using underground detention systems and where possible infiltration of stormwater will be provided. Drainage will be conveyed through a combination of water quality swales and pipes throughout the site and discharged to three proposed underground stormwater detention systems and an existing open detention basin on the south side of the site. The detention systems will be designed so the post-development peak flow rates do not exceed pre-development peak flow rates. Operations and maintenance protocols that will assist in pollution prevention will include regular street and paved area sweeping, catch basin cleaning, and snow management.

Stormwater planting basins will be used above portions of the underground detention systems to provide storage capacity of smaller storm events and to treat the water quality volume from the proposed development. Additional treatment will be provided by utilizing deep sump catch basins, disconnected impervious coverage, swales and where necessary hydrodynamic separators. Stormwater discharge points to the existing bio-retention basin on the south side of the site and the existing 24" reinforced concrete pipe (RCP) pipe on the east side of the site will be maintained and peak flows at these locations will be managed to predevelopment levels.

The stormwater management system(s) for this project will be in accordance with the requirements of the CT DEEP General Permit for the Discharge of Stormwater and Dewatering from Construction Activities and be required to obtain a CT DEEP Flood Management Certification.

The conservation of natural conditions within the Moss Sanctuary and wetlands located adjacent to the site is integral to the project design. The proposed project will incorporate green infrastructure and Low Impact Development (LID) measures to encourage detention, infiltration, and treatment of site stormwater, controlling the quality and quantity of surface water leaving the redeveloped site and reaching the Moss Sanctuary to the south.

By incorporating additional stormwater management to that existing on site, no adverse impacts to water resources are anticipated by the Proposed Action. The University is aware of previous stormwater management efforts on site and will work to ensure that any water quality measures previously designed and constructed are replaced in kind or improved upon with the redevelopment project.

3.5 WETLANDS

3.5.1 EXISTING CONDITIONS

Wetlands on the Proposed Action Site and the surrounding vicinity were delineated by All Points Technology Corporation (APTC) on January 25, 2022. As a potential vernal pool was identified offsite to the south during the wetlands investigation, several follow-up vernal pool investigations were performed by APTC between March 30 and May 11, 2022. These follow-up surveys confirmed hydrologic and biological (evidence of breeding spotted salamanders and wood frogs – obligate vernal pool species) characteristics of a vernal pool. The full investigation results are documented in the UConn Mansfield Apartments Wetlands Inspection Report and Vernal Pool Survey, both dated July 8, 2022, included as Appendix C of this EIE.

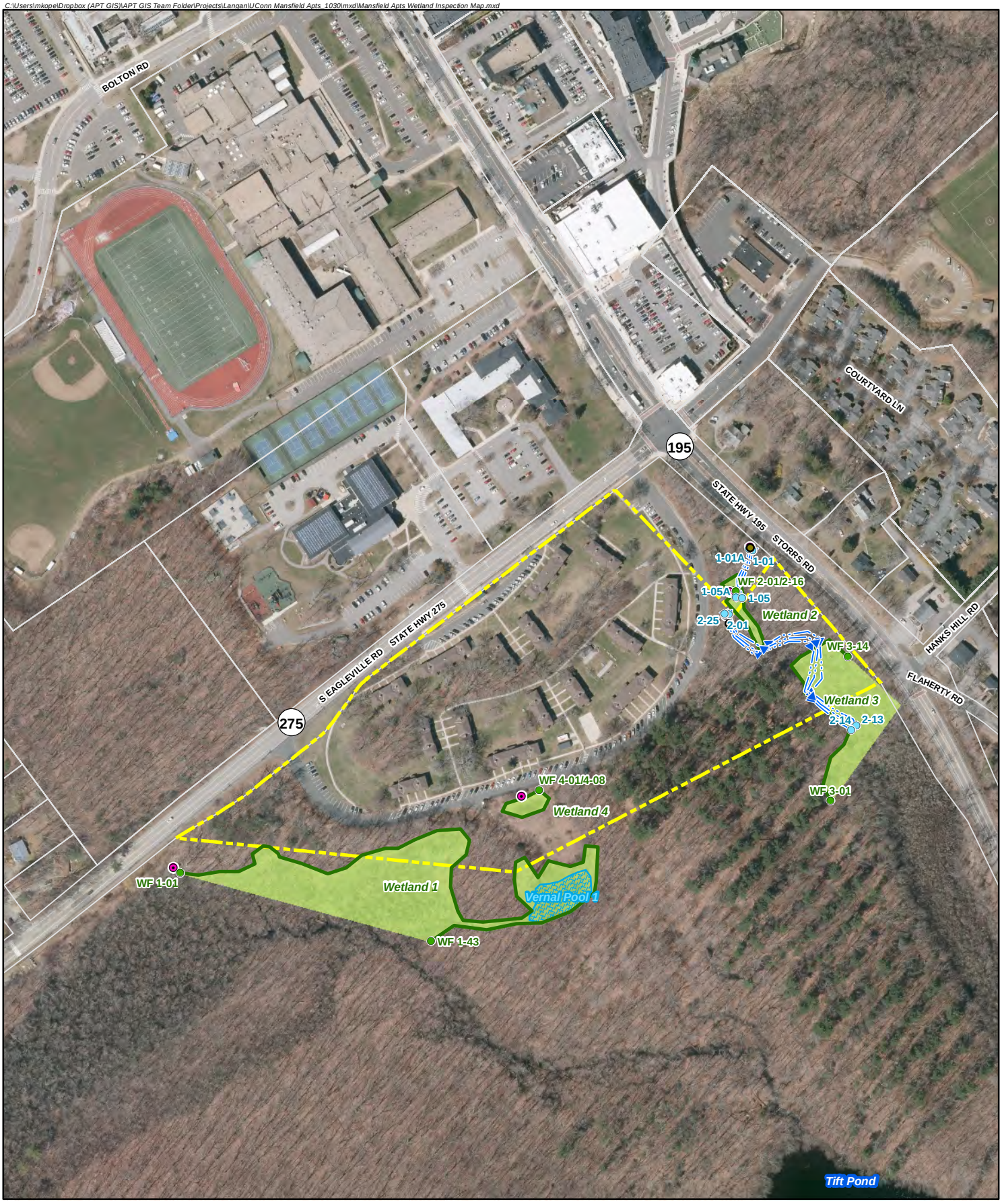
The wetland delineation was conducted by Professional Soil Scientists. Wetlands and watercourses (collectively referred to as "resources") were delineated in accordance with local, state, and federal definitions and guidelines. The identification of Connecticut-regulated resources was determined by the limit of any of the soil types designated as poorly drained, very poorly drained, alluvial, or floodplain by the National Cooperative Soils Survey, of the Natural Resource Conservation Service (NRCS) of the United States Department of Agriculture (§22a-38-15). Intermittent watercourses were determined by the presence of a defined channel and two or more of the following:

- Recent alluvium
- Hydrophytic vegetation, or
- Flowing water longer than a storm event.

NRCS soil surveys were consulted to compare observed soil types to those mapped for the Proposed Action Site. The Field Indicators for Identifying Hydric Soils in New England Version 4 (2017) and Field Indicators of Hydric Soils in the United States, Version 8.1 (2017) were used to identify hydric soils, which include both poorly and very poorly drained soils.

Federal wetlands were identified in accordance with the United States Army Corps of Engineers (USACE) 1987 *Wetland Delineation Manual* and the USACE 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region – Version 2.0*. Federal wetland boundaries were determined by the presence of dominant hydrophytic vegetation, presence of hydric soils, and evidence of wetland hydrology. The limits of wetlands and watercourses identified within the project limits were flagged with sequentially labeled flagging tape.

Figure 3.5-1 depicts the locations of the delineated wetlands on the Proposed Action Site and Table 3.5-1 provides details for each of the delineated wetlands.



Legend

- Subject Property Boundary
- Approximate Parcel Boundary
- Wetland Flag
- Watercourse Flag
- Existing Culvert
- Delineated Intermittent Watercourse
- Delineated Wetland Boundary
- Approximate Wetland Area
- Vernal Pool

N W E S

300 150 0 300 Feet

Map Notes:
Base Map Source: 2019 CT Aerial Imagery (CTECO)
Map Scale:1 inch = 300 feet
Map Date: July 2022

Wetland Inspection Map

UConn Mansfield Apartments
South Eagleville Road
Storrs, Connecticut

FIG. 3.5-1

LANGAN

ALL-POINTS TECHNOLOGY CORPORATION

Table 3.5-1 Wetland Delineation Results

Resource ID	Resource Type[2]	General Description	Soil Type	Vegetation and other Characteristics	Predominant Hydrology	Principal Functions and Values
Wetland 1 and Off-Site Vernal Pool	Palustrine forested and scrub shrub, emergent	Large area located southwest of existing development on site, extending off site to the west. Vernal Pool is connected to Wetland 1 to the west via a man-made drainage ditch.	Catden and Freetown soils	Red maple, ironwood, tussock sedge, yellow birch, skunk cabbage, gray dogwood, sensitive fern, cinnamon fern, silky dogwood, swamp white oak, sweet pepperbush, multiflora rose.	Seasonally flooded/saturated, depressional forested wetland with contributing drainage via a roadside culvert along South Eagleville Road, slightly west of the Study Area.	Groundwater Recharge/ Discharge; Wildlife Habitat; Sediment/ Toxicant Retention; Uniqueness (Vernal Pool)
Wetland 2 and IWC	Palustrine forested and emergent	Narrow wetland and IWC corridor located east of development on site; located within 1-acre "outparcel" to be transferred to Town of Mansfield.	Gloucester gravelly sandy loam	Red maple, greenbrier, sedge, green ash, Japanese barberry, multiflora rose, silky dogwood, white oak	Seasonally saturated soils resulting from seepage and contributing drainage to the north via an IWC fed by a culvert outfall that conveys stormwater discharge from Mansfield Apartments and Storrs Road.	Groundwater Discharge; Sediment/ Toxicant Retention; Wildlife Habitat
Wetland 3	Palustrine forested and scrub shrub, emergent	Wetland begins in the southeastern portion of the subject parcel and continues off site to the south. An intermittent watercourse drains into the wetland where it eventually disperses down slope.	Gloucester gravelly sandy loam; Udorthents -Urban land complex; Timakwa and Natchaug soils	Primarily forested to the north with green ash, red maple and white oak, and transitioning south to a scrub-shrub wetland with silky dogwood, high bush blueberry, and sweet pepperbush,	Seasonally saturated with contributing drainage from IWC to the north and areas of seasonal flooding in the southern portion.	Groundwater Discharge; Sediment/ Toxicant Retention; Wildlife Habitat

[2] Cowardin et. A., 1979

Resource ID	Resource Type[2]	General Description	Soil Type	Vegetation and other Characteristics	Predominant Hydrology	Principal Functions and Values
Wetland 4 (man-made stormwater basin)	Palustrine emergent	Wetland 4 consists of a wet man-made stormwater basin, apparently designed to allow stormwater to infiltrate into the surrounding ground.	Udorthents -Urban land complex	Hydrophytic vegetation to including steeplebush, common reed, soft rush, sensitive fern and black willow are found within and on the sidewalls of the basin.	The basin captures stormwater from the adjacent impervious surfaces associated with the apartment complex to the immediate north. A culvert discharges into the basin where it is apparently designed to hold water until it infiltrates into the surrounding ground.	Sediment/ Toxicant Retention; Wildlife Habitat

3.5.2 IMPACT EVALUATION

3.5.2.1 No Action Alternative

There would be no impacts to wetlands or watercourses under the No Action Alternative. The wetlands and watercourses (perennial and intermittent) on the Proposed Action Site, as described above in Table 3.5-1, would continue to exist, and function as they presently do.

3.5.2.2 Proposed Action

Based on the conceptual design of the Proposed Action as developed by the Sasaki Architecture project team, the redevelopment of Mansfield Apartments avoids direct and indirect impacts to delineated wetlands on and within the vicinity of the subject parcel. By working within the existing developed footprint on site, no direct impacts to wetlands are anticipated by the Proposed Action. Figure 3.1-1 depicts the wetlands the Proposed Action site in relation to the proposed development concept.

Although the project proposes redevelopment activities including demolition of existing buildings, construction of new buildings, structures and roadways, and other ground-disturbing activities, these activities will generally conform to the existing development footprint and completely avoid impacting wetland areas. Additionally, all proposed activities will occur greater than 200 feet from the delineated vernal pool depression located off-site within the Moss Sanctuary. Further, potential short-term indirect wetland impacts such as sedimentation and erosion will be mitigated by a robust sedimentation and erosion (S&E) control plan. Potential long-term indirect impacts to wetlands and water quality will be avoided through the use of a comprehensive stormwater management plan (both described further in Section 4.4, Mitigation). The proposed stormwater management system will be designed such that there

will be no increase in peak rates of runoff from the site. In addition, an approximately 20- to 30-foot-wide, vegetated buffer between existing wetlands/watercourse and the proposed redevelopment will be maintained on site, consistent with the buffer that currently separates the Mansfield Apartments development from the forested land to the south.

As described in Section 3.4, indirect wetland impacts will be mitigated in the long term through enhanced stormwater management on site. The stormwater management system for the site will be designed to provide water quality management while attenuating the proposed peak-flow rates from the redevelopment. The design goal is to provide water quality treatment in accordance with the CT DEEP requirements for the water quality flow (WQF) and to prevent increases in the predevelopment runoff rates from the site. The site design will involve the incorporation of engineered green infrastructure and LID measures to encourage detention, infiltration, or treatment of site stormwater in alignment with Connecticut statewide standards and the University's sustainability commitment.

3.6 NATURAL COMMUNITIES, FLORA AND FAUNA

3.6.1 EXISTING CONDITIONS

3.6.1.1 Vegetation Communities and Habitats

Within the approximately 16-acre subject parcel, nearly 10 acres consist of the existing Mansfield Apartments development. Natural communities within the development are limited to manicured lawn areas punctuated by individual shade trees surrounding the buildings, though an approximately 1-acre narrow corridor of canopy trees extends west-east through the center of the apartment complex. The remainder of the site to the south, east, and west of the development consists of undeveloped forested uplands and some wetland areas, described below.

Uplands – Undeveloped forested land (hardwood deciduous and coniferous) and associated edge habitat surround the existing developed portion of the site to the south, east, and west. Characteristic vegetation in the adjacent upland forest includes Red Oak (*Quercus rubra*), Black Oak *(Quercus velutina*), Black Birch (*Betula lenta*), and Shagbark Hickory (*Carya ovata*) in the tree layer. Eastern Hemlock *(Tsuga canadensis*) forms distinct, but limited inclusions in the southwest portion of the site. American Hornbeam (*Carpinus caroliniana*) was noted intermittently in a diffuse sub-canopy layer of the upland forest. Witch Hazel (Hamamelis) is a characteristic species of the shrub layer. Hay-scented Fern (*Dennstaedtia punctilobula*) is a characteristic plant of the herbaceous layer.

Invasive species are relatively common in the understory, particularly in the edge and denser scrub shrub communities, and include multiflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), and bush honeysuckle (*Lonicera* spp.).

Wetlands and Water Resources - Refer to Section 3.5 for information regarding wetlands and watercourses on the Proposed Action Site.

3.6.1.2 Characteristic Fauna

As an existing residential complex consisting largely of buildings, paved surfaces, and manicured lawn, the Proposed Action site provides only limited habitat for wildlife and pollinators including birds, bats, invertebrates, herpetofauna, and small mammals. The central corridor of trees bisecting the development likely provides the majority of this habitat in the form of shade, food, cover, and potential nesting spots.
Additionally, the palustrine forested and scrub shrub wetland areas on and adjacent to the site, outside of the Proposed Action work area, provides suitable habitat for aquatic insects, detritivores, herpetofauna (including frogs, snakes, and salamanders), and small, insect-eating mammals.
Finally, the site's location adjacent to the offsite Moss Sanctuary greatens the potential for larger species of mammal and birds of prey to utilize the site especially near the interface between the Preserve and the development, but also occasionally on the development site itself. It is likely that deer, and occasionally coyotes and foxes may visit the site to hunt or forage, and birds of prey such as hawks may utilize the buildings and light-posts as perches for hunting within the open grassy and paved areas within the development.

3.6.1.3 Rare and Protected Species

State Listed Species A review of CT DEEP Natural Diversity Database (NDDB) Geographic Information System (GIS) mapping (June 2022) revealed no known rare species within or proximal to the Proposed Action Site (the nearest occurrence is approximately 0.1-mile to the north). Therefore, a formal request for additional rare species information from the NDDB was not required. The term "rare species" in this EIE refers to any of Connecticut's flora or fauna included on the CT DEEP (2015) list of endangered, threatened, and special concern species[3].
Federal Listed Species A query was performed to identify federal listed candidate, threatened, or endangered species or critical habitat under the jurisdiction of United State Fish and Wildlife Service (USFWS) under the Endangered Species Act (ESA) with potential to occur on site. The USFWS consultation, using the web-based Information for Planning and Conservation (IPaC) tool, resulted in an Official Species List (provided in Appendix A), dated July 19, 2022, with the following ESA species:

- Northern Long-eared Bat (Threatened)
- Monarch Butterfly (Candidate)

[3] The wood frog (*Rana sylvatica*), observed off-site in Wetland 1 during several site visits conducted during Spring 2022, is a species identified as "Greatest Conservation Need" in the State Wildlife Action Plan (CT DEEP 2015).

No exemplary critical habitats of state or federally listed species were noted on site.

3.6.2 IMPACT EVALUATION

3.6.2.1 No Action Alternative

Under the No Action Alternative, there would be no change to the existing geology, topography, or soils on the site, and therefore no immediate significant change in vegetation, natural communities and biodiversity on site. No rare or unique habitat is found within the natural areas of the Proposed Action Site, therefore no critical habitat areas would be lost or impacted by the proposed project. Due to the existing limited and less sophisticated stormwater management system on site compared to current design standards, species biodiversity, especially related to wetlands in close proximity to the existing development, would continue to remain susceptible to potential deleterious impacts associated with untreated stormwater entering surface water and groundwater sources.

3.6.2.2 Proposed Action

Onsite Habitat - The proposed design utilizes the existing developed footprint of the site to the maximum extent practicable to avoid significant loss of tree canopy and any natural habitat present on site. Minor work is proposed in forest edge habitat including approximately 20,000 SF of vegetation clearing in the western project area to accommodate the new ingress and parking. However, over 90 percent of the existing forested edge surrounding the complex will be preserved under the proposed conditions.

The existing vegetated buffer will be maintained and enhanced through native plantings to promote pollinators, habitat cover, and soil stabilization (as guided by the SITES Certification for Sustainable Landscape Design). By including native restoration plantings on site, the Proposed Action will provide enhanced habitat for native pollinators including birds, insects, and other small wildlife.

Overall, the potential to impact natural communities within the Proposed Action Site is limited; there are no known state listed species within the vicinity of the site, and the presence of the two identified federally listed species is unlikely given the site characteristics (this assessment is described further below). By working largely within the existing developed footprint on site and preserving existing, large landscape trees and the tree canopy corridor on site, no direct impacts to natural communities, flora, and fauna are expected by the Proposed Action.

Adjacent Habitat - Directly off site to the south is the 135-acre Albert E. Moss Forest, Wildflower, and Wildlife Sanctuary (the Sanctuary), owned and operated by the Town of Mansfield, which presently provides and will continue to provide direct pedestrian access via the Mansfield Apartments. The Sanctuary is an important resource for hiking and other passive nature recreation activities for both the campus and larger local community, and the proposed redevelopment of the Mansfield Apartments will not impact the character, composition, or ecology of the Sanctuary. The redevelopment is not anticipated to impose a negative impact on Moss Sanctuary in the short-term relative to access. The existing access

from the southern property line will be temporarily closed during construction, though Moss Sanctuary will continue to be accessible from this vicinity using an existing trailhead at the eastern boundary of the Sanctuary.

Although the proposed development constitutes a densification based on the number of potential residents housed annually on site, the footprint will not physically encroach into the development, and the same undeveloped, woody buffer between the residential complex and the forested preserve will remain intact and see planting enhancements as necessary. As discussed in previous sections, improvements proposed on site in terms of stormwater management and LID, modernization of the site with respect to energy use and overall site management are anticipated to have indirect benefit to the Moss Sanctuary through a reduction in untreated stormwater and potential contamination reaching the site via impervious surfaces. Exterior lighting trespass and Dark Sky compliance measures are anticipated to limit light pollution impacts which can have deleterious effects to various species' migration and breeding patterns.

As a precaution to protect any species potentially utilizing the Mansfield Apartments complex as a corridor to reach the Sanctuary to the south, temporary, construction-phase wildlife management BMPs including geotextile fencing will exclude wildlife from the construction adjacent to forested areas.

While many wildlife species are negatively impacted by ambient noise, a measurable increase in noise volumes emanating from the site (other than during construction) is not anticipated. The Proposed Action site has existed as University housing for the greater part of a century, and a similar level and type of noise from residential traffic is anticipated to be maintained. As a nature preserve located at the cross-section of two major roads, wildlife occupying the edge portions of the sanctuary should be adapted to the disturbance levels defined by roadways and the existing surrounding developments. More detailed information regarding noise impacts can be found below in Section 3.7.

Overall, no adverse impacts to the Moss Sanctuary are anticipated from the proposed action relating to: stormwater runoff, traffic/parking/pedestrian access, noise/light/solid waste pollution, visual aesthetics, and ecological community composition. The University commits to continued collaboration with the Town and to support the management goals, public access, and uses of the Moss Sanctuary.

Federal Listed Species The following habitat assessment and impact mitigation has been provided for the two federally protected species with potential to occur on site:

- Northern long-eared bat (*Myotis septentrionalis*) – Threatened Species

No impacts on the Northern Long-eared bat are anticipated from the Proposed Action. There are no known hibernacula within the project area. Any tree clearing necessary for the project will not be conducted during the Northern Long-eared Bat time-of-year restrictions, June 1 through July 31, to avoid impacts on this species' habitat areas.

- Monarch butterfly (*Danaus plexippus*) – Candidate Species

Although some temporary vegetation clearing will be conducted as part of the site plans, no impacts on the Monarch butterfly or its habitat are anticipated. Currently, vegetated areas surrounding the existing site improvements consist largely of manicured lawn with a buffer of canopy trees to remain largely undisturbed in the center of the site. Following redevelopment, proposed native landscaping in bioswales and other planted areas will increase pollinator habitat on site.

As known natural habitat adjacent to the Proposed Action Site including wetlands and watercourses will be avoided under the proposed redevelopment plan and state or federally listed species are known to depend on the site for critical habitat, surveys and/or mitigation specifically for threatened or endangered species is not warranted for the Proposed Action. The expected improvement to water quality of stormwater draining the site would benefit downstream aquatic receptors both on and off site protecting any aquatic species of Greatest Conservation Need that may occur downstream. Tree removal would be limited to outside of the breeding season for birds, and outside of the maternity roosting season for bats. Incorporation of native plantings into the landscape plans would help to further mitigate the limited impacts to vegetation removal and offer alternative plant species of high or higher wildlife value than over existing conditions.

3.7 NOISE

3.7.1 EXISTING CONDITIONS

Title 22a of the RCSA addresses Environmental Protection, and specifically, Control of Noise is codified in RCSA Section 22a-69-1 through 22a-69-7.4 (revised June 3, 2015). The noise control regulations identify three distinct Noise Zones designated as Class A, B and C, with Class A being the most noise sensitive and Class C being the least. The defining land uses and characteristics of these zones are presented in Table 3.7-1.

Table 3.7-1 Noise Zones – Defining Characteristics

Noise Zone	Definition	Land Uses
Class A	Primarily residential areas, places where people sleep, or areas where serenity and tranquillity are essential to the intended use of the land.	Single- and multi-family residential, hotels, prisons, hospitals, religious facilities, cultural facilities, forest preserves, or land intended for residential or special uses requiring such protection.
Class B	Primarily commercial areas, or areas where people converse, and such conversation is essential to the intended use of the land.	Retail, trade, personal business and legal services, educational institutions, government services, amusements, agricultural activities, and lands intended for such commercial or institutional uses.
Class C	Generally industrial where protection against damage to hearing is essential, and the necessity for conversation is limited.	Manufacturing activities, transportation facilities, warehousing, military bases, mining, and other lands intended for such use.

The Proposed Action Site, located to the south of South Eagleville Road, is within the Southern Gateway District of the Main Campus, and is therefore designated as a Class B Noise Zone due to its association with an educational institution. Similarly, much of the developed land directly surrounding the site to the north and northeast is comprised of municipal property including the Mansfield Community Center, Fire Department, and Town Clerk's office, which are located just south of the E.O. Smith public high school campus, and all are classified under the Class B Noise Zone. To the northeast, approximately 400 feet from the Proposed Action site, the Storrs Commons mixed-use development contains a grocery store, dining, and retail stores as well as several apartment buildings located along Storrs Road. Storrs Commons represents a mix of Class A and Class B noise zone areas.

The largest land use immediately surrounding the site is comprised of undeveloped forested open space, including the 135-acre Albert E. Moss Sanctuary, which abuts the site to the south. Together with a small residential community located over 400 feet to the east across Storrs Road, and another approximately 0.25-mile to the west along South Eagleville Road, these areas fall within the Class A noise zone.

According to RCSA Section 22a-69-3.5 (Noise Zone Standards), equivalent sound levels (Leq[4]) in A-weighted decibels (dBA[5]) allowed by a Class B Noise Zone emitter, shall not exceed 55 dBA (daytime – 7:00 a.m. to 10:00 p.m.) or 45 dBA (nighttime – 10:00 p.m. to 7:00 am.) to an adjacent Class A Noise Zone or 62 dBA at any time to an adjacent Class B or C Noise Zone. As mentioned above, the Proposed Action Site is a Class B Noise Zone, and the nearby residential and open space areas are Class A Noise Zones.

3.7.2 IMPACT EVALUATION

3.7.2.1 No Action Alternative

Under the No Action Alternative, no changes to the existing conditions on site which operates as a residential complex would occur. Therefore, no change to the existing noise environment would occur with the No Action Alternative.

3.7.2.2 Proposed Action

The Proposed Action would redevelop the existing 270-bed, on-campus residential complex into an on-campus apartment complex hosting approximately 900 beds. As a Class-B noise zone, the existing noise environment is suitable for the Proposed Action. While no new types of noise impacts are anticipated, a greater number of residents and cars will likely result in greater noise volumes during certain times of day. Due to the relatively undeveloped land surrounding the Proposed Action site, there are a limited number

[4] Leq is the equivalent continuous sound level in decibels equivalent to the total sound energy measured over a stated time period and is also known as the time-average sound level (LAT).

[5] dBA is the A-weighted decibel and is the unit typically used to describe sound levels perceptible to the human ear. It is a logarithmic unit of measure. For example, a 10-decibel increase in noise level is perceived as a doubling of loudness.

of residential properties to be impacted by an increase in noise. The nearest residential property to the Proposed Action site is approximately 0.1-mile to the east, on the opposite of Storrs Road as the redevelopment site. The nearest developed properties to the site are approximately 300 feet to the north across South Eagleville Road, and consist of the Mansfield Community Center, a playground, skate park, tennis courts, and other recreational facilities, as well as the Mansfield Fire Department and Town Clerk's office. With the exception of the fire department building, the other Town facilities are open and in use during the daytime hours and should not be negatively impacted by normal anticipated noise levels coming from the redeveloped Mansfield Apartments. Additionally, as a campus owned and operated residential complex, the property is and would continue to be held to University noise policies, which would continue to be enforced by campus authorities.

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 3.18, Construction Impacts.

3.8 AIR QUALITY

Existing air quality and potential environmental consequences associated with the No Action and Proposed Action Alternatives are addressed in this section. Both mobile and stationary sources of air pollutants are discussed. Mobile sources consist of vehicles and construction equipment, whereas stationary sources include boilers, emergency generators and other fuel-burning equipment associated with the redeveloped apartments.

Background

Under the Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for concentrations of six criteria air pollutants, including: carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM2.5 & PM10), sulfur dioxide (SO2), and lead (Pb). Primary standards have been established to protect public health; secondary standards have been established to protect plants and animals and to prevent economic damage.

The State of Connecticut adopted the NAAQS and subsequently developed State Implementation Plan (SIP) to attain and maintain these standards. CT DEEP has pollutant monitoring stations across Connecticut that are 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, emergency generators, and other fuel-burning equipment.

3.8.1 EXISTING CONDITIONS

The State of Connecticut is divided into designation areas by pollutant for air quality planning purposes. Each area is then designated as being in attainment, or non-attainment, with the air quality standards established for each criteria pollutant. 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 a non-attainment area for ozone (serious non-attainment for the 2008 8-hour standard and marginal non-attainment for the 2015 8-hour standard) and is located in unclassified or attainment air quality designation areas for the other criteria pollutants, including CO, NO2, Pb, SO2, PM2.5, and PM10.

Stationary Sources

Under the Clean Air Act Amendments (CAAAs) of 1990, major sources of air pollution are required to obtain a Title V operating permit, which is administered in Connecticut by the CT DEEP 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. As such, the University currently holds an active Title V permit for the Storrs campus (CT DEEP, 2019a). The pollutants covered by the Title V permit include nitrogen oxides (NOx), volatile organic compounds (VOCs), CO, sulfur oxides (SOx), particulate matter (PM10 & PM2.5), other hazardous air pollutants (HAPs), and greenhouse gas (GHG) emissions. The campus is a major source for each pollutant except the HAPs. UConn is considered an area source for HAPs (CT DEEP, 2019a, p. 7). Fuel burning equipment is the major stationary source of air emissions on the campus. All emission sources with applicable permitting and regulatory requirements are accounted for in the Storrs campus Title V permit. This includes emergency and non-emergency engines, boilers, heating equipment, and combustion turbines. Fuel burning equipment currently at the Central Utility Plant (CUP) includes three dual fuel combustion turbines each with heat recovery steam generators (HRSG) and natural gas duct burners, four dual fuel steam boilers (Boil 1, 2, 7, and 9), four natural gas chiller units, and three diesel emergency generators. A separate South Campus Chiller Plant includes one natural gas chiller engine and one diesel emergency generator. A Supplemental Utility Plant (SUP) is under construction, at least in part, to support the new Science 1 building, and this facility includes an emergency generator and a dual fuel steam boiler. Other stationary sources of air pollutants throughout campus include emergency generators, as well as natural gas or oil-fired heating equipment for building locations not serviced by the CUP or SUP.

Stationary sources of air pollution at the existing Mansfield Apartments include natural gas-fired heating equipment.

Mobile Sources

Mobile sources of air pollutants on the UConn Campus include vehicles and service equipment. The air quality effects of mobile sources are considered on a regional, or mesoscale, level in the context of the SIP. The CAAAs require that each state submit a SIP for attainment of the NAAQS to the EPA, and the SIP and subsequent SIP revisions submitted to EPA have demonstrated that Connecticut has met all requirements mandated by the CAAAs for moderate 8-hour ozone nonattainment areas (EPA, 2010).

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. Existing vehicle circulation and traffic patterns on site are described below in Section 3.15.

3.8.2 IMPACT EVALUATION

3.8.2.1 No Action Alternative

Under the No Action Alternative, there would be no new mobile or stationary sources of air pollution emissions and therefore adverse impacts to air quality are not expected. Over the long-term, as a result of reductions in motor vehicle emission rates through improved technology, and assuming that the volume of motor vehicle traffic remains essentially the same, the level of pollutants and precursors is expected to decrease, thereby resulting in an overall improvement in air quality in the future.

3.8.2.2 Proposed Action

Stationary

Under the Proposed Action, the Mansfield Apartments would be served by onsite renewables for heating, cooling and electricity needs with electricity provided by the CUP and/or Eversource as needed to supplement the onsite generation. A diesel-fired emergency generator would provide power in the event of a power outage.

The CT DEEP requires the owner/operator of a new emergency engine with potential emissions of any individual air pollutant of 15 tons per year (TPY) or more to obtain an individual permit for the emergency engine. The emissions are conservatively calculated as the emergency unit running 24 hours a day for the entire year. Based on the initial design for the Mansfield Apartments, it is anticipated the proposed emergency generator would produce greater than 15 TPY and, therefore, would require a permit. However, in lieu of obtaining an individual permit for the emergency generator, CT DEEP has a provision set forth in the RCSA Section 22a-174-3b, also known as “Permit-by-Rule”, which allows the owner/operator to restrict the hours of operation in order to decrease the potential emissions to under 15 TPY. The University will be utilizing this provision for the proposed emergency generator in order to

comply with applicable permit requirements.

If the projected emissions from the Proposed Action are less than de minimis thresholds for Conformity Determinations and the emissions are not regionally significant, the action can be presumed to conform to the SIP and, therefore, a conformity determination is not required. The proposed emergency generator emissions is anticipated to be well below the de minimis thresholds and it is unlikely the pollutant concentrations would exceed a NAAQS. No impact to air quality is anticipated to result from the Mansfield Apartment project. The emergency generator will be managed in accordance with all applicable regulatory requirements which will be included the University's existing Title V permit.

In addition, because UConn's Storrs campus is a major source of emissions, under the federal De Minimis Rule set forth in Sections 182(c)(6) and 182(f) of the Clean Air Act, the University is required to prepare campus-wide emissions aggregation calculations for each new emission source to evaluate whether or not the installation will be considered a major modification to the Storrs campus. subject to non-attainment New Source Review (NSR) requirements. The De Minimis Rule emission calculations require the tracking of campus-wide net emissions increases of nitrogen oxides (NOx) and VOC over a given 5-year calendar year period (e.g., net emissions increases between calendar year 2020 and 2024 when the Proposed Action is anticipated to occur). If the campus-wide net emissions increase for emission sources added and/or removed within the 5-year period is greater than 25 tons, the Proposed Action would be considered a major modification and would be subject to non-attainment NSR requirements. Based on the current emissions projections for the time period the Proposed Action will occur, it is anticipated that the installation of the Mansfield Apartment emergency generator will not exceed the campus-wide 25 ton threshold and, therefore, will not be subject to non-attainment NSR requirements.

Mobile

Increased mobile source pollutant emissions may occur from additional vehicles traveling to/from the housing complex. However, a reduction in motor vehicle emission rates over the long term may occur due to improved automotive industry technology regionally. For its part, the University will provide new electric vehicle charging stations on site at the redeveloped Mansfield Apartments complex.

3.9 SOLID WASTE

3.9.1 EXISTING CONDITIONS

Solid waste is currently collected at two locations on site that each house an 8 cubic yard (CY) waste receptacle and 8 CY recycle receptacle. All students are required to dispose of their own waste at these locations. All receptacles are emptied as scheduled by the University by a third-party waste hauler.

3.9.2 NO ACTION ALTERNATIVE

Under the No Action Alternative, no change would occur to existing solid waste conditions.

3.9.3 PROPOSED ACTION

The Proposed Action would not significantly add to the overall amount or type of solid waste generated on the UConn campus. The redeveloped Mansfield Apartments complex is expected to generate solid waste of similar type and volume per unit student to that presently generated on site. However, due to the increased number of beds to be provided under the proposed conditions, a greater volume of student trash is anticipated to be generated. To accommodate this increase in volume, four waste collection locations will be provided on site, each with 8 CY waste and recycle receptacles that will be emptied as scheduled by the University by a third-party waste hauler.

3.10 TOXIC AND HAZARDOUS MATERIALS

3.10.1 ASBESTOS INSPECTION

On behalf of the University, Atlas Technical Consultants, LLC performed comprehensive asbestos surveys of the Mansfield Apartments in January and February 2022. The results of the surveys indicate that the existing buildings to be demolished on site contain a number of asbestos-containing materials (ACM), which by definition contain one percent (1 percent) or greater asbestos by weight, as well as other materials with asbestos levels below 1 percent volume by weight. The removal and/or abatement of materials containing asbestos is regulated under the federal EPA, CT DEEP/Connecticut Department of Public Health (CTDPH), and the federal Occupational Health and Safety Administration (OSHA), depending on volumes and categorization of asbestos types.) These materials are regulated as a “special waste” in Connecticut and may not be disposed of with regular construction and demolition waste. Instead, these materials may only be disposed of at facilities that are specifically authorized to accept ACM. The University will be responsible for ensuring a proper asbestos abatement contractor is selected prior to further site activities, and demolition crews and other site contractors will need to comply with all relevant asbestos regulations when conducting site activities. The formal results of these asbestos inspections, as well as recommended actions, are included within the Mansfield Apartments Redevelopment Demolition Package (Appendix D).

3.10.2 PHASE 1/PHASE 2 ENVIRONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment (ESA) was performed for the Proposed Action site by an SLR Licensed Environmental Professional (LEP) at the request of the University, including an onsite inspection on June 22, 2022. The ESA utilized the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E1527-21 and the CT DEEP *Site Characterization Guidance Document* (SCGD)

(September 2007, revised December 2010) as guidance in performing the work. The work was performed in support of this Environmental Impact Evaluation conducted in accordance with the CEPA. More specifically, the work was performed as part of the inventory and analysis of existing environmental conditions and should not be considered a stand-alone document, rather it should be considered a component of the overall environmental impact evaluation.

SLR identified one recognized environmental condition (REC) and one area of concern (AOC) in associated with the site. These characteristics, which were identified as a result of the research performed during the ESA, are listed below in Table 3.10-1, and described further in the attached Phase I ESA report (Appendix E).

Table 3.10-1 Phase 1 ESA Potential Release Sites

Environmental Condition	Details	Risk
REC: Documented Petroleum Release to Groundwater	Petroleum impact to groundwater identified during a June 2022 subsurface investigation. Release recorded with CT DEEP as Spill Case Number 2022-02394. ETPH present in onsite groundwater at a concentration greater than the Connecticut Remediation Standard Regulation (RSR) criteria.	Medium
AOC: Presence of a 600-Gallon Diesel UST	Existing 600-gallon diesel underground storage tank (UST) presents the potential for a petroleum-related release to occur to the surrounding subsurface. CT DEEP Registered UST, Site ID: 78-12400	Low

The SLR Phase I ESA included a summary of the findings reported by WSP USA (WSP) in their Phase II Investigation site investigation of the Proposed Action site, dated June 16, 2022. A copy of the report is included in Appendix E.

Documents provided for the Site identified a release from a UST in 1993. The laboratory reports identified constituents of concern (COC) in soil above the Residential Direct Exposure Criteria (RDEC) and the GA-classified groundwater area Pollutant Mobility Criteria (GA PMC), and of the Groundwater Protection Criteria (GWPC) for petroleum in groundwater.; however, the samples were reportedly not representative of the final excavation extent. The reports indicate that 60 cubic yards (CY) of contaminated soils were disposed at the Manchester landfill. The location of the UST release was not identified in the material provided.

The Phase II investigations included the drilling of 12 soil borings to investigate former fuel oil USTs associated with the apartment buildings and a fuel-oil UST associated with a pump station. Field screening

measured VOCs above typical background at two former UST locations (USTs 6 and 7). It is not known if UST 6 or 7 are the location of the 1993 UST release. No other elevated VOCs were measured with the PID.

Investigations included the collection of soil samples to determine how soil generated during construction and/or remediation activities need to be managed. The results of these investigations indicated that soils may be managed as non-hazardous and non-TSCA.

Phase II investigations identified a release of fuel oil at UST 6. CT DEEP was notified of the release on July 1, 2022 and was assigned spill number 2022-02394. The extent and magnitude of the of the release has not been characterized, however, groundwater was detected in a grab groundwater sample above the GWPC and SWPC.

3.10.3 IMPACT EVALUATION

3.10.3.1 No Action Alternative

Under the No Action Alternative, there would be no generation of hazardous or toxic materials or substances at the project site since no work is proposed. There would also be no soil or groundwater disturbance to any land areas under this alternative. The existing site conditions, and in particular the documented soil and groundwater impacts would remain under the No Action Alternative.

3.10.3.2 Proposed Action

The Proposed Action Alternative includes the demolition of existing buildings and excavation for new parking areas, which would involve soil disturbance and site work at the Proposed Action Site.

Soil and groundwater contamination could occur on site if excavation and/or groundwater extraction activities are conducted within either the REC or AOC areas identified during the Phase 1 ESA. Soils from these areas shall not be reused onsite unless additional characterization is completed and determines that soils meet all applicable RSR criteria. If groundwater is extracted from these areas, it would either need to be properly disposed or discharge to the publicly owned treatment works (POTW) under a CT General Permit. Additionally, if signs of contamination in soils (staining, discoloring, odors or solid waste) are encountered during the construction activities, an environmental professional should be contacted. These materials would need to be further characterized to determine appropriate reuse and/or disposal options.

Demolition debris may also include materials that contain polychlorinated biphenyls (PCBs) or contaminated with lead-based paint, residues or materials that require special disposal. EPA recommends testing caulk that is going to be removed as the first step in order to determine what protections are needed during removal. Where testing confirms the presence of PCBs, it is critically important to ensure that they are not released to air during replacement or repair of caulk in affected buildings. Many such

PCB removal projects will need to include sampling of the substrate and soil, as well as require plans to be approved by EPA in coordination with DEEP.

The operation of the redeveloped Mansfield Apartments would potentially involve the use, storage, and generation of hazardous materials. Hazardous materials include solvents, chemicals, and petroleum products used to power and maintain HVAC and other mechanical equipment, boilers, and generators. BMPs would be instituted to ensure that the hazardous materials are properly utilized, stored, and managed and that wastes are also disposed of properly; therefore, these hazardous materials are not anticipated to cause adverse impacts. Since the existing Mansfield Apartments are currently operating on site, the Proposed Action does not incorporate activities, equipment, or processes that are new or unusual to the University. Thus, the Proposed Action is not anticipated to have any significant adverse impacts related to the handling of hazardous materials. All waste streams would be managed according to pre-existing university protocols. Overall, impacts from toxic and hazardous materials are not anticipated under the Proposed Action Alternative.

3.11 PUBLIC HEALTH AND SAFETY

3.11.1 EXISTING CONDITIONS

3.11.1.1 Public Safety

The UConn Division of Public Safety (DPS) consists of the Police Department, Fire Department, Office of Emergency Management, Fire Marshall and Building Inspector's Office, and Environmental Health & Safety. DPS is responsible for the safety of property and people on the UConn campus. The police and fire departments are both located in the Public Safety Complex at 126 North Eagleville Road, approximately 1.1 miles northwest of the Proposed Action Site. There are several methods to contact emergency services, including a series of blue emergency phones located throughout the campus that dial directly to the police department. Police also have a Public Safety Emergency Communications Center to field and respond to 911 calls. To distribute information to the campus community in the event of an emergency, students and staff may sign up for UConn Alert, an emergency notification system that sends emergency information via text, voicemail, and online.

The UConn Police Department is not a "campus-only" police force. UConn police have the same authority and duties as any municipal police department in Connecticut. The UConn Fire Department provides fire protection, public safety, and fire education services to the UConn campus as well as 24/7 response to all emergencies. The Mansfield Fire Department provides first responder services within Mansfield and outside of the UConn Storrs campus as well as supporting the UConn Fire Department.

3.11.1.2 Public Health

Student Health and Wellness is located on the UConn campus at 234 Glenbrook Road, approximately 0.9-mile north of the Proposed Action Site. UConn Health Urgent Care is located on campus at 1 Royce Circle, approximately 0.3-mile northeast of the Proposed Action Site. Pharmacy, urgent care, primary care, mental health, nutrition and physical activity services, behavioral health services, women's health care, orthopedics, 24/7 emergency care, and physical therapy are all offered on campus. Natchaug Hospital is the nearest off-campus hospital, located approximately 4.6 miles southeast at 189 Storrs Road in Mansfield.

3.11.1.3 Environmental Health and Safety

The Environmental Health and Safety department (EHS) at UConn identifies and manages health, safety, and environmental risks to safeguard the welfare of everyone on campus. EHS is responsible for developing, delivering, and implementing all written policies, procedures, and training materials for applicable regulatory standards to campus groups. The EHS departmental web page is maintained by EHS to provide access to health and safety technical guidance documents, policies, procedures, and compliance assistance information. UConn Environmental Programs is part of EHS. Environmental Programs ensures compliance with the environmental rules and regulations for UConn's activities and operations.

EHS provides services in five types of health and safety areas:

- Chemical Health and Safety section limits the risks of exposure to hazardous chemicals and regulated materials in research and teaching laboratories.
- Biological Health and Safety Programs review, audit, and manage the use and storage of biological agents as well as safeguarding University personnel that work with animals.
- Occupational Health and Safety promotes safe work practices and compliance with worker safety regulations across numerous areas including construction, maintenance, and custodial trades; dining, farm, and animal care services; technical fields; and office/administrative arenas.
- Radiation Safety Programs oversee the safe use of radioactive materials and radiation-producing equipment used in research.
- Food Safety and Public Health program is mainly focused on safe food handling, preparation, and delivery, but also includes safe practices in areas such as housing, youth camps, daycares and playgrounds, and public pools.

3.11.2 IMPACT EVALUATION

3.11.2.1 No Action Alternative

The existing Mansfield Apartments has provided student housing for the University for over 70 years. While necessary building safety updates have been made at the standard frequency for this type of housing, it is inevitable that older buildings will continue to pose health and safety risks related to both the age of their structures and equipment, as well as the presence of certain chemicals that may have been utilized during earlier periods and are known today to carry higher health risks than previously known. For example, as described in Section 3.10.1, the existing Mansfield Apartments are known to have asbestos-containing materials, which pose a potential health risk to residents in the unlikely event of exposure. Therefore, under the No Action Alternative, the University remains responsible for continued inspection, maintenance, and required updates to aging building structures and equipment, and potentially liable for any unintended health consequences related to hazardous substances present in the buildings due solely to the age and era of the development.

3.11.2.2 Proposed Action

The Proposed Action does not incorporate processes, activities, or equipment that existing UConn safety personnel are unfamiliar with, particularly as the Proposed Action site currently operates as on-campus student housing. Existing UConn public health and safety services are equipped to handle the construction, operation, and management of the redeveloped apartment complex.

The 2020 Water Supply Plan developed for the University indicated fire flow tests at the existing Mansfield Apartments achieved water flows which may be inadequate for multi-story buildings; in response to these results, the proposed redevelopment plan incorporates water service updates including replacing an existing 8” water main with a 12” water main and installing new hydrants and a proposed fire pump to increase the available volume and pressure for the new development.

Due to the existing safety policies, planning, and infrastructure on site, and proposed safety updates, adverse impacts to environmental health and safety are not anticipated from the Proposed Action.

3.12 CULTURAL RESOURCES

3.12.1 EXISTING CONDITIONS

Specific agency coordination for this EIE included coordination with the SHPO as a project review cover form was submitted to SHPO. In a letter dated September 23, 2022, SHPO concurred that no historic properties will be affected by the Proposed Action and that no further investigation was warranted. The SHPO project review cover form and response letter are provided in Appendix A of this EIE.

3.12.2 IMPACT EVALUATION

3.12.2.1 No Action Alternative

Under the No Action alternative, the redevelopment of the existing Mansfield Apartments would not occur. Therefore, no impacts to potential cultural resources would be incurred.

3.12.2.2 Proposed Action

As verified by CT SHPO in the letter dated September 23, 2022, no historic architectural resources or significant archeological deposits were identified on the Proposed Action site to be impacted by the Proposed Action. As such, impacts to Cultural Resources because of the proposed redevelopment are unlikely.

3.13 VISUAL AND AESTHETIC CHARACTER

3.13.1 EXISTING CONDITIONS

The Proposed Action Site, which encompasses approximately 16 acres, is currently a developed residential complex with 15 student housing buildings constructed in 1951 for the University, each comprising 4,698 SF with various out-buildings and appurtenances. Surrounding the residential buildings are paved walkways and a single row of parking spaces along a 0.3-mile-long ring road which borders the developed portion of the site to the east, south, and west and connects in two locations with South Eagleville Road to the north, along which an entrance loop and another row of parking exists.

Vegetation within the developed portion of the site consists of manicured grass and individual shade trees, as well as an approximately 725-foot-long, east-west corridor of canopy trees occupying the central portion of the site, loosely separating the apartment complex into a northern and southern hemisphere.

The approximately 9.75-acre developed portion of the site is bordered to the south, east, and west by mature upland forest with several areas of forested and scrub shrub wetland (described in Section 3.5 above). These undeveloped portions of the site are directly connected to the Albert E. Moss Sanctuary which abuts the site to the south and comprises 135 acres with hiking trails, bound by Route 195 to the east and extending south over 0.65-mile to Monticello Lane.

Please refer to the photo log (Appendix F) for existing conditions site photos of the Mansfield Apartments.

3.13.2 IMPACT EVALUATION

3.13.2.1 No Action Alternative

Under the No Action Alternative, no demolitions or new construction would occur within the Proposed Action site. Therefore, no impacts to the existing visual and aesthetic characteristics of the site would occur.

3.13.2.2 Proposed Action

Because the Proposed Action involves redevelopment of an existing residential complex and all new construction is proposed within the footprint of existing development, maintaining the existing roadways, trees, and landscaping on site, adverse impacts to the existing visual and aesthetic character of the area are unlikely. The new facility would be designed to complement the surrounding environment, including residential and recreational land uses. The proposed site plan embraces the idea of preserving and enhancing existing green space and pedestrian trails within the complex while maintaining the existing buffer between the apartment complex and the Moss Sanctuary off site. The redeveloped site will seek to reduce its aesthetic impact to adjacent properties in all reasonable capacities, including the use of exterior lighting trespass and Dark Sky compliance measures to limit light pollution.

The landscape plan that would be developed for the project would be in keeping with the University's objective to establish a green, sustainable feel to all new campus developments. This approach would lend to an overall visual and aesthetically pleasing development. Overall, the Proposed Action would not largely transform the visual character of the site, but rather create a more modernized version of existing conditions. Additionally, the condensing of the residential buildings on the site from 15 under existing conditions, to a proposed three buildings, will lead to more open space to accommodate grass, landscaping, and green stormwater infrastructure. This more open site plan will allow a greater opportunity for campus residents and visitors to enjoy the forested views surrounding the complex. The project is seeking SITES designation, which refers to the Sustainable Sites Initiative. Managing the redevelopment of the property in a pro-active sustainable way provides the potential to increase the aesthetic character compared to the 1950s design that presently exists.

3.14 SOCIOECONOMICS

3.14.1 EXISTING CONDITIONS

3.14.1.1 Economy

The following section briefly describes the economy, employment, and income characteristics of the geographic region where the Proposed Action is planned. The Connecticut Economic Resources Council

(Advance CT) 2021 Town Profile for Mansfield indicates that the University of Connecticut continues to be the top employer in town, and as such, has a major beneficial impact on both local and regional job growth and economic development. Much of the planned development on the UConn campus through 2025 is driven by the $1.54 billion state-funded Next Generation Connecticut (NextGen) initiative that focuses on supporting and promoting STEM education and research enterprises. Table 3.14-1 provides Economic, Employment and Income (2020) data for the Town of Mansfield, Tolland County, and the State as a whole.

Table 3.14-1 Economic, Employment and Income Indicators (2020)

Town/County/State	Unemployment Rate	Median Annual Income
Town of Mansfield	4.8%	$50,492
Tolland County	6.1%	$87,809
State of Connecticut	7.8%	$79,855

Sources: (Income) – American Community Survey 5 Year Estimates- https://data.census .gov. (Employment) – CT Department of Labor Force Monthly Data- https://ctdol.state.ct.us.

The Town of Mansfield had a lower unemployment rate (4.8 percent) in 2020 than Tolland County (6.1 percent) and the State (7.8 percent). Mansfield also had a lower median annual income ($50,492) in 2020 than the county ($87,809) and state ($79,855). UConn and its surrounding commercial center create a significant number of jobs within the town of Mansfield, resulting in higher employment than the surrounding area. UConn's student population also has an effect on lowering the town's median annual income as the large student population is made up of young individuals with low levels of income.

3.14.1.2 Environmental Justice

The CT DEEP is the agency responsible for ensuring compliance with the Environmental Justice Policy of the state. Regulations and policy definitions can be found in CGS Section 22a-20a. An Environmental Justice Community is defined as either a U.S Census block group with 30 percent or more of the population consisting of low-income persons who are not institutionalized and have an income below two hundred percent of the federal poverty level, or a distressed municipality. The 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.

A review of the CT Department of Economic and Community Development (DECD) website that lists 2021 distressed municipalities confirmed that the Town of Mansfield is **not** listed as a distressed municipality[6]. According to the US Census, the Proposed Action Site falls within Tract 8112 Block 1026. This census block includes the land area between South Eagleville Road and the Albert E. Moss Sanctuary and includes 15 student apartment buildings, surface parking lots, and two outbuildings. This census block is located in the

[6] (https://portal.ct.gov/DECD/Content/About_DECD/Research-and-Publications/02_Review_Publications/Distressed-Municipalities)

southeastern section of campus, separated from the main campus area by E.O. Smith High School, Mansfield Community Center, and the Downtown Storrs mixed-use developments.

Demographic data for the census tract is presented in Tables 3.14-2 and 3.14-3 and indicate a population of 9,522 with approximately 34.9 percent minority and 57.6 percent below the poverty level. Normally, these demographics would suggest that the census block qualifies as an Environmental Justice Community per the state definition (because of the low-income population data). However, as indicated above, a portion of the population within this census block resides on campus in college housing/dormitories, and therefore are technically classified as institutionalized individuals (college students). These individuals are generally not included as an environmental justice population because of the special conditions of their residence that prohibits a determination of poverty status. As such, the Proposed Action Site is not considered to be within an Environmental Justice Community due to the presence of institutionalized individuals that skew the data.

The state and availability of on-campus housing has implications for UConn's student population, of which 76 percent are in-state students[7], and over 50 percent of which receive need-based financial aid to help defray the costs of tuition and housing. The ability for UConn to provide adequate housing, which is affordable, safe, and meets the lifestyle needs of a diverse student population may impact the ability of some students to attend and succeed at UConn. As more of UConn's existing housing options become outdated, the likelihood of safety or other logistical issues preventing these housing units from being operable increases, reducing the number of on-campus beds available to enrolled or prospective students. As students seek housing options off campus, this reduces the ability of the University to offer certain types of financial and transportation support to ensure that students are living in locations that are affordable, safe, and accessible via multiple forms of transportation.

Table 3.14-2 Income and Poverty 2020

Area	Median Household Income (Dollars) [2]	Persons Below Poverty Level (Percent) [1]
Connecticut	$79,855	9.8%
Tolland County	$87,809	7.9%
Mansfield	$50,492	26.8%
	Individual Census Tract in the Project Area	
Proposed Action Site - Census Tract 8812	$30,125[3]	57.6%

Note: *Most recently available census tract and larger geographical data were used for comparisons.
Source: US Census Bureau, American Community Survey 2020 5-Year Estimates.

[7] Refers to undergraduates, according to UConn Fact Sheet, 2022.
[3] 2020 ACS 5 Year Estimate not available, references 2019 ACS 5 Year Estimate

Table 3.14-3 Regional Population by Race

Area	White	Black or African American	Asian	American Indian and Alaska Native	Native Hawaiian and Pacific Islander	Other	Two or More Races	Hispanic or Latinx	Minority (Percent)	Population 2020
Connecticut	2,279,232	360,973	170,459	6,404	974	27,076	137,569	623,293	36.8%	3,605,944
Tolland County	122,869	5,450	8,465	272	59	3,452	9,221	9,699	23.0%	149,788
Mansfield	17,581	1,245	3,780	39	15	143	883	2,206	32.1%	25,892
Individual Census Tract in the Project Area										
Census Tract 8812	6,740	722	1,294	18	2	365	381	1,018	34.9%	9,522

Source: US Census Bureau, 2020 Decennial Census. Minority percentage represents non-white population, SLR.

Census Tract 8812 has a diverse population (34.9 percent minority) similar to that of Mansfield (32.1 percent minority) and Connecticut (36.8 percent minority) but is significantly more diverse than Tolland County (23 percent minority). UConn attracts a large number of students and employees to a predominantly white, rural region of Connecticut; this results in a more diverse population than the surrounding area.

3.14.2 IMPACT EVALUATION

3.14.2.1 No Action Alternative

Under the No Action Alternative there would be no change to existing socioeconomic conditions and no impact to environmental justice populations. The University would continue to pursue and implement development projects consistent with NextGen initiatives as well as other campus-wide development priorities and infrastructure improvements as stipulated in the University's Master Plan so long as the economic climate nationwide and on the state level continues to be strong and funding is available. The University would continue to be the major employer in the Town of Mansfield and within the region as a whole and economic indicators, such as labor statistics and median annual income levels, would continue along present trends.

3.14.2.2 Proposed Action

Construction of the Proposed Action may result in a short-term boost to the local economy as local and regional construction workers would be hired to complete this construction project. Construction materials may also need to be purchased from local and regional suppliers. Local businesses may see an uptick in economic activity during the construction period as well, as construction workers may purchase food, goods, or other services while in the project area. Once constructed, the new apartments are not

envisioned to be a major employment or economic generator beyond the current level of economic activity and employment of building managers and maintenance workers. As the increased number of units/beds will accommodate a greater number of residents, some local businesses may see a slight uptick in activity as the potential for more students and families to support economic opportunities in the area increases.

In terms of environmental justice, the Proposed Action would not have adverse impacts as the project is not within a distressed municipality nor within a census block that meets the characteristics of an Environmental Justice Community. However, the Proposed Action may promote the ability of the University to offer certain types of financial and transportation support to ensure that students are living on campus in locations that are affordable, safe, and transportation accessible.

3.15 TRAFFIC, PARKING, AND TRANSPORTATION

SLR conducted a thorough analysis of existing site conditions as they pertain to traffic, parking, and transportation, summarized below. The full report with all referenced appendices is provided with this EIE as Appendix G.

3.15.1 EXISTING SITE CONDITIONS

3.15.1.1 Background

Mansfield Apartments is located on a 16.4-acre parcel, owned by the University of Connecticut, to the southwest of the intersection of Route 275 (South Eagleville Road) and Route 195. The site is located at the south end of campus and across the street from the Mansfield Community Center and Town Hall. The Mansfield Apartment complex currently houses 270 bedrooms across 15 buildings with 126 parking spaces. Access and parking are divided between two locations; the first is a short one-way drop off loop along the frontage of Route 275 with only 26 parking spaces. There is also a bus stop with shelter that has access to both regional and UConn transportation systems. The second is a one-way loop that travels along the outside perimeter of the complex where the rest of the parking spaces are located. The exit for this loop is located roughly 60’ from the Route 195 and Route 275 intersection.

3.15.1.2 Parking

There are roughly 126 existing parking spaces with most of the spaces lining the outside driveway. In order to understand the existing and potential future use of Mansfield Apartments, parking counts were collected on April 28, and April 30, 2022. Through discussions with the UConn, SLR was made aware that Mansfield apartments was used as COVID quarantine housing and therefor would not reflect an accurate representation of typical parking conditions. This was confirmed through data collected on the 28th and 30th.

Parking counts were also collected at a neighboring complex, Knollwood's Apartments, which has a similar number of units and parking spaces to the existing Mansfield Apartment. While Knollwood's Apartments is not a university-owned asset; it has some similar characteristics to that of Mansfield Apartments and is located along Route 275 nearby to the southwest. It is also anticipated that that overflow parking from Mansfield Apartments can be accommodated elsewhere on campus at the discretion of UConn.

3.15.1.3 Roadway Network

The roadway network and subsequent study area is bounded by Routes 275 from Route 32 to Route 195 and Route 195 from Route 275 to Mansfield Road.

Transportation to Mansfield Apartments is accessed via Route 275 (South Eagleville Road). Route 275 is a two-lane minor arterial that runs east-west connecting to Route 32 to the west and Route 195 to the east, which both run north-south. Within the study area, Route 275 has a speed limit 30 miles per hour (mph), wide shoulders and a sidewalk on the south side that extends two-thirds of a mile from Route 195 to Maple Road across the site frontage.

Route 195 is a north-south Connecticut state highway classified as a Principal Arterial. It is a two-lane roadway that connects to I-84 in Tolland to the north and Route 6 in Willimantic to the south. The speed limit on Route 195 in the vicinity of the campus and Downtown Storrs is 25 mph. In the areas immediately to the north and south of the campus the speed limit is 40 mph. Within the study area, the 85th percentile speed ranges from 31.9 mph to 35.8 mph, which is above the posted limit. There are also many access points that connect to Route 195 within the stretch next to campus, including 3 signalized intersections at Route 275, Bolton Road, and Mansfield Road. The latter two roads provide important access routes to UConn's campus via vehicle and bus. Many pedestrians also travel to/from Mansfield Apartments and other complexes in Storrs center, where there are many shops and restaurants, by walking along or by crossing Route 195. All three signals have a separate exclusive pedestrian phase during which all vehicle traffic has a red light and people on foot are given a walk signal to cross. Route 195 is also the main artery for both UConn's bus system and the regional transportation network. A secondary artery, Separatist Road, is parallel to Route 195 and serves as a back entrance to campus, but is unlikely to be utilized by Mansfield apartment residents due to its location.

3.15.1.4 Travel Speed Data

Speed data, collected during the COVID-19 epoch by the Connecticut Department of Transportation (CTDOT), shows a combined 85th percentile speed of 31.9 mph. This data was collected at Station 42 as identified on CTDOT's Traffic Monitoring Station Viewer website, which is located near the Route 275 (South Eagleville Road) Route 195 intersection. However, data specifically collected recently for this study on Route 275 adjacent to the site showed a minimum 85th percentile speed of 47.6 mph, which is significantly higher than both the CTDOT collected speed (during COVID) and the posted speed limit. This

data was collected via an ATR count over 48 hours (Friday and Saturday), which was placed between Eastwood Road and the Mansfield Apartment perimeter driveway ingress, father away from the Route 275 and Route 195 intersection. The speed differences make sense due to the proximities of the data collectors relative to the major intersection; the closer to the intersection you get, the slower the overall speeds.

3.15.1.5 Study Intersections

The study area for this traffic impact study includes nine existing intersections, as shown in Figure 3.15-1. These intersections were identified for analysis to provide a comprehensive look at the traffic impacts to the surrounding area. There intersections are as follows:

1. Route 195 at Mansfield Road.
2. Route 195 at Bolton Road.
3. Route 195 at Route 275 (South Eagleville Road).
4. Route 275 (South Eagleville Road) at Mansfield Apt Exit and Community Center Entrance.
5. Route 275 (South Eagleville Road) at Community Center Exit.
6. Route 275 (South Eagleville Road) at Mansfield Apt Entrance.
7. Route 275 (South Eagleville Road) at Eastwood Road.
8. Route 275 (South Eagleville Road) at Separatist Road.
9. Route 275 (South Eagleville Road) at Route 32

Of the 9 intersections in the study area, numbers 1, 2, 3 and 9 are signalized intersections and the rest are two-way stopped controlled intersections. To evaluate the traffic for the existing condition, turning movement count data was assembled from past studies and compiled with count data provided by CTDOT and newly collected traffic count data to determine a baseline condition representative of existing traffic volumes.

3.15.1.6 Pedestrian and Bicycle Access

The University of Connecticut is a major generator of pedestrian and bicycle activity and includes students from Mansfield Apartments going to and from campus. There are sidewalks on Route 275 and Route 195 with crosswalks and signalized intersections. To get to campus, pedestrians would need to cross Route 275 and take one of three ways directions:

1. Enter campus via Eastwood Road to the west,
2. Cut through the Community Center across the street,
3. or take the sidewalk along Route 195 to the east.

Bicyclists accessing campus would generally take Eastwood Road to the west or Route 195 to the east. While Route 275 has wide shoulders, Route 195 and UConn's campus lack consistent bicycle infrastructure. We note that a study is currently underway to improve active transportation infrastructure at UConn.

3.15.1.7 Area Crash History

Crash Data obtained via the Connecticut Crash Data Repository for a 3-year period was evaluated from January 1, 2019, to January 1, 2022.

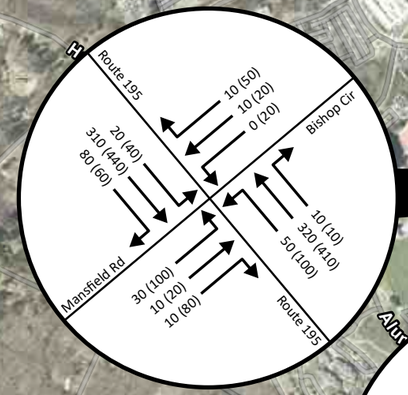
Based on the data, there were a total of 95 crashes along the study corridor within the last 3-year period. Only 5 of those crashes occurred along the site frontage; 3 resulted in no injury, 1 resulted in a possible injury and 1 resulted in a possible minor injury. Of those crashes, 3 were angle crashes, 1 was a head on collision and 1 was a rear end collision.

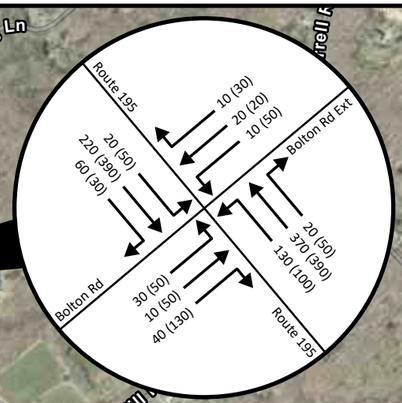
For the study corridor the most prevalent severity type was no apparent injury by a significant amount with 75 crashes, followed by suspected minor injury with 13 crashes. The most prevalent manner of crashes were rear-ended collisions, not applicable (animal, object, nonmotorized crashes etc.) and angle crashes with 30, 23 and 22 crashes respectively. Rear-end and angle crashes are typical at signalized intersections. Most notably, there was one bicycle crash that resulted in a suspected minor injury and one pedestrian fatality crash that occurred near the site frontage, close to the Route 275 (South Eagleville Road) and Eastwood Road intersection. This is currently being addressed by CTDOT by initiating safety measures along the corridor and installing and RRFB to cross Route 275 at Eastwood Road.

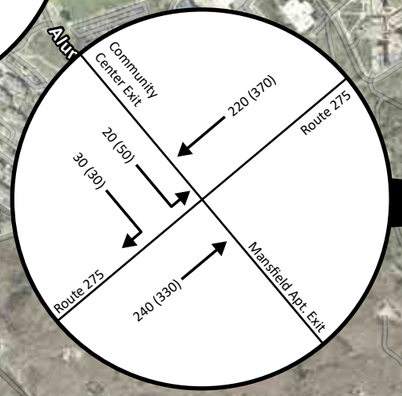
- A.M. Peak Hour
(##) - P.M. Peak hour

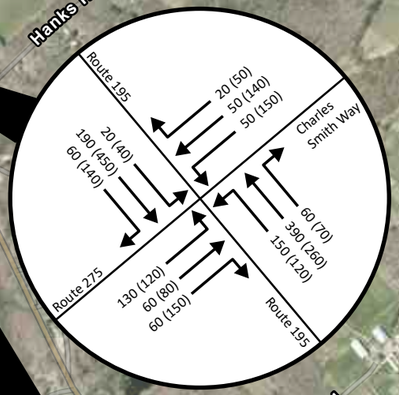
Intersection

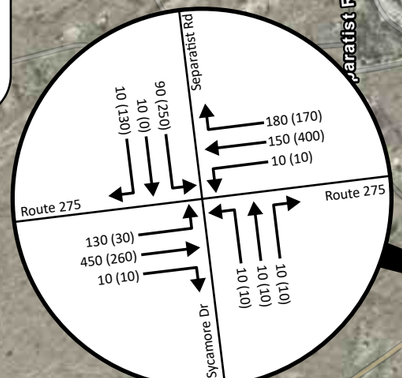
1. Route 195 @ Mansfield Rd
2. Route 195 @ Bolton Rd
3. Route 275 @ Route 195
4. Route 275 @ Community Center Entrance and Mansfield Exit
5. Route 275 @ Community Center Exit
6. Route 275 @ Mansfield Apt Entrance
7. Route 275 @ Eastwood Rd
8. Route 275 @ Separatist Rd
9. Route 32 @ Route 275

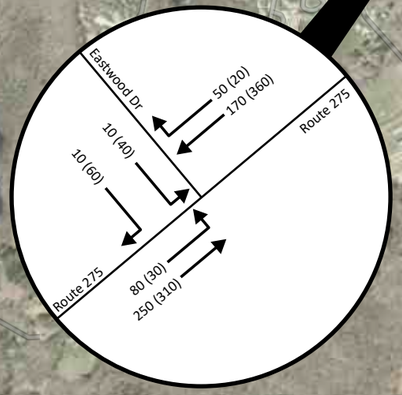


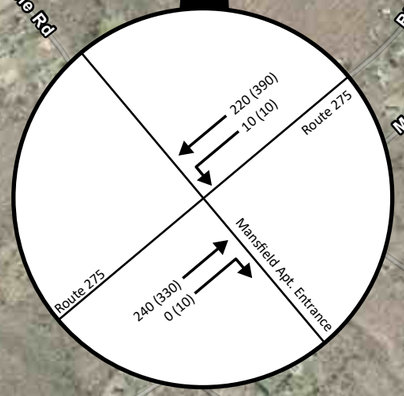


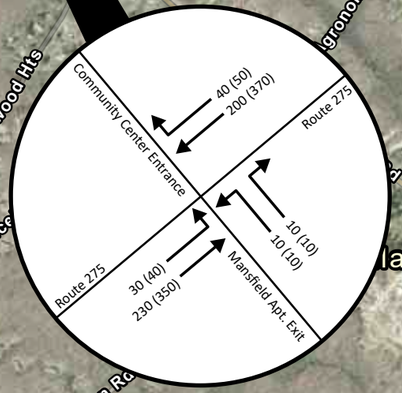


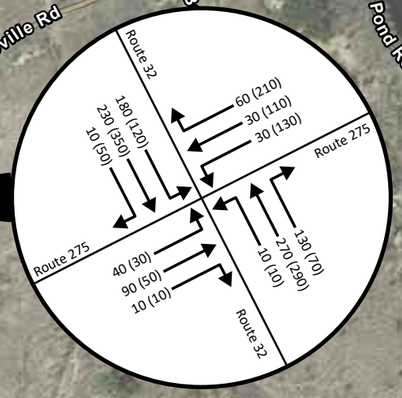












N

0 50 100

Feet

SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

NO-BUILD TRAFFIC VOLUMES

MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT
31 LeDoyt Road, Unit 3038
Storrs, Connecticut

SCALE: 1 IN = 1,000 FT

DATE: 9/12/2022

PROJECT NO.: 11958.00132

FIG. 3.15-1

3.15.2 EXISTING TRAFFIC OPERATIONS

3.15.2.1 Traffic Impact

Based on the results of the intersection capacity analysis, most of the intersections perform reasonably well in the a.m. peak hour with most intersection operating at LOS B or C, which is acceptable by CTDOT standards. Some of the individual movements for both signalized and unsignalized intersections operate at LOS D which is not uncommon and not necessarily a cause for concern. In the p.m. peak, however, the LOS for most intersections operates between a C and a D. This also includes some individual movements operating at LOS E or worse. This is particularly true for two intersections:

1. The Southbound movement (Separatist Road) at the intersection of Route 275 and Separatist Road operating at LOS F.
2. The Northeast Thru (Route 275) and Southeast Thru movements (Route 195) at the intersection of Route 275 and Route 195 operating at LOS E.

These operating conditions will likely deteriorate further with the new development and in the future condition. However, CTDOT is planning to install a traffic signal at the Route 275 and Separatist Road intersection, which will improve operating and safety conditions.

3.15.2.2 Queue Analysis

A review of vehicle queuing was performed at the intersection of Route 195 and Route 275 (South Eagleville Road) as there were concerns that queuing for the northeast movement (Route 275) would extend beyond the existing Mansfield Apartment egress. This would also impact future traffic conditions as the queueing would only get worse due to traffic growth and added trips from the proposed development.

Based on the analysis, the 50th percentile queue for the morning a.m. peak hour does not extend past the Mansfield egress. The p.m. peak-hour 50th percentile extends past the Mansfield egress but does not extend bast the Community Center Ingress. However, the 95th percentile queue for both morning and afternoon peak hours extend beyond the existing Mansfield Apartment egress, which is 60 feet from the intersection. The queue also extends beyond the existing Community Center ingress for the thru-right lane afternoon peak-hour condition. The queued vehicles were found to block the exit from the Mansfield Apartment egress while the Community Center is an ingress only drive (no exits).

The full Existing Traffic Impact Study analysis can be found in Appendix G.

3.15.3 IMPACT EVALUATION

3.15.3.1 No Action Alternative

No changes to existing traffic, parking, and transportation conditions are proposed under the No Action alternative, therefore no impacts would be anticipated under this scenario. However, there are changes proposed through a recently completed RSA by CTDOT along Route 275 that would go into effect regardless of whether Mansfield Apartments is built or not. These changes are meant to address safety issues and not necessarily existing traffic or parking condition.

3.15.3.2 Proposed Action

This analysis addresses future traffic aspects of the proposed redevelopment including trips generated by the complex, geographic routing distribution of the estimated future site traffic, other developments in the area, and operational analysis including vehicle Level of Service (LOS) and queuing comparisons between the future Build and No-Build Scenarios.

Data utilized in the analysis including ITE Trip Generation and Synchro Sheets are provided in Appendix G.

3.15.3.3 Traffic Circulation

The proposed Mansfield Apartments will feature approximately 900 beds with a similar site layout to the existing complex. However, several changes to access management and traffic circulation were made due to the existing conditions report findings. The new traffic circulation includes the following changes:

1. An improved southwest driveway located to the west of the existing apartment ingress which provides full access into and out of the complex.
2. A right-only egress from the apartment complex across from the Community Center egress, with no entry and no left turns out.
3. Another right-only egress, for buses only, shifted from its previous location near the Route 195 and Route 275 intersection, located across from the Community Center Ingress.
4. Raised median in the midsection of the site frontage with a pedestrian crossing and RRFB.

These changes were meant to provide optimal access to/from the complex, given the proposed site redevelopment plan and acknowledging the queueing from the Route 195 and Route 275 intersection that was identified in the Existing Conditions report with a right-turn only east of the driveway. This will be discussed further in the Queueing Analysis of this report.

Intersection sight distances were also reviewed based on the changes to the driveway locations and lane assignments for the future development. With no major modifications along the site frontage, besides

potential landscaping improvements, there are no expected impacts to intersection sight distances from the proposed site driveways.

3.15.3.4 Parking

While this report does not include a full parking analysis, a brief review of proposed parking conditions was performed. According to the Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition, the required parking spaces for the proposed development is approximately 373. Proposed on-site parking potentially falls below the demand estimates in the Institute of Transportation Engineers (ITE) Parking Generation guidelines. However, overflow parking, if occurs, is anticipated to be made available on campus to residents of Mansfield Apartments at the discretion of UConn. There is also the potential for UConn students residing at the Mansfield Apartments to utilize alternative transportation options including walking, biking, and University buses and shuttles which could reduce parking demand to some degree.

3.15.3.5 Bicycle and Pedestrian Access

An upgraded sidewalk along Route 275 is proposed. If the improved sidewalk width is 10 feet or greater, it may be able to function as a shared-use (pedestrian and bicycle) path. We note that the Connecticut Department of Transportation (CTDOT) plans to improve bicycle and pedestrian safety along the corridor. A future median along Route 275 is planned where there is an existing mid-block crossing, which will function as a pedestrian refuge island to reduce the crossing distances with one-directional crossings for pedestrians. Access to and from campus includes crossing Route 275 and either cutting through the community center to the northwest, taking Eastwood Road to the southwest or taking Route 195 to the northeast. Out of the three paths, pedestrians would most likely cut through the community center as it is the shortest distance. Furthermore, it was found in the analysis that an increase in pedestrian traffic at the Route 275 and Route 195 intersection does not significantly impact vehicular delay. This, combined with future plans to improve safety along Route 275, is expected to address traffic and pedestrian safety concerns adjacent to the site in the future.

3.15.3.6 Future Background Traffic

It was determined that 2045 would be the future analysis year evaluated for the No-Build (Background) and Build (Combined) proposed conditions. Existing traffic volumes for the roadway network sent to CTDOT and approved by the agency on June 10, 2022, were used for the Existing Conditions traffic analysis report. CTDOT provided a total future growth rate of 6 percent and projected 2045 traffic volumes to use toward this analysis. Results produced in this report utilize these CTDOT-approved volumes in the projected future traffic scenarios. The approved Existing traffic volumes are shown in the Existing Conditions Report (Appendix G). Figure 3.15-1 shows the 2045 Background traffic volumes, which take into other approved area developments discussed below.

3.15.3.7 Other Area Developments/Projects

Through discussions with the Town of Mansfield and UConn, as well as CTDOT, several proposed developments and roadways projects were considered with the future conditions analysis. They include the following:

1. Eagleville Green – 42-unit mixed income rental housing development located along Route 275 near the Mansfield Apartments redevelopment scheduled to be built in 2023. Trips generated from this development were added into the background traffic used in the 2045 No-Build and Build Scenarios.
2. A new signalized intersection at Route 275 and Separatist Road – Per the Existing Conditions Report, the southbound movement operated at LOS F. The signal planned for construction in 2024 is considered in the 2045 No-Build and Build scenarios.
3. Potential redevelopment of the municipal complex across from Mansfield Apartments – As a long-term plan with no existing plans or approvals, there are no studies indicating whether a proposed redevelopment would result in a net increase in traffic. Therefore, this potential redevelopment was not considered in the analysis per discussion with the Town of Mansfield.
4. Bolton Road Extension – UConn has previously discussed plans to extend Bolton Road to connect somewhere along Route 275 as a long-range improvement. Through discussions with UConn, it was determined that that concept was unlikely to be prioritized. However, it is important to note that if the Bolton Road extension is built in the future, intersections and lane reconfigurations will need to be reevaluated to determine the impacts of this extension on the transportation network.
5. Road Safety Audit – Future roadway improvements discussed by CTDOT near the site include the addition of medians along Routes 275 and 195. It does not appear at this time that such improvements would directly impact traffic operations or significantly affect lane assignments at the signalized study intersections for the proposed project. The proposed CTDOT road safety audit improvements are not anticipated to affect the traffic analysis discussed below.

3.15.3.8 Site-Generated Traffic

Institute of Transportation Engineers (ITE) Land Use Code (LUC) 226, Mid Rise Apartment Complex, from the 5th edition of their *Trip Generation Manual* was used to estimate the number of peak hour trips that may be generated by the proposed Mansfield Apartments redevelopment. The estimated trips generated in the AM and PM peak hours are shown in Table 3.15-1 and are provided in Appendix F. Since the redevelopment is replacing an already existing apartment complex, there would typically be a reduction/discount on trips. However, as Mansfield apartments was utilized as a quarantine site during the COVID-19 pandemic and saw a significant reduction in occupation, the existing data does not accurately reflect a typical school year condition. This was confirmed with UConn officials and reflected in

traffic and parking counts collected and used to develop existing and future condition traffic volumes. Based on this information, any credit/discounts were considered negligible and not included as part of this study. Nonetheless, the trip generation is conservative as Mansfield apartments was being used in some capacity at the time of data collection and there are already 270 total beds at the current site that were in generally full use pre-pandemic. Thus, the net increase from 270 beds to 920 beds has a net increase in site traffic compared to pre-pandemic times that is less than that shown in Table 3.15-1.

Table 3.15-1 Trip Generation

Land Use	Number Of Vehicle Trips					
	Weekday Morning			Weekday Afternoon		
	Peak Hour			Peak Hour		
	In	Out	Total	In	Out	Total
Mansfield Apartments Redevelopment (920 Beds) – LUC 226	30	35	65	92	104	196

Source: ITEtripGen web-based app (https://itetripgen.org/index.html).

3.15.3.9 Trip Distribution

The geographic trip distribution routing of these trips was estimated based on travel patterns, and review of Journey to Work Census Data[8]. Distribution reflects a blend of Mansfield Apartment residents, largely students, driving to campus and off-campus, work and other activities during the study period. Figure 3.15-2 shows the distribution of site-generated Trips to and from the apartment complex. It is estimated that a significant number of vehicle trips, 40 percent, will head north to access UConn's campus from Route 195 either via Bolton Road or Mansfield Road. The rest of the trip distribution continues north (15 percent) to access Four Corners and Route 44 and I-84 to a lesser extent, South (25 percent) to go toward Willimantic/Windham, or West (20 percent) to head towards Manchester/Hartford. It is important to note that many of the students residing in the Mansfield Apartments are anticipated to access campus via foot, bicycle, and/or bus rather than personal automobile during the study periods.

Since this development is considered an off-campus dorm occupied by students, a significant portion of the trips will travel to campus (40 percent) as reflected above. However, the apartment complex's proximity to campus (walking and biking) and other travel habits, such as traveling to/from work, were also taken into account to accurately reflect vehicular distribution. There are several reasons to support this methodology:

1. Trips from apartments adjacent to campus (LUC 226) are less than trips from apartments over a half-mile away from campus (LUC 225). The total trips in the AM is 65 (LUC 226) vs 110 (LUC 225)

[8] United States Census data on Commuting (https://www.census.gov/topics/employment/commuting.html)

and the total trips in the PM is 196 (LUC 226) vs 221 (LUC 225). This suggests that the closer students are to campus the more likely they'll walk or bike there rather than take a vehicle.

2. While college classes are consistent from week to week, they vary throughout the day and occur on different days of the week. Therefore, it is not appropriate to assume all trips in the AM and PM peak are related to campus activities.
3. Peak morning and afternoon times are generally dominated by commuters going to/from work. Some students also have jobs while attending college and it is reasonable to assume that they may be traveling to/from work during these peak periods.
4. Future safety improvements along Route 275 will increase the likelihood students will walk or bike to class resulting in a further reduction of campus trips.

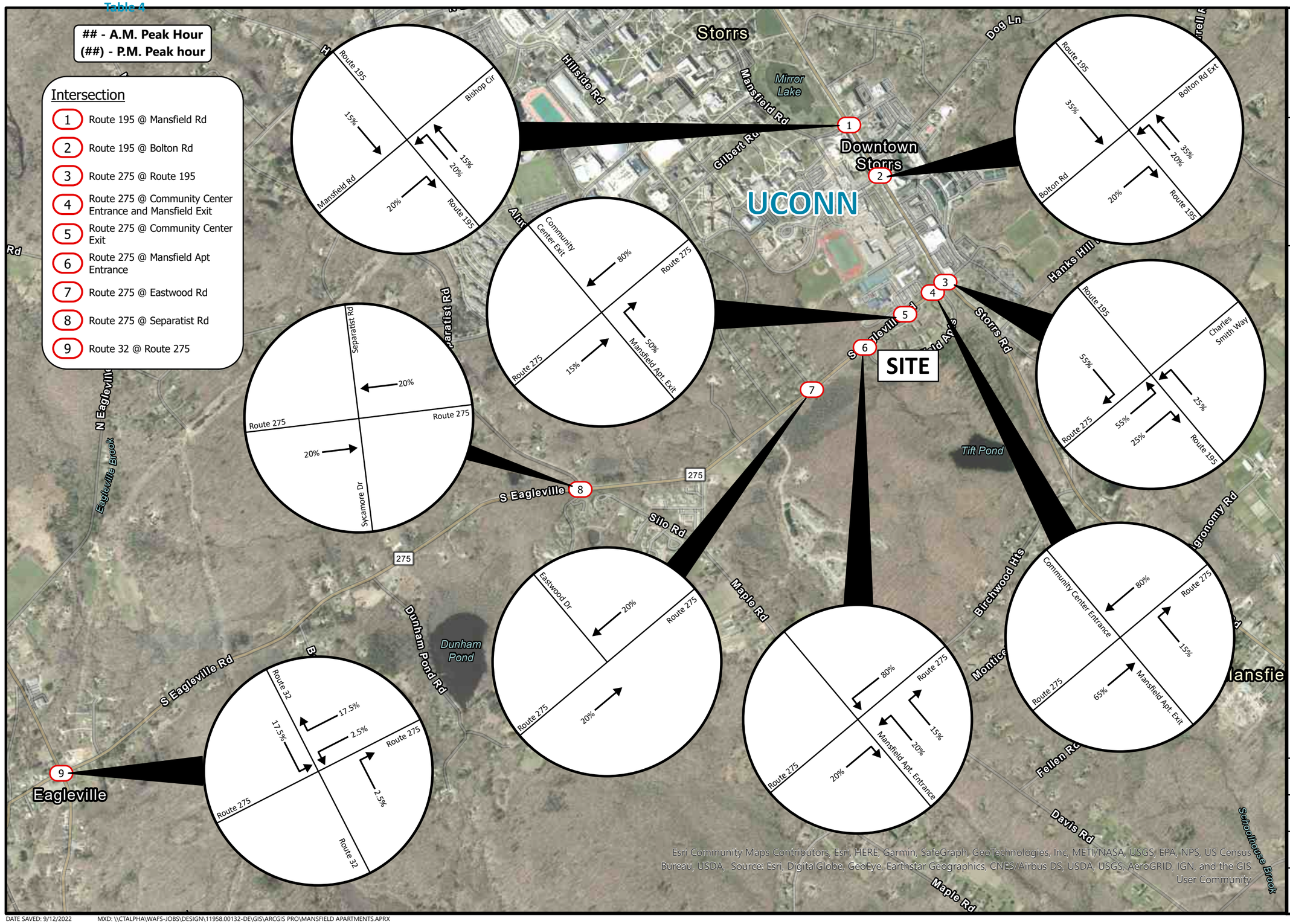
Trips and their distribution throughout the travel network are estimated on the best available data and engineering judgment. For these reasons, SLR believe the vehicular distribution is appropriate for the redevelopment and accurately reflects potential travel patterns. Figure 3.15-3 shows the estimated site-generated vehicle trips routed through the study area roadway network based on the Trip Distribution.

Table 4

- A.M. Peak Hour
(##) - P.M. peak hour

Intersection

1. Route 195 @ Mansfield Rd
2. Route 195 @ Bolton Rd
3. Route 275 @ Route 195
4. Route 275 @ Community Center Entrance and Mansfield Exit
5. Route 275 @ Community Center Exit
6. Route 275 @ Mansfield Apt Entrance
7. Route 275 @ Eastwood Rd
8. Route 275 @ Separatist Rd
9. Route 32 @ Route 275



N

0 50 100

Feet

SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

TRIP DISTRIBUTION

MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT
31 LeDoyt Road, Unit 3038
Storrs, Connecticut

SCALE: 1 IN = 1,000 FT

DATE: 9/12/2022

PROJECT NO.: 11958.00132

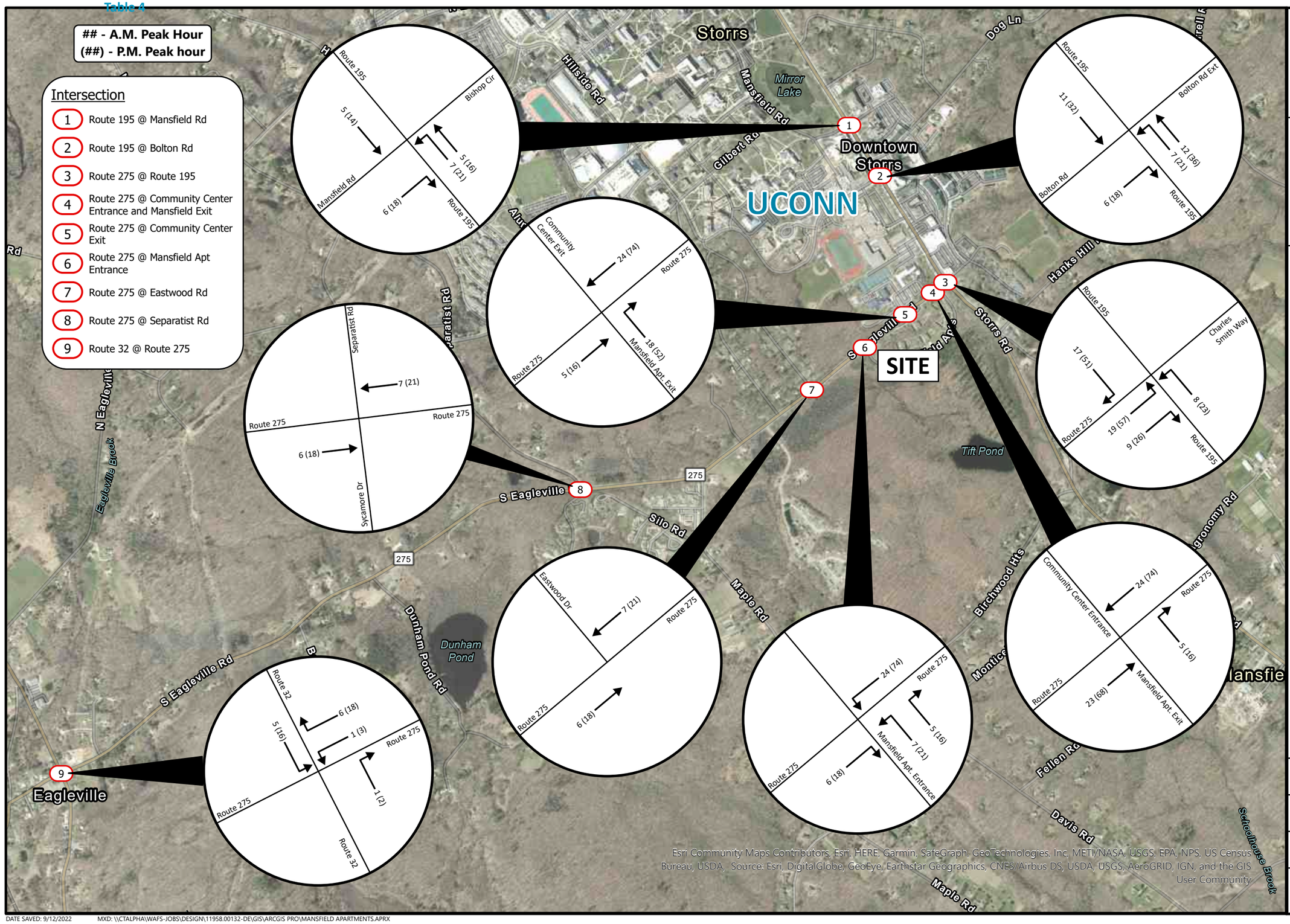
FIG. 3.15-2

Table 4

- A.M. Peak Hour
(##) - P.M. Peak hour

Intersection

1. Route 195 @ Mansfield Rd
2. Route 195 @ Bolton Rd
3. Route 275 @ Route 195
4. Route 275 @ Community Center Entrance and Mansfield Exit
5. Route 275 @ Community Center Exit
6. Route 275 @ Mansfield Apt Entrance
7. Route 275 @ Eastwood Rd
8. Route 275 @ Separatist Rd
9. Route 32 @ Route 275



Esri Community Maps Contributors, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

N

0 50 100

Feet

SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

TRIPS DISTRIBUTED THROUGH THE NETWORK

MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT
31 LeDoyt Road, Unit 3038
Storrs, Connecticut

SCALE	1 IN = 1,000 FT
DATE	9/12/2022
PROJECT NO.	11958.00132

FIG. 3.15-3

DATE SAVED: 9/12/2022 MXD: \\CTALPHA\WAFS-JOBS\DESIGN\11958.00132-DE\GIS\ARCGIS PRO\MANSFIELD APARTMENTS.APRX

3.15.3.10 Future Operational Analysis

Capacity Analysis

Intersection capacity analyses were undertaken comparing the 2045 No-Build versus Build conditions to determine if the proposed Mansfield Apartments redevelopment may cause any significant traffic impacts. Tables 3.15-2 and 3.15-3 summarize the unsignalized and signalized intersection LOS.

Table 3.15-2 Unsignalized Intersection Capacity Analysis

Lane Group	Level of Service (LOS)			
	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour	
	2045 No-Build Conditions	2045 Build Conditions	2045 No-Build Conditions	2045 Build Conditions
Route 275 @ Mansfield Northeast Exit *				
NW	A	A	B	A
NEL	-	A	-	A
NET	-	A	-	A
Route 275 @ Community Center Exit				
SB	B	B	C	C
Route 275 @ Mansfield Middle Exit **				
NW	A	A	A	B
Route 275 @ Mansfield Apt Southwest Entrance ***				
NW	A	B	A	C
SWL	A	A	A	A
SWT	A	A	A	A
Route 275 @ Eastwood Road				
NEL	A	A	A	A
NET	A	A	A	A
SE	B	B	B	C

* *Build Condition slightly moves the Mansfield Apartment egress and converts it to right-turn only exit.*

** *Build Condition converts small front parking area to right-only egress connected with main parking area.*

*** *Build Condition Converts southwest Mansfield Apartment Ingress to an ingress and egress.*

For the unsignalized intersections, the capacity analysis for the 2045 conditions indicate the Mansfield Apartment redevelopment will have only minimal impact on adjacent intersection LOS. There are some downgrades to LOS for unsignalized intersections in the 2045 PM Peak Build condition but none of the LOS values drop below a C, which is considered acceptable by UCONN and CTDOT over a 20+ year time-frame for growth. This includes changes to the circulation of the complex in the Build condition, which improves LOS in some areas and reduces LOS in others.

For the signalized intersections, there are a few individual movements that decrease in LOS due to the increased delay from the additional projected site-traffic, as shown at the Route 195 and Route 275 intersection where the Charles Smith Way Left turn downgrades from a D to an E. There are also a few other LOS E movements throughout the network, including two additional LOS E's at the Route 195 and Route 275 intersection. The downgrades to LOS E are generally acceptable for individual movements in a

busy campus-area/town-center-area corridor. The overall LOS for the signalized intersections, including the new signalized intersection at Route 275 and Separatist Road, remain at LOS C or D, which is, again, good considering a 20+ year growth period. There were no individual movements or intersections that are expected to be LOS F.

One other significant note is the Route 275 and Separatist Road intersection which operates at LOS E for the southbound movement in the AM peak period. While the intersection will be signalized in the immediate future, signal timing modifications are potentially necessary in the future to help mitigate these impacts.

Table 3.15-3 Signalized Intersection Capacity Analysis

Lane Group	Level of Service (LOS)			
	Weekday Morning Peak Hour	Weekday Morning Peak Hour	Weekday Afternoon Peak Hour	Weekday Afternoon Peak Hour
	2045 No-Build Conditions	2045 Build Conditions	2045 No-Build Conditions	2045 Build Conditions
Route 32 @ Route 275				
EBT	D	D	B	B
WBT	B	B	D	D
NBT	C	C	C	C
SBT	A	A	C	C
OVERALL	**B**	**B**	**C**	**C**
Route 195 @ Route 275				
SEL	B	B	C	C
SET	C	C	D	D
NWL	B	B	C	C
NWT	C	C	D	D
NEL	C	D	D	D
NET	C	C	E	E
SWL	C	C	D	E
SWT	D	D	E	E
OVERALL	**C**	**C**	**D**	**D**
Route 195 @ Bolton Road				
EBL	C	C	C	C
EBT	B	B	C	C
WBL	C	C	C	C
WBT	C	C	C	C
NBL	B	B	B	C
NBT	C	C	C	D
SBL	C	C	C	C
SBT	D	D	D	D
OVERALL	**C**	**C**	**C**	**D**
Route 195 @ Mansfield Road				
EBT	D	D	E	E
EBR	A	A	A	A
WBT	C	C	C	C
NBL	A	A	B	C
NBT	B	B	C	C

SBL	B	B	B	B
SBT	C	C	D	D
SBR	A	A	A	A
OVERALL	**B**	**B**	**C**	**C**
Route 275 @ Separatist Road				
EBT	C	C	C	C
WBT	B	B	C	C
NBT	C	C	D	D
SBT	E	E	D	D
OVERALL	**C**	**C**	**C**	**C**

Queue Analysis

Per the Existing Conditions report, there were concerns with queuing at the eastbound movements of Route 275 at its signalized intersection with Route 195. Based on the results of the queue analysis for the No-Build and Build scenarios, the 50th percentile queue for both the AM and PM peak hour fall below the desired distance to the proposed nearest Mansfield Apartment egress. This remains true for the 95th percentile queue for the AM peak hour. The PM peak hour 95th percentile queue for both the Build and No-Build scenarios, however, is expected to exceed the proposed egress but not the middle egress, which is far enough away to be unaffected by the queue (700' +/-). Nonetheless, this is considered acceptable based on the following reasons:

1. The site egress is a proposed to be a right-turn only, thus eliminating crash-potential associated with left turns.
2. The AM Peak hour for all scenarios meets the desired distance.
3. There is limited effect on motorist delay based on the operational analysis for the right-turn site egress movement.

For these reasons, the queue due to the eastbound movement will not negatively affect the Mansfield Apartment egress. Tables 3.15-4 and 3.15-5 illustrate the 50th and 95th percentile queues, respectively.

Table 3.15-4 50th Percentile Queue Analysis Results

Route 195/275 Intersection – 50th Percentile Queue					
Location/Approach	**Distance To Proposed Mansfield Apartment Egress**	**50th AM Peak No-Build**	**50th AM Peak Build**	**50th PM Peak No-Build**	**50th PM Peak Build**
Northeast Left	190'	55'	64'	77'	128'
Northeast Thru/Right		46'	49'	147'	174'

Table 3.15-5
95th Percentile Queue Analysis Results

Route 195/275 Intersection – 95th Percentile Queue					
Location/Approach	Distance To Proposed Mansfield Apartment Egress	95th AM Peak No-Build	95th AM Peak Build	95th PM Peak No-Build	95th PM Peak Build
Northeast Left	190'	160’	183’	147'	#240'
Northeast Thru/Right		143’	152’	#283'	#342'

 # 95th percentile vehicle volume exceeds analysis signal capacity; actual queue may be longer.

3.15.3.11 Recommendations

Based on the results of the operational analysis, there are no significant expected impacts to the roadway network due to the proposed Mansfield Apartments redevelopment. Intersections in the 2045 Build condition operate at a D or better for signalized intersection and C or better for unsignalized intersections. No individual movements operate at LOS F. While some movements operate at LOS E, this is not uncommon for busy corridors at/near campus center and town-center areas. The queue analysis is also improved due to the movement of the northeast egress to align with the Community Center ingress. While there are still some queueing issues in the PM peak 95th percentile, the easterly drive will be a right-out only egress. Left turns out of the complex will occur at the west driveway, several hundred feet from the intersection and outside of the expected queue.

Overall, no specific traffic mitigation strategies are recommended at this time based on the future conditions analysis. The increased number of pedestrians crossing at the midpoint of the site frontage will be upgraded with a median pedestrian refuge island and RRFB. The Town, CTDOT, and UConn should monitor traffic conditions in the future for any potential need to adjust signal timings at the study intersections.

3.16 UTILITIES

3.16.1 EXISTING CONDITIONS

The existing Mansfield Apartments complex is currently served by all major campus utilities: electrical, sanitary sewer, gas, potable water, and stormwater drainage. A general summary of each utility is provided below in the context of the overall campus.

- Existing Electrical Service – The existing Mansfield Apartment complex receives its electricity from the Eversource overhead electrical system along South Eagleville Road (RT 275). Distribution through the campus is a joint ownership between the University and Eversource, though the University has a goal of supplying 100 percent of the campus electrical demand without relying on Eversource.

- Existing Sanitary Sewer Service – UConn owns and operates a campus-wide wastewater collection and treatment system. The water pollution control facility (WPCF) is located north of North Eagleville Road off LeDoyt Road. The existing Mansfield Apartments complex sanitary waste is served by a central pump station discharging to the gravity sanitary located in Storrs Road (RT 195), which is directed to the Gurleyville Pump station and ultimately to the existing wastewater treatment plant.

- Existing Gas Service – Connecticut Natural Gas (CNG) supplies the UConn campus with natural gas through the Algonquin Gas Transmission pipeline.

- Existing Potable Water – Drinking water and water used for fire protection is supplied to the UConn campus via a system that is operated by New England Water Utility Services, a subsidiary of the Connecticut Water Company. Groundwater wells draw from stratified drift aquifers associated with the Fenton River and Willimantic River. Water is also supplied to the University by the Connecticut Water Company from a reservoir located in Vernon, CT as authorized by a CT DEEP diversion permit. Conservation of water has been an ongoing objective for the University and depending on hydrologic conditions at the Fenton River and Willimantic River wellfields (i.e., low flow/drought conditions), voluntary as well as mandatory conservation practices have been implemented. A Reclaimed Water Facility which produces high-quality reclaimed water for non-potable uses such as heating and cooling is also now operating on-campus. This facility has reduced the amount of potable water consumption by the University for non-potable uses. The installation of low-flow fixtures in existing and new buildings and other conservation measures have also been implemented by the University.

  Potable water system pipes and connections service the existing Mansfield Apartments complex. The UConn campus reclaimed water facility pipes do not extend to this particular section of campus and therefore non-potable/reclaimed water is not currently incorporated into the water sourcing for the site.

- Stormwater Drainage – Traditional stormwater collection/drainage systems consisting of catch basins, manholes and drainage pipes are located throughout the UConn campus. At the Proposed Action Site, the existing drainage system currently discharges just under half of the stormwater runoff from the Mansfield Apartments complex into a bio-retention pond located in the southwestern portion of the site while the remaining area discharges to a drainage channel located on the southeastern portion of the site. The existing bio-retention pond has an emergency overflow spillway that discharges any overflows from the pond to the south and ultimately to Tift Pond. The discharge from Tift Pond runs to the east and north where it converges with the drainage channel from the southeastern portion of the site before both of these systems cross below Route 195 into Bundy Brook and eventually to the Fenton River.

3.16.2 IMPACT EVALUATION

3.16.2.1 No Action Alternative

Under the No Action Alternative, all major utility services would continue to be provided by the University to the Mansfield Apartments. While the No Action Alternative would not result in any further demand on utilities, it would also not address any future utility needs or provide any additional utility capacity and resilience.

3.16.2.2 Proposed Action

All major utility services and connections necessary to support the Proposed Action are located within the immediate vicinity of the Proposed Action Site. The same utility services presently provided at the Mansfield Apartments complex would also be required and provided for the redeveloped site. A summary of each proposed utility under the Proposed Conditions is provided below.

- Proposed Electrical Service – The proposed development is reviewing options to extend one of the University's main campus primary electrical circuits along the existing overhead pathway along Storrs Road (RT 195) and into the site. Alternatively, the electrical service for this project would be sourced from the existing Eversource circuits.

  The project is also considering the installation of 1500 kW of Fuel Cell capacity which would provide the primary source of electricity for the development. The fuel cell, when not fully utilized by the Mansfield Apt project, would feed back into the University's primary grid under the option of extending campus circuit to this region. This option would help offset electrical demands in other parts of campus. Waste heat from the fuel cells is being captured to provide additional heat for the new development during peak times.

  Emergency and Stand-By power will be provided by a diesel fueled generator.

- Proposed Sanitary Sewer Service – The new development will continue to discharge sanitary to the existing gravity system along Storrs Road (RT 195). The project site will include new gravity sewers to a new central sanitary pump station located on the site sized to accommodate the increase in flows from the new development. The discharge from the new pump station will be via a new force main extending from the site to the gravity sanitary in Storrs Road (RT 195). A section of the existing gravity line in RT 195 will be upgraded to increase the capacity of the existing sanitary.

- Proposed Gas Service – There is no requirement for new gas service to the new development. The project is proposing the integration of fuel cells which will require a natural gas service extending from the existing main in South Eagleville Road (RT 275).

- Proposed Potable Water – The project is proposing to relocate the existing 8" water main running through the site with a new 12" water main along South Eagleville Road (RT 275). The new main will connect to the existing 12" main located in Storrs Road (RT 195) on the eastern side and the existing 8" water main on the western side. A new 12" water main will extend into the project site at both the eastern and western entrances looping around the development. Laterals to the buildings will be provided by the internal loop including a separate lateral to supply water to the proposed fire pump. New hydrants would be provided off the new water system(s). The proposed water system improvements will increase the available volume and pressure for the new development.

  The campus reclaimed water does not extend to this particular section of campus therefore this project will not be incorporating reclaimed water as part of the design.

- Proposed Stormwater Drainage – The project will increase the amount of impervious coverage by approximately 2.15 acres due the increases in both building coverage and additional parking areas. Increases in peak flow will be mitigated through the use of underground detention systems and where possible infiltration of stormwater will be provided. Stormwater planting basins will be used above portions of the underground detention systems to provide storage capacity of smaller storm events and to treat the water quality volume from the proposed development. Additional treatment will be provided by utilizing deep sump catch basins, disconnected impervious coverage, swales and where necessary hydrodynamic separators. Stormwater discharge points to the existing bio-retention basin on the south side of the site and the existing 24" RCP pipe on the east side of the site will be maintained and peak flows at these locations will be managed to predevelopment levels.

Under the proposed conditions, the existing utility services and systems provided by the University are likely insufficient to handle the anticipated demand attributed to the new, higher-density residential complex. In anticipation of the demand for utility service and capacity to increase, the project has designed site utilities to accommodate a greater level of demand and use.

3.17 ENERGY CONSERVATION AND SUSTAINABILITY

3.17.1 EXISTING CONDITIONS

The University is internationally recognized as a leader of college/university campus sustainability and conservation, as evidenced by its programs and practices that promote energy efficiency and sustainability. UConn is consistently ranked in the top 10 of the Sierra Club's Cool Schools system and earned a Gold Rating with the Association for the Advancement of Sustainability in Higher Education's

Sustainability Tracking, Assessment & Rating System (STARS). UConn's Storrs campus, has several initiatives currently underway:

- The University of Connecticut Climate Action Plan: Guiding the Path Toward Carbon Neutrality (August 2009) UConn has a goal of having a carbon neutral Storrs campus by the year 2050, and this plan serves as a blueprint to achieve those goals. The Climate Action Plan (CAP) includes a greenhouse gas (GHG) inventory, emission reduction strategies, and funding, outreach, and research approaches. The energy section of this CAP includes strategies that reduce demand, maximize efficiency, substitute green technologies for existing ones, and plan for future energy efficiency in building design and energy supply. In 2015, an Interim Assessment of UConn's Climate Action Plan was completed to review progress since the CAP was initiated in 2010 and be sure the University is on track to meet the 2050 GHG reduction goals.

- 2020 Vision for Campus Sustainability & Climate Leadership (2016) Endorsed by UConn in 2016, this vision provides suggestions for reaching the goals included in the CAP. The vision includes measurable metrics and numeric goals to measure the success of the implementation of the CAP goals. The categories contained in this vision include energy and buildings, waste reduction and diversion, outreach and engagement, food and dining, water resources, purchasing, transportation, and grounds, open space, and conservation areas.

