

Tighe&Bond

Jericho-Brandon Study Area Town of Dudley, Massachusetts

Jericho-Brandon Infrastructure Planning Project

Prepared For: Town of Dudley 71 West Main Street Dudley, Massachusetts

June 2021

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Section 1 **Project Information**

1.1 Introduction

The Jericho-Brandon Study Area (Area), located within southeast Dudley Massachusetts, encompasses the historic Jericho neighborhood and the adjacent Brandon Road vicinity. This Area historically provided housing for the nearby mill workers and has since remained primarily residential with most housing dating from the late 1800s to the early and middle 1900s. Current infrastructure within the Area has been installed through the years by various entities, including the Town of Dudley (Town), private contractors, and residential developers.

The Area's proximity to Dudley Elementary School, Dudley's West Main corridor, and downtown Webster makes it desirable for walking. However, the deteriorated, noncompliant sidewalks make it dangerous for pedestrians. Stormwater from the Area eventually flows to the Potash Brook and French River. Due to the limited and aging drainage infrastructure throughout the Area, and the Brandon neighborhood's terrain, stormwater causes erosion, yard/basement flooding, and icy conditions in the winter. The Area is serviced by sewer and water, both with differing main sizes causing flow issues and concern. Sewers date back to circa 1940 and suffer from groundwater infiltration and illicit flow, tree root intrusion, regular backups, and difficult maintenance access to portions within private properties without easements. Water mains have seen modest improvement since installation in the early 1900s and suffer from break prone asbestos cement mains, inadequate capacity, and lack of loop connections.

The primary goal of this infrastructure evaluation is to assist the Town in identifying the current condition of the existing infrastructure and to aid the Town in making informed decisions about potential infrastructure improvements. The Town received funds for the Jericho-Brandon Infrastructure Improvement Project (Project) through the Fiscal Year 2019 Community Development Fund (CDF) to conduct professional infrastructure planning services related to the Area. The Central Massachusetts Regional Planning Commission (CMRPC) is assisting the Town with the grant implementation and administration of the Project. Tighe & Bond is working with CMRPC and the Town to provide a comprehensive master plan for needed infrastructure improvements in the Area.

Following completion of the master plan development, it is anticipated that the Town will submit applications through the Community Development Block Grant (CDBG) program, or other similar grant programs to assist in financing future infrastructure improvements. To receive CDBG funding a project must demonstrate how it meets one of three objectives, including benefit to low and moderate-income communities, prevention or elimination of slums or blight, or urgent need.

1.2 Base Plan Development

The first task undertaken in the creation of this master plan was to develop a base plan for the Area. The base plan of the Area was developed by an aerial survey which was conducted within the Town rights-of-way and extended 100 feet beyond each roadway centerline. The information gathered from the aerial survey was supplemented by a ground survey which tied in project survey control and obtained additional utility Jericho-Brandon Infrastructure Planning Project

information. The ground survey included two-foot topographic contours, assessor map property line information, visible surface features, utility structures, pipe sizes, inverts, and pipe types. Available record utility information from the Town and other utility owners was reviewed and incorporated into the base mapping plans.

Information or data gaps that could not be reconciled by survey or record drawings were further supplemented by internal knowledge of key staff. Representatives from the Town Highway, Water, and Sewer Departments were interviewed to provide insight and institutional knowledge of the existing infrastructure.

Appendix B contains the 40-scale base plans developed for the Area. It is anticipated that the base mapping provided as part of this master plan will be utilized by the Town for future engineering design of infrastructure projects.

1.3 Site Investigations and Rating System

Upon completion of the base plans, initial on-site investigations of the Area were conducted to assess surface and subsurface infrastructure conditions. This effort included field infrastructure assessment and GIS database development to organize and quantify public infrastructure features into defined condition categories. The conditions assessment categories are defined by the Massachusetts Department of Housing and Community Development (DHCD) ratings system. The ratings, as they pertain to public infrastructure, are defined in the Fiscal Year 2020 CDBG Application Guidance Package as follows:

Excellent: Infrastructure is newer and/or improved and updated to meet current need and demand, is compliant with all applicable codes and requirements, and has no visual or physical evidence of deterioration or needed repair.

<u>Good</u>: Infrastructure such as streets and sidewalks show minor cracks, unevenness and patching. No visible or known evidence of deficiencies with water, sewer, or drainage systems.

Fair: Infrastructure, including parks, playgrounds and parking facilities, is older and needs regular maintenance and repair. Streets and sidewalks are cracked, uneven, patched, and not conducive to convenient pedestrian and/or vehicular travel. Slow drainage causes some ponding to occur during heavy rains.

Poor: Infrastructure, including parks, playgrounds and parking facilities show advanced stages of deterioration and appear to not to have been maintained for an extensive period of time. Streets and sidewalks and other paved surfaces are rutted, cracked, heaving and appear to require full reconstruction. Curb reveals are minimal or nonexistent. Conditions may pose hazards to pedestrian and/or vehicular travel. Some surfaces are severely deteriorated, and infrastructure is generally antiquated, undersized, or obsolete. Regular street flooding occurs due to poor drainage.

Sections 2 and 3 of the report summarize the investigations performed to assign a rating to each component of the infrastructure assessment.

1.4 Priority Project Development

Upon completion of the base mapping and infrastructure assessment, 5 priority project areas were selected for a total of 8 priority projects. Tighe & Bond developed conceptual design drawings and estimated project costs for each of the 8 proposed projects. Conceptual project drawings and detailed cost breakdowns are provided for each priority project for the Town and CMRPC to use in grant applications to secure funding. The proposed conceptual improvement drawings and priority projects are discussed in Section 4 of the report and provided in Appendix F.

Section 2 Inventory and Database Development

2.1 Existing Conditions Inventory

In July 2020 Tighe & Bond performed a field inventory within the limits of the Area to assess the infrastructure. The Jericho and Brandon neighborhood areas are comprised of approximately 42 acres and 87 acres, respectively, for a total of approximately of 129 acres. A Locus Map provided as Figure 1 in Appendix A, presents the geographical area within the larger region. A Study Area Map, provided as Figure 2 in Appendix A, further details the Area's boundaries.

Using a Global Positioning System (GPS) unit, Tighe & Bond performed a field inventory to locate and record various information about each public infrastructure component. To provide a graphical representation of the data obtained in the field, Tighe & Bond analyzed it spatially with Geographic Information System (GIS) software and generated maps and tables of the inventory data presented in this report. Tighe & Bond evaluated each public infrastructure component based on the rating system outlined in the DHCD CDBG application, as noted above. Pavement surfaces, parking lots, curbing, sidewalks, ramps, crosswalks, evident walking hazards, drainage structures, drainage concerns, water hydrants, and sewer manholes were visually observed and documented in real-time during the inventory using GPS. The following roads, or portions thereof, were evaluated:

Jericho

- Chestnut Street
- Green Street
- West Street
- Oak Street

Brandon

- Progress Avenue
- Prospect Avenue
- View Street
- Love Circle
- Hill Court
- James Street
- Williams Street
- Marshall Terrace

- Saenger Street
- School Court
- Ardlock Place
- Curfew Lane
 - Sixth Avenue
 - Fifth Avenue
 - Fourth Avenue
 - Third Avenue
 - Second Avenue
 - First Avenue
 - Warsaw Avenue
 - Warsaw Avende
 Wooddell Road

- Mill Street
- Oxford Avenue
- Pine Street
 - Village Street
 - Fairview Avenue
 - Didonato Terrace
 - Ellis Avenue
 - Menzone Drive
 - Donna Lane
 - Brandon Road
 - George Street
- 2.2 Subsurface Utility Inventory

Subsurface utility data included record information provided by the Town and utility owners supplemented by field data and institutional knowledge. Drainage system data was based on information collected by Sherman & Frydryk, LLC during the development of the survey base plan, observations during Tighe & Bond's field investigations, and input from the Town. The sanitary sewer data was based on a Sewer System Site map developed by Tighe & Bond, dated 2018, information collected by Sherman & Frydryk, LLC, during the survey base plan development, input from the Town, and observations from the closed-circuit television video (CCTV) work performed as part of the investigation. As part of a previous Mass GIS grant, the Town had its sewer system mapped, and in 2018 Tighe & Bond developed an overall Sewer Systems Site Plan utilizing the mapping results. This Sewer Systems Site Plan includes some installation dates and materials of construction but does not include any projects completed since 2018. Discussions with the Water and Sewer Department provided some confirmation and additional information regarding approximate installation dates and materials of construction for the sanitary sewer system for the Area.

The water main data was based on a water distribution map developed by Tighe & Bond, dated 2019, information collected by Sherman & Frydryk, LLC during the development of the survey base plan, and "*The History of the Dudley Water Department Report*" provided by the Water and Sewer Department. In 2019 Tighe & Bond Developed a Water Distribution Map from various hand-drawn maps provided by the Town, however the map has not been updated with any recent projects since 2019 and does not include installation dates or materials. Discussions with the Water and Sewer Department provided approximate materials of construction for the water mains in the Area.

Interviews with the Town Planner, and Highway, Sewer, and Water Departments occurred in September and October 2020. The interviews included discussions regarding any concerns within the study area pertaining to the storm drain, sanitary sewer, and water distribution systems, as well as filling data gaps with institutional knowledge. The meeting's discussions identified several areas of major concern, detailed in Section 3.

Section 3 Findings

Tighe & Bond evaluated and detailed each infrastructure component, as outlined in the above sections, utilizing the DHCD rating system for each street in the Area. The data was compiled into spreadsheets for tabulation. The compiled field data spreadsheets are summarized in the following sections of this report, and full data tables are provided in Appendix C. DHCD CDBG Rating Sheets, outlining the infrastructure assessed on each street, are provided in Appendix D.

3.1 Public Way Infrastructure

The public way surface infrastructure inventory components included pavement surfaces (both roadway and parking areas), curbing, sidewalks, and ramps. Each component was assigned a rating and is summarized in the tables in subsequent paragraphs below. Categorization was based on visual observation of condition and included the following considerations for each public way surface feature:

Roadway Surface/Public Parking

• Cracking, Patching, Rutting, and Heaving

Curbing

- Material and Reveal Height
- Lack of Proper Curbing

Sidewalks

- Spalling, Cracking, and Settling
- General Walkability including:
 - ADA compliance
 - Evident walking hazards
 - o Crosswalks
 - Protective measures

3.1.1 Pavement

The Area consists of approximately 31,442 linear feet of paved roadway surface and an additional 2,110 square feet of paved public parking lots. Most of the streets have unofficial on-street parking. In general, pavement conditions vary from fair to excellent. Photos 1 and 2 represent areas showing the pavement surface conditions most observed throughout the Area.



Photo 1: Good Pavement Surface



Photo 2: Fair Pavement Surface

Table 3.1 summarizes roadway pavement conditions observed throughout the Area.

Table 3.1: Pavement Condition (Roadway)			
	Linear Feet	Percentage of Total	
Excellent	8,703 ft	27.7%	
Good	12,468 ft	39.7%	
Fair	8,382 ft	26.7%	
Poor	1,888 ft	6.0%	
Total	31,442 ft	100%	

As indicated in Table 3.1, 27.7% of the roadway surfaces are of excellent condition with no needed repair. 39.7% of the roadway surfaces are in good condition and may require some cosmetic maintenance such as crack sealing. The remaining 32.7% of the roadway surface, designated as fair or poor, may require structural rehabilitation upon further evaluation.

Pavement condition within the public parking lot was designated as "good". Private parking facilities were excluded from this study. Table 3.2 presents overall pavement conditions for the parking area, including the number of parking spaces.

