



# LOWELL REGIONAL WASTEWATER UTILITY

WASTEWATER COLLECTION AND TREATMENT



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**SUBJECT: CMOM Self-Assessment Checklist**

**DATE: 12/30/2022**

Mrs. King and Mr. Koopman

With this correspondence, the City of Lowell is submitting an updated CMOM Self-Assessment Checklist as part of the National Pollutant Discharge Elimination System requirement to properly operate and maintain Lowell's collection system.

The CMOM Self-Assessment serves as a thorough account and summary of the current status and performance of Lowell's wastewater collection system. Topics addressed in this report include an assessment of the collection system with respect to performance and I/I, past and planned measures related to overflow mitigation, organization structure and staffing, training, public communication and notification, collection system data management and information systems, legal authority, financing, odor control, safety, emergency preparedness and response, asset inspection, sewer cleaning and maintenance, inventory and energy use.

Should you have any questions, please do not hesitate to call me at 978-674-1604.

Respectfully,

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# 2022 CMOM Self Assessment

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## *Lowell Regional Wastewater Utility*



*NPDES Permit Number: MA0100633*

*Report Date: December 30, 2022*

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## 1. Introduction

Lowell Wastewater is a public utility located in Lowell, Massachusetts that owns, maintains and operates an extensive stormwater drainage system; a flood protection system; and a wastewater utility comprised by a large combined sewer system dating to the 1800s, newer separated conveyance systems, and a multi-modal wastewater treatment works that delivers efficient secondary-level treatment of dry-weather sewage flows as well as wet-weather flows up to 112 million gallons per day (MGD).

The purpose of Lowell's collection system is to protect public health and the environment by conveying sewage wastes to the Duck Island Wastewater Facility for treatment, and to prevent unnecessary property damage from flooding or sewer surcharging. The primary objectives of the Capacity, Management, Operation and Maintenance (CMOM) program are to ensure that all work necessary to provide maximum conveyance of wastewater to the treatment plant is performed in a timely manner and to industry standards.

## 2. Report Requirements and Layout

Through negotiations with EPA and Massachusetts DEP the City has agreed to voluntarily perform a CMOM self-assessment update as part of its National Pollutant Discharge Elimination System (NPDES) requirement to properly operate and maintain its sewer system.

The CMOM Program Self-Assessment was conducted in accordance with EPA's Guide for Evaluating CMOM Programs at Sanitary Sewer Collection Systems (EPA 305-B-05-002, January 2005), which is available on-line at

[http://www.epa.gov/npdes/pubs/cmom\\_guide\\_for\\_collection\\_systems.pdf](http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf). As part of the CMOM Program Assessment, the City completed and, hereby submits the Wastewater Collection System CMOM Program Assessment Checklist ("CMOM Program Self-Assessment Checklist"). The CMOM Program Self-Assessment specifically evaluates collection system improvements or operational measures which will reduce the risk of surcharge/overflow events, and resultant public health risks at/near areas with historical backup events, including the following areas: Raven/River Road, Eagle Court, Winward Road, Marginal Street, Bishop Street, the Lowell Boys and Girls Club, and an assessment of the Chelmsford Pump Station.

The CMOM Program Assessment Checklist is attached hereto as Appendix A. Assessment items that require future action are denoted with an "A" in the "\*Act" column, and full answers to each question are accessible via internal hyperlinks found in the "Response" column. Response to future actions will be provided as part of the City of Lowell's CMOM Corrective Action plan (CMOM CAP).

## 3. Executive Summary

This 2022 CMOM Self-Assessment serves as a thorough account and summary of the current status and performance of Lowell's wastewater collection system. Topics addressed in this report include an assessment of the collection system with respect to performance and I/I, past and planned measures related to overflow mitigation, organization structure and staffing, training, public communication and notification, collection system data management an information systems, legal authority, financing, odor control, safety, emergency preparedness and response, asset inspection, sewer cleaning and maintenance, inventory and energy use. Additional information and supporting documentation pertaining to and referenced within the 2022 CMOM Self-Assessment can be found in a series of appendices attached.

## 4. CMOM Self-Assessment Checklist

The following sections provide response to the questions contained within EPA’s Wastewater Collection System CMOM Program Assessment Checklist:

### I. General Information – Collection System Description

#### **Question I.1:**

*How many people are served by your wastewater collection system?*

Response: The City of Lowell’s population, per the 2020 US census, is 115,554 residents. In addition to local residents, Lowell’s collection system facilitates out-of-town flow from four neighboring communities: Chelmsford, Tyngsborough, Dracut, and Tewksbury. These communities total an additional 112,731 residents.

#### **Question I.2:**

*What is the number of service connections to your collection system? How many: Manholes? Pump stations? Feet (or miles) of sewer? Force mains? Siphons?*

Response: There are 24,564 service connections in Lowell. Out of all connections, 20,599 are residential, while 3,965 are non-residential. Additionally, Lowell Wastewater’s Industrial Pretreatment Program manages 34 Significant Industrial Users (SIUs). A full list of non-residential addresses can be found in Appendix B and SIUs can be found in Appendix G.

Lowell’s collection system is comprised of the following assets: 226 miles of gravity sewer; 5 miles of force main; 6,788 sewer manholes (of which 371 are buried); 14 pump stations; 47 force mains; and 6 siphons.

The following tables pertain to the composition of Lowell’s gravity sewers and force mains:

<b>Gravity Sewer</b>			
Length:	226 miles	1,192,800 feet	
Composition:	Material	Length (ft)	Percentage
	Vitrified Clay	362,000	30%
	Concrete	265,000	22%
	Asbestos Concrete	175,600	15%
	Brick	157,700	13%
	PVC	94,300	8%
	Other	14,200	2%
	Unknown	124,000	10%
Size:	Nominal Diameter	Length (ft)	Percentage
	8"	224,400	19%
	10"	202,000	17%
	12"	323,200	27%
	15"	97,500	8%

18"	53,600	4%
24"	24,600	2%
36"	25,200	2%
48"	22,100	2%
72"	4,400	0%
84"	16,000	1%
96"	11,700	1%
Other	164,500	14%
Unknown	23,600	2%

Table 1. Gravity Sewer Composition

Force Main			
Length:	5 miles	26,157 feet	
Composition:	Material	Length (ft)	Percentage
	HDPE	1,737	7%
	Cast Iron	1,887	7%
	Ductile Iron	10,209	39%
	PVC	7,956	30%
	Unknown	4,368	17%
Size:	Nominal Diameter	Length (ft)	Percentage
	1.25"	503	2%
	1.5"	554	2%
	2"	3,334	13%
	3"	2,531	10%
	4"	1,574	6%
	6"	2,883	11%
	8"	1,243	5%
	10"	4,589	18%
	16"	8,485	32%
	Unknown	461	2%

Table 2. Force Main Composition

**Question I.3:**

What is the age of your system (e.g., 30% over 30 years, 20% over 50 years, etc.)?

Response: The age of point and line features throughout the collection system is tracked in GIS as an attribute under the “Date Installed” field. The following table provides a breakdown of the age of Lowell’s gravity sewer mains, by decade.

Gravity Sewer		
Date Installed	Length (ft)	Percentage
Null	121,976	10.23%
1830s	409	0.03%
1840s	4,964	0.42%
1850s	17,627	1.48%
1860s	1,276	0.11%
1870s	101,346	8.50%
1880s	120,954	10.14%
1890s	136,721	11.46%
1900s	109,947	9.22%
1910s	104,098	8.73%
1920s	72,194	6.05%
1930s	67,185	5.63%
1940s	20,340	1.71%
1950s	93,579	7.85%
1960s	80,722	6.77%
1970s	56,600	4.75%
1980s	16,822	1.41%
1990s	12,691	1.06%
2000s	43,947	3.68%
2010s	9,266	0.77%
2020s	139	0.01%

*Table 3. Gravity Sewer Main Age*

#### **Question I.4:**

*What type(s) of collection system map is/are available and what percent of the system is mapped by each method (e.g., paper only, paper scanned into electronic, digitized, interactive GIS, etc.)? When were the map(s) last updated?*

Response: Paper records of the collection system, dating back to the late 1800s, were actively maintained and updated by the City's Engineering department until the early 1990s, and can still be found at City Hall. These paper records were scanned and digitized as PDF copies around 2007. Given the age, heavy-use, and fragility of these documents, paper/PDF records exist for ~86% of Lowell's collection system.

The Lowell Regional Wastewater Utility began talks with ESRI in 2006 to adopt a GIS platform for its collection system. With contracted help provided by CDM Smith, an interactive GIS database of the collection system was established in late 2007. This GIS platform is still actively maintained, and serves as the most accurate and complete representation of the collection system. Updates to the Lowell's GIS system are continuously being made by engineering staff and CMOM field personnel; a monthly reconcile of the City's GIS database is performed by the City's GIS Manager and Management Information Systems (MIS) department. It is estimated that comprehensive GIS records exist for ~90% of Lowell's collection system.

**Question I.5:**

*If you have a systematic numbering and identification method/system established to identify sewer system manhole, sewer lines, and other items (pump stations, etc.), please describe.*

Response: A systematic numbering and identification method/system is in place to identify and inventory physical assets of Lowell’s collection system. Lowell’s GIS Manager assigns a FacilityID to newly created features via an automated script during a monthly reconcile of the City’s GIS database. For point features (i.e. manhole), the FacilityID is comprised of a two-to-six letter identifier label, followed by a six-digit inventory number. For line features (i.e. sewer pipes), the FacilityID is a combination of the upstream and downstream point feature FacilityIDs that are stored in the line’s attribute table. In the event that a line is missing an upstream or downstream ID, a dash (-) is used as the missing FacilityID.

The following table contains a list of commonly used FacilityIDs pertaining to the collection system:

<b>Asset Type</b>	<b>FacilityID</b>
Drain Manhole	DMH-xxxxxx
Sewer Manhole	SMH-xxxxxx
Catch Basin	CB-xxxxxx
Outfall	OUTGPS-xxxxxx
Station	STA-xxxxxx
Drain Line	DMH-xxxxxx-DMH-yyyyyy
Sewer Line	SMH-xxxxxx-SMH-yyyyyy
Lateral Line	-CB-xxxxxx; -DMH-xxxxxx; etc.

*Table 4. Collection System GIS FacilityIDs*

**Question I.6:**

*Are “as-built” plans (record drawings) or maps available and used by field crews in the office and in the field?*

Response: Digital “as-built” plans exist for capital projects and private sewer work completed throughout the collection system. Paper “as-built” plans are kept in City Hall and Lowell Wastewater’s Engineering office, and are available to field crews, when needed. Field crews are equipped with iPads and have access to GIS maps of the collection system via ESRI’s ArcGIS Online Collector application. Additionally, Lowell employees are able to access an online GIS Utility viewer that is maintained by the City’s Management Information Systems (MIS) department. This viewer provides an overview of the city by parcel, and contains hyperlinks to scanned sewer tie cards.

**Question I.7:**

*Describe the type of asset management (AM) system you use (e.g. card catalog, spreadsheets, AM software program, etc.)*

Response: Lowell Wastewater primarily uses MP2 Enterprise to manage preventative and corrective maintenance work orders. Information is gathered from SCADA, Civic Plus, field observations, city planning activities, AGOL Survey123 documents, and other data gathering means are used to generate work orders created in MP2. Spreadsheets and GIS information are used to generate contractor work prioritization.

## II. Continuing Sewer Assessment Plan

### **Question II.1:**

*Under what conditions, if any, does the collection system overflow? Does it overflow during wet and/or dry weather? Has your system had problems with:  hydraulic issues,  debris,  roots,  Fats, Oils & Grease (FOG),  vandalism blockages resulting in manhole overflows,  basement backups,  other (specify)? Describe your system's history of structural collapses, and PS or force main failures.*

Response: Dry weather overflows are a rare occurrence in Lowell's collection system. During wet weather instances where the collection system experiences intense levels of inflow, collection system overflows can occur at nine (9) permitted CSO relief points along the banks of the Merrimack River, Concord River, and Beaver Brook. These overflows, more commonly referred to as combined sewer overflows, or CSOs, are regulated according to the Utility's NPDES permit. They activate when the available hydraulic capacity of the collection system's interceptor pipes are approaching their limits, and allowable flow through the Duck Island Wastewater Treatment Plant has been maximized. In 2021 these conditions were typically triggered during rain events with median total rainfall of 0.89 inches, and a peak hourly rainfall around 0.32 inches. An advanced SCADA system has been established throughout the collection system to monitor and optimize available hydraulic capacity in the collection system in order to minimize the occurrence of these CSOs.

Collection system overflows occur on occasion at unregulated structures (e.g. a manhole or catch basin). These overflows are typically caused when roots and/or Fats, Oils & Grease buildup create a hydraulic restriction in a pipe, and intense rain-related inflow exceeds the restricted available hydraulic capacity. A few locations in the collection system experience reoccurring overflows brought on by general hydraulic capacity limitations during wet weather that are unrelated to any the aforementioned causes.

There are no documented sewer system overflows stemming from structural collapses of manholes and pipes, pump station failures, or force main failures.

### **Question II.2:**

*How many SSOs have occurred in each of the last three calendar years? What is the most frequent cause?*

Response: A total of twenty-one (21) sanitary sewer overflows have occurred in Lowell's collection system in the last three calendar years. This is a truly excellent level of performance for the collection system. By year, the breakdown of these SSOs is as follows: seven SSOs occurred in 2020, ten SSOs occurred in 2021, and four SSOs have occurred in 2022.

The most frequent cause of SSOs in Lowell's collection system is inadequate capacity; which accounted for fifteen (15) of the reported surcharges. Additional information pertaining to these SSOs can be found as an attachment in Appendix C.

### **Question II.3:**

*Of those SSOs, how many basement backups occurred in each of the last three calendar years? How are they documented?*

Response: Three (3) of the aforementioned SSOs in Question II.2 were related to basement backups. Two (2) of these basement backups occurred in 2020 and one (1) occurred in 2022.

Lowell's collection system supervisor is made aware of any building and/or private property backups via citizen alerts submitted through the City's CivicPlus, and responds to them as quickly as possible. Upon arriving at the scene of the backup, the collection system supervisor surveys the area and inspects the collection system to determine if it is the source cause of the building and/or private property backup.

If it is determined that the collection system is the underlying cause of the backup, the collection system supervisor will stay and resolve the issue; additional in-house or contracted personnel may be called in to help remediate the issue and clean the affected area. Lowell Wastewater is not obligated to resolve building and property backups that stem from issues or blockages within a private sewer service lateral.

The collection system supervisor documents any response and investigatory results through the received CivicPlus notification, and more recently, through the use of a Survey123 form. This information is relayed to a staff engineer, who reports this issue following standard SSO reporting protocols.

**Question II.4:**

*What is the ratio of peak wet-weather flow to average dry-weather flow at the wastewater treatment plant (or municipal boundary for satellite collection systems)?*

Response: The ratio of peak wet-weather flow to average dry-weather flow at the Lowell Regional Wastewater Utility is 112MGD/32MGD.

**Question II.5:**

*What short-term measures have been implemented or plan to be implemented to mitigate the overflows? If actions are planned, when will they be implemented?*

Response: Lowell Wastewater has a short-term remedial protocol that it follows to mitigate reoccurring overflows in the collection system. As discussed in greater detail in Question III.C.3, upon arriving at the scene of an overflow, the Collection System Supervisor evaluates the situation to determine if the cause of the overflow is related to the municipal collection system or to a private sewer service. In the event where an overflow is caused by the collection system, the Collection System Supervisor will stay and resolve the issue. Additional personnel, including contracted services, may be called in when necessary. This usually entails removing a blockage and cleaning/disinfecting the site.

Shortly after the overflow has been resolved, the downstream sewer main is video inspected to assess the condition of the line, and see if the overflow was caused by a structural deficiency, or conveyance issue. In the event that a conveyance issue is found (e.g. root intrusion, grease blockage, etc.), a work order is placed to restore proper conveyance through the line. This follow up can consist of cleaning the line, cutting roots, or even CIPP lining the affected downstream main.

Once this initial follow up has been completed, the Engineering Supervisor and a Staff Engineer will review the nature of the overflow event, as well as collection system records for the affected area, to determine where best a level sensor should be deployed to monitor for signs of potential future overflows.

Lowell Wastewater uses these ADS ECHO level sensors to observe real-time flow levels passing through the collection system. These level sensors measure and collect level profiles over user-specified time intervals across an established deployment period. Data collected from these sensors is transmitted to an online viewing portal using a 4G SIM connection. These sensors utilize an advanced mounting feature that secures sensor alignment near the top of the manhole, allowing for quick deployment and easy maintenance. This method of secured mounting assures that consistent, high-quality data is being collected, while eliminating the likelihood of false alarms due to sensor disruption. Text and email alerts can be set such that an alert notification is sent out in real time when a set level threshold is breached. This “alarm level” is set to match the pipe crown height relative to the manhole floor depth from rim.

Lowell began to utilize these level sensors for targeted flow monitoring at various locations in the collection system with known surcharging issues. These sensors are typically deployed at, or just downstream of, a manhole experiencing repeated surcharge overflows. Sensors are continuously deployed and inspected both before and after heavy rain events. The data collected by these sensors provides for a better understanding of the duration and intensity of any captured surcharge and enables for a quicker real-time response from Lowell Wastewater to investigate, remediate and resolve surcharging issues as they happen. Furthermore, this data is also helpful in determining what further planned action may be needed to mitigate overflows at a specific location.

**Question II.6:**

*What long-term measures have been implemented or plan to be implemented to mitigate the overflows? If actions are planned, when will they be implemented?*

Response: In February 2002, the Utility submitted its first Long Term Control Plan (LTCP). This LTCP identified a phased program of improvements that was developed with the intent that the city assess its ongoing implementation of the Phase 1 program to identify the benefits and determine where additional work would provide the largest environmental benefit for the least cost.

As the largest investment in Phase 1, Lowell’s sewer separation projects resulted in miles of new drainage pipes, removing public and private inflow from combined sewer basins; aging sewer lines were rehabilitated to reduce infiltration and inflow (I/I) into Lowell’s combined sewer system. Lowell’s 2014 CSO LTCP summarized these completed sewer separation projects, shown in Table 5 below:

Sewer Separation Project Area	Approximate Acres Separated	Sewer Replaced (LF)	Sewer Rehabilitated (LF)	New Drainage (LF)
Varnum/LaPlume/West Meadow	30	1,500	0	4,100
Sixth and Emery	164	3,084	0	11,881
Weed Street and Wellman Street (Part 1)	103	5,443	8,810	15,004
Lincoln Street East, Lincoln Street West (Part 1) and Gorham Street South	282	7,031	5,984	20,271

Lincoln Street West (Part 2) and Wellman Street (Part 2) and Sewer Areas 24/25	320	3,845	4,530	28,716
Cabot Street Area & Third & Ellis	50	3,250	4,400	4,900
<b>Total</b>	<b>949</b>	<b>22,653</b>	<b>23,724</b>	<b>80,772</b>

*Table 5. 2014 CSO LTCP Summary of Completed Sewer Separation Projects*

Wet-weather operation investments coupled with treatment-facility process-control improvements culminated in the design and implementation of an automated High-Flow Management program (HFM) based on core principles of the Nine Minimum Controls specified in Lowell's 2005 NPDES wastewater permit: maximizing peak flow to the treatment facility by utilizing excess primary treatment capacity, and maximizing interceptor storage. The City's High-Flow Management program is incorporated by reference into Lowell's CMOM program as part of the Utility's proper operation and maintenance of the treatment works, as well as to satisfy the CSO Nine Minimum Control requirements.

Central to these efforts were upgrades to Diversion Structures intended to increase conveyance and utilize existing interceptor pipeline storage, including new control gates, instrumentation and SCADA equipment for remote operation and automated control of CSOs.

Treatment facility improvements at Duck Island were also completed, including gravity thickener and aeration blower upgrades that increased biological treatment capacity and performance.

Also implemented in this phase, the Utility developed and committed to an ongoing infiltration and inflow reduction program that included a sump pump disconnection program and significant investment in continual sewer rehabilitation projects throughout the City.

Planning for Phase 2 began in 2012 and was finalized in 2014. As in Phase 1, an adaptive management approach was taken to target expenditures to the greatest expected return on investment, evaluate the benefits of those improvements, and adjust planned projects based on the results of previous work.

In this phase, Lowell Wastewater committed to CSO control and critical capital improvement projects.

The Read Station Flow Control Structure, which allows additional inline wet-weather storage, was brought online in 2018. This structure is located near the Read Street diversion station, at a point where the North Bank interceptor has a significant drop from one interceptor pipe segment to the next. An actuated flow-control gate was installed upstream of this drop, in order to increase in-line storage capacity between Read and West stations. Upstream of the gate itself, a storage chamber with a capacity of approximately 0.75 MG was constructed, as well, and the site is under consideration for expansion to a screening and disinfection facility, as described in the ICIP.

Phase 2 remote station upgrades were designed to improve flow through some of the CSO diversion stations and increase reliability of communications and reporting between central SCADA servers and these stations. Substantial completion of the planned SCADA improvements was achieved in 2020, and additional programmatic cleanup work was finalized in 2021.

The City continues to make reasonable further progress toward controlling CSO discharges. Absent US EPA's renewal of the City's 2003 NPDES permit, discussions are ongoing with EOA and MassDEP regarding further phases of CSO control projects and activities.

**Question II.7:**

*Describe your preventive maintenance program; how do you track it (e.g., card files, electronically, with specific software)?*

Response: Lowell Wastewater's preventive maintenance program is led and co-managed by the Maintenance Manager and the Collection System Supervisor, and supported by members of the engineering department. Maintenance work is assigned and tracked through multiple commercial software packages, including CivicPlus, MP2, ArcGIS Online applications, and DoForms.

Information obtained as a result of the preventive maintenance program is recorded and stored using ArcGIS Collector and Survey123 applications.

**Question II.8:**

*How do you prioritize investigations, repairs and rehabilitation? What critical and priority problem areas are addressed more frequently than the remainder of your system? How frequently are these areas evaluated?*

Response: Manhole and catch basin repair work is prioritized based on reported and assessed condition. Point structures that show signs of heavy structural deterioration, whose frames are sinking in, and/or are on the verge of collapsing are rated as "imminent failure" and receive expedited attention by the on-call repair services contractor.

Line repair work is prioritized based on structural ratings and criticality that are determined during video inspection. Lines are cleaned on an as needed basis, however, lines that are inspected and are observed to have conveyance issues (e.g. stagnant flow, grease blockages, oil buildup, etc.) are deemed potentially problematic, and are added to a reoccurring cleaning schedule that is managed through MP2 work order assignments for priority cleaning status.

Additionally, the City's paving program is taken into consideration when prioritizing investigations, repairs and rehabilitation. Described in greater detail in Question V.B.2, this paving program calls for a five-year road work moratorium following the resurfacing of roads in the City. Collection system infrastructure that falls within the extents of annual paving work is assessed, and if necessary repaired, ahead of the proposed paving work and subsequent moratorium period.

Catch basins are cleaned system wide by neighborhood. Certain areas in Lowell are known to experience greater amounts of sediment and debris on the road; catch basins in these areas are prioritized and cleaned more frequently.

All preventative maintenance work is prioritized foremost with respect to public safety. Other factors, including assessed condition, location, and age, are considered when prioritizing maintenance work. Additionally, CivicPlus requests are prioritized with respect to the order in which the request was received.

Chronic problem areas are viewed as areas of the collection system that are subject to conveyance issues, repeated backups, and/or surcharges. Typically, these are areas that have sewer lines with observed conveyance issues (e.g. stagnant flow, flat pitch, grease blockages, oil buildup, etc.) and/or reoccurring sewer surcharges.

Lowell Wastewater identifies sewer lines that have chronic problems through video inspections. Lowell's Collection System Supervisor manages an in-house camera truck staffed by two full-time CCTV inspectors to regularly inspect sewer lines throughout the collection system. Lines that are inspected and are observed to have conveyance issues are deemed potentially problematic, and are added to a scheduled cleaning regiment that is tracked and managed by the Maintenance Manager and Collection System Supervisor via MP2 work order software. A list of these areas, based on the cleaning assignment, exist on the MP2 platform. Cleaning frequency is typically set at once per quarter.

Lowell Wastewater's response to a sewer surcharge is outlined in Question II.5, and as mentioned, a level sensor will be installed in the downstream manhole post event to continuously monitor this problem area.

**Question II.9:**

*Are septage haulers required to declare the origin of their "load"? Are records of these declarations maintained? Do any of the declarations provide evidence of SSOs?*

Response: Lowell Wastewater accepts septage from in and out of the service area. Septage haulers transport and dispose septage loads directly to the headworks at Duck Island; as such, Lowell's collection system is not impacted by these septage loads. Manifests are required to be maintained by the haulers and will be inspected at the Utility's discretion. Since the collection system is not affected by hauled septage, these manifests are not utilized to identify potential SSOs.

**III.A. Collection System Management Organizational Structure**

**Question III.A.1:**

*Provide an organizational chart that shows the overall personnel structure for collection system operations, including operation and maintenance staff.*

Response: An organizational chart depicting authorities and positions of all staff at Lowell Wastewater is provided in Figure 1 below. Positions that have responsibilities related to collection systems operations are shown in green, with gradient representative to the percentage of time dedicated to the collection system, as described in Question III.A.3.

In addition to these positions, Lowell Wastewater hires outside contractors for various collection system maintenance activities; this is described in greater detail in Question III.A.5.

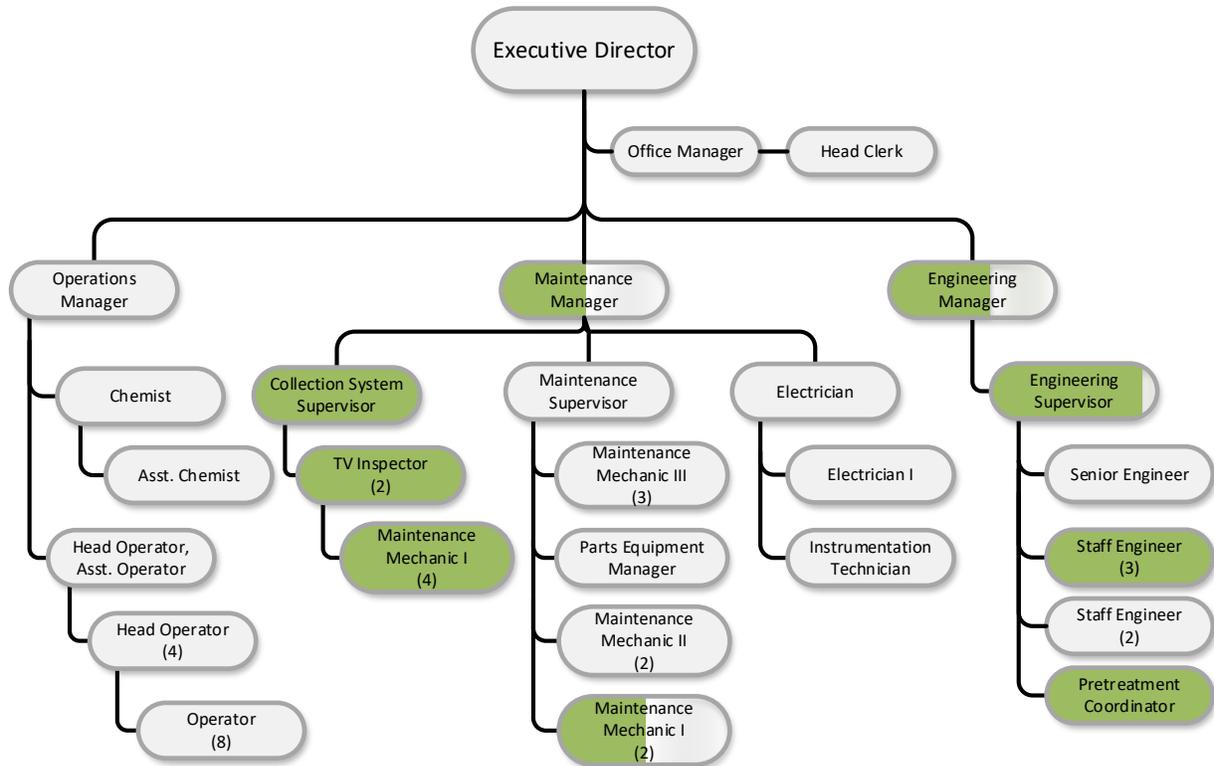


Figure 1. Lowell Wastewater Organizational Chart

**Question III.A.2:**

For which jobs do you have up-to-date job descriptions that delineate responsibilities and authority for each position?

Response: Job descriptions are maintained by the Office Manager and include the nature of the work performed, minimum requirements for the position, special qualifications and certifications or licenses that are required. Advancement through the ranks is encouraged through multiple practices, including: educational reimbursement for advanced degrees; annual stipends for certifications achieved and maintained; and preferential notice of and consideration for open positions. Such practices allow Lowell to retain talented workers with critical system knowledge and experience, and to place high-performing individuals in charge of critical programs like CMOM.

Copies of these job descriptions can be found in Appendix D.

**Question III.A.3:**

How many staff members are dedicated to collection system maintenance? Of those, how many are responsible for any other duties, (e.g., road repair or maintenance, O&M of the storm water collection system)? If so, describe other duties.

Response: Below is a breakdown of the position title (description in III.A.2) and number of positions assigned to the collection system. The percentage indicated next to the position indicates the percent of time dedicated to the collection system:

- Maintenance Manager (1) – 50%
- Collection System Supervisor (1) – 100%

- Mechanic I (4) – 100%
- Mechanic I (2) – 50%
- TV Inspector (2) – 100%
- Pretreatment Coordinator (1) – 100%
- Engineering Manager (1) – 60%
- Engineering Supervisor (1) – 90%
- Staff Engineers (3) – 100%

**Question III.A.4:**

*Are there any collection system maintenance position vacancies? How long has the position(s) been vacant?*

Response: One Mechanic I position is vacant. This position has been vacant since March 2022.

**Question III.A.5:**

*For which, if any, maintenance activities do you use an outside contractor?*

Response: Outside contractors are used for various collection system related maintenance activities. This work includes small-to-medium sized replacement and repair work, catch basin cleaning, sewer line cleaning, CIPP lining, and street sweeping.

The Utility has contracted DeFelice Construction for on-call repair services. Rapid Flow handles heavy cleaning, and emergency on-call response work when in-house staff are unavailable. National Water Main currently holds the contract for CIPP lining projects. BMC has been contracted to supplement in-house catch basin cleaning. Bi-annual street sweeping is coordinated with the City's DPW department.

**Question III.A.6:**

*Describe any group purchase contracts you participate in.*

Response: Lowell Wastewater does not participate in any CMOM related group purchase contracts.

**III.B. Collection System Management: Training**

**Question III.B.1:**

*What types of training are provided to staff?*

Response: Lowell Wastewater provides an annual safety training program which covers CPR, AED, slips and falls, fire prevention, confined space entry, Lock-out Tag-out, Spill Response and HAZWOPER, Right-to-Know, Emergency Response, and more. New hires receive a condensed safety training session that covers all topics that are normally spread out through the year.

Additionally, collections systems maintenance employees are required to receive hoisting engineer and CDL driver certifications. These certifications, while not held Additional certification trainings (e.g. collection system operator licenses) are offered on an as requested basis upon manager approval, and are incentivized via annual stipends for certifications achieved and maintained.

For positions that require licenses with annual training credit hours (TCHs), Lowell provides reimbursement for training and flexibility for staff to attend necessary training during work hours if properly planned.

**Question III.B.2:**

*Is training provided in the following areas: general safety, routine line maintenance, confined space entry, MSDS, lockout/tagout, biologic hazards, traffic control, record keeping, electrical and instrumentation, pipe repair, public relations, SSO/emergency response, pump station operations and maintenance, trench/shoring, other (describe)?*

Response: Training is provided in the following specified areas: general safety, confined space entry, MSDS, lockout/tagout, biologic hazards, electrical and instrumentation, SSO/emergency response, hydraulics, pump station operations and maintenance, trenching and shoring, hoisting, and commercial driver's license training.

**Question III.B.3:**

*Which training requirements are mandatory for key employees?*

Response: Safety training is mandatory for all Lowell Wastewater employees. Specified trainings are required for positions that require job-specific licenses.

**Question III.B.4:**

*How many collection system employees are certified (e.g, NEWEA certification program) and at what grade are they certified?*

Response: 8 of the 16 employees identified in III.A.3 have a collection system certification. The breakdown is as follows:

- Grade 2 – 2 employees
- Grade 3 – 1 employee
- Grade 4 – 5 employees

25 of the 47 employees for the entire Utility have a collection system certification. The breakdown is as follows:

- Grade 2 – 7 employees
- Grade 3 – 1 employee
- Grade 4 – 17 employees

**III.C. Collection System Management: Communication and Customer Service**

**Question III.C.1:**

*Describe your public education/outreach programs (e.g., for user rates, FOG, extraneous flow, SSOs etc.)?*

Response: Lowell Wastewater's public education/outreach programs are largely spearheaded by MS4 requirements, and therefore focus more on stormwater messaging than on CMOM messaging. Template fliers are available to the public upon request. Additionally, collection system personnel have been labeling catch basins in an effort to promote a better understanding of the purpose that this infrastructure has in facilitating flow, and remediating street flooding.

**Question III.C.2:**

*What are the most common collection system complaints? How many complaints have you received in each of the past three calendar years?*

Response: Catch basin cleaning, sewer back-ups, and street flooding issues are the most common complaints received. The breakdown of the total complaints compiled in Civic Plus over the last three calendar years is as follows:

- 2019 = 506
- 2020 = 450
- 2021 = 422

**Question III.C.3:**

*Are formal procedures in place to evaluate and respond to complaints?*

Response: Citizens are able to file a complaints and/or report any collection system issues via the city website's CivicPlus request tracker. This tracker is accessed by following the "Report a Concern" link found on the website homepage (<https://lowellma.gov/requesttracker.aspx/>). The form accessed via this tracker provides a template for the filer to provided information related to the problem, as well as contact information (<https://www.lowellma.gov/forms.aspx?fid=165>).

Citizens can also notify Lowell Wastewater of a complaint or issue by calling the front office phone number (978-674-4248). A CivicPlus request is then filed by the office manager, or head operator on shift, depending on the time of the call 24/7.

Submitted requests generate an automated email alert to the maintenance manager and collection system supervisor, who relay the alert to an appropriate staff member for response. For CMOM related complaints/issues, the Collection System Supervisor is first to be notified.

Upon arriving at the scene of the issue, the Collection System Supervisor evaluates the situation via deductive investigation to determine if the root cause of the issue is related to the municipal collection system or the private sewer service. In the case where an issue is caused by the collection system, the Collection System Supervisor will stay and resolve the issue. Additional personnel, including contracted services, may be called in when necessary. The Collection System Supervisor will document the resolution in a response section found on the initial alert notice, prompting an automated email containing the resolution to be sent to the person who filed the initial complaint.

**Question III.C.4:**

*How are complaint records maintained (e.g, logs, spreadsheets)? How are complaints tied to emergency response and operations and maintenance programs?*

Response: Complaint records are stored via the City of Lowell's CivicPlus request registry and can be downloaded as a csv dataset as needed. These complaint records serve as the official notice for work requests related to system emergency response and operations and maintenance programs.

### **III.D. Collection System Management: Management Information Systems**

#### **Question III.D.1:**

*How do you manage collection system information? (Commercial software package, spreadsheets, data bases, SCADA, etc). What information and functions are managed electronically?*

Response: Collection system information is managed by the Maintenance Manager and Collection System Supervisor, with support from Lowell Wastewater engineering staff, using digital management software, including: GIS, ArcGIS Online applications (Collector, Survey123, Workforce), CivicPlus, MP2 software, GraniteNet, DoForms, SCADA, Hach WIMS, and Excel spreadsheets.

Information related to collection system infrastructure, including location, age, material and condition is stored GIS and companion ArcGIS Online applications. Complaint records and work orders are managed using CivicPlus, while recurring preventative maintenance is managed through MP2 software. GraniteNet is a software platform that is used to record and manage video inspections. DoForms are used to conduct routine inspections and that various remote facilities located throughout Lowell's collection system. A combination of SCADA and Hach WIMS allows for the real-time remote management of the collection system as a whole. Information collected through the aforementioned software packages can be compiled and tabulated using Excel spreadsheets.

#### **Question III.D.2:**

*What procedures are used to track and plan collection system maintenance activities?*

Response: Collection system maintenance activities are planned as a collaborative effort between CMOM related personnel, led by the Maintenance Manager and Collection System Supervisor. Planned maintenance activities stem from the requests received through CivicPlus, by situational requests submitted directly from staff engineers, and from reoccurring work orders scheduled using MP2. Emergency repair work is not typically planned; hence it being an emergency.

Collection system maintenance activities are tracked using specially designed web maps accessible through ArcGIS Collector. Details and information related to these individual maintenance activities are recorded using ArcGIS Survey123. Video inspection results are collected and recorded using GraniteNet software, while reoccurring satellite facility inspections are recorded using DoForms software.

#### **Question III.D.3:**

*Who is responsible for establishing maintenance priorities? What records are maintained for each piece of mechanical equipment within the collection system?*

Response: The Maintenance Manager and Collection System Supervisor coordinate and establish maintenance priorities. Biweekly meetings are held between upper-level collections system staff, city engineers, and water distribution staff, and serve as a forum to discuss ongoing collection system work and maintenance priorities.

Equipment O&M manuals are kept digitally in the Utility's shared drive that is hosted on the City's network. Mechanical equipment at pump stations are inspected by a Mechanic I on a daily basis; mechanical equipment at diversion stations are inspected on a weekly basis. Digital records of each inspection are collected using an iPad equipped with DoForms software. Once

collected, a copy of the inspection record is sent to the Maintenance Manager, Operation Manager, and Engineering Manager. Copies of these records are stored on the Utility's shared drive.

**Question III.D.4:**

*What is the backlog for various types of work orders?*

Response: There exists an occasional backlog of small repair work orders, however, this is namely due to contractor availability, and is quickly resolved. There is also a planning list of CIPP lining work. Additionally, repair work identified by of TV inspections is added to the list of ongoing work to be addressed.

**Question III.D.5:**

*How do you track emergencies and your response to emergencies? How do you link emergency responses to your maintenance activities?*

Response: Emergency work, and Lowell Wastewater's response to emergencies, are tracked in the same manner as public complaints and other maintenance requests: through the City's Civic Plus request tracker. Emergency calls are received by the Head Operator on duty, who will file a maintenance request in CivicPlus, and coordinate with the Collection System Supervisor to call in any additional personnel needed to resolve the emergency.

**Question III.D.6:**

*What written policies/protocols do you have for managing and tracking the following information: complaint work orders, scheduled work orders, customer service, scheduled preventative maintenance, scheduled inspections, sewer system inventory, safety incidents, emergency responses, scheduled monitoring/sampling, compliance/overflow tracking, equipment/tools tracking, parts inventory?*

Response: LRWWU utilizes MP2 enterprise software to issue and track work orders. The software will provide a list and length of open work orders. Corrective maintenance work orders are entered in by staff when a problem arises. Citizen complaint responses are tracked through Civic Plus portal, either entered in by citizens directly or will be entered in by staff when they receive a call or email. This allows assigners to follow up on the issue and comments are entered so the citizen can see the status of the solution in real time. The Utility also utilizes DoForms to schedule and maintain a record of structure checklist workflows. Safety incidents and emergency response are tracked through injury report forms to document the issue and follow up if the injury relates to lost time. All inventory (spare parts, tools, equipment, etc.) is stored in a locked room that is managed by the equipment manager. The equipment manager will sign out/in parts and tools as needed for assigned work orders.

**III.E. Collection System Management: SSO Notification Program**

**Question III.E.1:**

*What are your procedures, including time frames, for notifying state agencies, health agencies, regulatory authorities, and the drinking water authorities of overflow events?*

Response: Lowell Wastewater follows the reporting procedures outlined in the newly passed 314 CMR 16.00. Initial notification to the public is made via email and text alert within two hours of the overflow start time or discovery. Downstream users and regulatory authorities are required to be

recipients of this notification.

Update notifications are issued every eight hours to inform whether or not the overflow event is still ongoing, or if it has ceased. Lowell Wastewater sends additional updates within two hours when there is a change in overflow activity at one of the regulated outfalls.

These notifications are created and distributed using Everbridge software. Wastewater engineering staff developed template messages specific for the aforementioned overflow scenarios, which Operations staff update with the relevant information pertaining to each event. Once input, Everbridge software compiles the information, populates the template and distributes the notification alert.

The City website is updated within one business day detailing the overflow event. An initial overflow report is uploaded to MassDEP's website within eighteen hours of the start of the event. Detailed reports summarizing the overflow are uploaded to MassDEP's website on a monthly basis.

In the event that an SSO does not discharge to a waterbody, and 314 CMR 16.00 regulations are not in effect, Lowell Wastewater will notify MassDEP and EPA of this type of overflow within 24 hours of discovery. A follow-up email detailing the overflow, including a completed copy of MassDEP's Sanitary Sewer Overflow (SSO)/Bypass Notification Form is submitted within 10 days of the initial notice.

**Question III.E.2:**

*Do you use the state standard form for recording/reporting overflow events? If not, provide a sample copy of the form that is used.*

Response: Standard email templates have been developed to report overflow events via Everbridge. Overflow data is recorded using WIMS software, and compiled to fit into these standard templates.

MassDEP's Sanitary Sewer Overflow (SSO)/Bypass Notification Form is used to record and report sanitary sewer overflow events that do not discharge to a waterbody.

Templates for all reporting forms can be found in Appendix E.

**III.F. Collection System Management: Legal Authority**

**Question III.F.1:**

*Are discharges to the sewer regulated by a sewer use ordinance (SUO)? Does the SUO contain procedures for controlling and enforcing the following:  FOG;  Infiltration/ Inflow (I/I);  building structures over the sewer lines;  storm water connections to sanitary lines;  defects in service laterals located on private property;  sump pumps?*

Response: Yes, certain discharges to the sewer system are regulated by Lowell's City Ordinance. The Ordinance can be found in Appendix F.

The following sections of the ordinance outline regulations prohibiting or regulating discharges to the collection system:

- § 272-38 Surface runoff and groundwater

- § 272-42. Uncontaminated waters excluded from sanitary sewer
- § 272-43. Discharge of surface drainage and industrial cooling water.
- § 272-44 Prohibited discharges
- § 272-45 Discharges which cause pass-through or interference
- § 272-47. Grease, oil and sand interceptors.
- § 272-53. Industrial discharge permit.
- § 272-73. Compliance with pretreatment standards.

**Question III.F.2:**

*Who is responsible for enforcing various aspects of the SUO? Does this party communicate with your department on a regular basis?*

Response: The Executive Director and his/her assigned designee is responsible for enforcing the SUO. The staff members identified in III.A.3 as well as the Sanitary Code Enforcement Inspector will notify the Executive Director of any violation that has occurred.

**Question III.F.3:**

*Summarize any SUO enforcement actions/activities that have occurred in the last three calendar years.*

Response: Three (3) Significant Industrial Users (SIUs) were cited for non-compliance in 2021, two (2) Significant Industrial Users (SIUs) were cited for non-compliance in 2020, three (3) Significant Industrial Users (SIUs) were cited for non-compliance in 2019.

**Question III.F.4:**

*Do you have a program to control FOG entering the collection system? If so, which of the following does it include:  permits,  inspection  enforcement? Are commercial grease traps inspected regularly and who is responsible for conducting inspections?*

Response: The Sewer Use Ordinance identifies/quantifies what FOG is in § 272-45.B.(1). Grease traps are inspected on a corrective action basis by the Pretreatment Coordinator and the Sanitary Code Enforcement Inspector and follow up to the onsite inspection is done by the Executive Director or his/her designee.

**Question III.F.5:**

*Is there an ordinance dealing with storm water connections or requirements to remove storm water connections?*

Response: Below is the current language in the SUO ordinance dealing with storm water connections:

§ 272-42. Uncontaminated waters excluded from sanitary sewer. [Amended 12-13-1988] No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, and uncontaminated cooling water to any sanitary sewer without expressed permission by the Executive Director of the Lowell Regional Wastewater Utility.

**Question III.F.6:**

*Does the collection system receive flow from satellite communities? Which communities? How are flows from these satellite communities regulated? Are satellite flow capacity issues periodically reviewed?*

Response: The plant receives flow from four towns – Chelmsford, Dracut, Tewksbury and Tyngsboro. Each community has an allotment of flow and regulations are identified in their Inter-municipal Agreement with Lowell.

- Chelmsford 3.01 MGD
- Dracut 3.60 MGD
- Lowell 21.06 MGD
- Tewksbury 4.25 MGD
- Tyngsborough 0.08 MGD

All communities are continuously metered at major entry points to Lowell. Lowell maintains the flow meters for all flow Tewksbury, Dracut, and Tyngsborough entering Lowell. Chelmsford manages their own flow meters and Lowell participates in the yearly calibration of all their meters. Flow that enters the system from unmetered lines are identified and billed based on water usage as tracked by respective water billing departments. No communities have exceeded their flow allotment, as determined by yearly billing.

**Question III.F.7:**

*Does the collection system receive flow from private collection systems? If yes, how is flow from these private sources regulated? How are overflows dealt with? Provide details, including contact information for these private systems.*

Response: In addition to the satellite communities specified in Question III.F.6, Lowell’s collection system receives flow from thirty-three (34) active permitted Significant Industrial Users (SIUs). These SIUs are monitored through the Utility’s longstanding Industrial Pretreatment Program (IPP), which was designed to prevent the introduction of contaminants into the collection system. A full list of active SIUs can be found in Appendix G.

SIUs are required to install adequate flow metering and sampler interface equipment as part of the permit application/renewal process. Median flow across all SIUs is 17,500 GPD. During permit renewals, IPP personnel assess the efficacy of existing monitoring requirements. The basis of this assessment is the performance of baseline monitoring for each permit renewal. A review of historical sampling results and the new baseline data is also utilized to assess the monitoring requirements, and adjust them if necessary.

Monitoring efforts are led by the Pretreatment Coordinator, and consist of annual unannounced visits to each permittee, during which a facility inspection and IPP sampling are performed. IPP monitoring is intended to enhance industry self-monitoring, and verify permittee compliance with local and federal limits.

IPP personnel work in conjunction with the Lowell Fire Department Hazmat Team and are trained in spill response and clean up. Spills that occur at these SIU sites are typically small, and can be contained before any major damage is caused to the collection system or surrounding area. In the event that a spill impacts a surface waterbody, 314 CMR 16.00 reporting procedures would be followed. In the event of an overflow occurring in the private collection system, if it is determined that the root cause of the overflow is attributed to Lowell’s municipal collection system, then the event would be reported following the protocol outlined in Question III.E.1. If the cause of the overflow is due to an issue with the private collection system, then it is viewed as the responsibility of the SIU permittee to report the incident.

## IV.A. Collection System Operation: Financing

### **Question IV.A.1:**

*Has an enterprise (or other) fund been established and what does it include: wastewater collection and treatment operations; collection system maintenance; long-term infrastructure improvements; etc.? Are the funds sufficient to properly fund future system needs?*

Response: LRWWU operates through an enterprise fund system that supports all wastewater collection and treatment operations, all collection system maintenance, and all infrastructure improvements. The current sewer rate will not support future long term capital improvements. A rate model has been developed to support long term infrastructure improvements, which will increase sewer rates.

### **Question IV.A.2:**

*How are rates calculated (have you done a rate analysis)? What is the current sewer charge rate? When was it last increased? How much was the increase?*

Response: Rates are calculated based on generating necessary revenues for 15% in retained earnings at the end of each fiscal year. Lowell is currently undergoing a sewer rate study looking at a 5-year horizon to calculate sewer rates. Lowell has 10% retained earnings, but future capital projects will create a deficit unless the sewer rate is increased over future years. Lowell increased their sewer rate last on July 1st, 2022 by 5%.

CITY OF LOWELL SEWER RATES			
YEAR	RATE (\$/1 HCF)	YEARLY COST @ 80 HCF	YEARLY COST @ 120 HCF
4/1/1978	\$0.600	\$48.00	\$72.00
1/1/1984	\$0.670	\$53.60	\$80.40
5/1/1985	\$0.820	\$65.60	\$98.40
8/23/1988	\$1.240	\$99.20	\$148.80
7/1/1994	\$1.390	\$111.20	\$166.80
7/1/1996	\$1.501	\$120.08	\$180.12
4/1/1999	\$1.766	\$141.28	\$211.92
10/1/2000	\$1.819	\$145.52	\$218.28
7/1/2003	\$2.039	\$163.12	\$244.68
7/1/2004	\$2.440	\$195.20	\$292.80
1/1/2009	\$2.708	\$216.64	\$324.96
1/1/2013	\$2.843	\$227.44	\$341.16
7/1/2013	\$2.985	\$238.80	\$358.20
7/1/2014	\$3.194	\$255.52	\$383.28
7/1/2015	\$3.418	\$273.44	\$410.16
7/1/2016	\$4.170	\$333.60	\$500.40
7/1/2017	\$4.545	\$363.60	\$545.40
7/1/2018	\$4.681	\$374.48	\$561.72

7/1/2020	\$4.845	\$387.60	\$581.40
7/1/2022	\$5.087	\$415.48	\$632.00

Table 6. Lowell Sewer Rates

**Question IV.A.3:**

*What is your O&M budget?*

Response: Below are the last three fiscal year O&M budgets and the current FY2023 budget. It is worth noting these values include total O&M for all plant and collection systems work over each fiscal year; it is not just a CMOM specific O&M budget.

- Fiscal Year 2023: \$14,286,449
- Fiscal Year 2022: \$12,930,344
- Fiscal Year 2021: \$11,509,397
- Fiscal Year 2020: \$11,142,097

**Question IV.A.4:**

*If an enterprise fund has not been established, how are collection system maintenance operations funded?*

Response: N/A: Lowell has an established enterprise fund.

**Question IV.A.5:**

*Does a Capital Improvement Plan (CIP) that provides for system repair/replacement on a prioritized basis exist? What is the collection system's average annual CIP budget?*

Response: There is no Capital Improvement Plan that provides for system repair/replacement on a prioritized basis. Funding for this type of work, namely repairs and lining, is allocated through the Utility's O&M budget. The average annual budget for this type of work \$1.25 million.

**Question IV.A.6:**

*How do you account for the value of your system infrastructure for the Government Accounting Standards Board standard 34 (GASB 34)?*

Response: The City of Lowell's collection system is accounted for within the City's total statement of net position, which is calculated by the Chief Financial Officer and City Auditor, with assistance from outside consultants, in compliance with GASB standards. A report on examination of basic financial statements was issued on June 30, 2021.

## **IV.B. Collection System Operation: Hydrogen Sulfide Monitoring and Control**

**Question IV.B.1:**

*Are odors a frequent source of complaints? How many have been received in the last calendar year?*

Response: Odor complaints in the collection system are a rare and infrequent occurrence. There have been two complaints pertaining to collection system odors received in the last calendar year.

**Question IV.B.2:**

*Do you have a hydrogen sulfide problem, and if so, do you have corrosion control programs? What are the major elements of the program?*

Response: Frequent flushing and low detention times of Lowell's combined sewerage collection system helps prevent hydrogen sulfide and corrosion problems from forming. Video inspection results, in which corrosion issues are rarely identified, support this claim. As such, current evidence is indicative of there being no known hydrogen sulfide problem in the collection system.

**Question IV.B.3:**

*Does your system contain air relief valves at the high points of the force main system? How often are they inspected? How often are they exercised?*

Response: There are no known air relief valves on city owned force mains.

**IV.C. Collection System Operation: Safety**

**Question IV.C.1:**

*Do you have a formal Safety Training Program? How do you maintain safety training records?*

Response: Lowell Wastewater provides an aggressive safety training program which includes CPR, AED, slips and falls, fire prevention, confined space entry, Lock-out Tag-out, Spill Response and HAZWOPER, Right-to-Know, Emergency Response, and more.

Safety training is done by an outside contractor who is certified to teach on safety matters and all trainings are customized to fit the safety areas/concerns related to the Utility. Employees receive TCHs (training contact hours) from an accredited source.

All records are maintained by the safety committee and are stored electronically on a shared drive. Records include sign-in sheets of safety trainings, power point presentations and/or videos of the trainings, tests completed during training, and certificates of training hours. In addition to digital copies printed copies of the certifications are also kept on hand in designated file cabinets located in the engineering building.

**Question IV.C.2:**

*Which of the following equipment items are available and in adequate supply:  rubber/disposable gloves;  confined space ventilation equipment;  hard hats,  safety glasses,  rubber boots;  antibacterial soap and first aid kit;  tripods or non-entry rescue equipment;  fire extinguishers;  equipment to enter manholes;  portable crane/hoist;  atmospheric testing equipment and gas detectors;  oxygen sensors;  H2S monitors;  full body harness;  protective clothing;  traffic/public access control equipment;  5-minute escape breathing devices;  life preservers for lagoons;  safety buoy at activated sludge plants;  fiberglass or wooden ladders for electrical work;  respirators and/or self-contained breathing apparatus;  methane gas or OVA analyzer;  LEL metering?*

Response: The following items are available and in adequate supply: rubber/disposable gloves; confined space ventilation equipment; hard hats, safety glasses, and rubber boots; antibacterial soap and first aid kits; tripods or non-entry rescue equipment; fire extinguishers; equipment to enter manholes; portable crane/hoist; atmospheric testing equipment and gas detectors; oxygen sensors; H2S monitors; full body harnesses; protective clothing; traffic/public access control

equipment; life preservers; safety buoys; fiberglass and wooden ladders for electrical work; methane gas or OVA analyzer; LEL metering.