- The University of Connecticut Sustainable Design & Construction Policy (2016) This policy was formally adopted in 2007 and updated in 2016 to outline development on campus for projects that cost over $5 million. This policy ensures that buildings on campus will be designed, constructed, and renovated as energy efficient, sustainable, and water efficient. LEED building certification and approaches will be considered for campus building design and construction projects.

- Preliminary Feasibility Study and Strategic Deployment Plan for Renewable and Sustainable Energy Projects (2012) This plan outlines 12 demonstration-scale renewable and sustainable energy projects on campus for the following technologies: geothermal, fuel cells, solar thermal, biofuels, solar photovoltaic, and wind. These clean and renewable energy technologies will reduce energy use and emissions associated with the use of fossil fuels for electric generation, thermal energy, and/or transportation. This plan is also called the UConn Renewable Energy Strategic Plan.

- The University of Connecticut Sustainability Framework Plan (2015) This appendix to the overall UConn Campus Master Plan lays out five focus areas to achieve sustainability goals: energy, water, land, materials, and movement. The energy goals in this plan include the reduction of fossil fuel use, careful siting of future buildings, integration of renewable energy systems on the campus, sub-meter and smart-meter buildings, and shifting transportation fleet to clean fuel vehicles. The approaches outlined in this plan strive to bring UConn's campus carbon neutrality by 2050.

- Campus Sustainable Design Guidelines (2004) These technical guidelines outline strategies to improve energy efficiency, plan sustainable sites, safeguard water, conserve materials and resources, and enhance indoor environmental quality. The four main goals of the energy efficiency sections are to: reduce the total energy consumption of buildings; satisfy a portion of the electricity demand for a project with renewable energy sources; eliminate the use of ozone in buildings; and monitor and assess building system performance. The reduction of the energy consumption of buildings can be achieved by outlining strategies to reduce the building's dependence on mechanical heating and cooling, identifying systems that increase operational efficiencies, and utilizing onsite energy generation. The verification of building systems includes tracking usage and assessing the results to be sure that buildings have been sited, designed, constructed, and are operating with maximum efficiency.

The energy consumption of the proposed redevelopment would be from: the construction of the facility; the geothermal wells and to heat the new residential buildings, and mechanical ventilation to control heating, humidity, and indoor air quality. Additional energy use would be from lighting and other normal, daily electricity usage by the residents.

3.17.2 IMPACT EVALUATION

3.17.2.1 No Action Alternative

Under the No Action Alternative, there would be no new construction and the site would continue to operate as on-campus housing for the existing number of students. While no direct adverse impacts are anticipated under the No Impact alternative, lost opportunities to invest in alternative and renewable energies through the installation of a photovoltaic electric and geothermal heating system on site, the provision of electric vehicle charging stations, and the implementation of energy-saving building technologies would result in a complex that is less energy-efficient than desired standards for the University.

3.17.2.2 Proposed Action

The Proposed Action, by increasing the number of residential beds from 270 to approximately 900 would likely result in a net increase energy consumption, when the units are occupied at their full capacity. At the same time, the redeveloped residential buildings will be more energy efficient when compared with the existing Mansfield Apartments which are over 75 years old and lack many modern, energy-efficient building design elements. A benefit of the Proposed Action is that the finished redevelopment will provide additional on-campus beds in a modern, energy-efficient building, which will lessen the housing burden in other residential locations on campus and allow the retrofit/modernization of other aging campus residential facilities to take place without reducing the availability of on-campus housing while these updates are taking place.

In concert with the UConn Sustainable Design & Construction policy, energy efficiency measures would be incorporated into the design, construction, and operation of the new Mansfield Apartments. The Proposed Action would adhere to the UConn Sustainability Framework Plan with reduction of fossil fuel use, sub-meter / smart-meter buildings, and careful building siting associated with the redevelopment. The design and construction of Proposed Action would adhere to LEED building requirements that would make the proposed buildings more energy efficient than the existing apartments. Measures taken to aid in reducing energy and water consumption shall comply with *Connecticut Building Standard Guidelines Compliance Manual for High Performance Buildings* and are listed on the LEED v4 score card, Appendix H).

The project is also being designed to be SITES compliant. SITES refers to the Sustainable Sites Initiative, which is similar to the LEED process but for landscapes and site management. Designing a project for SITES compliance is intended to ensure the protection of ecosystems. SITES-certified landscapes are intended to help reduce water demand, filter and reduce stormwater runoff, provide wildlife habitat, reduce energy consumption, improve air quality, and improve human health and outdoor recreation opportunities. Each of these areas are described in this EIE and specific design attributes are noted.

3.18 CONSTRUCTION PERIOD IMPACTS

3.18.1 IMPACT EVALUATION

3.18.1.1 No Action Alternative

There would be no redevelopment construction associated with the No Action Alternative and consequently no construction period impacts.

3.18.1.2 Proposed Action Alternative

Temporary impacts during demolition of the existing Mansfield Apartments buildings and construction of the proposed redeveloped Mansfield Apartments and associated parking areas are anticipated in relation to air quality, stormwater and water quality, noise, economy, solid waste, hazardous materials, energy, and campus disruption/parking. Various BMPs would be incorporated into construction specifications and would be implemented during construction to avoid or minimize temporary construction period impacts to the greatest extent possible. Additionally, all contractors working on the Proposed Action Site would be required to adhere to the guidelines and requirements of UConn's *Contractor EHS Manual - Health, and Safety* (EHS) Requirements for Construction, Service, and Maintenance Contractors (May 24, 2019 - 7th Revision). An evaluation of the temporary construction-phase impacts and mitigation measures are described in more detail below.

3.18.1.2.1 Air Quality

Construction air quality impacts would occur due to the use of diesel-powered construction vehicles and are anticipated to be greatest in 2023 based on the proposed construction schedule provided by the University. Diesel air emissions include CO, hydrocarbons, nitrogen oxides, sulfur oxides and particulate matter (PM10 and PM2.5). These construction emissions are 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 the construction equipment in the vicinity of the Proposed Action Site.

DEEP Bureau of Air Management typically recommends the use of newer off-road construction equipment and newer on-road vehicles that meet the latest EPA or California Air Resources Board (CARB). Alternatively, if newer equipment cannot be used, equipment with the best emission controls or retrofits should be used where feasible. Section 22a-174-18(b)(3)(C) of the RCSA limits the idling of mobile sources to 3 minutes. This regulation applies to most vehicles such as trucks and other diesel engine-powered vehicles commonly used on construction sites. Use of posted signs indicating the three-minute idling limit is recommended.

Fugitive dust emissions could occur during demolition of the existing buildings; from clearing, grubbing, blasting, ground excavation or other site preparation activities; during material handling and storage; during movement of equipment on site; or during transport of material to and from the site. Fugitive dust is most likely to occur during periods of intense activity and would be accentuated by windy and/or dry weather conditions.

Mitigation of potential construction air quality impacts from diesel exhausts would be addressed through the 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.

Potential air quality impacts from fugitive dust would be addressed through the following mitigation measures:

- Reducing exposed erodible earth area to the extent possible through appropriate construction phasing. Stabilization of exposed earth with grass, pavement, or other cover as early as possible.
- Application of stabilizing agent such as calcium chloride or water to the work areas and haul roads.
- Covering, shielding, or stabilizing stockpiled material.
- Use of covered haul trucks.

- Limiting dust-producing construction activities during high wind conditions.
- Rinsing construction equipment with water at a designated wash area near the entrance/exit to the construction site to minimize drag-out of sediment by construction equipment onto the adjacent roads.
- Street sweeping of roads within the construction area.

3.18.1.2.2. Stormwater and Water Quality

Storm events during construction have the potential to erode areas of exposed soils which could potentially result in offsite impacts to adjacent lands and downstream wetland and receiving waters. Because more than one acre would be disturbed during construction of the Proposed Action, a general permit for stormwater discharge during construction will be required from the CT DEEP. This general permit would establish water quality and quantity design goals for the Proposed Action Site.

To mitigate potential surface water quality degradation during construction, a stormwater pollution control plan (SWPCP) would be specifically designed and implemented for this construction project in accordance with the 2002 Connecticut Guidelines for Erosion and Sedimentation Control (CT DEEP, 2002). The measures taken would prevent and minimize sedimentation, siltation, and/or pollution of adjacent properties and surface water bodies. Measures would include, among others, the proper placement of geotextile silt fencing, haybales, or other controls adjacent to site disturbance limits, along stream banks, upslope of wetlands, or around existing catch basins to keep all sediments and pollutants on site and out of surface waters, wetlands and drainages. These erosion and sedimentation controls would be maintained throughout the period of active construction until all exposed soils have become stabilized. In addition to erosion and sedimentation controls, construction site stormwater management facilities, such as sedimentation basins, dewatering, and filtration systems, would be appropriately designed in conformance with the Connecticut *Stormwater Quality Manual* (CT DEEP, 2004). The demolition phase of the project has been registered with DEEP using the General Permit (GP) for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. The construction phase will also register this same GP.

3.18.1.2.3 Noise

During the construction period, continuous as well as intermittent (or impulse) noise would be experienced in the immediate vicinity of the Proposed Acton Site, which may be perceived by some students and nearby residents to be intrusive, annoying, and discomforting. This noise would be generated by construction equipment including pneumatic tools which emit strong penetrating percussive sounds, and by the daily movement of dump trucks, loaders, backhoes, and other heavy equipment to, from, and on the construction site.

Table 3.18-1 provides typical noise emission levels in A-weighted decibels (dBA) 50 feet from construction equipment that is anticipated to be utilized to construct the Proposed Action. For comparison, ambient noise levels in suburban environments like the UConn campus range from approximately 50 to 60 dBA.

Table 3.18-1 Noise Emission Levels from Construction Equipment

Construction Equipment Likely to be Used to Construct the Proposed Action	Noise Level (dBA) 50 feet from Source
Air compressor	80
Backhoe	80
Dozer	85
Generator	82
Jackhammer	88
Loader	80
Pneumatic Tool	85
Rock Drill	95
Dump Truck	84

Source: *Federal Transit Administration Noise and Vibration Impact Assessment Manual*, September 2018

In general, noise levels are reduced by 6 dBA for each doubling of distance from a noise source. Thus, a dump truck with a noise level of 84 dBA at 50 feet for instance, would have a noise level of 78 dBA at 100 feet, 72 dBA at 200 feet, 66 dBA at 400 feet, 60 dBA at 800 feet, and so forth. Buildings and other barriers located between a noise source and a receiver further reduce the intensity of construction noise. For comparison, the Proposed Action Site is located approximately 850 feet east of two residences located along Separatist Road on the west. These are the closest noise sensitive receptors to the Proposed Action Site. Thus, as an example, a dump truck operating on site would have a noise level of approximately 60 dBA at outdoor locations adjacent to these homes.

While construction noise is exempt under Section 22a-69-1.8(g) of the RCSA, construction documents would require the contractor to limit the duration and intensity of noise generated by construction. To mitigate the potential impacts during construction, noise abatement measures would be included in construction specifications. Such measures include appropriate mufflers on all construction vehicles and restrictions on hours of operation.

Contractors working at the University are required to comply with OSHA's Noise Standard, 29 CFR 1910.95 and to the noise requirements identified in the University's *Contractor Environmental Health and Safety Manual*. Per the latter, the University requires that contractors limit onsite work hours from 7:00 a.m. (or 8:00 a.m. in the vicinity of a dormitory) to 4:30 p.m., Monday through Friday. Thus, there would be no nighttime noise related to construction of the Proposed Action. Also, two days advanced notice is required to be given by the contractor to the University when disruptive/noisy construction operations are planned. Commencement of those activities cannot take placed until written permission is granted to the contractor by the University.

3.18.1.2.4 Economy

As discussed in Section 3.14 of this EIE, there would be some economic benefit due to construction of the Proposed Action, albeit minimal. One effect would be the production of jobs in onsite and offsite construction, and trade, transportation, manufacturing, and services in support of construction. The earnings from these jobs will in turn generate personal expenditures by project-related workers that will stimulate the local and regional economy. Expenditures will also encompass materials used in construction. Overall there will be a beneficial construction period effect on the economy.

3.18.1.2.5 Solid Waste and Hazardous Materials

As discussed in Section 3.9 of this EIE, solid waste would be generated from construction. Pallets, wood scraps, wallboard, siding and roofing scraps, packaging, dry latex paint residue, foam padding, insulation, are some examples of the types of solid waste that might be generated during construction. This waste would be disposed of as municipal solid waste as described in Section 3.9. Any construction waste materials containing solvents (e.g., paint thinner, varnishes) would be managed as hazardous waste and disposed of by a licensed waste hauler.

Demolition debris may also include materials that contain PCBs or contaminated with lead-based paint, residues or materials that require special disposal. EPA recommends testing caulk that is going to be removed as the first step to determine what protections are needed during removal. Where testing confirms the presence of PCBs, it is critically important to ensure that they are not released to air during replacement or repair of caulk in affected buildings. Many such PCB removal projects will need to include sampling of the substrate and soil, as well as require plans to be approved by EPA in coordination with DEEP.

Potential incidental exposure of construction workers to hazardous materials during the construction process would be addressed prior to commencement of construction, with the development of a site-specific hazardous materials management plan. A Health and Safety Plan for construction workers would also be developed in accordance with OSHA guidelines. It is anticipated that no hazardous materials other than diesel fuel for construction equipment would be stored on site during construction. All fuel storage tanks used during construction would be equipped with secondary containment systems.

3.18.1.2.6 Energy Use and Conservation

Construction of the Proposed Action would result in an increased demand for fossil fuels (primarily diesel fuel) to over a certain and limited temporal phase to operate construction machinery and trucks. In the long term, the increased building areas and student beds will increase demand for energy, though the proposed buildings are to be LEED compliant and more energy efficient than existing infrastructure.

3.18.1.2.7 Campus Disruption/Parking

During the period it would take to construct the Proposed Action, there would be sights and sounds of construction activity, such as the movement of construction equipment along local roadways that could be perceived as disruptive to students, nearby residents, and other visitors to Mansfield and UConn.

As the Proposed Action site is in the South Campus Gateway district, outside of the main hub of campus activity, the construction period is unlikely to greatly disrupt campus transportation patterns. Parking within the existing and proposed redeveloped Mansfield Apartments is reserved solely for residents; as such, no daily campus parking will be disrupted by the temporary closure of the site during construction. Much of the land surrounding the Proposed Action site consists of open space and other undeveloped areas, limiting the amount of daily use and traffic patterns that are anticipated to be disrupted by any construction-related machinery and an influx of construction-related traffic.

The proposed project will be limited to University property. The redevelopment is not intended to impose a negative impact on Moss Sanctuary in the short-term relative to access. Existing access will be maintained to the Sanctuary from Birchwood Heights Road during construction with a relocated trailhead sign. The University will continue to coordinate with the Town to ensure no disruptions to traffic or Moss Sanctuary access are sustained throughout construction. An access from the Mansfield Apartment Complex – with signage - will reopen at the Sanctuary northern boundary following construction.

4. SUMMARY OF IMPACTS

4.1 UNAVOIDABLE ADVERSE IMPACTS

A detailed assessment of the Proposed Action to determine whether the action would have beneficial or substantial adverse environmental effects on natural, social, and cultural resources is provided in Chapter 3 of this EIE. This chapter summarizes the results of that impact assessment to identify only the unavoidable adverse impacts attributed to the Proposed Action.

The only unavoidable adverse environmental impacts associated with the Proposed Action would be those incurred during the project construction period. These temporary construction-related impacts are described in Section 3.18 and primarily include impacts to air quality, noise, stormwater and water quality, and campus disruption/parking. Through construction best management practices, outreach and communication with the campus community and Town of Mansfield, and proper site planning these impacts could be effectively minimized but would not be eliminated.

4.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

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

The Proposed Action involves a commitment of a range of natural, physical, human, and fiscal resources. Land used in construction is considered an irreversible commitment during the period that the land is used. However, given that the Proposed Action site already exists as a developed residential community, the proposed land use does not constitute a new resource commitment. Furthermore, if a greater need arises for use of the land or if the University determines at some point in the future that the Mansfield Apartments are no longer needed, then the land could eventually be converted to another use. However, there is no reason to believe such a conversion would ever be necessary or desirable.

Fossil fuels, labor, and materials such as steel and concrete would be used to construct the Proposed Action. Additionally, labor and natural resources are used in the making of construction materials. These materials are generally not retrievable. However, aside from fossil fuels, they are not considered to be in short supply and their use would not have an adverse effect upon continued availability of these resources. Any construction would require a one-time use of fiscal resources, which are not retrievable.

Once constructed, operation of the new Mansfield Apartments complex would require the irretrievable commitment of energy to heat and cool the buildings, and to illuminate the complex buildings and associated walkways and parking areas, all of which could require a somewhat higher demand compared

to existing conditions as the complex would accommodate a greater number of residents and vehicles. Therefore, overall energy use on campus would increase with the Proposed Action. Operation and maintenance of the facility would also require an expenditure of human labor and fiscal resources for the lifespan of the facility.

4.3 INDIRECT AND CUMULATIVE IMPACTS

Indirect impacts are effects from a Proposed Action that are either removed in distance or time from the action itself. Cumulative impacts are the total incremental effects on a resource, ecosystem, or human community due to past, present, and reasonably foreseeable future activities undertaken by the sponsoring agency (in this case, the University). Cumulative impacts are only considered for those resources that are directly or indirectly impacted by the Proposed Action. In assessing what may happen in the future, reasonably foreseeable activities are actions estimated to be probable, based on observed trends and known programmed future projects, rather than simply possible, based on speculation. The UConn Master Plan is therefore used as the guide for assessment of cumulative impacts from reasonably foreseeable future actions.

Assessment of cumulative impacts from past actions requires consideration of a reasonable timeframe. The University is amid the $1.5 billion NextGen Connecticut Development Initiative that was signed into law by Governor Malloy in January 2013. The NextGen Initiative proposes to greatly expand educational opportunities, research, and innovation in the science, technology, engineering, and math (STEM) disciplines at UConn over the next decade. The goal of this initiative is to leverage the strength and resources of the University to help create jobs and invigorate the State's economy. An objective of this effort is to increase in the University's enrollment, expand the University's faculty, and develop new and existing facilities to accommodate enhanced STEM research and teaching. While the Mansfield Apartments Redevelopment is not a STEM project, the Purpose and Need for the Proposed Action, which is to provide an increase in available housing and housing typologies to accommodate a growing student population, is consistent with and complementary to these goals and objectives.

It is therefore logical and appropriate to use 2014 (the year that NextGen projects started to advance) as the starting point for the assessment of cumulative impacts for this EIE. The geographic area for the assessment of indirect and cumulative impacts is the University of Connecticut campus.

4.3.1 INDIRECT IMPACTS

Indirect impacts are either growth inducing effects or are the result of encroachment into or alteration of a resource that could potentially lead to long-term degradation of the affected resource. Although wetlands exist within the subject property, adjacent to the Proposed Action site, redevelopment of the Mansfield Apartments is not anticipated to cause indirect impacts to the character or functionality of wetlands. All work will avoid wetlands by occurring within the upland, developed portion of the site, and

through the use of comprehensive S&E control measures and other construction and redevelopment BMPs including LID measures.

The design of the Proposed Action would include a variety of green infrastructure and LID measures to manage the quantity and quality of stormwater generated at the site and would therefore be an improvement over the existing stormwater management system at the Mansfield Apartments complex. Thus, the future condition with the Proposed Action would improve quality and reduce the quantity of stormwater runoff leaving the Proposed Action Site. For this reason, indirect impacts to downstream wetlands, receiving waters, and adjacent lands from runoff leaving the site is not anticipated.

The redevelopment of Mansfield Apartments is in UConn's Master Plan as a priority project. It is part of the University's overall objective to increase and improve on-campus housing options. The redevelopment project would take place between the years of 2023 and 2025. This on-campus housing redevelopment project would not be considered the type of development project that would induce growth on campus, as once it was constructed, the modernized Mansfield Apartments would replace other aging on-campus housing options, creating a shift of student residents from one part of campus to another. The project is needed to enhance the existing experience for existing and prospective UConn students and as a result are anticipated to incentivize students to choose to reside on campus as opposed to seeking local off-campus housing. As a result, it is possible that the Proposed Action could actually reduce the conversion of land elsewhere in the vicinity of the UConn campus to make way for private development of student housing, in favor of the Proposed Action which would maintain an existing development in its current use.

While a more desirable, modernized on-campus housing facility may attract more UConn students to choose to live on campus, it is unlikely to have a significant impact on the total student population of the University. For this reasons, indirect impacts attributed to induced growth triggered by the redevelopment of Mansfield Apartments is not anticipated.

4.3.2 CUMULATIVE IMPACTS

As mentioned above, the assessment of cumulative impacts only considers those resources that are directly or indirectly impacted by the Proposed Action. The geographic area for cumulative impact assessment is the campus and the timeframe considered is from 2014 (the year that NextGen Connecticut projects began to advance) through 2035, the planning horizon year for the most recent UConn Master Plan.

Based on the assessment in Chapter 3 of this EIE, the Proposed Action would result in direct and indirect impacts to traffic/parking conditions, and minor impacts to forested edge habitat adjacent to the Proposed Action site.

Projects that have been undertaken on the UConn campus since 2014 are included in Table 4.3-1. The date of the environmental documentation associated with each project is included as well as a summary of the

impacts to wetlands, habitat, and traffic/parking conditions (the resources that are the focus of this cumulative impact assessment) for each project.

Table 4.3-1 Development Projects on the UConn Campus Since 2013 and Related Resource Impacts

Project Name	Date of Environmental Documentation	Summary of Impacts to Wetlands, Habitat, and Traffic/Parking Conditions
Main Accumulation Area	February 2014	• No wetland impacts • Loss of 0.75 acre of fragmented upland forest habitat • No parking or transportation impacts
Innovative Partnership Building – North Campus	February 2014	• 9,580 SQ FT of wetland impact • Some disturbance within the 750-foot critical habitat buffer associated with a vernal pool but the project meets specified vernal pool habitat management and conservation objectives. • No parking or transportation impacts
STEM Residence Hall	April 2014	• 935 SQ FT of wetland impact • No habitat impacts • Additional demand for on-campus student parking
South Campus Development	January 2016	• No wetland impacts • No habitat impacts • Minimal new vehicle trips with no adverse impact on traffic operations in and around the UConn campus • Loss of an estimated 81 existing parking spaces in the South Campus area • Potential spill-over parking impacts on adjacent Town parking lots and streets
Student Recreation Center	April 2016	• No wetland impacts • No habitat impacts • No parking or transportation impacts
Athletic District (Stadia) Development	March 2018	• No wetland impacts • Loss of one acre of forest cover with minimal habitat value due to the relocation of the baseball field and pedestrian connection to surface parking (Y-Lot) • No parking or transportation impacts
Main Campus Parking Replacements	June 2018	• No wetland impacts • No habitat impacts • Parking benefits and no transportation impacts

Project Name	Date of Environmental Documentation	Summary of Impacts to Wetlands, Habitat, and Traffic/Parking Conditions
Northwest Science Quad	December 2018	• 2,500 SQ FT of wetland impact • Vegetation clearing including the removal of invasive plants • No expected increase in site-generated traffic volumes • Shift of parking from campus core to periphery for approximately 705 vehicles • No disruption of existing intersections • Minimal new vehicle trips • Improved pedestrian and bicycle access within campus core
UConn Ice Hockey Arena Development	February 2022	• 4,900 SQ FT of wetland impact • Minor loss of forested edge habitat • Increased vehicle delays and other impacts to traffic operations, during high-traffic events • Provide an enhanced UConn Hockey program and facilities to attract and retain top-tier athletes and increase the national and regional prestige of the University
Mansfield Apartments Redevelopment (Proposed Action)	September 2022	• Increase in impervious Cover (12 percent increase from existing) • No direct wetland impacts • The project will require a Major Traffic Generator Certificate pursuant to Sections 14-311 and 14-311c of the CGS. OSTA will review proposed traffic mitigation and/or traffic safety measures on the state highway system to confirm that project impacts have been mitigated.

As can be seen from the Table 4.3-1, resource impacts to wetlands, habitats, and campus parking/ transportation conditions from UConn development projects since 2014 have been relatively minimal when considering the nature and extent of development that has occurred on campus. Overall, a total of 17,915 SQ FT (0.41 acres) of wetland impact from nine projects; a total of greater than 2.75 acres of impact to unfragmented forest blocks, or forest edge habitat with varying levels of habitat value; and various changes to parking and transportation conditions that have been planned for and addressed by the University to offset impact and ensure adequate parking and efficient traffic operations on campus and in the surrounding area.

Undoubtedly, with the NextGen Initiative in full swing and the ambitious development plans outlined in the UConn Master Plan, there will likely be future impacts to these resources on a level and scale similar to those that have occurred by the past projects listed in Table 4.3-1. The University is very proactive with their campus planning and is a recognized leader in the state when it comes to the protection of the

environment. It is reasonable to assume that designs of future projects would be developed with the intent of avoiding and minimizing impacts to natural resources such as wetlands and habitats to the greatest extent possible and where unavoidable impacts occur, they would be adequately mitigated as part of the goal to sustain the natural environmental quality of the campus setting. Similarly, the University is committed to providing a parking supply that meets the overall University demand while also ensuring safe and efficient transportation both on campus and in the surrounding areas of Mansfield.

5. COSTS AND BENEFITS

The primary costs of the Proposed Action arise from the monetary outlay and energy consumption required for constructing and operating the redeveloped Mansfield Apartment Complex and associated surface parking areas. Project costs change as the design advances to completion. An estimate of operational costs cannot accurately be provided at this time but is anticipated to comparable new housing development projects per unit student.

Costs associated with environmental impacts are minimal as the Proposed Action is compatible with its surroundings. It would be located on a site that has historically provided housing. There are additional costs relative to the demolition and disposal of hazardous materials that comprise portions of the buildings, though these costs are lower than exposure risks to human health.

Considering the immediate need and potential long-term benefits of the Proposed Action weighed against the project's construction costs and relatively minor adverse environmental impact, the Proposed Action appears to be an advantageous activity that justifies expenditures.

6. POTENTIAL CERTIFICATES, PERMITS, AND APPROVALS

Certificates, permits, and approvals that are anticipated to be required for the construction of the Proposed Action are listed in Table 6.1-1. Upon conclusion of the CEPA process and depending on final design, additional certificates, permits, and approvals may be identified and required for the Mansfield Apartments Redevelopment project. Some approvals may be needed for operation of the facility once it is constructed.

Table 6-1 List of Potential Certifications, Permits and Approvals

Certificate, Permit or Approval	Regulatory Agency	Regulated Resource and/or Need	Comments
Certificate Approval/Administrative Decision Approval	Office of the State Traffic Commission (OSTA)	Traffic and Parking	• The project will require state level approval as a Major Traffic Generator pursuant to Sections 14-311c of the CGS • OSTA will review proposed traffic mitigation measures on the state highway system to confirm that project impacts have been mitigated.
General Permit for Discharge of Stormwater and Dewatering Wastewater Associated with Construction Activities	CT DEEP Bureau of Materials Management and Compliance Assurance	Stormwater	• The total site disturbance exceeds 1 acre, therefore registration is required for each phase, demolition and construction
Flood Management Certificate	CT DEEP Land and Water Resources Division	Stormwater	• This certificate is necessary due to changes in stormwater flow to a man-made drainage basin located in the southern portion of the site.
New Source Review for Stationary Sources of Air Pollution	CT DEEP Bureau of Air Management Engineering and Enforcement Division	Air Quality	• The proposed 500 kW diesel generator would be subject to permitting but will be covered under "Permit-by-Rule" eliminating the need to obtain an individual NSR permit.
Title V Operating Permit	CT DEEP Bureau of Air Management Engineering and Enforcement Division	Air Quality	• New stationary sources that have permit or any other regulatory requirements would be added to the University's existing Title V permit

7. DOCUMENT PREPARERS

7.1 PUBLIC REVIEW

The individuals, agencies, and organizations listed in Table 7.1-1 have contributed either directly or indirectly to the content in this document. A summary of the EIE authors and their roles follows.

Table 7.1-1 EIE Contributors

Role	Entity
Sponsoring Agency	University Planning, Design and Construction 3 Discovery Drive, Unit 6038 Storrs, Connecticut 06269-3038
Implementing Agency	University Planning, Design and Construction 3 Discovery Drive, Unit 6038 Storrs, Connecticut 06269-3038
Primary Author	SLR International Corporation 195 Church Street, 7th Floor New Haven, CT 06510
Design Architect	Sasaki 64 Pleasant Street Watertown, MA 02472

The primary author of this EIE is the consulting firm of SLR. SLR is a professional consulting firm comprised of engineers, planners, environmental scientists, landscape architects, and surveyors. A summary of the SLR staff involved with the environmental analysis and preparation of this document follows.

Megan B. Raymond, MS, PWS, CFM, Principal Scientist, Wetlands and Waterways Lead (Project Manager) Ms. Raymond holds a BS from Tufts University and a MS from the College of William and Mary. Professionally, Ms. Raymond is a professional wetland scientist (PWS), registered soil scientist, and certified floodplain manager (CFM). She has over 20 years of experience in land use consulting and has prepared several Environmental Assessments.

Marlee L. Antill, MS – Environmental Scientist – Ms. Antill holds a BA from the University of Vermont and a MS from the California State Polytechnic University in Environmental and Plant Science. She has experience in wetlands and sensitive habitat assessment, local, state, and federal permitting, and GIS.

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APPENDIX A

AGENCY COORDINATION

University of Connecticut
Mansfield Apartments Redevelopment

University Planning, Design and Construction

3 Discovery Drive, Unit 6038

Storrs, Connecticut 06268

(860) 486-2776

www.updc.uconn.edu

September 2022

Department of Economic and Community Development

State Historic Preservation Office

September 23, 2022

Ms. Megan B. Raymond
SLR International Corporation
195 Church Street
New Haven, CT 06510

Subject: Mansfield Apartments Redevelopment
1 South Eagleville Road
Mansfield (Storrs), Connecticut
ENV-23-0163

Dear Ms. Raymond,

The State Historic Preservation Office (SHPO) has reviewed the referenced project in response to your request for our comments regarding potential effects to historic properties. SHPO understands that proposed scope of work includes the demolition of the existing apartment complex and construction of a new complex, with a new parking area, to be located west of the new development. The project is subject to review by this office pursuant to the Connecticut Environmental Policy Act

Five previously identified archaeological sites are located within 0.5 miles of the project area; however, they will not be impacted by the undertaking. One property listed on the National Register of Historic Places, the University of Connecticut Historic District-Connecticut Agricultural School (NR# 88003202), is located within 0.5 miles of the project area; however, it will not be impacted by the undertaking.

The Subject Property does not appear eligible for listing on either the State or National Register of Historic Places. Additionally, proposed ground disturbance is to take place within areas previously disturbed by construction of the extant housing complex. Therefore, based on the information provided, no historic properties will be affected. Should the scope of work change, this office should be contacted for additional information.

Department of Economic and Community Development

State Historic Preservation Office

The State Historic Preservation Office appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act and Section 106 of the National Historic Preservation Act. For further information please contact Marena Wisniewski, Environmental Reviewer, at (860) 500-2357 or marena.wisniewski@ct.gov.

Sincerely,

Jonathan Kinney
State Historic Preservation Officer

Figure 1. Excerpt from a USGS 7.5' series topographic quadrangle image showing the location of the project area in Mansfield, Connecticut.

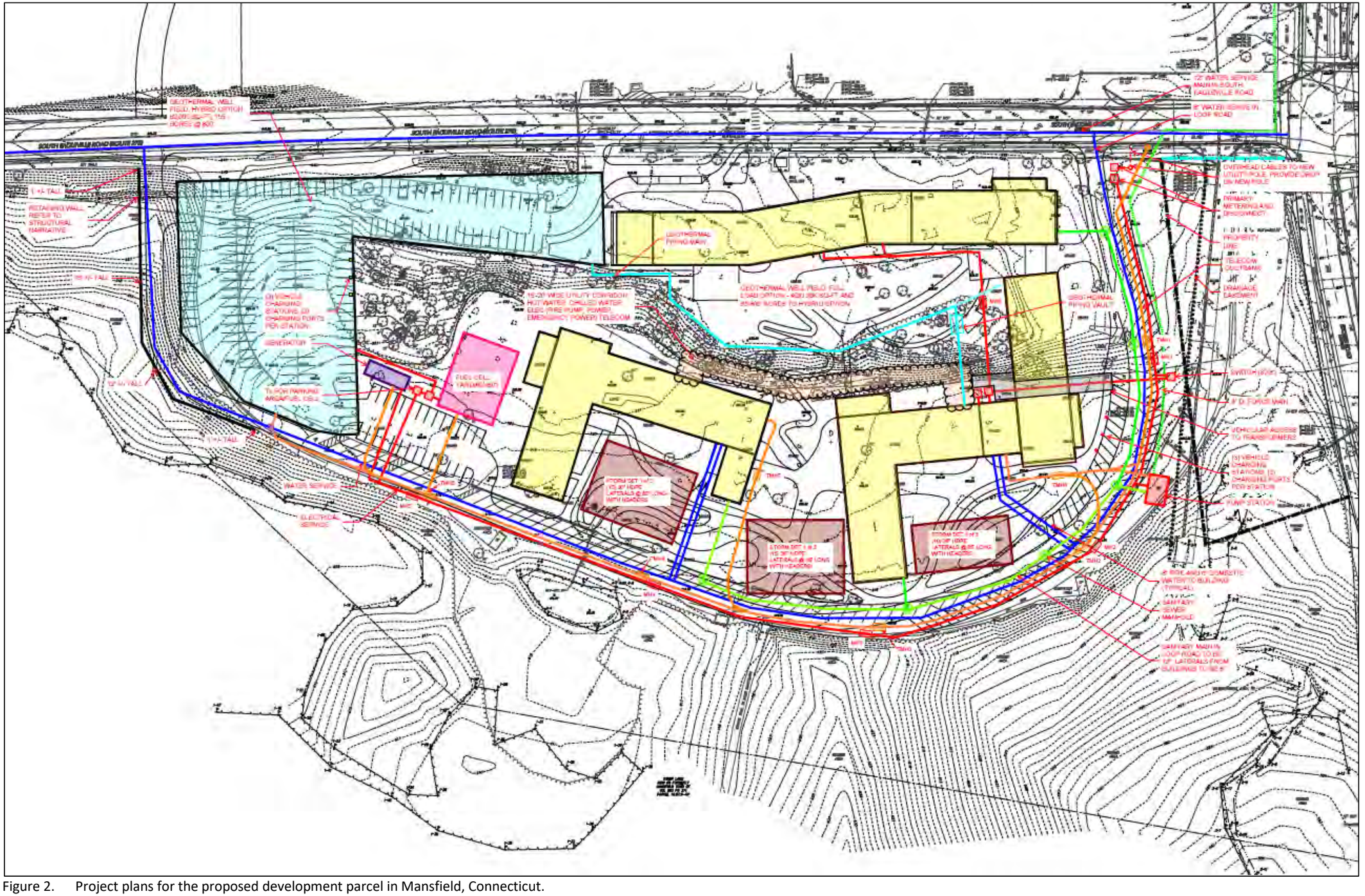


Figure 2. Project plans for the proposed development parcel in Mansfield, Connecticut.

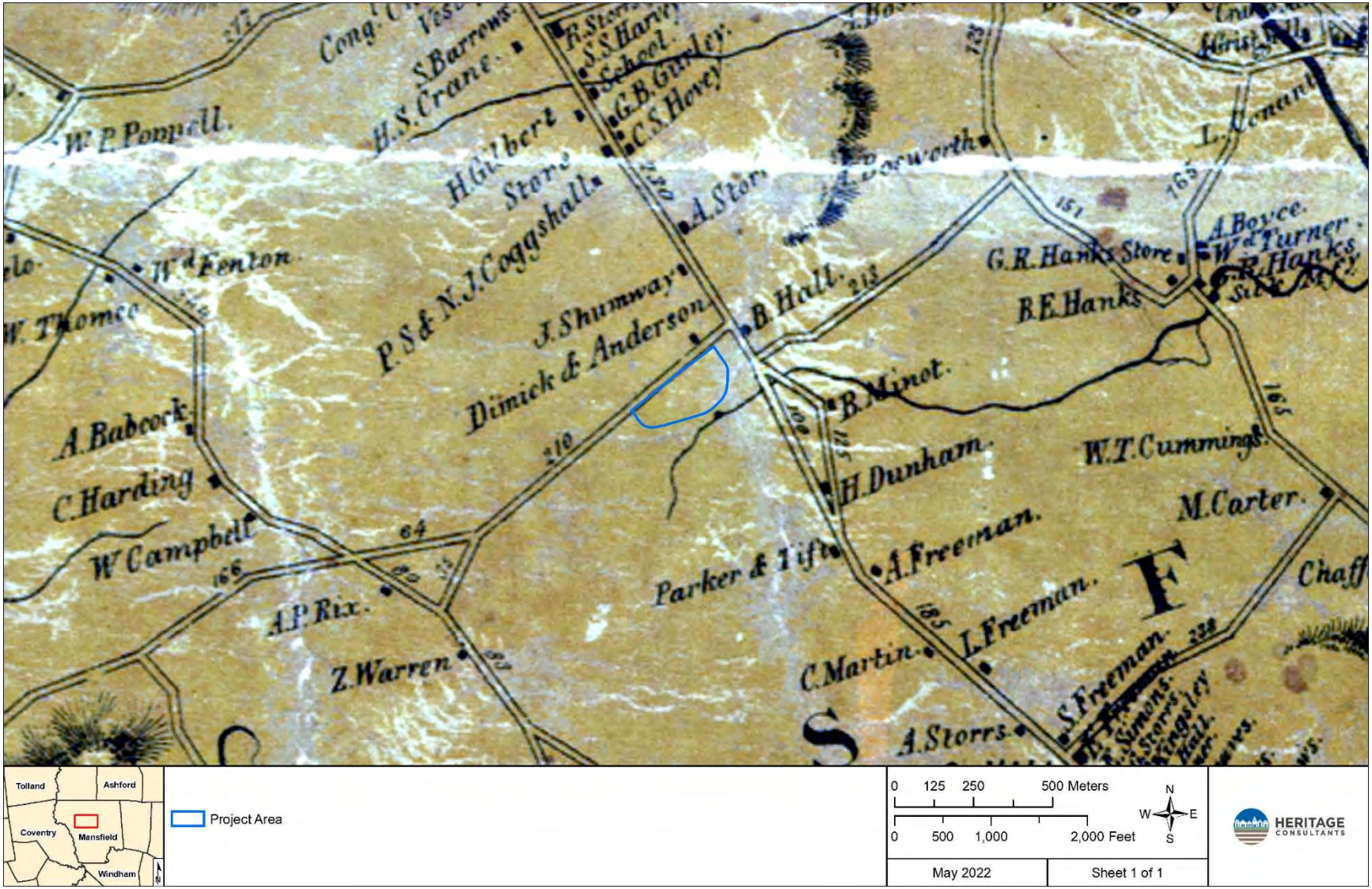


Figure 3. Excerpt from an 1857 historical map showing the location of the project area in Mansfield, Connecticut.

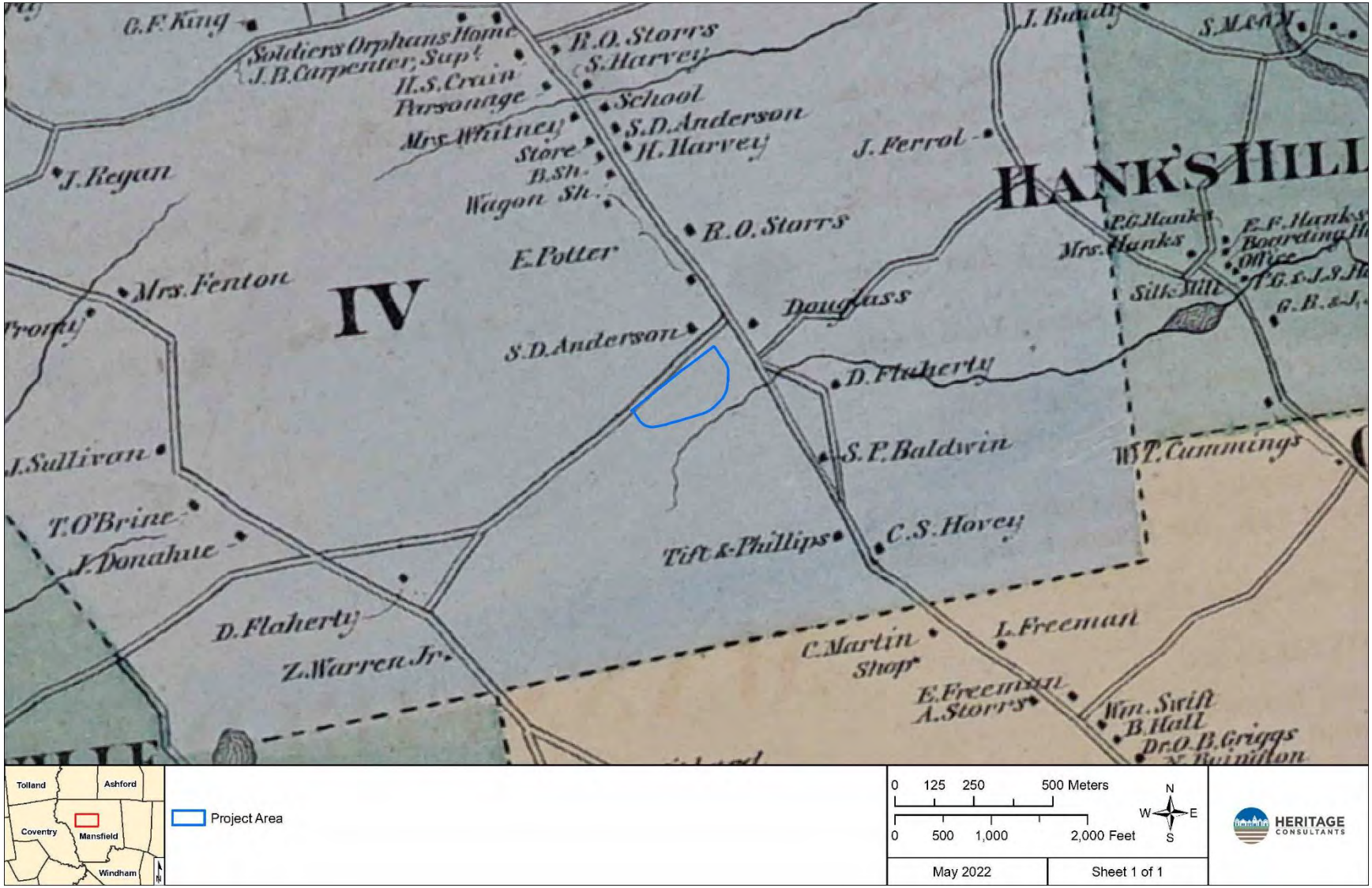


Figure 4. Excerpt from an 1869 historical map showing the location of the project area in Mansfield, Connecticut.

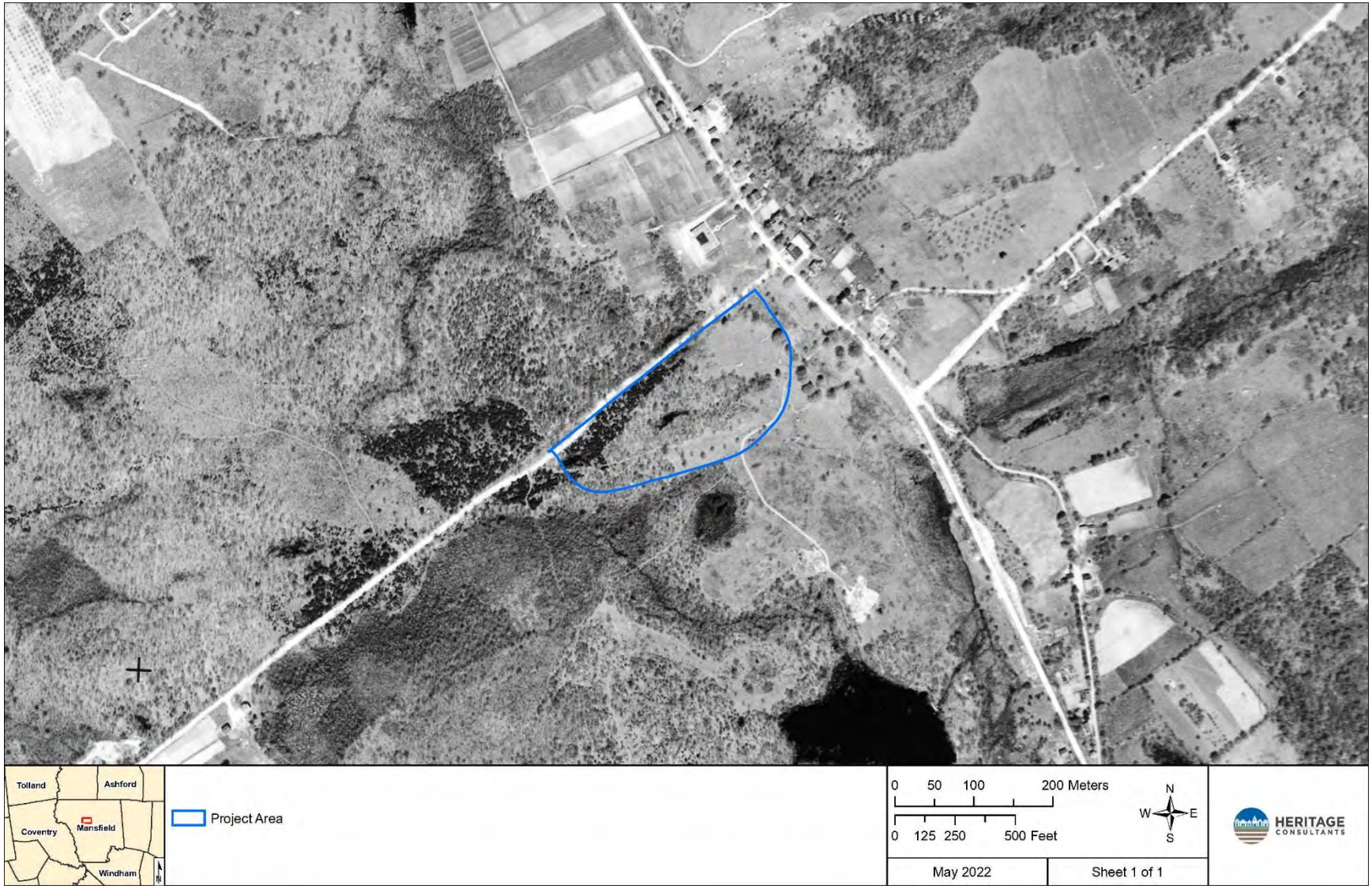


Figure 5. Excerpt from a 1934 aerial photograph showing the location of the project area in Mansfield, Connecticut.

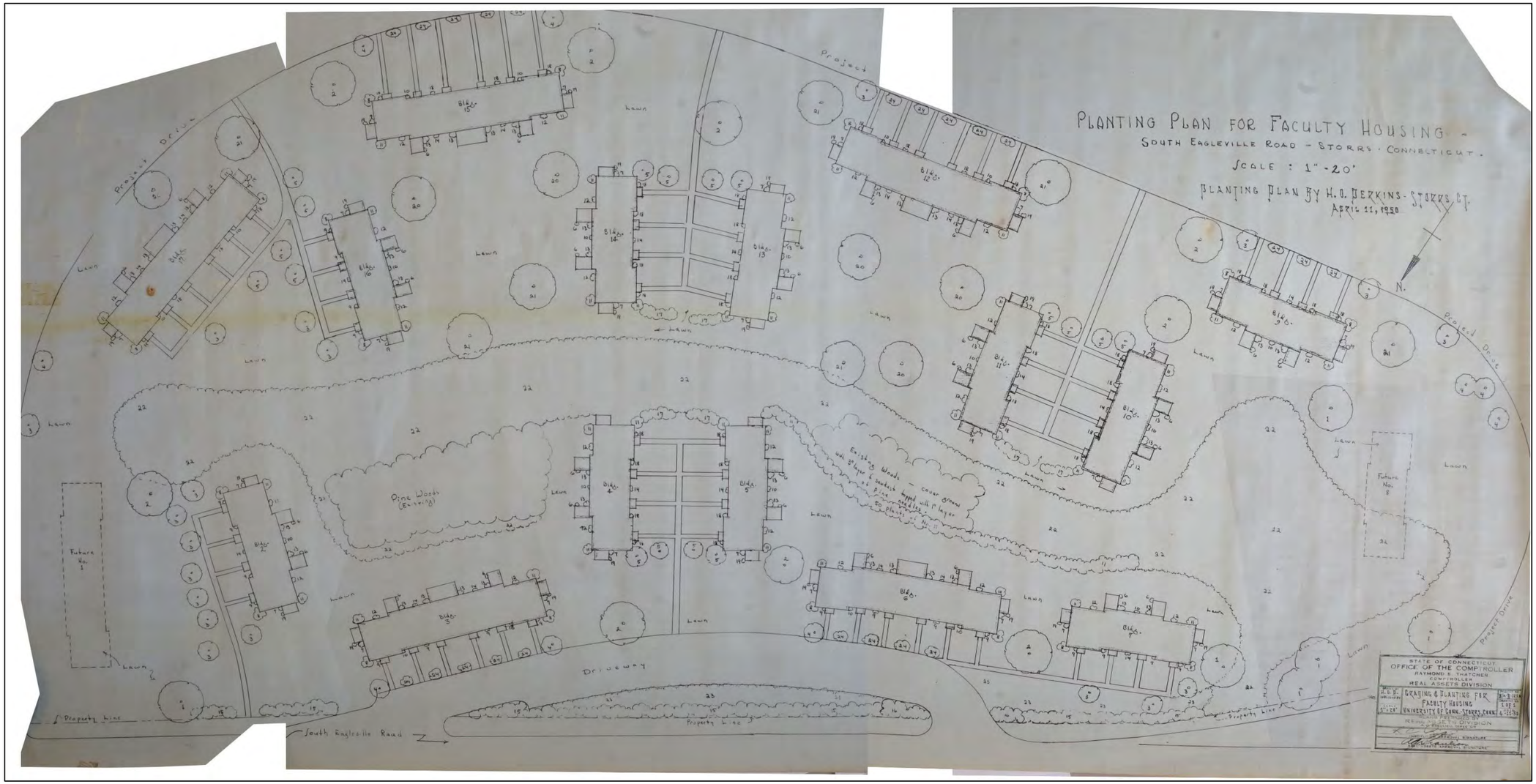


Figure 6. 1950 drawing of the Mansfield Apartments from the Department of Public Works files at the Connecticut State Archives, R.G. 181.

Figure 7. Excerpt from a 1951 aerial photograph showing the location of the project area in Mansfield, Connecticut.

Figure 8. Excerpt from a 1970 aerial photograph showing the location of the project area in Mansfield, Connecticut.

Figure 9. Excerpt from a 2019 aerial photograph showing the location of the project area in Mansfield, Connecticut.

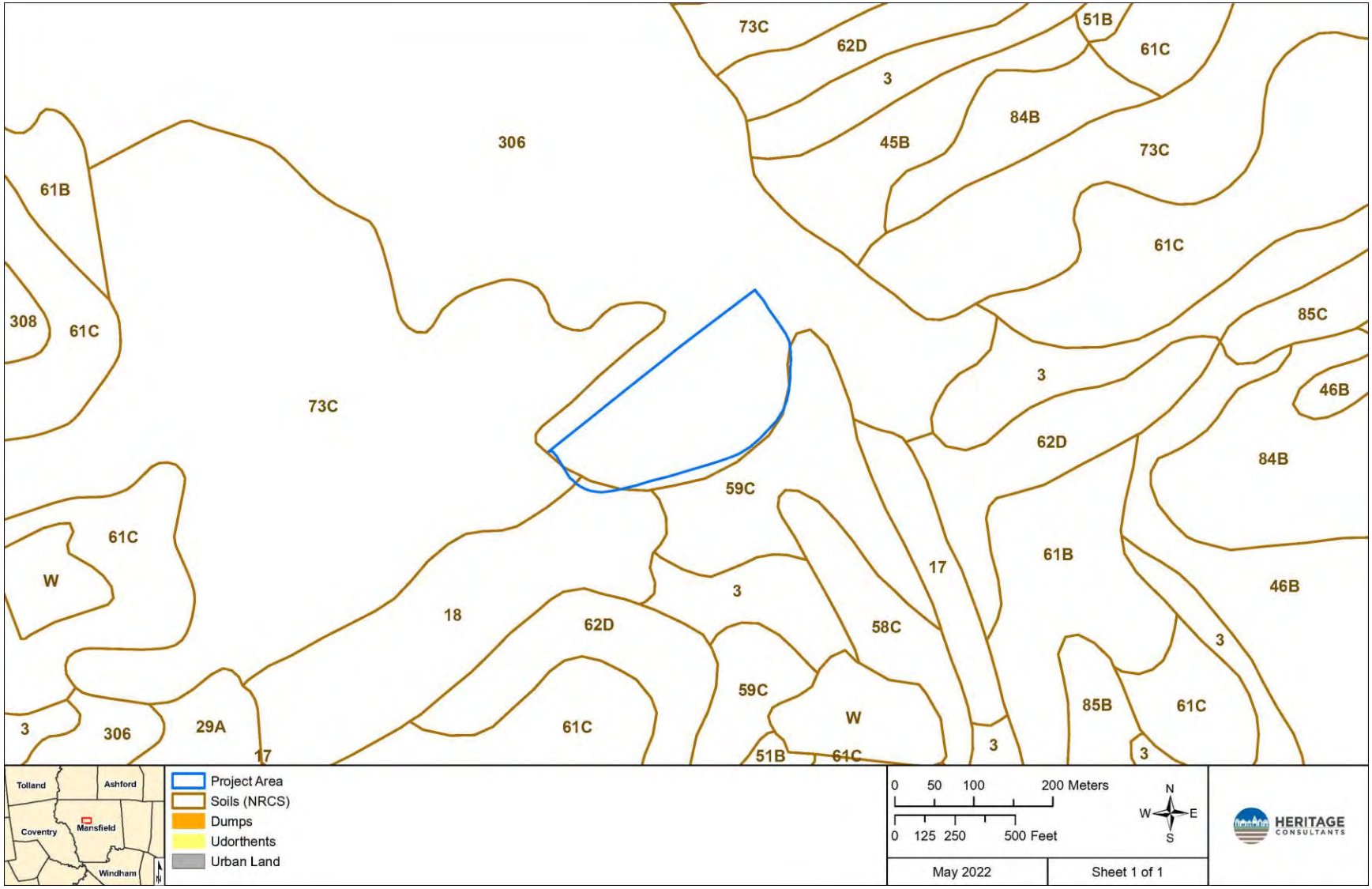


Figure 10. Digital map showing the soil types within the project area in Mansfield, Connecticut.

Figure 11. Excerpt from a 2019 aerial photograph showing pedestrian survey photographs taken with directional arrows, and building numbers, within the project area in Mansfield, Connecticut.

Photo 1. Overview photo from northern corner of project area facing south with Buildings 2 and 3 in view.

Photo 2. Overview photo from western boundary of project area facing west with Buildings 5, 4, and 3 in view.

Photo 3. Overview photo from southern portion of project area facing north with Building 7 in view.

Photo 4. Overview photo from west-central portion of the project area facing southeast with Building 4 in view.

Photo 5. Overview photo from north-central portion of the project area facing south, with Building 4 in view.

Photo 6. Overview photo from northern portion of project area facing southwest.

Photo 7. Overview photo of the south-central portion of the project area facing north with the grilling area, gazebo, and Building 16 in view.

Photo 8. Building 2 façade, facing south.

Photo 9. Detail of a single unit of Building 2, facing south.

Photo 10. Building 5 façade, facing south.

Photo 11. Building 5 rear elevation, facing northeast.

Photo 12. Building 13 façade, facing west.

Photo 13. Building 13 rear elevation, facing north.

Photo 14. Building 3 façade, facing east.

Photo 15. Building 3 rear elevation, facing west.

Photo 16. Detail of double portico on Building 3 rear elevation, facing west.

Photo 17. Detail of cornice on Building 3, facing west.

Photo 18. Detail of coal holes outside Building 7, facing south.

Photo 19. Volleyball court, facing south.

Photo 20. Modern sheds, facing northwest.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: July 19, 2022
Project Code: 2022-0065135
Project Name: UConn Mansfield Apartments Redevelopment

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the "**New England Field Office Endangered Species Project Review and Consultation**" website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat Update - Additionally, please note that on March 23, 2022, the Service published a proposal to reclassify the northern long-eared bat (NLEB) as endangered under the Endangered Species Act. The U.S. District Court for the District of Columbia has ordered the Service to complete a new final listing determination for the NLEB by November 2022 (Case 1:15-cv-00477, March 1, 2021). The bat, currently listed as threatened, faces extinction due to the range-wide impacts of white-nose syndrome (WNS), a deadly fungal disease affecting cave-dwelling bats across the continent. The proposed reclassification, if finalized, would remove the current 4(d) rule for the NLEB, as these rules may be applied only to threatened species. Depending on the type of effects a project has on NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective (anticipated to occur by December 30, 2022). If your project may result in incidental take of NLEB after the new listing goes into effect this will first need to be addressed in an updated consultation that includes an Incidental Take Statement. If your project may require re-initiation of consultation, please contact our office for additional guidance.

Additional Info About Section 7 of the Act
Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/service/section-7-consultations

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the

ESA. The species' occurrence on an official species list does not convey a requirement to consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/program/migratory-bird-permit

https://www.fws.gov/library/collections/bald-and-golden-eagle-management

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Project Code: 2022-0065135
Event Code: None
Project Name: UConn Mansfield Apartments Redevelopment
Project Type: Residential Construction
Project Description: The University of Connecticut (UConn) is planning a design-build project to redevelop the existing 240-bed apartment complex known as Mansfield Apartments located at 1 South Eagleville Road in Storrs, Connecticut. The facilities have reached the end of their useful life and the 16-acre property is proposed for redevelopment with two to four apartment buildings, site improvements and parking. The project includes the demolition of the existing buildings, walks and utilities within the site, and construction of a new student residential complex consisting of approximately 300,000 gross square feet with up to 900 beds, to be owned and operated by UConn. The existing loop road will remain in place though additional site improvements and surface parking of up to 450 spaces are proposed, as well as potential utility and infrastructure improvements. Demolition is anticipated to begin following permitting in fall 2022 to winter 2023, with new construction to occur in 2023.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.7998233,-72.24200708243632,14z

Counties: Tolland County, Connecticut

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: Connecticut Department of Energy and Environmental
Name: Marlee Antill
Address: 99 Realty Dr
City: Cheshire
State: CT
Zip: 06410
Email mantill@slrconsulting.com
Phone: 2032711773

Lead Agency Contact Information

Lead Agency: Army Corps of Engineers

APPENDIX B

SCOPING DOCUMENTATION

University of Connecticut
Mansfield Apartments Redevelopment

University Planning, Design and Construction

3 Discovery Drive, Unit 6038

Storrs, Connecticut 06268

(860) 486-2776

www.updc.uconn.edu

September 2022

UCONN Mansfield Apartments Redevelopment Scoping Meeting

Megan B. Raymond, MS, PWS, CFM, SLR International Corporation

Victoria Vetre, MS, CFM, SLR International Corporation

global **environmental** and **advisory** solutions

SLR

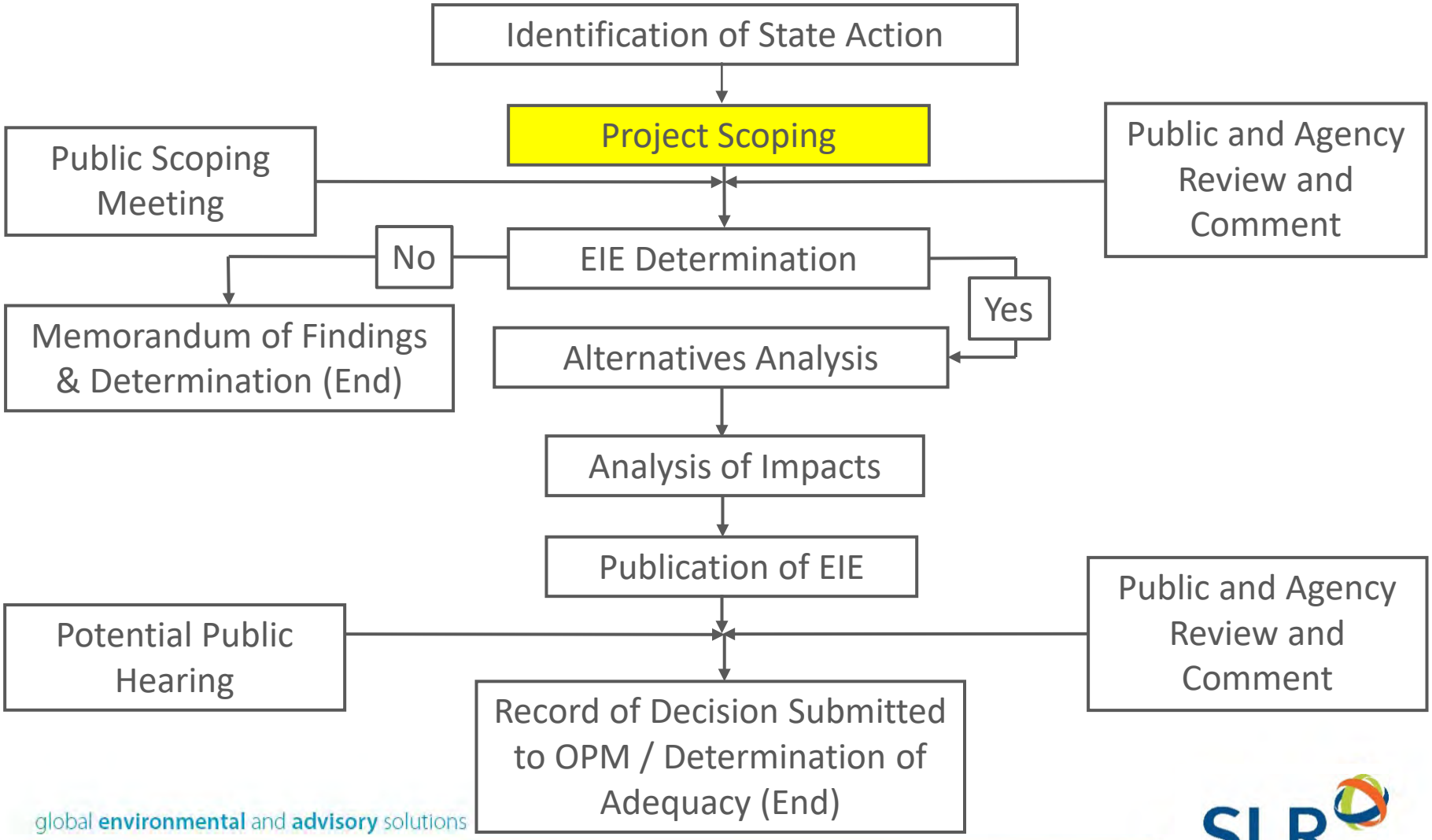
MEETING PURPOSE

- Provide background information
- Present the project scope and objectives
- Provide information relative to the overall schedule and future efforts
- Provide a forum for gathering input
- Understand the topics of public interest / concern
- Identify questions to be answered
- Meeting is being recorded and will be available

WHAT IS CEPA?

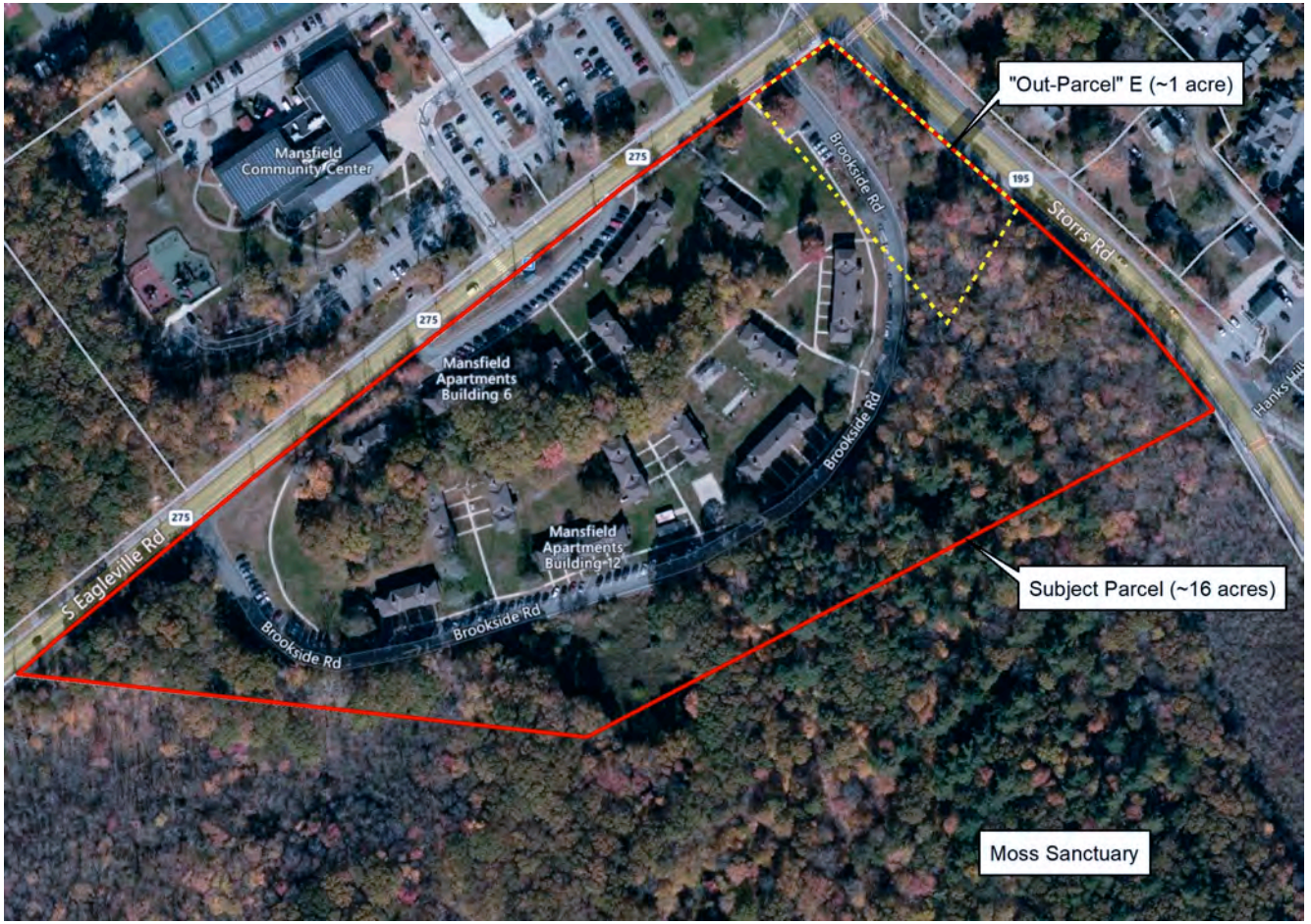
- The Connecticut Environmental Policy Act (CEPA) established statutes and regulations that apply to certain State-funded projects in Connecticut.
- A mechanism for planning and coordination among interested parties, including the public at large.
- A process of identifying and evaluating environmental impacts in the early stages of a project such that they can be avoided, minimized, and/or mitigated.

CEPA PROCESS



SITE LOCATION

- 16-acres parcel with a one-acre outparcel (E); no work in outparcel
- Located at SW intersection of Route 275 and Route 195
- Abuts 135-acre Moss Sanctuary to the north
- Project confined to UCONN property; if adjustments to Moss Sanctuary trailhead are necessary, this will take place without loss of service to the open space area



PROJECT PURPOSE AND NEED

- Existing apartment complex is aged, past the useful life of the facility, and in need of redevelopment
- Need for modernization of housing options on the UConn campus
  - In the short term, residential space is needed to house students who currently reside in other aging residential complexes
  - In the long term, there is a need to modernize residential experiences and introduce new housing typologies on the campus
- This is the second project identified in a campus housing renewal plan that is currently under review by the Board of Trustees

2015-2035 MASTER PLAN

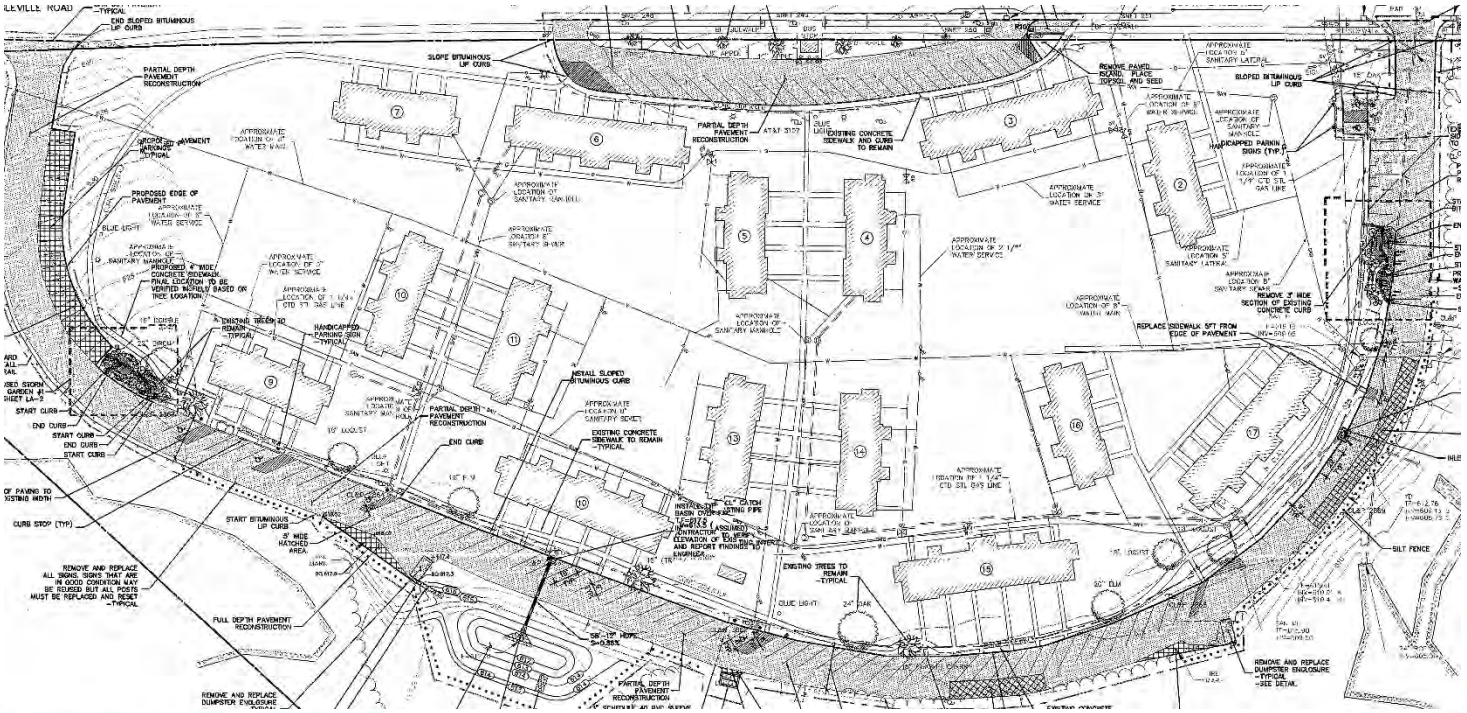
- Identified many residential complexes in need of renovations and redevelopment

- Identified Mansfield Apartments as a Mid-Term (2020-2025) "Potential Redevelopment Site" that could include projects such as:

  - Mixed Use Redevelopment (Not being pursued)
  - Parking Garage (Not being pursued)
  - Hockey Arena (Not pursued)
  - Redeveloped Residential Complex

PROPOSED PROJECT ELEMENTS

- Two to four buildings
- +/- 900 beds and common spaces
- Primarily apartments with 4 single bedrooms with amenities
- Proposed Upperclassmen housing
- Eventual building configuration will define building heights, 5-7 floors are likely
- +/- 450 parking spaces, including a parking deck



ANTICIPATED PROJECT OUTCOMES

- Site redevelopment that maintains campus residential use, largely within existing development footprint
- Demolition of existing aged buildings known to be beyond their useful life and monotypic
- Increase of on-campus housing typologies
- Construction of new residential complex (LEED v.4 Gold Standard)
- Realignments of site egress and access to South Eagleville Road
- Upgrade/relocation of sewage pumping station and potentially a force main

ALTERNATIVES CONSIDERED TO DATE

- No Action
  - Keep using buildings as is until they can no longer be used
  - Rehabilitate the buildings as-is

- Alternatives Considered & Not Pursued
  - Hockey Rink
  - Mixed Use
  - Parking Garage

REDEVELOP IN-SITU

- No change in land use
- Consistent with Campus Master Plan
- Pedestrian accessible to campus via connectivity on Route 195
- Proximity to Downtown Storrs
- Meets project purpose and need
  - Eliminates buildings beyond useful life
  - Increases housing availability to support other renovation projects in the short-term
  - Increases housing diversity through modernization and typology

TYPICAL CEPA ENVIRONMENTAL ANALYSIS CATEGORIES

Physical

- Air Quality
- Noise & Light
- Traffic, Parking & Circulation
- Public Utilities
- Potable Water Supply
- Stormwater Drainage
- Solid & Hazardous Waste
- Aesthetic Resources
- Cultural Resources

Natural

- Geology, Topography & Soils
- Surface Water Resources
- Groundwater Resources
- Floodplains
- Wetlands
- Fisheries
- Plants & Wildlife / State Listed Species
- Specimen Trees

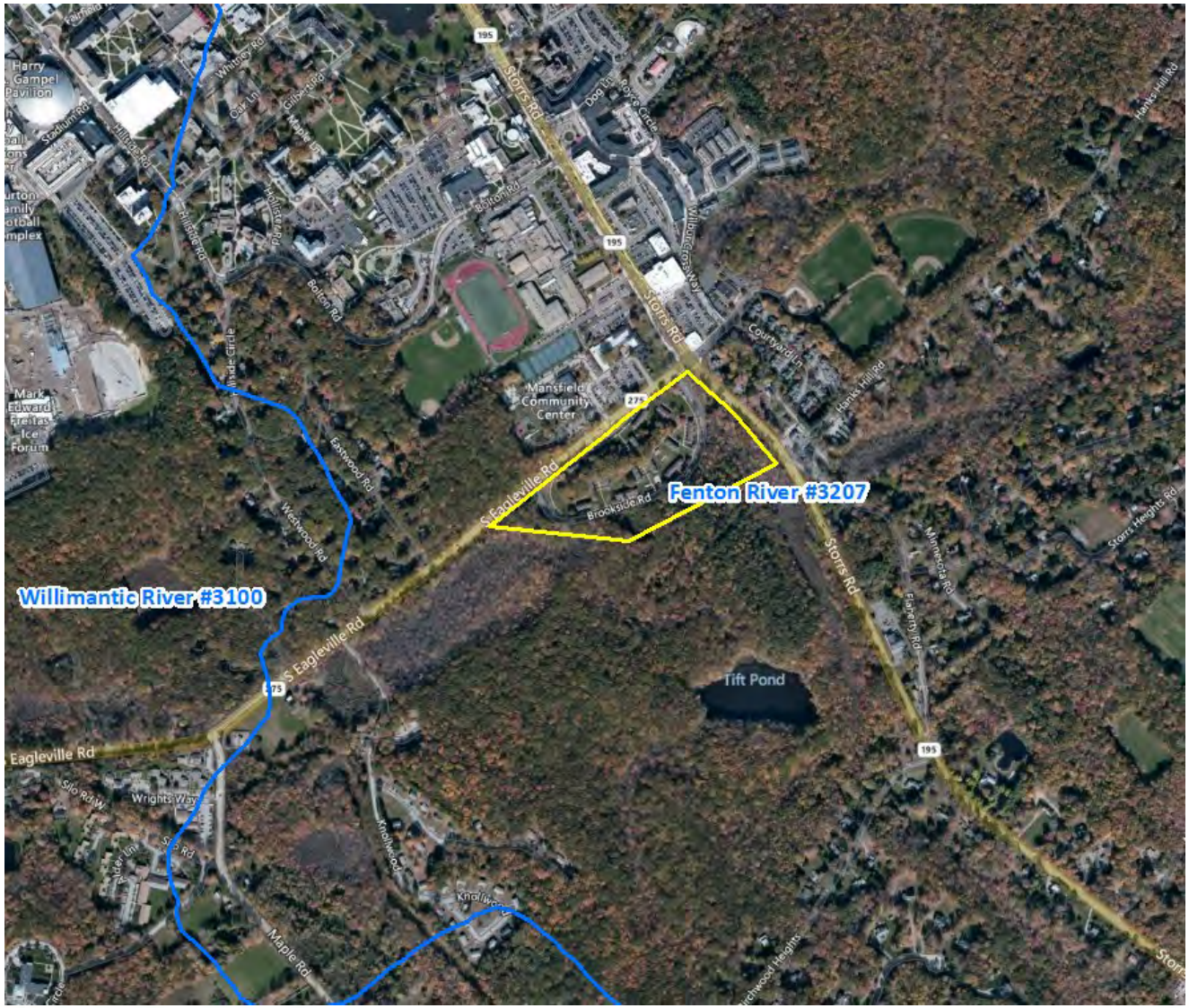
Socioeconomic

- Land Use & Zoning
- State, Local & Campus Master Planning
- Open Space & Farmland
- Public Health & Safety
- Economy, Employment & Income
- Environmental Justice
- Community Facilities & Services

AFFECTED ENVIRONMENT

- Proposal is compatible with State Conservation & Development Plan (Priority Funding Area) and consistent with existing land use
- Pedestrian access and transportation infrastructure appears adequate although there is a potential for new access patterns
- Adequate utilities and services appear to be available
- Buildings are ~75 years old; there are no immediately apparent cultural or historic resources within the project footprint
- Topography, geology, and site conditions are suitable for redevelopment

AFFECTED ENVIRONMENT – WATERSHED DIVIDES

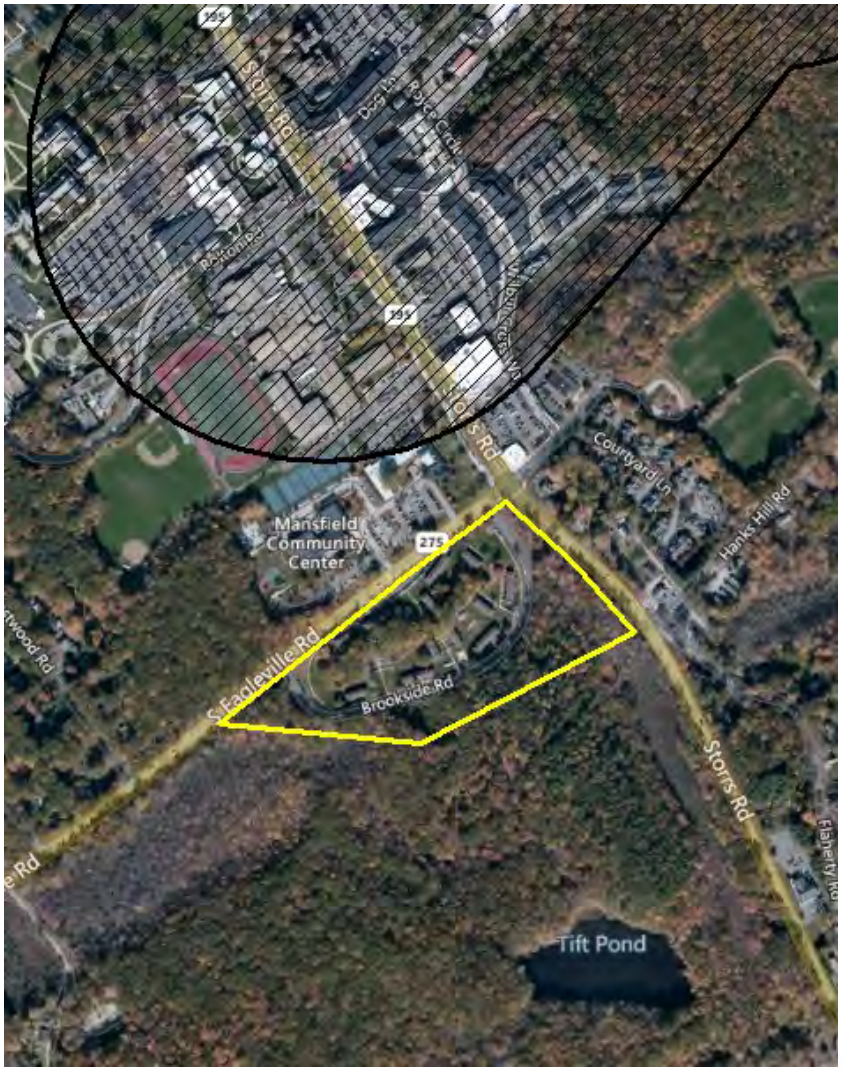


AFFECTED ENVIRONMENT – WATER QUALITY

- Project is in the Fenton River Watershed, drains to Willimantic Reservoir Groundwater is Class GA
- Nearby Surface Water (Fenton River) is Class AA
- No FEMA floodplain
- State soil mapping; wetlands drain to Tift Pond and Bundy Brook
- Design acknowledges sensitivity of Moss Sanctuary and adjacent areas; will seek opportunities for water quality improvement

AFFECTED ENVIRONMENT

- Site is not mapped as a Natural Diversity Data Base (NDDB) area; no identified presence of endangered, threatened, or special concern species (hatched area not on site)
- Limited vegetative clearing is required with redevelopment as opposed to new development
- Opportunity to improve stormwater treatment / management controls



NEXT STEPS

- Review public and State agency comments
- Determine one of the following:
  - Proceed to EIE per CEPA
  - EIE not necessary per CEPA

POTENTIAL SCHEDULE MILESTONES

Milestone	Tentative Date
Public Scoping Period	Ends March 24, 2022
Determination of the Need for an EIE	Late March 2022
Post Scoping Notice	April 2022
If no EIE: Prepare and Post Summary Document	May 2022
If EIE: Analysis of Environmental Impacts	Spring & Summer 2022
Public Hearing & Public Comment Period	Early Autumn 2022
CEPA Record of Decision (ROD)	Late Autumn 2022
OPM Determination of Adequacy	Winter 2022
Proposed Start of Construction	Spring 2023

COMMENTS

- Comments accepted tonight
  (via Zoom chat or by raising hand to speak)
  - State name, address, and your comments

- Submit comments (email preferred) to:
  - John Robitaille, AIA, CSI
  - 31 LeDoyt Road, Unit 3038, Storrs, CT 06269-3038
  - Fax: 860-486-3117
  - John.Robitaille@uconn.edu

- End of comment period: **March 24, 2022**

- Additional information regarding the meeting, as well as a link to a recording of the meeting, will be posted at: https://updc.uconn.edu

- Recording will be posted after March 11, 2022

THANK YOU

Summary of Scoping Comments and Responses

The Mansfield Planning and Zoning Commission Provided written comments from Paul Aho, Chair, dated March 22, 2022		
Comment Number	**Comment**	**Response**
PZC MAC #1	The proposed development would increase the number of beds on the site from 270 to 900 and the number of parking spaces from 130 to 450; tripling both the occupants (Sec. 22a-1a-3-b-10) and trip generation. This increase in traffic will have corresponding impacts to air quality (Sec. 22a-1a-3-b-14) and greenhouse gas emissions (Sec. 22a-1a-3-b-19). The statement that existing "transportation infrastructure appears adequate" has not been backed up with any data or analysis. Based on the size of the proposed development (300,000 square feet, 450 parking spaces), it will be considered a major traffic generator, triggering a requirement for approval from the Office of the State Traffic Administration. While it is anticipated that primary impacts will be to state roads, the traffic analysis should include study of potential impacts to local roads such as Eastwood and Westwood that may be used to access campus to avoid the Storrs Road/South Eagleville intersection given the substantial increase in traffic.	The project has completed the pre-design phase and as such the bed and parking count are approximate and subject to change. The University has engaged traffic engineers to analyze existing and proposed conditions and this analysis will be included within the EIE. The University understands that portions of the project on the South Eagleville Road frontage will require state authorization and will submit to OSTA as part of the construction document phase.
PZC MAC #2	The distance of the subject property from the main campus may detract from UConn's efforts to become a sustainable, walkable campus and decrease the use of vehicles. Due to this distance, the EIE should incorporate evaluation of the impact of the necessary increase in bus service to connect this development to the new STEM campus area.	The project area has long served as student housing - located approximately 5-minute walking distance to campus - that accommodates the range of transportation options, e.g., biking, shuttling or passenger vehicle. To this end, the proposed action will have no effect. Th site will maintain campus walkability and will continue to have transit accessibility.
PZC MAC #3	Should UConn be considering installation of the long-proposed campus access road between Bolton Road and South Eagleville Road, parallel to Eastwood Road, as part of mitigation to improve connectivity, the EIE should include a full evaluation of the impacts of such a connection.	Any potential connection from Bolton Road to South Eagleville Road would have its own CEPA scoping and traffic analysis. This work is not part of the Mansfield Apartment Redevelopment Project.
PZC MAC #4	The Town would strongly encourage the new access driveway for the site to align with the exit to the municipal parking lot (western curb cut adjacent to the Mansfield Community	Noted for EIE and design development.

The Mansfield Planning and Zoning Commission Provided written comments from Paul Aho, Chair, dated March 22, 2022		
Comment Number	**Comment**	**Response**
	Center). This would increase the separation distance between the access to the property and the intersection, and also provide for much needed traffic calming and pedestrian infrastructure as further described below. This recommendation is made with the understanding that redesign of the Town's own parking lot may be necessary.	
PZC MAC #5	The proposed project only increases the need for significant improvements to pedestrian circulation, contrary to the assessment in the scoping presentation that "pedestrian access . . . appears to be adequate." While a sidewalk connects the site to the sidewalk on Route 195, that route has not been used by many pedestrians, including former residents of Mansfield Apartments. Many pedestrians choose to cross Route 275 mid-block to cut through the municipal complex and high school to access Route 195 and Bolton Road. With the significant increase in population proposed by the project, improvements to pedestrian facilities including physical barriers will be needed to direct pedestrians to safe routes. Other pedestrian improvements that should be considered include widening of the existing sidewalk on the south side of Route 275 to accommodate the increase in residential population created by the project as well as installation of a sidewalk on the north side of Route 275 connecting Route 195 to the existing WRTD bus stop.	The proposed project will incorporate meaningful design amenities specific to pedestrian circulation and will work with the Town to ensure consistency with planned mobility improvements on South Eagleville Road. The University is aware of the nexus of the project site to Town facilities and views the redevelopment project as an opportunity to improve the pedestrian environment for students and residents alike. The University supports the Town's recently awarded Community Challenge grant and will continue to work toward common goals in this area.
PZC MAC #6	One concept to address both traffic and pedestrian circulation concerns is the installation of landscape medians similar to those in Storrs Road leading to the intersection. Such medians would discourage mid-block crossings and also help to slow traffic. Changes to access driveways for both Mansfield Apartments and the municipal complex would be needed to increase the effectiveness of these medians.	The proposed project is limited to University property and will not extend into South Eagleville Road. The University will work with the Town to ensure that contemplated improvements to South Eagleville Road will not be impeded by the redevelopment. The University is in active discussions with the Town and DOT and their on-going Road Safety Audit.
PZC MAC #7	The 2020 Water Supply Plan developed for the University indicates fire flow tests at the Mansfield Apartment Complex achieved only 590 gallons per minute. This flow may be inadequate for multi-story buildings.	Noted for EIE and design development.
PZC MAC #8	Given the increase in overall development intensity on the site, it is anticipated that impervious cover will also increase significantly. UConn has indicated through the scoping process that opportunities exist to improve water quality. Given the sensitivity of abutting	The University understands and appreciates the sensitivity of Moss Sanctuary. The purpose and

The Mansfield Planning and Zoning Commission Provided written comments from Paul Aho, Chair, dated March 22, 2022		
Comment Number	**Comment**	**Response**
	natural resources, it is imperative that stormwater generated by the project be retained and treated on-site, preferably using Low Impact Development Practices to the greatest extent possible with a focus on disconnecting impervious surfaces from stormwater systems.	need of LID practices are understood and will be described in the EIE process.
PZC MAC #9	The Mansfield Tomorrow Plan of Conservation and Development identified specific design principles for redevelopment of the site based on its location and the need to protect the adjacent preserve. The POCD identifies this area as a transitional area between Downtown Storrs and adjacent rural neighborhoods. As such, the POCD calls for scale and massing that is lower than the four to five stories that comprise much of Downtown. The proposal for two to four buildings at five to seven stories in height is in direct contradiction to the need for scale and massing that provides a transition to the one to two-story buildings that characterize residential buildings in the surrounding area and would have a significant impact on the physical character of the area.	Whereas the University shares some of the goals articulated in the Town of Mansfield's (POCD) for this site, the POCD is not a controlling or binding document pertaining to development of university property. The primary drivers for the size, scale and scope of the proposed project are to meet the University's needs for housing diversity and renewal. Furthermore, and although the POCD proposed University property as a future site for Compact Residential development, a subsequent update to the Town of Mansfield's zoning map (effective June 30, 2021) correctly identified the parcel as Institutional.
PZC MAC #10	More information is needed to determine if the scale, massing, and density of the development will impact the Moss Sanctuary. The Sanctuary is a significant recreational resource valued by the community for its trails, historic pond and associated stone dam (dating back to 1846), scenic vistas, and diversity of plants and animals.	The University is advancing the redesign effort mindful of abutting Moss Sanctuary and its history, including natural resource studies that have been completed to date. Noted for EIE and design development.
PZC MAC #11	The Conservation Commission has noted that the proposed redevelopment has the potential to impact water quality of seeps and headwater streams on site and adjacent to the project site in Moss Sanctuary. Such impacts could have negative impacts on water quality in Tift Pond as well as the Fenton River, which has a Class AA water quality designation, meaning it is suitable for existing or proposed drinking water supply, fish and	See response PZC MAC #8 Noted for EIE and design development.

The Mansfield Planning and Zoning Commission Provided written comments from Paul Aho, Chair, dated March 22, 2022		
Comment Number	**Comment**	**Response**
	wildlife habitat, recreational uses (with possible restrictions), agricultural and industrial supply.	
PZC MAC #12	Moss Sanctuary is home to an extensive wetland system, portions of which appear to extend on to the subject property. Protection of these natural resources should be a primary driver of project design. The lack of information provided with regard to field delineation of wetlands and other surface and ground water features, combined with a lack of a concept plan makes it impossible to fully understand the potential impacts of the project on these important natural resources.	The University has retained a professional wetland scientist to delineate wetlands and watercourses on the subject property. Information from the delineation will be included in the EIE.
PZC MAC #13	While the proposed project falls under the jurisdiction of UConn Public Safety services, its proximity to the Resident Trooper's office and Mansfield Fire Station 307 makes it likely that the Town will be involved in emergency responses to the complex, which may impact ability to serve other non-UConn properties.	Although the proposed project is in close proximity to the Resident State Police Office, and Mansfield Fire Station 307, the primary response authority belongs to the University of Connecticut, Division of University Safety. Any request for additional resources from the State or Town, would follow normal mutual aid agreements currently in-place.
PZC MAC #14	The substantial increase in populations has the potential to negatively affect recreational resources such as Moss Sanctuary, both through the impacts to the natural environment of increased usage and associated littering as well as on potential for development of a future nature center as described in the Conservation Easement for the property.	The proposed project will be limited to University property. The redevelopment is not intended to impose a negative impact on Moss Sanctuary in the short-term relative to access. The Town has agreed to a temporary access to Moss Sanctuary during construction. The University will continue to collaborate with the Town on any potential impacts related to student housing or conduct.
PZC MAC #15	In addition to the normal environmental considerations of an EIE, it is imperative that UConn conduct a full EIE to ensure that the established conservation restriction held by the Connecticut Park and Forest Association (CFPA) is not compromised by the proposed action at the abutting UConn property.	Noted for EIE and design development.
PZC MAC #16	The full EIE should include an inventory of current conditions in the Moss Sanctuary, both natural resources, wetland quality, and recreational use to establish a base line and better	Please see MAC response #10.

The Mansfield Planning and Zoning Commission Provided written comments from Paul Aho, Chair, dated March 22, 2022		
Comment Number	**Comment**	**Response**
	understand and predict potential impacts of the proposed development. Both potential physical environmental quality effects and the increase recreational use pressure due to increased population residing next door should be fully evaluated. The proposed increase in parking area will likely exacerbate impacts of runoff, and the increased population will likely adversely impact condition of existing trails. A significant upgrade in trail construction may be necessary to avoid adverse impact to trails by an increase in the number of adjacent residents who will use them. The EIE should identify actions needed to maintain a quality natural area experience, and these actions should be considered part of the project cost.	
PZC MAC #17	An important design principle noted in the Town Plan of Conservation and Development (POCD) is that the Moss Sanctuary is essentially in the back yard of the Mansfield Apartments, but its boundary should be considered a primary design frontage of any redevelopment and as important as road frontage. Utility and service areas should not be located to impact the Moss Sanctuary experience, but rather be interior to the development. In addition, the proposed 5-7 story buildings may be visible from within Moss Sanctuary, and this would negatively impact the view shed and the experience of the natural area.	Noted for EIE and design development.
PZC MAC #18	The post-development sanctuary access should be carefully designed, rather than an afterthought. Provision of parking as allowed under the easement granted by UConn in UConn's deed to CFPA is unlikely to be of use without a workable mechanism to ensure it is available for recreational users not familiar with the area. Although the access must allow vehicular access into Moss Sanctuary, a careful design should discourage the use of private vehicles, including trail bikes, on the Moss Sanctuary trails. Although trail bike use is prohibited by the conservation restriction, the increased number of bike owners adjacent to the Moss Sanctuary will require increased signage and enforcement to ensure this prohibition is honored.	The University will make any necessary provisions per the easement. Otherwise access to Moss Sanctuary will remain as it is today.
PZC MAC #19	The potential for increased Town expenditures for maintenance and enforcement, due to increased usage, including expectable prohibited uses, should be evaluated in the EIE, and a solution for this cost impact proposed.	The University will continue to work with the town regarding Moss Sanctuary and assist with stewardship of Moss Sanctuary, as appropriate.

The Mansfield Planning and Zoning Commission Provided written comments from Paul Aho, Chair, dated March 22, 2022		
Comment Number	**Comment**	**Response**
		The redevelopment of this parcel was identified in the Campus Master Plan in 2015.
PZC MAC #20	The Town may need to consider developing a second access point to Moss Sanctuary on the corner of Birchwood Heights Road and Route 195 that is not "buried" in the UConn parcel. This would encourage Town residents to take full advantage of the Moss Sanctuary without having to traverse a high-density student housing area. This would be an additional expense for the Town.	The University and the Town have coordinated a new access from Birchwood Road with signage that will allow Sanctuary access during construction. An access from the Mansfield Apartment Complex – with signage - will reopen at the Sanctuary northern boundary following construction.
PZC MAC #21	As previously indicated, a full traffic study is needed as part of the EIE; furthermore, critical elements of the traffic study include increased pedestrian traffic and increased potential for car/pedestrian conflict, especially for those crossing South Eagleville Road, already a concern without increased development. In addition, the development is likely to increase the number of pedestrians at the Route 275/195 intersection and affect traffic congestion on both roads. One element of pedestrian safety to evaluate is that currently most users of the Moss Sanctuary park their vehicles at the Community Center and then cross South Eagleville Road by foot, and the increased traffic will likely make this access pathway less safe.	See response PZC MAC #1

The Mansfield Town Council provided written comments from Antonia Moran, Mayor, dated March 29, 2022		
Comment Number	**Comment**	**Response**
MTC MAC #1	The Town Council echoes the comments provided by the PZC. The size and scale of the proposed redevelopment has the potential to significantly impact both the built and natural environment in addition to potential socioeconomic impacts. The Council supports the PZC's conclusion in that an EIE is needed, and that alternatives should be evaluated, such as reducing number of beds and increasing the parking ratio.	Noted for EIE and design development.

MTC MAC #2	The EIE should include an evaluation of the impacts of any mitigation measures that are proposed to minimize impacts of the development, particularly if construction of the connection from Route 275 to Bolton Road is being considered as a mitigation measure for anticipated traffic impacts.	Noted for EIE and design development.

The Department of Energy and Environmental Protection provided written comments from Linda Brunza, Environmental Analyst, dated March 22, 2022		
Comment Number	**Comment**	**Response**
DEEP MAC #1	Redevelopment plans could have the potential to increase impervious coverage and associated impacts of stormwater pollution on the aquatic life to downstream Bundy Brook. Stormwater best management practices (BMPs) targeted for the planned urban residential redevelopment should include disconnecting impervious surfaces from drainage to headwaters of Bundy Brook, education, and outreach programs regarding animal (pet) waste, proper use and management of solid waste dumpsters, and where practical, the treatment and infiltration of urban runoff from this redevelopment project. Metrics for pollution prevention and good housekeeping practices developed for the new residential complex should consider street and paved area sweeping, catch basin cleaning, and snow management. Where the redevelopment project has control of headwater riparian areas, natural woody vegetation planting enhancements with an activity exclusion buffer of 100 feet or more should be considered. The nearby state highways (Route 275 and Route 195) have management control by CTDOT and possible stormwater discharges through this redevelopment stormwater system should be coordinated for effective treatment of stormwater volume and quantity.	Stormwater BMPs will be taken into consideration both during design, and as it relates to property maintenance.
DEEP MAC #2	University personnel with the Natural Resources Conservation Academy renovated a paved driveway runoff stormwater retrofit project (a rain garden) on this site in 2016; it appears that functional water quality improvement practice would be removed with this redevelopment.	The University is aware of previous stormwater management efforts on site and will work to ensure that any water quality measures previously designed and constructed are replaced in kind or improved upon with the redevelopment project
DEEP MAC #3	The Sanctuary access (adjacent to the rear parking area) should be maintained or enhanced for continued public enjoyment and understanding (through interpretive stations) of the protected watershed resources of Tift Pond and associated diverse habitats. Where practical, the University redevelopment project for the Mansfield	Noted for design development.

The Department of Energy and Environmental Protection provided written comments from Linda Brunza, Environmental Analyst, dated March 22, 2022		
Comment Number	**Comment**	**Response**
	Apartments should fully support the management goals, public access and uses of the Moss Sanctuary.	
DEEP MAC #4	The disposal of demolition waste should be handled in accordance with applicable solid waste statutes and regulations. Clean fill can be used on site or at appropriate off-site locations. Land clearing debris and waste other than clean fill resulting from demolition activities is considered bulky waste, also defined in section 22a-209-1 of the RCSA. Bulky waste is classified as special waste and must be disposed of at a permitted landfill or other solid waste processing facility pursuant to section 22a-208c of the CGS and section 22a-209-2 of the RCSA.	Noted for the selected site contractor.
DEEP MAC #5	Construction and demolition debris should be segregated on-site and reused or recycled to the greatest extent possible. Waste management plans for construction, renovation or demolition projects are encouraged to help meet the State's reuse and recycling goals. DEEP recommends that contracts be awarded only to those companies who present a sufficiently detailed construction/demolition waste management plan for reuse/recycling.	Noted for the selected contractor and site development team.
DEEP MAC #6	If abatement is required for asbestos containing materials (ACM), these materials are regulated as a "special waste" in Connecticut and may not be disposed of with regular construction and demolition waste. Instead, these materials may only be disposed of at facilities that are specifically authorized to accept ACM. Although the disposal of asbestos-containing material is typically arranged for by the licensed asbestos abatement contractor, project proponents should ensure that the contractor disposes of all such materials at properly licensed facilities.	Noted for the selected site contractor.
DEEP MAC #7	Demolition debris may also include materials that contain polychlorinated biphenyls (PCBs) or contaminated with lead-based paint, residues or materials that require special disposal. EPA recommends testing caulk that is going to be removed as the first step in order to determine what protections are needed during removal. Where testing confirms the presence of PCBs, it is critically important to ensure that they are not released to air during replacement or repair of caulk in affected buildings. Many such PCB removal projects will need to include sampling of the substrate and soil, as well as require plans to be approved by EPA in coordination with DEEP.	Noted for the selected site contractor.

The Department of Energy and Environmental Protection provided written comments from Linda Brunza, Environmental Analyst, dated March 22, 2022		
Comment Number	**Comment**	**Response**
DEEP MAC #8	DEEP's Wildlife Division has no concerns or comments on the redevelopment in regard to Natural Diversity Database (NDDB) mapped species.	Comment noted.
DEEP MAC #9	The General Permit for Stormwater and Dewatering Wastewaters from Construction Activities may be applicable depending on the size of the disturbance regardless of phasing. This general permit applies to discharges of stormwater and dewatering wastewater from construction activities where the activity disturbs more than an acre. Stormwater treatment systems must be designed to comply with the post-construction stormwater management performance requirements of the permit. These include post-construction performance standards requiring retention and/or infiltration of the runoff from the first inch of rain (the water quality volume or WQV) and incorporating control measures for runoff reduction and low impact development practices. Locally Approvable construction projects with a total disturbed area of one to five acres are not required to register with the Department provided the development plan has been approved by a municipal land use agency and adheres to local erosion and sediment control land use regulations and the CT Guidelines for Soil Erosion and Sediment Control.	Noted for EIE and design development.
DEEP MAC #10	DEEP Bureau of Air Management typically recommends the use of newer off-road construction equipment and newer on-road vehicles that meet the latest EPA or California Air Resources Board (CARB). Alternatively, if newer equipment cannot be used, equipment with the best emission controls or retrofits should be used where feasible.	Noted for the site development team.
DEEP MAC #11	Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies (RCSA) limits the idling of mobile sources to 3 minutes. This regulation applies to most vehicles such as trucks and other diesel engine-powered vehicles commonly used on construction sites. Use of posted signs indicating the three-minute idling limit is recommended.	Noted for the site development team.
DEEP MAC #12	Please contact the Land and Water Division for information regarding Flood Management Certification, which may be required for this location.	Noted for the site development team.

Members of the public provided written or verbal comments during a virtual scoping meeting held dated March 10, 2022		
Comment Number	**Comment**	**Response**
PC MAC #1	Comment from Mike Benevento, Mansfield CT - The purple wetlands areas [as seen in the public scoping meeting] are those wetlands soils per se or does that show the soil + the jurisdiction of the inland wetlands agency (i.e., +150 ft upland review). If the former, can you also show the upland review area on any subsequent materials?	See response PZC MAC #12
PC MAC #2	Comment from Mike Benevento, Mansfield CT – A comment was made on the general importance and criticality of the biodiversity and NDDB, as well as water quality concerns in the area, particularly because surrounding neighbors rely on private wells.	Please see DEEP MAC #8
PC MAC #3	Comment from an anonymous attendee - Of the 15 acres, what percent is currently impervious cover? Based on the goals stated, do you expect the percent impervious cover increase or decrease when project is finished?	The existing impervious cover on the site is approximately 30%. Pre-design plans identify approximately 42% impervious with the redevelopment.
PC MAC #4	Comment from an anonymous attendee - Can you provide more information on the EIE and what triggers this process?	Commentor was addressed verbally during the scoping presentation.
PC MAC #5	Comment from Kenneth Feathers, Storrs CT - You indicate that there is no change use, yet the proposed bed count is almost 4 times the current bed count. It seems this is a significant change in density that could be construed a change in use.	The present use is campus residential housing, this use is not proposed to change.
PC MAC #6	Comment from Kenneth Feathers, Storrs CT - In evaluation of the impact on sensitive species it would seem to be important to look at and inventory the species present in Moss Sanctuary, an adjacent parcel that might be subject to both runoff and increased recreational pressure due to the higher population living immediately adjacent.	Please see PZC MAC #10.
PC MAC #7	Comment from Kenneth Feathers, Storrs CT - In personal experience a typical off-campus 4-bedroom rental house may have 6 or more cars parked at it. How realistic is your parking allocation with 900 beds and only 450 parking spaces?	See response PZC MAC #1 Parking for residents can be distributed throughout campus and is not necessarily restricted to this site. Therefore, residents with a vehicle on campus may be permitted to park elsewhere.

APPENDIX C

ALL POINTS TECHNOLOGY WETLAND REPORT AND VERNAL POOL SURVEY

University of Connecticut
Mansfield Apartments Redevelopment

University Planning, Design and Construction

3 Discovery Drive, Unit 6038

Storrs, Connecticut 06268

(860) 486-2776

www.updc.uconn.edu

September 2022

WETLAND INSPECTION

July 8, 2022 **APT Project No.: CT3611030**

Prepared For: Langan Engineering and Environmental Services
Long Wharf Maritime Center
555 Long Wharf Drive, New Haven, CT 06511
Attention: Andrew Ives, L.S., Associate

Site Name: UConn Mansfield Apartments

Site Address: South Eagleville Road, Storrs, Connecticut

Date of Investigation: 1/25/2022

Field Conditions: **Weather:** cloudy**,** mid 30's
Soil Moisture: dry to moist

Wetland/Watercourse Delineation Methodology[1]:
☒Connecticut Inland Wetlands and Watercourses

The wetlands inspection was performed by and reviewed by[2]

Emily Perko, Registered Soil Scientist

Dean Gustafson, Professional Soil Scientist

Enclosures: Wetland Delineation Field Forms & Wetland Inspection Map

This report is provided as a brief summary of findings from APT's wetland investigation of the referenced Study Area that consists of proposed development activities and areas generally within 200 feet.[3] If applicable, APT is available to provide a more comprehensive wetland impact analysis upon receipt of site plans depicting the proposed development activities and surveyed location of identified wetland and watercourse resources.