	Area (square feet) (# of Spaces)	Percentage of Total
Excellent	0 sf (0 spaces)	0.0%
Good	2,110 sf (8 spaces)	100.0%
Fair	0 sf (0 spaces)	0.0%
Poor	0 sf (0 spaces)	0.0%
Total	2,110 sf (8 spaces)	100%

Table 3.2: Pavement Condition (Parking Areas)

As indicated in Table 3.2, the parking lot's parking area surface is in good condition and may only require some cosmetic maintenance such as crack sealing upon further evaluation.

Figures 3A and 3B provided in Appendix A, provide a graphical representation of roadway and parking lot surfaces' locations and classifications. Specific roadway condition data, broken down by road name, is provided in Appendix C, Table 1. Parking lot condition data is provided in Appendix C, Table 2.

3.1.2 Curbing

Curbing materials within the Area vary and include granite, cement concrete and bituminous concrete berm. Curb reveals vary considerably from a typical six-inch height to flush with the roadway. In general, curbs are predominantly in fair to good condition when present, however a large portion of the roadways do not have curbing. Repair and/or replacement of curbing is often completed coincidental to roadway improvement. Roadways previously identified as needing pavement improvements will also likely receive curbing enhancements on an as needed basis. Granite or cement concrete existing curbing in excellent or good condition can potentially be reused during future construction efforts.

Photos 3 and 4 represent areas showing the curb conditions most observed throughout the Area.



Photo 3: Good Curb

Photo 4: Fair Curb

Table 3.3 summarizes curbing conditions observed throughout the Area.

	Linear Feet	Percentage of Total
Excellent	2,937 ft	11.5%
Good	15,304 ft	59.8%
Fair	6,045 ft	23.6%
Poor	1,307 ft	5.1%
Total	25,592 ft	100%

Table 3.3: Curbing Condition

As indicated in Table 3.3, 29.7% of the curbing is in fair to poor condition, and may require replacement, while the remaining 71.3% of the curbing is in good or excellent condition.

Figure 4A and 4B provided in Appendix A, provide a graphical representation of curbing locations and classifications. Curbing condition data, broken down by road name, is provided in Appendix C, Table 3.

3.1.3 Sidewalks

Sidewalk materials are primarily bituminous concrete; however, some cement concrete sections are present. Sidewalks are predominantly in poor to good condition. Only 15% of existing sidewalks are in the Brandon neighborhood, and the remaining 85% are in the Jericho neighborhood. Photos 5 through 7 represent the sidewalk conditions most observed throughout the Area.



Photo 5: Good Sidewalk

Photo 6: Fair Sidewalk

Photo 7: Poor Sidewalk

Table 3.4 summarizes sidewalk conditions observed throughout the Area.

	Sidewalk Suitace	Condition
	Linear Feet	Percentage of Total
Excellent	1,259 ft	9.0%
Good	5,167 ft	36.9%
Fair	3,675 ft	26.3%
Poor	3,892 ft	27.8%
Total	13,993	100%

Table 3.4: Sidewalk Surface Condition

As indicated in Table 3.4, 45.9% of the sidewalks are in excellent or good condition and may require some cosmetic maintenance. The remaining 54.1% of the sidewalks, those designated as being in fair or poor condition, likely require sub base improvement and complete replacement. A majority of the sidewalks also do not comply with accessibility guidelines with regard to slope, obstructions, and walkability.

Figures 5A and 5B provided in Appendix A, provide a graphical representation of sidewalk locations and classifications. Sidewalk condition, broken down by road name, is provided in Appendix C, Table 4.

3.1.4 Ramps, Crosswalks & Evident Walking Hazards

Sidewalk ramps were evaluated based on the physical condition as well as compliance with accessibility guidelines. Based on our assessment, it appears that 91.3% of the evaluated ramps are non-compliant with current accessibility guidelines. Additionally, there are ramps that are entirely missing. With respect to condition, the majority of the ramps present were rated poor to good. Table 3.5 summarizes ramp conditions observed throughout the Area.

Table 5.5. Ramp condition		
	Number of Ramps	Percentage of Total
Excellent	4	8.7%
Good	17	37.0%
Fair	13	28.3%
Poor	12	26.1%
Total	46	100%

able 3.5: Ramp Condition

As indicated in Table 3.5, 8.7% of the ramps are in excellent condition and meet accessibility requirements. 37.0% of the ramps are in good condition, being passable for some disabled, elderly, and those with strollers but not compliant with accessibility requirements. The remaining 54.4% of the ramps, those designated as being in fair or poor condition, are unusable for the disabled, elderly, and those with strollers. Photo 8 represents an area that does not have a ramp and Photo 9 is a ramp that does not meet accessibility requirements.



Photo 9: No Ramp

Photo 8: Non-Compliant Ramp

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Obstacles can be present besides flawed sidewalks and ramps that cause walking hazards. Some of the obstacles to pedestrian traffic found in the Area were roots, vegetation, cars, and failing walls. In addition to the evident walking hazards observed, there is only one crosswalk in the Area located on Brandon Road. The large lack of crosswalks is a concern for pedestrian safety when crossing the roadways. Photo 10 is a wall and vegetation that is obstructing the sidewalk representing an evident walking hazard.



Photo 10: Evident Walking Hazard

Table 3.6 summarizes the number of evident walking hazards observed throughout the Area.

Street	Number of Hazards
Brandon Road	1
Green Street	1
Mill Street	1
Pine Street	1
Village Street	1
West Street	1
Total	6

Table 3.6: Evident Walking Hazard

As indicated in Table 3.6, evident walking hazards are mostly present in the Jericho neighborhood.

Figures 6A and 6B provided in Appendix A, provide a graphical representation of ramp locations and classification and evident walking hazard locations. Ramp condition, broken down by road name, is provided in Appendix C Table 5. Evident walking hazard detailed descriptions and field photographs are provided in Appendix C Table 6.

3.2 Subsurface Infrastructure

Subsurface infrastructure was evaluated using record data from the Town, the survey base plan and data previously collected by Tighe & Bond. Piping materials and installation dates generally dictate the longevity of public infrastructure, such as storm drainage, sewer, and water. Furthermore, soil conditions may impact certain piping materials. For purposes of this study, Tighe & Bond generally assessed all subsurface infrastructure based on age and pipe materials. Using input from the Town, observations from the August 2018 Infiltration and Inflow Analysis Report, and observations from the CCTV work performed as part of the investigation, spot-specific conditions were also assigned.

3.2.1 Storm Drainage

Storm drainage infrastructure is limited within the Area and is comprised of catch basins, drainage manholes, and piping. The majority of the drainage pipes are corrugated metal pipe. According to the Town, most of the storm drainage system dates back to the early 1900's. The field inventory task included visual assessment of catch basins to observe the functionality of each basin. Numerous basins throughout the study area were filled with sediment making observation of the piping difficult.

Overall, the storm drain system appears to be in poor to fair condition. Photos 11 and 12 represent catch basin conditions most observed throughout the Area.



Photo 11: Fair Catch Basin

Photo 12: Poor Catch Basin

The most notable drainage concern identified by the Highway Department is the lack of drainage infrastructure in the Brandon neighborhood, especially on Brandon Road. Stormwater runoff from the neighborhood flows to Brandon Road, where it flows down the hill unchecked and pools on Schofield Ave. Additionally, during a field visit by Tighe & Bond, a resident expressed concern of stormwater flowing unchecked down Warsaw Ave. and pooling on Fairview Ave. and in the yard of 23 Fairview Ave. Table 3.7 summarizes storm drainage pipe conditions and Table 3.8 summarizes storm drainage structure conditions throughout the Area.

	Lineal Feet	Percentage of Total	
Excellent	- ft	0.0%	
Good	487 ft	9.3%	
Fair	3,439 ft	66.0%	
Poor	1,285 ft	24.7%	
Total	5,211 ft	100%	

As indicated in Table 3.7, 90.7% of drainage pipe infrastructure needs repairs or replacement (rated as fair or poor condition).

	# of Structures	Percentage of Total
Excellent	2	3.3%
Good	28	46.7%
Fair	22	36.7%
Poor	8	13.3%
Total	60	100%

Table 3.8. S	torm Drainage	Structure	Condition
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As indicated in Table 3.8, 50% of drainage structure infrastructure needs repairs or replacement (rated as fair or poor condition).

Figures 7A and 7B provided in Appendix A, provide a graphical representation of storm drainage infrastructure locations and classifications. Detailed data sheets are provided in Appendix C, Tables 7 and 8.

Tighe & Bond also observed notable drainage concerns where storm drainage infrastructure currently is not present. Most of these observations are areas where erosion is occurring along the side of the road. Roads experiencing erosion include the following:

- View Street
- Fourth Ave
- Fifth Ave
- Ellise Ave
- Mill Street
- Chestnut Street
- Green Street
- Oxford Ave
- School Court

Photos 13 and 14 represent areas showing erosion due to no drainage infrastructure and no curbing.

Photo 13: View Street Erosion

Photo 14: Fifth Ave Erosion

3.2.1.1 Storm Drainage Conceptual Layout

Based on the observed drainage infrastructure condition and observed and discussed drainage concerns, Tighe & Bond developed conceptual design drawings for the drainage improvements in the Jericho and Brandon neighborhoods depicting proposed catch basins, drainage manholes, piping, and outfall locations. Conceptual design drawings are provided in Appendix E and design considerations of the stormwater conceptual design are included in the priority projects discussed further in Section 4. In accordance with the scope of services stormwater hydraulic analysis was not included in this schematic design effort.

3.2.2 Sanitary Sewer

The sanitary sewer system within the Area ranges from approximately 50 to 120 years old and suffers from poorly defined groundwater infiltration and illicit flow, tree root intrusion, and regular backups. The sanitary sewer system includes sewer mains within the limits of the public right-of-way and through private properties. The sewer mains running through private properties generally have no recorded easements and sometimes are routed under existing buildings.

Sewer mains are comprised primarily of vitrified clay pipe (VCP) and asbestos cement pipe (ACP). VCP has a life expectancy of over 100 years due to its corrosion resistance and for a long period was the material of choice for sanitary sewer systems. The sanitary sewer infrastructure within the study area is predominantly VCP, with 61% of the system being comprised of this material. ACP, popular for use with sanitary sewers in the 1970's, accounts for approximately 29% of the sanitary sewer system. Replacement of this material requires hazardous material removal professionals, which will result in additional replacement costs. Today, polyvinyl chloride (PVC) piping is the standard material utilized for sewer systems due to the ease of installation, the ability to provide a watertight seal at joints and junctions, and pipe longevity.

The primary area of concern identified by the Water and Sewer Department is the historic sanitary sewer infrastructure located outside of the public right of way. Between Village Street and Ardlock Place is an area of major concern as these mains run through the backyards of many residential properties and beneath existing buildings. Historically the Water and Sewer Department has had to address frequent backups in this location. Sewer manholes where installed to provide access points for cleaning the system, however the additional manholes do not solve concerns of backups into basements and restrained access to private property.



Photo 15: Full Sewer Manhole in front of 5 Mill Street

Additional areas where the sanitary sewer infrastructure is located outside of the public right of way and experiences sewer blockages are:

- Sewer main between Williams Street and Schofield Avenue
- Sewer main between Third Avenue and Second Avenue
- Sewer main between Marshall Terrace and Prospect Avenue

Based on the system's age and the available materials at the time of residential development in the area, many of the services are likely made of VCP or ACP. VCP and ACP have little ductility and if stressed too much, typically crack and collapse, requiring immediate repairs. This is evidenced by the fact that the Water and Sewer Department indicated that there have been many sewer service breaks in recent years.