#### **IV.D. Collection System Operation: Emergency Preparedness and Response**

##### **Question IV.D.1:**

*Do you have a written collection system emergency response plan? When was the plan last updated? What departments are included in your emergency planning?*

Response: Lowell Wastewater does not have a formalized collection system emergency response plan. All personnel are trained in spill response procedures as part of the mandatory safety training program that employees are required to participate in. Additionally, the Utility maintains a flood response plan for the Centralville Flood Damage Reduction (FDR) System and the West Street Flood Pump Station.

##### **Question IV.D.2:**

*Which of the following issues are considered:  vulnerable points in the system,  severe natural events,  failure of critical system components,  vandalism or other third party events (specify),  other types of incidents (specify)?*

Response: As previously mentioned in Question IV.D.1, Lowell Wastewater does not have a formalized collection system emergency response plan.

##### **Question IV.D.3:**

*How do you train staff to respond to emergency situations? Where are responsibilities detailed for personnel who respond to emergencies?*

Response: As previously mentioned in Section III.B, Lowell Wastewater provides mandatory safety training to all employees on an annual basis. One major component of this training is spill response. This training program consists of a classroom setting review of the response procedures, followed by a simulated example allowing for the demonstration and application of the procedures in a safe, but representative, setting. Detailed responsibilities for personnel who respond to emergencies are included in employee job descriptions, which are stored on the Utility's shared drive. Additionally, safety training sessions are recorded and posted to a Utility YouTube account.

##### **Question IV.D.4:**

*How many emergency calls have you had in the past calendar year?*

Response: In calendar year 2021, 423 civic plus requests were closed. Out of those requests only 4 were identified as urgent.

#### **IV.E. Collection System Operation: Engineering – Capacity**

##### **Question IV.E.1:**

*How do you evaluate the capacity of your system and what capacity issues have you identified, if any? What is your plan to remedy the identified capacity issues?*

Response: Flow and capacity studies of Lowell's collection system have been conducted on multiple

occasions, with the most recent study having been concluded in 2018. This study saw to the deployment and monitoring of twenty level sensors throughout the collection system in an effort to refine the Lowell's hydraulic model and improve SCADA performance. It is worth noting that while being a larger study across broad monitoring areas, sensors were only deployed along the major trunk lines in the City's collection area. Smaller branched sewer sheds were not closely monitored.

Additionally, as previously addressed in Question II.8., Lowell has a collection of ADS ECHO level sensors deployed strategically in chronic problem areas throughout the city to observe real-time flow levels passing through its collection system. These sensors are typically deployed at, or just downstream of, a manhole experiencing repeated surcharge overflows.

Lowell Wastewater's plan to remedy identified capacity issues is to remove excess inflow through sewer separation projects. Additional plans to construct additional system storage in the Barasford sewershed will provide more available capacity in an area of the collection system with known and identified capacity issues.

**Question IV.E.2:**

*What procedures do you use to determine whether the capacity of existing gravity sewer system, pump stations and force mains are adequate for new connections?*

Response: As previously addressed in Question IV.E.1, Lowell Wastewater has conducted flow and capacity studies of Lowell's collection system, with a focus on larger diameter pipes. New connections are reviewed both independently and collaboratively by City Engineering, the Maintenance Manager, and Engineering Supervisor; factors including pipe diameter, condition, material and age of the existing collection system are considered when evaluating a proposed new connection.

**Question IV.E.3:**

*Do you charge hook up fees for new development and if so, how are they calculated?*

Response: The City of Lowell has an established "sewer assessment fee" that is collected and managed by City Engineering. Lowell Wastewater does not collect this fee.

The sewer assessment fee is calculated based on the square-footage of the lot, and varies for residential and commercial development. For residential development, the fee is \$0.01/ft.<sup>2</sup>, up to the first 100 ft. back from the front property line. For commercial development, the fee is \$0.05/ft.<sup>2</sup> across the total lot area.

Additionally, in the event that there is no existing municipal sewer in front of a residential development property, and the developer is forced to connect down a side street or adjacent parcel, the fee is reduced to \$0.005/ft.<sup>2</sup>.

**Question IV.E.4:**

*Do you have a hydraulic model of your collection system? Is it used to predict the effects of system remediation and new connections?*

Response: Lowell's hydraulic model was updated for the 2019 Integrated Plan submission by Hazen and Sawyer. This model is used to predict the impact from large scale sewer separation and modifications to our high flow management protocols.

## IV.F. Collection System Operation: Pump Stations - Inspection

### **Question IV.F.1:**

*How many pump stations are in the system? How often are pump stations inspected? How many are privately owned, and how are they inspected? Do you use an inspection checklist?*

Response: There are 14 municipally owned pump stations operated by LRWWU and inspected daily, every business day. The structures crew completes an inspection form via DoForms software and any identified issue is automatically emailed to management staff. LRWWU does not maintain or inspect private pump stations and does not have an accurate count on the number of private pump stations that may exist within city limits.

### **Question IV.F.2:**

*Is there sufficient redundancy of equipment at all pump stations?*

Response: Below is a table showing all the pump station owned by the city and the redundancy at each one:

<b>Pump Station:</b>	<b># Of Pumps</b>	<b>Redundancy</b>
Appleton Mills	2	Yes
School Street	2	Yes
Freda Lane	2	Yes
Trotting Park	2	Yes
Cannington	2	Yes
Varnum Ave	3	Yes
Pawtucket Blvd	3	Yes
Princeton	2	Yes
Rosemont	2	Yes
Lawrence Mills	2	Yes
Chelmsford	3	Yes
Pyne School	2	Yes
Rivers Edge	2	Yes
Hamilton Canal District	2	Yes

*Table 7. Pump Station - Redundancy*

### **Question IV.F.3:**

*How are pump stations monitored? If a SCADA system is used, what parameters are monitored?*

Response: All city owned pump stations are monitored by head operators by LRWWU’s SCADA system. All stations can be monitored and controlled from Duck Island. The SCADA system monitors level, pump status, power status, and communication status at all stations.

### **Question IV.F.4:**

*How many pump station/force main failures have you had in each of the last three years? Who responds to pump station/force main failures and overflows? How are the responders notified?*

Response: There were no critical failures at any pump station over the last three years. Operators were alerted via SCADA alarms, and all issues were addressed before any critical failures occurred.

Head Operators, who operate the treatment facility 24/7, are automatically alerted for issues at all pump stations dealing with level monitoring devices, power issues, communication issues, and pumping issues. If the issue needs to be addressed immediately they will call in the appropriate employee to address the alarm.

**Question IV.F.5:**

*How many pump stations are equipped with backup power sources? How many require portable generators? How many portable generators does your system own? Explain how the portable generators will be deployed during a system-wide electrical outage.*

Response: Twelve of the fourteen pump stations have backup power. The Utility has two portable generators; when necessary, on-call electricians are able to deploy these generators. Below is a table showing all the pump station owned by the city and the backup power information at each one:

<b>Pump Station:</b>	<b>Generator on Site</b>	<b>Portable Generator Hook Up</b>
Appleton Mills	No	--
School Street	No	Yes
Freda Lane	Yes	--
Trotting Park	No	Yes
Cannington	No	Yes
Varnum Ave	Yes	--
Pawtucket Blvd	Yes	--
Princeton	Yes	--
Rosemont	Yes	--
Lawrence Mills	Yes	--
Chelmsford	Yes	--
Pyne School	Yes	--
Rivers Edge	No	Yes
Hamilton Canal District	No	--

*Table 8. Pump Station - Generators*

**Question IV.F.6:**

*Are operation logs maintained for all pump stations? Are the lead, lag, and backup pumps rotated regularly?*

Response: The structures crew completes an inspection form via DoForms software and any identified issue is automatically emailed to management staff. The lead, lag, and backup pumps are programmed to rotate every pump-cycle.

**Question IV.F.7:**

*Is there a procedure to modify pump operations (manually, or automatically), during wet weather to increase in-line storage of wet weather flows? If so, describe.*

Response: Each station is controlled via Lowell’s Supervisory Control and Data Acquisition (SCADA) system and are automatically rotated are each use. Pump stations on and off set points are set by the level in the wet well and operate according the set points at each station. 7 of the 9 diversion stations have flow control structures that modulate during wet weather events to maximize flow to the treatment facility and maximize in-storage in the interceptors.

Lowell Wastewater’s High Flow Management program (HFM) has been developed to maximize the treatment and storage of wet-weather flows using existing infrastructure by following automated wet-weather protocols implemented through SCADA algorithms.

The HFM protocol follows the following logic:

1. Maximize flow to the Duck Island treatment facility;
2. Maximize use of available storage in the collection system’s interceptors upstream of flow-control gates;
3. Prevent sewer surcharging by diverting flow through CSO stations.

A flow chart depicting Lowell’s HFM protocols can be found in Appendix H. The HFM is incorporated by reference into this CMOM as part of the City’s program to properly operate and maintain the wastewater system.

**V.A. Equipment and Collection System Maintenance: Sewer Cleaning**

**Question V.A.1:**

*What is your schedule for cleaning sewer lines on a system-wide basis? At this frequency, how long will it take to clean the system? How are sewer cleaning efforts documented?*

Response: Sewer lines are cleaned on an “as needed” basis, as determined by video inspection results. One exception to this policy are sewer lines that have known conveyance issues. These lines are cleaned on a scheduled basis. Sewer system cleaning results are tracked and recording using ArcGIS Collector and Survey123.

Between in-house staff and contracted help, Lowell Wastewater cleans an average of 10,750 feet of sewer/drain lines in a given year (based on the past calendar years). This is approximately one percent of the sewer system per year. This cleaning approach has been appropriate, especially given the very low incidence of blockage/maintenance –related sewer overflows.

**Question V.A.2:**

*How many linear miles of the collection system were cleaned in each of the past 3 calendar years?*

Response: 2.3 linear miles (12,166 LF) of the collection system was cleaned in 2019. 2.0 linear miles (10,726 LF) of the collection system was cleaned in 2020. 1.8 linear miles (9,395 LF) of the collection system was cleaned in 2021.

**Question V.A.3:**

*How do you identify sewer line segments that have chronic problems and should be cleaned more frequently? Is a list of these areas maintained and cleaning frequencies established?*

Response: Lowell Wastewater identifies sewer lines that have chronic problems through video inspections.

As has been previously mentioned, the Collection System Supervisor manages an in-house camera truck staffed by two full-time CCTV inspectors to regularly inspect sewer lines throughout the collection system. Lines that are inspected and are observed to have conveyance issues (e.g. stagnant flow, grease blockages, oil buildup, etc.) are deemed potentially problematic.

These potentially problematic sewer lines get added to a scheduled cleaning regimen that is tracked and managed by the Maintenance Manager and Collection System Supervisor via MP2 work order software. A list of these areas, based on the cleaning assignment, exist on the MP2 platform. Cleaning frequency is typically set at once per quarter.

**Question V.A.4:**

*Approximately, how many collection system blockages have occurred during the last calendar year, and what were the causes?*

Response: Complaints related to collection system blockages are kept tracked and managed through the City's CivicPlus notification system. 22 collection system blockages occurred in 2021. Of these 22 blockages, 7 pertained to blocked sewer mains, while the remaining 15 were related to blocked catch basins. Sewer blockages are typically caused by the excessive buildup of fats, oils, and grease (FOGs) in the main line, root intrusions growing through the pipes, structural collapse, and excessive grit and larger debris that make their way into the catch basins and laterals. Significantly, none of these reported blockages resulted in any overflows.

**Question V.A.5:**

*Has the number of blockages increased, decreased, or stayed the same over the past five years?*

Response: With respect to strictly blocked sewer mains, the total number of blockages in 2021 is on par with the 5-year average (7.2 blockages/year). It is worth noting, however, that when looking at data within the past three years, the number of reported blockages in 2021 is lower than the 3-year average (10 blockages/year).

**Question V.A.6:**

*What equipment is available to clean sewers? Is any type of cleaning contracted to other parties? If yes, under what circumstances?*

Response: Lowell's collection system maintenance personnel have access to two in-house vacuum trucks for routine and light-to-moderate cleaning activities. In 2012, the Utility purchased a CCTV inspection truck and dedicated two full-time positions for conducted in-house video inspections of the collection system. A new CCTV truck was purchased in 2022. Sufficient PPE is kept in stock to ensure the safety of personnel that may be required to enter any sewer.

Heavier cleaning activities (e.g. deep cleaning, root removal, etc.) are contracted to other parties. At the time of completing this self-assessment, Rapid Flow holds the contract for heavy cleaning activities.

**Question V.A.7:**

*Do you have a root control program? Describe its critical components.*

Response: Video inspections of Lowell’s collection system are performed by the Utility’s CCTV inspectors on a daily basis. Pipes that are observed to have any major root intrusions are flagged for follow-up action to be performed by the heavy cleaning and CIPP lining contractors. Roots are removed via a rodder or specialized root cutter, after which the pipe is CIPP lined.

**V.B. Equipment and Collection System Maintenance: Maintenance Right-of-Way**

**Question V.B.1:**

*Is scheduled maintenance performed on Rights-of-Way and Easements? At what frequency? How many manholes in easement areas can not be located?*

Response: Lowell Wastewater does not perform scheduled maintenance on Rights-of-Way and Easements. Maintenance work in these areas are performed on an as-needed basis.

Lowell Wastewater does not have an accurate easements layer present in its GIS system, making it difficult to quantify the number of manholes that are located in easement areas. Collection system infrastructure that falls within the extents of a Right-of-Way, easement, or municipally owned parcel are referred to as “cross-country” by Utility personnel and are recorded as such in GIS.

**Question V.B.2:**

*Are road paving projects coordinated with the collection system operators? Have manholes been paved over? How many manholes in paved areas can not be located? Describe any systems in place for locating and raising manholes that have been paved over.*

Response: Road paving operations are coordinated between Lowell’s City Engineering, DPW and Wastewater departments. An annual paving list detailing the planned paving activities for the following year is compiled by City Engineering, before being distributed to the DPW and Wastewater departments.

Sewer lines that fall within the extents of any proposed paving areas are video inspected, assessed for repair and CIPP lined ahead of the scheduled paving. It is crucial that this work be completed before any actual paving takes place, as a five-year road work moratorium exists on all freshly paved roads in the City.

Manholes are not typically paved over, however, GIS records do exist for 371 buried manholes throughout the collection system. It is worth noting that the majority of these records (~87%) are sourced directly from the paper records described in Section I.4., which as previously mentioned, are a dated record source. Furthermore, these records exist as their own point features, as opposed to an attribute related to a sewer manhole, making it likely that this total number is an overestimate.

Buried manholes are located using a traceable GPS-sonde and signal receiver, a remote camera, and metal detectors. Once located, the position of the buried manhole is marked on the surface, and a work order to raise the asset is assigned to the Utility’s on-call repair services contractor.

## **V.C. Equipment and Collection System Maintenance: Parts Inventory**

### **Question V.C.1:**

*Do you have a central location for the storage of spare parts?*

Response: Spare parts are kept and handled by the Parts Equipment Manager. Most parts are kept in a central storage location within the maintenance garage at Duck Island, while larger weather-resistant parts (e.g. grates, frames and covers) are kept outside in an area adjacent to the maintenance garage.

### **Question V.C.2:**

*How have critical spare parts been identified?*

Response: Parts that are frequently replaced are deemed critical. These tend to be parts related to vehicles and equipment that are more prone to breaking.

### **Question V.C.3:**

*How do you determine if adequate supplies on hand? Has an inventory tracking system been implemented?*

Response: An adequate supply of a particular spare part is determined by past experience and needs. Inventory is replaced as supplies are used, on an as needed basis. There is no established inventory tracking system currently in place.

## **VI A. SSES: System Assessment**

### **Question VI.A.1:**

*Do POTW flow records or prior I/I or SSES programs indicate the presence of public/private inflow sources or sump pumps? Please Explain.*

Response: Seasonal flow records and prior I/I studies and Sewer System Evaluation Survey (SSES) programs indicate that Lowell's collection system has both public and private sources of inflow. Further details pertaining to these studies can be found in the following response to Question VI.A.2.

### **Question VI.A.2:**

*If problems are related to I/I, has a Sewer System Evaluation Survey (SSES) been conducted? When? What is the status of the recommendations?*

Response: A comprehensive Infiltration/Inflow Investigation Study was completed by Camp Dresser & McKee Incorporated (CDM) in accordance with the City in 1990. The investigation was conducted in accordance with the MassDEP's 1989 I/I and SSES Guidelines.

The 1990 Phase 1 I/I program included a comprehensive City-wide flow metering program, dividing the City into 48 sewer catchments to identify those areas with excessive amounts of I/I. Sewer catchments ranged in size from 4,560 feet to 44,740 feet of sewer pipe. The 1990 Phase 1 I/I Report followed the 1989 Sanitary Sewer Evaluation Survey (SSES) guidelines where MassDEP classifies "high" infiltration rates as equal to, or higher than, 5,000 gallons per day per inch-diameter-mile (gpd/idm). Thirty out of the 48-meter areas were identified as high-infiltration contributors and recommended for further investigations including flow isolation,

closed-circuit television (CCTV) inspections, and manhole inspections. For the purposes of development of LRWWU's I/I Abatement Plan, the six highest I/I areas from the 1990 I/I study were evaluated and considered for further investigation. The nine subareas listed in the following table detail the six highest infiltration areas and the six highest inflow areas from the 1990 I/I study.

CSO Area	Sewer Sub-Area	Total Sewer Length (LF)	Peak Infiltration Rate (GPD/inch-mi)	Peak Inflow (GPD/inch-mi)
Warren	19	11,880	59,700	72,800
Warren	10	42,203	41,100	51,400
Tilden	20	9,423	38,200	N/A
Warren	14	12,699	21,900	N/A
Merrimack	7	12,857	21,000	N/A
Merrimack	9	5,421	18,500	60,400
Tilden	21	25,497	N/A	115,900
Warren	17	30,703	N/A	39,900
Merrimack	43	12,857	N/A	39,200

*Table 9. 1990 I/I Study Priority Subareas*

In 1995, CDM prepared a Sewer System Evaluation Survey (SSES) on three subareas that were identified as the three highest infiltration contributing subareas in the aforementioned I/I study. The purpose of this SSES was to locate and quantify these sources of I/I and to assess and identify pipe segments with structural integrity problems. Recommendations that came from this SSES included cost-effective and value-effective sewer rehabilitation, and for additional flow isolation and TV inspections.

Lowell Wastewater is in the planning phases for a comprehensive I/I study and SSES; implementation of this study and SSES is tentative set for Spring 2023. Below is a summary of the specific elements of the 2023 (Year 1) I/I Program.

1. Conduct a City-wide Flow Metering Program and summarize findings and recommendations in an I/I Analysis Report in accordance with MassDEP Guidelines.
2. Conduct CCTV and manhole inspections during high groundwater periods in subareas 7, 9, 19, 20 (as defined in 1990 I/I Study). Includes approximately 60,100 feet (5% of system) of sewer inspections and 330 manhole inspections (5% of system).
3. CCTV inspections of River-front interceptors (up to 10,000 feet) and siphon (up to 1 location).
4. Repair of Kearney Square sewer.

It is anticipated that a draft I/I Analysis Report would be developed within 6 months of the completion of the flow metering and infiltration/inflow inspections. The I/I Analysis Report will include a road map for LRWWU to implement an ongoing plan to execute continuous I/I investigations and reduction efforts, along with estimated costs, budgeting, and draft schedule of subsequent SSES phases.

**Question VI.A.3:**

*Do you have a program to identify and eliminate sources of I/I into the system including private service laterals and illegal connections? If so, describe.*

Response: In 2018, Lowell Wastewater established a sewer system conductance surveying program to identify sources of I/I into the collection system. Conductance is a measure of electrical conductivity (or dissolved ions) in water. Typically, sewage has a high specific conductivity in the range of 1,000 micro-Siemens per centimeter ( $\mu\text{S}/\text{cm}$ ). Sections of the collection system with high I/I tend to dilute the sewage and lower the conductance, offering a low-effort screening tool to identify areas of the system in need of further inspection and repair.

Lowell's sewer system conductance surveying program is specifically designed to identify primary points of entry for I/I by utilizing specific conductance probes to screen the collection system at major junctions and other vulnerable points near wetlands and river crossings. Readings are entered into Lowell's GIS database so that they can be easily reviewed in online management dashboards for follow-up actions, which may include flow metering at specific targeted areas, and/or dispatching the video truck to areas of interest for visual assessment of pipe condition and repair needs. Conductance values are ranked into three tiers: high priority (0 - 399  $\mu\text{S}/\text{cm}$ ), normal priority (>399 – 799  $\mu\text{S}/\text{cm}$ ), and low priority (>799  $\mu\text{S}/\text{cm}$ ). While any decrease from the expected conductance range can be indicative of I/I related issue, addressing the instances of highest priority first will result in a more immediate reduction in total system I/I. Lowell Wastewater views this approach as a better allocation of limited resources.

Additionally, Lowell has developed a private inflow control program which establishes criteria to require private inflow removal from highly impervious properties within the city that are undergoing substantial reinvestment. Lowell's Stormwater Management Team, consisting of Lowell Wastewater's Engineering Manager and Stormwater Program Manager, review all proposed site plans brought before the City's Project Review Boards to ensure that impacts from new construction and redevelopment activities are properly managed to protect the City's collection system infrastructure and meet overall objectives of environmental protection. Projects that meet the criteria thresholds are required to detain the first inch of rainfall that falls across the impervious area on site. This is done in an effort to mitigate the effects that peak rainfall has on the collection system and minimize this rainfall's contributions to downstream sewer surcharges.

The intent of the site-planning review program is to gradually reduce the acreage of existing impervious area that is directly connected to the combined sewer system, and to restrict the introduction of peak inflow from created impervious areas to the combined sewer system through consistent application of the policies described above. By structuring Lowell's stormwater standards to target smaller projects undergoing substantial property investment, this program is able to alleviate excessive inflow that would otherwise be missed were the Massachusetts Stormwater Standards be the only set of stormwater guidance governing development in Lowell. By having Lowell's stormwater standards be more easily applicable to commercial redevelopment projects, Lowell is able to remove a common impactful source of inflow in an equitable manner.

**Question VI.A.4:**

*Have private residences been inspected for sump pumps and roof leader connections?*

Response: Private residences and businesses that fell within the extents of Phase I LTCP sewer separation areas were inspected for sump pumps and roof leader connections. These inspections took place from 2006 to 2010.

**Question VI.A.5:**

*Are inspections to identify illicit connections conducted during the property transfer process?*

Response: Inspections to specifically identify illicit connections are not conducted during the property transfer process. Inspections of existing sewer laterals are required during property redevelopment projects.

**Question VI.A.6:**

*How many sump pumps and roof leaders have been identified? How many have been removed?*

Response: Through targeted efforts within planned Phase I LTCP sewer separation areas (Sixth-Emery, Weed-Wellman, Lincoln East, and Lincoln West-Wellman 2), 88 sump pumps were identified and disconnected from the collection system. A total of 331 sump pumps were installed as part of the sump pump incentive program described in Question VI.A.8.

**Question VI.A.7:**

*Have follow-up homeowner inspections been conducted?*

Response: The aforementioned sump pump removal/installation work was completed by Lowell Wastewater collection systems staff and hired general contractor. In doing so, removal and disconnection of any existing sump pumps, and the installation of any new sump pumps, was confirmed.

**Question VI.A.8:**

*What incentive programs exist to encourage residences to disconnect roof leaders & sump pumps? (i.e. matching funds, etc.)*

Response: During Phase I LTCP efforts, Lowell Wastewater offered an incentive program which had the Utility subsidize the majority of the cost related to sump pump disconnection/installation. Homeowners who opted into the program were charged a one-time purchase fee of \$100 for the sump pump; the Utility covered the remaining cost for each new sump pump, as well as the costs to disconnect any preexisting illicit sump pumps. Connection costs for each new sump pump were also covered by the Utility. By opting into the program, the homeowner took on responsibility for all potential future costs related to the sump pump. This incentive program is no longer in effect.

**Question VI.A.9:**

*What disincentive programs exist to encourage residences to disconnect roof leaders & sump pumps? (i.e. fines, surcharges)*

Response: Lowell's Sewer Use Ordinance prohibits extraneous flow connections to the public sewer system, with provisions to assess fines for non-compliance.

## **VI.B. SSES: Manhole Inspection**

### **Question VI.B.1:**

*Do you have a manhole inspection and assessment program?*

Response: Manhole inspections are performed during routine CMOM activities. Additionally, upstream and downstream manholes are inspected and assessed by the CCTV inspectors as part of the Utility's video inspection procedure for sewer lines.

### **Question VI.B.2:**

*Has a formal manhole inspection checklist been developed?*

Response: A formal manhole inspection checklist is not used. Designated GIS users are able to directly access and edit a manhole's attribute information in the field via ArcGIS Collector. Survey123 forms containing space to provide relevant information related to a mapped manhole, as well as a space to record comments observed during an inspection are available also available for field staff.

### **Question VI.B.3:**

*How many manholes were inspected during the past calendar year?*

Response: A total of 855 manholes have been inspected during 2022. 710 manholes were inspected by the Utility's camera truck, while 145 manholes were inspected by other maintenance personnel during cleaning/repair related CMOM activities.

## **VII. Energy Use**

### **Question VII.1:**

*What is your annual energy cost for operating your system? For which pieces of equipment do you track energy use?*

Response: For Fiscal Year (FY) 2022, the electrical cost for the pumping and diversion stations was \$110,667, FY 2021: \$128,356, and FY 2020: \$118,587.

For Fiscal Year (FY) 2022, the gas cost for the pumping and diversion stations was \$16,815, FY 2021: \$17,107, and FY 2020: \$22,887.

The collection system is tracked on a station by station basis. The last 8 years of energy use and cost is shown in the tables and charts in Appendix I.

### **Question VII.2:**

*Have you upgraded any of your pumps and motors to more energy efficient models? If so, please describe.*

Response: The pumps and motors have not been upgraded, but Lowell has installed VFDs at four major pump stations. These stations are Pawtucket, Princeton, Chelmsford, and Varnum.

**Question VII.3:**

*Have you performed an energy audit in the past three years?*

Response: The last energy audit was finished in September 2021.

**Question VII.4:**

*Where do you use the most energy (fuel, electricity) in operating your collection system?*

Response: For gas and electricity, Merrimack Station uses the most energy.

A breakdown of usage at each station is shown in Appendix I.

**Question VII.5:**

*If you have a treatment plant, would you be interested in participating in EnergyStar benchmarking of your treatment plant?*

Response: Lowell is not interested in the time.

Lowell is part of the green communities program and LRWWU is always actively working with the energy manager for the City to identify opportunities to reduce energy demand and costs.

## **VIII. Other Actions**

**Question VIII.1:**

*Describe any other actions that you plan to take to improve your CMOM Program that are not discussed above.*

Response: Lowell Wastewater is in the process of developing a formal I/I plan for submittal. Additionally, the Utility is undertaking an expansion of its collection system cleaning equipment, via the planned purchase of two additional vacuum/sewer cleaning vehicles.

**Appendix A: Wastewater Collection System CMOM Program Self-Assessment Checklist**

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**Attachment A**

**Oct 2010 Wastewater Collection System CMOM Program Self-Assessment Checklist**

Name of your system Lowell Regional Wastewater Utility

Date 12-28-22

Put an “A” in the final column for an issue you intend to address with future action, or leave blank if you have evaluated your program as sufficient.

**I. General Information – Collection System Description**

<b>I</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	How many people are served by your wastewater collection system?	<a href="#">See response to Question I.1</a>	
2	What is the number of service connections to your collection system? How many: Manholes? Pump stations? Feet (or miles) of sewer? Force mains? Siphons?	<a href="#">See response to Question I.2</a>	
3	What is the age of your system (e.g., 30% over 30 years, 20% over 50 years, etc.)?	<a href="#">See response to Question I.3</a>	
4	What type(s) of collection system map is/are available and what percent of the system is mapped by each method (e.g., paper only, paper scanned into electronic, digitized, interactive GIS, etc.)? When where the map(s) last updated?	<a href="#">See response to Question I.4</a>	
5	If you have a systematic numbering and identification method/system established to identify sewer system manhole, sewer lines, and other items (pump stations, etc.), please describe.	<a href="#">See response to Question I.5</a>	
6	Are “as-built” plans (record drawings) or maps available and used by field crews in the office and in the field?	<a href="#">See response to Question I.6</a>	
7	Describe the type of asset management (AM) system you use (e.g. card catalog, spreadsheets, AM software program, etc.)	<a href="#">See response to Question I.7</a>	

**II. Continuing Sewer Assessment Plan**

<b>II</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	Under what conditions, if any, does the collection system overflow? Does it overflow during wet and/or dry weather? Has your system had problems with: <input type="checkbox"/> hydraulic issues, <input type="checkbox"/> debris, <input type="checkbox"/> roots, <input type="checkbox"/> Fats, Oils & Grease (FOG), <input type="checkbox"/> vandalism blockages resulting in manhole overflows, <input type="checkbox"/> basement backups, <input type="checkbox"/> other (specify)? Describe your system’s history of structural collapses, and PS or force main failures.	<a href="#">See response to Question II.1</a>	

2	How many SSOs have occurred in each of the last three calendar years? What is the most frequent cause?	<a href="#">See response to Question II.2</a>	
3	Of those SSOs, how many basement backups occurred in each of the last three calendar years? How are they documented?	<a href="#">See response to Question II.3</a>	
4	What is the ratio of peak wet-weather flow to average dry-weather flow at the wastewater treatment plant (or municipal boundary for satellite collection systems)?	<a href="#">See response to Question II.4</a>	
5	What short-term measures have been implemented or plan to be implemented to mitigate the overflows? If actions are planned, when will they be implemented?	<a href="#">See response to Question II.5</a>	
6	What long-term measures have been implemented or plan to be implemented to mitigate the overflows? If actions are planned, when will they be implemented?	<a href="#">See response to Question II.6</a>	
7	Describe your preventive maintenance program; how do you track it (e.g., card files, electronically, with specific software)?	<a href="#">See response to Question II.7</a>	
8	How do you prioritize investigations, repairs and rehabilitation? What critical and priority problem areas are addressed more frequently than the remainder of your system? How frequently are these areas evaluated?	<a href="#">See response to Question II.8</a>	
9	Are septage haulers required to declare the origin of their "load"? Are records of these declarations maintained? Do any of the declarations provide evidence of SSOs?	<a href="#">See response to Question II.9</a>	

### **III.A. Collection System Management Organizational Structure**

<b>III A</b>	Question	Response	*Act
1	Do you have an organizational chart that shows the overall personnel structure for collection system operations, including operation and maintenance staff? Please attach your chart.	<a href="#">See response to Question III.A.1</a>	
2	For which jobs do you have up-to-date job descriptions that delineate responsibilities and authority for each position?	<a href="#">See response to Question III.A.2</a>	
3	How many staff members are dedicated to collection system maintenance? Of those, how many are responsible for any other duties, (e.g., road repair or maintenance, O&M of the storm water collection system)? If so, describe other duties.	<a href="#">See response to Question III.A.3</a>	
4	Are there any collection system maintenance position vacancies? How long has the position(s) been vacant?	<a href="#">See response to Question III.A.4</a>	A

5	For which, if any, maintenance activities do you use an outside contractor?	<a href="#">See response to Question III.A.5</a>	
6	Describe any group purchase contracts you participate in.	<a href="#">See response to Question III.A.6</a>	

### **III.B. Collection System Management: Training**

<b>III B</b>	Question	Response	*Act
1	What types of training are provided to staff?	<a href="#">See response to Question III.B.1</a>	
2	Is training provided in the following areas: general safety, routine line maintenance, confined space entry, MSDS, lockout/tagout, biologic hazards, traffic control, record keeping, electrical and instrumentation, pipe repair, public relations, SSO/emergency response, pump station operations and maintenance, trench/shoring, other (describe)?	<a href="#">See response to Question III.B.2</a>	
3	Which training requirements are mandatory for key employees?	<a href="#">See response to Question III.B.3</a>	
4	How many collection system employees are certified (e.g, NEWEA certification program) and at what grade are they certified?	<a href="#">See response to Question III.B.4</a>	

### **III.C. Collection System Management: Communication and Customer Service**

<b>III C</b>	Question	Response	*Act
1	Describe your public education/outreach programs (e.g., for user rates, FOG, extraneous flow, SSOs etc.)	<a href="#">See response to Question III.C.1</a>	A
2	What are the most common collection system complaints? How many complaints have you received in each of the past three calendar years?	<a href="#">See response to Question III.C.2</a>	
3	Are formal procedures in place to evaluate and respond to complaints?	<a href="#">See response to Question III.C.3</a>	
4	How are complaint records maintained (i.e., computerized)? How are complaints tied to emergency response and operations and maintenance programs?	<a href="#">See response to Question III.C.4</a>	

### **III.D. Collection System Management: Management Information Systems**

<b>III D</b>	Question	Response	*Act
1	How do you manage collection system information? (Commercial software package, spreadsheets, data bases, SCADA, etc). What information and functions are managed electronically?	<a href="#">See response to Question III.D.1</a>	
2	What procedures are used to track and plan collection system maintenance activities?	<a href="#">See response to Question III.D.2</a>	
3	Who is responsible for establishing maintenance priorities? What records are maintained for each piece of mechanical equipment within the collection	<a href="#">See response to Question III.D.3</a>	

	system?		
4	What is the backlog for various types of work orders?	<a href="#">See response to Question III.D.4</a>	
5	How do you track emergencies and your response to emergencies? How do you link emergency responses to your maintenance activities?	<a href="#">See response to Question III.D.5</a>	
6	What written policies/protocols do you have for managing and tracking the following information: complaint work orders, scheduled work orders, customer service, scheduled preventative maintenance, scheduled inspections, sewer system inventory, safety incidents, emergency responses, scheduled monitoring/sampling, compliance/overflow tracking, equipment/tools tracking, parts inventory?	<a href="#">See response to Question III.D.6</a>	

### **III.E. Collection System Management: SSO Notification Program**

<b>III E</b>	Question	Response	*Act
1	What are your procedures, including time frames, for notifying state agencies, health agencies, regulatory authorities, and the drinking water authorities of overflow events?	<a href="#">See response to Question III.E.1</a>	
2	Do you use the state standard form for recording/reporting overflow events? If not, provide a sample copy of the form that is used.	<a href="#">See response to Question III.E.2</a>	

### **III.F. Collection System Management: Legal Authority**

<b>III F</b>	Question	Response	*Act
1	Are discharges to the sewer regulated by a sewer use ordinance (SUO)? Does the SUO contain procedures for controlling and enforcing the following: <input type="checkbox"/> FOG; <input type="checkbox"/> Infiltration/ Inflow (I/I); <input type="checkbox"/> building structures over the sewer lines; <input type="checkbox"/> storm water connections to sanitary lines; <input type="checkbox"/> defects in service laterals located on private property; <input type="checkbox"/> sump pumps?	<a href="#">See response to Question III.F.1</a>	A
2	Who is responsible for enforcing various aspects of the SUO? Does this party communicate with your department on a regular basis?	<a href="#">See response to Question III.F.2</a>	
3	Summarize any SUO enforcement actions/activities that have occurred in the last three calendar years.	<a href="#">See response to Question III.F.3</a>	
4	Do you have a program to control FOG entering the collection system? If so, which of the following does it include: <input type="checkbox"/> permits, <input type="checkbox"/> inspection <input type="checkbox"/> enforcement? Are commercial grease traps inspected regularly and who is responsible for conducting inspections?	<a href="#">See response to Question III.F.4</a>	A
5	Is there an ordinance dealing with storm water	<a href="#">See response to Question III.F.5</a>	A

	connections or requirements to remove storm water connections?		
6	Does the collection system receive flow from satellite communities? Which communities? How are flows from these satellite communities regulated? Are satellite flow capacity issues periodically reviewed?	<a href="#">See response to Question III.F.6</a>	
7	Does the collection system receive flow from private collection systems? If yes, how is flow from these private sources regulated? How are overflows dealt with? Provide details, including contact information for these private systems.	<a href="#">See response to Question III.F.7</a>	

#### **IV.A. Collection System Operation: Financing**

<b>IV A</b>	<b>Question</b>		<b>*Act</b>
1	Has an enterprise (or other) fund been established and what does it include: wastewater collection and treatment operations; collection system maintenance; long-term infrastructure improvements; etc.? Are the funds sufficient to properly fund future system needs?	<a href="#">See response to Question IV.A.1</a>	
2	How are rates calculated (have you done a rate analysis)? What is the current sewer charge rate? When was it last increased? How much was the increase?	<a href="#">See response to Question IV.A.2</a>	
3	What is your O&M budget?	<a href="#">See response to Question IV.A.3</a>	
4	If an enterprise fund has not been established, how are collection system maintenance operations funded?	<a href="#">See response to Question IV.A.4</a>	
5	Does a Capital Improvement Plan (CIP) that provides for system repair/replacement on a prioritized basis exist? What is the collection system's average annual CIP budget?	<a href="#">See response to Question IV.A.5</a>	
6	How do you account for the value of your system infrastructure for the Government Accounting Standards Board standard 34 (GASB 34)?	<a href="#">See response to Question IV.A.6</a>	

#### **IV.B. Collection System Operation: Hydrogen Sulfide Monitoring and Control**

<b>IV B</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	Are odors a frequent source of complaints? How many have been received in the last calendar year?	<a href="#">See response to Question IV.B.1</a>	
2	Do you have a hydrogen sulfide problem, and if so, do you have corrosion control programs? What are the major elements of the program?	<a href="#">See response to Question IV.B.2</a>	
3	Does your system contain air relief valves at the high points of the force main system? How often are they inspected? How often are they exercised?	<a href="#">See response to Question IV.B.3</a>	

#### **IV.C. Collection System Operation: Safety**

<b>IV C</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	Do you have a formal Safety Training Program? How do you maintain safety training records?	<a href="#">See response to Question IV.C.1</a>	
2	Which of the following equipment items are available and in adequate supply: <input type="checkbox"/> rubber/disposable gloves; <input type="checkbox"/> confined space ventilation equipment; <input type="checkbox"/> hard hats, <input type="checkbox"/> safety glasses, <input type="checkbox"/> rubber boots; <input type="checkbox"/> antibacterial soap and first aid kit; <input type="checkbox"/> tripods or non-entry rescue equipment; <input type="checkbox"/> fire extinguishers; <input type="checkbox"/> equipment to enter manholes; <input type="checkbox"/> portable crane/hoist; <input type="checkbox"/> atmospheric testing equipment and gas detectors; <input type="checkbox"/> oxygen sensors; <input type="checkbox"/> H2S monitors; <input type="checkbox"/> full body harness; <input type="checkbox"/> protective clothing; <input type="checkbox"/> traffic/public access control equipment; <input type="checkbox"/> 5-minute escape breathing devices; <input type="checkbox"/> life preservers for lagoons; <input type="checkbox"/> safety buoy at activated sludge plants; <input type="checkbox"/> fiberglass or wooden ladders for electrical work; <input type="checkbox"/> respirators and/or self-contained breathing apparatus; <input type="checkbox"/> methane gas or OVA analyzer; <input type="checkbox"/> LEL metering?	<a href="#">See response to Question IV.C.2</a>	

#### **IV.D. Collection System Operation: Emergency Preparedness and Response**

<b>IV D</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	Do you have a written collection system emergency response plan? When was the plan last updated? What departments are included in your emergency planning?	<a href="#">See response to Question IV.D.1</a>	A
2	Which of the following issues are considered: <input type="checkbox"/> vulnerable points in the system, <input type="checkbox"/> severe natural events, <input type="checkbox"/> failure of critical system components, <input type="checkbox"/> vandalism or other third party events (specify), <input type="checkbox"/> other types of incidents (specify)?	<a href="#">See response to Question IV.D.2</a>	A
3	How do you train staff to respond to emergency situations? Where are responsibilities detailed for personnel who respond to emergencies?	<a href="#">See response to Question IV.D.3</a>	A
4	How many emergency calls have you had in the past calendar year?	<a href="#">See response to Question IV.D.4</a>	

#### **IV.E. Collection System Operation: Engineering – Capacity**

<b>IV E</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	How do you evaluate the capacity of your system and what capacity issues have you identified, if any? What is your plan to remedy the identified capacity issues?	<a href="#">See response to Question IV.E.1</a>	
2	What procedures do you use to determine whether the capacity of existing gravity sewer system, pump	<a href="#">See response to Question IV.E.2</a>	

	stations and force mains are adequate for new connections?		
3	Do you charge hook up fees for new development and if so, how are they calculated?	<a href="#">See response to Question IV.E.3</a>	
4	Do you have a hydraulic model of your collection system? Is it used to predict the effects of system remediation and new connections?	<a href="#">See response to Question IV.E.4</a>	

#### **IV.F. Collection System Operation: Pump Stations - Inspection**

<b>IV F</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	How many pump stations are in the system? How often are pump stations inspected? How many are privately owned, and how are they inspected? Do you use an inspection checklist?	<a href="#">See response to Question IV.F.1</a>	
2	Is there sufficient redundancy of equipment at all pump stations?	<a href="#">See response to Question IV.F.2</a>	
3	How are pump stations monitored? If a SCADA system is used, what parameters are monitored?	<a href="#">See response to Question IV.F.3</a>	
4	How many pump station/force main failures have you had in each of the last three years? Who responds to pump station/force main failures and overflows? How are the responders notified?	<a href="#">See response to Question IV.F.4</a>	
5	How many pump stations are equipped with backup power sources? How many require portable generators? How many portable generators does your system own? Explain how the portable generators will be deployed during a system-wide electrical outage.	<a href="#">See response to Question IV.F.5</a>	A
6	Are operation logs maintained for all pump stations? Are the lead, lag, and backup pumps rotated regularly?	<a href="#">See response to Question IV.F.6</a>	
7	Is there a procedure to modify pump operations (manually, or automatically), during wet weather to increase in-line storage of wet weather flows? If so, describe.	<a href="#">See response to Question IV.F.7</a>	

#### **V.A. Equipment and Collection System Maintenance: Sewer Cleaning**

<b>V A</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	What is your schedule for cleaning sewer lines on a system-wide basis? At this frequency, how long will it take to clean the system? How are sewer cleaning efforts documented?	<a href="#">See response to Question V.A.1</a>	
2	How many linear miles of the collection system were cleaned in each of the past 3 calendar years?	<a href="#">See response to Question V.A.2</a>	
3	How do you identify sewer line segments that have chronic problems and should be cleaned more frequently? Is a list of these areas maintained and cleaning frequencies established?	<a href="#">See response to Question V.A.3</a>	

4	Approximately, how many collection system blockages have occurred during the last calendar year, and what were the causes?	<a href="#">See response to Question V.A.4</a>	
5	Has the number of blockages increased, decreased, or stayed the same over the past five years?	<a href="#">See response to Question V.A.5</a>	
6	What equipment is available to clean sewers? Is any type of cleaning contracted to other parties? If yes, under what circumstances?	<a href="#">See response to Question V.A.6</a>	
7	Do you have a root control program? Describe its critical components.	<a href="#">See response to Question V.A.7</a>	

### **V.B. Equipment and Collection System Maintenance: Maintenance Right-of-Way**

<b>V B</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	Is scheduled maintenance performed on Rights-of-Way and Easements? At what frequency? How many manholes in easement areas can not be located?	<a href="#">See response to Question V.B.1</a>	A
2	Are road paving projects coordinated with the collection system operators? Have manholes been paved over? How many manholes in paved areas can not be located? Describe any systems in place for locating and raising manholes that have been paved over.	<a href="#">See response to Question V.B.2</a>	

### **V.C. Equipment and Collection System Maintenance: Parts Inventory**

<b>V C</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	Do you have a central location for the storage of spare parts?	<a href="#">See response to Question V.C.1</a>	
2	How have critical spare parts been identified?	<a href="#">See response to Question V.C.2</a>	
3	How to you determine if adequate supplies on hand? Has an inventory tracking system been implemented?	<a href="#">See response to Question V.C.3</a>	A

### **VI A. SSES: System Assessment**

<b>VI A</b>	<b>Question</b>	<b>Response</b>	<b>*Act</b>
1	Do POTW flow records or prior I/I or SSES programs indicate the presence of public/private inflow sources or sump pumps? Please Explain.	<a href="#">See response to Question VI.A.1</a>	
2	If problems are related to I/I, has a Sewer System Evaluation Survey (SSES) been conducted? When? What is the status of the recommendations?	<a href="#">See response to Question VI.A.2</a>	A
3	Do you have a program to identify and eliminate sources of I/I into the system including private service laterals and illegal connections? If so, describe.	<a href="#">See response to Question VI.A.3</a>	A
4	Have private residences been inspected for sump pumps and roof leader connections?	<a href="#">See response to Question VI.A.4</a>	A

5	Are inspections to identify illicit connections conducted during the property transfer process?	<a href="#">See response to Question VI.A.5</a>	A
6	How many sump pumps and roof leaders have been identified? How many have been removed?	<a href="#">See response to Question VI.A.6</a>	
7	Have follow-up homeowner inspections been conducted?	<a href="#">See response to Question VI.A.7</a>	
8	What incentive programs exist to encourage residences to disconnect roof leaders & sump pumps? (i.e. matching funds, etc.)	<a href="#">See response to Question VI.A.8</a>	
9	What disincentive programs exist to encourage residences to disconnect roof leaders & sump pumps? (i.e. fines, surcharges)	<a href="#">See response to Question VI.A.9</a>	

### **VI.B. SSES: Manhole Inspection**

<b>VI B</b>	Question	Response	*Act
1	Do you have a manhole inspection and assessment program?	<a href="#">See response to Question VI.B.1</a>	
2	Has a formal manhole inspection checklist been developed?	<a href="#">See response to Question VI.B.2</a>	A
3	How many manholes were inspected during the past calendar year?	<a href="#">See response to Question VI.B.3</a>	

### **VII. Energy Use**

<b>VII</b>	Question	Response	*Act
1	What is your annual energy cost for operating your system? For which pieces of equipment do you track energy use?	<a href="#">See response to Question VII.1</a>	
2	Have you upgraded any of your pumps and motors to more energy efficient models? If so, please describe.	<a href="#">See response to Question VII.2</a>	
3	Have you performed an energy audit in the past three years?	<a href="#">See response to Question VII.3</a>	
4	Where do you use the most energy (fuel, electricity) in operating your collection system?	<a href="#">See response to Question VII.4</a>	
5	If you have a treatment plant, would you be interested in participating in EnergyStar benchmarking of your treatment plant?	<a href="#">See response to Question VII.5</a>	

### **VIII. Other Actions**

<b>VIII</b>	Question	Response	*Act
1	Describe any other actions that you plan to take to improve your CMOM Program that are not discussed above.	<a href="#">See response to Question VIII.1</a>	

## **Appendix B: Non-residential Addresses**

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City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
20	ACADEMY DR	Apt 9 Units and Up C	285	ANDOVER ST	Char Other R
77	ACTION ST	Apt 4 to 8 Units R	623	ANDOVER ST	Church/Temple R
311	ADAMS ST	Church/Temple V	154	ANDOVER ST	Apt 4 to 8 Units R
52	ADAMS ST	Housing Authority R	160	ANDOVER ST	Apt 4 to 8 Units R
298	ADAMS ST	Housing Authority C	151	ANDOVER ST	Retail < 10,000 SF
46	ADAMS ST	Housing Authority R	26	ANDOVER ST	Restaurant/Club
298	ADAMS ST	Housing Authority C	84	ANDOVER ST	Apt 4 to 8 Units R
107	ADAMS ST	Apt 4 to 8 Units R	781	ANDOVER ST	Apt 4 to 8 Units R
105	AGAWAM ST	CONDO MAIN	137	ANDOVER ST	Gas Station
89	AGAWAM ST	Char Housing R	403	ANDOVER ST REAR	Church/Temple C
9	AGAWAM ST	Apt 4 to 8 Units C	63	ANDREWS ST	Apt 4 to 8 Units R
5	AGAWAM ST	Apt 4 to 8 Units C	76	ANDREWS ST	Apt 4 to 8 Units R
170	AGAWAM ST	Apt 4 to 8 Units C	67	ANDREWS ST	Apt 4 to 8 Units R
86	AGAWAM ST	Apt 4 to 8 Units R	87	ANDREWS ST	Apt 4 to 8 Units R
32	AGAWAM ST	Apt 4 to 8 Units R	18	APPLETON ST	CONDO MAIN
38	AGAWAM ST	Apt 4 to 8 Units R	102	APPLETON ST	Boarding House R
55	AGAWAM ST	Apt 9 Units and Up C	150	APPLETON ST	Church/Temple C
55	AGAWAM ST	Apt 9 Units and Up C	170	APPLETON ST	Char Services C
21	AGAWAM ST	Apt 4 to 8 Units C	192	APPLETON ST	Church/Temple C
73	AIKEN AVE	Apt 4 to 8 Units C	193	APPLETON ST	Apt 4 to 8 Units C
47	AIKEN AVE	Auto Repair	266	APPLETON ST	Apt 9 Units and Up R
74	AIKEN AVE	Apt 4 to 8 Units R	266	APPLETON ST	Apt 9 Units and Up R
37	AIKEN AVE	Apt 4 to 8 Units C	151	APPLETON ST	Boarding House R
23	AIKEN AVE	Retail < 10,000 SF	287	APPLETON ST	Retail > 10,000 SF
44	AIKEN AVE	Apt 9 Units and Up R	186	APPLETON ST	Gas Station
56	AIKEN AVE	Retail < 10,000 SF	197	APPLETON ST	Apt 9 Units and Up C
44	AIKEN AVE	Apt 9 Units and Up R	247	APPLETON ST	Apt 9 Units and Up C
36	AIKEN AVE	Apt 9 Units and Up C	189	APPLETON ST	Retail < 10,000 SF
322	AIKEN AVE	Apt 9 Units and Up R	185	APPLETON ST	Retail < 10,000 SF
322	AIKEN AVE	Apt 9 Units and Up C	251	APPLETON ST	Apt 4 to 8 Units C
338	AIKEN AVE	Apt 4 to 8 Units R	110	APPLETON ST	Apt 9 Units and Up C
114	AIKEN AVE	Apt 4 to 8 Units C	116	APPLETON ST	Apt 9 Units and Up C
322	AIKEN AVE	Apt 9 Units and Up C	115	APPLETON ST	R&D
199	AIKEN AVE	Apt 9 Units and Up C	110	APPLETON ST	Apt 9 Units and Up C
169	AIKEN AVE	Apt 9 Units and Up C	116	APPLETON ST	Apt 9 Units and Up C
169	AIKEN AVE	Apt 9 Units and Up C	220	APPLETON ST	Retail < 10,000 SF
28	AIKEN AVE	Apt 4 to 8 Units C	226	APPLETON ST	Retail < 10,000 SF
36	AIKEN AVE	Apt 9 Units and Up C	85	APPLETON ST	Tel Xchange Station C
199	AIKEN AVE	Apt 9 Units and Up C	205	APPLETON ST	Retail < 10,000 SF
328	AIKEN AVE REAR	Apt 9 Units and Up C	244	APPLETON ST	Restaurant/Club
328	AIKEN AVE REAR	Apt 9 Units and Up C	90	APPLETON ST	Apt 9 Units and Up C
328	AIKEN AVE REAR	Apt 9 Units and Up R	171	APPLETON ST	Retail < 10,000 SF
450	AIKEN ST	City of Lowell C	90	APPLETON ST	Apt 9 Units and Up C
450	AIKEN ST	City of Lowell C	263	APPLETON ST	Auto Repair
450	AIKEN ST	City of Lowell C	234	APPLETON ST	Apt 4 to 8 Units C
220	AIKEN ST	US GOVT C	241	APPLETON ST	Apt 4 to 8 Units R
220	AIKEN ST	US GOVT C	197	APPLETON ST	Apt 9 Units and Up C
700	AIKEN ST	Restaurant/Club	50	ARCAND DR	City of Lowell C
734	AIKEN ST	Auto Repair	50	ARCAND DR	City of Lowell C
737	AIKEN ST	Retail Gas Station C	23	ARCAND DR	City of Lowell V
225	AIKEN ST(EAST FIELDS)	ED MDL-96 REIMB	110	ARCAND DR	Aff Hgs Units (Apts)
322	AIKEN ST(REC CNTR)	ED C REIMB	110	ARCAND DR	Aff Hgs Units (Apts)
327	AIKEN ST(USUITES)	ED C REIMB	77	ARCH ST	City of Lowell C
327	AIKEN ST(USUITES)	ED C REIMB	68	ARCH ST	Warehouse/Dist/Storage
48	ALMA ST	Apt 4 to 8 Units R	18	ARLINGTON ST	Apt 4 to 8 Units R
12	AMES ST	Auto Repair	37	ARLINGTON ST	Apt 4 to 8 Units R
16	AMES ST	Apt 4 to 8 Units R	5	ARTHUR ST	Apt 4 to 8 Units R
74	ANDOVER ST	Housing Authority R	23	ASH ST	Apt 4 to 8 Units R
229	ANDOVER ST	Char Housing R	35	ASH ST	Apt 9 Units and Up R
403	ANDOVER ST	Church/Temple C	35	ASH ST	Apt 9 Units and Up R
29	ASH ST	Apt 9 Units and Up R	29	ASH ST	Apt 9 Units and Up R