1 *Wetlands and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance.*

2 All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

3 *APT has relied upon the accuracy of information provided by Langan Engineering and Environmental Services regarding the location and limits of the Study Area for the purposes of identifying wetlands and watercourses.*

Attachments

- Wetland Delineation Field Forms
- Wetland Inspection Map

Wetland Delineation Field Form

Wetland I.D.:	Wetland 1	
Flag #'s:	WF 1-01 to 1-43	
Flag Location Method:	Site Sketch ☒	GPS (sub-meter) located ☒

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☒	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated/seepage ☐	Seasonally Saturated/perched ☒
Comments: Wetland 1 is characterized by areas of seasonally saturated soils and a low topographic position with embedded areas of shallow seasonal flooding.		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☒
Open Water ☐	Disturbed ☒	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☒	Tidal ☐
Watercourse Name: Unnamed interior intermittent watercourse tributary to Tift Pond.		
Comments: None		

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☒ No ☐ Potential ☐	Other ☐
Vernal Pool Habitat Type: 'Classic'	
Comments: Vernal pool is connected to forested wetland system via man-made ditch. Further investigation during the Spring 2022 breeding season was performed and confirmed presence of obligate vernal pool species.	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Red Maple (Acer rubrum)	Sensitive Fern (Onoclea sensibilis)
Ironwood (Carpinus caroliniana)	Cinnamon Fern (Osmunda cinnamomea)
Tussock Sedge (Carex stricta)	Silky Dogwood (Cornus amomum)
Yellow Birch (Betula alleghaniensis)	Multiflora Rose* (Rosa multiflora)
Skunk Cabbage (Symplocarpus foetidus)	Swamp White Oak (Quercus bicolor)
Gray Dogwood (Cornus racemosa)	Sweet Pepperbush (Clethera alnifolia)

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

All-Points Technology Corp., P.C. ("APT") performed a wetland investigation of the UConn Mansfield Apartments complex located on the south side of South Eagleville Road in Storrs Mansfield, Connecticut. The Study Area for this wetland investigation included the existing UConn Mansfield Apartments complex, surrounding ring road, and areas south within ±150 feet of the ring road.

Wetland 1 is a seasonally flooded/saturated forested wetland with contributing drainage via a roadside culvert along South Eagleville Road, slightly west of the Study Area. The wetland follows a topographic break as it extends to the east and then south along the southwestern limits of the Study Area. A smaller forested wetland to the east, classified as Vernal Pool 1, connects to the larger wetland system via a man-made ditch. Bordering upland areas surround Wetland 1 consist of impervious surfaces, fill slopes, and disturbed associated with the apartment complex development and mature upland forest. The majority of the wetland is dominated by native species with pockets of multiflora rose, an invasive shrub species, along the boundary and in adjacent uplands. A small old field separates the eastern end of this wetland from a wet stormwater management feature identified as Wetland 4.

Wetland Delineation Field Form

Wetland I.D.:	Wetland 2	
Flag #'s:	Wetland: 2-01 to 2-16 Intermittent Watercourses: 1-01/1-01A to 1-05/1-05A & 2-01 to 2-25	
Flag Location Method:	Site Sketch ☒	GPS (sub-meter) located ☒

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated/seepage ☒	Seasonally Saturated/perched ☐
Comments: Wetland 2 consists of seasonally saturated soils resulting from seepage and contributing drainage to the north.		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☒	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☒
Open Water ☐	Disturbed ☒	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☒	Tidal ☐
Watercourse Name: None		
Comments: An intermittent watercourse is present to the north of the wetland, fed by a culvert outfalls that convey stormwater discharge from Mansfield Apartments development and Storrs Road (State Route 195).		

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments: None	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Red Maple (Acer rubrum)	Japanese Barberry* (Berberis thunbergii)
Greenbrier (Smilax rotundifolia)	Multiflora Rose* (Rosa multiflora)
Sedge (Carex sp.)	Silky Dogwood (Cornus amomum)
Green Ash (Fraxinus pennsylvanica)	White Oak (Quercus alba)

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

All-Points Technology Corp., P.C. ("APT") performed a wetland investigation of the UConn Mansfield Apartments complex located on the south side of South Eagleville Road in Storrs Mansfield, Connecticut. The Study Area for this wetland investigation included the existing UConn Mansfield Apartments complex, surrounding ring road, and areas south within ±150 feet of the ring road.

Wetland 2 is a forested wetland that conveys contributing stormwater drainage from the north via an intermittent watercourse feature that is subject to culvert outfalls from the Mansfield Apartments and State Route 195. This wetland parallels another intermittent watercourse that it converges with downslope. Wetland 2 is in a disturbed setting as evident by the invasive species ground cover and multiple culvert outlets. The surrounding upland landscape is primarily developed with the UConn Mansfield Apartments to the northwest, State Route 195 to the northeast, State Route 275 to the north and an intermittent watercourse/wetland complex to the south (identified as Wetland 3). Vegetation within Wetland 2 is primarily green ash, red maple, white oak, silky dogwood and greenbrier in addition to invasive shrub species multiflora rose and Japanese barberry.

Wetland Delineation Field Form

Wetland I.D.:	Wetland 3	
Flag #'s:	WF 3-01 to 3-14	
Flag Location Method:	Site Sketch ☒	GPS (sub-meter) located ☒

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☒	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated/seepage ☒	Seasonally Saturated/perched ☐
Comments: Wetland 3 is seasonally saturated with contributing drainage from the north and areas of seasonal flooding in the southern portion.		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☒	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☒	Forested ☒
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: Dominated by forested areas to the north, transitioning to a scrub-shrub wetland to the south.		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☒	Tidal ☐
Watercourse Name: None		
Comments: An intermittent watercourse beginning to the north, flowing south into the wetland and eventually disperses within the complex.		

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments: None	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Multiflora Rose* (Rosa multiflora)	Swamp White Oak (Quercus bicolor)
Green Ash (Fraxinus pennsylvanica)	Red Maple (Acer rubrum)
Japanese Barberry* (Berberis thunbergii)	Silky Dogwood (Cornus amomum)
Highbush Blueberry (Vaccinium corymbosum)	Sedges (Carex sp.)
Sweet Pepperbush (Clethera alnifolia)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

All-Points Technology Corp., P.C. ("APT") performed a wetland investigation of the UConn Mansfield Apartments complex located on the south side of South Eagleville Road in Storrs Mansfield, Connecticut. The Study Area for this wetland investigation included the existing UConn Mansfield Apartments complex, surrounding ring road, and areas south within ±150 feet of the ring road.

Wetland 3 begins in the southeastern corner of the Study Area and continues off-site to the south. An intermittent watercourse drains into the wetland where it eventually disperses down slope. The wetland emerges in a primarily forested setting characterized by green ash, red maple and white oak. The intermittent watercourse begins to fan out with the main channel serving as the western wetland boundary. At the base of the slope where the watercourse disperses, Wetland 3 transitions to a scrub-shrub wetland with silky dogwood, high bush blueberry, and pepperbush as the main shrub species.

Wetland Delineation Field Form

Wetland I.D.:	Wetland 4	
Flag #'s:	WF 4-01 to 4-08	
Flag Location Method:	Site Sketch ☒	GPS (sub-meter) located ☒

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☒	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated/seepage ☐	Seasonally Saturated/perched ☐
Comments: Wetland 4 consists of a wet man-made stormwater basin, apparently designed to allow stormwater to infiltrate into the surrounding ground.		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☐
Open Water ☐	Disturbed ☒	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments: None	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Steeplebush (Spiraea tomentosa)	Common Reed* (Phragmites australis)
Soft Rush (Juncus effuses)	Multiflora Rose* (Rosa multiflora)
Bush Honeysuckles* (Lonicera spp.)	Sensitive Fern (Onoclea sensibilis)
Black Willow (Salix nigra)	Sedge (Carex sp.)

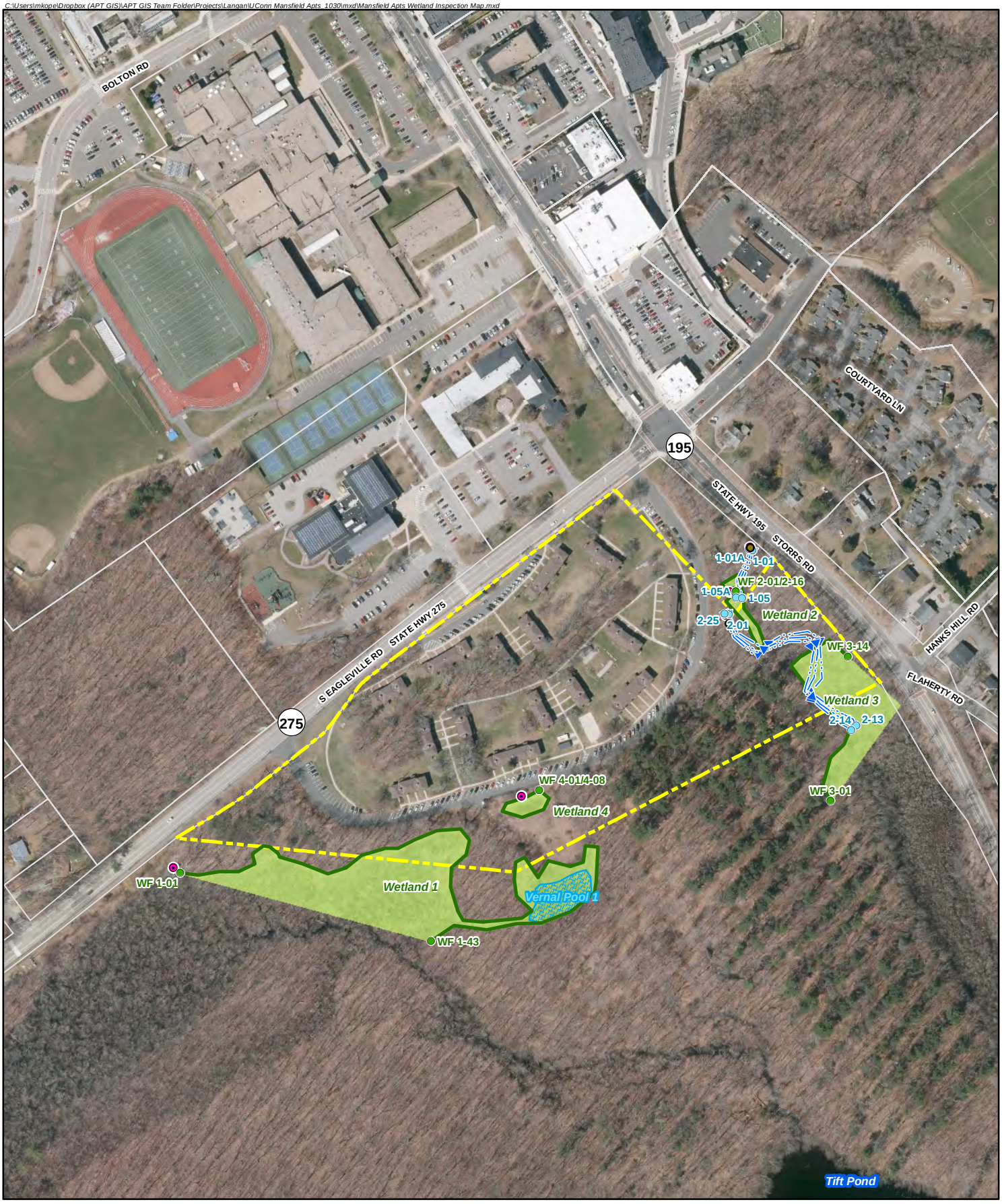
* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

All-Points Technology Corp., P.C. ("APT") performed a wetland investigation of the UConn Mansfield Apartments complex located on the south side of South Eagleville Road in Storrs Mansfield, Connecticut. The Study Area for this wetland investigation included the existing UConn Mansfield Apartments complex, surrounding ring road, and areas south within ±150 feet of the ring road.

Wetland 4 is a man-made wet stormwater basin that contains wetland characteristics to classify as a man-made wetland feature. The basin captures stormwater from the adjacent impervious surfaces associated with the apartment complex to the immediate north. A culvert discharges into the basin where it is apparently designed to hold water until it infiltrates into the surrounding ground. Investigation into the soil presented mottling indicators of water present near the surface for an extended period of time. Hydrophytic vegetation to include steeplebush, common reed, soft rush, sensitive fern and black willow within and on the sidewalls of the basin were indicative of a wet environment. This wetland is isolated and does not outlet or display any surface connection to nearby Wetland 1.

C:\Users\mkope\Dropbox (APT GIS)\APT GIS Team Folder\Projects\Langan\UConn Mansfield Apts 1030\mxd\Mansfield Apts Wetland Inspection Map.mxd



Legend

- Subject Property Boundary
- Approximate Parcel Boundary
- Wetland Flag
- Watercourse Flag
- Existing Culvert
- Delineated Intermittent Watercourse
- Delineated Wetland Boundary
- Approximate Wetland Area
- Vernal Pool

N W E S

300 150 0 300 Feet

Map Notes:
Base Map Source: 2019 CT Aerial Imagery (CTECO)
Map Scale:1 inch = 300 feet
Map Date: July 2022

Wetland Inspection Map

UConn Mansfield Apartments
South Eagleville Road
Storrs, Connecticut

LANGAN

ALL-POINTS TECHNOLOGY CORPORATION

ALL-POINTS TECHNOLOGY CORPORATION

VERNAL POOL SURVEY

July 8, 2022

Andrew Ives, L.S., Associate
Langan
555 Long Wharf Maritime Center
New Haven, Connecticut 06511

Re: UConn Mansfield Apartments
South Eagleville Road
Storrs, Connecticut

Dear Mr. Ives:

All-Points Technology Corp., P.C. ("APT") performed a survey of potential vernal pool habitat within wetlands identified during APT's previous wetland investigation that was conducted on January 25, 2022. The Study Area included the existing UConn Mansfield Apartments complex, surrounding ring road, and areas south within ±150 feet of the ring road. The intent of the vernal pool survey was to determine if breeding activity by obligate vernal pool species is occurring within the suspected vernal pool habitat and if so, collect baseline data on the species breeding in the pool, the relative breeding productivity based on egg mass count data, and hydrology conditions present in the pool.

Introduction

Vernal pools tend to be highly productive ephemeral aquatic habitats that provide unique breeding habitat for certain woodland amphibians. In basic terms, vernal pools are small, seasonal forest ponds that typically dry out at some point during the year, usually full in the early spring as snow and ice melt, and dry completely (or at least mostly) by late summer or early fall.

Vernal Pool Definition

Vernal pool definitions vary slightly among various regulatory and conservation agencies, although they all contain the same common characteristics. A widely recognized definition is provided by the U.S. Army Corps of Engineers New England District.

The Department of the Army Regional General Permits for the State of Connecticut defines vernal pools as: *depressional wetland basins that typically go dry in most years and may contain inlets or outlets, typically of intermittent flow. Vernal pools range in both size and depth depending upon landscape position and parent material(s). In most years, VPs support one or more of the following obligate indicator species: wood frog, spotted salamander, blue-spotted salamander, marbled salamander, Jefferson's salamander and fairy shrimp. However, they should preclude sustainable populations of predatory fish.*

Vernal Pool Identification Characteristics

Many organisms critically rely upon vernal pool habitat for reproductive success. These species are referred to as obligate vernal pool species and their presence in a wetland during the breeding season helps to identify that area as a vernal pool. Obligate vernal pool species that may have ranges within the Study Area include the following:

- wood frog (*Lithobates sylvatica*)
- spotted salamander (*Ambystoma maculatum*)
- marbled salamander (*Ambystoma opacum*)
- fairy shrimp (*Eubranchipus spp.*)

Vernal pool physical characteristics can vary widely while still providing habitat for obligate species. "Classic" vernal pools are natural depressions in a wooded upland with no hydrologic connection to other wetland systems. Often, vernal pools are depressions or impoundments within larger wetland systems. These vernal pool habitats are commonly referred to as "cryptic" vernal pools. "Anthropogenic" vernal pools are intentionally or unintentionally man-made depressions that support successful breeding by obligate species.

Facultative vernal pool species are fauna that utilize, but do not necessarily require, vernal pools for reproductive success. Examples of facultative species include spring peeper (*Pseudacris crucifer*), spotted turtle (*Clemmys guttata*), red-spotted newt (*Notophthalmus viridescens viridescens*), green frog (*Rana clamitans*) and bull frog (*Rana catesbeiana*). Facultative species such as those mentioned above can utilize vernal pool habitats. However, these species can also breed successfully in the margins of permanent water bodies including streams, rivers, and lakes.

Not all vernal pools are equally valuable from an ecological standpoint. Some vernal pools dry too early during the metamorphosis period cutting short the life cycle of obligate vernal pool amphibians that try to breed in pools that have too short of a hydroperiod. In such cases, these pools become population sinks, wasting amphibians' reproductive effort, and not contributing to local or regional populations.

Vernal pool values may also be decreased by being separated from other pools and wetland habitats by impassable barriers to wildlife movement, such as busy roads, curbs, walls, or large cleared areas that expose migrating amphibians to desiccation from sun exposure and increased chances of predation. Such barriers to movement can also be natural, taking the form of geologic or topographic features that prevent emigration or immigration and thereby prevent genetic mixing of amphibian populations.

The obligate species that rely on vernal pool habitats for breeding spend the majority of their life cycle in the surrounding upland (terrestrial) forested habitat. These forested habitats provide terrestrial non-breeding habitat for amphibians (i.e., wood frog, spotted salamander), where they feed on the forest floor and shelter beneath surficial cover objects (e.g., rocks, logs) and within fossorial small mammal burrows. Forests not only provide habitat, but the trees adjacent to vernal pools are critical to vernal pool ecology, as they contribute nutrients (via detritus inputs), help maintain cool water temperatures, and affect pool hydrology.

Vernal Pool Survey Results

APT wetland biologists identified one vernal pool ("Vernal Pool 1" or "VP1") within the Study Area, located at the far eastern extent of Wetland 1. Please refer to the attached Wetland Inspection Map for the location of VP1. Representative photographs of VP1 and observed obligate vernal pools species is also attached.

Vernal Pool Survey Methodology

The wetlands identified during APT's January 2022 wetland investigation were surveyed for the possible presence of vernal pool habitat. The first inspection was performed on March 30, 2022, during the time of year when known breeding by obligate vernal pool species had occurred in the region and egg masses had been deposited. Although the focus of the vernal pool survey was on a potential vernal pool area noted in the far eastern end of Wetland 1 during the previous wetland investigation, all of the wetlands were traversed to find potentially suitable pools.

With only one vernal pool identified, APT wetland biologists logged any auditory cues (e.g., wood frog chorusing) and searched the pool for egg masses while wearing waders and polarized sunglasses. Biologists used dipnets to search for wood frog and spotted salamander adults, egg masses and larvae, and fairy shrimp. Discretion was used during dipnet sweeps, such that small, shallow areas containing obligate vernal pool indicators were disrupted as little as possible (i.e., suspending of decomposed leaf litter, organic matter, silt, etc. was minimized to avoid obscuring the water column). The terrestrial habitat surrounding the pool was also searched utilizing a circular pattern around the pool and consisted of cover searches (overturning logs, large stones, and other debris) to reveal possible herptiles underneath. Field notes were recorded and supporting photographs were taken of the vernal pool, any egg masses observed, and depth of inundation in the pool's deepest area. The high-water limits of the vernal pool edge were collected using a sub-meter GPS survey device.

Vernal Pool Physical Characteristics

VP1 is considered a classic vernal pool, typical for its kind found in maple-oak-dominated forests, with tea colored water (resulting from a high concentration of leaf and organic matter tannins). The hydrology is seasonally flooded, and the maximum observed depth of inundation of 18 inches noted during the March 30, 2022 inspection; inundation depth was recorded at 12 inches during the May 11, 2022 inspection. Historically, it appears this pool was entirely isolated from the main Wetland 1 system and at some point in the past a drainage ditch was dug through uplands on the west side of VP1 connecting it to Wetland 1. Although this dug ditch has some effect on the pool's peak hydroperiod inundation, the pool appears to sustain sufficient hydrology during most years for the successful metamorphosis period from egg deposition to juvenile development for both wood frogs and spotted salamanders. The pool interior contains several vegetated hummocks of red maple, highbush blueberry, sweet pepperbush, and sphagnum along with numerous attachment sites for egg masses within the water column.

Vernal Pool Biological Characteristics

Overall, high productivity of obligate vernal pool species was observed in VP1. The following table contains observations of individuals from VP1's two field visits. The vernal pool contained two obligate vernal pool breeders: spotted salamander and wood frog. No rare species were observed utilizing the vernal pool or in the immediate surround terrestrial habitat.

Table 1 - 2022 Vernal Pool Survey Results

Vernal Pool ID	Spotted Salamander (egg masses)	Wood Frog (egg masses)	Fairy Shrimp (presence)	Additional Species
1	50	150+	-	-

If you have any questions regarding the above-referenced information, please feel free to contact me by telephone at (860) 552-2033 or at dgustafson@allpointstech.com.

Sincerely,

All-Points Technology Corporation, P.C.

Dean Gustafson
Senior Wetland Scientist

Enclosures

Wetland Inspection Map

Legend

- Subject Property Boundary
- Approximate Parcel Boundary
- Wetland Flag
- Watercourse Flag
- Existing Culvert
- Delineated Intermittent Watercourse
- Delineated Wetland Boundary
- Approximate Wetland Area
- Vernal Pool

N
W E
S

300 150 0 300
Feet

Map Notes:
Base Map Source: 2019 CT Aerial Imagery (CTECO)
Map Scale: 1 inch = 300 feet
Map Date: July 2022

Wetland Inspection Map

UConn Mansfield Apartments
South Eagleville Road
Storrs, Connecticut

LANGAN

ALL-POINTS TECHNOLOGY CORPORATION

Photodocumentation

Photo 1: View of Vernal Pool #1 looking southeast.
Photo taken on April 1, 2022.

Photo 2: View of dug ditch looking west from Vernal Pool #1.
Photo taken on February 21, 2022.

Photo 3: View of adult male wood frog.
Photo taken on April 1, 2022.

Photo 4: View of wood frog egg masses.
Photo taken on April 1, 2022.

Photo 5: View of spotted salamander egg mass.
Photo taken on April 1, 2022.

Photo 6: View of Vernal Pool #1 looking south.
Photo taken on May 12, 2022.

APPENDIX D

MANSFIELD APARTMENTS REDEVELOPMENT DEMOLITION PACKAGE

PROVIDED UNDER SEPARATE COVER

University of Connecticut
Mansfield Apartments Redevelopment

University Planning, Design and Construction

3 Discovery Drive, Unit 6038

Storrs, Connecticut 06268

(860) 486-2776

www.updc.uconn.edu

September 2022

APPENDIX E

PHASE 1 AND PHASE 2 ENVIRONMENTAL SITE ASSESSMENTS

University of Connecticut

Mansfield Apartments Redevelopment

University Planning, Design and Construction

3 Discovery Drive, Unit 6038

Storrs, Connecticut 06268

(860) 486-2776

www.updc.uconn.edu

September 2022

UNIVERSITY OF CONNECTICUT
RESIDENTIAL LIFE MANSFIELD APARTMENTS

1 SOUTH EAGLEVILLE ROAD

MANSFIELD, CONNECTICUT

Phase I Environmental Site Assessment

Prepared for:
University of Connecticut
University Planning, Design, and Construction

Client Ref: #126.11958.00132.0030

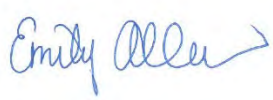
July 26, 2022

SLR

SIGNATURE PAGE

This document has been prepared by SLR International Corporation. The material and data in this report were prepared under the supervision and direction of Scott Bristol.

Reviewed by:



Emily Allison

Associate Environmental Scientist

Reviewed by:

Scott G. Bristol, LEP, PG

Principal Consultant

CONTENTS

APPENDICES

EXECUTIVE SUMMARY

SLR International Corporation (SLR) performed a Phase I Environmental Site Assessment (ESA) for the property located at 1 South Eagleville Road in the central portion of Mansfield, Connecticut, as shown on Figure 1, herein referred to as the "Site" or “Subject Property.” The Site is currently owned by the University of Connecticut (UCONN). It is our understanding that UCONN intends to redevelop the Site.

The Phase I ESA was performed at the request of UCONN and utilized the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E1527-21 and the Connecticut Department of Energy & Environmental Protection (CTDEEP) *Site Characterization Guidance Document* (SCGD) (September 2007, revised December 2010) as guidance in performing the work. The work was performed in support of an Environmental Impact Evaluation conducted in accordance with the Connecticut Environmental Policy Act (CEPA). More specifically, the work was performed as part of the inventory and analysis of existing environmental conditions.

SITE DESCRIPTION AND USE

The Site is located on the north-central portion of Mansfield, Connecticut to the southwest of the State Route 275 (South Eagleville Road) and State Route 195 (Storrs Road) intersection and is comprised of an approximate 16.4-acre parcel multi-residential development. Physical details of the Site and vicinity are provided in Section 2.0 of this report.

The Site is currently used as housing for students attending the University of Connecticut (UCONN) and is owned by UCONN.

Access to the Site is via two loop driveways accessed from South Eagleville Road.

HISTORICAL USES

The Site appears to have been developed since at least 1951 as a housing development. It is also noted that since approximately 1934, the Site appears to also have been used as a thruway for pedestrian traffic leading from the east side of Storrs Road to Tift Pond located far south of the Site.

CONCLUSIONS

SLR identified one recognized environmental condition (REC), one area of concern (AOC) and one historical recognized environmental condition (HREC) in association with the Site. These characteristics, which were identified as a result of the research performed during this assessment, are further explained in the following paragraphs.

RECOGNIZED ENVIRONMENTAL CONDITIONS

This assessment has revealed evidence of one recognized environmental condition (REC) in association with the Site. A recent Site environmental investigation performed in June 2022 identified the presence of petroleum-impacted groundwater in the area of a former UST at the east end of the Site.

AREAS OF CONCERN

This assessment has revealed that the presence of the existing 600-gallon diesel underground storage tank (UST) presents potential for the release to the environment. The UST is located within a fenced area on the east side of the Site next to the sewer pump and is associated with the emergency generator for the sewer pump.

SIGNIFICANT DATA GAPS

SLR did not encounter any significant data gaps during this investigation.

1. INTRODUCTION

1.1 PROJECT INFORMATION

Client Contact:		Project Manager:	
Name:	John Robitaille	**Name:**	Scott Bristol, LEP
Phone:	860-819-4458	**Phone:**	860-400-5701
Email:	John.robitaille@uconn.edu	**Email:**	sbristol@slrconsulting.com
Inspection Details:			
Site:	1 Eagleville Road, Storrs-Mansfield, Connecticut 06268	**Inspection Date:**	June 22, 2022
		Records Date:	June-July 2022
County:	Tolland	**Assessors:**	Emily Allison, Jackson Schille
Lat/Long:	41.7996830, -72.2422080	**Environmental Professional:**	Scott Bristol

1.2 OBJECTIVES

The objective of this Phase I ESA is to identify, to the extent feasible pursuant to the processes outlined in the scope of work, existing environmental conditions as part of the EIE being conducted for the planned redevelopment project. The American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation E 1527-21 (ASTM E1527-21) and the Connecticut Department of Energy & Environmental Protection (CTDEEP) Site Characterization Guidance Document (SCGD) (September 2007, revised December 2010) were utilized as guidance in performing this assessment.

The ASTM Practice defines a REC on page 8 of the E1527-21 Terminology Section as:
"…(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment…"

The ASTM Practice defines an HREC on page 6 of the E1527-21 Terminology Section as:
"…a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations). A historical recognized condition is not a recognized environmental condition…"

The ASTM Practice defines a CREC on page 4 of the E1527-21 Terminology Section as:
"…a recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations.)"

The CTDEEP SCGD defines an AOC on page v of the SCGD Definition of Terms Section as:
"…locations or areas at a site where hazardous waste and or hazardous substances (including, petroleum products) have been or may have been used, stored, treated, handled, disposed, spilled, and/or released to the environment…." Note that not all AOCs are considered RECs but would require evaluation in accordance with the Connecticut Transfer Act (CTA) and the associated Remediation Standard Regulations (RSRs).

The ASTM Practice defines a BER on page 3 and 4 of the E1527-21 Terminology Section as:
"…a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of *commercial real estate,* not necessarily related to those environmental issues required to be investigated in this practice…."

The ASTM Practice defines a *de minimis condition* on page 4 of the E1527-21 Terminology Section as:
"…a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a *de minimis condition* is not a recognized environmental condition or a controlled recognized environmental condition…"

1.3 PURPOSE

This assessment was performed to help identify known existing environmental conditions at the Site so that those conditions can be further evaluated as part of the CEPA planning process associated with the proposed redevelopment project.

The former and current operations at the Site were evaluated for the purpose of this ESA.

1.4 SCOPE OF WORK, SIGNIFICANT ASSUMPTIONS, TERMS AND CONDITIONS

This Phase I ESA focused on the Site parcel, as shown on Figure 2.

The scope of work, significant assumptions, and terms and conditions applicable to this Phase I ESA are identified in the following documents:

- SLR Engagement Letter dated May 11, 2022
- ASTM Standard Practice, Designation E1527-21 (as guidance)
- CTDEEP SCGD (revised December 2010) (as guidance)
- Statement of Limitations presented in Appendix F of this report

1.5 USER/RELIANCE

This report was prepared for the exclusive use of UCONN. No other entity may rely on the information presented in the report without the express written consent of SLR. Any use of this Phase I ESA report constitutes acceptance of the terms and conditions under which it was prepared. SLR liability extends only to its client and not to any other parties who may obtain the Phase I ESA report.

1.6 USER-PROVIDED INFORMATION

SLR requested the following information from the User of this ESA report:

Information on environmental liens on the Site:	The User reported no knowledge of environmental liens on the Site.
Information on Site activity and use limitations (AULs):	The User reported no knowledge related to AULs on the Site.
Specialized knowledge or experience of the User that is material to RECs in connection with the Site:	The User reported no special knowledge or experience material to RECs in connection with the Site.
Knowledge that Site purchase/sale price is significantly lower than market value:	N/A
Commonly known or reasonably ascertainable information about the Site material to RECs:	The User reported knowledge of a former leaking underground storage tank (LUST) release in the early-1990s. The User indicated that the release was cleaned up when the tanks were removed and provided facsimile and individual pages of laboratory data to support the successful remedial efforts. SLR considers this remediated release from the former leaking UST a historical recognized environmental condition (HREC).

1.7 USER-PROVIDED DOCUMENTS

The User provided SLR with a User questionnaire as summarized in the above table, a March 18, 1949 Heating Oil Tank Highlight Site Plan, an October 18, 2021 Mansfield Pump Station Assessment Report, documentation associated with the removal of a former leaking heating oil UST, copies of Pump Station Record Plans dated May 1996, a specification packet for the on-Site emergency generator located in the fenced area with the pump station, and a copy of the University of Connecticut Spill Prevention Control and Countermeasure (SPCC) Plan. Information provided in these documents is discussed in further detail in the pertinent sections of this report. Copies of these documents including the User Questionnaire is included with Appendix E.

2. SITE AND SURROUNDING AREA OBSERVATIONS

SLR performed the Site inspection on June 22, 2022. Access to the Site was granted by an owner representative, Mr. John Robitaille.

2.1 METHODOLOGY

SLR utilized the following methodology to observe the Site:

- Traverse the outer Site boundary.
- Traverse transects across the Site.
- Traverse the periphery of all structures within the Site.
- Visually observe all accessible areas within the Site.

2.2 SUBJECT SITE

2.2.1 SITE DESCRIPTION AND LAYOUT

The Site is comprised of an approximate 16-acre developed parcel with 15 residential apartment buildings and two storage sheds for lawn maintenance and building maintenance equipment respectively. The Site is situated in the central portion of Mansfield and is bordered to the south and west by a wooded area designated as a wildlife sanctuary. South Eagleville Road borders the north side of the Site and Storrs Road borders the east side. The following table provides information on the property with Town of Mansfield Assessor details.

Parcel Address	Map, Block, Lot	Acreage	Owner	Current Use
1 South Eagleville Road	16 / 57 / UC179	16.44	UCONN	Residential (off-campus student housing)

Utilities, additional features of the Site, and observations made by SLR during the Site reconnaissance are outlined in the table below. Figures presented in Appendix A show the general location of the Site and a Site plan. Photographs are included as Appendix B.

Estimated percentage of Site covered by buildings and/or pavement:	~30 percent. Most of the developed area of the Site is covered in landscaped grass/brush. Driveways and sidewalks are located throughout the Site and paved parking areas are located along the driveways.
Potable water provider:	The Site buildings are served municipal water. No potable supply wells were observed.
Water supply wells:	No water supply wells were identified at the Site.
Sewage disposal method:	The Site buildings are served municipal sewer. A sewer pump station at the east end of the Site collects all sewage. From there sewage is pumped off-Site to the UCONN wastewater treatment plant.
Electric utility:	Overhead via South Eagleville Road

Natural gas utility:	The Site buildings use natural gas for heat. The Site contact (Mr. John Robitaille) indicated the buildings previously were heated with oil. A total of 12 oil tanks were formerly present at the Site and were removed in 1993.
Emergency generators:	One emergency generator was observed in the fenced area with the sewer pump station at the east end of the Site. This generator was associated with a 600-gallon diesel UST also located within this area. Details on the UST are provided in Section 2.2.3.1. of this report.
On-Site pits, ponds, or lagoons:	Two small bioretention ponds are located at the northeast end of the Site. The ponds appeared to be in good condition.
Stained soil or pavement:	None observed.
Stressed vegetation:	No stressed vegetation was observed.
On-Site solid waste disposal including land filling, dumping, disturbed soils, or direct burial activities:	None observed.
Other noteworthy features:	None

2.2.2 SITE OPERATIONS

The Site is currently used for residential purposes as off-campus student housing.

2.2.3 MATERIAL HANDLING AND STORAGE

The table below describes the visual and/or physical observations made by SLR during the Site reconnaissance, in interviews, or the records review portions of the assessment:

Observation	Description
Hazardous substances and petroleum products:	Various lawn maintenance and building maintenance-related fluids and lubricants were stored inside the sheds located in the southern portion of the Site. No obvious staining, strong odors, or leaks were evident.
Other materials:	None observed
Staining:	None observed
Pools of liquid:	None observed
Unidentified substance containers:	None observed
Polychlorinated biphenyl (PCB) - containing equipment:	No PCB-containing equipment was observed.

2.2.3.1 Underground Storage Tanks/Structures

One, 600-gallon diesel fuel UST was present at the Site in the fenced area on the east side. This UST is associated with an emergency generator for the Site buildings. The generator and UST are within the fenced area with the sewer pump. The sewer lift pumps domestic wastewater from the Site buildings to the UCONN wastewater treatment plant off-Site. The CTDEEP Registered UST list includes this tank as Site ID 78-12400 under the address of 2 South Eagleville Road. The following details were provided per the CTDEEP documentation:

Tank Id / Capacity / Content	Install Date	Construction Type	Piping Details	Spill Protection	Overfill Protection
A1 600-gallon Diesel	9/1/1995	Rigid, fiberglass reinforced plastic, double-walled, within a concrete vault	Containment sumps @ tanks, metallic fittings isolated from soil and water	Spill Bucket	Audible alarm

The presence of the existing UST is considered an AOC as there is potential for a release to the soil.

CTDEEP records that were available for review did not present evidence that a release had ever occurred from this UST.

SLR was informed of the former presence of 12 heating oil USTs per User-provided documentation dated August 1993. During the removal of one UST contaminated soil was discovered. Approximately 120 yards of impacted soil was subsequently removed. Post-excavation laboratory results for two soil samples collected following the soil removal were provided to SLR by the User. The results indicated that total petroleum hydrocarbons were not detected at concentrations above the Connecticut Remediation Standard Regulation (RSR) Criteria. It is noted that the groundwater quality in this area did not appear to have been investigated at that time. It is not possible to determine if this area could be considered an HREC, given that the location of the tank is unknown and the groundwater appears to have not been assessed.

During a June 2022 environmental investigation (details provided in Section 3.4), it was determined that groundwater within the area of the former UST-6 was impacted with petroleum and therefore resulted in the filing of a release report, Spill Case Number 2022-02394 dated June 16, 2022. It is not known if the location of UST-6 coincides with the location of the removed UST noted above. The reported concentration of total extractable petroleum hydrocarbons (ETPH) detected in the grab groundwater sample collected from this temporary monitoring well during this investigation was 7,450 micrograms per liter (ug/L), which is above both the Groundwater Protection Criteria (GWPC) and the Surface Water Protection Criteria (SWPC) of 250 ug/L. It appears that groundwater in impacted in the area of the former UST-6. This is considered a REC.

It is also noted that although 11 former UST locations appear to have been investigated, a 1949 Heating Oil Highlight Site Plan provided by the owner identifies the former presence of 12 USTs, with the twelfth UST located in the southwest portion of the Site. The Phase II WSP report discussed in Section 3.4 included a boring location map which showed three borings that were drilled to depths between 7 and 9.7 ft bg in the general vicinity of the twelfth UST. The soil samples collected from these three borings were composites of the top six feet of material from each boring for the purpose of waste characterization pertaining to soil management during proposed redevelopment.

A second shallow soil sample was collected from Garage-2 (0 – 2 ft bg) and was analyzed for both polychlorinated biphenyls (PCBs) and VOCs. The results indicated no detections of VOCs or PCBs above

the laboratory reporting limits with the exception of 0.047 mg/kg methylene chloride; the presence of which was attributed to interference as a common laboratory artifact. The waste characterization results for the three samples did not indicate evidence of a petroleum-related release.

2.2.3.2 Aboveground Storage Tanks

No above ground storage tanks were observed at the Site. Based on a review of available Site documentation, there appear to have been no former ASTs located at the Site.

2.2.4 WASTE GENERATION

There are currently no industrial solid wastes generated at the Site.

2.2.5 WATER SUPPLY

No wells were observed to be present at the Site. The Site receives potable water service from the Connecticut Water Company (CWC), per the Site contact. The water connections are present along South Eagleville Road.

The CTECO interactive mapping also indicated that the nearest Wellhead Protection/Aquifer Protection Area is located approximately one mile northeast of the Site.

2.2.6 WASTEWATER

No industrial or domestic wastewaters are generated at the Site.

2.2.7 STORMWATER

Two small bioretention ponds were located at the northeast end of the Site, just west of the sewer pump station. The ponds appeared to be in good condition and did not appear to be flooded or clogged with excessive sand, silt, or refuse.

In general, stormwater runoff from the Site is expected to infiltrate into the ground in the nonpaved areas at the Site. The paved areas and some grassy areas contain storm drains throughout the Site which directs stormwater runoff flow toward the wetland areas toward the southwest, south, and southeast.

The nearest National Wetlands Inventory (NWI) mapped wetlands are located to the southwest approximately 30 feet. The mapped wetland is identified by NWI as “PFO1E” which is defined as freshwater forested/shrub wetlands. The Town of Mansfield wetland mapping and the CTECO wetland mapping shows similar wetland boundaries, except that the wetlands appear to extend into the Site boundary on the southwest and southeast sides. A view of the mapped wetlands at the federal, state, and local wetland mapping websites are included with Appendix E.

Federal Emergency Management Agency (FEMA) online portal mapping indicates the Site is within Zone "C," which is an area of minimal flooding outside of the 500-year flood boundary. A copy of this Flood Insurance Rate Map (FIRM) dated January 2, 1981 is included with Appendix E.

2.2.8 SURFACE WATER

Aside from the wetlands discussed above, the nearest surface waterbody to the Site is Tift Pond located approximately 950 feet south of the Site. This surface water is classified by CTDEEP as a class AA surface waterbody. This classification is generally considered to represent waterbodies that are designated for habitat for fish and other aquatic life and wildlife, potential drinking water supplies, recreation, navigation, and water supply for industry and agriculture.

2.2.9 GROUNDWATER

Groundwater beneath the Site is classified as "GA." CTDEEP generally defines a GA groundwater area as an area of existing private and potential public or private supplies of water suitable for drinking without treatment and/or as baseflow for hydraulically connected surface waterbodies.

2.3 SUMMARY OF SITE VISIT FINDINGS

The Site is comprised of approximately 16.4 acres of residentially developed land surrounded by woods on the west, south, and east sides, and is located southwest of the State Route 275 (South Eagleville Road) and State Route 195 (Storrs Road) intersection. The Site has 15 apartment buildings and two building maintenance and lawn maintenance equipment sheds located throughout the Site. A sewer pump station and an emergency generator and associated diesel UST are located in the eastern portion within a fenced area.

Each apartment building had a corresponding furnace closet with natural gas-fired furnaces. The floors of these rooms were concrete slab. No staining, open joints, or cracks were observed in/on the floors. The heating source for the Site buildings prior to 1993 was heating oil; however, the Site contact indicated there were no heating oil USTs remaining at the Site and SLR did not observe any evidence of the presence of a UST other than the sewer pump station diesel UST.

The interior of the residence portions of the buildings were not accessible at the time of the Site visit; however, this was not deemed significant enough of a data gap to alter the conclusions drawn in this report.

The maintenance equipment sheds were barn building structures in the southern portion of the Site and contained furniture, lawn maintenance equipment, ice melt, and building maintenance equipment. Various lawn maintenance and building maintenance-related fluids and lubricants were stored inside the sheds. No obvious staining strong odors, leaks, or cracks in the floors were evident.

Based on the Site visit observations, no RECs were identified in association with the current land use. The presence of the 600-gallon diesel UST is considered an AOC as it poses potential for a release to the ground

to occur. If this tank is removed, an assessment of the area should be performed in accordance with the applicable regulations (Regulations of Connecticut State Agencies [RCSA], Sections 22a-449(d)-1 through 22a-449(d)-113).

2.4 ADJOINING PROPERTIES

2.4.1 AREA DESCRIPTION

The Site is located in a residential and wooded area of Mansfield, Connecticut. Current uses of adjoining properties are described in the following table:

North	South Eagleville Road, then Mansfield Community Center and Mansfield Town Hall/Audrey B. Peck Municipal Building
South	Forested land/Albert E. Moss Wildlife Sanctuary and Tift Pond
East	Storrs Road, then a mix of primarily residential use with some commercial use
West	Forested land/Albert E. Moss Wildlife Sanctuary, then residential use

2.4.2 DISCHARGES, MIGRATION, OR RUNOFF OF POTENTIAL CONTAMINANTS FROM SURROUNDING PROPERTIES

No evidence of discharges, migration, or runoff of potential contaminants from surrounding properties was observed at the time of the Site visit.

3. RECORDS REVIEW

3.1 FEDERAL/STATE ENVIRONMENTAL RECORDS

A regulatory agency database search report was obtained from a third-party environmental database search firm, Environmental Data Resources, Inc. (EDR). A complete copy of the database, including the date the report was prepared, the date the information was last updated, and the definition of databases searched, is provided in Appendix C.

3.1.1 LISTINGS FOR SITE

The only listings for the Site in the reviewed database records were asbestos removal records and one Connecticut Underground Storage Tank (CT UST) listing. The asbestos records indicated that asbestos was removed from the Site in July 2004 and in August 2010. A pre-demolition asbestos survey should be performed if Site buildings are to be removed.

The Mansfield Apartments Pump Station at 2 South Eagleville Road is listed in the EDR as a nearby property listing; however, it is known that a pump station currently exists on the east end of the Site (1 South Eagleville Road). In addition, there is no valid address of "2 South Eagleville" (or "2 S Eagleville Road") in the Mansfield assessor records. The listing indicates that a 600-gallon diesel fuel UST is present at the Site with Tank ID "A1." The Owner representative confirmed this is the UST associated with the emergency generator currently located at the Site. Other details provided on the UST include the following:

- Tank Owner: University of Connecticut
- UST Facility ID: 78-12400
- Tank material: fiberglass reinforced plastic
- Secondary material: double-walled, within a concrete vault
- Overfill installed: audible alarm
- Pipe material: rigid fiberglass reinforced plastic
- Pipe mode description: containment sumps at tanks, double-walled, metallic fittings isolated from soil and water
- Spill petroleum installed: spill bucket
- Tank latitude, longitude: -72.240921, 41.800441 (east side of the Site where the Site's pumping station is present)

CTDEEP record search findings on this UST were similar to the EDR provided details and are discussed in Section 2.2.3.1. of this report.

In addition, the CTDEEP record search also included copies of UST inspection reports from October 19, 2006 (no issues), August 14, 2008 (ATG improperly operating at the time), June 7, 2011 (no issues); and November 4, 2013 (no issues). The UST file also included a Statement of Training for UST Facility Operators dated August 7, 2012 and Tank Notification Forms dated October 18, 2002 and March 30, 2012.

No RECs were identified in association with the CTDEEP files pertaining to the Site that were available for our review.

3.1.2 LISTINGS FOR NEARBY SITES WITH POTENTIAL TO IMPACT SITE

There were 29 off-Site listings identified within the ASTM specified search radius in the EDR. Most of these listings did not appear to present an environmental concern to the Site based upon listing details, gradient, closure status, and distance relative to the Site. One Site was considered to most likely have the potential to affect Site environmental media:

- Audrey P Beck Municipal Building at 4 South Eagleville Road, located north adjacent to the Site across South Eagleville Road.
    - This listing indicated that a former 5,000-gallon gasoline underground storage tank (UST) identified as "A1" was present at this north adjacent property between approximately 1955 and 1987. The UST was removed from the ground in 1987. No further details were provided in the listing.
    - A 5,000-gallon diesel UST identified as "A1R1" was installed at the time of the removal of Tank "A1" and was subsequently removed from the ground in 2014. No additional details were provided in the listing.
    - These UST listings alone do not present evidence of a release associated with these former USTs; therefore, the concern for impact to the Site in association with is minimal.

Details regarding these additional facility listings are presented in the database search report in Appendix C.

SLR reviewed the 13 orphan sites (sites that could not be plotted) identified in the regulatory agency database search report and concluded that none indicated evidence of the presence of an REC/AOC to the Site.

3.2 LOCAL/REGIONAL ENVIRONMENTAL RECORDS

In addition to the User/Owner, SLR also contacted the following sources to request information pertaining to the Site use and/or indicative of AOCs/RECs in connection with the Site:

Agency Name	Finding

Connecticut Department of Energy & Environmental Protection 79 Elm Street Hartford, CT 06106	SLR conducted a review of the CTDEEP Document Online Search Portal (CT DOSP) online records, including manifest database, UST records, and Contaminated or Potentially Contaminated Sites List (CPCS) for information pertaining to spills, releases, inspections, violations, or any other environmentally significant information. Information obtained is summarized in relevant sections of this report.
Mansfield Assessor Office 4 South Eagleville Road, Mansfield, CT 06268	SLR obtained the latest property record card for the Site from the Town online property record database. Information provided is summarized in relevant sections of this report.
Building & Housing Department 4 South Eagleville Road, Storrs Mansfield, CT 06268	SLR placed a request to review publicly available information of the Building & Engineering Departments' records in June 2022. No response was received as of the issuance date of this report.
Fire Marshal's Office 4 South Eagleville Road, Storrs Mansfield, CT 06268	SLR placed a request to review publicly available information of the Fire Department records in June 2022. The department representative indicated there would be no files associated any UCONN-owned properties (including the Site).
Eastern Highlands Health District 4 South Eagleville Road, Storrs Mansfield, CT 06268	SLR placed a request to review publicly available information of the Health Department-related records in June 2022. Information obtained is summarized in relevant sections of this report.

3.3 HISTORICAL RECORDS

3.3.1 SITE AND SURROUNDING AREA HISTORICAL USE SUMMARY

The Site appears to have been developed in its current configuration since at least the early-1930s based on a review of the historical aerial imagery, topographic maps, and Town of Mansfield Site building information listed on the tax card. The 15 Site residential buildings appear to have been constructed between 1951 and 1960, and the sheds were placed/constructed between 1991 and 1995.

3.3.2 HISTORICAL SOURCE SUMMARY

SLR reviewed historical records to help identify historical activities likely to represent an AOC and/or REC to the Site. Documentation for this section is provided in Appendix D.

Year(s)	Description	Source(s)
1890s	*Site:* The Site does not appear developed at this time and appears to be situated at between approximately 560 and 580 feet above mean sea level (ft amsl)	Topo (1892)
	Surrounding Properties: The surrounding properties do not appear developed except for the east side and to the far north and south along Storrs Road. Tift Pond is visible to the far south.	
1910s, 1920s	*Site:* The Site still does not appear developed at this time; however, these mapped years show the Site as heavily vegetated in the west, north, and south portions.	Topo (1915, 1921)
	Surrounding Properties: No significant changes since the prior topographic map.	

Year(s)	Description	Source(s)
1930s	*Site:* The Site is shown as a partially forested parcel and appears to be used as a thruway with a unpaved path traversing the east side leading from Storrs Road at the northeast corner of the Site onto the south adjacent property and beyond, ending near Tift Pond. No structures are evident.	Topo (1921) Aerial (1934)
	Surrounding Properties: Development is sparse in the surrounding properties and limited to the north beyond South Eagleville Road (Town Hall building) and to the east beyond Storrs Road (residential). Development to the far south, far east, and far north appears to be primarily agricultural use.	
1940s	*Site:* The Site appears to have more dense vegetation growth throughout the entire parcel. No structures are evident, and the paths observed in the previous aerial image are still present.	Topo (1943, 1944, 1945) Aerial (1941)
	Surrounding Properties: No significant changes are evident to the surrounding properties.	
1950s	*Site:* The 15 residential apartment buildings are visible throughout the central portion of the Site by 1953. The Site driveway is evident and loops southward along the Site boundary with an entrance and an exit along South Eagleville Road. The northeast area where the existing sewer pump station is currently located is difficult to discern in the aerial imagery for 1959 but does not appear to be present.	Topo (1953) Aerial (1959)
	Surrounding Properties: Surrounding properties to the north and the east appear to have additional developments. The property to the far north at 1245 Storrs Road beyond the Town Hall is developed (E. O. Smith School). To the far southwest some residential growth appears.	
1960s	*Site:* The Site does not appear significantly different than the previous aerial image except that a very small, cleared area is present in the eastern side where the existing sewer pump station is currently located. No structures are evident in this area and it visual details are difficult to discern at this scale.	Aerial (1960)
	Surrounding Properties: More dense forest growth has encompassed much of the area to the south, west, northwest, and far northeast. Athletic fields associated with E. O. Smith School to the far north are under construction.	
1970s	*Site:* No significant changes observed except for the development of the fenced area in the east corner where the existing sewer pump station is currently located.	Topo (1970) Aerial (1970, 1974)
	Surrounding Properties: No significant changes observed other than slightly more residential and commercial-mixed development along Storrs Road to the far east and to the far northwest and southwest.	
1980s	*Site:* No significant changes observed.	Topo (1983) Aerials (1986)
	Surrounding Properties: No significant changes observed. The E. O. Smith School athletic field appears to be under construction again with a track under development.	
1990s	*Site:* No significant changes observed.	Aerial (1990, 1991, 1995)
	Surrounding Properties: Property to the north of the Site has been developed into a variety of different athletic fields including baseball field, track, and tennis courts.	
2000s	*Site:* No significant changes observed.	Aerials (2005, 2008)
	Surrounding Properties: Additional athletic fields have been developed to the far east of the Site, across Storrs Road and beyond residential development. Additional municipal buildings are present to the northwest of the Site across South Eagleville Road.	
2010s	*Site:* No significant changes observed.	Aerials (2012, 2016) Topo (2015, 2018)
	Surrounding Properties: No significant changes observed.	

Year(s)	Description	Source(s)
	Surrounding Properties: No significant changes to surrounding properties are apparent.	

3.3.3 SITE RECORDED LAND TITLE RECORDS

A record title search was not performed as part of the scope of services.

3.4 PRIOR REPORTS

SLR was provided with a Phase II Investigation and Soil Management investigation report performed at the Site by WSP USA (WSP) dated July 2022. This report was prepared for UCONN and summarized a subsurface investigation which focused on the evaluation of soil quality in the following locations: the approximate locations of 11 former USTs; the area of the existing diesel UST in the sewer pump station; and an area of potential soil export on the southwestern portion of the Site.

WSP reported that soil from borings drilled within the areas of the former USTs UST-6 and UST-7 showed field-observed evidence of volatile organic compounds (VOCs) at concentrations slightly above typical background levels via the use of a photoionization detector (PID). The laboratory results of the soil sample collected at the depth of observed impact near UST-6 (10 – 11 feet below grade [ft bg]) indicated a low-level presence of VOCs, 104 milligrams per kilogram (mg/kg) total extractable petroleum hydrocarbons (ETPH), and no polynuclear aromatic hydrocarbons (PAHs) above the detection limits. In addition, the laboratory results of the soil sample collected at UST-7 (5.5 – 6.5 ft bg) indicated traces of VOCs that are considered as common laboratory contaminants and not generally considered indicative of a release, and no detections of ETPH or PAHs above the detection limits.

WSP also installed temporary groundwater monitoring wells in the areas of UST-6 and UST-7 at the time and attempted to collect grab groundwater samples. The UST-7 temporary well did not yield enough volume to collect a sample; however, the well in the area of UST-6 produced sufficient volume for a sample. The UST-6 temporary groundwater well grab sample was analyzed for VOCs, PAHs, and ETPH. The results indicated the presence of 7,450 micrograms per liter (ug/L) of ETPH, 10 PAH constituents (two slightly above the SWPC and one slightly above the GWPC), and no VOC detections above applicable CTDEEP criteria. The presence of ETPH in the groundwater sample prompted release notification 2022-02394 to the CTDEEP on July 1, 2022. A copy of the release report was not provided to SLR for review, nor was it available on the CTDOSP. A listing of the release with limited details was available on the Connecticut Open Data records website in the Spill Incidents database. A copy of this listing is included with Appendix E. The spill record is listed as “closed;” however, the presence of impacted groundwater with ETPH at a concentration above the GPWC is considered a REC.

3.5 PHYSICAL SETTING

Topography:	Site topography is benched at a maximum elevation of approximately 640 ft amsl along the northern border, a steep southerly decline in the central portion from approximately 635 ft amsl

	to approximately 625 ft amsl, ending at the southern border at a low elevation of approximately 620 ft amsl.
Soil/Bedrock Data:	According to CTECO, surficial soil at the Site consists of till. According to the Bedrock Geologic Map of Connecticut (1985), the general geological formation underlying the Site is gneiss, schist, and quartzite of the Bronson Hill Anticlinorium. The CTECO bedrock mapping indicates the Site is underlain by Hebron Gneiss, an interlayered, dark-gray schist and greenish-gray, fine-to-medium – grained calc-silicate gneiss of the Iapetos (Oceanic) Terrane/Merrimack Synclinorium.
Estimated Depth to Groundwater/ Direction of Gradient:	The estimated direction of groundwater flow is presumed to follow the general topography of the Site to the south-southeast toward the lower elevation areas with wetlands.

4. OWNER-PROVIDED INFORMATION

4.1 OWNER QUESTIONNAIRE

Mr. James T. Hutton is an Environmental Compliance Professional with UCONN and completed an Owner Questionnaire. A copy of the questionnaire is included as Appendix E, and information obtained from the questionnaire is summarized in the following table:

Name, Title:	James T. Hutton, owner representative
Current Use of Site:	The owner representative indicated that the Site is used for residential purposes "Mansfield Apartments."
Past Use(s) of Site:	The owner representative did not provide any information on the past uses of the property, other than that the Site buildings were once heated via heating oil (USTs were formerly present).
Current or Past Hazardous/ Petroleum Material Use, Storage, Disposal:	The owner representative indicated that heating oil was formerly stored in underground storage tanks on the Site for heating the buildings and that the tanks have since been removed (1990s). The owner representative is aware that currently, the Site has one 600-gallon diesel UST that services the emergency generator.
Current or Past Regulatory Action(s):	Not aware of any current or past regulatory actions.
Past Releases of Hazardous/ Petroleum Materials on the Property:	The owner representative indicated there were no releases of hazardous/petroleum materials on the property to his knowledge, other than the release of heating oil in the 1990s, as discussed in Section 2.2.3.1. of this report.

Interview Questions	Owner/Operator
Litigation Relevant to Hazardous Substances or Petroleum Products in, on, or from the Site?	Not aware
Administrative Proceedings Relevant to Hazardous Substances or Petroleum Products in, on, or from the Site?	Not aware
Notices from Any Governmental Entity Regarding Possible Violations of Environmental Laws or Possible Liability Relating to Hazardous Substances?	Not aware

4.2 FINDINGS FROM INTERVIEW WITH MAJOR OCCUPANTS

No Site residents were available for an interview.

4.3 SUMMARY OF FINDINGS FROM OWNER PROVIDED INFORMATION

Findings from the Owner Questionnaire were generally consistent with information from other sources. SLR did not identify evidence of RECs in connection with owner-provided information. SLR identified the existing 600-gallon diesel UST as an AOC.

5. SIGNIFICANT DATA GAPS

Data gaps are a lack of or inability to obtain information identified by the ASTM Standard Environmental Assessment Practice despite good faith efforts by the *environmental professional* to gather such information. Data gaps may have resulted from incompleteness in any of the activities required in the Practice including but not limited to the Site reconnaissance, records review, or interviews. The presence of a data gap may or may not present a *REC* due to the possibility that a *REC* could be discovered if the missing information is obtained.

5.1 SIGNIFICANT DATA GAPS

No significant data gaps were encountered that are believed by the authors to affect the findings of this report.

5.2 ADDITIONAL INVESTIGATION

No additional investigations were conducted as part of this Phase I ESA.

6. CONCLUSIONS

This section summarizes the conclusions drawn based on the review of available Site documentation and the observations made during the Site visit.

This report was prepared in support of the compilation and analysis of existing environmental conditions at the proposed project redevelopment Site. More specifically, this report focuses upon known or potential releases of solid or hazardous waste which is one component of the overall Site evaluation process. This report should not be considered a stand-alone document, rather it should be considered a component of the overall environmental impact evaluation.

RECOGNIZED ENVIRONMENTAL CONDITIONS

This assessment has revealed evidence of one recognized environmental condition (REC) in association with the Site as the documented release of petroleum on June 16, 2022, detected at a concentration above the GWPC and SWPC in groundwater near the former UST-6.

AREAS OF CONCERN

The presence of the existing 600-gallon diesel UST presents the potential for a release to the environment; however, this tank is reportedly contained within a concrete vault and no releases are known to have occurred. The recent Phase II investigation performed in June 2022 by WSP indicated that results of a soil sample collected in the vicinity of this UST, “Pump-1,” at 10 – 11 ft bg did not indicate evidence of a petroleum release.

SIGNIFICANT DATA GAPS

No significant data gaps were encountered.

ph i esa - mansfield apartments.docx

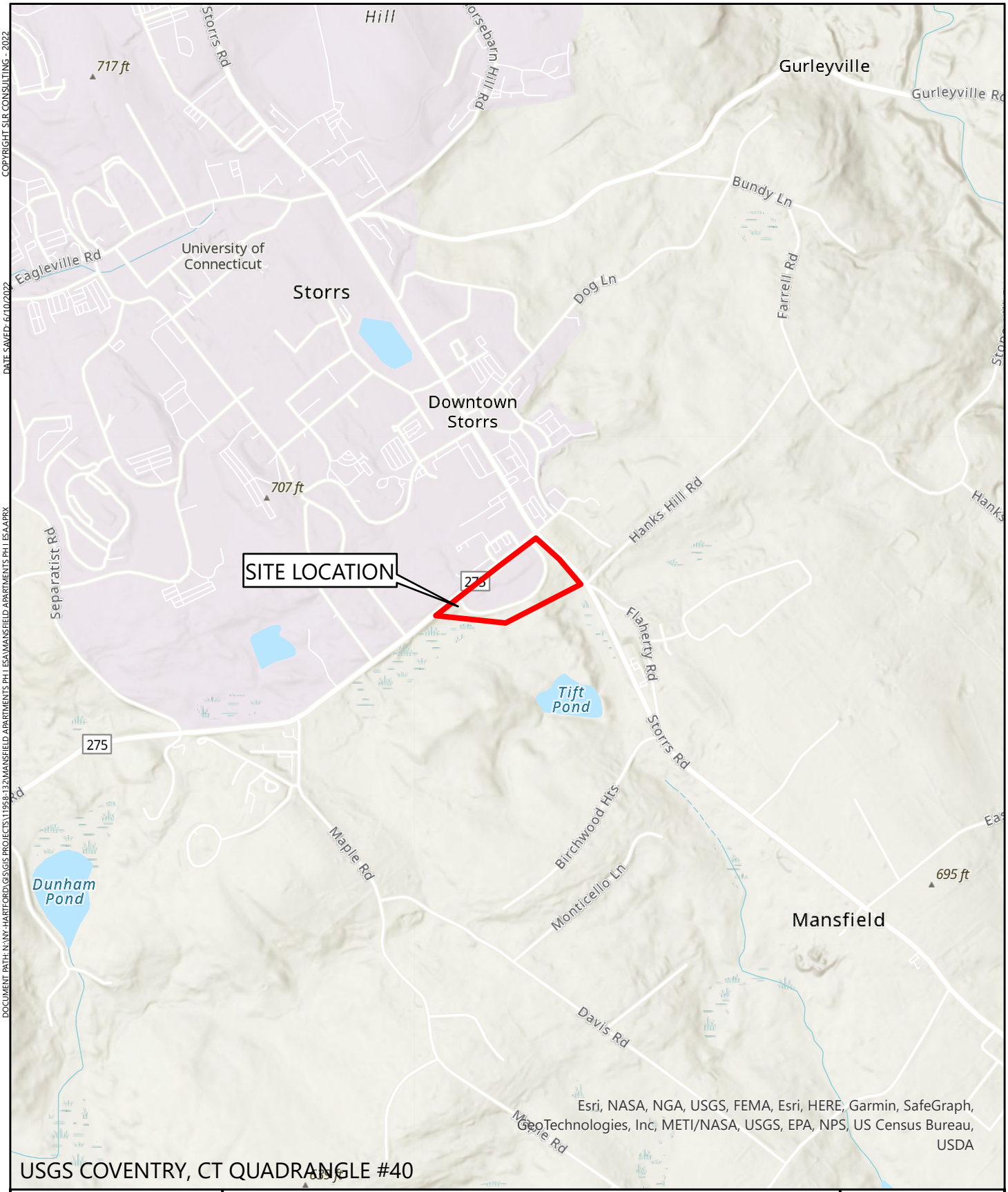
APPENDIX A

FIGURES

Phase I Environmental Site Assessment

UCONN Mansfield Apartments
1 South Eagleville Road
Mansfield, Connecticut 06268

July 26, 2022



USGS COVENTRY, CT QUADRANGLE #40

SLR
45 GLASTONBURY BLVD
1ST FLOOR
GLASTONBURY, CT 06033
860.400.5680

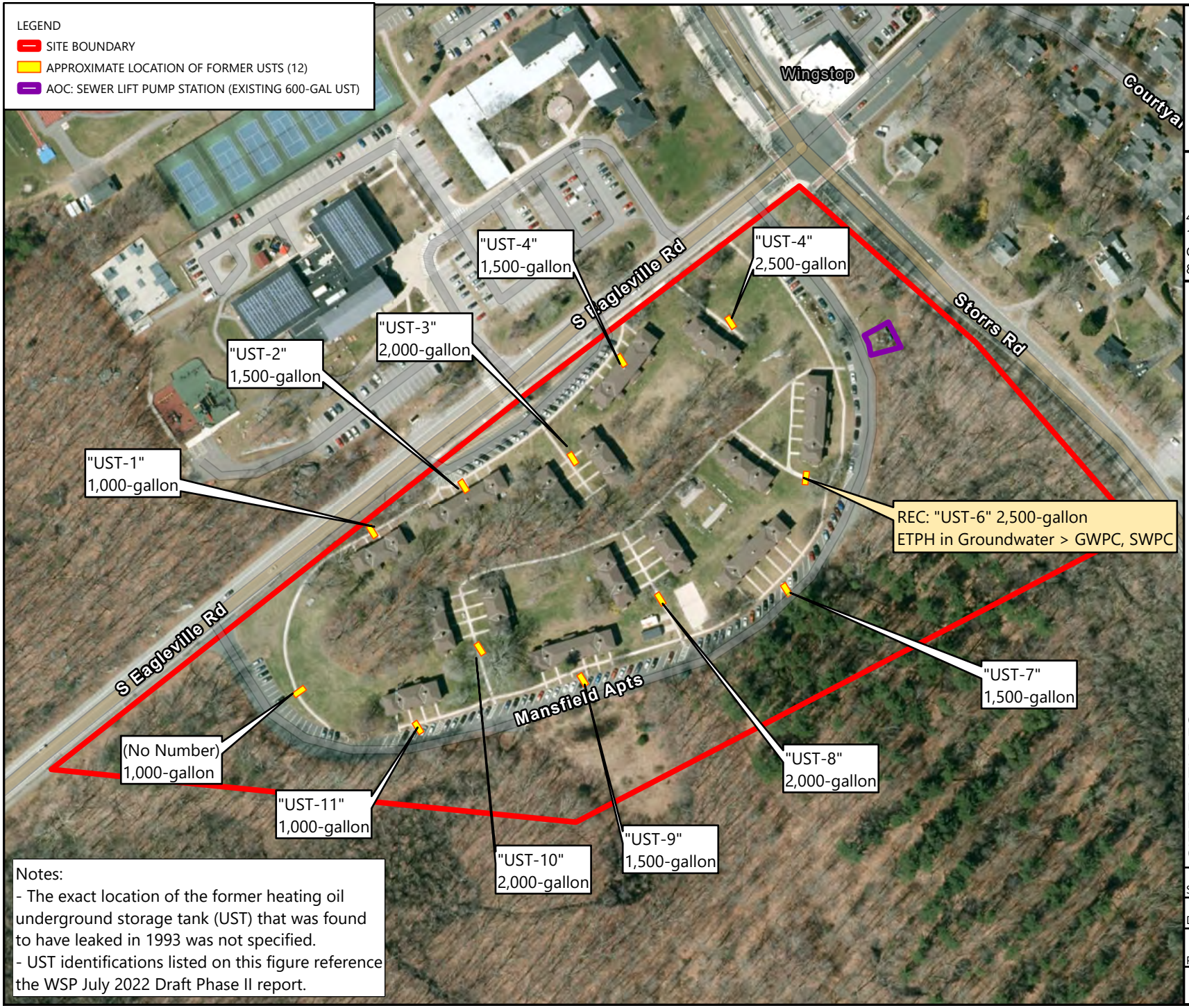
SITE LOCATION MAP

PHASE I ENVIRONMENTAL SITE ASSESSMENT
UNIVERSITY OF CONNECTICUT
1 SOUTH EAGLEVILLE ROAD
STORRS (MANSFIELD), CONNECTICUT

N
0 2,000
Feet

SCALE 1 IN = 2,000 FT
DATE 6/10/2022
PROJ. NO. 141.11958.00132

FIGURE 1



Notes:
- The exact location of the former heating oil underground storage tank (UST) that was found to have leaked in 1993 was not specified.
- UST identifications listed on this figure reference the WSP July 2022 Draft Phase II report.

SLR
45 GLASTONBURY BLVD
1ST FLOOR
GLASTONBURY, CT 06033
860.400.5680

SITE FEATURES

PHASE I ENVIRONMENTAL SITE ASSESSMENT
UNIVERSITY OF CONNECTICUT
1 SOUTH EAGLEVILLE ROAD
STORRS (MANSFIELD), CONNECTICUT

SCALE 1 IN = 200 FT

DATE 7/8/2022

PROJ. NO. 141.11958.00132

FIGURE 2

Date Saved: 7/8/2022

Document Path: N:\NY-Hartford\GIS\GIS Projects\11958-132\Mansfield Apartments Ph I ESA\Mansfield Apartments Ph I ESA.aprx

APPENDIX B

SITE PHOTOGRAPHS

Phase I Environmental Site Assessment

UCONN Mansfield Apartments
1 South Eagleville Road
Mansfield, Connecticut 06268

July 26, 2022

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
University of Connecticut (UCONN), University Planning, Design, and Construction	1 South Eagleville Road, Mansfield, CT 06268	141.11958.00132.0030

Photo No.	**Date:**
1	06/22/2022

Direction Photo Taken:
Facing southeast

A front (north) view of the Site, showing residential buildings.

Photo No.	**Date:**
2	06/22/2022

Direction Photo Taken:
Facing east

Description:
View of the emergency generator and 600-gallon underground storage tank access vault as part of the sewer pump station on the east side of the Site.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
UCONN, University Planning, Design, and Construction	1 South Eagleville Road, Mansfield, CT 06268	141.11958.00132.0030

Photo Nos.	Date:
3 & 4	06/22/2022

Direction Photo Taken:
(Interior)

A typical interior view of the furnace closets associated with each residential building. Minor water staining on the concrete floor but no cracks or open joints observed.

Photo No.	Date:
5	04/15/2022

Direction Photo Taken:
Facing southwest (interior)

Description:
View of the bioretention ponds in the eastern portion of the Site.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
UCONN, University Planning, Design, and Construction	1 South Eagleville Road, Mansfield, CT 06268	141.11958.00132.0030

Photo No.	Date:
6	06/22/2022

Direction Photo Taken:
Facing west

A view of the south portion of the Site showing the wooded wildlife sanctuary to the south (left).

Photo No.	Date:
7	06/22/2022

Direction Photo Taken:
Shed (interior)

Description:
Typical view of lawn and building maintenance equipment stored in the sheds at the south end of the Site.

SLR

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
UCONN, University Planning, Design, and Construction	1 South Eagleville Road, Mansfield, CT 06268	141.11958.00132.0030

Photo No.	**Date:**
8	06/22/2022

Direction Photo Taken:
Shed (interior)

A view of the gasoline storage for the lawn maintenance equipment.

Photo No.	**Date:**
9	06/22/2022

Direction Photo Taken:
Facing south

Description:
View of the south adjacent wetland/wildlife sanctuary trail entrance.

APPENDIX C

EDR DATABASE REPORT

Phase I Environmental Site Assessment

UCONN Mansfield Apartments
1 South Eagleville Road
Mansfield, Connecticut 06268

July 26, 2022

UCONN Circa
1 South Eagleville Rd
Storrs Mansfield, CT 06268

Inquiry Number: 6993737.2s
May 25, 2022

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1 SOUTH EAGLEVILLE RD
STORRS MANSFIELD, CT 06268

COORDINATES

Latitude (North):	41.7996830 - 41ˆ 47' 58.85''
Longitude (West):	72.2422080 - 72ˆ 14' 31.94''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	729125.0
UTM Y (Meters):	4630999.5
Elevation:	644 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	11738226 SPRING HILL, CT
Version Date:	2018
West Map:	11738170 COVENTRY, CT
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140712
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1 SOUTH EAGLEVILLE RD
STORRS MANSFIELD, CT 06268

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	UNIVERSITY OF CONNEC	1 SOUTH EAGLEVILLE R	CT ASBESTOS		TP
A2	UCONN	1 S. EAGLEVILLE RD	CT ASBESTOS		TP
A3	UNIVERSITY OF CT	1 SOUTH EAGLEVILLE R	CT ASBESTOS		TP
B4	THOMPSON FEED STORE	54 MIDDLE TPK	CT MANIFEST	Lower	46, 0.009, NNE
B5	CT STATE OF DPW	179 MIDDLE TPK	CT MANIFEST	Lower	46, 0.009, NNE
B6	AUDREY P BECK MUNICI	4 S EAGLEVILLE RD	CT UST	Lower	56, 0.011, NNE
B7	MANSFIELD APARTMENT	2 S EAGLEVILLE ROAD	CT UST	Lower	58, 0.011, NNE
8	STORRS DENTAL GROUP	1182 STORRS RD	RCRA-VSQG, FINDS, ECHO	Lower	80, 0.015, East
9	UCONN EASTWOOD ROAD	EASTWOOD RD	CT UST	Higher	526, 0.100, WSW
10	UCONN PRINT SHOP	1228 STORRS ROAD	CT VCP, CT SPILLS	Lower	620, 0.117, North
C11	UNIVERSITY OF CT	14 EASTWOOD RD	CT MANIFEST	Higher	802, 0.152, West
C12	UNIVERSITY OF CONNEC	14 EASTWOOD DR	NY MANIFEST	Higher	802, 0.152, West
D13	CAMPUS VIDEO & PHOTO	1232 STORRS RD	CT MANIFEST	Lower	883, 0.167, North
D14	E.O. SMITH HIGH SCHO	1235 STORRS RD	CT UST	Lower	895, 0.170, North
D15	E O SMITH HIGH SCHOO	1235 STORRS RD	CT MANIFEST	Lower	895, 0.170, North
D16	E.O. SMITH HIGH SCHO	1235 STORRS ROAD	RCRA-VSQG	Lower	895, 0.170, North
D17	MANSFIELD TOWN OF	1235 STORRS RD	CT MANIFEST	Lower	895, 0.170, North
D18	STORRS COMMONS LAUND	1244 STORRS RD	CT MANIFEST	Lower	944, 0.179, North
D19	STORRS COMMONS	1244 STORRS RD	CT UST	Lower	944, 0.179, North
D20	STORRS COMMONS LAUND	1244 STORRS RD	CT MANIFEST	Lower	944, 0.179, North
D21	E.O. SMITH HIGH SCHO	1245 STORRS ROAD	CT LUST, CT CPCS	Lower	952, 0.180, North
D22	CVS PHARMACY #10317	8 ROYCE CIR	RCRA-LQG, FINDS, ECHO	Lower	1044, 0.198, North
23	FORMER MARKLANDS GAR	1132 STORRS RD	CT UST	Lower	1118, 0.212, SE
24	UCONN BAT HSG SITE		FUDS	Higher	1436, 0.272, West
E25	STEVE ROGERS	13 DOG LN.	CT CPCS	Lower	1653, 0.313, North
F26	HAROLD SDRWENLE	6 HILLSIDE CIRCLE	CT LUST, CT SPILLS	Higher	1682, 0.319, WNW
E27	STEVE ROGERS	13 DOG LN.	CT LUST, CT SPILLS	Lower	1700, 0.322, North
F28	DEBBIE BROWN	6 HILLSIDE CIRCLE	CT ASBESTOS, CT CPCS	Higher	1724, 0.327, WNW
F29	JOHN MANNING	7 HILLSIDE CIRCLE	CT LUST, CT SPILLS, CT CPCS	Higher	1812, 0.343, West
30	RESIDENCE	70 BIRCHWOOD HEIGHTS	CT LUST, CT SPILLS, CT CPCS	Higher	2246, 0.425, SSE
G31	NUTMEG ALUMNI ASSOCI	1082 STORRS ROAD	CT LUST, CT SPILLS	Lower	2523, 0.478, SE
G32	NUTMEG FARMS ASSOC.	1082 STORRS ROAD	CT LUST, CT SPILLS	Lower	2523, 0.478, SE
G33	NUTMEG ALUMNI ASSOCI	1082 STORRS ROAD	CT CPCS	Lower	2564, 0.486, SE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
UNIVERSITY OF CONNEC 1 SOUTH EAGLEVILLE R STORRS, CT 06269	CT ASBESTOS	N/A
UCONN 1 S. EAGLEVILLE RD STORRS, CT 06268	CT ASBESTOS	N/A
UNIVERSITY OF CT 1 SOUTH EAGLEVILLE R STORRS, CT 06269	CT ASBESTOS	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

EXECUTIVE SUMMARY

Lists of Federal RCRA TSD facilities

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-SQG ..... RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROLS ..... Institutional Controls Sites List

Federal ERNS list

ERNS ..... Emergency Response Notification System

Lists of state- and tribal hazardous waste facilities

CT SHWS ..... Inventory of Hazardous Disposal Sites
CT SDADB ..... Site Discovery and Assessment Database

Lists of state and tribal landfills and solid waste disposal facilities

CT SWF/LF ..... List of Landfills/Transfer Stations

Lists of state and tribal leaking storage tanks

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST ..... Underground Storage Tank Listing
CT AST ..... Marine Terminals and Tank Information
INDIAN UST ..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

CT ENG CONTROLS ..... Engineering Controls Listing
CT AUL ..... ELUR Sites

Lists of state and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

CT BROWNFIELDS ..... Brownfields Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

CT SWRCY	Recycling Facilities
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
ODI	Open Dump Inventory
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS	Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL	Delisted National Clandestine Laboratory Register
CT CDL	Clandestine Drug Lab Listing
US CDL	National Clandestine Laboratory Register
CT PFAS	PFAS Contamination Site Listing

Local Land Records

CT PROPERTY	Property Transfer Filings
CT LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CT SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations

FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
UXO ---- Unexploded Ordnance Sites
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
CT AIRS ---- Permitted Air Sources Listing
CT DRYCLEANERS ---- Drycleaner Facilities
CT ENF ---- Enforcement Case Listing
CT Financial Assurance ---- Financial Assurance Information Listing
CT LEAD ---- Lead Inspection Database
CT LWDS ---- Connecticut Leachate and Wastewater Discharge Sites
CT NPDES ---- Wastewater Permit Listing
CT SEH ---- List of Significant Environmental Hazards Report to DEEP
CT UIC ---- Underground Injection Control Listing
MINES MRDS ---- Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

CT RGA HWS ---- Recovered Government Archive State Hazardous Waste Facilities List
CT RGA LUST ---- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 02/28/2022 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CVS PHARMACY #10317 EPA ID:: CTR000515577	***8 ROYCE CIR***	***N 1/8 - 1/4 (0.198 mi.)***	***D22***	***84***

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 02/28/2022 has revealed that there are 2 RCRA-VSQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
STORRS DENTAL GROUP EPA ID:: CTD983872284	***1182 STORRS RD***	***E 0 - 1/8 (0.015 mi.)***	***8***	***16***
E.O. SMITH HIGH SCHO EPA ID:: CTR000518514	1235 STORRS ROAD	N 1/8 - 1/4 (0.170 mi.)	D16	42

Lists of state and tribal leaking storage tanks

CT LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection's Leaking Underground Storage Tank List.

A review of the CT LUST list, as provided by EDR, and dated 12/15/2021 has revealed that there are 7 CT LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HAROLD SDRWENLE LUST Id: 29692	***6 HILLSIDE CIRCLE***	***WNW 1/4 - 1/2 (0.319 mi.)***	***F26***	***94***
JOHN MANNING	***7 HILLSIDE CIRCLE***	***W 1/4 - 1/2 (0.343 mi.)***	***F29***	***106***

LUST Id: 36885

RESIDENCE LUST Id: 30311	***70 BIRCHWOOD HEIGHTS***	***SSE 1/4 - 1/2 (0.425 mi.)***	***30***	***111***

Lower Elevation	Address	Direction / Distance	Map ID	Page
E.O. SMITH HIGH SCHO LUST Id: 31363	***1245 STORRS ROAD***	***N 1/8 - 1/4 (0.180 mi.)***	***D21***	***81***
STEVE ROGERS LUST Id: 30497	***13 DOG LN.***	***N 1/4 - 1/2 (0.322 mi.)***	***E27***	***98***
NUTMEG ALUMNI ASSOCI LUST Id: 30174	***1082 STORRS ROAD***	***SE 1/4 - 1/2 (0.478 mi.)***	***G31***	***116***
NUTMEG FARMS ASSOC. LUST Id: 32386	***1082 STORRS ROAD***	***SE 1/4 - 1/2 (0.478 mi.)***	***G32***	***120***

Lists of state and tribal registered storage tanks

CT UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Protection's "Town Inventory" UST Listing.

A review of the CT UST list, as provided by EDR, and dated 02/14/2022 has revealed that there are 6 CT UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UCONN EASTWOOD ROAD Facility Id: 78-12390 Tank Status: Currently In Use	EASTWOOD RD	WSW 0 - 1/8 (0.100 mi.)	9	19

Lower Elevation	Address	Direction / Distance	Map ID	Page
AUDREY P BECK MUNICI Facility Id: 78-1165 Tank Status: Permanently Closed	4 S EAGLEVILLE RD	NNE 0 - 1/8 (0.011 mi.)	B6	12
MANSFIELD APARTMENT Facility Id: 78-12400 Tank Status: Currently In Use	2 S EAGLEVILLE ROAD	NNE 0 - 1/8 (0.011 mi.)	B7	13
E.O. SMITH HIGH SCHO Facility Id: 78-12421 Tank Status: Permanently Closed Tank Status: Currently In Use	1235 STORRS RD	N 1/8 - 1/4 (0.170 mi.)	D14	28
STORRS COMMONS Facility Id: 78-1157 Tank Status: Permanently Closed	1244 STORRS RD	N 1/8 - 1/4 (0.179 mi.)	D19	75
FORMER MARKLANDS GAR Facility Id: 78-1242 Tank Status: Permanently Closed	1132 STORRS RD	SE 1/8 - 1/4 (0.212 mi.)	23	92

Lists of state and tribal voluntary cleanup sites

CT VCP: Sites involved in the Voluntary Remediation Program.

A review of the CT VCP list, as provided by EDR, and dated 04/07/2022 has revealed that there is 1 CT VCP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
UCONN PRINT SHOP	***1228 STORRS ROAD***	***N 0 - 1/8 (0.117 mi.)***	***10***	***21***
Status: Initial Form IV, Portion or Interim Verification not audited, LEP lead				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 12/01/2021 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UCONN BAT HSG SITE		W 1/4 - 1/2 (0.272 mi.)	24	93

CT CPCS: A list of Contaminated or Potentially Contaminated Sites within Connecticut. This list represents the "Hazardous Waste Facilities," as defined in Section 22a-134f of the Connecticut General Statutes (CGS). The list contains the following types of sites: Sites listed on the Inventory of Hazardous Waste Disposal Sites; Sites subject to the Property Transfer Act; Sites at which underground storage tanks are known to have leaked; Sites at which hazardous waste subject to the RCRA; Sites that are included in EPA's (CERCLIS); Sites that are the subject of an order issued by the Commissioner of DEP that requires investigation and remediation of a potential or known source of pollution; and Sites that have entered into one of the Department's Voluntary Remediation Programs.

A review of the CT CPCS list, as provided by EDR, and dated 02/17/2022 has revealed that there are 6 CT CPCS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DEBBIE BROWN	***6 HILLSIDE CIRCLE***	***WNW 1/4 - 1/2 (0.327 mi.)***	***F28***	***105***
Lust Status: LUST Completed (DEP's significant hazard definition)				
JOHN MANNING	***7 HILLSIDE CIRCLE***	***W 1/4 - 1/2 (0.343 mi.)***	***F29***	***106***
Lust Status: LUST Completed (DEP's significant hazard definition)				
RESIDENCE	***70 BIRCHWOOD HEIGHTS***	***SSE 1/4 - 1/2 (0.425 mi.)***	***30***	***111***
Lust Status: Pending				

Lower Elevation	Address	Direction / Distance	Map ID	Page
E.O. SMITH HIGH SCHO	***1245 STORRS ROAD***	***N 1/8 - 1/4 (0.180 mi.)***	***D21***	***81***
Lust Status: Investigation				
STEVE ROGERS	13 DOG LN.	N 1/4 - 1/2 (0.313 mi.)	E25	94

Lust Status: LUST Completed (DEP's significant hazard definition)

NUTMEG ALUMNI ASSOCI Lust Status: Investigation	1082 STORRS ROAD	SE 1/4 - 1/2 (0.486 mi.)	G33	124

CT MANIFEST: Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

A review of the CT MANIFEST list, as provided by EDR, and dated 12/03/2021 has revealed that there are 8 CT MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNIVERSITY OF CT EPA Id: CTP000025851	14 EASTWOOD RD	W 1/8 - 1/4 (0.152 mi.)	C11	25

Lower Elevation	Address	Direction / Distance	Map ID	Page
THOMPSON FEED STORE EPA Id: CTP000022507	54 MIDDLE TPK	NNE 0 - 1/8 (0.009 mi.)	B4	10
CT STATE OF DPW EPA Id: CTP000013186	179 MIDDLE TPK	NNE 0 - 1/8 (0.009 mi.)	B5	11
CAMPUS VIDEO & PHOTO EPA Id: CTP000021527	1232 STORRS RD	N 1/8 - 1/4 (0.167 mi.)	D13	26
E O SMITH HIGH SCHOO EPA Id: CTP000026766	1235 STORRS RD	N 1/8 - 1/4 (0.170 mi.)	D15	34
MANSFIELD TOWN OF EPA Id: CTP000023107	1235 STORRS RD	N 1/8 - 1/4 (0.170 mi.)	D17	72
STORRS COMMONS LAUND EPA Id: CTP000009709	1244 STORRS RD	N 1/8 - 1/4 (0.179 mi.)	D18	74
STORRS COMMONS LAUND EPA Id: CTP000014504	1244 STORRS RD	N 1/8 - 1/4 (0.179 mi.)	D20	76

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, and dated 01/01/2019 has revealed that there is 1 NY MANIFEST site within approximately 0.25 miles of the target property.

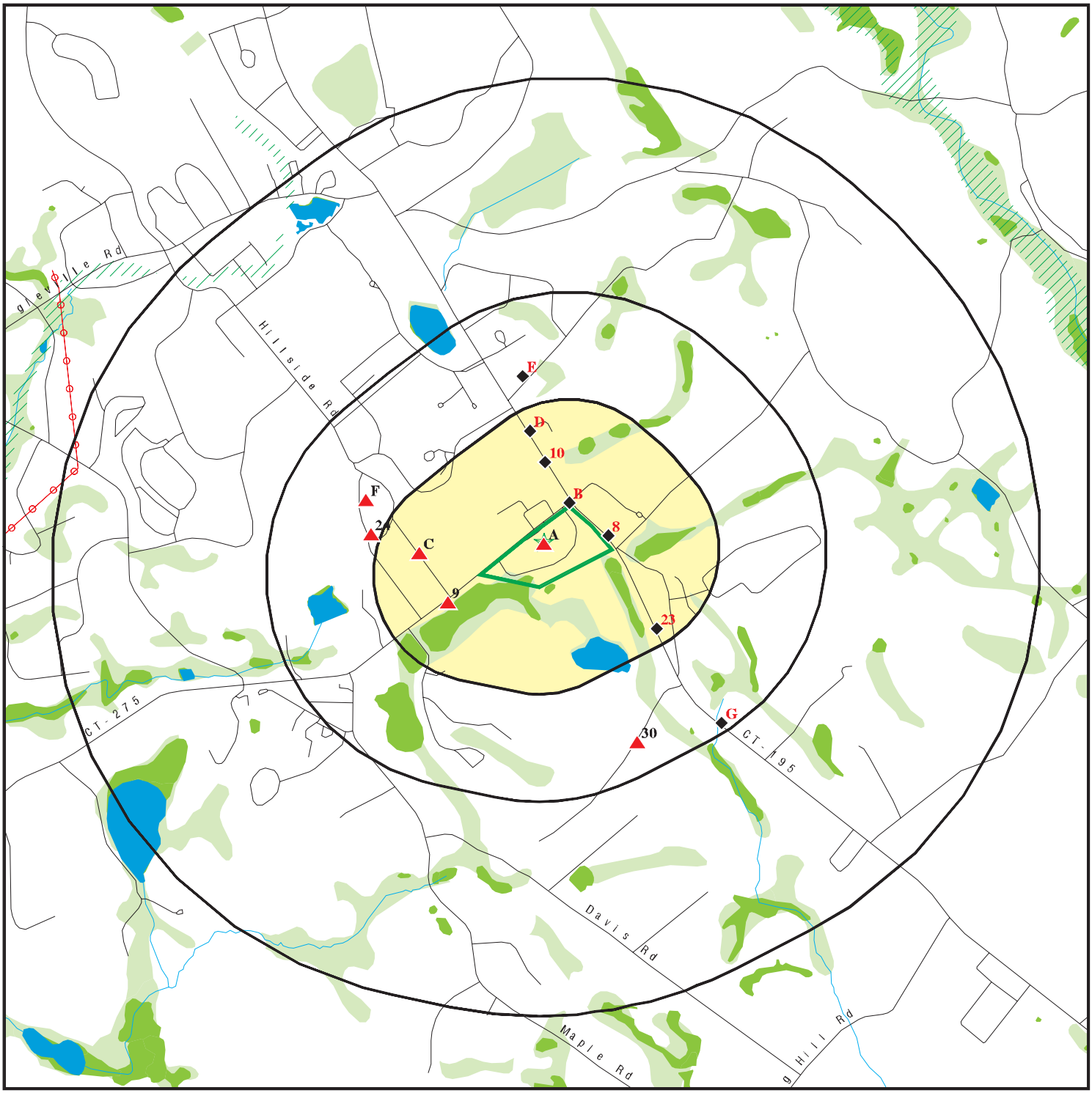
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNIVERSITY OF CONNEC EPA ID: CTP000025851	14 EASTWOOD DR	W 1/8 - 1/4 (0.152 mi.)	C12	26

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 13 records.

Site Name	Database(s)
UCONN	CT ASBESTOS
UCONN	CT ASBESTOS
UCONN	CT ASBESTOS
UCONN	CT ASBESTOS
UCONN	CT ASBESTOS
UCONN	CT ASBESTOS
UCONN	CT ASBESTOS
UCONN	CT ASBESTOS
UCONN	CT ASBESTOS
UCONN	CT ASBESTOS
TOWN OF MANSFIELD (LANDFILL)	PRP
DUFFY RESIDENCE	CT LUST, CT CPCS
UCONN BASKETBALL TRAINING FACILITY	FINDS, ECHO

OVERVIEW MAP - 6993737.2S



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA
Power transmission lines
Special Flood Hazard Area (1%)
0.2% Annual Chance Flood Hazard
National Wetland Inventory
State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	UCONN Circa	CLIENT:	SLR
ADDRESS:	1 South Eagleville Rd Storrs Mansfield CT 06268	CONTACT:	Emily Allison
LAT/LONG:	41.799683 / 72.242208	INQUIRY #:	6993737.2s
		DATE:	May 25, 2022 12:45 pm

DETAIL MAP - 6993737.2S

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	UCONN Circa	CLIENT:	SLR
ADDRESS:	1 South Eagleville Rd Storrs Mansfield CT 06268	CONTACT:	Emily Allison
		INQUIRY #:	6993737.2s
LAT/LONG:	41.799683 / 72.242208	DATE:	May 25, 2022 12:46 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	1	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		1	1	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal hazardous waste facilities								
CT SHWS	1.000		0	0	0	0	NR	0
CT SDADB	0.500		0	0	0	NR	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
CT SWF/LF	0.500		0	0	0	NR	NR	0
Lists of state and tribal leaking storage tanks								
CT LUST	0.500		0	1	6	NR	NR	7

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
CT UST	0.250		3	3	NR	NR	NR	6
CT AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
CT ENG CONTROLS	0.500		0	0	0	NR	NR	0
CT AUL	0.500		0	0	0	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
CT VCP	0.500		1	0	0	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
CT BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
CT SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
CT CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
CT PFAS	0.500		0	0	0	NR	NR	0
Local Land Records								
CT PROPERTY	TP		NR	NR	NR	NR	NR	0
CT LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CT SPILLS	TP		NR	NR	NR	NR	NR	0
CT SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	1	0	NR	1
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CT AIRS	TP		NR	NR	NR	NR	NR	0
CT ASBESTOS	TP	3	NR	NR	NR	NR	NR	3
CT CPCS	0.500		0	1	5	NR	NR	6
CT DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CT ENF	TP		NR	NR	NR	NR	NR	0
CT Financial Assurance	TP		NR	NR	NR	NR	NR	0
CT LEAD	TP		NR	NR	NR	NR	NR	0
CT LWDS	0.250		0	0	NR	NR	NR	0
CT MANIFEST	0.250		2	6	NR	NR	NR	8
NY MANIFEST	0.250		0	1	NR	NR	NR	1
CT NPDES	TP		NR	NR	NR	NR	NR	0
CT SEH	0.500		0	0	0	NR	NR	0
CT UIC	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
CT RGA HWS	TP		NR	NR	NR	NR	NR	0
CT RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		3	7	14	12	0	0	36

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **UNIVERSITY OF CONNECTICUT** **CT ASBESTOS** **S125122567**
Target **1 SOUTH EAGLEVILLE RD** **N/A**
Property **STORRS, CT 06269**

Site 1 of 3 in cluster A

Actual: **644 ft.**

ASBESTOS:

Name:	UNIVERSITY OF CONNECTICUT
Address:	1 SOUTH EAGLEVILLE RD
City,State,Zip:	STORRS, CT 06269
ID:	32569
Trans Number:	23
Enter Date:	07/13/2004
Postmark Date:	07/09/2004
Check Amount:	$67.75
Check Number:	66939
Type of Notification (new):	X
Type of Notification (cancel):	Not reported
Type of Notification (revised):	Not reported
Type of Notification (blanket):	Not reported
Type of Notification (emergency):	Not reported
Project Type:	UCONN MANSFIELD APT.#3
Start Date:	07/19/2004
End Date:	07/29/2004
Licence Number:	000036
Contractor:	PETCO INSULATION COMPANY, INC
Contractor Address:	88 FARWELL ST., P.O BOX 26127
Contractor City:	WEST HAVEN CT
Contractor State:	CT
Contractor Zip:	06516
Owner:	VALLEY LANDFILL/WASTE MGMT NH
Hauler:	WASTE MANAGEMENT
Location of Demo:	Not reported
Inspection Conducted:	Not reported
Inspector Name:	Not reported
Inspector License Number:	Not reported
Disposal Facility:	Not reported

A2 **UCONN** **CT ASBESTOS** **S125101437**
Target **1 S. EAGLEVILLE RD** **N/A**
Property **STORRS, CT 06268**

Site 2 of 3 in cluster A

Actual: **644 ft.**

ASBESTOS:

Name:	UCONN
Address:	1 S. EAGLEVILLE RD
City,State,Zip:	STORRS, CT 06268
ID:	16223
Trans Number:	57
Enter Date:	08/02/2010
Postmark Date:	07/28/2010
Check Amount:	$140.00
Check Number:	041949
Type of Notification (new):	X
Type of Notification (cancel):	Not reported
Type of Notification (revised):	Not reported
Type of Notification (blanket):	Not reported
Type of Notification (emergency):	Not reported
Project Type:	RESIDENTIAL LIFE

UCONN (Continued) **S125101437**

Start Date:	08/10/2010
End Date:	08/12/2010
Licence Number:	000017
Contractor:	A.A.I.S. Corporation
Contractor Address:	16 Hamilton St
Contractor City:	West Haven
Contractor State:	CT
Contractor Zip:	06516
Owner:	MODERN
Hauler:	RTL
Location of Demo:	Not reported
Inspection Conducted:	Not reported
Inspector Name:	Not reported
Inspector License Number:	Not reported
Disposal Facility:	Not reported

A3 **UNIVERSITY OF CT** **CT ASBESTOS** **S125122566**
Target **1 SOUTH EAGLEVILLE RD** **N/A**
Property **STORRS, CT 06269**

Site 3 of 3 in cluster A

Actual: **644 ft.**

ASBESTOS:

Name:	UNIVERSITY OF CT
Address:	1 SOUTH EAGLEVILLE RD
City,State,Zip:	STORRS, CT 06269
ID:	32568
Trans Number:	23
Enter Date:	07/13/2004
Postmark Date:	07/09/2004
Check Amount:	$85.49
Check Number:	66940
Type of Notification (new):	X
Type of Notification (cancel):	Not reported
Type of Notification (revised):	Not reported
Type of Notification (blanket):	Not reported
Type of Notification (emergency):	Not reported
Project Type:	UCONN MANSFIELD APT.BLD#4
Start Date:	07/19/2004
End Date:	07/29/2004
Licence Number:	000036
Contractor:	PETCO INSULATION COMPANY, INC
Contractor Address:	88 FARWELL ST., P.O BOX 26127
Contractor City:	WEST HAVEN CT
Contractor State:	CT
Contractor Zip:	06516
Owner:	VALLEY LANDFILL/WASTE MGMT NH
Hauler:	WASTE MANAGEMENT
Location of Demo:	Not reported
Inspection Conducted:	Not reported
Inspector Name:	Not reported
Inspector License Number:	Not reported
Disposal Facility:	Not reported

B4 **THOMPSON FEED STORE** **CT MANIFEST** **S109750053**
NNE **54 MIDDLE TPK** **N/A**
< 1/8 **MANSFIELD DEPOT, CT 06251**
0.009 mi.
46 ft. **Site 1 of 4 in cluster B**

Relative:
Lower

Actual:
636 ft.

CT MANIFEST:

Name:	THOMPSON FEED STORE
Address:	54 MIDDLE TPK
City,State,Zip:	MANSFIELD DEPOT, CT 06251
Phone:	Not reported
Country:	Not reported
Manifest ID:	CTF0495534
EPA ID:	CTP000022507

Hazardous Waste Manifest:

Year:	1999
Manifest:	CTF0495534
EPA ID:	CTP000022507
Generator Mailing Address:	54 MIDDLE TPK
Generator City,State,Zip:	MANSFIELD DEPOT, CT 06251
Discrepancies:	N
Date Shipped:	1999-04-28
Date Received:	1999-04-28
Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY DBA ADV LIQ REC
TSDF Address:	136 GRACEY AVE
TSDF City,State,Zip:	MERIDEN, CT 06451
TSDF Country:	USA
Transporter EPA ID:	CTD983895400
Transporter Name:	SHIRE CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	gasahol, gasoline
Number of Containers:	001
Container Type:	TT
Quantity/Weight/Volume:	418/G
Batch Number:	2723, 2723
EPA Waste Codes:	D001 - IGNITABLE WASTE
Copies:	1, 2
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

B5 **CT STATE OF DPW** **CT MANIFEST** **S109742286**
NNE **179 MIDDLE TPK** **N/A**
< 1/8 **MANSFIELD DEPOT, CT 06251**
0.009 mi.
46 ft. **Site 2 of 4 in cluster B**

Relative:
Lower

Actual:
636 ft.

CT MANIFEST:

Name:	CT STATE OF DPW
Address:	179 MIDDLE TPK
City,State,Zip:	MANSFIELD DEPOT, CT 06251
Phone:	Not reported
Country:	Not reported
Manifest ID:	CTF0114374
EPA ID:	CTP000013186

Hazardous Waste Manifest:

Year:	1992
Manifest:	CTF0114374
EPA ID:	CTP000013186
Generator Mailing Address:	179 MIDDLE TPK
Generator City,State,Zip:	MANSFIELD DEPOT, CT 06251
Discrepancies:	N
Date Shipped:	1992-01-02
Date Received:	1992-01-02
Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY INC
TSDF Address:	136 GRACEY AVE
TSDF City,State,Zip:	MERIDEN, CT 06450
TSDF Country:	USA
Transporter EPA ID:	CTD021816889
Transporter Name:	UNITED OIL RECOVERY INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity/Weight/Volume:	900/G
Batch Number:	999999
EPA Waste Codes:	D018 - BENZENE
Copies:	1
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

B6 **AUDREY P BECK MUNICIPAL BLDG** **CT UST** **U003294780**
NNE **4 S EAGLEVILLE RD** **N/A**
< 1/8 **STORRS MANSFIELD, CT 06268**
0.011 mi.
56 ft. **Site 3 of 4 in cluster B**

Relative:
Lower

Actual:
632 ft.

UST:

Name:	AUDREY P BECK MUNICIPAL BLDG
Address:	4 S EAGLEVILLE RD
Address 2:	Not reported
City,State,Zip:	STORRS MANSFIELD 06268
Facility ID:	78-1165
Substance:	Gasoline
Last Use Date:	12/01/1987
Tank ID:	A1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	5000
Install Date:	07/01/1955
Overfill Installed:	Not reported
Pipe Material:	Other (Specify)
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.801602
Longitude:	-72.242067
Tank Latitude:	41.801602
Tank Longitude:	-72.242067

Contact:

Facility ID:	78-1165
Owner Name:	TOWN OF MANSFIELD
Owner Address:	4 S EAGLEVILLE RD
Owner Address 2:	Not reported
Owner Phone:	(860) 429-3331
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS MANSFIELD, CT 062682574
Affiliation Type:	Owner
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-1165
Owner Name:	TOWN OF MANSFIELD
Owner Address:	4 S EAGLEVILLE RD
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS MANSFIELD, CT 062682574
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Name:	AUDREY P BECK MUNICIPAL BLDG
Address:	4 S EAGLEVILLE RD
Address 2:	Not reported

AUDREY P BECK MUNICIPAL BLDG (Continued) **U003294780**

City,State,Zip:	STORRS MANSFIELD 06268
Facility ID:	78-1165
Substance:	Diesel
Last Use Date:	08/27/2014
Tank ID:	A1R1
Closure Status:	Tank was Removed From Ground
Compartment ID:	A
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Coated & Cathodically Protected Steel (sti-P3)
Capacity:	5000
Install Date:	12/01/1987
Overfill Installed:	Flapper Device
Pipe Material:	Other (Specify)
Pipe Mode Description:	Metallic fittings isolated from soil and water,Metallic piping isolated from soil and water
Spill Installed:	Spill Bucket
Latitude:	41.801602
Longitude:	-72.242067
Tank Latitude:	41.801605
Tank Longitude:	-72.24205

Contact:

Facility ID:	78-1165
Owner Name:	TOWN OF MANSFIELD
Owner Address:	4 S EAGLEVILLE RD
Owner Address 2:	Not reported
Owner Phone:	(860) 429-3331
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS MANSFIELD, CT 062682574
Affiliation Type:	Owner
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-1165
Owner Name:	TOWN OF MANSFIELD
Owner Address:	4 S EAGLEVILLE RD
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS MANSFIELD, CT 062682574
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

B7 **MANSFIELD APARTMENT PUMP STATION** **CT UST** **U004140668**
NNE **2 S EAGLEVILLE ROAD EXT** **N/A**
< 1/8 **STORRS MANSFIELD, CT 06268**
0.011 mi.
58 ft. **Site 4 of 4 in cluster B**

Relative: **Lower**

Actual: **635 ft.**

UST:

Name:	MANSFIELD APARTMENT PUMP STATION
Address:	2 S EAGLEVILLE ROAD EXT
Address 2:	Not reported

MANSFIELD APARTMENT PUMP STATION (Continued) **U004140668**

City,State,Zip:	STORRS MANSFIELD 06268
Facility ID:	78-12400
Substance:	Diesel
Last Use Date:	Not reported
Tank ID:	A1
Closure Status:	Not reported
Compartment ID:	Not reported
Tank Status:	Currently In Use
Secondary Material:	Double Walled
Tank Material:	Fiberglass Reinforced Plastic
Capacity:	600
Install Date:	09/01/1995
Overfill Installed:	Audible Alarm
Pipe Material:	Rigid Fiberglass Reinforced Plastic
Pipe Mode Description:	Containment Sumps @ Tanks,Double Walled,Metallic fittings isolated from soil and water
Spill Installed:	Spill Bucket
Latitude:	41.800441
Longitude:	-72.240921
Tank Latitude:	41.800441
Tank Longitude:	-72.240921

Contact:

Facility ID:	78-12400
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Primary Contact
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12400
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Property Owner
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12400
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Registrant
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

MANSFIELD APARTMENT PUMP STATION (Continued) **U004140668**

Facility ID:	78-12400
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Owner
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12400
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Operator
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12400
Owner Name:	Katie Milardo
Owner Address:	25 Ledoyt Rd
Owner Address 2:	Not reported
Owner Phone:	(860) 486-8745
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT
Affiliation Type:	Class A Operator
Contact Name:	.
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12400
Owner Name:	Katie Milardo
Owner Address:	25 Ledoyt Rd
Owner Address 2:	Not reported
Owner Phone:	(860) 486-8745
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT
Affiliation Type:	Class B Operator
Contact Name:	.
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12400
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-8745
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Billing Contact
Contact Name:	KATIE MILARDO

MANSFIELD APARTMENT PUMP STATION (Continued) **U004140668**

Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12400
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-8745
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Off Site Records
Contact Name:	KATIE MILARDO
Contact Title:	Not reported
Contact Email:	Not reported

---

8 **STORRS DENTAL GROUP** **RCRA-VSQG 1004681509**
East **1182 STORRS RD** **FINDS CTD983872284**
< 1/8 **STORRS, CT 06268** **ECHO**
0.015 mi.
80 ft.

Relative: **Lower**

Actual: **626 ft.**

RCRA-VSQG:

Date Form Received by Agency:		19891201
Handler Name:	STORRS DENTAL GROUP	
Handler Address:		1182 STORRS RD
Handler City,State,Zip:		STORRS, CT 06268
EPA ID:		CTD983872284
Contact Name:		NICKY SOUCY
Contact Address:		1671 W MAIN ST
Contact City,State,Zip:		WILLIMANTIC, CT 06226
Contact Telephone:		203-429-2239
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		01
Land Type:		Private
Federal Waste Generator Description:		Conditionally Exempt Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		W MAIN ST
Mailing City,State,Zip:		WILLIMANTIC, CT 06226
Owner Name:		CT DENTAL GROUP
Owner Type:		Private
Operator Name:		Not reported
Operator Type:		Not reported
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

STORRS DENTAL GROUP (Continued) **1004681509**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20000902
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D011
Waste Description:	SILVER

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CT DENTAL GROUP

STORRS DENTAL GROUP (Continued) **1004681509**

Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	OWNERSTREET
Owner/Operator City,State,Zip:	OWNERCITY, CT 99999
Owner/Operator Telephone:	203-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19891201
Handler Name: STORRS DENTAL GROUP	
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

FINDS:

Registry ID: 110002487835

Click Here:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1004681509
Registry ID:	110002487835
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002487835
Name:	STORRS DENTAL GROUP
Address:	1182 STORRS RD

STORRS DENTAL GROUP (Continued) **1004681509**

City,State,Zip: STORRS, CT 06268

9
WSW
< 1/8
0.100 mi.
526 ft.

UCONN EASTWOOD ROAD PUMP STATION **CT UST** **U004140657**
EASTWOOD RD **N/A**
STORRS MANSFIELD, CT 06269

Relative:
Higher

Actual:
644 ft.

UST:

Name:	UCONN EASTWOOD ROAD PUMP STATION
Address:	EASTWOOD RD
Address 2:	Not reported
City,State,Zip:	STORRS MANSFIELD 06269
Facility ID:	78-12390
Substance:	Diesel
Last Use Date:	Not reported
Tank ID:	A1
Closure Status:	Not reported
Compartment ID:	Not reported
Tank Status:	Currently In Use
Secondary Material:	Double Walled
Tank Material:	Fiberglass Reinforced Plastic
Capacity:	600
Install Date:	09/01/1995
Overfill Installed:	Audible Alarm
Pipe Material:	Other (Specify)
Pipe Mode Description:	Containment Sumps @ Tanks,Double Walled,Metallic fittings isolated from soil and water
Spill Installed:	Spill Bucket
Latitude:	41.797709
Longitude:	-72.246539
Tank Latitude:	41.797709
Tank Longitude:	-72.246539

Contact:

Facility ID:	78-12390
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Owner
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12390
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Registrant
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

UCONN EASTWOOD ROAD PUMP STATION (Continued) **U004140657**

Facility ID:	78-12390
Owner Name:	Katie Milardo
Owner Address:	25 Ledoyt Rd
Owner Address 2:	Not reported
Owner Phone:	(860) 486-8745
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT
Affiliation Type:	Class B Operator
Contact Name:	.
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12390
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Property Owner
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12390
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Off Site Records
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12390
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Operator
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12390
Owner Name:	Katie Milardo
Owner Address:	25 Ledoyt Rd
Owner Address 2:	Not reported
Owner Phone:	(860) 486-8745
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT
Affiliation Type:	Class A Operator
Contact Name:	.