For purposes of this report, sewer infrastructure was rated primarily based on the age of the system, with specific rating adjustments made based on input from the Town, observations from the August 2018 Infiltration and Inflow Analysis Report, and observations made during CCTV work. In general, sanitary sewer infrastructure identified as over 75 years and older is considered poor due to age and anticipated life expectancy. Any segments of sewer main identified by the Town as being an ongoing concern are also considered to be in poor condition. Sanitary sewer infrastructure between 50 and 74 years old is considered to be in fair condition and the age indicates that future repairs are likely. Only sanitary sewer infrastructure installed within the most recent 25 years is classified as excellent, however unknown installation practices may affect this rating.

The field inventory task included visual assessment of sanitary sewer manholes to observe their structural and cover condition. Most manholes in the Area are constructed of brick and appear to be in good condition. Photos 16 and 17 represent sanitary sewer manhole conditions most observed throughout the Area.



Photo 16: Good Sanitary Sewer Manhole



Photo 17: Fair Sanitary Sewer Manhole

In December 2020 and June 2021 National Water Main Cleaning Co. conducted CCTV work to confirm the condition of sewers of primary concern and to help the Town gain a better understanding of the location of sewers within private property. Inspection reports with photos are included in Appendix C and data links of the video footage were provided to

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the Town. In addition, the sewer locations on the base plans in Appendix B were updated accordingly based on the CCTV investigation.

Table 3.9 summarizes sanitary sewer main conditions and Table 3.8 summarizes sanitary sewer manholes conditions throughout the Area.

Table 515: Santary Sewer Hans condition			
	Linear Feet	Percentage of Total	
Excellent	274 ft	1.0%	
Good	487 ft	1.8%	
Fair	10,976 ft	40.8%	
Poor	15,188 ft	56.4%	
Total	26,925 ft	100%	

Table 3.9: Sanitary Sewer Mains Condition

As indicated in Table 3.9, 97.2% of sanitary sewer main likely needs repairs or replacement (rated as fair or poor condition).

	# of Sewer Manholes	Percentage of Total
Excellent	2	1.7%
Good	81	66.9%
Fair	32	26.4%
Poor	6	5.0%
Total	121	100%

Table 3.10: Sanitary Sewer Manholes Condition

As indicated in Table 3.10, 68.6% of the sewer manholes are in excellent or good condition and may require some minor repairs and maintenance. 31.4 % of sanitary sewer manholes need repairs or replacement (rated as fair or poor condition).

Figures 8A and 8B provided in Appendix A, provide a graphical representation of sanitary sewer infrastructure locations and classifications. Detailed datasheets for sewer mains and structures, distributed by road name and age, are provided in Appendix C, Tables 9 and 10.

3.2.3 Water

The water distribution system within the Area ranges in age from 20 to 110 years old and is comprised primarily of cast iron with some asbestos cement mains. Many studies argue the life expectancy of water distribution piping. Under ideal soil and installation practices, water infrastructure frequently has a relatively long-life expectancy. Variations in water

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supply characteristics, soil conditions and installation practices decrease that life expectancy. Cast iron pipe commonly has a life expectancy of over 100 years when ideal water supply and soil conditions are present. As these mains age, their reliability to provide water for both potable and fire protection supplies is compromised.

During interviews with Town staff, the primary concern with water infrastructure lies with the 6-inch main in Oxford Ave. The 6-inch cast iron main was constructed around the 1900's and has a history of breaks. Additionally, this main serves a highly-populated area that includes multi-family houses and apartments.

Since the start of Tighe & Bond's infrastructure assessment for the Project, two water main breaks have occurred on Fairview Ave, increasing concern within the water department regarding the integrity of the water main. As noted in Appendix C on the service cards, previous breaks recorded on Fairview Ave. also include:

•	11/2/2002	12 Fairview Ave	Transite Main Break
•	10/30/2008	18 Fairview Ave	Transite Main Break
•	3/18/2016	Fairview Ave - 4 Ft. From Warsaw	Transite Main Break

For purposes of this report, pipes which are identified as over 75 years and older are considered to be in poor condition due to their age with respect to anticipated life expectancy. Any segments of water main that were identified by the Town as being a concern due to frequent breaks are also considered to be in poor condition. Pipes between 50 and 74 years old are considered to be in fair condition and are generally not in need of repair. Only those water mains that have been installed within the most recent 25 years are classified as excellent, however unknown installation practices may affect this rating.

Fire Hydrants were evaluated based on physical condition, year, and model number. Fire hydrant model noted during our field work included Eddy Fire Hydrants by Clow Valve #2846 and nine hydrants where the make and model was not discernable. Hydrants where year of manufacture was visible ranged from 1968 to 2016. Most of the fire hydrants had rusting and paint chipping visible but appeared to still be in working condition. It should be noted that hydrants were not operated during this investigation and assessment was only conducted visually.



Photo 18: Representative Fire Hydrant

Table 3.11 summarizes water main conditions and Table 3.12 summarizes fire hydrant conditions throughout the Area.

	Linear Feet	Percentage of Total	
Excellent	4,060 ft	14.4%	
Good	-	0.0%	
Fair	5,047 ft	17.8%	
Poor	19,176 ft	67.8%	
Total	28,284	100%	

Table 3.11: Water Main Condition

As indicated in Table 3.11, 85.6% of water infrastructure is considered to be in need of repair or replacement (rated as fair or poor).

	Number of Hydrants	Percentage of Total
Excellent	11	20.4%
Good	36	66.6%
Fair	7	13.0%
Poor	0	0.0%
Total	54	100%

Table 3.12: Fire Hydrants

As indicated in Table 3.12, 87% of the hydrants are in excellent or good condition and may require some cosmetic maintenance.

Figures 9A and 9B provided in Appendix A, provide a graphical representation of the locations and classifications of water infrastructure. Detailed datasheets for water mains and hydrants, distributed by road name, are provided in Appendix C, Tables 10 and 11.

3.3 CDBG Infrastructure Rating Sheets

Rating sheets, in compliance with Mass. DHCD's current CDBG slum and blight survey guidance, have been completed with detailed infrastructure inventory information for each street within the study area. These sheets are provided in Appendix D for use in future funding opportunities.

3.4 Public Meetings

After completing the initial inspection, Tighe & Bond and CMRPC held a public forum on October 22, 2020. Tighe & Bond presented the mapping developed and the inspection effort results and collected comments from the residents. The meeting was televised, and residents had the option to email in any comments. Residents expressed concern about the costs associated with replacing or upgrading the infrastructure and the impositions it might cause the businesses during construction work.

Following the public meeting, Tighe & Bond developed recommended improvements and prioritized 5 project areas consisting of 8 projects summarized in Sections 4.



Photo 19: 10/22/2020 Public Meeting

On February 8, 2021, Tighe & Bond presented a summary of the infrastructure evaluation and the priority projects at the Board of Selectmen's meeting. The presentation and draft report were also made available for public comment and review on the Town's website.



Photo 20: 2/8/2021 Public Meeting

Section 4 Priority Projects

Following the infrastructure assessment and first round of public and Town department meetings, Tighe & Bond, CMRPC, and Town staff met to prioritize five potential project areas. These projects were selected by Dudley based on review of infrastructure conditions as reflected in this study, with consideration for potential projects' suitability for future grant funding and for prioritization in other Town plans. Projects already scheduled to be constructed in the short term using local resources were excluded. This resulted in the initial five priority project areas for a total of eight priority projects including the following:

- Oxford Avenue Project
- Chestnut, Green, Oak, and West Projects (3 projects)
- Village, Mill, and Ardlock Projects (2 projects)
- First Avenue Project
- Fairview Avenue Project

Tighe & Bond developed conceptual design drawings and estimated project costs for each of the eight proposed projects. The subsections below discuss the priority projects in more detail and conceptual project drawings are provided in Appendix F. Detailed cost breakdowns are included in Appendix G. A 25% construction contingency is included in the cost breakdowns at this time due to the possibility of a large number of unknowns at the conceptual level.

4.4 Oxford Avenue Project

The Oxford Avenue Project includes Oxford Avenue, School Street, and Saenger Street within the Jericho neighborhood. The area is a highly-populated residential area with many multi-family houses and apartments. The existing 6-inch cast iron water main in Oxford Avenue was constructed around the 1900's and has a history of breaks. Additionally, the water main is undersized for providing fire protection and serving fire hydrants. The existing 8-inch vitrified clay sewer main in Oxford Avenue, also constructed around the 1900's, is in fair condition based on the section of pipe observed through CCTV. Currently, the sewer from School Street and Saenger Street connects with the sewer mainline in Oxford Avenue by wye fittings that are not accessible. The sidewalks and curb are in poor to fair condition with significant cracking, settling, patching, and grass growth.

The Oxford Avenue construction project addresses the water infrastructure and includes minor improvements to the sewer system. A summary of proposed improvements includes the following:

- Approximately 2,150 LF of new water main with associated fittings and valving
- Removal and installation of new hydrants
- New water services to property lines
- Installation of doghouse sewer manholes at side street intersections
- Associated surface restoration and repairs

The total estimated cost for this proposed improvement project is outlined below.

Oxford	Avenue	Project	

Estimated Construction + Contingency + Construction Engineering	\$879,895.00
Design Engineering	\$114,800.00
Project Total	\$995,000.00

A detailed cost breakdown is provided in Appendix G and the conceptual project drawing is provided in Appendix F.

4.2 Chestnut, Green, Oak, & West Projects

The Chestnut, Green, Oak, and West Projects include Chestnut Street, Green Street, Oak Street, and West Street, in the Jericho neighborhood. This area is a residential area with single and multi-family houses along with some apartment complexes. The existing underground utilities are understood to have been constructed in the early 1900's. The existing 6-inch cast iron water mains are in poor condition based on age and undersized to provide fire protection and serve fire hydrants. The existing sewer mains are mostly vitrified clay pipe in fair to poor condition based on age. The drainage infrastructure is in poor condition, and there have been recurring drainage and erosion issues. The sidewalks and curb are in poor to fair condition with significant cracking, settling, patching, and grass growth. Additionally, hazards along the sidewalks make them unwalkable in some areas and ramps are either missing or not ADA compliant.

Three Chestnut, Green, Oak, and West construction projects are proposed to address the water, drainage, and sidewalk deficiencies separately due to expected funding limitations. Additionally, the proposed water project has been broken into 2 sub-phases due to the size of the project area and expected construction costs. A summary of proposed improvements includes the following:

Chestnut, Green, Oak, & West Water Project (2 Sub-Phases)

- Approximately 4,000 LF of new water main with associated fittings and valving
- Removal and installation of new hydrants
- New water services to property lines
- Associated surface repairs

Chestnut, Green, Oak, & West Drain Project

- Approximately 2,500 LF of new drain line
- New catch basins and manholes
- Two improved outlets
- Associated surface repairs

Chestnut, Green, Oak, & West Sidewalk Project

- Rehabilitated sidewalk and curb
- Conversion of grassed area to sidewalk and curb
- New wheelchair ramps

• New crosswalks and signage

The total estimated cost for these proposed improvement projects is outlined below.

Chestnut, Green, Oak, & West Water Project (Sub-Phase 1)

Phase 1 Estimated Construction + Contingency +Construction Engineering	\$573,580.00
Phase 1 Design Engineering	\$74,800.00
Phase 1 Total	\$648,000.00

Chestnut, Green, Oak, & West Water Project (Sub-Phase 2)

Phase 2 Estimated Construction + Contingency +Construction Engineering	\$631,825.00
Phase 2 Design Engineering	\$82,400.00
Phase 2 Total	\$714,000.00

Chestnut, Green, Oak, & West Drain Project

Estimated Construction + Contingency + Construction Engineering	\$868,300.00
Design Engineering	\$113,300.00
Project Total	\$982,000.00

Chestnut, Green, Oak, & West Sidewalk Project

Estimated Construction + Contingency + Construction Engineering	\$530,230.00
Design Engineering	\$69,200.00
Project Total	\$599,000.00

Detailed cost breakdowns of each project are provided in Appendix G and the conceptual project plans are provided in Appendix F.