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
17	ASTOR ST	Apt 4 to 8 Units C	85	BOISVERT ST - SCHOOL	Church/Temple C
17	ASTOR ST	Apt 4 to 8 Units C	123	BOLT ST	Warehouse
18	AUBURN ST	Apt 4 to 8 Units R	90	BOLT ST	Comm Bldg C
73	AUSTIN ST	Apt 9 Units and Up C	90	BOLT ST	Warehouse/Dist/Storage
73	AUSTIN ST	Apt 9 Units and Up C	50	BOSTON RD	Warehouse/Dist/Storage
15	AUSTIN ST	Apt 4 to 8 Units R	7	BOWDEN ST	Apt 4 to 8 Units R
85	AVON ST	Apt 4 to 8 Units R	130	BOWDEN ST #136	Apt 9 Units and Up C
101	AVON ST	Apt 4 to 8 Units R	130	BOWDEN ST #136	Apt 9 Units and Up C
42	B ST	Apt 4 to 8 Units R	130	BOWDEN ST #2	Apt 9 Units and Up C
12	BALDWIN ST	Warehouse/Dist/Storage	130	BOWDEN ST #2	Apt 9 Units and Up C
12	BALDWIN ST	Car Dealer Small	130	BOWDEN ST #4	Apt 9 Units and Up C
259	BALDWIN ST	NURSING HOME	130	BOWDEN ST #4	Apt 9 Units and Up C
259	BALDWIN ST	NURSING HOME	130	BOWDEN ST BLDG	Apt 9 Units and Up C
259	BALDWIN ST	NURSING HOME	130	BOWDEN ST BLDG	Apt 9 Units and Up C
259	BALDWIN ST	NURSING HOME	130	BOWDEN ST BLDG	Apt 9 Units and Up C
12	BALDWIN ST	Car Dealer Small	130	BOWDEN ST BLDG	Apt 9 Units and Up C
86	BALDWIN ST	Apt 4 to 8 Units R	130	BOWDEN ST BLDG	Apt 9 Units and Up C
45	BARCLAY ST	Apt 4 to 8 Units R	130	BOWDEN ST BLDG	Apt 9 Units and Up C
174	BARKER AVE	Apt 4 to 8 Units R	130	BOWDEN ST BLDG	Apt 9 Units and Up C
33	BARTLETT ST	Commercial Condo	130	BOWDEN ST BLDG	Apt 9 Units and Up C
12	BARTLETT ST	Hospital C	130	BOWDEN ST CLUB HSE	Apt 9 Units and Up C
12	BARTLETT ST	Hospital C	130	BOWDEN ST CLUB HSE	Apt 9 Units and Up C
12	BARTLETT ST	Hospital C	55	BOWERS ST	Church/Temple C
12	BARTLETT ST	Hospital C	44	BOWERS ST	Church/Temple R
17	BASSETT ST	Housing Authority R	75	BOWERS ST	Apt 4 to 8 Units R
9	BASSETT ST	Apt 4 to 8 Units R	22	BOWERS ST	Aff Hgs Units (Apts)
11	BASSETT ST	Apt 4 to 8 Units R	22	BOWERS ST	Aff Hgs Units (Apts)
184	BEACON ST	Apt 4 to 8 Units C	4	BOWERS ST	Apt 4 to 8 Units R
31	BEACON ST	Apt 4 to 8 Units R	17	BOWERS ST	Apt 4 to 8 Units R
75	BEACON ST	Apt 4 to 8 Units R	145	BOYLSTON ST	Lowell Education C
78	BEAULIEU ST	Apt 4 to 8 Units R	145	BOYLSTON ST	Lowell Education C
57	BEAULIEU ST	Apt 4 to 8 Units R	20	BOYLSTON ST	Apt 4 to 8 Units R
105	BEECH ST	Apt 4 to 8 Units R	449	BOYLSTON ST	61B PICNIC
25	BEECH ST	Apt 4 to 8 Units R	449	BOYLSTON ST	Fraternal Org
49	BELLEVUE ST	Apt 4 to 8 Units R	111	BOYNTON ST	Apt 4 to 8 Units C
12	BELLEVUE ST	Apt 4 to 8 Units R	45	BRANCH ST	Public Safety C
32	BELLEVUE ST	Apt 4 to 8 Units R	200	BRANCH ST	Apt 4 to 8 Units R
87	BELLEVUE ST	Apt 4 to 8 Units R	129	BRANCH ST	Warehouse/Dist/Storage
74	BELLEVUE ST	Apt 4 to 8 Units R	237	BRANCH ST	Apt 4 to 8 Units C
2	BELLEVUE ST	Apt 4 to 8 Units R	54	BRANCH ST	Retail < 10,000 SF
59	BELLEVUE ST	Apt 4 to 8 Units R	237	BRANCH ST	Apt 4 to 8 Units C
141	BELLEVUE ST	Apt 4 to 8 Units R	185	BRANCH ST	Apt 4 to 8 Units R
28	BELLEVUE ST	Apt 4 to 8 Units R	220	BRANCH ST	Apt 9 Units and Up C
85	BELMONT ST	Apt 9 Units and Up C	74	BRANCH ST	Apt 9 Units and Up C
85	BELMONT ST	Apt 9 Units and Up C	74	BRANCH ST	Apt 9 Units and Up C
20	BELMONT ST	Apt 9 Units and Up C	53	BRANCH ST	Apt 4 to 8 Units C
20	BELMONT ST	Apt 9 Units and Up C	86	BRANCH ST	Apt 9 Units and Up R
18	BELMONT ST	Apt 9 Units and Up C	86	BRANCH ST	Apt 9 Units and Up R
18	BELMONT ST	Apt 9 Units and Up C	136	BRANCH ST	Apt 4 to 8 Units R
71	BERNIER ST	Apt 9 Units and Up C	156	BRANCH ST	Apt 4 to 8 Units R
71	BERNIER ST	Apt 9 Units and Up C	266	BRANCH ST	Retail < 10,000 SF
35	BERNIER ST	Apt 9 Units and Up C	21	BRANCH ST	Office Bldg
35	BERNIER ST	Apt 9 Units and Up C	267	BRANCH ST	Retail < 10,000 SF
34	BERRY RD	Char Housing R	37	BRANCH ST	Retail < 10,000 SF
2	BILLERICA ST	Apt 4 to 8 Units R	37	BRANCH ST	Auto Repair
2	BILLERICA ST	Apt 4 to 8 Units R	37	BRANCH ST	Warehouse/Dist/Storage
49	BLOSSOM ST	Church/Temple C	32	BRANCH ST	Retail < 10,000 SF
85	BOISVERT ST - SCHOOL	Rectory/Parsonage R	6	BRANCH ST	Retail > 10,000 SF
72	BOISVERT ST - SCHOOL	Church/Temple C	37	BRANCH ST	Retail < 10,000 SF
			223	BRANCH ST	Apt 4 to 8 Units C
190	BRANCH ST	Retail < 10,000 SF	349	BRIDGE ST	Retail < 10,000 SF

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
173	BRANCH ST	Apt 4 to 8 Units C	417	BRIDGE ST	Apt 9 Units and Up C
37	BRANCH ST	Auto Repair	417	BRIDGE ST	Apt 9 Units and Up C
186	BRANCH ST	Retail < 10,000 SF	560	BRIDGE ST	Bank Bldg
24	BRANCH ST	Apt 4 to 8 Units C	380	BRIDGE ST	Retail < 10,000 SF
220	BRANCH ST	Apt 9 Units and Up C	1201	BRIDGE ST	Retail > 10,000 SF
79	BRANCH ST	Retail < 10,000 SF	418	BRIDGE ST	Office Bldg
37	BRANCH ST	Warehouse/Dist/Storage	430	BRIDGE ST	Retail < 10,000 SF
115	BRANCH ST	Apt 4 to 8 Units R	380	BRIDGE ST	Retail < 10,000 SF
45	BRANCH ST - ENGINE #2	Public Safety C	372	BRIDGE ST	Retail < 10,000 SF
965	BRIDGE ST	Lowell Education C	1235	BRIDGE ST	Retail < 10,000 SF
965	BRIDGE ST	Lowell Education C	25	BRIDGE ST	Retail < 10,000 SF
746	BRIDGE ST	Church/Temple C	1148	BRIDGE ST	Retail < 10,000 SF
543	BRIDGE ST	Rectory/Parsonage R	1201	BRIDGE ST	Shopping Mall
5582	BRIDGE ST	CONDO MAIN	651	BRIDGE ST	Retail < 10,000 SF
965	BRIDGE ST	Lowell Education C	159	BRIDGE ST	Apt 9 Units and Up C
965	BRIDGE ST	Lowell Education C	501	BRIDGE ST	Bank Bldg
591	BRIDGE ST	Housing Authority R	677	BRIDGE ST	Retail < 10,000 SF
1140	BRIDGE ST	Retail < 10,000 SF	494	BRIDGE ST 1	Retail < 10,000 SF
159	BRIDGE ST	Apt 9 Units and Up C	494	BRIDGE ST 2	Retail < 10,000 SF
485	BRIDGE ST	Apt 9 Units and Up C	1141	BRIDGE ST UNIT	Retail < 10,000 SF
159	BRIDGE ST	Apt 9 Units and Up C	1141	BRIDGE ST UNIT	Retail < 10,000 SF
485	BRIDGE ST	Apt 9 Units and Up C	1141	BRIDGE ST UNIT	Retail < 10,000 SF
485	BRIDGE ST	Apt 9 Units and Up C	1141	BRIDGE ST UNIT	Retail < 10,000 SF
838	BRIDGE ST	Apt 9 Units and Up C	1141	BRIDGE ST UNIT	Retail < 10,000 SF
1230	BRIDGE ST	Professional Office	430	BRIDGE ST UNIT	Retail < 10,000 SF
81	BRIDGE ST	Office Bldg	430	BRIDGE ST UNIT	Retail < 10,000 SF
838	BRIDGE ST	Apt 9 Units and Up C	430	BRIDGE ST UNIT	Retail < 10,000 SF
159	BRIDGE ST	Apt 9 Units and Up C	1201	BRIDGE ST UNIT	Retail > 10,000 SF
1200	BRIDGE ST	Restaurant/Club	1201	BRIDGE ST UNIT	Shopping Mall
485	BRIDGE ST	Apt 9 Units and Up C	1201	BRIDGE ST UNIT	Retail > 10,000 SF
338	BRIDGE ST	Retail > 10,000 SF	430	BRIDGE ST UNIT	Retail < 10,000 SF
338	BRIDGE ST	Retail > 10,000 SF	1201	BRIDGE ST UNIT	Shopping Mall
404	BRIDGE ST	Apt 4 to 8 Units C	140	BROADWAY ST	City of Lowell V
848	BRIDGE ST	Apt 4 to 8 Units R	951	BROADWAY ST	Char Other C
612	BRIDGE ST	Boarding House R	560	BROADWAY ST	Lowell Education C
28	BRIDGE ST	Apt 9 Units and Up C	735	BROADWAY ST	Char Other C
315	BRIDGE ST	Restaurant/Club	41	BROADWAY ST	Priv Secondary C
28	BRIDGE ST	Apt 9 Units and Up C	951	BROADWAY ST	Char Other C
462	BRIDGE ST	Apt 9 Units and Up C	346	BROADWAY ST	Vacant Land Dev
70	BRIDGE ST	Apt 9 Units and Up C	559	BROADWAY ST	Apt 9 Units and Up C
1107	BRIDGE ST	Apt 4 to 8 Units C	559	BROADWAY ST	Apt 9 Units and Up C
70	BRIDGE ST	Retail > 10,000 SF	369	BROADWAY ST	Restaurant/Club
462	BRIDGE ST	Apt 9 Units and Up C	423	BROADWAY ST	Apt 9 Units and Up R
863	BRIDGE ST	Apt 4 to 8 Units R	423	BROADWAY ST	Apt 9 Units and Up R
359	BRIDGE ST	Retail < 10,000 SF	430	BROADWAY ST	Apt 9 Units and Up C
471	BRIDGE ST	Apt 4 to 8 Units C	658	BROADWAY ST	Car Dealer Small
423	BRIDGE ST	Retail < 10,000 SF	771	BROADWAY ST	Apt 4 to 8 Units C
1150	BRIDGE ST	Car Wash	479	BROADWAY ST	Auto Repair
686	BRIDGE ST	Apt 4 to 8 Units R	688	BROADWAY ST	Comm Bldg C
757	BRIDGE ST	Office	706	BROADWAY ST	Parking Lot
112	BRIDGE ST	Restaurant/Club	742	BROADWAY ST	Retail < 10,000 SF
596	BRIDGE ST	Apt 4 to 8 Units R	706	BROADWAY ST	Parking Lot
411	BRIDGE ST	Retail < 10,000 SF	545	BROADWAY ST	Warehouse
447	BRIDGE ST	Parking Lot	346	BROADWAY ST	Retail < 10,000 SF
581	BRIDGE ST	Office Bldg	651	BROADWAY ST	Parking Lot
1190	BRIDGE ST	Retail < 10,000 SF	66	BROADWAY ST	Auto Repair
625	BRIDGE ST	Apt 4 to 8 Units R	627	BROADWAY ST	Apt 4 to 8 Units C
603	BRIDGE ST	Restaurant/Club	66	BROADWAY ST	Auto Repair
1235	BRIDGE ST	Retail < 10,000 SF	537	BROADWAY ST	Auto Repair
751	BROADWAY ST	Apt 9 Units and Up R			
759	BROADWAY ST	Apt 9 Units and Up R			

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
751	BROADWAY ST	Apt 9 Units and Up R	22	BROOKS ST	Apt 4 to 8 Units C
643	BROADWAY ST	Apt 4 to 8 Units C	20	BURLINGTON AVE	Char Housing R
757	BROADWAY ST	Apt 9 Units and Up R	36	BURLINGTON AVE	Apt 9 Units and Up C
759	BROADWAY ST	Apt 9 Units and Up R	36	BURLINGTON AVE	Apt 9 Units and Up C
757	BROADWAY ST	Apt 9 Units and Up R	26	BURNS ST	Apt 4 to 8 Units R
583	BROADWAY ST	Apt 4 to 8 Units R	17	BURNS ST	Apt 4 to 8 Units R
276	BROADWAY ST	Office Bldg	11	BURNSIDE ST	Apt 4 to 8 Units R
198	BROADWAY ST	Apt 4 to 8 Units C	30	BURTT ST	Apt 4 to 8 Units R
605	BROADWAY ST	Apt 9 Units and Up C	27	BUTLER AVE	Apt 4 to 8 Units R
743	BROADWAY ST	Apt 4 to 8 Units R	23	BUTLER AVE	Apt 4 to 8 Units R
378	BROADWAY ST	Restaurant/Club	496	BUTMAN RD	Apt 9 Units and Up C
236	BROADWAY ST	Day Care	496	BUTMAN RD	Apt 9 Units and Up C
804	BROADWAY ST	Apt 9 Units and Up C	4	BUTTERFIELD ST	Apt 9 Units and Up C
804	BROADWAY ST	Apt 9 Units and Up C	4	BUTTERFIELD ST	Apt 9 Units and Up C
278	BROADWAY ST	Office Bldg	38	BUTTERFIELD ST	Apt 4 to 8 Units R
517	BROADWAY ST	Restaurant/Club	7	C ST	Auto Repair
451	BROADWAY ST	Retail < 10,000 SF	114	CABOT ST	Boarding House C
163	BROADWAY ST	Apt 9 Units and Up C	120	CABOT ST	Boarding House C
276	BROADWAY ST	Office Bldg	26	CABOT ST	Apt 4 to 8 Units R
197	BROADWAY ST	Apt 4 to 8 Units R	30	CABOT ST	Boarding House C
236	BROADWAY ST	Day Care	16	CABOT ST	Restaurant/Club
605	BROADWAY ST	Apt 9 Units and Up C	175	CABOT ST	Office Bldg
270	BROADWAY ST	Office Bldg	199	CABOT ST #1	Commercial Condo
270	BROADWAY ST	Office Bldg	201	CABOT ST #2	Office Condo
163	BROADWAY ST	Apt 9 Units and Up C	7	CADY ST	Apt 4 to 8 Units R
278	BROADWAY ST	Office Bldg	11	CADY ST	Apt 4 to 8 Units R
499	BROADWAY ST	Retail < 10,000 SF	24	CAMBRIDGE ST	Church/Temple C
804	BROADWAY ST	Apt 9 Units and Up C	147	CAMBRIDGE ST	Comm Bldg C
804	BROADWAY ST	Apt 9 Units and Up C	147	CAMBRIDGE ST	Comm Bldg C
885	BROADWAY ST (ALLEN HOUSE)	ED C REIMB	137	CAMBRIDGE ST	Auto Repair
885	BROADWAY ST (ALLEN HOUSE)	ED C REIMB	143	CAMBRIDGE ST	Comm Bldg C
850	BROADWAY ST (COBURN HALL)	ED - UML-MCC REIMB	14	CAMBRIDGE ST	Warehouse/Dist/Storage
850	BROADWAY ST (COBURN HALL)	ED - UML-MCC REIMB	133	CAMBRIDGE ST	Auto Repair
880	BROADWAY ST (MAHONEY)	ED C REIMB	175	CAMPBELL DR	Lowell Education C
880	BROADWAY ST (MAHONEY)	ED MDL-96 REIMB	30	CANADA ST	Factory
883	BROADWAY ST [DUGAN HALL]	ED C REIMB	48	CANADA ST	Warehouse/Dist/Storage
883	BROADWAY ST [DUGAN HALL]	ED C REIMB	66	CANADA ST	Warehouse
876	BROADWAY ST [WEED HALL]	ED C REIMB	66	CANADA ST	Warehouse
876	BROADWAY ST [WEED HALL]	ED C REIMB	200	CANAL ST	Apt 9 Units and Up C
876	BROADWAY ST [WEED HALL]	ED C REIMB	200	CANAL ST	Apt 9 Units and Up C
876	BROADWAY ST [WEED HALL]	ED C REIMB	200	CANAL ST	Apt 9 Units and Up C
700	BROADWAY ST REAR	Retail < 10,000 SF	200	CANAL ST	Apt 9 Units and Up C
700	BROADWAY ST REAR	Retail < 10,000 SF	110	CANAL ST	OFFICE BLD MDL-96
700	BROADWAY ST UNIT	Retail < 10,000 SF	33	CANTON ST	Apt 4 to 8 Units R
700	BROADWAY ST UNIT	Retail < 10,000 SF	39	CARL ST	Apt 9 Units and Up C
887	BROADWAY ST(CONCORDIA)	ED - UML-MCC REIMB	39	CARL ST	Apt 9 Units and Up C
850	BROADWAY ST(S. PWR PLNT)	ED - UML-MCC REIMB	14	CARLTON ST UNIT	IND CONDO MDL-06
889	BROADWAY ST(SHEEHY)	ED - UML-MCC REIMB	14	CARLTON ST UNIT	IND CONDO MDL-06

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
6	BROOKS ST	Apt 4 to 8 Units C	80	CAROLYN ST	Apt 4 to 8 Units R
15	CARTER ST	Lowell Education C	533	CENTRAL ST	Apt 4 to 8 Units R
7	CEDAR ST	Apt 4 to 8 Units R	243	CENTRAL ST	Retail < 10,000 SF
490	CENTRAL ST	Restaurant/Club	940	CENTRAL ST	Apt 4 to 8 Units R
217	CENTRAL ST	Can't Find Address	723	CENTRAL ST	Apt 4 to 8 Units R
217	CENTRAL ST	Can't Find Address	313	CENTRAL ST	Office
480	CENTRAL ST	Char Housing R	960	CENTRAL ST	Apt 9 Units and Up C
745	CENTRAL ST	Char Other C	147	CENTRAL ST	Retail > 10,000 SF
893	CENTRAL ST	Church/Temple C	278	CENTRAL ST	Boarding House C
240	CENTRAL ST	ED UML, MCC NR	231	CENTRAL ST	Retail > 10,000 SF
240	CENTRAL ST	ED UML, MCC NR	25	CENTRAL ST	Office Bldg
893	CENTRAL ST	Church/Temple C	884	CENTRAL ST	Retail < 10,000 SF
901	CENTRAL ST	Church/Temple C	279	CENTRAL ST	Restaurant/Club
40	CENTRAL ST	Char Services C	621	CENTRAL ST	Apt 4 to 8 Units C
624	CENTRAL ST	Apt 4 to 8 Units R	661	CENTRAL ST	Retail < 10,000 SF
136	CENTRAL ST	Office Bldg	295	CENTRAL ST	Retail > 10,000 SF
583	CENTRAL ST	Apt 4 to 8 Units C	216	CENTRAL ST	Apt 4 to 8 Units C
50	CENTRAL ST	Bank Bldg	1010	CENTRAL ST	Aff Hgs Units (Apts)
321	CENTRAL ST	Office Bldg	1010	CENTRAL ST	Aff Hgs Units (Apts)
336	CENTRAL ST	Office Bldg	249	CENTRAL ST	Apt 4 to 8 Units C
483	CENTRAL ST	Apt 4 to 8 Units R	512	CENTRAL ST	Apt 4 to 8 Units C
810	CENTRAL ST	Apt 4 to 8 Units C	31	CENTRAL ST	Restaurant/Club
375	CENTRAL ST	Restaurant/Club	512	CENTRAL ST REAR	Apt 4 to 8 Units C
216	CENTRAL ST	Apt 4 to 8 Units C	1	CENTRE ST	Apt 4 to 8 Units C
166	CENTRAL ST	Professional Office	36	CHAMBERLAIN ST	Restaurant/Club
381	CENTRAL ST	Retail < 10,000 SF	20	CHAMBERS ST	Apt 4 to 8 Units R
290	CENTRAL ST	Restaurant/Club	3	CHAMBERS ST	Retail < 10,000 SF
290	CENTRAL ST	Restaurant/Club	66	CHAMBERS ST	Apt 4 to 8 Units R
26	CENTRAL ST	Apt 9 Units and Up C	54	CHAMBERS ST (AN REAR	Apt 4 to 8 Units R
834	CENTRAL ST	Apt 4 to 8 Units R	169	CHAPEL ST	Housing Authority R
26	CENTRAL ST	Retail > 10,000 SF	75	CHAPEL ST	Apt 4 to 8 Units R
447	CENTRAL ST	Comm Bldg C	93	CHAPEL ST	Apt 4 to 8 Units R
547	CENTRAL ST	Restaurant/Club	106	CHAPEL ST	Apt 9 Units and Up C
26	CENTRAL ST	Retail > 10,000 SF	112	CHAPEL ST	Apt 4 to 8 Units C
220	CENTRAL ST	Restaurant/Club	64	CHAPEL ST	Apt 4 to 8 Units C
26	CENTRAL ST	Apt 9 Units and Up C	106	CHAPEL ST	Apt 9 Units and Up C
1020	CENTRAL ST	Aff Hgs Units (Apts)	211	CHARLES ST	Church/Temple C
1020	CENTRAL ST	Aff Hgs Units (Apts)	189	CHARLES ST	Apt 4 to 8 Units R
395	CENTRAL ST	Retail < 10,000 SF	59	CHARLES ST	Fraternal Org
594	CENTRAL ST	Apt 4 to 8 Units C	151	CHARLES ST	Apt 4 to 8 Units R
101	CENTRAL ST	Retail < 10,000 SF	37	CHARLES ST	Car Dealer Small
189	CENTRAL ST	Retail < 10,000 SF	135	CHARLES ST #1	Apt 4 to 8 Units R
447	CENTRAL ST	Comm Bldg C	135	CHARLES ST #2	Apt 4 to 8 Units R
776	CENTRAL ST	Apt 4 to 8 Units C	135	CHARLES ST #3	Apt 4 to 8 Units R
454	CENTRAL ST	Apt 4 to 8 Units R	135	CHARLES ST #4	Apt 4 to 8 Units R
464	CENTRAL ST	Apt 4 to 8 Units R	135	CHARLES ST #5	Apt 4 to 8 Units R
91	CENTRAL ST	Office Bldg	11	CHASE ST	City of Lowell V
30	CENTRAL ST	Office	16	CHASE ST	Apt 9 Units and Up C
648	CENTRAL ST	Office Bldg	16	CHASE ST	Apt 9 Units and Up C
212	CENTRAL ST	Retail < 10,000 SF	294	CHELMSFORD ST	Lowell Education C
431	CENTRAL ST	Apt 4 to 8 Units C	580	CHELMSFORD ST	Housing Authority C
953	CENTRAL ST	Auto Repair	294	CHELMSFORD ST	Lowell Education C
9	CENTRAL ST	Office Bldg	580	CHELMSFORD ST	Housing Authority C
933	CENTRAL ST	Apt 4 to 8 Units R	580	CHELMSFORD ST	Housing Authority C
198	CENTRAL ST	Retail > 10,000 SF	580	CHELMSFORD ST	Housing Authority C
21	CENTRAL ST	Retail < 10,000 SF	524	CHELMSFORD ST	Church/Temple C
45	CENTRAL ST	Apt 9 Units and Up C	580	CHELMSFORD ST	Housing Authority C
604	CENTRAL ST	Retail < 10,000 SF	580	CHELMSFORD ST	Housing Authority C
736	CENTRAL ST	Apt 4 to 8 Units C	580	CHELMSFORD ST	Housing Authority C
421	CENTRAL ST	Retail < 10,000 SF	580	CHELMSFORD ST	Housing Authority C
925	CENTRAL ST	Apt 4 to 8 Units R	665	CHELMSFORD ST	Retail < 10,000 SF

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
872	CENTRAL ST	Apt 4 to 8 Units R	900	CHELMSFORD ST	Office
900	CHELMSFORD ST	Office	255	CHELMSFORD ST	Restaurant/Club
900	CHELMSFORD ST	Office	55	CHELMSFORD ST	Gas Station
469	CHELMSFORD ST	Retail < 10,000 SF	850	CHELMSFORD ST	Shopping Mall
900	CHELMSFORD ST	Office	236	CHELMSFORD ST	Auto Repair
179	CHELMSFORD ST	Supermarket	365	CHELMSFORD ST	Auto Repair
374	CHELMSFORD ST	Restaurant/Club	475	CHELMSFORD ST	Restaurant/Club
452	CHELMSFORD ST	Retail > 10,000 SF	980	CHELMSFORD ST	Gas Station
452	CHELMSFORD ST	Retail > 10,000 SF	100	CHELMSFORD ST	R-D FACIL MDL-94
93	CHELMSFORD ST	Car Dealer Small	115	CHELMSFORD ST	Retail < 10,000 SF
289	CHELMSFORD ST	Apt 4 to 8 Units C	980	CHELMSFORD ST	Car Wash
39	CHELMSFORD ST	Warehouse/Dist/Storage	980	CHELMSFORD ST	Car Wash
497	CHELMSFORD ST	Retail < 10,000 SF	317	CHELMSFORD ST	Gas Station
249	CHELMSFORD ST	Restaurant/Club	115	CHELMSFORD ST	Restaurant/Club
703	CHELMSFORD ST	Office Bldg	100	CHELMSFORD ST	R-D FACIL MDL-94
182	CHELMSFORD ST	STORE/SHOP MDL-96	100	CHELMSFORD ST	R-D FACIL MDL-94
394	CHELMSFORD ST	Restaurant/Club	100	CHELMSFORD ST	R-D FACIL MDL-94
182	CHELMSFORD ST	STORE/SHOP MDL-96	443	CHELMSFORD ST	Restaurant/Club
450	CHELMSFORD ST	Office	716	CHELMSFORD ST	Apt 9 Units and Up C
963	CHELMSFORD ST	Retail < 10,000 SF	450	CHELMSFORD ST - REAR	Office
119	CHELMSFORD ST	Retail < 10,000 SF	8	CHEERY ST	Apt 4 to 8 Units R
480	CHELMSFORD ST	Restaurant/Club	136	CHESTNUT ST	Apt 4 to 8 Units R
77	CHELMSFORD ST	Auto Repair	80	CHESTNUT ST	Boarding House R
706	CHELMSFORD ST	Apt 9 Units and Up C	81	CHESTNUT ST	Apt 4 to 8 Units R
704	CHELMSFORD ST	Apt 9 Units and Up C	61	CHESTNUT ST	Apt 9 Units and Up R
219	CHELMSFORD ST	Office Bldg	61	CHESTNUT ST	Apt 9 Units and Up R
712	CHELMSFORD ST	Apt 9 Units and Up C	75	CHESTNUT ST	Office
704	CHELMSFORD ST	Apt 9 Units and Up C	77	CHESTNUT ST	Office
161	CHELMSFORD ST	Apt 4 to 8 Units C	227	CHURCH ST	Apt 4 to 8 Units R
712	CHELMSFORD ST	Apt 9 Units and Up C	80	CHURCH ST	Retail > 10,000 SF
706	CHELMSFORD ST	Apt 9 Units and Up C	40	CHURCH ST	Office Bldg
280	CHELMSFORD ST	Car Dealer Small	32	CHURCH ST	Office Bldg
716	CHELMSFORD ST	Apt 9 Units and Up C	50	CHURCH ST	Office Bldg
724	CHELMSFORD ST	Shopping Mall	170	CHURCH ST	Office Bldg
440	CHELMSFORD ST	Restaurant/Club	203	CHURCH ST	Auto Repair
558	CHELMSFORD ST	Retail < 10,000 SF	177	CHURCH ST	Retail < 10,000 SF
460	CHELMSFORD ST	Retail < 10,000 SF	97	CHURCH ST	Retail < 10,000 SF
700	CHELMSFORD ST	Retail < 10,000 SF	177	CHURCH ST	Shopping Mall
277	CHELMSFORD ST	Retail < 10,000 SF	97	CHURCH ST	Shopping Mall
200	CHELMSFORD ST	Car Dealer Small	87	CHURCH ST	Retail < 10,000 SF
694	CHELMSFORD ST	Office Bldg	89	CHURCH ST	Shopping Mall
525	CHELMSFORD ST	Retail < 10,000 SF	95	CHURCH ST	Shopping Mall
200	CHELMSFORD ST	Car Dealer Small	121	CHURCH ST	Retail < 10,000 SF
642	CHELMSFORD ST	Retail < 10,000 SF	89	CHURCH ST	Retail < 10,000 SF
611	CHELMSFORD ST	Apt 4 to 8 Units R	121	CHURCH ST	Shopping Mall
646	CHELMSFORD ST	Retail < 10,000 SF	125	CHURCH ST	Retail < 10,000 SF
279	CHELMSFORD ST	Retail < 10,000 SF	125	CHURCH ST	Shopping Mall
460	CHELMSFORD ST	Retail < 10,000 SF	242	CHURCH ST	Office Bldg
710	CHELMSFORD ST	Office Bldg	55	CHURCH ST	Shopping Mall
200	CHELMSFORD ST	Car Dealer Small	55	CHURCH ST	Retail < 10,000 SF
200	CHELMSFORD ST	Car Dealer Small	87	CHURCH ST	Shopping Mall
368	CHELMSFORD ST	Apt 4 to 8 Units R	95	CHURCH ST	Retail < 10,000 SF
424	CHELMSFORD ST	Retail < 10,000 SF	127	CHURCH ST	Retail < 10,000 SF
255	CHELMSFORD ST	Restaurant/Club	239	CHURCH ST	Retail < 10,000 SF
402	CHELMSFORD ST	Auto Repair	127	CHURCH ST	Shopping Mall
426	CHELMSFORD ST	Retail < 10,000 SF	21	CLARE ST	Apt 4 to 8 Units R
457	CHELMSFORD ST	Restaurant/Club	123	CLARENDON ST	61B GOLF MDL-00
850	CHELMSFORD ST	Shopping Mall	512	CLARK RD	City of Lowell V
980	CHELMSFORD ST	Gas Station	512	CLARK RD	City of Lowell V
682	CHELMSFORD ST	Apt 4 to 8 Units R	63	CLIFTON ST	Apt 4 to 8 Units R
360	CHELMSFORD ST	Car Dealer Small	51	CLIFTON ST	Apt 4 to 8 Units R

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
325	CHELMSFORD ST	Comm Bldg C	9	COBURN CT	Apt 4 to 8 Units R
201	COBURN ST	Church/Temple C	9	DECATUR AVE	Apt 4 to 8 Units C
10	COBURN ST	Fraternal Org	106	DELMONT AVE	Apt 9 Units and Up C
10	COBURN ST	Fraternal Org	101	DELMONT AVE	Apt 9 Units and Up C
54	COLUMBUS AVE	Apt 4 to 8 Units C	102	DELMONT AVE	Apt 9 Units and Up C
12	COLUMBUS AVE	Apt 4 to 8 Units R	114	DELMONT AVE	Apt 9 Units and Up C
2	COLWELL AVE	Housing Authority R	101	DELMONT AVE	Apt 9 Units and Up C
1	COLWELL AVE	Housing Authority R	102	DELMONT AVE	Apt 9 Units and Up C
1	COLWELL AVE	Housing Authority R	114	DELMONT AVE	Apt 9 Units and Up C
5	COLWELL AVE	Housing Authority R	106	DELMONT AVE	Apt 9 Units and Up C
2	COLWELL AVE	Housing Authority R	60	DIX ST	Warehouse/Dist/Storage
470	CONCORD ST	Housing Authority C	45	DIX ST	Comm Bldg C
33	CONCORD ST	Auto Repair	27	DIX ST	Auto Repair
10	CONCORD ST	Apt 4 to 8 Units C	43	DOANE ST	Warehouse/Dist/Storage
99	CONCORD ST	Apt 4 to 8 Units R	59	DOANE ST #1 & 2	Auto Repair
121	CONCORD ST	Comm Bldg C	59	DOANE ST #3	Auto Repair
244	CONCORD ST	Apt 4 to 8 Units R	59	DOANE ST #4	Auto Repair
301	CONCORD ST	Apt 4 to 8 Units R	59	DOANE ST #5	Auto Repair
104	CONCORD ST	Apt 4 to 8 Units R	59	DOANE ST #6	Auto Repair
134	CONGRESS ST	Auto Repair	59	DOANE ST #7	Auto Repair
133	CONGRESS ST	Warehouse/Dist/Storage	59	DOANE ST #8	Auto Repair
115	CONGRESS ST	Auto Repair	111	DOUGLAS RD	Lowell Education C
107	CONGRESS ST	Auto Repair	424	DOUGLAS RD	City of Lowell V
125	CONGRESS ST	Parking Lot	111	DOUGLAS RD	Lowell Education C
103	CONGRESS ST	Apt 4 to 8 Units R	382	DOUGLAS RD	DEPT CONS/PARKS NR
86	CONGRESS ST	Warehouse/Dist/Storage	382	DOUGLAS RD	DEPT CONS/PARKS NR
64	CORAL ST	Apt 4 to 8 Units R	15	DOVER ST	Apt 4 to 8 Units R
3	CORAL ST	Apt 4 to 8 Units R	1	DOVER ST	Restaurant/Club
10	CORK ST	Apt 9 Units and Up C	11	DOVER ST	Apt 4 to 8 Units R
10	CORK ST	Apt 9 Units and Up C	50	DRACUT ST	Church/Temple C
60	COURT ST	Church/Temple V	109	DRACUT ST	Apt 4 to 8 Units R
13	CRANE ST	Housing Authority R	30	DRACUT ST	Apt 4 to 8 Units R
10	CRANE ST	Can't Find Address	50	DUBLIN ST	Housing Authority C
12	CRANE ST	Can't Find Address	14	DUBLIN ST	Apt 4 to 8 Units C
1	CRANE ST	Apt 4 to 8 Units R	14	DUBLIN ST	Apt 4 to 8 Units C
5	CRESCENT ST	Apt 4 to 8 Units R	5	DUBLIN ST	Apt 4 to 8 Units R
174	CROSBY ST	Apt 4 to 8 Units R	24	DUBLIN ST	Apt 4 to 8 Units C
81	CROSS ST	DEPT CONS/PARKS NR	22	DUBLIN ST	Apt 4 to 8 Units C
81	CROSS ST	DEPT CONS/PARKS NR	80	DUMMER ST	City of Lowell V
148	CROSS ST	Apt 4 to 8 Units C	75	DUNBAR AVE	Apt 4 to 8 Units R
226	CROSS ST	Apt 4 to 8 Units R	74	DURANT ST	Apt 4 to 8 Units R
135	CROSS ST	Apt 9 Units and Up C	24	DUREN AVE	Warehouse
135	CROSS ST	Apt 9 Units and Up C	79	DUTTON ST	Func/Frat Org C
133	CROSS ST	Apt 9 Units and Up C	350	DUTTON ST	City of Lowell C
133	CROSS ST	Apt 9 Units and Up C	167	DUTTON ST	Char Other C
213	CROSS ST	Apt 4 to 8 Units R	740	DUTTON ST	Industrial Bldg
101	CROSS ST	Restaurant/Club	760	DUTTON ST	Office
6	CROSS ST	Apt 4 to 8 Units C	755	DUTTON ST	Warehouse
229	CROSS ST	Apt 4 to 8 Units R	556	DUTTON ST	Office Bldg
170	CROSS ST	Apt 9 Units and Up C	564	DUTTON ST	Office Bldg
170	CROSS ST	Apt 9 Units and Up C	600	DUTTON ST	Warehouse/Dist/Storage
230	CUMBERLAND RD	Retail < 10,000 SF	705	DUTTON ST	Warehouse/Dist/Storage
187	CUMBERLAND RD	Apt 4 to 8 Units R	771	DUTTON ST	Vacant Land Dev
137	CUSHING ST	Apt 4 to 8 Units C	215	DUTTON ST	Gas Station
169	CUSHING ST	Warehouse/Dist/Storage	243	DUTTON ST	Apt 9 Units and Up C
143	CUSHING ST	Auto Repair	305	DUTTON ST	Apt 9 Units and Up C
56	D ST	Housing Authority R	305	DUTTON ST	Apt 9 Units and Up C
13	D ST	Apt 4 to 8 Units R	273	DUTTON ST	Warehouse/Dist/Storage
18	DALTON ST	Apt 4 to 8 Units R	650	DUTTON ST	Warehouse/Dist/Storage
6	DANE ST	ED - UML-MCC REIMB	507	DUTTON ST	Retail < 10,000 SF
158	DARTMOUTH ST	Apt 4 to 8 Units R	615	DUTTON ST	Auto Repair

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
43	DAVIDSON ST	Parking Lot	731	DUTTON ST	Warehouse/Dist/Storage
615	DUTTON ST	Retail < 10,000 SF	37	ELM ST	Apt 4 to 8 Units R
599	DUTTON ST	Auto Repair	43	ELM ST	Apt 4 to 8 Units R
145	DUTTON ST	Restaurant/Club	74	ELM ST	Apt 4 to 8 Units R
295	DUTTON ST	Apt 9 Units and Up C	172	ENDICOTT ST	Apt 4 to 8 Units C
774	DUTTON ST	Warehouse/Dist/Storage	49	ENNELL ST	Church/Temple C
295	DUTTON ST	Apt 9 Units and Up C	151	ENNELL ST	Lowell Education C
183	DUTTON ST	Retail < 10,000 SF	73	ENNELL ST	STORE/SHOP MDL-96
91	DUTTON ST	Restaurant/Club	133	ENNELL ST	Apt 4 to 8 Units R
279	DUTTON ST	Apt 4 to 8 Units C	128	ENNELL ST	Apt 4 to 8 Units R
740	DUTTON ST	Warehouse/Dist/Storage	121	ENNELL ST	Apt 4 to 8 Units R
17	E MEADOW LANE	Apt 9 Units and Up C	1	ENNELL ST EXT	Retail < 10,000 SF
17	E MEADOW LANE	Apt 9 Units and Up C	1	ENNELL ST EXT	Retail < 10,000 SF
18	E MEADOW LANE	Apt 9 Units and Up C	7	EXETER ST	Apt 4 to 8 Units R
33	E MEADOW LANE	Apt 9 Units and Up C	35	EXETER ST	Apt 4 to 8 Units R
33	E MEADOW LANE	Apt 9 Units and Up C	22	EXETER ST	Apt 4 to 8 Units R
18	E MEADOW LANE	Apt 9 Units and Up C	376	FAIRMOUNT ST	Apt 4 to 8 Units R
49	E MEADOW LN	Apt 9 Units and Up C	358	FAIRMOUNT ST	Restaurant/Club
49	E MEADOW LN	Apt 9 Units and Up C	370	FAIRMOUNT ST	Retail < 10,000 SF
569	E MERRIMACK ST	CONDO MAIN	0	FALMOUTH ST(REACTOR RM)	ED C REIMB
52	E MERRIMACK ST	City of Lowell C	81	FARMLAND RD	Warehouse/Dist/Storage
180	E MERRIMACK ST	Church/Temple C	81	FARMLAND RD	Professional Office
180	E MERRIMACK ST	Rectory/Parsonage R	25	FATHER JOHN SARANTOS WAY	Church/Temple C
220	E MERRIMACK ST	Church/Temple C	25	FATHER JOHN SARANTOS WAY	Church/Temple C
263	E MERRIMACK ST	Housing Authority R	25	FATHER JOHN SARANTOS WAY	Church/Temple C
368	E MERRIMACK ST	Apt 9 Units and Up C	50	FATHER MORISSETTE BLVD	Lowell Education C
177	E MERRIMACK ST	Apt 9 Units and Up C	50	FATHER MORISSETTE BLVD	Lowell Education C
368	E MERRIMACK ST	Apt 9 Units and Up C	47	FATHER MORISSETTE BLVD	City of Lowell C
177	E MERRIMACK ST	Apt 9 Units and Up C	14	FAULKNER ST	Housing Authority C
141	E MERRIMACK ST	Retail < 10,000 SF	10	FAVOR ST	Lowell Education C
167	E MERRIMACK ST	Apt 4 to 8 Units C	7	FAVOR ST	Church/Temple C
546	E MERRIMACK ST	Apt 4 to 8 Units C	11	FAYETTE ST	Rectory/Parsonage C
131	E MERRIMACK ST	Office	134	FAYETTE ST	Housing Authority C
362	E MERRIMACK ST	Apt 4 to 8 Units R	134	FAYETTE ST	Housing Authority C
378	E MERRIMACK ST	Apt 4 to 8 Units R	229	FAYETTE ST	Aff Hgs Units (Apts)
151	E MERRIMACK ST	Retail < 10,000 SF	229	FAYETTE ST	Aff Hgs Units (Apts)
412	E MERRIMACK ST	Apt 4 to 8 Units R	128	FAYETTE ST	Apt 4 to 8 Units R
219	E MERRIMACK ST	Auto Repair	278	FAYETTE ST	Apt 4 to 8 Units C
437	E MERRIMACK ST	Apt 9 Units and Up C	110	FAYETTE ST	Apt 4 to 8 Units C
189	E MERRIMACK ST	Apt 4 to 8 Units C	109	FELKER ST	Apt 9 Units and Up C
81	E MERRIMACK ST	Office Bldg	109	FELKER ST	Apt 9 Units and Up C
420	E MERRIMACK ST	Apt 4 to 8 Units R	105	FELKER ST	Apt 9 Units and Up C
408	E MERRIMACK ST	Apt 4 to 8 Units R	105	FELKER ST	Apt 9 Units and Up C
437	E MERRIMACK ST	Apt 9 Units and Up C	4	FERNALD ST	Apt 4 to 8 Units R
73	E MERRIMACK ST	Office Bldg	15	FIFTH ST	Apt 4 to 8 Units R
382	E MERRIMACK ST	Apt 4 to 8 Units R	43	FIFTH ST	Apt 4 to 8 Units R
425	E MERRIMACK ST	Apt 4 to 8 Units R	333	FIRST ST	Can't Find Address
388	E MERRIMACK ST	Apt 9 Units and Up C	51	FIRST ST	Church/Temple C
356	E MERRIMACK ST	Apt 9 Units and Up R	102	FIRST ST	Apt 4 to 8 Units R
388	E MERRIMACK ST	Apt 9 Units and Up C	72	FIRST ST	Auto Repair
12	E PINE ST	Apt 4 to 8 Units R	148	FIRST ST	Apt 4 to 8 Units R
14	E ST	Auto Repair	50	FIRST ST BLVD	Auto Repair
32	EASTON ST	Apt 4 to 8 Units R	31	FIRST ST BLVD	Warehouse
11	EDSON ST	Apt 4 to 8 Units R	36	FIRST ST BLVD [A-SPORTS]	Industrial Bldg
18	EDSON ST	Apt 4 to 8 Units R	18	FIRST ST BLVD [HEROES]	Retail < 10,000 SF
26	EDWARDS ST	City of Lowell V	26	FISHER ST	Apt 4 to 8 Units R
26	EDWARDS ST	City of Lowell V	12	FISHER ST	Apt 4 to 8 Units R
4	EIGHTH AVE	Apt 4 to 8 Units R	150	FLEMING ST	Lowell Education C
122	ELEVENTH ST	Apt 9 Units and Up C	520	FLETCHER ST	Char Housing C
122	ELEVENTH ST	Apt 9 Units and Up C	413	FLETCHER ST	Lowell Education C

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
37	ELLIOT ST	Restaurant/Club	398	FLETCHER ST	Restaurant/Club
35	ELLSWORTH ST	Warehouse	135	FLETCHER ST	Housing Authority R
123	FLETCHER ST	Housing Authority R	14	GAGE AVE	Apt 9 Units and Up R
465	FLETCHER ST	CHURCH C	14	GAGE AVE	Apt 9 Units and Up R
143	FLETCHER ST	Housing Authority R	1	GALLAGHER SQ	Apt 4 to 8 Units C
404	FLETCHER ST	Apt 4 to 8 Units R	1	GALLAGHER SQ	Apt 4 to 8 Units C
311	FLETCHER ST	Supermarket	12	GARNET ST	Apt 4 to 8 Units R
185	FLETCHER ST	Apt 4 to 8 Units R	15	GARNET ST	Auto Repair
116	FLETCHER ST	Warehouse	83	GATES ST	Apt 4 to 8 Units R
154	FLETCHER ST	Warehouse	105	GATES ST	Apt 4 to 8 Units R
412	FLETCHER ST	Boarding House R	101	GATES ST	Apt 4 to 8 Units R
326	FLETCHER ST	Retail < 10,000 SF	41	GAUDREAU ST	Apt 9 Units and Up C
171	FLETCHER ST	Apt 4 to 8 Units R	41	GAUDREAU ST	Apt 9 Units and Up C
168	FLETCHER ST	Apt 4 to 8 Units R	1	GEORGE ST	Char Services C
466	FLETCHER ST	Apt 4 to 8 Units C	10	GEORGE ST	Office Bldg
426	FLETCHER ST	Boarding House R	21	GEORGE ST	Office Bldg
434	FLETCHER ST	Apt 4 to 8 Units R	29	GERSHOM AVE	Apt 4 to 8 Units R
63	FLETCHER ST	Apt 9 Units and Up C	82	GERSHOM AVE	Apt 4 to 8 Units C
282	FLETCHER ST	Apt 4 to 8 Units C	75	GERSHOM AVE	Apt 4 to 8 Units R
503	FLETCHER ST	Apt 4 to 8 Units R	203	GIBSON ST	Apt 4 to 8 Units R
213	FLETCHER ST	Retail < 10,000 SF	15	GILBRIDE TERR	Apt 4 to 8 Units R
201	FLETCHER ST	Apt 4 to 8 Units R	20	GILBRIDE TERR	Apt 4 to 8 Units R
444	FLETCHER ST	Apt 4 to 8 Units R	1313	GORHAM ST	Cemeteries C
63	FLETCHER ST	Apt 9 Units and Up C	1140	GORHAM ST	Lowell Education C
542	FLETCHER ST	Apt 4 to 8 Units R	1158	GORHAM ST	Lowell Education C
60	FLETCHER ST	Warehouse/Dist/Storage	1391	GORHAM ST	Cemeteries C
22	FLOYD ST	Apt 4 to 8 Units R	1168	GORHAM ST	Lowell Education C
11	FOREST ST	Apt 4 to 8 Units R	1168	GORHAM ST	Lowell Education C
111	FORT HILL AVE	Char Housing R	1168	GORHAM ST	Lowell Education C
92	FORT HILL AVE	Apt 4 to 8 Units R	360	GORHAM ST	JUDICIARY NR
91	FORT HILL AVE	Apt 4 to 8 Units R	360	GORHAM ST	JUDICIARY NR
300	FOSTER ST	Apt 4 to 8 Units R	1168	GORHAM ST	Lowell Education C
10	FOURTH AVE	Lowell Education C	1426	GORHAM ST	Church/Temple C
125	FOURTH AVE	CHURCH C	1236	GORHAM ST	Church/Temple C
64	FOURTH AVE	Apt 4 to 8 Units R	260	GORHAM ST	CHURCH C
126	FOURTH AVE	Apt 4 to 8 Units R	558	GORHAM ST	Retail < 10,000 SF
87	FOURTH AVE	Apt 4 to 8 Units R	444	GORHAM ST	Bank Bldg
102	FOURTH AVE	Apt 4 to 8 Units R	920	GORHAM ST	Office Bldg
31	FOURTH AVE	Apt 4 to 8 Units R	463	GORHAM ST	Restaurant/Club
100	FOURTH AVE	Apt 4 to 8 Units R	379	GORHAM ST	Professional Office
26	FOURTH ST	Apt 4 to 8 Units R	327	GORHAM ST	Office Bldg
33	FOURTH ST	Apt 4 to 8 Units R	62	GORHAM ST	Retail < 10,000 SF
97	FOURTH ST	Apt 4 to 8 Units R	506	GORHAM ST	Apt 4 to 8 Units R
82	FOURTH ST	Apt 4 to 8 Units R	305	GORHAM ST	Aff Hgs Units (Apts)
21	FOURTH ST	Apt 4 to 8 Units R	933	GORHAM ST	Retail < 10,000 SF
72	FOWLER RD	City of Lowell V	1018	GORHAM ST	Restaurant/Club
20	FRANKLIN CT N	City of Lowell V	1278	GORHAM ST	Restaurant/Club
44	FRANKLIN ST	Apt 4 to 8 Units R	196	GORHAM ST	Restaurant/Club
58	FRANKLIN ST	Apt 4 to 8 Units R	1403	GORHAM ST	Gas Station
32	FRANKLIN ST	Warehouse/Dist/Storage	30	GORHAM ST	Apt 4 to 8 Units C
75	FREMONT ST	Apt 4 to 8 Units R	107	GORHAM ST	Boarding House C
96	FREMONT ST	Apt 4 to 8 Units R	101	GORHAM ST	Retail < 10,000 SF
48	FREMONT ST	Apt 4 to 8 Units R	588	GORHAM ST	Retail < 10,000 SF
6	FREMONT ST	Apt 4 to 8 Units R	785	GORHAM ST	Retail Gas Station C
43	FRENCH ST	Lowell Education C	788	GORHAM ST	Retail < 10,000 SF
42	FRENCH ST	US GOVT C	101	GORHAM ST	Retail < 10,000 SF
30	FRENCH ST	Warehouse	101	GORHAM ST	Apt 9 Units and Up C
574	FRENCH ST EXT	Aff Hgs Units (Apts)	912	GORHAM ST	Apt 4 to 8 Units C
548	FRENCH ST EXT	Aff Hgs Units (Apts)	378	GORHAM ST	Retail Gas Station C
548	FRENCH ST EXT	Aff Hgs Units (Apts)	1484	GORHAM ST	Professional Office
574	FRENCH ST EXT	Aff Hgs Units (Apts)	1040	GORHAM ST	Restaurant/Club

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
3	FRYE ST	Apt 4 to 8 Units R	1258	GORHAM ST	Restaurant/Club
35	FULTON ST	Apt 4 to 8 Units R	1188	GORHAM ST	Warehouse/Dist/Storage
41	GORHAM ST	Office Bldg	92	GRAND ST	Housing Authority R
970	GORHAM ST	Restaurant/Club	106	GRAND ST	Apt 4 to 8 Units R
970	GORHAM ST	Restaurant/Club	82	GRAND ST	Apt 4 to 8 Units R
859	GORHAM ST	Car Dealer Small	28	GRAND ST	Apt 4 to 8 Units R
1294	GORHAM ST	Auto Repair	14	GRAND ST	Apt 4 to 8 Units R
970	GORHAM ST	Retail < 10,000 SF	22	GRAND ST	Apt 4 to 8 Units R
970	GORHAM ST	Retail < 10,000 SF	31	GROTON ST	Retail < 10,000 SF
1067	GORHAM ST	Auto Repair	141	GROVE ST	Apt 4 to 8 Units R
1081	GORHAM ST	Restaurant/Club	19	GROVE ST	Apt 4 to 8 Units R
970	GORHAM ST	Restaurant/Club	96	GROVE ST	Apt 4 to 8 Units R
953	GORHAM ST	Retail > 10,000 SF	68	GROVE ST	Apt 4 to 8 Units R
1060	GORHAM ST	Auto Dealer Large	100	HALE ST	Transport Authority C
124	GORHAM ST	Retail < 10,000 SF	196	HALE ST	Housing Authority C
883	GORHAM ST	Auto Repair	196	HALE ST	Housing Authority C
642	GORHAM ST	Apt 9 Units and Up C	153	HALE ST	Church/Temple C
642	GORHAM ST	Apt 9 Units and Up C	224	HALE ST	Apt 4 to 8 Units R
1222	GORHAM ST	Restaurant/Club	87	HALE ST	Bank Bldg
1208	GORHAM ST	Single Fam MDL-96	121	HALE ST	R-D FACIL MDL-94
1344	GORHAM ST	Retail < 10,000 SF	87	HALE ST	Bank Bldg
86	GORHAM ST	Apt 4 to 8 Units C	119	HALL ST	Priv Elementary C
110	GORHAM ST	Restaurant/Club	90	HALL ST	Retail < 10,000 SF
1100	GORHAM ST	Warehouse	58	HALLY RD	Apt 4 to 8 Units R
1088	GORHAM ST	Retail > 10,000 SF	37	HAMPSHIRE ST	Church/Temple R
930	GORHAM ST	Retail < 10,000 SF	16	HAMPSHIRE ST	City of Lowell V
124	GORHAM ST	Retail < 10,000 SF	15	HAMPSHIRE ST	Apt 4 to 8 Units R
110	GORHAM ST	Restaurant/Club	32	HAMPSHIRE ST	Apt 4 to 8 Units R
1021	GORHAM ST	Apt 4 to 8 Units R	15	HAMPTON AVE	Apt 4 to 8 Units R
92	GORHAM ST	Apt 9 Units and Up C	64	HANKS ST	Apt 4 to 8 Units R
1100	GORHAM ST	Retail > 10,000 SF	76	HANKS ST	Apt 4 to 8 Units R
1095	GORHAM ST	Apt 4 to 8 Units R	52	HANKS ST	Apt 4 to 8 Units R
937	GORHAM ST	Retail < 10,000 SF	65	HARVARD ST	Char Housing R
1300	GORHAM ST	Retail < 10,000 SF	6	HARVARD ST	Apt 4 to 8 Units R
92	GORHAM ST	Apt 9 Units and Up C	45	HARVARD ST	Apt 4 to 8 Units R
168	GORHAM ST	Retail < 10,000 SF	163	HAVILAH ST	Parking Lot
70	GORHAM ST	Retail < 10,000 SF	163	HAVILAH ST	Parking Lot
869	GORHAM ST	Apt 4 to 8 Units C	350	HIGH ST	Church/Temple C
1500	GORHAM ST	Professional Office	291	HIGH ST	Char Rec Activity C
305	GORHAM ST	Aff Hgs Units (Apts)	440	HIGH ST	Char Housing R
1278	GORHAM ST	Restaurant/Club	340	HIGH ST	Rectory/Parsonage R
101	GORHAM ST	Apt 9 Units and Up C	288	HIGH ST	Apt 4 to 8 Units R
970	GORHAM ST	Retail < 10,000 SF	250	HIGH ST	Apt 4 to 8 Units C
1088	GORHAM ST	Warehouse	242	HIGH ST	Apt 4 to 8 Units C
795	GORHAM ST - ENGINE #1	Public Safety C	183	HIGH ST	Retail < 10,000 SF
912	GORHAM ST A	Apt 4 to 8 Units C	165	HIGH ST	Retail < 10,000 SF
912	GORHAM ST B	Apt 4 to 8 Units C	279	HIGH ST	Apt 4 to 8 Units R
179	GORHAM ST BLDG	Housing Authority C	197	HIGH ST	Restaurant/Club
179	GORHAM ST BLDG	Housing Authority C	337	HIGH ST	Apt 4 to 8 Units R
179	GORHAM ST BLDG	Housing Authority C	190	HIGH ST	Apt 9 Units and Up R
179	GORHAM ST BLDG	Housing Authority C	144	HIGH ST	Apt 9 Units and Up R
179	GORHAM ST BLDG	Housing Authority C	144	HIGH ST	Apt 9 Units and Up R
179	GORHAM ST BLDG	Housing Authority C	168	HIGH ST	Apt 9 Units and Up R
179	GORHAM ST BLDG	Housing Authority C	168	HIGH ST	Apt 9 Units and Up R
179	GORHAM ST BLDG	Housing Authority C	221	HIGH ST	Apt 4 to 8 Units R
179	GORHAM ST BLDG	Housing Authority C	260	HIGH ST	Retail < 10,000 SF
179	GORHAM ST BLDG	Housing Authority C	239	HIGH ST	Restaurant/Club
30	GRAFTON ST	Church/Temple C	190	HIGH ST	Apt 9 Units and Up R
30	GRAFTON ST	Church/Temple C	198	HIGH ST - ENGINE #4	Public Safety C
109	GRAND ST	Housing Authority R	46	HIGHLAND AVE	Apt 4 to 8 Units R
78	GRAND ST	Church/Temple C	138	HIGHLAND AVE BLDG	Retail < 10,000 SF