UCONN EASTWOOD ROAD PUMP STATION (Continued) **U004140657**

Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12390
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Billing Contact
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12390
Owner Name:	UNIVERSITY OF CONNECTICUT
Owner Address:	25 LEDOYT RD
Owner Address 2:	BOX U-3252
Owner Phone:	(860) 486-9295
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS, CT 062693252
Affiliation Type:	Primary Contact
Contact Name:	PAUL FERRI
Contact Title:	Not reported
Contact Email:	Not reported

10
North
< 1/8
0.117 mi.
620 ft.

UCONN PRINT SHOP **CT VCP** **S112074775**
1228 STORRS ROAD **CT SPILLS** **N/A**
MANSFIELD, CT

Relative:
Lower

Actual:
636 ft.

VCP:

Name:	UCONN PRINT SHOP
Address:	1228 STORRS ROAD
City,State,Zip:	MANSFIELD, CT
Transferor (seller):	Not reported
Transfee (buyer):	Not reported
Certifying Party:	Storrs Center Alliance, LLC
Certifying Party Attn:	Howard Kaufman
Certifying Party Title:	Managing Member
Certifying Party Address:	P. O. Box 8768 - 233 Route 17
Certifying Party City,St,Zip:	Tuxedo Park, NY 10987
Voluntary Remediation Site:	Yes
Date Received:	06/25/2012
Acknowledge Date:	07/17/2012
Determination Date:	07/17/2012
LEP Verified/DEP:	Not reported
Rem Id:	11092
Remediation Location Id:	8929
Date Entered:	07/02/2012
Program:	Vol_Rem_X
GAO Site:	False
Staff Full Name:	Michael Senyk
Super/Date:	07/17/2012
Stage Of Project:	Not reported

UCONN PRINT SHOP (Continued) **S112074775**

RP Level Of Activity:	Not reported
RP Needed Level Of Activity:	Not reported
Staff Level Of Activity:	Not reported
Staff Needed Level Of Activity:	Not reported
Public Intrest:	Not reported
PRP Cooperation:	Not reported
Enforcement Status:	Not reported
Level Of Complexity:	Not reported
Complex Eng Or Sci:	False
Complex Due To Public Involvement:	False
Politically Complex:	False
Complex Enforcement:	False
Coordination With Other Bureaus:	False
EPA Involvement:	False
Staff Prefrence:	Not reported
Readiness For Transfer:	Not reported
Project Transfer Time:	Not reported
Transfer Comments:	Not reported
Staff As Of July 2000:	Not reported
Initial Staff:	Not reported
Type Of Transfer:	Not reported
Salutation:	Mr. Kaufman
Relationship To Transfer:	Not reported
Audit Date:	Not reported
Verif Type:	Not reported
Audit Outcome:	Not reported
GW:	GAA
Basin:	Not reported
1st Payment:	3250
Pay Tag1:	1679
2nd Payment:	Not reported
Pay Tag2:	Not reported
Rtn:	Not reported
Revised:	Not reported
ECAF Received:	Not reported
Old Determination Date:	Not reported
Redeterminationdate:	Not reported
Previous Determination:	Not reported
Monitoringoption:	Not reported
Postremedialmonitoring:	Not reported
Schedule Of I/R:	Not reported
Schedule Overdue:	Not reported
Aprvl Sched:	Not reported
Yr 1 Report:	Not reported
Yr 2 Report:	Not reported
Report Overdue:	Not reported
Ext Aprvl Sched:	Not reported
License #:	Not reported
Project Phase:	Not reported
PT Comments:	Not reported
EPA Id Number:	Not reported
GW Class:	Not reported
SW Class:	Not reported
AO/C0:	Not reported
Water Lead(Y Or N):	Not reported
Priority:	Not reported
Project Status(A, I Or D):	Not reported

UCONN PRINT SHOP (Continued) **S112074775**

Last Updated:	Not reported
SR Comments:	Not reported
Priority Or Work-Load:	Not reported
Status:	Initial Form IV, Portion or Interim Verification not audited, LEP lead
Notes:	Not reported
Special Project Name:	Not reported
Special Project Comments:	Not reported
DOT Project:	Not reported
Pt Counter:	0
Project Complete:	False
Project Inactive:	False
Intl Deposit #:	Not reported
Deposit #:	Not reported
Spill Case #:	Not reported
Diversion Id:	0
Public Notice:	Not reported
Rap Received:	Not reported
Rap Approved:	Not reported
Compliance Category:	Not reported
Delete Record:	False
ECAF Reviewed By:	Not reported
Notlocatable:	False
Primaryaddress:	False
Aka_sitename:	False
Primarysitename:	False
Aka_siteaddress:	False
Lead:	LEP
Contain Value For Decode:	LV
ACKTAG:	Not reported
RCVTAG:	Not reported
Rtn Ctfd:	Not reported
Review:	06/11/2014
I:	Not reported
C:	Not reported
D:	Not reported
Issued:	Not reported
Cont Type:	Not reported
Issues:	Not reported
PW Program:	False
PT Program:	False
US Program:	False
DA Program:	False
SR Program:	False
SF Program:	False

SPILLS:

Name:	Not reported
Address:	1228 STORRS ROAD
City,State,Zip:	MANSFIELD, CT
Year of Database:	2013
Case Number:	201304149
Who Took Spill:	202
Assigned To:	NO Response
Report Date:	08/06/2013
Report Time:	39:00 AM
Date Release:	08/06/2013
Time Responded:	00:00 AM

UCONN PRINT SHOP (Continued) **S112074775**

Corrective Action Taken: Contained, and Sanded, and Cleaned
Cause Info: Hose Failure
Media Info: Ground Surface
Release Type: petroleum
Reported By: jared yellen
Phone: 203 6301406 - 617 3065910
Representing: BL Companys
Terminated: YES
Recovd (Total): 0
Total (Water): 0
Facility Status: CLOSED
Continuous Spill: False
Released Substance: HYDRAULIC OIL
Qty: < 2.00 (Gallons)
Emergency Measure: Not reported
Water Body: Other (none)
Discharger: Hayward Baker
Telephone: Not reported
Responsible Party: Not reported
RP Address 1: Not reported
RP City,St,Zip: CT
Historic: False
Waterbody: Not reported
Time Stamp: 2013-08-06 17:15:55
Sr Inspector: Landry, Robin
At Inspctor: **NO RESPONSE
User Stamp: GuzmanCa
Comments: Not reported
Action: Contained
Other Action: Not reported
Action: Sanded
Other Action: Not reported
Action: Cleaned
Other Action: Not reported
Agency ID: DEP Dispatch
Other Agency: Not reported
DEP Bureau: Not reported
DEP Agency: Not reported
Cause ID: Hose Failure
Other Cause: Not reported
Media ID: Ground Surface
Other Media: Not reported
Class ID: Transportation
Other Class: Not reported
Class ID: Commercial
Other Class: Not reported
Release Type: petroleum
Other Release: Not reported
Waterbody: Other
Other Wtrbody: none

C11
West
1/8-1/4
0.152 mi.
802 ft.

UNIVERSITY OF CT
14 EASTWOOD RD
STORRS, CT 06268

Site 1 of 2 in cluster C

CT MANIFEST **S109752143**
N/A

Relative:
Higher

Actual:
655 ft.

CT MANIFEST:

Name:	UNIVERSITY OF CT
Address:	14 EASTWOOD RD
City,State,Zip:	STORRS, CT 06268
Phone:	Not reported
Country:	Not reported
Manifest ID:	NYG3070287
EPA ID:	CTP000025851

Hazardous Waste Manifest:

Year:	2001
Manifest:	NYG3070287
EPA ID:	CTP000025851
Generator Mailing Address:	14 EASTWOOD RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2001-08-02
Date Received:	2001-08-07
Transporter 2 Date:	Not reported
TSDF EPA ID:	NYD049836679
TSDF Name:	C W M CHEMICAL SERVICES LLC
TSDF Address:	1550 BALMER RD
TSDF City,State,Zip:	MODEL CITY, NY 14107
TSDF Country:	USA
Transporter EPA ID:	CTD983896341
Transporter Name:	WASTE MGT NEW ENGLAND ENV TRANSP INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	ENVIRONMENTALLY HAZ. SUBSTANCES,SOLID
Number of Containers:	002
Container Type:	CF
Quantity/Weight/Volume:	500/P
Batch Number:	4644, 4644
EPA Waste Codes:	D008 - LEAD
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

C12 **UNIVERSITY OF CONNECTICUT** **NY MANIFEST** **1009220594**
West **14 EASTWOOD DR** **N/A**
1/8-1/4 **STORRS, CT 06268**
0.152 mi.
802 ft. **Site 2 of 2 in cluster C**

Relative:
Higher

Actual:
655 ft.

NY MANIFEST:

Name:	UNIVERSITY OF CONNECTICUT
Address:	14 EASTWOOD DR
City,State,Zip:	STORRS, CT 06268
Country:	USA
EPA ID:	CTP000025851
Facility Status:	Not reported
Location Address 1:	14 EASTWOOD DR
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	STORRS
Location State:	CT
Location Zip:	06268
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	CTP000025851
Mailing Name:	UNIVERSITY OF CONNECTICUT
Mailing Contact:	DENIS SHANNON
Mailing Address 1:	3102 HORSEBARN HILL RD
Mailing Address 2:	Not reported
Mailing City:	STORRS MANSFIELD
Mailing State:	CT
Mailing Zip:	06269
Mailing Zip 4:	4097
Mailing Country:	USA
Mailing Phone:	8608877913

D13 **CAMPUS VIDEO & PHOTO EXP** **CT MANIFEST** **S128037318**
North **1232 STORRS RD** **N/A**
1/8-1/4 **STORRS, CT 06268**
0.167 mi.
883 ft. **Site 1 of 10 in cluster D**

Relative:
Lower

Actual:
632 ft.

CT MANIFEST:

Name:	CAMPUS VIDEO & PHOTO EXP
Address:	1232 STORRS RD
City,State,Zip:	STORRS, CT 06268
Phone:	Not reported
Country:	Not reported
Manifest ID:	MAK268124
EPA ID:	CTP000021527

Hazardous Waste Manifest:

Year:	1999
Manifest:	CTF0863673
EPA ID:	CTP000021527
Generator Mailing Address:	1232 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	1999-06-03
Date Received:	1999-06-03

CAMPUS VIDEO & PHOTO EXP (Continued) **S128037318**

Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY DBA ADV LIQ REC
TSDF Address:	136 GRACEY AVE
TSDF City,State,Zip:	MERIDEN, CT 06451
TSDF Country:	USA
Transporter EPA ID:	CTD021816889
Transporter Name:	UNITED OIL RECOVERY INC/UIS DBA ADVANCED LIQ REC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity/Weight/Volume:	74/G
Batch Number:	2885, 2885, 2890
EPA Waste Codes:	D001 - IGNITABLE WASTE
Copies:	2, 6, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	1998
Manifest:	MAK268124
EPA ID:	CTP000021527
Generator Mailing Address:	1232 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	Not reported
Date Shipped:	1998-09-28
Date Received:	1998-10-01
Transporter 2 Date:	Not reported
TSDF EPA ID:	MAD096287354
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	224 EAST MAIN ST
TSDF City,State,Zip:	W BROOKFIELD, MA 01585
TSDF Country:	USA
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	RQ HAZARDOUS WASTE, LIQUID, N.O.S.
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	200/P
Batch Number:	2451, 2451

CAMPUS VIDEO & PHOTO EXP (Continued) **S128037318**

EPA Waste Codes:	D011 - SILVER
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

D14 **E.O. SMITH HIGH SCHOOL** **CT UST** **U003908383**
North **1235 STORRS RD** **N/A**
1/8-1/4 **STORRS, CT 06268**
0.170 mi.
895 ft. **Site 2 of 10 in cluster D**

Relative:
Lower

Actual:
632 ft.

UST:

Name:	E.O. SMITH HIGH SCHOOL
Address:	1235 STORRS RD
Address 2:	Not reported
City,State,Zip:	STORRS 06268
Facility ID:	78-12421
Substance:	Heating Oil(on-site consumption)
Last Use Date:	06/01/1998
Tank ID:	A1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Fiberglass Reinforced Plastic
Capacity:	15000
Install Date:	01/01/1986
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.804265
Longitude:	-72.243847
Tank Latitude:	41.804265
Tank Longitude:	-72.243847

Contact:

Facility ID:	78-12421
Owner Name:	CARY CRANDALL
Owner Address:	1235 STORRS RD
Owner Address 2:	Not reported
Owner Phone:	(860) 487-0877
Owner Phone Ext:	4901
Owner City/State/Zip:	STORRS MANSFIELD, CT 062682244
Affiliation Type:	Class B Operator
Contact Name:	.
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	Dennis Stanavage
Owner Address:	1235 Storrs Rd
Owner Address 2:	Not reported
Owner Phone:	(860) 487-2215
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs Mansfield, CT

E.O. SMITH HIGH SCHOOL (Continued) **U003908383**

Affiliation Type:	Class A Operator
Contact Name:	.
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Property Owner
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Operator
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Billing Contact
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Primary Contact
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School

E.O. SMITH HIGH SCHOOL (Continued) **U003908383**

Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Registrant
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Owner
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Name:	E.O. SMITH HIGH SCHOOL
Address:	1235 STORRS RD
Address 2:	Not reported
City,State,Zip:	STORRS 06268
Facility ID:	78-12421
Substance:	Heating Oil(on-site consumption)
Last Use Date:	06/01/1999
Tank ID:	B2
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Fiberglass Reinforced Plastic
Capacity:	5000
Install Date:	01/01/1986
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.804265
Longitude:	-72.243847
Tank Latitude:	41.804265
Tank Longitude:	-72.243847

Contact:

Facility ID:	78-12421
Owner Name:	CARY CRANDALL
Owner Address:	1235 STORRS RD
Owner Address 2:	Not reported
Owner Phone:	(860) 487-0877
Owner Phone Ext:	4901
Owner City/State/Zip:	STORRS MANSFIELD, CT 062682244
Affiliation Type:	Class B Operator
Contact Name:	.
Contact Title:	Not reported
Contact Email:	Not reported

E.O. SMITH HIGH SCHOOL (Continued) **U003908383**

Facility ID:	78-12421
Owner Name:	Dennis Stanavage
Owner Address:	1235 Storrs Rd
Owner Address 2:	Not reported
Owner Phone:	(860) 487-2215
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs Mansfield, CT
Affiliation Type:	Class A Operator
Contact Name:	.
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Property Owner
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Operator
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Billing Contact
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Primary Contact
Contact Name:	DENNIS STANAVAGE

E.O. SMITH HIGH SCHOOL (Continued) **U003908383**

Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Registrant
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Owner
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported
Name:	E.O. SMITH HIGH SCHOOL
Address:	1235 STORRS RD
Address 2:	Not reported
City,State,Zip:	STORRS 06268
Facility ID:	78-12421
Substance:	Heating Oil(on-site consumption)
Last Use Date:	Not reported
Tank ID:	C3
Closure Status:	Not reported
Compartment ID:	Not reported
Tank Status:	Currently In Use
Secondary Material:	Double Walled
Tank Material:	Fiberglass Reinforced Plastic
Capacity:	12000
Install Date:	08/01/1998
Overfill Installed:	Not reported
Pipe Material:	Other (Specify)
Pipe Mode Description:	Containment Sumps @ Tanks,Double Walled,Metallic fittings isolated from soil and water,Metallic piping isolated from soil and water
Spill Installed:	Not reported
Latitude:	41.804265
Longitude:	-72.243847
Tank Latitude:	41.804265
Tank Longitude:	-72.243847

Contact:

Facility ID:	78-12421
Owner Name:	CARY CRANDALL
Owner Address:	1235 STORRS RD
Owner Address 2:	Not reported

E.O. SMITH HIGH SCHOOL (Continued) **U003908383**

Owner Phone:	(860) 487-0877
Owner Phone Ext:	4901
Owner City/State/Zip:	STORRS MANSFIELD, CT 062682244
Affiliation Type:	Class B Operator
Contact Name:	.
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	Dennis Stanavage
Owner Address:	1235 Storrs Rd
Owner Address 2:	Not reported
Owner Phone:	(860) 487-2215
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs Mansfield, CT
Affiliation Type:	Class A Operator
Contact Name:	.
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Property Owner
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Operator
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Billing Contact
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421

E.O. SMITH HIGH SCHOOL (Continued) **U003908383**

Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Primary Contact
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Registrant
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	78-12421
Owner Name:	REGIONAL SCHOOL DISTRICT #19
Owner Address:	1235 Storrs Rd
Owner Address 2:	E.O. Smith High School
Owner Phone:	(860) 487-0877
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Storrs, CT 062682244
Affiliation Type:	Owner
Contact Name:	DENNIS STANAVAGE
Contact Title:	Not reported
Contact Email:	Not reported

D15 **E O SMITH HIGH SCHOOL** **CT MANIFEST** **S125685158**
North **1235 STORRS RD** **N/A**
1/8-1/4 **STORRS, CT 06268**
0.170 mi.
895 ft. **Site 3 of 10 in cluster D**

Relative:
Lower

Actual:
632 ft.

CT MANIFEST:

Name:	E O SMITH HIGH SCHOOL
Address:	1235 STORRS RD
City,State,Zip:	STORRS, CT 06268
Phone:	Not reported
Country:	Not reported
Manifest ID:	CTF1017063
EPA ID:	CTP000026766

Hazardous Waste Manifest:

Year:	2002
Manifest:	CTF1017061
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268

E O SMITH HIGH SCHOOL (Continued) **S125685158**

Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	OXIDIZING SOLID TOXIC
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	100/P
Batch Number:	5181, 5181
EPA Waste Codes:	D001 - IGNITABLE WASTE
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	2002
Manifest:	CTF1017066
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	CYANIDE SOLUTIONS NOS
Number of Containers:	001

E O SMITH HIGH SCHOOL (Continued) **S125685158**

Container Type:	DF
Quantity/Weight/Volume:	10/P
Batch Number:	5181, 5181
EPA Waste Codes:	D003 - REACTIVE WASTE
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported
Year:	2002
Manifest:	CTF1017061
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity/Weight/Volume:	250/P
Batch Number:	5181, 5181
EPA Waste Codes:	D001 - IGNITABLE WASTE
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported
Year:	2002
Manifest:	CTF1017062
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)

E O SMITH HIGH SCHOOL (Continued) **S125685158**

TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	toxic solid inorganic
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	20/P
Batch Number:	5181, 5181
EPA Waste Codes:	D004 - ARSENIC
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	2002
Manifest:	CTF1017062
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	TOXIC SOLID , ORGANIC N.O.S.
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	50/P
Batch Number:	5181, 5181
EPA Waste Codes:	D007 - CHROMIUM
Copies:	2, 7
Alternate Facility Name:	Not reported

E O SMITH HIGH SCHOOL (Continued) **S125685158**

Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported
Year:	2002
Manifest:	CTF1017062
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	TOXIC, LIQUIDS, ORGANIC, N.O.S.
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	50/P
Batch Number:	5181, 5181
EPA Waste Codes:	D004 - ARSENIC
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported
Year:	2002
Manifest:	CTF1017062
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported

E O SMITH HIGH SCHOOL (Continued) **S125685158**

Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	WASTE PHENOL SOLID
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	5/P
Batch Number:	5181, 5181
EPA Waste Codes:	U188 - PHENOL
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	2002
Manifest:	CTF1017063
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	CORROSIVE LIQUID TOXIC N.O.S.
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	250/P
Batch Number:	5181, 5181
EPA Waste Codes:	D002 - CORROSIVE WASTE
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	2002
Manifest:	CTF1017063

E O SMITH HIGH SCHOOL (Continued) **S125685158**

EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	corrosive liquid basic, inorganic nos
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	100/P
Batch Number:	5181, 5181
EPA Waste Codes:	D002 - CORROSIVE WASTE
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	2002
Manifest:	CTF1017063
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT

E O SMITH HIGH SCHOOL (Continued) **S125685158**

Transporter 2 Country:	USA
US DOT Description:	CORROSIVE SOLID BASIC, INORGANIC NOS
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	10/P
Batch Number:	5181, 5181
EPA Waste Codes:	D003 - REACTIVE WASTE
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	2002
Manifest:	CTF1017063
EPA ID:	CTP000026766
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	2002-08-29
Date Received:	2002-08-30
Transporter 2 Date:	Not reported
TSDF EPA ID:	RID040098352
TSDF Name:	NORTHLAND ENV INC (STABLEX RI)
TSDF Address:	252 - 275 ALLENS AVE
TSDF City,State,Zip:	PROVIDENCE, RI 02905
TSDF Country:	USA
Transporter EPA ID:	CTD018811802
Transporter Name:	ENVIRONMENTAL SERV MITCHELL ASSOC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	mercury
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	15/P
Batch Number:	5181, 5181
EPA Waste Codes:	D009 - MERCURY
Copies:	2, 7
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

D16 **E.O. SMITH HIGH SCHOOL (DISTRICT 19)** **RCRA-VSQG** **1024878404**
North **1235 STORRS ROAD** **CTR000518514**
1/8-1/4 **STORRS, CT 06268**
0.170 mi.
895 ft. **Site 4 of 10 in cluster D**

Relative: RCRA-VSQG:
Lower

Date Form Received by Agency:	20190117
Handler Name:	E.O. SMITH HIGH SCHOOL (DISTRICT 19)
Handler Address:	1235 STORRS ROAD
Handler City,State,Zip:	STORRS, CT 06268
EPA ID:	CTR000518514
Contact Name:	DENNIS STANAVGE
Contact Address:	STORRS ROAD
Contact City,State,Zip:	STORRS, CT 06268
Contact Telephone:	860-487-2215
Contact Fax:	Not reported
Contact Email:	DSTANAVAGE@EOSMITH.ORG
Contact Title:	DIRECTOR AND BUILDINGS AND GROUNDS
EPA Region:	01
Land Type:	Municipal
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	STORRS ROAD
Mailing City,State,Zip:	STORRS, CT 06268
Owner Name:	E.O. SMITH HIGH SCHOOL (DISTRICT 19)
Owner Type:	Municipal
Operator Name:	E.O. SMITH HIGH SCHOOL (DISTRICT 19)
Operator Type:	Municipal
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

Actual:
632 ft.

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190129
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE
Waste Code:	D004
Waste Description:	ARSENIC
Waste Code:	D005
Waste Description:	BARIUM
Waste Code:	D006
Waste Description:	CADMIUM
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D008
Waste Description:	LEAD

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D010
Waste Description:	SELENIUM
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D012
Waste Description:	ENDRIN (1,2,3,4,10,10-HEXACHLORO-1,7-EPOXY-1,4,4A,5,6,7,8,8A-OCTAHYDRO-1,4-ENDO, ENDO-5,8-DIMETH-ANO-NAPHTHALENE)
Waste Code:	D013
Waste Description:	LINDANE (1,2,3,4,5,6-HEXA-CHLOROCYCLOHEXANE, GAMMA ISOMER)
Waste Code:	D014
Waste Description:	METHOXYCHLOR (1,1,1-TRICHLORO-2,2-BIS [P-METHOXYPHENYL] ETHANE)
Waste Code:	D015
Waste Description:	TOXAPHENE (C10 H10 CL8, TECHNICAL CHLORINATED CAMPHENE, 67-69 PERCENT CHLORINE)
Waste Code:	D016
Waste Description:	2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
Waste Code:	D017
Waste Description:	2,4,5-TP SILVEX (2,4,5-TRICHLOROPHENOXYPROPIONIC ACID)
Waste Code:	D018
Waste Description:	BENZENE
Waste Code:	D019
Waste Description:	CARBON TETRACHLORIDE
Waste Code:	D020
Waste Description:	CHLORDANE
Waste Code:	D021
Waste Description:	CHLOROBENZENE
Waste Code:	D022
Waste Description:	CHLOROFORM
Waste Code:	D023
Waste Description:	O-CRESOL
Waste Code:	D024
Waste Description:	M-CRESOL
Waste Code:	D025
Waste Description:	P-CRESOL
Waste Code:	D026
Waste Description:	CRESOL

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

Waste Code: D027
Waste Description: 1,4-DICHLOROBENZENE

Waste Code: D028
Waste Description: 1,2-DICHLOROETHANE

Waste Code: D029
Waste Description: 1,1-DICHLOROETHYLENE

Waste Code: D030
Waste Description: 2,4-DINITROTOLUENE

Waste Code: D031
Waste Description: HEPTACHLOR (AND ITS EPOXIDE)

Waste Code: D032
Waste Description: HEXACHLOROBENZENE

Waste Code: D033
Waste Description: HEXACHLOROBUTADIENE

Waste Code: D034
Waste Description: HEXACHLOROETHANE

Waste Code: D035
Waste Description: METHYL ETHYL KETONE

Waste Code: D036
Waste Description: NITROBENZENE

Waste Code: D037
Waste Description: PENTACHLOROPHENOL

Waste Code: D038
Waste Description: PYRIDINE

Waste Code: D039
Waste Description: TETRACHLOROETHYLENE

Waste Code: D040
Waste Description: TRICHLORETHYLENE

Waste Code: D041
Waste Description: 2,4,5-TRICHLOROPHENOL

Waste Code: D042
Waste Description: 2,4,6-TRICHLOROPHENOL

Waste Code: D043
Waste Description: VINYL CHLORIDE

Waste Code: F001
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F002
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F003
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F004
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F005
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F006
Waste Description: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Waste Code: F007
Waste Description: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS.

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

Waste Code: F008
Waste Description: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

Waste Code: F009
Waste Description: SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

Waste Code: F010
Waste Description: QUENCHING BATH RESIDUES FROM OIL BATHS FROM METAL HEAT TREATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

Waste Code: F011
Waste Description: SPENT CYANIDE SOLUTIONS FROM SLAT BATH POT CLEANING FROM METAL HEAT TREATING OPERATIONS.

Waste Code: F012
Waste Description: QUENCHING WASTEWATER TREATMENT SLUDGES FROM METAL HEAT TREATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

Waste Code: F019
Waste Description: WASTEWATER TREATMENT SLUDGES FROM THE CHEMICAL CONVERSION COATING OF ALUMINUM, EXCEPT FROM ZIRCONIUM PHOSPHATING IN ALUMINUM CAN WASHING WHEN SUCH PHOSPHATING IS AN EXCLUSIVE CONVERSION COATING PROCESS.

Waste Code: F020
Waste Description: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE PRODUCTION OR MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF TRI- OR TETRACHLOROPHENOL OR OF INTERMEDIATES USED TO PRODUCE THEIR PESTICIDE DERIVATIVES. (THIS LISTING DOES NOT INCLUDE WASTES FROM THE PRODUCTION OF HEXACHLOROPHENE FROM HIGHLY PURIFIED 2,4,5-TRICHLOROPHENOL.)

Waste Code: F021
Waste Description: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE PRODUCTION OR MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF PENTACHLOROPHENOL, OR OF INTERMEDIATES USED TO PRODUCE DERIVATIVES.

Waste Code: F022
Waste Description: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF TETRA-, PENTA-, OR HEXACHLOROBENZENES UNDER ALKALINE CONDITIONS.

Waste Code: F023
Waste Description: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE PRODUCTION OF MATERIALS ON EQUIPMENT PREVIOUSLY USED FOR THE PRODUCTION OR MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF TRI- AND TETRACHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE WASTES FROM EQUIPMENT USED ONLY FOR THE PRODUCTION OR USE OF HEXACHLOROPHENE FROM HIGHLY PURIFIED 2,4,5-TRICHLOROPHENOL.)

Waste Code: F024
Waste Description: PROCESS WASTES INCLUDING, BUT NOT LIMITED TO, DISTILLATION RESIDUES,

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

HEAVY ENDS, TARS, AND REACTOR CLEAN-OUT WASTES FROM THE PRODUCTION OF CERTAIN CHLORINATED ALIPHATIC HYDROCARBONS BY FREE RADICAL CATALYZED PROCESSES. THESE CHLORINATED ALIPHATIC HYDROCARBONS ARE THOSE HAVING CARBON CHAIN LENGTHS RANGING FROM ONE TO, AND INCLUDING FIVE, WITH VARYING AMOUNTS AND POSITIONS OF CHLORINE SUBSTITUTION. (THIS LISTING DOES NOT INCLUDE WASTEWATERS, WASTEWATER TREATMENT SLUDGE, SPENT CATALYSTS, AND WASTES LISTED IN SECTIONS 261.31. OR 261.32)

Waste Code: F025
Waste Description: CONDENSED LIGHT ENDS, SPENT FILTERS AND FILTER AIDS, AND SPENT DESICCANT WASTES FROM THE PRODUCTION OF CERTAIN CHLORINATED ALIPHATIC HYDROCARBONS BY FREE RADICAL CATALYZED PROCESSES. THESE CHLORINATED ALIPHATIC HYDROCARBONS ARE THOSE HAVING CARBON CHAIN LENGTHS RANGING FROM ONE TO, AND INCLUDING FIVE, WITH VARYING AMOUNTS AND POSITIONS OF CHLORINE SUBSTITUTION.

Waste Code: F026
Waste Description: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE PRODUCTION OF MATERIALS ON EQUIPMENT PREVIOUSLY USED FOR THE MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF TETRA-, PENTA-, OR HEXACHLOROBENZENE UNDER ALKALINE CONDITIONS.

Waste Code: F027
Waste Description: DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT.)

Waste Code: F028
Waste Description: RESIDUES RESULTING FROM THE INCINERATION OR THERMAL TREATMENT OF SOIL CONTAMINATED WITH EPA HAZARDOUS WASTE NOS. F020, F021, F022, F023, F026, AND F027.

Waste Code: F032
Waste Description: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESSES GENERATED AT PLANTS THAT CURRENTLY USE, OR HAVE PREVIOUSLY USED, CHLOROPHENOLIC FORMULATIONS [EXCEPT POTENTIALLY CROSS-CONTAMINATED WASTES THAT HAVE HAD THE F032 WASTE CODE DELETED IN ACCORDANCE WITH SECTION 261.35 (I.E., THE NEWLY PROMULGATED EQUIPMENT CLEANING OR REPLACEMENT STANDARDS), AND WHERE THE GENERATOR DOES NOT RESUME OR INITIATE USE OF CHLOROPHENOLIC FORMULATIONS]. (THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSE THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL.)

Waste Code: F034
Waste Description: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESSES GENERATED AT PLANTS THAT USE CREOSOTE FORMULATIONS. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL.

Waste Code: F035
Waste Description: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESSES GENERATED AT PLANTS THAT

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

USE INORGANIC PRESERVATIVES CONTAINING ARSENIC OR CHROMIUM. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL.

Waste Code: F037
Waste Description: PETROLEUM REFINERY PRIMARY OIL/WATER/SOLIDS SEPARATION SLUDGE - ANY SLUDGE GENERATED FROM THE GRAVITATIONAL SEPARATION OF OIL/WATER/SOLIDS DURING THE STORAGE OR TREATMENT OF PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH SLUDGES INCLUDE, BUT ARE NOT LIMITED TO, THOSE GENERATED IN OIL/WATER/SOLIDS SEPARATORS; TANKS AND IMPOUNDMENTS; DITCHES AND OTHER CONVEYANCES; SUMPS; AND STORM WATER UNITS RECEIVING DRY WEATHER FLOW. SLUDGES GENERATED IN STORM WATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS), AND K051 WASTES ARE EXEMPTED FROM THIS LISTING.

Waste Code: F038
Waste Description: PETROLEUM REFINERY SECONDARY (EMULSIFIED) OIL/WATER/SOLIDS SEPARATION SLUDGE - ANY SLUDGE AND/OR FLOAT GENERATED FROM THE PHYSICAL AND/OR CHEMICAL SEPARATION OF OIL/WATER/SOLIDS IN PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH WASTES INCLUDE, BUT ARE NOT LIMITED TO, ALL SLUDGES AND FLOATS GENERATED IN INDUCED AIR FLOTATION (IAF) UNITS, TANKS AND IMPOUNDMENTS, AND ALL SLUDGES GENERATED IN DAF UNITS. SLUDGES GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS), AND F037, K048, AND K051 WASTES ARE EXEMPTED FROM THIS LISTING.

Waste Code: F039
Waste Description: LEACHATE RESULTING FROM THE TREATMENT, STORAGE, OR DISPOSAL OF WASTES CLASSIFIED BY MORE THAN ONE WASTE CODE UNDER SUBPART D, OR FROM A MIXTURE OF WASTES CLASSIFIED UNDER SUBPARTS C AND D OF THIS PART. (LEACHATE RESULTING FROM THE MANAGEMENT OF ONE OR MORE OF THE FOLLOWING EPA HAZARDOUS WASTES AND NO OTHER HAZARDOUS WASTES RETAINS ITS HAZARDOUS WASTE CODE(S): F020, F021, F022, F023, F026, F027, AND/OR F028.)

Waste Code: LABP
Waste Description: LAB PACK

Waste Code: P001
Waste Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Waste Code: P002
Waste Description: 1-ACETYL-2-THIOUREA (OR) ACETAMIDE, N-(AMINOTHIOXOMETHYL)-

Waste Code: P003
Waste Description: 2-PROPENAL (OR) ACROLEIN

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Waste Code: P004
Waste Description: 1,4,5,8-DIMETHANONAPHTHALENE, 1,2,3,4,10,10-HEXA-CHLORO-1,4,4A,5,8,8A,-HEXAHYDRO-, (1ALPHA, 4ALPHA, 4ABETA, 5ALPHA, 8ALPHA, 8ABETA)- (OR) ALDRIN

Waste Code: P005
Waste Description: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL

Waste Code: P006
Waste Description: ALUMINUM PHOSPHIDE (R,T)

Waste Code: P007
Waste Description: 3(2H)-ISOXAZOLONE, 5-(AMINOMETHYL)- (OR) 5-(AMINOMETHYL)-3-ISOXAZOLOL

Waste Code: P008
Waste Description: 4-AMINOPYRIDINE (OR) 4-PYRIDINAMINE

Waste Code: P009
Waste Description: AMMONIUM PICRATE (R) (OR) PHENOL, 2,4,6-TRINITRO-, AMMONIUM SALT (R)

Waste Code: P010
Waste Description: ARSENIC ACID H3ASO4

Waste Code: P011
Waste Description: ARSENIC OXIDE AS2O5 (OR) ARSENIC PENTOXIDE

Waste Code: P012
Waste Description: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

Waste Code: P013
Waste Description: BARIUM CYANIDE

Waste Code: P014
Waste Description: BENZENETHIOL (OR) THIOPHENOL

Waste Code: P015
Waste Description: BERYLLIUM

Waste Code: P016
Waste Description: DICHLOROMETHYL ETHER (OR) METHANE, OXYBIS[CHLORO-

Waste Code: P017
Waste Description: 2-PROPANONE, 1-BROMO- (OR) BROMOACETONE

Waste Code: P018
Waste Description: BRUCINE (OR) STRYCHNIDIN-10-ONE, 2,3-DIMETHOXY-

Waste Code: P020
Waste Description: DINOSEB (OR) PHENOL, 2-(1-METHYLPROPYL)-4,6-DINITRO-

Waste Code: P021
Waste Description: CALCIUM CYANIDE (OR) CALCIUM CYANIDE CA(CN)2

Waste Code: P022
Waste Description: CARBON DISULFIDE

Waste Code: P023

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Waste Description: ACETALDEHYDE, CHLORO- (OR) CHLOROACETALDEHYDE

Waste Code: P024
Waste Description: BENZENAMINE, 4-CHLORO- (OR) P-CHLORANILINE

Waste Code: P026
Waste Description: 1-(O-CHLOROPHENYL)THIOUREA (OR) THIOUREA, (2-CHLOROPHENYL)-

Waste Code: P027
Waste Description: 3-CHLOROPROPIONITRILE (OR) PROPANENITRILE, 3-CHLORO-

Waste Code: P028
Waste Description: BENZENE, (CHLOROMETHYL)- (OR) BENZYL CHLORIDE

Waste Code: P029
Waste Description: COPPER CYANIDE (OR) COPPER CYANIDE CU(CN)

Waste Code: P030
Waste Description: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

Waste Code: P031
Waste Description: CYANOGEN (OR) ETHANEDINITRILE

Waste Code: P033
Waste Description: CYANOGEN CHLORIDE (OR) CYANOGEN CHLORIDE (CN)CL

Waste Code: P034
Waste Description: 2-CYCLOHEXYL-4,6-DINITROPHENOL (OR) PHENOL, 2-CYCLOHEXYL-4,6-DINITRO-

Waste Code: P036
Waste Description: ARSONOUS DICHLORIDE, PHENYL- (OR) DICHLOROPHENYLARSINE

Waste Code: P037
Waste Description: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA, 2BETA, 2AALPHA, 3BETA, 6BETA, 6AALPHA, 7BETA, 7AALPHA)- (OR) DIELDRIN

Waste Code: P038
Waste Description: ARSINE, DIETHYL- (OR) DIETHYLARSINE

Waste Code: P039
Waste Description: DISULFOTON (OR) PHOSPHORODITHIOIC ACID, O,O-DIETHYL S-[2-(ETHYLTHIO)ETHYL] ESTER

Waste Code: P040
Waste Description: O,O-DIETHYL O-PYRAZINYL PHOSPHOROTHIOATE (OR) PHOSPHOROTHIOIC ACID, O,O-DIETHYL O-PYRAZINYL ESTER

Waste Code: P041
Waste Description: DIETHYL-P-NITROPHENYL PHOSPHATE (OR) PHOSPHORIC ACID, DIETHYL 4-NITROPHENYL ESTER

Waste Code: P042
Waste Description: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)- (OR) EPINEPHRINE

Waste Code: P043

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Waste Description: DIISOPROPYLFLUOROPHOSPHATE (DFP) (OR) PHOSPHOROFLUORIDIC ACID, BIS(1-METHYLETHYL) ESTER

Waste Code: P044
Waste Description: DIMETHOATE (OR) PHOSPHORODITHIOIC ACID, O,O-DIMETHYL S-[2-(METHYLAMINO)-2-OXOETHYL] ESTER

Waste Code: P045
Waste Description: 2-BUTANONE, 3,3-DIMETHYL-1-(METHYLTHIO)-, O-[METHYLAMINO)CARBONYL] OXIME (OR) THIOFANOX

Waste Code: P046
Waste Description: ALPHA,ALPHA-DIMETHYLPHENETHYLAMINE (OR) BENZENEETHANAMINE, ALPHA, ALPHA-DIMETHYL-

Waste Code: P047
Waste Description: 4,6-DINITRO-O-CRESOL, & SALTS (OR) PHENOL, 2-METHYL-4,6-DINITRO-, & SALTS

Waste Code: P048
Waste Description: 2,4-DINITROPHENOL (OR) PHENOL, 2,4-DINITRO-

Waste Code: P049
Waste Description: DITHIOBIURET (OR) THIOIMIDODICARBONIC DIAMIDE [(H2N)C(S)]2NH

Waste Code: P050
Waste Description: 6,9-METHANO-2,4,3-BENZODIOXATHIEPIN,6,7,8,9,10,10-HEXACHLORO-1,5,5A,6, 9,9A-HEXAHYDRO-,3-OXIDE (OR) ENDOSULFAN

Waste Code: P051
Waste Description: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA, 2BETA, 2ABETA, 3ALPHA, 6ALPHA, 6ABETA, 7BETA, 7AALPHA)- & METABOLITES (OR) ENDRIN (OR) ENDRIN, & METABOLITES

Waste Code: P054
Waste Description: AZIRIDINE (OR) ETHYLENEIMINE

Waste Code: P056
Waste Description: FLUORINE

Waste Code: P057
Waste Description: ACETAMIDE, 2-FLUORO- (OR) FLUOROACETAMIDE

Waste Code: P058
Waste Description: ACETIC ACID, FLUORO-, SODIUM SALT (OR) FLUOROACETIC ACID, SODIUM SALT

Waste Code: P059
Waste Description: 4,7-METHANO-1H-INDENE, 1,4,5,6,7,8,8-HEPTACHLORO-3A,4,7,7A-TETRAHYDRO- (OR) HEPTACHLOR

Waste Code: P060
Waste Description: 1,4,5,8-DIMETHANONAPHTHALENE, 1,2,3,4,10,10-HEXA-CHLORO-1,4,4A,5,8,8A,-HEXAHYDRO-, (1ALPHA, 4ALPHA, 4ABETA, 5BETA, 8BETA, 8ABETA)- (OR) ISODRIN

Waste Code: P062

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Waste Description: HEXAETHYL TETRAPHOSPHATE (OR) TETRAPHOSPHORIC ACID, HEXAETHYL ESTER

Waste Code: P063
Waste Description: HYDROCYANIC ACID (OR) HYDROGEN CYANIDE

Waste Code: P064
Waste Description: METHANE, ISOCYANATO- (OR) METHYL ISOCYANATE

Waste Code: P065
Waste Description: FULMINIC ACID, MERCURY(2+) SALT (R,T) (OR) MERCURY FULMINATE (R,T)

Waste Code: P066
Waste Description: ETHANIMIDOTHIOIC ACID, N-[[(METHYLAMINO)CARBONYL]OXY]-, METHYL ESTER (OR) METHOMYL

Waste Code: P067
Waste Description: 1,2-PROPYLENIMINE (OR) AZIRIDINE, 2-METHYL-

Waste Code: P068
Waste Description: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

Waste Code: P069
Waste Description: 2-METHYLLACTONITRILE (OR) PROPANENITRILE, 2-HYDROXY-2-METHYL-

Waste Code: P070
Waste Description: ALDICARB (OR) PROPANAL, 2-METHYL-2-(METHYLTHIO)-, O-[(METHYLAMINO)CARBONYL]OXIME

Waste Code: P071
Waste Description: METHYL PARATHION (OR) PHOSPHOROTHIOIC ACID, O,O,-DIMETHYL O-(4-NITROPHENYL) ESTER

Waste Code: P072
Waste Description: ALPHA-NAPHTHYLTHIOUREA (OR) THIOUREA, 1-NAPHTHALENYL-

Waste Code: P073
Waste Description: NICKEL CARBONYL (OR) NICKEL CARBONYL NI(CO)4, (T-4)-

Waste Code: P074
Waste Description: NICKEL CYANIDE (OR) NICKEL CYANIDE NI(CN)2

Waste Code: P075
Waste Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Waste Code: P076
Waste Description: NITRIC OXIDE (OR) NITROGEN OXIDE NO

Waste Code: P077
Waste Description: BENZENAMINE, 4-NITRO- (OR) P-NITROANILINE

Waste Code: P078
Waste Description: NITROGEN DIOXIDE (OR) NITROGEN OXIDE NO2

Waste Code: P081
Waste Description: 1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)

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Waste Code: P082
Waste Description: METHANIMINE, N-METHYL-N-NITROSO- (OR) N-NITROSODIMETHYLAMINE

Waste Code: P084
Waste Description: N-NITROSOMETHYLVINYLAMINE (OR) VINYLAMINE, N-METHYL-N-NITROSO-

Waste Code: P085
Waste Description: DIPHOSPHORAMIDE, OCTAMETHYL- (OR) OCTAMETHYLPYROPHOSPHORAMIDE

Waste Code: P087
Waste Description: OSMIUM OXIDE OSO4, (T-4)- (OR) OSMIUM TETROXIDE

Waste Code: P088
Waste Description: 7-OXABICYCLO[2.2.1]HEPTANE-2,3-DICARBOXYLIC ACID (OR) ENDOTHALL

Waste Code: P089
Waste Description: PARATHION (OR) PHOSPHOROTHIOIC ACID, O,O-DIETHYL-O-(4-NITROPHENYL) ESTER

Waste Code: P092
Waste Description: MERCURY, (ACETATO-O)PHENYL- (OR) PHENYLMERCURY ACETATE

Waste Code: P093
Waste Description: PHENYLTHIOUREA (OR) THIOUREA, PHENYL-

Waste Code: P094
Waste Description: PHORATE (OR) PHOSPHORODITHIOIC ACID, O,O-DIETHYL S-[(ETHYLTHIO)METHYL] ESTER

Waste Code: P095
Waste Description: CARBONIC DICHLORIDE (OR) PHOSGENE

Waste Code: P096
Waste Description: HYDROGEN PHOSPHIDE (OR) PHOSPHINE

Waste Code: P097
Waste Description: FAMPHUR (OR) PHOSPHOROTHIOIC ACID O-[4-[(DIMETHYLAMINO)SULFONYL]PHENYL] O,O-DIMETHYL ESTER

Waste Code: P098
Waste Description: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

Waste Code: P099
Waste Description: ARGENTATE (1-), BIS(CYANO-C)-, POTASSIUM (OR) POTASSIUM SILVER CYANIDE

Waste Code: P101
Waste Description: ETHYL CYANIDE (OR) PROPANENITRILE

Waste Code: P102
Waste Description: 2-PROPYN-1-OL (OR) PROPARGYL ALCOHOL

Waste Code: P103
Waste Description: SELENOUREA

Waste Code: P104
Waste Description: SILVER CYANIDE (OR) SILVER CYANIDE AG(CN)

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Waste Code: P105
Waste Description: SODIUM AZIDE

Waste Code: P106
Waste Description: SODIUM CYANIDE (OR) SODIUM CYANIDE NA(CN)

Waste Code: P108
Waste Description: STRYCHNIDIN-10-ONE, & SALTS (OR) STRYCHNINE, & SALTS

Waste Code: P109
Waste Description: TETRAETHYLDITHIOPYROPHOSPHATE (OR) THIODIPHOSPHORIC ACID, TETRAETHYL ESTER

Waste Code: P110
Waste Description: PLUMBANE, TETRAETHYL- (OR) TETRAETHYL LEAD

Waste Code: P111
Waste Description: DIPHOSPHORIC ACID, TETRAETHYL ESTER (OR) TETRAETHYL PYROPHOSPHATE

Waste Code: P112
Waste Description: METHANE, TETRANITRO- (R) (OR) TETRANITROMETHANE (R)

Waste Code: P113
Waste Description: THALLIC OXIDE (OR) THALLIUM OXIDE TL2O3

Waste Code: P114
Waste Description: SELENIOUS ACID, DITHALLIUM (1+) SALT (OR) THALLIUM(I) SELENITE

Waste Code: P115
Waste Description: SULFURIC ACID, DITHALLIUM (1+) SALT (OR) THALLIUM(I) SULFATE

Waste Code: P116
Waste Description: HYDRAZINECARBOTHIOAMIDE (OR) THIOSEMICARBAZIDE

Waste Code: P118
Waste Description: METHANETHIOL, TRICHLORO- (OR) TRICHLOROMETHANETHIOL

Waste Code: P119
Waste Description: AMMONIUM VANADATE (OR) VANADIC ACID, AMMONIUM SALT

Waste Code: P120
Waste Description: VANADIUM OXIDE V2O5 (OR) VANADIUM PENTOXIDE

Waste Code: P121
Waste Description: ZINC CYANIDE (OR) ZINC CYANIDE ZN(CN)2

Waste Code: P122
Waste Description: ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 10% (R,T)

Waste Code: P123
Waste Description: TOXAPHENE

Waste Code: P124
Waste Description: ACTINOMYCIN D

Waste Code: P127

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Waste Description: P127

Waste Code: P128
Waste Description: P128

Waste Code: P185
Waste Description: 1,3-DITHIOLANE-2-CARBOXALDEHYDE, 2,4-DIMETHYL-, O-[(METHYLAMINO)-CARBONYL]OXIME (OR) TIRPATE

Waste Code: P188
Waste Description: BENZOIC ACID, 2-HYDROXY-, COMPD. WITH (3AS-CIS)-1,2,3,3A,8,8A-HEXAHYDRO-1,3A,8-TRIMETHYLPYRROLO[2,3-B]INDOL-5-YL METHYLCARBAMATE ESTER (1:1) (OR) PHYSOSTIGMINE SALICYLATE

Waste Code: P189
Waste Description: CARBAMIC ACID, [(DIBUTYLAMINO)-THIO]METHYL-, 2,3-DIHYDRO-2,2-DIMETHYL -7-BENZOFURANYL ESTER (OR) CARBOSULFAN

Waste Code: P190
Waste Description: CARBAMIC ACID, METHYL-, 3-METHYLPHENYL ESTER (OR) METOLCARB

Waste Code: P191
Waste Description: CARBAMIC ACID, DIMETHYL-, 1-[(DIMETHYL-AMINO)CARBONYL]- 5-METHYL-1H-PYRAZOL-3-YL ESTER (OR) DIMETILAN

Waste Code: P192
Waste Description: ISOLAN (OR) CARBAMIC ACID, DIMETHYL-, 3-METHY-L-(1-METHYLETHYL)-1H-PYRAZOL-5-YL ESTER

Waste Code: P194
Waste Description: ETHANIMIDOTHIOC ACID, 2-(DIMETHYLAMINO)-N-[[(METHYLAMINO) CARBONYL]OXY]-2-OXO-, METHYL ESTER (OR) OXAMYL

Waste Code: P196
Waste Description: MANGANESE DIMETHYLDITHIOCARBAMATE (OR) MANGANESE, BIS(DIMETHYLCARBAMODITHIOATO-S,S')-,

Waste Code: P197
Waste Description: FORMPARANATE (OR) METHANIMIDAMIDE, N,N-DIMETHYL-N'-[2-METHYL-4-[[(METHYLAMINO)CARBONYL]OXY]PHENYL]

Waste Code: P198
Waste Description: METHANIMIDAMIDE, N,N-DIMETHYL-N'-[3-[[(METHYLAMINO)-CARBONYL]OXY]PHENYL]-, MONOHYDROCHLORIDE (OR) FORMETANATE HYDROCHLORIDE

Waste Code: P199
Waste Description: P199

Waste Code: P201
Waste Description: PHENOL, 3-METHYL-5-(1-METHYLETHYL)-, METHYL CARBAMATE (OR) PROMECARB

Waste Code: P202
Waste Description: M-CUMENYL METHYLCARBAMATE (OR) 3-ISOPROPYLPHENYL N-METHYLCARBAMATE (OR) PHENOL, 3-(1-METHYLETHYL)-, METHYL CARBAMATE

Waste Code: P203

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Waste Description: ALDICARB SULFONE (OR) PROPANAL, 2-METHYL-2-(METHYL-SULFONYL)-, O-[(METHYLAMINO)CARBONYL] OXIME

Waste Code: P204
Waste Description: PHYSOSTIGMINE (OR) PYRROLO[2,3-B]INDOL-5-OL, 1,2,3,3A,8,8A-HEXAHYDRO-1,3A,8-TRIMETHYL-METHYLCARBAMATE (ESTER), (3AS-CIS)-

Waste Code: P205
Waste Description: ZINC, BIS(DIMETHYLCARBAMODITHIOATO-S,S')-, (OR) ZIRAM

Waste Code: U001
Waste Description: ACETALDEHYDE (I) (OR) ETHANAL (I)

Waste Code: U002
Waste Description: 2-PROPANONE (I) (OR) ACETONE (I)

Waste Code: U003
Waste Description: ACETONITRILE (I,T)

Waste Code: U004
Waste Description: ACETOPHENONE (OR) ETHANONE, 1-PHENYL-

Waste Code: U005
Waste Description: 2-ACETYLAMINOFLUORENE (OR) ACETAMIDE, N-9H-FLUOREN-2-YL

Waste Code: U006
Waste Description: ACETYL CHLORIDE (C,R,T)

Waste Code: U007
Waste Description: 2-PROPENAMIDE (OR) ACRYLAMIDE

Waste Code: U008
Waste Description: 2-PROPENOIC ACID (I) (OR) ACRYLIC ACID (I)

Waste Code: U009
Waste Description: 2-PROPENENITRILE (OR) ACRYLONITRILE

Waste Code: U010
Waste Description: AZIRINO [2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[(AMINOCARBONYL)OXY]METHYL]-1,1A,2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA, 8AALPHA, 8BALPHA)]- (OR) MITOMYCIN C

Waste Code: U011
Waste Description: 1H-1,2,4-TRIAZOL-3-AMINE (OR) AMITROLE

Waste Code: U012
Waste Description: ANILINE (I,T) (OR) BENZENAMINE (I,T)

Waste Code: U014
Waste Description: AURAMINE (OR) BENZENAMINE, 4,4'-CARBONIMIDOYLBIS[N,N-DIMETHYL-

Waste Code: U015
Waste Description: AZASERINE (OR) L-SERINE, DIAZOACETATE (ESTER)

Waste Code: U016

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Waste Description: BENZ[C]ACRIDINE

Waste Code: U017
Waste Description: BENZAL CHLORIDE (OR) BENZENE, (DICHLOROMETHYL)-

Waste Code: U018
Waste Description: BENZ[A]ANTHRACENE

Waste Code: U019
Waste Description: BENZENE (I,T)

Waste Code: U020
Waste Description: BENZENESULFONIC ACID CHLORIDE (C,R) (OR) BENZENESULFONYL CHLORIDE (C,R)

Waste Code: U021
Waste Description: [1,1'-BIPHENYL]-4,4'-DIAMINE (OR) BENZIDINE

Waste Code: U022
Waste Description: BENZO[A]PYRENE

Waste Code: U023
Waste Description: BENZENE, (TRICHLOROMETHYL)- (OR) BENZOTRICHLORIDE (C,R,T)

Waste Code: U024
Waste Description: DICHLOROMETHOXY ETHANE (OR) ETHANE, 1,1'-[METHYLENEBIS(OXY)]BIS[2-CHLORO-

Waste Code: U025
Waste Description: DICHLOROETHYL ETHER (OR) ETHANE, 1,1'-OXYBIS[2-CHLORO-

Waste Code: U026
Waste Description: CHLORNAPHAZIN (OR) NAPHTHALENAMINE, N,N'-BIS(2-CHLOROETHYL)-

Waste Code: U027
Waste Description: DICHLOROISOPROPYL ETHER (OR) PROPANE, 2,2'-OXYBIS[2-CHLORO-

Waste Code: U028
Waste Description: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER (OR) DIETHYLHEXYL PHTHALATE

Waste Code: U029
Waste Description: METHANE, BROMO- (OR) METHYL BROMIDE

Waste Code: U030
Waste Description: 4-BROMOPHENYL PHENYL ETHER (OR) BENZENE, 1-BROMO-4-PHENOXY-

Waste Code: U031
Waste Description: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

Waste Code: U032
Waste Description: CALCIUM CHROMATE (OR) CHROMIC ACID H2CRO4, CALCIUM SALT

Waste Code: U033
Waste Description: CARBON OXYFLUORIDE (R,T) (OR) CARBONIC DIFLUORIDE

Waste Code: U034

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Waste Description: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

Waste Code: U035
Waste Description: BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL

Waste Code: U036
Waste Description: 4,7-METHANO-1H-INDENE, 1,2,4,5,6,7,8,8-OCTACHLORO-2,3,3A,4,7,7A-HEXAHYDRO- (OR) CHLORDANE, ALPHA & GAMMA ISOMERS

Waste Code: U037
Waste Description: BENZENE, CHLORO- (OR) CHLOROBENZENE

Waste Code: U038
Waste Description: BENZENEACETIC ACID, 4-CHLORO-ALPHA-(4-CHLOROPHENYL)-ALPHA-HYDROXY-, ETHYL ESTER (OR) CHLOROBENZILATE

Waste Code: U039
Waste Description: P-CHLORO-M-CRESOL (OR) PHENOL, 4-CHLORO-3-METHYL-

Waste Code: U041
Waste Description: EPICHLOROHYDRIN (OR) OXIRANE, (CHLOROMETHYL)-

Waste Code: U042
Waste Description: 2-CHLOROETHYL VINYL ETHER (OR) ETHENE, (2-CHLOROETHOXY)-

Waste Code: U043
Waste Description: ETHENE, CHLORO- (OR) VINYL CHLORIDE

Waste Code: U044
Waste Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Waste Code: U045
Waste Description: METHANE, CHLORO- (I,T) (OR) METHYL CHLORIDE (I,T)

Waste Code: U046
Waste Description: CHLOROMETHYL METHYL ETHER (OR) METHANE, CHLOROMETHOXY-

Waste Code: U047
Waste Description: BETA-CHLORONAPHTHALENE (OR) NAPHTHALENE, 2-CHLORO-

Waste Code: U048
Waste Description: O-CHLOROPHENOL (OR) PHENOL, 2-CHLORO-

Waste Code: U049
Waste Description: 4-CHLORO-O-TOLUIDINE, HYDROCHLORIDE (OR) BENZENAMINE, 4-CHLORO-2-METHYL-, HYDROCHLORIDE

Waste Code: U050
Waste Description: CHRYSENE

Waste Code: U051
Waste Description: CREOSOTE

Waste Code: U052
Waste Description: CRESOL (CRESYLIC ACID) (OR) PHENOL, METHYL-

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Waste Code: U053
Waste Description: 2-BUTENAL (OR) CROTONALDEHYDE

Waste Code: U055
Waste Description: BENZENE, (1-METHYLETHYL)- (I) (OR) CUMENE (I)

Waste Code: U056
Waste Description: BENZENE, HEXAHYDRO- (I) (OR) CYCLOHEXANE (I)

Waste Code: U057
Waste Description: CYCLOHEXANONE (I)

Waste Code: U058
Waste Description: 2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE

Waste Code: U059
Waste Description: 5,12-NAPHTHACENEDIONE, 8-ACETYL-10-[(3-AMINO-2,3,6-TRIDEOXY)-ALPHA-L-LYXO-HEXOPYRANOSYL)OXY]-7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-1-METHOXY-, (8S-CIS)- (OR) DAUNOMYCIN

Waste Code: U060
Waste Description: BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDD

Waste Code: U061
Waste Description: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDT

Waste Code: U062
Waste Description: CARBAMOTHIOIC ACID, BIS(1-METHYLETHYL)-, S-(2,3-DICHLORO-2-PROPENYL) ESTER (OR) DIALLATE

Waste Code: U063
Waste Description: DIBENZ[A,H]ANTHRACENE

Waste Code: U064
Waste Description: BENZO[RST]PENTAPHENE (OR) DIBENZO[A,I]PYRENE

Waste Code: U066
Waste Description: 1,2-DIBROMO-3-CHLOROPROPANE (OR) PROPANE, 1,2-DIBROMO-3-CHLORO-

Waste Code: U067
Waste Description: ETHANE, 1,2-DIBROMO- (OR) ETHYLENE DIBROMIDE

Waste Code: U068
Waste Description: METHANE, DIBROMO- (OR) METHYLENE BROMIDE

Waste Code: U069
Waste Description: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER (OR) DIBUTYL PHTHALATE

Waste Code: U070
Waste Description: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

Waste Code: U071
Waste Description: BENZENE, 1,3-DICHLORO- (OR) M-DICHLOROBENZENE

Waste Code: U072

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Waste Description: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

Waste Code: U073
Waste Description: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO- (OR) 3,3'-DICHLOROBENZIDINE

Waste Code: U074
Waste Description: 1,4-DICHLORO-2-BUTENE (I,T) (OR) 2-BUTENE, 1,4-DICHLORO- (I,T)

Waste Code: U075
Waste Description: DICHLORODIFLUOROMETHANE (OR) METHANE, DICHLORODIFLUORO-

Waste Code: U076
Waste Description: ETHANE, 1,1-DICHLORO- (OR) ETHYLIDENE DICHLORIDE

Waste Code: U077
Waste Description: ETHANE, 1,2-DICHLORO- (OR) ETHYLENE DICHLORIDE

Waste Code: U078
Waste Description: 1,1-DICHLOROETHYLENE (OR) ETHENE, 1,1-DICHLORO-

Waste Code: U079
Waste Description: 1,2-DICHLOROETHYLENE (OR) ETHENE, 1,2-DICHLORO-,(E)-

Waste Code: U080
Waste Description: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

Waste Code: U081
Waste Description: 2,4-DICHLOROPHENOL (OR) PHENOL, 2,4-DICHLORO-

Waste Code: U082
Waste Description: 2,6-DICHLOROPHENOL (OR) PHENOL, 2,6-DICHLORO-

Waste Code: U083
Waste Description: PROPANE, 1,2-DICHLORO- (OR) PROPYLENE DICHLORIDE

Waste Code: U084
Waste Description: 1,3-DICHLOROPROPENE (OR) 1-PROPENE, 1,3-DICHLORO-

Waste Code: U085
Waste Description: 1,2:3,4-DIEPOXYBUTANE (I,T) (OR) 2,2'-BIOXIRANE

Waste Code: U086
Waste Description: HYDRAZINE, 1,2-DIETHYL- (OR) N,N'-DIETHYLHYDRAZINE

Waste Code: U087
Waste Description: O,O-DIETHYL S-METHYL DITHIOPHOSPHATE (OR) PHOSPHORODITHIOIC ACID, O,O-DIETHYL S-METHYL ESTER

Waste Code: U088
Waste Description: 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER (OR) DIETHYL PHTHALATE

Waste Code: U089
Waste Description: DIETHYLSTILBESTEROL (OR) PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS, (E)-

Waste Code: U090

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Waste Description: 1,3-BENZODIOXOLE, 5-PROPYL- (OR) DIHYDROSAFROLE

Waste Code: U091
Waste Description: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIMETHOXY- (OR) 3,3'-DIMETHOXYBENZIDINE

Waste Code: U092
Waste Description: DIMETHYLAMINE (I) (OR) METHANAMINE, N-METHYL- (I)

Waste Code: U093
Waste Description: BENZENAMINE, N,N-DIMETHYL-4-(PHENYLAZO)- (OR) P-DIMETHYLAMINOAZOBENZENE

Waste Code: U094
Waste Description: 7,12-DIMETHYLBENZ[A]ANTHRACENE (OR) BENZ[A]ANTHRACENE, 7,12-DIMETHYL-

Waste Code: U095
Waste Description: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIMETHYL- (OR) 3,3'-DIMETHYLBENZIDINE

Waste Code: U096
Waste Description: ALPHA,ALPHA-DIMETHYLBENZYLHYDROPEROXIDE (R) (OR) HYDROPEROXIDE, 1-METHYL-1-PHENYLETHYL- (R)

Waste Code: U097
Waste Description: CARBAMIC CHLORIDE, DIMETHYL- (OR) DIMETHYLCARBAMOYL CHLORIDE

Waste Code: U098
Waste Description: 1,1-DIMETHYLHYDRAZINE (OR) HYDRAZINE, 1,1-DIMETHYL-

Waste Code: U099
Waste Description: 1,2-DIMETHYLHYDRAZINE (OR) HYDRAZINE, 1,2-DIPHENYL-

Waste Code: U101
Waste Description: 2,4-DIMETHYLPHENOL (OR) PHENOL, 2,4-DIMETHYL-

Waste Code: U102
Waste Description: 1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER (OR) DIMETHYL PHTHALATE

Waste Code: U103
Waste Description: DIMETHYL SULFATE (OR) SULFURIC ACID, DIMETHYL ESTER

Waste Code: U105
Waste Description: 2,4-DINITROTOLUENE (OR) BENZENE, 1-METHYL-2,4-DINITRO-

Waste Code: U106
Waste Description: 2,6-DINITROTOLUENE (OR) BENZENE, 2-METHYL-1,3-DINITRO-

Waste Code: U107
Waste Description: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER (OR) DI-N-OCTYL PHTHALATE

Waste Code: U108
Waste Description: 1,4-DIETHYLENEOXIDE (OR) 1,4-DIOXANE

Waste Code: U109
Waste Description: 1,2-DIPHENYLHYDRAZINE (OR) HYDRAZINE, 1,2-DIPHENYL-

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Waste Code: U110
Waste Description: 1-PROPANIMINE, N-PROPYL-(I) (OR) DIPROPYLAMINE (I)

Waste Code: U111
Waste Description: 1-PROPANAMINE, N-NITROSO-N-PROPYL- (OR) DI-N-PROPYLNITROSAMINE

Waste Code: U112
Waste Description: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

Waste Code: U113
Waste Description: 2-PROPENOIC ACID, ETHYL ESTER (I) (OR) ETHYL ACRYLATE (I)

Waste Code: U114
Waste Description: CARBAMODITHIOIC ACID, 1,2-ETHANEDIYLBIS-, SALTS & ESTERS (OR) ETHYLENEBISDITHIOCARBAMIC ACID, SALTS & ESTERS

Waste Code: U115
Waste Description: ETHYLENE OXIDE (I,T) (OR) OXIRANE (I,T)

Waste Code: U116
Waste Description: 2-IMIDAZOLIDINETHIONE (OR) ETHYLENETHIOUREA

Waste Code: U117
Waste Description: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)

Waste Code: U118
Waste Description: 2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER (OR) ETHYL METHACRYLATE

Waste Code: U119
Waste Description: ETHYL METHANESULFONATE (OR) METHANESULFONIC ACID, ETHYL ESTER

Waste Code: U120
Waste Description: FLUORANTHENE

Waste Code: U121
Waste Description: METHANE, TRICHLOROFLUORO- (OR) TRICHLOROMONOFLUOROMETHANE

Waste Code: U122
Waste Description: FORMALDEHYDE

Waste Code: U123
Waste Description: FORMIC ACID (C,T)

Waste Code: U124
Waste Description: FURAN (I) (OR) FURFURAN (I)

Waste Code: U125
Waste Description: 2-FURANCARBOXALDEHYDE (I) (OR) FURFURAL (I)

Waste Code: U126
Waste Description: GLYCIDYLALDEHYDE (OR) OXIRANECARBOXYALDEHYDE

Waste Code: U127
Waste Description: BENZENE, HEXACHLORO- (OR) HEXACHLOROBENZENE

Waste Code: U128
Waste Description: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO- (OR) HEXACHLOROBUTADIENE

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Waste Code: U129
Waste Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Waste Code: U130
Waste Description: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO- (OR) HEXACHLOROCYCLOPENTADIENE

Waste Code: U131
Waste Description: ETHANE, HEXACHLORO- (OR) HEXACHLOROETHANE

Waste Code: U132
Waste Description: HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-

Waste Code: U133
Waste Description: HYDRAZINE (R,T)

Waste Code: U134
Waste Description: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

Waste Code: U135
Waste Description: HYDROGEN SULFIDE (OR) HYDROGEN SULFIDE H2S

Waste Code: U136
Waste Description: ARSINIC ACID, DIMETHYL- (OR) CACODYLIC ACID

Waste Code: U137
Waste Description: INDENO[1,2,3-CD]PYRENE

Waste Code: U138
Waste Description: METHANE, IODO- (OR) METHYL IODIDE

Waste Code: U140
Waste Description: 1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)

Waste Code: U141
Waste Description: 1,3-BENZODIOXOLE, 5-(1-PROPENYL)- (OR) ISOSAFROLE

Waste Code: U142
Waste Description: 1,3,4-METHENO-2H-CYCLOBUTA[CD]PENTALEN-2-ONE, 1,1A,3,3A,4,5,5,5A,5B,6-DECACHLOROOCTAHYDRO- (OR) KEPONE

Waste Code: U143
Waste Description: 2-BUTENOIC ACID, 2-METHYL-, 7-[[2,3-DIHYDROXY-2-(1-METHOXYETHYL)-3-METHYL-1-OXOBUTOXY]METHYL]-2,3,5,7A-TETRAHYDRO-1H-PYRROLIZIN-1-YL ESTER, [1S-[1ALPHA(Z), 7(2S*,3R*), 7AALPHA]]- (OR) LASIOCARPINE

Waste Code: U144
Waste Description: ACETIC ACID, LEAD(2+) SALT (OR) LEAD ACETATE

Waste Code: U145
Waste Description: LEAD PHOSPHATE (OR) PHOSPHORIC ACID, LEAD(2+) SALT (2:3)

Waste Code: U146
Waste Description: LEAD SUBACETATE (OR) LEAD, BIS(ACETATO-O)TETRAHYDROXYTRI-

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Waste Code: U147
Waste Description: 2,5-FURANDIONE (OR) MALEIC ANHYDRIDE

Waste Code: U148
Waste Description: 3,6-PYRIDAZINEDIONE, 1,2-DIHYDRO- (OR) MALEIC HYDRAZIDE

Waste Code: U149
Waste Description: MALONONITRILE (OR) PROPANEDINITRILE

Waste Code: U150
Waste Description: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

Waste Code: U151
Waste Description: MERCURY

Waste Code: U152
Waste Description: 2-PROPENENITRILE, 2-METHYL- (I,T) (OR) METHACRYLONITRILE (I,T)

Waste Code: U153
Waste Description: METHANETHIOL (I,T) (OR) THIOMETHANOL (I,T)

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U155
Waste Description: 1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)- (OR) METHAPYRILENE

Waste Code: U156
Waste Description: CARBONOCHLORIDIC ACID, METHYL ESTER, (I,T) (OR) METHYL CHLOROCARBONATE (I,T)

Waste Code: U157
Waste Description: 3-METHYLCHOLANTHRENE (OR) BENZ[J]ACEANTHRYLENE, 1,2-DIHYDRO-3-METHYL-

Waste Code: U158
Waste Description: 4,4'-METHYLENEBIS(2-CHLOROANILINE) (OR) BENZENAMINE, 4,4'-METHYLENEBIS[2-CHLORO-

Waste Code: U159
Waste Description: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

Waste Code: U160
Waste Description: 2-BUTANONE, PEROXIDE (R,T) (OR) METHYL ETHYL KETONE PEROXIDE (R,T)

Waste Code: U161
Waste Description: 4-METHYL-2-PENTANONE (I) (OR) METHYL ISOBUTYL KETONE (I) (OR) PENTANOL, 4-METHYL-

Waste Code: U162
Waste Description: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

Waste Code: U163
Waste Description: GUANIDINE, N-METHYL-N'-NITRO-N-NITROSO- (OR) MNNG

Waste Code: U164

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Waste Description: 4(1H)-PYRIMIDINONE, 2,3-DIHYDRO-6-METHYL-2-THIOXO- (OR) METHYLTHIOURACIL

Waste Code: U165
Waste Description: NAPHTHALENE

Waste Code: U166
Waste Description: 1,4-NAPHTHALENEDIONE (OR) 1,4-NAPHTHOQUINONE

Waste Code: U167
Waste Description: 1-NAPTHALENAMINE (OR) ALPHA-NAPHTHYLAMINE

Waste Code: U168
Waste Description: 2-NAPTHALENAMINE (OR) BETA-NAPHTHYLAMINE

Waste Code: U169
Waste Description: BENZENE, NITRO- (OR) NITROBENZENE (I,T)

Waste Code: U170
Waste Description: P-NITROPHENOL (I,T) (OR) PHENOL, 4-NITRO-

Waste Code: U171
Waste Description: 2-NITROPROPANE (I,T) (OR) PROPANE, 2-NITRO- (I,T)

Waste Code: U172
Waste Description: 1-BUTANAMINE, N-BUTYL-N-NITROSO- (OR) N-NITROSODI-N-BUTYLAMINE

Waste Code: U173
Waste Description: ETHANOL, 2,2'-(NITROSOIMINO)BIS- (OR) N-NITROSODIETHANOLAMINE

Waste Code: U174
Waste Description: ETHANAMINE, N-ETHYL-N-NITROSO- (OR) N-NITROSODIETHYLAMINE

Waste Code: U176
Waste Description: N-NITROSO-N-ETHYLUREA (OR) UREA, N-ETHYL-N-NITROSO-

Waste Code: U177
Waste Description: N-NITROSO-N-METHYLUREA (OR) UREA, N-METHYL-N-NITROSO-

Waste Code: U178
Waste Description: CARBAMIC ACID, METHYLNITROSO-, ETHYL ESTER (OR) N-NITROSO-N-METHYLURETHANE

Waste Code: U179
Waste Description: N-NITROSOPIPERIDINE (OR) PIPERIDINE, 1-NITROSO-

Waste Code: U180
Waste Description: N-NITROSOPYRROLIDINE (OR) PYRROLIDINE, 1-NITROSO-

Waste Code: U181
Waste Description: 5-NITRO-O-TOLUIDINE (OR) BENZENAMINE, 2-METHYL-5-NITRO

Waste Code: U182
Waste Description: 1,3,5-TRIOXANE, 2,4,6-TRIMETHYL- (OR) PARALDEHYDE

Waste Code: U183
Waste Description: BENZENE, PENTACHLORO- (OR) PENTACHLOROBENZENE

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Waste Code: U184
Waste Description: ETHANE, PENTACHLORO- (OR) PENTACHLOROETHANE

Waste Code: U185
Waste Description: BENZENE, PENTACHLORONITRO- (OR) PENTACHLORONITROBENZENE (PCNB)

Waste Code: U186
Waste Description: 1,3-PENTADIENE (I) (OR) 1-METHYLBUTADIENE (I)

Waste Code: U187
Waste Description: ACETAMIDE, N-(4-ETHOXYPHENYL)- (OR) PHENACETIN

Waste Code: U188
Waste Description: PHENOL

Waste Code: U189
Waste Description: PHOSPHORUS SULFIDE (R) (OR) SULFUR PHOSPHIDE (R)

Waste Code: U190
Waste Description: 1,3-ISOBENZOFURANDIONE (OR) PHTHALIC ANHYDRIDE

Waste Code: U191
Waste Description: 2-PICOLINE (OR) PYRIDINE, 2-METHYL-

Waste Code: U192
Waste Description: BENZAMIDE, 3,5-DICHLORO-N-(1,1-DIMETHYL-2-PROPYNYL)- (OR) PRONAMIDE

Waste Code: U193
Waste Description: 1,2-OXATHIOLANE, 2,2-DIOXIDE (OR) 1,3-PROPANE SULTONE

Waste Code: U194
Waste Description: 1-PROPANAMINE (I,T) (OR) N-PROPYLAMINE (I,T)

Waste Code: U196
Waste Description: PYRIDINE

Waste Code: U197
Waste Description: 2,5-CYCLOHEXADIENE-1,4-DIONE (OR) P-BENZOQUINONE

Waste Code: U200
Waste Description: RESERPINE (OR) YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL)OXY]-, METHYL ESTER, (3BETA, 16BETA, 17ALPHA, 18BETA, 20ALPHA)-

Waste Code: U201
Waste Description: 1,3-BENZENEDIOL (OR) RESORCINOL

Waste Code: U203
Waste Description: 1,3-BENZODIOXOLE, 5-(2-PROPENYL)- (OR) SAFROLE

Waste Code: U204
Waste Description: SELENIOUS ACID (OR) SELENIUM DIOXIDE

Waste Code: U205
Waste Description: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

Waste Code: U206

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Waste Description: D-GLUCOSE, 2-DEOXY-2-[[(METHYLNITROSOAMINO)-CARBONYL]AMINO]- (OR) GLUCOPYRANOSE, 2-DEOXY-2-(3-METHYL-3-NITROSOUREIDO)-,D- (OR) STREPTOZOTOCIN

Waste Code: U207
Waste Description: 1,2,4,5-TETRACHLOROBENZENE (OR) BENZENE, 1,2,4,5-TETRACHLORO-

Waste Code: U208
Waste Description: 1,1,1,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,1,2-TETRACHLORO-

Waste Code: U209
Waste Description: 1,1,2,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,2,2-TETRACHLORO-

Waste Code: U210
Waste Description: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

Waste Code: U211
Waste Description: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

Waste Code: U213
Waste Description: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

Waste Code: U214
Waste Description: ACETIC ACID, THALLIUM(1+) SALT (OR) THALLIUM(I) ACETATE

Waste Code: U215
Waste Description: CARBONIC ACID, DITHALLIUM(1+) SALT (OR) THALLIUM(I) CARBONATE

Waste Code: U216
Waste Description: THALLIUM CHLORIDE TLCL (OR) THALLIUM(I) CHLORIDE

Waste Code: U217
Waste Description: NITRIC ACID, THALLIUM(1+) SALT (OR) THALLIUM(I) NITRATE

Waste Code: U218
Waste Description: ETHANETHIOAMIDE (OR) THIOACETAMIDE

Waste Code: U219
Waste Description: THIOUREA

Waste Code: U220
Waste Description: BENZENE, METHYL- (OR) TOLUENE

Waste Code: U221
Waste Description: BENZENEDIAMINE, AR-METHYL- (OR) TOLUENEDIAMINE

Waste Code: U222
Waste Description: BENZENAMINE, 2-METHYL-, HYDROCHLORIDE (OR) O-TOLUIDINE HYDROCHLORIDE

Waste Code: U223
Waste Description: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Waste Code: U225
Waste Description: BROMOFORM (OR) METHANE, TRIBROMO-

Waste Code: U226
Waste Description: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

Waste Code: U227
Waste Description: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

Waste Code: U228
Waste Description: ETHENE, TRICHLORO- (OR) TRICHLOROETHYLENE

Waste Code: U234
Waste Description: 1,3,5-TRINITROBENZENE (R,T) (OR) BENZENE, 1,3,5-TRINITRO-

Waste Code: U235
Waste Description: 1-PROPANOL, 2,3-DIBROMO-, PHOSPHATE (3:1) (OR) TRIS(2,3,-DIBROMOPROPYL) PHOSPHATE

Waste Code: U236
Waste Description: 2,7-NAPHTHALENEDISULFONIC ACID,3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)BIS[5-AMINO -4-HYDROXY]-, TETRASODIUM SALT (OR) TRYPAN BLUE

Waste Code: U237
Waste Description: 2,4-(1H,3H)-PYRIMIDINEDIONE, 5-[BIS(2-CHLOROETHYL)AMINO]- (OR) URACIL MUSTARD

Waste Code: U238
Waste Description: CARBAMIC ACID, ETHYL ESTER (OR) ETHYL CARBAMATE (URETHANE)

Waste Code: U239
Waste Description: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Waste Code: U240
Waste Description: 2,4-D, SALTS & ESTERS (OR) ACETIC ACID, (2,4-DICHLOROPHENOXY)-, SALTS & ESTERS (OR) DICHLOROPHENOXYACETIC ACID 2,4-D

Waste Code: U243
Waste Description: 1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- (OR) HEXACHLOROPROPENE

Waste Code: U244
Waste Description: THIOPEROXYDICARBONIC DIAMIDE [(H2N)C(S)]2S2, TETRAMETHYL- (OR) THIRAM

Waste Code: U246
Waste Description: CYANOGEN BROMIDE (CN)BR

Waste Code: U247
Waste Description: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-METHOXY- (OR) METHOXYCHLOR

Waste Code: U248
Waste Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYL-BUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS OF 0.3% OR LESS (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS OF 0.3% OR LESS

Waste Code: U249
Waste Description: ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS OF 10% OR LESS

Waste Code: U271
Waste Description: BENOMYL (OR) CARBAMIC ACID, [1-[(BUTYLAMINO)CARBONYL]-1H-BENZIMIDAZOL-2-YL]-, METHYL ESTER

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

Waste Code: U278
Waste Description: BENDIOCARB (OR) 1,3-BENZODIOXOL-4-OL, 2,2-DIMETHYL-, METHYL CARBAMATE

Waste Code: U279
Waste Description: U279

Waste Code: U280
Waste Description: BARBAN (OR) CARBAMIC ACID, (3-CHLOROPHENYL)-, 4-CHLORO-2-BUTYNYL ESTER

Waste Code: U328
Waste Description: BENZENAMINE, 2-METHYL- (OR) O-TOLUIDINE

Waste Code: U353
Waste Description: BENZENAMINE, 4-METHYL- (OR) P-TOLUIDINE

Waste Code: U359
Waste Description: ETHANOL, 2-ETHOXY- (OR) ETHYLENE GLYCOL MONOETHYL ETHER

Waste Code: U364
Waste Description: BENDIOCARB PHENOL (OR) 1,3-BENZODIOXOL-4-OL, 2,2-DIMETHYL-

Waste Code: U367
Waste Description: 7-BENZOFURANOL, 2,3-DIHYDRO-2,2-DIMETHYL- (OR) CARBOFURAN PHENOL

Waste Code: U372
Waste Description: CARBAMIC ACID, 1H-BENZIMIDAZOL-2-YL, METHYL ESTER (OR) CARBENDAZIM

Waste Code: U373
Waste Description: CARBAMIC ACID, PHENYL-, 1-METHYLETHYL ESTER (OR) PROPHAM

Waste Code: U378
Waste Description: CARBAMODITHIOIC ACID, (HYDROXYMETHYL) METHYL-, MONOPOTASSIUM SALT (OR) POTASSIUM N-HYDROXYMETHYL- N-METHYLDI-THIOCARBAMATE

Waste Code: U387
Waste Description: CARBAMOTHIOIC ACID, DIPROPYL-, S-(PHENYLMETHYL) ESTER (OR) PROSULFOCARB

Waste Code: U389
Waste Description: CARBAMOTHIOIC ACID, BIS(1-METHYLETHYL)-, S-(2,3,3-TRICHLORO-2-PROPENYL) ESTER (OR) TRIALLATE

Waste Code: U394
Waste Description: A2213 (OR) ETHANIMIDOTHIOIC ACID, 2-(DIMETHYLAMINO)-N-HYDROXY-2-OXO-, METHYL ESTER

Waste Code: U395
Waste Description: DIETHYLENE GLYCOL, DICARBAMATE (OR) ETHANOL, 2,2'-OXYBIS-, DICARBAMATE

Waste Code: U404
Waste Description: U404

Waste Code: U409
Waste Description: CARBAMIC ACID, [1,2-PHENYLENEBIS (IMINOCARBONOTHIOYL)]BIS-, DIMETHYL ESTER (OR) THIOPHANATE-METHYL

Waste Code: U410

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

Waste Description: ETHANIMIDOTHIOIC ACID, N,N'-[THIOBIS[(METHYLIMINO)CARBONYLOXY]]BIS-, DIMETHYL ESTER (OR) THIODICARB

Waste Code: U411
Waste Description: U411

Waste Code: U480
Waste Description: 2,4,6, TRIBROMPHENOL (I.E.; DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUES, AND SPILL RESIDUES THEREOF)

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	E.O. SMITH HIGH SCHOOL (DISTRICT 19)
Legal Status:	Municipal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1235 STORRS ROAD
Owner/Operator City,State,Zip:	STORRS, CT 06268
Owner/Operator Telephone:	860-487-2215
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	DSTANAVAGE@EOSMITH.ORG

Owner/Operator Indicator:	Operator
Owner/Operator Name:	E.O. SMITH HIGH SCHOOL (DISTRICT 19)
Legal Status:	Municipal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1235 STORRS ROAD
Owner/Operator City,State,Zip:	STORRS, CT 06268
Owner/Operator Telephone:	860-487-2215
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	DSTANAVAGE@EOSMITH.ORG

Historic Generators:

Receive Date:	20190117
Handler Name:	E.O. SMITH HIGH SCHOOL (DISTRICT 19)
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:
NAICS Code: 611110
NAICS Description: ELEMENTARY AND SECONDARY SCHOOLS

Facility Has Received Notices of Violations:

E.O. SMITH HIGH SCHOOL (DISTRICT 19) (Continued) **1024878404**

Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

D17 **MANSFIELD TOWN OF** **CT MANIFEST** **S125684874**
North **1235 STORRS RD** **N/A**
1/8-1/4 **MANSFIELD CENTER, CT 06268**
0.170 mi.
895 ft. **Site 5 of 10 in cluster D**

Relative:
Lower

Actual:
632 ft.

CT MANIFEST:

Name:	MANSFIELD TOWN OF
Address:	1235 STORRS RD
City,State,Zip:	MANSFIELD CENTER, CT 06268
Phone:	Not reported
Country:	Not reported
Manifest ID:	CTF1030861
EPA ID:	CTP000023107

Hazardous Waste Manifest:

Year:	2001
Manifest:	CTF1030861
EPA ID:	CTP000023107
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	MANSFIELD CENTER, CT 06268
Discrepancies:	Y
Date Shipped:	2001-10-30
Date Received:	2001-10-31
Transporter 2 Date:	Not reported
TSDF EPA ID:	CT5000001495
TSDF Name:	NORTHEAST LAMP RECYCLING INC
TSDF Address:	250 MAIN ST
TSDF City,State,Zip:	EAST WINDSOR, CT 06088
TSDF Country:	USA
Transporter EPA ID:	CT5000001495
Transporter Name:	NORTHEAST LAMP RECYCLING INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	ENVIRONMENTALLY HAZ. SUBSTANCES,SOLID
Number of Containers:	002
Container Type:	DF
Quantity/Weight/Volume:	200/P
Batch Number:	4767, 4767
EPA Waste Codes:	D009 - MERCURY
Copies:	1, 2
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

MANSFIELD TOWN OF (Continued) **S125684874**

Year:	2000
Manifest:	CTF0933682
EPA ID:	CTP000023107
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	MANSFIELD CENTER, CT 06268
Discrepancies:	Y
Date Shipped:	2000-06-29
Date Received:	2000-06-29
Transporter 2 Date:	Not reported
TSDF EPA ID:	CT5000001495
TSDF Name:	NORTHEAST LAMP RECYCLING INC
TSDF Address:	250 MAIN ST
TSDF City,State,Zip:	EAST WINDSOR, CT 06088
TSDF Country:	USA
Transporter EPA ID:	CT5000001495
Transporter Name:	NORTHEAST LAMP RECYCLING INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	ENVIRONMENTALLY HAZ. SUBSTANCES,SOLID
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	100/P
Batch Number:	3815, 3815
EPA Waste Codes:	D009 - MERCURY
Copies:	1, 2
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	1999
Manifest:	CTF0871902
EPA ID:	CTP000023107
Generator Mailing Address:	1235 STORRS RD
Generator City,State,Zip:	MANSFIELD CENTER, CT 06268
Discrepancies:	N
Date Shipped:	1999-11-05
Date Received:	1999-11-06
Transporter 2 Date:	Not reported
TSDF EPA ID:	CT5000001495
TSDF Name:	NORTHEAST LAMP RECYCLING INC
TSDF Address:	250 MAIN ST
TSDF City,State,Zip:	EAST WINDSOR, CT 06088
TSDF Country:	USA
Transporter EPA ID:	CT5000001495
Transporter Name:	NORTHEAST LAMP RECYCLING INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported

MANSFIELD TOWN OF (Continued) **S125684874**

Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	ENVIRONMENTALLY HAZ. SUBSTANCES,SOLID
Number of Containers:	005
Container Type:	DF
Quantity/Weight/Volume:	750/P
Batch Number:	3257, 3257
EPA Waste Codes:	D009 - MERCURY
Copies:	1, 2
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

D18 **STORRS COMMONS LAUNDRY CENTER** **CT MANIFEST** **S125683818**
North **1244 STORRS RD** **N/A**
1/8-1/4 **STORRS, CT 06269**
0.179 mi.
944 ft. **Site 6 of 10 in cluster D**

Relative: **Lower**

Actual: **630 ft.**

CT MANIFEST:

Name:	STORRS COMMONS LAUNDRY CENTER
Address:	1244 STORRS RD
City,State,Zip:	STORRS, CT 06269
Phone:	Not reported
Country:	Not reported
Manifest ID:	CTC0221173
EPA ID:	CTP000009709

Hazardous Waste Manifest:

Year:	1989
Manifest:	CTC0221173
EPA ID:	CTP000009709
Generator Mailing Address:	1244 STORRS RD
Generator City,State,Zip:	STORRS, CT 06269
Discrepancies:	N
Date Shipped:	1989-07-20
Date Received:	1989-07-20
Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY KLEEN CORP 2-070-01
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06107
TSDF Country:	USA
Transporter EPA ID:	ILD051060408
Transporter Name:	SAFETY-KLEEN CORP (TRANSPORTER ONLY)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	WASTE PERCHLOROETHYLENE
Number of Containers:	002

STORRS COMMONS LAUNDRY CENTER (Continued) **S125683818**

Container Type:	CF
Quantity/Weight/Volume:	160/P
Batch Number:	999999
EPA Waste Codes:	F002 - THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Copies:	1
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

D19 **STORRS COMMONS** **CT UST** **U004246471**
North **1244 STORRS RD** **N/A**
1/8-1/4 **STORRS, CT 06268**
0.179 mi.
944 ft. **Site 7 of 10 in cluster D**

Relative: **Lower**

Actual: **630 ft.**

UST:

Name:	STORRS COMMONS
Address:	1244 STORRS RD
Address 2:	Not reported
City,State,Zip:	STORRS 06268
Facility ID:	78-1157
Substance:	Gasoline
Last Use Date:	07/01/1986
Tank ID:	1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	5000
Install Date:	01/01/1950
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.80407
Longitude:	-72.2434
Tank Latitude:	41.80407
Tank Longitude:	-72.2434

Contact:

Facility ID:	78-1157
Owner Name:	STORRS ASSOC
Owner Address:	PO BOX 476
Owner Address 2:	Not reported
Owner Phone:	(203) 429-9820
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS MANSFIELD, CT 062680476
Affiliation Type:	Owner

STORRS COMMONS (Continued) **U004246471**

Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-1157
Owner Name:	STORRS ASSOC
Owner Address:	PO BOX 476
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS MANSFIELD, CT 062680476
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

D20 **STORRS COMMONS LAUNDRY** **CT MANIFEST** **S125684261**
North **1244 STORRS RD** **N/A**
1/8-1/4 **STORRS, CT 06268**
0.179 mi.
944 ft. **Site 8 of 10 in cluster D**

Relative: **Lower**
Actual: **630 ft.**

CT MANIFEST:

Name:	STORRS COMMONS LAUNDRY
Address:	1244 STORRS RD
City,State,Zip:	STORRS, CT 06268
Phone:	Not reported
Country:	Not reported
Manifest ID:	CTF0213391
EPA ID:	CTP000014504

Hazardous Waste Manifest:

Year:	1993
Manifest:	CTF0230810
EPA ID:	CTP000014504
Generator Mailing Address:	1244 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	1993-06-17
Date Received:	1993-06-17
Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY KLEEN CORP 2 070 01
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06107
TSDF Country:	USA
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY KLEEN CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA

STORRS COMMONS LAUNDRY (Continued) **S125684261**

US DOT Description:	WASTE TETRACHLOROETHYLENE
Number of Containers:	001
Container Type:	DF
Quantity/Weight/Volume:	195/P
Batch Number:	999999
EPA Waste Codes:	F002 - THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Copies:	1
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	1993
Manifest:	CTF0231010
EPA ID:	CTP000014504
Generator Mailing Address:	1244 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	1993-08-09
Date Received:	1993-08-09
Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY KLEEN CORP 2 070 01
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06107
TSDF Country:	USA
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY KLEEN CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	WASTE TETRACHLOROETHYLENE
Number of Containers:	001
Container Type:	DM
Quantity/Weight/Volume:	20/P
Batch Number:	999999
EPA Waste Codes:	F002 - THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

STORRS COMMONS LAUNDRY (Continued) **S125684261**

	SPENT SOLVENT MIXTURES.
Copies:	1
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported
Year:	1993
Manifest:	CTF0316920
EPA ID:	CTP000014504
Generator Mailing Address:	1244 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	1993-05-20
Date Received:	1993-05-20
Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY KLEEN CORP 2 070 01
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06107
TSDF Country:	USA
Transporter EPA ID:	ILD051060408
Transporter Name:	SAFETY KLEEN CORP (TRANSP)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	WASTE TETRACHLORO.
Number of Containers:	002
Container Type:	DM
Quantity/Weight/Volume:	120/P
Batch Number:	999999
EPA Waste Codes:	F002 - THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Copies:	1
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported
Year:	1993
Manifest:	CTF0213391
EPA ID:	CTP000014504
Generator Mailing Address:	1244 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N

STORRS COMMONS LAUNDRY (Continued) **S125684261**

Date Shipped:	1993-03-25
Date Received:	1993-03-25
Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY KLEEN CORP 2 070 01
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06107
TSDF Country:	USA
Transporter EPA ID:	ILD051060408
Transporter Name:	SAFETY KLEEN CORP (TRANSP)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	WASTE TETRACHLOROETHYLENE
Number of Containers:	001
Container Type:	DM
Quantity/Weight/Volume:	60/P
Batch Number:	999999
EPA Waste Codes:	F002 - THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Copies:	1
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	1993
Manifest:	CTF0100552
EPA ID:	CTP000014504
Generator Mailing Address:	1244 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	1993-02-24
Date Received:	1993-02-24
Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY KLEEN CORP 2 070 01
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06107
TSDF Country:	USA
Transporter EPA ID:	ILD051060408
Transporter Name:	SAFETY KLEEN CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA

STORRS COMMONS LAUNDRY (Continued) **S125684261**

Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	WASTE TETRACHLORO.
Number of Containers:	002
Container Type:	DF
Quantity/Weight/Volume:	390/P
Batch Number:	999999
EPA Waste Codes:	F002 - THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Copies:	1
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

Year:	1993
Manifest:	CTF0212314
EPA ID:	CTP000014504
Generator Mailing Address:	1244 STORRS RD
Generator City,State,Zip:	STORRS, CT 06268
Discrepancies:	N
Date Shipped:	1993-04-20
Date Received:	1993-04-20
Transporter 2 Date:	Not reported
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY KLEEN CORP 2 070 01
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06107
TSDF Country:	USA
Transporter EPA ID:	ILD051060408
Transporter Name:	SAFETY KLEEN CORP (TRANSP)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter 2 EPA ID:	Not reported
Transporter 2 Name:	Not reported
Transporter 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Transporter 2 Country:	USA
US DOT Description:	WASTE TETRACHLORO.
Number of Containers:	002
Container Type:	DM
Quantity/Weight/Volume:	120/P
Batch Number:	999999
EPA Waste Codes:	F002 - THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE,

STORRS COMMONS LAUNDRY (Continued) **S125684261**

ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Copies:	1
Alternate Facility Name:	Not reported
Alternate Facility Address:	Not reported
Alternate Facility State:	Not reported
Alternate Facility Date:	Not reported

D21 **E.O. SMITH HIGH SCHOOL** **CT LUST S105457749**
North **1245 STORRS ROAD** **CT CPCS N/A**
1/8-1/4 **STORRS MANSFIELD, CT 06268**
0.180 mi.
952 ft. **Site 9 of 10 in cluster D**

Relative:
Lower

Actual:
630 ft.

LUST:

Name:	E.O. SMITH HIGH SCHOOL
Name 2:	Not reported
Address:	1245 STORRS ROAD
Address 2:	Not reported
City,State,Zip:	STORRS MANSFIELD, CT 06268
LUST Case Id:	31363
Release Date:	Not reported
Site Case ID:	9803460
Substance:	Not reported
Release Source:	Not reported
Release Cause:	Not reported
Release Identified:	Not reported
Case Number:	Not reported
Release Quantity:	Not reported
Facility City Number:	78

Detail As of 06/2020:

Name:	E.O. SMITH HIGH SCHOOL
Name 2:	Not reported
Address:	1245 STORRS ROAD
City,State,Zip:	STORRS MANSFIELD, CT 06268
Address 2:	Not reported
LUST Id:	3314
UST Facility Id:	Not reported
LUST Case Id:	31363
Lust Status:	Investigation
Processing Status:	Not reported
EPA Reportable:	False
Motor Fuel:	False
Diesel:	False
Gasoline:	False
Other:	False
Other Release:	Not reported
No Release:	False
Leak:	False
Tank:	False
Piping:	False
Overfill:	False
Removal:	False

E.O. SMITH HIGH SCHOOL (Continued) **S105457749**

Incident Date:	06/03/1998
Entry Date:	Not reported
Site Case Id:	9803460
UST Site Id:	Not reported
Cost Recovery Spill Case #:	Not reported
Old SITS Number:	Not reported
Case Log Id:	Not reported
Monthly Report Id:	0
UST Owner Id:	Not reported
LUST Owner Id:	Not reported
UST Event Id:	3350
Contact Info:	Not reported
Contact EMail:	Not reported
Site Contact City,St,Zip:	UNKNOWN, CT
2nd Contact:	Not reported
2nd Contact EMail:	Not reported
2nd Contact Address:	Not reported
2nd Contact City,St,Zip:	UNKNOWN
2nd Contact Address 2:	Not reported
2nd Contact City 2:	Not reported
2nd Contact Phone Number:	Not reported
2nd Contact Fax Number:	Not reported
2nd Contact Type:	Not reported
Facility City Num:	78
Site Contact:	John Jackman
Site Contact Address:	Fire Marshal
Site Contact Add 2:	Not reported
Site Contact City 2:	Storrs Mansfield
Site Contact Phone:	(860) 429-3328
Site Contact Fax:	Not reported
Site Contact Type:	Not reported
Department Contact 1:	Not reported
Department Contact 2:	Not reported
Referral Source:	Not reported
Offsite Source:	False
Date Referred:	Not reported
Emergency:	False
Private Heating Fuel:	False
Commercial Heating Fuel:	True
Commercial HF < 2100 Gal.:	False
Commercial HF > 2100 Gal.:	False
Commercial HF - Size Unk:	True
No LUST Site:	False
Cost Recvry Prgm Candidate:	False
OCSRD Complete:	True
Follow Up Flag:	False
Alternate Water Supply:	False
Relocation:	False
Responsible Party:	False
Responsible EMail:	Not reported
Resp Party Name:	Not reported
Resp Party Address:	Not reported
Resp Party City,St,Zip:	Not reported
Resp Party Town Number:	UNKNOWN
Resp Party Phone:	Not reported
Resp Party Fax:	Not reported
Resp Party Name 2:	Not reported

E.O. SMITH HIGH SCHOOL (Continued) **S105457749**

Resp Party Address 2:	Not reported
Resp Party Phone 2:	Not reported
Investigator Id:	29
Follow Update:	Not reported
Area Lextent:	Not reported
Annual Precipitation:	Not reported
Affected Population:	Not reported
Population Setting:	Not reported
Ground Water Direction:	Not reported
Ground Water Gradient:	Not reported
Hydro Basin:	Not reported
Drastic:	Not reported
Geo Setting:	Not reported
Ground Water Classification:	Not reported
Receptor:	Not reported
Ground Water Flow Direction:	Not reported
Ground Water Depth:	Not reported
Areas Of Concern:	Not reported
Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlayed:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	False
Install Micro Wells:	False
Ground Water Sample:	False
Soil Sample:	False
Soil Gas:	False
Site Inspect:	False
Soil Excavate:	False
Geo Probe:	False
Survey:	False
Potable Well Sample:	False
Sample MWS:	False
Ground Water Gauging:	False
Soil Venting:	False
Active:	False
NOV Action:	None
NOV Issued:	Not reported
NOV Due:	Not reported
NOV Received:	Not reported
NOV Closed:	Not reported
NOV Disc Date:	Not reported
NOV Issued Date:	Not reported
NOV Compliance Sched:	Not reported
NOV Admin Order:	Not reported
NOV Referred To Ag:	Not reported
Stop All NOV Actions:	False
Release Invest Rpt:	False
DEP App Letter 1:	False
Correct Action Plan:	False
DEP App Letter 2:	False
Rem Sys Install:	False
Rem Sys Install Date:	Not reported
Closure Date:	Not reported

E.O. SMITH HIGH SCHOOL (Continued) **S105457749**

Rem Sys Monitoring Rpt:	False
Qrtly Gwater Mon Rpts:	False
Closure Req Rpt:	False
DEP Closure Letter:	False
Referred To:	Not reported
No Wells:	Not reported
Lph Wells:	Not reported
User Stamp:	Allison Forrest/forresta
Date Stamp:	08/26/2014
Correspondence:	Not reported
Environmental Impact:	Not reported
FollowUp:	Not reported
GW Comments:	Not reported
Location Desc:	Not reported
NOV Comments:	Not reported
Release Desc:	Not reported
Running Comments:	Spills Files
Work Performed:	Not reported

CPCS:

Name:	E.O. SMITH HIGH SCHOOL
Address:	1245 STORRS ROAD
City,State,Zip:	STORRS MANSFIELD, CT
Site Type:	LUST
Lust Status code:	2
Lust Status:	Investigation
PTP Form:	Not reported
Program:	Not reported
Comments:	Not reported
Site Type Definition:	Leaking Underground Storage Tanks Investigation

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D22 **CVS PHARMACY #10317** **RCRA-LQG** **1019899804**
North **8 ROYCE CIR** **FINDS** **CTR000515577**
1/8-1/4 **MANSFIELD, CT 06268** **ECHO**
0.198 mi.
1044 ft. **Site 10 of 10 in cluster D**

Relative: **Lower**

Actual: **629 ft.**

RCRA-LQG:

Date Form Received by Agency:		20220217
Handler Name:	CVS PHARMACY #10317	
Handler Address:		8 ROYCE CIR
Handler City,State,Zip:		MANSFIELD, CT 06268
EPA ID:		CTR000515577
Contact Name:		NICOLE WILKINSON
Contact Address:		CVS DR MC2340
Contact City,State,Zip:		WOONSOCKET, RI 02895
Contact Telephone:		401-770-7132
Contact Fax:		Not reported
Contact Email:		NICOLE.WILKINSON@CVSHEALTH.COM
Contact Title:		SENIOR DIRECTOR, CORPORATE ENVIRONMENTAL
EPA Region:		01
Land Type:		Private
Federal Waste Generator Description:		Large Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		2021
Accessibility:		Not reported

CVS PHARMACY #10317 (Continued) **1019899804**

Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	CVS DR MC2340
Mailing City,State,Zip:	WOONSOCKET, RI 02895
Owner Name:	SCT STORRS CENTER LLC
Owner Type:	Private
Operator Name:	CONNECTICUT CVS PHARMACY LLC
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220226

CVS PHARMACY #10317 (Continued) **1019899804**

Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2019

Click Here for Biennial Reporting System Data:
Year: 2017

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D004
Waste Description:	ARSENIC
Waste Code:	D005
Waste Description:	BARIUM
Waste Code:	D006
Waste Description:	CADMIUM
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D008
Waste Description:	LEAD
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D010
Waste Description:	SELENIUM
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D016
Waste Description:	2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
Waste Code:	D018
Waste Description:	BENZENE
Waste Code:	D024
Waste Description:	M-CRESOL

CVS PHARMACY #10317 (Continued) **1019899804**

Waste Code: D027
Waste Description: 1,4-DICHLOROBENZENE

Waste Code: D035
Waste Description: METHYL ETHYL KETONE

Waste Code: D039
Waste Description: TETRACHLOROETHYLENE

Waste Code: P001
Waste Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Waste Code: P012
Waste Description: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

Waste Code: P075
Waste Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Waste Code: P188
Waste Description: BENZOIC ACID, 2-HYDROXY-, COMPD. WITH (3AS-CIS)-1,2,3,3A,8,8A-HEXAHYDRO-1,3A,8-TRIMETHYLPYRROLO[2,3-B]INDOL-5-YL METHYLCARBAMATE ESTER (1:1) (OR) PHYSOSTIGMINE SALICYLATE

Waste Code: U002
Waste Description: 2-PROPANONE (I) (OR) ACETONE (I)

Waste Code: U010
Waste Description: AZIRINO [2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[(AMINOCARBONYL)OXY]METHYL]-1,1A,2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA, 8AALPHA, 8BALPHA)]- (OR) MITOMYCIN C

Waste Code: U031
Waste Description: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

Waste Code: U034
Waste Description: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

Waste Code: U035
Waste Description: BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL

Waste Code: U044
Waste Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Waste Code: U058
Waste Description: 2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE

Waste Code: U059
Waste Description: 5,12-NAPHTHACENEDIONE, 8-ACETYL-10-[(3-AMINO-2,3,6-TRIDEOXY)-ALPHA-L-LYXO-HEXOPYRANOSYL)OXY]-7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-1-METHOXY-, (8S-CIS)- (OR) DAUNOMYCIN

CVS PHARMACY #10317 (Continued) **1019899804**

Waste Code: U070
Waste Description: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

Waste Code: U072
Waste Description: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

Waste Code: U089
Waste Description: DIETHYLSTILBESTEROL (OR) PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS, (E)-

Waste Code: U122
Waste Description: FORMALDEHYDE

Waste Code: U129
Waste Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Waste Code: U132
Waste Description: HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-

Waste Code: U150
Waste Description: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

Waste Code: U151
Waste Description: MERCURY

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U165
Waste Description: NAPHTHALENE

Waste Code: U188
Waste Description: PHENOL

Waste Code: U200
Waste Description: RESERPINE (OR) YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL)OXY]-, METHYL ESTER, (3BETA, 16BETA, 17ALPHA, 18BETA, 20ALPHA)-

Waste Code: U201
Waste Description: 1,3-BENZENEDIOL (OR) RESORCINOL

Waste Code: U205
Waste Description: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

Waste Code: U206
Waste Description: D-GLUCOSE, 2-DEOXY-2-[[(METHYLNITROSOAMINO)-CARBONYL]AMINO]- (OR) GLUCOPYRANOSE, 2-DEOXY-2-(3-METHYL-3-NITROSOUREIDO)-,D- (OR) STREPTOZOTOCIN

Waste Code: U210
Waste Description: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

Waste Code: U279
Waste Description: U279

CVS PHARMACY #10317 (Continued) **1019899804**

Waste Code: U411
Waste Description: U411

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: SCT STORRS CENTER LLC
Legal Status: Private
Date Became Current: 20121130
Date Ended Current: Not reported
Owner/Operator Address: 800 BOYLON ST SUITE 1300
Owner/Operator City,State,Zip: BOSTON, MA 02199
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SCT STORRS CENTER LLC
Legal Status: Private
Date Became Current: 20121130
Date Ended Current: Not reported
Owner/Operator Address: 800 BOYLON ST SUITE 1300
Owner/Operator City,State,Zip: BOSTON, MA 02199
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: CONNECTICUT CVS PHARMACY LLC
Legal Status: Private
Date Became Current: 20140928
Date Ended Current: Not reported
Owner/Operator Address: ONE CVS DR MAIL CODE 2340
Owner/Operator City,State,Zip: WOONSOCKET, RI 02895
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SCT STORRS CENTER LLC
Legal Status: Private
Date Became Current: 20121130
Date Ended Current: Not reported
Owner/Operator Address: 800 BOYLON ST SUITE 1300
Owner/Operator City,State,Zip: BOSTON, MA 02199
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: CONNECTICUT CVS PHARMACY LLC
Legal Status: Private
Date Became Current: 20140928
Date Ended Current: Not reported

CVS PHARMACY #10317 (Continued) **1019899804**

Owner/Operator Address:	1 CVS DR MC2340
Owner/Operator City,State,Zip:	WOONSOCKET, RI 02895
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	CONNECTICUT CVS PHARMACY LLC
Legal Status:	Private
Date Became Current:	20140928
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SCT STORRS CENTER LLC
Legal Status:	Private
Date Became Current:	20121130
Date Ended Current:	Not reported
Owner/Operator Address:	800 BOYLON ST SUITE 1300
Owner/Operator City,State,Zip:	BOSTON, MA 02199
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	CONNECTICUT CVS PHARMACY LLC
Legal Status:	Private
Date Became Current:	20140928
Date Ended Current:	Not reported
Owner/Operator Address:	ONE CVS DR MAIL CODE 2340
Owner/Operator City,State,Zip:	WOONSOCKET, RI 02895
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20180314
Handler Name: CVS PHARMACY #10317	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

CVS PHARMACY #10317 (Continued) **1019899804**

Receive Date: 20200224
Handler Name: CVS PHARMACY #10317
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20220217
Handler Name: CVS PHARMACY #10317
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20161005
Handler Name: CVS PHARMACY #10317
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 44611
NAICS Description: PHARMACIES AND DRUG STORES

NAICS Code: 446110
NAICS Description: PHARMACIES AND DRUG STORES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110069707464

CVS PHARMACY #10317 (Continued) **1019899804**

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1019899804
Registry ID:	110069707464
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110069707464
Name:	CVS PHARMACY #10317
Address:	8 ROYCE CIR
City,State,Zip:	MANSFIELD, CT 06268

---

23 **FORMER MARKLANDS GARAGE** **CT UST** **U003908382**
SE **1132 STORRS RD** **N/A**
1/8-1/4 **STORRS MANSFIELD, CT 06268**
0.212 mi.
1118 ft.