4.3 Village, Mill, & Ardlock Projects

The Village, Mill, and Ardllock Projects include Village Street, Mill Street, and Ardlock Place, within the Jericho neighborhood. This area is mainly a residential area with single and multi-family houses along with some businesses. The existing 12-inch water main in Village Street and Mill Street is of recent construction and in excellent condition. The remaining 6-inch cast iron water main in the remaining portion of Mill Street is in fair condition and serves a small number of residents. The existing sewer main is mostly vitrified clay pipe ranging from 4-inch to 8-inch and in poor condition. The sanitary sewer infrastructure is located outside of the public right of way between Village Street and Ardlock Place. This section of sewer is an area of major concern as these mains run through the backyards of many residential properties and beneath existing buildings. Historically the Water and Sewer Department has had to address frequent backups in this

location. Sewer manholes where installed to provide access points for cleaning the system, however the additional manholes do not remedy all the backups into basements and restricted access on private property makes repairs more challenging. The sidewalks and curb are in poor to fair condition with significant cracking, settling, patching, and grass growth. Hazards along the sidewalks make them unwalkable in some areas and ramps are not ADA compliant. Additionally, Village Street does not have a continuous sidewalk.

Two Village, Mill, and Ardllock construction projects are proposed to address the sewer and sidewalk deficiencies separately due to expected funding limitations. A summary of proposed improvements includes the following:

Village, Mill, & Ardlock Sewer Project

- Approximately 960 LF of new sewer main with associated fittings
- Installation of new sewer manholes
- New services to property lines
- Associated surface repairs

Village, Mill, & Ardlock Sidewalk Project

- Rehabilitated sidewalk and curb
- Conversion of grassed area to sidewalk and curb
- New wheelchair ramps
- New crosswalks and signage

The total estimated cost for these proposed improvement projects is outlined below:

Village, Mill, & Ardlock Sewer Project

Estimated Construction + Contingency + Construction Engineering	\$587,940.00
Design Engineering	\$76,700.00
Project Total	\$665,000.00

Village, Mill, & Ardlock Sidewalk Project

Estimated Construction + Contingency + Construction Engineering	\$337,775.00
Design Engineering	\$44,100.00
Project Total	\$382,000.00

A detailed cost breakdown is provided in Appendix G and the conceptual project plan is provided in Appendix F.

4.4 First Avenue Project

The First Avenue Project includes First Avenue within the Brandon neighborhood. The area is a residential area with many single and multi-family houses and apartments. The existing 6-inch cast iron water main is in poor condition based on its age and is undersized to provide fire protection and serve fire hydrants. The existing 8-inch vitrified clay sewer main is in fair condition based on the pipe section observed through CCTV. Only a portion

of the sewer pipe was able to be inspected with CCTV because an external pipe or cable goes through the sewer pipe, causing an obstruction, and the sewer manholes along First Avenue are paved over. This area has many residents, businesses, restaurants, and the public library, however, there is currently no sidewalk and pedestrian accessibility is limited.

The First Avenue construction project addresses the water infrastructure and sidewalk deficiencies along with minor improvements to the sewer system. A summary of proposed improvements includes the following:

- Approximately 800 LF of new water main with associated fittings and valving
- New water services to property lines
- Two sewer main repairs
- Raising of sewer manhole covers
- Associated surface repairs
- New sidewalk and curb
- New wheelchair ramps
- New crosswalks

The total estimated cost for this improvement project is outlined below:

First Avenue Project

Estimated Construction + Contingency + Construction Engineering	\$385,105.00
Design Engineering	\$50,200.00
Project Total	\$435,000.00

A detailed cost breakdown is provided in Appendix G and the conceptual project plan is provided in Appendix F.

4.5 Fairview Avenue Project

The Fairview Avenue Project includes Fairview Avenue and George Street and is within the Brandon neighborhood. The area is a residential area with mostly single-family houses and some multi-family houses and apartments. The existing 6-inch cast iron water main is in poor condition based on its age and is undersized to provide fire protection and serve fire hydrants. Two water main breaks have occurred over the past year. The existing 10-inch asbestos cement sewer main is in fair condition based on age. Recurring drainage problems result from stormwater flowing down Warsaw Avenue and collecting on Fairview Avenue and on private property.

The Fairview Avenue construction project addresses the water infrastructure and drainage concerns. A summary of proposed improvements includes the following:

- Approximately 2,000 LF of new water main with associated fittings and valving
- New water services to property lines
- Approximately 340 LF of new drain line
- New catch basins and manholes
- A new stormwater outlet

• Associated surface repairs

The total estimated cost for this improvement project is outlined below:

Fairview Avenue Project	
Estimated Construction + Contingency + Construction Engineering	\$725,350.00
Design Engineering	\$94,600.00
Project Total	\$820,050.00

A detailed cost breakdown is provided in Appendix G and the conceptual project plan is provided in Appendix F.

As outlined above, these initial five priority project areas, include eight priority projects, with a combined total estimated cost of \$6,240,000, including construction, contingency, construction engineering and design. These initial priority projects are proposed to help guide the Town in planning and acquiring potential funding through grant programs for these critical infrastructure improvements. We are hopeful that the entirety of the report and master plan may also be a useful tool to determine and guide additional infrastructure projects in the future.

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APPENDIX A



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APPENDIX B

TOWN OF DUDLEY, MA JERICHO-BRANDON INFRASTRUCTURE PLANNING PROJECT

BASE PLAN FEBRUARY 2021

LIST OF DRAWINGS		
SHEET NO.	DRAWING NO.	DRAWING TITLE
1	G-001	COVER SHEET AND LIST OF DRAWINGS
2	G-002	GENERAL NOTES, ABBREVIATIONS, AND LEGEND
3 - 20	C-101 - C-118	EXISTING CONDITIONS



PREPARED BY: Tighe&Bond

PREPARED FOR: TOWN OF DUDLEY JONATHAN RUDA, TOWN ADMINISTRATOR



CENTRAL MASSACHUSETTS REGIONAL PLANNING COMMISSION

COMPLETE SET 20 SHEETS

GENERAL NOTES

THE EXISTING BASE MAPPING WAS PREPARED BY SHERMAN & FRYDRYK, LLC BASED ON PHOTOGRAMMETRY PROVIDED BY BLUE SKY DATED 07/27/2020 AND FIELD SURVEY CONDUCTED 06/15/2020 THROUGH 08/24/2020. ADDITIONAL BASE MAPPING WAS OBTAINED FROM AVAILABLE MASSGIS DATA AND UNDERGROUND UTILITY DATA.

- HORIZONTAL DATUM SHOWN HEREIN REFERENCES THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM NAD83. THE VERTICAL DATUM IS NAVD88.
- 3. PROPERTY LINE INFORMATION AS SHOWN ON THE DRAWINGS APPROXIMATE.
- 4. NOTIFY "DIGSAFE" AT 1-888-344-7233 TO ARRANGE FOR MARKING OUT EXISTING UNDERGROUND UTILITIES AT LEAST 72 HOURS IN ADVANCE OF MAKING EXCAVATION AT ANY GIVEN LOCATION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE ALLOWED TO START ANY KIND OF EXCAVATION WORK PRIOR TO OBTAINING ALL THE NECESSARY INFORMATION REGARDING THE LOCATION OF UNDERGROUND UTILITIES AT THE SITE.
- EXISTING UTILITIES AND APPURTENANCES SHOWN ON THESE DRAWINGS ARE APPROXIMATE, AND THE EXACT SIZE, TYPE, LOCATION AND ELEVATION SHALL BE THOROUGHLY INVESTIGATED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTACT THE APPROPRIATE UTILITY COMPANY TO VERIFY ACTUAL UTILITY LOCATIONS PRIOR TO THE START OF WORK.

ABBREVIATIONS

ADDREVIATIONS	
CATCH BASIN	СВ
CAST IRON	CI
CEMENT	CEM
CONCRETE	CONC
CONCRETE CURB	CC
CORRUGATED METAL PIPE	CMP
DRAIN (STORM DRAIN)	D
DRAIN MANHOLE	DMH
DUCTILE IRON	DI
GAS	G
GAS GATE	GG
HYDRANT	HYD
INVERT	INV
MAILBOX	MB
MANHOLE	MH
OVERHEAD ELECTRIC	OE
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	Jericho- Brandon Infrastructure Planning Project
	Town of Dudley Dudley,MA
	PROJECT NO: D5011-007 DATE: 08/20/2020 FILE: Existing.dwg DRAWN BY: ELD CHECKED BY: MPW APPROVED BY: JPV EXISTING CONDITIONS - 18
0 40° 80° SCALE: 1" = 40°	SCALE: 1" = 40' C-118

![](_page_68_Picture_0.jpeg)

## **APPENDIX C**

**Data Tables** 

![](_page_70_Picture_0.jpeg)

#### APPENDIX C - TABLE 1:

**ROADWAY SURFACES:** 

#### ARDLOCK PLACE:

Street Name	Length (ft)	Rating		
ARDLOCK PLACE (WEST OF VILLAGE)	708	FAIR		
ARDLOCK PLACE (VILLAGE TO W MAIN STREET)	501	FAIR		
Total Roadway:	1,209	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway:	-	LF	% Good =	0.0%
Total Fair Roadway:	1,209	LF	% Fair =	100.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%
BRANDON ROAD:				
Street Name	Length (ft)	Rating		
BRANDON ROAD (WEST MAIN TO MARSHALL TER)	356	GOOD		

BRANDON ROAD ( MARSHALL TER TO SCHOFIELD)	1789	GOOD	r -	
Total Roadway:	2,145	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway:	2,145	LF	% Good =	100.0%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%

#### **CHESTNUT STREET:**

Street Name	Length (ft)	Rating
CHESTNUT STREET (OXFORD TO WEST)	224	GOOD
CHESTNUT STREET (GREEN TO MILL)	722	GOOD
CHESTNUT STREET (WEST TO GREEN)	234	FAIR

Total Roadway:	1,180	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway:	946	LF	% Good =	80.2%
Total Fair Roadway:	234	LF	% Fair =	19.8%
Total Poor Roadway:	-	LF	% Poor =	0.0%

#### **CURFEW LANE:**

Street Name	Length (ft)		Rating		
CURFEW LANE	229		FAIR		
Total Roadway:	229	LF			
Total Excellent Roadway:	-	LF		% Excellent =	0.0%
Total Good Roadway:	-	LF		% Good =	0.0%
Total Fair Roadway:	229	LF		% Fair =	100.0%
Total Poor Roadway:	-	LF		% Poor =	0.0%

![](_page_71_Picture_0.jpeg)

#### Jericho-Brandon Infrastructure Planning Project Inventory

#### DIDONATO TERRACE:

St	treet Name	Length (ft)		Rating		
DIDONATO TERRACE		542		FAIR		
	Total Roadway:	542	LF			
	Total Excellent Roadway:	-	LF		% Excellent =	0.0%
	Total Good Roadway:	-	LF		% Good =	0.0%
	Total Fair Roadway:	542	LF		% Fair =	100.0%
	Total Poor Roadway:	-	LF		% Poor =	0.0%

#### DONNA LANE: Length (ft) Street Name Rating DONNA LANE 268 POOR Total Roadway: 268 LF Total Excellent Roadway: LF % Excellent = 0.0% -Total Good Roadway: LF % Good = 0.0% -Total Fair Roadway: LF % Fair = 0.0% -Total Poor Roadway: 268 LF % Poor = 100.0%