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
123	GRAND ST	Housing Authority R	138	HIGHLAND AVE BLDG	Retail < 10,000 SF
102	GRAND ST	Housing Authority R	62	HIGHLAND ST	CONDO MAIN
50	HIGHLAND ST	Apt 4 to 8 Units R	239	INDUSTRIAL AVE E	Factory
14	HIGHLAND ST	Funeral Home	87	INDUSTRIAL AVE E	Industrial Bldg
38	HIGHLAND ST	Apt 9 Units and Up C	87	INDUSTRIAL AVE E	Industrial Bldg
38	HIGHLAND ST	Apt 9 Units and Up C	30	INDUSTRIAL AVE E	HOTEL
185	HILDRETH ST	City of Lowell V	181	INDUSTRIAL AVE E	Warehouse
185	HILDRETH ST	City of Lowell V	70	INDUSTRIAL AVE E	Retail > 10,000 SF
111	HILDRETH ST	Housing Authority C	165	INDUSTRIAL AVE E	Factory
277	HILDRETH ST	Apt 4 to 8 Units R	70	INDUSTRIAL AVE E	Retail > 10,000 SF
117	HILDRETH ST	Apt 4 to 8 Units R	70	INDUSTRIAL AVE E	Factory
50	HILDRETH ST	Apt 9 Units and Up C	263	INDUSTRIAL AVE E	Warehouse
320	HILDRETH ST	Apt 4 to 8 Units R	70	INDUSTRIAL AVE E	Factory
362	HILDRETH ST	Apt 4 to 8 Units R	33	IOWA ST	Apt 4 to 8 Units R
50	HILDRETH ST	Apt 9 Units and Up C	45	IOWA ST	Apt 4 to 8 Units R
193	HILDRETH ST	Aff Hgs Units (Apts)	21	IOWA ST	Apt 4 to 8 Units C
203	HILDRETH ST	Aff Hgs Units (Apts)	10	IRVING ST	Apt 4 to 8 Units R
193	HILDRETH ST	Aff Hgs Units (Apts)	10	ISLAND ST	Parking Lot
199	HILDRETH ST	Aff Hgs Units (Apts)	370	JACKSON ST	DIV CAP ASSET NR
327	HILDRETH ST	Funeral Home	370	JACKSON ST	DIV CAP ASSET NR
230	HILDRETH ST	Apt 4 to 8 Units R	161	JACKSON ST	Char Other Condo
203	HILDRETH ST	Aff Hgs Units (Apts)	71	JACKSON ST	Aff Hgs Units (Apts)
321	HILDRETH ST	Apt 4 to 8 Units R	71	JACKSON ST	Aff Hgs Units (Apts)
221	HILDRETH ST	Apt 4 to 8 Units R	109	JACKSON ST	Apt 9 Units and Up C
252	HILDRETH ST	Retail < 10,000 SF	109	JACKSON ST	Apt 9 Units and Up C
199	HILDRETH ST	Aff Hgs Units (Apts)	34	JACKSON ST	Restaurant/Club
2	HOSPITAL DR	Hospital C	109	JACKSON ST	Apt 9 Units and Up C
20	HOWARD ST	Auto Repair	300	JACKSON ST #B	Office Condo
26	HOWARD ST	Auto Repair	300	JACKSON ST UNIT	Char Other Condo
280	HOWARD ST	Factory	8	JAMES ST(E. MAINTENANCE)	ED - UML-MCC REIMB
237	HOWARD ST	Warehouse	31	JEWETT ST	Housing Authority R
220	HOWARD ST	Factory	31	JEWETT ST	Housing Authority R
129	HOWE ST	Office Bldg	95	JEWETT ST	City of Lowell V
24	HOWE ST	Warehouse/Dist/Storage	97	JEWETT ST	Apt 4 to 8 Units R
24	HOWE ST	Warehouse/Dist/Storage	5	JEWETT ST	Apt 4 to 8 Units R
6	HOWE ST	Auto Repair	115	JOHN ST	US GOVT C
19	HUDSON ST	Apt 4 to 8 Units C	75	JOHN ST	City of Lowell C
11	HUDSON ST	Apt 4 to 8 Units R	100	JOHN ST	Comm Bldg C
15	HUDSON ST	Apt 4 to 8 Units C	100	JOHN ST	Comm Bldg C
21	HUNTINGTON ST	Apt 4 to 8 Units R	141	JOHN ST	Aff Hgs Units (Apts)
35	HURD ST	JUDICIARY NR	141	JOHN ST	Aff Hgs Units (Apts)
35	HURD ST	JUDICIARY NR	30	JOHN ST	Bank Bldg
37	HURD ST	JUDICIARY NR	39	JOHN ST	Office Bldg
13	HURD ST	Office Bldg	50	KEARNEY SQ	ED UML, MCC NR
19	HURD ST	Apt 4 to 8 Units C	33	KEARNEY SQ	ED UML, MCC NR
16	HURD ST	Bank Bldg	11	KEARNEY SQ	Office Bldg
25	HURD ST	Apt 4 to 8 Units C	10	KEARNEY SQ 100	Commercial Condo
110	INDUSTRIAL AVE	Auto Dealer Large	20	KIRK ST	Rectory/Parsonage R
110	INDUSTRIAL AVE	Auto Dealer Large	38	KIRK ST	Lowell Education C
2	INDUSTRIAL AVE	Factory	20	KIRK ST	Church/Temple R
110	INDUSTRIAL AVE	Auto Dealer Large	45	KIRK ST	Char Other C
110	INDUSTRIAL AVE	Auto Dealer Large	8	KIRK ST	Church/Temple R
2	INDUSTRIAL AVE	Factory	29	KIRK ST	Church/Temple R
240	INDUSTRIAL AVE	Factory	29	KIRK ST	Church/Temple R
240	INDUSTRIAL AVE	Factory	63	KIRK ST	US GOVT C
150	INDUSTRIAL AVE E	TRANS RES FAC	17	KIRK ST	Office Bldg
109	INDUSTRIAL AVE E	Warehouse	37	KIRK ST	Office Bldg
305	INDUSTRIAL AVE E	Warehouse	71	KNAPP AVE	Char Other C
305	INDUSTRIAL AVE E	Warehouse	357	LAKEVIEW AVE	Apt 4 to 8 Units C
160	INDUSTRIAL AVE E	Warehouse	268	LAKEVIEW AVE	Rectory/Parsonage R
160	INDUSTRIAL AVE E	Warehouse	276	LAKEVIEW AVE	Church/Temple C

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
205	INDUSTRIAL AVE E	Warehouse/Dist/Storage	600	LAKEVIEW AVE	Housing Authority C
203	INDUSTRIAL AVE E	Warehouse/Dist/Storage	139	LAKEVIEW AVE	Housing Authority C
664	LAKEVIEW AVE	Church/Temple C	93	LANE ST	Apt 9 Units and Up R
600	LAKEVIEW AVE	Housing Authority C	93	LANE ST	Apt 9 Units and Up R
258	LAKEVIEW AVE	Church/Temple C	45	LAWRENCE DR	Can't Find Address
85	LAKEVIEW AVE	Retail < 10,000 SF	1250	LAWRENCE ST	Retail Condo
768	LAKEVIEW AVE	Warehouse	136	LAWRENCE ST	Char Housing C
768	LAKEVIEW AVE	Apt 4 to 8 Units R	1197	LAWRENCE ST	Church/Temple C
587	LAKEVIEW AVE	Apt 4 to 8 Units R	70	LAWRENCE ST	Church/Temple C
101	LAKEVIEW AVE	Restaurant/Club	60	LAWRENCE ST	Church/Temple C
825	LAKEVIEW AVE	Apt 4 to 8 Units R	1191	LAWRENCE ST	Church/Temple R
715	LAKEVIEW AVE	Restaurant/Club	984	LAWRENCE ST	Char Other C
737	LAKEVIEW AVE	Apt 4 to 8 Units C	48	LAWRENCE ST	Char Housing C
749	LAKEVIEW AVE	Retail < 10,000 SF	405	LAWRENCE ST	Retail < 10,000 SF
317	LAKEVIEW AVE	Apt 4 to 8 Units R	335	LAWRENCE ST	Apt 4 to 8 Units R
341	LAKEVIEW AVE	Apt 9 Units and Up R	103	LAWRENCE ST	Apt 4 to 8 Units R
63	LAKEVIEW AVE	Apt 4 to 8 Units C	491	LAWRENCE ST	Retail < 10,000 SF
776	LAKEVIEW AVE	Hardware Store	1025	LAWRENCE ST	Office
742	LAKEVIEW AVE	Apt 4 to 8 Units C	1272	LAWRENCE ST	Retail < 10,000 SF
801	LAKEVIEW AVE	Fuel Service	1173	LAWRENCE ST	Apt 4 to 8 Units R
802	LAKEVIEW AVE	Retail < 10,000 SF	1107	LAWRENCE ST	Apt 4 to 8 Units R
682	LAKEVIEW AVE	Commercial Condo	645	LAWRENCE ST	Factory
684	LAKEVIEW AVE	Commercial Condo	685	LAWRENCE ST	Apt 9 Units and Up C
171	LAKEVIEW AVE	Restaurant/Club	685	LAWRENCE ST	Apt 9 Units and Up C
754	LAKEVIEW AVE	Apt 4 to 8 Units R	352	LAWRENCE ST	Apt 4 to 8 Units R
547	LAKEVIEW AVE	Apt 4 to 8 Units R	685	LAWRENCE ST	Apt 9 Units and Up C
989	LAKEVIEW AVE	Apt 4 to 8 Units R	685	LAWRENCE ST	Apt 9 Units and Up C
941	LAKEVIEW AVE	Apt 4 to 8 Units R	460	LAWRENCE ST	Retail < 10,000 SF
781	LAKEVIEW AVE	Apt 9 Units and Up C	850	LAWRENCE ST	Apt 9 Units and Up C
639	LAKEVIEW AVE	Factory	850	LAWRENCE ST	Apt 9 Units and Up C
815	LAKEVIEW AVE	Retail < 10,000 SF	417	LAWRENCE ST	Restaurant/Club
838	LAKEVIEW AVE	Apt 4 to 8 Units R	351	LAWRENCE ST	Apt 4 to 8 Units R
731	LAKEVIEW AVE	Retail < 10,000 SF	437	LAWRENCE ST	Auto Repair
942	LAKEVIEW AVE	Apt 4 to 8 Units R	412	LAWRENCE ST	Retail < 10,000 SF
1012	LAKEVIEW AVE	Apt 4 to 8 Units R	781	LAWRENCE ST	Apt 4 to 8 Units R
78	LAKEVIEW AVE	Restaurant/Club	908	LAWRENCE ST	Industrial Bldg
148	LAKEVIEW AVE	Office	1136	LAWRENCE ST	Apt 4 to 8 Units R
289	LAKEVIEW AVE	Apt 4 to 8 Units R	1164	LAWRENCE ST	Restaurant/Club
431	LAKEVIEW AVE	Apt 4 to 8 Units R	1089	LAWRENCE ST	Auto Repair
871	LAKEVIEW AVE	Apt 9 Units and Up C	573	LAWRENCE ST	Restaurant/Club
295	LAKEVIEW AVE	Apt 4 to 8 Units R	915	LAWRENCE ST	Apt 4 to 8 Units R
859	LAKEVIEW AVE	Apt 9 Units and Up C	310	LAWRENCE ST	Apt 4 to 8 Units R
841	LAKEVIEW AVE	Apt 4 to 8 Units R	575	LAWRENCE ST	Restaurant/Club
680	LAKEVIEW AVE	Commercial Condo	1300	LAWRENCE ST	Greenhouse
152	LAKEVIEW AVE	Apt 4 to 8 Units R	709	LAWRENCE ST	Apt 9 Units and Up C
57	LAKEVIEW AVE	Apt 4 to 8 Units R	473	LAWRENCE ST	Apt 4 to 8 Units R
569	LAKEVIEW AVE	Apt 4 to 8 Units C	709	LAWRENCE ST	Apt 9 Units and Up C
678	LAKEVIEW AVE	Commercial Condo	533	LAWRENCE ST	Apt 4 to 8 Units R
341	LAKEVIEW AVE	Apt 9 Units and Up R	663	LAWRENCE ST	Factory
954	LAKEVIEW AVE	Apt 4 to 8 Units R	121	LAWRENCE ST	Apt 4 to 8 Units R
859	LAKEVIEW AVE	Apt 9 Units and Up C	743	LAWRENCE ST - ENGINE #11	Public Safety C
871	LAKEVIEW AVE	Apt 9 Units and Up C	1272	LAWRENCE ST #A	Retail < 10,000 SF
341	LAKEVIEW AVE UNIT	Apt 9 Units and Up R	1272	LAWRENCE ST #C	Retail < 10,000 SF
341	LAKEVIEW AVE UNIT	Apt 9 Units and Up R	1274	LAWRENCE ST #D	Retail < 10,000 SF
341	LAKEVIEW AVE UNIT	Apt 9 Units and Up R	576	LAWRENCE ST [APARTMENTS]	121A Corporation C
341	LAKEVIEW AVE UNIT	Apt 9 Units and Up R	576	LAWRENCE ST [APARTMENTS]	121A Corporation C
341	LAKEVIEW AVE UNIT	Apt 9 Units and Up R	576	LAWRENCE ST [OFFICE]	121A Corporation C
341	LAKEVIEW AVE UNIT	Apt 9 Units and Up R	576	LAWRENCE ST [OFFICE]	121A Corporation C
341	LAKEVIEW AVE UNIT	Apt 9 Units and Up R	14	LAWSON ST	Apt 4 to 8 Units R
341	LAKEVIEW AVE UNIT	Apt 9 Units and Up R	37	LEE ST	Church/Temple C

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
51	LANE ST	Housing Authority C	37	LEE ST	Church/Temple C
51	LANE ST	Housing Authority C	13	LENOX ST	Apt 4 to 8 Units R
96	LANE ST	Apt 4 to 8 Units R	21	LEROY ST	Apt 4 to 8 Units R
34	LEVERETT ST	Apt 4 to 8 Units R	158	MAMMOTH RD	Church/Temple C
62	LEWIS ST	Church/Temple C	158	MAMMOTH RD	Rectory/Parsonage R
139	LEXINGTON AVE	Char Housing R	158	MAMMOTH RD	Church/Temple C
106	LIBERTY ST	Housing Authority C	158	MAMMOTH RD	Church/Temple C
178	LIBERTY ST	Retail < 10,000 SF	158	MAMMOTH RD	Church/Temple C
104	LIBERTY ST	Housing Authority C	86	MAMMOTH RD	Apt 4 to 8 Units R
204	LIBERTY ST	Church/Temple C	80	MAMMOTH RD	Restaurant/Club
204	LIBERTY ST	Church/Temple C	77	MAMMOTH RD	Restaurant/Club
68	LIBERTY ST	Apt 4 to 8 Units R	360	MAMMOTH RD	Gas Station
242	LIBERTY ST	Apt 4 to 8 Units R	369	MAMMOTH RD	Retail < 10,000 SF
131	LIBERTY ST	Apt 9 Units and Up R	358	MAMMOTH RD	Retail < 10,000 SF
131	LIBERTY ST	Apt 9 Units and Up R	51	MAMMOTH RD	Apt 4 to 8 Units R
233	LIBERTY ST	Apt 9 Units and Up C	51	MAMMOTH RD	Apt 4 to 8 Units C
268	LIBERTY ST	Apt 9 Units and Up C	42	MAMMOTH RD	Apt 9 Units and Up C
268	LIBERTY ST	Apt 9 Units and Up C	374	MAMMOTH RD	Office Bldg
255	LIBERTY ST	Apt 4 to 8 Units R	58	MAMMOTH RD	Restaurant/Club
153	LIBERTY ST	Restaurant/Club	32	MAMMOTH RD	Bank Bldg
167	LIBERTY ST	Apt 4 to 8 Units C	395	MAMMOTH RD	Apt 9 Units and Up C
233	LIBERTY ST	Apt 9 Units and Up C	390	MAMMOTH RD	Apt 9 Units and Up C
143	LIBERTY ST	Apt 4 to 8 Units R	68	MAMMOTH RD	Retail < 10,000 SF
1	LILLEY AVE	Restaurant/Club	390	MAMMOTH RD	Apt 9 Units and Up C
6	LILLEY AVE	Apt 9 Units and Up C	68	MAMMOTH RD	Retail < 10,000 SF
6	LILLEY AVE	Apt 9 Units and Up C	395	MAMMOTH RD	Apt 9 Units and Up C
83	LILLEY AVE	Apt 9 Units and Up C	99	MAMMOTH RD	Retail < 10,000 SF
83	LILLEY AVE	Apt 9 Units and Up C	307	MAMMOTH RD	Apt 4 to 8 Units R
39	LILLEY AVE	Apt 4 to 8 Units R	61	MAMMOTH RD	Retail < 10,000 SF
110	LILLEY AVE	Apt 4 to 8 Units R	93	MAMMOTH RD FIRE PREVENT	Public Safety C
11	LILLEY AVE	Apt 4 to 8 Units C	24	MANAHAN ST	Apt 4 to 8 Units R
60	LILLEY AVE	Apt 4 to 8 Units R	16	MANAHAN ST	Apt 4 to 8 Units R
21	LILLEY AVE	Apt 4 to 8 Units R	29	MANAHAN ST	Apt 4 to 8 Units R
47	LINCOLN ST	City of Lowell V	26	MANCHESTER ST	Apt 4 to 8 Units R
170	LINCOLN ST	Retail > 10,000 SF	217	MANSUR ST	Office Bldg
171	LINCOLN ST	Factory	15	MANUFACTURE ST	Apt 4 to 8 Units R
204	LINCOLN ST	Auto Repair	14	MANUFACTURERS ST	Auto Repair
185	LINCOLN ST	Auto Repair	91	MAPLE ST UNIT	IND CONDO MDL-06
190	LINCOLN ST	Car Dealer Small	91	MAPLE ST UNIT	IND CONDO MDL-06
43	LINCOLN ST	Apt 4 to 8 Units R	91	MAPLE ST UNIT	IND CONDO MDL-06
57	LINCOLN ST	Apt 4 to 8 Units R	91	MAPLE ST UNIT	IND CONDO MDL-06
230	LINCOLN ST	Apt 4 to 8 Units R	91	MAPLE ST UNIT	IND CONDO MDL-06
26	LINCOLN ST	Retail < 10,000 SF	91	MAPLE ST UNIT	IND CONDO MDL-06
105	LINCOLN ST	Auto Repair	91	MAPLE ST UNIT	IND CONDO MDL-06
38	LINCOLN ST	Apt 4 to 8 Units R	91	MAPLE ST UNIT	IND CONDO MDL-06
90	LINCOLN ST REAR	Auto Repair	91	MAPLE ST UNIT	IND CONDO MDL-06
87	LINDEN ST	Apt 4 to 8 Units C	91	MAPLE ST UNIT	IND CONDO MDL-06
23	LINWOOD ST	Apt 4 to 8 Units C	91	MAPLE ST UNIT	IND CONDO MDL-06
22	LIVINGSTON AVE	Apt 4 to 8 Units R	91	MAPLE ST UNIT	IND CONDO MDL-06
75	LIVINGSTON ST	Apt 4 to 8 Units R	35	MAPLE ST UNIT	IND CONDO MDL-06
14	LIVINGSTON ST	Comm Bldg C	91	MAPLE ST UNIT	IND CONDO MDL-06
16	LOMBARD ST	CONDO MAIN	91	MAPLE ST UNIT	IND CONDO MDL-06
36	LONDON ST	Apt 4 to 8 Units R	35	MAPLE ST UNIT	IND CONDO MDL-06
27	LORING ST	Church/Temple C	35	MAPLE ST UNIT	IND CONDO MDL-06
50	LOWE'S WAY	Retail > 10,000 SF	35	MAPLE ST UNIT	IND CONDO MDL-06
59	LOWE'S WAY	Office	91	MAPLE ST UNIT	IND CONDO MDL-06
82	LUCE ST	Rectory/Parsonage R	35	MAPLE ST UNIT	IND CONDO MDL-06
34	LYON ST	Apt 4 to 8 Units R	35	MAPLE ST UNIT	IND CONDO MDL-06
2	MAIN ST	Out of Town	35	MAPLE ST UNIT	IND CONDO MDL-06
2	MAIN ST	Can't Find Address	35	MAPLE ST UNIT	IND CONDO MDL-06
215	MAMMOTH RD	CONDO MAIN	91	MAPLE ST UNIT	IND CONDO MDL-06

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
158	MAMMOTH RD	Rectory/Parsonage R	96	MARGINAL ST	Apt 4 to 8 Units R
1	MAMMOTH RD	Church/Temple C	178	MARKET ST	Can't Find Address
61	MAMMOTH RD	Retail < 10,000 SF	86	MARKET ST	City of Lowell C
29	MARKET ST	Char Services C	219	MEADOWCROFT ST	Warehouse/Dist/Storage
610	MARKET ST	Housing Authority C	52	MEADOWCROFT ST	Warehouse
610	MARKET ST	Housing Authority C	219	MEADOWCROFT ST	Warehouse/Dist/Storage
610	MARKET ST	Housing Authority C	195	MEADOWCROFT ST	Industrial V
610	MARKET ST	Housing Authority C	52	MEADOWCROFT ST	Warehouse
398	MARKET ST	Housing Authority C	45	MEADOWCROFT ST #1	Auto Repair
398	MARKET ST	Housing Authority C	145	MEADOWCROFT ST REAR A	Warehouse
153	MARKET ST	Professional Office	1	MERRIMACK PLZ	APT OVER 8 MDL-94
453	MARKET ST	Restaurant/Club	1	MERRIMACK PLZ	APT OVER 8 MDL-94
45	MARKET ST	Apt 9 Units and Up C	1	MERRIMACK PLZ	APT OVER 8 MDL-94
314	MARKET ST	Retail < 10,000 SF	1	MERRIMACK PLZ	APT OVER 8 MDL-94
133	MARKET ST	Office Bldg	681	MERRIMACK ST	Restaurant/Club
133	MARKET ST	Office Bldg	725	MERRIMACK ST	Apt 9 Units and Up R
73	MARKET ST	Aff Hgs Units (Apts)	817	MERRIMACK ST	Commercial Condo
129	MARKET ST	Office Bldg	375	MERRIMACK ST	City of Lowell C
73	MARKET ST	Aff Hgs Units (Apts)	375	MERRIMACK ST	Library/Museum C
73	MARKET ST	Aff Hgs Units (Apts)	420	MERRIMACK ST	Lowell Education C
73	MARKET ST	Aff Hgs Units (Apts)	227	MERRIMACK ST	Church/Temple C
338	MARKET ST	Apt 9 Units and Up C	160	MERRIMACK ST	CONDO MAIN
477	MARKET ST	Retail < 10,000 SF	401	MERRIMACK ST	City of Lowell C
105	MARKET ST	Restaurant/Club	401	MERRIMACK ST	Library/Museum C
246	MARKET ST	Apt 9 Units and Up C	400	MERRIMACK ST	City of Lowell V
246	MARKET ST	Apt 9 Units and Up C	8	MERRIMACK ST	Can't Find Address
246	MARKET ST	Apt 9 Units and Up C	555	MERRIMACK ST	Office Bldg
246	MARKET ST	Apt 9 Units and Up C	256	MERRIMACK ST	Apt 9 Units and Up C
205	MARKET ST	Restaurant/Club	767	MERRIMACK ST	Char Housing R
197	MARKET ST	Restaurant/Club	704	MERRIMACK ST	Apt 4 to 8 Units C
40	MARKET ST	Office Bldg	657	MERRIMACK ST	Housing Authority C
463	MARKET ST	Restaurant/Club	812	MERRIMACK ST	Char Housing R
523	MARKET ST	Apt 4 to 8 Units C	740	MERRIMACK ST	Char Housing C
391	MARKET ST	Apt 4 to 8 Units C	760	MERRIMACK ST	Aff Hgs Units (Apts)
350	MARKET ST	Restaurant/Club	1	MERRIMACK ST	Retail > 10,000 SF
307	MARKET ST	Warehouse/Dist/Storage	368	MERRIMACK ST	Boarding House C
345	MARKET ST	Apt 4 to 8 Units C	760	MERRIMACK ST	Aff Hgs Units (Apts)
345	MARKET ST	Apt 4 to 8 Units C	445	MERRIMACK ST	Aff Hgs Units (Apts)
345	MARKET ST	Apt 9 Units and Up C	540	MERRIMACK ST	Apt 4 to 8 Units C
345	MARKET ST	Apt 9 Units and Up C	107	MERRIMACK ST	Retail > 10,000 SF
57	MARKET ST	Retail < 10,000 SF	445	MERRIMACK ST	Aff Hgs Units (Apts)
95	MARKET ST	Office Bldg	773	MERRIMACK ST	Apt 4 to 8 Units R
199	MARKET ST	Retail < 10,000 SF	707	MERRIMACK ST	Apt 4 to 8 Units C
61	MARLBOROUGH ST	Apt 4 to 8 Units R	156	MERRIMACK ST	Office Bldg
49	MARSHALL RD	Factory	776	MERRIMACK ST	Apt 4 to 8 Units C
49	MARSHALL RD	Factory	322	MERRIMACK ST	Car Dealer Small
49	MARSHALL RD	Factory	123	MERRIMACK ST	Retail < 10,000 SF
122	MARSHALL RD	Professional Office	134	MERRIMACK ST	Retail > 10,000 SF
20	MARSHALL ST	Warehouse/Dist/Storage	65	MERRIMACK ST	Retail < 10,000 SF
52	MARSHALL ST	Apt 9 Units and Up C	474	MERRIMACK ST	Boarding House C
52	MARSHALL ST	Apt 9 Units and Up C	478	MERRIMACK ST	Boarding House C
42	MARSHALL ST	Apt 9 Units and Up C	65	MERRIMACK ST	Retail < 10,000 SF
42	MARSHALL ST	Apt 9 Units and Up C	65	MERRIMACK ST	Retail > 10,000 SF
17	MARSHALL TERR	Apt 4 to 8 Units C	65	MERRIMACK ST	Retail > 10,000 SF
17	MARSHALL TERR	Apt 4 to 8 Units C	611	MERRIMACK ST	Boarding House C
129	MARTIN ST	Auto Repair	694	MERRIMACK ST	Apt 4 to 8 Units C
27	MAUDE ST	Apt 9 Units and Up R	24	MERRIMACK ST	Apt 9 Units and Up C
27	MAUDE ST	Apt 9 Units and Up R	170	MERRIMACK ST	Office Bldg
14	MCINTIRE ST	Church/Temple C	170	MERRIMACK ST	Office Bldg
20	MEADOWCROFT ST	Church/Temple C	133	MERRIMACK ST	Professional Office
145	MEADOWCROFT ST	Warehouse	24	MERRIMACK ST	Apt 9 Units and Up C

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
10	MEADOWCROFT ST	Apt 4 to 8 Units R	24	MERRIMACK ST	Retail > 10,000 SF
219	MEADOWCROFT ST	Warehouse/Dist/Storage	24	MERRIMACK ST	Retail > 10,000 SF
219	MEADOWCROFT ST	Warehouse/Dist/Storage	784	MERRIMACK ST	Apt 9 Units and Up C
784	MERRIMACK ST	Apt 9 Units and Up C	155	MIDDLESEX ST	CONDO MAIN
19	MERRIMACK ST	Restaurant/Club	1224	MIDDLESEX ST	Church/Temple C
19	MERRIMACK ST	Retail < 10,000 SF	135	MIDDLESEX ST	City of Lowell C
169	MERRIMACK ST	Retail > 10,000 SF	150	MIDDLESEX ST	Church/Temple C
585	MERRIMACK ST	Bank Bldg	1361	MIDDLESEX ST	City of Lowell C
521	MERRIMACK ST	Retail < 10,000 SF	1361	MIDDLESEX ST	City of Lowell C
818	MERRIMACK ST	Apt 9 Units and Up C	665	MIDDLESEX ST	Char Other C
818	MERRIMACK ST	Apt 9 Units and Up C	135	MIDDLESEX ST	City of Lowell C
602	MERRIMACK ST	Restaurant/Club	189	MIDDLESEX ST	Other R
124	MERRIMACK ST	Retail > 10,000 SF	679	MIDDLESEX ST	Char Other C
504	MERRIMACK ST	Retail < 10,000 SF	1705	MIDDLESEX ST	Church/Temple C
492	MERRIMACK ST	Retail < 10,000 SF	1488	MIDDLESEX ST	Char Other C
586	MERRIMACK ST	Apt 9 Units and Up C	1705	MIDDLESEX ST	Church/Temple C
489	MERRIMACK ST	Bank Bldg	1527	MIDDLESEX ST	Retail > 10,000 SF
104	MERRIMACK ST	Retail > 10,000 SF	1449	MIDDLESEX ST	Factory
748	MERRIMACK ST	Office	1449	MIDDLESEX ST	Factory
360	MERRIMACK ST	Retail < 10,000 SF	1449	MIDDLESEX ST	Office
793	MERRIMACK ST	Boarding House C	1449	MIDDLESEX ST	Office
114	MERRIMACK ST	Retail > 10,000 SF	9	MIDDLESEX ST	Office Bldg
300	MERRIMACK ST	Fuel Service	1317	MIDDLESEX ST	Car Wash
463	MERRIMACK ST	Office	205	MIDDLESEX ST	Char Housing C
115	MERRIMACK ST	Retail > 10,000 SF	1585	MIDDLESEX ST	Auto Repair
797	MERRIMACK ST	Apt 9 Units and Up C	1600	MIDDLESEX ST	Car Dealer Small
88	MERRIMACK ST	Office Bldg	1317	MIDDLESEX ST	Car Wash
797	MERRIMACK ST	Apt 9 Units and Up C	1527	MIDDLESEX ST	Shopping Mall
757	MERRIMACK ST	Apt 9 Units and Up C	1519	MIDDLESEX ST	Retail > 10,000 SF
72	MERRIMACK ST	Retail > 10,000 SF	1519	MIDDLESEX ST	Shopping Mall
757	MERRIMACK ST	Apt 9 Units and Up C	1449	MIDDLESEX ST	Office
797	MERRIMACK ST	Apt 9 Units and Up C	1095	MIDDLESEX ST	Apt 4 to 8 Units R
350	MERRIMACK ST	Retail < 10,000 SF	984	MIDDLESEX ST	Apt 4 to 8 Units R
72	MERRIMACK ST	Retail > 10,000 SF	122	MIDDLESEX ST	Retail < 10,000 SF
143	MERRIMACK ST	Retail > 10,000 SF	1599	MIDDLESEX ST	Auto Repair
797	MERRIMACK ST	Apt 9 Units and Up C	1613	MIDDLESEX ST	Office Bldg
839	MERRIMACK ST	Office Bldg	193	MIDDLESEX ST	Boarding House C
45	MERRIMACK ST	Retail > 10,000 SF	138	MIDDLESEX ST	Retail < 10,000 SF
463	MERRIMACK ST	Office	1599	MIDDLESEX ST	Auto Repair
218	MERRIMACK ST REAR	Office Bldg	1350	MIDDLESEX ST	Retail < 10,000 SF
16	MERRIMACK ST UNIT	Retail Condo	138	MIDDLESEX ST	Retail < 10,000 SF
241	METHUEN ST	CONDO MAIN	886	MIDDLESEX ST	Car Dealer Small
70	METHUEN ST	Apt 4 to 8 Units R	1720	MIDDLESEX ST	Restaurant/Club
10	METHUEN ST	Apt 4 to 8 Units R	1592	MIDDLESEX ST	Restaurant/Club
124	METHUEN ST	Apt 4 to 8 Units R	1375	MIDDLESEX ST	Auto Repair
84	METHUEN ST	Apt 4 to 8 Units R	1919	MIDDLESEX ST	Apt 9 Units and Up C
67	MIDDLE ST	Can't Find Address	70	MIDDLESEX ST	Restaurant/Club
82	MIDDLE ST	Can't Find Address	1126	MIDDLESEX ST	Office Bldg
40	MIDDLE ST	ED UML, MCC NR	1919	MIDDLESEX ST	Apt 9 Units and Up C
108	MIDDLE ST	Office Bldg	1905	MIDDLESEX ST	Apt 9 Units and Up C
83	MIDDLE ST	Office Bldg	1560	MIDDLESEX ST	Retail < 10,000 SF
129	MIDDLE ST	Office Bldg	1105	MIDDLESEX ST	Apt 4 to 8 Units R
134	MIDDLE ST	Office Bldg	1905	MIDDLESEX ST	Apt 9 Units and Up C
194	MIDDLE ST	Retail < 10,000 SF	1867	MIDDLESEX ST	Apt 9 Units and Up C
142	MIDDLE ST	Office Bldg	1687	MIDDLESEX ST	Retail < 10,000 SF
43	MIDDLE ST	Office Bldg	871	MIDDLESEX ST	Apt 9 Units and Up C
98	MIDDLE ST	Restaurant/Club	48	MIDDLESEX ST	Apt 9 Units and Up C
150	MIDDLE ST	Retail > 10,000 SF	1117	MIDDLESEX ST	Apt 4 to 8 Units R
194	MIDDLE ST (LIFE ALIVE)	Retail < 10,000 SF	871	MIDDLESEX ST	Apt 9 Units and Up C
155	MIDDLESEX ST	CONDO MAIN	1867	MIDDLESEX ST	Apt 9 Units and Up C
1485	MIDDLESEX ST	ED C REIMB	1180	MIDDLESEX ST	Apt 4 to 8 Units R

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
1857.1	MIDDLESEX ST	Lowell Education C	1861	MIDDLESEX ST	Apt 9 Units and Up C
1857.1	MIDDLESEX ST	Lowell Education C	202	MIDDLESEX ST	Apt 9 Units and Up C
60	MIDDLESEX ST	Apt 4 to 8 Units C	861	MIDDLESEX ST	Apt 9 Units and Up C
202	MIDDLESEX ST	Apt 9 Units and Up C	511	MIDDLESEX ST	Car Dealer Small
1400	MIDDLESEX ST	Factory	1842	MIDDLESEX ST	Apt 9 Units and Up C
1129	MIDDLESEX ST	Apt 4 to 8 Units R	1895	MIDDLESEX ST	Apt 9 Units and Up C
48	MIDDLESEX ST	Apt 9 Units and Up C	590	MIDDLESEX ST	Warehouse/Dist/Storage
861	MIDDLESEX ST	Apt 9 Units and Up C	1988	MIDDLESEX ST	Apt 9 Units and Up C
1551	MIDDLESEX ST	Auto Repair	1982	MIDDLESEX ST	Apt 9 Units and Up C
1505	MIDDLESEX ST	Restaurant/Club	1984	MIDDLESEX ST	Apt 9 Units and Up C
1703	MIDDLESEX ST	Comm Bldg C	1840	MIDDLESEX ST	Office
1460	MIDDLESEX ST	Retail < 10,000 SF	1982	MIDDLESEX ST	Apt 9 Units and Up C
1939	MIDDLESEX ST	Apt 9 Units and Up C	1984	MIDDLESEX ST	Apt 9 Units and Up C
717	MIDDLESEX ST	Retail < 10,000 SF	1842	MIDDLESEX ST	Apt 9 Units and Up C
1416	MIDDLESEX ST	Auto Repair	1570	MIDDLESEX ST	Retail < 10,000 SF
1460	MIDDLESEX ST	Restaurant/Club	1990	MIDDLESEX ST	Apt 9 Units and Up C
1085	MIDDLESEX ST	Apt 4 to 8 Units R	1614	MIDDLESEX ST	Retail < 10,000 SF
1416	MIDDLESEX ST	Auto Dealer Large	1840	MIDDLESEX ST	Apt 9 Units and Up C
1149	MIDDLESEX ST	Apt 4 to 8 Units R	1988	MIDDLESEX ST	Apt 9 Units and Up C
1460	MIDDLESEX ST	Restaurant/Club	660	MIDDLESEX ST	Retail > 10,000 SF
1939	MIDDLESEX ST	Apt 9 Units and Up C	1334	MIDDLESEX ST	Restaurant/Club
1416	MIDDLESEX ST	Auto Dealer Large	30	MIDDLESEX ST	Bank Bldg
1181	MIDDLESEX ST	Apt 4 to 8 Units R	1895	MIDDLESEX ST	Apt 9 Units and Up C
1733	MIDDLESEX ST	Restaurant/Club	1844	MIDDLESEX ST	Office
78	MIDDLESEX ST	Health Spa	1844	MIDDLESEX ST	Apt 9 Units and Up C
1199	MIDDLESEX ST	Apt 4 to 8 Units C	1994	MIDDLESEX ST	Apt 4 to 8 Units R
1550	MIDDLESEX ST	Office Bldg	1840	MIDDLESEX ST	Apt 9 Units and Up C
78	MIDDLESEX ST	Health Spa	1842	MIDDLESEX ST	Office
1460	MIDDLESEX ST	Retail < 10,000 SF	1844	MIDDLESEX ST	Apt 9 Units and Up C
190	MIDDLESEX ST	Restaurant/Club	1990	MIDDLESEX ST	Apt 9 Units and Up C
577	MIDDLESEX ST	Warehouse/Dist/Storage	1449	MIDDLESEX ST	Factory
1625	MIDDLESEX ST	Car Dealer Small	1861	MIDDLESEX ST	Apt 9 Units and Up C
716	MIDDLESEX ST	Retail > 10,000 SF	1852	MIDDLESEX ST	Apt 4 to 8 Units R
716	MIDDLESEX ST	Retail > 10,000 SF	1733	MIDDLESEX ST	Restaurant/Club
716	MIDDLESEX ST	Retail > 10,000 SF	190	MIDDLESEX ST	Restaurant/Club
1	MIDDLESEX ST	Retail < 10,000 SF	1815	MIDDLESEX ST	Retail < 10,000 SF
1301	MIDDLESEX ST	Apt 9 Units and Up C	1986	MIDDLESEX ST	Apt 9 Units and Up C
602	MIDDLESEX ST	Retail > 10,000 SF	1320	MIDDLESEX ST	Factory
1360	MIDDLESEX ST	Apt 4 to 8 Units R	1311	MIDDLESEX ST #1	Apt 9 Units and Up R
1516	MIDDLESEX ST	Auto Repair	1311	MIDDLESEX ST #1	Apt 9 Units and Up R
706	MIDDLESEX ST	Retail < 10,000 SF	1311	MIDDLESEX ST #2	Apt 9 Units and Up R
602	MIDDLESEX ST	Warehouse/Dist/Storage	1311	MIDDLESEX ST #2	Apt 9 Units and Up R
692	MIDDLESEX ST	Office	1311	MIDDLESEX ST #3	Apt 9 Units and Up R
1500	MIDDLESEX ST	Auto Repair	1311	MIDDLESEX ST #3	Apt 9 Units and Up R
543	MIDDLESEX ST	Apt 9 Units and Up C	1311	MIDDLESEX ST #4	Apt 9 Units and Up R
1765	MIDDLESEX ST	Retail > 10,000 SF	1311	MIDDLESEX ST #4	Apt 9 Units and Up R
1700	MIDDLESEX ST	Retail < 10,000 SF	1311	MIDDLESEX ST #5	Apt 9 Units and Up R
489	MIDDLESEX ST	Comm Bldg C	1311	MIDDLESEX ST #5	Apt 9 Units and Up R
1682	MIDDLESEX ST	Retail < 10,000 SF	1311	MIDDLESEX ST #6	Apt 9 Units and Up R
1776	MIDDLESEX ST	Retail < 10,000 SF	1311	MIDDLESEX ST #6	Apt 9 Units and Up R
1235	MIDDLESEX ST	Apt 4 to 8 Units R	1311	MIDDLESEX ST #7	Apt 9 Units and Up R
585	MIDDLESEX ST	Office Bldg	1311	MIDDLESEX ST #7	Apt 9 Units and Up R
915	MIDDLESEX ST	Apt 4 to 8 Units R	1311	MIDDLESEX ST #8	Apt 9 Units and Up R
1671	MIDDLESEX ST	Shopping Mall	1311	MIDDLESEX ST #8	Apt 9 Units and Up R
1682	MIDDLESEX ST	Car Wash	1740	MIDDLESEX ST #A	Restaurant/Club
248	MIDDLESEX ST	Boarding House C	1740	MIDDLESEX ST #B	Restaurant/Club
1671	MIDDLESEX ST	Shopping Mall	1599	MIDDLESEX ST (VENTURAS)	Auto Repair
543	MIDDLESEX ST	Apt 9 Units and Up C	1599	MIDDLESEX ST (VENTURAS)	Auto Repair
1301	MIDDLESEX ST	Apt 9 Units and Up C	1317	MIDDLESEX ST UNIT	Car Wash
1465	MIDDLESEX ST	Auto Repair	1717	MIDDLESEX ST UNIT	Auto Repair
1582	MIDDLESEX ST	Office Bldg	1317	MIDDLESEX ST UNIT	Car Wash

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
1986	MIDDLESEX ST	Apt 9 Units and Up C	1499	MIDDLESEX ST( RECEIVI	ED C REIMB
1682	MIDDLESEX ST	Car Wash	1717	MIDDLESEX STREET	Retail Condo
1281	MIDDLESEX ST	Apt 4 to 8 Units C	11	MILL ST	Office Bldg
19	MILL ST CT	Office Bldg	32	MT WASHINGTON ST	Apt 4 to 8 Units R
125	MONTREAL ST	IND CONDO MDL-06	14	MT WASHINGTON ST	Apt 9 Units and Up C
131	MONTREAL ST	Warehouse	11	MYRTLE ST	Apt 4 to 8 Units R
454	MOODY ST	Church/Temple V	39	MYRTLE ST	Apt 9 Units and Up C
517	MOODY ST	Office Bldg	24	MYRTLE ST	Apt 4 to 8 Units R
511	MOODY ST	Aff Hgs Units (Apts)	5	N FRANKLIN CT	Warehouse/Dist/Storage
511	MOODY ST	Aff Hgs Units (Apts)	6	N FRANKLIN CT	Warehouse/Dist/Storage
517	MOODY ST	Office Bldg	7	NELSON AVE	Apt 4 to 8 Units R
324	MOODY ST	Apt 4 to 8 Units C	260	NESMITH ST	Apt 9 Units and Up C
373	MOODY ST	Fraternal Org	270	NESMITH ST	Apt 9 Units and Up C
500	MOODY ST	Apt 9 Units and Up C	100	NESMITH ST	Church/Temple C
309	MOODY ST	Aff Hgs Units (Apts)	270	NESMITH ST	Apt 9 Units and Up C
229	MOODY ST	Aff Hgs Units (Apts)	28	NESMITH ST	Apt 4 to 8 Units R
229	MOODY ST	Aff Hgs Units (Apts)	260	NESMITH ST	Apt 9 Units and Up C
309	MOODY ST	Aff Hgs Units (Apts)	293	NESMITH ST	Apt 9 Units and Up C
205	MOODY ST	Aff Hgs Units (Apts)	173	NESMITH ST	Apt 9 Units and Up C
205	MOODY ST	Aff Hgs Units (Apts)	173	NESMITH ST	Apt 9 Units and Up C
142	MOORE ST	Church/Temple C	178	NESMITH ST	Apt 9 Units and Up C
248	MOORE ST	Church/Temple V	178	NESMITH ST	Apt 9 Units and Up C
18	MOORE ST	Auto Repair	172	NESMITH ST	Apt 9 Units and Up C
211	MOORE ST	Apt 4 to 8 Units R	172	NESMITH ST	Apt 9 Units and Up C
121	MOORE ST	Apt 4 to 8 Units R	194	NESMITH ST	Apt 4 to 8 Units R
105	MOORE ST	Funeral Home	95	NESMITH ST	Apt 4 to 8 Units R
80	MOORE ST	Apt 4 to 8 Units R	267	NESMITH ST	Apt 9 Units and Up C
80	MOORE ST	Apt 4 to 8 Units R	267	NESMITH ST	Apt 9 Units and Up C
183	MOORE ST	Apt 4 to 8 Units R	187	NESMITH ST	Funeral Home
218	MOORE ST	Apt 4 to 8 Units R	43	NESMITH ST	Apt 9 Units and Up C
203	MOORE ST	Apt 4 to 8 Units R	279	NESMITH ST	Apt 4 to 8 Units R
70	MOORE ST	Apt 4 to 8 Units C	43	NESMITH ST	Apt 9 Units and Up C
159	MOORE ST	Apt 4 to 8 Units C	59	NESMITH ST	Apt 4 to 8 Units R
169	MOORE ST	Apt 9 Units and Up C	141	NESMITH ST	Apt 9 Units and Up C
181	MOORE ST	Apt 9 Units and Up C	278	NESMITH ST	Apt 9 Units and Up C
110	MOORE ST	Apt 4 to 8 Units R	294	NESMITH ST	Apt 9 Units and Up C
204	MOORE ST	Apt 4 to 8 Units R	141	NESMITH ST	Apt 9 Units and Up C
97	MOORE ST	Apt 4 to 8 Units R	255	NESMITH ST	Apt 9 Units and Up C
118	MOORE ST	Apt 4 to 8 Units R	105	NESMITH ST	Apt 4 to 8 Units R
2	MOREY PL	Apt 9 Units and Up R	294	NESMITH ST	Apt 9 Units and Up C
1	MOREY PL	Apt 9 Units and Up R	221	NESMITH ST	Apt 9 Units and Up C
1	MOREY PL	Apt 9 Units and Up R	317	NESMITH ST	Apt 4 to 8 Units R
2	MOREY PL	Apt 9 Units and Up R	73	NESMITH ST	Apt 4 to 8 Units R
25	MORSE ST	Apt 9 Units and Up C	115	NESMITH ST	Apt 4 to 8 Units R
25	MORSE ST	Apt 9 Units and Up C	330	NESMITH ST	Apt 9 Units and Up C
33	MORSE ST	Apt 9 Units and Up C	255	NESMITH ST	Apt 9 Units and Up C
33	MORSE ST	Apt 9 Units and Up C	221	NESMITH ST	Apt 9 Units and Up C
55	MT GROVE ST	Apt 4 to 8 Units R	330	NESMITH ST	Apt 9 Units and Up C
9	MT HOPE ST	Fraternity/Sorority	293	NESMITH ST	Apt 9 Units and Up C
79	MT HOPE ST	Apt 4 to 8 Units R	278	NESMITH ST	Apt 9 Units and Up C
60	MT VERNON ST	CONDO MAIN	56	NEWHALL ST	Warehouse
181	MT VERNON ST	Apt 4 to 8 Units R	67	NEWHALL ST	Apt 4 to 8 Units R
63	MT VERNON ST	Apt 4 to 8 Units R	139	NEWHALL ST	Warehouse
35	MT VERNON ST	Apt 4 to 8 Units R	125	NEWHALL ST	Warehouse
28	MT VERNON ST	Apt 4 to 8 Units R	73	NEWHALL ST	Apt 4 to 8 Units R
105	MT VERNON ST	Apt 4 to 8 Units R	51	NEWHALL ST	Apt 4 to 8 Units R
141	MT VERNON ST	Apt 4 to 8 Units R	48	NEWHALL ST	Factory
54	MT VERNON ST	Apt 4 to 8 Units R	168	NEWHALL ST EXT	Retail < 10,000 SF
251	MT VERNON ST	Art Gallery	168	NEWHALL ST EXT	Retail < 10,000 SF
14	MT WASHINGTON ST	Apt 9 Units and Up C	169	NEWHALL ST EXT	Retail < 10,000 SF
52	MT WASHINGTON ST	Apt 4 to 8 Units R	31	NICHOLS ST	Apt 4 to 8 Units R