Relative:
Lower

Actual:
624 ft.

UST:

Name:	FORMER MARKLANDS GARAGE
Address:	1132 STORRS RD
Address 2:	Not reported
City,State,Zip:	STORRS MANSFIELD 06268
Facility ID:	78-1242
Substance:	Gasoline
Last Use Date:	02/01/1984
Tank ID:	A1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	1000
Install Date:	01/01/1950
Overfill Installed:	Not reported
Pipe Material:	Not reported
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.795738
Longitude:	-72.236305
Tank Latitude:	41.795738
Tank Longitude:	-72.236305

Contact:

Facility ID:	78-1242
Owner Name:	FORMER MARKLANDS GARAGE
Owner Address:	1132 STORRS RD
Owner Address 2:	Not reported

FORMER MARKLANDS GARAGE (Continued) **U003908382**

Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS MANSFIELD, CT 062682304
Affiliation Type:	Owner
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	78-1242
Owner Name:	FORMER MARKLANDS GARAGE
Owner Address:	1132 STORRS RD
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	STORRS MANSFIELD, CT 062682304
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

24
West
1/4-1/2
0.272 mi.
1436 ft.

UCONN BAT HSG SITE **FUDS** **1024899779** **N/A**

NO CITY, CT

Relative: Higher

Actual: 681 ft.

FUDS:

EPA Region:	1
Installation ID:	CT19799FA10300
Congressional District Number:	2
Name:	UCONN BAT HSG SITE
FUDS Number:	D01CT0986
City:	NO CITY
State:	CT
County:	Not reported
Object ID:	10033
USACE Division:	NAD
USACE District:	New England District (NAE)
Status:	Properties without projects
Current Owner:	Not reported
EMS Map Link:	https://fudsportal.usace.army.mil/ems/ems/inventory/map/map?id=54166
Eligibility:	Eligible
Has Projects:	No
NPL Status:	Not on the NPL
Property History:	According to testimony and public documents, the Army Special Training Program (ASTP) was active at the University and Army personnel took courses there. Quonset huts and a building shaped like an E were located in three separate areas, most of which were removed sometime in the 1950s. Records indicate the buildings were removed sometime prior to 1978.
Project Required:	No
Feature Description:	Not reported
Latitude:	41.8
Longitude:	-72.25

E25 **STEVE ROGERS** **CT CPCS** **S105457237**
North **13 DOG LN.** **N/A**
1/4-1/2 **MANSFIELD, CT 06268**
0.313 mi.
1653 ft. **Site 1 of 2 in cluster E**

Relative: **Lower**
Actual: **626 ft.**

CPCS:

Name:	STEVE ROGERS
Address:	13 DOG LN.
City,State,Zip:	MANSFIELD, CT 06268
Site Type:	LUST
Lust Status code:	4
Lust Status:	Lust Completed (DEP's significant hazard definition)
PTP Form:	Not reported
Program:	Not reported
Comments:	Not reported
Site Type Definition:	Leaking Underground Storage Tanks Completed

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F26 **HAROLD SDRWENLE** **CT LUST** **S108789761**
WNW **6 HILLSIDE CIRCLE** **CT SPILLS** **N/A**
1/4-1/2 **MANSFIELD, CT 06250**
0.319 mi.
1682 ft. **Site 1 of 3 in cluster F**

Relative: **Higher**
Actual: **685 ft.**

LUST:

Name:	HAROLD SDRWENLE
Name 2:	Not reported
Address:	6 HILLSIDE CIRCLE
Address 2:	Not reported
City,State,Zip:	MANSFIELD, CT 06250
LUST Case Id:	29692
Release Date:	Not reported
Site Case ID:	Not reported
Substance:	Not reported
Release Source:	Not reported
Release Cause:	Not reported
Release Identified:	Not reported
Case Number:	Not reported
Release Quantity:	Not reported
Facility City Number:	78

Detail As of 06/2020:

Name:	HAROLD SDRWENLE
Name 2:	Not reported
Address:	6 HILLSIDE CIRCLE
City,State,Zip:	MANSFIELD, CT 06250
Address 2:	Not reported
LUST Id:	1583
UST Facility Id:	Not reported
LUST Case Id:	29692
Lust Status:	Lust Completed
Processing Status:	Not reported
EPA Reportable:	False
Motor Fuel:	False
Diesel:	False
Gasoline:	False
Other:	False
Other Release:	Not reported
No Release:	False
Leak:	False

HAROLD SDRWENLE (Continued) **S108789761**

Tank:	False
Piping:	False
Overfill:	False
Removal:	False
Incident Date:	05/09/1996
Entry Date:	Not reported
Site Case Id:	Not reported
UST Site Id:	Not reported
Cost Recovery Spill Case #:	Not reported
Old SITS Number:	Not reported
Case Log Id:	Not reported
Monthly Report Id:	0
UST Owner Id:	Not reported
LUST Owner Id:	Not reported
UST Event Id:	1582
Contact Info:	Not reported
Contact EMail:	Not reported
Site Contact City,St,Zip:	UNKNOWN
2nd Contact:	Not reported
2nd Contact EMail:	Not reported
2nd Contact Address:	Not reported
2nd Contact City,St,Zip:	UNKNOWN
2nd Contact Address 2:	Not reported
2nd Contact City 2:	Not reported
2nd Contact Phone Number:	Not reported
2nd Contact Fax Number:	Not reported
2nd Contact Type:	Not reported
Facility City Num:	78
Site Contact:	Not reported
Site Contact Address:	Not reported
Site Contact Add 2:	Not reported
Site Contact City 2:	Not reported
Site Contact Phone:	Not reported
Site Contact Fax:	Not reported
Site Contact Type:	Not reported
Department Contact 1:	Not reported
Department Contact 2:	Not reported
Referral Source:	Not reported
Offsite Source:	False
Date Referred:	Not reported
Emergency:	False
Private Heating Fuel:	True
Commercial Heating Fuel:	True
Commercial HF < 2100 Gal.:	True
Commercial HF > 2100 Gal.:	False
Commercial HF - Size Unk:	False
No LUST Site:	False
Cost Recvry Prgm Candidate:	False
OCSRD Complete:	False
Follow Up Flag:	False
Alternate Water Supply:	False
Relocation:	False
Responsible Party:	False
Responsible EMail:	Not reported
Resp Party Name:	Not reported
Resp Party Address:	Not reported
Resp Party City,St,Zip:	Not reported

HAROLD SDRWENLE (Continued) **S108789761**

Resp Party Town Number:	UNKNOWN
Resp Party Phone:	Not reported
Resp Party Fax:	Not reported
Resp Party Name 2:	Not reported
Resp Party Address 2:	Not reported
Resp Party Phone 2:	Not reported
Investigator Id:	20
Follow Update:	Not reported
Area Lextent:	Not reported
Annual Precipitation:	Not reported
Affected Population:	Not reported
Population Setting:	Not reported
Ground Water Direction:	Not reported
Ground Water Gradient:	Not reported
Hydro Basin:	Not reported
Drastic:	Not reported
Geo Setting:	Not reported
Ground Water Classification:	Not reported
Receptor:	Not reported
Ground Water Flow Direction:	Not reported
Ground Water Depth:	Not reported
Areas Of Concern:	Not reported
Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlayed:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	False
Install Micro Wells:	False
Ground Water Sample:	False
Soil Sample:	False
Soil Gas:	False
Site Inspect:	False
Soil Excavate:	False
Geo Probe:	False
Survey:	False
Potable Well Sample:	False
Sample MWS:	False
Ground Water Gauging:	False
Soil Venting:	False
Active:	False
NOV Action:	None
NOV Issued:	Not reported
NOV Due:	Not reported
NOV Received:	Not reported
NOV Closed:	Not reported
NOV Disc Date:	Not reported
NOV Issued Date:	Not reported
NOV Compliance Sched:	Not reported
NOV Admin Order:	Not reported
NOV Referred To Ag:	Not reported
Stop All NOV Actions:	False
Release Invest Rpt:	False
DEP App Letter 1:	False
Correct Action Plan:	False

HAROLD SDRWENLE (Continued) **S108789761**

DEP App Letter 2:	False
Rem Sys Install:	False
Rem Sys Install Date:	Not reported
Closure Date:	Not reported
Rem Sys Monitoring Rpt:	False
Qrtly Gwater Mon Rpts:	False
Closure Req Rpt:	False
DEP Closure Letter:	False
Referred To:	Not reported
No Wells:	Not reported
Lph Wells:	Not reported
User Stamp:	Not reported
Date Stamp:	Not reported
Correspondence:	Not reported
Environmental Impact:	Not reported
FollowUp:	Not reported
GW Comments:	Not reported
Location Desc:	Not reported
NOV Comments:	Not reported
Release Desc:	Not reported
Running Comments:	Not reported
Work Performed:	Not reported

SPILLS:

Name:	Not reported
Address:	6 HILLSIDE CIRCLE
City,State,Zip:	MANSFIELD, CT
Year of Database:	96
Case Number:	2240
Who Took Spill:	ALEXANDER
Assigned To:	Not reported
Report Date:	05/09/1996
Report Time:	9
Date Release:	Not reported
Time Responded:	Not reported
Corrective Action Taken:	Not reported
Cause Info:	Not reported
Media Info:	Not reported
Release Type:	Not reported
Reported By:	JOHN JACKMAN
Phone:	Not reported
Representing:	FIRE DEPT
Terminated:	Y
Recovd (Total):	Not reported
Total (Water):	Not reported
Facility Status:	Not reported
Continuous Spill:	Not reported
Released Substance:	Not reported
Qty:	20 (Gallons)
Emergency Measure:	Not reported
Water Body:	Not reported
Discharger:	Not reported
Telephone:	Not reported
Responsible Party:	Not reported
RP Address 1:	Not reported
RP City,St,Zip:	Not reported

HAROLD SDRWENLE (Continued) **S108789761**

Historic:	Not reported
Waterbody:	Not reported
Time Stamp:	Not reported
Sr Inspector:	Not reported
At Inspctor:	Not reported
User Stamp:	Not reported
Comments:	Not reported

E27 **STEVE ROGERS** **CT LUST** **S104093479**
North **13 DOG LN.** **CT SPILLS** **N/A**
1/4-1/2 **MANSFIELD, CT 06250**
0.322 mi.
1700 ft. **Site 2 of 2 in cluster E**

Relative: **Lower**
Actual: **624 ft.**

LUST:

Name:	STEVE ROGERS
Name 2:	Not reported
Address:	13 DOG LN.
Address 2:	Not reported
City,State,Zip:	MANSFIELD, CT 06250
LUST Case Id:	30497
Release Date:	Not reported
Site Case ID:	Not reported
Substance:	Not reported
Release Source:	Not reported
Release Cause:	Not reported
Release Identified:	Not reported
Case Number:	Not reported
Release Quantity:	Not reported
Facility City Number:	78

Detail As of 06/2020:

Name:	STEVE ROGERS
Name 2:	Not reported
Address:	13 DOG LN.
City,State,Zip:	MANSFIELD, CT 06250
Address 2:	Not reported
LUST Id:	2426
UST Facility Id:	Not reported
LUST Case Id:	30497
Lust Status:	Lust Completed
Processing Status:	Not reported
EPA Reportable:	False
Motor Fuel:	False
Diesel:	False
Gasoline:	False
Other:	False
Other Release:	Not reported
No Release:	False
Leak:	False
Tank:	False
Piping:	False
Overfill:	False
Removal:	False
Incident Date:	10/06/1994
Entry Date:	Not reported
Site Case Id:	Not reported
UST Site Id:	Not reported

STEVE ROGERS (Continued) **S104093479**

Cost Recovery Spill Case #:	Not reported
Old SITS Number:	Not reported
Case Log Id:	Not reported
Monthly Report Id:	0
UST Owner Id:	Not reported
LUST Owner Id:	Not reported
UST Event Id:	2425
Contact Info:	Not reported
Contact EMail:	Not reported
Site Contact City,St,Zip:	UNKNOWN
2nd Contact:	Not reported
2nd Contact EMail:	Not reported
2nd Contact Address:	Not reported
2nd Contact City,St,Zip:	UNKNOWN
2nd Contact Address 2:	Not reported
2nd Contact City 2:	Not reported
2nd Contact Phone Number:	Not reported
2nd Contact Fax Number:	Not reported
2nd Contact Type:	Not reported
Facility City Num:	78
Site Contact:	Not reported
Site Contact Address:	Not reported
Site Contact Add 2:	Not reported
Site Contact City 2:	Not reported
Site Contact Phone:	Not reported
Site Contact Fax:	Not reported
Site Contact Type:	Not reported
Department Contact 1:	Not reported
Department Contact 2:	Not reported
Referral Source:	Not reported
Offsite Source:	False
Date Referred:	Not reported
Emergency:	False
Private Heating Fuel:	True
Commercial Heating Fuel:	False
Commercial HF < 2100 Gal.:	False
Commercial HF > 2100 Gal.:	False
Commercial HF - Size Unk:	False
No LUST Site:	False
Cost Recvry Prgm Candidate:	False
OCSRD Complete:	False
Follow Up Flag:	False
Alternate Water Supply:	False
Relocation:	False
Responsible Party:	False
Responsible EMail:	Not reported
Resp Party Name:	Not reported
Resp Party Address:	Not reported
Resp Party City,St,Zip:	Not reported
Resp Party Town Number:	UNKNOWN
Resp Party Phone:	Not reported
Resp Party Fax:	Not reported
Resp Party Name 2:	Not reported
Resp Party Address 2:	Not reported
Resp Party Phone 2:	Not reported
Investigator Id:	20
Follow Update:	Not reported

STEVE ROGERS (Continued) **S104093479**

Area Lextent:	Not reported
Annual Precipitation:	Not reported
Affected Population:	Not reported
Population Setting:	Not reported
Ground Water Direction:	Not reported
Ground Water Gradient:	Not reported
Hydro Basin:	Not reported
Drastic:	Not reported
Geo Setting:	Not reported
Ground Water Classification:	Not reported
Receptor:	Not reported
Ground Water Flow Direction:	Not reported
Ground Water Depth:	Not reported
Areas Of Concern:	Not reported
Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlayed:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	False
Install Micro Wells:	False
Ground Water Sample:	False
Soil Sample:	False
Soil Gas:	False
Site Inspect:	False
Soil Excavate:	False
Geo Probe:	False
Survey:	False
Potable Well Sample:	False
Sample MWS:	False
Ground Water Gauging:	False
Soil Venting:	False
Active:	False
NOV Action:	None
NOV Issued:	Not reported
NOV Due:	Not reported
NOV Received:	Not reported
NOV Closed:	Not reported
NOV Disc Date:	Not reported
NOV Issued Date:	Not reported
NOV Compliance Sched:	Not reported
NOV Admin Order:	Not reported
NOV Referred To Ag:	Not reported
Stop All NOV Actions:	False
Release Invest Rpt:	False
DEP App Letter 1:	False
Correct Action Plan:	False
DEP App Letter 2:	False
Rem Sys Install:	False
Rem Sys Install Date:	Not reported
Closure Date:	Not reported
Rem Sys Monitoring Rpt:	False
Qrtly Gwater Mon Rpts:	False
Closure Req Rpt:	False
DEP Closure Letter:	False

STEVE ROGERS (Continued) **S104093479**

Referred To:	Not reported
No Wells:	Not reported
Lph Wells:	Not reported
User Stamp:	Allison Forrest/forresta
Date Stamp:	08/26/2014
Correspondence:	Not reported
Environmental Impact:	Not reported
FollowUp:	Not reported
GW Comments:	Not reported
Location Desc:	Not reported
NOV Comments:	Not reported
Release Desc:	Not reported
Running Comments:	Spills Files
Work Performed:	Not reported

SPILLS:

Name:	Not reported
Address:	13 DOG LANE
City,State,Zip:	MANSFIELD, CT
Year of Database:	2006
Case Number:	200600228
Who Took Spill:	922
Assigned To:	Aceto, John
Report Date:	01/13/2006
Report Time:	06:00 PM
Date Release:	01/13/2006
Time Responded:	00:00 AM
Corrective Action Taken:	Removed, and Contained, and Contracted
Cause Info:	Other (OVERTURNED DRUM)
Media Info:	Ground Surface
Release Type:	petroleum
Reported By:	AMY SITTHIVANTHA
Phone:	860 4290612
Representing:	UCONN - STORRS
Terminated:	NO
Recovd (Total):	55
Total (Water):	0
Facility Status:	CLOSED
Continuous Spill:	False
Released Substance:	COOKING GREASE
Qty:	0.00 (Gallons)
Emergency Measure:	REPORTED OVERTURNED 55-GALLON DRUM - CONTAINING COOKING GREASE - ENVIRONMENTAL CONTRACTOR TO BE RETAINED
Water Body:	Not reported
Discharger:	SAME AS ABOVE
Telephone:	Not reported
Responsible Party:	true
RP Address 1:	Not reported
RP City,St,Zip:	CT
Historic:	False
Waterbody:	NA
Time Stamp:	2006-01-20 11:09:54
Sr Inspector:	Aceto, John
At Inspctor:	Aceto, John
User Stamp:	mgranill
Comments:	Not reported

STEVE ROGERS (Continued) **S104093479**

Action: Removed
Other Action: Not reported
Action: Contained
Other Action: Not reported
Action: Contracted
Other Action: Not reported
Agency ID: DEP
Other Agency: Not reported
DEP Bureau: BUREAU OF WASTE MANAGEMENT
DEP Agency: OIL AND CHEMICAL SPILL RESPONSE
Agency ID: LOCAL FIRE DEPARTMENT
Other Agency: Not reported
DEP Bureau: Not reported
DEP Agency: Not reported
Cause ID: Other
Other Cause: OVERTURNED DRUM
Media ID: Ground Surface
Other Media: Not reported
Class ID: Commercial
Other Class: Not reported
Release Type: petroleum
Other Release: Not reported

Name: Not reported
Address: 13 DOG LANE
City,State,Zip: MANSFIELD, CT
Year of Database: 2011
Case Number: 201108105
Who Took Spill: 205
Assigned To: SHULER, ROBERT
Report Date: 12/19/2011
Report Time: 38:00 AM
Date Release: 12/19/2011
Time Responded: 00:00 AM
Corrective Action Taken: Investigated
Cause Info: Container Failure
Media Info: Ground Surface
Release Type: petroleum
Reported By: John Jackman
Phone: 860 4293328
Representing: Fire Marshal Offic
Terminated: YES
Recovd (Total): 0
Total (Water): 0
Facility Status: CLOSED
Continuous Spill: False
Released Substance: COOKING GREASE
Qty: 0.00 (Gallons)
Emergency Measure: Leaking 55 gallons drum, staining to ground area. Advice on clean up needed.
Water Body: Other (none)
Discharger: WESTERN MASS RENDERING COMPANY
Telephone: 413 5696265
Responsible Party: true
RP Address 1: 94 FOSTER ROAD
RP City,St,Zip: SOUTHWICK, MA 01077-
Historic: False

STEVE ROGERS (Continued) **S104093479**

Waterbody: n/a
Time Stamp: 2012-01-17 14:32:13
Sr Inspector: Cox, Michael
At Inspctor: SHULER, ROBERT
User Stamp: mgranill
Comments: Not reported
Action: Investigated
Other Action: Not reported
Agency ID: Local Fire Marshal
Other Agency: Not reported
DEP Bureau: Not reported
DEP Agency: Not reported
Agency ID: DEP Dispatch
Other Agency: Not reported
DEP Bureau: Not reported
DEP Agency: Not reported
Cause ID: Container Failure
Other Cause: Not reported
Media ID: Ground Surface
Other Media: Not reported
Class ID: Commercial
Other Class: Not reported
Release Type: petroleum
Other Release: Not reported
Waterbody: Other
Other Wtrbody: none

Name: Not reported
Address: 13 DOG LANE
City,State,Zip: MANSFIELD, CT
Year of Database: 1994
Case Number: 5788
Who Took Spill: TORRES
Assigned To: Not reported
Report Date: 10/06/1994
Report Time: 955
Date Release: Not reported
Time Responded: Not reported
Corrective Action Taken: Not reported
Cause Info: Not reported
Media Info: Not reported
Release Type: Not reported
Reported By: JOHN JACKMAN
Phone: Not reported
Representing: Not reported
Terminated: Y
Recovd (Total): .
Total (Water): .
Facility Status: Not reported
Continuous Spill: Not reported
Released Substance: Not reported
Qty: . (Gallons)
Emergency Measure: Not reported
Water Body: Not reported
Discharger: Not reported
Telephone: Not reported
Responsible Party: Not reported

STEVE ROGERS (Continued) **S104093479**

RP Address 1: Not reported
RP City,St,Zip: Not reported
Historic: Not reported
Waterbody: Not reported
Time Stamp: Not reported
Sr Inspector: Not reported
At Inspctor: Not reported
User Stamp: Not reported
Comments: Not reported

Year of Database: 1994
Town of Spill: MANSFIELD
Case Number: 5788
OCSRD Inspector: 934
Spill Date: 10/06/94
Spill Time: 930
Report Date: 10/06/94
Report Time: 955
Reported By: JOHN JACKMAN
Representing: FIRE DEPT
Work Telephone: 2033
Home Telephone: Not reported
Telephone Pole#: .
Incident Type: PETROLEUM
Substance: 2 FUEL OIL
Quantity: . Gallon(s)
Concentration: .
Action Desc: Not reported
On Going: Not reported
Continuous Spill: Not reported
Release Status: Terminated, Contained
Misc Info: 1K LUST REMOVED W SOIL CONTAM FORMER UNIVERSAL FOOD AWAITING SOIL SAMPLES GRAVE APPEARS TO BE CLEAN CITY WATER/SEWER ON PROPERTY
Water Body: Not reported
Other Media: Not reported
Release Area: Ground Surface
Total (Water): .
Recovd (Water): .
Recovd (Total): .
Polluter Name: STEVE ROGERS
Polluted Address: 650 MIDDLE TNPK
Polluted City,St,Zip: MANSFIELD, CT 6250
Polluter Phone: 203-429-8455
Polluter Responisbility: Polluter accepts financial reponsibility
Unknown Responsibility: Not reported
Unknown Polluter: Not reported
Cleanup Action: TANK/SOIL REMOVED
Dun and Bradst#: Not reported
UST Unit: Not reported
Agency Notified: Not reported
State Agency: Not reported
Notify Date: .
Notify Time: . .
Other Agency: Not reported
Notify Other: Not reported
Notify Status: Not reported
Class1: Private

STEVE ROGERS (Continued) **S104093479**

Other Class:	Not reported
Cause1:	Leaking UST Report
Other Cause:	Not reported
Actions1:	Removed Tank
Other Actions:	Soil Removal
Cleanup Contractor:	Y
Contractor Name:	HIPSKY EXCAVATION
Did DEP Hire Contractor:	No
Date Contractor Hired:	.
When Contractor Requested:	Not reported
When Contractor Arrived:	Not reported
Who Took Spill:	TORRES
Badge # of Who Recieved Spill:	935
Who Assigned Spill:	WILLIAMSON
Badge # of Who Assigned Spill:	934
Date Assigned:	10/06/94
Assigned Time:	10:15
Spill Status:	Closed
Case 1136:	Not reported
Federal 311K:	.
Case #1:	Not reported
Case #2:	.
Cost Recovery:	.
Property Owner:	Not reported
Property Other:	.
Property Name:	Not reported
Property Addr:	Not reported
Property CSZ:	.
Polluter:	Not reported
Owner:	Not reported
Operator:	Not reported
Vehicle Make:	Not reported
Vehicle Model:	Not reported
Truck Reg:	Not reported
Trail Reg:	Not reported
Additional Info:	1K TANK REMOVED AS A RESULT OF PROPERTY TRANSFER PROPERTY OWNER IS SAMPLING GRAVE ALTHOUGH IT APPEARED TO BE CLEAN ANALYSES ATTACHED
Updated:	Y
Update Date:	10/06/94

F28 **DEBBIE BROWN** **CT ASBESTOS** **S105456789**
WNW **6 HILLSIDE CIRCLE** **CT CPCS** **N/A**
1/4-1/2 **MANSFIELD, CT 06268**
0.327 mi.
1724 ft. **Site 2 of 3 in cluster F**

Relative: **Higher**

Actual: **691 ft.**

ASBESTOS:

Name:	DEBBIE BROWN
Address:	6 HILLSIDE CIRCLE
City,State,Zip:	MANSFIELD, CT 06268
ID:	45768
Trans Number:	491
Enter Date:	Not reported
Postmark Date:	03/11/2013
Check Amount:	$148.00
Check Number:	1454
Type of Notification (new):	X
Type of Notification (cancel):	Not reported

DEBBIE BROWN (Continued) **S105456789**

Type of Notification (revised):	Not reported
Type of Notification (blanket):	Not reported
Type of Notification (emergency):	Not reported
Project Type:	RESIDENCE
Start Date:	03/21/2013
End Date:	03/23/2013
Licence Number:	000569
Contractor:	ZERO HAZARD, LLC
Contractor Address:	556 SOUTH MAIN STREET
Contractor City:	WEST HARTFORD
Contractor State:	CT
Contractor Zip:	06110
Owner:	MINERVA
Hauler:	USA HAULING & RECYCLING
Location of Demo:	Not reported
Inspection Conducted:	Not reported
Inspector Name:	Not reported
Inspector License Number:	Not reported
Disposal Facility:	Not reported

CPCS:

Name:	HAROLD SDRWENLE
Address:	6 HILLSIDE CIRCLE
City,State,Zip:	MANSFIELD, CT 06268
Site Type:	LUST
Lust Status code:	4
Lust Status:	Lust Completed (DEP's significant hazard definition)
PTP Form:	Not reported
Program:	Not reported
Comments:	Not reported
Site Type Definition:	Leaking Underground Storage Tanks Completed

---

F29 **JOHN MANNING** **CT LUST** **S105444761**
West **7 HILLSIDE CIRCLE** **CT SPILLS** **N/A**
1/4-1/2 **MANSFIELD, CT 06268** **CT CPCS**
0.343 mi.
1812 ft. **Site 3 of 3 in cluster F**

Relative:
Higher

Actual:
703 ft.

LUST:

Name:	JOHN MANNING
Name 2:	Not reported
Address:	7 HILLSIDE CIRCLE
Address 2:	Not reported
City,State,Zip:	MANSFIELD, CT 06250
LUST Case Id:	36885
Release Date:	Not reported
Site Case ID:	9905907
Substance:	Not reported
Release Source:	Not reported
Release Cause:	Not reported
Release Identified:	Not reported
Case Number:	Not reported
Release Quantity:	Not reported
Facility City Number:	78

Detail As of 06/2020:

Name:	JOHN MANNING
Name 2:	Not reported

JOHN MANNING (Continued) **S105444761**

Address:	7 HILLSIDE CIRCLE
City,State,Zip:	MANSFIELD, CT 06250
Address 2:	Not reported
LUST Id:	8859
UST Facility Id:	Not reported
LUST Case Id:	36885
Lust Status:	Lust Completed
Processing Status:	Not reported
EPA Reportable:	False
Motor Fuel:	False
Diesel:	False
Gasoline:	False
Other:	True
Other Release:	kerosene
No Release:	False
Leak:	False
Tank:	False
Piping:	False
Overfill:	False
Removal:	False
Incident Date:	09/02/1999
Entry Date:	Not reported
Site Case Id:	9905907
UST Site Id:	Not reported
Cost Recovery Spill Case #:	Not reported
Old SITS Number:	Not reported
Case Log Id:	Not reported
Monthly Report Id:	0
UST Owner Id:	Not reported
LUST Owner Id:	Not reported
UST Event Id:	9040
Contact Info:	Not reported
Contact EMail:	Not reported
Site Contact City,St,Zip:	UNKNOWN
2nd Contact:	Not reported
2nd Contact EMail:	Not reported
2nd Contact Address:	Not reported
2nd Contact City,St,Zip:	UNKNOWN
2nd Contact Address 2:	Not reported
2nd Contact City 2:	Not reported
2nd Contact Phone Number:	Not reported
2nd Contact Fax Number:	Not reported
2nd Contact Type:	Not reported
Facility City Num:	78
Site Contact:	Not reported
Site Contact Address:	Not reported
Site Contact Add 2:	Not reported
Site Contact City 2:	Not reported
Site Contact Phone:	Not reported
Site Contact Fax:	Not reported
Site Contact Type:	Not reported
Department Contact 1:	Not reported
Department Contact 2:	Not reported
Referral Source:	Not reported
Offsite Source:	False
Date Referred:	Not reported
Emergency:	False

JOHN MANNING (Continued) **S105444761**

Private Heating Fuel:	True
Commercial Heating Fuel:	False
Commercial HF < 2100 Gal.:	False
Commercial HF > 2100 Gal.:	False
Commercial HF - Size Unk:	False
No LUST Site:	False
Cost Recvry Prgm Candidate:	False
OCSRD Complete:	True
Follow Up Flag:	False
Alternate Water Supply:	False
Relocation:	False
Responsible Party:	False
Responsible EMail:	Not reported
Resp Party Name:	Not reported
Resp Party Address:	Not reported
Resp Party City,St,Zip:	Not reported
Resp Party Town Number:	UNKNOWN
Resp Party Phone:	Not reported
Resp Party Fax:	Not reported
Resp Party Name 2:	Not reported
Resp Party Address 2:	Not reported
Resp Party Phone 2:	Not reported
Investigator Id:	35
Follow Update:	Not reported
Area Lextent:	Not reported
Annual Precipitation:	Not reported
Affected Population:	Not reported
Population Setting:	Not reported
Ground Water Direction:	Not reported
Ground Water Gradient:	Not reported
Hydro Basin:	Not reported
Drastic:	Not reported
Geo Setting:	Not reported
Ground Water Classification:	Not reported
Receptor:	Not reported
Ground Water Flow Direction:	Not reported
Ground Water Depth:	Not reported
Areas Of Concern:	Not reported
Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlayed:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	False
Install Micro Wells:	False
Ground Water Sample:	False
Soil Sample:	False
Soil Gas:	False
Site Inspect:	False
Soil Excavate:	False
Geo Probe:	False
Survey:	False
Potable Well Sample:	False
Sample MWS:	False
Ground Water Gauging:	False

JOHN MANNING (Continued) **S105444761**

Soil Venting:	False
Active:	False
NOV Action:	None
NOV Issued:	Not reported
NOV Due:	Not reported
NOV Received:	Not reported
NOV Closed:	Not reported
NOV Disc Date:	Not reported
NOV Issued Date:	Not reported
NOV Compliance Sched:	Not reported
NOV Admin Order:	Not reported
NOV Referred To Ag:	Not reported
Stop All NOV Actions:	False
Release Invest Rpt:	False
DEP App Letter 1:	False
Correct Action Plan:	False
DEP App Letter 2:	False
Rem Sys Install:	False
Rem Sys Install Date:	Not reported
Closure Date:	Not reported
Rem Sys Monitoring Rpt:	False
Qrtly Gwater Mon Rpts:	False
Closure Req Rpt:	False
DEP Closure Letter:	False
Referred To:	Not reported
No Wells:	Not reported
Lph Wells:	Not reported
User Stamp:	Not reported
Date Stamp:	Not reported
Correspondence:	Not reported
Environmental Impact:	Not reported
FollowUp:	Not reported
GW Comments:	Not reported
Location Desc:	Not reported
NOV Comments:	Not reported
Release Desc:	Not reported
Running Comments:	m, FUEL OIL & KEROSENE, PRIVATE, A 550 FUEL OIL & A 275 KEROSENE TANK, EACH WAS AN UST WITH 2 HOLES 935 WILL CALL SHIRE BACK TODAY
Work Performed:	Not reported

SPILLS:

Name:	Not reported
Address:	7 HILLSIDE CIRCLE
City,State,Zip:	MANSFIELD, CT
Year of Database:	1999
Case Number:	9905907
Who Took Spill:	931
Assigned To:	NO Response
Report Date:	09/02/1999
Report Time:	15:00 AM
Date Release:	08/31/1999
Time Responded:	00:00 AM
Corrective Action Taken:	Removed Tank
Cause Info:	Inground Tank Failure
Media Info:	Other (SOIL)
Release Type:	petroleum

JOHN MANNING (Continued) **S105444761**

Reported By: LOI WEISE
Phone: 860 6426618
Representing: SHIRE CORP.
Terminated: YES
Recovd (Total): 0
Total (Water): 0
Facility Status: Closed
Continuous Spill: False
Released Substance: #2 FUEL OIL & KEROSENE
Qty: 0.00 (Gallons)
Emergency Measure: A 550 FUEL OIL & A 275 KEROSENE TANK, EACH WAS AN UST WITH 2 HOLES 935 WILL CALL SHIRE BACK TODAY
Water Body: Not reported
Discharger: JOHN MANNING
Telephone: 860 4299552
Responsible Party: true
RP Address 1: SAME
RP City,St,Zip: CT
Historic: False
Waterbody: NA
Time Stamp: 1999-11-26 10:29:30
Sr Inspector: Coss, Brian
At Inspctor: **NO RESPONSE
User Stamp: Not reported
Comments: Not reported
Action: Removed Tank
Other Action: Not reported
Agency ID: Local Fire Marshal
Other Agency: Not reported
DEP Bureau: Not reported
DEP Agency: Not reported
Agency ID: Other
Other Agency: NOEL WAITE ON SCENE
DEP Bureau: Not reported
DEP Agency: Not reported
Cause ID: Inground Tank Failure
Other Cause: Not reported
Media ID: Other
Other Media: SOIL
Class ID: Private
Other Class: Not reported
Release Type: petroleum
Other Release: Not reported

CPCS:
Name: JOHN MANNING
Address: 7 HILLSIDE CIRCLE
City,State,Zip: MANSFIELD, CT 06268
Site Type: LUST
Lust Status code: 4
Lust Status: Lust Completed (DEP's significant hazard definition)
PTP Form: Not reported
Program: Not reported
Comments: M, Fuel Oil & Kerosene, Private, A 550 Fuel Oil & A 275 Kerosene Tank, Each Was An Ust With 2 Holes 935 Will Call Shire Back Today
Site Type Definition: Leaking Underground Storage Tanks Completed

30
SSE
1/4-1/2
0.425 mi.
2246 ft.

RESIDENCE
70 BIRCHWOOD HEIGHTS
MANSFIELD, CT 06250

CT LUST **S104093451**
CT SPILLS **N/A**
CT CPCS

Relative:
Higher

Actual:
656 ft.

LUST:

Name:	RESIDENCE
Name 2:	Not reported
Address:	70 BIRCHWOOD HEIGHTS
Address 2:	Not reported
City,State,Zip:	MANSFIELD, CT 06250
LUST Case Id:	30311
Release Date:	Not reported
Site Case ID:	Not reported
Substance:	Not reported
Release Source:	Not reported
Release Cause:	Not reported
Release Identified:	Not reported
Case Number:	Not reported
Release Quantity:	Not reported
Facility City Number:	78

Detail As of 06/2020:

Name:	RESIDENCE
Name 2:	Not reported
Address:	70 BIRCHWOOD HEIGHTS
City,State,Zip:	MANSFIELD, CT 06250
Address 2:	Not reported
LUST Id:	2240
UST Facility Id:	Not reported
LUST Case Id:	30311
Lust Status:	Pending
Processing Status:	Not reported
EPA Reportable:	False
Motor Fuel:	False
Diesel:	False
Gasoline:	False
Other:	False
Other Release:	Not reported
No Release:	False
Leak:	False
Tank:	False
Piping:	False
Overfill:	False
Removal:	False
Incident Date:	07/08/1994
Entry Date:	Not reported
Site Case Id:	Not reported
UST Site Id:	Not reported
Cost Recovery Spill Case #:	Not reported
Old SITS Number:	Not reported
Case Log Id:	Not reported
Monthly Report Id:	0
UST Owner Id:	Not reported
LUST Owner Id:	Not reported
UST Event Id:	2239
Contact Info:	Not reported
Contact EMail:	Not reported
Site Contact City,St,Zip:	UNKNOWN

RESIDENCE (Continued) **S104093451**

2nd Contact:	Not reported
2nd Contact EMail:	Not reported
2nd Contact Address:	Not reported
2nd Contact City,St,Zip:	UNKNOWN
2nd Contact Address 2:	Not reported
2nd Contact City 2:	Not reported
2nd Contact Phone Number:	Not reported
2nd Contact Fax Number:	Not reported
2nd Contact Type:	Not reported
Facility City Num:	78
Site Contact:	Not reported
Site Contact Address:	Not reported
Site Contact Add 2:	Not reported
Site Contact City 2:	Not reported
Site Contact Phone:	Not reported
Site Contact Fax:	Not reported
Site Contact Type:	Not reported
Department Contact 1:	Not reported
Department Contact 2:	Not reported
Referral Source:	Not reported
Offsite Source:	False
Date Referred:	Not reported
Emergency:	False
Private Heating Fuel:	True
Commercial Heating Fuel:	False
Commercial HF < 2100 Gal.:	False
Commercial HF > 2100 Gal.:	False
Commercial HF - Size Unk:	False
No LUST Site:	False
Cost Recvry Prgm Candidate:	False
OCSRD Complete:	False
Follow Up Flag:	False
Alternate Water Supply:	False
Relocation:	False
Responsible Party:	False
Responsible EMail:	Not reported
Resp Party Name:	Not reported
Resp Party Address:	Not reported
Resp Party City,St,Zip:	Not reported
Resp Party Town Number:	UNKNOWN
Resp Party Phone:	Not reported
Resp Party Fax:	Not reported
Resp Party Name 2:	Not reported
Resp Party Address 2:	Not reported
Resp Party Phone 2:	Not reported
Investigator Id:	21
Follow Update:	Not reported
Area Lextent:	Not reported
Annual Precipitation:	Not reported
Affected Population:	Not reported
Population Setting:	Not reported
Ground Water Direction:	Not reported
Ground Water Gradient:	Not reported
Hydro Basin:	Not reported
Drastic:	Not reported
Geo Setting:	Not reported
Ground Water Classification:	Not reported

RESIDENCE (Continued) **S104093451**

Receptor:	Not reported
Ground Water Flow Direction:	Not reported
Ground Water Depth:	Not reported
Areas Of Concern:	Not reported
Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlayed:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	False
Install Micro Wells:	False
Ground Water Sample:	False
Soil Sample:	False
Soil Gas:	False
Site Inspect:	False
Soil Excavate:	False
Geo Probe:	False
Survey:	False
Potable Well Sample:	False
Sample MWS:	False
Ground Water Gauging:	False
Soil Venting:	False
Active:	False
NOV Action:	None
NOV Issued:	Not reported
NOV Due:	Not reported
NOV Received:	Not reported
NOV Closed:	Not reported
NOV Disc Date:	Not reported
NOV Issued Date:	Not reported
NOV Compliance Sched:	Not reported
NOV Admin Order:	Not reported
NOV Referred To Ag:	Not reported
Stop All NOV Actions:	False
Release Invest Rpt:	False
DEP App Letter 1:	False
Correct Action Plan:	False
DEP App Letter 2:	False
Rem Sys Install:	False
Rem Sys Install Date:	Not reported
Closure Date:	Not reported
Rem Sys Monitoring Rpt:	False
Qrtly Gwater Mon Rpts:	False
Closure Req Rpt:	False
DEP Closure Letter:	False
Referred To:	Not reported
No Wells:	Not reported
Lph Wells:	Not reported
User Stamp:	Not reported
Date Stamp:	Not reported
Correspondence:	Action: Issued: Received:2/17/1999status date is date of data cleanup
Environmental Impact:	Not reported
FollowUp:	Not reported
GW Comments:	Not reported
Location Desc:	Not reported

RESIDENCE (Continued) **S104093451**

NOV Comments: Not reported
Release Desc: Not reported
Running Comments: Not reported
Work Performed: Not reported

SPILLS:
Name: Not reported
Address: 70 BIRCHWOOD HEIGHTS
City,State,Zip: MANSFIELD, CT
Year of Database: 1994
Case Number: 3719
Who Took Spill: CIASULLO
Assigned To: Not reported
Report Date: 07/08/1994
Report Time: 825
Date Release: Not reported
Time Responded: Not reported
Corrective Action Taken: Not reported
Cause Info: Not reported
Media Info: Not reported
Release Type: Not reported
Reported By: SALLY WEISE
Phone: Not reported
Representing: Not reported
Terminated: Y
Recovd (Total): .
Total (Water): .
Facility Status: Not reported
Continuous Spill: Not reported
Released Substance: Not reported
Qty: 50 (Gallons)
Emergency Measure: Not reported
Water Body: Not reported
Discharger: Not reported
Telephone: Not reported
Responsible Party: Not reported
RP Address 1: Not reported
RP City,St,Zip: Not reported
Historic: Not reported
Waterbody: Not reported
Time Stamp: Not reported
Sr Inspector: Not reported
At Inspctor: Not reported
User Stamp: Not reported
Comments: Not reported

Year of Database: 1994
Town of Spill: MANSFIELD
Case Number: 3719
OCSRD Inspector: 933
Spill Date: 07/08/94
Spill Time: . .
Report Date: 07/08/94
Report Time: 825
Reported By: SALLY WEISE
Representing: SHIRE CORP

RESIDENCE (Continued) **S104093451**

Work Telephone: 2036
Home Telephone: Not reported
Telephone Pole#: .
Incident Type: PETROLEUM
Substance: 2 FUEL OIL
Quantity: 50 Gallon(s)
Concentration: .
Action Desc: Not reported
On Going: Not reported
Continuous Spill: Not reported
Release Status: Terminated, Contained
Misc Info: SUSPECT 550 LEAKER HOMEOWNER SUSPECTED INCREASED USAGE OIL CO REFILLED TANK MONITORED SAW 1 DROP IN OIL LEVEL PUMPED OUT
Water Body: Not reported
Other Media: Not reported
Release Area: Ground Surface
Total (Water): .
Recovd (Water): .
Recovd (Total): .
Polluter Name: MRS WEINER
Polluted Address: 70 BIRCHWOOD HEIGHTS
Polluted City,St,Zip: MANSFIELD, CT 6250
Polluter Phone: .- .- .
Polluter Responisbility: Polluter accepts financial reponsibility
Unknown Responsibility: Not reported
Unknown Polluter: Not reported
Cleanup Action: TANK/SOIL REMOVED
Dun and Bradst#: Not reported
UST Unit: Not reported
Agency Notified: Not reported
State Agency: Not reported
Notify Date: .
Notify Time: . .
Other Agency: Not reported
Notify Other: Not reported
Notify Status: Not reported
Class1: Private
Other Class: Not reported
Cause1: Ground Tank Failure
Other Cause: Not reported
Actions1: Pumped Out
Other Actions: Removed Tank, Soil Removal
Cleanup Contractor: Y
Contractor Name: SHIRE CORP
Did DEP Hire Contractor: No
Date Contractor Hired: .
When Contractor Requested: Not reported
When Contractor Arrived: Not reported
Who Took Spill: CIASULLO
Badge # of Who Recieved Spill: 912
Who Assigned Spill: SANTACROCE
Badge # of Who Assigned Spill: 933
Date Assigned: 07/08/94
Assigned Time: 8:46
Spill Status: Closed
Case 1136: Not reported
Federal 311K: .

RESIDENCE (Continued) **S104093451**

Case #1: Not reported
Case #2: .
Cost Recovery: .
Property Owner: Not reported
Property Other: .
Property Name: Not reported
Property Addr: Not reported
Property CSZ: .
Polluter: Not reported
Owner: Not reported
Operator: Not reported
Vehicle Make: Not reported
Vehicle Model: Not reported
Truck Reg: Not reported
Trail Reg: Not reported
Additional Info: 550 NO APPARENT HOLES CONTAM UNDER TANK ADJ TO FOUNDATION SM AMT CONTAM SOIL REMOVED TO BROOKLYN LANDFILL ANALYSES ATTACHED
Updated: Y
Update Date: 07/08/94

CPCS:
Name: RESIDENCE
Address: 70 BIRCHWOOD HEIGHTS
City,State,Zip: MANSFIELD, CT 06268
Site Type: LUST
Lust Status code: 1
Lust Status: Pending
PTP Form: Not reported
Program: Not reported
Comments: Not reported
Site Type Definition: Leaking Underground Storage Tanks Pending

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G31 **NUTMEG ALUMNI ASSOCIATION** **CT LUST** **S106140895**
SE **1082 STORRS ROAD** **CT SPILLS** **N/A**
1/4-1/2 **MANSFIELD, CT 06250**
0.478 mi.
2523 ft. **Site 1 of 3 in cluster G**

Relative:
Lower

Actual:
622 ft.

LUST:
Name: NUTMEG ALUMNI ASSOCIATION
Name 2: Not reported
Address: 1082 STORRS ROAD
Address 2: Not reported
City,State,Zip: MANSFIELD, CT 06250
LUST Case Id: 30174
Release Date: Not reported
Site Case ID: Not reported
Substance: Not reported
Release Source: Not reported
Release Cause: Not reported
Release Identified: Not reported
Case Number: Not reported
Release Quantity: Not reported
Facility City Number: 78

Detail As of 06/2020:
Name: NUTMEG ALUMNI ASSOCIATION

NUTMEG ALUMNI ASSOCIATION (Continued) **S106140895**

Name 2:	Not reported
Address:	1082 STORRS ROAD
City,State,Zip:	MANSFIELD, CT 06250
Address 2:	Not reported
LUST Id:	2065
UST Facility Id:	Not reported
LUST Case Id:	30174
Lust Status:	Investigation
Processing Status:	Not reported
EPA Reportable:	False
Motor Fuel:	False
Diesel:	False
Gasoline:	False
Other:	False
Other Release:	Not reported
No Release:	False
Leak:	False
Tank:	False
Piping:	False
Overfill:	False
Removal:	False
Incident Date:	07/31/1996
Entry Date:	Not reported
Site Case Id:	Not reported
UST Site Id:	Not reported
Cost Recovery Spill Case #:	Not reported
Old SITS Number:	Not reported
Case Log Id:	Not reported
Monthly Report Id:	0
UST Owner Id:	Not reported
LUST Owner Id:	Not reported
UST Event Id:	2064
Contact Info:	Not reported
Contact EMail:	Not reported
Site Contact City,St,Zip:	UNKNOWN
2nd Contact:	Not reported
2nd Contact EMail:	Not reported
2nd Contact Address:	Not reported
2nd Contact City,St,Zip:	UNKNOWN
2nd Contact Address 2:	Not reported
2nd Contact City 2:	Not reported
2nd Contact Phone Number:	Not reported
2nd Contact Fax Number:	Not reported
2nd Contact Type:	Not reported
Facility City Num:	78
Site Contact:	Not reported
Site Contact Address:	Not reported
Site Contact Add 2:	Not reported
Site Contact City 2:	Not reported
Site Contact Phone:	Not reported
Site Contact Fax:	Not reported
Site Contact Type:	Not reported
Department Contact 1:	Not reported
Department Contact 2:	Not reported
Referral Source:	Not reported
Offsite Source:	False
Date Referred:	Not reported

NUTMEG ALUMNI ASSOCIATION (Continued) **S106140895**

Emergency:	False
Private Heating Fuel:	False
Commercial Heating Fuel:	True
Commercial HF < 2100 Gal.:	True
Commercial HF > 2100 Gal.:	False
Commercial HF - Size Unk:	False
No LUST Site:	False
Cost Recvry Prgm Candidate:	False
OCSRD Complete:	False
Follow Up Flag:	False
Alternate Water Supply:	False
Relocation:	False
Responsible Party:	False
Responsible EMail:	Not reported
Resp Party Name:	Not reported
Resp Party Address:	Not reported
Resp Party City,St,Zip:	Not reported
Resp Party Town Number:	UNKNOWN
Resp Party Phone:	Not reported
Resp Party Fax:	Not reported
Resp Party Name 2:	Not reported
Resp Party Address 2:	Not reported
Resp Party Phone 2:	Not reported
Investigator Id:	29
Follow Update:	Not reported
Area Lextent:	Not reported
Annual Precipitation:	Not reported
Affected Population:	Not reported
Population Setting:	Not reported
Ground Water Direction:	Not reported
Ground Water Gradient:	Not reported
Hydro Basin:	Not reported
Drastic:	Not reported
Geo Setting:	Not reported
Ground Water Classification:	Not reported
Receptor:	Not reported
Ground Water Flow Direction:	Not reported
Ground Water Depth:	Not reported
Areas Of Concern:	Not reported
Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlayed:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	False
Install Micro Wells:	False
Ground Water Sample:	False
Soil Sample:	False
Soil Gas:	False
Site Inspect:	False
Soil Excavate:	False
Geo Probe:	False
Survey:	False
Potable Well Sample:	False
Sample MWS:	False

NUTMEG ALUMNI ASSOCIATION (Continued) **S106140895**

Ground Water Gauging:	False
Soil Venting:	False
Active:	False
NOV Action:	None
NOV Issued:	Not reported
NOV Due:	Not reported
NOV Received:	Not reported
NOV Closed:	Not reported
NOV Disc Date:	Not reported
NOV Issued Date:	Not reported
NOV Compliance Sched:	Not reported
NOV Admin Order:	Not reported
NOV Referred To Ag:	Not reported
Stop All NOV Actions:	False
Release Invest Rpt:	False
DEP App Letter 1:	False
Correct Action Plan:	False
DEP App Letter 2:	False
Rem Sys Install:	False
Rem Sys Install Date:	Not reported
Closure Date:	Not reported
Rem Sys Monitoring Rpt:	False
Qrtly Gwater Mon Rpts:	False
Closure Req Rpt:	False
DEP Closure Letter:	False
Referred To:	Not reported
No Wells:	Not reported
Lph Wells:	Not reported
User Stamp:	Not reported
Date Stamp:	Not reported
Correspondence:	Not reported
Environmental Impact:	Not reported
FollowUp:	Not reported
GW Comments:	Not reported
Location Desc:	Not reported
NOV Comments:	Not reported
Release Desc:	Not reported
Running Comments:	Not reported
Work Performed:	Not reported

SPILLS:

Name:	Not reported
Address:	1082 STORRS RD.
City,State,Zip:	MANSFIELD, CT
Year of Database:	2003
Case Number:	200308938
Who Took Spill:	915
Assigned To:	NO Response
Report Date:	12/17/2003
Report Time:	35:00 PM
Date Release:	12/17/2003
Time Responded:	20:00 PM
Corrective Action Taken:	Contained
Cause Info:	Hose Failure
Media Info:	Ground Surface
Release Type:	petroleum

NUTMEG ALUMNI ASSOCIATION (Continued) **S106140895**

Reported By:	rick pothier
Phone:	860 8595840
Representing:	eastern usa fuel
Terminated:	YES
Recovd (Total):	1
Total (Water):	0
Facility Status:	Closed
Continuous Spill:	False
Released Substance:	#2 FUEL OIL
Qty:	< 1.00 (Gallons)
Emergency Measure:	sorbants deployed.
Water Body:	Other (na)
Discharger:	s.a.a.
Telephone:	860 8595840
Responsible Party:	true
RP Address 1:	15 wisconsin ave.
RP City,St,Zip:	NORWICH, CT 06360
Historic:	False
Waterbody:	na
Time Stamp:	2003-12-17 13:45:32
Sr Inspector:	Capuano, Mike
At Inspctor:	**NO RESPONSE
User Stamp:	Not reported
Comments:	Not reported
Action:	Contained
Other Action:	Not reported
Cause ID:	Hose Failure
Other Cause:	Not reported
Media ID:	Ground Surface
Other Media:	Not reported
Class ID:	Transportation
Other Class:	Not reported
Class ID:	Commercial
Other Class:	Not reported
Release Type:	petroleum
Other Release:	Not reported
Waterbody:	Other
Other Wtrbody:	na

G32 **NUTMEG FARMS ASSOC.** **CT LUST** **S103154890**
SE **1082 STORRS ROAD** **CT SPILLS** **N/A**
1/4-1/2 **MANSFIELD CENTER, CT 06250**
0.478 mi.
2523 ft. **Site 2 of 3 in cluster G**

Relative: LUST:
Lower

Actual: Name:	NUTMEG FARMS ASSOC.
622 ft. Name 2:	Not reported
Address:	1082 STORRS ROAD
Address 2:	Not reported
City,State,Zip:	MANSFIELD CENTER, CT 06250
LUST Case Id:	32386
Release Date:	Not reported
Site Case ID:	9603876
Substance:	Not reported
Release Source:	Not reported
Release Cause:	Not reported
Release Identified:	Not reported

NUTMEG FARMS ASSOC. (Continued) **S103154890**

Case Number:	Not reported
Release Quantity:	Not reported
Facility City Number:	78

Detail As of 06/2020:

Name:	NUTMEG FARMS ASSOC.
Name 2:	Not reported
Address:	1082 STORRS ROAD
City,State,Zip:	MANSFIELD CENTER, CT 06250
Address 2:	Not reported
LUST Id:	4214
UST Facility Id:	Not reported
LUST Case Id:	32386
Lust Status:	Lust Completed
Processing Status:	Not reported
EPA Reportable:	False
Motor Fuel:	False
Diesel:	False
Gasoline:	False
Other:	False
Other Release:	Not reported
No Release:	False
Leak:	False
Tank:	False
Piping:	False
Overfill:	False
Removal:	False
Incident Date:	07/31/1996
Entry Date:	Not reported
Site Case Id:	9603876
UST Site Id:	Not reported
Cost Recovery Spill Case #:	Not reported
Old SITS Number:	Not reported
Case Log Id:	Not reported
Monthly Report Id:	0
UST Owner Id:	Not reported
LUST Owner Id:	Not reported
UST Event Id:	4314
Contact Info:	Not reported
Contact EMail:	Not reported
Site Contact City,St,Zip:	UNKNOWN
2nd Contact:	Not reported
2nd Contact EMail:	Not reported
2nd Contact Address:	Not reported
2nd Contact City,St,Zip:	UNKNOWN
2nd Contact Address 2:	Not reported
2nd Contact City 2:	Not reported
2nd Contact Phone Number:	Not reported
2nd Contact Fax Number:	Not reported
2nd Contact Type:	Not reported
Facility City Num:	78
Site Contact:	Not reported
Site Contact Address:	Not reported
Site Contact Add 2:	Not reported
Site Contact City 2:	Not reported
Site Contact Phone:	Not reported
Site Contact Fax:	Not reported
Site Contact Type:	Not reported

NUTMEG FARMS ASSOC. (Continued) **S103154890**

Department Contact 1:	Not reported
Department Contact 2:	Not reported
Referral Source:	Not reported
Offsite Source:	False
Date Referred:	Not reported
Emergency:	False
Private Heating Fuel:	False
Commercial Heating Fuel:	True
Commercial HF < 2100 Gal.:	True
Commercial HF > 2100 Gal.:	False
Commercial HF - Size Unk:	False
No LUST Site:	False
Cost Recvry Prgm Candidate:	False
OCSRD Complete:	True
Follow Up Flag:	False
Alternate Water Supply:	False
Relocation:	False
Responsible Party:	False
Responsible EMail:	Not reported
Resp Party Name:	Not reported
Resp Party Address:	Not reported
Resp Party City,St,Zip:	Not reported
Resp Party Town Number:	UNKNOWN
Resp Party Phone:	Not reported
Resp Party Fax:	Not reported
Resp Party Name 2:	Not reported
Resp Party Address 2:	Not reported
Resp Party Phone 2:	Not reported
Investigator Id:	29
Follow Update:	Not reported
Area Lextent:	Not reported
Annual Precipitation:	Not reported
Affected Population:	Not reported
Population Setting:	Not reported
Ground Water Direction:	Not reported
Ground Water Gradient:	Not reported
Hydro Basin:	Not reported
Drastic:	Not reported
Geo Setting:	Not reported
Ground Water Classification:	Not reported
Receptor:	Not reported
Ground Water Flow Direction:	Not reported
Ground Water Depth:	Not reported
Areas Of Concern:	Not reported
Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlayed:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	False
Install Micro Wells:	False
Ground Water Sample:	False
Soil Sample:	False
Soil Gas:	False
Site Inspect:	False

NUTMEG FARMS ASSOC. (Continued) **S103154890**

Soil Excavate:	False
Geo Probe:	False
Survey:	False
Potable Well Sample:	False
Sample MWS:	False
Ground Water Gauging:	False
Soil Venting:	False
Active:	False
NOV Action:	None
NOV Issued:	Not reported
NOV Due:	Not reported
NOV Received:	Not reported
NOV Closed:	Not reported
NOV Disc Date:	Not reported
NOV Issued Date:	Not reported
NOV Compliance Sched:	Not reported
NOV Admin Order:	Not reported
NOV Referred To Ag:	Not reported
Stop All NOV Actions:	False
Release Invest Rpt:	False
DEP App Letter 1:	False
Correct Action Plan:	False
DEP App Letter 2:	False
Rem Sys Install:	False
Rem Sys Install Date:	Not reported
Closure Date:	Not reported
Rem Sys Monitoring Rpt:	False
Qrtly Gwater Mon Rpts:	False
Closure Req Rpt:	False
DEP Closure Letter:	False
Referred To:	Not reported
No Wells:	Not reported
Lph Wells:	Not reported
User Stamp:	Not reported
Date Stamp:	Not reported
Correspondence:	Not reported
Environmental Impact:	Not reported
FollowUp:	Not reported
GW Comments:	Not reported
Location Desc:	Not reported
NOV Comments:	Not reported
Release Desc:	Not reported
Running Comments:	#2 HEATING OIL, , 550 TANK PULL VISIBLE HOLES WELL WATER AREA WELL 50-60 FEET AWAY
Work Performed:	Not reported

SPILLS:

Name:	Not reported
Address:	1082 STORRS ROAD
City,State,Zip:	MANSFIELD, CT
Year of Database:	1996
Case Number:	9603876
Who Took Spill:	912
Assigned To:	Stavola, Rosanne
Report Date:	07/31/1996
Report Time:	04:00 AM

NUTMEG FARMS ASSOC. (Continued) **S103154890**

Date Release: 07/31/1996
Time Responded: 00:00 AM
Corrective Action Taken: Removed Tank
Cause Info: Inground Tank Failure
Media Info: Ground Water
Release Type: petroleum
Reported By: JOHN JACKMAN
Phone: 860 4293328
Representing: TOWN FIRE MARSHALS OFFICE
Terminated: YES
Recovd (Total): 0
Total (Water): 0
Facility Status: Closed
Continuous Spill: False
Released Substance: #2 FUEL OIL
Qty: 0.00 (Gallons)
Emergency Measure: 550 TANK PULL VISIBLE HOLES WELL WATER AREA WELL 50-60 FEET AWAY
Water Body: Not reported
Discharger: NUTMEG FARMS ASSOC.
Telephone: Not reported
Responsible Party: true
RP Address 1: 1082 STORRS ROAD
RP City,St,Zip: MANSFIELD, CT 06268
Historic: False
Waterbody: Not reported
Time Stamp: 1997-07-01 10:02:31
Sr Inspector: Ciasullo, Rich
At Inspctor: Stavola, Rosanne
User Stamp: Not reported
Comments: Not reported
Action: Removed Tank
Other Action: Not reported
Agency ID: Local Fire Marshal
Other Agency: Not reported
DEP Bureau: Not reported
DEP Agency: Not reported
Agency ID: DEP Dispatch
Other Agency: Not reported
DEP Bureau: Not reported
DEP Agency: Not reported
Cause ID: Inground Tank Failure
Other Cause: Not reported
Media ID: Ground Water
Other Media: Not reported
Release Type: petroleum
Other Release: Not reported

G33 **NUTMEG ALUMNI ASSOCIATION** **CT CPCS** **S122374961**
SE **1082 STORRS ROAD** **N/A**
1/4-1/2 **MANSFIELD, CT 06268**
0.486 mi.
2564 ft. **Site 3 of 3 in cluster G**

Relative: CPCS:
Lower
Name: NUTMEG ALUMNI ASSOCIATION
Actual: Address: 1082 STORRS ROAD
620 ft. City,State,Zip: MANSFIELD, CT 06268
Site Type: LUST

NUTMEG ALUMNI ASSOCIATION (Continued) **S122374961**

Lust Status code:	2
Lust Status:	Investigation
PTP Form:	Not reported
Program:	Not reported
Comments:	Not reported
Site Type Definition:	Leaking Underground Storage Tanks Investigation

Count: 13 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
MANSFIELD	S127005181	UCONN	SOUTH EAGLEVILLE RD	06269	CT ASBESTOS
MANSFIELD	S127005096	UCONN	NORTH EAGLEVILLE RD	06269	CT ASBESTOS
MANSFIELD	S122497559	UCONN	NORTH EAGLEVILLE RD.	06269	CT ASBESTOS
MANSFIELD	S125146542	UCONN	106 STORRS ROAD	06268	CT ASBESTOS
MANSFIELD	S127005177	UCONN	STORRS RD	06269	CT ASBESTOS
MANSFIELD	S105456686	DUFFY RESIDENCE	1097 STORRS RD.	06268	CT LUST, CT CPCS
MANSFIELD	1018367520	UCONN BASKETBALL TRAINING FACILITY	UCONN STORRS CAMPUS STADIUM RO	06269	FINDS, ECHO
STORRS	S125106168	UCONN	NORTH EAGLEVILLE RD	06269	CT ASBESTOS
STORRS	S125120197	UCONN	NORTH EAGLEVILLE RD	06269	CT ASBESTOS
STORRS	S125113112	UCONN	NORTH EAGLEVILLE RD	06269	CT ASBESTOS
STORRS	S125120556	UCONN	NORTH EAGLEVILLE RD	06269	CT ASBESTOS
STORRS	S125147934	UCONN	NORTH EAGLEVILLE RD	06269	CT ASBESTOS
STORRS	1026645611	TOWN OF MANSFIELD (LANDFILL)	FOUR SOUTH EAGLEVILLE ROAD	06268	PRP

APPENDIX F

LIMITATIONS

Phase I Environmental Site Assessment

UCONN Mansfield Apartments
1 South Eagleville Road
Mansfield, Connecticut 06268

July 26, 2022

LIMITATIONS

The conclusions presented in this report are professional opinions based on data described in this report. These opinions have been arrived at in accordance with currently accepted environmental industry standards and practices applicable to the work described in this report. The opinions presented are subject to the following inherent limitations:

1. This report was prepared for the exclusive use of the entity referenced in Section 1.6. SLR has no liability for this report and its contents to any other entity.

2. This Phase I ESA report is subject to the terms and conditions in the SLR proposal referenced in Section 1.4 and in the contract between SLR and its client under which the work was performed. Any use of the Phase I report constitutes acceptance of the limits of SLR's liability specified in the contract. SLR's liability extends only to its client and not to any other parties who may obtain the Phase I report.

3. SLR derived the data in this report primarily from visual inspections, examination of records in the public domain, and interviews with individuals having information about the Site. The passage of time, manifestation of latent conditions, or occurrence of future events may require further study at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions in the report.

4. The data reported and the findings, observations, and conclusions expressed in the report are limited by the scope of work. The scope of work is presented in Section 1.4 and was agreed to by the client.

5. SLR's Phase I ESA reports present professional opinions and findings of a scientific and technical nature. The report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations, or policies of federal, state, or local governmental agencies.

6. The conclusions presented in this report are professional opinions based on data described in this report. They are intended only for the purpose, Site location, and project indicated. This report is not a definitive study of contamination at the Site and should not be interpreted as such. An evaluation of subsurface soil and groundwater conditions was not performed as part of this investigation, unless indicated in Section 1.4. No sampling or chemical analyses of structural materials or other media was completed as part of this study unless explicitly stated in Section 1.4.

7. This report is based, in part, on unverified information supplied to SLR by third-party sources. While efforts have been made to substantiate this third-party information, SLR cannot guarantee its completeness or accuracy.

PHASE II INVESTIGATION AND SOIL MANAGEMENT

MANSFIELD APARTMENTS
UNIVERSITY OF CONNECTICUT
1 SOUTH EAGLEVILLE ROAD
MANSFIELD, CONNECTICUT

PROJECT NO.: 30901633.000
DATE: JULY 2022

WSP USA
4 RESEARCH DRIVE, SUITE 204
SHELTON, CT 06484

PHONE: +1 (203) 929-8555
FAX: +1 (203) 926-9140
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SIGNATURES

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Project Environmental Scientist

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Vice President

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1.0 INTRODUCTION

WSP USA (WSP) completed a Phase II Investigation at the Mansfield Apartments located at 1 South Eagleville Road in Mansfield, Connecticut (the "Site", Figure 1). The investigation was completed on behalf of University of Connecticut (UCONN) to support the redevelopment of the Site and evaluate soils in the location of former fuel-oil underground storage tanks (USTs) located near the apartment buildings, a fuel-oil UST near a pump station, as well as an area of potential soil export on the southwestern portion of the Site. This report also provides guidance regarding the reuse and/or disposal of the soil and/or groundwater investigated at the aforementioned locations.

2.0 BACKGROUND/SITE SETTING

2.1 Physical Description

The Site consists of one rectangular parcel of land located at 1 South Eagleville Road in the Town of Mansfield, Connecticut. The approximate 16-acre Site and contains 15 approximate 4,698-square foot student housing buildings that were constructed in 1951 for the University of Connecticut. This 270-bed, townhouse style complex is surrounded by paved parking areas.

2.2 Geology and Hydrogeology

The Site is located within the eastern uplands in Mansfield, Connecticut, with approximate coordinates of 41.799928, -72.242459. The land surface along the western portion of the Site is at an elevation of approximately 640 ft msl (feet above mean sea level) and the land surface along the eastern portion of the Site is at an elevation of approximately 620 ft msl. The elevation of the Site slopes from the west to the east/southeast with an elevation decrease of approximately 20 feet.

Bedrock at the Site is mapped as Hebron Gneiss, an interlayered dark-gray schist and greenish-gray, fine to medium grained calc-silicate gneiss (Rodgers, 1985). Large bedrock outcrops were observed on the southwestern portion of the Site, along South Eagleville Road. During the Phase II investigation, bedrock was encountered between 2 ft bgs (feet below ground surface) (UST-1) to 13 ft bgs (UST-6).

Surficial materials underlying the Site is mapped as till. Till is in areas of bedrock outcrops. Upper till is loose to moderately compact, generally sandy, and commonly stony (Stone et. al., 1992). Soils underlying the Site are mapped as urban influenced which are soils comprised of human-altered materials in areas of high population density in a largely built environment (USDA, 2007). Soils encountered during the 2022 Phase II Investigation mainly consisted of fine to coarse sand and gravel with some silt and clay materials. The thickness of the overburden was variable and dependent on the depth to bedrock and visibly large bedrock outcrops. Groundwater was observed between 7 to 13 ft bgs throughout the Site.

Groundwater beneath the Site has a Connecticut Department of Energy and Environmental Protection (CTDEEP) groundwater quality classification of "GAA" (CTDEEP, 2017). Class GAA designated uses include "ground water that is tributary to a public water supply reservoir".

Based on the topography of the area and local surface water, the general direction of groundwater flow beneath the Site is presumed to be from the west to the east/southeast. The nearest surface-water body is the Tift Pond. A tributary to Tift Pond is located approximately 500 feet southeast of the Site. The Tift Pond has a CTDEEP water-quality classification of "AA", indicating surface waters suitable for existing or

proposed drinking water supply, fish and wildlife habitat, recreational use, agricultural and industrial supply.

3.0 REGULATORY FRAMEWORK

The investigations at the Site are being completed on a voluntary basis, and criteria outlined in the CTDEEP Remediation Standard Regulations (RSRs) will be used as a benchmark to compare soil and groundwater results. Groundwater beneath the Site is classified as "GAA", which designates areas that contain existing private and potential public or private supplies of water suitable for drinking without treatment and baseflow for hydraulically connected surface-water bodies (RCSA §22a-426-7(d)). A summary of those RSR criteria that apply to the Site is provided below.

3.1 Soil Remediation Standards

In general, soil impacts at the Site are evaluated against the applicable: (1) direct exposure criteria (DEC); and (2) pollutant mobility criteria (PMC). See R.S.C.A. §22a-133k-2(a).

Direct Exposure Criteria

- The DEC apply to all soils within 15 feet of grade at a site (with the exception of PCBs), unless the soils are "inaccessible". Soils are considered inaccessible if they are: i) beneath a building or other permanent structure; ii) more than 2 feet below a concrete or asphalt pavement layer (minimum 3 inches); iii) more than 4 feet below the ground surface; or iv) are polluted fill below an asphalt pavement layer (minimum 3 inches) or below reinforced concrete (minimum 4 inches) and exceeds the applicable direct exposure criteria solely due to (a) semi-volatile substances or petroleum hydrocarbons that are normal constituents of bituminous concrete or concentrations of metals equal to or less than two times the applicable DEC. In order to render soils inaccessible, an Environmental Use Restriction (EUR) prohibiting disturbance of the soil must be recorded on the land records.
- The Residential DEC (RDEC) are the default DEC for all sites regardless of actual land use. However, the Industrial/Commercial DEC (I/C DEC) may be applied to a particular site with an EUR prohibiting residential use.
- Pursuant to RCSA § 22a-133k-2(e)(1), compliance with the DEC for constituents other than PCBs is achieved when the 95-percent upper confidence level (UCL) of the arithmetic mean of all the sample results from the release area are equal to or less than the applicable DEC, or all the samples results from the release are equal to or less than the applicable DEC. Compliance with the DEC for PCBs is achieved when all sample results from the release are equal to or less than the applicable DEC.

Pollutant Mobility Criteria (PMC)

The Site is located in an area with a "GA" groundwater classification (GA area). In a GA area, the GA PMC apply to soils above the seasonal-low water table.

- For metals, cyanide and polychlorinated biphenyls (PCBs) in soils, the results of a leaching test (typically Synthetic Precipitation Leaching Procedure (SPLP)) performed on the soils must be below the GA PMC.
- For all other constituents, the total (mass) concentrations of the constituent in the soil must be below the GA PMC listed in the RSRs.

The PMC do not apply to soils that meet the definition of "environmentally isolated". Environmentally-isolated soils must be below a building or other (approved) permanent structure that will prevent the migration of pollutants. To use this exception, an EUR must be placed that ensures soils do not become exposed as a result of demolition of a building or structure. Exceptions to the PMC also include soils impacted by widespread polluted fill, proximity to a public water-supply distribution system and certain other specific requirements.

3.2 Groundwater Remediation Standards

In general, three groundwater remediation criteria would be required to be met at the Site. These are the Groundwater Protection Criteria (GWPC), Surface-Water Protection Criteria (SWPC) and the Groundwater Volatilization Criteria (GWVC).

Groundwater Protection Criteria (GWPC)

The GWPC apply to groundwater beneath the Site and are generally consistent with drinking water standards.

Surface-Water Protection Criteria (SWPC)

The SWPC apply to groundwater at the point it discharges into a surface-water body. The SWPC apply to groundwater prior to it discharging into a surface-water body, regardless of land use. Where groundwater discharges to a wetland or intermittent stream, the more-stringent published aquatic life criteria (from Appendix D of the most recent Water Quality Standards) apply in lieu of the SWPC.

Alternatives to the SWPC listed in the RSRs may be calculated based upon site-specific conditions and using the equation in RSCA §22a-133k-3(b)(1)(A).

Groundwater Volatilization Criteria (GWVC)

The Residential (R) GWVC apply to volatile organic compound (VOC) concentrations in groundwater within 30 feet of the ground surface or a building and are the default GWVC unless an EUR is in place to restrict land use on the parcel to non-residential activities.

The Industrial/Commercial (I/C) GWVC apply to VOCs in groundwater within 30 feet of the ground surface or a building. The I/C GWVC can only be used with an EUR that prohibits residential land use on the parcel.

The R GWVC and I/C GWVC can be rendered inapplicable to a site if an EUR is in place that prohibits a building from being constructed over the affected groundwater.

As an alternative, compliance with the VC can be established through analysis of VOCs in soil vapor beneath a building compared to the soil-vapor volatilization criteria (SVVC).

3.3 Alternatives, Exemptions and Variances

The RSRs provide exemptions, alternatives and variances to all of the criteria. None of the exemptions, alternative and variances are contemplated in this report.

3.4 Additional Polluting Substances

Constituents of concern (COCs) for which criteria have not been promulgated (referred to as "additional pollution substances" or APS), the RSRs provide a means by which to develop DEC, PMC, GWPC and the SWPC. Requests for criteria for APS must be submitted for Commissioner approval on a site-specific basis. An APS has not been requested for this Site; however, criteria included in the CTDEEP "fast track" APS have been included for guidance.

4.0 SITE HISTORY

4.1 UST Closure Activities

According to a 1949 development plan and the subsequent final development of the property, 11 fuel-oil USTs were installed at the Mansfield Apartments. All fuel-oil USTs associated with the apartment buildings were reportedly removed in 1993.

On August 27, 1993, the Oil and Chemical Spill Response Division authorized the disposal of approximately 60 cubic yards of soil from a UST spill from the Site. The precise location of the spill on the Site was not identified in the documents provided (Appendix I). The contaminated soils were reportedly disposed of at the Manchester Landfill. This spill was documented on August 13, 1993, during a tank removal (tank ID unknown) at the Mansfield Apartments.

The documents include laboratory results for soil samples collected from the stockpiled soils to be disposed, and in-situ soil and groundwater samples. The samples were collected on August 11, and 23, 1993. A note on the report indicates that all samples were collected prior to an additional excavation which reportedly doubled the size of the removal. The results of the samples collected on August 11th identified total petroleum hydrocarbons (TPH) in the sample collected from the stockpile above the GA PMC and RDEC, and aromatic VOCs above the GA PMC. Soil samples collected from the "side of the pit" and "bottom of the pit" on August 11th and the 23rd and analyzed for TPH were below the GA PMC and RDEC; however, aromatic VOCs (ethyl benzene, toluene and xylenes) were detected in the "left side pit" sample collected on August 11th above the GA PMC. Two additional sample results were included for VOCs in the documents for the "bottom of pit" and "right side of pit"; the results were reported in micrograms per liter (ug/L) and are presumed to be groundwater sample results. If the samples were groundwater, the results contained VOCs (ethyl benzene, toluene and xylenes) at concentrations above the GWPC.

No other documentation regarding the removal of the USTs was provided. During the 2022 Phase II Investigation, the areas of the USTs were scanned using ground-penetrating radar (GPR) for utility clearance. The area was also scanned to determine if the USTs and associated piping have been removed

from the ground. No USTs associated with the apartment buildings were identified during the underground utility clearance.

The Mansfield Apartments have been connected to the natural gas line since the removal of the fuel-oil USTs. During the 2022 Phase II Investigation, the gas line was noted to cross the area of the former UST-3, indicating that the tank has been removed in order for the gas line to be installed.

A fuel-oil UST is reportedly located in the vicinity of a pump station on the northern portion of the Site. WSP did not have access to the gated area of the pump station, so the GPR scan was completed outside of this area.

5.0 PHASE II INVESTIGATIONS

Phase II investigations occurred on June 16, 2022, and included drilling of soil borings, installation of temporary monitoring wells, and collection and analyses of soil and groundwater samples. Soil borings and monitoring wells were drilled with use of a direct-push drill rig. Samples were collected continuously from each boring using a 5-foot Macrocore® sampling device. Soil borings samples were field screened for ionizable VOCs using a photoionization detector (PID) and recorded descriptions of soil samples on geologic logs. Copies of the geologic logs are included in Appendix II. All soil samples collected during the 2022 investigation were submitted to York Analytical Laboratory (York) of Stratford, CT for laboratory analysis using the CTDEEP Reasonable Confidence Protocols (RCP). VOC soil samples were collected following the CTDEEP *Guidance for Collecting and Preserving Soil and Sediment Samples for Laboratory Determination of Volatile Organic Compounds, February 2006.* In total, 12 soil samples were analyzed for the following analyses:

- VOCs by EPA Method 8260;
- Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270; and
- Extractable Total Petroleum Hydrocarbons (ETPH).

A summary of contaminants of concern analyzed for in the soil samples are listed in Table 1, while sample locations are shown on Figure 2. Soil borings were backfilled with the cuttings generated.

Additionally, soil samples representative of soil generated during constructions were collected. Three samples were analyzed for constituents of concern identified in the Table 1 of the Massachusetts Department of Environmental Protection (MADEP) *Policy #COMM-97-001: Reuse & Disposal of Contaminated Soil at Massachusetts Landfill*. With the exception of polychlorinated biphenyls (PCBs) and volatile organic compounds (VOCs), samples analyzed were composited from the borings completed for the UST investigation, and western export area. PCB and VOC analyses were completed from discrete samples. The results from this investigation are discussed in Section 6.3.

Elevated VOCs were measured in soils screened with the PID at the former UST-6 location, as such, a temporary monitoring well was installed at this location. The well was constructed with 1-inch diameter PVC components, including 10 feet of PVC screen with a 0.01-inch slot size.

Following well construction, the temporary well was purged with a peristaltic pump for approximately 10 minutes prior to taking the groundwater grab sample. During sampling, dissolved oxygen (DO), oxidation-reduction potential (ORP), turbidity, pH and conductivity levels were measured using a YSI or Horiba multi-parameter water-quality meter that was calibrated prior to the sampling event and recorded on a groundwater sampling log. Copies of the groundwater sampling logs are included in

Appendix II. Groundwater samples were collected in laboratory-supplied glassware and submitted to York for laboratory analysis of VOCs, PAHs and ETPH following the CTDEEP RCP. The groundwater contaminants of concern analyzed for are listed in Table 5 and copies of the groundwater laboratory reports are included in Appendix III.

6.0 SUMMARY OF ENVIRONMENTAL INVESTIGATIONS RESULTS

The following summarizes the environmental condition at the identified locations of the former USTs and the results of our comparison of the Site conditions to the RSRs. Sections 6.1 through 6.3 discuss the soil and groundwater quality at the Site. The sampling locations are included on Figure 2. A summary of soil and groundwater analyses and results are presented in Tables 2 through 8. Laboratory reports are presented in Appendix III.

6.1 UST Soil Quality

Investigation included the installation of 12 soil borings located in the presumed hydraulic downgradient direction and or immediate vicinity of the former apartment heating oil USTs and pump station UST. These borings were drilled to 15 ft bg (feet below grade), or bedrock, whichever was encountered first. Soil samples were collected at a depth of observed gross contamination. If gross contamination was not observed, then a sample was collected from the base of the UST (presumed 10 ft bg), the top of the saturation zone, or at bedrock refusal. Constituents of concern (COC) analyzed included VOCs, PAHs, and ETPH.

During field observations, typical VOC vapor concentrations were detected with the PID ranging from 0 to 3.8 ppm (parts per million) with the exception of UST-6 and UST-7. VOC vapor concentrations were detected at 13.8 ppm at approximately 6 ft bg at UST-7 and at a concentration of 361.8 ppm at approximately 11 ft bg at UST-6. Petroleum odor was also observed at these depths.

Extractable Total Petroleum Hydrocarbons

ETPH was detected above the laboratory reporting limits at a concentration of 104 mg/kg at UST-6, which is below the GA PMC and RDEC. As noted above, elevated VOCs were measured with the PID at UST-7, and petroleum odor was identified by the field hydrogeologist. The presence of ETPH at this location is indicative of release. CTDEEP was notified of the detection on June 1, 2022, and the release was identified with spill number 2022-02394.

As shown in Table 2, ETPH was not detected above the laboratory reporting limit in any of the other samples analyzed.

Polynuclear Aromatic Hydrocarbons

Fluoranthene was detected above laboratory reporting limits at concentrations of 0.637 mg/kg at UST-8 and 0.670 mg/kg at UST-1; while pyrene was detected above the laboratory reporting limits at a concentration of 0.590 mg/kg at UST-1. All detections are below the GA PMC and RDEC. No evidence

of a release was identified at either of these USTs (field screening or detections of other COCs); it is presumed that the trace detections of PAHs in these areas associated with the backfill from the UST graves.

As shown in Table 3, PAHs were not detected above the laboratory reporting limit in any of the other samples analyzed.

Volatile Organic Compounds

Acetone, 2-butanone, and/or methylene chloride were detected at trace concentrations in all of the soil samples collected. All of the constituents are common laboratory artifacts and are believed to be reflective of the soil quality. Nonetheless, the trace detections were below the RDEC and GA PMC.

6.2 UST Groundwater Quality

During field observations, typical VOC vapor concentrations were detected with the PID ranging from 0 to 3.8 ppm with the exception of UST-6 and UST-7. VOC vapor concentrations were detected at 13.8 ppm at approximately 6 ft bg at UST-7 and at a concentration of 361.8 ppm at approximately 11 ft bg at UST-6. Petroleum odor was also observed at these depths. A temporary monitoring well was installed at both of these locations. Due to the depth of the saturated zone, the temporary monitoring well installed at UST-7 did not produce enough groundwater to be viable for a sample. A groundwater sample was taken from the temporary monitoring well installed at UST-6. COC analyzed included ETPH, PAHs and VOCs.

Groundwater purged from the temporary monitoring well installed at UST-6 appeared to have a slight petroleum related sheen. Due to the collection method of the sample, the water quality of the sample had some suspended solids in it.

Extractable Total Petroleum Hydrocarbons

ETPH was detected above the laboratory reporting limits at a concentration of 7,450 ug/L. This detection is above the GWPC (250 ug/L) as well as the SWPC and volatilization criteria (250 ug/L).

Polynuclear Aromatic Hydrocarbons

As shown in Table 7, acenaphthylene, acenaphthene, anthracene, benzo(a)anthracene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene and pyrene were all detected in the groundwater sample. Acenaphthylene and phenanthrene were detected above the SWPC. No other constituents were detected above the SWPC or GWPC.

Volatile Organic Compounds

As shown in Table 8, methylene chloride, 1,2-dibromoethane, 2,4-trimethylbenzene, isopropylbenzene, n-butylbenzene, and sec-butylbenzene and p-isopropyltoluene were detected at trace levels in the groundwater sample. None of the aforementioned constituents were detected above applicable RSR groundwater criteria.

ETPH was detected above the GWPC and SWPC, while PAHs were detected above the SWPC. The groundwater samples were collected from a temporary monitoring well, and the sample was not collected using low-flow sampling techniques so the results should be considered as an indicator of

groundwater quality as the concentrations may be skewed by matrix interference. Evaluation of groundwater quality should be evaluated from the collection of samples using low-flow purging techniques from a permanent monitoring well that has been properly developed.

6.3 Waste Characterization Soil Quality

Soil samples representative of soil generated during construction and/or remediation activities were collected to determine how any exported soils would need to be managed. Three samples were analyzed for constituents of concern identified in the Table 1 of the Massachusetts Department of Environmental Protection (MADEP) *Policy #COMM-97-001: Reuse & Disposal of Contaminated Soil at Massachusetts Landfill*. With the exception of polychlorinated biphenyls (PCBs), samples analyzed were composited from the borings completed for the UST investigation, and potential western export area. PCB and VOC analyses were completed from discrete samples. A summary of soil analyses and results are presented in Tables 9 through 17. Laboratory reports are presented in Appendix III.

Soil samples were collected as composite samples from boring USTs 1 through 5, USTs 6 through 11 and Garage 1 through 3 (see Figure 2 for locations of composites). The soil samples were submitted to York Analytical Laboratories Inc. in Stratford, CT for the analysis of the following:

- Extractable Total Petroleum Hydrocarbons (ETPH);
- Total Semi-volatile organic compounds (SVOCs) by EPA Method 8270;
- Polychlorinated biphenyls (PCBs) by EPA Method 82;
- VOCs by EPA Method 8260;
- Total arsenic, cadmium, chromium, lead and mercury;
- Toxicity characteristic leaching procedure (TCLP) Resource Conservation Recovery Act (RCRA) VOCs, SVOCs, metals, pesticides and herbicides; and
- Corrosivity, ignitability, reactivity, and paint filter test.

The analyses of the individual samples are presented in table 9, while the results are presented in Tables 10 through 16, and the laboratory report is presented in Appendix III.

TCLP Pesticides, TCLP Herbicides, TCLP metals TCLP SVOCs, and TCLP VOCs were not detected in any of the composite soil samples. All results were below "Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic" of 40 CFR Part 261.24. Results of corrosivity, ignitability and reactivity testing also meet thresholds identified in 40 Code of Federal Regulation (CFR) Part 261.

PCBs were not detected above the laboratory reporting limit; based on these results, these soils are NOT considered PCB Remediation Waste under 40 CFR 761.

ETPH was not detected in any of the soil samples. The only VOC detected was methylene chloride. The detection is believed to be a laboratory artifact and not indicative of the soil quality; nonetheless, the detection was below the GA PMC and RDEC.

Arsenic, cadmium, chromium and lead were detected at concentrations above the laboratory reporting limits but below applicable RSR criteria. The metals were detected at concentrations typical of background and are not associated with a release.

Fluoranthene was the only SVOC detected above laboratory reporting limits. The detection is below applicable RSR criteria. PAHs were also sporadically detected at trace levels during the investigation of the USTs; the detection may be associated with back fill of the UST graves.

Based on the above the above, any material to be disposed offsite, may be managed as non-hazardous and non-Toxic Substance Control Act (TSCA). In addition, all results are below criteria identified in Table 1 of the Massachusetts Department of Environmental Protection (MADEP) *Policy #COMM-97-001: Reuse & Disposal of Contaminated Soil at Massachusetts Landfill.*

7.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES

The CTDEEP Quality Assurance/Quality Control (QA/QC) Work Group finalized Reasonable Confidence Protocols (RCPs) in August 2006. These RCPs are guidelines for enhanced QA/QC procedures for analytical methods and reporting. The CTDEEP recommends that environmental professionals request that the laboratory follow the RCPs when producing data that is used as the basis of decisions regarding compliance with the RSRs. QA/QC data validation for this project consisted of a review of the Laboratory QA/QC Certification Forms and confirmation of attainment of data-quality objectives for the post-excavation soil samples.

The laboratory analyses and reporting relied upon in making this work product were conducted and produced by York Analytical Laboratories, Inc. (York) in Stratford, Connecticut a Connecticut Department of Public Health Certified Laboratory. The laboratory data reports indicate compliance with the RCPs and the QA/QC procedures outlined in EPA 600/4-79-019, "Handbook for Analytical Quality in Water and Waste Water" and method QA/QC procedures from SW 846.

Laboratory analytical data from the remedial activities were reviewed to ensure that data quality objectives for the project were met. Attachment IV provides tabular summary of data quality and usability for each laboratory report used in the preparation of this SIR. The DQA/DUE was completed using CTDEEP's "*Laboratory Quality Assurance and Quality Control Data Quality Assessment and Data Usability Evaluation Guidance Document*", issued May 2009 and revised December 2010 as guidance.

The 2022 laboratory reports included the "Laboratory Analysis QA/QC Certification Form", which indicated that the specified QA/QC performance criteria were followed, although not all of the RCP-specified performance criteria were met. A high bias for methylene chloride was detected for the LCS duplicate in the groundwater report. Methylene chloride was also detected in the laboratory blank sample in the soil report. Acetone and methylene chloride were detected at trace concentrations in select soil samples; both detections are presumed to be laboratory artifacts. 2-Butonone was also detected in select soil samples, and is also presumed to be a laboratory artifact. 1,2-Dibromoethane was not detected above laboratory reporting limits in the groundwater sample, however, laboratory reporting limits exceed the GWPC RSR criteria. The results of our QA/QC procedures and analysis of the laboratory compliance with the RCPs have not identified any other issues that would qualify the use of the environmental data generated by this investigation.

8.0 FINDINGS AND SOIL MANAGEMENT

The Site consists of one rectangular parcel of land in the Town of Mansfield, Connecticut. The Site is approximately 16 acres and contains 15 4,698-square foot student housing buildings that were constructed in 1951 for the University of Connecticut. This 270-bed, townhouse-style complex is surrounded by paved parking areas.

Groundwater beneath the Site has a CTDEEP groundwater quality classification of "GAA" (CTDEEP, 2017). Class GAA designated uses include "ground water that is tributary to a public water supply reservoir".

Documents provided for the Site identified a release from a UST in 1993. The laboratory reports identified constituents of concern in soil above the RDEC and GA PMC, and groundwater above the GWPC; however, the samples were reportedly not reflective of the final excavation extent. The reports indicate that 60 cubic yards of contaminated soils were disposed at the Manchester landfill. The location of the UST release was not identified in the material provided.

Investigations included the drilling of 12 soil borings to investigate former fuel oil USTs associated with the apartment buildings and a fuel-oil UST associated with a pump station. Field screening measured VOCs above typical background at two former UST locations (USTs 6 and 7). It is not known if UST 6 or 7 are the location of the 1993 UST release. No other elevated VOCs were measured with the PID.

Investigations included the collection of soil samples to determine how soil generated during construction and/or remediation activities need to be managed. The results of these investigations indicated that soils may be managed as non-hazardous and non-TSCA.

Phase II investigations identified a release of fuel oil at UST 6. CTDEEP was notified of the release on July 1, 2022, and was assigned spill number 2022-02394. The extent and magnitude of the of the release has not been characterized, however, groundwater was detected in a grab groundwater sample above the GWPC and SWPC. Soils from this area should not be reused onsite unless additional characterization is completed and determines that soils meet all applicable RSR criteria. If additional investigations identify constituents in soils above the RDEC and/or GA PMC, these soils should be managed as Connecticut Regulated Waste. Waste characterization sampling indicates that this material would be managed as non-hazardous and non-TSCA. Sampling also indicates that the remediation waste would be accepted at a landfill in Massachusetts. The material may also be disposed and/or recycled at facilities within Connecticut. Additional samples may need to be collected for waste disposal purposes based on the volume generated during remediation. If groundwater is extracted from this area, it would either need to be properly disposed or discharge to the publicly owned treatment works (POTW) under a CT General Permit.

While the soil sample results did not identify a release at UST 7, VOCs were measured modestly above background. If this area is excavated, soils should be screened during the activities to ensure that a release has not occurred. If a release is identified, these soils may be managed in a similar manner to soils generated at UST 6.

No other constituents of concern were identified at levels in the areas investigated that would limit the reuse of soils onsite as clean fill. Only trace levels of PAHs were sporadically detected in the soil samples collected. The detections were below applicable RSR soil criteria and presumed to be the result of backfill in the UST areas.

If signs of contamination in soils (staining, discoloring, odors or solid waste) are encountered during the construction activities, an environmental professional should be contacted. These materials would need to be further characterized to determine appropriate reuse and/or disposal options.

cmm
July 8, 2022
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9.0 REFERENCES

1) Rodgers, John, 1985, “Bedrock Geological Map of Connecticut”, Connecticut Geological and Natural History Survey, United States Geological Survey.

2) Stone, Janet; Schafer, John; London, Elizabeth and Thompson, Woodrow, “Surficial Materials Map of Connecticut”, State of Connecticut Department of Environmental Protection, Geological and Natural History Survey, 1992.

TABLES

TABLE 1
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Constituents Analyzed in Soil

Boring ID	Interval (ft bg)		Date Collected	CT ETPH	SVOCs	VOCs
	Top	Bot				
UST-1	7	8	6/16/2022	X	X	X
UST-2	5	6	6/16/2022	X	X	X
UST-3	8.5	9.5	6/16/2022	X	X	X
UST-4	10	11	6/16/2022	X	X	X
UST-5	10	11	6/16/2022	X	X	X
UST-6	10	11	6/16/2022	X	X	X
UST-7	5.5	6.5	6/16/2022	X	X	X
UST-8	1	2	6/16/2022	X	X	X
UST-9	10	11	6/16/2022	X	X	X
UST-10	5	6	6/16/2022	X	X	X
UST-11	10	11	6/16/2022	X	X	X
PUMP-1	10	11	6/16/2022	X	X	X

CT ETPH	Extractable total petroleum hydrocarbons
SVOCs	Semi-volatile organic compounds
VOCs	Volatile organic compounds
ft bg	Feet below grade
X	Constituent analyzed for total concentration
X/SPLP	Constituent analyzed for total and SPLP concentrations

TABLE 2
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Extractable Total Petroleum Hydrocarbons Detected in Soil

Boring	Interval (ft bg)		Date	CT ETPH
	Top	Bot	Collected	mg/kg
UST-1	7	8	6/16/2022	ND<39.7
UST-2	5	6	6/16/2022	ND<40.6
UST-3	8.5	9.5	6/16/2022	ND<44.7
UST-4	10	11	6/16/2022	ND<40.6
UST-5	10	11	6/16/2022	ND<48.2
UST-6	10	11	6/16/2022	104
UST-7	5.5	6.5	6/16/2022	ND<45.2
UST-8	1	2	6/16/2022	ND<43.7
UST-9	10	11	6/16/2022	ND<43.9
UST-10	5	6	6/16/2022	ND<45.6
UST-11	10	11	6/16/2022	ND<42.3
PUMP-1	10	11	6/16/2022	ND<47.3
CTDEEP RSR Residential Direct Exposure Criteria (RDEC)				500
GA Pollutant Mobility Criteria (GB PMC)				500

ND<: Concentration was not detected above the laboratory reporting limit.
mg/kg: milligrams per kilogram
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations
ft bg: feet below grade

TABLE 3
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Polynuclear Aromatic Hydrocarbons Detected in Soil

Boring	Interval (ft bg)		Date Collected	Pyrene mg/kg	Flouranthene mg/kg
UST-1	7	8	6/16/2022	0.59	0.67
UST-2	5	6	6/16/2022	ND<0.541	ND<0.541
UST-3	8.5	9.5	6/16/2022	ND<0.590	ND<0.590
UST-4	10	11	6/16/2022	ND<0.535	ND<0.535
UST-5	10	11	6/16/2022	ND<0.620	ND<0.620
UST-6	10	11	6/16/2022	ND<0.561	ND<0.561
UST-7	5.5	6.5	6/16/2022	ND<0.564	ND<0.564
UST-8	1	2	6/16/2022	ND<0.560	0.637
UST-9	10	11	6/16/2022	ND<0.549	ND<0.549
UST-10	5	6	6/16/2022	ND<0.567	ND<0.567
UST-11	10	11	6/16/2022	ND<0.550	ND<0.550
PUMP-1	10	11	6/16/2022	ND<0.583	ND<0.583
CTDEEP RSR Residential Direct Exposure Criteria (RDEC)				1000	1000
GA Pollutant Mobility Criteria (GB PMC)				4	5.60

Only detected constituents are reported.
ND<: Concentration was not detected above the laboratory reporting limit.
mg/kg: milligrams per kilogram

TABLE 4
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Volatile Organic Compounds Detected in Soil

Boring	Interval (ft bg)		Date Collected	2-Butanone (MEK) mg/kg	Acetone mg/kg	Methylene Chloride mg/kg
UST-1	7	8	6/16/2022	ND<0.0041	ND<0.0083	0.035
UST-2	5	6	6/16/2022	ND<0.0044	ND<0.0089	0.074
UST-3	8.5	9.5	6/16/2022	ND<0.0043	ND<0.0086	0.074
UST-4	10	11	6/16/2022	ND<0.0038	ND<0.0077	0.039
UST-5	10	11	6/16/2022	0.0084	0.024	0.025
UST-6	10	11	6/16/2022	ND<0.0051	ND<0.010	0.039
UST-7	5.5	6.5	6/16/2022	0.0043	0.016	0.025
UST-8	1	2	6/16/2022	ND<0.0044	ND<0.0088	0.042
UST-9	10	11	6/16/2022	ND<0.0044	ND<0.0087	0.032
UST-10	5	6	6/16/2022	ND<0.0049	0.012	0.043
UST-11	10	11	6/16/2022	ND<0.0045	ND<0.0091	0.04
PUMP-1	10	11	6/16/2022	ND<0.0043	ND<0.0087	0.034
CTDEEP RSR Residential Direct Exposure Criteria (RDEC)				500	500	82
GA Pollutant Mobility Criteria (GB PMC)				8	14	0.1

Note: Both acetone and methylene chloride are laboratory artifacts, and not associated with a release.
Only detected constituents are reported

NR: Not reported.
ND<: Concentration was not detected above the laboratory reporting limit.
mg/kg: milligrams per kilogram
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations

TABLE 5
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Constituents Analyzed in Groundwater

Well/SAMPLE ID	Date Collected	CT ETPH	SVOCs (PAHs)	VOCs
UST-6	6/16/2022	X	X	X

CT ETPH	Extractable total petroleum hydrocarbons
SVOCs	Semi-volatile organic compounds
PAHs	Polyaromatic hydrocarbons
VOCs	Volatile organic compounds
X	Constituent analyzed

TABLE 6
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Extractable Total Petroleum Hydrocarbons Detected in Groundwater

Well ID	Date Collected	ETPH (u/l)
UST-6	6/16/2022	**7,450**
CTDEEP RSR Surface Water Protection Criteria (SWPC)		250
CTDEEP RSR Groundwater Protection Criteria		250

ND<: Concentration was not detected above the laboratory reporting limit
ug/l: micrograms per liter
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations

TABLE 7
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Polynuclear Aromatic Hydrocarbons Detected in Groundwater

Well ID	Date Collected	Acenaphthene (ug/L)	Acenaphthylene (ug/L)	Anthracene (ug/L)	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)	Fluoranthene	Fluorene	Napthalene	Phenanthrene	Pyrene
UST-6	6/16/2022	13.60	**2.71**	4.17	0.09	0.12	0.93	19.70	1.38	19.60	1.36
CTDEEP RSR Surface Water Protection Criteria (SWPC)		150	0.3	1,100,000	0.3	0.54	3,700	140,000	210	**14**	110,000
CTDEEP RSR Groundwater Protection Criteria (GWPC)		420	420	2000	0.06	4.8	280	280	280	200	200

Note: All results shown in micrograms per liter (ug/l).
Only detected constituents are reported
ND<: Concentration was not detected above the laboratory reporting limit.
NE: Not established or criteria do not apply to this constituent.
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations

TABLE 8
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Volatile Organic Compounds Detected in Groundwater

Well ID	Date Collected	1,2,4-Trimethylbenzene (ug/L)	Isopropylbenzene (ug/L)	Methylene chloride (ug/L)	n-Butylbenzene (ug/L)	p-Isopropyltoluene (ug/L)	sec-Butylbenzene (ug/l)
UST-6	6/16/2022	2.21	0.62	3.18	1.16	0.71	6.30
CTDEEP RSR Surface Water Protection Criteria (SWPC)		150	210	48000	10,000	200	10,000
CTDEEP RSR Residential Volatilization Criteria (RVC)		20	30	160	69	25	69
CTDEEP RSR Groundwater Protection Criteria		140	25	5	350	30	350

Note: All results shown in micrograms per liter (ug/l).
Only detected constituents are reported
MTBE: Methyl tertiary-butyl ether
ND<: Concentration was not detected above the laboratory reporting limit.
NE: Not established or criteria do not apply to this constituent.
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations

TABLE 9
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Constituents Analyzed in Waste Characterization Soil Samples

Boring ID	Interval (ft bg)		Date Collected	CT ETPH	SVOCs	VOCs	PCBs	PESTICIDES	HERBICIDES	ARSENIC	BARIUM	CADMIUM	CHROMIUM	LEAD	SELENIUM	SILVER	MERCURY	CORROSIVITY (pH)	IGNITABILITY	REACTIVITY	PAINT FILTER
	Top	Bot																			
UST 1-5			6/16/2022	X	X/ TCLP	TCLP		TCLP	TCLP	X/TCLP	TCLP	X/TCLP	X/TCLP	X/TCLP	TCLP	TCLP	X/TCLP	X	X	X	X
UST 6-11			6/16/2022	X	X/TCLP	TCLP		TCLP	TCLP	X/TCLP	TCLP	X/TCLP	X/TCLP	X/TCLP	TCLP	TCLP	X/TCLP	X	X	X	X
GARAGE 1-3			6/16/2022	X	X/TCLP	TCLP		TCLP	TCLP	X/TCLP	TCLP	X/TCLP	X/TCLP	X/TCLP	TCLP	TCLP	X/TCLP	X	X	X	X
UST-5	10	11	6/16/2022				X														
UST-9	10	11	6/16/2022				X														
GARAGE 2	0	2	6/16/2022			X	X														

CT ETPH	Extractable total petroleum hydrocarbons
SVOCs	Semi-volatile organic compounds
VOCs	Volatile organic compounds
PCBs	Polychlorinated Biphenyls
ft bg	Feet below grade
X	Constituent analyzed for total concentration.
X/TCLP	Constituent analyzed for total and TCLP concentrations.

TABLE 10
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Extractable Total Petroleum Hydrocarbons Detected in Waste Characterization Soil Samples

Boring	Date Collected	CT ETPH mg/kg
UST 1-5	6/16/2022	ND<42.1
UST 6-11	6/16/2022	ND<42.4
GARAGE 1-3	6/16/2022	ND<43.0
CTDEEP RSR Residential Direct Exposure Criteria (RDEC)		500
GA Pollutant Mobility Criteria (GB PMC)		500

ND<: Concentration was not detected above the laboratory reporting limi
mg/kg: milligrams per kilogram
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations

TABLE 11
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Total and TCLP Metals Detected in Waste Characterization Soil Samples

Boring	Date Collected	Total Metals				TCLP Metals
		Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	RCRA Metals (mg/L)
UST 1-5	6/16/2022	ND<1.61	ND<0.322	17.3	4.81	ND
UST 6-11	6/16/2022	3.8	ND<0.327	46.5	4.76	ND
GARAGE 1-3	6/16/2022	ND<1.63	1.3	29.7	5.52	ND
CTDEEP RSR Residential Direct Exposure Criteria (RDEC		10	34	100/3,900	400	NE
GA Pollutant Mobility Criteria (GB PMC)		NE	NE	NE	NE	Varies

Only detected constituents are reported.

ND<: Concentration was not detected above the laboratory reporting limit.
mg/kg: milligrams per kilogram
mg/l: milligrams per liter
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations
NE: Not established or does not apply to this type of analysis.

TABLE 12
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of PCBs Detected in Waste Characterization Soil Samples

Boring	Interval (ft bg)		Date Collected	PCB
UST-5	10	11	6/16/2022	ND<0.0302 (ALL)
UST-9	10	11	6/16/2022	ND<0.0276 (ALL)
GARAGE 2	0	2	6/16/2022	ND<0.0270 (ALL)
CTDEEP RSR Residential Direct Exposure Criteria (RDEC)				1
GA Pollutant Mobility Criteria (GB PMC)				NE

ND<: Concentration was not detected above the laboratory reporting limit.
mg/kg: milligrams per kilogram
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations
NE: Not established or does not apply to this type of analysis.

TABLE 13
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of TCLP Pesticides Detected in Waste Characterization Soil Samples

Boring	Date Collected	TCLP PESTICIDES (ug/L)
UST 1-5	6/16/2022	ND<1.25 (ALL)
UST 6-11	6/16/2022	ND<1.11 (ALL)
GARAGE 1-3	6/16/2022	ND<1.11 (ALL)
CTDEEP RSR Residential Direct Exposure Criteria (RDEC)		Varies
GA Pollutant Mobility Criteria (GB PMC)		Varies

ND<: Concentration was not detected above the laboratory reporting limit.
mg/kg: milligrams per kilogram
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations
NE: Not established or does not apply to this type of analysis.

TABLE 14
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of TCLP Herbicides Detected in Waste Characterization Soil Samples

Boring	Date Collected	TCLP HERBICIDES (ug/L)
UST 1-5	6/16/2022	ND< 5.0 (ALL)
UST 6-11	6/16/2022	ND< 5.0 (ALL)
GARAGE 1-3	6/16/2022	ND< 5.0 (ALL)
CTDEEP RSR Residential Direct Exposure Criteria (RDEC)		Varies
GA Pollutant Mobility Criteria (GB PMC)		Varies

ND<: Concentration was not detected above the laboratory reporting limit.
mg/kg: milligrams per kilogram
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations
NE: Not established or does not apply to this type of analysis.