#### **ELLIS AVENUE:**

	Street Name	Length (ft)	Rating		
ELLIS AVENUE		616	EXCELLENT		
	Total Roadway:	616	LF		
	Total Excellent Roadway:	616	LF	% Excellent =	100.0%
	Total Good Roadway:	-	LF	% Good =	0.0%
	Total Fair Roadway:	-	LF	% Fair =	0.0%
	Total Poor Roadway:	-	LF	% Poor =	0.0%

#### FAIRVIEW AVENUE:

Street Name	Length (ft)	Rating	
FAIRVIEW AVENUE (GEORGE TO WOODDELL)	670	GOOD	
FAIRVIEW AVENUE (WOODDELL TO WARSAW)	872	FAIR	
Total Roadway:	1,542	LF	
Total Excellent Roadway:	-	LF	% Excellent =
Total Good Roadway:	670	LF	% Good =
Total Fair Roadway:	872	LF	% Fair =
Total Poor Roadway:	-	LF	% Poor =

0.0% 43.5% 56.5% 0.0%


FIFTH AVENUE:

Street Name	Length (ft)	Rating		
FIFTH AVENUE	753	EXCELLENT		
Total Roadway:	753	LF		
Total Excellent Roadway:	753	LF	% Excellent =	100.0%
Total Good Roadway:	-	LF	% Good =	0.0%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%

FIRST AVENUE:				
Street Name	Length (ft)	Rating		
FIRST AVENUE	752	FAIR	ł.	
Total Roadway	r: 752	LF		
Total Excellent Roadway		LF	% Excellent =	0.0%
Total Good Roadway		LF	% Good =	0.0%
Total Fair Roadway	. 752	LF	% Fair =	100.0%
Total Poor Roadway	r: -	LF	% Poor =	0.0%

# FOURTH AVENUE:

Street Name	Length (ft)	Rating		
FOURTH AVENUE	747	EXCELLENT		
Total Roadway:	747	LF		
Total Excellent Roadway:	747	LF	% Excellent =	100.0%
Total Good Roadway:	-	LF	% Good =	0.0%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%

# **GEORGE STREET:**

Street Name	Length (ft)	Rating		
GEORGE STREET	1471	GOOD		
Total Roadway:	1,471	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway:	1,471	LF	% Good =	100.0%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%



**GREEN STREET:** 

	Street Name	Length (ft)		Rating		
GREEN STREET		1201		GOOD		
	Total Roadway:	1,201	LF			
	Total Excellent Roadway:	-	LF		% Excellent =	0.0%
	Total Good Roadway:	1,201	LF		% Good =	100.0%
	Total Fair Roadway:	-	LF		% Fair =	0.0%
	Total Poor Roadway:	-	LF		% Poor =	0.0%

HILL COURT:				
Street Name	Length (ft)	Rating		
HILL COURT	397	GOOD		
Total Roadway:	397	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway	397	LF	% Good =	100.0%
Total Fair Roadway	-	LF	% Fair =	0.0%
Total Poor Roadway	-	LF	% Poor =	0.0%

# JAMES STREET:

Street Name	Length (ft)	Rating		
JAMES STREET	799	FAIR		
Total Roadway:	799	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway:	-	LF	% Good =	0.0%
Total Fair Roadway:	799	LF	% Fair =	100.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%

# LOVE COURT:

Street Name		Length (ft)	F	Rating		
LOVE COURT		246		GOOD		
Total Ro	adway:	246	LF			
Total Excellent Ro	adway:	-	LF		% Excellent =	0.0%
Total Good Ro	adway:	246	LF		% Good =	100.0%
Total Fair Ro	adway:	-	LF		% Fair =	0.0%
Total Poor Ro	adway:	-	LF		% Poor =	0.0%

# MARSHALL TERRACE:

Street Name	Length (ft)	Rating		
MARSHALL TERRACE (HSE #1 TO HSE #9)	374	GOOD		
MARSHALL TERRACE (HSE # 11 TO BRANDON RD)	1131	FAIR		
Total Roadway:	1,504	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway:	374	LF	% Good =	24.8%
Total Fair Roadway:	1,131	LF	% Fair =	75.2%
Total Poor Roadway:	-	LF	% Poor =	0.0%



#### MENZONE DRIVE:

I

Street Name	Length (ft)	Rating		
MENZONE DRIVE (EXTENTION OF ELLIS AVE)	157	EXCELLENT		
MENZONE DRIVE	475	POOR		
Total Roadway:	632	LF		
Total Excellent Roadway:	157	LF	% Excellent =	24.9%
Total Good Roadway:	-	LF	% Good =	0.0%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	475	LF	% Poor =	75.1%

#### **MILL STREET:**

Street Name	Street Name Length (ft) Rating			
MILL STREET (PINE TO VILLAGE)	2177	EXCELLENT		
MILL STREET (ARDLOCK TO W MAIN ST)	459	GOOD		
Total Roadway:	2,636	LF		
Total Excellent Roadway:	2,177	LF	% Excellent =	82.6%
Total Good Roadway:	459	LF	% Good =	17.4%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%

# OAK STREET:

	Street Name	Length (ft)		Rating		
OAK STREET		439		GOOD		
	Total Roadway:	439	LF			
	Total Excellent Roadway:	-	LF		% Excellent =	0.0%
	Total Good Roadway:	439	LF		% Good =	100.0%
	Total Fair Roadway:	-	LF		% Fair =	0.0%
	Total Poor Roadway:	-	LF		% Poor =	0.0%

# **OXFORD AVENUE:**

Street Name	Length (ft)	Rating	7	
OXFORD AVENUE	1526	GOOL	>	
Total Roadway:	1,526	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway:	1,526	LF	% Good =	100.0%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%



	CTDEET.	
PINE	VIREE1.	
	JINELI.	

	Street Name	Length (ft)	Rating		
PINE STREET		1212	EXCELLENT		
	Total Roadway:	1,212	LF		
	Total Excellent Roadway:	1,212	LF	% Excellent =	100.0%
	Total Good Roadway:	-	LF	% Good =	0.0%
	Total Fair Roadway:	-	LF	% Fair =	0.0%
	Total Poor Roadway:	-	LF	% Poor =	0.0%

# PROGRESS AVENUE:

	Street Name	Length (ft)		Rating		
PROGRESS AVENUE		1089		FAIR		
	Total Roadway:	1,089	LF			
	Total Excellent Roadway:	-	LF		% Excellent =	0.0%
	Total Good Roadway:	-	LF		% Good =	0.0%
	Total Fair Roadway:	1,089	LF		% Fair =	100.0%
	Total Poor Roadway:	-	LF		% Poor =	0.0%

# PROSPECT AVENUE:

Street Name		Length (ft)	Rating		
PROSPECT AVENUE		1105	EXCELLENT		
Total R	oadway:	1,105	LF		
Total Excellent R	oadway:	1,105	LF	% Excellent =	100.0%
Total Good R	oadway:	-	LF	% Good =	0.0%
Total Fair R	oadway:	-	LF	% Fair =	0.0%
Total Poor R	oadway:	-	LF	% Poor =	0.0%

#### SAENGER STREET:

Street Name	Length (ft)	R	ating		
SAENGER STREET	234		FAIR		
Total Roadway:	234	LF			
Total Excellent Roadway:	-	LF		% Excellent =	0.0%
Total Good Roadway:	-	LF		% Good =	0.0%
Total Fair Roadway:	234	LF		% Fair =	100.0%
Total Poor Roadway:	-	LF		% Poor =	0.0%

#### SCHOOL COURT:

St	reet Name	Length (ft)	1	Rating		
SCHOOL COURT		212		GOOD		
	Total Roadway:	212	LF			
	Total Excellent Roadway:	-	LF		% Excellent =	0.0%
	Total Good Roadway:	212	LF		% Good =	100.0%
	Total Fair Roadway:	-	LF		% Fair =	0.0%
	Total Poor Roadway:	-	LF		% Poor =	0.0%



SECOND AVENUE:

Street Name	Length (ft)		Rating		
SECOND AVENUE	746		GOOD		
Total Roadway:	746	LF			
Total Excellent Roadway:	-	LF		% Excellent =	0.0%
Total Good Roadway:	746	LF		% Good =	100.0%
Total Fair Roadway:	-	LF		% Fair =	0.0%
Total Poor Roadway:	-	LF		% Poor =	0.0%

SIXTH AVENUE:						
Street Name		Length (ft)		Rating		
SIXTH AVENUE		737	0	EXCELLENT		
	Total Roadway:	737	LF			
Тс	otal Excellent Roadway:	737	LF		% Excellent =	100.0%
	Total Good Roadway:	-	LF		% Good =	0.0%
	Total Fair Roadway:	-	LF		% Fair =	0.0%
	Total Poor Roadway:	-	LF		% Poor =	0.0%

# THIRD AVENUE:

Street Name	Length (ft)	Rating		
THIRD AVENUE	744	EXCELLENT		
Total Roadway:	744	LF		
Total Excellent Roadway:	744	LF	% Excellent =	100.0%
Total Good Roadway:	-	LF	% Good =	0.0%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%

# VIEW STREET:

Street Name	Length (ft)	Rat	ing		
VIEW STREET	315	•	FAIR		
Total Roadway:	315	LF			
Total Excellent Roadway:	-	LF		% Excellent =	0.0%
Total Good Roadway:	-	LF		% Good =	0.0%
Total Fair Roadway:	315	LF		% Fair =	100.0%
Total Poor Roadway:	-	LF		% Poor =	0.0%

#### VILLAGE STREET:

Street Name	Length (ft)	Rating		
VILLAGE STREET	569	GOOD		
Total Roadway:	569	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway:	569	LF	% Good =	100.0%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%



# WARSAW AVENUE:

Street Name	Length (ft)	Rating		
WARSAW AVENUE	1066	GOOD		
Total Roadway:	1,066	LF		
Total Excellent Roadway:	-	LF	% Excellent =	0.0%
Total Good Roadway:	1,066	LF	% Good =	100.0%
Total Fair Roadway:	-	LF	% Fair =	0.0%
Total Poor Roadway:	-	LF	% Poor =	0.0%

#### WEST STREET:

	Street Name	Length (ft)		Rating		
WEST STREET		976	5	FAIR		
	Total Roadway:	976	LF			
	Total Excellent Roadway:	-	LF		% Excellent =	0.0%
	Total Good Roadway:	-	LF		% Good =	0.0%
	Total Fair Roadway:	976	LF		% Fair =	100.0%
	Total Poor Roadway:	-	LF		% Poor =	0.0%

# WILLIAMS STREET:

Street Name	Length (ft)		Rating		
WILLIAMS STREET	1145		POOR		
Total Roadway:	1,145	LF			
Total Excellent Roadway:	-	LF		% Excellent =	0.0%
Total Good Roadway:	-	LF		% Good =	0.0%
Total Fair Roadway:	-	LF		% Fair =	0.0%
Total Poor Roadway:	1,145	LF		% Poor =	100.0%

# WOODDELL ROAD:

	Street Name	Length (ft)		Rating		
WOODDELL ROAD		454		EXCELLENT		
	Total Roadway:	454	LF			
	Total Excellent Roadway:	454	LF		% Excellent =	100.0%
	Total Good Roadway:	-	LF		% Good =	0.0%
	Total Fair Roadway:	-	LF		% Fair =	0.0%
	Total Poor Roadway:	-	LF		% Poor =	0.0%
	Tota Roadway Length =	31,442	LF			

Tota Roadway Length =	31,442	LF		
Total Excellent Roadway:	8,703	LF	% Excellent =	27.7%
Total Good Roadway:	12,468	LF	% Good =	39.7%
Total Fair Roadway:	8,382	LF	% Fair =	26.7%
Total Poor Roadway:	1,888	LF	% Poor =	6.0%