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
128	MT WASHINGTON ST	Apt 4 to 8 Units R	41	NICHOLS ST	Apt 4 to 8 Units R
78	MT WASHINGTON ST	Apt 4 to 8 Units R	21	NINETEENTH ST	Apt 4 to 8 Units R
65	MT WASHINGTON ST	Apt 4 to 8 Units R			
1	OAK ST	Church/Temple C	1339	PAWTUCKET BLVD	Aff Hgs Units (Apts)
35	OAK ST	Apt 4 to 8 Units R	1341	PAWTUCKET BLVD	Aff Hgs Units (Apts)
4	OAK ST	Apt 4 to 8 Units R	1349	PAWTUCKET BLVD	Aff Hgs Units (Apts)
13	OAK ST	Apt 4 to 8 Units R	1347	PAWTUCKET BLVD	Comm Bldg C
62	OAK ST	Apt 4 to 8 Units R	1359	PAWTUCKET BLVD	Comm Bldg C
14	OAKLAND ST	Apt 4 to 8 Units R	1361	PAWTUCKET BLVD	Aff Hgs Units (Apts)
40	OLD FERRY RD	Fraternal Org	1371	PAWTUCKET BLVD	Aff Hgs Units (Apts)
81	OLD FERRY RD	Office	1321	PAWTUCKET BLVD	Aff Hgs Units (Apts)
81	OLD FERRY RD	Warehouse	1325	PAWTUCKET BLVD	Aff Hgs Units (Apts)
57	OLD FERRY RD- ENGINE #10	Public Safety C	1361	PAWTUCKET BLVD	Aff Hgs Units (Apts)
70	OLDE CANAL DR	Factory	1309	PAWTUCKET BLVD	Aff Hgs Units (Apts)
70	OLDE CANAL DR	Factory	1313	PAWTUCKET BLVD	Aff Hgs Units (Apts)
174	OLDE CANAL DR	Warehouse	1317	PAWTUCKET BLVD	Aff Hgs Units (Apts)
22	OLDE CANAL DR	OFFICE CONDO	1335	PAWTUCKET BLVD	Aff Hgs Units (Apts)
180	OLDE CANAL DR	Warehouse	1347	PAWTUCKET BLVD	Aff Hgs Units (Apts)
180	OLDE CANAL DR	Warehouse	1353	PAWTUCKET BLVD	Aff Hgs Units (Apts)
22	OLDE CANAL DR	Office Bldg	1363	PAWTUCKET BLVD	Aff Hgs Units (Apts)
174	OLDE CANAL DR	Warehouse	1367	PAWTUCKET BLVD	Aff Hgs Units (Apts)
175	OLDE CANAL DR A	Commercial Condo	1329	PAWTUCKET BLVD	Aff Hgs Units (Apts)
179	OLDE CANAL DR B	Commercial Condo	1341	PAWTUCKET BLVD	Aff Hgs Units (Apts)
25	OLNEY ST	Warehouse/Dist/Storage	1349	PAWTUCKET BLVD	Aff Hgs Units (Apts)
31	ORLEANS ST	Apt 4 to 8 Units R	1313	PAWTUCKET BLVD	Comm Bldg C
26	OSGOOD ST	Apt 4 to 8 Units R	1325	PAWTUCKET BLVD	Aff Hgs Units (Apts)
72	OTIS ST	Apt 4 to 8 Units R	1335	PAWTUCKET BLVD	Aff Hgs Units (Apts)
29	PAIGE ST	Boarding House R	1347	PAWTUCKET BLVD	Aff Hgs Units (Apts)
61	PARK AVE W	Apt 9 Units and Up C	1353	PAWTUCKET BLVD	Comm Bldg C
83	PARK AVE W	Apt 9 Units and Up C	1363	PAWTUCKET BLVD	Aff Hgs Units (Apts)
61	PARK AVE W	Apt 9 Units and Up C	1371	PAWTUCKET BLVD	Comm Bldg C
83	PARK AVE W	Apt 9 Units and Up C	1359	PAWTUCKET BLVD	Aff Hgs Units (Apts)
14	PARK ST	Apt 4 to 8 Units R	1367	PAWTUCKET BLVD	Comm Bldg C
26	PARK ST	Apt 9 Units and Up C	1309	PAWTUCKET BLVD	Comm Bldg C
4	PARK ST	Apt 4 to 8 Units R	1335	PAWTUCKET BLVD	Comm Bldg C
26	PARK ST	Apt 9 Units and Up C	1339	PAWTUCKET BLVD	Aff Hgs Units (Apts)
26	PARK ST	Apt 9 Units and Up C	1341	PAWTUCKET BLVD	Comm Bldg C
26	PARK ST	Apt 9 Units and Up C	1317	PAWTUCKET BLVD	Comm Bldg C
26	PARK ST	Apt 9 Units and Up C	1359	PAWTUCKET BLVD	Aff Hgs Units (Apts)
26	PARK ST	Apt 9 Units and Up C	1361	PAWTUCKET BLVD	Comm Bldg C
338	PARKER ST	Office Bldg	1367	PAWTUCKET BLVD	Aff Hgs Units (Apts)
191	PAWTUCKET BLVD	Office Bldg	1275	PAWTUCKET BLVD	Parking Lot
160	PAWTUCKET BLVD	City of Lowell V	1313	PAWTUCKET BLVD	Aff Hgs Units (Apts)
831	PAWTUCKET BLVD	Utility Authority C	1317	PAWTUCKET BLVD	Aff Hgs Units (Apts)
1471	PAWTUCKET BLVD	Lowell Education V	1275	PAWTUCKET BLVD	Parking Lot
1471	PAWTUCKET BLVD	City of Lowell V	1275	PAWTUCKET BLVD	Parking Lot
1467	PAWTUCKET BLVD	City of Lowell V	1275	PAWTUCKET BLVD	Parking Lot
1180	PAWTUCKET BLVD	DEPT CONS/PARKS NR	595	PAWTUCKET BLVD	Office Bldg
1471	PAWTUCKET BLVD	City of Lowell V	1275	PAWTUCKET BLVD	Parking Lot
1471	PAWTUCKET BLVD	City of Lowell V	1275	PAWTUCKET BLVD	Parking Lot
585	PAWTUCKET BLVD	Office Bldg	1275	PAWTUCKET BLVD	Parking Lot
149	PAWTUCKET BLVD	Auto Repair	605	PAWTUCKET BLVD	Apt 9 Units and Up C
521	PAWTUCKET BLVD	Restaurant/Club	617	PAWTUCKET BLVD	Apt 9 Units and Up C
1309	PAWTUCKET BLVD	Aff Hgs Units (Apts)	611	PAWTUCKET BLVD	Apt 9 Units and Up C
1321	PAWTUCKET BLVD	Comm Bldg C	617	PAWTUCKET BLVD	Apt 9 Units and Up C
1339	PAWTUCKET BLVD	Comm Bldg C	647	PAWTUCKET BLVD	Bowling
1349	PAWTUCKET BLVD	Comm Bldg C	1301	PAWTUCKET BLVD	Retail < 10,000 SF
1363	PAWTUCKET BLVD	Comm Bldg C	605	PAWTUCKET BLVD	Apt 9 Units and Up C
163	PAWTUCKET BLVD	Restaurant/Club	611	PAWTUCKET BLVD	Apt 9 Units and Up C
1353	PAWTUCKET BLVD	Aff Hgs Units (Apts)	677	PAWTUCKET BLVD	Shopping Mall
1325	PAWTUCKET BLVD	Comm Bldg C	1001	PAWTUCKET BLVD	Factory

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
1321	PAWTUCKET BLVD	Aff Hgs Units (Apts)	1001	PAWTUCKET BLVD	Factory
1329	PAWTUCKET BLVD	Aff Hgs Units (Apts)	1001	PAWTUCKET BLVD	Factory
1001	PAWTUCKET BLVD	Factory	65	PERKINS ST(RH VILLAGE)	ED C REIMB
677	PAWTUCKET BLVD	Shopping Mall	65	PERKINS ST(RH VILLAGE)	ED C REIMB
1329	PAWTUCKET BLVD	Comm Bldg C	125	PERRY ST	Church/Temple C
1371	PAWTUCKET BLVD	Aff Hgs Units (Apts)	40	PERRY ST	Retail < 10,000 SF
500	PAWTUCKET BLVD(BOATHOUSE)	ENV.MGT REIMB	151	PERRY ST	Warehouse
524	PAWTUCKET ST	Char Other C	16	PERRY ST	Car Wash
536	PAWTUCKET ST	Char Other C	237	PERRY ST	Apt 4 to 8 Units R
375	PAWTUCKET ST	Apt 4 to 8 Units R	229	PERRY ST	Apt 4 to 8 Units R
267	PAWTUCKET ST	Church/Temple R	229	PERRY ST	Apt 4 to 8 Units R
383	PAWTUCKET ST	Char Housing R	237	PERRY ST	Apt 4 to 8 Units R
360	PAWTUCKET ST	Char Housing C	223	PERRY ST	Apt 4 to 8 Units R
321	PAWTUCKET ST	Church/Temple R	223	PERRY ST	Apt 4 to 8 Units R
309	PAWTUCKET ST	Funeral Home	170	PERRY ST	Auto Repair
308	PAWTUCKET ST	Funeral Home	50	PERRY ST	Auto Repair
145	PAWTUCKET ST	Co Gen - Agreement Val	145	PERRY ST UNIT	IND CONDO MDL-06
340	PAWTUCKET ST	Apt 4 to 8 Units R	145	PERRY ST UNIT	IND CONDO MDL-06
423	PAWTUCKET ST	Apt 4 to 8 Units R	145	PERRY ST UNIT	IND CONDO MDL-06
357	PAWTUCKET ST	Apt 9 Units and Up C	145	PERRY ST UNIT	IND CONDO MDL-06
357	PAWTUCKET ST	Apt 9 Units and Up C	85	PEVEY ST	Warehouse
336	PAWTUCKET ST	Apt 4 to 8 Units R	9	PHILLIPS ST	Parking Lot
276	PAWTUCKET ST	Funeral Home	137	PHOENIX AVE	Telephone Tower
295	PAWTUCKET ST	Funeral Home	126	PHOENIX AVE	Char Other C
298	PAWTUCKET ST	Apt 4 to 8 Units C	100	PHOENIX AVE	Warehouse
321	PAWTUCKET ST	Aff Hgs Units (Apts)	90	PHOENIX AVE	Factory
487	PAWTUCKET ST	Yacht Club	90	PHOENIX AVE	Factory
322	PAWTUCKET ST	Apt 4 to 8 Units R	148	PHOENIX AVE	Vacant Land Dev
453	PAWTUCKET ST	Apt 9 Units and Up C	101	PHOENIX AVE	Industrial Bldg
453	PAWTUCKET ST	Apt 9 Units and Up C	75	PHOENIX AVE	Warehouse/Dist/Storage
406	PAWTUCKET ST	Apt 9 Units and Up R	75	PHOENIX AVE	Warehouse/Dist/Storage
406	PAWTUCKET ST	Apt 9 Units and Up R	180	PHOENIX AVE	Factory
915	PAWTUCKET ST	Retail < 10,000 SF	180	PHOENIX AVE	Factory
415	PAWTUCKET ST	Apt 4 to 8 Units R	180	PHOENIX AVE	Factory
318	PAWTUCKET ST	Apt 4 to 8 Units C	77	PHOENIX AVE	Warehouse/Dist/Storage
500	PAWTUCKET ST	Restaurant/Club	180	PHOENIX AVE	Factory
357	PAWTUCKET ST	Apt 9 Units and Up C	79	PHOENIX AVE	Warehouse/Dist/Storage
403	PAWTUCKET ST	Boarding House C	79	PHOENIX AVE	Warehouse/Dist/Storage
220	PAWTUCKET ST [A] (UCROSS)	ED C REIMB	77	PHOENIX AVE	Warehouse/Dist/Storage
220	PAWTUCKET ST [B] (UCROSS)	ED C REIMB	81	PHOENIX AVE	Warehouse/Dist/Storage
91	PAWTUCKET ST(DONAHUE)	ED C REIMB	81	PHOENIX AVE	Warehouse/Dist/Storage
91	PAWTUCKET ST(DONAHUE)	ED C REIMB	55	PHOENIX AVE	Warehouse/Dist/Storage
47	PAWTUCKET ST(EAST GARAGE)	ED C REIMB	55	PHOENIX AVE	Warehouse/Dist/Storage
47	PAWTUCKET ST(EAST GARAGE)	ED C REIMB	159	PHOENIX AVE	Factory
100	PAWTUCKET ST(FOX)	ED C REIMB	159	PHOENIX AVE	Factory
71	PAWTUCKET ST(LEITCH/BOUG)	ED C REIMB	159	PHOENIX AVE	Factory
71	PAWTUCKET ST(LEITCH/BOUG)	ED C REIMB	159	PHOENIX AVE	Factory
50	PAYNE ST	Auto Repair	148	PHOENIX AVE	Vacant Land Dev
34	PAYNE ST	Auto Repair	130	PINE ST	Lowell Education C
67	PAYNE ST	Auto Repair	341	PINE ST	Lowell Education C
20	PAYTON ST	Warehouse	183	PINE ST	Apt 4 to 8 Units C
30	PAYTON ST	Factory	173	PINE ST	Professional Office
30	PAYTON ST REAR	Factory	160	PINE ST	Apt 4 to 8 Units R
15	PEARL ST	Apt 4 to 8 Units R	231	PINE ST	Apt 9 Units and Up C

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
1	PERKINS ST(HOFF CNTR)	ED C REIMB	231	PINE ST	Apt 9 Units and Up C
39	PERKINS ST(PERKINS)	ED C REIMB	30	PINE ST	Retail < 10,000 SF
206	PINE ST	Apt 4 to 8 Units R	31	PLEASANT ST	Apt 4 to 8 Units R
50	PINE ST	Apt 9 Units and Up C	137	PLEASANT ST	Apt 4 to 8 Units R
50	PINE ST	Apt 9 Units and Up C	82	PLEASANT ST	Apt 4 to 8 Units R
67	PINE ST	Apt 4 to 8 Units R	67	PLEASANT ST	Apt 4 to 8 Units R
4	PINE ST	Retail < 10,000 SF	22	PLEASANT ST BDLG	Apt 9 Units and Up R
224	PINE ST	Apt 4 to 8 Units C	22	PLEASANT ST BDLG	Apt 9 Units and Up R
184	PINE ST	Apt 4 to 8 Units R	22	PLEASANT ST BLDG	Apt 9 Units and Up R
16	PINE ST	Professional Office	22	PLEASANT ST BLDG	Apt 9 Units and Up R
221	PINE ST	Apt 4 to 8 Units R	10	PLYMOUTH ST	Housing Authority C
163	PINE ST	Professional Office	39	PLYMOUTH ST	Boarding House R
53	PINE ST	Apt 4 to 8 Units R	24	POLLARD ST	Apt 4 to 8 Units R
127	PINE ST	Apt 4 to 8 Units R	16	POLLARD ST	Apt 4 to 8 Units R
89	PLAIN ST	City of Lowell V	2	POLLARD ST	Apt 4 to 8 Units R
316	PLAIN ST	Warehouse/Dist/Storage	28	POLLARD ST	Apt 4 to 8 Units R
316	PLAIN ST	Warehouse/Dist/Storage	48	POND ST	Can't Find Address
312	PLAIN ST	Warehouse/Dist/Storage	54	POND ST	Apt 9 Units and Up R
312	PLAIN ST	Warehouse/Dist/Storage	7	PORTER ST	Apt 4 to 8 Units R
285	PLAIN ST	Retail > 10,000 SF	0	POST OFFICE SQ	Can't Find Address
168	PLAIN ST	Car Wash	235	POWELL ST	Lowell Education C
168	PLAIN ST	Car Wash	95	POWELL ST	Apt 4 to 8 Units R
120	PLAIN ST	Fuel Service	171	POWELL ST	Apt 4 to 8 Units R
120	PLAIN ST	Fuel Service	142	POWELL ST	Warehouse/Dist/Storage
66	PLAIN ST	Restaurant/Club	110	POWELL ST	Apt 4 to 8 Units R
54	PLAIN ST	Retail > 10,000 SF	103	POWELL ST	Apt 4 to 8 Units R
190	PLAIN ST	Fraternal Org	23	POWELL ST	Apt 4 to 8 Units R
181	PLAIN ST BLDG	Retail > 10,000 SF	39	POWELL ST	Apt 4 to 8 Units R
211	PLAIN ST UNIT	Retail > 10,000 SF	36	POWELL ST	Apt 4 to 8 Units R
211	PLAIN ST UNIT	Retail > 10,000 SF	121	POWELL ST	Apt 4 to 8 Units R
211	PLAIN ST UNIT	Retail > 10,000 SF	57	POWELL ST	Retail < 10,000 SF
211	PLAIN ST UNIT	Retail > 10,000 SF	44	POWELL ST	Apt 4 to 8 Units R
211	PLAIN ST UNIT	Retail < 10,000 SF	135	POWELL ST	Apt 4 to 8 Units R
211	PLAIN ST UNIT	Retail > 10,000 SF	82	POWELL ST	Apt 4 to 8 Units R
211	PLAIN ST UNIT	Retail > 10,000 SF	23	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail > 10,000 SF	29	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail < 10,000 SF	59	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail < 10,000 SF	35	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail > 10,000 SF	59	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail < 10,000 SF	23	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail > 10,000 SF	35	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail > 10,000 SF	45	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail > 10,000 SF	45	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail > 10,000 SF	51	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail < 10,000 SF	29	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail < 10,000 SF	51	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail < 10,000 SF	206	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail > 10,000 SF	206	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT	Retail > 10,000 SF	205	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT #11-14 & 17	Retail > 10,000 SF	205	PRATT AVE	Apt 9 Units and Up C
211	PLAIN ST UNIT #11-14 & 17	Retail > 10,000 SF	206	PRATT AVE #A	Apt 9 Units and Up C
211	PLAIN ST UNIT #11-14 & 17	Retail < 10,000 SF	206	PRATT AVE #A	Apt 9 Units and Up C
199	PLAIN ST UNIT 11	Retail < 10,000 SF	27	PRESCOTT ST	Char Services C
199	PLAIN ST UNIT 11	Retail > 10,000 SF	27	PRESCOTT ST	Char Services C
199	PLAIN ST UNIT 11	Retail > 10,000 SF	72	PRESCOTT ST	Retail > 10,000 SF
211	PLAIN ST UNITS	Retail > 10,000 SF	72	PRESCOTT ST	Apt 9 Units and Up C
211	PLAIN ST UNITS	Retail < 10,000 SF	47	PRINCE AVE	Apt 4 to 8 Units R
211	PLAIN ST UNITS	Retail > 10,000 SF	2	PRINCE AVE	Office
49	PLEASANT ST	Apt 4 to 8 Units R	29	PRINCE AVE	Apt 4 to 8 Units R
147	PLEASANT ST	Apt 4 to 8 Units R	2	PRINCE AVE	Office
38	PRINCE AVE	Apt 4 to 8 Units R	32	REISS AVE	Movie Theater

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
39	PRINCE AVE	Apt 4 to 8 Units R	28	REISS AVE	Movie Theater
21	PRINCE AVE	Apt 4 to 8 Units R	26	REISS AVE	Restaurant/Club
2	PRINCE AVE	Office	26	REISS AVE	Movie Theater
48	PRINCE AVE	Apt 4 to 8 Units R	24	REISS AVE	Auto Dealer Large
2	PRINCE AVE BLDG	Office	77	RICHARDSON ST	Aff Hgs Units (Apts)
716	PRINCETON	Apt 9 Units and Up C	85	RICHARDSON ST	Aff Hgs Units (Apts)
716	PRINCETON	Apt 9 Units and Up C	88	RICHARDSON ST	Apt 4 to 8 Units R
105	PRINCETON BLVD	Church/Temple C	77	RICHARDSON ST	Aff Hgs Units (Apts)
52	PRINCETON BLVD	Char Housing C	85	RICHARDSON ST	Aff Hgs Units (Apts)
421	PRINCETON BLVD	Church/Temple C	64	RICHARDSON ST	Apt 9 Units and Up C
52	PRINCETON BLVD	Char Housing C	64	RICHARDSON ST	Apt 9 Units and Up C
421	PRINCETON BLVD	Church/Temple C	1	RIVER PL	Aff Hgs Units (Apts)
40	PRINCETON BLVD	Church/Temple C	1	RIVER PL	Aff Hgs Units (Apts)
756	PRINCETON BLVD	Apt 9 Units and Up C	3	RIVER PL	Aff Hgs Units (Apts)
756	PRINCETON BLVD	Apt 9 Units and Up C	3	RIVER PL	Aff Hgs Units (Apts)
737	PRINCETON BLVD	Apt 9 Units and Up C	300	RIVER PL(TSONGAS)	ED UML, MCC NR
670	PRINCETON BLVD	Apt 9 Units and Up C	101	RIVERSIDE ST	Fraternity/Sorority
737	PRINCETON BLVD	Apt 9 Units and Up C	338	RIVERSIDE ST	Auto Repair
670	PRINCETON BLVD	Apt 9 Units and Up C	182	RIVERSIDE ST	Restaurant/Club
30	PRINCETON BLVD	NURSING HOME	182	RIVERSIDE ST	Apt 4 to 8 Units C
122	PRINCETON BLVD	Funeral Home	142	RIVERSIDE ST	Apt 9 Units and Up C
480	PRINCETON BLVD	Gas Station	142	RIVERSIDE ST	Apt 9 Units and Up C
493	PRINCETON BLVD	Auto Repair	40	RIVERSIDE ST	Apt 4 to 8 Units R
100	PRINCETON BLVD	NURSING HOME	10	RIVERSIDE ST	Auto Repair
678	PRINCETON BLVD	Apt 9 Units and Up C	170	RIVERSIDE ST	Apt 4 to 8 Units C
744	PRINCETON BLVD	Apt 9 Units and Up C	272	RIVERSIDE ST	Apt 9 Units and Up C
736	PRINCETON BLVD	Apt 9 Units and Up C	272	RIVERSIDE ST	Apt 9 Units and Up C
725	PRINCETON BLVD	Apt 9 Units and Up C	396	RIVERSIDE ST	Retail < 10,000 SF
744	PRINCETON BLVD	Apt 9 Units and Up C	48	RIVERSIDE ST	Apt 4 to 8 Units R
736	PRINCETON BLVD	Apt 9 Units and Up C	22	RIVERSIDE ST	Apt 4 to 8 Units R
725	PRINCETON BLVD	Apt 9 Units and Up C	429	RIVERSIDE ST -GAR	Auto Repair
100	PRINCETON BLVD	NURSING HOME	201	RIVERSIDE ST(BALL)	ED C REIMB
645	PRINCETON BLVD	Retail < 10,000 SF	201	RIVERSIDE ST(BALL)	ED C REIMB
711	PRINCETON BLVD	Apt 9 Units and Up C	201	RIVERSIDE ST(BALL)	ED MDL-96 REIMB
719	PRINCETON BLVD	Apt 9 Units and Up C	261	RIVERSIDE ST(COSTELLO)	ED C REIMB
678	PRINCETON BLVD	Apt 9 Units and Up C	261	RIVERSIDE ST(COSTELLO)	ED MDL-96 REIMB
700	PRINCETON BLVD	Apt 9 Units and Up C	261	RIVERSIDE ST(COSTELLO)	ED C REIMB
719	PRINCETON BLVD	Apt 9 Units and Up C	281	RIVERSIDE ST(CUMNOCK)	ED MDL-96 REIMB
740	PRINCETON BLVD	Apt 9 Units and Up C	281	RIVERSIDE ST(CUMNOCK)	ED C REIMB
732	PRINCETON BLVD	Apt 9 Units and Up C	281	RIVERSIDE ST(CUMNOCK)	ED C REIMB
711	PRINCETON BLVD	Apt 9 Units and Up C	293	RIVERSIDE ST(N. GARAGE)	ED MDL-96 REIMB
700	PRINCETON BLVD	Apt 9 Units and Up C	293	RIVERSIDE ST(N. GARAGE)	ED C REIMB
707	PRINCETON BLVD	Apt 9 Units and Up C	293	RIVERSIDE ST(N. GARAGE)	ED C REIMB
732	PRINCETON BLVD	Apt 9 Units and Up C	281	RIVERSIDE ST(OLNEY)	ED C REIMB
740	PRINCETON BLVD	Apt 9 Units and Up C	281	RIVERSIDE ST(OLNEY)	ED C REIMB
707	PRINCETON BLVD	Apt 9 Units and Up C	281	RIVERSIDE ST(OLNEY)	ED MDL-96 REIMB
30	PRINCETON BLVD	NURSING HOME	198	RIVERSIDE ST(OLSEN)	ED C REIMB
45	PRINCETON BLVD	Apt 4 to 8 Units R	231	RIVERSIDE ST(PINANSKI)	ED MDL-96 REIMB
23	PUFFER ST	Apt 4 to 8 Units R	231	RIVERSIDE ST(PINANSKI)	ED C REIMB
111	QUEBEC ST	Auto Repair	231	RIVERSIDE ST(PINANSKI)	ED C REIMB
54	QUEEN ST	Apt 4 to 8 Units R	223	RIVERSIDE ST(PWR PLANT)	ED MDL-96 REIMB
26	QUEEN ST	Apt 4 to 8 Units R	223	RIVERSIDE ST(PWR PLANT)	ED C REIMB
50	QUEEN ST	Boarding House C	223	RIVERSIDE ST(PWR PLANT)	ED C REIMB
4	QUIMBY AVE	Auto Repair	281	RIVERSIDE ST(SW QUAD)	ED C REIMB
8	READ ST	Apt 4 to 8 Units R	281	RIVERSIDE ST(SW QUAD)	ED MDL-96 REIMB
23	READ ST	Apt 4 to 8 Units R	281	RIVERSIDE ST(SW QUAD)	ED MDL-96 REIMB
72	READ ST	Apt 4 to 8 Units C	281	RIVERSIDE ST(SW QUAD)	ED C REIMB
24	REISS AVE	Auto Dealer Large	281	RIVERSIDE ST(SW QUAD)	ED C REIMB
32	REISS AVE	Restaurant/Club	281	RIVERSIDE ST(SW QUAD)	ED C REIMB
28	REISS AVE	Restaurant/Club	75	ROBBINS ST	Apt 9 Units and Up C
75	ROBBINS ST	Apt 9 Units and Up C	802	ROGERS ST	Shopping Mall

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
71	ROBBINS ST	Apt 9 Units and Up C	720	ROGERS ST	Auto Dealer Large
71	ROBBINS ST	Apt 9 Units and Up C	794	ROGERS ST	Shopping Mall
21	ROBERT ST	Apt 4 to 8 Units R	802	ROGERS ST	Bank Bldg
106	ROCK ST	Char Housing C	661	ROGERS ST	Auto Repair
94	ROCK ST	Char Housing C	600	ROGERS ST	Restaurant/Club
48	ROCK ST	Apt 4 to 8 Units C	558	ROGERS ST	Office
41	ROCK ST	Char Other C	855	ROGERS ST	Parking Lot
17	ROCK ST	Warehouse	700	ROGERS ST	Office Bldg
30	ROCK ST	Car Dealer Small	572	ROGERS ST	Auto Repair
22	ROCK ST	Apt 4 to 8 Units R	777	ROGERS ST	Supermarket
34	ROCK ST	Auto Repair	631	ROGERS ST	Restaurant/Club
115	ROCK ST	Auto Repair	196	ROGERS ST	Aff Hgs Units (Apts)
115	ROCK ST	Auto Repair	196	ROGERS ST	Aff Hgs Units (Apts)
74	ROCK ST	Auto Repair	103	ROGERS ST	Retail < 10,000 SF
70	ROCK ST	Car Dealer Small	502	ROGERS ST - TRAINING CTR	Public Safety C
6	ROCK ST #1	Office	638	ROGERS ST #3C	Retail < 10,000 SF
6	ROCK ST #2	Office	638	ROGERS ST #A	Retail < 10,000 SF
6	ROCK ST #3	Office	590	ROGERS ST #B	Retail < 10,000 SF
635	ROGERS ST	Office Condo	638	ROGERS ST #B	Retail < 10,000 SF
206	ROGERS ST	Can't Find Address	590	ROGERS ST #C	Retail < 10,000 SF
171	ROGERS ST	City of Lowell V	638	ROGERS ST #D-E	Retail < 10,000 SF
158	ROGERS ST	Lowell Education C	638	ROGERS ST #F	Retail < 10,000 SF
453	ROGERS ST	City of Lowell V	75	ROGERS ST REAR	Warehouse
171	ROGERS ST	City of Lowell V	75	ROGERS ST REAR	Factory
831	ROGERS ST	Auto Dealer Large	75	ROGERS ST REAR	Warehouse
777	ROGERS ST	Supermarket	75	ROGERS ST REAR	Factory
85	ROGERS ST	Apt 4 to 8 Units R	45	ROYAL ST	Char Housing R
541	ROGERS ST	Retail < 10,000 SF	86	ROYAL ST	Apt 4 to 8 Units R
308	ROGERS ST	Apt 4 to 8 Units R	105	S HIGHLAND ST	Apt 4 to 8 Units R
316	ROGERS ST	Apt 4 to 8 Units R	115	S LORING ST	Apt 4 to 8 Units R
517	ROGERS ST	Office Bldg	84	S WHIPPLE ST	Apt 4 to 8 Units R
81	ROGERS ST	Car Wash	100	S WHIPPLE ST	Apt 4 to 8 Units R
733	ROGERS ST	Auto Dealer Large	47	S WHIPPLE ST	Apt 9 Units and Up C
733	ROGERS ST	Auto Dealer Large	47	S WHIPPLE ST	Apt 9 Units and Up C
484	ROGERS ST	Apt 4 to 8 Units R	17	S WHIPPLE ST	Apt 4 to 8 Units R
527	ROGERS ST	Retail < 10,000 SF	501	SALEM ST	Housing Authority C
688	ROGERS ST	Restaurant/Club	501	SALEM ST	Housing Authority C
590	ROGERS ST	Retail < 10,000 SF	501	SALEM ST	Housing Authority C
680	ROGERS ST	Retail < 10,000 SF	179	SALEM ST	Char Housing R
307	ROGERS ST	Office	501	SALEM ST	Housing Authority C
780	ROGERS ST	Auto Repair	21	SALEM ST	Housing Authority C
674	ROGERS ST	Office Bldg	501	SALEM ST	Housing Authority C
196	ROGERS ST	Aff Hgs Units (Apts)	501	SALEM ST	Housing Authority C
732	ROGERS ST	Auto Dealer Large	135	SALEM ST	Apt 4 to 8 Units R
660	ROGERS ST	Restaurant/Club	219	SALEM ST	Apt 4 to 8 Units R
732	ROGERS ST	Auto Dealer Large	175	SALEM ST	Retail < 10,000 SF
521	ROGERS ST	Office	125	SALEM ST	Apt 4 to 8 Units R
626	ROGERS ST	Gas Station	93	SALEM ST	Retail < 10,000 SF
196	ROGERS ST	Aff Hgs Units (Apts)	87	SALEM ST	Apt 4 to 8 Units C
803	ROGERS ST	Restaurant/Club	11	SALEM ST	Restaurant/Club
711	ROGERS ST	Gas Station	210	SALEM ST	Apt 4 to 8 Units R
683	ROGERS ST	Retail < 10,000 SF	115	SALEM ST	Apt 4 to 8 Units R
687	ROGERS ST	Bank Bldg	62	SARATOGA ST	Apt 4 to 8 Units R
720	ROGERS ST	Auto Dealer Large	20	SAUNDERS ST	Car Dealer Small
581	ROGERS ST	Restaurant/Club	9	SAYLES ST	Apt 4 to 8 Units R
847	ROGERS ST	Office Bldg	159	SAYLES ST	Apt 4 to 8 Units R
847	ROGERS ST	Office Bldg	465	SCHOOL ST	Char Services C
645	ROGERS ST	Auto Repair	17	SCHOOL ST	DEPT CONS/PARKS NR
794	ROGERS ST	Bank Bldg	104	SCHOOL ST	Apt 4 to 8 Units C
95	ROGERS ST	Single Fam MDL-96	195	SCHOOL ST	Apt 4 to 8 Units R
184	SCHOOL ST	Apt 4 to 8 Units R	8	SHAFFER ST	Housing Authority R

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
641	SCHOOL ST	Retail < 10,000 SF	33	SHAFFER ST	Housing Authority C
84	SCHOOL ST	Apt 4 to 8 Units R	33	SHAFFER ST	Housing Authority C
103	SCHOOL ST	Apt 4 to 8 Units R	33	SHAFFER ST	Housing Authority C
620	SCHOOL ST	Retail < 10,000 SF	33	SHAFFER ST	Housing Authority C
410	SCHOOL ST	Warehouse/Dist/Storage	44	SHAFFER ST	Apt 4 to 8 Units R
571	SCHOOL ST	Apt 4 to 8 Units R	44	SHAFFER ST	Apt 4 to 8 Units R
400	SCHOOL ST	Warehouse/Dist/Storage	20	SHAFFER ST	Apt 4 to 8 Units R
712	SCHOOL ST	Apt 4 to 8 Units R	25	SHATTUCK ST	DEPT CONS/PARKS NR
410	SCHOOL ST	Auto Repair	18	SHATTUCK ST	Library/Museum C
410	SCHOOL ST	Auto Repair	22	SHATTUCK ST	Professional Office
317	SCHOOL ST	Gas Storage C	238	SHAW ST	Retail < 10,000 SF
316	SCHOOL ST	Gas Substation C	113	SHAW ST	Apt 4 to 8 Units R
316	SCHOOL ST	Gas Substation C	79	SHAW ST	Apt 4 to 8 Units R
316	SCHOOL ST	Gas Substation C	129	SHAW ST	Apt 4 to 8 Units R
333	SCHOOL ST	Gas Storage C	48	SHAW ST	Auto Repair
316	SCHOOL ST	Gas Substation C	123	SHAW ST	Apt 4 to 8 Units R
247	SCHOOL ST	Apt 4 to 8 Units R	61	SHEA ST	Apt 9 Units and Up C
316	SCHOOL ST	Gas Substation C	61	SHEA ST	Apt 9 Units and Up C
121	SCHOOL ST	Apt 9 Units and Up C	34	SHEDD ST	Apt 4 to 8 Units R
121	SCHOOL ST	Apt 9 Units and Up C	5	SHELDON ST	Retail < 10,000 SF
333	SCHOOL ST	Gas Storage C	1	SHERMAN ST	Auto Repair
316	SCHOOL ST	Gas Substation C	17	SIDNEY ST	Apt 4 to 8 Units R
405	SCHOOL ST	Apt 4 to 8 Units R	168	SIXTH AVE	Apt 4 to 8 Units R
391	SCHOOL ST	Warehouse	21	SIXTH ST	Church/Temple V
317	SCHOOL ST	Gas Storage C	122	SIXTH ST	Apt 4 to 8 Units R
49	SCHOOL ST	Apt 4 to 8 Units R	46	SIXTH ST	Apt 4 to 8 Units R
391	SCHOOL ST	Office	38	SIXTH ST	Apt 4 to 8 Units R
391	SCHOOL ST	Warehouse	101	SMITH ST	Church/Temple C
502	SCHOOL ST	Apt 4 to 8 Units R	98	SMITH ST	Apt 9 Units and Up C
273	SCHOOL ST	Retail < 10,000 SF	98	SMITH ST	Apt 9 Units and Up C
273	SCHOOL ST	Retail < 10,000 SF	103	SMITH ST	Lowell Education C
98	SCHOOL ST	Apt 4 to 8 Units R	32	SMITH ST	Tax Title V
577	SCHOOL ST	Apt 4 to 8 Units R	75	SMITH ST	Apt 4 to 8 Units R
613	SCHOOL ST	Apt 4 to 8 Units R	31	SMITH ST	Apt 4 to 8 Units R
397	SCHOOL ST	Auto Repair	160	SMITH ST	Apt 4 to 8 Units R
400	SCHOOL ST	Auto Repair	152	SMITH ST	Apt 4 to 8 Units R
400	SCHOOL ST	Auto Repair	68	SMITH ST	Apt 4 to 8 Units R
606	SCHOOL ST	Apt 4 to 8 Units R	244	SMITH ST	Comm Bldg C
273	SCHOOL ST	Retail < 10,000 SF	136	SMITH ST	Apt 4 to 8 Units R
400	SCHOOL ST UN IT	Warehouse/Dist/Storage	176	SMITH ST	Apt 4 to 8 Units R
400	SCHOOL ST UN IT	Auto Repair	256	SMITH ST	Auto Repair
400	SCHOOL ST UN IT	Auto Repair	240	SMITH ST	Factory
400	SCHOOL ST UNIT	Warehouse/Dist/Storage	228	SMITH ST	Apt 4 to 8 Units R
400	SCHOOL ST UNIT	Auto Repair	259	SOUTH ST	Out of Town
400	SCHOOL ST UNIT	Auto Repair	259	SOUTH ST	CONDO MAIN
400	SCHOOL ST UNIT	Warehouse/Dist/Storage	171	SOUTH ST	City of Lowell V
400	SCHOOL ST UNIT	Auto Repair	130	SOUTH ST	Housing Authority C
400	SCHOOL ST UNIT	Auto Repair	130	SOUTH ST	Housing Authority C
400	SCHOOL ST UNIT	Auto Repair	17	SOUTH ST	Auto Repair
400	SCHOOL ST UNIT	Auto Repair	99	SOUTH ST	Warehouse/Dist/Storage
400	SCHOOL ST UNIT	Warehouse/Dist/Storage	26	SOUTH ST	Apt 4 to 8 Units R
22	SECOND ST	Apt 4 to 8 Units R	26	SOUTH ST	Restaurant/Club
14	SECOND ST	Apt 4 to 8 Units R	11	SPRING AVE	Auto Repair
49	SECOND ST	Apt 4 to 8 Units R	5	SPRING AVE	Auto Repair
195	SEVENTH AVE	CONDO MAIN	17	SPRING ST	Apt 4 to 8 Units C
22	SEVENTH AVE	Apt 9 Units and Up C	50	STACKPOLE ST	Housing Authority C
22	SEVENTH AVE	Apt 9 Units and Up C	50	STACKPOLE ST	Housing Authority C
0	SEVENTH ST	Can't Find Address	122	STACKPOLE ST	Char Other C
20	SEVENTH ST	Apt 4 to 8 Units R	122	STACKPOLE ST	Char Other C
12	SEVENTH ST	Apt 4 to 8 Units R	122	STACKPOLE ST	Char Other C
206	STACKPOLE ST	Apt 9 Units and Up C	225	STEDMAN ST UNIT	Office Condo

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
206	STACKPOLE ST	Apt 9 Units and Up C	225	STEDMAN ST UNIT	Office Condo
196	STACKPOLE ST	Apt 9 Units and Up C	225	STEDMAN ST UNIT	Office Condo
196	STACKPOLE ST	Apt 9 Units and Up C	225	STEDMAN ST UNIT	Office Condo
253	STACKPOLE ST	Apt 4 to 8 Units R	225	STEDMAN ST UNIT	IND CONDO MDL-06
25	STANDISH ST(LYDON)	ED C REIMB	225	STEDMAN ST UNIT	Office Condo
99	STAPLES ST	Golf Course	225	STEDMAN ST UNIT	Office Condo
33	STATE ST	Apt 4 to 8 Units R	225	STEDMAN ST UNIT	Office Condo
61	STAVELEY ST	Apt 4 to 8 Units R	225	STEDMAN ST UNIT	Office Condo
50.1	STEDMAN ST	Church/Temple C	225	STEDMAN ST UNIT	Commercial Condo
181	STEDMAN ST	Warehouse	225	STEDMAN ST UNIT	Office Condo
181	STEDMAN ST	Warehouse	225	STEDMAN ST UNIT	IND CONDO MDL-06
181	STEDMAN ST	Warehouse	210	STEDMAN ST UNIT	Commercial Condo
100	STEDMAN ST	Retail < 10,000 SF	225	STEDMAN ST UNIT	Office Condo
160	STEDMAN ST	Warehouse	225	STEDMAN ST UNIT	Office Condo
120	STEDMAN ST	Factory	225	STEDMAN ST UNIT	IND CONDO MDL-06
160	STEDMAN ST	Warehouse	210	STEDMAN ST UNIT	Office Condo
24	STEDMAN ST	Warehouse/Dist/Storage	225	STEDMAN ST UNIT	Office Condo
151	STEDMAN ST	Professional Office	374	STEVENS ST	Rectory/Parsonage C
44	STEDMAN ST	Warehouse/Dist/Storage	530	STEVENS ST	Church/Temple C
194	STEDMAN ST	Retail Condo	530	STEVENS ST	Church/Temple C
16	STEDMAN ST	Office Bldg	486	STEVENS ST	Church/Temple C
70	STEDMAN ST	Auto Repair	530	STEVENS ST	Church/Temple C
96	STEDMAN ST	Vacant Land Dev	530	STEVENS ST	Church/Temple C
225	STEDMAN ST #01	IND CONDO MDL-06	530	STEVENS ST	Church/Temple C
181	STEDMAN ST #1	Warehouse	486	STEVENS ST	Church/Temple C
181	STEDMAN ST #2	Warehouse	530	STEVENS ST	Church/Temple C
181	STEDMAN ST #3F	Warehouse	530	STEVENS ST	Church/Temple C
181	STEDMAN ST #3R	Warehouse	530	STEVENS ST	Church/Temple C
181	STEDMAN ST #5	Warehouse	374	STEVENS ST	Church/Temple C
181	STEDMAN ST #6	Warehouse	146	STEVENS ST	Apt 9 Units and Up C
181	STEDMAN ST #7	Warehouse	146	STEVENS ST	Apt 9 Units and Up C
181	STEDMAN ST #8	Warehouse	215	STEVENS ST	Apt 4 to 8 Units R
181	STEDMAN ST #9	Warehouse	770	STEVENS ST	Retail < 10,000 SF
133	STEDMAN ST #A	Tax Title C	166	STEVENS ST	Apt 9 Units and Up C
133	STEDMAN ST #A	Tax Title C	124	STEVENS ST	Apt 4 to 8 Units R
133	STEDMAN ST #C	Tax Title C	166	STEVENS ST	Apt 9 Units and Up C
133	STEDMAN ST #C	Tax Title C	161	STEVENS ST	Apt 9 Units and Up C
133	STEDMAN ST #D	Tax Title C	161	STEVENS ST	Apt 9 Units and Up C
133	STEDMAN ST #D	Tax Title C	229	STEVENS ST	Apt 4 to 8 Units R
133	STEDMAN ST #E	Tax Title C	275	STEVENS ST - ENGINE #7	Public Safety C
133	STEDMAN ST #E	Tax Title C	282	SUFFOLK ST	Rectory/Parsonage R
210	STEDMAN ST UNIT	Tax Title Condo	282	SUFFOLK ST	Rectory/Parsonage R
225	STEDMAN ST UNIT	Office Condo	282	SUFFOLK ST	Church/Temple C
225	STEDMAN ST UNIT	Office Condo	310	SUFFOLK ST	Housing Authority C
225	STEDMAN ST UNIT	Office Condo	282	SUFFOLK ST	Church/Temple C
225	STEDMAN ST UNIT	Office Condo	2	SUFFOLK ST	Housing Authority R
225	STEDMAN ST UNIT	Office Condo	310	SUFFOLK ST	Housing Authority C
210	STEDMAN ST UNIT	Office Condo	408	SUFFOLK ST	Retail < 10,000 SF
225	STEDMAN ST UNIT	IND CONDO MDL-06	186	SUFFOLK ST	Aff Hgs Units (Apts)
225	STEDMAN ST UNIT	IND CONDO MDL-06	186	SUFFOLK ST	Aff Hgs Units (Apts)
225	STEDMAN ST UNIT	Office Condo	650	SUFFOLK ST	Office Bldg
225	STEDMAN ST UNIT	IND CONDO MDL-06	192	SUFFOLK ST	Apt 4 to 8 Units R
225	STEDMAN ST UNIT	Commercial Condo	720	SUFFOLK ST(AMES)	ED UML, MCC NR
225	STEDMAN ST UNIT	IND CONDO MDL-06	720	SUFFOLK ST(AMES)	ED UML, MCC NR
225	STEDMAN ST UNIT	Office Condo	600	SUFFOLK ST(WANNA MILL)	ED C REIMB
225	STEDMAN ST UNIT	IND CONDO MDL-06	291	SUMMER ST	DIV CAP ASSET NR
225	STEDMAN ST UNIT	Office Condo	65	SUMMER ST	Housing Authority C
225	STEDMAN ST UNIT	Office Condo	43	SUMMER ST	Housing Authority C
225	STEDMAN ST UNIT	Office Condo	43	SUMMER ST	Housing Authority C
225	STEDMAN ST UNIT	Commercial Condo	50	SUMMER ST	Housing Authority C
65	SUMMER ST	Housing Authority C	320	THORNDIKE ST	Apt 4 to 8 Units C

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
50	SUMMER ST	Housing Authority C	320	THORNDIKE ST	Apt 4 to 8 Units C
153	SUMMER ST	Apt 4 to 8 Units R	242	THORNDIKE ST	Apt 4 to 8 Units R
209	SUMMER ST	Boarding House C	165	THORNDIKE ST	Restaurant/Club
275	SUMMER ST	Apt 9 Units and Up C	165	THORNDIKE ST	Restaurant/Club
275	SUMMER ST	Apt 9 Units and Up C	165	THORNDIKE ST	Apt 9 Units and Up C
25	SUTHERLAND ST	Apt 4 to 8 Units R	165	THORNDIKE ST	Apt 9 Units and Up C
58	SYCAMORE ST	Lowell Education C	84	TOWNSEND AVE	Warehouse
97	TANNER ST	Warehouse/Dist/Storage	1	TREMONT PL	Office Bldg
97	TANNER ST	Auto Repair	1	TREMONT PL	Office Bldg
97	TANNER ST	Auto Repair	80	TROTting PARK RD	Church/Temple C
97	TANNER ST	Warehouse/Dist/Storage	80	TROTting PARK RD	Church/Temple C
249	TANNER ST	Warehouse	62	TWELFTH ST	Apt 4 to 8 Units R
220	TANNER ST	Warehouse/Dist/Storage	62	TWELFTH ST	Apt 4 to 8 Units R
148	TANNER ST	Warehouse/Dist/Storage	62	TWELFTH ST	Apt 4 to 8 Units R
148	TANNER ST	Warehouse/Dist/Storage	76	TYLER PK	Apt 4 to 8 Units R
244	TANNER ST	Warehouse	16	TYLER PK	Apt 9 Units and Up C
15	TANNER ST	Factory	16	TYLER PK	Apt 9 Units and Up C
160	TANNER ST	Factory	64	TYLER PK	Apt 9 Units and Up C
86	TANNER ST	Factory	64	TYLER PK	Apt 9 Units and Up C
50	TANNER ST	Factory	38	UNION ST	Apt 4 to 8 Units R
26	TANNER ST	Factory	14	UNION ST	Apt 9 Units and Up R
131	TANNER ST	Warehouse/Dist/Storage	14	UNION ST	Apt 9 Units and Up R
86	TANNER ST	Factory	38	UNION ST	Apt 4 to 8 Units R
2	TANNER ST	Co Generation	245	UNIVERSITY AVE	Church/Temple C
131	TANNER ST	Warehouse/Dist/Storage	198	UNIVERSITY AVE	Retail < 10,000 SF
2	TANNER ST	Co Generation	146	UNIVERSITY AVE	Retail < 10,000 SF
44	TANNER ST	Factory	106	UNIVERSITY AVE	Retail < 10,000 SF
86	TANNER ST	Factory	102	UNIVERSITY AVE	Retail < 10,000 SF
35	TANNER ST	Factory	106	UNIVERSITY AVE	Apt 4 to 8 Units C
108	TANNER ST	Warehouse	94	UNIVERSITY AVE	Apt 4 to 8 Units C
270	TANNER ST	Warehouse	104	UNIVERSITY AVE	Apt 4 to 8 Units C
86	TANNER ST	Factory	94	UNIVERSITY AVE	Retail < 10,000 SF
148	TANNER ST #A	Warehouse/Dist/Storage	380	UNIVERSITY AVE	Apt 4 to 8 Units R
148	TANNER ST #A	Warehouse/Dist/Storage	102	UNIVERSITY AVE	Apt 4 to 8 Units C
86	TANNER ST #A	Factory	162	UNIVERSITY AVE	Restaurant/Club
86	TANNER ST #A	Factory	382	UNIVERSITY AVE	Apt 4 to 8 Units R
148	TANNER ST #B	Warehouse/Dist/Storage	202	UNIVERSITY AVE	Apt 4 to 8 Units R
148	TANNER ST #B	Warehouse/Dist/Storage	114	UNIVERSITY AVE	Apt 4 to 8 Units C
75	TECHNOLOGY DR	R&D	165	UNIVERSITY AVE	Apt 4 to 8 Units R
75	TECHNOLOGY DR	R&D	123	UNIVERSITY AVE	Restaurant/Club
55	TECHNOLOGY DR	Office	150	UNIVERSITY AVE	Apt 4 to 8 Units R
75	TECHNOLOGY DR	R&D	143	UNIVERSITY AVE	Apt 4 to 8 Units R
75	TECHNOLOGY DR	R&D	104	UNIVERSITY AVE	Retail < 10,000 SF
59	TECHNOLOGY DR	R&D	283	UNIVERSITY AVE	Apt 4 to 8 Units R
10	TECHNOLOGY DR	R&D	54	UNIVERSITY AVE(ALUMNI)	ED C REIMB
59	TECHNOLOGY DR	R&D	40	UNIVERSITY AVE(ETIC)	ED UML, MCC NR
10	TECHNOLOGY DR#7	R&D	71	UNIVERSITY AVE(PERRY)	ED C REIMB
25	TEMPLE ST	Housing Authority C	71	UNIVERSITY AVE(PERRY)	ED C REIMB
25	TEMPLE ST	Housing Authority R	72	UNIVERSITY AVE(PTBC)	ED C REIMB
25	TEMPLE ST	Housing Authority C	72	UNIVERSITY AVE(PTBC)	ED C REIMB
53	TEMPLE ST	Apt 4 to 8 Units R	78	VARNEY ST	Apt 4 to 8 Units R
59	TEMPLE ST	Apt 4 to 8 Units R	476	VARNUM AVE	Char Other C
156	TENTH ST	Apt 4 to 8 Units R	476	VARNUM AVE	Char Other C
50	THIRD AVE	Apt 4 to 8 Units R	1071	VARNUM AVE	Hospital C
53	THIRD ST	Apt 4 to 8 Units R	983	VARNUM AVE	Char Housing C
24	THIRD ST	Apt 4 to 8 Units R	1195	VARNUM AVE	Church/Temple C
30	THIRD ST	Apt 4 to 8 Units R	295	VARNUM AVE	Hospital C
42	THIRD ST	Apt 4 to 8 Units R	295	VARNUM AVE	Hospital C
117	THORNDIKE ST	OTHER NR	1081	VARNUM AVE	Char Housing C
117	THORNDIKE ST	OTHER NR	983	VARNUM AVE	Hospital C
1085	VARNUM AVE	Char Housing C	221	W SIXTH ST	Rectory/Parsonage R

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
391	VARNUM AVE	PUB HEALTH NR	287	W SIXTH ST	Apt 4 to 8 Units C
295	VARNUM AVE	Hospital C	364	W SIXTH ST	Fraternal Org
983	VARNUM AVE	Char Housing C	267	W SIXTH ST	Apt 4 to 8 Units R
1195	VARNUM AVE	Church/Temple C	31	W SIXTH ST	Apt 9 Units and Up R
1081	VARNUM AVE	Hospital C	276	W SIXTH ST	Apt 4 to 8 Units R
1085	VARNUM AVE	Hospital C	76	W SIXTH ST	Retail < 10,000 SF
983	VARNUM AVE	Char Housing C	244	W SIXTH ST	Apt 4 to 8 Units R
983	VARNUM AVE	Char Housing C	54	W SIXTH ST	Apt 4 to 8 Units R
983	VARNUM AVE	Hospital C	302	W SIXTH ST	Retail < 10,000 SF
983	VARNUM AVE	Hospital C	191	W SIXTH ST	Apt 4 to 8 Units R
295	VARNUM AVE	Hospital C	254	W SIXTH ST	Apt 4 to 8 Units C
983	VARNUM AVE	Hospital C	286	W SIXTH ST	Apt 4 to 8 Units C
983	VARNUM AVE	Hospital C	99	W SIXTH ST	Apt 4 to 8 Units C
983	VARNUM AVE	Char Housing C	31	W SIXTH ST	Apt 9 Units and Up R
240	VARNUM AVE	Apt 9 Units and Up C	339	W SIXTH ST	Apt 4 to 8 Units R
240	VARNUM AVE	Apt 9 Units and Up C	284	W SIXTH ST - ENGINE #6	Public Safety C
863	VARNUM AVE	Retail > 10,000 SF	25	W TENTH ST	Apt 4 to 8 Units R
887	VARNUM AVE	Apt 9 Units and Up C	34	W THIRD ST	Apt 4 to 8 Units R
863	VARNUM AVE	Retail > 10,000 SF	27	W THIRD ST	Apt 9 Units and Up C
863	VARNUM AVE	Retail > 10,000 SF	11	WACHUSETT ST	Apt 4 to 8 Units R
871	VARNUM AVE	Professional Office	2	WACHUSETT ST	Apt 4 to 8 Units R
863	VARNUM AVE	Retail > 10,000 SF	17	WALKER ST	Apt 4 to 8 Units R
887	VARNUM AVE	Apt 9 Units and Up C	29	WALKER ST	Apt 9 Units and Up R
19	VARNUM AVE	Parking Lot	29	WALKER ST	Apt 9 Units and Up R
1262	VARNUM AVE	Comm Bldg C	29	WALKER ST	Apt 4 to 8 Units R
1262	VARNUM AVE	Aff Hgs Units (Apts)	253	WALKER ST	Apt 9 Units and Up R
1262	VARNUM AVE	Aff Hgs Units (Apts)	384	WALKER ST	Apt 4 to 8 Units R
477	VARNUM AVE	Dormitory	253	WALKER ST	Apt 9 Units and Up R
557	VARNUM AVE	APT OVER 8 MDL-94	399	WALKER ST	Apt 9 Units and Up C
557	VARNUM AVE	APT OVER 8 MDL-94	345	WALKER ST	Apt 4 to 8 Units R
1010	VARNUM AVE	NURSING HOME	84	WALKER ST	Apt 4 to 8 Units R
1010	VARNUM AVE	NURSING HOME	99	WALKER ST	Apt 9 Units and Up R
863	VARNUM AVE STORE #3	Retail > 10,000 SF	99	WALKER ST	Apt 9 Units and Up R
19	VARNUM ST	NURSING HOME	80	WALKER ST	Apt 4 to 8 Units R
19	VARNUM ST	NURSING HOME	416	WALKER ST	Apt 4 to 8 Units R
15	VETERANS WAY	US GOVT C	340	WALKER ST	Apt 4 to 8 Units R
15	VETERANS WAY	US GOVT C	169	WALKER ST	Apt 4 to 8 Units R
65	VILLAGE ST	Char Other C	356	WALKER ST	Apt 4 to 8 Units R
65	VILLAGE ST	Char Other C	37	WALKER ST	Apt 4 to 8 Units R
65	VILLAGE ST	Char Other V	116	WALKER ST	Apt 4 to 8 Units R
360	VILLAGE ST	City of Lowell V	176	WALKER ST	Office
45	W ADAMS ST	Warehouse	348	WALKER ST	Apt 4 to 8 Units R
14	W BOWERS ST	Apt 4 to 8 Units R	224	WALKER ST	Factory
28	W FIFTH ST	Church/Temple C	224	WALKER ST	Factory
37	W FIFTH ST	Apt 4 to 8 Units R	399	WALKER ST	Apt 9 Units and Up C
101	W FOREST ST	Church/Temple C	33	WALKER ST UNIT	Apt 9 Units and Up R
101	W FOREST ST	Church/Temple C	33	WALKER ST UNIT	Apt 9 Units and Up R
22	W FOURTH ST	City of Lowell V	33	WALKER ST UNIT	Apt 9 Units and Up R
67	W FOURTH ST	Housing Authority R	33	WALKER ST UNIT	Apt 4 to 8 Units R
15	W FOURTH ST	Fraternal Org	33	WALKER ST UNIT	Apt 4 to 8 Units R
53	W FOURTH ST	Apt 4 to 8 Units R	33	WALKER ST UNIT	Apt 4 to 8 Units R
27	W FOURTH ST	Apt 4 to 8 Units R	33	WALKER ST UNIT	Apt 9 Units and Up R
258	W MANCHESTER ST	Warehouse	33	WALKER ST UNIT	Apt 4 to 8 Units R
213	W MANCHESTER ST	Apt 4 to 8 Units R	33	WALKER ST UNIT	Apt 9 Units and Up R
475	W MEADOW RD	Lowell Education C	33	WALKER ST UNIT	Apt 9 Units and Up R
365	W MEADOW RD	Lowell Education C	33	WALKER ST UNIT	Apt 9 Units and Up R
475	W MEADOW RD	Lowell Education C	33	WALKER ST UNIT	Apt 9 Units and Up R
365	W MEADOW RD	Lowell Education C	33	WALKER ST UNIT	Apt 4 to 8 Units R
21	W NINTH ST	Apt 4 to 8 Units R	33	WALKER ST UNIT	Apt 9 Units and Up R
370	W SIXTH ST	Other C	33	WALKER ST UNIT	Apt 9 Units and Up R
16	WALNUT ST	Apt 4 to 8 Units R	302	WESTFORD ST	Retail < 10,000 SF