TABLE 15
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Total and TCLP Semi-Volatile Organic Compounds Detected in Waste Characterization Soil Samples

Boring	Date Collected	Total SVOCs	TCLP SVOCs
		Fluoranthene (mg/kg)	RCRA SVOCs (ug/L)
UST 1-5	6/16/2022	ND<0.532	ND
UST 6-11	6/16/2022	0.539	ND
GARAGE 1-3	6/16/2022	ND<0.538	ND
CTDEEP RSR Residential Direct Exposure Criteria (RDEC)		1000	Varies
GA Pollutant Mobility Criteria (GB PMC)		5.6	Varies

Only detected constituents are reported

ND<: Concentration was not detected above the laboratory reporting limit.

mg/kg: milligrams per kilogram

ug/L: micrograms per liter

CTDEEP: Connecticut Department of Energy and Environmental Protection

RSR: Remediation Standard Regulations

TABLE 16
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Total and TCLP Volatile Organic Compounds Detected in Waste Characterization Soil Samples

Boring	Interval (ft bg)		Date Collected	Total VOCs	TCLP VOCs
				Methylene Chloride (mg/kg)	RCRA VOCs (ug/L)
UST 1-5			6/16/2022	NA	ND <25
UST 6-11			6/16/2022	NA	ND <25
GARAGE 1-3			6/16/2022	NA	ND <25
GARAGE 2	0	2	6/16/2022	0.047	ND <25
CTDEEP RSR Residential Direct Exposure Criteria (RDEC)				82	Varies
GA Pollutant Mobility Criteria (GB PMC)				0.1	Varies

Note: Both acetone and methylene chloride are laboratory artifacts, and not associated with a release.
Only detected constituents are reported.
NA: Not Analyzed
ND<: Concentration was not detected above the laboratory reporting limit.
mg/kg: milligrams per kilogram
ug/L: micrograms per liter
CTDEEP: Connecticut Department of Energy and Environmental Protection
RSR: Remediation Standard Regulations

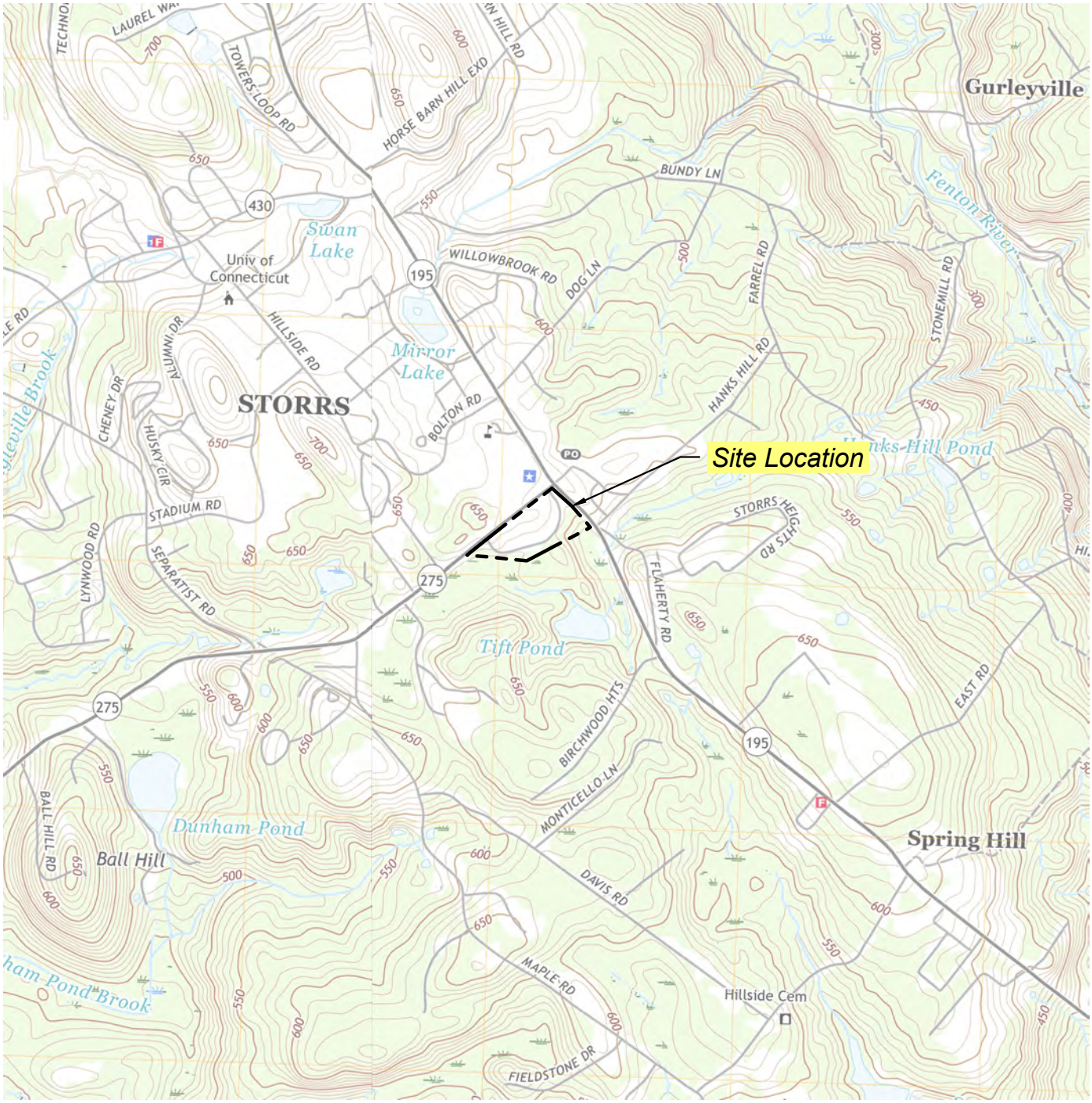
TABLE 17
University of Connecticut
Mansfield Apartment
Mansfield, Connecticut

Summary of Miscellaneous Analytes in Waste Characterization Soil Samples

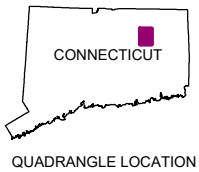
Boring	Date Collected	Corrosivity (pH)	Reactivity-Cyanide (mg/kg)	Reactivity-Sulfide (mg/kg)	Ignitability	Paint Filter Test
UST 1-5	6/16/2022	6.75	ND <0.250	48	Non- Ignitable	No Free Liquid
UST 6-11	6/16/2022	6.35	ND <0.250	40	Non- Ignitable	No Free Liquid
GARAGE 1-3	6/16/2022	5.36	ND <0.250	40	Non- Ignitable	No Free Liquid

ND<: Concentration was not detected above the laboratory reporting limit.
mg/kg: milligrams per kilogram

FIGURES



SOURCE: USGS TOPOGRAPHIC QUADRANGLE COVENTRY AND SPRING HILL, CONNECTICUT (2018).



QUADRANGLE LOCATION

LEGEND

PROPERTY BOUNDARY

0 2000

SCALE IN FEET

WSP USA Inc.
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

Mansfield Apartments at UCONN
1 South Eagleville Road
Mansfield, Connecticut

SITE LOCATION MAP

FIGURE 1

DWG Date: 07/06/22
Checked: KA
Approved: MM
Drawn By: RAC
A

O:\DWG\UCONN\Mansfield Apartments\F1_SLM.dwg, Layout1, 7/6/2022 6:53:42 AM, DWG To PDF.pc3

MANSFIELD APARTMENTS
1 SOUTH EAGLEVILLE ROAD
MANSFIELD, CONNECTICUT

Site Map

DATE	REVISED

PREPARED BY:

WSP USA Inc.
4 Research Drive
Suite 204
Shelton, CT 06484
Tel: (203) 944-5000

DRAWN: | CHECKED: | DATE: 7/6/22 | FIGURE: 2

APPENDIX I

Mansfield Apts

Northeast Laboratories, Inc.
129 Mill Street
Berlin, Connecticut 06037-9990

CT Certification: PH-0606
EPA Certification: CT-024
USDA Certification: 0976

FAX TRANSMISSION COVER SHEET

NUMBER OF PAGES IN THIS TRANSMISSION (INCLUDING COVER SHEET): 2

TO: FAX NUMBER: 486-1106

:00 PM
/26/93

efan Wawzyniecki
CONN

DER: Alan Johnson
ITLE: Lab Director
NORTHEAST LABORATORIES, INC.

Frank –

I placed call to DEP (566.4433) to have Mark DeCaprio or Matt Williamson call you in my absence Thursday. Please relay analytical results – arrange for visit from DEP if necessary. Call Dick Brand (3119)

- all results are before additional excavation
- doubled amount of soil down & concrete pad -

FACSIMILE TRANSMITTAL FORM

THE UNIVERSITY OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL HEALTH AND SAFETY
189 AUDITORIUM ROAD
STORRS, CT 06269-3097

TEL: (203) 486-3613
FAX: (203) 486-1106

FAX 566-8682

TO: MARK DeCAPRIO

FROM: FRANK LABATO

PAGE 1 OF 2 (incl. this cover page)

DATE: 8-27-93

Request permit to send ~ 60 yards of petroleum-contaminated soil to Manchester landfill.

NOTE: PLEASE NOTIFY SENDER IF ALL PAGES ARE NOT RECEIVED

****
*** ACTIVITY REPORT ***
****

TRANSMISSION OK

TX/RX NO.	1349
CONNECTION TEL	815668682
CONNECTION ID	
START TIME	08/27 15:11
USAGE TIME	01'00
PAGES	2
RESULT	OK

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT
OIL AND CHEMICAL SPILL RESPONSE DIVISION

DATE: 8/27/93

TO: State of Connecticut, Department of Environmental Protection, Waste Management Bureau, Waste Engineering and Enforcement Division/SW

FROM: State of Connecticut, Department of Environmental Protection, Waste Management Bureau, Oil and Chemical Spill Response Division

SUBJECT: **Disposal of contaminated soil from Underground Storage Tank (UST) spill incident or tank removals**

The Oil and Chemical Spill Response Division has authorized the disposal of approximately 60 cubic yards of soil from an UST spill or tank removal on 8/93/93 (date) at So. Eagleville Road (street address). The name of the person and/or company responsible for the UST spill/tank removal is Mansfield Apartments Stan Wawrzyniski

Phone number: (203) (area code) 4863613 (number)

The contractor for the cleanup who will be hauling the materials to the disposal site is Univ of Conn. State of Conn.

Contact Person: Frank Lubato Phone number: 486 3613

M. DeCaprio (Inspector name), the Inspector for Oil and Chemical Spill Response Division has checked the materials involved and determined that the material is suitable for daily cover and will not present a problem during transportation or at the disposal site. All required analysis have been completed and results have been received by the Oil and Chemical Spill Response Division.

Disposal has been arranged at Manchester Landfill.

Mark DeCapr
Inspector, Oil and Chemical Spill Response Division

☑ Analysis Received ☐ Analysis not required

☐ Disposal Fee
Check no. N/A Amount $100.00
Date of receipt
Received by

Attachments: Disposal Fee check
Analysis reports

cc: Operator/Owner

Gave copy to Earl Eldredge on 8/27/93. MF

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TELEFAX COVER SHEET

TO: Frank Labato TELEPHONE NUMBER: ( ) 4863613

DEPARTMENT: UCONN H+S

FROM: M. DeCaprio TELEPHONE NUMBER: ( ) 566463

DEPARTMENT: DEP OCSRD

NUMBER OF PAGES INCLUDING COVER SHEET: 2 DATE:

PERSON SENDING TELEFAX: M. DeCaprio TIME: 1538

TIME COMPLETED:

Please

Northeast Laboratories, Inc.
129 Mill Street
Berlin, Connecticut 06037-9990

CT Certification: PH-0606
EPA Certification: CT-024
USDA Certification: 0976

CERTIFICATE OF ANALYSIS

Report To:
Uconn
189 Auditorium Road
Box U97
Storrs, CT 06269

Fax # 486-1106

Date Sample(s) Collected:	Not Given
Collected By:	D. Shannon
Date Sample(s) Received @ Lab:	8/23/93
Time Received @ Lab:	4:20pm
Temp. When Received @ Lab:	Not Given
Date Tested/Plated:	8/24-25/93
Tested/Plated By:	SA/ACJ
Report Date:	**8/26/93**

Sample Description: Two Soil Samples- UCONN Mansfield Apts.

Sample Location	Total Petroleum Hydrocarbons Milligrams per Kilogram (Dry Weight Basis)
#1 Side of Pit	36
#2 Bottom of Pit	<21

Results are based upon samples submitted/collected: 8/23/93

Allan C. Johnson
Director

Northeast Laboratories, Inc.
129 Mill Street
Berlin, Connecticut 06037-9990

CT Certification: PH-0606
EPA Certification: CT-024
USDA Certification: 0976

CERTIFICATE OF ANALYSIS

Report To:
Uconn
189 Auditorium Road
Box U97
Storrs, CT 06269

Fax # 486-1106

Date Sample(s) Collected:	Not Given
Collected By:	D. Shannon
Date Sample(s) Received @ Lab:	8/23/93
Time Received @ Lab:	4:20pm
Temp. When Received @ Lab:	Not Given
Date Tested/Plated:	8/24-25/93
Tested/Plated By:	SA/ACJ
Report Date:	**8/26/93**

Sample Description: Two Soil Samples- UCONN Mansfield Apts.

Sample Location	Total Petroleum Hydrocarbons Milligrams per Kilogram (Dry Weight Basis)
#1 Side of Pit	36
#2 Bottom of Pit	<21

Results are based upon samples submitted/collected: 8/23/93

Allan C. Johnson
Director

Northeast Laboratories, Inc.
129 Mill Street
Berlin, Connecticut 06037-9990

CT Certification: PH-0606
EPA Certification: CT-024
USDA Certification: 0976

CERTIFICATE OF ANALYSIS

REPORT TO:
University of Connecticut
Dept. of Environmental Health & Safety
Box V97
89 Auditorium Road
Storrs, CT 06269

Attn: Stefan Wawzyniecki

Date Sample(s) Collected:	8/11/93
Time Collected:	Not Stated
Collected By:	UCONN
Date Sample(s)Received @ Lab:	8/11/93 PM
Date Tested:	8/13-18/93
Tested By:	SA, AJ
Report Date:	**8/18/93**
Purchase Order No.:	**Not Given with Sample**

SAMPLE DESCRIPTION: Soil Samples: Mansfield Apartments
Grab Samples

	Total Petroleum Hydrocarbons (milligrams per Kilogram)
Excavated Pile	3400
Side of Pit	278
Bottom of Pit	183
	(Dry Weight Basis)

EPA 8020 Organics (Attached)

Results based on samples submitted 8/11/93

Allan C. Johnson
Director

Northeast Laboratories, Inc.
129 Mill Street
Berlin, Connecticut 06037-9990

CT Certification: PH-0606
EPA Certification: CT-024
USDA Certification: 0976

EPA TEST METHOD: 8020

AROMATIC VOLATILE ORGANICS
(Ground Water, Soils, Sludges)

REPORT TO:
University of Connecticut
Dept. of Environmental Health & Safety
Box V97
89 Auditorium Road
Storrs, CT 06269

Attn: Stefan Wawzyniecki

Date Sample(s) Collected: 8/11/93
Time Collected: Not Stated

Collected By: UCONN
Date Sample(s)Received @ Lab: 8/11/93 PM
Date Tested: 8/13-18/93
Tested By: SA, AJ
Report Date: 8/18/93
Report No.: 93-0818A
Purchase Order No.: Not Given with Sample

SAMPLE SITE:	SAMPLING POINT
Mansfield Apartments Mansfield, CT	Not Stated
SOURCE:	**TREATMENT:**
Excavated Pile	Not Stated

COMPOUND	AMOUNT DETECTED (µg/L) or mg/Kg	MINIMUM DETECTABLE LIMIT (µg/L) or mg/Kg
Benzene	ND	0.2
Chlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.3
1,3-Dichlorobenzene	26.9	0.4
1,2-Dichlorobenzene	26.8	0.4
Ethyl Benzene	1.1	0.2
Toluene	150	0.4
Xylene (Total)	12.0	0.10

ND = none detected **Results based upon samples submitted/collected: 8/11/93**

Alan C. Johnson
Director

Northeast Laboratories, Inc.
129 Mill Street
Berlin, Connecticut 06037-9990

CT Certification: PH-0606
EPA Certification: CT-024
USDA Certification: 0976

EPA TEST METHOD: 8020

AROMATIC VOLATILE ORGANICS
(Ground Water, Soils, Sludges)

REPORT TO:
University of Connecticut
Dept. of Environmental Health & Safety
Box V97
89 Auditorium Road
Storrs, CT 06269

Attn: Stefan Wawzyniecki

Date Sample(s) Collected: 8/11/93
Time Collected: Not Stated

Collected By: UCONN
Date Sample(s)Received @ Lab: 8/11/93 PM
Date Tested: 8/13-18/93
Tested By: SA, AJ
Report Date: 8/18/93
Report No.: 93-0818B
Purchase Order No.: Not Given with Sample

SAMPLE SITE:
Mansfield Apartments
Mansfield, CT

SAMPLING POINT
Not Stated

SOURCE:
Left Side of Pit

TREATMENT:
Not Stated

COMPOUND	AMOUNT DETECTED (µg/L) or mg/Kg	MINIMUM DETECTABLE LIMIT (µg/L) or mg/Kg
Benzene	ND	0.2
Chlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.3
1,3-Dichlorobenzene	ND	0.4
1,2-Dichlorobenzene	ND	0.4
Ethyl Benzene	97	0.2
Toluene	4.8	0.4
Xylene (Total)	215	0.10

ND = none detected **Results based upon samples submitted/collected: 8/11/93**

Allan C. Johnson
Director

Northeast Laboratories, Inc.
129 Mill Street
Berlin, Connecticut 06037-9990

CT Certification: PH-0606
EPA Certification: CT-024
USDA Certification: 0976

EPA TEST METHOD: 8020

AROMATIC VOLATILE ORGANICS
(Ground Water, Soils, Sludges)

REPORT TO:

University of Connecticut
Dept. of Environmental Health & Safety
Box V97
89 Auditorium Road
Storrs, CT 06269

Attn: Stefan Wawzyniecki

Date Sample(s) Collected:	8/11/93
Time Collected:	Not Stated
Collected By:	UCONN
Date Sample(s)Received @ Lab:	8/11/93 PM
Date Tested:	8/13-18/93
Tested By:	SA, AJ
Report Date:	**8/18/93**
Report No.:	**93-0818C**
Purchase Order No.:	**Not Given with Sample**

SAMPLE SITE:	SAMPLING POINT
Mansfield Apartments Mansfield, CT	Not Stated
SOURCE:	**TREATMENT:**
Right Side of Pit	Not Stated

COMPOUND	AMOUNT DETECTED (µg/L)	MINIMUM DETECTABLE LIMIT (µg/L)
Benzene	ND	0.2
Chlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.3
1,3-Dichlorobenzene	ND	0.4
1,2-Dichlorobenzene	ND	0.4
Ethyl Benzene	710	0.2
Toluene	1600	0.4
Xylene (Total)	1250	0.10

ND = none detected **Results based upon samples submitted/collected: 8/11/93**

Alan C. Johnson
Director

Northeast Laboratories, Inc.
129 Mill Street
Berlin, Connecticut 06037-9990

CT Certification: PH-0606
EPA Certification: CT-024
USDA Certification: 0976

EPA TEST METHOD: 8020

AROMATIC VOLATILE ORGANICS
(Ground Water, Soils, Sludges)

REPORT TO:
University of Connecticut
Dept. of Environmental Health & Safety
Box V97
89 Auditorium Road
Storrs, CT 06269

Attn: Stefan Wawzyniecki

Date Sample(s) Collected: 8/11/93
Time Collected: Not Stated

Collected By: UCONN
Date Sample(s)Received @ Lab: 8/11/93 PM
Date Tested: 8/13-18/93
Tested By: SA, AJ
Report Date: 8/18/93
Report No.: 93-0818D
Purchase Order No.: Not Given with Sample

SAMPLE SITE:
Mansfield Apartments
Mansfield, CT

SAMPLING POINT
Not Stated

SOURCE:
Bottom of Pit

TREATMENT:
Not Stated

COMPOUND	AMOUNT DETECTED (µg/L)	MINIMUM DETECTABLE LIMIT (µg/L)
Benzene	ND	0.2
Chlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.3
1,3-Dichlorobenzene	ND	0.4
1,2-Dichlorobenzene	ND	0.4
Ethyl Benzene	1183	0.2
Toluene	354	0.4
Xylene (Total)	1160	0.10

ND = none detected **Results based upon samples submitted/collected: 8/11/93**

Allan C. Johnson
Director

Northeast Laboratories, Inc.
129 Mill Street
Berlin, Connecticut 06037-9990

CT Certification: PH-0606
EPA Certification: CT-024
USDA Certification: 0976

Facsimile Cover Sheet

To: Mr. Stefan Wawzyniecki
Company: UCONN, Dept of Environmental Health/Safety
Phone: 486-1106
Fax: ~~488~~-1106

From: Alan C. Johnson, Lab Director
Company: Northeast Laboratories, Inc.
Phone: 828-9787
Fax: 829-1050

Date: 08/18/93
Pages including this cover page: 6

Comments:

APPENDIX II

GEOLOGIC LOG
WSP USA
SHELTON, CONNECTICUT

OWNER: University of Connecticut

BORING NO: UST-1

PAGE 1 **OF** 1 **PAGE**

SITE LOCATION: Mansfield Apartments
S. Eagleville Rd
Storrs Mansfield, CT

SCREEN SIZE & TYPE: NA **SLOT NO:** NA
SETTING: NA

DATE COMPLETED: 6/16/2022

SAND PACK SIZE & TYPE: NA
SETTING: NA

DRILLING COMPANY: Complete Environmental Services (CES)

CASING SIZE & TYPE: NA
SETTING: NA

DRILLING METHOD: GeoProbe 7822DT Direct Push

SAMPLING METHOD: MacroCore (MC)

SEAL TYPE: NA
SETTING: NA

OBSERVER: Kristen Amodeo and Maggie Roberts

REFERENCE POINT (RP): Ground Surface

BACKFILL TYPE: NA

ELEVATION OF RP: ---

STATIC WATER LEVEL: NA

STICK-UP: NA

DEVELOPMENT METHOD: NA

SURFACE COMPLETION: Sand

DURATION: NA **YIELD:** NA

REMARKS: Sample collected from 7-8 ft interval @0935 and submitted for laboratory analytical
Soils collected for composite waste characterization sample

GPS COORDINATES:

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million

DEPTH (FEET) FROM	DEPTH (FEET) TO	SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
0	5	MC		1.9	0.5 @ 0.5ft 0.7 @ 1.5ft	0-0.5ft: brown, fine to coarse, SAND, some gravel, trace organics, loose compact 0.5-1ft: brown, fine to coarse SAND and GRAVEL, trace silt, medium compact 1-1.9ft: light brown, fine to coarse SAND and GRAVEL, trace clay, medium compact
5	10	MC		2	0 @ 5.5ft 0@6.5ft	5-6.5ft: light brown, fine to coarse SAND and GRAVEL, some silt, trace clay, medium compact 6.5-7ft: crushed rock Refusal at 8 ft

GEOLOGIC LOG
WSP USA
SHELTON, CONNECTICUT

OWNER: University of Connecticut

BORING NO: UST-2

PAGE 1 **OF** 1 **PAGE**

SITE LOCATION: Mansfield Apartments
S. Eagleville Rd
Storrs Mansfield, CT

SCREEN SIZE & TYPE: NA **SLOT NO:** NA
SETTING: NA

DATE COMPLETED: 6/16/2022

SAND PACK SIZE & TYPE: NA
SETTING: NA

DRILLING COMPANY: Complete Environmental Services (CES)

CASING SIZE & TYPE: NA
SETTING: NA

DRILLING METHOD: GeoProbe 7822DT Direct Push

SAMPLING METHOD: MacroCore (MC)

SEAL TYPE: NA
SETTING: NA

OBSERVER: Kristen Amodeo and Maggie Roberts

REFERENCE POINT (RP): Ground Surface

BACKFILL TYPE: NA

ELEVATION OF RP: ---

STATIC WATER LEVEL: NA

STICK-UP: NA

DEVELOPMENT METHOD: NA

SURFACE COMPLETION: Sand

DURATION: NA **YIELD:** NA

REMARKS: Sample collected from 5-6 ft interval @0950 and submitted for laboratory analytical
Soils collected for composite waste characterization sample

GPS COORDINATES:

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million

DEPTH (FEET) FROM	DEPTH (FEET) TO	SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
0	5	MC		2.2	0.0 @ 1.0ft 0.0 @ 2.0ft	0-0.5ft: brown, fine to coarse, SAND, trace gravel, little silt, little organics, loose compact 0.5-2.2ft: red, fine to coarse SAND and GRAVEL, trace silt, medium compact
5	10	MC		1.7	0.8 @ 5.6ft 1.1 @6.0ft	5-5.6ft: red, fine to coarse SAND and GRAVEL, trace silt, medium compact 5.6-6.1ft: brown and gray, fine to coarse SAND and GRAVEL, little crushed rock 6.1-6.7 ft: crushed rock Refusal at 8 ft

GEOLOGIC LOG
WSP USA
SHELTON, CONNECTICUT

OWNER: University of Connecticut

BORING NO: UST-3

PAGE 1 **OF** 1 **PAGE**

SITE LOCATION: Mansfield Apartments
S. Eagleville Rd
Storrs Mansfield, CT

SCREEN SIZE & TYPE: NA **SLOT NO:** NA
SETTING: NA

DATE COMPLETED: 6/16/2022

SAND PACK SIZE & TYPE: NA
SETTING: NA

DRILLING COMPANY: Complete Environmental Services (CES)

CASING SIZE & TYPE: NA
SETTING: NA

DRILLING METHOD: GeoProbe 7822DT Direct Push

SAMPLING METHOD: MacroCore (MC)

SEAL TYPE: NA
SETTING: NA

OBSERVER: Kristen Amodeo and Maggie Roberts

REFERENCE POINT (RP): Ground Surface

BACKFILL TYPE: NA

ELEVATION OF RP: ---

STATIC WATER LEVEL: NA

STICK-UP: NA

DEVELOPMENT METHOD: NA

SURFACE COMPLETION: Sand

DURATION: NA **YIELD:** NA

REMARKS: Sample collected from 8.5-9.5 ft interval @0900 and submitted for laboratory analytical
Soils collected for composite waste characterization sample
Tank grave under gas lines

GPS COORDINATES:

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million

DEPTH (FEET) FROM	DEPTH (FEET) TO	SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
0	5	MC		3	1.0 @ 1.0ft 1.2 @ 2.0ft 1.5 @ 3.0ft	0-0.5ft: brown, fine to medium SAND, little organics, trace gravel, lose compact 0.5-1.1ft: crushed rock 1.1-3.0ft: light brown and grey fine to medium SAND and GRAVEL, little silt, trace clay, medium compact
5	10	MC		3.5	0.0 @ 6.0ft 0.7 @ 7.0ft 0.0 @ 3ft	5.0-8.5ft: grey fine to coarse SAND and GRAVEL, little clay, medium compact, wet at 7 ft Refusal at 9.5 ft

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut **BORING NO:** UST-4 **PAGE** 1 **OF** 1 **PAGE**

SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA

REMARKS: Sample collected from 10-11 ft interval @0835 and submitted for laboratory analytical

Soils collected for composite waste characterization sample

GPS COORDINATES:

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million

DEPTH (FEET) FROM	DEPTH (FEET) TO	SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
0	5	MC		2.5	0.0 @ 1.0ft 0.0 @ 2.0ft	0-0.4ft: asphalt 0.4-0.8ft: brown, fine to coarse SAND and GRAVEL, lose compact 0.8-1.8ft: light brown, fine to medium SAND and SILT, some gravel, medium compact 1.8-2.5ft: grey and light brown, fine to coarse SAND and GRAVEL, little clay, trace silt, medium compact
5	10	MC		3.6	0.0 @ 6.0ft 0.0 @7.0ft 0.0 @ 8.0ft	5.0-8.0ft: grey and light brown, fine to coarse SAND and GRAVEL, little clay, trace silt, medium compact, saturated at 6.2 ft 8.0-8.6ft: light brown and orange, fine to coarse SAND, some silt, little gravel, medium compact
10	15	MC		2.5	0.0 @ 11ft 0.0 @ 12ft	10.0-12.5ft: light brown and orange, fine to coarse SAND and GRAVEL, little silt, medium compact, wet Refusal at 12.5ft

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut **BORING NO:** UST-5 **PAGE** 1 **OF** 1 **PAGE**

SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA

REMARKS: Sample collected from 10-11 ft interval @1420 and submitted for laboratory analytical

Soils collected for composite waste characterization and discrete PCB sample

GPS COORDINATES:

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
FROM	TO					
0	5	MC		2	0.0 @ 0.5ft 0.0 @ 1.5ft	0-0.6ft: brown, fine to coarse SAND and GRAVEL, some organics, little silt, medium compact 0.6-1.7: red and brown, fine to coarse SAND and GRAVEL, some silt, medium compact 1.7-2.0ft: crushed rock
5	10	MC		0		No recovery
10	15	MC		1.8	0.0 @ 10.5ft 0.0 @ 11.5ft	10.0-10.3ft: brown and red, fine to coarse SAND and GRAVEL, some silt, medium compact, damp 10.3-11.0ft: grey, fine to coarse SAND and GRAVEL, some silt, little clay, medium compact, damp 11.0-11.8ft: orange and light brown fine to coarse SAND and CLAY, some silt, medium compact, damp

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut **BORING NO:** UST-6 **PAGE** 1 **OF** 1 **PAGE**

SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** 6.85 ft
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA

REMARKS: Sample collected from 10-11 ft interval @1315 and submitted for laboratory analytical

Soils collected for composite waste characterization sample

Temporary well installed, sample collected @1445

GPS COORDINATES:

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million

DEPTH (FEET) FROM	DEPTH (FEET) TO	SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
0	5	MC		2.4	2.1 @ 1.0ft 2.0 @ 2.0ft	0-0.6ft: brown, fine to coarse, SAND and GRAVEL, some organics, loose to medium compact 0.6-2.4ft: red and brown, fine to coarse SAND and GRAVEL, little silt, medium compact
5	10	MC		1.3	2.2 @ 6.0ft	5-6.3ft: red and brown, fine to coarse SAND and GRAVEL, little silt, medium compact, damp at 5.75ft
10	15	MC		0.9	361.8 @ 11ft	10-10:65ft: red and brown, fine to coarse SAND and GRAVEL, little silt, medium compact, saturated at 10 ft, petroleum odor 10.65-10.9ft: crushed rock, saturated, petroleum odor Refusal at 13ft

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut **BORING NO:** UST-7 **PAGE** 1 **OF** 1 **PAGE**
SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** 9.9 ft
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA
REMARKS: Sample collected from 5.5-6.5 ft interval @1300 and submitted for laboratory analytical Soils collected for composite waste characterization sample Temporary well installed, no sample collected	
GPS COORDINATES:	
ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
FROM	TO					
0	5	MC		2.1	0.0 @ 1.0ft 0.0 @ 2.0ft	0-0.5ft: brown, fine to coarse SAND and GRAVEL, some organics, trace silt, lose compact 0.5-2.1ft: red, fine to coarse SAND and GRAVEL, trace silt, medium compact
5	10	MC		1.8	13.8 @ 6.0ft	5.0-5.5ft: red, fine to coarse SAND and GRAVEL, trace silt, medium compact 5.5-6.3ft: brown and grey, fine to coarse SAND and GRAVEL, medium compact, damp, petroleum odor 6.3-6.8ft: crushed rock Refusal at 9.75ft

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut
	BORING NO: UST-8
	PAGE 1 **OF** 1 **PAGE**
SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA
REMARKS: Sample collected from 1-2 ft interval @1210 and submitted for laboratory analytical Soils collected for composite waste characterization sample	
GPS COORDINATES:	
ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million	

DEPTH (FEET) FROM	DEPTH (FEET) TO	SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
0	5	MC		2.0	0.0 @ 0.5ft 0.0 @ 1.5ft	0-0.8ft: dark brown fine to coarse SAND and GRAVEL, some organics, trace silt, medium compact, damp 0.8-1.0ft: crushed white rock 1.0-1.6ft: light brown, fine to coarse SAND and GRAVEL, trace silt, medium compact 1.6-2.0ft: crushed rock Refusal at 3.0 ft

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut **BORING NO:** UST-9 **PAGE** 1 **OF** 1 **PAGE**
SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA
REMARKS: Sample collected from 10-11 ft interval @1125 and submitted for laboratory analytical Soils collected for composite waste characterization and discrete PCB sample	
GPS COORDINATES:	
ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
FROM	TO					
0	5	MC		1.8	0.0 @ 0.5ft 0.0 @ 1.5ft	0-0.9ft: brown, fine to coarse SAND and GRAVEL, little organics, lose to medium compact 0.9-1.8ft: red and light brown, fine to coarse SAND and GRAVEL, some silt, medium compact, damp at 1.2ft
5	10	MC		1.7	0.0 @ 5.5ft 0.0 @ 6.5ft	5.0-5.5ft: red and light brown, fine to coarse SAND and GRAVEL, some silt, medium compact, damp 5.5-6.7ft: light brown, fine to coarse SAND and GRAVEL, some silt, medium compact, saturated at 5.8ft
10	15	MC		2.2	0.0 @ 11.0ft	10.0-10.8ft: light brown, fine to coarse SAND and GRAVEL, some silt, medium compact, saturated 10.8-12.2ft: crushed rock Refusal at 13ft

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut
	BORING NO: UST-10
	PAGE 1 **OF** 1 **PAGE**
SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA
REMARKS: Sample collected from 5-6 ft interval @1110 and submitted for laboratory analytical Soils collected for composite waste characterization sample	
GPS COORDINATES:	
ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
FROM	TO					
0	5	MC		1.5	0.0 @ 1.0ft	0-0.5ft: brown, fine to coarse, SAND, some organics, loose compact 0.5-1.5ft: red and light brown, fine to coarse SAND and GRAVEL, some crushed rock, trace silt, medium compact
5	10	MC		1.0	0.0 @ 5.0ft	5.0-6.0ft: red and light brown, fine to coarse SAND and GRAVEL, some crushed rock, trace silt, medium compact, damp at 5.7 ft Refusal at 8.5 ft

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut
	BORING NO: UST-11
	PAGE 1 **OF** 1 **PAGE**
SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA
REMARKS: Sample collected from 10-11 ft interval @1050 and submitted for laboratory analytical Soils collected for composite waste characterization sample	
GPS COORDINATES:	
ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
FROM	TO					
0	5	MC		1.4	0.0 @ 1.0ft	0-0.3ft: brown, fine SAND, some organics, trace silt, lose compact 0.3-1.2ft: red, fine to coarse SAND and GRAVEL, medium compact 1.2-1.4ft: light brown, fine to coarse SAND, little silt, medium compact
5	10	MC		0.75	0.0 @ 5.5ft	5.0-5.5ft: light brown, fine to coarse SAND, little silt, medium compact 5.5-5.75ft: crushed rock
10	15	MC		1.4	0.0 @ 11.0ft	10.0-11.0ft: light brown, fine SAND and GRAVEL, little silt, medium compact, damp at 10.5ft 11.0-11.4ft: crushed rock Refusal at 11.4ft

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut
	BORING NO: Garage 1
	PAGE 1 **OF** 1 **PAGE**
SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA
REMARKS: Sample collected from 0-6ft interval for composite waste characterization sample	
GPS COORDINATES:	
ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million	

DEPTH (FEET) FROM	DEPTH (FEET) TO	SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
0	5	MC		1.8	0.7 @ 1.0ft	0-0.5ft: brown, fine to medium SAND, some organics, little gravel, medium compact 0.5-1.8ft: brown, fine to coarse SAND and GRAVEL, some silt, some white crushed rock, little clay, medium compact
5	10	MC		2.0	0.0 @ 6.0ft	5.0-6.0ft: brown, fine to coarse SAND and GRAVEL, some silt, some white crushed rock, little clay, medium compact 6.0-7.0ft: brown and gray fine to coarse SAND, some gravel, little silt, damp

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut **BORING NO:** Garage 2 **PAGE** 1 **OF** 1 **PAGE**
SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA
REMARKS: Sample collected from 0-2 ft interval @1010 and submitted for discrete VOC and PCB analysis, Sample collected from 0-6ft interval for composite waste characterization	
GPS COORDINATES:	
ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
FROM	TO					
0	5	MC		1.8	0.0 @ 1.0ft	0-0.7ft: brown, fine to coarse SAND and GRAVEL, little organics, trace silt, medium compact 0.7-1.8ft: brown, fine to coarse SAND, some white crushed rock, trace silt, medium compact
5	10	MC		1.5	0.0 @ 6.0	5.0-5.8ft: brown, fine to coarse SAND, some white crushed rock, trace silt, medium compact 5.8-6.5ft: light brown and orange, fine to coarse SAND and GRAVEL, trace silt, medium compact Refusal at 9.75ft

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut
	BORING NO: Garage 3
	PAGE 1 **OF** 1 **PAGE**
SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA
REMARKS: Sample collected from 0-6ft interval for composite waste characterization	
GPS COORDINATES:	
ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
FROM	TO					
0	5	MC		1.4	0.0 @ 1.0ft	0-0.5ft: brown, fine to coarse SAND, little organics, trace silt, lose compact 0.5-1.4ft: brown, fine to coarse SAND and GRAVEL, little white crushed rock, trace silt, medium compact
5	10	MC		1.0ft	0.0 @ 6.0ft	5.0-6.0ft: brown, fine to coarse SAND and GRAVEL, little white crushed rock, trace silt, medium compact

GEOLOGIC LOG **WSP USA** **SHELTON, CONNECTICUT**	**OWNER:** University of Connecticut **BORING NO:** Pump 1 **PAGE** 1 **OF** 1 **PAGE**
SITE LOCATION: Mansfield Apartments S. Eagleville Rd Storrs Mansfield, CT	**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA **SETTING:** NA
DATE COMPLETED: 6/16/2022	**SAND PACK SIZE & TYPE:** NA
DRILLING COMPANY: Complete Environmental Services (CES)	**SETTING:** NA
	CASING SIZE & TYPE: NA
DRILLING METHOD: GeoProbe 7822DT Direct Push	**SETTING:** NA
SAMPLING METHOD: MacroCore (MC)	**SEAL TYPE:** NA
OBSERVER: Kristen Amodeo and Maggie Roberts	**SETTING:** NA
REFERENCE POINT (RP): Ground Surface	**BACKFILL TYPE:** NA
ELEVATION OF RP: ---	**STATIC WATER LEVEL:** NA
STICK-UP: NA	**DEVELOPMENT METHOD:** NA
SURFACE COMPLETION: Sand	**DURATION:** NA **YIELD:** NA
REMARKS: Sample collected from 10-11 ft interval @1345 and submitted for laboratory analytical Soils collected for composite waste characterization sample	
GPS COORDINATES:	
ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million	

DEPTH (FEET) FROM	DEPTH (FEET) TO	SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READING (PPM)	DESCRIPTION
0	5	MC		3.3	3.8 @ 1.0ft 3.6 @ 2.0ft	0-0.5ft: brown, fine to coarse SAND and GRAVEL, trace silt, some organics, medium compact, damp 0.5-2.1ft: light brown and grey, fine SAND and GRAVEL, little clay, crushed rock, medium compact 2.1-3.3ft: light brown and orange, fine SAND, some silt, medium compact, damp
5	10	MC		3.2	2.0 @ 6.0ft 0.7 @ 7.0ft 0.0 @ 8.0ft	5.0-5.3ft: light brown and orange, fine SAND, some silt, medium compact, damp 5.3-8.2ft: light brown and orange, fine to coarse SAND and GRAVEL, some silt, medium compact, damp
5	15	MC		3.0	0.0 @ 11.0ft	10-12.9ft: light brown and orange, fine to coarse SAND and GRAVEL, some silt, medium compact, saturated 12.9-13ft: crushed rock Refusal at 13ft

WSP USA

LOW-FLOW SAMPLING LOG

PAGE 1 OF 1

SAMPLE DATE: 6/16/2022

TOTAL # WELLS: 1

Client Name: University of Connecticut

Project Location: Mansfield Apartments

Sampler(s): Kristen Amodeo and Maggie Roberts

Sample Pump: Geopump

Tubing Type: LDPE - Tygon -

Monitoring Equipment: Horiba / YSI

Well I.D. UST-6

Well Diameter (inches): 1

Total Depth (ft btoc): 13

Depth to Water (ft btoc): 6.85

Screen Setting (ft btoc): 3 to 13

Tubing Intake (ft btoc): 8

Comments: Pump on at 1428

Horiba / YSI full at

Well Condition: Temporary Monitoring well

Time (hours)	Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Water Quality Monitoring Parameters: pH	Conductivity (µS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/l)	Temperature (°C)	ORP (mV)
1428	6.85							
1438			6.21	721.00	0.0	3.00	17.09	81

Stabilization of Parameters (stabilization achieved for three consecutive measurements)

Time FROM	Time TO	Depth to Water (ft btoc)	Total Removed > Change in Storage (Y/N)?	pH	Conductivity (%)	Turbidity (%)	Dissolved oxygen (%)	Temperature (%)	ORP (mv)
Recommended Stabilization		≤ 0.3 ft. total	NA	+/- 0.1 unit	+/- 3%	<5 NTU or +/- 10%	+/- 10% if >0.5 mg/L	+/- 3%	+/- 10 mv
Stabilization: (Yes/No)									

Sample Time: Grab at 1445

ft btoc	feet below top of casing	NTU	Nephelometric Turbidity Units	°C	degrees Celsius
ml/min	milliliters per minute	mg/l	milligrams per liter	mv	millivolts
µs/cm	microseimens per centimeter	ms/cm	milliseimens per centimeter		

PHASE I ENVIRONMENTAL SITE ASSESSMENT OWNER QUESTIONNAIRE

As part of the American Society for Testing and Materials (ASTM) Standard E1527-13 Phase I Environmental Site Assessment (ESA) report, it is required that the "owner" (the owner of the property for which the assessment is being prepared) provide the information below to the best extent of the owner's knowledge in order to help the environmental professional to identify any recognized environmental conditions (RECs) at the property.

Please complete the questionnaire to the best extent of your knowledge. If you do not have an answer, please feel free to write, "don't know," or "not to my knowledge." It is also encouraged that the questionnaire be completed and returned as quickly as possible, in time for the completion and issuance of the report, as is required. If you have any questions, please call our office at (860) 400-5680.

Site Name: **Mansfield Apartments**

Site Address: **1 South Eagleville Road**

City/Town: **Mansfield/Storrs** State: **CT** Zip Code: **06268**

Site Owner: **University of Connecticut**

Key Manager (if other than owner, with specified knowledge or site):
UConn Facilities Operations (FACOPS)

Please answer to the best of your ability; you have no obligation to answer them.

1. Based on your knowledge of *recorded* land title records for the property, are there any environmental liens filed or recorded against the *property* under federal, tribal, state, or local law? **No.**

2. Based on your knowledge have any activity use limitations (AULs), such as *engineering controls*, land use restrictions, or *institutional controls*, been put in place at the *property* and/or have been filed or recorded against the *property* under federal, tribal, state, or local law? **No.**

3. Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an *adjoining property* so that you would have specialized knowledge of the chemicals and processes used at the property? **UConn EHS Environmental Programs group maintains environmental compliance records for the UConn Storrs Campus and assists other UConn departments apply for and maintain environmental permits.**

4. Commonly known or *reasonably ascertainable* information about the *property*:
   (a.) Have any Environmental Site Assessment Reports been completed for the property? **None specifically for the property identified as the Mansfield Apartments Project site.**
   (b.) Do you know of specific chemicals that are present or once were present at the *property*? **Heating oil was formerly stored in underground storage tanks on the property for heating the buildings. Fuel oil for an emergency generator is currently stored in an underground storage tank at the sewage lift station on the site. Page 7 of the UConn Storrs Campus SPCC Plan provides information on the emergency generator UST.**
   (c.) Do you know of spills or other chemical releases that have taken place at the *property*? **Historically there was a release of heating oil from one of the underground storage tanks. The release was cleaned up when the tanks were removed in the 1990s.**
   (d.) Do you know of any environmental cleanups that have taken place at the *property*? **See above.**
   (e.) Does the facility have any current or historical environmental permits (for example, solid waste disposal permits, hazardous waste permits, wastewater permits, NPDES permits, underground injection permits)? **None specific to the Mansfield Apartments Project site.**
   (f.) Are there any safety plans, preparedness and prevention plans, spill prevention plans, countermeasure or other best management practices plans related to operations of the facility? **UConn has an SPCC Plan for the Storrs Campus which encompasses the Mansfield Apartments Project site.**

(g.) Have any reports been completed in relation to hydrogeologic conditions on the property or surrounding area? **Yes. A geotechnical investigation report was completed for the site recently (within 6 months).**

(h.) Are there any notices or other correspondences from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property? **No.**

(i.) Do you have any reports on hazardous waste generation, waste manifests or associated reports? **None that are specific to the Mansfield Apartments Project site.**

(j.) Have any underground storage tanks (USTs) been removed, abandoned, or taken out of service from the facility or property? **Yes. Former heating oil USTs were removed from the site in the 1990s. One UST had indications of a release of heating oil which was cleaned up at the time the UST was removed.**

(k.) Are there any current USTs at the site? **Yes. There is on UST for the storage of fuel oil for an emergency generator at the sewage lift station on the Project site.**

(l.) Has any contaminated soil been discovered and/or remediated at the facility without oversight by an appropriate regulatory agency? **No.**

(m.) Do you have any other information you would like to include based on your history with the site in relation to potential environmental risks? **No.**

5. Based on your knowledge and experience related to the *property* have there been any releases or spills of chemicals to environmental media (soil, and/or groundwater, and/or surface water) at the *property*? **Yes. See information on USTs, above.**

Please **provide copies** of any environmental documentation with respect to the *property*. Examples of this type of documentation:

- environmental permits (including but not limited to wastewater, National Pollutant Discharge Elimination System (NPDES), solid waste disposal, hazardous waste disposal, underground injection);
- notices from any government agency relating to the violation of environmental laws;
- **safety plans (spill prevention, countermeasure and control plans, safety data sheets);**
- **underground and/or above ground storage tank documentation;**
- previous environmental assessment reports;
- environmental compliance audit reports;
- environmental liens and/or activity use limitations;
- **geotechnical studies.**

Form Completed By (name): **James T. Hutton, LEP**

Title: **Environmental Compliance Professional**

Relationship to Site: **UConn Staff in the EHS Environmental Programs Group**

Date: **June 13, 2022**

PHASE I ENVIRONMENTAL SITE ASSESSMENT USER QUESTIONNAIRE

As part of the American Society for Testing and Materials (ASTM) Standard E1527-13 Phase I Environmental Site Assessment (ESA) report, it is required that the "user" (the party for whom the assessment is being prepared) provide the information below to the best extent of the user's knowledge in order to help the environmental professional to identify any recognized environmental conditions (RECs) at the property.

It is understood that you, the user, may have little or no information; please complete the questionnaire to the best extent of your knowledge. If you do not have an answer, please feel free to write, "don't know," or "not to my knowledge." It is also encouraged that the questionnaire be completed and returned as quickly as possible, in time for the completion and issuance of the report, as is required. If you have any questions, please call our office at (860) 400-5701.

Site Name: **Mansfield Apartments**

Site Address: **1 South Eagleville Road**

City/Town: **Mansfield/Storrs** State: **CT** Zip Code: **06268**

Site Owner:

1. To the extent of your knowledge, has a search of *recorded land title records* (or judicial records, where appropriate) been conducted? **NO.**

2. Are you aware of any environmental liens filed or recorded against the *property* under federal, tribal, state, or local law? **NO.**

3. Are you aware of any activity use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place at the *property*, and/or have been filed or recorded against the *property* under federal, tribal, state or local law? **NO.**
4. Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an *adjoining property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

5. This question applies to users who intend to purchase the *property*: **UConn already owns the property so the below questions are not relevant.**

   a. Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? **Not Applicable.**

   b. If you conclude that there is a difference in the two prices, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*? **Not Applicable.**

6. Commonly known or *reasonably ascertainable* information on the *property*: (a.) Do you know the past uses of the *property*? **The property was vacant wooded land before it was developed as the Mansfield Apartments in the early 1950s.**

   (b.) Do you know of specific chemicals that are present or once were present at the *property*? **Heating oil was formerly stored in underground storage tanks on the property for heating the buildings. Fuel oil for an emergency generator is currently stored in an underground storage tank at the sewage lift station on the site. Page 7 of the UConn Storrs Campus SPCC Plan provides information on the emergency generator UST.**

   (c.) Do you know of spills or other chemical releases that have taken place at the *property*? (d.) Do you know of any environmental cleanups that have taken place at the *property*?
   Historically there was a release of heating oil from one of the underground storage tanks. The release was cleaned up when the tanks were removed in the 1990s.

7. Based on your knowledge and experience related to the *property*, are you aware if there any *obvious* indicators that point to the presence or likely presence of releases at the *property*? **See above information on historical heating oil release that was remediated.**

Please **provide copies** of any environmental documentation with respect to the *property*. Examples of this type of documentation:

- environmental permits (including but not limited to wastewater, National Pollutant Discharge Elimination System (NPDES), solid waste disposal, hazardous waste disposal, underground injection);
- notices from any government agency relating to the violation of environmental laws;
- **safety plans (spill prevention, countermeasure and control plans, safety data sheets);**
- **underground and/or above ground storage tank documentation;**
- previous environmental assessment reports;
- environmental compliance audit reports;
- environmental liens and/or activity use limitations;
- **geotechnical studies.**

Name of User: **James T. Hutton, LEP**

Title: **Environmental Compliance Professional**

Relationship to Site: **UConn Staff in the EHS Environmental Programs Group**

Date: **June 13, 2022**

APPENDIX F

LIMITATIONS

Phase I Environmental Site Assessment

UCONN Mansfield Apartments
1 South Eagleville Road
Mansfield, Connecticut 06268

July 26, 2022

LIMITATIONS

The conclusions presented in this report are professional opinions based on data described in this report. These opinions have been arrived at in accordance with currently accepted environmental industry standards and practices applicable to the work described in this report. The opinions presented are subject to the following inherent limitations:

1. This report was prepared for the exclusive use of the entity referenced in Section 1.6. SLR has no liability for this report and its contents to any other entity.

2. This Phase I ESA report is subject to the terms and conditions in the SLR proposal referenced in Section 1.4 and in the contract between SLR and its client under which the work was performed. Any use of the Phase I report constitutes acceptance of the limits of SLR's liability specified in the contract. SLR's liability extends only to its client and not to any other parties who may obtain the Phase I report.

3. SLR derived the data in this report primarily from visual inspections, examination of records in the public domain, and interviews with individuals having information about the Site. The passage of time, manifestation of latent conditions, or occurrence of future events may require further study at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions in the report.

4. The data reported and the findings, observations, and conclusions expressed in the report are limited by the scope of work. The scope of work is presented in Section 1.4 and was agreed to by the client.

5. SLR's Phase I ESA reports present professional opinions and findings of a scientific and technical nature. The report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations, or policies of federal, state, or local governmental agencies.

6. The conclusions presented in this report are professional opinions based on data described in this report. They are intended only for the purpose, Site location, and project indicated. This report is not a definitive study of contamination at the Site and should not be interpreted as such. An evaluation of subsurface soil and groundwater conditions was not performed as part of this investigation, unless indicated in Section 1.4. No sampling or chemical analyses of structural materials or other media was completed as part of this study unless explicitly stated in Section 1.4.

7. This report is based, in part, on unverified information supplied to SLR by third-party sources. While efforts have been made to substantiate this third-party information, SLR cannot guarantee its completeness or accuracy.

APPENDIX F

TRAFFIC STUDY: EXISTING CONDITIONS REPORT

University of Connecticut
Mansfield Apartments Redevelopment

University Planning, Design and Construction

3 Discovery Drive, Unit 6038

Storrs, Connecticut 06268

(860) 486-2776

www.updc.uconn.edu

September 2022

Existing Conditions Report

SLR International Corporation (SLR) has taken on this evaluation to provide an existing conditions traffic impact assessment of the proposed Mansfield Apartments Redevelopment Project located in Storrs, Connecticut just south of the University of Connecticut campus.

The study is meant to assess the impacts of redeveloping the existing 270-bedroom apartment complex to a proposed 932-bedroom apartment complex on the roadway network. The redevelopment will occur on the existing 16.4-acre parcel.

This report will focus on the existing conditions only and include the following information: a review of existing site, roadway and traffic conditions, a review of existing traffic volumes and speeds, a review of the most recent three (3) year crash data and an existing condition capacity and queue analysis.

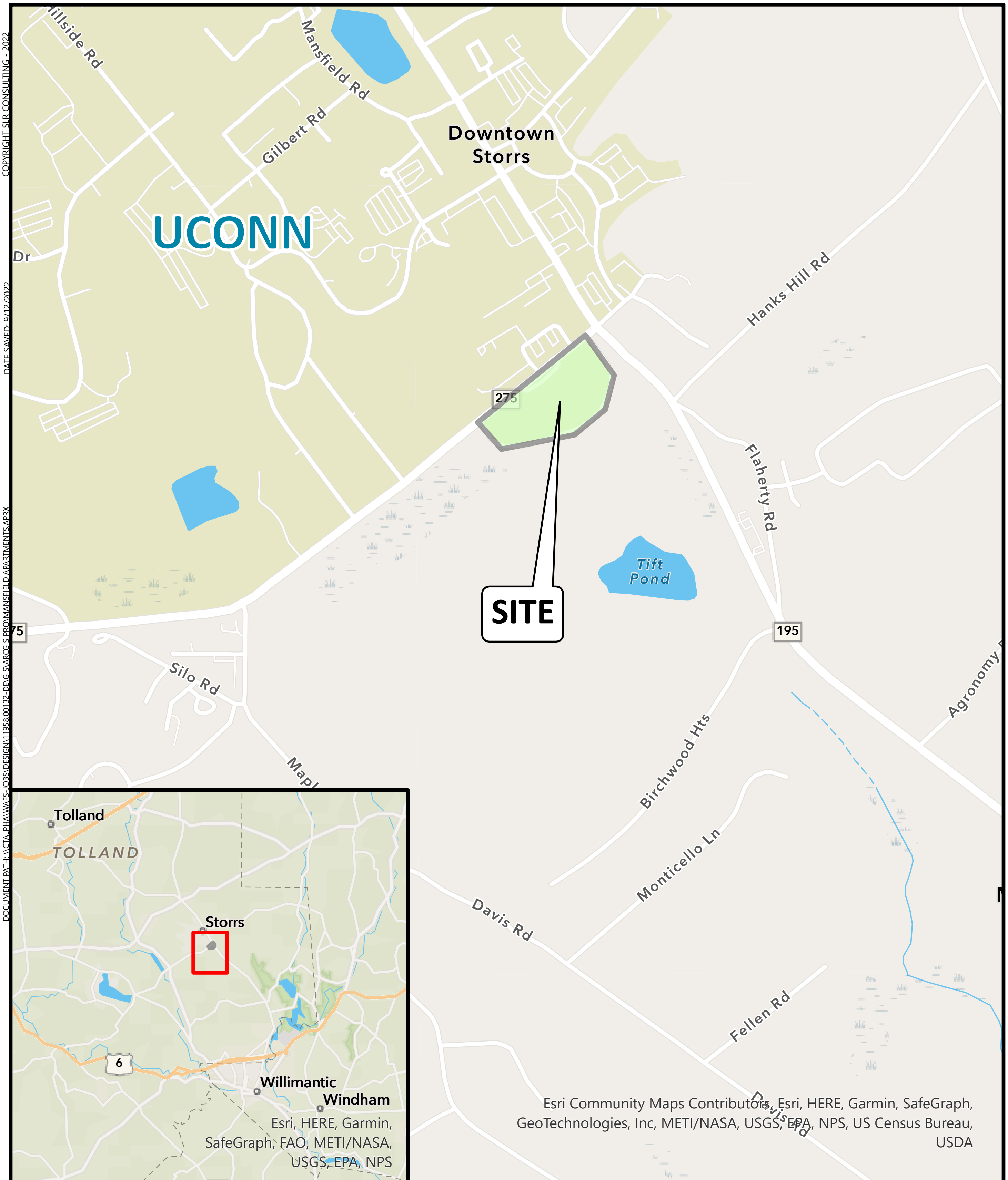
1. Traffic, Parking and Transportation

1.1. Existing Site Conditions

Mansfield Apartments is located on a 16.4-acre parcel, owned by the University of Connecticut, to the southwest of the intersection of Route 275 (South Eagleville Road) and Route 195. The site is located south of campus and Downtown Storrs, and also just south of the Mansfield Community Center and Town Offices. The Mansfield Apartment complex currently houses 270 bedrooms across 15 buildings with 126 parking spaces. Access and parking are divided between two locations; the first is a short one-way drop off loop along the frontage of Route 275 with only 26 parking spaces. There is also a bus stop with shelter that has access to both regional and UConn transportation systems. The second is a one-way loop that travels along the outside perimeter of the complex where the rest of the parking spaces are located. The exit for this loop is located roughly 60' from the Route 195 and Route 275 intersection. Figure 1.1 illustrates the site location.

1.2. Parking

There are roughly 126 existing parking spaces with most of the spaces lining the outside driveway. In order to understand the existing and potential future use of Mansfield Apartments, parking counts were collected on April 28th and April 30th, 2022. Through discussions with the UConn, SLR was made aware that Mansfield apartments was used as COVID quarantine housing and therefor would not reflect an accurate representation of typical parking conditions. This was confirmed through data collected on the 28th and 30th.



SLR

99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773

LOCATION MAP

MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT
31 LeDoyt Road, Unit 3038
Storrs, Connecticut

N

0 100
Feet

SCALE 1 IN = 1,000 FT

DATE 9/12/2022

PROJ. NO. 11958.00132

Figure 1-1

Parking counts were also collected at a neighboring complex, Knollwood's Apartments, which has a similar number of units and parking spaces to the existing Mansfield Apartment. While Knollwood's Apartments isn't a university owned asset; it has some similar characteristics to that of Mansfield Apartments and is located along Route 275 nearby to the southwest. Understanding parking at this complex will therefore provide a better understanding of the future parking conditions.

Based on discussions with Storrs Student Living, there are roughly 35 buildings that house 146 units ranging from 1 to 4 bedrooms with 182 parking spaces at Knollwood's Apartment's. The complex is 100% occupied during the school year and contains mostly students attending the University of Connecticut. Table 1 illustrates the parking data collected for four different time periods during the week. This data will be further analyzed in the future conditions report once the site plan is finalized with the proposed number of new parking spaces due to the redevelopment to better understand parking conditions and cross reference with park gen numbers from the ITE Trip Generation Manual.

Table 1
Knollwood Apartments Parking Counts

Time	Parking (182 Spaces)	Percent Occupied
6:00 AM	121	66.5%
9:00 AM	103	56.6%
3:00 PM	88	48.4%
6:00 PM	89	48.9%

1.3. Roadway Network

The roadway network and subsequent study area is bounded by Routes 275 from Route 32 to Route 195 and Route 195 from Route 275 to Mansfield Road. Intersections identified for analysis are discussed in section 1.5 of this report.

Transportation to Mansfield Apartments is accessed via Route 275 (South Eagleville Road). Route 275 is a two-lane minor arterial that runs east-west connecting to Route 32 to the west and Route 195 to the east, which both run north-south. Within the study area, Route 275 has a speed limit 30 mph, wide shoulders and a sidewalk on the south side that extends two-thirds of a mile from the Route 195 to Maple Road.

Route 195 is a north-south Connecticut state highway classified as a Principal Arterial. It is a two-lane roadway that connects to I-84 in Tolland to the north and Route 6 in Willimantic to the south. The speed limit on Route 195 in the vicinity of the campus and Downtown Storrs is 25 mph. In the areas immediately to the north and south of the campus the speed limit is 40 mph. Within the study area, the 85th percentile speed ranges from 31.9 mph to 35.8 mph, which is above the posted limit. There are also many access points that connect to Route 195 within the stretch next to campus, including 3 signalized intersections at Route 275, Bolton Road, and Mansfield Road. The latter two roads provide important access routes to UConn's campus via vehicle and bus. Many pedestrians also travel to/from Mansfield Apartments and other complexes in Storrs center, where there are many shops and restaurants, by

walking along or by crossing Route 195. All three signals have a separate exclusive pedestrian phase during which all vehicle traffic has a red light and people on foot are given a walk signal to cross. Route 195 is also the main artery for both UConn's bus system and the regional transportation network.

1.4. Travel Speed Data

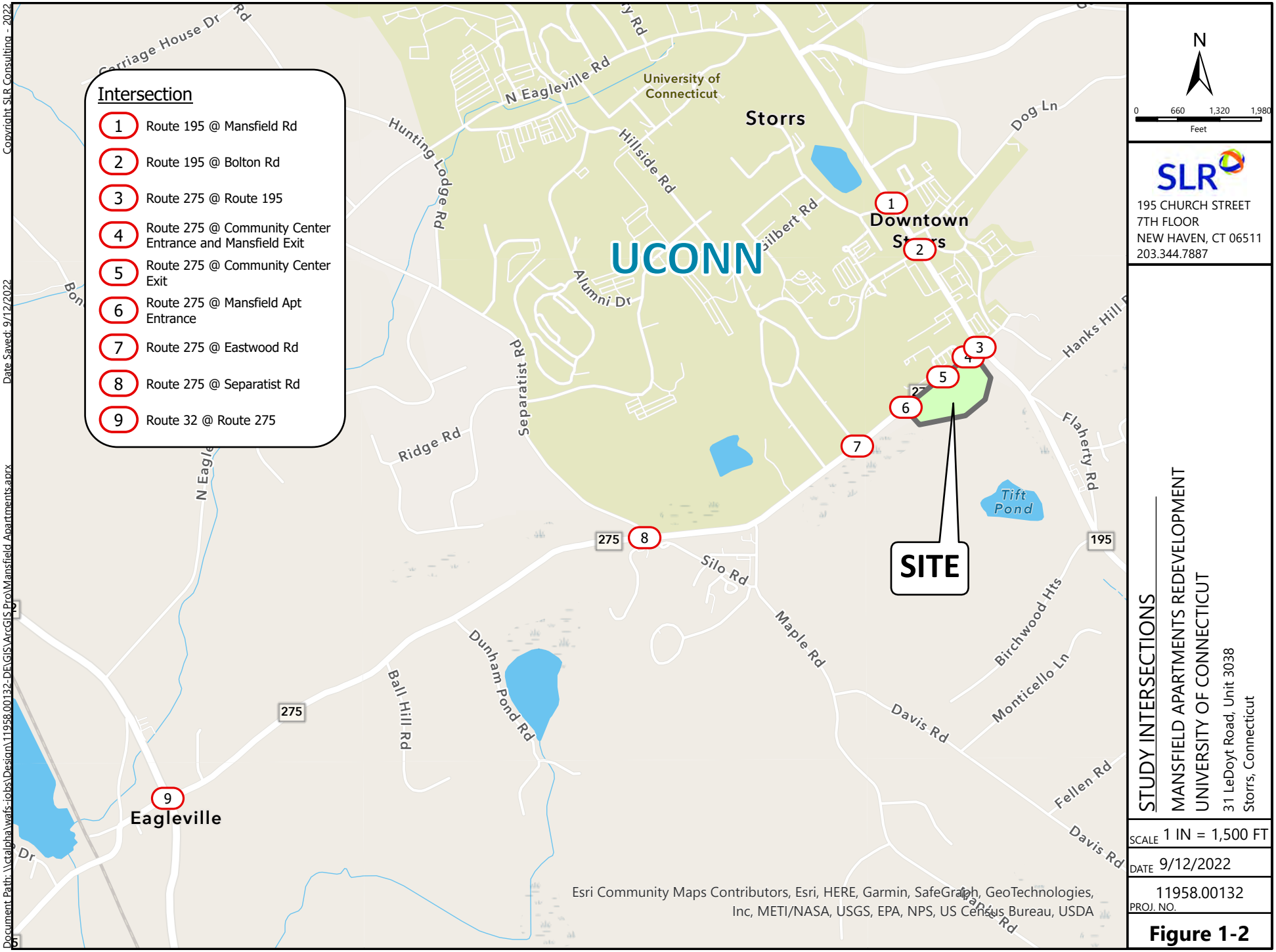
Speed data, collected during the COVID-19 epoch by the Connecticut Department of Transportation (CTDOT), shows a combined 85th percentile speed of 31.9 mph. This data was collected at Station 42 as identified on CTDOT's Traffic Monitoring Station Viewer website, which is located near the Route 275 (South Eagleville Road) Route 195 intersection. *The 85th percentile speed is the speed at which or below 85% of the vehicles were measured to travel and is used by engineers to help set speed limits and evaluate the overall safety of the roadway. In general, the 85th percentile speed should be close to the posted speed limit for safety purposes.* However, data specifically collected recently for this study on Route 275 adjacent to the site showed a minimum 85th percentile speed of 47.6 mph, which is significantly higher than both the CTDOT collected speed (during COVID) and the posted speed limit. This data was collected via an ATR count over 48 hours (Friday and Saturday), which was placed between Eastwood Road and the Mansfield Apartment perimeter driveway ingress, father away from the Route 275 and Route 195 intersection. The speed differences make sense due to the proximities of the data collectors relative to the major intersection; the closer to the intersection you get, the slower the overall speeds due to the metering by the signal. We understand that CTDOT is in the process of addressing this through safety initiatives which also comes on the heels of a recent pedestrian fatality on Route 275, which will be discussed more in Section 1.7, Area Crash History. Still, this should be taken into consideration when developing the site an analyzing future conditions. The speed limit increases to 35 mph west of separatist road and the shoulders narrow on the way out of the center of town to more rural areas.

1.5. Study Intersections

The study area for this traffic impact study includes nine (9) existing intersections, as shown in Figure 1.2. These intersections were identified for analysis to provide a comprehensive look at the traffic impacts to the surrounding area. There intersections are as follows:

1. Route 195 at Mansfield Road.
2. Route 195 at Bolton Road.
3. Route 195 at Route 275 (South Eagleville Road).
4. Route 275 (South Eagleville Road) at Mansfield Apt Exit and Community Center Entrance.
5. Route 275 (South Eagleville Road) at Community Center Exit.
6. Route 275 (South Eagleville Road) at Mansfield Apt Entrance.
7. Route 275 (South Eagleville Road) at Eastwood Road.
8. Route 275 (South Eagleville Road) at Separatist Road.
9. Route 275 (South Eagleville Road) at Route 32

Of the 9 intersections in the study area, numbers 1, 2, 3 and 9 are signalized intersections and the rest are two-way stopped controlled intersections. To evaluate the traffic for the existing condition, turning movement count data was assembled from past studies and compiled with count data provided by CTDOT and newly collected traffic count data to determine a baseline condition representative of existing traffic volumes. This is further discussed in section 2.1.



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Feet

SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

STUDY INTERSECTIONS

MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT
31 LeDoyt Road, Unit 3038
Storrs, Connecticut

SCALE 1 IN = 1,500 FT

DATE 9/12/2022

11958.00132
PROJ. NO.

Figure 1-2

Date Saved: 9/12/2022

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1.6. Pedestrian and Bicycle Access

The University of Connecticut is a major generator of pedestrian and bicycle activity and includes students from Mansfield Apartments going to and from campus. To get to campus, pedestrians would need to cross Route 275 and take one of three ways directions:

1. Enter campus via Eastwood Road to the west,
2. Cut through the Community Center across the street,
3. or take the sidewalk along Route 195 to the east.

Pedestrian data was reviewed and collected from various sources – along Route 275 there wasn't enough activity to show any significant pedestrian movement that would affect traffic or safety immediately adjacent to the site. This is partially due to COVID-19 and the Universities use of the complex as discussed in section 1.2 Parking. Further crash and safety implications are discussed in section 1.6. This will change with the redevelopment and will be explored further in the Future Conditions Analysis. Along Route 195, pedestrian data was collected via 2018 traffic signal counts at Mansfield Road, Bolton Road, and Route 195. This data is summarized in Table 2.

There are two noticeable trends with this data:

1.1. The PM peak hour pedestrian counts are greater than the AM peak hour pedestrian counts.
1.2. Pedestrian counts increase moving north along Route 195 the farther you get away from the Mansfield Apartments. This is most likely due to the greater amount of activity and university buildings and assets as you move closer to the center of campus.

These pedestrian counts were used in the existing conditions operational analysis and will be further analyzed in the future conditions analysis.

Bicyclists accessing campus would generally take Eastwood Road to the west or Route 195 to the east. While Route 275 has wide shoulders, Route 195 and UConn's campus lack consistent bicycle infrastructure. We note that a study is currently underway to improve active transportation infrastructure at UConn. This Active Transportation Plan is expected to be published in the coming months. ATR data collected along Route 275, which will be discussed more in section 2.1, showed no significant activity along the roadway. As with pedestrians, this activity will change with the redevelopment and should be further explored in the future conditions analysis.

Table 2
Route 195 Pedestrian Counts

Approach Group	Pedestrian Counts	
	Weekday Morning Peak Hour	Weekday Afternoon Peak Hour
Route 195 at Mansfield Rd		
Route 195 From North	51	76
Southwest bound Approach From Northeast	48	220
Mansfield From East	38	141
Route 195 From South	4	159
Northeast bound Approach From Southwest	12	18
Mansfield From West	43	35
TOTAL	**196**	**649**
Route 195 at Bolton Rd		
Route 195 From North	7	53
Bolton Road From East	71	170
Route 195 From South	18	49
Northeast bound Approach From Southwest	1	15
Bolton Road From West	24	62
Southwest bound Approach From Northeast	11	67
TOTAL	**132**	**416**
Route 195 at Route 275 (South Eagleville Rd)		
Route 195 From North	11	4
Route 275 From East	2	1
Route 195 From South	0	11
Route 275 From West	8	55
TOTAL	**21**	**71**

1.7. Area Crash History

Crash Data obtained via the Connecticut Crash Data Repository for a 3-year period was evaluated from January 1st, 2019, to January 1st, 2022. The data is summarized in Table 3, Crash Severity, and Table 4, Manner of Crash.

Based on the data, there were a total of 95 crashes along the study corridor within the last 3-year period. Only 5 of those crashes occurred along the site frontage; 3 resulted in no injury, 1 resulted in a possible injury and 1 resulted in a possible minor injury. Of those crashes, 3 were angle crashes, 1 was a head on collision and 1 was a rear end collision.

For the study corridor the most prevalent severity type was no apparent injury by a significant amount with 75 crashes, followed by suspected minor injury with 13 crashes. The most prevalent manner of

crashes were rear-ended collisions, not applicable (animal, object, nonmotorized crashes etc.) and angle crashes with 30, 23 and 22 crashes respectively. Rear-end and angle crashes are typical at signalized intersections. Most notably, there was one bicycle crash that resulted in a suspected minor injury and one pedestrian fatality crash that occurred near the site frontage, close to the Route 275 (South Eagleville Road) and Eastwood Road intersection. This is important as effectively tripling the occupancy of the current Mansfield Apartments will invite more pedestrians and cyclists to travel to and from UConn's campus. This is currently being addressed by CTDOT by initiating safety measures along the corridor and installing and RRFB to cross Route 275 at Eastwood Road.

Table 3
Crash Severity Summary

LOCATION:	CRASH SEVERITY				
	Fatal Injury (K)	No Apparent Injury (O)	Possible Injury (C)	Suspected Minor Injury (B)	TOTAL
Intersection					
Route 195 @ Mansfield Road	-	1	-	-	1
Route 195 @ Bolton Road	-	7	-	1	8
Route 195 @ Route 275	-	12	1	2	15
Route 275 @ Eastwood Road	-	1	1	-	2
Route 275 @ Separatist Road	-	4	1	1	6
Route 275 @ Route 32	-	4	-	1	5
TOTAL	-	29	3	5	37
Non-Intersection					
Route 275 Between Route 195 Int and Mansfield Apt Ent	**-**	**3**	**1**	**1**	**5**
Route 275 Non-Intersection*	1	15	1	5	22
Route 195 Non-Intersection	-	29	-	2	31
TOTAL	1	47	2	8	58
GRAND TOTAL	**1**	**76**	**5**	**13**	**95**

** Pedestrian fatality occurred close to Eastwood Road Intersection*

Table 4
Manner of Crash Summary

LOCATION:	CRASH TYPE									
	Angle	Front to front	Front to rear	Not Applicable	Other	Rear to rear	Rear to side	Sideswipe, opposite direction	Sideswipe, same direction	TOTAL
Intersection										
Route 195 @ Mansfield Road	-	-	1	-	-	-	-	-	-	1
Route 195 @ Bolton Road	2	1	2	2	-	-	-	-	1	8
Route 195 @ Route 275	4	-	5	2	2	-	-	-	2	15
Route 275 @ Eastwood Road	1	-	-	1	-	-	-	-	-	2
Route 275 @ Separatist Road	5	-	-	1	-	-	-	-	-	6
Route 275 @ Route 32	3	-	2	-	-	-	-	-	-	5
TOTAL	15	1	10	6	2	0	0	0	3	37
Non-Intersection										
Route 275 Between Route 195 Int and Mansfield Apt Ent	**3**	**1**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**5**
Route 275 Non-Intersection	2	1	4	13	1	-	-	1	-	22
Route 195 Non-Intersection	2	-	15	4	2	1	2	-	5	31
TOTAL	7	2	20	17	3	1	2	1	5	58
GRAND TOTAL	**22**	**3**	**30**	**23**	**5**	**1**	**2**	**1**	**8**	**95**

2. Existing Traffic Operations

2.1. Data Collection and Peak Hour Intersection Traffic Volumes

To determine the existing traffic volumes to use for the operational analysis, traffic volume data was collected/assembled at the following locations during the weekday morning and afternoon peak periods:

1. Route 195 at Mansfield Road – Gridsmart Counts (2022)
2. Route 195 at Bolton Road – Gridsmart Counts (2022)
3. Route 195 at Route 275 (South Eagleville Road) – Gridsmart Counts (2022)

4. Route 275 (South Eagleville Road) at Mansfield Apt Exit and Community Center Entrance – Field Counted (2022)
5. Route 275 (South Eagleville Road) at Community Center Exit – Field Counted (2022)
6. Route 275 (South Eagleville Road) at Mansfield Apt Entrance – Field Counted (2022)
7. Route 275 (South Eagleville Road) at Eastwood Road – Field Counted (2022)
8. Route 275 (South Eagleville Road) at Separatist Road – Field Counted (2022)
9. Route 275 (South Eagleville Road) at Route 32 – Gridsmart Counts (2022)

Both the Gridsmart data and field counts were conducted before summer break in order to reflect the typical conditions of a university semester. This data was then balanced in to determine the baseline existing conditions and the peak hour time frame for analysis. Figure 1.3 shows the existing condition weekday peak hour traffic volumes, which were approved by CTDOT's Bureau of Policy and Planning on June 10th for this analysis.

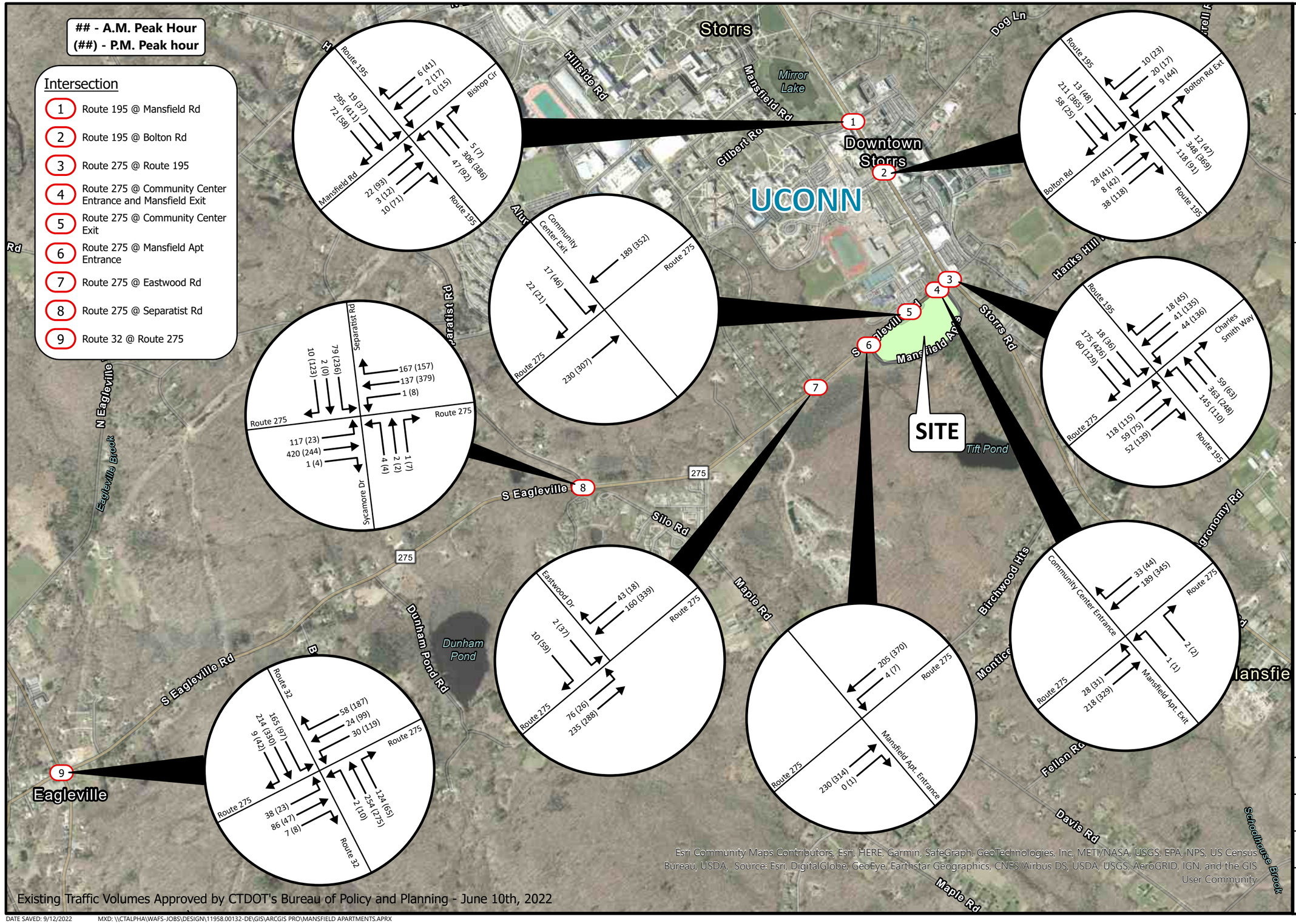
2.2. Traffic Analysis Tools & Performance Measures

The operational analysis for the study area was completed using Synchro 11.0, which is a computer-based modeling software that follows procedures from the Highway Capacity Manual (HCM). The methodology evaluates the performance of an intersection using Level of Service, which is a qualitative measure on how well an intersection operates based on the delay (seconds) per vehicle. This is shown on a scale from A to F; with LOS A reflecting traffic flow with little to no delay and LOS F reflecting traffic congestion and long motorist delays. We note that LOS D or better during peak hour is generally considered acceptable in most communities. In downtowns, campus settings, and built-up areas, LOS D/E during peak hours are often deemed acceptable and can indicate an efficient tradeoff between traffic flow and the amount of land devoted to the movement of motor vehicles. LOS is measured differently between signalized intersections and not signalized intersections. Table 5 illustrates the delay values that determine the LOS grade for signalized and unsignalized intersections.

Table 5
Level of Service Criteria

Level of Service	Signalized Intersection Delay (s/veh)	Unsignalized Intersection Delay (s/veh)
A	0 -10	0 -10
B	>10-20	>10-15
C	>20-35	>15-25
D	>35-55	>25-35
E	>55-80	>35-50
F	>80	>50

Queue length is a variable also used to determine how an intersection, or rather, an individual movement, operates. Typically, the 95th and 50th percentile queue is used when determining queue length, which is calculated in the synchro model. In this case, queue length for the Route 275, Route 195 intersection is important due to the proximity of the Mansfield Apartment egress and Community Center ingress.



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0 50 100

Feet

SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

EXISTING TRAFFIC VOLUMES

MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT
31 LeDoyt Road, Unit 3038
Storrs, Connecticut

SCALE: 1 IN = 1,000 FT

DATE: 9/12/2022

PROJECT NO.: 11958.00132

Figure 1-3

2.3. Capacity Analysis

The Synchro analysis results are shown in Tables 6 and 7. Based on the results of the analysis, most of the intersections perform reasonably well in the AM peak hour with most intersection operating at LOS B or C, which is acceptable by CTDOT standards. Some of the individual movements for both signalized and unsignalized intersections operate at LOS D which is not uncommon and not necessarily a cause for concern. In the PM peak, however, the LOS for most intersections operates between a C and a D. This also includes some individual movements operating at LOS E or worse. This is particularly true for two intersections:

1. The Southbound movement at the intersection of Route 275 and Separatist Road operating at LOS F.
2. The Northeast Thru and Southeast Thru movement at the intersection of Route 275 and Route 195 operating at LOS E.

These operating conditions will likely deteriorate further with the new development and in the future condition. However, CTDOT is planning to add a signal to the Route 275 and Separatist Road intersection, which will improve operating and safety conditions. Further analysis will be conducted, and mitigation strategies will be explored in the future conditions report.

Table 6
Unsignalized Intersection Level of Service

Lane Group	Level of Service (LOS)	
	Weekday Morning Peak Hour	Weekday Afternoon Peak Hour
	2022 Existing Conditions	2022 Existing Conditions
Route 275 @ Separatist Road		
NB	C	C
EBL	A	A
EBT	A	A
WBL	A	A
WBT	A	A
SB	D	F
Route 275 @ Eastwood Road		
NEL	A	A
NET	A	A
SE	B	B
Route 275 @ Community Center Exit		
EBL	B	B
Route 275 @ Mansfield Apartment Exit		
NW	A	B

Table 7
Signalized Intersection Level of Service

Lane Group	Level of Service (LOS)	
	Weekday Morning Peak Hour	Weekday Afternoon Peak Hour
	2022 Existing Conditions	2022 Existing Conditions
Route 32 @ Route 275		
EBT	C	B
WBT	B	C
NBT	B	C
SBT	A	B
OVERALL	**B**	**C**
Route 195 @ Route 275		
SEL	B	C
SET	C	D
NWL	B	C
NWT	C	D
NEL	C	D
NET	D	E
SWL	C	D
SWT	D	E
OVERALL	**C**	**D**
Route 195 @ Bolton Road		
EBL	C	C
EBT	B	C
WBL	C	C
WBT	C	C
NBL	B	B
NBT	B	C
SBL	C	C
SBT	D	D
OVERALL	**C**	**C**
Route 195 @ Mansfield Road		
EBT	D	D
EBR	A	A
WBT	C	C
NBL	A	B
NBT	B	C
SBL	B	B
SBT	B	D
SBR	A	A
OVERALL	**B**	**C**

2.4. Queue Analysis

A review of vehicle queuing was performed at the intersection of Route 195 and Route 275 (South Eagleville Road) as there were concerns that queuing for the northeast movement would extend beyond the existing Mansfield Apartment egress. This would also impact future traffic conditions as the queueing would only get worse due to traffic growth and added trips from the proposed development.

As shown in Table 8, based on the analysis, the 50th percentile queue for the morning AM peak hour doesn't extend past the Mansfield egress. The PM peak hour 50th percentile extends past the Mansfield egress but doesn't extend bast the Community Center Ingress. However, the 95th percentile queue for both morning and afternoon peak hours extend beyond the existing Mansfield Apartment egress. The queue also extends beyond the existing Community Center ingress for the thru-right lane afternoon peak hour condition. This is a safety concern and could cause delays for the proposed development if the driveway is kept in the same location. This will be further explored in the future conditions analysis.

Table 8
Queue Analysis Results

ROUTE 195/275 INTERSECTION – 50th and 95th PERCENTILE QUEUE						
LOCATION/APPROACH	DISTANCE TO EXISTING MANSFIELD APARTMENT EGRESS	DISTANCE TO EXISTING COMMUNITY CENTER INGRESS	50th AM PEAK HOUR LENGTH	50th PM PEAK HOUR LENGTH	95th AM PEAK HOUR LENGTH	95th PM PEAK HOUR LENGTH
Northeast Left	60'	190'	46'	72'	146'	138'
Northeast Thru/Right			41'	130'	139'	244'

3. Conclusion

This report summarized the existing conditions of Mansfield Apartments and the surrounding roadway network used in the analysis. While there are some concerns with speeding and crash history, especially with the recent pedestrian fatality near the site location, those concerns are being addressed by CTDOT in separate projects.

The existing condition operating LOS for the study intersections are acceptable based on the Synchro analysis, there are concerns in the PM peak hour and queueing for the northeast movement at the intersection of Route 275 and Route 195. This will only get worse with traffic added from the redevelopment and with future traffic conditions. Further analysis will need to be conducted in the future condition to fully evaluate the impact and determine appropriate mitigation strategies.

Appendix:

- CTDOT Speed Data
- ATR Speed Data
- Synchro sheets

Appendix

Status: OK East Combined West

MANS-042 - Combined - e/w

Route 275 - 4.13 mi West of Route 195 (Storrs Rd)

Collected during COVID-19 epoch

Town.....Mansfield
Station.....42
Location..... 41.800981,-72.241249
Posted Speed Limit.....30 MPH
2015-Minor Arterial 4.....2015-Urban
Start Report.....13-Apr-2021 11:00AM
End Report.....15-Apr-2021 01:00PM

All Vehicles Average Speed..... 27 MPH
Total Vehicles.....10733
Percentile Sampling Period... 9AM to 4PM
Vehicle Too Close.....5 secs
Vehicle Too Slow..... < 15 MPH
Speed Lower Limit....15 MPH below Posted

All Report Days
85th Percentile Speed.....31.9 MPH
50th Percentile Speed.....26.6 MPH
10 MPH Pace (65%).....23-32 MPH
All Hours Total Vehicles.....10733
In-Period Total Vehicles.....5824
Omitted Vehicles Too Close (28%)...1627
Omitted Vehicles Too Slow (3%).....165
Sampled Vehicles (69%).....4032

Tuesday 13-Apr-2021
85th Percentile Speed.....32.3 MPH
50th Percentile Speed.....26.8 MPH
10 MPH Pace (65%).....24-33 MPH
All Hours Total Vehicles.....3688
In-Period Total Vehicles.....1981
Omitted Vehicles Too Close (30%)....597
Omitted Vehicles Too Slow (3%).....61
Sampled Vehicles (67%).....1323

Wednesday 14-Apr-2021
85th Percentile Speed.....32.2 MPH
50th Percentile Speed.....26.8 MPH
10 MPH Pace (65%).....23-32 MPH
All Hours Total Vehicles.....5050
In-Period Total Vehicles.....2621
Omitted Vehicles Too Close (28%)....746
Omitted Vehicles Too Slow (3%).....73
Sampled Vehicles (69%).....1802

Thursday 15-Apr-2021
85th Percentile Speed.....31.1 MPH
50th Percentile Speed.....25.9 MPH
10 MPH Pace (68%).....22-31 MPH
All Hours Total Vehicles.....1995
In-Period Total Vehicles.....1222
Omitted Vehicles Too Close (23%)....284
Omitted Vehicles Too Slow (3%).....31
Sampled Vehicles (74%).....907

Hour	MPH 0-15	MPH 16-20	MPH 21-25	MPH 26-30	MPH 31-35	MPH 36-40	MPH 41-45	MPH 46-50	MPH 51-55	MPH 56-60	MPH 61-65	MPH 66-70	MPH 71-75	MPH 76+	Total Vol.	Daily Vol.
Tuesday																
13-Apr																
12:00am																
01:00am																
02:00am																
03:00am																
04:00am																
05:00am																
06:00am																
07:00am																
08:00am																
09:00am																
10:00am	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
11:00am	10	32	90	127	81	19	.	.	.	.	.	.	.	.	359	10%
12:00pm	20	48	108	115	81	25	.	.	.	.	.	.	.	.	397	11%
01:00pm	11	30	78	113	102	22	2	1	.	.	.	.	.	.	359	10%
02:00pm	21	39	98	150	95	19	1	.	.	.	.	.	.	.	423	11%
03:00pm	30	33	92	153	105	25	4	1	.	.	.	.	.	.	443	12%
04:00pm	23	49	80	118	115	29	4	1	.	.	.	.	.	.	419	11%
05:00pm	13	25	85	124	99	29	7	.	.	.	.	.	.	.	382	10%
06:00pm	7	18	80	104	94	29	3	.	.	.	.	.	.	.	335	9%
07:00pm	3	12	44	92	57	17	1	1	.	.	.	.	.	.	227	6%
08:00pm	.	7	31	58	43	12	2	.	.	.	.	.	.	.	153	4%
09:00pm	.	.	15	38	26	14	.	.	.	.	.	.	.	.	93	3%
10:00pm	.	4	9	23	23	3	.	.	.	.	.	.	.	.	62	2%
11:00pm	.	4	5	13	13	1	.	.	.	.	.	.	.	.	36	1%
Totals	138	301	815	1228	934	244	24	4	0	0	0	0	0	0	3688	
Percent	3.74	8.16	22.10	33.30	25.33	6.62	0.65	0.11	0.00	0.00	0.00	0.00	0.00	0.00		
Wednesday																
14-Apr																
12:00am	.	.	4	7	5	.	1	.	.	.	.	.	.	.	17	0%
01:00am	.	.	5	5	3	.	.	.	.	.	.	.	.	.	13	0%
02:00am	.	.	.	5	.	.	.	.	.	.	.	.	.	.	5	0%
03:00am	.	.	.	3	.	.	.	.	.	.	.	.	.	.	3	0%
04:00am	.	.	1	3	3	.	.	.	.	.	.	.	.	.	7	0%
05:00am	.	2	10	12	9	2	.	.	.	.	.	.	.	.	35	1%
06:00am	1	8	25	47	30	4	2	.	.	.	.	.	.	.	117	2%
07:00am	1	17	49	80	48	11	.	.	.	.	.	.	.	.	206	4%
08:00am	7	30	70	98	60	11	4	.	.	.	.	.	.	.	280	6%
09:00am	.	18	64	94	61	15	2	.	.	.	.	.	.	.	254	5%
10:00am	11	29	88	91	50	12	.	.	.	.	.	.	.	.	281	6%
11:00am	18	47	75	135	71	20	4	.	.	.	.	.	.	.	370	7%
12:00pm	11	42	110	140	96	27	4	1	.	.	.	.	.	.	431	9%
01:00pm	15	23	95	160	98	20	8	.	.	.	.	.	.	.	419	8%
02:00pm	18	35	90	135	103	19	2	.	.	.	.	.	.	.	402	8%
03:00pm	31	51	113	151	96	22	.	.	.	.	.	.	.	.	464	9%
04:00pm	50	74	109	138	83	34	4	1	.	.	.	.	.	.	493	10%
05:00pm	6	29	79	123	91	22	3	1	.	.	.	.	.	.	354	7%
06:00pm	3	11	72	111	77	18	3	.	.	.	.	.	.	.	295	6%
07:00pm	2	10	52	85	57	21	2	.	.	.	.	.	.	.	229	5%
08:00pm	4	10	30	58	45	12	.	.	.	.	.	.	.	.	159	3%
09:00pm	.	1	21	39	34	7	1	.	.	.	.	.	.	.	103	2%
10:00pm	1	3	14	26	22	4	.	.	.	.	.	.	.	.	70	1%
11:00pm	.	3	4	14	17	4	1	.	.	.	.	.	.	.	43	1%
Totals	179	443	1180	1760	1159	285	41	3	0	0	0	0	0	0	5050	
Percent	3.54	8.77	23.37	34.85	22.95	5.64	0.81	0.06	0.00	0.00	0.00	0.00	0.00	0.00		
Thursday																
15-Apr																
12:00am	.	1	2	7	11	1	.	.	.	.	.	.	.	.	22	1%
01:00am	.	.	1	6	1	1	.	.	.	.	.	.	.	.	9	0%
02:00am	.	.	2	2	.	.	.	.	.	.	.	.	.	.	4	0%
03:00am	.	.	.	1	1	.	.	.	.	.	.	.	.	.	2	0%
04:00am	.	2	5	6	2	.	.	.	.	.	.	.	.	.	15	1%
05:00am	1	6	10	13	9	3	.	.	.	.	.	.	.	.	42	2%
06:00am	2	10	32	45	34	7	1	.	.	.	.	.	.	.	131	7%
07:00am	3	20	50	105	49	13	2	.	.	.	.	.	.	.	242	12%
08:00am	8	39	84	95	65	13	1	.	.	1	.	.	.	.	306	15%
09:00am	8	28	88	104	36	4	1	.	.	.	.	.	.	.	269	13%
10:00am	19	38	97	102	45	5	.	.	.	.	.	.	.	.	306	15%
11:00am	13	41	98	108	64	5	2	.	.	.	.	.	.	.	331	17%
12:00pm	9	32	84	95	83	10	3	.	.	.	.	.	.	.	316	16%
01:00pm	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
02:00pm	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
03:00pm																
04:00pm																
05:00pm																
06:00pm																
07:00pm																
08:00pm																
09:00pm																
10:00pm																
11:00pm																
Totals	63	217	553	689	400	62	10	0	0	1	0	0	0	0	1995	
Percent	3.16	10.88	27.72	34.54	20.05	3.11	0.50	0.00	0.00	0.05	0.00	0.00	0.00	0.00		

Daily Total Speeds (MPH)

Study Date: Friday, 04/22/2022
Unit ID:
Location: S. Eagleville Road in Storrs, CT

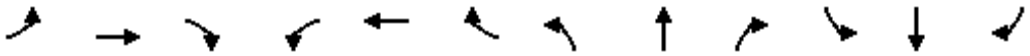
Posted Speed: 45

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	1	9	23	27	22	10	3	2	0	0	0	0	0	**97**
01:00 - 01:59	0	0	0	2	9	17	21	9	2	3	0	0	0	0	0	**63**
02:00 - 02:59	0	0	0	0	2	4	5	9	2	1	0	0	0	0	0	**23**
03:00 - 03:59	0	0	0	0	1	7	6	3	0	0	1	0	0	0	0	**18**
04:00 - 04:59	0	0	0	0	5	2	3	2	0	0	0	0	0	0	0	**12**
05:00 - 05:59	0	0	0	0	2	8	24	7	5	1	1	0	0	0	0	**48**
06:00 - 06:59	0	0	0	0	9	26	35	24	17	2	0	0	0	0	0	**113**
07:00 - 07:59	0	0	1	6	23	64	75	57	19	4	0	1	0	0	0	**250**
08:00 - 08:59	0	0	1	2	34	107	118	77	18	2	1	0	0	0	0	**360**
09:00 - 09:59	1	0	0	3	34	105	126	66	15	2	0	0	0	1	0	**353**
10:00 - 10:59	0	0	1	3	47	128	153	88	15	0	1	0	0	0	0	**436**
11:00 - 11:59	0	0	1	2	29	157	164	82	33	7	2	1	1	0	0	**479**
12:00 - 12:59	0	1	0	7	46	153	205	82	27	8	0	0	0	0	1	**530**
13:00 - 13:59	2	1	0	4	52	161	199	105	23	5	2	0	0	0	0	**554**
14:00 - 14:59	0	0	0	0	32	183	227	121	24	0	0	0	0	0	1	**588**
15:00 - 15:59	1	1	1	6	53	173	204	88	31	3	1	0	1	0	1	**564**
16:00 - 16:59	0	1	2	7	43	155	211	124	27	1	2	0	0	0	0	**573**
17:00 - 17:59	0	0	1	9	43	118	211	115	21	5	2	1	0	0	1	**527**
18:00 - 18:59	0	0	0	7	28	102	163	91	30	7	1	0	0	0	1	**430**
19:00 - 19:59	1	3	5	5	44	102	144	82	5	6	1	0	0	0	0	**398**
20:00 - 20:59	0	0	2	7	52	115	99	36	7	0	0	0	0	0	0	**318**
21:00 - 21:59	0	0	1	6	33	99	91	37	6	0	0	1	0	0	0	**274**
22:00 - 22:59	0	0	0	3	25	62	89	33	6	2	1	0	0	0	1	**222**
23:00 - 23:59	0	0	0	2	10	38	37	21	8	1	2	0	0	0	0	**119**
Totals	**5**	**7**	**17**	**90**	**679**	**2113**	**2632**	**1369**	**344**	**62**	**18**	**4**	**2**	**1**	**6**	**7349**
Percent of Total	**0.1**	**0.1**	**0.2**	**1.2**	**9.2**	**28.8**	**35.8**	**18.6**	**4.7**	**0.8**	**0.2**	**0.1**	**0.0**	**0.0**	**0.1**	**100**
Percent of AM	**0.0**	**0.0**	**0.2**	**1.2**	**9.7**	**29.0**	**33.4**	**19.3**	**5.7**	**1.1**	**0.3**	**0.1**	**0.0**	**0.0**	**0.0**	**100**
Percent of PM	**0.1**	**0.1**	**0.2**	**1.2**	**9.0**	**28.7**	**36.9**	**18.3**	**4.2**	**0.7**	**0.2**	**0.0**	**0.0**	**0.0**	**0.1**	**100**

Standard Deviation: 6.1 MPH
Mean Speed: 41.5 MPH
Median Speed: 41.4 MPH
Modal Speed: 42.5 MPH

Ten Mile Pace: 35 to 44 MPH
Percent in Ten Mile Pace: 64.6%

85th Percentile: 47.6 MPH
15th Percentile: 35.7 MPH
90th Percentile: 48.9 MPH
95th Percentile: 51.0 MPH

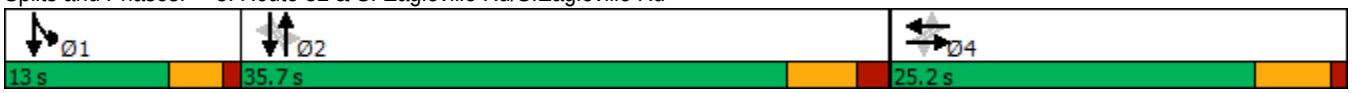


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	86	7	30	24	58	2	254	124	165	214	9
Future Volume (vph)	38	86	7	30	24	58	2	254	124	165	214	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.992			0.930			0.956			0.997	
Flt Protected		0.986			0.987						0.979	
Satd. Flow (prot)	0	1822	0	0	1710	0	0	1781	0	0	1818	0
Flt Permitted		0.887			0.887			0.998			0.717	
Satd. Flow (perm)	0	1639	0	0	1537	0	0	1777	0	0	1332	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		4			63			40				
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		642			499			633			576	
Travel Time (s)		14.6			9.7			14.4			13.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	41	93	8	33	26	63	2	276	135	179	233	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	142	0	0	122	0	0	413	0	0	422	0
Number of Detectors	1	1		1	1		1	2		1	2	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	31		20	46		20	406		20	406	
Trailing Detector (ft)	0	-4		0	-4		0	-4		0	-4	
Turn Type	Perm	NA		Perm	NA		Perm	NA		D.P+P	NA	
Protected Phases		4			4			2		1	1 2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		1	1 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		15.0	15.0		6.0		
Minimum Split (s)	13.2	13.2		13.2	13.2		23.7	23.7		10.0		
Total Split (s)	25.2	25.2		25.2	25.2		35.7	35.7		13.0		
Total Split (%)	34.1%	34.1%		34.1%	34.1%		48.3%	48.3%		17.6%		
Yellow Time (s)	4.2	4.2		4.2	4.2		3.9	3.9		3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.8	1.8		1.0		
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		5.2			5.2			5.7				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Max		
Act Effct Green (s)		10.2			10.2			28.0			38.9	
Actuated g/C Ratio		0.16			0.16			0.45			0.62	
v/c Ratio		0.53			0.40			0.50			0.47	
Control Delay		31.1			17.4			13.9			6.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.1			17.4			13.9			6.7	
LOS		C			B			B			A	
Approach Delay		31.1			17.4			13.9			6.7	
Approach LOS		C			B			B			A	
Queue Length 50th (ft)		50			20			93			51	
Queue Length 95th (ft)		99			62			186			113	
Internal Link Dist (ft)		562			419			553			496	
Turn Bay Length (ft)												
Base Capacity (vph)		534			540			885			950	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.27			0.23			0.47			0.44	

Intersection Summary			
Area Type:	Other		
Cycle Length: 73.9			
Actuated Cycle Length: 62.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 64.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Route 32 & S. Eagleville Rd/S.Eagleville Rd



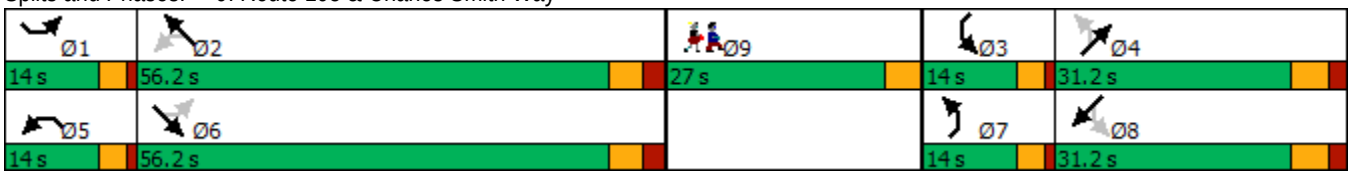
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	18	175	60	145	363	59	118	59	52	44	41	18
Future Volume (vph)	18	175	60	145	363	59	118	59	52	44	41	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		250	0		0	0		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.962			0.979			0.929			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	3291	0	1711	1763	0	1711	1673	0	1711	1718	0
Flt Permitted	0.332			0.532			0.472			0.679		
Satd. Flow (perm)	598	3291	0	958	1763	0	850	1673	0	1223	1718	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		37			6			27				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		351			347			121			378	
Travel Time (s)		8.0			7.9			2.8			8.6	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	20	190	65	158	395	64	128	64	57	48	45	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	255	0	158	459	0	128	121	0	48	65	0
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template												
Leading Detector (ft)	36	234		36	163		46	100		44	44	
Trailing Detector (ft)	-10	0		-10	0		-4	-4		-4	-4	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4	4		8	8	
Detector Phase	1	6		5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	9.0	21.2		9.0	21.2		9.0	13.2		9.0	13.2	
Total Split (s)	14.0	56.2		14.0	56.2		14.0	31.2		14.0	31.2	
Total Split (%)	9.8%	39.5%		9.8%	39.5%		9.8%	21.9%		9.8%	21.9%	
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	4.1		3.0	4.1	
All-Red Time (s)	1.0	2.5		1.0	2.5		1.0	2.1		1.0	2.1	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.2		4.0	6.2		4.0	6.2		4.0	6.2	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	19%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		None	Min		None	None		None	None	
Act Effct Green (s)	37.0	28.4		43.1	31.6		22.5	15.0		16.2	10.2	
Actuated g/C Ratio	0.44	0.33		0.51	0.37		0.26	0.18		0.19	0.12	
v/c Ratio	0.06	0.23		0.28	0.70		0.38	0.38		0.18	0.32	
Control Delay	16.2	20.7		16.2	31.6		34.9	37.7		32.6	48.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.2	20.7		16.2	31.6		34.9	37.7		32.6	48.5	
LOS	B	C		B	C		C	D		C	D	
Approach Delay		20.4			27.7			36.3			41.7	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	4	36		32	160		46	41		16	30	
Queue Length 95th (ft)	24	100		120	441		146	139		65	98	
Internal Link Dist (ft)		271			267			41			298	
Turn Bay Length (ft)	250											
Base Capacity (vph)	451	2184		609	1165		346	593		368	590	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.12		0.26	0.39		0.37	0.20		0.13	0.11	

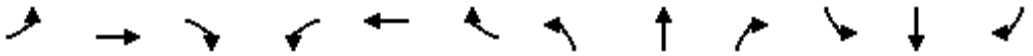
Intersection Summary			
Area Type:	Other		
Cycle Length: 142.4			
Actuated Cycle Length: 85			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 29.1		Intersection LOS: C	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 9: Route 195 & Charles Smith Way



Lane Group	Ø9
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



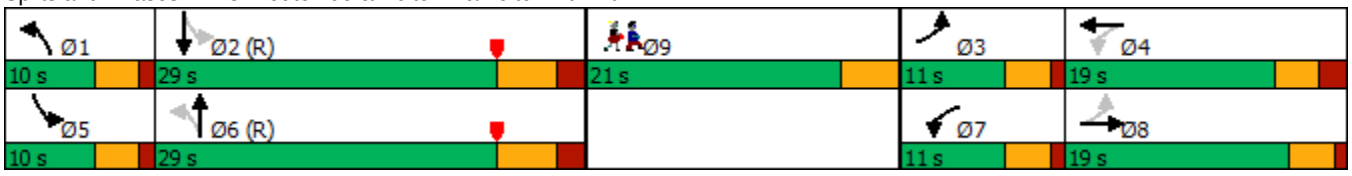
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	8	38	9	20	10	118	348	12	13	211	58
Future Volume (vph)	28	8	38	9	20	10	118	348	12	13	211	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	125		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			75			75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.877			0.950			0.995			0.968	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	1579	0	1711	1711	0	1711	1792	0	1711	1743	0
Flt Permitted	0.531			0.727			0.455			0.482		
Satd. Flow (perm)	956	1579	0	1309	1711	0	819	1792	0	868	1743	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		41			11			2			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		351			174			994			693	
Travel Time (s)		8.0			4.0			22.6			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	30	9	41	10	22	11	128	378	13	14	229	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	50	0	10	33	0	128	391	0	14	292	0
Number of Detectors	1	1		1	1		1	2		1	2	
Detector Template												
Leading Detector (ft)	44	44		40	40		40	233		40	238	
Trailing Detector (ft)	-4	-4		-4	-4		-10	0		-10	0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	3	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	7.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	9.0	9.0		9.0	12.0		9.0	21.0		9.0	21.0	
Total Split (s)	11.0	19.0		11.0	19.0		10.0	29.0		10.0	29.0	
Total Split (%)	12.2%	21.1%		12.2%	21.1%		11.1%	32.2%		11.1%	32.2%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	5.0		4.0	6.0		4.0	6.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	21.0
Total Split (s)	21.0
Total Split (%)	23%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	12.4	11.0		10.0	7.1		51.2	48.0		47.2	40.2	
Actuated g/C Ratio	0.14	0.12		0.11	0.08		0.57	0.53		0.52	0.45	
v/c Ratio	0.17	0.22		0.06	0.23		0.25	0.41		0.03	0.37	
Control Delay	32.3	16.4		29.7	33.1		13.2	18.0		28.3	36.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.3	16.4		29.7	33.1		13.2	18.0		28.3	36.8	
LOS	C	B		C	C		B	B		C	D	
Approach Delay		22.4			32.3			16.8			36.5	
Approach LOS		C			C			B			D	
Queue Length 50th (ft)	14	4		5	12		38	145		9	176	
Queue Length 95th (ft)	37	38		18	40		75	284		m24	257	
Internal Link Dist (ft)		271			94			914			613	
Turn Bay Length (ft)							125			150		
Base Capacity (vph)	199	313		205	275		524	956		520	786	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.15	0.16		0.05	0.12		0.24	0.41		0.03	0.37	

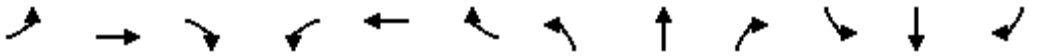
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 24.3		Intersection LOS: C	
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 13: Route 195 & Bolton Rd/Bolton Rd Ext