# APPENDIX C - TABLE 2:

PUBLIC PARKING:

#### PINE STREET:

Street Name	Rating	Number Spaces	Number HC Spaces	Area (SF)
PINE STREET LOT	GOOD	7	1	2110
	Totals:	7	1	2110

Total Parking Spaces:	8	EA		
Total Parking Area:	2,110	SF		
Total Excellent Parking:	-	SF	% Excellent =	0.0%
Total Good Parking:	2,110	SF	% Good =	100.0%
Total Fair Parking:	-	SF	% Fair =	0.0%
Total Poor Parking:	-	SF	% Poor =	0.0%



# **APPENDIX C - TABLE 3:**

**CURBING** 

#### ARDLOCK PLACE:

Street Name	Length (ft)	Rating
ARDLOCK PLACE (WEST OF VILLAGE)	94	GOOD
ARDLOCK PLACE (VILLAGE TO W MAIN ST)	111	GOOD
ARDLOCK PLACE (WEST OF VILLAGE)	181	FAIR
ARDLOCK PLACE (VILLAGE TO W MAIN ST)	363	FAIR
ARDLOCK PLACE (VILLAGE TO W MAIN ST)	493	FAIR
	•	K

Total Curbing:	1,243	LF		
Total Excellent Curbing:	-	LF	% Excellent =	0.0%
Total Good Curbing:	205	LF	% Good =	16.5%
Total Fair Curbing:	1,037	LF	% Fair =	83.5%
Total Poor Curbing:	-	LF	% Poor =	0.0%

#### **BRANDON ROAD:**

Street Name	Length (ft)	Rating
BRANDON ROAD (LIBRARY TO SCHOFIELD)	289	EXCELLENT
BRANDON ROAD (WEST MAIN TO MARSHALL TER)	356	GOOD
BRANDON ROAD (WEST MAIN TO MARSHALL TER)	353	GOOD
BRANDON ROAD (MARSHALL TER TO SCHOFIELD)	1620	GOOD
BRANDON ROAD (MARSHALL TER TO LIBRARY)	1413	GOOD

Total Curbing:	4,030	LF		
Total Excellent Curbing:	289	LF	% Excellent =	7.2%
Total Good Curbing:	3,741	LF	% Good =	92.8%
Total Fair Curbing:	-	LF	% Fair =	0.0%
Total Poor Curbing:	-	LF	% Poor =	0.0%

#### **DIDONATO TERRACE:**

Street Nam	e	Length (ft)		Rating		
DIDONATO TERRACE		229		FAIR		
	Total Curbing:	229	LF			
	Total Excellent Curbing:	-	LF		% Excellent =	0.0%
	Total Good Curbing:	-	LF		% Good =	0.0%
	Total Fair Curbing:	229	LF		% Fair =	100.0%
	Total Poor Curbing:	-	LF		% Poor =	0.0%

# **ELLIS AVENUE:**

	Street Name	Length (ft)	Rating	
FILIS AVENUE		508	GOOD	
ELLIS AVENUE		506	GOOD	
	Total Curbing:	1 015	IE	
	rotal curbing.	1,015	Li	
	Total Excellent Curbing:	-	LF	% Excellent
	Total Good Curbing:	1,015	LF	% Good
	Total Fair Curbing:	-	LF	% Fair

**Total Poor Curbing:** 

0.0%

0.0%

100.0% 0.0%

% Poor =

LF

-



0.0%

23.4%

0.0%

76.6%

# FAIRVIEW AVENUE:

Street Name	Length (ft)	Rating		
FAIRVIEW AVENUE (GEORGE TO WOODDELL)	627	GOOD		
FAIRVIEW AVENUE (GEORGE TO WOODDELL)	440	GOOD		
FAIRVIEW AVENUE (WOODDELL TO WARSAW)	291	GOOD		
Total Curbing:	1,358	LF		
Total Excellent Curbing:	-	LF	% Excellent =	0.0%
Total Good Curbing:	1,358	LF	% Good =	100.0%
Total Fair Curbing:	-	LF	% Fair =	0.0%
Total Poor Curbing:	-	LF	% Poor =	0.0%
FIRST AVENUE:				

Street Name	Length (ft)	Rating	
FIRST AVENUE	62	GOOD	
FIRST AVENUE	203	POOR	
Total Curbing:	265	LF	
Total Excellent Curbing:	-	LF	% Excellent =
Total Good Curbing:	62	LF	% Good =
Total Fair Curbing:	-	LF	% Fair =
Total Poor Curbing:	203	LF	% Poor =

#### FOURTH AVENUE:

	Street Name	Length (ft)	Rating		
FOURTH AVENUE		86	GOOD	]	
	Total Curbing:	86	LF		
	Total Excellent Curbing:	-	LF	% Excellent =	0.0%
	Total Good Curbing:	86	LF	% Good =	100.0%
	Total Fair Curbing:	-	LF	% Fair =	0.0%
	Total Poor Curbing:	-	LF	% Poor =	0.0%

# **GEORGE STREET:**

Street Name	Length (ft)	Rating		
GEORGE STREET	1290	GOOD		
GEORGE STREET	1444	GOOD		
Total Curbing:	2,735	LF		
Total Excellent Curbing:	-	LF	% Excellent =	0.0%
Total Good Curbing:	2,735	LF	% Good =	100.0%
Total Fair Curbing:	-	LF	% Fair =	0.0%
Total Poor Curbing:	-	LF	% Poor =	0.0%



# **GREEN STREET:**

Street Name	Length (ft)	Rating		
GREEN STREET (PINE TO CHESTNUT)	536	GOOD		
GREEN STREET (PINE TO CHESTNUT)	538	FAIR		
GREEN STREET (CHESTNUT TO OAK)	395	POOR		
Total Curbi	ng: 1,469	LF		
Total Excellent Curbi	ng: -	LF	% Excellent =	0.0%
Total Good Curb	in: 536	LF	% Good =	36.5%
Total Fair Curbi	ng: 538	LF	% Fair =	36.6%
Total Poor Curbi	ng: 395	LF	% Poor =	26.9%
JAMES STREET:				
Street Name	Length (ft)	Rating		
JAMES STREET	59	FAIR		
Total Curbi	ng: 59	LF		

Total Excellent Curbing:	-	LF	% Excellent =	0.0%
Total Good Curbing:	-	LF	% Good =	0.0%
Total Fair Curbing:	59	LF	% Fair =	100.0%
Total Poor Curbing:	-	LF	% Poor =	0.0%

#### LOVE COURT:

Street Name	Length (ft)	Rating		
LOVE COURT	248	GOOD		
Total Curbing:	248	LF		
Total Excellent Curbing:	-	LF	% Excellent =	0.0%
Total Good Curbing:	248	LF	% Good =	100.0%
Total Fair Curbing:	-	LF	% Fair =	0.0%
Total Poor Curbing:	-	LF	% Poor =	0.0%

# MILL STREET:

Street Name	Length (ft)	Rating
MILL STREET (PINE STREET TO CHESTNUT)	541	EXCELLENT
MILL STREET (CHARLTON RD TO VILLAGE)	970	EXCELLENT
MILL STREET (CHESTNUT TO CHARLTON RD)	278	GOOD
MILL STREET (CHESTNUT TO CHARLTON RD)	459	GOOD
MILL STREET (FLAXFIELD TO VILLAGE)	181	GOOD
MILL STREET (ARDLOCK TO W MAIN STREET)	387	GOOD
MILL STREET (ARDLOCK TO W MAIN STREET)	430	GOOD
MILL STREET (FLAXFIELD TO VILLAGE)	175	FAIR
MILL STREET (ARDLOCK TO W MAIN STREET)	31	FAIR
MILL STREET (CHARLTON RD TO FLAXFIELD RD)	213	POOR
MILL STREET (FLAXFIELD TO VILLAGE)	144	POOR

Total Curbing:	3,809	LF		
Total Excellent Curbing:	1,511	LF	% Excellent =	39.7%
Total Good Curbing:	1,736	LF	% Good =	45.6%
Total Fair Curbing:	206	LF	% Fair =	5.4%
Total Poor Curbing:	357	LF	% Poor =	9.4%



0.0% 0.0% 80.6% 19.4%

0.0% 0.0% 90.9% 9.1%

# OAK STREET:

OAK OAK

Street Name	Length (ft)	Rating	
STREET	417	FAIR	
STREET	100	POOR	
Total Curbing:	517	LF	
Total Excellent Curbing:	-	LF	% Excellent =
Total Good Curbing:	-	LF	% Good =
Total Fair Curbing:	417	LF	% Fair =
Total Poor Curbing:	100	LF	% Poor =

#### **OXFORD AVENUE:**

Street Name	Length (ft)	Rating	1
OXFORD AVENUE (PINE TO FRENCH RIVER)	1267	FAIR	1
OXFORD AVENUE (PINE TO FRENCH RIVER)	1243	FAIR	1
OXFORD AVENUE (NORTH OF PINE)	252	POOR	1
Total Curbing:	2,762	LF	
Total Excellent Curbing:	-	LF	% Excellent =
Total Good Curbing:	-	LF	% Good =
Total Fair Curbing:	2,510	LF	% Fair =
Total Poor Curbing:	252	LF	% Poor =

#### **PINE STREET:**

	Street Name	Length (ft)		Rating		
PINE STREET		422		EXCELLENT		
PINE STREET		716		EXCELLENT		
	Total Curbing:	1,137	LF			
	Total Excellent Curbing:	1,137	LF		% Excellent =	100.0%
	Total Good Curbing:	-	LF		% Good =	0.0%
	Total Fair Curbing:	-	LF		% Fair =	0.0%
	Total Poor Curbing:	-	LF		% Poor =	0.0%

#### SECOND AVENUE:

Street Name	Length (ft)		Rating		
SECOND AVENUE	74		GOOD		
Total Curbing	74	LF			
Total Excellent Curbing		LF		% Excellent =	0.0%
Total Good Curbing	74	LF		% Good =	100.0%
Total Fair Curbing	-	LF		% Fair =	0.0%
Total Poor Curbing	-	LF		% Poor =	0.0%



0.0%

0.0%

100.0% 0.0%

# VIEW STREET:

	Street Name	Length (ft)	Rating	
VIEW STREET		222	GOOD	
VIEW STREET		161	GOOD	
	Total Curbing:	383	LF	
	Total Excellent Curbing:	-	LF	% Excellent =
	Total Good Curbing:	383	LF	% Good =
	Total Fair Curbing:	-	LF	% Fair =
	Total Poor Curbing:	-	LF	% Poor =

#### VILLAGE STREET:

Street Name	Length (ft)		Rating		
VILLAGE STREET	27		GOOD		
Total Curbing:	27	LF			
Total Excellent Curbing:	-	LF		% Excellent =	0.0%
Total Good Curbing:	27	LF		% Good =	100.0%
Total Fair Curbing:	-	LF		% Fair =	0.0%
Total Poor Curbing:	-	LF		% Poor =	0.0%

#### WARSAW AVENUE:

	Street Name	Length (ft)	Rating	1	
WARSAW AVENUE		1039	GOOD		
WARSAW AVENUE		1034	GOOD		
	Total Curbing:	2,072	LF		
	Total Excellent Curbing:	-	LF	% Excellent =	0.0%
	Total Good Curbing:	2,072	LF	% Good =	100.0%
	Total Fair Curbing:	-	LF	% Fair =	0.0%
	Total Poor Curbing:	-	LF	% Poor =	0.0%