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
15	WALNUT ST	Apt 4 to 8 Units R	583	WESTFORD ST	Retail < 10,000 SF
57	WAMESIT ST	Retail < 10,000 SF	505	WESTFORD ST	Apt 4 to 8 Units R
33	WAMESIT ST	Auto Repair	268	WESTFORD ST	Retail < 10,000 SF
83	WANNALANCIT ST	Lowell Education C	508	WESTFORD ST	Office
19	WANNALANCIT ST	Apt 4 to 8 Units R	13	WESTFORD ST	Boarding House C
98	WANNALANCIT ST	Apt 4 to 8 Units R	1035	WESTFORD ST	Retail > 10,000 SF
15	WANNALANCIT ST	Apt 4 to 8 Units C	81	WESTFORD ST	Boarding House C
37	WARE ST	Housing Authority R	1115	WESTFORD ST	Office Bldg
22	WARE ST	Housing Authority R	143	WESTFORD ST	Apt 4 to 8 Units R
51	WARE ST	Apt 4 to 8 Units R	1221	WESTFORD ST	Office
100	WARREN ST	City of Lowell C	561	WESTFORD ST	Apt 4 to 8 Units R
90	WARREN ST	City of Lowell C	655	WESTFORD ST	Apt 4 to 8 Units R
15	WARREN ST	Char Services C	1270	WESTFORD ST	Shopping Mall
35	WARREN ST	Char Services C	756	WESTFORD ST	Apt 9 Units and Up C
168	WARREN ST	Apt 4 to 8 Units R	377	WESTFORD ST	Apt 4 to 8 Units R
151	WARREN ST	Office Bldg	756	WESTFORD ST	Apt 9 Units and Up C
50	WARREN ST (ICC)	ED C REIMB	1270	WESTFORD ST	Shopping Mall
5	WARWICK ST	Apt 4 to 8 Units C	1270	WESTFORD ST	Retail < 10,000 SF
0	WASHER ST	Can't Find Address	1270	WESTFORD ST	Retail < 10,000 SF
10	WASHER ST	Office Bldg	1270	WESTFORD ST	Shopping Mall
10	WASHER ST	Office Bldg	1270	WESTFORD ST	Retail < 10,000 SF
12	WASHER ST	Office Bldg	1270	WESTFORD ST	Shopping Mall
12	WASHER ST	Office Bldg	1270	WESTFORD ST	Shopping Mall
59	WASHINGTON ST	Apt 4 to 8 Units R	1270	WESTFORD ST	Shopping Mall
19	WATSON ST	Apt 4 to 8 Units R	1270	WESTFORD ST	Shopping Mall
38	WAUGH ST	Can't Find Address	1270	WESTFORD ST	Shopping Mall
18	WAUGH ST	Apt 9 Units and Up C	289	WESTFORD ST	Retail < 10,000 SF
24	WAUGH ST	Apt 9 Units and Up C	283	WESTFORD ST	Auto Repair
18	WAUGH ST	Apt 9 Units and Up C	1270	WESTFORD ST	Retail < 10,000 SF
24	WAUGH ST	Apt 9 Units and Up C	1270	WESTFORD ST	Retail < 10,000 SF
18	WEBBER ST	Retail < 10,000 SF	1270	WESTFORD ST	Shopping Mall
5	WEBBER ST	Office Bldg	295	WESTFORD ST	Retail < 10,000 SF
5	WEBBER ST	Office Bldg	303	WESTFORD ST	Retail < 10,000 SF
18	WEBSTER AVE	Apt 4 to 8 Units R	308	WESTFORD ST	Restaurant/Club
42	WEED ST	Warehouse/Dist/Storage	329	WESTFORD ST	Restaurant/Club
26	WELLMAN ST	Warehouse	263	WESTFORD ST	Apt 4 to 8 Units R
41	WELLMAN ST	Office	233	WESTFORD ST	Apt 4 to 8 Units R
42	WELLMAN ST	APT OVER 8 MDL-94	101	WESTFORD ST	Apt 4 to 8 Units R
42	WELLMAN ST	APT OVER 8 MDL-94	307	WESTFORD ST	Retail < 10,000 SF
500	WENTWORTH AVE	NURSING HOME	346	WESTFORD ST	Bank Bldg
500	WENTWORTH AVE	NURSING HOME	1010	WESTFORD ST	Retail < 10,000 SF
122	WESTERN AVE	IND CONDO MDL-06	71	WESTFORD ST	Apt 4 to 8 Units C
299	WESTERN AVE	Factory	31	WESTFORD ST	Warehouse/Dist/Storage
279	WESTERN AVE	Factory	327	WESTFORD ST	OFFICE BLD MDL-96
215	WESTERN AVE	Factory	1184	WESTFORD ST	Office Bldg
346	WESTERN AVE	Industrial Bldg	336	WESTFORD ST	Office
150	WESTERN AVE UNIT	Char Other Condo	110	WESTFORD ST	Apt 4 to 8 Units R
1012	WESTFORD ST	Warehouse	1250	WESTFORD ST	Apt 9 Units and Up C
684	WESTFORD ST	REST/CLUBS MDL-96	7	WESTFORD ST	Boarding House C
789	WESTFORD ST	Can't Find Address	336	WESTFORD ST	Office
450	WESTFORD ST	CONDO MAIN	1250	WESTFORD ST	Apt 9 Units and Up C
50	WESTFORD ST	City of Lowell V	566	WESTFORD ST	Apt 4 to 8 Units R
128	WESTFORD ST	Housing Authority C	34	WESTFORD ST	Retail < 10,000 SF
460	WESTFORD ST	Church/Temple C	487	WESTFORD ST	Retail < 10,000 SF
123	WESTFORD ST	Apt 4 to 8 Units C	190	WESTFORD ST	Apt 9 Units and Up R
1212	WESTFORD ST	Auto Dealer Large	196	WESTFORD ST	Apt 9 Units and Up R
129	WESTFORD ST	Apt 9 Units and Up C	321	WESTFORD ST	Retail < 10,000 SF
267	WESTFORD ST	Apt 4 to 8 Units R	1095	WESTFORD ST	Retail < 10,000 SF
345	WESTFORD ST	Apt 9 Units and Up C	282	WESTFORD ST	Retail < 10,000 SF
1212	WESTFORD ST	Auto Dealer Large	1001	WESTFORD ST	Apt 9 Units and Up C
1001	WESTFORD ST	Apt 9 Units and Up C	24	WHITEHEAD AVE	Apt 4 to 8 Units R

City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
185	WESTFORD ST	Office	5	WHITING ST	City of Lowell V
321	WESTFORD ST	Retail < 10,000 SF	39	WILBUR ST	Office Condo
1260	WESTFORD ST	Apt 9 Units and Up C	44	WILBUR ST	Warehouse/Dist/Storage
494	WESTFORD ST	Retail < 10,000 SF	70	WILBUR ST UNIT	Office Condo
549	WESTFORD ST	Apt 4 to 8 Units R	70	WILBUR ST UNIT	Office Condo
1007	WESTFORD ST	Apt 9 Units and Up C	70	WILBUR ST UNIT	Office Condo
1150	WESTFORD ST	Auto Dealer Large	70	WILBUR ST UNIT	Office Condo
51	WESTFORD ST	Auto Repair	70	WILBUR ST UNIT	Commercial Condo
1003	WESTFORD ST	Apt 9 Units and Up C	795	WILDER ST	Lowell Education C
1005	WESTFORD ST	Apt 9 Units and Up C	319	WILDER ST	Char Housing R
1005	WESTFORD ST	Apt 9 Units and Up C	340	WILDER ST	Apt 4 to 8 Units R
509	WESTFORD ST	Apt 4 to 8 Units R	328	WILDER ST	Boarding House C
1003	WESTFORD ST	Apt 9 Units and Up C	199	WILDER ST	Apt 4 to 8 Units R
1003	WESTFORD ST	Apt 9 Units and Up C	218	WILDER ST	Apt 9 Units and Up C
256	WESTFORD ST	Professional Office	377	WILDER ST	Apt 9 Units and Up C
1075	WESTFORD ST	Comm Bldg C	218	WILDER ST	Apt 9 Units and Up C
196	WESTFORD ST	Apt 9 Units and Up R	430	WILDER ST	Apt 9 Units and Up C
1005	WESTFORD ST	Apt 9 Units and Up C	189	WILDER ST	Apt 4 to 8 Units R
1001	WESTFORD ST	Apt 9 Units and Up C	20	WILDER ST	Apt 4 to 8 Units R
1007	WESTFORD ST	Apt 9 Units and Up C	234	WILDER ST	Apt 4 to 8 Units R
415	WESTFORD ST	Apt 4 to 8 Units R	17	WILDER ST	Retail < 10,000 SF
1003	WESTFORD ST	Apt 9 Units and Up C	377	WILDER ST	Apt 9 Units and Up C
1007	WESTFORD ST	Apt 9 Units and Up C	430	WILDER ST	Apt 9 Units and Up C
1009	WESTFORD ST	Apt 9 Units and Up C	190	WILDER ST	Apt 4 to 8 Units R
1001	WESTFORD ST	Apt 9 Units and Up C	270	WILDER ST # 9	Apt 9 Units and Up C
1009	WESTFORD ST	Apt 9 Units and Up C	270	WILDER ST # 9	Apt 9 Units and Up C
1150	WESTFORD ST	Auto Dealer Large	270	WILDER ST #10	Apt 9 Units and Up C
1201	WESTFORD ST	Office	270	WILDER ST #10	Apt 9 Units and Up C
1095	WESTFORD ST	Bank	270	WILDER ST #11	Apt 9 Units and Up C
535	WESTFORD ST	Apt 4 to 8 Units R	270	WILDER ST #11	Apt 9 Units and Up C
190	WESTFORD ST	Apt 9 Units and Up R	270	WILDER ST #12	Apt 9 Units and Up C
1260	WESTFORD ST	Apt 9 Units and Up C	270	WILDER ST #12	Apt 9 Units and Up C
779	WESTFORD ST	Apt 4 to 8 Units R	270	WILDER ST #13	Apt 9 Units and Up C
153	WESTFORD ST	Apt 4 to 8 Units R	270	WILDER ST #13	Apt 9 Units and Up C
129	WESTFORD ST	Apt 9 Units and Up C	270	WILDER ST #14	Apt 9 Units and Up C
769	WESTFORD ST	Apt 4 to 8 Units R	270	WILDER ST #14	Apt 9 Units and Up C
717	WESTFORD ST	Apt 4 to 8 Units R	270	WILDER ST #7	Apt 9 Units and Up C
583	WESTFORD ST	Retail < 10,000 SF	270	WILDER ST #7	Apt 9 Units and Up C
77	WESTFORD ST	Boarding House C	270	WILDER ST #8	Apt 9 Units and Up C
1270	WESTFORD ST	Shopping Mall	270	WILDER ST #8	Apt 9 Units and Up C
295	WESTFORD ST	Retail < 10,000 SF	113	WILDER ST (HEALTH BLDG)	ED C REIMB
319	WESTFORD ST	Retail < 10,000 SF	113	WILDER ST (HEALTH BLDG)	ED C REIMB
101	WESTFORD ST	Apt 4 to 8 Units R	35	WILDER ST [DURGIN HALL]	ED C REIMB
571	WESTFORD ST	Apt 4 to 8 Units R	35	WILDER ST [DURGIN HALL]	ED C REIMB
250	WESTFORD ST	Apt 4 to 8 Units R	270	WILDER ST 1-6	Apt 9 Units and Up C
1005	WESTFORD ST	Apt 9 Units and Up C	270	WILDER ST 1-6	Apt 9 Units and Up C
1007	WESTFORD ST	Apt 9 Units and Up C	61	WILDER ST(OLEARY)	ED C REIMB
307	WESTFORD ST A	Retail < 10,000 SF	61	WILDER ST(OLEARY)	ED C REIMB
28	WHIPPLE ST	Apt 4 to 8 Units R	71	WILDER ST: MCGAUVRAN HALL	ED C REIMB
60	WHIPPLE ST	Apt 4 to 8 Units R	71	WILDER ST: MCGAUVRAN HALL	ED C REIMB
39	WHIPPLE ST	Apt 4 to 8 Units R	71	WILDER ST: MCGAUVRAN HALL	ED C REIMB
67	WHIPPLE ST	Apt 4 to 8 Units R	71	WILDER ST: MCGAUVRAN HALL	ED C REIMB
48	WHIPPLE ST	Apt 4 to 8 Units R	134	WILLARD ST	Apt 9 Units and Up C
213	WHITE ST	Apt 4 to 8 Units R	148	WILLARD ST	Apt 9 Units and Up C
159	WHITE ST	Apt 4 to 8 Units R	140	WILLARD ST	Apt 9 Units and Up C
123	WHITE ST	Apt 4 to 8 Units R	148	WILLARD ST	Apt 9 Units and Up C
227	WHITE ST	Apt 4 to 8 Units R	140	WILLARD ST	Apt 9 Units and Up C
49	WHITE ST	Apt 4 to 8 Units R	134	WILLARD ST	Apt 9 Units and Up C
197	WHITE ST	Apt 4 to 8 Units R	20	WILLIAM ST	Office Bldg
39	WHITEHEAD AVE	Office	40	WILLIAMS ST	Char Services C
11	WILLIE ST	Apt 4 to 8 Units R	220	WORTHEN ST	Char Other C

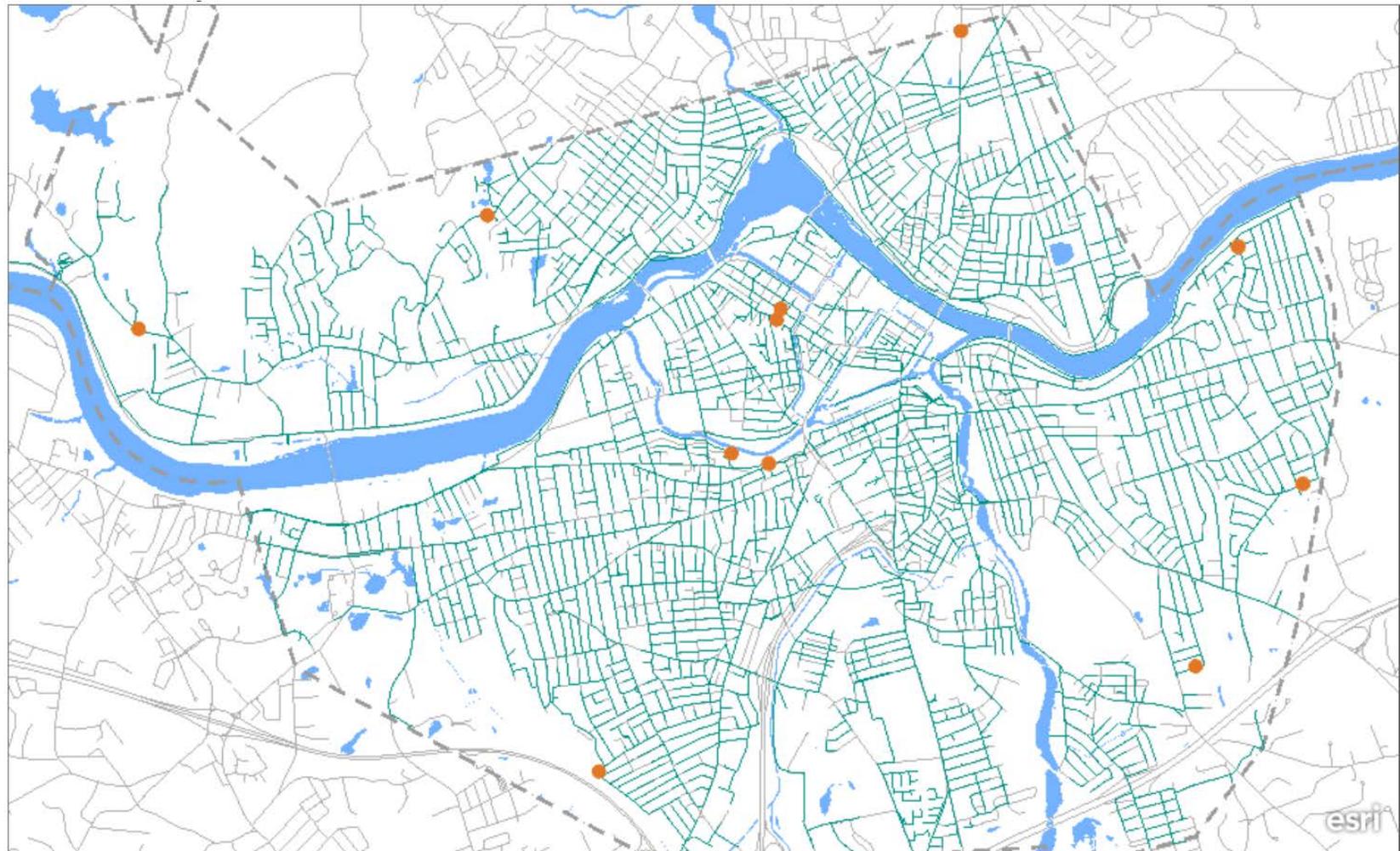
City of Lowell  
Non-Residential Properties

House number	Street	Land Use Description	House number	Street	Land Use Description
70	WILLIE ST	Apt 4 to 8 Units R	236	WORTHEN ST	Substation C
74	WILLIE ST	Apt 4 to 8 Units R	143	WORTHEN ST	Restaurant/Club
106	WILLIE ST	Auto Repair	35	YMCA DR	Char Rec Activity C
61	WILLIE ST	Auto Repair			
24	WILLIE ST	Apt 4 to 8 Units R			
71	WILLIE ST	Warehouse/Dist/Storage			
86	WILLIE ST	Apt 4 to 8 Units R			
99	WILLIE ST	Factory			
52	WILLIE ST	Restaurant/Club			
65	WILLOW ST	Office			
55	WILLOW ST	Apt 4 to 8 Units R			
45	WILLOW ST UNIT	Apt 4 to 8 Units R			
45	WILLOW ST UNIT	Apt 4 to 8 Units R			
45	WILLOW ST UNIT	Apt 4 to 8 Units R			
45	WILLOW ST UNIT	Apt 4 to 8 Units R			
73	WOBURN ST	Lowell Education C			
181	WOBURN ST	Retail < 10,000 SF			
185	WOBURN ST	Retail < 10,000 SF			
154	WOBURN ST	Apt 4 to 8 Units R			
14	WOBURN ST	Apt 4 to 8 Units R			
109	WOOD ST	Aff Hgs Units (Apts)			
109	WOOD ST	Aff Hgs Units (Apts)			
109	WOOD ST	Aff Hgs Units (Apts)			
109	WOOD ST	Aff Hgs Units (Apts)			
109	WOOD ST	Aff Hgs Units (Apts)			
109	WOOD ST	Aff Hgs Units (Apts)			
109	WOOD ST	Aff Hgs Units (Apts)			
109	WOOD ST	Aff Hgs Units (Apts)			
109	WOOD ST	Aff Hgs Units (Apts)			
109	WOOD ST	Aff Hgs Units (Apts)			
52	WOOD ST	Office Bldg			
40	WOOD ST	Apt 4 to 8 Units R			
11	WOOD ST	Shopping Mall			
13	WOOD ST	Shopping Mall			
17	WOOD ST	Shopping Mall			
15	WOOD ST	Shopping Mall			
25	WOOD ST	Shopping Mall			
1	WOOD ST	Shopping Mall			
21	WOOD ST	Shopping Mall			
23	WOOD ST	Shopping Mall			
151	WOOD ST	Apt 9 Units and Up C			
151	WOOD ST	Apt 9 Units and Up C			
151	WOOD ST	Apt 9 Units and Up C			
151	WOOD ST	Apt 9 Units and Up C			
150	WOOD ST	Bank			
150	WOOD ST	Retail < 10,000 SF			
109	WOOD ST	Aff Hgs Units (Apts)			
42	WOOD ST	Apt 4 to 8 Units R			
26	WOOD ST #1	Professional Office			
12	WOOD ST BLDG	Retail < 10,000 SF			
12	WOOD ST BLDG	Retail < 10,000 SF			
12	WOOD ST BLDG	Retail < 10,000 SF			
12	WOOD ST BLDG	Retail < 10,000 SF			
80	WOODWARD AVE	City of Lowell V			
228	WORTHEN ST	Fraternal Org			
281	WORTHEN ST	Priv Secondary C			
243	WORTHEN ST	P/HOS CHAR C			
243	WORTHEN ST	P/HOS CHAR C			
222	WORTHEN ST	Char Other C			

## Appendix C: SSO Summary

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## 2020-2022 Sanitary Sewer Overflow (SSO) Summary Table



0.6mi

The map above provides an overview of the sanitary sewer overflows (SSOs) that occurred in Lowell's collection system between 2020-2022, and is supported by the following table. It is worth noting, the map shows the location of every SSO, but not each individual occurrence; this is due to the fact that some of the reported SSOs were instances of recurring overflows at the same location in the collection system.

## 2020-2022 Sanitary Sewer Overflow (SSO) Summary Table

Date	Associated Address	Discharge From	Cause	Discharge To
7/22/2020	Eagle Ct	Combined Sewer Manhole	Inadequate Capacity	Ground
7/22/2020	35 Windward Rd.	Combined Sewer Manhole	Inadequate Capacity	Unnamed wetland
9/10/2020	657 Middlesex St.	Combined Sewer Manhole	Inadequate Capacity	Ground
9/10/2020	42 Bishop St.	Backup into Property	Inadequate Capacity	Property Basement
9/10/2020	35 Windward Rd.	Combined Sewer Manhole	Inadequate Capacity	Unnamed wetland
9/10/2020	Raven Rd x Broadway Rd	Combined Sewer Manhole	Inadequate Capacity	Ground
9/11/2020	657 Merrimack St.	Backup into Property	Inadequate Capacity	Property Basement
4/1/2021	1230 Bridge St.	Combined Sewer Manhole	Other	Ground
5/24/2021	163 Marshall Ave.	Sanitary Sewer Manhole	Root Intrusion	Ground
7/12/2021	246 Raven Rd.	Combined Sewer Manhole	Inadequate Capacity	Ground
8/19/2021	35 Windward Rd.	Combined Sewer Manhole	Inadequate Capacity	Unnamed Wetland
8/19/2021	246 Raven Rd.	Combined Sewer Manhole	Inadequate Capacity	Ground
9/2/2021	246 Raven Rd.	Combined Sewer Manhole	Inadequate Capacity	Ground
9/2/2021	35 Windward Rd.	Combined Sewer Manhole	Inadequate Capacity	Unnamed Wetland
9/24/2021	246 Raven Rd.	Combined Sewer Manhole	Inadequate Capacity	Ground
11/12/2021	35 Eagle Ct.	Combined Sewer Manhole	Inadequate Capacity	Ground
11/12/2021	246 Raven Rd.	Combined Sewer Manhole	Root Intrusion	Ground
5/30/2022	130 W Meadow Road	Combined Sewer Manhole	Root Intrusion	Ground
7/19/2022	67 Payne Street	Combined Sewer Manhole	Inadequate Capacity	Ground
10/28/2022	1255 Varnum Ave	Backup into Property	Root Intrusion	Property Basement
11/9/2022	617 Market St	Backup into Property	Debris Blockage	Ground

## Appendix D: Lowell Wastewater Job Descriptions

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**JOB TITLE:           MAINTENANCE MANAGER**

**SECTION:             WASTEWATER**

**REPORTS TO (JOB TITLE): EXECUTIVE DIRECTOR**

**JOB TITLES SUPERVISED: MAINTENANCE SUPERVISOR**

**HEAD ELECTRICIAN**

**INSTRUMENTATION ELECTRICIAN**

**MECHANIC IIIs**

**MECHANIC IIs**

**MECHANIC Is**

**TV INSPECTION OPERATOR**

**COLLECTION SYSTEM SUPERVISOR**

**JOB TITLE: MAINTENANCE MANAGER**

## **JOB PURPOSE:**

Efficiently maintain the Wastewater Treatment Facility and Collection System in a cost effective manner and comply with all Federal, State and Local Regulations and Laws Training, scheduling, and monitoring staff; enforcing standards and procedures.

## **ESSENTIAL JOB RESULTS:**

1. OVERSEE MAINTENANCE DEPT
  - Supervising all maintenance personnel
  - Scheduling and assigning employees and following up on work results
2. MAINTAINS THE MAINTENANCE DEPT
  - Initiating, coordinating, and enforcing standards and procedures
3. COMPLY WITH FEDERAL, STATE, AND LOCAL LEGAL REQUIREMENTS
  - Studying existing and new legislation
  - Enforcing adherence to requirements
  - Advising upper management on needed action
4. ENSURES OPERATION OF PLANT AND COLLECTION EQUIPMENT
  - Developing and enforcing preventive maintenance programs
  - Studying manufacturers instructions
  - Establishing repair and installation policies and procedures
  - Troubleshooting malfunctions
  - Coordinating trades people
  - Maintaining equipment and parts inventory
  - Evaluating new equipment and techniques
  - Recommending equipment purchases and replacements
  - Maintains integrity and safety of the Utility's vehicle fleet
5. IDENTIFIES MANAGEMENT AND EMPLOYEE CONCERNS
  - Surveying environmental, operations, and occupational conditions
  - Holding and attending Staff Meetings
  - Surveying and interfacing with employees
6. DETERMINES SERVICE EQUIPMENT, AND PERSONNEL REQUIREMENTS
  - Conducting inspections
7. MAINTAINS CLEAN WORKING ENVIRONMENT
  - Assigning housekeeping, custodial and landscaping duties
8. ACHIEVES FINANCIAL OBJECTIVES
  - Working within and monitoring the maintenance budget
  - Scheduling and analyzing for cost effectiveness

- Writes specifications for contracts to be bid
- Participates in the City's procurement process

#### 9. MAINTAINS MAINTENANCE DEPARTMENT COHESIVENESS

- Setting policy and goals for collection system work, maintenance work, and preventive maintenance
- Enforcing policies and procedures

#### 10. MAINTAINS MAINTENANCE STAFF

- Recruiting, interviewing, selecting orientating and training employees

#### 11. MAINTAINS MAINTENANCE STAFF JOB RESULTS

- Coaching, counseling and disciplining employees
- Participates in the disciplinary process
- Planning, monitoring, and appraising job results

#### 12. MAINTAINS PROFESSIONAL AND TECHNICAL KNOWLEDGE

- Attending educational workshops, seminars, courses or conferences
- Reviewing professional publications and establishing personal networks

#### 13. COORDINATE FACILITY EFFORTS

- Interfacing with Operations and Engineering Divisions
- Exchanging information and scheduling mutual projects
- Managing assigned contractor activities

#### 14. MAINTAINS MAINTENANCE EFFECTIVENESS

- Setting department goals
- Coordinating department functions
- Evaluating department functions for effectiveness

#### 15. COORDINATE WITH OTHER CITY DEPARTMENTS

- Interfacing with other City Departments
- Availing needed resources

#### 16. ORDER AND TRACK SUPPLIES AND SPARE PARTS

- Maintaining records and usages
- Conferring with Maintenance Supervisor, Head Electrician, Instrumentation Electrician and Collection System Supervisor
- Tracking amounts used

#### 17. KEEPS EXECUTIVE DIRECTOR INFORMED

- Reviewing, analyzing and summarizing information
- Identifying trends
- Submitting written reports

#### 18. MAINTAINS SAFE WORKING ENVIRONMENT

- Establishing and enforcing safety rules, regulations, and procedures
- Attending safety seminars
- Acting on reported safety concerns
- Member of the Utility's Safety Group
- Following Safety Group recommendations

**19. MAINTAINS HISTORICAL RECORDS**

- Filing and compiling logs, reports, records, charts and related documents
- Managing Utility's CMMS Program

**20. CONTRIBUTES TO TEAM EFFORT**

- Accomplishing related results as needed.

**ENVIRONMENT**

**PHYSICAL DEMANDS**

   Balancing    Crouching    Hearing    Seeing    Sitting    Carrying    Feeling    Kneeling    Close  
   Standing    Climbing    Fingering    Lifting    Far    Stooping    Crawling    Grasping    Pulling  
   Color    Talking    Depth    Walking

**EXPOSURES**

   Airborne Particles    Explosives    Muscular strain    Temperatures    Caustics    Fumes  
   Noise    Toxicants    Chemicals    High places    Odors    Vibrations    Electrical  
   Moving parts    Vision strain    Weather

**SUPERVISORY-MANAGEMENT RESPONSIBILITY**

   Hire/discipline/terminate    Assign and check work    Train    Plan/appraise job results

Number of employees supervised    1 -    20

**CITY OF LOWELL**  
**Job Posting**  
**Please Post: June 11, 2019**  
**Deadline: June 25, 2019**  
**Wastewater Utility**  
**Collection Systems Supervisor**

**Job Title:** Collection Systems Supervisor (2900-05, 2661)  
**Department:** WWTP  
**Reports To:** Maintenance Superintendent  
**May Report to:** Maintenance Supervisor, Head Electrician  
**Union:** MVEA Waste Water Unit II  
**Salary:** \$1,234.70 (min) to \$1,396.78 (max) per week; 40hrs/week  
**FLSA Status:** Non Exempt

**SUMMARY**

Ensures proper maintenance of entire sewer system in a safe, cost effective and efficient manner complying with all regulations

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. Other duties may be assigned.

1. SUPERVISE SUBORDINATES, MAINTAINS STAFF JOB RESULTS

By

- Assigning and delegating tasks
- Coordinating work activities
- Inspection and check of subordinates (Mechanics and TV Inspection Operators) work and job performance
- Coaching and counseling subordinates
- Recommends disciplinary action
- Participates in the disciplinary process

2. MAINTAINS SEWER SYSTEM

By

- Coordinating all activities
- Installation of new equipment
- Maintenance inspection and repair of all existing systems

3. MAINTAINS COLLECTION SYSTEM

By

- Training subordinates
- Having a thorough knowledge of the collection system, structures, policies and procedures
- Following policies and procedures
- Carrying out assignments
- Ensuring working order of equipment
- Ensure subordinates perform requirements
- Reporting and recording abnormalities
- Taking corrective action

- Reporting needed changes
- Responsible for TV Inspection Crew
- Responsible for Wastewater related street sweeping program
- Responsible for catch basin cleaning program
- Responsible for root treatment program
- Responsible for sewer line heavy cleaning program
- Responsible for sewer lining program
- Required to carry a cell phone

4. ENSURES PROPER OPERATION OF SEWER SYSTEM

By

- Performing preventative maintenance requirements
- If needed, follow manuals, schematic diagrams, blueprints, and other specifications
- Investigates illegal entry and discharges into the sewer system
- Troubleshooting

5. MAY INSTALL NEW EQUIPMENT/MAKE REPAIRS TO EXISTING EQUIPMENT

By

- Using all equipment available
- Managers and coordinates wastewater contractors

6. REPAIR AND MAINTAIN SEWER SYSTEM AND ALL ASSOCIATED STRUCTURES

By

- Diagnosing problems
- Informing user (s) if necessary
- Informing Maintenance Superintendent and/or Maintenance Supervisor
- Coordinating repairs with outside contractors and/or City Engineer and/or related City departments

7. CONTROLS DOWNTIME OF SEWER SYSTEM

By

- Expediting needed repairs and/or cleaning in a timely manner

8. COORDINATES ROUTINE AND EMERGENCY WORK

By

- Informing outside contractors of needs Directs and operates equipment and personnel where required

9. MAINTAINS SEWER COLLECTION EQUIPMENT, PARTS AND SUPPLY INVENTORIES

By

- Checking stock to determine inventory level
- Anticipating needed equipment, parts, and supplies
- Reporting needs

10. CONSERVES SEWER SYSTEM RESOURCES

By

- Using equipment and supplies as needed to accomplish job results

11. MAINTAINS SEWER COLLECTION EQUIPMENT

By

- Performing minor repairs to all associated equipment

- Report any malfunctioning equipment

12. PROVIDES SEWER SYSTEM INFORMATION

By

- Answering questions and requests
- Enters collection system information into computer data base
- Enters collection system calls into computer data base

13. PREPARES SEWER SYSTEM REPORTS

By

- Collecting, analyzing, and summarizing information and trends
- Submitting written reports

14. MAINTAIN PROFESSIONAL AND TECHNICAL KNOWLEDGE

By

- Attending educational workshops
- Reviewing technical publications
- Establishing personal networks
- Maintain required licenses

15. MAINTAINS CONTINUITY AMONG WORK TEAMS

By

- Documenting and communicating actions, irregularities and continuing needs

16. WORK SAFTLY

By

- Knowing and following facility safety rules and regulations
- Attending in plant and outside safety seminars and courses
- Reporting unsafe conditions
- Consider safety aspects of jobs before assigning or performing
- Issues confined space entry permits for collection system jobs
- Keep subordinates informed and updated of safety procedure changes and updates

17. COORDINATE WITH OTHER CITY DEPARTMENT PERSONNEL

By

- Availing needed resources
- Represents the Utility at applicable Conservation Commission hearings
- Represents the Utility at DPD Projects Meetings
- Represents the Utility on litigation involving the collection system
- Determines and obtains police details as needed
- Obtains necessary permits for collection system work
- Provides City Engineers and Utility Engineers with as built of sewer repairs

18. MAINTAINS CLEAN WORKING ENVIRONMENT

By

- Assigning and performing housekeeping, custodial, and landscaping duties

19. HELPS THE PUBLIC

By

- Being courteous
- Investigate complaints promptly

- Investigates claims of damage caused by the collection system
- Assure prompt action

## 20. CONTRIBUTES TO TEAM EFFORT

By

- Being courteous
- Investigate complaints promptly
- Investigates claims of damage caused by the collection system
- Assure prompt action

## **SUPERVISORY RESPONSIBILITIES**

Supervise between 1-15 employees. Assign and check work of subordinates. Train subordinates and plan/appraise job results.

## **EDUCATION and/or EXPERIENCE**

Required to have a high school education or GED due to the nature of the equipment and system mechanics working with and within;

The variety of duties will require experience in at least one of several fields involved in plant maintenance;

## **QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

## **LANGUAGE SKILLS**

Ability to read and comprehend simple instructions, short correspondence, and memos. Ability to write simple correspondence. Ability to effectively present information in one-on-one and small group situations to customers, clients, and other employees of the organization.

## **MATHEMATICAL SKILLS**

Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent and to draw and interpret bar graphs.

## **REASONING ABILITY**

Ability to apply common sense understanding to carry out detailed but uninvolved written or oral instructions. Ability to deal with problems involving a few concrete variables in standardized situations.

## **CERTIFICATES, LICENSES, REGISTRATIONS**

CDL with hoisting engineer's license required.

## **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Must meet physical requirements for Commercial Drivers as set forth under 49 CFR 391.41; samples are listed below:

While performing the duties of this job, the employee is frequently required to stand; walk; sit; use hands to finger, handle, or feel; reach with hands and arms; climb or balance; stoop, kneel, crouch, or crawl; talk or hear; taste or smell, climb, carry objects, crouch, grasp, lift, and pull. The employee must occasionally

lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, and ability to adjust focus.

### **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently exposed to moving mechanical parts, fumes or airborne particles, toxic or caustic chemicals, outside weather conditions, extreme cold, extreme heat, risk of electrical shock, explosives, toxicants, risk of radiation, and vibration. The employee is occasionally exposed to wet and/or humid conditions and high, precarious places. The noise level in the work environment is usually loud.

The City of Lowell is a smoke and drug free employer and requires a physical with drug screen and CORI, post offer.

***Qualified individuals may send application/resume with cover letter to the Human Relations Office, Mary Callery, HR Director Room 19 - City Hall, Lowell, MA 01852 by 8:00 PM on the deadline of June 25, 2019. Applicants may also send application/resume with cover letter to fax 978-446-7102 or email to [cityjobs@lowellma.gov](mailto:cityjobs@lowellma.gov)***

**EOE/AA/504 Employer**

## CITY OF LOWELL

### Job Description

**Please Post: January 13, 2021**

**Deadline: Open Until Filled**  
**Waste Water Treatment Plant**  
**Television Inspection Operator**

**Job Title:** Television Inspection Operator (2600- 28, 2848)  
**Department:** WWTP  
**Reports To:** Maintenance Superintendent; Head Collection System Operator  
**May Report To:** Maint. Supervisor; Plant Electrician; Instrumentation Electrician  
**Union:** MVEA WWTP, Unit I  
**FLSA Status:** Non Exempt  
**Salary:** \$23.1653 (min) to \$26.5265 (max) per hour (40 hours per week)

### SUMMARY

Set up and operation of TV Inspection equipment, including cameras, winches and all related equipment. Perform video inspection of wastewater utility collection system infrastructure.

### ESSENTIAL DUTIES AND RESPONSIBILITIES

include the following. Other duties may be assigned.

- Operates the TV camera and video related equipment associated with internal pipeline inspections.
- Participates in precision shop and field work calibrating, troubleshooting, installing, repairing and maintaining internal pipeline inspection equipment.
- Performs preventive maintenance on all related equipment to insure its dependability and readiness.
- Insures the vehicle is fully stocked at all times to insure immediate response.
- Insures all equipment is secured daily, or when left unattended.
- Orders and maintains inventory of necessary supplies.
- Insures vehicle and all related equipment is always presented in a clean and workmanlike condition.
- Locates sources of problems with all equipment by observing all equipment in operation; Observes and listens for problems during equipment operation; Making Necessary repairs.
- Removes defective equipment by dismantling device; Using necessary tools available
- Controls Downtime by performing preventive maintenance: Making repairs, adjustments, or new installation as expeditiously as possible; Performing Mechanic I duties that may include, but not limited to, operating the Vaccon trucks, CSO and pump station inspections, screenings removal and other duties, etc. Performing all other duties assigned.
- Provides television information by Answering questions; Passing on information; Maintaining video library for work performed

- Performs required television equipment maintenance by performing repairs to television equipment; Troubleshooting and making recommendations to accomplish job results; Operate television equipment and vehicle
- Installs new equipment by using hand and power tools and measuring devices
- Performs preventive maintenance by knowing lubrication and adjustment requirements on related equipment; Maintaining a clean work environment
- Maintains professional and technical knowledge by attending educational workshops, seminars, and courses; reviewing professional publication; Maintaining required licenses
- Helps the public by being courteous; Investigating complaints promptly; Assuring prompt action
- Works Safely by knowing facility rules and regulations; Attending in-house and outside safety seminars and courses; Reporting unsafe conditions
- Maintains clean work environment by performing housekeeping and custodial duties
- Contributes to team effort By: Accomplishing related results as needed

#### **QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

#### **EDUCATION and/or EXPERIENCE**

Required to have a high school education or GED due to the nature of the equipment and system mechanics working with and within;

The variety of duties will require experience in at least one of several fields involved in plant maintenance; At least five years experience required in associated field.

#### **CERTIFICATES, LICENSES, REGISTRATIONS**

Commercial Driver's License from Registry of Motor vehicles. Good driving record.

License commensurate with equipment repairing. Hoisting License required.

#### **LANGUAGE SKILLS**

Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence.

Ability to speak effectively before groups of customers or employees of organization.

#### **MATHEMATICAL SKILLS**

Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent and to draw and interpret bar graphs.

#### **REASONING ABILITY**

Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. Ability to deal with problems involving several concrete variables in standardized situations.

## **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel or operate objects, tools, or controls and reach with hands and arms. The employee frequently is required to stand and talk or hear. The employee is occasionally required to walk; sit; climb or balance; stoop, kneel, crouch, or crawl; and taste or smell. The employee must frequently lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

## **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly exposed to moving mechanical parts. The employee is frequently exposed to vibration. The noise level in the work environment is usually moderately loud office setting.

The City of Lowell is a smoke and drug free employer and requires a physical with drug screen and CORI, post offer.

***Qualified individuals should send application/resume with cover letter to the Human Relations Office, Mary Callery, HR Director, Room 19 - City Hall, Lowell, MA 01852 by the Deadline, Open Until Filled. Applicants may also send application/resume with cover letter to fax 978-446-7102 or email to [cityjobs@lowellma.gov](mailto:cityjobs@lowellma.gov)***

***EOE/AA/504 Employer***

**City of Lowell**  
**Job Posting**  
**Please Post: March 24, 2021**  
**Deadline: Open Until Filled**  
**Wastewater Utility**  
**Maintenance Mechanic I**

**Job Title:** Maintenance Mechanic I (2600-23, 2880)  
**Department:** Wastewater Utility  
**Reports To:** Maint. Supt; Plant Engineer; Head Mechanic & Skilled Mechanic  
**Union:** MVEA WWTP Unit I  
**Salary:** \$806.96 (min) to \$977.53 (max) weekly; 40 hours/week  
**FLSA Status:** Non-exempt

**SUMMARY**

Performs equipment maintenance, installation and repair work on process and domestic equipment and piping systems found in a large complex wastewater treatment plant and outlying structures both in existence and to be added in the future. Must be able to perform work at a lower grade.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. Other duties may be assigned.

Responsible for routine maintenance tasks as well as working under mechanics in repair and installation of domestic and process piping and equipment systems.

Must be capable of a wide variety of physical tasks in carrying out instructions received from the head mechanic and mechanic.

Typical duties may include but are not limited to assisting in removal or breakdown of equipment for maintenance or repair, cleaning and unplugging line process lines, preventative maintenance including greasing and oil requirements of various equipment items.

Repair and maintenance of both on and off plant vehicles are part of the maintenance mechanic's normal duties.

Also included in duties are the maintenance of buildings, tanks and wet well structures in site and outlying structures.

Due to the nature of the installation, these tasks are sometimes difficult and unpleasant.

Driving a dump truck, pick-up truck, van or mack sludge vehicle is also included in this position for on plant site use and between plant and outlying structures.

**SUPERVISOR RESPONSIBILITIES**

May exercise working supervision over a small group comprised of laborers and at times operations personnel on loan to the maintenance department.

**QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or

ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

### **EDUCATION and/or EXPERIENCE**

Required to have a high school education or GED due to the nature of the equipment and system mechanics working with and within; Knowledge of plant and equipment maintenance is required as well as experience in wastewater treatment of a similar application. A minimum of five years experience in building and machine maintenance is required. Education and training should indicate ability to function well in machine and building maintenance environment.

### **LANGUAGE SKILLS**

Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of organization.

### **MATHEMATICAL SKILLS**

Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent and to draw and interpret bar graphs.

### **REASONING ABILITY**

Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. Ability to deal with problems involving several concrete variables in standardized situations.

### **CERTIFICATES, LICENSES, REGISTRATIONS**

*Current and valid Commercial Driver's and Hoisting license required, must be obtained within 1 year of appointment. Good driving record.*

### **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Must meet physical requirements for Commercial Drivers as set forth under 49 CFR 391.41; samples are listed below: While performing the duties of this job, the employee is frequently required to stand. The employee is occasionally required to walk; sit; use hands to finger, handle, or feel; reach with hands and arms; climb or balance; stoop, kneel, crouch, or crawl; talk or hear; and taste or smell. The employee must occasionally lift and/or move up to 100 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

### **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently exposed to moving mechanical parts. The employee is occasionally exposed to wet and/or humid conditions; high, precarious

places; fumes or airborne particles; toxic or caustic chemicals; outside weather conditions; risk of electrical shock; risk of radiation; and vibration. The noise level in the work environment is usually loud.

The City of Lowell is a smoke and drug free employer and requires a physical with drug screen and CORI, post offer.

***Qualified individuals should send application/resume with cover letter to the Human Relations Office, Mary Callery, HR Director Room 19 - City Hall, Lowell, MA 01852 by the Deadline: Open Until Filled. Applicants may also send application/resume with cover letter to fax 978-446-7102 or email to [cityjobs@lowellma.gov](mailto:cityjobs@lowellma.gov)***

**EOE/AA/504 Employer**

**POSITION:           ENGINEERING MANAGER**

**REPORTS TO:       EXECUTIVE DIRECTOR**

**SUPERVISION**

**EXERCISED:**     Engineering Supervisor  
                      Staff Engineers  
                      Pretreatment Coordinator

**JOB PURPOSE:**   Supervises and directs the engineering and pretreatment activities of the utility. Supervises and directs activities of contractors and consulting engineers working for the Utility. Supports, assists, and advises operation, lab, and maintenance departments in operating and maintaining the utility in the best interest of the City. Develops and maintains plans, records, and files of engineering and pretreatment activities.

**ESSENTIAL JOB RESULTS**

**1. OVERSEE ENGINEERING DIVISION:**

- Supervising Staff Engineers, Pretreatment Coordinator and Engineering Supervisor
- Scheduling and assigning employees and follow up on work results

**2. MAINTAINS ENGINEERING DIVISION:**

- Initiating, coordinating, and enforcing standards and procedures

**3. COMPLIES WITH FEDERAL, STATE, AND LOCAL LEGAL REQUIREMENTS**

- Studying existing and new legislation
- Enforcing adherence to requirements
- Advising management on needed actions
- Maintains communication with regulatory agencies regarding engineering, pretreatment and inter-municipal activities
- Confers with municipal, state, and federal officials and with outside consultants on technical and administrative matters

**4. MAINTAINS ENGINEERING STAFF JOB RESULTS:**

- Coaching, counseling, and disciplining employees
- Participates in the disciplinary process
- Planning, monitoring and appraising job results

**5. ACHIEVES FINANCIAL OBJECTIVES:**

- Assists Executive Director on financial grant and loan programs and applications, filing for grants, and adherence to conditions set forth in such grants/loans.
- Scheduling expenditures
- Analyzing variances
- Initiating corrective actions

**6. COORDINATE FACILITY EFFORTS:**

- Participating in plant wide projects aimed at the improvement of operations, maintenance, and management
- Consulting with operations and maintenance supervisors to provide engineering and technical advice and assistance in the solution of new, complex, or unusual problems of an engineering nature in the design operation and maintenance of the utility and related facilities
- Interfacing with maintenance and operations
- Exchanging information
- Scheduling mutual projects

7. MAINTAINS ENGINEERING EFFECTIVENESS:

- Setting Division goals
- Coordinating department functions
- Evaluating department functions for effectiveness
- Responsible for developing specifications, plans, contracts, and bidding documents for work the Utility desires to let out to contract or purchase.
- Responsible for the proper supervision and inspection of contracted work to insure conformance to specifications.
- Reviews and advises on change orders that occur during the progress of construction.
- Reviews and approves payment requests for contracted work.

8. COORDINATE WITH OTHER CITY DEPARTMENTS:

- Interfacing with other city department heads
- Availing needed resources

9. OVERSEE PRETREATMENT AND INTERMUNICIPAL ACTIVITIES:

- Meeting daily with Pretreatment Coordinator
- Coordinating pretreatment program requirements
- Coordinating intermunicipal requirements
- Oversees the intermunicipal agreements and adherence to the intermunicipal agreements
- Review inspections, sampling, test results, work schedules and reports
- Review results

10. MAINTAIN ENGINEERING COHESIVENESS:

- Setting policy and goals
- Enforcing policies and procedures

11. KEEPS EXECUTIVE DIRECTOR INFORMED:

- Advising Executive Director on all matters pertaining to engineering, pretreatment and intermunicipal functions
- Reviewing, analyzing and summarizing information
- Identifying trends
- Submitting written reports

12. HELPS THE PUBLIC:

- Being courteous, assessable and prompt
- Investigates complaints promptly, assuring prompt action

13. MAINTAINS ENGINEERING STAFF

- Recruiting, interviewing, selecting orienting, and training Employees
- Preparing personnel schedules and enforcing work rules in accordance with established utility policies
- Responsible for staffing, training, resolution of personnel problems, grievances and related issues for the Engineering Division
- Directing and supervising the performance of duties and tasks of personnel assigned to work under his direction

14. MAINTAINS HISTORICAL RECORDS:

- Filling and compiling logs, reports, records, charts, and related documents

15. MAINTAINS PROFESSIONAL AND TECHNICAL KNOWLEDGE:

- Attending educational workshops, seminars, courses or conferences
- Reviewing professional publications
- Establishing personal networks
- Maintaining required licenses

16. IDENTIFIES MANAGEMENT AND EMPLOYEE CONCERNS:

- Surveying environmental, operational and occupational conditions
- Holding and attending staff meetings
- Surveying and interfacing with employees
- Developing, recommending and executing new or improved current or long range plans, policies, procedures, and practices relative to the utility

17. MAINTAINS SAFE WORKING ENVIRONMENT:

- Establishing and enforcing safety rules, regulations, and procedures
- Attending safety seminars
- Acting on reported safety concerns
- Follow safety committee recommendations

18. MAINTAINS CLEAN WORKING ENVIRONMENT:

- Assigns housekeeping, custodial and landscaping duties

19. CONTRIBUTES TO TEAM EFFORT

- Accomplishing related results as needed
- Performing administrative and technical duties as assigned
- Performing other duties as assigned
- Subject to call for emergency work during any given 24-hour period
- Required to carry a beeper

### **REQUIREMENTS AND QUALIFICATIONS**

- A college bachelors degree in sanitary, civil, environmental or mechanical engineering. A Masters Degree is preferred.
- Engineer In Training (EIT) certification preferred

- Possession of a Massachusetts Grade 6 Operator certification
- Thorough knowledge of the principles, practices and procedures of modern professional, environmental engineering, particularly as applied to wastewater treatment
- Thorough knowledge of the principles, methods, procedures, systems, equipment and materials used in designing, construction, operating and maintaining a large, activated sludge wastewater treatment plant and associated facilities
- Thorough knowledge of the occupational hazards and safety precautions involved in the work
- Considerable knowledge of industrial wastes and their effect on wastewater processes and equipment
- Considerable knowledge of standard laboratory methods in the examination of wastewater
- Ability to plan, administer, coordinate and direct the engineering, pretreatment and intermunicipal activities of a large activated sludge wastewater treatment plant
- Ability to plan, assign, supervise and review the work of subordinates
- Ability to establish and maintain effective working relationships with subordinates, government officials, consultants, industrial officials, and the general public
- Ability to express oneself clearly and concisely, orally and in writing
- Must be reliable, thorough, dependable with the ability to work both independently and as head of a team
- Provide positive leadership and management control to the engineering personnel by his/her actions and examples
- Must be able to accept instruction, formulate plans of action, implementation changes, and ensure their compliance
- Must present a neat, courteous and professional appearance and attitude at all times

**POSITION: ENGINEERING SUPERVISOR**

**REPORTS TO: ENGINEERING MANAGER  
EXECUTIVE DIRECTOR**

**SUPERVISION**

**EXERCISED:** Staff Engineers  
Pretreatment Coordinator

**JOB PURPOSE:** Supervises and directs the engineering and pretreatment activities of the utility. Supervises and directs activities of contractors and consulting engineers working for the Utility. Supports, assists, and advises operation, lab, and maintenance departments in operating and maintaining the utility in the best interest of the City. Develops and maintains plans, records, and files of engineering and pretreatment activities.