Lane Group	Ø9
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



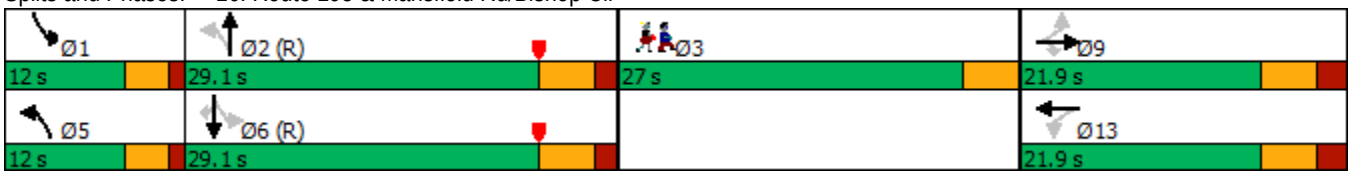
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	3	10	0	2	6	47	306	5	19	295	72
Future Volume (vph)	22	3	10	0	2	6	47	306	5	19	295	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	150		0	175		0
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			75			75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.895			0.998				0.850
Flt Protected		0.957					0.950			0.950		
Satd. Flow (prot)	0	1723	1531	0	1612	0	1711	1797	0	1711	1801	1531
Flt Permitted		0.840					0.468			0.494		
Satd. Flow (perm)	0	1513	1531	0	1612	0	843	1797	0	890	1801	1531
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			125		7			1				132
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		286			226			693			256	
Travel Time (s)		6.5			5.1			15.8			5.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	24	3	11	0	2	7	51	333	5	21	321	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	11	0	9	0	51	338	0	21	321	78
Number of Detectors	1	1	1	1	1		1	2		1	2	1
Detector Template	Left			Left								
Leading Detector (ft)	20	39	39	20	31		40	167		35	167	35
Trailing Detector (ft)	0	-4	-4	0	-4		-4	4		-8	0	0
Turn Type	Perm	NA	Perm		NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases		9			13		5	2		1	6	
Permitted Phases	9		9	13			2			6		6
Detector Phase	9	9	9	13	13		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		5.0	15.0		5.0	15.0	15.0
Minimum Split (s)	12.9	12.9	12.9	12.9	12.9		9.0	20.3		9.0	20.3	20.3
Total Split (s)	21.9	21.9	21.9	21.9	21.9		12.0	29.1		12.0	29.1	29.1
Total Split (%)	24.3%	24.3%	24.3%	24.3%	24.3%		13.3%	32.3%		13.3%	32.3%	32.3%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7		3.0	3.7		3.0	3.7	3.7
All-Red Time (s)	2.2	2.2	2.2	2.2	2.2		1.0	1.6		1.0	1.6	1.6
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.9	5.9		5.9		4.0	5.3		4.0	5.3	5.3

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	30%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	C-Min
Act Effct Green (s)		7.3	7.3		7.3		49.9	45.9		48.0	43.6	43.6
Actuated g/C Ratio		0.08	0.08		0.08		0.55	0.51		0.53	0.48	0.48
v/c Ratio		0.22	0.05		0.07		0.10	0.37		0.04	0.37	0.10
Control Delay		43.1	0.4		25.8		4.3	12.2		11.3	19.4	1.1
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		43.1	0.4		25.8		4.3	12.2		11.3	19.4	1.1
LOS		D	A		C		A	B		B	B	A
Approach Delay		30.7			25.8			11.2			15.6	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)		15	0		1		3	91		6	132	0
Queue Length 95th (ft)		40	0		16		7	287		18	219	8
Internal Link Dist (ft)		206			146			613			176	
Turn Bay Length (ft)							150			175		
Base Capacity (vph)		268	374		292		549	917		564	871	809
Starvation Cap Reductn		0	0		0		0	0		0	0	0
Spillback Cap Reductn		0	0		0		0	0		0	0	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.10	0.03		0.03		0.09	0.37		0.04	0.37	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 29 (32%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 14.4		Intersection LOS: B	
Intersection Capacity Utilization 41.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 16: Route 195 & Mansfield Rd/Bishop Cir



Lane Group	Ø3
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	1	2	218	0	0	222
Future Volume (vph)	1	2	218	0	0	222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.910					
Flt Protected	0.984					
Satd. Flow (prot)	1668	0	3539	0	0	1863
Flt Permitted	0.984					
Satd. Flow (perm)	1668	0	3539	0	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	250		147			121
Travel Time (s)	5.7		3.3			2.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	1	2	237	0	0	241
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3	0	237	0	0	241
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	0	28	218	189	33
Future Volume (vph)	0	0	28	218	189	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	50			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		100			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt					0.980	
Flt Protected				0.994		
Satd. Flow (prot)	0	0	0	3518	1825	0
Flt Permitted				0.994		
Satd. Flow (perm)	0	0	0	3518	1825	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	159			310	147	
Travel Time (s)	3.6			7.0	3.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	0	0	30	237	205	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	267	241	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	17	22	0	230	189	0
Future Volume (vph)	17	22	0	230	189	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.923					
Flt Protected	0.979					
Satd. Flow (prot)	1683	0	0	1863	1863	0
Flt Permitted	0.979					
Satd. Flow (perm)	1683	0	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	172			565	310	
Travel Time (s)	3.9			12.8	7.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	18	24	0	250	205	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	42	0	0	250	205	0
Sign Control	Stop			Free	Free	

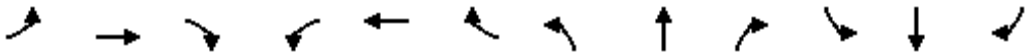
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	230	0	4	205
Future Volume (vph)	0	0	230	0	4	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						0.999
Satd. Flow (prot)	0	0	1863	0	0	1861
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1863	0	0	1861
Link Speed (mph)	30		30			30
Link Distance (ft)	169		752			565
Travel Time (s)	3.8		17.1			12.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	250	0	4	223
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	250	0	0	227
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	2	10	76	235	160	43
Future Volume (vph)	2	10	76	235	160	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.886				0.971	
Flt Protected	0.992			0.988		
Satd. Flow (prot)	1637	0	0	1840	1809	0
Flt Permitted	0.992			0.988		
Satd. Flow (perm)	1637	0	0	1840	1809	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	337			1540	752	
Travel Time (s)	7.7			35.0	17.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	2	11	83	255	174	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	0	0	338	221	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.9%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	420	1	1	137	167	4	2	1	79	2	10
Future Volume (vph)	117	420	1	1	137	167	4	2	1	79	2	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.926			0.981			0.985	
Flt Protected		0.989						0.972			0.958	
Satd. Flow (prot)	0	1842	0	0	1725	0	0	1776	0	0	1758	0
Flt Permitted		0.989						0.972			0.958	
Satd. Flow (perm)	0	1842	0	0	1725	0	0	1776	0	0	1758	0
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		1043			1296			284			440	
Travel Time (s)		20.3			29.5			6.5			10.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	127	457	1	1	149	182	4	2	1	86	2	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	585	0	0	332	0	0	7	0	0	99	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.6%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	1	2	218	0	0	222
Future Vol, veh/h	1	2	218	0	0	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	2	237	0	0	241

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	478	119	0	-	-	-
Stage 1	237	-	-	-	-	-
Stage 2	241	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	531	911	-	0	0	-
Stage 1	781	-	-	0	0	-
Stage 2	798	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	531	911	-	-	-	-
Mov Cap-2 Maneuver	531	-	-	-	-	-
Stage 1	781	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NWLn1	SWT
Capacity (veh/h)	-	736	-
HCM Lane V/C Ratio	-	0.004	-
HCM Control Delay (s)	-	9.9	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	17	22	0	230	189	0
Future Vol, veh/h	17	22	0	230	189	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	24	0	250	205	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	455	205	-	0	-	0
Stage 1	205	-	-	-	-	-
Stage 2	250	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	563	836	0	-	-	0
Stage 1	829	-	0	-	-	0
Stage 2	792	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	563	836	-	-	-	-
Mov Cap-2 Maneuver	563	-	-	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	792	-	-	-	-	-

Approach	SB	NE	SW
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	SBLn1	SWT
Capacity (veh/h)	-	690	-
HCM Lane V/C Ratio	-	0.061	-
HCM Control Delay (s)	-	10.6	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.2	-

Intersection	
Int Delay, s/veh	1.4

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	2	10	76	235	160	43
Future Vol, veh/h	2	10	76	235	160	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	11	83	255	174	47

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	619	198	221	0	-	0
Stage 1	198	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	452	843	1348	-	-	-
Stage 1	835	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	419	843	1348	-	-	-
Mov Cap-2 Maneuver	419	-	-	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	662	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10.1	1.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1348	-	721	-	-
HCM Lane V/C Ratio	0.061	-	0.018	-	-
HCM Control Delay (s)	7.8	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-

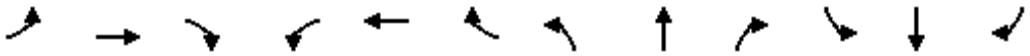
Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	117	420	1	1	137	167	4	2	1	79	2	10
Future Vol, veh/h	117	420	1	1	137	167	4	2	1	79	2	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	127	457	1	1	149	182	4	2	1	86	2	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	331	0	0	458	0	0	961	1045	458	955	954	240
Stage 1	-	-	-	-	-	-	712	712	-	242	242	-
Stage 2	-	-	-	-	-	-	249	333	-	713	712	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1228	-	-	1103	-	-	236	229	603	238	259	799
Stage 1	-	-	-	-	-	-	423	436	-	762	705	-
Stage 2	-	-	-	-	-	-	755	644	-	423	436	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1228	-	-	1103	-	-	206	197	603	210	223	799
Mov Cap-2 Maneuver	-	-	-	-	-	-	206	197	-	210	223	-
Stage 1	-	-	-	-	-	-	364	375	-	656	704	-
Stage 2	-	-	-	-	-	-	742	643	-	361	375	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	21.6	32.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	224	1228	-	-	1103	-	-	229
HCM Lane V/C Ratio	0.034	0.104	-	-	0.001	-	-	0.432
HCM Control Delay (s)	21.6	8.3	0	-	8.3	0	-	32.2
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.1	0.3	-	-	0	-	-	2

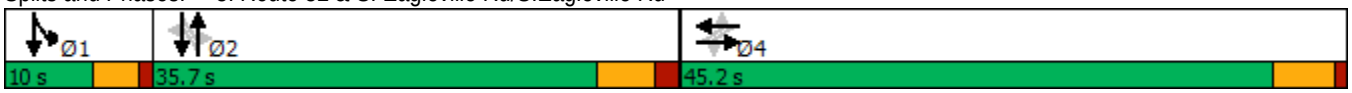


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	47	8	119	99	187	10	275	65	97	330	42
Future Volume (vph)	23	47	8	119	99	187	10	275	65	97	330	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.986			0.938			0.975			0.988	
Flt Protected		0.986			0.986			0.999			0.990	
Satd. Flow (prot)	0	1811	0	0	1723	0	0	1814	0	0	1822	0
Flt Permitted		0.848			0.871			0.982			0.857	
Satd. Flow (perm)	0	1557	0	0	1522	0	0	1783	0	0	1577	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		8			61			14				
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		642			499			633			576	
Travel Time (s)		14.6			9.7			14.4			13.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	25	51	9	129	108	203	11	299	71	105	359	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	85	0	0	440	0	0	381	0	0	510	0
Number of Detectors	1	1		1	1		1	2		1	2	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	31		20	46		20	406		20	406	
Trailing Detector (ft)	0	-4		0	-4		0	-4		0	-4	
Turn Type	Perm	NA		Perm	NA		Perm	NA		D.P+P	NA	
Protected Phases		4			4			2		1	1 2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		1	1 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		15.0	15.0		6.0		
Minimum Split (s)	13.2	13.2		13.2	13.2		23.7	23.7		10.0		
Total Split (s)	45.2	45.2		45.2	45.2		35.7	35.7		10.0		
Total Split (%)	49.7%	49.7%		49.7%	49.7%		39.3%	39.3%		11.0%		
Yellow Time (s)	4.2	4.2		4.2	4.2		3.9	3.9		3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.8	1.8		1.0		
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		5.2			5.2			5.7				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		Min	Min		Max		
Act Effct Green (s)		24.0			24.0			29.4			37.2	
Actuated g/C Ratio		0.32			0.32			0.39			0.50	
v/c Ratio		0.17			0.83			0.54			0.63	
Control Delay		16.7			33.8			22.0			18.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.7			33.8			22.0			18.8	
LOS		B			C			C			B	
Approach Delay		16.7			33.8			22.0			18.8	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)		25			163			124			132	
Queue Length 95th (ft)		54			269			266			304	
Internal Link Dist (ft)		562			419			553			496	
Turn Bay Length (ft)												
Base Capacity (vph)		851			856			736			829	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.10			0.51			0.52			0.62	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90.9			
Actuated Cycle Length: 74.7			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 24.2		Intersection LOS: C	
Intersection Capacity Utilization 86.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Route 32 & S. Eagleville Rd/S.Eagleville Rd



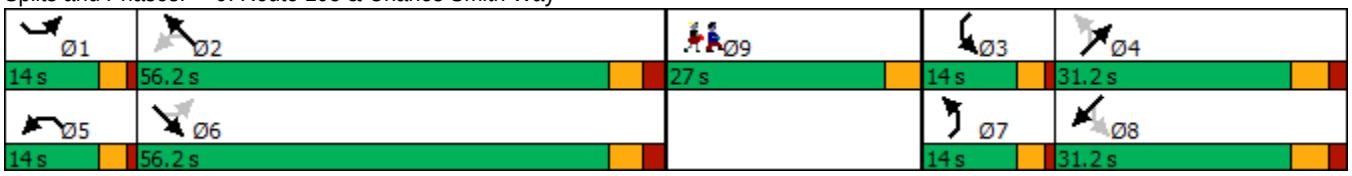
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	36	426	129	110	248	63	115	75	139	136	135	45
Future Volume (vph)	36	426	129	110	248	63	115	75	139	136	135	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		250	0		0	0		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.965			0.970			0.903			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	3301	0	1711	1747	0	1711	1626	0	1711	1732	0
Flt Permitted	0.409			0.262			0.460			0.343		
Satd. Flow (perm)	736	3301	0	472	1747	0	828	1626	0	618	1732	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		31			10			56				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		351			347			121			378	
Travel Time (s)		8.0			7.9			2.8			8.6	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	39	463	140	120	270	68	125	82	151	148	147	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	603	0	120	338	0	125	233	0	148	196	0
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template												
Leading Detector (ft)	36	234		36	163		46	100		44	44	
Trailing Detector (ft)	-10	0		-10	0		-4	-4		-4	-4	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4	4		8	8	
Detector Phase	1	6		5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	9.0	21.2		9.0	21.2		9.0	13.2		9.0	13.2	
Total Split (s)	14.0	56.2		14.0	56.2		14.0	31.2		14.0	31.2	
Total Split (%)	9.8%	39.5%		9.8%	39.5%		9.8%	21.9%		9.8%	21.9%	
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	4.1		3.0	4.1	
All-Red Time (s)	1.0	2.5		1.0	2.5		1.0	2.1		1.0	2.1	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.2		4.0	6.2		4.0	6.2		4.0	6.2	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	19%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		None	Min		None	None		None	None	
Act Effct Green (s)	39.3	30.5		44.4	33.0		28.0	16.5		28.3	16.6	
Actuated g/C Ratio	0.37	0.28		0.41	0.31		0.26	0.15		0.26	0.15	
v/c Ratio	0.12	0.63		0.40	0.62		0.43	0.78		0.58	0.73	
Control Delay	22.5	36.8		26.5	38.8		38.4	55.5		43.6	64.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	22.5	36.8		26.5	38.8		38.4	55.5		43.6	64.1	
LOS	C	D		C	D		D	E		D	E	
Approach Delay		35.9			35.6			49.5			55.3	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	17	200		56	209		72	130		86	142	
Queue Length 95th (ft)	43	282		106	341		138	244		161	247	
Internal Link Dist (ft)		271			267			41			298	
Turn Bay Length (ft)	250											
Base Capacity (vph)	400	1720		330	907		321	461		285	447	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.10	0.35		0.36	0.37		0.39	0.51		0.52	0.44	

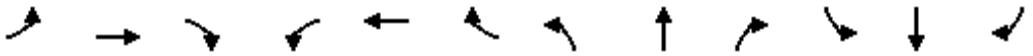
Intersection Summary			
Area Type:	Other		
Cycle Length: 142.4			
Actuated Cycle Length: 107.2			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 42.2		Intersection LOS: D	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 9: Route 195 & Charles Smith Way



Lane Group	Ø9
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



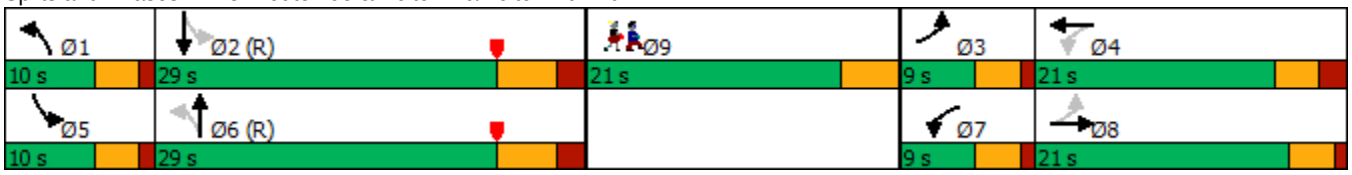
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	42	118	44	17	23	91	368	47	48	365	25
Future Volume (vph)	41	42	118	44	17	23	91	368	47	48	365	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	125		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			75			75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.890			0.913			0.983			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	1603	0	1711	1644	0	1711	1770	0	1711	1783	0
Flt Permitted	0.729			0.476			0.333			0.338		
Satd. Flow (perm)	1313	1603	0	857	1644	0	600	1770	0	609	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		128			25			7			4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		351			174			994			693	
Travel Time (s)		8.0			4.0			22.6			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	45	46	128	48	18	25	99	400	51	52	397	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	174	0	48	43	0	99	451	0	52	424	0
Number of Detectors	1	1		1	1		1	2		1	2	
Detector Template												
Leading Detector (ft)	44	44		40	40		40	233		40	238	
Trailing Detector (ft)	-4	-4		-4	-4		-10	0		-10	0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	3	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	7.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	9.0	9.0		9.0	12.0		9.0	21.0		9.0	21.0	
Total Split (s)	9.0	21.0		9.0	21.0		10.0	29.0		10.0	29.0	
Total Split (%)	10.0%	23.3%		10.0%	23.3%		11.1%	32.2%		11.1%	32.2%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	5.0		4.0	6.0		4.0	6.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	21.0
Total Split (s)	21.0
Total Split (%)	23%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	12.4	9.4		12.4	8.4		44.0	38.4		42.8	36.4	
Actuated g/C Ratio	0.14	0.10		0.14	0.09		0.49	0.43		0.48	0.40	
v/c Ratio	0.22	0.62		0.29	0.25		0.27	0.59		0.15	0.59	
Control Delay	32.1	22.3		34.1	24.2		15.3	27.3		20.5	37.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.1	22.3		34.1	24.2		15.3	27.3		20.5	37.3	
LOS	C	C		C	C		B	C		C	D	
Approach Delay		24.3			29.4			25.1			35.5	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	22	25		23	10		29	211		29	252	
Queue Length 95th (ft)	47	84		49	39		65	#405		m45	#382	
Internal Link Dist (ft)		271			94			914			613	
Turn Bay Length (ft)							125			150		
Base Capacity (vph)	202	406		165	312		367	760		366	723	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.22	0.43		0.29	0.14		0.27	0.59		0.14	0.59	

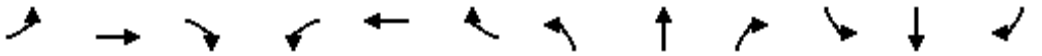
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow, Master Intersection			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 29.0		Intersection LOS: C	
Intersection Capacity Utilization 55.0%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 13: Route 195 & Bolton Rd/Bolton Rd Ext



Lane Group	Ø9
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



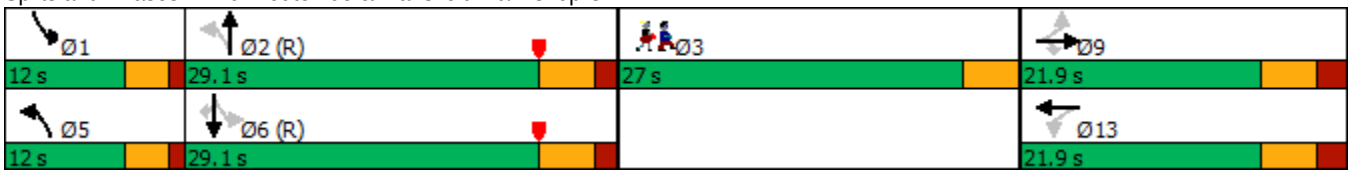
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	12	71	15	17	41	92	386	7	58	411	72
Future Volume (vph)	93	12	71	15	17	41	92	386	7	58	411	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	150		0	175		0
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			75			75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.923			0.997				0.850
Flt Protected		0.958			0.990		0.950			0.950		
Satd. Flow (prot)	0	1725	1531	0	1645	0	1711	1795	0	1711	1801	1531
Flt Permitted		0.775			0.910		0.262			0.303		
Satd. Flow (perm)	0	1396	1531	0	1512	0	472	1795	0	546	1801	1531
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			125		45			1				132
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		286			226			693			256	
Travel Time (s)		6.5			5.1			15.8			5.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	101	13	77	16	18	45	100	420	8	63	447	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	114	77	0	79	0	100	428	0	63	447	78
Number of Detectors	1	1	1	1	1		1	2		1	2	1
Detector Template	Left			Left								
Leading Detector (ft)	20	39	39	20	31		40	167		35	167	35
Trailing Detector (ft)	0	-4	-4	0	-4		-4	4		-8	0	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases		9			13		5	2		1	6	
Permitted Phases	9		9	13			2			6		6
Detector Phase	9	9	9	13	13		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		5.0	15.0		5.0	15.0	15.0
Minimum Split (s)	12.9	12.9	12.9	12.9	12.9		9.0	20.3		9.0	20.3	20.3
Total Split (s)	21.9	21.9	21.9	21.9	21.9		12.0	29.1		12.0	29.1	29.1
Total Split (%)	24.3%	24.3%	24.3%	24.3%	24.3%		13.3%	32.3%		13.3%	32.3%	32.3%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7		3.0	3.7		3.0	3.7	3.7
All-Red Time (s)	2.2	2.2	2.2	2.2	2.2		1.0	1.6		1.0	1.6	1.6
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.9	5.9		5.9		4.0	5.3		4.0	5.3	5.3

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	30%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	C-Min
Act Effct Green (s)		11.5	11.5		11.5		39.0	31.9		37.9	31.4	31.4
Actuated g/C Ratio		0.13	0.13		0.13		0.43	0.35		0.42	0.35	0.35
v/c Ratio		0.64	0.25		0.34		0.34	0.67		0.20	0.71	0.13
Control Delay		53.2	3.8		21.6		11.2	27.9		16.7	35.9	1.6
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		53.2	3.8		21.6		11.2	27.9		16.7	35.9	1.6
LOS		D	A		C		B	C		B	D	A
Approach Delay		33.3			21.6			24.7			29.3	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)		63	0		18		13	254		19	226	0
Queue Length 95th (ft)		112	12		56		m21	#426		46	#433	9
Internal Link Dist (ft)		206			146			613			176	
Turn Bay Length (ft)							150			175		
Base Capacity (vph)		248	374		305		317	637		340	627	619
Starvation Cap Reductn		0	0		0		0	0		0	0	0
Spillback Cap Reductn		0	0		0		0	0		0	0	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.46	0.21		0.26		0.32	0.67		0.19	0.71	0.13

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 29 (32%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 27.7		Intersection LOS: C	
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 16: Route 195 & Mansfield Rd/Bishop Cir



Lane Group	Ø3
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	1	2	329	0	0	389
Future Volume (vph)	1	2	329	0	0	389
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.910					
Flt Protected	0.984					
Satd. Flow (prot)	1668	0	3539	0	0	1863
Flt Permitted	0.984					
Satd. Flow (perm)	1668	0	3539	0	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	250		147			121
Travel Time (s)	5.7		3.3			2.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	1	2	358	0	0	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3	0	358	0	0	423
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	0	31	329	345	44
Future Volume (vph)	0	0	31	329	345	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	50			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		100			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt					0.985	
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	3525	1835	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	3525	1835	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	159			310	147	
Travel Time (s)	3.6			7.0	3.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	0	0	34	358	375	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	392	423	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	46	21	0	307	352	0
Future Volume (vph)	46	21	0	307	352	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.957					
Flt Protected	0.967					
Satd. Flow (prot)	1724	0	0	1863	1863	0
Flt Permitted	0.967					
Satd. Flow (perm)	1724	0	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	172			565	310	
Travel Time (s)	3.9			12.8	7.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	50	23	0	334	383	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	334	383	0
Sign Control	Stop			Free	Free	

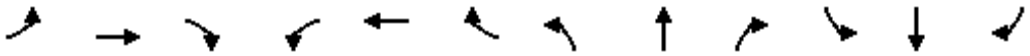
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	314	1	7	370
Future Volume (vph)	0	0	314	1	7	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						0.999
Satd. Flow (prot)	0	0	1863	0	0	1861
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1863	0	0	1861
Link Speed (mph)	30		30			30
Link Distance (ft)	169		752			565
Travel Time (s)	3.8		17.1			12.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	341	1	8	402
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	342	0	0	410
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	37	59	26	288	339	18
Future Volume (vph)	37	59	26	288	339	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.917				0.993	
Flt Protected	0.981			0.996		
Satd. Flow (prot)	1676	0	0	1855	1850	0
Flt Permitted	0.981			0.996		
Satd. Flow (perm)	1676	0	0	1855	1850	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	337			1540	752	
Travel Time (s)	7.7			35.0	17.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	40	64	28	313	368	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	104	0	0	341	388	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.0%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	244	4	8	379	157	4	2	7	236	0	123
Future Volume (vph)	23	244	4	8	379	157	4	2	7	236	0	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.961			0.923			0.954	
Flt Protected		0.996			0.999			0.986			0.968	
Satd. Flow (prot)	0	1852	0	0	1788	0	0	1695	0	0	1720	0
Flt Permitted		0.996			0.999			0.986			0.968	
Satd. Flow (perm)	0	1852	0	0	1788	0	0	1695	0	0	1720	0
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		1043			1296			284			440	
Travel Time (s)		20.3			29.5			6.5			10.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	25	265	4	9	412	171	4	2	8	257	0	134
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	294	0	0	592	0	0	14	0	0	391	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.3%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	1	2	329	0	0	389
Future Vol, veh/h	1	2	329	0	0	389
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	2	358	0	0	423

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	781	179	0	-	-	-
Stage 1	358	-	-	-	-	-
Stage 2	423	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	347	834	-	0	0	-
Stage 1	679	-	-	0	0	-
Stage 2	660	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	347	834	-	-	-	-
Mov Cap-2 Maneuver	347	-	-	-	-	-
Stage 1	679	-	-	-	-	-
Stage 2	660	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	11.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	NWLn1	SWT
Capacity (veh/h)	-	568	-
HCM Lane V/C Ratio	-	0.006	-
HCM Control Delay (s)	-	11.4	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0	-

Intersection	
Int Delay, s/veh	1.3

Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	46	21	0	307	352	0
Future Vol, veh/h	46	21	0	307	352	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	23	0	334	383	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	717	383	-	0	-	0
Stage 1	383	-	-	-	-	-
Stage 2	334	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	396	664	0	-	-	0
Stage 1	689	-	0	-	-	0
Stage 2	725	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	396	664	-	-	-	-
Mov Cap-2 Maneuver	396	-	-	-	-	-
Stage 1	689	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	SB	NE	SW
HCM Control Delay, s	14.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	SBLn1	SWT
Capacity (veh/h)	-	453	-
HCM Lane V/C Ratio	-	0.161	-
HCM Control Delay (s)	-	14.5	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.6	-

Intersection	
Int Delay, s/veh	2

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	37	59	26	288	339	18
Future Vol, veh/h	37	59	26	288	339	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	64	28	313	368	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	747	378	388	0	-	0
Stage 1	378	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	381	669	1170	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	699	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	370	669	1170	-	-	-
Mov Cap-2 Maneuver	370	-	-	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	699	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	13.9	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1170	-	510	-	-
HCM Lane V/C Ratio	0.024	-	0.205	-	-
HCM Control Delay (s)	8.2	0	13.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Intersection	
Int Delay, s/veh	42.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	23	244	4	8	379	157	4	2	7	236	0	123
Future Vol, veh/h	23	244	4	8	379	157	4	2	7	236	0	123
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	265	4	9	412	171	4	2	8	257	0	134

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	583	0	0	269	0	0	900	918	267	838	835	498
Stage 1	-	-	-	-	-	-	317	317	-	516	516	-
Stage 2	-	-	-	-	-	-	583	601	-	322	319	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	991	-	-	1295	-	-	259	272	772	286	304	572
Stage 1	-	-	-	-	-	-	694	654	-	542	534	-
Stage 2	-	-	-	-	-	-	498	489	-	690	653	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	991	-	-	1295	-	-	192	261	772	273	292	572
Mov Cap-2 Maneuver	-	-	-	-	-	-	192	261	-	273	292	-
Stage 1	-	-	-	-	-	-	673	634	-	526	528	-
Stage 2	-	-	-	-	-	-	377	484	-	660	633	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.1	15.8	139.3
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	346	991	-	-	1295	-	-	333
HCM Lane V/C Ratio	0.041	0.025	-	-	0.007	-	-	1.172
HCM Control Delay (s)	15.8	8.7	0	-	7.8	0	-	139.3
HCM Lane LOS	C	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	16.2

APPENDIX G

LEED SCORE CARD

University of Connecticut
Mansfield Apartments Redevelopment

University Planning, Design and Construction

3 Discovery Drive, Unit 6038

Storrs, Connecticut 06268

(860) 486-2776

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September 2022

LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

Project Name: UCONN Mansfield
Date: 4/22/2022

Y	?	N			
1			Credit	Integrative Process	1

9	4	3	Location and Transportation		16
			Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
	2		Credit	High Priority Site	2
5			Credit	Surrounding Density and Diverse Uses	5
1	1	3	Credit	Access to Quality Transit	5
1			Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

4	5	1	Sustainable Sites		10
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
	1	1	Credit	Site Development - Protect or Restore Habitat	2
1			Credit	Open Space	1
1	2		Credit	Rainwater Management	3
	2		Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

7	3	1	Water Efficiency		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2			Credit	Outdoor Water Use Reduction	2
4	1	1	Credit	Indoor Water Use Reduction- 42% with 1.28 WC, 1.5 shower, 1GPM	6
	2		Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

17	12	4	Energy and Atmosphere		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
4	2		Credit	Enhanced Commissioning	6
13	2	3	Credit	Optimize Energy Performance	18
	1		Credit	Advanced Energy Metering	1
	2		Credit	Demand Response	2
	2	1	Credit	Renewable Energy Production	3
	1		Credit	Enhanced Refrigerant Management	1
	2		Credit	Green Power and Carbon Offsets	2

5	4	4	Materials and Resources		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
1	2	2	Credit	Building Life-Cycle Impact Reduction	5
1		1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	1	1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1	1		Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

7	5	4	Indoor Environmental Quality		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
1		1	Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
	1	1	Credit	Indoor Air Quality Assessment	2
	1		Credit	Thermal Comfort	1
1	1		Credit	Interior Lighting	2
	1	2	Credit	Daylight	3
1			Credit	Quality Views	1
	1		Credit	Acoustic Performance	1

5	1	0	Innovation		6
4	1		Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

4	0	0	Regional Priority		4
1			Credit	Regional Priority: Light Pollution Reduction	1
1			Credit	Regional Priority: Sensitive Land	1
1			Credit	Regional Priority: Denisty	1
1			Credit	Regional Priority: Optimize	1

59	34	17	TOTALS	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

LEED v4 for BD+C: Core and Shell

Project Checklist

Project Name:
Date:

Y	?	N			
			Credit	Integrative Process	1

0	0	0	**Location and Transportation**		**20**
			Credit	LEED for Neighborhood Development Location	20
			Credit	Sensitive Land Protection	2
			Credit	High Priority Site	3
			Credit	Surrounding Density and Diverse Uses	6
			Credit	Access to Quality Transit	6
			Credit	Bicycle Facilities	1
			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

0	0	0	**Sustainable Sites**		**11**
Y			Prereq	Construction Activity Pollution Prevention	Required
			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
			Credit	Rainwater Management	3
			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1
			Credit	Tenant Design and Construction Guidelines	1

0	0	0	**Water Efficiency**		**11**
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	2
			Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	**Energy and Atmosphere**		**33**
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	0	0	**Materials and Resources**		**14**
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	6
			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	Construction and Demolition Waste Management	2

0	0	0	**Indoor Environmental Quality**		**10**
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
			Credit	Enhanced Indoor Air Quality Strategies	2
			Credit	Low-Emitting Materials	3
			Credit	Construction Indoor Air Quality Management Plan	1
			Credit	Daylight	3
			Credit	Quality Views	1

0	0	0	**Innovation**		**6**
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	**Regional Priority**		**4**
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

0	0	0	**TOTALS**	Possible Points:	**110**

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

LEED v4 for BD+C: Schools

Project Checklist

Project Name:

Date:

Y	?	N			
			Credit	Integrative Process	1

0	0	0	Location and Transportation	15
			Credit	LEED for Neighborhood Development Location	15
			Credit	Sensitive Land Protection	1
			Credit	High Priority Site	2
			Credit	Surrounding Density and Diverse Uses	5
			Credit	Access to Quality Transit	4
			Credit	Bicycle Facilities	1
			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

0	0	0	Sustainable Sites	12
Y			Prereq	Construction Activity Pollution Prevention	Required
Y			Prereq	Environmental Site Assessment	Required
			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
			Credit	Rainwater Management	3
			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1
			Credit	Site Master Plan	1
			Credit	Joint Use of Facilities	1

0	0	0	Water Efficiency	12
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	2
			Credit	Indoor Water Use Reduction	7
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	Energy and Atmosphere	31
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	16
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	0	0	Materials and Resources	13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	Construction and Demolition Waste Management	2

0	0	0	Indoor Environmental Quality	16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
Y			Prereq	Minimum Acoustic Performance	Required
			Credit	Enhanced Indoor Air Quality Strategies	2
			Credit	Low-Emitting Materials	3
			Credit	Construction Indoor Air Quality Management Plan	1
			Credit	Indoor Air Quality Assessment	2
			Credit	Thermal Comfort	1
			Credit	Interior Lighting	2
			Credit	Daylight	3
			Credit	Quality Views	1
			Credit	Acoustic Performance	1

0	0	0	Innovation	6
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	Regional Priority	4
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

0	0	0	TOTALS	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

LEED v4 for BD+C: Retail

Project Checklist

Project Name:
Date:

Y	?	N			
			Credit	Integrative Process	1

0	0	0	Location and Transportation	16
			Credit	LEED for Neighborhood Development Location	16
			Credit	Sensitive Land Protection	1
			Credit	High Priority Site	2
			Credit	Surrounding Density and Diverse Uses	5
			Credit	Access to Quality Transit	5
			Credit	Bicycle Facilities	1
			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

0	0	0	Sustainable Sites	10
Y			Prereq	Construction Activity Pollution Prevention	Required
			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
			Credit	Rainwater Management	3
			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1

0	0	0	Water Efficiency	12
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	2
			Credit	Indoor Water Use Reduction	7
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	Energy and Atmosphere	33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	0	0	Materials and Resources	13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	Construction and Demolition Waste Management	2

0	0	0	Indoor Environmental Quality	15
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
			Credit	Enhanced Indoor Air Quality Strategies	2
			Credit	Low-Emitting Materials	3
			Credit	Construction Indoor Air Quality Management Plan	1
			Credit	Indoor Air Quality Assessment	2
			Credit	Thermal Comfort	1
			Credit	Interior Lighting	2
			Credit	Daylight	3
			Credit	Quality Views	1

0	0	0	Innovation	6
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	Regional Priority	4
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

0	0	0	TOTALS	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

LEED v4 for BD+C: Data Centers

Project Checklist

Project Name:
Date:

Y	?	N			
			Credit	Integrative Process	1

0	0	0	Location and Transportation	16
			Credit	LEED for Neighborhood Development Location	16
			Credit	Sensitive Land Protection	1
			Credit	High Priority Site	2
			Credit	Surrounding Density and Diverse Uses	5
			Credit	Access to Quality Transit	5
			Credit	Bicycle Facilities	1
			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

0	0	0	Sustainable Sites	10
Y			Prereq	Construction Activity Pollution Prevention	Required
			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
			Credit	Rainwater Management	3
			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1

0	0	0	Water Efficiency	11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	2
			Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	Energy and Atmosphere	33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	0	0	Materials and Resources	13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declaratior	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	Construction and Demolition Waste Management	2

0	0	0	Indoor Environmental Quality	16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
			Credit	Enhanced Indoor Air Quality Strategies	2
			Credit	Low-Emitting Materials	3
			Credit	Construction Indoor Air Quality Management Plan	1
			Credit	Indoor Air Quality Assessment	2
			Credit	Thermal Comfort	1
			Credit	Interior Lighting	2
			Credit	Daylight	3
			Credit	Quality Views	1
			Credit	Acoustic Performance	1

0	0	0	Innovation	6
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	Regional Priority	4
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

0	0	0	TOTALS	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

LEED v4 for BD+C: Warehouses and Distribution Centers

Project Checklist

Project Name:
Date:

Y	?	N			
			Credit	Integrative Process	1

0	0	0	Location and Transportation		16
			Credit	LEED for Neighborhood Development Location	16
			Credit	Sensitive Land Protection	1
			Credit	High Priority Site	2
			Credit	Surrounding Density and Diverse Uses	5
			Credit	Access to Quality Transit	5
			Credit	Bicycle Facilities	1
			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

0	0	0	Sustainable Sites		10
Y			Prereq	Construction Activity Pollution Prevention	Required
			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
			Credit	Rainwater Management	3
			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1

0	0	0	Water Efficiency		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	2
			Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	Energy and Atmosphere		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	0	0	Materials and Resources		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	Construction and Demolition Waste Management	2

0	0	0	Indoor Environmental Quality		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
			Credit	Enhanced Indoor Air Quality Strategies	2
			Credit	Low-Emitting Materials	3
			Credit	Construction Indoor Air Quality Management Plan	1
			Credit	Indoor Air Quality Assessment	2
			Credit	Thermal Comfort	1
			Credit	Interior Lighting	2
			Credit	Daylight	3
			Credit	Quality Views	1
			Credit	Acoustic Performance	1

0	0	0	Innovation		6
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	Regional Priority		4
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

0	0	0	TOTALS	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

LEED v4 for BD+C: Hospitality

Project Checklist

Project Name:
Date:

Y	?	N			
			Credit	Integrative Process	1

0	0	0	Location and Transportation	16
			Credit	LEED for Neighborhood Development Location	16
			Credit	Sensitive Land Protection	1
			Credit	High Priority Site	2
			Credit	Surrounding Density and Diverse Uses	5
			Credit	Access to Quality Transit	5
			Credit	Bicycle Facilities	1
			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

0	0	0	Sustainable Sites	10
Y			Prereq	Construction Activity Pollution Prevention	Required
			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
			Credit	Rainwater Management	3
			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1

0	0	0	Water Efficiency	11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	2
			Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	Energy and Atmosphere	33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	0	0	Materials and Resources	13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	Construction and Demolition Waste Management	2

0	0	0	Indoor Environmental Quality	16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
			Credit	Enhanced Indoor Air Quality Strategies	2
			Credit	Low-Emitting Materials	3
			Credit	Construction Indoor Air Quality Management Plan	1
			Credit	Indoor Air Quality Assessment	2
			Credit	Thermal Comfort	1
			Credit	Interior Lighting	2
			Credit	Daylight	3
			Credit	Quality Views	1
			Credit	Acoustic Performance	1

0	0	0	Innovation	6
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	Regional Priority	4
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

0	0	0	TOTALS	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

LEED v4 for BD+C: Healthcare

Project Checklist

Project Name:
Date:

Y	?	N			
Y			Prereq	Integrative Project Planning and Design	Required
			Credit	Integrative Process	1

0	0	0	**Location and Transportation**		**9**
			Credit	LEED for Neighborhood Development Location	9
			Credit	Sensitive Land Protection	1
			Credit	High Priority Site	2
			Credit	Surrounding Density and Diverse Uses	1
			Credit	Access to Quality Transit	2
			Credit	Bicycle Facilities	1
			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

0	0	0	**Sustainable Sites**		**9**
Y			Prereq	Construction Activity Pollution Prevention	Required
Y			Prereq	Environmental Site Assessment	Required
			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	1
			Credit	Open Space	1
			Credit	Rainwater Management	2
			Credit	Heat Island Reduction	1
			Credit	Light Pollution Reduction	1
			Credit	Places of Respite	1
			Credit	Direct Exterior Access	1

0	0	0	**Water Efficiency**		**11**
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	1
			Credit	Indoor Water Use Reduction	7
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	**Energy and Atmosphere**		**35**
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	20
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	0	0	**Materials and Resources**		**19**
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
Y			Prereq	PBT Source Reduction- Mercury	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	PBT Source Reduction- Mercury	1
			Credit	PBT Source Reduction- Lead, Cadmium, and Copper	2
			Credit	Furniture and Medical Furnishings	2
			Credit	Design for Flexibility	1
			Credit	Construction and Demolition Waste Management	2

0	0	0	**Indoor Environmental Quality**		**16**
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
			Credit	Enhanced Indoor Air Quality Strategies	2
			Credit	Low-Emitting Materials	3
			Credit	Construction Indoor Air Quality Management Plan	1
			Credit	Indoor Air Quality Assessment	2
			Credit	Thermal Comfort	1
			Credit	Interior Lighting	1
			Credit	Daylight	2
			Credit	Quality Views	2
			Credit	Acoustic Performance	2

0	0	0	**Innovation**		**6**
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	**Regional Priority**		**4**
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

0	0	0	**TOTALS**	Possible Points:	**110**

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

APPENDIX H

GEOTECHNICAL REPORT

University of Connecticut
Mansfield Apartments Redevelopment

University Planning, Design and Construction

3 Discovery Drive, Unit 6038

Storrs, Connecticut 06268

(860) 486-2776

www.updc.uconn.edu

September 2022

RES LIFE MANSFIELD APARTMENTS REDEVELOPMENT
MANSFIELD, CONNECTICUT
UCONN CONTRACT # 011-7-NV-043024
PROJECT # 300234

GEOTECHNICAL REPORT

JULY 2022

Prepared for:
UCONN
University of Connecticut
Office of the Associate Vice President
University Planning, Design and Construction
31 Ledoyt Road, Unit 3038
Storrs, Connecticut 06269-3038

Prepared by:
WSP USA
100 Summer Street
Boston, Massachusetts 02110

GEOTECHNICAL REPORT

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Project Scope & Site Description

The University of Connecticut (UCONN) is proposing redevelopment of the site of the existing Mansfield Apartments located at 1 South Eagleville Road in Storrs, Connecticut, on approximately 400,000 square feet of property bounded on the northwest by South Eagleville Road/State Highway Route 275, and by the Albert E. Moss Sanctuary (Town of Mansfield) on the northeast, south, and west as shown on the *Figure 1* Site Location Plan. WSP USA (WSP) has been contracted by UCONN to perform a schematic subsurface boring exploration program for the project. This report summarizes the results of this exploration program. We also provide herein our recommendations for the geotechnical aspects of the design and construction for inclusion within a design-build package and subsequent use by a design-build Engineer Of Record (EOR).

We understand the proposed redevelopment include demolition of the 15 existing 2-story apartment buildings and the construction of three new 5 to 6 story apartment buildings totaling approximately 88,000 square feet in plan, an approximately 37,000 square feet, 2-level parking garage with the upper level just below the existing grade of the adjoining South Eagleville Road, and new at-grade parking and access roadways which are planned to have a slightly different alignment than at present. As shown on *Figure 2 Boring Location Plan,* the project site redevelopment includes a slight expansion to the west into what is presently undeveloped woods and a realignment of the northeast section of the access road slightly to the southwest. Within the general center of the existing apartment complex there is also an area of generally undeveloped woods which is understood to remain wooded for the new apartment complex. It is assumed that there will be some alterations to the above- and below-grade utility infrastructure. It is still undecided whether there will be below-grade spaces. WSP has been provided with a proposed building, garage and roadway layout as shown on *Figure 2 Boring Location Plan* and in Image 1 below.

Image 1: Proposed Concept

Elevations indicated within this report are based on the 1988 North American Vertical Datum (NAVD 88).

The existing and proposed surface grade of the site generally dips from a high of approximately El. 630 in the northeast to approximately El. 618 in the south and west.

2. SUBSURFACE CONDITIONS

2.1 Local Conditions

A report[1] and map[2] of the surficial geology of the Central Connecticut region at the Spring Hill quadrangle provides the following general description of the surficial geology:

> *Spring Hill Quadrangle:* The major topographic elements in the Spring Hill quadrangle were formed by preglacial erosion of dipping metamorphic bedrock into alternating hills and valleys.
>
> The surface deposits and minor topographic features are primarily the work of the Wisconsin glaciation, which ended about 15,000 years ago. The regolith was eroded, and areas of bedrock plucked and abraded. The resulting sediments were later deposited over most of the quadrangle as a thin blanket of till and stratified drift. The orientation of the long axes of the drumlins indicates that the glacier moved SSE.
>
> As the New England ice sheet melted and the front receded northward during deglaciation, its irregular margin was characterized by a zone of stagnant blocks of ice. In the Spring Hill area, this stagnant ice disintegrated into tongues confined to the major valleys. Adjacent to these ice masses, meltwater streams deposited sediment that collapsed later, during the final melting of the ice.
>
> In postglacial time streams dissected the landscape, cutting ravines into the till-covered hillslopes. The major rivers cut downward, forming terraces and floodplains. Swamp muck filled the ponds that had formed in kettles and closed depression in the till.

The surface soils of Thin Till are described as follows:

> *Thin Till:* Area where till is generally less than 10-15 ft thick and including areas of bedrock outcrop where till is absent. Predominately upper till; loose to moderately compact, generally sandy, commonly stony.

A bedrock geology map of the region[3] indicates that the bedrock at the project site is part of the Southbridge Formation. The map describes the formation and three rock types (Zsu, Zss and Zsl) within the project area and two of the three (Zss and Zsl) within the immediate site area. The map describes the formations and these three rock types as follows:

> *Southbridge Formation:* Medium-gray, well-layered gneiss and schist. The formation is divided into an upper and lower member with a middle sillimanite schist member.

[1] Perry H. Rahn, 1971, The Surficial Geology of the Spring Hill Quadrangle Report No. 26, State Geological and Natural of Connecticut.
[2] Janet Radway Stone, John P. Schafer, Elizabeth Haley London, and Woodrow B. Thompson, 1992, Map Showing Surficial Materials Map of Connecticut, U.S. Geological Survey, scale 1:125000.
[3] Pease Jr., Maurice H., 1988, U.S.G.S. Bedrock Geologic Map of the Spring Hill Quadrangle, Connecticut, scale 1:24000.

Upper member (Zsu): Mostly medium to dark-gray, olive- or brownish-gray weathering, fine- to medium-grained, granular, evenly thinly layered quartz-plagioclase-biotite *schist and gneiss*.

Sillimanite schist member (Zss): Medium-gray, brownish-gray weathering, medium-grained, quartz-plagioclase-biotite-coarse muscovite-sillimanite-garnet schist interlayered with coarser stingers and lenses of feldspar and quartz.

Lower member (Zsl): Gray to greenish-gray, brown to olive-gray weathering, fine- to medium-grained, granular, thinly layered quartz-plagioclase-biotite schist xenoliths with various amounts of calc-silicate-bearing minerals locally composing as much as 10 percent of unit.

Within the immediate footprint of the project site the above referenced map[3] shows the Lee Brook Fault. On the existing ground surface, a distinct, small-scale elevation change occurs approximately along this mapped bedrock contact zone. Snapshots from this map are shown within the below plan view and section. The approximate location of this fault line is also shown on the *Figure 2 Boring Location Plan*.

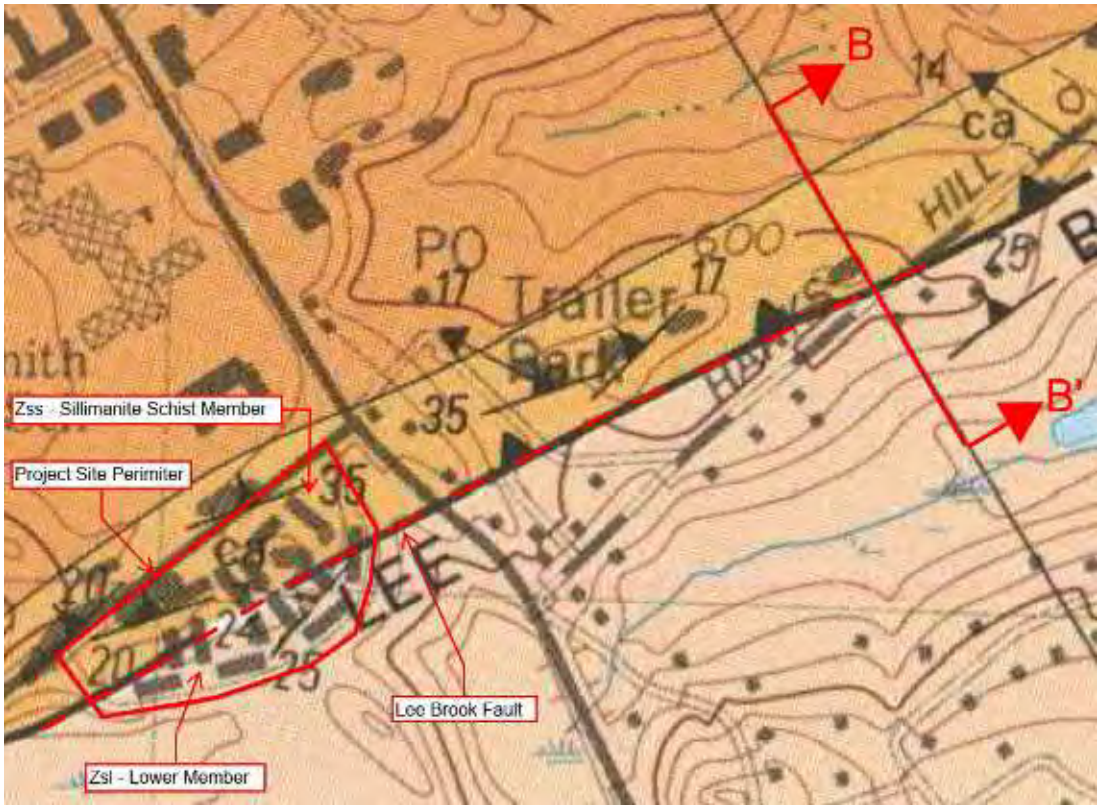

Image 2: Plan View

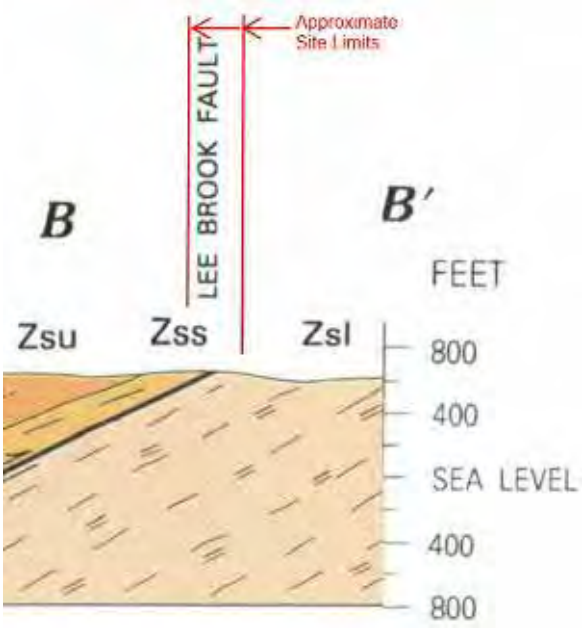

Image 3: Section

2.2 Subsurface Exploration

For the project site no existing subsurface data was available. Therefore, therefore WSP recommended a subsurface exploration program comprising thirty borings (BX-1 to BX-30). Due to a field issue preventing the completion to the final intended depth at BX-24, one boring was supplementally added (BX-24A) offset from the original BX-24 location to reach the final intended depth.

In March and April of 2022, thirty-one borings (BX-1 to 30 inclusive and BX-24A) were drilled across the project site. All borings extended through the surface soils and terminated within the underlying bedrock. The locations of the borings are as shown on the *Figure 2 Boring Location Plan*. A ground surface elevation, Northing and Easting of each boring was determined from a subsequent as-built survey elevation performed by WSP.

All borings were performed by New Hampshire Boring of Derry, New Hampshire (D.B.A. New England Boring Contractors) under continuous observation of a WSP field engineer/geologist Andrew Martin. Borings were drilled using a rubber-track-mounted Diedrich D-90 drill rig, using solid-stem augers followed by driven flush-joint casing (4-inch I.D.) and rotary wash techniques using potable water and no supplemental stabilization fluids. All boreholes were backfilled with the drill spoils upon completion. The borings logs were produced by WSP and are included in *Appendix A Boring Logs.* Soil descriptions are provided in the modified Burmister system along with supplemental USCS group symbols. Representative soil samples were obtained in the borings with a 2-inch O.D. split-spoon sampler driven with a 140-pound safety hammer free-falling 30 inches. The number of hammer blows required to advance the sampler through each 6-inch interval was recorded up to 24 inches. The Standard Penetration Test (SPT) N-value is obtained by adding the blows from the second and third intervals. This value, expressed in blows-per-foot (bpf), is an indication of the density of the material sampled. Where soils were too dense for the sampler to fully penetrate, or where sampler refusal occurred on large gravel, cobbles or boulders, the sampler was

driven until 100 blows per six-inch average or greater was administered and the actual penetration of the sampler was measured and recorded. As the 1-⅜ inch I.D. of the split-spoon limits the particle size that can be recovered, the presence of larger gravel, cobbles and boulders can only be inferred from spoon refusal, drilling resistance, and "rig chatter". Representative split-spoon soil samples were placed in labeled glass containers.

Bedrock was cored using an NX-size double-tube core barrel equipped with a diamond bit. Percent recovered (REC) and rock quality designation (RQD) were determined for each core run in bedrock. RQD is defined as the sum of the length of recovered core pieces greater than four inches in length between natural breaks expressed as a percentage of the total core run. RQD is an indication of the relative frequency of jointing or natural fracturing of the bedrock. Included at the end of Appendix A is a key to the soil and rock descriptions made including boring log terms. All rock cores obtained were placed within labeled wooden core boxes and photos are included in *Appendix B* Rock Core Photos.

Selected soil and rock core samples from the borings were sent to the GeoTesting Express Soils Laboratory in Acton, Massachusetts for testing. Lab testing included:

- Gradation Analyses - Sieve (ASTM D1613 - 19 tests)
- Gradation Analyses - Combined Sieve / Hydrometer (ASTM D1613 / D7928 – 1 test)
- Uniaxial Unconfined Compressive Strength of Rock (ASTM D7012 Method - 6 tests)
- Corrosivity (ASTM G51, G57, D512-12, D516-16, SM4500 - 3 tests)

The results of the laboratory testing are provided in *Appendix C* Laboratory Testing Data and presented upon the *Figure 3 Subsurface Profiles*.

2.3 Subsurface Profile

For the project site thirteen subsurface profile sections have been produced based on the boring data obtained. These thirteen subsurface profiles are identified as Sections A-A to M-M within the *Figure 3 Subsurface Profiles*. The locations of the subsurface profile sections are as shown on the *Figure 2 Boring Location Plan.*

The subsurface profiles show a generalized stratification, N-values for the soil samples and the Recovery / RQD for the rock cores obtained.

The soil and rock strata encountered within the borings performed are summarized as follows.

TOPSOIL: In the areas without pavement, the borings encountered topsoil with a thickness varying from approximately 0.3 to 2.0 feet with an average of 0.5 feet.

FILL: For the currently developed portions of the site, it was anticipated that some, nominal thickness of fill may have been placed during the development although this thickness was not readily discernable from the in-situ soils. It is possible that this layer is predominantly reworked natural material. Generally, substantially lower blow counts were encountered in the upper 2 to 6 feet of the unpaved areas, mostly lower than 10 bpf, allowing us to estimate the depth to the bottom of Fill as generally 6 feet.

In the areas where borings were drilled through pavement (BX-18, 22, 25 and 27), the measured pavement thickness varied from approximately 0.4 to 0.5 feet and the depth to bottom of roadway box materials was estimated at 3 feet.

TILL: This generally medium dense to very dense stratum was found in all locations except for BX-10 and varied from approximately 0 to 19 feet and averaged 5 feet. The thicknesses greater than 10 feet were generally located at west southwest area of the project site. SPT N-Values of samples (excluding the top samples though topsoil) varied from approximately 10 to refusal and averaged 42 (limiting SPTs to 100 maximum).

The composition of the samples obtained in the Till stratum in the area of the proposed buildings were primarily granular with varying proportions of sand, gravel, silt, cobbles and boulders and included USCS classifications of SM, SM-SP, SP, GP-GM and ML although predominately SM, SM-SP and SP.

The composition of the samples obtained in the Till stratum in the area of the proposed parking garage and proposed roadway/pavement were also primarily granular with varying proportions of sand, gravel, silt, cobbles and boulders and included USCS classifications of SM, SM-SP, SP, GP, GW, GM, GP-GM, CL and ML although predominately SM, SM-SP, GP and GP-GW.

WEATHERED BEDROCK: Immediately below the Till stratum is a discontinuous layer of in-situ bedrock that was sufficiently weathered or/ decomposed so as to be unrecoverable by core barrel and minimally sampled by split-spoon. This stratum has been labeled on the boring logs and sections as “weathered bedrock”. With only minimal split-spoon sampling possible, grain size and equivalent soil or rock descriptions are also minimal.

This dense to very dense stratum was encountered at all borings with the exclusion of borings BX-10, BX-13 and BX-24. The thickness of this weathered bedrock stratum, where encountered, varied from approximately 0.5 to 6.5 feet and averaged 3 feet. Where a split-spoon could be driven, SPT N-Values of samples varied from approximately 43 to refusal and averaged 97 (limiting SPTs to 100 maximum).

BEDROCK: At each boring approximately 10 feet of rock core was obtained. All cores obtained were classified as Schist and samples obtained were found to be collectively and generally consistent with the two primary rock types/members at the site as indicated by local mapping and described above in Section 2.1 Local Conditions (Sillimanite schist member – Zss and the Lower schist member - Zsl).

The top of bedrock was measured at depths ranging from approximately 1 to 27 feet below the existing grade or at approximate elevations ranging from El. 592.1 to El. 631.6 feet. While the five uniaxial unconfined compressive strength measurements (see Appendix C, Laboratory Testing Data) ranged from 6,349 to 32,958 psi (averaging approximately 24,000 psi), the extensive jointing and weathering controls the classification as an intermediate to weathered rock.

A summary of the rock cores properties, recoveries and Rock Quality Designation (RQD) is presented below.

- Grain Size: Fine to coarse, primarily fine to medium
- Strength: Medium strong to extremely strong, primarily medium strong to very strong
- Overall Weathering: Fresh to highly weathered, primarily fresh to slightly weathered
- Fracture Weathering: Fresh to highly weathered, primarily slightly to moderately weathered
- Fracture Spacing: Very closely to moderately, primarily very closely to closely
- Rock Core Recovery: 16% to 100 % and averaging 83%
- RQD: 0% to 66% and averaging 23%

2.4 Fluid Observations During Drilling

The approximate measured depths to borehole mud-levels varied from approximately 4 to 26 feet corresponding to approximately El. 613 to El. 638 feet. These measurements were made during drilling with minimal stabilization and may not necessarily be representative of actual groundwater levels. As reflected within the *Figure 3* Subsurface Profiles, these levels indicate a general downward gradient from north to south and appear to generally follow the top of bedrock. To better delineate actual groundwater levels, the installation of observation wells into the bedrock may be considered.

3. DESIGN AND CONSTRUCTION RECOMMENDATIONS

3.1 General

Design recommendations made herein are in accordance with the 2015 International Building Code (IBC) as modified by the 2018 Edition of the Connecticut Building Code and as supplemented by ASCE 7-16.

3.2 Preliminary Soil and Rock Design Parameters

Based on available laboratory test results and commonly accepted correlations with in-situ testing, published data, and the building code, we recommend preliminary design parameters as in below Table 1. Note we have not provided design parameters for the Topsoil or Fill strata. We assume those will be removed during site preparation.

Table 1: Preliminary Design Parameters

Parameter	Till / Weathered Rock(Note 2)	Bedrock
Friction angle Φ	36°	NA
Unit Weight	125 pcf	NA
Allowable Bearing Pressure	4 ksf(Note 1)	20 ksf (Note 3)
K_0	0.41	NA
K_A	0.26	NA
K_P	3.85	NA

Note 1: Due to the presence of large cobbles and boulders, it is recommended that if these are encountered in the excavation for a footing, any over-excavation deeper than the planned bearing elevation that results is not backfilled with sand, but, instead, incorporated into the concrete pour.

Note 2: For preliminary design properties, the Weathered Rock stratum could be considered to have the same properties of the Till stratum.

Note 3: With proper subgrade preparation techniques and inspection by a qualified professional engineer, it is possible to increase the bearing capacity at the footing subgrades in rock. Methods include removal of all loose rock within the footing excavation, embedment greater than one foot while fully confined in a rock mass of the same quality or better, and careful cleaning of the rock surface with water and compressed air.

3.3 Groundwater

Waterproofing: As noted above, it is likely the groundwater generally follows the rock surface. However, given possible temporary conditions of higher groundwater due to heavy precipitation, the variation in rock surface and the likelihood that some foundations may be below the groundwater, we recommend the use of a waterproofing membrane such as the PrePrufe waterproofing system by GCP Applied Technologies or similar. Additionally, a gungrade, hydrophilic waterstop, such as DeNeef Swellseal WA is recommended for all joints at and below grade.

Dewatering: Throughout all phases of construction, the subgrade, including all stages of preparation, backfilling and compaction, must be kept free of water and isolated from potential freezing. During excavation close to the bedrock surface, it is likely water will be encountered. Incidental water during construction must be managed so as not to affect the construction. Depending on flow encountered, management methods may include local sumping in rock trenches.. Additionally, surface site grading should be designed to direct surface drainage away from the excavations and structures.

3.4 Seismic Design Considerations

Based on an analysis of the subsurface data in conjunction with these codes, the site should be classified as Seismic Site Class C.

From the CT Building Code, for Mansfield, earthquake design factors are:

S_s = 0.173 (short-period acceleration)
S_1 = 0.062 (long-period acceleration)

Based on a Site Class C determination for the project site:

S_{MS} = 0.208 and S_{DS} = 0.138 (short-period acceleration)
S_{M1} = 0.105 and S_{D1} = 0.070 (long-period acceleration)

Based on a review of the boring logs there is no liquefaction concern for the project site. While there are some SPT N-values measured that were low enough to potentially be liquefiable all locations were noted to be above the fluid levels encountered during drilling.

3.5 Foundations - Proposed Apartment Buildings and Parking Garage

For the proposed buildings and parking garage, spread footings may be considered for the foundations. As per the CT building code, 3-foot 6-inch (42-inch) is the minimum frost depth specified and is the recommended minimum depth below the lowest adjacent permanently exposed grade for all spread footings on soil and heavily weathered and closely jointed rock. If the spread footings are placed on solid bedrock, this coverage will not be necessary. The subgrade slope between the bottom edges of the subgrades of any two footings should not exceed 1:2 (V:H).

Other rock-socketed, grouted foundation elements such as drilled shafts or micro-piles may be considered. Both types potentially could also provide substantial capacities in tension if needed. If utilized for foundation support, a grade beam element would be required to span the shafts or piles/pile caps where walls are proposed.

Differential settlements can be calculated based actual loads and foundation details and dimensions. Given the soils encountered at the site maximum total and differential settlements on the order of ¾ and ½ inch are reasonable estimates.

For a mat foundation (or for a slab-on-grade), placement of a minimum thickness of 6-inches of ¾-inch crushed stone beneath and a preliminary design modulus of subgrade reaction of 150 pci are recommended. For a mat (or a slab-on-grade) subjected to frost, the 6-inches of crushed stone will reduce, but not eliminate the frost heave potential, movement and cracking. To address frost concerns for a mat foundation (or for a slab-on-grade), frost effects can be mitigated by extending the bottom of the crushed stone layer to the 3-foot 6-inch frost depth.

3.6 Excavation, Backfill and Compaction

Within the area of the proposed buildings, the proposed grades are understood to require only minimal change but in the area of the proposed parking garage and proposed access road to the west of the garage significant cuts and fills will be required. The extent of the differences between the existing and proposed grade elevations at the proposed parking garage are shown on the *Figure 3* Subsurface Profiles. In summary, the proposed elevation of the lower parking deck varies from approximately 0 and 16 feet below the existing grade and the proposed elevation of the access road to the west of the garage varies from approximately between 0 and 16 feet above the existing grade.

Prior to spread footing foundation or mat/slab-on-grade construction all unsuitable bearing materials should be removed including, but not limited to, topsoil, pavement, and organic and loose soils. Additionally, all existing foundations, underground utilities and other underground structures and facilities within the footprints of the new foundations should be removed.

No spread footing foundation or mat/slab-on-grade construction or fill placement should be made over a subgrade that is loose. All loose material shall be removed and preferably sufficient concrete should be allowed for incorporation of the additional excavated volume into the planned footings. Additionally, no spread footing foundation or mat/slab-on-grade construction or fill placement shall be made over a subgrade that is wet or frozen.

Once the final excavation is made for a spread footing foundation or mat/slab-on-grade and prior to any fill placement if needed, the subgrade should be proof rolled using a tandem axle truck with a minimum gross

weight of 40,000 lbs or a minimum 10-ton vibratory roller, performed under the observation of the EOR. Areas with noted deflection should be excavated to a stable base and the soil replaced. All subgrade backfill, if needed, should conform to Structural Fill defined as inorganic, non-plastic (i.e., plasticity Index <= 6), granular soil with the following gradation:

Sieve Size	% By Weight Passing
2-inch	100
No. 4	20-60
No. 200	<10

All fill materials should be placed and compacted, in lifts not to exceed 8 inches in loose thickness. All natural and fill subgrade materials should be compacted at a moisture content of +/- 2% of the Optimum Moisture Content, and to densities in excess of 95% of the maximum dry density, as determined by ASTM D1557 or as directed by the Engineer. After the initial compaction of the subgrade and after the placement and compaction of each and any subsequent lift, the in-place dry density of the subgrade should be field tested with Nuclear Methods (ASTM D 5195), to be at least 95% of the maximum dry density, as determined by ASTM D 1557. Each test should be applicable to no greater than a 400 square foot area. Areas testing less than 95% should be re-worked as necessary, including possible replacement of materials, and re-tested.

The horizontal limits of all compaction and compaction testing requirements should be applicable to the full footprint of the structure plus areas extending approximately ten feet beyond the furthest limit of all exterior footings.

From the time of final subgrade compaction to the time of concrete placement for the spread footings, care should be taken to avoid subgrade disturbance by workmen and equipment. We recommend placement of a two to three inch thick “mud mat” of concrete to protect against disturbance and to provide a clean working surface for placement of waterproofing membranes as well as plumbing and conduit placement.

3.7 Support of Excavation

For the required excavations, benched or sloped excavation could be utilized to the extent possible to minimize the need for formal support-of-excavation methods. To the extent this is not possible, soldier piles and lagging may be considered for excavation support given the possible presence of boulders and shallow bedrock. If tiebacks are used along South Eagleville Road, utilities in the public right-of-way must be mapped prior to design and permission from the State for drilling into public property.

To minimize sloughing at the excavation walls and loss of ground due to seepage, proper backfilling of voids with soil between the louvers of the lagging boards and packing with hay to retain soil in space between boards is recommended.

A geotechnical instrumentation program is recommended comprised of, at a minimum, vibration monitoring and survey monitoring points installed on any existing structures, utilities and ground surfaces as may be potentially impacted by the proposed construction, including any temporary support-of-excavation structure. The survey points would be monitored for possible vertical and horizontal deformations.

FIGURES

N

GEOTECHNICAL REPORT

RESIDENTIAL LIFE
MANSFIELD APARTMENTS REDEVELPOMENT
UNIVERSITY OF CONNECTICUT

SITE LOCATION PLAN

JULY 2022

FIGURE 1

LEGEND:

- APPROXIMATE LOCATION OF 2022 BORING LOCATIONS (BX-1 TO BX-30)
- APPROXIMATE AT-GRADE FOOTPRINT OF PROPOSED BUILDINGS
- APPROXIMATE AT-GRADE FOOTPRINT OF PROPOSED PARKING GARAGE
- APPROXIMATE AT-GRADE FOOTPRINT OF PROPOSED ROADWAYS/PAVEMENT
- APPROXIMATE DEMARCATION OF WETLANDS
- APPROXIMATE 50-FT BUFFER ZONE FROM WETLANDS
- APPROXIMATE 100-FT BUFFER ZONE FROM WETLANDS
- APPROXIMATE LOCATION OF LEE BROOK FAULT

N

Approximate Location of Lee Brook Fault

Approximate Location of Lee Brook Fault

Wetlands Boundary along with 50-foot and 100-foot Buffer Zones

0 ' 100 '
SCALE

NOTES:

1. The base plan used for this figure is a plan showing the existing topographic contours along with existing site features and buildings. Overlaid upon this base plan are the approximate location of the three proposed buildings (red shading), the proposed parking garage (purple shading) and proposed new pavement/roadways (blue shading).

2. See Figures 3.1 to 3.7 for subsurface profiles, at sections A-A to M-M shown on this boring location plan.

GEOTECHNICAL REPORT

RESIDENTIAL LIFE
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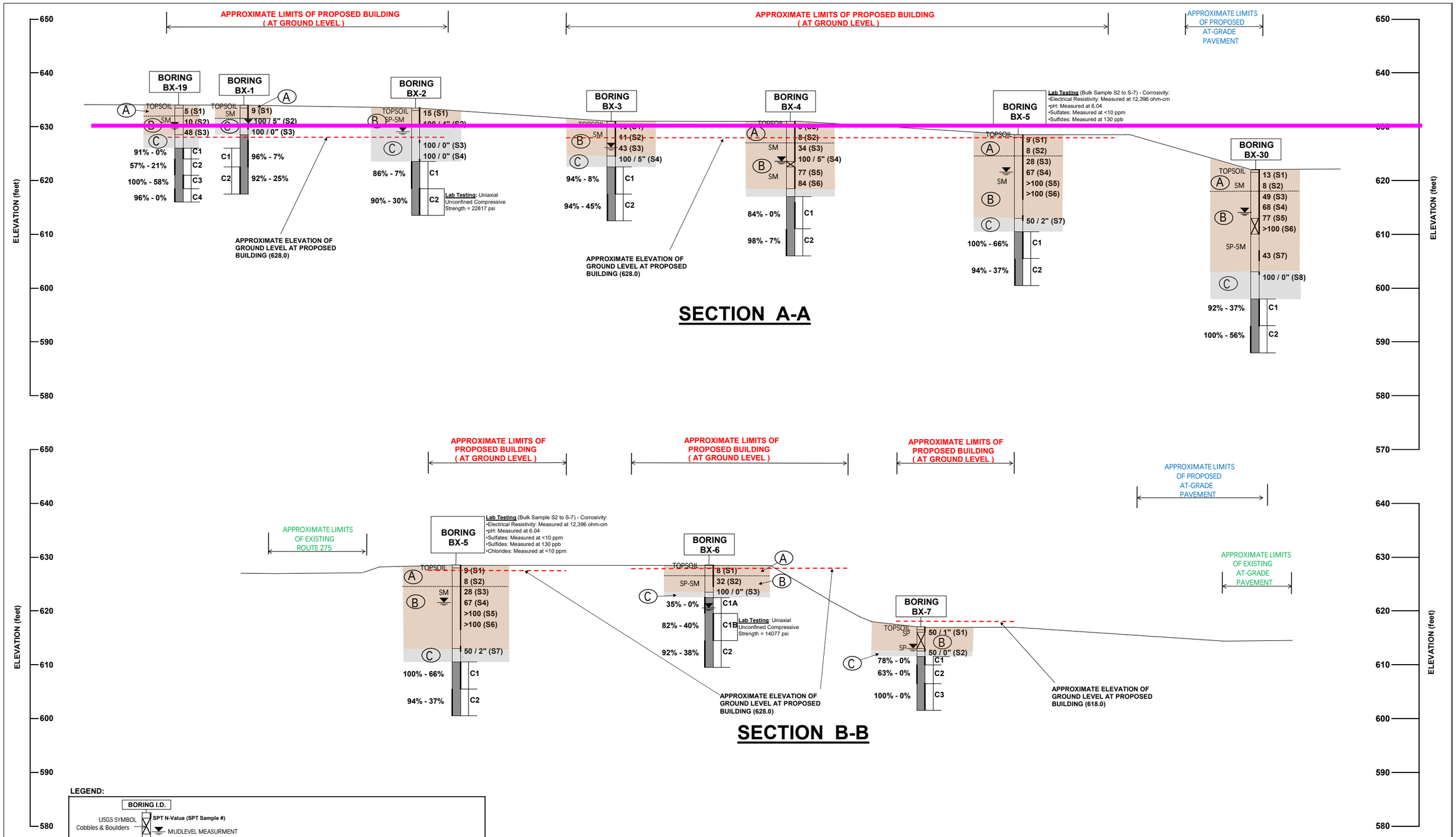
BORING LOCATION PLAN

JULY 2022

FIGURE 2



SECTION A-A

SECTION B-B

LEGEND:

BORING I.D.

USGS SYMBOL
Cobbles & Boulders

SPT N-Value (SPT Sample #)

MUDLEVEL MEASURMENT

REC % - RQD %

Core Run #

A / B — Upper thickness with some very loose to loose SPT N-Values; Thickness with all medium dense or greater SPT N-Values

Surface Stratum - Fill over Till - Primarily Granular w/ Varying Proportions of Sand, Gravel, Silt, Cobbles and Boulders (with either a thin topsoil or asphalt cover as noted)

C — **Weathered Bedrock**

Bedrock

Cobbles and Boulders

NOTES:

1. These subsurface profiles of the site have been generalized with the stratification as listed in the legend. See boring logs for more detailed descriptions.

2. The Surface Stratum, as sampled, is generally granular with varying proportions of sand, gravel, inorganic silt, cobbles and boulders. Additional generalized descriptors have been included within the above profile(s) to delineate the variation in this stratum.

3. Lab testing results are provided within Appendix C including Uniaxial Compressive Strength of rock core, Corrosivity and Sieve Analyses. Strength and corrosivity results are alos shown upon these subsurface profiles.

4. The ground surface is referenced to NAVD 88.

5. See Figure 2 Boring Location Plan for section locations.

0 8 16 24 32 40 80

HORIZONTAL SCALE (feet)

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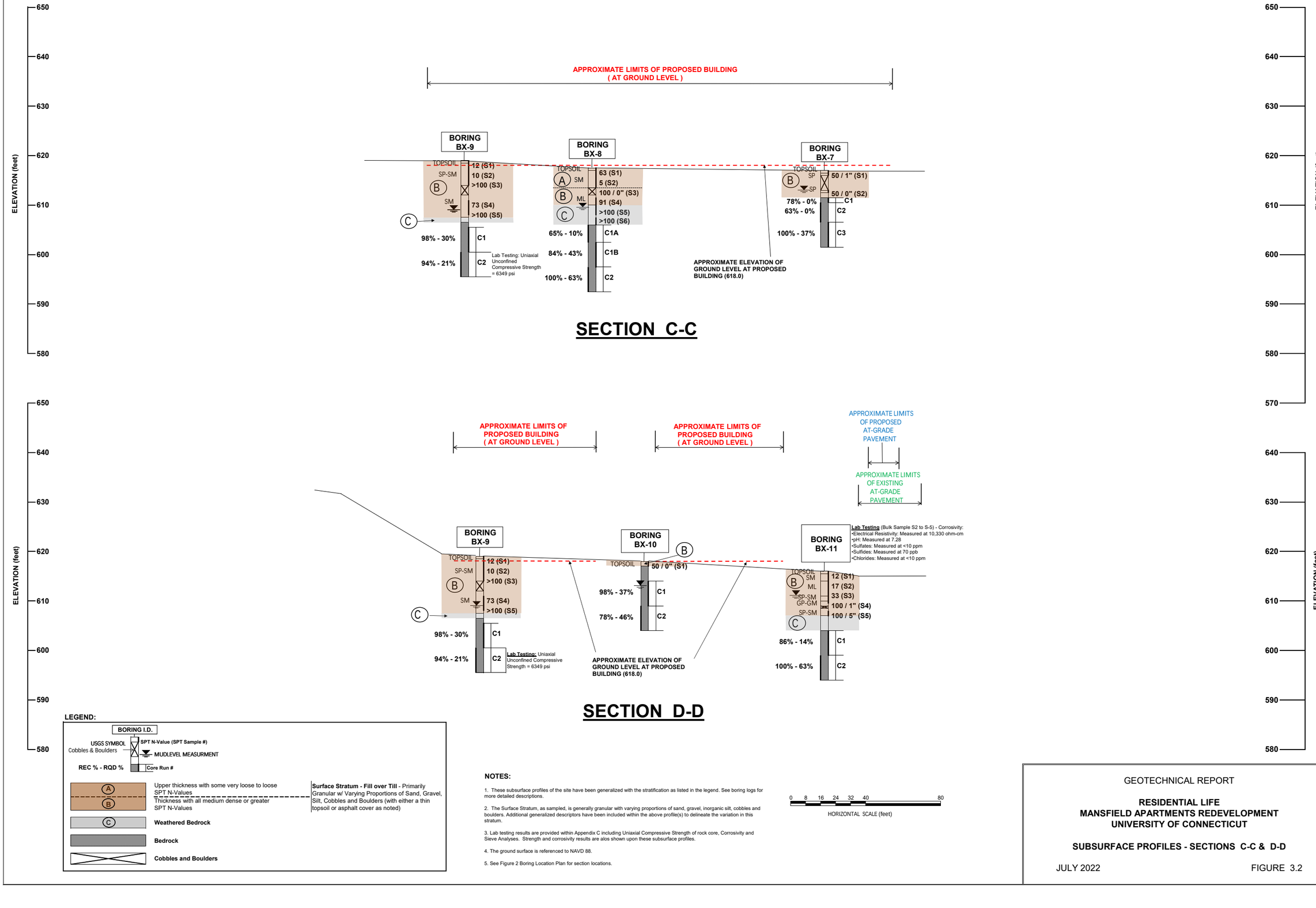
MANSFIELD APARTMENTS REDEVELOPMENT
UNIVERSITY OF CONNECTICUT

SUBSURFACE PROFILES - SECTIONS A-A & B-B

JULY 2022

FIGURE 3.1



NOTES:

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2. The Surface Stratum, as sampled, is generally granular with varying proportions of sand, gravel, inorganic silt, cobbles and boulders. Additional generalized descriptors have been included within the above profile(s) to delineate the variation in this stratum.
3. Lab testing results are provided within Appendix C including Uniaxial Compressive Strength of rock core, Corrosivity and Sieve Analyses. Strength and corrosivity results are alos shown upon these subsurface profiles.
4. The ground surface is referenced to NAVD 88.
5. See Figure 2 Boring Location Plan for section locations.

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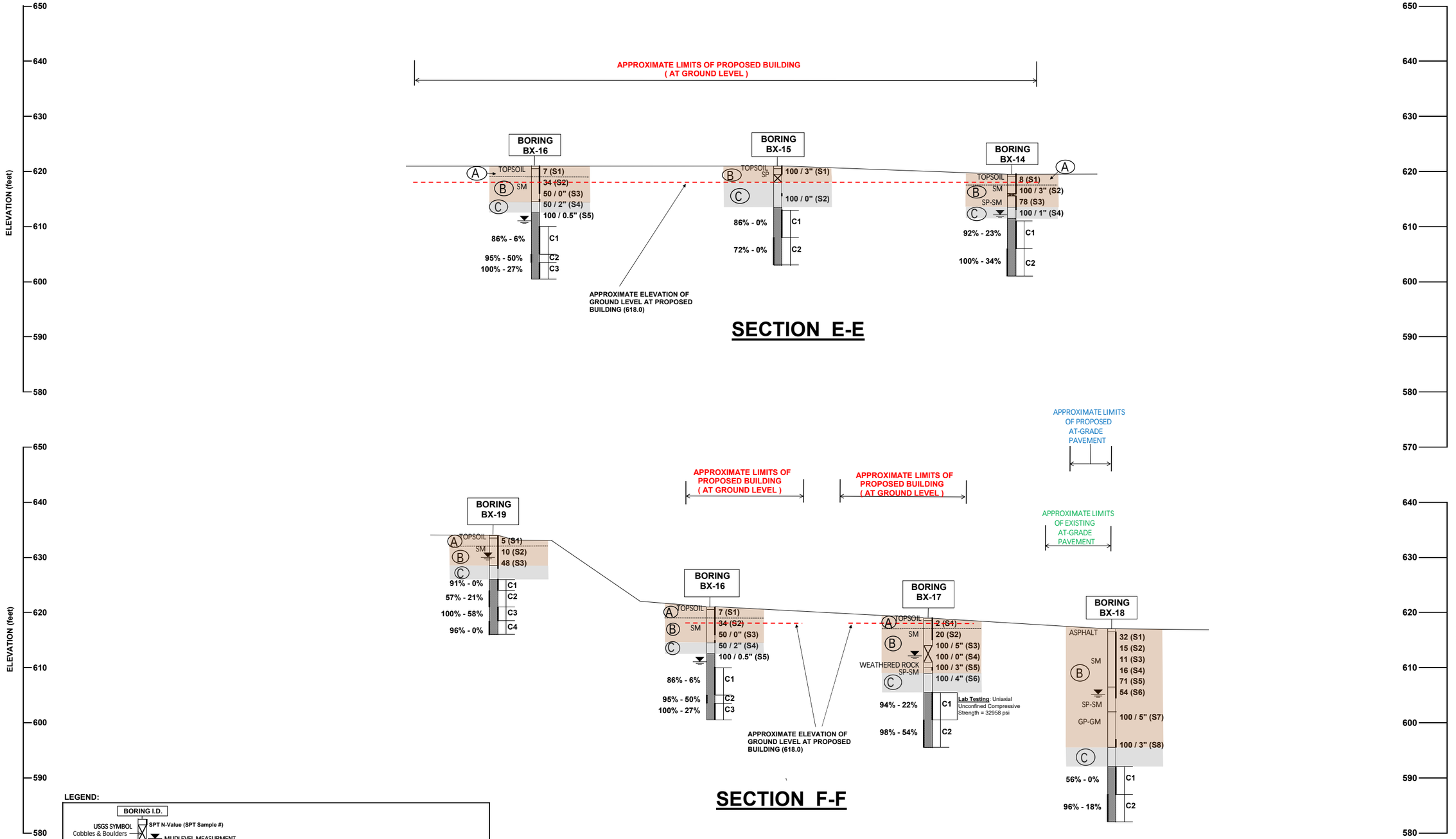
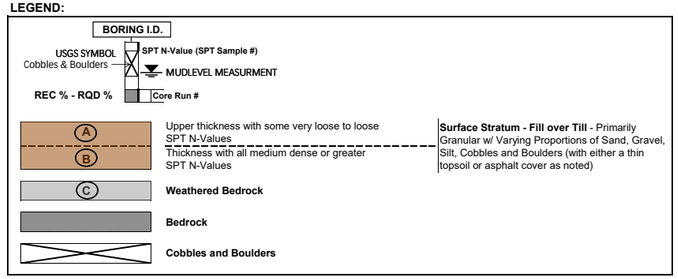
SUBSURFACE PROFILES - SECTIONS C-C & D-D

JULY 2022 FIGURE 3.2



LEGEND:



NOTES:

1. These subsurface profiles of the site have been generalized with the stratification as listed in the legend. See boring logs for more detailed descriptions.
2. The Surface Stratum, as sampled, is generally granular with varying proportions of sand, gravel, inorganic silt, cobbles and boulders. Additional generalized descriptors have been included within the above profile(s) to delineate the variation in this stratum.
3. Lab testing results are provided within Appendix C including Uniaxial Compressive Strength of rock core, Corrosivity and Sieve Analyses. Strength and corrosivity results are alos shown upon these subsurface profiles.
4. The ground surface is referenced to NAVD 88.
5. See Figure 2 Boring Location Plan for section locations.

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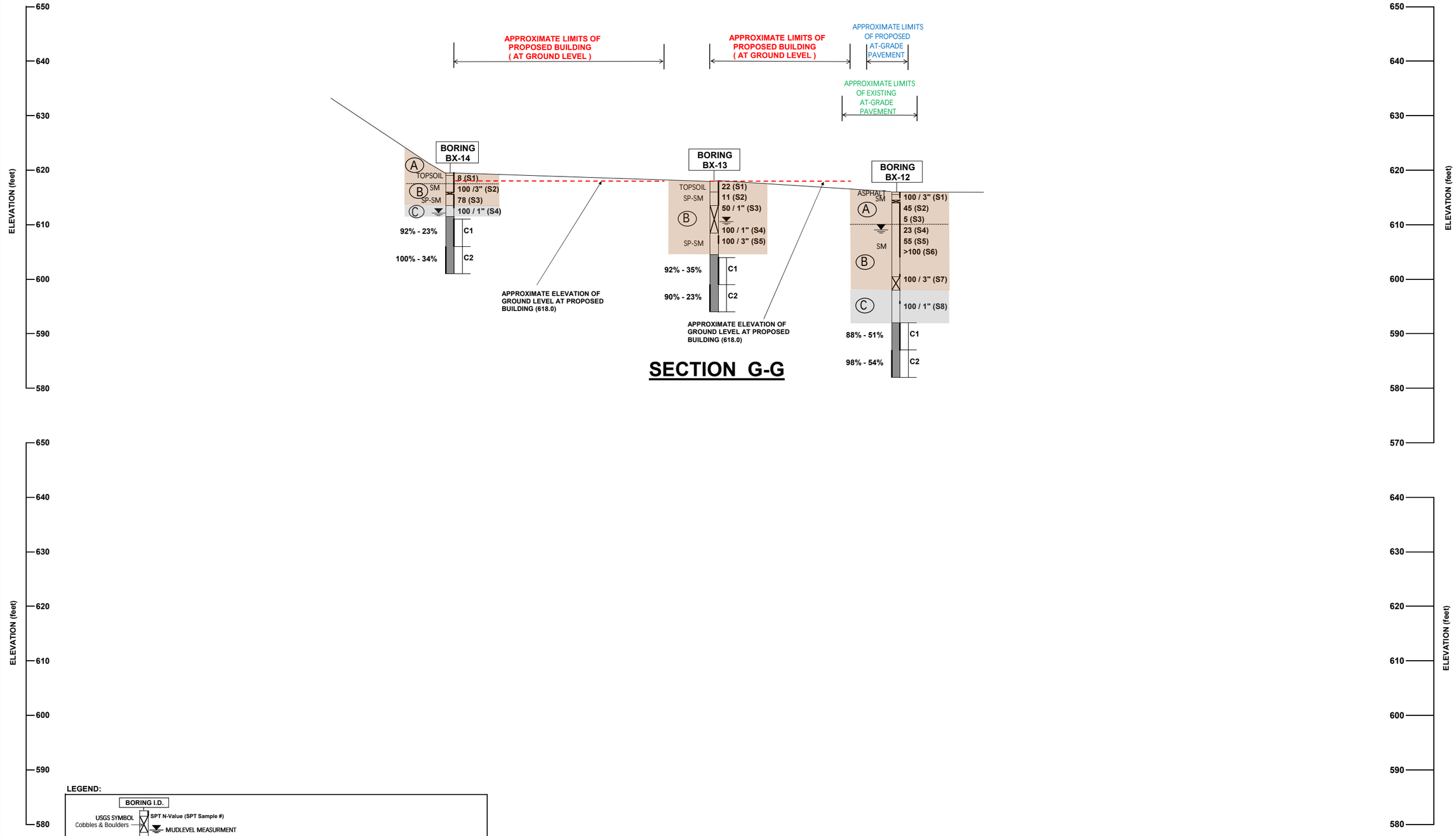
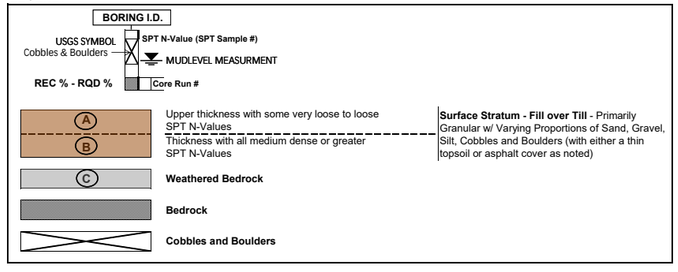
SUBSURFACE PROFILES - SECTIONS E-E & F-F

JULY 2022 FIGURE 3.3



LEGEND:



NOTES:

1. These subsurface profiles of the site have been generalized with the stratification as listed in the legend. See boring logs for more detailed descriptions.

2. The Surface Stratum, as sampled, is generally granular with varying proportions of sand, gravel, inorganic silt, cobbles and boulders. Additional generalized descriptors have been included within the above profile(s) to delineate the variation in this stratum.

3. Lab testing results are provided within Appendix C including Uniaxial Compressive Strength of rock core, Corrosivity and Sieve Analyses. Strength and corrosivity results are alos shown upon these subsurface profiles.

4. The ground surface is referenced to NAVD 88.

5. See Figure 2 Boring Location Plan for section locations.

0 8 16 24 32 40 80

HORIZONTAL SCALE (feet)

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RESIDENTIAL LIFE
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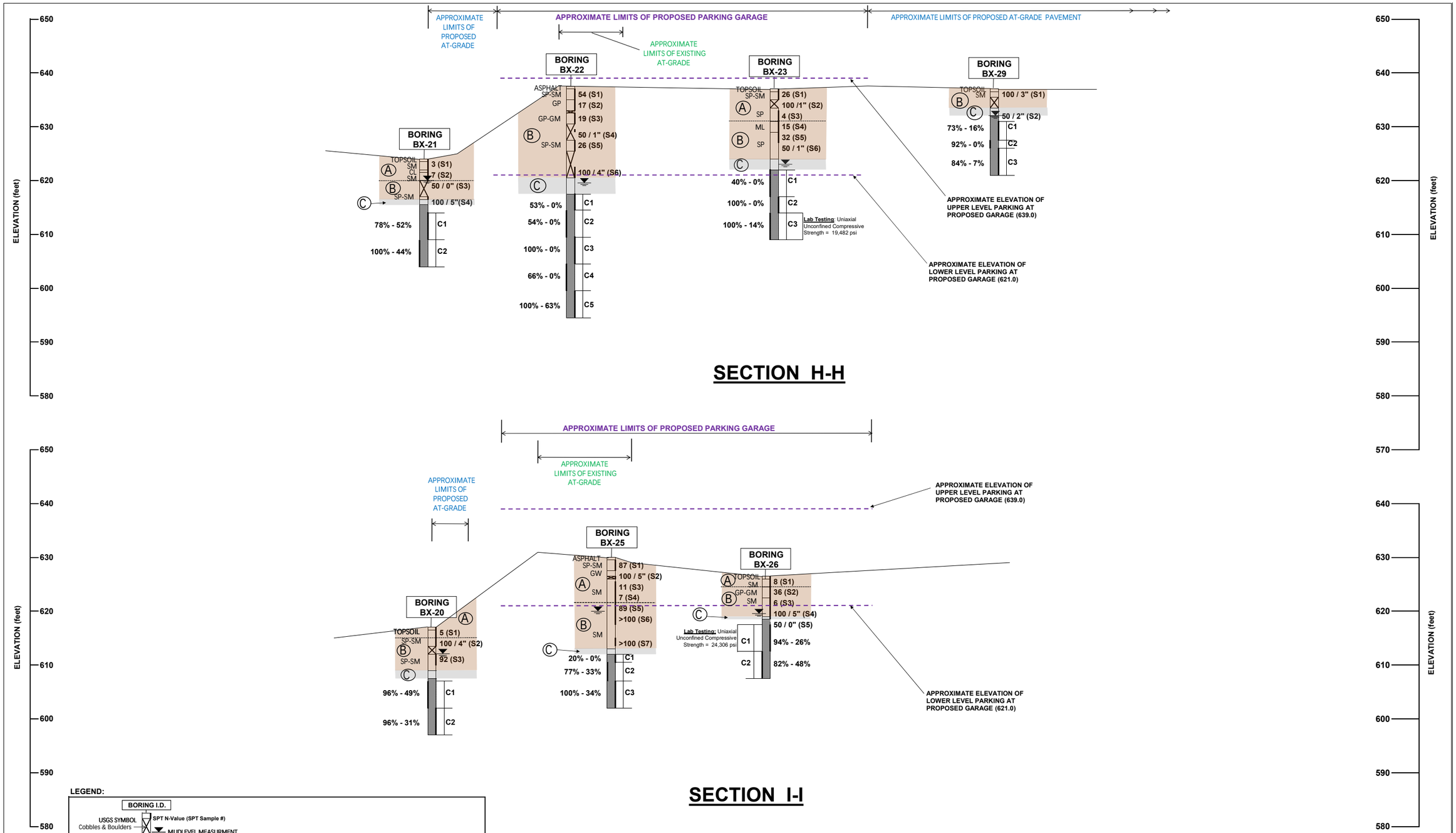
SUBSURFACE PROFILES - SECTION G-G

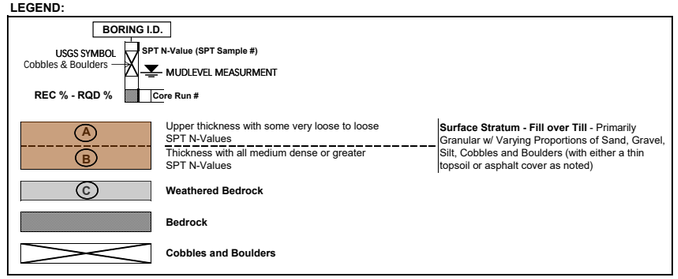
JULY 2022 FIGURE 3.4



SECTION H-H

SECTION I-I

LEGEND:



NOTES:

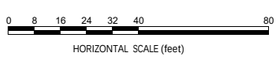
1. These subsurface profiles of the site have been generalized with the stratification as listed in the legend. See boring logs for more detailed descriptions.

2. The Surface Stratum, as sampled, is generally granular with varying proportions of sand, gravel, inorganic silt, cobbles and boulders. Additional generalized descriptors have been included within the above profile(s) to delineate the variation in this stratum.

3. Lab testing results are provided within Appendix C including Uniaxial Compressive Strength of rock core, Corrosivity and Sieve Analyses. Strength and corrosivity results are alos shown upon these subsurface profiles.

4. The ground surface is referenced to NAVD 88.

5. See Figure 2 Boring Location Plan for section locations.



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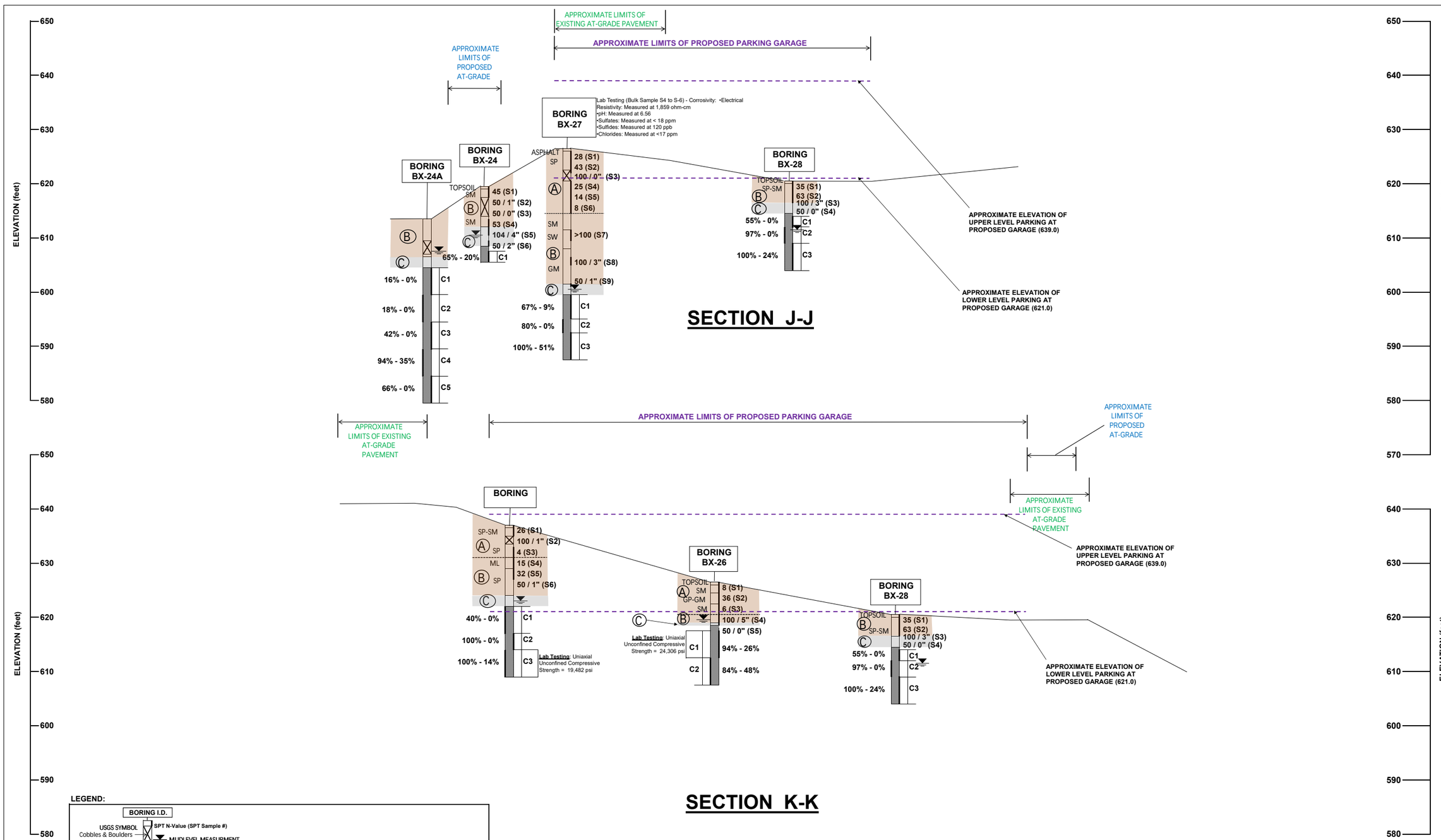
SUBSURFACE PROFILES - SECTIONS H-H & I-I

JULY 2022 FIGURE 3.5



NOTES:

1. These subsurface profiles of the site have been generalized with the stratification as listed in the legend. See boring logs for more detailed descriptions.
2. The Surface Stratum, as sampled, is generally granular with varying proportions of sand, gravel, inorganic silt, cobbles and boulders. Additional generalized descriptors have been included within the above profile(s) to delineate the variation in this stratum.
3. Lab testing results are provided within Appendix C including Uniaxial Compressive Strength of rock core, Corrosivity and Sieve Analyses. Strength and corrosivity results are alos shown upon these subsurface profiles.
4. The ground surface is referenced to NAVD 88.
5. See Figure 2 Boring Location Plan for section locations.

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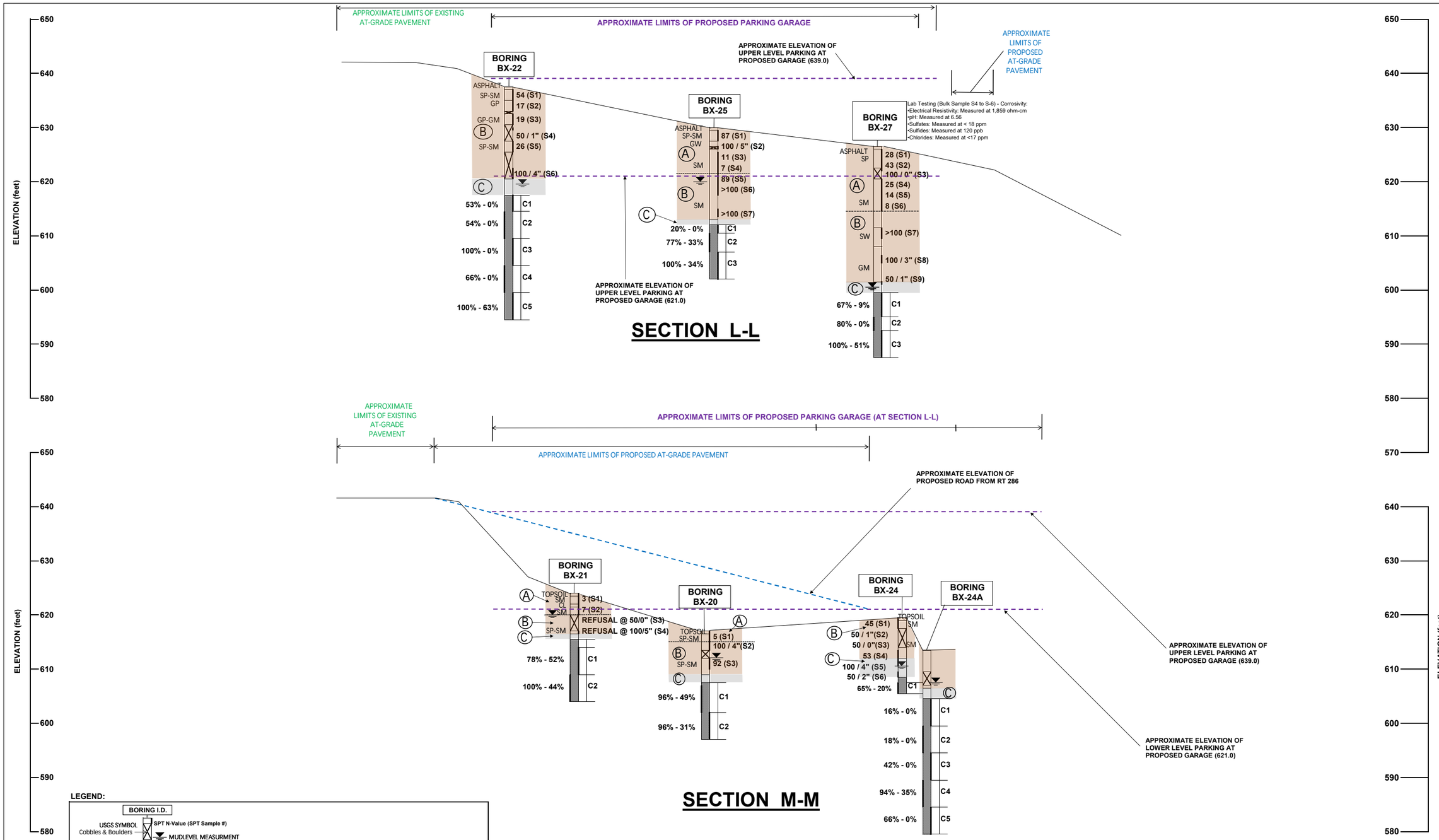
SUBSURFACE PROFILES - SECTIONS J-J & K-K

JULY 2022 FIGURE 3.6



NOTES:

1. These subsurface profiles of the site have been generalized with the stratification as listed in the legend. See boring logs for more detailed descriptions.
2. The Surface Stratum, as sampled, is generally granular with varying proportions of sand, gravel, inorganic silt, cobbles and boulders. Additional generalized descriptors have been included within the above profile(s) to delineate the variation in this stratum.
3. Lab testing results are provided within Appendix C including Uniaxial Compressive Strength of rock core, Corrosivity and Sieve Analyses. Strength and corrosivity results are alos shown upon these subsurface profiles.
4. The ground surface is referenced to NAVD 88.
5. See Figure 2 Boring Location Plan for section locations.