#### WEST STREET:

Street Name	Length (ft)	Rating
WEST STREET (PINE TO CHESTNUT)	530	GOOD
WEST STREET (PINE TO CHESTNUT)	278	GOOD
WEST STREET (CHESTNUT TO OAK)	399	FAIR
WEST STREET (CHESTNUT TO OAK)	397	FAIR
WEST STREET (PINE TO CHESTNUT)	254	FAIR

#### Total Curbing: 1,859 LF Total Excellent Curbing: - LF % Excellent = 0.0% Total Good Curbing: 808 LF % Good = 43.5% **Total Fair Curbing:** 1,051 LF % Fair = 56.5% **Total Poor Curbing:** -LF % Poor = 0.0%



# WOODDELL ROAD:

Street Name	Length (ft)		Rating		
WOODDELL ROAD	218		GOOD		
Total Curbing:	218	LF			
Total Excellent Curbing:	-	LF		% Excellent =	0.0%
Total Good Curbing:	218	LF		% Good =	100.0%
Total Fair Curbing:	-	LF		% Fair =	0.0%
Total Poor Curbing:	-	LF		% Poor =	0.0%
 Total Curbing Length =	25,592	LF			
Total Excellent Curbing:	2,937	LF		% Excellent =	11.5%
Total Good Curbing:	15,304	LF		% Good =	59.8%
Total Fair Curbing:	6,045	LF		% Fair =	23.6%
Total Poor Curbing:	1,307	LF		% Poor =	5.1%



# **APPENDIX C - TABLE 4:**

SIDEWALKS:

# ARDLOCK PLACE:

Street Name	Length (ft)	Rating		
ARDLOCK PLACE (VILLAGE TO MILL)	147	GOOD		
ARDLOCK PLACE (VILLAGE TO MILL)	106	GOOD		
Total Sidewalk:	253	LF		
Total Excellent Sidewalk:	-	LF	% Excellent =	0.0%
Total Good Sidewalk:	253	LF	% Good =	100.0%
Total Fair Sidewalk:	-	LF	% Fair =	0.0%
Total Poor Sidewalk:	-	LF	% Poor =	0.0%

# BRANDON ROAD:

	Street Name	Length (ft)	Rating		
BRANDON ROAD		285	EXCELLENT		
BRANDON ROAD		1620	GOOD		
	Total Sidewalk:	1,906	LF		
	Total Excellent Sidewalk:	285	LF	% Excellent =	15.0%
	Total Good Sidewalk:	1,620	LF	% Good =	85.0%
	Total Fair Sidewalk:	-	LF	% Fair =	0.0%
	Total Poor Sidewalk:	-	LF	% Poor =	0.0%

# FIRST AVENUE:

Length (ft)	Rating		
78	FAIR	]	
78	LF		
-	LF	% Excellent =	0.0%
-	LF	% Good =	0.0%
78	LF	% Fair =	100.0%
-	LF	% Poor =	0.0%
	Length (ft) 78 78 - - 78 - 78 -	Length (ft) Rating   78 FAIR   78 LF   - LF   - LF   78 LF	Length (ft) Rating   78 FAIR   78 LF   - LF % Excellent =   - LF % Good =   78 LF % Fair =   - LF % Fair =   - LF % Poor =



# **GREEN STREET:**

Street Name	Length (ft)	Rating
GREEN STREET (PINE TO HSE # 22)	329	GOOD
GREEN STREET (HSE #22 - CHESTNUT)	242	GOOD
GREEN STREET (PINE TO HSE # 22)	294	FAIR
GREEN STREET (HSE #22 - CHESTNUT)	211	FAIR
GREEN STREET (CHESTNUT TO HSE # 12)	245	FAIR
GREEN STREET (CHESTNUT TO HSE # 12)	208	FAIR
GREEN STREET (HSE #1 - HSE # 12)	305	POOR
GREEN STREET (HSE #1 - HSE # 12)	410	POOR

2,244	LF		
-	LF	% Excellent =	0.0%
571	LF	% Good =	25.4%
959	LF	% Fair =	42.7%
715	LF	% Poor =	31.8%
	2,244 - 571 959 715	2,244 LF - LF 571 LF 959 LF 715 LF	2,244 LF - LF % Excellent = 571 LF % Good = 959 LF % Fair = 715 LF % Poor =

# MILL STREET:

Street Name	Length (ft)	Rating
MILL STREET (CHARLTON RD TO MILL BUILDING )	974	EXCELLENT
MILL STREET (PINE TO CHESTNUT)	539	GOOD
MILL STREET (CHESTNUT TO CHARLTON RD)	278	GOOD
MILL STREET (MILL BUILDING TO VILLAGE)	104	GOOD
MILL STREET (ARDLOCK TO W MAIN ST)	386	GOOD
MILL STREET (CHARLTON RD TO FLAXFIELD)	216	FAIR
MILL STREET (ARDLOCK TO W MAIN ST)	32	FAIR
MILL STREET (AT MILL BUILDING)	105	POOR
MILL STREET (CHARLTON RD TO FLAXFIELD) MILL STREET (ARDLOCK TO W MAIN ST) MILL STREET (AT MILL BUILDING)	216 32 105	F F PC

Total Sidewalk:	2,634 l	LF		
Total Excellent Sidewalk:	974 l	LF	% Excellent =	37.0%
Total Good Sidewalk:	1,307 l	LF	% Good =	49.6%
Total Fair Sidewalk:	248 l	LF	% Fair =	9.4%
Total Poor Sidewalk:	105 l	LF	% Poor =	4.0%

# OAK STREET:

Street Name	Length (ft)	Rating	
OAK STREET (OXFORD TO WEST)	201	GOOD	
OAK STREET (WEST TO GREEN)	219	FAIR	
OAK STREET (WEST TO GREEN)	102	POOR	
Total Sidewalk:	522	LF	
Total Excellent Sidewalk:	-	LF	% Excellent =
Total Good Sidewalk:	201	LF	% Good =
Total Fair Sidewalk:	219	LF	% Fair =
Total Poor Sidewalk:	102	LF	% Poor =

0.0% 38.6% 42.0% 19.4%



0.0% 85.4% 0.0% 14.6%

# **OXFORD AVENUE:**

Street Name	Length (ft)	Rating		
OXFORD AVENUE (PINE TO FRENCH RIVER)	1241	FAIR		
OXFORD AVENUE (PINE TO FRENCH RIVER)	1207	POOR		
OXFORD AVENUE (NORTH OF PINE)	240	POOR		
OXFORD AVENUE (NORTH OF PINE)	250	POOR		
Total Sidewalk:	2,939	LF		
Total Excellent Sidewalk:	-	LF	% Excellent =	0.0%
Total Good Sidewalk:	-	LF	% Good =	0.0%
Total Fair Sidewalk:	1,241	LF	% Fair =	42.2%
Total Poor Sidewalk:	1,698	LF	% Poor =	57.8%

# PINE STREET:

	Street Name	Length (ft)	Rating	
PINE STREET		1190	GOOD	
PINE STREET		203	POOR	
	Total Sidewalk:	1,393	LF	
	Total Excellent Sidewalk:	-	LF	% Excellent =
	Total Good Sidewalk:	1,190	LF	% Good =
	Total Fair Sidewalk:	-	LF	% Fair =
	Total Poor Sidewalk:	203	LF	% Poor =

# VILLAGE STREET:

	Street Name	Length (ft)	Rating		
VILLAGE STREET		25	GOOD		
VILLAGE STREET		478	POOR		
	Total Sidewalk:	503	LF		
	Total Excellent Sidewalk:	-	LF	% Excellent =	0.0%
	Total Good Sidewalk:	25	LF	% Good =	4.9%
	Total Fair Sidewalk:	-	LF	% Fair =	0.0%
	Total Poor Sidewalk:	478	LF	% Poor =	95.1%

# WEST STREET:

Street Name	Length (ft)	Rating
WEST STREET (CHESTNUT TO OAK)	395	FAIR
WEST STREET (PINE TO CHESTNUT)	534	FAIR
WEST STREET (CHESTNUT TO OAK)	304	POOR
WEST STREET (PINE TO CHESTNUT)	120	POOR
WEST STREET (PINE TO CHESTNUT)	51	POOR
WEST STREET (PINE TO CHESTNUT)	41	POOR

Total Sidewalk:	1,445	LF		
Total Excellent Sidewalk:	-	LF	% Excellent =	0.0%
Total Good Sidewalk:	-	LF	% Good =	0.0%
Total Fair Sidewalk:	930	LF	% Fair =	64.3%
Total Poor Sidewalk:	515	LF	% Poor =	35.7%

# Tighe&Bond

# WILLIAMS STREET:

Street Name	Length (ft)	R	ating			
WILLIAMS STREET	77	,	POOR			
Total Sidewalk:	77	LF				
Total Excellent Sidewalk:	-	LF		% Excellent =	0.0%	
Total Good Sidewalk:	-	LF		% Good =	0.0%	
Total Fair Sidewalk:	-	LF		% Fair =	0.0%	
Total Poor Sidewalk:	77	LF		% Poor =	100.0%	
Total Sidewalk Length =	13,993	LF				
Total Excellent Sidewalk:	1,259	LF		% Excellent =	9.0%	
Total Good Sidewalk:	5,167	LF		% Good =	36.9%	
Total Fair Sidewalk:	3,675	LF		% Fair =	26.3%	
Total Poor Sidewalk:	3,892	LF		% Poor =	27.8%	



# APPENDIX C - TABLE 5:

RAMPS:

# BRANDON ROAD:

Street Name	Not ADA Compliant Count (ea)	ADA Compliant Count (ea)	Rating
BRANDON ROAD	0	1	EXCELLENT
BRANDON ROAD	0	1	EXCELLENT
BRANDON ROAD	0	1	EXCELLENT
BRANDON ROAD	0	1	EXCELLENT
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD
BRANDON ROAD	1	0	GOOD

Total Not ADA Compliant Ramps:	11	EA		
Total ADA Compliant Ramps:	4	EA		
Total Excellent Ramps:	4	EA	% Excellent =	26.7%
Total Good Ramps:	11	EA	% Good =	73.3%
Total Fair Ramps: -		EA	% Fair =	0.0%
Total Poor Ramps: -		EA	% Poor =	0.0%



#### GREEN STREET:

Street Name	Not ADA Compliant Count (ea)	ADA Compliant Count (ea)	Rating
GREEN STREET	1	0	GOOD
GREEN STREET	1	0	FIAR
GREEN STREET	1	0	FAIR
GREEN STREET	1	0	POOR

Total Not ADA Compliant Ramps:	4 EA		
Total ADA Compliant Ramps:	- EA		
Total Excellent Ramps:	- EA	% Excellent =	0.0%
Total Good Ramps:	1 EA	% Good =	25.0%
Total Fair Ramps:	2 EA	% Fair =	50.0%
Total Poor Ramps:	1 EA	% Poor =	25.0%

#### MILL STREET:

Street Name	Not ADA Compliant Count (ea)	ADA Compliant Count (ea)	Rating
MILL STREET	1	0	FAIR
MILL STREET	1	0	FAIR
MILL STREET	1	0	FAIR
MILL STREET	1	0	POOR

Total Not ADA Compliant Ramps:	4	ΕA		
Total ADA Compliant Ramps:	-	EA		
Total Excellent Ramps:	-	EA	% Excellent =	0.0%
Total Good Ramps:	-	EA	% Good =	0.0%
Total Fair Ramps:	3	EA	% Fair =	75.0%
Total Poor Ramps:	1	EA	% Poor =	25.0%



# OAK STREET:

Street Name	Not ADA Compliant Count (ea)	ADA Compliant Count (ea)	Rating
OAK STREET	1	0	FAIR
OAK STREET	1	0	POOR
OAK STREET	1	0	POOR
OAK STREET	1	0	GOOD