**ESSENTIAL JOB RESULTS**

**1. OVERSEE ENGINEERING DIVISION:**

- Supervising Staff Engineers and Pretreatment
- Scheduling and assigning employees and follow up on work results

**2. MAINTAINS ENGINEERING DIVISION:**

- Initiating, coordinating, and enforcing standards and procedures

**3. COMPLIES WITH FEDERAL, STATE, AND LOCAL LEGAL REQUIREMENTS**

By

- Studying existing and new legislation
- Enforcing adherence to requirements
- Advising management on needed actions
- Maintains communication with regulatory agencies regarding engineering, pretreatment and inter-municipal activities
- Confers with municipal, state, and federal official and with outside consultants on technical and administrative matters

**4. MAINTAINS ENGINEERING STAFF JOB RESULTS:**

- Coaching, counseling, and disciplining employees
- Participates in the disciplinary process
- Planning, monitoring and appraising job results

**5. ACHIEVES FINANCIAL OBJECTIVES:**

- Assists Executive Director on financial grant and loan programs and applications, filing for grants, and adherence to conditions set forth in such grants/loans.
- Scheduling expenditures
- Analyzing variances
- Initiating corrective actions

**6. COORDINATE FACILITY EFFORTS:**

- Participating in plant wide projects aimed at the improvement of operations, maintenance, and management
  - Consulting with operations and maintenance supervisors to provide engineering and technical advice and assistance in the solution of new, complex, or unusual problems of an engineering nature in the design operation and maintenance of the utility and related facilities
  - Interfacing with maintenance and operations
  - Exchanging information
  - Scheduling mutual projects
7. MAINTAINS ENGINEERING EFFECTIVENESS:
- Setting Division goals
  - Coordinating department functions
  - Evaluating department functions for effectiveness
  - Responsible for developing specifications, plans, contracts, and bidding documents for work the Utility desires to let out to contract or purchase.
  - Responsible for the proper supervision and inspection of contracted work to insure conformance to specifications.
  - Reviews and advises on change orders that occur during the progress of construction.
  - Reviews and approves payment requests for contracted work.
8. COORDINATE WITH OTHER CITY DEPARTMENTS:
- Interfacing with other city department heads
  - Availing needed resources
9. OVERSEE PRETREATMENT AND INTERMUNICIPAL ACTIVITIES:
- Meeting daily with Pretreatment Coordinator
  - Coordinating pretreatment program requirements
  - Coordinating intermunicipal requirements
  - Oversees the intermunicipal agreements and adherence to the intermunicipal agreements
  - Review inspections, sampling, test results, work schedules and reports
  - Review results
10. MAINTAIN ENGINEERING COHESIVENESS:
- Setting policy and goals
  - Enforcing policies and procedures
11. KEEPS EXECUTIVE DIRECTOR INFORMED:
- Advising Executive Director on all matters pertaining to engineering, pretreatment and intermunicipal functions
  - Reviewing, analyzing and summarizing information
  - Identifying trends
  - Submitting written reports
12. HELPS THE PUBLIC:
- Being courteous, assessable and prompt
  - Investigates complaints promptly, assuring prompt action

13. MAINTAINS ENGINEERING STAFF:

- Recruiting, interviewing, selecting orienting, and training Employees
- Preparing personnel schedules and enforcing work rules in accordance with established utility policies
- Responsible for staffing, training, resolution of personnel problems, grievances and related issues for the Engineering Division
- Directing and supervising the performance of duties and tasks of personnel assigned to work under his direction

14. MAINTAINS HISTORICAL RECORDS:

- Filling and compiling logs, reports, records, charts, and related documents

15. MAINTAINS PROFESSIONAL AND TECHNICAL KNOWLEDGE:

- Attending educational workshops, seminars, courses or conferences
- Reviewing professional publications
- Establishing personal networks
- Maintaining required licenses

16. IDENTIFIES MANAGEMENT AND EMPLOYEE CONCERNS:

- Surveying environmental, operational and occupational conditions
- Holding and attending staff meetings
- Surveying and interfacing with employees
- Developing, recommending and executing new or improved current or long range plans, policies, procedures, and practices relative to the utility

17. MAINTAINS SAFE WORKING ENVIRONMENT:

- Establishing and enforcing safety rules, regulations, and procedures
- Attending safety seminars
- Acting on reported safety concerns
- Follow safety committee recommendations

18. MAINTAINS CLEAN WORKING ENVIRONMENT:

- Assigns housekeeping, custodial and landscaping duties

19. CONTRIBUTES TO TEAM EFFORT:

- Accomplishing related results as needed
- Performing administrative and technical duties as assigned
- Performing other duties as assigned
- Subject to call for emergency work during any given 24-hour period
- Required to carry a beeper

## **REQUIREMENTS AND QUALIFICATIONS**

- A college bachelors degree in sanitary, civil, environmental or mechanical engineering. A Masters Degree is preferred.
- Engineer In Training (EIT) certification preferred

- Possession of a Massachusetts Grade 6 Operator certification
- Thorough knowledge of the principles, practices and procedures of modern professional, environmental engineering, particularly as applied to wastewater treatment
- Thorough knowledge of the principles, methods, procedures, systems, equipment and materials used in designing, construction, operating and maintaining a large, activated sludge wastewater treatment plant and associated facilities
- Thorough knowledge of the occupational hazards and safety precautions involved in the work
- Considerable knowledge of industrial wastes and their effect on wastewater processes and equipment
- Considerable knowledge of standard laboratory methods in the examination of wastewater
- Ability to plan, administer, coordinate and direct the engineering, pretreatment and intermunicipal activities of a large activated sludge wastewater treatment plant
- Ability to plan, assign, supervise and review the work of subordinates
- Ability to establish and maintain effective working relationships with subordinates, government officials, consultants, industrial officials, and the general public
- Ability to express oneself clearly and concisely, orally and in writing
- Must be reliable, thorough, dependable with the ability to work both independently and as head of a team
- Provide positive leadership and management control to the engineering personnel by his/her actions and examples
- Must be able to accept instruction, formulate plans of action, implementation changes, and ensure their compliance
- Must present a neat, courteous and professional appearance and attitude at all times

**City of Lowell**  
**Job Posting**  
**Please Post: December 15, 2020**  
**Deadline: Open Until Filled**  
**Staff Engineer**  
**Lowell Regional Wastewater Utility**  
*Anticipated Vacancy*

**Job Title:** Staff Engineer (2300-08, INC, 2840)  
**Department:** Lowell Regional Wastewater Utility (LRWWU)  
**Reports To:** Wastewater Engineering Supervisor; Executive Director  
**Union:** MVEA - WWTP Unit IIP  
**FLSA Status:** Non Exempt  
**Salary:** \$1,087.45 (min) to \$1,246.48 (max) per week; 40hrs/week

**SUMMARY**

A Wastewater Engineer is responsible for management and administration of various tasks and programs within the LRWWU Engineering Division. A Wastewater Engineer provides technical support and project management assistance to the Wastewater Engineering Manager, the Wastewater Engineering Supervisor, and other division staff.

**QUALIFICATIONS**

The requirements listed below are representative of the knowledge, skill, and ability required of the Engineering Supervisor. To perform this job successfully, an individual must meet the education and experience requirements and be able to perform each essential duty satisfactorily.

**EDUCATION AND EXPERIENCE**

- A bachelor's degree in civil/environmental engineering, environmental studies, physical sciences, or a comparable area of study is required.
- Certification as an Engineer-In-Training (EIT) is preferred.
- Experience with engineering design, project management is required and program administration, especially in the municipal wastewater treatment industry, is preferred.

**ESSENTIAL DUTIES AND RESPONSIBILITIES**

Below are some of the essential duties and responsibilities of the position. Depending upon experience, education, skills, and the needs of the LRWWU Engineering Division, the duties described below may or may not be assigned. Other duties not listed below may be assigned by the Engineering Manager as deemed necessary to fulfill the overall objectives of the department.

- Administer tasks in any of the following division programs: Inter-Municipal Program (IMP), Storm-Water Management (SWM), Utility Safety Program, Industrial Pretreatment Program (IPP), Fats, Oil & Grease (FOG) Program, Long Term Control Program (LTCP), Capital Improvements Program (CIP), Geographical Information Systems (GIS), Website Development, and Supervisory Control and Data Acquisition (SCADA) Management. Task include permitting, inspection, correspondence, billing, regulatory compliance, planning and

design, project management, environmental monitoring, program implementation and maintenance, contractor oversight, and database management.

- Participate in design review process and make recommendations for design revisions; support other members of department, including operations and maintenance personnel; supervise contractors and consultants during design, bidding, and construction of projects, as required.
- Craft reports and other documents that describe work activities; create spreadsheets, tables, charts that summarize data and convey information; maintain electronic and paper files, including design reports, meeting minutes, technical memoranda, computer programs, correspondence, databases, and other records.
- Participate in planning and implementation of program objectives; support other Wastewater Engineering staff by providing technical assistance and support; participate in team projects and support efforts of other group members as needed. This includes assistance with pretreatment and intermunicipal responsibilities, as well as engineering projects, if necessary.
- Participate in Wastewater department programs and projects as needed; provide technical assistance to the operations and maintenance divisions; respond to emergency calls outside of normal working hours; keep Executive Director and Engineering Manager informed of Wastewater Engineering functions; interact in a professional manner with city departments, other organizations, public officials, and the general public.
- Refine skills related to mathematical concepts and calculations; enhance knowledge of the principles and practices of wastewater / stormwater treatment and transport; advance proficiency in organizing technical materials and writing letters; improve knowledge of federal and state regulations related to wastewater and stormwater management.
- Obtain and maintain professional licenses and certifications; establish and utilize professional networks; attend educational workshops, conferences, and seminars; reviews technical publications and refine knowledge
- Contribute to the preparation and submittal of reports and correspondence to the United States Environmental Protection Agency and the Massachusetts Department of Environmental Protection; maintain a working knowledge of relevant rules and regulations; coordinate and communicate with other agencies as needed; comply with federal, state, and local legal requirements.
- Collaborate with the Wastewater Engineering Manager, the Wastewater Engineering Supervisor, and other staff members in the LRWWU Engineering division regarding all project work; attend staff meetings as necessary.
- Interact with supervisors in other LRWWU divisions as needed, particularly the Operations Superintendent, Maintenance Superintendent, and Executive Director.
- Foster a safe and productive work environment by engaging in effective work practices and procedures; perform housekeeping and custodial duties as needed.

#### **CERTIFICATES, LICENSES, AND REGISTRATIONS**

- Engineer-In-Training certification is preferred.
- Valid motor vehicle license is required; commercial driver's license is preferred.
- Wastewater treatment operator's and wastewater collection system licenses are preferred.
- Hazwoper emergency responder training is desired.

#### **LANGUAGE SKILLS**

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business

correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the public.

### **MATHEMATICAL SKILLS**

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry, trigonometry, and calculus. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

### **COMPUTER SKILLS**

Ability to utilize computer programs such as *Word*, *Excel*, *PowerPoint*, and *Access*. Ability to create tables, charts, and spreadsheets and facility with email messaging. Familiarity with *AutoCad* and *GIS* a plus.

### **REASONING ABILITY**

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret information presented in written, oral, schematic, or schedule form.

### **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally required to stand; walk; sit; use hands to finger, handle, or feel; reach with hands and arms; climb or balance; stoop, kneel, crouch, or crawl; talk or hear; and taste or smell. The employee must occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

### **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to moving mechanical parts; high, precarious places; fumes or airborne particles; toxic or caustic chemicals; outside weather conditions; risk of electrical shock; and vibration. The noise level in the work environment is usually moderate.

*The city of Lowell is a smoke and drug free employer and requires a physical with drug screen and CORI, post offer.*

**Qualified applicants should send resume/application with cover letter to Mary Callery, HR Director, Human Relations Office, Room 19 City Hall, Lowell, MA 01852 by Deadline: Open Until Filled. Applicants may also send resume and /or application to fax 978-446-7102 or email to [cityobs@lowellma.gov](mailto:cityobs@lowellma.gov)**

**EOE/AA/504 Employer**

**City of Lowell**  
**Job Description**  
**Please Post ~ January 8, 2008**  
**Deadline ~ January 18, 2008**  
**Pretreatment Coordinator**  
**Lowell Regional Wastewater Utility**

**Job Title:** *Pretreatment Coordinator*  
**Department:** Lowell Regional Wastewater Utility (LRWWU)  
**Reports To:** Wastewater Engineering Supervisor; other designated personnel  
**Salary:** *\$822.29 (min) to \$947.86 (max) per week*

### **SUMMARY**

The Pretreatment Coordinator implements the LRWWU Industrial Pretreatment Program (IPP) by managing the daily activities of the program and coordinating the efforts of other staff members assigned to support the program.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

Below are the essential responsibilities of the position. Other duties not listed below may be assigned by the Wastewater Engineering Supervisor as deemed necessary to fulfill the overall objectives of the industrial pretreatment program and other LRWWU programs.

- Review industrial sewer user permit applications and craft sewer user permits.
- Conduct sewer user facility inspections and surveillance visits, and write inspection reports.
- Manage sewer user monitoring database, including data input of self monitoring and utility monitoring results.
- Assist with sewer user monitoring program, including the collection of sewer discharge samples.
- Maintain electronic and paper pretreatment program files, including sewer user database, permits, inspection reports, sampling results, and correspondence.
- Correspond with industrial sewer users regarding all aspects of the pretreatment program.
- Prepare and submit pretreatment reports and correspondence to the United States Environmental Protection Agency and the Massachusetts Department of Environmental Protection.
- Create and transmit a variety of sewer user bills and abatements.
- Implement a Fats, Oils & Grease (FOG) Program.
- Develop pretreatment program documents such as IPP enforcement response plan, IPP local limits, FOG control plan, and local sewer use ordinance.
- Coordinate a hazardous spill response program.
- Understand federal and state regulations related to sewer discharges and industrial pretreatment programs.
- Participate in team projects and support the efforts of other group members.
- Inform Wastewater Engineering Supervisor of pretreatment program activities.
- Foster a safe and productive work environment by engaging in effective work practices and procedures.

### **QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and ability required for the position.

### **EDUCATION AND EXPERIENCE**

- A bachelor's degree in engineering, science, environmental studies, or a comparable degree is preferred.
- Knowledge of the principles and practices of industrial and municipal wastewater treatment is desired.
- Facility with mathematical concepts and calculations related to wastewater treatment is required.
- Proficiency in organizing technical materials, writing letters, and project management is required.

- Ability to read, interpret, and understand regulations and laws related to wastewater treatment is required.
- Familiarity with wastewater sample collection and analysis is required.

### **LANGUAGE SKILLS**

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the public.

### **MATHEMATICAL SKILLS**

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

### **REASONING ABILITY**

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret information presented in written, oral, schematic, or schedule form.

### **CERTIFICATES, LICENSES, AND REGISTRATIONS**

- Valid motor vehicle license is required.
- Wastewater treatment operator's license is preferred.
- Wastewater collection system license is preferred.
- Hazwoper emergency responder training is preferred.

### **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally required to stand; walk; sit; use hands to finger, handle, or feel; reach with hands and arms; climb or balance; stoop, kneel, crouch, or crawl; talk or hear; and taste or smell. The employee must occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

### **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to moving mechanical parts; high, precarious places; fumes or airborne particles; toxic or caustic chemicals; outside weather conditions; risk of electrical shock; and vibration. The noise level in the work environment is usually moderate.

The city of Lowell is a smoke and drug free employer and requires a physical with drug screen and CORI, post offer.

***Qualified applicants send resume/application to the Human Relations Office, Room 19 City Hall, Lowell, MA 01852 by 4:00 pm on: Deadline - January 18, 2008***  
***EOE/AA/504 Employer***

***S:\WWTP\Asstpret.jbx***

## Appendix E: SSO Notification Templates

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## **Overflow Start Notification Template**

This is a public notification that as of {Event Start Date and Time} discharges of {Overflow Type} are currently underway at the Lowell Wastewater Utility and its diversion structures.

Diversions occur only when necessary to reduce risks to public health and safety that would otherwise result from street flooding and property damage. We are constantly working to improve our high-flow management program in order to reduce the volume and frequency of these discharges. Overflow discharges can occur in multiple ways. Blended wastewater overflows are a mixture of treated and partially treated wastewater. Combined Sewer overflow (CSO) diversions are an untreated mixture of stormwater and sewage. The tables below give details on active outfalls.

### Blended Wastewater

Outfall #	Name	Latitude	Longitude	Receiving Water	Average Discharge Volume (MG)	Active/Inactive
35	Lowell Wastewater Facility	42.645	-71.2888	Merrimack River	6.23	<a href="#">Active/Inactive</a>

### Combined Sewer Overflows

Outfall #	Name	Latitude	Longitude	Receiving Water	Average Discharge Volume (MG)	Active/Inactive
002-SDS#1	Walker Station	42.646	-71.3341	Merrimack River	0.995	<a href="#">Active/Inactive</a>
007-SDS#2	Beaver Brook	42.659	-71.3193	Beaver Brook	0.53	<a href="#">Active/Inactive</a>
008-SDS#3	West Station	42.653	-71.3103	Merrimack River	3.4	<a href="#">Active/Inactive</a>
011-SDS#4	Read Station	42.648	-71.3011	Merrimack River	0.02	<a href="#">Active/Inactive</a>
012-SDS#5	First Street	42.648	-71.2909	Merrimack River	0	<a href="#">Active/Inactive</a>
020-SDS#6	Warren Station	42.643	-71.305	Concord River	1.86	<a href="#">Active/Inactive</a>
027-SDS#7	Tilden Station	42.651	-71.3115	Merrimack River	0.43	<a href="#">Active/Inactive</a>
030(1)-SDS#8	Barasford Station	42.645	-71.2884	Merrimack River	1.025	<a href="#">Active/Inactive</a>
030(2)	Merrimack Station	42.645	-71.2888	Merrimack River	2.43	<a href="#">Active/Inactive</a>

Avoid contact with these water bodies for 48 hours after the discharge or overflow ceases due to increased health risks from bacteria and other pollutants. A follow-up email will be distributed when these discharges have ceased.

Lowell Regional Wastewater Utility  
451 First St Blvd (Rte-110) | Lowell, MA 01850  
T: 978.674.1600 | E: [csonotification@lowellma.gov](mailto:csonotification@lowellma.gov)  
[Visit Our Website For More Information](#)

## **Overflow Update/Continuation Notification Template**

This is a public notification that as of {Current Time} the {Overflow Type} discharge event that started at {Event Start Date and Time} is still underway at the Lowell Regional Wastewater Utility and its diversion structures.

Diversions occur only when necessary to reduce risks to public health and safety that would otherwise result from street flooding and property damage. We are constantly working to improve our high-flow management program in order to reduce the volume and frequency of these discharges. Overflow discharges can occur in multiple ways. Blended wastewater overflows are a mixture of treated and partially treated wastewater. Combined Sewer overflow (CSO) diversions are an untreated mixture of stormwater and sewage. The tables below give details on active outfalls.

### Blended Wastewater

Outfall #	Name	Latitude	Longitude	Receiving Water	Average Discharge Volume (MG)	Active/Inactive
35	Lowell Wastewater Facility	42.645	-71.2888	Merrimack River	6.23	<a href="#">Active/Inactive</a>

### Combined Sewer Overflows

Outfall #	Name	Latitude	Longitude	Receiving Water	Average Discharge Volume (MG)	Active/Inactive
002-SDS#1	Walker Station	42.646	-71.3341	Merrimack River	0.995	<a href="#">Active/Inactive</a>
007-SDS#2	Beaver Brook	42.659	-71.3193	Beaver Brook	0.53	<a href="#">Active/Inactive</a>
008-SDS#3	West Station	42.653	-71.3103	Merrimack River	3.4	<a href="#">Active/Inactive</a>
011-SDS#4	Read Station	42.648	-71.3011	Merrimack River	0.02	<a href="#">Active/Inactive</a>
012-SDS#5	First Street	42.648	-71.2909	Merrimack River	0	<a href="#">Active/Inactive</a>
020-SDS#6	Warren Station	42.643	-71.305	Concord River	1.86	<a href="#">Active/Inactive</a>
027-SDS#7	Tilden Station	42.651	-71.3115	Merrimack River	0.43	<a href="#">Active/Inactive</a>
030(1)-SDS#8	Barasford Station	42.645	-71.2884	Merrimack River	1.025	<a href="#">Active/Inactive</a>
030(2)	Merrimack Station	42.645	-71.2888	Merrimack River	2.43	<a href="#">Active/Inactive</a>

Avoid contact with these water bodies for 48 hours after the discharge or overflow ceases due to increased health risks from bacteria and other pollutants. A follow-up email will be distributed when these discharges have ceased.

Lowell Regional Wastewater Utility  
451 First St Blvd (Rte-110) | Lowell, MA 01850  
T: 978.674.1600 | E: [csonotification@lowellma.gov](mailto:csonotification@lowellma.gov)  
[Visit Our Website For More Information](#)

## **Overflow Cease/End Notification Template**

This is a public notification that as of {Event End Date and Time} the discharges of {Overflow Type} have ceased.

Diversions occur only when necessary to reduce risks to public health and safety that would otherwise result from street flooding and property damage. We are constantly working to improve our high-flow management program in order to reduce the volume and frequency of these discharges. Overflow discharges can occur in multiple ways. Blended wastewater overflows are a mixture of treated and partially treated wastewater. Combined Sewer overflow (CSO) diversions are an untreated mixture of stormwater and sewage. The tables below give details on the outfalls for the Lowell Regional Wastewater Utility.

### Blended Wastewater

Outfall #	Name	Latitude	Longitude	Receiving Water	Average Discharge Volume (MG)	Active/Inactive
35	Lowell Wastewater Facility	42.645	-71.2888	Merrimack River	6.23	Inactive

### Combined Sewer Overflows

Outfall #	Name	Latitude	Longitude	Receiving Water	Average Discharge Volume (MG)	Active/Inactive
002-SDS#1	Walker Station	42.646	-71.3341	Merrimack River	0.995	Inactive
007-SDS#2	Beaver Brook	42.659	-71.3193	Beaver Brook	0.53	Inactive
008-SDS#3	West Station	42.653	-71.3103	Merrimack River	3.4	Inactive
011-SDS#4	Read Station	42.648	-71.3011	Merrimack River	0.02	Inactive
012-SDS#5	First Street	42.648	-71.2909	Merrimack River	0	Inactive
020-SDS#6	Warren Station	42.643	-71.305	Concord River	1.86	Inactive
027-SDS#7	Tilden Station	42.651	-71.3115	Merrimack River	0.43	Inactive
030(1)-SDS#8	Barasford Station	42.645	-71.2884	Merrimack River	1.025	Inactive
030(2)	Merrimack Station	42.645	-71.2888	Merrimack River	2.43	Inactive

Avoid contact with these water bodies for 48 hours after the discharge or overflow ceases due to increased health risks from bacteria and other pollutants.

Lowell Regional Wastewater Utility  
451 First St Blvd (Rte-110) | Lowell, MA 01850  
T: 978.674.1600 | E: [csonotification@lowellma.gov](mailto:csonotification@lowellma.gov)  
[Visit Our Website For More Information](#)

## **Overflow Text-Message Alerts**

### **Start**

This is a public notification that as of {Event Start Date and Time} discharges of {Overflow Type} are currently underway at the Lowell Wastewater Utility and its diversion structures.

Lowell Regional Wastewater Utility  
451 First St Blvd (Rte-110) | Lowell, MA 01850  
T: 978.674.1600 | E: csonotification@lowellma.gov  
WEB: <https://www.lowellma.gov/1287>

### **Update**

This is a public notification that as of {Current Time} the {Overflow Type} discharge event that started at {Event Start Date and Time} is still underway at the Lowell Regional Wastewater Utility and its diversion structures.

Lowell Regional Wastewater Utility  
451 First St Blvd (Rte-110) | Lowell, MA 01850  
T: 978.674.1600 | E: csonotification@lowellma.gov  
WEB: <https://www.lowellma.gov/1287>

### **End**

This is a public notification that as of {Event End Date and Time} the discharges of {Overflow Type} have ceased.

Lowell Regional Wastewater Utility  
451 First St Blvd (Rte-110) | Lowell, MA 01850  
T: 978.674.1600 | E: csonotification@lowellma.gov  
WEB: <https://www.lowellma.gov/1287>



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection – Watershed Permitting Program**  
**Sanitary Sewer Overflow (SSO)/Bypass**  
**Notification Form**

FOR DEP USE ONLY

\_\_\_\_\_  
 Tax Identification Number

**A. Reporting Facility**

**Important:** When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility Information

\_\_\_\_\_  
 Reporting Sewer Authority

\_\_\_\_\_  
 Permit #

2. Authorized Representative Transmitting Form:

\_\_\_\_\_  
 First Name

\_\_\_\_\_  
 Last Name

\_\_\_\_\_  
 Telephone No.

\_\_\_\_\_  
 Title

\_\_\_\_\_  
 E-mail Address

**B. Phone Notifications:**

See DEP Regional Office telephone and fax numbers at the end of this form.

1. **MassDEP staff** contacted:

\_\_\_\_\_  
 first name

\_\_\_\_\_  
 last name

Date/Time contacted:

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Time

am

pm

2. **EPA staff** contacted:

\_\_\_\_\_  
 first name

\_\_\_\_\_  
 last name

Date/Time EPA contacted:

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Time

am

pm

3. **Board of Health** contacted:

\_\_\_\_\_  
 First Name

\_\_\_\_\_  
 Last Name

Date/Time contacted:

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Time

am

pm

4. **Others notified (select all that apply);**

Conservation Commission

Harbormaster

Shellfish Warden

Division of Marine Fisheries

Downstream Drinking Water Supplier

Watershed Association

Beach Resource Manager

Other:

\_\_\_\_\_  
 (specify)

**C. SSO Information**

1. SSO Discovered:

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Time

am

pm

By: \_\_\_\_\_

2. SSO Stopped:

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Time

am

pm

3. SSO Discharge from:

Sanitary Sewer Manhole

Pump Station

Backup into Property

Other:

\_\_\_\_\_  
 (specify)

4. SSO Discharge to:  Ground Surface (no release to surface water)

Direct to Receiving Water

\_\_\_\_\_  
 (surface water)

Catch basin to Receiving Water

\_\_\_\_\_  
 (surface water)

Backup into Property Basement



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection – Watershed Permitting Program**  
**Sanitary Sewer Overflow (SSO)/Bypass**  
**Notification Form**

FOR DEP USE ONLY

\_\_\_\_\_  
Tax Identification Number

**C. SSO Information (cont.)**

Location: \_\_\_\_\_  
(Description of discharge site or closest address)

5. Estimated SSO Volume at time of this Report: \_\_\_\_\_

Method of Estimating Volume: \_\_\_\_\_

6. Cause of SSO Event:

Rain Event     Pump Station Failure     Insufficient Capacity in System

Treatment Unit failure

Sewer System Blockage:     Pipe Collapse     Root Intrusion     Grease Blockage

Other: \_\_\_\_\_  
(Specify)

7. Corrective Actions Taken:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Impact Area cleaned and/or disinfected:     Yes     No

\_\_\_\_\_  
\_\_\_\_\_

Corrective Actions Completed:     Yes     No

\_\_\_\_\_  
\_\_\_\_\_

**D. Comments/Attachments/Follow-up**

I wish to provide (select all that apply):

Attachment     Additional comments below:     No additional comments or attachments

Additional comments and planned actions:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection – Watershed Permitting Program**  
**Sanitary Sewer Overflow (SSO)/Bypass**  
**Notification Form**

FOR DEP USE ONLY

\_\_\_\_\_  
 Tax Identification Number

**E. Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
 Signature of Authorized Representative

\_\_\_\_\_  
 Date Signed

Please keep a copy of this report for your records. When submitting additional information, include the MassDEP Incident Number from this report.

**MassDEP Regional Office and EPA Telephone and Fax Numbers:**

Northeast Region	Phone: 978-694-3215	Fax: 978-694-3499
Southeast Region	Phone: 508-946-2750	Fax: 508-947-6557
Central Region	Phone: 508-792-7650	Fax: 508-792-7621
Western Region	Phone: 413-784-1100	Fax: 413-784-1149
EPA Contact	Phone: 617-918-1870	Fax: 617-918-0870
DEP 24-hour emergency	Phone: 888-304-1133	

## **Appendix F: City of Lowell Sewer Use Ordinance**

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**Part 2**  
**Sewers**

ARTICLE III  
**General Regulations**

**§ 272-19. Definitions and abbreviations. [Amended 12-13-1988]**

A. Definitions. Unless the context specifically indicates otherwise, the meanings of the following words and phrases used in this Part 2 shall be as follows:

ACT or THE ACT — The Federal Water Pollution Control Act, also known as the "Clean Water Act," as amended, 33 U.S.C. § 1251 et seq.

APPLICANT — Any person requesting approval to discharge wastewaters into the municipal facilities or a new connection to the wastewater works.

APPROVAL AUTHORITY — The administrator of the Environmental Protection Agency for Region 2.[Amended 5-31-1994]

AUTHORIZED REPRESENTATIVE or SIGNATURE AUTHORITY[Amended 5-31-1994] —

- (1) If the industrial user is a corporation:
  - (a) The president, secretary, treasurer, or a vice president of the corporation in charge of a principal business function or any other person who performs similar policy or decision making functions for the corporation.
  - (b) The manager of one or more manufacturing, production or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedure.
- (2) If the industrial user is a partnership or sole proprietorship, a general partner or proprietor, respectfully.
- (3) If the industrial user is a federal, state or local governmental facility, a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility or his/her designee.
- (4) The individuals described in Subsections (1) through (3) above may designate another authorized representative if the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for the environmental matters for the company and the written authorization is submitted to the Executive Director.

BEST MANAGEMENT PRACTICES — Practices such as preventive maintenance, scheduling of activities, or process alterations which enable the user

to comply with the provisions of this Part 2 or any applicable state and/or federal guidelines.

**BOD** (denoting "biochemical oxygen demand") — The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five days at 20° C., expressed in milligrams per liter.

**BUILDING DRAIN** — That part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning 10 feet (three meters) outside the inner face of the building wall.

**BUILDING SEWER** — The extension from the building drain to the public sewer or other place of disposal.

**BYPASS** — The intentional diversion of waste streams from any portion of an industrial user's treatment facility. **[Added 8-13-1991]**

**CATEGORICAL PRETREATMENT STANDARD** — Any regulation containing pollutant limitations promulgated by the EPA in accordance with Section 307(b) and (c) of the Act (33 U.S.C. § 1317) which applies to a specific category of industrial users. This term includes prohibitive discharge limits established pursuant to 40 CFR 403.5 and those found in 40 CFR Chapter I, Subchapter N, Parts 405 to 471.<sup>1</sup> **[Added 5-31-1994]**

**CITY** — The City of Lowell, Massachusetts.

**COMBINED SEWER** — A sewer receiving both surface runoff and sewage.

**COMPATIBLE POLLUTANTS** — Wastewater constituents for which the POTW was designed or is operated to adequately treat.

**COOLING WATER** — The water discharge from any use such as air conditioning, cooling or refrigeration or to which the only pollutant added is heat.

**CONTROL AUTHORITY** — Upon acceptance of the pretreatment program by the EPA, the control authority will be the Executive Director of the Lowell Regional Water and Wastewater Utilities. Until the program has gained acceptance, the control authority shall be synonymous with the approval authority. **[Amended 5-31-1994]**

**DAILY AVERAGE IN MILLIGRAMS PER LITER** — The average concentration of grab samples collected over a normal operating day.

**DAILY MAXIMUM IN MILLIGRAMS PER LITER** — The highest single value obtained for a particular parameter over a normal operating day.

**DISCHARGE DOCUMENT** — Either the previously negotiated agreements or a wastewater discharge permit, and shall include the criteria for discharge to the POTW.

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1. Editor's Note: The definition of "categorical pretreatment standards or national categorical pretreatment standard" which immediately followed this definition was deleted at time of adoption of Code (see Ch. 1, General Provisions, Art. II).

DOMESTIC WASTEWATER — The wastewater derived principally from dwellings, business buildings, institutions and the like.

EXCESSIVE — Amounts or concentrations of a constituent of a wastewater which in the judgment of the Executive Director will cause damage to any City facility; will be harmful to a wastewater treatment process; cannot be removed in the City treatment works to the degree required to meet the limiting stream classification standards of the Merrimack River and/or EPA and state effluent standards; can otherwise endanger life, limb, or public property; or can constitute a nuisance.

EXECUTIVE DIRECTOR — The Executive Director of the Lowell Regional Wastewater Utility or his duly authorized representative.

FACILITIES — Structures and conduits for the purpose of collecting, treating, neutralizing, stabilizing, or disposing of domestic wastewater and/or industrial or other wastewaters as are disposed of by means of such structures and conduits, including treatment and disposal works, necessary intercepting, outfall, and outlet sewers, and pumping stations integral to such facilities, with sewers, equipment, furnishings thereof and other appurtenances connected therewith.

GARBAGE — The animal and vegetable wastes resulting from the handling, preparation, cooking, and serving of food. It is composed largely of putrescible organic matter and its natural moisture content.

GRAB SAMPLE — A sample which is taken from a waste stream on a one-time basis with no regard to the flow in the waste stream and without consideration of time.

HOLDING TANK WASTE — Any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks, and vacuum-pump tank trucks.

INDIRECT DISCHARGE — The discharge or the introduction of nondomestic pollutants from any source regulated under Section 307(b) or (c) of the Act (33 U.S.C. § 1317) into the POTW (including holding tank waste discharged into the system).

INDUSTRIAL DISCHARGE PERMIT — The permit required to be obtained from the City by significant industrial users to discharge to the City's POTW, as set forth in § 272-53 of this Part 2.

INDUSTRIAL USER — A source of indirect discharge. **[Amended 5-31-1994]**

INDUSTRIAL WASTEWATER — All water-carried wastes and wastewater, excluding domestic wastewater and unpolluted water. Includes all wastewater from any producing, manufacturing, processing, testing, institutional, commercial, agricultural, or other operations where the wastewater discharged includes nondomestic wastes.

INTERFERENCE — A discharge by an industrial user which, alone or in conjunction with discharges by other sources, inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and which is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the

prevention of sewage sludge use or disposal by the POTW in accordance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) [including Title II, more commonly referred to as the "Resource Conservation and Recovery Act (RCRA)," and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA], the Clean Air Act, the Toxic Substance Control Act, and the Marine Protection Research and Sanctuaries Act.

**LOCAL LIMITS** — Specific effluent pollutant concentrations developed by the POTW for an industrial user(s) in order to prevent any interference and/or pass-through of the POTW as mandated by 40 CFR 403.5(c).

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT or NPDES PERMIT** — A permit issued pursuant to Section 402 of the Act (33 U.S.C. § 1342).

**NATIONAL PRETREATMENT STANDARD or CATEGORICAL STANDARD** — The term "national pretreatment standard," "pretreatment standard" or "standard" means any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act which applies to industrial users. This term includes prohibitive discharge limits established pursuant to 40 CFR 403.5 and those found in 40 CFR Chapter I, Subchapter N, Parts 405 to 471.<sup>2</sup>**[Amended 5-31-1994]**

**NATURAL OUTLET** — Any outlet into a watercourse, pond, ditch, lake or other body of surface water or groundwater.

**NEW SOURCE****[Added 8-13-1991; amended 5-31-1994]** —

- (1) Any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:
  - (a) The building, structure, facility or installation is constructed at a site at which no other source is located;
  - (b) The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
  - (c) The production or wastewater-generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant and the extent to which the

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2. Editor's Note: The definition of "national prohibitive discharge standard or prohibitive discharge standard" which immediately followed this definition was deleted at time of adoption of Code (see Ch. 1, General Provisions, Art. II).

new facility is engaged in the same general type of activity as the existing source should be considered.

- (2) Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of Subsection (1)(b) or (c) of this definition but otherwise alters, replaces, or adds to existing process or production equipment.
- (3) Construction of a new source as defined under this definition has commenced if the owner or operator has:
  - (a) Begun or caused to begin as part of a continuous on-site construction program any placement, assembly, or installation of facilities or equipment or significant site preparation work, including clearing, excavation, or removal of existing buildings, structures, or facilities, which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
  - (b) Entered into a binding contractual obligation for the purchase of facilities or equipment which is intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this subsection.

**NON-CONTACT COOLING WATER** — Cooling water which does not come in contact with any raw material, intermediate product, waste product, or finished product. **[Added 5-31-1994]**

**NORMAL OPERATING DAY** — A twenty-four-hour day in which the standard and routine operations and work of the facility are conducted. It would include, but is not limited to, daily cleaning, routine maintenance, and production. It would not include work stoppages, scheduled and unscheduled shutdowns, holiday schedules, major cleanups and the like.

**OIL AND GREASE** — Any material (animal, vegetable or hydrocarbon) which is extractable from an acidified sample of a waste by freon or other designated solvent and as determined by the appropriate standard procedure.

**PASS-THROUGH** — The discharge of pollutants through the POTW into the waters of the United States in quantities or concentration which, alone or in conjunction with discharges from other sources, is cause of a violation of any requirements of the POTW's NPDES permit (including an increase in the magnitude or duration of the violation). **[Amended 5-31-1994]**

**PERSON** — Any individual, firm, company, association, society, partnership, corporation, municipality, government entity, or similar organization, agency or group. **[Added 8-13-1991]**

**pH** — A measure of the alkalinity or acidity of a substance, expressed in standard

units. **[Amended 5-31-1994]**

**POLLUTANT** — Any dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, or industrial, municipal or agricultural waste discharged into water.

**POLLUTION** — The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.

**POTW TREATMENT PLANT** — That portion of the POTW designed to provide treatment to wastewater.

**PRETREATMENT or TREATMENT** — The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutants or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants to the POTW. The reduction or alteration can be obtained by physical, chemical or biological processes, or process changes other than the above means, except as prohibited by 40 CFR 403.6(d).

**PRETREATMENT REQUIREMENTS** — Any substantive or procedural requirements related to pretreatment, other than a national pretreatment standard, imposed on an industrial user.

**PROPERLY SHREDDED GARBAGE** — The wastes from the preparation, cooking and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than 1/2 inch (1.27 centimeters) in any dimension.

**PUBLICLY OWNED TREATMENT WORKS or POTW** — The City-owned treatment works, as defined in Section 212 of the Act (33 U.S.C. § 1292). This definition includes any sewers that convey wastewater to the POTW treatment plant but does not include pipes, sewers, or other conveyances not connected to a facility providing treatment. For the purposes of this Part 2, "POTW" shall also include any sewers that convey wastewater to the POTW from persons outside the City who are, by agreement with the City, users of the City's POTW.

**PUBLIC SEWER** — A sewer in which all owners of abutting properties have equal rights and which is controlled by public authority.

**RECEIVING WATERS** — Any watercourse, river, pond, ditch, lake, aquifer, or other body of surface or ground water receiving discharge of wastewaters.

**SANITARY SEWER** — A sewer which carries sewage and to which stormwater, surface water and groundwater are not intentionally admitted.

**SEPTAGE** — The sludge produced in individual domestic on-site wastewater disposal systems, such as septic tanks and cesspools.

**SEWAGE** — A combination of the water-carried wastes from residences, business buildings, institutions and industrial establishments together with such

groundwater, surface water and stormwater as may be present.

**SEWAGE TREATMENT PLANT** — Any arrangement of devices and structures used for treating sewage.

**SEWER** — A pipe or conduit for carrying sewage.

**SEWERAGE WORKS** — All facilities for collecting, pumping, treating and disposing of sewage.

**SEWER CONNECTION** — A sewer pipeline running laterally from a street sewer, an off-street sewer or a trunk sewer to an individual tract, lot, or parcel of land to serve one or more houses or other buildings, whether or not connected to any house or building.

**SIGNIFICANT INDUSTRIAL USER or SIGNIFICANT USER****[Amended 5-31-1994]** —

- (1) Except as provided in Subsection (2) of this definition:
  - (a) All industrial users subject to categorical pretreatment standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
  - (b) Any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, non-contact cooling and boiler blowdown wastewater); contributes a process waste stream which makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the control authority as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].
- (2) Upon a finding that an industrial user meeting the criteria in Subsection (1)(b) of this definition has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the control authority [as defined in 40 CFR 403.12(a)] may at any time, on its own initiative or in response to a petition received from an industrial user or POTW and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

**SLUG LOAD** — Any discharge at a flow rate or concentration which could cause a violation of the prohibitive discharge standards in §§ 272-44 and 272-45 of this Part 2 or any discharge of a nonroutine, episodic nature, including but not limited to an accidental spill or a noncustomary batch discharge.**[Amended 5-31-1994]**

**STANDARD INDUSTRIAL CLASSIFICATION (SIC)** — A classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1972.

**STANDARD LABORATORY PROCEDURES** — Those methods outlined in the

most recent edition of the EPA manual Methods for Chemical Analysis of Water and Wastes and/or the APHA, AWWA and WPCF publication Standard Methods for the Examination of Water and Wastewater or in 40 CFR 136.

STATE — The Massachusetts Division of Water Pollution Control.

STORM DRAIN or STORM SEWER — A sewer which carries stormwater and surface water and drainage but excludes sewage and industrial wastes, other than unpolluted cooling water.

STORMWATER — Any flow occurring during, or following any form of, natural precipitation and resulting therefrom, including snowmelt. This flow shall not include any industrial or domestic wastewater.<sup>3</sup>[**Added 5-31-1994**]

SUSPENDED SOLIDS — Solids that either float on the surface of, or are in suspension in, water, sewage or other liquids and which are removable by laboratory filtering.

TOXIC POLLUTANT — One of the pollutants or a combination of those pollutants which are listed as toxic in regulations promulgated by the EPA under provisions of Section 307 of the Act.[**Added 5-31-1994**]

TOXIC SUBSTANCE — Any substance or mixture, whether gaseous, liquid or solid, which, when discharged into the sewer system, may tend to interfere with any wastewater treatment process, constitute a hazard to human beings or animals, inhibit aquatic life, or create a hazard to recreation in the receiving waters of the effluent from the POTW.

UPSET — An incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards or the provisions of this Part 2 because of factors beyond the control of the industrial user. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

USER — Any person who contributes, causes or permits the contribution of wastewater into the City's POTW.

WASTES — Substances in liquid, solid or gaseous form that can be carried in water.

WASTEWATER — The spent water of a community, which may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions together with any groundwater, surface water, and stormwater that may be present.

WATERCOURSE — A channel in which a flow of water occurs either continuously or intermittently.

- B. Abbreviations. The following abbreviations shall have the designated meanings:  
[**Amended 5-31-1994**]

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3. Editor's Note: The definition of "Superintendent" which immediately followed this definition was deleted at time of adoption of Code (see Ch. 1, General Provisions, Art. II).

BOD	Biochemical oxygen demand
COD	Chemical oxygen demand
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
gpd	Gallons per day
mgd	Million gallons per day
mg/l	Milligrams per liter
NPDES	National Pollutant Discharge Elimination System
O & G	Oil and grease
POTW	Publicly owned treatment works
RCRA	Resource Conservation and Recovery Act
SIC	Standard Industrial Classification
TTO	Total toxic organics
TSS	Total suspended solids
USC	United States Code

**§ 272-20. Authority to construct and repair sewers.**

The City Council shall order, lay, make and maintain, of such materials and dimensions as it deems proper, all such main drain and common sewers as it shall adjudge to be necessary for the public convenience or the public health, through the public streets, or through the lands of any persons or corporations, and may repair the same from time to time whenever repair thereof shall be necessary. All main drains or common sewers so laid shall be the property of the City.

**§ 272-21. Procedure for taking land.**

When any lands or real estate of any person shall be taken for the purpose named in § 272-20, the proceedings shall be the same as are provided in this Code or other ordinances of this City for the laying out of highways or streets, except as provided in this Part 2.

**§ 272-22. Damages to property by laying of sewers and drains.**

All persons suffering damage in their property by reason of the laying of any main drains or common sewers shall have the same rights and remedies for ascertaining and recovering the amount of such damages as in the case of the laying out of highways or streets, except as provided in this Part 2.

**§ 272-23. Expense of construction.**

One-half of the expense of constructing any main drains or common sewers, also the whole cost of all manholes and catch basins, shall be paid by the City, the other 1/2

thereof, or any portion less than 1/2, shall be assessed by the City Council upon every person who enters his particular drain into such main drain or common sewer or who, by more remote means, receives benefit thereby for draining his cellar or land.

**§ 272-24. Assessment of costs to benefited land.**

- A. The City Council shall first proceed and determine the amount of each lot of land or part of a lot benefited by any main drain or common sewer, and then the assessment shall be made and apportioned among the different owners of the land so benefited according to the value of the land benefited, independently of buildings and improvements.
- B. When such assessments are made and apportioned, they shall be certified and signed by the City Council and notice of this assessment and the amount thereof shall be given to the party to be charged or to his tenant or lessee.

**§ 272-25. Authority to require construction of drain to common sewer.**

The City Council shall have power in all cases where there is any common sewer in any street, highway, passageway or alley to cause every owner of land adjoining such street, highway, passageway or alley, his agent or tenant to make a sufficient drain from his house, yard or lot, whenever in its opinion the same shall be necessary, and shall, upon ordering such drain, give notice in writing to such owner, agent or tenant, specifying the time within which such drain shall be completed, and in case such owner, agent or tenant shall neglect to complete the same within the time specified, the City Council shall cause the same to be done, and the expense thereof shall be paid by the party benefited thereby.

**§ 272-26. Appropriation prerequisite to construction.**

The City Council shall in no case proceed to construct a common sewer or main drain until an appropriation to defray the cost of the same shall have been made by the City Council.

**§ 272-27. Stench traps required. [Amended 12-13-1988]**

- A. Every private drain connecting with a main drain or common sewer in the City shall be provided with a suitable stench trap, which shall be located outside of all house connections.
- B. Every person having a drain already connected with a main drain and having no such trap shall provide the same after the expiration of three days' notice from the Executive Director of the Lowell Regional Wastewater Utility, and every person who shall hereafter make such connection shall provide such trap at the time of making such connection.

**§ 272-28. Connection of exhaust steam and boiler blowoff with drains. [Amended 12-13-1988]**

No exhaust from steam engines shall be connected with any of the public or private

drains and no blowoff from steam boilers shall be so connected without special permission of the Executive Director of the Lowell Regional Wastewater Utility.

**§ 272-29. Interfering with drain or sewer; unlawful deposits in catch basins.**

No person shall cut into, interfere with or obstruct a main drain or common sewer, or shall enter a private drain therein, except as herein provided, or shall place or deposit in any street catch basin any animal or vegetable matter, solid or liquid, or any filthy substance.

**§ 272-30. Permit to enter main drain or common sewer. [Amended 12-13-1988]**

- A. The Executive Director of the Lowell Regional Wastewater Utility may grant written permits to any person to enter any main drain or common sewer heretofore built or which may be hereafter built or repaired under the authority of the City, provided that such person shall first pay the assessment and provided further that in the materials, constructing and maintaining of such particular drain he shall comply with the conditions that the Executive Director may prescribe.
- B. The authority of the Executive Director of the Lowell Regional Wastewater Utility to grant permits to any person to enter any main drain or public sewer shall be restricted to any area within the City, and any petitions for private sewer tie-ins without the City shall be first submitted to the City Council for approval.<sup>4</sup>

**§ 272-31. Permit required for use of public sewer. [Amended 12-13-1988<sup>5</sup>]**

- A. No unauthorized person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the Executive Director of the Lowell Regional Wastewater Utility.
- B. Any person proposing a new discharge into the system or a substantial change in the volume or character of pollutants that are being discharged into the system shall notify the Executive Director of the Lowell Regional Wastewater Utility and the City Council at least 45 days prior to the proposed change or connection.

**§ 272-32. Classes of building sewer permits. [Amended 8-23-1988]**

- A. There shall be two classes of building sewer permits: for residential and commercial service and for service to establishments producing industrial wastes. In either case, the owner or his agent shall make application on a special form furnished by the City. The permit application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the Executive Director. The application forms furnished by the City will be secured from the City Engineer.
- B. A permit and inspection fee for a residential, commercial, or industrial building

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4. Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. II).

5. Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. II).

sewer permit shall be paid to the City at the time the application is filed.

**§ 272-33. Payment of assessments, fees and costs; owner to indemnify City.  
[Amended 12-13-1988]**

All assessments and fees shall be paid before a permit can be given under this Part 2. All costs and expense incident to the installation and connection, with the Executive Director's approval, of the building sewer shall be borne by the owner. The owner shall indemnify the City from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

**§ 272-34. Separate sewer required for each building; exception.**

A separate or independent building sewer shall be provided for every building, except that where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer, under jurisdiction of the Board of Health.

**§ 272-35. Use of old building sewers. [Amended 12-13-1988]**

Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the Executive Director, to meet all requirements of this Part 2.

**§ 272-36. Standards for construction and installation of building sewers.**

The size, slope, alignment and materials for construction of a building sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing and backfilling the trench, shall all conform to the requirements of the building and plumbing codes or other applicable rules and regulations of the City. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the ASTM and WPCF Manual of Practice No. 9 shall apply.

**§ 272-37. Drainage into building sewer.**

Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer within the building.

**§ 272-38. Surface runoff and groundwater.**

No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.

**§ 272-39. Standards for connection to public sewer. [Amended 12-13-1988]**

The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing codes or other applicable rules and regulations of the City or the procedures set forth in appropriate specifications of the ASTM and the WPCF Manual of Practice No. 9. All such connections shall be made gastight and watertight. Any deviation from the prescribed procedures and materials must be approved by the Executive Director before installation.

**§ 272-40. Inspection; supervision of connection. [Amended 12-13-1988]**

An applicant for a building sewer permit shall notify the Executive Director when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the Executive Director or his representative.

**§ 272-41. Protection of public at excavation sites; restoration of public property.**

All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the City.

**§ 272-42. Uncontaminated waters excluded from sanitary sewer. [Amended 12-13-1988]**

No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, and uncontaminated cooling water to any sanitary sewer without expressed permission by the Executive Director of the Lowell Regional Wastewater Utility.

**§ 272-43. Discharge of surface drainage and industrial cooling water. [Amended 12-13-1988]**

Stormwater and all other surface drainage shall be discharged to such sewers as are specifically designed as combined sewers or storm sewers or to a natural outlet approved by the Executive Director. Industrial cooling water may be discharged, on approval by the Executive Director, to a storm sewer, combined sewer or a natural outlet. Nothing in this section may be construed to permit any discharge without all appropriate state, federal and local permits.

**§ 272-44. Prohibited discharges.**

- A. No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewers:
- (1) Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas.

- (2) Any liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or the operation of the POTW. At no time shall two successive readings on an explosion hazard meter at the point of discharge into the system (or at any point in the system) be more than 5% nor any single reading over 10% of the lower explosive limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, fuel oil, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substance which is a fire hazard or a hazard to the system. **[Amended 5-31-1994]**
- (3) Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges. **[Amended 5-31-1994]**
- (4) Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works, such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails, paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.
- (5) Heat in the amounts which will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40° C. (104° F.).
- (6) Any substance which may cause the POTW's effluent or any other product of the POTW, such as residues, sludges, or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall any substance discharged to the POTW cause the POTW to violate its NPDES and/or state disposal system permit or the receiving water quality standards.
- (7) Any trucked or hauled pollutants except at discharge points designated by the Executive Director. **[Added 5-31-1994]**
- (8) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass-through. **[Added 5-31-1994]**
- (9) Any pollutant that results in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems. **[Added 5-31-1994]**
- (10) Any sludges screenings or other residues from the pretreatment of industrial wastes. **[Added 5-31-1994]**
- (11) Any wastewater causing the treatment plant's effluent to fail a toxicity test. **[Added 5-31-1994]**

- B. It shall be unlawful for any person to discharge into the sewer system or cause to be discharged into the sewer system the sludge resulting from pretreatment of waters or wastewaters.
- C. Except where expressly authorized to do so by an applicable federal categorical pretreatment standard, no user, whether subjugated to categorical requirements or not, shall ever increase the use of process water or in any other way attempt to dilute the discharge as a partial or complete substitute for adequate treatment to achieve compliance with a categorical standard. The control authority may impose mass limitations on the user where the imposition of mass limitations is appropriate. **[Amended 5-31-1994]**
- D. Wastes prohibited by this section shall not be stored or processed in such a manner that they could possibly be discharged to the POTW. All floor drains in the process areas or storage areas must be piped through the pretreatment system prior to discharge to the POTW. **[Added 5-31-1994]**

**§ 272-45. Discharges which cause pass-through or interference. [Amended 5-31-1994]**

- A. A user may not introduce into a POTW any pollutant(s) which may cause pass-through or interference. These general prohibitions and the specific prohibitions below apply to each user introducing pollutants into a POTW, whether or not the user is subject to national pretreatment standards or any national, state, or local pretreatment requirements.
- B. No person shall discharge or cause to be discharged the following described substances, materials, waters, or wastes which can harm either the sewers, sewage treatment process or equipment, collection system, or treatment plant headworks, have an adverse effect on the receiving stream or can otherwise endanger life, limb, or public property or be considered a nuisance. The following discharges are prohibited from entering the waste stream without the explicit, written approval of the Executive Director or his designee. In forming his opinion as to the acceptability of these wastes, the Executive Director will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant and other pertinent factors. The substances prohibited are:
  - (1) Any water or waste containing fats, wax, grease or oils, whether emulsified or not, in excess of 100 milligrams per liter or containing substances which may solidify or become viscous at temperatures between 32° and 150° F. (0° to 65° C.).
  - (2) Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of 3/4 horsepower (0.76 horsepower metric) or greater shall be subject to the review and approval of the Executive Director.

- (3) Any waters or wastes containing strong acid iron pickling wastes or concentrated plating solutions, whether neutralized or not.
- (4) Any waters or wastes containing iron, chromium, copper, zinc and similar objectionable or toxic substances or wastes exerting an excessive chlorine requirement to such degree that any such material received in the composite sewage at the sewage treatment works exceeds the limits established by the Executive Director for such materials.
- (5) Any waters or wastes containing phenols or other taste- or odor-producing substances in such concentrations exceeding limits which may be established by the Executive Director as necessary after treatment of the composite sewage to meet the requirements of state, federal or other public agencies having jurisdiction over discharge to the receiving waters.
- (6) Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Executive Director in compliance with applicable state or federal regulations.
- (7) Any waters or wastes having a pH in excess of 9.5.
- (8) Materials which exert or cause:
  - (a) Unusual concentrations of inert suspended solids, such as, but not limited to, fuller's earth, lime slurries and lime residues, or of dissolved solids, such as, but not limited to, sodium chloride and sodium sulfate.
  - (b) Excessive discoloration, such as, but not limited to, dye wastes and vegetable tanning solutions.
  - (c) Unusual BOD, chemical oxygen demand or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works.
  - (d) Unusual volume of flow or concentration of wastes constituting slugs.
- (9) Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.
- (10) Pollutants which create a fire or explosion hazard in the POTW, including but not limited to waste streams with a closed-cup flashpoint of less than 140° F. or 60° C. using the test methods specified in 40 CFR 261.21.
- (11) Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
- (12) Pollutants which result in the presence of toxic gases, vapors, or fumes within

the POTW in a quantity that may cause acute worker health and safety problems.

**§ 272-46. Actions available to Executive Director. [Amended 12-13-1988]**

- A. If any waters or wastes are discharged or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in § 272-45 and which in the judgment of the Executive Director may have a deleterious effect upon the sewage works, processes, equipment or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the Executive Director may act in any or all of the following ways. He may:
- (1) Reject the wastes.
  - (2) Require pretreatment to an acceptable condition for discharge to the public sewers.
  - (3) Require control over the quantities and rates of discharge.
  - (4) Require payment to cover the added costs of handling and treating the wastes not covered by existing taxes or sewer charges under the provisions of § 272-49.
- B. If the Executive Director permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the Executive Director and subject to the requirements of all applicable codes, ordinances and laws.
- C. Under no circumstance shall the decision of the Executive Director exempt a user from a federally mandated prohibition or the surcharge of a user for violations of the federal prohibitions. [Added 5-31-1994]

**§ 272-47. Grease, oil and sand interceptors. [Amended 12-13-1988]**

Grease, oil and sand interceptors shall be provided when, in the opinion of the Executive Director, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts or any flammable wastes, sand or other harmful ingredients, except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the Executive Director and shall be located as to be readily and easily accessible for cleaning and inspection.