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SUBSURFACE PROFILES - SECTIONS L-L & M-M

JULY 2022 FIGURE 3.7

APPENDIX A

BORING LOGS

RECORD OF BOREHOLE BX-1

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 16.5 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/6/22
DATE COMPLETED: 4/6/22

COORDS: N: 852,542.00 E: 1,138,271.00
GS ELEVATION: 634.2 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 3.5 ft
ELEVATION W.L.: 630.7 ft
DATE W.L.: 4/6/2022
TIME W.L.: 1237

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.4ft TOPSOIL	SM		0.0	S-1	SS	2-5-4-10	9	1.0 / 2.0	Brown, moist, loose, fine to medium SAND, some silt, little fine to coarse gravel, trace grass roots in top 0.4 feet, poorly-graded (SM)
		0.4 - 2.4ft SAND	SM		2.0	S-2	SS	100/5"	R	0.2 / 0.4	Gray brown, moist, fine to medium SAND, trace fine to medium gravel, trace silt, poorly graded (SP)
		2.4 - 5.5ft WEATHERED ROCK (SCHIST)									2.4-4.0 ft: Augered through weathered rock from 2.4 to 4 feet bgs 4.0-5.0 ft: Attempted splitspoon sample a 4 feet bgs (100 blows for 0 inches of penetration). Advanced with augers through weathered rock to 5 feet bgs. 5.0-6.5 ft: Casing set to 5 feet bgs then boring advanced with roller bit to 6.5 feet bgs (hard rock encountered at 5.5 feet bgs)
5.0	630	5.5 - 16.5ft BEDROCK (SCHIST)			6.5	C-1	CORE	RQD = 7%	-	4.8 / 5.0	Gray, coarse-grained, strong, SCHIST, fresh to slightly weathered with slightly to moderately weathered fractures, very closely to closely spaced, horizontal to high angle dipping, open gray silt infilling Average 5.6 fractures per foot Run times (minutes per foot): 4:54, 3:42, 4:02, 2:51, 3:33
10.0	625				11.5	C-2	CORE	RQD = 25%	-	4.6 / 5.0	Gray, coarse-grained, strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 4.4 fractures per foot Run times (minutes per foot): 2:12, 2:36, 2:28, 2:19, 2:25
15.0	620										

Boring completed at 16.5 ft

Notes:
1. Boring terminated at 16.5 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-2

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 20.0 ft
LOCATION: Offset 3ft E of staked location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/6/22
DATE COMPLETED: 4/6/22

COORDS: N: 852,576.00 E: 1,138,350.00
GS ELEVATION: 633.5 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 4.5 ft
ELEVATION W.L.: 629.0 ft
DATE W.L.: 4/6/2022
TIME W.L.: 1040

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.3ft TOPSOIL	SM		0.0	S-1	SS	1-7-8-5	15	1.6 / 2.0	Brown, moist, medium dense, fine to medium SAND and fine to medium GRAVEL, some silt, trace grass roots in top 0.3 feet, poorly-graded (SM)
		0.3 - 3.3ft SAND	SP-SM		2.0	S-2	SS	6-8-100/4"	R	0.7 / 1.3	Brown, moist, very dense, fine to medium SAND, some gray weathered rock, little silt, poorly-graded (SP-SM)
	630	3.3 - 10.0ft WEATHERED BEDROCK (SCHIST)									3.3-5.0 ft: Augered through weathered rock from 3.3 to 5.0 feet bgs 5.0-6.0 ft: Casing set to 5 feet bgs then boring was advanced with the roller bit through weathered rock to 6 feet bgs 6.0-8.0 ft: Attempted splitspoon at 6 feet bgs, no penetration for 100 blows. Advanced with roller bit through weathered rock to 8 feet bgs 8.0-10.0 ft: Attempted splitspoon at 8 feet bgs, no penetration for 100 blows. Advanced with roller bit through weathered rock to 10 feet bgs
5.0 ▽											
	625										
10.0		10.0 - 20.0ft BEDROCK (SCHIST)			10.0	C-1	CORE	RQD = 7%	-	4.3 / 5.0	Gray, coarse-grained, strong, SCHIST, fresh with slightly to moderately weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open with gray silt infilling Average 4.4 fractures per foot Run times (minutes per foot): 2:11, 3:52, 3:12, 3:19, 3:34
	620										
15.0					15.0	C-2	CORE	RQD = 30%	-	4.5 / 5.0	Gray, coarse-grained, medium strong, SCHIST, fresh with slightly to moderately weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open with gray silt infilling Average 3.6 fractures per foot Run times (minutes per foot): 3:10, 3:32, 3:26, 3:19, 2:51
	615										
20.0		Boring completed at 20.0 ft									

Notes:
1. Boring terminated at 20 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Poorly-graded Sand with Silt (SP-SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-3

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 18.5 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/5/22
DATE COMPLETED: 4/6/22

COORDS: N: 852,635.00 E: 1,138,419.00
GS ELEVATION: 631.2 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 5.0 ft
ELEVATION W.L.: 626.2 ft
DATE W.L.: 4/6/2022
TIME W.L.: 1850

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0	631.2	0.0 - 0.3ft TOPSOIL									
	630	0.3 - 6.4ft SAND	SM		0.0	S-1	SS	2-6-10-8	16	0.8 / 2.0	Brown, moist, medium dense, fine to medium SAND, some silt, trace medium gravel, trace grass roots in the top 0.3 feet, poorly-graded (SM)
					2.0	S-2	SS	4-5-6-6	11	1.2 / 2.0	Brown, moist, medium dense, fine to medium SAND, some silt, little gray weathered rock, poorly-graded (SM)
5.0 ▽					4.0	S-3	SS	12-25-18-24	43	1.6 / 2.0	Orange brown, moist, dense, fine to medium SAND, little silt, little fine to coarse gravel, poorly-graded (SP-SM)
	625	6.4 - 8.5ft WEATHERED BEDROCK (SCHIST)			6.0	S-4	SS	100/5"	R	0.4 / 0.4	Orange brown, moist, very dense, fine to medium SAND, little silt, poorly-graded (SP-SM) (large amount of mica present in sand indicates weathered bedrock) 6.4-7.5 ft: Advanced with augers through weathered rock from 6.4 feet bgs to 7.5 feet bgs 7.5-8.5 ft: Casing set to 7.5 feet bgs then boring advanced using the roller bit through weathered bedrock to 8.5 feet bgs
		8.5 - 18.5ft BEDROCK (SCHIST)			8.5	C-1	CORE	RQD = 8%	-	4.7 / 5.0	Gray, coarse-grained, medium strong, SCHIST, fresh with slightly to moderately weathered fractures, very closely to closely spaced, horizontal to high angle dipping, open with gray silt infilling Average 5.5 fractures per foot Run times (minutes per foot): 2:10, 2:12, 2:15, 1:53, 2:01
10.0	620										
					13.5	C-2	CORE	RQD = 45%	RQD = 45%	4.7 / 5.0	Gray, coarse-grained, strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open with gray silt infilling Average 3.4 fractures per foot Run times (minutes per foot): 1:58, 2:31, 2:48, 3:12, 3:05
15.0	615										

Boring completed at 18.5 ft

Notes:
1. Boring terminated at 18.5 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-4

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 25.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/5/22
DATE COMPLETED: 4/5/22

COORDS: N: 852,710.00 E: 1,138,474.00
GS ELEVATION: 630.8 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 7.5 ft
ELEVATION W.L.: 623.3 ft
DATE W.L.: 4/5/2022
TIME W.L.: 1410

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0	630	0.0 - 0.4ft TOPSOIL 0.4 - 12.5ft SAND	SM		0.0	S-1	SS	2-3-5-4	8	1.1 / 2.0	Brown, moist, loose, fine to medium SAND, some silt, trace fine to medium gravel, trace grass roots in top 0.4 feet, poorly-graded (SM)
					2.0	S-2	SS	3-4-4-5	8	1.2 / 2.0	Brown to orange brown (transitions at 3.5 feet bgs), loose, fine to medium SAND, some silt, trace fine to medium gravel, poorly-graded (SM)
					4.0	S-3	SS	6-7-27-29	34	1.5 / 2.0	Brown, moist, dense, fine to medium SAND, some silt, some fine to medium gravel, poorly-graded (SM)
5.0	625		SM		6.0	S-4	SS	24-29-100/5"	R	1.4 / 1.4	Gray brown, moist, very dense, fine to medium SAND, some silt, some fine to coarse gravel, poorly-graded (SM)
▽											7.4-8.5 ft: Advanced with augers past cobbles from 7.4 to 8.5 feet bgs
					8.5	S-5	SS	41-39-38-23	77	1.4 / 2.0	Brown, wet, very dense, fine to medium SAND, some silt, little fine to coarse gravel, poorly-graded (SM)
10.0	620				10.5	S-6	SS	31-40-44-57	84	1.8 / 2.0	Brown, wet, very dense, fine to medium SAND, some silt, little gray weathered bedrock, poorly-graded (SM)
		12.5 - 14.0ft WEATHERED BEDROCK (SCHIST) 14.0 - 25.0ft BEDROCK (SCHIST)									12.5-15.0 ft: Auger refusal encountered at 14 feet bgs. Casing set to 14 feet bgs then boring advanced with the roller bit through bedrock to 15 feet bgs
15.0	615				15.0	C-1	CORE	RQD = 0%	-	4.2 / 5.0	Gray, coarse-grained, medium strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 6.2 fractures per foot Run times (minutes per foot): 2:24, 3:51, 3:32, 3:15, 2:52
20.0	610				20.0	C-2	CORE	RQD = 7%	-	4.9 / 5.0	Gray, coarse-grained, medium strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open with gray silt infilling, quartz vein from 23.3 to 23.4 feet bgs Average 5.2 fractures per foot Run times (minutes per foot): 3:15, 3:25, 2:54, 2:47, 2:31
25.0											

Boring completed at 25.0 ft

Notes:
1. Boring terminated at 25 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-5

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 28.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/4/22
DATE COMPLETED: 4/5/22

COORDS: N: 852,782.00 E: 1,138,562.00
GS ELEVATION: 628.3 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 7.0 ft
ELEVATION W.L.: 621.3 ft
DATE W.L.: 4/5/2022
TIME W.L.: 0840

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.3ft TOPSOIL 0.3 - 15.7ft SAND	SM		0.0	S-1	SS	1-4-5-3	9	0.6 / 2.0	Brown, moist, loose, fine to medium SAND, some silt, trace grass roots in top 0.3 feet, poorly-graded (SM)
	625				2.0	S-2	SS	2-2-6-6	8	1.3 / 2.0	Brown, moist, loose, fine to medium SAND and SILT, trace fine to medium gravel, poorly-graded (SM)
5.0					4.0	S-3	SS	3-8-20-45	28	1.0 / 2.0	Brown, moist, medium dense, fine to medium SAND and fine to coarse GRAVEL, little silt, poorly-graded (SP-SM)
▽					6.0	S-4	SS	34-32-35-43	67	1.5 / 2.0	Brown, moist, very dense, fine to medium SAND, some silt, some gray weathered rock (apparent schist), poorly-graded (SM)
	620		SM		8.0	S-5	SS	42-75-41-44	116	1.4 / 2.0	Brown, moist, very dense, fine to medium SAND, some silt, little gray weathered rock (apparent schist), poorly-graded (SM)
10.0					10.0	S-6	SS	89-55-47-57	102	2.0 / 2.0	Brown, moist, very dense, fine to medium SAND, some silt, some gray and white weathered rock (apparent schist), poorly-graded (SM)
	615										
15.0					15.0	S-7	SS	30-50/2"	R	0.7 / 0.7	Orange brown, wet, very dense, fine to coarse SAND, some silt, little gray weathered rock (apparent schist), poorly-graded (SM) 15.7-18.0 ft: Casing set to 15.7 feet bgs. Advanced with the roller bit through weathered rock from 15.7 to 18 feet bgs
		15.7 - 18.0ft WEATHERED BEDROCK (SCHIST)									
	610	18.0 - 28.0ft BEDROCK (SCHIST)			18.0	C-1	CORE	RQD = 66%	-	5.0 / 5.0	Gray, fine-grained to coarse-grained (transitioned at 20.2 feet bgs), strong, SCHIST, fresh with slightly weathered fractures, very closely to moderately spaced, low to high angle dipping, open Average 2.2 fractures per foot Run times (minutes per foot): 2:12, 2:58, 4:02, 2:32, 2:24
20.0											
	605				23.0	C-2	CORE	RQD = 37%	-	4.7 / 5.0	Gray, coarse-grained, strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open with gray silt infilling at 26.8 feet bgs Average 3.6 fractures per foot Run times: 2:10, 2:05, 2:21, 2:48, 2:29
25.0											

Boring completed at 28.0 ft

Notes:
1. Boring terminated at 28 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

003B MANCHESTER NH GEOTECH SOIL/RX LOGO UCONN BORING LOGS.GPJ GOLDER NH 2011.GDT 6/21/22

RECORD OF BOREHOLE BX-6

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 19.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/5/22
DATE COMPLETED: 4/5/22

COORDS: N: 852,702.00 E: 1,138,659.00
GS ELEVATION: 628.3 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 8.0 ft
ELEVATION W.L.: 620.3 ft
DATE W.L.: 4/5/2022
TIME W.L.: 1130

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.4ft TOPSOIL 0.4 - 5.0ft SAND	SP-SM		0.0	S-1	SS	2-3-5-4	8	1.3 / 2.0	Brown, moist, loose, fine to medium SAND, little silt, little fine to coarse gravel, trace grass roots in top 0.4 feet, poorly-graded (SP-SM)
	625		SP-SM		2.0	S-2	SS	4-12-20-24	32	1.6 / 2.0	Orange brown, moist, dense, fine to medium SAND, some silt, trace fine to medium gravel, poorly-graded (SM)
					4.0	S-3	SS	25-66-100/0"	R	1.0 / 1.0	Gray brown, moist, very dense, fine to medium SAND, some gray and white weathered rock, little silt, poorly-graded (SP-SM)
5.0		5.0 - 6.0ft WEATHERED BEDROCK (SCHIST) 6.0 - 19.0ft BEDROCK (SCHIST)									5.0-8.0 ft: Advanced with augers through weathered rock from 5 to 8 feet bgs
					6.0	C-1A	CORE	RQD = 0%	-	0.7 / 2.0	Light gray, medium-grained, very strong, SCHIST, moderately weathered with moderately weathered fractures, very closely to closely spaced, low to high angle dipping, open Fracture count indistinguishable due to amount of weathering
▽	620										8.0-9.0 ft: Casing set to 8 feet bgs and boring advanced with the roller bit to 9 feet bgs
10.0					9.0	C-1B	CORE	RQD = 40%	-	4.1 / 5.0	Light gray, medium-grained, very strong, SCHIST, fresh to slightly-weathered with moderately weathered fracture at 11.9 feet bgs, very closely to moderately spaced, horizontal to high angle dipping, open with gray silt infilling, sparse pink mineral spots scattered throughout full core run length Average 3.2 fractures per foot Run times (minutes per foot): 3:15, 4:02, 4:21, 3:58, 4:14
	615										
15.0					14.0	C-2	CORE	RQD = 38%	-	4.6 / 5.0	Light gray, medium-grained, very strong, SCHIST, fresh with slightly-weathered fractures, closely spaced, horizontal to low angle dipping, open with light gray silt infilling, sparse pink mineral spots scattered throughout full core run length Average 3.0 fractures per foot Run times (minutes per foot): 4:01, 5:22, 5:48, 5:08, 4:48
	610										

Boring completed at 19.0 ft

Notes:
1. Boring terminated at 19 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Poorly-graded Sand with Silt (SP-SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-7

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 15.5 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/31/22
DATE COMPLETED: 3/31/22

COORDS: N: 852,622.00 E: 1,138,726.00
GS ELEVATION: 616.9 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 4.0 ft
ELEVATION W.L.: 612.9 ft
DATE W.L.: 3/31/2022
TIME W.L.: 1215

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.4ft TOPSOIL	SM / SP		0.0	S-1	SS	2-11-50/1"	R	0.7 / 1.1	Top 0.4 feet: Brown, moist, loose, fine SAND and SILT, trace grass roots, poorly-graded (SM)
	615	0.4 - 1.1ft SAND									Bottom 0.3 feet: Gray brown, moist, very dense, fine to medium SAND, some fine to medium gravel, trace silt, poorly-graded (SP) (spoon bouncing on boulder at 1.1 feet bgs)
		1.1 - 3.8ft BOULDERS									1.1-2.0 ft: Augered though boulder from 1.1 to 2.0 feet bgs 2.0-3.8 ft: Attempted splitspoon sample at 2.0 feet bgs. Splitspoon bounced on boulder for 100 blows and 0 inches of penetration. Augered through boulders to 3.8 feet bgs.
▽		3.8 - 4.5ft SAND	SP		4.0	S-2	SS	68-50/0"	R	0.4 / 0.5	Gray brown, moist, very dense, fine to medium SAND, some weathered rock (apparent schist), trace silt, poorly-graded (SP)
5.0		4.5 - 5.5ft WEATHERED BEDROCK (SCHIST)			5.5	C-1	CORE	RQD = 0%	-	0.7 / 0.9	Gray, fine-grained, very strong, SCHIST, fresh with moderately weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open. Average 3.4 fractures per foot. Run times (minutes per foot): 18:53
	610	5.5 - 15.5ft BEDROCK (SCHIST)			6.4	C-2	CORE	RQD = 0%	-	2.6 / 4.1	Gray, fine-grained, very strong, SCHIST, fresh with moderately weathered fractures, very closely to closely spaced, low angle dipping, and open with brown silt infilling Average 3.5 fractures per foot Run times (minutes per foot): 3:32, 3:51, 3:48, 4:24
10.0					10.5	C-3	CORE	RQD = 37%	-	5.0 / 5.0	Gray, fine-grained, very strong, SCHIST wit quartz vein from 14 to 14.4 feet bgs, fresh with moderately weathered fractures, very closely to closely spaced, horizontal to moderately dipping, and open with gray silt infilling Average 4.1 fractures per foot Run times (minutes per foot): 3:15, 2:33, 2:49, 2:15, 2:08
	605										
15.0											

Boring completed at 15.5 ft

Notes:
1. Boring terminated at 15.5 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Poorly-graded Sand (SP) | Boulders and cobbles | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-8

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 25.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/31/22
DATE COMPLETED: 4/1/22

COORDS: N: 852,538.00 E: 1,138,633.00
GS ELEVATION: 617.4 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 8.0 ft
ELEVATION W.L.: 609.4 ft
DATE W.L.: 4/1/2022
TIME W.L.: 1120

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.6ft TOPOSOIL	SM	0.0	S-1	SS	1-9-54-23	63	0.6 / 2.0	Brown, moist, very dense, fine to medium SAND, some silt, trace grass roots, poorly-graded (SM)
	615	0.6 - 3.8ft SAND	SM	2.0	S-2	SS	5-3-2-100/3"	5	0.5 / 1.8	Brown, moist, loose, fine to medium SAND and SILT, little fine to medium gravel, poorly-graded (SM) (gravel lodged in tip of split spoon)
		3.8 - 5.5ft BOULDER		4.0	S-3	SS	100/0"	R	0.0 / 0.0	3.8-4.0 ft: Advanced with augers from 3.8 to 4.0 feet bgs NO RECOVERY 4.0-5.5 ft: Casing set to 4.0 feet bgs. Advanced with roller bit to 5.5 feet bgs. Casing crimped at 5.5 feet bgs and boring offset 2 feet to the west
5.0		5.5 - 7.4ft SILT	ML	6.0	S-4	SS	12-18-73-100'1"	91	1.6 / 1.6	Top 1.4 feet: Gray, moist, very dense, SILT and fine to medium SAND, some fine to coarse gravel, non-plastic (ML) Bottom 0.2 feet: Orange moist, very dense, fine to medium SAND, little silt, little coarse gravel, poorly-graded (SM)
▽	610	7.4 - 11.6ft WEATHERED BEDROCK		8.0	S-5	SS	30-93-110-100/0"	203	1.3 / 1.5	Brown, moist, very dense, fine to coarse SAND, little weathered rock (apparent mica schist), little silt, poorly-graded (SM) (weathered rock in tip of split spoon)
10.0				10.0	S-6	SS	45-56-49-100/1"	105	1.6 / 1.6	9.5-11.6 ft: Advanced with augers through weathered bedrock from 9.5 to 11 feet bgs then casing set to 11.6 feet bgs Orange brown, wet, very dense, fine to coarse SAND, some fine to coarse gravel (weathered bedrock), little silt, poorly-graded (SP-SM)
	605	11.6 - 25.0ft BEDROCK (SCHIST)		11.6	S-7	SS	50/0"	R	0.0 / 0.0	NO RECOVERY (split spoon bouncing on bedrock)
				11.6	C-1A	CORE	RQD = 10%	-	2.2 / 3.4	Gray, medium-grained, extremely strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 2.9 fractures per foot Run times (minutes per foot): 1:54, 3:04, 6:38, 2:58/0.4 feet
15.0				15.0	C-1B	CORE	RQD = 43%	-	4.2 / 5.0	12.5-15.0 ft: Advanced with roller bit through weathered bedrock from 12 to 15 feet bgs Gray, fine-grained, extremely strong, SCHIST, fresh with slightly to moderately weathered fractures, very closely to closely spaced, horizontal to high angle dipping, open Average 2.6 fractures per foot Run times (minutes per foot): 2:06, 3:27, 4:14, 5:36, 3:30
	600									
20.0				20.0	C-2	CORE	RQD = 63%	-	5.0 / 5.0	Gray, fine-grained, extremely strong, SCHIST, fresh with slightly to moderately weathered fractures, very closely to closely spaced, horizontal to moderately dipping, open Average 2.0 fractures per foot Run times (minutes per foot): 7:42, 6:32, 11:18, 9:10, 10:12
	595									
25.0		Boring completed at 25.0 ft								

Notes:
1. Boring terminated at 25 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Boulders and cobbles | USCS Silt (ML) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

003B MANCHESTER NH GEOTECH SOIL/RX LOGO UCONN BORING LOGS.GPJ GOLDER NH 2011.GDT 6/21/22

RECORD OF BOREHOLE BX-9

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 23.5 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/1/22
DATE COMPLETED: 4/4/22

COORDS: N: 852,504.00 E: 1,138,577.00
GS ELEVATION: 618.8 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 10.0 ft
ELEVATION W.L.: 608.8 ft
DATE W.L.: 4/4/2022
TIME W.L.: 1100

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.4ft TOPSOIL 0.4 - 5.1ft SAND	SM		0.0	S-1	SS	1-7-5-3	12	1.3 / 2.0	Brown, moist, medium dense, fine to medium SAND, little silt, trace grass roots in top 0.4 feet, poorly-graded (SP-SM)
			SP-SM		2.0	S-2	SS	2-5-5-3	10	1.0 / 2.0	Light brown, moist, loose, fine to coarse SAND, little silt, trace fine to medium gravel, poorly-graded (SP-SM)
	615				4.0	S-3	SS	17-18-50/1"	R	– / 1.1	Gray brown, moist (wet at bottom 0.1 feet), very dense, fine to coarse SAND, little gray weathered rock (apparent schist), little silt, poorly-graded (SP)
5.0		5.1 - 7.0ft WEATHERED COBBLES & BOULDERS									5.1-7.0 ft: Advanced with augers through weathered COBBLES AND BOULDERS from 5.1 to 7 feet bgs
		7.0 - 11.3ft SAND			8.0	S-4	SS	23-30-43-65	73	1.5 / 2.0	Orange brown, moist, very dense, fine to medium SAND, some silt, trace fine to medium gravel, poorly-graded (SM)
	610		SM								
10.0 ▽					10.0	S-5	SS	17-41-100/3"	R	0.5 / 1.3	Brown, wet, very dense, fine to coarse SAND, little fine to coarse gravel, little silt, poorly-graded (SP-SM)
		11.3 - 12.5ft WEATHERED BEDOCK (SCHIST)									11.3-12.5 ft: Advanced with augers through weathered rock from 11.3 to 12.5 feet bgs
		12.5 - 23.5ft BEDROCK (SCHIST)			12.5	C-1	CORE	RQD = 30%	-	4.9 / 5.0	Gray, fine-grained, very strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to high angle dipping, open with brown and gray silt infilling Average 3.4 fractures per foot Run times (minutes per foot): 5:38, 7:13, 10:42, 7:12, 6:34 12.5-13.5 ft: Casing set to 12.5 feet bgs. Advanced with the roller bit through bedrock from 12.5 to 13.5 feet bgs
15.0	605										
					17.5	C-2	CORE	RQD = 21%	-	4.7 / 5.0	Gray, fine-grained, very strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to moderately dipping, open with gray silt infilling Average 5.2 fractures per foot Run times (minutes per foot): 2:51, 4:02, 3:32, 4:20, 6:30
	600										
20.0											

Boring completed at 23.5 ft

Notes:
1. Boring terminated at 23.5 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Poorly-graded Sand with Silt (SP-SM) | Boulders and cobbles | USCS Silty Sand (SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-10

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 14.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/1/22
DATE COMPLETED: 4/1/22

COORDS: N: 852,443.00 E: 1,138,639.00
GS ELEVATION: 617.8 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 4.8 ft
ELEVATION W.L.: 613.0 ft
DATE W.L.: 4/1/2022
TIME W.L.: 1500

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 1.0ft TOPSOIL	SM		0.0	S-1	SS	3-12-50/0"	R	0.8 / 1.0	Brown, moist, very dense, fine to medium SAND, some silt, little fine to coarse gravel, trace grass roots, poorly-graded (SM)
		1.0 - 14.0ft BEDROCK (SCHIST)									1.0-3.0 ft: Advanced with augers through bedrock to 3 feet bgs
	615										3.0-4.0 ft: Casing set to 3 feet bgs then boring advanced with the roller bit through bedrock to 4 feet bgs
▽ 5.0					4.0	C-1	CORE	RQD = 37%	-	4.9 / 5.0	Gray, fine-grained, strong, SCHIST, slightly weathered with moderately weathered fractures, very closely to closely spaced, low angle dipping, open with gray silt and brown sand infilling Average 4.0 fractures per foot Run times (minutes per foot): 6:13, 2:52, 6:02, 7:21, 7:39
	610										
10.0					9.0	C-2	CORE	RQD = 46%	-	3.9 / 5.0	Gray, fine-grained, very strong, SCHIST, slightly weathered with slightly weathered fractures, very closely to closely spaced, low angle dipping, open with gray silt infilling, quartz veins from 9.9 to 10.3 feet bgs and 10.4 to 10.6 feet bgs Average 3.8 fractures per foot Run times (minutes per foot): 2:19, 5:32, 12:51, 7:58, 10:11
	605										

Boring completed at 14.0 ft

Notes:
1. Boring terminated at 14 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-11

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 22.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/30/22
DATE COMPLETED: 3/31/22

COORDS: N: 852,382.00 E: 1,138,708.00
GS ELEVATION: 616.0 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 5.0 ft
ELEVATION W.L.: 611.0 ft
DATE W.L.: 3/31/2022
TIME W.L.: 0905

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0	615	0.0 - 0.5ft TOPSOIL 0.5 - 2.0ft SAND	SM SP-SM		0.0	S-1	SS	2-4-8-6	12	1.6 / 2.0	Top 0.5 feet: Brown, moist, medium dense, fine SAND and SILT, trace grass roots, poorly-graded (SM) Bottom 1.5 feet: Light brown, moist, medium dense, fine to medium SAND, little silt, trace fine to medium gravel, poorly-graded (SP-SM)
		2.0 - 5.0ft SANDY SILT	ML		2.0	S-2	SS	19-9-8-4	17	0.6 / 2.0	Brown to light brown (transition at 2.4 feet bgs), medium dense, SILT and fine SAND, trace medium gravel, non-plastic (ML)
5.0	610	5.0 - 6.0ft GRAVELLY SAND 6.0 - 7.1ft SANDY GRAVEL	SP-SM GP-GM		4.0	S-3	SS	1-12-21-2	33	1.4 / 2.0	Top 1.0 feet: Brown, moist, dense, SILT and fine SAND, non-plastic (ML) Bottom 1.0 feet: Orange brown, moist, dense, fine to coarse SAND and fine to coarse GRAVEL, little silt, poorly-graded (SP-SM)
					6.0	S-4	SS	27-73-100/1"	R	0.7 / 1.1	Brown, wet, very dense, fine to coarse GRAVEL and fine to medium SAND, little silt, poorly-graded (GP-GM)
		7.1 - 7.5ft BOULDER									7.1-7.5 ft: Augered past boulder from 7.1 to 7.5 feet bgs
		7.5 - 8.9ft GRAVELLY SAND	SP-SM		8.0	S-5	SS	21-100/5"	R	0.9 / 0.9	Brown, wet, very dense, fine to coarse SAND and fine to coarse GRAVEL, little silt, poorly-graded (SP-SM)
10.0	605	8.9 - 12.0ft WEATHERED BEDROCK (SCHIST)									8.9-10.0 ft: Augered through weathered rock from 8.9 to 10 feet bgs. Attempted split spoon sample at 10 feet bgs, 100 blows and 0" of penetration. 10.0-12.0 ft: Augered through weathered rock from 10 feet bgs to 12 feet bgs then set casing to 12 feet bgs
		12.0 - 22.0ft BEDROCK (SCHIST)			12.0	C-1	CORE	RQD = 14%	-	4.3 / 5.0	Gray, fine-grained, very strong, SCHIST with quartzite veins from 12.5 to 12.6 feet bgs and 13.2 to 13.3 feet bgs, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to high angle dipping, open with gray silt infilling Average 3.6 fractures per foot Run times (minutes per foot) 3:12, 2:51, 3:32, 3:38, 4:01
15.0	600										
					17.0	C-2	CORE	RQD = 63%	-	5.0 / 5.0	Gray, fine-grained, very strong, SCHIST with mica schist layer from 16.6 to 17 feet bgs, fresh with slightly weathered fractures, very closely to moderately spaced, horizontal to high angle dipping, open Average 2.8 fractures per foot Run times (minutes per foot): 3:51, 3:32, 3:25, 2:53, 3:02
20.0	595										

Boring completed at 22.0 ft

Notes:
1. Boring terminated at 22 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | Highly weathered bedrock | USCS Poorly-graded Sand with Silt (SP-SM) | Schist | USCS Silt (ML) | USCS Poorly-graded Gravel with Silt (GP-GM) | Boulders and cobbles

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-12

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 34.0 ft
LOCATION: At Marked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/29/22
DATE COMPLETED: 3/30/22

COORDS: N: 852,240.00 E: 1,138,543.00
GS ELEVATION: 616.2 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 7.0 ft
ELEVATION W.L.: 609.2 ft
DATE W.L.: 3/30/2022
TIME W.L.: 1000

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.5ft ASPHALT									
	615	0.5 - 1.3ft SAND	SM		0.5	S-1	SS	18-100/3"	R	0.7 / 0.8	Brown, moist, very dense fine to medium SAND, some fine to coarse gravel, some silt, poorly-graded (SM) (Gravel lodged in tip of splitspoon)
		1.3 - 2.0ft BOULDER									
		2.0 - 15.3ft SAND			2.0	S-2	SS	4-25-20-5	45	1.0 / 2.0	Brown, moist, dense, fine to medium SAND, some fine to coarse gravel, little silt, poorly-graded (SP-SM)
5.0					4.0	S-3	SS	2-2-3-5	5	0.3 / 2.0	Brown, moist, loose, fine to medium SAND, some silt, little fine to coarse gravel, poorly-graded (SM)
▽	610				6.0	S-4	SS	10-10-13-23	23	1.2 / 2.0	Orange brown, moist, medium dense, fine to medium SAND, some silt, little fine to coarse gravel, poorly-graded (SM)
			SM		8.0	S-5	SS	17-25-30-28	55	1.6 / 2.0	Orange brown, wet, very dense, fine to coarse SAND, some fine to coarse gravel, little silt, poorly-graded (SP-SM)
10.0	605				10.0	S-6	SS	89-92-63-45	155	2.0 / 2.0	Orange brown to gray, wet, very dense, fine to coarse SAND, some silt, some fine to coarse gravel, poorly-graded (SM) (Transitioned from orange brown to gray at 11.2 feet bgs)
15.0		15.3 - 18.0ft COBBLES & BOULDERS			15.0	S-7	SS	100/3"	R	0.0 / 0.3	NO RECOVERY (Splitspoon bounced on cobble/boulder upon refusal) 15.3-18.0 ft: Advanced through cobbles and boulders from 15.3 to 18 feet bgs. At 18 feet bgs the auger grinding became more consistent indicating a change from boulders and cobbles to weathered bedrock.
	600	18.0 - 24.0ft WEATHERED BEDROCK									
20.0					20.0	S-8	SS	100/1"	R	0.1 / 0.1	Gray, wet, very dense, fine to coarse GRAVEL and fine to coarse SAND (SCHIST), trace silt 20.0-24.0 ft: Switched from augers to drive and wash at 20 feet bgs. Advanced with the roller bit through weather bedrock to 24 feet bgs.
	595										
		24.0 - 34.0ft BEDROCK (SCHIST)			24.0	C-1	CORE	RQD = 51%	-	4.4 / 5.0	Gray, fine-grained, extremely strong, SCHIST and GNEISS with a coarse-grained, strong, MICA SCHIST layer from 25.1 to 26.6 feet bgs, fresh with slightly weathered fractures, very closely to moderately spaced, horizontal to low angle dipping, open. Average 2.4 fracture per foot. Run times (minutes per foot): 2:15, 2:12, 2:18, 3:02, 2:50
25.0	590										
					29.0	C-2	CORE	RQD = 54%	-	4.9 / 5.0	Gray, fine-grained, extremely strong, SCHIST and GNEISS with a coarse-grained, strong, MICA SCHIST layer from 30.2 to 31.3 feet bgs, fresh with slightly weathered fractures (MICA SCHIST layer is highly weathered), very closely to moderately spaced, horizontal to low angle dipping, open, silt infilling at 29 and 29.5 feet bgs Average 2.8 fracture per foot. Run times (minutes per foot): 3:10, 4:52, 3:21, 2:51, 2:48
30.0	585										

Boring completed at 34.0 ft

Notes:
1. Boring terminated at 34 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Asphalt | USCS Silty Sand (SM) | Boulders and cobbles | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-13

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 24.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/29/22
DATE COMPLETED: 3/29/22

COORDS: N: 852,326.00 E: 1,138,510.00
GS ELEVATION: 618.2 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 7.5 ft
ELEVATION W.L.: 610.7 ft
DATE W.L.: 3/29/2022
TIME W.L.: 1250

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 2.0ft TOPSOIL	SM		0.0	S-1	SS	3-11-11-10	22	0.4 / 2.0	Brown, moist, medium dense, fine SAND and SILT, (trace grass roots in top 0.4 feet), poorly-graded (SM)
		2.0 - 4.6ft SAND	SP-SM		2.0	S-2	SS	3-6-5-6	11	0.0 / 2.0	NO RECOVERY (attempted to recover sample with 3-inch splitspoon and had no recovery as well)
	615				4.0	S-3	SS	17-50/1"	R	0.5 / 0.6	Brown, moist, very dense, fine to medium SAND, little silt, little fine to coarse gravel, poorly-graded (SP-SM)
5.0		4.6 - 9.5ft COBBLES & BOULDERS									4.6-8.0 ft: Advanced past boulders and cobbles from 4.6 to 8 feet bgs
▽	610				8.0	S-4	SS	100/1"	R	0.0 / 0.1	NO RECOVERY (splitspoon bouncing on cobbles/boulder)
											8.1-9.5 ft: Augers grinding on boulders/cobbles from 8.1 to 9.5 feet bgs
10.0		9.5 - 13.5ft GRAVELLY SAND	SP-SM		10.0	S-5	SS	58-103-100/3"	R	1.0 / 1.3	Gray brown, moist, very dense, fine to coarse SAND and fine to coarse GRAVEL, little silt, poorly-graded (SP-SM)
	605										13.5-14.0 ft: Advanced with roller bit through bedrock from 13.5 to 14 feet bgs
		13.5 - 24.0ft BEDROCK (SCHIST)			14.0	C-1	CORE	RQD = 35%	-	4.6 / 5.0	Gray, medium-grained, medium strong, SCHIST with quartz layer from 16 to 16.8 feet bgs, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 3.2 fractures per foot Run times (minutes per foot):: 1:23, 2:25, 2:42, 2:36, 4:48
15.0											
	600				19.0	C-2	CORE	RQD = 23%	-	4.5 / 5.0	Gray, medium-grained, medium strong, SCHIST with quartz layer from 22.2 to 22.3 feet bgs, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 3.4 fractures per foot Run times (minutes per foot): 2:45, 2:58, 2:25, 2:15, 2:52
20.0											
	595										

Boring completed at 24.0 ft

Notes:
1. Boring terminated at 24 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Poorly-graded Sand with Silt (SP-SM) | Boulders and cobbles | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-14

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 18.5 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/30/22
DATE COMPLETED: 3/30/22

COORDS: N: 852,441.00 E: 1,138,481.00
GS ELEVATION: 619.5 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 7.5 ft
ELEVATION W.L.: 612.0 ft
DATE W.L.: 3/30/2022
TIME W.L.: 1345

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.5ft TOPSOIL	SM		0.0	S-1	SS	2-4-4-7	8	1.7 / 2.0	Top 0.5 feet: Brown, moist, loose, fine SAND and SILT, trace grass roots, poorly-graded (SM) Bottom 1.5 feet: Orange brown, moist, fine to medium SAND and SILT, poorly-graded (SM)
		0.5 - 3.3ft SAND	SM		2.0	S-2	SS	14-36-100/3"	R	0.4 / 1.3	Gray brown, moist, very dense, fine to medium SAND, some fine to coarse gravel, little silt, poorly-graded (SP-SM)
		3.3 - 4.0ft BOULDER									3.3-4.0 ft: Augered past boulder from 3.3 feet to 4.0 feet bgs
	615	4.0 - 6.1ft GRAVELLY SAND	SP-SM		4.0	S-3	SS	23-35-43-100	78	1.8 / 2.0	Brown, moist, very dense, fine to medium SAND and fine to coarse GRAVEL, little silt, poorly-graded (SP-SM)
5.0		6.1 - 8.0ft WEATHERED BEDROCK (SCHIST)			6.0	S-4	SS	100/1"	R	0.0 / 0.1	NO RECOVERY (Splitspoon bounced on rock) 6.1-7.0 ft: Augered through weathered rock from 6.1 to 6.5 feet bgs. Transitioned to sand from 6.5 to 7 feet bgs. 7.0-8.5 ft: Augered through weathered rock from 7 feet bgs to 8 feet bgs. Switched to drive and wash drilling and advanced with roller bit through bedrock from 8 to 8.5 feet bgs.
▽		8.0 - 18.5ft BEDROCK (SCHIST)			8.5	C-1	CORE	RQD = 23 %	-	4.6 / 5.0	Gray, fine-grained, very strong, SCHIST, fresh with slightly weathered (very weathered fracture at 11.1 feet bgs), very closely to closely spaced, horizontal to high angle dipping, open Average 3.4 fractures per foot Run times (minutes per foot): 2:32, 3:42, 2:58, 2:43, 3:07
10.0	610										
					13.5	C-2	CORE	RQD = 34%	-	5.0 / 5.0	Gray, fine-grained, very strong, SCHIST with quartzite vein from 18.3 to 18.5 feet bgs, fresh with slightly weathered, very closely to closely spaced, horizontal to high angle dipping, open Average 3.4 fractures per foot Run times (minutes per foot): 2:51, 2:11, 2:25, 2:54, 5:44
15.0	605										

Boring completed at 18.5 ft

Notes:
1. Boring terminated at 18.5 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Boulders and cobbles | USCS Poorly-graded Sand with Silt (SP-SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-15

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 18.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/28/22
DATE COMPLETED: 3/28/22

COORDS: N: 852,395.00 E: 1,138,388.00
GS ELEVATION: 620.8 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: NA
ELEVATION W.L.:
DATE W.L.: NA
TIME W.L.: NA

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0	620	0.0 - 0.5ft TOPSOIL 0.5 - 1.3ft SAND 1.3 - 3.0ft BOULDER 3.0 - 7.5ft WEATHERED BEDROCK (SCHIST)	SM SP		0.0	S-1	SS	1-20-100/3"	R	1.1 / 1.3	Top 0.5 feet: Brown, moist, very loose, fine SAND and SILT, trace grass roots, poorly-graded (SM) Bottom 0.8 feet: Gray, moist, very dense, fine to medium SAND and fine to coarse GRAVEL, trace silt, poorly-graded (SP) 2.5-2.8 ft: Augered into rock from 1.3 to 2.5 feet bgs. Set up to core and cored 0.3 feet then broke through rock (boulder). Offset boring 5 feet to the east to avoid the potential of casing getting damaged while advancing through the boulder 2.8-5.0 ft: Encountered rock at 2 feet bgs at the offset location and augered through to 5 feet bgs
5.0	615				5.0	S-2	SS	73-100/0"	R	0.3 / 0.5	Brown, wet, very dense, fine to coarse GRAVEL and fine to medium SAND, little silt, poorly-graded (GP-GM) 5.0-7.5 ft: Augered through weathered bedrock from 5 to 7.5 feet bgs
		7.5 - 18.0ft BEDROCK (SCHIST)			8.0	C-1	CORE	RQD = 0%	-	4.3 / 5.0	Gray, medium-grained, strong, SCHIST with quartz veins from 8.3 to 8.4 and 11 to 11.1 feet bgs, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 4.9 fractures per foot Run times (minutes per foot): 4:33, 3:30, 3:50, 5:57, 8:10
10.0	610				13.0	C-2	CORE	RQD = 0%	-	3.6 / 5.0	Gray, medium-grained, strong, SCHIST with quartz banding throughout, fresh with moderately weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 6.7 fractures per foot Run times (minutes per foot): 4:45, 4:30, 6:11, 12:13, 14:42
15.0	605										

Boring completed at 18.0 ft

Notes:
1. Boring terminated at 18 feet below ground surface (bgs)
2. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Poorly-graded Sand (SP) | Boulders and cobbles | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-16

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 20.5 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/25/22
DATE COMPLETED: 3/28/22

COORDS: N: 852,360.00 E: 1,138,277.00
GS ELEVATION: 621.1 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 10.0 ft
ELEVATION W.L.: 611.1 ft
DATE W.L.: 3/28/2022
TIME W.L.: 1105

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0	620	0.0 - 0.4ft TOPSOIL 0.4 - 6.5ft SAND	SM		0.0	S-1	SS	2-3-4-4	7	1.3 / 2.0	Brown, moist, loose, fine SAND and SILT, trace grass roots in top 0.4 feet, poorly-graded (SM)
			SM		2.0	S-2	SS	6-17-17-16	34	0.4 / 2.0	Orange brown, moist, dense, fine to medium SAND, some silt, some fine to coarse gravel, poorly-graded (SM)
					4.0	S-3	SS	25-97-50/0"	R	1.0 / 1.0	Orange brown, moist, very dense, fine to medium SAND, some silt, poorly-graded (SM)
5.0											5.0 ft: Gravel lodged in tip of splitspoon at 5.0 feet bgs
	615	6.5 - 8.5ft WEATHERED BEDROCK (SCHIST)			6.0	S-4	SS	100-50/2"	R	0.7 / 0.8	Top 0.5 feet: Orange brown, moist, very dense, fine to medium SAND, little silt, poorly-graded (SP-SM) Bottom 0.2 feet: Gray, moist, very dense, fine to coarse GRAVEL, some fine to coarse SAND, trace silt, poorly-graded (GP-GM) (WEATHERED BEDROCK)
		8.5 - 20.5ft BEDROCK (SCHIST)			8.0	S-5	SS	100/0.5"	R	0.0 / 0.1	6.7-8.0 ft: Augered through weathered rock from 6.7 to 8 feet bgs NO RECOVERY (splitspoon bouncing on rock) 8.0-8.5 ft: Augered through weathered rock from 8 to 8.5 feet bgs
10.0 ▽											8.5-10.5 ft: Casing set to 8.5 feet bgs. Advanced with roller bit through weathered bedrock to 10.5 feet bgs
	610				10.5	C-1	CORE	RQD = 6%	-	4.3 / 5.0	Gray, medium-grained, strong, SCHIST, fresh with moderately weathered fractures, very closely to closely spaced, horizontal to high angle dipping, open Average 3.8 fractures per foot Run times (minutes per foot): 6:51, 12:31, 11:42, 13:53, 14:44
15.0					15.5	C-2	CORE	RQD = 50%	-	1.9 / 2.0	Gray, medium-grained, strong, SCHIST with quartz vein from 16.1 to 16.4 feet bgs, fresh with slightly weathered fractures, closely spaced, low angle dipping, open Average 2.5 fractures per foot Run times (minutes per foot): 8:42, 14:21
	605				17.5	C-3	CORE	RQD = 27%	-	3.0 / 3.0	Gray, medium-grained, strong, SCHIST with quartz vein from 17.5 to 18.5 feet bgs, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open with silt infilling at 19.5 feet bgs Average 4.7 fractures per foot Run times (minutes per foot): 6:52, 16:12, 12:31
20.0											

Boring completed at 20.5 ft

Notes:
1. Boring terminated at 20.5 feet below ground surface (bgs)
2. Water level measured 5 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-17

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 23.5 ft
LOCATION: Offset from stake 7ft SE

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/24/22
DATE COMPLETED: 3/24/22

COORDS: N: 852,261.00 E: 1,138,310.00
GS ELEVATION: 619.2 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 7.0 ft
ELEVATION W.L.: 612.2 ft
DATE W.L.: 3/24/2022
TIME W.L.: 1620

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.3ft TOPSOIL	SM		0.0	S-1	SS	1-1-1-1	2	0.3 / 2.0	Brown, moist, very loose, fine to medium SAND and SILT, trace grass roots in top 0.3 feet, poorly-graded (SM)
		0.3 - 4.9ft SAND	SM		2.0	S-2	SS	2-9-11-6	20	0.3 / 2.0	Orange brown, moist, medium dense, fine to medium SAND, some silt, little fine gravel, poorly-graded (SM)
	615				4.0	S-3	SS	11-100/5"	R	0.5 / 0.9	Orange brown, moist, very dense, fine to medium SAND, little fine to medium gravel, little wood (tree roots), trace silt, well-graded (SW)
5.0		4.9 - 8.0ft COBBLES & BOULDERS									4.9-6.0 ft: Advanced with augers past cobbles and boulder from 4.9 to 6 feet bgs
					6.0	S-4	SS	100/0"	R	0.0 / 0.1	NO RECOVERY 6.0-8.0 ft: Splitspoon bouncing on boulder. Augered through a boulder from 6 to 8 ft bgs
		8.0 - 8.8ft WEATHERED BEDROCK (SCHIST)	SP-SM		8.0	S-5	SS	73-49-100/3"	R	1.0 / 1.3	Top 0.8 feet: Gray, wet, very dense, fine to coarse GRAVEL, some fine to coarse sand, poorly-graded (GP) (WEATHERED BEDROCK) Bottom 0.5 feet: Brown, wet, very dense, fine to medium SAND, little silt, trace medium gravel, poorly-graded (SP-SM)
	610	8.8 - 9.3ft SAND									
10.0		9.3 - 13.5ft WEATHERED BEDROCK (SCHIST)			10.0	S-6	SS	100/4"	R	0.3 / 0.3	Gray, wet, very dense, fine to coarse GRAVEL, some fine to coarse sand, trace silt, well-graded (GW) (WEATHERED BEDROCK)
	605	13.5 - 23.5ft BEDROCK (SCHIST)			13.5	C-1	CORE	RQD = 22%	-	4.7 / 5.0	Gray, medium-grained, medium strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 3.2 fractures per foot Run times (minutes per foot): 3:12, 4:21, 3:07, 6:01, 6:38
15.0											
	600				18.5	C-2	CORE	RQD = 54%	-	4.9 / 5.0	Gray, medium-grained, medium strong, SCHIST with quartz veins from 19.9 to 20.2 feet bgs and 22.2 to 22.4 feet bgs, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 2.2 fractures per foot Run times (minutes per foot): 4:38, 9:21, 8:10, 6:57, 9:27
20.0											

Boring completed at 23.5 ft

Notes:
1. Boring terminated at 23.5 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Boulders and cobbles | Highly weathered bedrock | USCS Poorly-graded Sand with Silt (SP-SM) | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-18

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 35.0 ft
LOCATION: At Marked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/23/22
DATE COMPLETED: 3/24/22

COORDS: N: 852,185.00 E: 1,138,363.00
GS ELEVATION: 617.1 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 12.0 ft
ELEVATION W.L.: 605.1 ft
DATE W.L.: 3/24/2022
TIME W.L.: 1140

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.5ft ASPHALT									
	615	0.5 - 10.5ft SAND	SM		0.5	S-1	SS	13-15-17-18	32	1.1 / 2.0	Orange brown, moist, dense, fine to medium SAND and fine to coarse GRAVEL, little silt, poorly-graded (SP-SM)
					2.5	S-2	SS	23-10-5-5	15	1.1 / 2.0	Brown, moist, medium dense, fine to medium SAND, some fine to coarse gravel, some silt, poorly-graded (SM)
5.0					4.5	S-3	SS	5-4-7-4	11	_ / 2.0	Orange brown, moist, medium dense, fine to medium SAND, little silt, poorly-graded (SP-SM)
	610				6.5	S-4	SS	6-9-7-8	16	1.4 / 2.0	Light brown, moist, medium dense, fine to medium SAND, some silt, poorly-graded (SM)
					8.5	S-5	SS	21-38-33-35	71	1.8 / 2.0	Orange brown, moist, very dense, fine to medium SAND, some silt, poorly-graded (SM)
10.0		10.5 - 15.0ft GRAVELLY SAND	SP-SM		10.5	S-6	SS	26-26-28-31	54	1.2 / 2.0	Orange, gray, moist, very dense, fine to coarse SAND and fine to coarse GRAVEL, little silt, poorly-graded (SP-SM)
	605										
15.0		15.0 - 21.3ft GRAVEL	GP-GM		15.0	S-7	SS	100/5"	R	0.4 / 0.4	Brown, wet, very dense, fine to coarse GRAVEL and fine to medium SAND, little silt, poorly-graded (GP-GM) 15.4-20.0 ft: Augered past cobbles from 15.4 to 20 feet bgs
	600				20.0	S-8	SS	17-20-100/3"	R	1.0 / 1.3	Gray, wet, very dense, fine to coarse GRAVEL, trace fine to medium sand, trace silt, well-graded (GW)
20.0		21.3 - 25.0ft WEATHERED BEDROCK (SCHIST)									
	595										
25.0		25.0 - 35.0ft BEDROCK (SCHIST)			25.0	C-1	CORE	RQD = 0%	-	2.8 / 5.0	Gray, medium-grained, medium strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 3.4 fractures per foot Run times (minutes per foot): 3:41, 1:45, 3:01, 4:08, 10:03
	590										
30.0					30.0	C-2	CORE	RQD = 18%	-	4.8 / 5.0	Top 2.0 feet: Gray, coarse-grained, medium strong, SCHIST, fresh with moderately weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Bottom 3.0 feet: Gray, medium-grained, medium strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 3.4 fractures per foot Run times (minutes per foot): 3:41, 1:45, 3:01, 4:08, 10:03
	585										
35.0		Boring completed at 35.0 ft									

Notes:
1. Boring terminated at 35 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings, sand, and cold patch asphalt sand to existing ground surface

Asphalt
Schist
USCS Silty Sand (SM)
USCS Poorly-graded Sand with Silt (SP-SM)
USCS Poorly-graded Gravel with Silt (GP-GM)
Highly weathered bedrock

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

wsp

003B MANCHESTER NH GEOTECH SOIL/RX LOGO UCONN BORING LOGS.GPJ GOLDER NH 2011.GDT 6/21/22

RECORD OF BOREHOLE BX-19

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 18.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/7/22
DATE COMPLETED: 4/7/22

COORDS: N: 852,471.00 E: 1,138,291.00
GS ELEVATION: 634.1 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 4.0 ft
ELEVATION W.L.: 630.1 ft
DATE W.L.: 4/7/2022
TIME W.L.: 1400

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.3ft TOPSOIL 0.3 - 5.7ft SAND	SM		0.0	S-1	SS	2-2-3-2	5	0.3 / 2.0	Brown, moist, loose, fine to medium SAND, some silt, trace grass roots in top 0.3 feet, poorly-graded (SM)
					2.0	S-2	SS	5-6-4-3	10	0.1 / 2.0	Brown, moist, loose, fine to medium SAND, some silt, poorly-graded (SM)
▽	630				4.0	S-3	SS	18-30-18-100/4"	48	1.5 / 1.7	Orange gray, dense, fine to medium SAND, some silt, little gray weathered rock (apparent schist), poorly-graded (SM)
5.0		5.7 - 8.0ft WEATHERED BEDROCK (SCHIST)									5.7-8.0 ft: Advanced with augers through weathered rock from 5.7 to 8 feet bgs
		8.0 - 18.0ft BEDROCK (SCHIST)			8.0	C-1	CORE	RQD = 0%	-	2.0 / 2.2	Gray, medium-grained, medium strong, SCHIST, slightly weathered with moderately weathered fractures, very closely spaced, horizontal to low angle dipping, open with brown sand and silt infilling Average 15 fractures per foot Run times (minutes per foot): 10:11, 10:42
	625				10.2	C-2	CORE	RQD = 21%	-	1.6 / 2.8	8.0 ft: Attempted split spoon at 8 feet bgs, split spoon bounced on rock for 50 blows and 0 inches of penetration Gray, medium-grained, medium strong, SCHIST, moderately weathered with moderately weathered fractures, very closely to closely spaced, horizontal to moderately dipping, open with brown sand and silt infilling Average 10 fractures per foot Run times (minutes per foot): 10:31, 5:21, 9:32/0.8ft
10.0					13.0	C-3	CORE	RQD = 58%	-	2.4 / 2.4	Gray, medium-grained, medium strong, SCHIST, slightly weathered with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 2.9 fractures per foot Run times (minutes per foot): 6:48, 15:21, 10:30/0.4ft
	620				15.4	C-4	CORE	RQD = 0%	-	2.5 / 2.6	Top 1.2 feet: Light gray, medium-grained, medium strong, SCHIST, slightly weathered with moderately weathered fractures, very closely spaced, low to high angle dipping, open Bottom 1.4 feet: Gray, medium-grained, medium strong, SCHIST, moderately weathered with moderately weathered fractures, very closely spaced, low to high angle dipping, open Average 7.1 fractures per foot Run times (minutes per foot): 4:23/0.6ft, 8:24, 10:17
15.0											

Boring completed at 18.0 ft

Notes:
1. Boring terminated at 18 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-20

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 20.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/18/22
DATE COMPLETED: 4/19/22

COORDS: N: 852,159.00 E: 1,137,905.00
GS ELEVATION: 616.9 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 5.0 ft
ELEVATION W.L.: 611.9 ft
DATE W.L.: 4/19/2022
TIME W.L.: 0950

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0	616.9	0.0 - 0.4ft TOPSOIL	SM		0.0	S-1	SS	2-2-3-5	5	0.5 / 2.0	Brown, moist, loose, fine to medium SAND, some silt, trace fine gravel, trace roots in top 0.4 feet, poorly-graded (SM)
	615	0.4 - 3.3ft SAND AND GRAVEL	SP-SM		2.0	S-2	SS	5-17-100/4"	R	0.6 / 1.4	Brown and gray, moist, very dense, fine to coarse GRAVEL (weathered bedrock) and fine to medium SAND, little silt, poorly-graded (GP-GM) 3.3-5.0 ft: Advanced past boulders and cobbles with augers from 3.3 to 5.0 feet bgs
		3.3 - 5.0ft COBBLES & BOULDERS									
5.0 ▽		5.0 - 7.9ft SAND	SP-SM		5.0	S-3	SS	46-51-41-22	92	2.0 / 2.0	Gray brown, moist, very dense, fine to medium SAND, little fine to coarse gravel (weathered bedrock), little silt, poorly-graded (SP-SM)
	610				7.0	S-4	SS	-------	R	- / 0.9	Gray brown, moist, very dense, fine to coarse SAND, some silt, little fine to coarse gravel (weathered rock in tip of split spoon), poorly-graded (SM)
		7.9 - 9.5ft WEATHERED BEDROCK (SCHIST)									7.9-9.5 ft: Advanced through weathered bedrock with augers from 7.9 to 9.5 feet bgs 9.5-10.0 ft: Casing set to 9.5 feet bgs and boring advanced through bedrock with the roller bit to 10 feet bgs
10.0		9.5 - 20.0ft BEDROCK (SCHIST)			10.0	C-1	CORE	RQD = 49	-	4.8 / 5.0	Gray, medium-grained, strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, low to high angle dipping, open Average 2.8 fractures per foot Run times (minutes per foot): 4:53, 5:12, 6:58, 5:42, 8:11
	605										
15.0					15.0	C-2	CORE	RQD = 31%	-	4.8 / 5.0	Gray, medium-grained, strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, low to high angle dipping, open Average 3.4 fractures per foot Run times (minutes per foot): 5:22, 6:19, 5:23, 8:34, 6:01
	600										
20.0		Boring completed at 20.0 ft									

Notes:
1. Boring terminated at 20 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Poorly-graded Sand with Silt (SP-SM) | Boulders and cobbles | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-21

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 20.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/18/22
DATE COMPLETED: 4/18/22

COORDS: N: 852,209.00 E: 1,137,867.00
GS ELEVATION: 623.8 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 4.0 ft
ELEVATION W.L.: 619.8 ft
DATE W.L.: 4/18/2022
TIME W.L.: 1425

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 1.0ft TOPSOIL	SM		0.0	S-1	SS	2-1-2-2	3	0.5 / 2.0	Brown, moist, very loose, fine to medium SAND, some silt, trace roots, poorly-graded (SM)
		1.0 - 2.3ft SILT & SAND	SM								
		2.3 - 2.6ft SILTY CLAY	CL		2.0	S-2	SS	3-4-3-3	7	1.5 / 2.0	Orange gray, moist, loose, SILT and fine to medium SAND (varved), poorly-graded, (ML) 2.3 to 2.6 feet bgs: Lens of SILTY CLAY, some fine to medium sand, plastic (CL)
▽	620	2.6 - 4.0ft SILT & SAND	SM								
		4.0 - 7.0ft COBBLES & BOULDERS			4.0	S-3	SS	50/0"	R	0.0 / 0.0	NO RECOVERY (split spoon bounced on boulders and cobbles) 4.0-7.0 ft: Advanced with augers past cobbles and boulders from 4 feet bgs to 7 feet bgs
5.0											
		7.0 - 7.3ft SAND	SP-SM		7.0	S-4	SS	100/5"	R	0.4 / 0.4	Top 0.3 feet: Brown, wet, very dense, fine to medium SAND, little silt, trace fine to medium gravel, poorly-graded (SP-SM) Bottom 0.1 feet: Gray, wet, very dense, fine to coarse GRAVEL, little fine to medium sand, trace silt, poorly-graded (GP) (WEATHERED BEDROCK)
		7.3 - 8.5ft WEATHERED BEDROCK (SCHIST)									
	615	8.5 - 20.0ft BEDROCK (SCHIST)									8.5-10.0 ft: Casing set to 8.5 feet bgs and advanced the boring through bedrock with the roller bit from 8.5 to 10 feet bgs
10.0					10.0	C-1	CORE	RQD = 52%	-	3.9 / 5.0	Gray, medium-grained, very strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, low angle dipping, open with gray silt infilling Average 2.4 fractures per foot Run times (minutes per foot): 2:49, 3:09, 4:16, 9:03, 4:56
	610										
15.0					15.0	C-2	CORE	RQD = 44%	-	5.0 / 5.0	Gray, medium-grained, very strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, low to high angle dipping, open with gray silt infilling Average 2.4 fractures per foot Run times (minutes per foot): 4:42, 5:11, 3:21, 6:59, 5:48
	605										
20.0		Boring completed at 20.0 ft									

Notes:
1. Boring terminated at 20 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | Highly weathered bedrock | USCS Silty Sand (SM) | Schist | USCS Low Plasticity Clay (CL) | Boulders and cobbles | USCS Poorly-graded Sand with Silt (SP-SM)

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-22

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 43.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/15/22
DATE COMPLETED: 4/18/22

COORDS: N: 852,274.00 E: 1,137,899.00
GS ELEVATION: 637.7 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 18.0 ft
ELEVATION W.L.: 619.7 ft
DATE W.L.: 4/18/2022
TIME W.L.: 1105

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.5ft ASPHALT 0.5 - 2.5ft SAND	SP-SM	0.5	S-1	SS	19-38-16-11	54	0.1 / 2.0	Brown, moist, very dense, fine to coarse SAND, little fine to medium gravel, little silt, poorly-graded (SP-SM)
	635	2.5 - 4.5ft GRAVEL	GP	2.5	S-2	SS	11-11-6-7	17	0.1 / 2.0	Brown, moist, medium dense, coarse GRAVEL, poorly-graded (GP)
5.0		4.5 - 5.0ft COBBLES & BOULDERS 5.0 - 6.8ft GRAVEL	GP-GM	5.0	S-3	SS	18-10-9-100/4"	19	0.3 / 1.8	4.5-5.0 ft: Advanced with augers past cobbles and boulders from 4.5 to 5 feet bgs Gray, moist, medium dense, fine to coarse GRAVEL, some fine to medium SAND, little silt, poorly-graded (GP-GM)
	630	6.8 - 10.0ft COBBLES & BOULDERS		8.0	S-4	SS	50/1"	R	0.1 / 0.1	6.8-8.0 ft: Advanced with augers past cobbles and boulders from 6.8 to 8 feet bgs Gray, moist, very dense, fine to coarse GRAVEL, little fine to medium SAND, little silt, poorly-graded (GP-GM) 8.1-10.0 ft: Casing set to 8.1 feet bgs then boring advanced with the roller bit past cobbles and boulders from 8.1 to 10 feet bgs
10.0		10.0 - 12.0ft SAND & GRAVEL	SP-SM	10.0	S-5	SS	29-14-12-9	26	0.5 / 2.0	Brown, wet, medium dense, fine to coarse SAND and fine to coarse GRAVEL, little silt, poorly-graded (GP-GM)
	625	12.0 - 17.0ft COBBLES & BOULDERS								12.0-15.0 ft: Advanced with roller bit past cobbles and boulders from 12 to 15 feet bgs
15.0				15.0	S-6	SS	100/4"	R	0.1 / 0.3	Brown, wet, medium dense, fine to coarse GRAVEL (partially gray weathered bedrock) and fine to coarse SAND, little silt, poorly-graded (GP-GM) 15.0-17.0 ft: Advanced with roller bit past cobbles and boulders from 15 to 17 feet bgs
▽	620	17.0 - 20.0ft WEATHERED BEDROCK (SCHIST)								
20.0		20.0 - 43.0ft BEDROCK (SCHIST)		20.0	C-1	CORE	RQD = 0%	-	1.6 / 3.0	Gray, medium-grained, medium strong, SCHIST, moderately weathered with moderately weathered fractures, very closely spaced, low angle to vertical dipping, open with brown sand infilling Average 5.3 fractures per foot Run times (minutes per foot): 8:24, 8:48, 10:23
	615			23.0	C-2	CORE	RQD = 0%	-	2.7 / 5.0	Gray, medium-grained, medium strong, SCHIST, moderately weathered with moderately weathered fractures, very closely spaced, horizontal to vertical dipping, open with brown and gray sand and silt infilling Average 6.6 fractures per foot Run times (minutes per foot): 4:22, 3:51, 3:29, 3:33, 4:02
25.0										
	610			28.0	C-3	CORE	RQD = 0%	-	5.0 / 5.0	Gray, medium-grained, medium strong, SCHIST, slightly weathered with slightly weathered fractures (highly weathered fracture at 28.5 feet bgs), very closely to closely spaced, low to high angle dipping, open with gray silt infilling Average 5.4 fractures per foot Run times (minutes per foot): 4:18, 4:46, 4:21, 5:18, 5:33
30.0										
	605			33.0	C-4	CORE	RQD = 0%	-	3.3 / 5.0	Gray, medium-grained, medium strong, SCHIST, moderately weathered with moderately weathered fractures, very closely to closely spaced, low to high angle dipping, open with gray sand and silt infilling Average 5.4 fractures per foot Run times (minutes per foot): 4:51, 5:12, 5:36, 5:02, 11:28
35.0										
	600			38.0	C-5	CORE	RQD = 63%	-	5.0 / 5.0	Gray, medium-grained, medium strong, SCHIST, fresh with slightly weathered, very closely to closely spaced, low to high angle dipping, open with gray sand and silt infilling Average 2.4 fractures per foot
40.0										

Log continued on next page

Asphalt
Highly weathered bedrock
USCS Poorly-graded Sand with Silt (SP-SM)
Schist
USCS Poorly-graded Gravel (GP)
Boulders and cobbles
USCS Poorly-graded Gravel with Silt (GP-GM)

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-22

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 43.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/15/22
DATE COMPLETED: 4/18/22

COORDS: N: 852,274.00 E: 1,137,899.00
GS ELEVATION: 637.7 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 18.0 ft
ELEVATION W.L.: 619.7 ft
DATE W.L.: 4/18/2022
TIME W.L.: 1105

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
40.0	595					C-5	CORE	RQD = 63%	-	5.0 / 5.0	Run times (minutes per foot): 5:22, 4:47, 4:49, 4:21, 6:38

Boring completed at 43.0 ft

Notes:
1. Boring terminated at 43 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Asphalt
Highly weathered bedrock
USCS Poorly-graded Sand with Silt (SP-SM)
Schist
USCS Poorly-graded Gravel (GP)
Boulders and cobbles
USCS Poorly-graded Gravel with Silt (GP-GM)

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-23

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 28.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/7/22
DATE COMPLETED: 4/8/22

COORDS: N: 852,342.00 E: 1,137,977.00
GS ELEVATION: 636.8 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 14.0 ft
ELEVATION W.L.: 622.8 ft
DATE W.L.: 4/8/2022
TIME W.L.: 1120

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.3ft TOPSOIL	SM		0.0	S-1	SS	2-18-8-54	26	0.6 / 2.0	Top 0.3 feet: Brown, moist, medium dense fine to medium SAND, some silt, trace grass roots, poorly-graded (SM)
	635	0.3 - 2.1ft SAND	SP-SM								Bottom 1.7 feet: Gray brown, moist, medium dense, fine to medium SAND, some fine to coarse gravel, little silt, poorly-graded (SP-SM)
		2.1 - 3.5ft COBBLES			2.0	S-2	SS	100/1"	R	0.1 / 0.1	Gray, moist, very dense, coarse GRAVEL, trace fine to medium sand, trace silt, poorly-graded (GP)
		3.5 - 6.0ft SAND	SP		4.0	S-3	SS	2-2-2-2	4	0.2 / 2.0	Gray, moist, very loose, fine to medium SAND, some fine to coarse gravel, trace silt, poorly-graded (SP)
5.0	630	6.0 - 8.0ft SANDY SILT	ML		6.0	S-4	SS	2-2-13-14	15	1.4 / 2.0	Brown, moist, medium dense, SILT, some fine to medium sand, little fine to medium gravel, non-plastic (ML)
		8.0 - 13.0ft SAND	SP		8.0	S-5	SS	18-20-12-19	32	1.1 / 2.0	Brown, moist, dense, fine to medium SAND, little fine to medium gravel, little silt, trace gray weathered rock, poorly-graded (SP-SM)
10.0					10.0	S-6	SS	15-76-50/1"	R	0.7 / 1.1	Brown, moist, very dense, fine to medium SAND, some fine to coarse gravel, trace silt, well-graded (SW)
	625										13.0-15.0 ft: Advanced with augers through weathered rock from 13 to 15 feet bgs
▽		13.0 - 15.0ft WEATHERED BEDROCK (SCHIST)									
15.0		15.0 - 28.0ft BEDROCK (SCHIST)			15.0	C-1	CORE	RQD = 0%	-	2.0 / 5.0	Gray, medium-grained, medium strong, SCHIST, moderately weathered with moderately weathered fractures, very closely spaced, low angle to moderately dipping, open Average 5.8 fractures per foot Run Times (minutes per foot): 4:12, 10:31, 6:51, 7:25, 6:09
	620										
20.0					20.0	C-2	CORE	RQD = 0%	-	3.0 / 3.0	Gray, medium-grained, medium strong, SCHIST, slightly weathered with moderately weathered fractures, very closely spaced, low angle dipping, open with brown sand infilling Average 6.7 fractures per foot Run Times (minutes per foot): 2:31, 6:44, 10:11
	615										
25.0					23.0	C-3	CORE	RQD = 14%	-	5.0 / 5.0	Gray, medium-grained, strong, SCHIST, fresh with weathered fractures (highly weathered fracture at 27.4 feet bgs), very closely to closely spaced, low angle dipping, open with gray silt and brown sand infilling Average 4.0 fractures per foot Run Times (minutes per foot): 2:08, 4:04, 4:11, 7:19, 5:33
	610										

Boring completed at 28.0 ft

Notes:
1. Boring terminated at 28 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Poorly-graded Sand with Silt (SP-SM) | Boulders and cobbles | USCS Poorly-graded Sand (SP) | USCS Silt (ML)
Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-24

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 14.0 ft
LOCATION: 8 ft South of Stake Location
DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/19/22
DATE COMPLETED: 4/20/22
COORDS: N: 852,107.00 E: 1,137,990.00
GS ELEVATION: 619.6 ft
WEATHER:
TEMPERATURE:
INCLINATION: 90
DEPTH W.L.: 9.0 ft
ELEVATION W.L.: 610.6 ft
DATE W.L.: 4/20/2022
TIME W.L.: 1000

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.6ft TOPSOIL	SM		0.0	S-1	SS	2-16-29-17	45	0.6 / 2.0	Brown, moist, dense, fine to medium SAND, some silt, little fine to medium gravel, trace roots
		0.6 - 2.1ft SAND	SM		2.0	S-2	SS	50/1"	R	0.0 / 0.1	NO RECOVERY (split spoon bouncing on boulder) 2.1-3.5 ft: Augered into boulder from 2.1 to 3.5 feet bgs then set casing to 3.5 feet bgs 3.5-4.0 ft: Advanced into boulder with the roller bit from 3.5 to 4 feet bgs
		2.1 - 5.5ft BOULDER & COBBLES			4.0	S-3	SS	50/0"	R	0.0 / 0.0	NO RECOVERY (split spoon bouncing on boulder) 4.0-5.5 ft: Advanced into boulder with the roller bit from 4 to 5.5 feet bgs. Broke through boulder at 5.5 feet bgs
5.0	615	5.5 - 7.5ft SAND	SM		6.0	S-4	SS	5-19-34-78	53	1.2 / 2.0	Gray brown, wet, very dense, fine to coarse SAND, some fine to coarse gravel, little silt, poorly-graded (SP-SM) (gray weathered rock in the tip of the split spoon)
		7.5 - 11.2ft WEATHERED BEDROCK			8.0	S-5	SS	106-100/4"	R	0.8 / 0.8	Gray brown, wet, very dense, fine to coarse SAND, some fine to coarse gravel (gray weathered bedrock), little silt, poorly-graded (SP-SM)
▽ 10.0	610				10.0	S-6	SS	29-48-50/2"	R	0.8 / 1.2	Gray brown, wet, very dense, fine to coarse SAND, some fine to coarse gravel (gray weathered bedrock), some silt, poorly-graded (SM)
		11.2 - 14.0ft BEDROCK (SCHIST)			12.0	C-1	CORE	RQD = 20%	-	1.3 / 2.0	Gray, medium-grained, extremely strong, SCHIST, moderately weathered with moderately weathered fractures, very closely to closely spaced, low to high angle dipping, open with brown sand infilling Average 3.0 fractures per foot Run times (minutes per foot): 10:32, 10:14

Boring completed at 14.0 ft

Notes:
1. Boring terminated at 14 feet below ground surface (bgs) due to teeth from the rock core bit breaking off and being stuck in the hole preventing further advancement. Boring offset 20 feet West and continued as Boring BX-24A
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Boulders and cobbles | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-24A

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 34.0 ft
LOCATION:

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/20/22
DATE COMPLETED: 4/20/22

COORDS: N: 852,081.00 E: 1,137,974.00
GS ELEVATION: 613.3 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 6.0 ft
ELEVATION W.L.: 607.3 ft
DATE W.L.: 4/20/2022
TIME W.L.: 1310

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0	613	0.0 - 4.0ft SAND									0.0-4.0 ft: Advanced with augers through sand (based on drill cuttings) from 0 to 4 feet bgs
	610	4.0 - 6.5ft COBBLES & BOULDERS									4.0-5.0 ft: Advanced with augers past boulders/cobbles from 4 to 5 feet bgs then casing set to 5 feet bgs 5.0-6.5 ft: Advanced with roller bit past boulders/cobbles from 5 to 6.5 feet bgs
5.0 ▽		6.5 - 7.0ft SAND									
	605	7.0 - 9.0ft WEATHERED BEDROCK (SCHIST)									7.0-9.0 ft: Weathered bedrock encountered at 7 feet bgs. Advanced with roller bit through weathered bedrock from 7 feet bgs to 9 feet bgs
10.0		9.0 - 34.0ft BEDROCK (SCHIST)			9.0	C-1	CORE	RQD = 0%	-	0.8 / 5.0	Gray, medium-grained, strong, SCHIST, highly weathered with highly weathered fractures, very closely spaced, horizontal to low angle dipping, open Fracture count indistinguishable due to amount of weathering Run times (minutes per foot): 1:52, 2:11, 2:31, 1:44, 1:57
	600				14.0	C-2	CORE	RQD = 0%	-	0.9 / 5.0	Gray, medium-grained, strong, SCHIST, highly weathered with highly weathered fractures, very closely spaced, horizontal to low angle dipping, open Fracture count indistinguishable due to amount of weathering Run times (minutes per foot): 11:12, 1:24, 2:41, 2:02, 1:36
15.0	595				19.0	C-3	CORE	RQD = 0%	-	2.1 / 5.0	Gray, medium-grained, very strong, SCHIST, moderately weathered with moderately weathered fractures, very closely to closely spaced, low to high angle dipping, open Average 5.6 fractures per foot Run times (minutes per foot): 1:34, 1:52, 1:16, 2:58, 3:22
20.0	590				24.0	C-4	CORE	RQD = 35%	-	4.7 / 5.0	Gray, medium-grained, very strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, low to vertical dipping, open, quartz vein from 27.5 to 27.7 feet bgs Average 3.2 fractures per foot Run times (minutes per foot): 2:48, 3:21, 3:06, 2:26, 4:11
25.0	585				29.0	C-5	CORE	RQD = 0%	-	3.3 / 5.0	Gray, medium-grained, very strong, SCHIST, moderately weathered with moderately weathered fractures, very closely to closely spaced, horizontal to high angle dipping, open Average 5.0 fractures per foot Run times (minutes per foot): 2:25, 2:38, 3:54, 4:16, 5:22
30.0	580										

Boring completed at 34.0 ft

Notes:
1. Boring terminated at 34 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Sand | Boulders and cobbles | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

003B MANCHESTER NH GEOTECH SOIL/RX LOGO UCONN BORING LOGS.GPJ GOLDER NH 2011.GDT 6/21/22

RECORD OF BOREHOLE BX-25

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 28.0 ft
LOCATION: At Marked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 3/23/22
DATE COMPLETED: 3/23/22

COORDS: N: 852,207.00 E: 1,137,975.00
GS ELEVATION: 629.8 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 10.0 ft
ELEVATION W.L.: 619.8 ft
DATE W.L.: 3/23/2022
TIME W.L.: 1345

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.5ft ASPHALT									
		0.5 - 2.5ft SAND	SP-SM		0.5	S-1	SS	17-42-45-42	87	0.9 / 2.0	Light brown, moist, very dense, fine to coarse SAND, some fine to medium gravel, little silt, poorly-graded (SP-SM)
		2.5 - 3.5ft GRAVEL	GW		2.5	S-2	SS	37-49-100/5"	R	0.8 / 1.4	Light brown, moist, very dense, fine to coarse GRAVEL, some fine to medium sand, well-graded (GW) 3.5-4.0 ft: Augered past boulder from 3.5 to 4 feet bgs
		3.5 - 4.0ft BOULDER									
		4.0 - 16.8ft SAND			4.0	S-3	SS	3-4-7-10	11	0.6 / 2.0	Light brown, moist, medium dense, fine to medium SAND, some silt, little coarse gravel, poorly-graded (SM)
5.0	625				6.0	S-4	SS	12-4-3-5	7	0.3 / 2.0	Brown, moist, loose fine to medium SAND and fine to coarse GRAVEL, little silt, poorly-graded (SP-SM)
					8.0	S-5	SS	13-42-47-58	89	1.9 / 2.0	Orange gray, moist, very dense, fine to coarse SAND, some silt, some fine to coarse gravel, poorly-graded (SM)
10.0 ▽	620		SM		10.0	S-6	SS	50-81-91-103	172	2.0 / 2.0	Top 1.2 feet: Orange brown, wet, very dense, fine to coarse SAND, some fine to coarse gravel, little silt, poorly-graded (SP-SM) Bottom 0.8 feet: Orange brown, wet, fine to medium SAND, little silt, poorly-graded (SP-SM)
15.0	615				15.0	S-7	SS	39-74-61-100/3"	135	1.8 / 1.8	Top 0.6 feet: Brown, wet, very dense, fine to coarse SAND, little coarse gravel, little silt, poorly-graded (SP-SM) Bottom 1.15 feet: Orange brown, wet, very dense fine to coarse SAND, little silt, little fine to medium gravel, poorly-graded (SP-SM)
		16.8 - 18.0ft WEATHERED BEDROCK (SCHIST)									
		18.0 - 28.0ft BEDROCK (SCHIST)			18.0	C-1	CORE	RQD = 0%	-	0.3 / 1.5	Gray, medium-grained, medium strong, SCHIST, fresh with moderately weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 3 fractures per foot Run times (minutes per foot): 10:00 (for 1.5 feet)
20.0	610				19.5	C-2	CORE	RQD = 33%	-	2.7 / 3.5	Gray, medium-grained, medium strong, SCHIST, fresh with moderately weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 4.9 fractures per foot Run times (minutes per foot): 13:04 (for 1.5 feet), 5:25, 2:01
25.0	605				23.0	C-3	CORE	RQD = 34%	-	5.0 / 5.0	Gray, medium-grained, medium strong, SCHIST with quartz veins at 24.2 to 24.5 feet bgs and 27.1 to 27.5 feet bgs, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 2.8 fractures per foot Run times (minutes per foot): 6:30, 6:45, 7:30, 7:33, 7:16

Boring completed at 28.0 ft

Notes:
1. Boring terminated at 28 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings, sand, and cold patch asphalt to existing ground surface

Asphalt
Highly weathered bedrock
USCS Poorly-graded Sand with Silt (SP-SM)
Schist
USCS Well-graded Gravel (GW)
Boulders and cobbles
USCS Silty Sand (SM)

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-26

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 19.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/8/22
DATE COMPLETED: 4/14/22

COORDS: N: 852,259.00 E: 1,138,037.00
GS ELEVATION: 626.5 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 7.0 ft
ELEVATION W.L.: 619.5 ft
DATE W.L.: 4/14/2022
TIME W.L.: 1015

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.4ft TOPSOIL	SM		0.0	S-1	SS	1-3-5-11	8	1.1 / 2.0	Brown, moist, loose, fine to medium SAND and SILT, little fine to medium gravel, trace grass roots in top 0.4 feet, poorly-graded (SM)
	625	0.4 - 2.0ft SAND	SM								1.5-4.0 ft: Advanced past cobbles and boulders from 1.5 to 4 feet bgs
		2.0 - 4.0ft GRAVEL	GP-GM		2.0	S-2	SS	18-21-15-16	36	0.2 / 2.0	Gray brown, moist, dense, fine to coarse GRAVEL and fine to coarse SAND, little silt, poorly-graded (GP-GM)
5.0		4.0 - 7.4ft SAND	SM		4.0	S-3	SS	3-3-3-10	6	1.5 / 2.0	Brown, moist, loose, fine to medium SAND and SILT, trace coarse gravel, poorly-graded (SM)
▽	620				6.0	S-4	SS	21-40-100/5"	R	1.4 / 1.4	Gray brown, wet, very dense, fine to medium SAND, some silt, some fine to coarse gravel, poorly-graded (SM)
		7.4 - 8.0ft WEATHERED BEDROCK (SCHIST)									7.4-8.0 ft: Advanced through weathered rock with augers from 7.4 to 8 feet bgs
					8.0	S-5	SS	50/0"	R	0.0 / 0.0	NO RECOVERY. Split spoon bounced on bedrock
		8.0 - 19.0ft BEDROCK (SCHIST)									8.0-9.0 ft: Casing set to 8 feet bgs and boring advanced through bedrock to 9 feet bgs with the roller bit
10.0					9.0	C-1	CORE	RQD = 26%	-	4.7 / 5.0	Gray, medium-grained, very strong, SCHIST, fresh with fresh fractures, very closely to closely spaced, low angle dipping, open with gray silt infilling Average 3.6 fractures per foot Run times (minutes per foot): 1:57, 3:28, 10:32, 3:06, 6:17
	615										
15.0					14.0	C-2	CORE	RQD = 48%	-	4.1 / 5.0	Gray, medium-grained, extremely strong, SCHIST, fresh with slightly weathered fractures, very closely to moderately spaced, horizontal to moderately dipping, open with gray silt infilling Average 2.8 fractures per foot Run times (minutes per foot): 3:08, 2:51, 6:02, 9:19, 10:32
	610										

Boring completed at 19.0 ft

Notes:
1. Boring terminated at 19 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface
4. Drilled to bedrock and soil sampled on 4/8/22. Rock coring occurred on 4/14/22

Topsoil | USCS Silty Sand (SM) | USCS Poorly-graded Gravel with Silt (GP-GM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-27

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 39.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/14/22
DATE COMPLETED: 4/15/22

COORDS: N: 852,140.00 E: 1,138,009.00
GS ELEVATION: 626.7 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 26.0 ft
ELEVATION W.L.: 600.7 ft
DATE W.L.: 4/15/2022
TIME W.L.: 1105

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.4ft ASPHALT								
	625	0.4 - 4.2ft SAND	SP	0.4	S-1	SS	19-17-11-22	28	1.2 / 2.0	Brown, moist, medium dense, fine to coarse SAND and fine to coarse GRAVEL, trace silt, poorly-graded (SP)
				2.4	S-2	SS	12-23-20-50/3"	43	1.0 / 1.8	Brown, moist, dense, fine to coarse SAND and fine to coarse GRAVEL, little silt, poorly-graded (SP-SM)
5.0		4.2 - 5.8ft COBBLES & BOULDERS		4.4	S-3	SS	100/0"	R	0.0 / 0.0	4.2-4.4 ft: Advanced with augers past cobbles and boulders from 4.2 to 4.4 feet bgs NO RECOVERY (split spoon bounced on cobble/boulder) 4.4-5.8 ft: Advanced with augers from 4.4 to 5.8 feet bgs
	620	5.8 - 15.0ft SAND & SILT		6.0	S-4	SS	7-19-6-7	25	1.4 / 2.0	Brown, moist, medium dense, fine to medium SAND, little fine to medium gravel, some silt, poorly-graded (SM)
				8.0	S-5	SS	5-6-8-9	14	1.1 / 2.0	Brown, moist, medium dense, fine to medium SAND and SILT, trace fine to medium gravel, poorly-graded (SM)
10.0			SM	10.0	S-6	SS	6-4-4-7	8	1.2 / 2.0	Brown, moist, medium dense, fine to medium SAND and SILT, trace fine to medium gravel, poorly-graded (SM)
	615									
15.0		15.0 - 18.5ft SAND		15.0	S-7	SS	24-49-54-51	103	1.8 / 2.0	Orange brown, moist, very dense, fine to coarse SAND, little fine to coarse gravel, trace silt, poorly-graded (SW) 15.0 ft: Switched to drive and wash drilling at 15 feet bgs after sample S-7 was taken
	610		SW							
		18.5 - 25.0ft GRAVEL								
20.0				20.0	S-8	SS	94-91-100/3"	R	1.3 / 1.3	Gray, wet, very dense, fine to coarse GRAVEL, some fine to medium sand, some silt, little fine to coarse sand (decomposed bedrock), poorly-graded (GM)
	605		GM							
25.0 ▽		25.0 - 27.0ft WEATHERED BEDROCK (SCHIST)		25.0	S-9	SS	50/1"	R	0.1 / 0.1	Gray brown, wet, very dense, fine to coarse SAND, trace silt, poorly-graded (SP) (Highly weathered bedrock) 25.1-27.0 ft: Advanced with roller bit through weathered bedrock from 25.1 to 27 feet bgs
	600									
		27.0 - 39.0ft BEDROCK (SCHIST)		27.0	C-1	CORE	RQD = 9%	-	3.0 / 4.5	Gray, medium-grained, strong, SCHIST with quartz vein from 28.9 to 29.5 feet bgs, moderately weathered with moderately weathered fractures, very closely to closely spaced, low angle to moderately dipping, open Average 4.2 fractures per foot Run times (minutes per foot): 3:30, 4:02, 2:48, 2:50, 6:27/0.5 feet
30.0				31.5	C-2	CORE	RQD = 0%	-	2.0 / 2.5	Gray, medium-grained, strong, SCHIST, moderately weathered with moderately weathered fractures, very closely to closely spaced, low to high angle dipping, open with brown sand infilling Average 7.6 fractures per foot Run times (minutes per foot): 3:55, 3:32, 7:33/0.5 feet
	595									
35.0				34.0	C-3	CORE	RQD = 51%	-	5.0 / 5.0	Gray, medium-grained, strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open with brown sand and gray silt infilling Average 3.2 fractures per foot Run times (minutes per foot): 7:05, 7:19, 6:27, 6:11, 6:31
	590									

Boring completed at 39.0 ft

Asphalt
USCS Poorly-graded Sand (SP)
Boulders and cobbles
USCS Silty Sand (SM)
USCS Well-graded Sand (SW)
USCS Silty Gravel
Highly weathered bedrock
Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

003B MANCHESTER NH GEOTECH SOIL/RX LOGO UCONN BORING LOGS.GPJ GOLDER NH 2011.GDT 6/21/22

RECORD OF BOREHOLE BX-28

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 16.5 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/8/22
DATE COMPLETED: 4/14/22

COORDS: N: 852,197.00 E: 1,138,102.00
GS ELEVATION: 620.4 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 9.0 ft
ELEVATION W.L.: 611.4 ft
DATE W.L.: 4/14/2022
TIME W.L.: 1315

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0	620	0.0 - 0.3ft TOPSOIL 0.3 - 4.1ft SAND	SM		0.0	S-1	SS	1-15-20-17	35	0.9 / 2.0	Gray brown, moist, dense, fine to medium SAND, some silt, little fine to medium gravel, trace grass roots in top 0.3 feet, poorly-graded (SM)
			SP-SM		2.0	S-2	SS	10-29-34-45	63	0.8 / 2.0	Gray brown, moist, very dense, fine to coarse SAND and fine to coarse GRAVEL, trace silt, poorly-graded (SP)
5.0	615	4.1 - 6.0ft WEATHERED BEDROCK (SCHIST)			4.0	S-3	SS	100/3"	R	0.3 / 0.2	Gray brown, moist, very dense, fine to medium SAND, some fine to coarse gravel (gray weathered bedrock), trace silt, poorly-graded (SP) 4.1-6.0 ft: Advanced with augers through weathered bedrock from 4.1 to 6 feet bgs
		6.0 - 16.5ft BEDROCK (SCHIST)			6.0	S-4	SS	50/0"	R	0.0	NO RECOVERY (split spoon bouncing bedrock)
					6.5	C-1	CORE	RQD = 0%	-	0.0 / 1.1 / 2.0	Gray, medium-grained, strong, SCHIST, moderately weathered with moderately weathered fractures, very closely to closely spaced, low angle dipping, open Average 3.6 fractures per foot Run times (minutes per foot): 6:15, 15:32
▽ 10.0	610				8.5	C-2	CORE	RQD = 0%	-	2.9 / 3.0	Gray, medium-grained, strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, low angle to moderately dipping, open Average 5.7 fractures per foot Run times (minutes per foot): 4:48, 6:12, 5:50
15.0	605				11.5	C-3	CORE	RQD = 24%	-	5.0 / 5.0	Gray, medium-grained, strong, SCHIST, moderately weathered with moderately weathered fractures, very closely to closely spaced, low to high angle dipping, open with brown sand infilling, highly weathered fracture at 16 feet bgs Average 5.0 fractures per foot Run times (minutes per foot): 2:31, 2:29, 5:15, 5:33, 6:08

Boring completed at 16.5 ft

Notes:
1. Boring terminated at 16.5 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Poorly-graded Sand with Silt (SP-SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-29

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 16.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/6/22
DATE COMPLETED: 4/7/22

COORDS: N: 852,401.00 E: 1,138,063.00
GS ELEVATION: 636.8 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 5.0 ft
ELEVATION W.L.: 631.8 ft
DATE W.L.: 4/7/2022
TIME W.L.: 1020

SOIL PROFILE					SAMPLE INFORMATION						
DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	GRAPHIC LOG	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.4ft TOPSOIL	SM		0.0	S-1	SS	4-9-100/3"	R	0.6 / 1.3	Brown, moist, fine to medium SAND, some silt, little coarse gravel, trace grass roots in top 0.4 feet, poorly-graded (SM)
	635	0.4 - 1.3ft SAND 1.3 - 3.5ft BOULDER									1.3-3.0 ft: Advanced through boulder with augers from 1.3 to 3 feet bgs. Attempted splitspoon at 3 feet bgs, split spoon bounced on boulder for 100 blows with 0 inches of penetration 3.0-3.5 ft: Set casing to 3 feet bgs then advanced with roller bit through boulder. Broke through boulder at 3.5 feet bgs.
		3.5 - 5.2ft WEATHERED BEDROCK (SCHIST)			4.0	S-2	SS	18-45-50/2"	R	0.7 / 1.2	Orange brown, moist, very dense, fine to coarse SAND, little silt, trace fine to medium gravel, poorly-graded, (SP-SM) (WEATHERED BEDROCK)
5.0 ▽		5.2 - 16.0ft BEDROCK (SCHIST)			6.0	C-1	CORE	RQD = 16%	-	2.7 / 3.7	Top 1.7 feet: Gray, medium-grained, strong, SCHIST, fresh with moderately weathered fractures, very closely spaced, low to high angle dipping, open Bottom 2.0 feet: Light gray to white, fine-grained, SCHIST (high quartz content), slightly weathered with moderately weathered fractures, very closely to closely spaced, low angle to moderately dipping, open Average 10 fractures per foot in top 1.7 feet and 15 fractures per foot in bottom 2.0 feet Run Times (minutes per foot): 5:10, 6:12, 6:11, 12:05/9"
10.0	630				9.7	C-2	CORE	RQD = 0%	-	1.2 / 1.3	Light gray, fine-grained, strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, low angle dipping, open Average 5.4 fractures per foot Run times: 5:55/1.3 feet
	625				11.0	C-3	CORE	RQD = 7%	-	4.2 / 5.0	Light gray, fine-grained, strong, SCHIST, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to low angle dipping, open Average 3.6 fractures per foot Run times (minutes per foot): 6:12, 6:45, 7:15, 7:31, 9:13
15.0											

Boring completed at 16.0 ft

Notes:
1. Boring terminated at 16 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Boulders and cobbles | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

RECORD OF BOREHOLE BX-30

SHEET 1 of 1

PROJECT: UCONN - Mansfield Apts
PROJECT NUMBER: 300234
DRILLED DEPTH: 34.0 ft
LOCATION: At Staked Location

DRILL METHOD: SSA and D+W
HAMMER TYPE: Cat Head w/Safety Hammer
DATE STARTED: 4/4/22
DATE COMPLETED: 4/4/22

COORDS: N: 852,800.00 E: 1,138,693.00
GS ELEVATION: 622.0 ft
WEATHER:
TEMPERATURE:

INCLINATION: 90
DEPTH W.L.: 8.1 ft
ELEVATION W.L.: 613.9 ft
DATE W.L.: 4/4/2022
TIME W.L.: 1410

DEPTH ft	ELEVATION ft	LITHOLOGY DESCRIPTION	USCS	SAMPLE DEPTH	NUMBER	SAMPLE TYPE	BLOWS per 6 in	N	REC / ATT	Sample Description
0.0		0.0 - 0.4ft TOPOSIL	SM	0.0	S-1	SS	2-6-7-5	13	0.4 / 2.0	Brown, moist, medium dense, fine to medium SAND and SILT, trace fine gravel, trace grass roots, poorly-graded (SM)
	620	0.4 - 8.8ft SILTY SAND		2.0	S-2	SS	5-4-4-9	8	0.0 / 2.0	NO RECOVERY
			SM	4.0	S-3	SS	20-26-23-20	49	2.0 / 2.0	Brown, moist, dense, fine to medium SAND, some silt, some fine to medium gravel, poorly-graded (SM)
5.0				6.0	S-4	SS	17-33-35-43	68	2.0 / 2.0	Brown, moist, very dense, fine to medium SAND and SILT, little fine to medium gravel, poorly-graded (SM)
	615			8.0	S-5	SS	39-38-39-20	77	1.4 / 2.0	Top 0.8 feet: Brown, wet, very dense, fine to medium SAND and SILT, little fine to medium gravel, poorly-graded (SM) Bottom 1.2 feet: Gray, wet, very dense, fine to coarse GRAVEL, some fine to coarse sand, little silt, poorly-graded (GP-GM) (WEATHERED BOULDER)
10.0		8.8 - 12.0ft WEATHERED COBBLES & BOULDER		10.0	S-6	SS	37-60-42-38	102	0.0 / 2.0	NO RECOVERY (Likely pushing piece of weathered boulder through sample interval)
	610	12.0 - 19.0ft SAND								
15.0			SP-SM	15.0	S-7	SS	19-24-19-21	43	0.2 / 2.0	Orange brown, wet, dense, fine to medium SAND, little silt, poorly-graded (SP-SM)
	605									17.0-19.0 ft: Advanced with augers to 19 feet bgs 19.0-20.0 ft: Casing set to 19 feet bgs and advanced with roller bit to 20 feet bgs 20.0 ft: Split spoon bounced on rock for 100 blows and 0 inches of penetration. 20.2-24.0 ft: Advanced through weathered rock with the roller bit from 20 feet bgs to 24 feet bgs
20.0		19.0 - 24.0ft WEATHERED BEDROCK (SCHIST)								
	600									
		24.0 - 34.0ft BEDROCK (SCHIST)		24.0	C-1	CORE	RQD = 37%	-	4.6 / 5.0	Gray, fine-grained, very strong, SCHIST with medium strong layer with high mica content from 24.2 feet bgs to 25.4 feet bgs, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to high angle dipping, open with gray silt infilling Average 3.4 fractures per foot Run times (minutes per foot): 1:53, 1:40, 2:11, 2:35, 3:42
25.0	595									
				29.0	C-2	CORE	RQD = 56%	-	5.0 / 5.0	Gray, fine-grained, strong, SCHIST with quartz veins from 20.6 to 30.9 feet bgs and 32.1 to 32.2 feet bgs, fresh with slightly weathered fractures, very closely to closely spaced, horizontal to moderately dipping, open Average 3.2 fractures per foot Run times (minutes per foot): 2:10, 2:19, 2:22, 2:31, 2:38
30.0	590									

Boring completed at 34.0 ft

Notes:
1. Boring terminated at 34 feet below ground surface (bgs)
2. Water level measured 10 minutes after the end of coring with the casing still in the ground
3. Upon completion the boring was backfilled with drill cuttings and sand to existing ground surface

Topsoil | USCS Silty Sand (SM) | Boulders and cobbles | USCS Poorly-graded Sand with Silt (SP-SM) | Highly weathered bedrock | Schist

D+W: Drive and Wash SH: Shelby Tube SSA: Solid Stem Auger AUG: Auger Cuttings PP: Pocket Penetrometer TV: Torvane

DRILLING COMPANY: New England Boring Contractors of CT. Inc.
DRILLER: Dave DeAngelis
DRILL RIG: Diedrich D-90

LOGGED BY: ATM
CHECKED BY: D. D'Angelo
DATE: 5/2/22

003B MANCHESTER NH GEOTECH SOIL/RX LOGO UCONN BORING LOGS.GPJ GOLDER NH 2011.GDT 6/21/22

Key to Soil and Rock Descriptions
Including Boring Log Terms and
Field Identification Information

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS (more than half of material is larger than No. 4 sieve size)	GRAVELS (more than half of coarse fraction is larger than No. 4 sieve size)	CLEAN GRAVELS (little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly-graded gravels, gravel sand mixtures, little or no fines.
		GRAVEL WITH FINES (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS (more than half of coarse fraction is smaller than No. 4 sieve size)	CLEAN SANDS (little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines
			SP	Poorly-graded sands, gravelly sand, little or no fines.
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures.
FINE-GRAINED SOILS (more than half of material is smaller than No. 200 sieve size)	SILTS AND CLAYS (liquid limit less than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (liquid limit greater than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
	HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils.

Desired Soil Observations: (in this order)

Color (Munsell color chart)
Moisture (dry, damp, moist, wet, saturated)
Density/Consistency (from above right hand side)
Name (sand, silty sand, clay, etc., including portions - trace, little, etc.)
Gradation (well-graded, poorly-graded, uniform, etc.)
Plasticity (non-plastic, slightly plastic, moderately plastic, highly plastic)
Structure (layering, fractures, cracks, etc.)
Bonding (well, moderately, loosely, etc., if applicable)
Cementation (weak, moderate, or strong, if applicable, ASTM D 2488)
Geologic Origin (till, marine clay, alluvium, etc.)
Unified Soil Classification Designation
Groundwater level

TERMS DESCRIBING DENSITY/CONSISTENCY

Coarse-grained soils (more than half of material is larger than No. 200 sieve): Includes (1) clean gravels; (2) silty or clayey gravels; and (3) silty, clayey or gravelly sands. Consistency is rated according to standard penetration resistance.

Modified Burmister System

Descriptive Term	Portion of Total
trace	0% - 10%
little	11% - 20%
some	21% - 35%
adjective (e.g. sandy, clayey)	36% - 50%

Density of Cohesionless Soils	Standard Penetration Resistance N-Value (blows per foot)
Very loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	> 50

Fine-grained soils (more than half of material is smaller than No. 200 sieve): Includes (1) inorganic and organic silts and clays; (2) gravelly, sandy or silty clays; and (3) clayey silts. Consistency is rated according to shear strength as indicated.

Consistency of Cohesive soils	SPT N-Value blows per foot	Approximate Undrained Shear Strength (psf)	Field Guidelines
Very Soft	WOH, WOR, WOP, <2	0 - 250	Fist easily Penetrates
Soft	2 - 4	250 - 500	Thumb easily penetrates
Medium Stiff	5 - 8	500 - 1000	Thumb penetrates with moderate effort
Stiff	9 - 15	1000 - 2000	Indented by thumb with great effort
Very Stiff	16 - 30	2000 - 4000	Indented by thumbnail
Hard	>30	over 4000	Indented by thumbnail with difficulty

Rock Quality Designation (RQD):

$$RQD = \frac{\text{sum of the lengths of intact pieces of core* > 100 mm}}{\text{length of core advance}}$$

*Minimum NQ rock core (1.88 in. OD of core)

Correlation of RQD to Rock Mass Quality

Rock Mass Quality	RQD
Very Poor	<25%
Poor	26% - 50%
Fair	51% - 75%
Good	76% - 90%
Excellent	91% - 100%

Desired Rock Observations: (in this order)

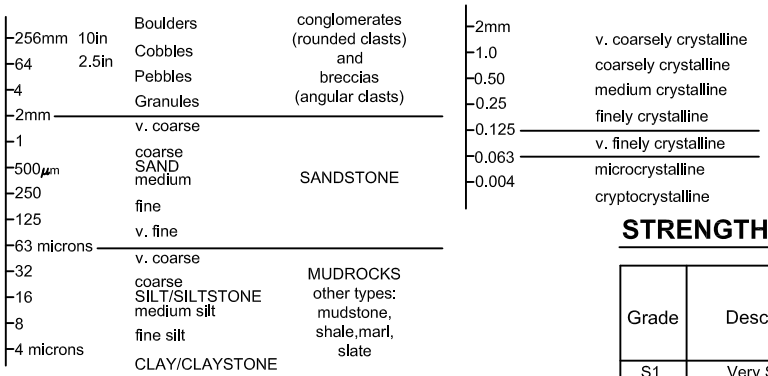
Color (Geological Society of America Rock Color Chart)
Texture (aphanitic, fine-grained, etc.)
Strength (ISRM Classification per Table A-2)
Lithology (igneous, sedimentary, metamorphic, etc.)
Hardness (very hard, hard, mod. hard, etc.)
Weathering (fresh, very slight, slight, moderate, mod. severe, severe, etc.)
Geologic discontinuities/jointing:
- -dip (horiz - 0-5, low angle - 5-35, mod. dipping - 35-55, steep - 55-85, vertical - 85-90)
- -spacing (very close - <5 cm, close - 5-30 cm, mod. close 30-100 cm, wide - 1-3 m, very wide >3 m)
- -tightness (tight, open or healed)
- -infilling (grain size, color, etc.)

Formation (Waterville, Ellsworth, Cape Elizabeth, etc.)
RQD and correlation to rock mass quality (very poor, poor, etc.)
ref: AASHTO Standard Specification for Highway Bridges 17th Ed. Table 4.4.8.1.2A
Recovery

ROCK MASS DESCRIPTION

Weathered State, Structure (foliated, flow banding, bedded, grading, sorting; dip of structure), Color, Grain/Crystal Size, Rock Material Strength, ROCK TYPE [FORMATION NAME], Other Characteristics (fracturing, veining, etc.)

GRAIN SIZE CLASSIFICATION



WEATHERING INDEX

Term	Description	Grade
Fresh	No visible sign of rock material weathering: perhaps slight discoloration on major discontinuity surfaces	I
Slightly Weathered	Discoloration indicates weathering of rock material and discontinuity surfaces. All rock material may be discolored by weathering and may be somewhat weaker externally then in its fresh condition.	II
Moderately Weathered	Less than half of the rock material is decomposed and/or disintegrated to a soil. Fresh or discolored rock is present either as a continuous framework or as corestones.	III
Highly Weathered	More than half of the rock material is decomposed and/or disintegrated to a soil. Fresh or discolored rock is present either as a discontinuous framework or as corestones.	IV
Completely Weathered	All rock material is decomposed and/or disintegrated to soil. The original mass structure is still largely intact.	V
Residual Soil	All rock material is converted to soil. The mass structure and material fabric are destroyed. There is a large change in volume, but the soil has not been significantly transported.	VI

FRACTURE SPACING

Fracturing	Spacing
Very Close	< 2 in
Close	2 to 12 in
Moderately Close	1 to 3 ft
Wide	3 to 10 ft
Very Wide	> 10 ft

BEDDING THICKNESS

Term	Criterion
Very thickly bedded	Thicker than 1m
Thickly bedded	30 - 100cm
Medium bedded	10 - 30cm
Thinly bedded	3 - 10cm
Very thinly bedded	1 - 3cm
Thickly laminated	0.3 - 1cm
Thinly laminated	Thinner than 0.3cm

MODIFIED CORE RECOVERY (RQD) AS AN INDEX OF ROCK QUALITY

RQD (%)	Description
0 - 25	Very Poor
25 - 50	Poor
50 - 75	Fair
75 - 90	Good
90 - 100	Excellent

STRENGTH INDEX

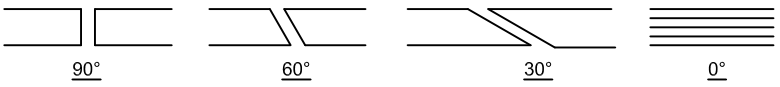
Grade	Description	Field Identification	Approximate Range of Uniaxial Compressive Strength (MPa)	(psi)
S1	Very Soft Clay	Easily penetrated several inches by fist	<0.025	<4
S2	Soft Clay	Easily penetrated several inches by thumb	0.025 - 0.05	4 - 7
S3	Firm Clay	Can be penetrated several inches by thumb with moderate effort	0.05 - 0.10	7 - 15
S4	Stiff Clay	Readily indented by thumb but penetrated only with great effort	0.1 - 0.25	15 - 35
S5	Very Stiff Clay	Readily indented by thumbnail	0.25 - 0.5	35 - 70
S6	Hard Clay	Indented with difficulty by thumbnail	>0.5	>70
R0	Extremely Weak Rock	Indented with thumbnail	0.25 - 1.0	35 - 150
R1	Very Weak Rock	Crumbles under firm blows with point of geological hammer, can be peeled by pocket knife	1.0 - 5.0	150 - 725
R2	Weak Rock	Can be peeled by pocket knife with difficulty, shallow indententations made by a firm blow of geological hammer	5.0 - 25	725 - 3500
R3	Medium Strong Rock	Cannot be scraped or peeled with a pocket knife, specimen can be fractured with single blow of geological hammer	25 - 50	3500 - 7500
R4	Strong Rock	Specimen requires more than one blow of geological hammer to fracture it	50 - 100	7500 - 15,000
R5	Very Strong Rock	Specimen requires many blows of geological hammer to fracture it	100 - 250	15,000 - 35,000
R6	Extremely Strong Rock	Specimen can only be chipped with geological hammer	>250	>35,000

NOTE: Grades S1 to S6 apply to cohesive soils, for example, clays, silty clays and combinations of silts and clays with sand, generally slow draining. Some rounding of the strength values has been made when converting to S.I. units.

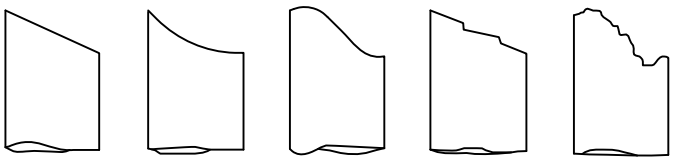
DISCONTINUITY DESCRIPTION

Depth, Dip Angle from Core Axis, Type, Shape, Roughness, Surface Description, Coating or Infilling (clean, stain, veneer, coating)

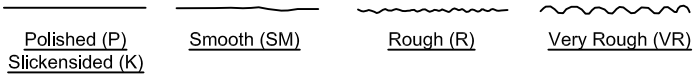
FRACTURE ORIENTATION WITH RESPECT TO CORE AXIS



DISCONTINUITY SHAPE CLASSIFICATION



DISCONTINUITY ROUGHNESS CLASSIFICATION



ABBREVIATIONS

Type		Shape		Roughness	
J	Joint	PL	Planar	P	Polished
F	Fault	C	Curved	K	Slickensided
S	Shear	U	Undulating	SM	Smooth
B	Bedding	ST	Stepped	R	Rough
FO	Foliation	I	Irregular	VR	Very Rough

Surface Description

CA	Calcite	Py	Pyrite	CO	Coal
CL	Clay	CHL	Chlorite	GR	Graphite
CT	Contact	MN	Manganese	SOL	Solutioning
Fe	Iron	CR	Carbon	W	Weathered
MI	Mica	SH	Shale	Mech	Mechanical

APPENDIX D

REPORT LIMITATIONS

Report Limitations

Explorations

1. The generalized subsurface profiles described in the text are intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil and bedrock transitions are probably more erratic. For specific information, refer to the boring logs.

2. In the event that any changes in the proposed general project development are planned the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed, and conclusions of this report modified or verified in writing by WSP.

Use of Report

3. This report has been prepared for the exclusive use of the University of Connecticut (UCONN) for specific application in reference to the proposed site redevelopment in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

4. The report is for use by our Client only. Others wishing to obtain a copy of the report may secure it only with the written authorization of our Client and then with the understanding that its scope is limited as stated in this report and is not applicable to any other use. It may not be relied upon by others for design or construction without further written concurrence by WSP.

APPENDIX I

FINANCIAL DISCLOSURE STATEMENT

University of Connecticut

Mansfield Apartments Redevelopment

University Planning, Design and Construction

3 Discovery Drive, Unit 6038

Storrs, Connecticut 06268

(860) 486-2776

www.updc.uconn.edu

September 2022

State of Connecticut
Department of Administrative Services

ENVIRONMENTAL CONSULTANT DISCLOSURE STATEMENT FORM

Project Title: **Environmental Impact Evaluation of University of Connecticut Mansfield Apartments Redevelopment Mansfield, CT**

I, Megan B. Raymond, hereby declare that neither SLR International Corporation nor any of its shareholders, principals or partners, as the case may be, has any financial interest in the outcome of the environmental study or the use of the property described above, and will not have such interest at any time during the term of the contract or task letter.

Authorized Signature: _____ **Date:** 9/19/22

Typed Name: **Megan B. Raymond**

Name of Firm: **SLR International Corporation**

Address of Firm: **195 Church Street, 7th Floor**
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