**§ 272-48. Maintenance of pretreatment facilities.**

Where preliminary treatment or flow-equalizing facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

**§ 272-49. Special agreements with industrial concerns. [Amended 5-31-1994]**

The Executive Director reserves the right to enter into special agreements with industrial

users setting out special terms under which they may discharge to the POTW. In no case shall a special agreement waive compliance with a pretreatment standard or requirement. However, the industrial user may request a net gross adjustment to a categorical pretreatment standard in accordance with 40 CFR 403.15. An industrial user may also request a variance from the categorical pretreatment standard from the EPA. Such a request will be approved only if the industrial user can prove that factors relating to its discharge are fundamentally different from the factors considered by the EPA when promulgating the standard. An industrial user requesting a fundamentally different pretreatment factor variance must comply with the procedural and substantive provisions in 40 CFR 403.13.

**§ 272-50. Damaging or tampering with sewage works.**

No unauthorized person shall maliciously, willfully or negligently break, damage, destroy, deface or tamper with any structure, appurtenance or equipment which is a part of the sewage works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct.

**§ 272-51. Powers and duties of inspectors; right of entry. [Amended 12-13-1988]**

The Executive Director and other duly authorized employees of the City bearing proper credentials and identification shall be permitted to enter all properties for the purpose of inspection, observation, measurement, sampling and testing in accordance with the provisions of this Part 2.

**§ 272-52. Observance of safety regulations; mutual indemnification policy.**

While performing the necessary work on private properties referred to in § 272-51, the Executive Director or duly authorized employees of the City shall observe all safety rules applicable to the premises established by the company, and the company shall be held harmless for injury or death to the City employees, and the City shall indemnify the company against loss or damage to its property by City employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions.

ARTICLE IV  
**Industrial Waste**

**§ 272-53. Industrial discharge permit.**

- A. All significant industrial users proposing to connect to or contribute to the POTW shall obtain an industrial discharge permit before connecting to or contributing to the POTW. All existing significant users connected to or contributing to the POTW shall obtain an industrial discharge permit within 180 days after the effective date of the ordinance from which this article derives (Ordinance Number 1-1987).
- B. Any violation of the terms and conditions of the industrial discharge permit shall be deemed a violation of this Part 2 and subjects the industrial user to the sanctions set out in Article V, Legal Action. Obtaining a discharge permit does not in any way relieve the industrial user of its obligation to comply with all federal, state and local laws. **[Added 5-31-1994]**

**§ 272-54. Permit application; issuance. [Amended 12-13-1988]**

- A. Users required to obtain an industrial discharge permit shall complete and file with the City an application in the form prescribed by the City and accompanied by a fee as provided in Chapter 150, Fees. **[Amended 4-28-1992<sup>6</sup>]**
- B. Existing users shall apply for an industrial discharge permit within 60 days after the effective date of the ordinance from which this article derives (Ordinance Number 1-1987), and proposed new users shall apply at least 90 days prior to connecting to or contributing to the POTW. In support of the application, the users shall submit, in units and terms appropriate for evaluation, the following information:
- (1) Name, address, and location (if different from the address).
  - (2) SIC number according to the Standard Industrial Classification Manual, Bureau of the Budget, 1972, as amended.
  - (3) Wastewater characteristics and constituents, including but not limited to those mentioned in §§ 272-44 and 272-45 of this Part 2, as determined through analysis done by an approved analytical laboratory. **[Amended 5-31-1994]**
    - (a) All analysis shall be performed in accordance to Section 304(g) of the Act and as contained in 40 CFR 136, as amended.
    - (b) In addition, the user shall submit the results of sampling and analysis identifying the nature and concentration (or mass, where required by the standard or control authority) of pollutants in the discharge from each process. Both daily maximum and average concentration (or mass, where required) shall be reported. The sample shall be representative of daily operations.

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6. Editor's Note: Amended at time of adoption of Code (see Ch. I, General Provisions, Art. II).

- (c) The user shall take a minimum of one representative sample to compile that data necessary to comply with the requirements of this Subsection B(3).
  - (d) Samples should be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the process if no pretreatment exists. If other wastewaters are mixed with the wastewater prior to pretreatment, the user should measure the flows and concentrations necessary to allow use of the combined waste stream formula of 40 CFR 403.6(e) in order to evaluate compliance with the pretreatment standards. Where an alternate concentration or mass limit has been calculated in accordance with 40 CFR 403.6(e), this adjusted limit along with supporting data shall be submitted to the control authority.
  - (e) Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto. Where 40 CFR 136 does not contain sampling or analytical techniques for the pollutant in question, or where the Administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by the Administrator.
  - (f) The control authority may allow the submission of a baseline report which utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures. The baseline report shall indicate the time, date and place of sampling and methods of analysis and shall certify that such sampling and analysis are representative of normal work cycles and expected pollutant discharges to the POTW.
- (4) Time and duration of contribution.
  - (5) Average daily and three-minute peak wastewater flow rates, including daily, monthly and seasonal variations if any.
  - (6) Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, sewer connections, and appurtenances by the size, location and elevation.
  - (7) Descriptions of activities, facilities and plant processes on the premises, including all materials which are or could be discharged.
  - (8) Compliance schedule report. If additional pretreatment and/or operation and maintenance (O & M) will be required to meet the pretreatment standards as indicated by the certification statement required by Subsection B(13), the shortest schedule by which the use will provide such additional pretreatment

must be followed. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

**[Amended 5-31-1994]**

- (a) The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (e.g., hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.).
  - (b) No increment referred to in Subsection B(8)(a) shall exceed nine months.
  - (c) Not later than 14 days following each date in the schedule and the final date for compliance, the user shall submit a progress report to the Executive Director including, as a minimum, whether or not it complied with the increment or progress to be met on such date and, if not, the date on which it expects to comply with this increment or progress, the reason for delay, and the steps being taken by the user to return the construction to the schedule established. In no event shall more than nine months elapse between such progress reports to the Executive Director.
- (9) Each product produced by type, amount, process or processes and rate of production.
  - (10) Type and amount of raw materials processed (average and maximum per day).
  - (11) Number and type of employees and hours of operation of plant and proposed or actual hours of operation of pretreatment systems.
  - (12) The pretreatment standards applicable to each regulated process.
  - (13) Certification. A statement, reviewed by an authorized representative of the industrial user (as defined in § 272-19) and certified to by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis and, if not, whether additional operation and maintenance (O & M) and/or additional pretreatment is required for the industrial user to meet the pretreatment standards and requirements. **[Amended 5-31-1994]**
  - (14) Permits. The user shall submit a list of any environmental control permits held by or for the facility. **[Added 5-31-1994]**
  - (15) Any other information as may be deemed by the Executive Director to be necessary to evaluate the permit application.
- C. The City will evaluate the data furnished by the user and may require additional information. The City reserves the right to deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants, to the POTW by industrial users where such contributions do not meet applicable pretreatment

standards or requirements or where such contributions would cause the POTW to violate its NPDES permit. After evaluation and acceptance of the data furnished, the City may issue an industrial discharge permit subject to terms and conditions provided herein. **[Amended 5-31-1994<sup>7</sup>]**

**§ 272-55. Permit conditions. [Amended 12-13-1988]**

Industrial discharge permits shall be expressly subject to all provisions of this Part 2 and all other applicable regulations, user charges and fees established by the Executive Director. Permits may contain the following:

- A. The unit charge or schedule of user charges and fees for the wastewater to be discharged to the POTW.
- B. Limits on the average and maximum wastewater constituents and characteristics.
- C. Limits on average and maximum rate and time of discharge or requirements for flow regulations and equalization.
- D. Requirements for installation and maintenance of inspection and sampling facilities.
- E. Specifications for monitoring program which may include sampling locations, frequency of sampling, number, types and standards for tests and reporting schedule.
- F. Compliance schedules.
- G. Requirements for submission of compliance schedule or periodic compliance reports.
- H. Requirements for maintaining and retaining plant records relating to wastewater discharge as specified by the Executive Director and affording the City access thereto.
- I. Requirements for notification to the City of any new introduction of wastewater constituents or any substantial change in the volume or character of the wastewater constituents being introduced into the wastewater treatment system.
- J. Requirements for notification of slug discharges. **[Amended 5-31-1994]**
- K. Other conditions as deemed appropriate by the Executive Director to ensure compliance with this Part 2.

**§ 272-56. Permit modifications. [Amended 5-31-1994]**

- A. Within, but not to exceed, 90 days of the promulgation of a national categorical pretreatment standard, the industrial discharge permit of users subject to such standards shall be revised to require compliance with such standard within, but not

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7. Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. II).

to exceed, the time frame prescribed by such standard. Where a user subject to a national categorical pretreatment standard has not previously submitted an application for an industrial discharge permit as required by § 272-53, the user shall apply for an industrial discharge permit within, but not to exceed, 180 days after the promulgation of the applicable national categorical pretreatment standard.

- B. In addition, the user with an existing industrial discharge permit shall submit to the Executive Director within 180 days after the promulgation of an applicable federal categorical pretreatment standard the information required by § 272-54B(8) and (9).
- C. The Executive Director or his designee may modify the industrial discharge permit for good cause, including but not limited to the following:
  - (1) To incorporate any new or revised federal, state or local pretreatment standards or requirements.
  - (2) To address any significant alterations or additions to the industrial user's operation, process or wastewater volume or character since the time of the industrial discharge permit's issuance.
  - (3) A change in the POTW which requires a temporary or permanent reduction or elimination of an authorized discharge.
  - (4) The misrepresentation or failure to fully disclose all relevant facts in the application or any other required reporting.
  - (5) To correct typographical or other errors.
  - (6) Any other changes deemed necessary by the Executive Director or his designee.

**§ 272-57. Permit duration. [Amended 12-13-1988]**

Permits shall be issued for a specified time period, not to exceed five years. A permit may be issued for a period less than a year or may be stated to expire on a specific date. The user shall apply for permit reissuance a minimum of 180 days prior to expiration of the user's existing permit. The terms and conditions of the permit may be subject to modification by the Executive Director during the term of the permit as limitations or requirements as identified in § 272-55 are modified or other just cause exists. The user shall be informed of any proposed changes in his permit at least 30 days prior to the effective date of change. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.

**§ 272-58. Permit transfer. [Amended 12-13-1988]**

Industrial discharge permits are issued to a specific user for a specific operation. An industrial discharge permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation without the approval of the Executive Director. Any succeeding owner or user shall also comply with the terms and

conditions of the permit in existence prior to the time of transfer.

**§ 272-59. Tenant responsibility. [Added 5-31-1994]**

Where an owner of a property leases to another person as a tenant under any rental agreement or lease agreement, if either the owner or the tenant is an industrial user, either or both may be held responsible for compliance under the provisions of this Part 2 and those of the Act.

**§ 272-60. Pretreatment baseline monitoring report. [Amended 12-13-1988; 5-31-1994]**

Any user subject to National Pretreatment Standards shall submit a baseline monitoring report containing the information listed under § 272-54 and 40 CFR 403.12(b) to the Executive Director by whichever deadline is later: 180 days after the final administrative decision is made upon a category determination submission under 40 CFR 403.6(a)(4) or 180 days after the effective date of categorical pretreatment for that particular industry. If additional pretreatment and/or operation and maintenance procedures will be required to meet the pretreatment standards, the user shall submit a schedule for compliance as detailed in § 272-61.

**§ 272-61. Compliance schedule report. [Amended 12-13-1988]**

If additional pretreatment and/or O & M will be required to meet the pretreatment standards as indicated by the certification statement required by § 272-54B(13), the shortest schedule by which the use will provide such additional pretreatment must be followed. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

- A. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (e.g., hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.).
- B. No increment referred to in Subsection A shall exceed nine months.
- C. Not later than 14 days following each date in the schedule and the final date for compliance, the user shall submit a progress report to the Executive Director including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the user to return the construction to the schedule established. In no event shall more than nine months elapse between such progress reports to the Executive Director.

**§ 272-62. Compliance deadline report. [Amended 12-13-1988]**

- A. Within 90 days following the date for final compliance with applicable pretreatment

standards or, in the case of a new source, following commencement of the introduction of wastewater into the POTW, any user subject to pretreatment standards and requirements shall submit to the Executive Director a report indicating the nature and concentration of all pollutants in the discharge from the regulated process which are limited by such pretreatment standards and requirements.

- B. The report shall state whether the applicable pretreatment standards or requirements are being met on a consistent basis and, if not, what additional O & M and/or pretreatment is necessary to bring the user into compliance with the applicable pretreatment standards or requirements. This statement shall be signed by an authorized representative of the industrial user and certified to by a qualified professional.

**§ 272-63. Periodic compliance reports. [Amended 12-13-1988<sup>8</sup>]**

Any user subject to a pretreatment standard, after the compliance date of such pretreatment standard or, in the case of a new source, after commencement of the discharge into the POTW, shall submit to the Executive Director during the months of June and December, unless required more frequently in the pretreatment standard or by the Executive Director, a report indicating the nature and concentration of pollutants in the effluent which are limited by such pretreatment standards. In addition, this report shall include a record of all daily flows which during the reporting period exceed the average daily flow reported in § 272-54B(5). At the discretion of the Executive Director and in consideration of such factors as local high or low flow rates, holidays, budget cycles, etc., the Executive Director may agree to alter the months during which the above reports are to be submitted.

**§ 272-64. Self-monitoring reports. [Amended 8-13-1991; 5-31-1994]**

- A. If a self-monitoring report is required, the reporting schedule and requirements will be stated on each industrial user's wastewater discharge permit. These reports shall contain the results of sampling and analysis of the discharge, including the flow and the nature and concentration, or production and mass where requested by the Executive Director, of pollutants contained therein which are limited by the applicable pretreatment standards. All analysis shall be performed in accordance with procedures established by the Administrator pursuant to Section 304(g) of the Act and contained in 40 CFR 136 and amendments thereto.<sup>9</sup>
- B. In the event that any sampling performed by an industrial user indicates a violation, said industry must inform the Utility within 24 hours of becoming aware of the violation. Any violation of the self-monitoring reports shall result in the industry retesting for that parameter. The results of the analysis must be submitted to the Utility within 30 days of the industry becoming aware of the violation.

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8. Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. II).

9. Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. II).

**§ 272-65. Accidental discharges. [Amended 12-13-1988]**

- A. Each user shall provide protection from accidental discharge of prohibited materials or other substances regulated by this article. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner's or user's own cost and expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the City for review and shall be approved by the City before construction of the facility. All existing users shall complete such a plan within 90 days of the effective date of the ordinance from which this article derives (Ordinance Number 1-1987). No user which commences contribution to the POTW after the effective date of the ordinance from which this article derives (Ordinance Number 1-1987) shall be permitted to introduce pollutants into the system until accidental discharge procedures have been approved by the City. Review and approval of such plans and operating procedures shall not relieve the industrial user from the responsibility to modify the user's facility as necessary to meet the requirements of this article. In the case of an accidental discharge, it is the responsibility of the user to immediately telephone and notify the POTW of the incident. The notification shall include location of the discharge, type of waste, concentration and volume, and corrective actions. Within five days following an accidental discharge, the user shall submit to the Executive Director a detailed written report describing the cause of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage, or other liability which may be incurred as a result of damage to the POTW, fish kills, or any other damage to person or property, nor shall such notification relieve the user of any fines, civil penalties, or other liability which may be imposed by this Part 2 or other applicable law. A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees whom to call in the event of a dangerous discharge. Employers shall ensure that all employees who may cause or suffer such a dangerous discharge to occur are advised of the emergency notification procedure.
- B. Development of a slug/spill plan. The Utility shall evaluate, at least once every two years, whether each such significant industrial user needs a plan to control slug discharges. For purposes of this subsection, a slug discharge is any discharge of a nonroutine, episodic nature, including but not limited to an accidental spill or a noncustomary batch discharge. The results of such activities shall be available to the approval authority upon request. If the POTW decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements: **[Added 5-31-1994]**
- (1) Description of discharge practices, including nonroutine batch discharges.
  - (2) Description of stored chemicals.
  - (3) Procedures for immediately notifying the POTW of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days.
  - (4) If necessary, procedures to prevent adverse impact from accidental spills,

including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

- C. Discharge of regulated wastes. Pursuant to 40 CFR 403.12(p), all industrial users must notify in writing the Utility, state and EPA of any discharge to the sewer system which would be considered a hazardous waste if disposed of in a different manner. **[Added 5-31-1994]**
- D. Notification of changes in discharge. All industrial users shall promptly notify the POTW in advance of any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the industrial user has submitted initial notification under 40 CFR 403.12(p). The Utility reserves the right to request any additional treatment or costs for an increase in the discharge or its components. **[Added 5-31-1994]**
- E. Notice of potential problems, including slug loading. All categorical and noncategorical industrial users shall notify the POTW immediately of all discharges that could cause problems to the POTW, including any slug loadings, as defined by 40 CFR 403.5(b), by the industrial user. **[Added 5-31-1994]**

#### **§ 272-66. Upset reporting.**

- A. The occurrence of an upset, as defined in § 272-19, shall constitute an affirmative defense for an industrial user to an action brought for noncompliance with national categorical pretreatment standards and local and state requirements only if all the conditions in this section are met. The burden of proof for such upset shall rest on the industrial user. The industrial user must notify the City within one hour of becoming aware of the upset. The industrial user must have evidence to demonstrate the following conditions:
  - (1) An upset occurred and the industrial user can identify the specific cause(s) of the upset.
  - (2) The treatment facility was at the time being operated according to best management practices.
  - (3) The industrial user has submitted the following information within 24 hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within five days):
    - (a) A description of the discharge and cause of noncompliance.
    - (b) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue.
    - (c) Steps being taken and/or planned to reduce, eliminate and prevent

recurrence of the noncompliance.

- B. The industrial user shall control production and all discharges to the extent necessary to maintain compliance with pretreatment standards upon reduction, loss, or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

**§ 272-67. Recordkeeping. [Amended 12-13-1988]**

- A. Any industrial user subject to the reporting requirements established in this section shall maintain records of all information resulting from any monitoring activities required by this article and/or the user's wastewater discharge permit. Such records shall include for all samples:
- (1) The date, exact place, method, and time of sampling and the name(s) of the person(s) taking the samples;
  - (2) The dates analyses were performed;
  - (3) Who performed the analyses;
  - (4) The analytical techniques/methods used; and
  - (5) The results of such analyses.
- B. Any industrial user subject to the reporting requirements established in this article shall be required to maintain for a minimum of three years all records of monitoring activities and results. Records shall be made available for inspection and copying by the Executive Director. The period of retention shall be extended during the course of any unresolved litigation regarding the industrial user or the City. This period may also be extended upon request by the approval authority. **[Amended 5-31-1994]**

**§ 272-68. Sludge documentation. [Amended 12-13-1988]**

The transportation and/or disposal of sludges generated by pretreatment shall be subject to applicable federal, state, and local regulations. The industrial user shall be responsible for documenting the transporting and/or disposal of all pretreatment sludges. Receipts and other documentation shall be kept for a minimum of three years or longer if state or federal laws require and shall be made available to the Executive Director upon request.

**§ 272-69. Disposal of material from interceptors or separators. [Amended 12-13-1988]**

Upon request by the Executive Director, a user having an interceptor or separator must state specifically how the waste oil, grease, solvent, paint, etc., is disposed of and must provide evidence of such disposal service when required by the Executive Director. Records and receipts must be kept which demonstrate that these waste materials were

contained and transported in a safe manner as prescribed by the rules of regulatory agencies, including but not limited to the United States Department of Transportation, and handled by reputable persons who shall dispose of all such wastes in accordance with all federal, state and local regulations.

**§ 272-70. Truth in reporting. [Amended 8-13-1991; 5-31-1994]**

The reports required by this article shall comply with the provisions of the United States Code (918 U.S.C. § 1001) relating to fraud and false statements and the provisions of Section 309(c)(2) of the Act governing false statements, representations or certifications in reports required under the Act.

- A. All applications, reports or information submitted to the Lowell Regional Wastewater Utility must contain the following certification statement, as prescribed by 40 CFR 403.12(1), and signed by the authorized representative or signature authority as described in § 272-19: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- B. All laboratory analysis shall include a signed statement from the laboratory director stating the accuracy and authenticity of the results in accordance with 40 CFR 403.6(a)(2)(ii).

**§ 272-71. Self-monitoring regulations. [Amended 12-13-1988]**

- A. Requirements. Periodic measurements of flow, pollutant concentrations and other appropriate waste characteristics shall be made by those users specifically designated by the Executive Director. The Executive Director shall determine the type of sampling required. Upon request all samples taken by the industrial user shall be divided with the City for testing as specified by the Executive Director. Continuous monitoring may be required in cases involving large fluctuations in quantity or quality of wastes or if the wastewater appears to have characteristics which may damage the treatment system. The acceptability of any monitoring results shall be determined by the Executive Director. Self-monitoring frequency, parameters, and location shall be specified by the Executive Director and stated on the user's discharge permit.
- B. Monitoring facilities. The City shall require to be provided and operated at the user's own expense monitoring facilities to allow inspection, sampling, and flow measurement of the building sewer and/or internal drainage systems. The monitoring facility should normally be situated on the user's premises, but the City may, when such location would be impractical or cause undue hardship on the user,

allow the facility to be constructed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles. There shall be ample room in or near such sampling and preparation of samples for analysis. The facility, sampling, and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the user. Whether constructed on public or private property, the sampling and monitoring facilities shall be provided in accordance with the City's requirements and all applicable local construction standards and specifications. Construction shall be completed within 90 days following written notification by the City.

- C. Analysis. All measurements, tests and analyses of the characteristics of wastewaters to which reference is made in this article shall be determined in accordance with 40 CFR 136 and its amendments. All sampling shall take place at locations designated by the Executive Director after review of an industrial discharge permit application and site investigations, as provided in Subsection B. All requirements for monitoring of wastewater discharges shall be determined by the Executive Director and shall be found in the user's industrial discharge permit. Any costs associated with the sampling and testing of the industry's effluent shall be paid by the individual industry. **[Amended 5-31-1994]**

**§ 272-72. City inspection and sampling. [Amended 12-13-1988]**

- A. The City may inspect the facilities of any user to ascertain whether the purpose of this article is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the Executive Director and his duly authorized employees of the City ready access at all reasonable times to all parts of the premises for the purposes of inspection, observation, measurement, sampling, records examination and copying. The City, EPA and the approval authority shall have the right to set up on the user's property such devices as are necessary to conduct sampling inspection, compliance monitoring and/or metering operations. Where a user has security measures in force which would require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that upon presentation of suitable identification personnel from the City, approval authority and EPA will be permitted to enter, without delay, for the purposes of performing their specific responsibilities.
- B. Unreasonable delay in allowing City personnel, upon presentation of credentials, access to the industrial user's premises is a violation of this Part 2. **[Added 5-31-1994]**

**§ 272-73. Compliance with pretreatment standards. [Amended 5-31-1994]**

- A. Users shall provide necessary wastewater treatment as required to comply with this article and shall achieve compliance with all federal categorical pretreatment standards within the time limitations as specified by the federal pretreatment regulations. Any facilities required to pretreat wastewater to a level acceptable to the City shall be provided, operated, and maintained at the user's expense. Detailed

plans showing the pretreatment facilities and operating procedures shall be submitted to the City for review and shall be acceptable to the City before construction of the facility. The review of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the facility as necessary to produce an effluent acceptable to the City under the provisions of this article. Any subsequent changes in the pretreatment facilities or method of operation shall be reported to and be acceptable to the City prior to the user's initiation of the changes.

B. The Executive Director shall submit an annual report which will summarize the data contained in all permits and monitoring reports by both industrial users and the City and the operating experience of the sewage treatment plant. The intent of this report shall be to compare the total discharge of industrial users with the design capacity of the industrial portion of the sewage treatment plant in each of the applicable aggregate influent parameters: pH, solids, loading, BOD, oil and grease, and metals content.

(1) Local limits. Industrial users shall comply with the following maximum allowable concentrations or loadings for the constituents listed below unless the industry is required to comply with a more-stringent National Categorical Pretreatment Standard (40 CFR, Chapter I, Subchapter N, Parts 405 to 471). The City has the right to adjust these local limits as necessary to reflect changes in the loading conditions at the POTW. Any changes in these limits must first be presented to the City Council for adoption into this article. All changes to the local limits must be approved by the EPA and go through public notice procedures prior to incorporation. **[Amended 1-26-1999; 5-18-1999; 7-24-2018]**

<b>Pollutant<sup>(a)</sup></b>	<b>Daily Maximum Discharge Limit (mg/L)</b>	<b>Maximum Allowable Industrial Loading<sup>(b)</sup> (pounds per day)</b>
Arsenic	0.235	2.662
Cadmium	0.108	1.22
Chromium	4.53	102.56
Copper	3.47	52.42
Lead	0.685	7.768
Molybdenum	0.74	8.43
Mercury	0.028	0.321
Nickel	1.81	8.43
Selenium	0.23	20.55
Silver	0.98	2.61
Zinc	4.5	15.86

NOTES:	
(a)	All pollutants as total and in mg/L, unless otherwise specified.
(b)	These limits are the total mass in pounds per day (lbs/day) that are available to allocate to SIUs and other designated non-SIUs. Allocations are at the sole discretion of the City.

The City may, at its sole discretion, implement local limits through allocation of the maximum allowable industrial load (MAIL) to significant industrial users and other designated non-SIUs that correspond to the uniform concentration local limits shown in the table above.

- (2) Categorical pretreatment standards. This article hereby incorporates the national categorical pretreatment standards found in 40 CFR Chapter I, Subchapter N, Parts 405 to 471. Industries which are covered under these standards must comply with the limits stated for that industry unless the local limits adopted by this article are more stringent for a particular pollutant. The more stringent limit shall always be met by the industry.
- (3) Industrial certification. The City of Lowell requires any person(s) who manages, operates or maintains a facility for treatment of industrial wastewater to be certified as an industrial wastewater treatment operator by the Massachusetts Board of Certification of Operators of Wastewater Treatment Facilities. The certification requirements will be governed by the board of certification for each industry. **[Amended 12-23-2008]**

**§ 272-74. Confidential information. [Amended 12-13-1988; 5-31-1994]**

Information and data on a user obtained from reports, questionnaires, permit applications, permits and monitoring programs and from inspections shall be available to the public or other governmental agency without restriction unless the user specifically requests and is able to demonstrate to the satisfaction of the Executive Director that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the user. If a claim of confidentiality is asserted, the information will be treated in accordance with the procedures in 40 CFR 2. Information claimed as confidential shall be made available, upon written request, to governmental agencies for uses related to this article, the national pollutant discharge elimination system (NPDES) permit, state disposal system permit and/or the pretreatment programs. Wastewater constituents and characteristics will not be recognized as confidential information.

**§ 272-75. Harmful contributions. [Amended 12-13-1988]**

- A. The City may suspend the wastewater treatment service and/or an industrial discharge permit when such suspension is necessary, in the opinion of the Executive Director, in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health or welfare of persons or to the environment, causes interference to the POTW or causes the City to violate

any condition of its NPDES permit.

- B. Any person notified of a suspension of the wastewater treatment service and/or his industrial discharge permit shall immediately stop or eliminate the contribution. In the event of failure of the person to comply voluntarily with the suspension order, or if the discharge appears to present an imminent danger to the health or welfare of persons, the City shall take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW system or endangerment to any individuals. The City shall reinstate the industrial discharge permit and/or the wastewater treatment service upon proof of the elimination of the noncomplying discharge. A detailed written statement submitted by the user describing the causes of the harmful contribution and the measures taken to prevent any future occurrence shall be submitted to the Executive Director within 15 days of the date of occurrence.

**§ 272-76. Revocation of industrial discharge permit.**

Any user which is in violation of this article or applicable state and federal regulations for the following reasons is subject to having his discharge document revoked in accordance with the procedures of § 272-75 and this section:

- A. Failure of a user to factually report the wastewater constituents and characteristics of his discharge.
- B. Failure of the user to report significant changes in operations or wastewater constituents and characteristics.
- C. Refusal of reasonable access to the user's premises for the purpose of inspection or monitoring.
- D. Violation of conditions of the permit.
- E. Falsifying self-monitoring reports. [Added 5-31-1994]
- F. Tampering with monitoring equipment. [Added 5-31-1994]
- G. Failure to meet effluent limitations. [Added 5-31-1994]
- H. Failure to pay fines. [Added 5-31-1994]
- I. Failure to meet compliance schedules. [Added 5-31-1994]

**§ 272-77. Notice of violation.**

- A. Whenever the City finds that any user has violated or is violating this article, the industrial discharge permit, or any prohibition, limitation or requirements contained herein, the City may serve upon such person a written notice stating the nature of violation. Within 30 days of the date of the notice, a plan for the satisfactory correction thereof shall be submitted to the City by the user.
- B. In no way shall it be construed that the issuance of a notification of violation shall

relieve the industry of any enforcement actions by the City for any other violations or continuation of a violation during the thirty-day period. **[Added 5-31-1994]**

**§ 272-78. Falsifying information. [Amended 5-31-1994]**

Any person who knowingly makes false statements, representation or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to this article or the industrial discharge permit or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required under this article shall, upon conviction, be punished by the maximum amount allowable in § 272-82 or by imprisonment for not more than six months, or by both.

**§ 272-79. Charges and fees. [Amended 12-13-1988]**

- A. The Executive Director may adopt charges and fees which may include:
- (1) Fees for reimbursement of costs of setting up and operating the City's pretreatment program.
  - (2) Fees for monitoring, inspection, and surveillance procedures.
  - (3) Fees for reviewing accidental discharge procedures and construction.
  - (4) Fees for permit applications.
  - (5) Fees for filing appeals.
  - (6) Fees for consistent removal by the City's POTW of pollutants otherwise subject to federal pretreatment standards.
  - (7) Other fees as the Executive Director may deem necessary to carry out the requirements contained herein.
  - (8) Fees for processing septage materials transported from member communities. **[Added 4-28-1992]**
- B. These fees relate solely to the matters covered by this article and are separate from all other fees chargeable by the City.

**§ 272-80. Notice of bypass. [Added 8-13-1991]**

- A. If an industrial user knows in advance of the need for a bypass, it shall submit prior notices to the Executive Director or his designee, if possible at least 10 days before the date of bypass.
- B. An industrial user shall submit oral notice of an unanticipated bypass that exceeds applicable pretreatment standards to the Executive Director or his designee within 24 hours from the time the industrial user becomes aware of the bypass. A written submission shall also be provided within five days of the time the industrial user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times,

and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The Executive Director or his designee may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

**§ 272-81. Public notice of significant noncompliance. [Added 8-13-1991; amended 5-31-1994]**

If over a twelve-month period there exists the occurrence of a significant noncompliance, the public shall be made aware of this fact through the publication of said significant noncompliances in the largest daily newspaper in the area, as specified in the public participation requirements of 40 CFR 25 in the enforcement of national pretreatment standards. For the purposes of this section, an industrial user is in significant noncompliance if its violation meets one or more of the following criteria:

- A. Chronic violations of wastewater discharge limits, defined here as those in which 66% or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter.
- B. Technical review criteria (TRC) violations, defined here as those in which 33% or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC equals 1.4 for BOD, TSS, fats, oil, and grease and 1.2 for all other pollutants except pH).
- C. Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the control authority determines has caused, alone or in combination with other discharges, interference or pass-through (including endangering the health of POTW personnel or the general public).
- D. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority to halt or prevent such a discharge.
- E. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance.
- F. Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, ninety-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules.
- G. Failure to accurately report noncompliance.
- H. Any other violation or group of violations which the control authority determines will adversely affect the operation or implementation of the local pretreatment program.



ARTICLE V  
**Legal Action**

**§ 272-82. Violations and penalties. [Amended 5-17-1988; 7-12-1988]**

- A. Any person found to be violating any provision of this Part 2 may be served by the Utility with written notice stating the nature of the violation. Liability is attached immediately to the person found violating any section of this Part 2 or its industrial user discharge permit. All violations of these documents will be subject to enforcement actions. **[Amended 5-31-1994]**
- B. Any person found to be violating any provision of this Part 2 may be subject to a civil penalty and, if found liable for the violation, shall be subject to a civil penalty and upon conviction shall be fined up to \$5,000 a day for each violation back to the first day of the violation in accordance with MGL c. 83, § 10, as amended by Chapter 174, Section 7, of the Acts of 1987. Civil action under this subsection shall be instituted by the City Solicitor's office. **[Amended 8-13-1991; 5-31-1994]**
- C. Any person found to be violating any provision of this Part 2 or any provision of a discharge permit shall be liable for the maximum penalty provided under the Massachusetts General Laws for each violation back to the first day of said violation. **[Amended 8-13-1991]**
- D. Any person violating any of the provisions of this Part 2 shall become liable to the City for any expense, loss or damage occasioned the City by reason of such violation.

**§ 272-83. Show cause hearing.**

- A. The City may order any user which causes or allows an unauthorized discharge to enter the POTW to show cause before the City Council why the proposed enforcement action should not be taken. A notice shall be served on the user specifying the time and place of a hearing to be held by the City Council regarding the violation, the reasons why the action is to be taken, and the proposed enforcement action and directing the user to show cause before the City Council why the proposed enforcement action should not be taken.
- B. The notice of the hearing shall be served personally or by registered or certified mail at least 10 days before the hearing. Service may be made on any agent or officer of a corporation.
- C. The City Council may itself conduct the hearing and take the evidence or may designate any of its members or any officer or employee of the assigned department to:
  - (1) Issue in the name of the City Council notices of hearings requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in such hearing.
  - (2) Take the evidence.

- (3) Transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the City Council for action thereon.
- D. At any hearing held pursuant to this Part 2, testimony taken must be under oath and recorded stenographically. The transcript, so recorded, will be made available to any member of the public or any party to the hearing upon payment of the usual charges therefor.
  - E. After the City Council has reviewed the evidence, it may issue an order to the user responsible for the discharge directing that, following a specified time period, the sewer service be discontinued unless adequate treatment facilities, devices or other related appurtenances shall have been installed on existing treatment facilities, devices or other related appurtenances and are properly operated. Further orders and directives as are necessary and appropriate may be issued.

**§ 272-84. Legal action. [Amended 5-31-1994]**

If any person discharges sewage, industrial wastes, or other wastes into the City's POTW contrary to the provisions of this Part 2, federal or state pretreatment requirements, the industrial discharge permit or any order of the City, the City Council may commence an action for appropriate legal and/or equitable relief in the appropriate court(s) of this county.

**§ 272-85. Amendments.**

Any rules and regulations consistent with this Part 2 (Ordinance Number 1-1987) may be adopted and/or amended by the Executive Director in conformance with MGL c. 83, § 10 after due notice published once a week for three consecutive weeks in a newspaper available to inhabitants of the City.

## **Appendix G: Active Significant Industrial Users (SIUs)**

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Permit No.	Industry	Daily Flow	Address	City	Zip	Email	Phone
5	Specialty Materials, Inc.	10,000	1449 Middlesex St	Lowell, MA	01851	<a href="mailto:spilioglos@specmaterials.com">spilioglos@specmaterials.com</a>	978-322-1927
6	Edwards Vacuum LLC (formerly Brooks Automation)	1,500	15 Elizabeth Drive	Chelmsford, MA	01824	<a href="mailto:robert.knudsen@brooks.com">robert.knudsen@brooks.com</a>	978-262-7778
12	Sutton Brook Disposal Area Superfund Site	30,000	South Street	Tewksbury, MA	01876	<a href="mailto:white.kimberly@epa.gov">white.kimberly@epa.gov</a>	617-918-1752
14	Interstate Container <b>**CLOSED**</b>		240 Industrial Avenue	Lowell, MA	01851		978-458-4555
19	M/A Com Technology Solutions (Chelmsford St.)	190,000	100 Chelmsford Street	Lowell, MA	01851	<a href="mailto:robert.harden@macom.com">robert.harden@macom.com</a>	978-656-2969
22	Thermo Fisher Scientific	500	2 Radcliff Road	Tewksbury, MA	01876	<a href="mailto:edward.lane@thermofisher.com">edward.lane@thermofisher.com</a>	978-513-3613
25	Fleetwash, Inc.	2,500	91 Maple Street	Lowell, MA	01852	<a href="mailto:JamesD@Fleetwash.com">JamesD@Fleetwash.com</a>	201-704-3231
29	Synthetic Labs	2,000	24 Victory Lane	Dracut, MA	01826	<a href="mailto:mhosmer@syntecpro.com">mhosmer@syntecpro.com</a>	978-957-2919
35	Cirtec Medical (Formerly Metrigraphics)	3,000	1001 Pawtucket Boulevard	Lowell, MA	01854	<a href="mailto:Robert.Trepanier@cirtecmed.com">Robert.Trepanier@cirtecmed.com</a>	978-703-4155
40	Texas Instruments	8,000	150 Phoenix Avenue	Lowell, MA	01851	<a href="mailto:chris.nitchie@tetrattech.com">chris.nitchie@tetrattech.com</a>	508-903-2363
44	Lowell General Hospital	125,000	295 Varnum Avenue	Lowell, MA	01854		978-937-6000
47	Lowell General Hospital (Saints Campus)	100,000	1 Hospital Drive	Lowell, MA	01852		978-458-1411
52	3-M	45,000	279 Billerica Road	Chelmsford, MA	01824	<a href="mailto:tbrenner@mmm.com">tbrenner@mmm.com</a>	978-256-3911
55	Mar Cor Purification	20,000	160 Stedman Street	Lowell, MA	01851	<a href="mailto:skula@mcpur.com">skula@mcpur.com</a>	978-453-9600
56	Cassidy/Culligan	10,000	39 Chelmsford Street	Lowell, MA	01851	<a href="mailto:tcassidy@cassidywater.com">tcassidy@cassidywater.com</a>	978-454-8896
57	JapEnamelLac	15,000	25 Katrina Road	Chelmsford, MA	01824	<a href="mailto:Steve.Sack@paceind.com">Steve.Sack@paceind.com</a>	978-256-2212
58	EVOQUA Water Technologies	75,000	10 Technology Drive	Lowell, MA	01851	<a href="mailto:charles.kidder@evoqua.com">charles.kidder@evoqua.com</a>	978-614-7429
61	Coating Systems	65,000	90 Phoenix Avenue	Lowell, MA	01852	<a href="mailto:jarrodc@coatingsystemsgroup.com">jarrodc@coatingsystemsgroup.com</a>	978-937-3712
64	Tanner Street Generation	250,000	2 Tanner Street	Lowell, MA	01852	<a href="mailto:scoughlin@heorotpower.com">scoughlin@heorotpower.com</a>	978-446-5095
66	Arlin Manufacturing Company	5,000	239 Industrial Avenue East	Lowell, MA	01853	<a href="mailto:pmitchell@arlinmfg.com">pmitchell@arlinmfg.com</a>	978-454-9165
68	University of Massachusetts- Lowell	20,200	220 Pawtucket Street	Lowell, MA	01854		978-934-4000
70	Silresim Superfund Site	57,600	86 Tanner Street	Lowell, MA	01853	<a href="mailto:Golden.Derrick@epa.gov">Golden.Derrick@epa.gov</a>	617-918-1448
76	Starflex	5,000	52 Meadowcroft Street	Lowell, MA	01824	<a href="mailto:dave.breslin@starflex.com">dave.breslin@starflex.com</a>	978-937-3889
79	Photo Etch	1,000	71 Willie Street	Lowell, MA	01854	<a href="mailto:Don.Peterson@stencil.com">Don.Peterson@stencil.com</a>	978-805-5001

Permit No.	Industry	Daily Flow	Address	City	Zip	Email	Phone
83	Cintas	110,000	200 Apollo Drive	Chelmsford, MA	01824	<a href="mailto:TorrisiN@cintas.com">TorrisiN@cintas.com</a>	978-244-6746
84	T&T Anodizing, Inc.	10,000	35 Maple Street Unit 1-8	Lowell, MA	01852	<a href="mailto:joe@ttanodizing.com">joe@ttanodizing.com</a>	978-454-9631
85	Charles George Landfill	86,400	Corner of Dunstable & Cummings Road	Tyngsborough, MA	01879	<a href="mailto:Fisher.Richard@epa.gov">Fisher.Richard@epa.gov</a>	617-918-1721
87	EVOQUA Water Technologies	50,000	558 Clark Road	Tewksbury, MA	01876	<a href="mailto:charles.kidder@evoqua.com">charles.kidder@evoqua.com</a>	978-614-7429
88	Thermo Fisher Scientific	10,000	22 Alpha Road	Chelmsford, MA	01824	<a href="mailto:cynthia.lefave@thermofisher.com">cynthia.lefave@thermofisher.com</a>	978-232-6054
93	Microsemi Corp-RFIS Diode Solutions	20,000	75 Technology Drive	Lowell, MA	01851	<a href="mailto:cynthia.lefave@thermofisher.com">cynthia.lefave@thermofisher.com</a>	978-442-5662
96	Middlesex Community College	2,000	33 Kearney Square	Lowell, MA	01852	<a href="mailto:MORANDEH@middlesex.mass.edu">MORANDEH@middlesex.mass.edu</a>	978-656-3217
97	EPA LAB New England	2,000	11 Technology Drive	Chelmsford, MA	01863	<a href="mailto:Sullivan.troy@epa.gov">Sullivan.troy@epa.gov</a>	617-918-8678
98	Four-in-One	5,000	12 Alpha Road	Chelmsford, MA	01824	<a href="mailto:ceaster@fourinone.com">ceaster@fourinone.com</a>	978-250-0751
99	Marine Polymer Technologies	20,000	59 Lorum Street	Tewksbury, MA	01876	<a href="mailto:BMorin@webmpt.com">BMorin@webmpt.com</a>	978-640-6926
HW001	Waste Management of NH	100,000	200 Rochester Nec Road	Rochester, NH	03839		800-963-4776

## **Appendix H: High Flow Management Protocol**

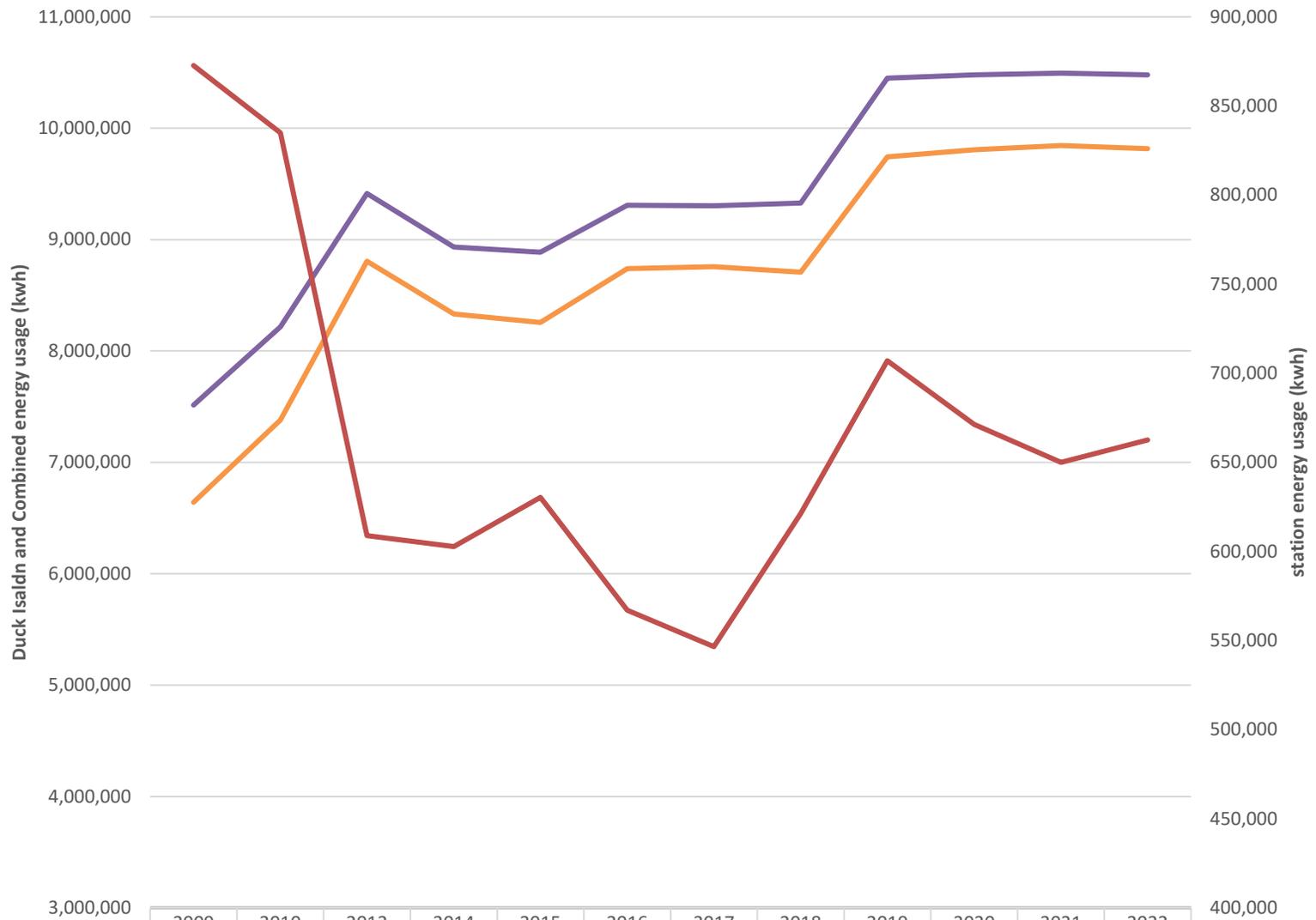
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## **Appendix I: Collection System Energy Cost and Consumption**

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# ELECTRICAL USAGE LOWELL REGIONAL WASTEWATER UTILITY



	2009	2010	2012	2014	2015	2016	2017	2018	2019	2020	2021	2022
Station & Duck Island Total (kWh)	7,514,29	8,215,76	9,414,81	8,934,08	8,887,14	9,307,64	9,302,71	9,328,26	10,449,8	10,478,8	10,494,7	10,479,0
Duck Island Total (kWh)	6,641,60	7,380,80	8,806,00	8,331,38	8,256,79	8,740,69	8,756,13	8,707,02	9,742,77	9,807,63	9,844,79	9,816,52
Yearly Station (kWh)	872,690	834,966	608,811	602,699	630,350	566,951	546,584	621,245	707,067	671,239	649,915	662,569

## Fiscal Year Electric Energy Use Summary

Facility	Type of Facility	2015		2016		2017		2018	
		kWhs	Annual Cost						
219 Jackson St	Pump Station	2,927	\$660	2,483	\$599	7,295	\$1,563	6,709	\$1,553
Pawtucket Blvd	Pump Station	107,240	\$22,023	83,680	\$17,460	92,680	\$18,937	107,120	\$20,216
Cannington	Pump Station	751	\$217	621	\$202	721	\$230	1,888	\$439
Chelmsford Street	Pump Station	34,920	\$7,248	44,400	\$9,141	45,680	\$9,350	49,320	\$9,168
Warren Street	CSO	34,423	\$7,024	40,887	\$8,379	41,369	\$8,469	39,736	\$7,529
First Street Blvd (pole 45)	Misc	1,556	\$388	1,846	\$482	1,910	\$503	1,943	\$357
Freda Lane	Pump Station	7,414	\$1,524	8,600	\$1,792	7,600	\$1,653	8,129	\$1,606
DPW Trotting Park Rd.	Pump Station	1,548	\$318	2,106	\$468	3,449	\$800	2,055	\$509
East Merrimack Street	Metering Station	2,956	\$550	2,958	\$696	2,392	\$599	1,384	\$382
408 Lakeview Avenue	CSO	2,286	\$681	1,689	\$449	5,659	\$672	92,114	\$17,119
<b>First Street WWTF</b>	<b>WWTF</b>	<b>8,256,795</b>	<b>\$1,063,020</b>	<b>8,740,694</b>	<b>\$1,101,078</b>	<b>8,756,133</b>	<b>\$1,279,242</b>	<b>8,707,020</b>	<b>\$1,357,505</b>
Martin Street/Beaver Brook	CSO	59,400	\$8,140	63,600	\$8,174	60,000	\$8,918	50,400	\$9,757
1st Street	Misc	760	\$251	644	\$245	671	\$255	1,307	\$357
DPW First Street Blvd	Misc	90	\$136	6	\$121	14	\$123	2	\$120
25 School Street	Pump Station	2,708	\$616	2,530	\$615	2,807	\$683	2,579	\$600
Hadley St./Princeton Blvd	Pump Station	67,364	\$12,921	59,917	\$12,430	64,776	\$13,252	74,319	\$13,883
Varnum Avenue	Pump Station	65,600	\$13,714	50,600	\$10,441	55,900	\$11,422	63,800	\$12,026
E. Merr & Barasford Is	CSO	130,800	\$24,930	97,800	\$20,444	67,200	\$13,800	45,000	\$8,827
Pawtucket/Walker Street	CSO	34,200	\$5,979	34,600	\$7,063	27,600	\$5,712	21,400	\$4,111
Tilden	CSO	61,800	\$10,730	58,200	\$10,891	53,700	\$11,237	49,500	\$9,748
Perkins	Misc	12,200	\$1,888	10,300	\$1,657	10,500	\$1,927	8,700	\$1,701
Willard St	Misc	748	\$255	625	\$242	653	\$251	549	\$224
<b>Stations Only</b>		<b>630,350</b>	<b>\$120,718</b>	<b>566,951</b>	<b>\$112,491</b>	<b>546,584</b>	<b>\$110,858</b>	<b>621,245</b>	<b>\$120,233</b>
<b>WWTF Only</b>		<b>8,256,795</b>	<b>\$1,063,020</b>	<b>8,740,694</b>	<b>\$1,101,078</b>	<b>8,756,133</b>	<b>\$1,279,242</b>	<b>8,707,020</b>	<b>\$1,357,505</b>
<b>Totals</b>		<b>8,887,145</b>	<b>\$1,183,738</b>	<b>9,307,645</b>	<b>\$1,213,569</b>	<b>9,302,717</b>	<b>\$1,390,100</b>	<b>9,328,265</b>	<b>\$1,477,738</b>

Facility	Type of Facility	2019		2020		2021		2022	
		kWhs	Annual Cost						
219 Jackson St	Pump Station	4,657	\$1,164	5,485	\$1,285	5,482	\$1,329	3,904	\$1,093
Pawtucket Blvd	Pump Station	106,760	\$18,896	83,880	\$16,214	104,560	\$20,613	137,280	\$0
Cannington	Pump Station	1,781	\$395	1,821	\$285	1,325	\$364	1,214	\$363
Chelmsford Street	Pump Station	56,920	\$10,171	55,840	\$10,904	53,062	\$9,742	44,040	\$9,153
Warren Street	CSO	40,962	\$7,314	27,432	\$5,394	23,381	\$4,671	29,358	\$6,055
First Street Blvd (pole 45)	Misc	2,007	\$473	2,063	\$516	1,263	\$359	2,136	\$555
Freda Lane	Pump Station	13,788	\$2,545	8,578	\$1,770	8,285	\$1,737	9,600	\$2,078
DPW Trotting Park Rd.	Pump Station	1,554	\$383	2,061	\$535	3,804	\$940	2,646	\$692
Burnham Rd, Tewksbury	Metering Station		\$0		\$0		\$0		\$0
East Merrimack Street	Metering Station	2,455	\$550	1,856	\$477	1,572	\$428	1,619	\$450
Bachman St, Dracut	Metering Station		\$0		\$0		\$0		\$0
408 Lakeview Avenue	CSO	49,070	\$8,744	49,561	\$9,607	49,562	\$9,804	51,002	\$10,500
<b>First Street WWTF</b>	<b>WWTF</b>	<b>9,742,772</b>	<b>\$1,497,322</b>	<b>9,807,635</b>	<b>\$1,573,859</b>	<b>9,844,793</b>	<b>\$1,683,911</b>	<b>9,816,529</b>	<b>\$1,747,995</b>
Martin Street/Beaver Brook	CSO	133,200	\$19,766	106,800	\$7,560	70,200	\$12,057	41,891	\$8,623
1st Street	Misc	2,750	\$603	2,763	\$651	2,688	\$644	2,708	\$672
DPW First Street Blvd	Misc	3	\$121	0	\$120	3	\$121	8	\$122
25 School Street	Pump Station	2,781	\$608	2,291	\$564	3,423	\$792	4,795	\$1,097
Hadley St./Princeton Blvd	Pump Station	96,858	\$17,188	129,370	\$25,080	87,487	\$17,228	85,772	\$17,622
Varnum Avenue	Pump Station	69,700	\$12,377	68,400	\$13,270	59,900	\$11,837	69,400	\$14,262
E. Merr & Barasford Is	CSO	45,000	\$8,015	48,600	\$9,559	101,400	\$19,959	115,200	\$23,563
Pawtucket/Walker Street	CSO	25,000	\$4,518	24,800	\$4,877	30,200	\$6,029	18,200	\$3,831
Tilden	CSO	48,000	\$8,395	47,100	\$8,886	39,000	\$7,825	36,000	\$7,758
Perkins	Misc	7,800	\$1,334	7,500	\$812	8,800	\$1,755	9,700	\$2,059
Willard St	Misc	678	\$238	523	\$221	0	\$120	0	\$120
Tanner St - CLOSED	Misc	0	\$1,164	0	\$10,171				
<b>Stations Only</b>		<b>707,067</b>	<b>\$123,797</b>	<b>671,239</b>	<b>\$118,587</b>	<b>649,915</b>	<b>\$128,356</b>	<b>662,569</b>	<b>\$110,667</b>
<b>WWTF Only</b>		<b>9,742,772</b>	<b>\$1,497,322</b>	<b>9,807,635</b>	<b>\$1,573,859</b>	<b>9,844,793</b>	<b>\$1,683,911</b>	<b>9,816,529</b>	<b>\$1,747,995</b>
<b>Totals</b>		<b>10,449,839</b>	<b>\$1,621,119</b>	<b>10,478,874</b>	<b>\$1,692,446</b>	<b>10,494,708</b>	<b>\$1,812,268</b>	<b>10,479,098</b>	<b>\$1,858,662</b>