Total Not ADA Compliant Ramps:	4 E	A		
Total ADA Compliant Ramps:	- E	A		
Total Excellent Ramps:	- E	A	% Excellent =	0.0%
Total Good Ramps:	- E	A	% Good =	0.0%
Total Fair Ramps:	1 E	A	% Fair =	25.0%
Total Poor Ramps:	3 E	A	% Poor =	75.0%

# **OXFORD AVENUE:**

Street Name	Not ADA Compliant Count (ea)	ADA Compliant Count (ea)	Rating
OXFORD AVENUE	1	0	FAIR
OXFORD AVENUE	1	0	FAIR
OXFORD AVENUE	1	0	FAIR
OXFORD AVENUE	1	0	FAIR
OXFORD AVENUE	1	0	FAIR
OXFORD AVENUE	1	0	POOR
OXFORD AVENUE	1	0	POOR
OXFORD AVENUE	1	0	POOR
OXFORD AVENUE	1	0	POOR
OXFORD AVENUE	1	0	POOR

Total Not ADA Compliant Ramps:	10 EA		
Total ADA Compliant Ramps:	- EA		
Total Excellent Ramps:	- EA	% Excellent =	0.0%
Total Good Ramps:	- EA	% Good =	0.0%
Total Fair Ramps:	5 EA	% Fair =	50.0%
Total Poor Ramps:	5 EA	% Poor =	50.0%



0.0%

0.0%

100.0% 0.0%

# PINE STREET:

Street Name	Not ADA Compliant Count (ea)	ADA Compliant Count (ea)	Rating
PINE STREET	1	0	GOOD
PINE STREET	1	0	GOOD
PINE STREET	1	0	GOOD
PINE STREET	1	0	GOOD
PINE STREET	1	0	GOOD

Total Not ADA Compliant Ramps:	5 EA		
Total ADA Compliant Ramps:	- EA		
Total Excellent Ramps:	- EA	% Excellent =	0.0%
Total Good Ramps:	5 EA	% Good =	100.0%
Total Fair Ramps:	- EA	% Fair =	0.0%
Total Poor Ramps:	- EA	% Poor =	0.0%

# VILLAGE STREET:

Street Name	Not ADA Compliant Count (ea)	ADA Compliant Count (ea)	Rating	
VILLAGE STREET	1	0	FAIR	
	Total Not ADA Compliant Ramps:	1	EA	
	Total ADA Compliant Ramps:	-	EA	
	Total Excellent Ramps:	-	EA	% Excellent
	Total Good Ramps:	-	EA	% Good
	Total Fair Ramps:	1	EA	% Faiı
	Total Poor Ramps:	-	EA	% Poo



# WEST STREET:

Street Name	Not ADA Compliant Count (ea)	ADA Compliant Count (ea)	Rating		
WEST STREET	1	0	FAIR		
WEST STREET	1	0	POOR		
WEST STREET	1	0	POOR		
	Total Not ADA Compliant Ramps:	3	EA		
	Total ADA Compliant Ramps:	-	EA		
	Total Excellent Ramps:	-	EA	% Excellent =	0.0%
	Total Good Ramps:	-	EA	% Good =	0.0%
	Total Fair Ramps:	1	EA	% Fair =	33.3%
	Total Poor Ramps:	2	EA	% Poor =	66.7%
	T				04.00/
	Total Not ADA Compliant Ramps:	42	EA	% Non Compliant	91.3%
	Total ADA Compliant Ramps:	4	EA	% Compliant	8.7%
	Total Excellent Ramps:	4	EA	% Excellent =	8.7%
	Total Good Ramps:	17	EA	% Good =	37.0%
	Total Fair Ramps:	13	EA	% Fair =	28.3%
	Total Poor Ramps:	12	EA	% Poor =	26.1%



# **APPENDIX C - TABLE 6:**

**EVIDENT WALKING HAZARD:** 

# BRANDON ROAD:

Street Name	Description
BRANDON ROAD	Vegetation protruding into the sidewalk.

#### **GREEN STREET**

Street Name	Description
GREEN STREET	Vegetation protruding into the sidewalk.





# MILL STREET

Street Name	Description
	Mill Street is a busy road and the sidewalk becomes extremely skinny that even a child
MILL STREET	can't safely walk on it.



#### PINE STREET

Street Name	Description
	Cars Parked on Sidewalk - Attempt was made to distinguish parking area from the
PINE STREET	sidewalk but many cars (a Tractor Trailer) are not in designated area.





Street Name	Description
/ILLAGE STREET	Erosion has created a gap in the sidewalk.

#### WEST STREET

Street Name	Description
WEST STREET	The wall has caved into the sidewalk.





# APPENDIX C - TABLE 7:

#### STORM LINE:

#### **CHESTNUT STREET:**

Street Name	Pipe Material	Length (ft)	Rating
CHESTNUT STREET	CORRUGATED METAL PIPE	39	POOR
CHESTNUT STREET	CORRUGATED METAL PIPE	60	POOR
CHESTNUT STREET	CORRUGATED METAL PIPE	60	POOR
CHESTNUT STREET	CORRUGATED METAL PIPE	29	POOR
CHESTNUT STREET	CORRUGATED METAL PIPE	60	POOR
CHESTNUT STREET	CORRUGATED METAL PIPE	24	FAIR

Total Length of Stormdrain:	271	LF		
Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
Total Good Stormdrain:	-	LF	% Good =	0.0%
Total Fair Stormdrain:	24	LF	% Fair =	8.8%
Total Poor Stormdrain:	248	LF	% Poor =	91.2%

#### FAIRVIEW AVENUE:

Street Name	Pipe Material	Length (ft)	Rating
FAIRVIEW AVENUE	CORRUGATED PLASTIC PIPE	40	POOR
FAIRVIEW AVENUE	CORRUGATED PLASTIC PIPE	434	POOR
FAIRVIEW AVENUE	CORRUGATED PLASTIC PIPE	68	GOOD
FAIRVIEW AVENUE	CORRUGATED PLASTIC PIPE	22	GOOD
FAIRVIEW AVENUE	CORRUGATED METAL PIPE	60	GOOD
FAIRVIEW AVENUE	CORRUGATED PLASTIC PIPE	37	GOOD
FAIRVIEW AVENUE	CORRUGATED PLASTIC PIPE	60	POOR

Total Length of Stormdrain:	721	LF		
Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
Total Good Stormdrain:	186	LF	% Good =	25.8%
Total Fair Stormdrain:	-	LF	% Fair =	0.0%
Total Poor Stormdrain:	534	LF	% Poor =	74.2%

#### HILL COURT:

Street Name	Pipe Material	Length (ft)	Rating
HILL COURT	CORRUGATED PLASTIC PIPE	60	FAIR

Total Length of Stormdrain:	60	LF		
Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
Total Good Stormdrain:	-	LF	% Good =	0.0%
Total Fair Stormdrain:	60	LF	% Fair =	100.0%
Total Poor Stormdrain:	-	LF	% Poor =	0.0%



#### MARSHALL TERRACE:

Street Name	Pipe Material	Length (ft)	Rating
MARSHALL TERRACE	CORRUGATED METAL PIPE	52	POOR
MARSHALL TERRACE	ASBESTOS COATED	60	POOR
MARSHALL TERRACE		60	POOR
	Total Length of Stormdrain:		172 LF

Total Length of Stormdrain: 172	2 LF	F		
Total Excellent Stormdrain: -	LF	F	% Excellent =	0.0%
Total Good Stormdrain: -	LF	F	% Good =	0.0%
Total Fair Stormdrain: -	LF	F	% Fair =	0.0%
Total Poor Stormdrain: 172	2 LF	F	% Poor =	100.0%

#### MILL STREET:

Street Name	Pipe Material	Length (ft)	Rating
MILL STREET	CORRUGATED METAL PIPE	19	FAIR
MILL STREET	CORRUGATED METAL PIPE	9	FAIR
MILL STREET	CORRUGATED METAL PIPE	21	FAIR
MILL STREET	CORRUGATED METAL PIPE	6	FAIR
MILL STREET	CORRUGATED METAL PIPE	28	FAIR
MILL STREET	CORRUGATED METAL PIPE	94	FAIR
MILL STREET	CORRUGATED METAL PIPE	125	FAIR
MILL STREET	CORRUGATED METAL PIPE	20	FAIR
MILL STREET	CORRUGATED METAL PIPE	13	FAIR
MILL STREET	CORRUGATED METAL PIPE	295	FAIR
MILL STREET	CORRUGATED PLASTIC PIPE	60	FAIR
MILL STREET	REINFORCED CONCRETE PIPE	60	FAIR
MILL STREET	POLYVINYL CHLORIDE	60	FAIR
MILL STREET	CORRUGATED METAL PIPE	285	FAIR

Total Length of Stormdrain:	1,095	LF		
Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
Total Good Stormdrain:	-	LF	% Good =	0.0%
Total Fair Stormdrain:	1,095	LF	% Fair =	100.0%
Total Poor Stormdrain:	-	LF	% Poor =	0.0%

#### OAK STREET:

Street Name	Pipe Material	Length (ft)	Rating		
OAK STREET	CORRUGATED METAL PIPE	24	FAIR		
	Total Length of Stormdrain:	24	LF		
	Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
	Total Good Stormdrain:	-	LF	% Good =	0.0%
	Total Fair Stormdrain:	24	LF	% Fair =	100.0%
	Total Poor Stormdrain:	-	LF	% Poor =	0.0%

#### OXFORD AVENUE:



Street Name	Pipe Material	Length (ft)	Rating		
OXFORD AVENUE	REINFORCED CONCRETE PIPE	25	GOOD		
OXFORD AVENUE	REINFORCED CONCRETE PIPE	60	GOOD		
	Total Length of Stormdrain:	8	5 LF		
	Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
	Total Good Stormdrain:	8	5 LF	% Good =	100.0%
	Total Fair Stormdrain:	-	LF	% Fair =	0.0%
	Total Poor Stormdrain:	-	LF	% Poor =	0.0%

#### PINE STREET:

Street Name	Pipe Material	Length (ft)	Rating
PINE STREET	CORRUGATED METAL PIPE	18	POOR
PINE STREET	CORRUGATED METAL PIPE	11	POOR
PINE STREET	CORRUGATED METAL PIPE	60	POOR
PINE STREET	CORRUGATED METAL PIPE	343	FAIR
PINE STREET	CORRUGATED METAL PIPE	335	FAIR
PINE STREET	CORRUGATED METAL PIPE	27	POOR
PINE STREET	CORRUGATED METAL PIPE	122	POOR
PINE STREET	CORRUGATED METAL PIPE	10	FAIR
PINE STREET	CORRUGATED METAL PIPE	23	FAIR

Total Length of Stormdrain:	948	LF		
Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
Total Good Stormdrain:	-	LF	% Good =	0.0%
Total Fair Stormdrain:	710	LF	% Fair =	75.0%
Total Poor Stormdrain:	237	LF	% Poor =	25.0%

#### PROGRESS AVENUE:

Street Name	Pipe Material	Length (ft)	Rating
PROGRESS AVENUE	CORRUGATED METAL PIPE	34	FAIR
PROGRESS AVENUE	CORRUGATED PLASTIC PIPE	60	FAIR
PROGRESS AVENUE	CORRUGATED METAL PIPE	60	FAIR
PROGRESS AVENUE	CORRUGATED PLASTIC PIPE	60	FAIR

Total Length of Stormdrain:	214	LF		
Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
Total Good Stormdrain:	-	LF	% Good =	0.0%
Total Fair Stormdrain:	214	LF	% Fair =	100.0%
Total Poor Stormdrain:	-	LF	% Poor =	0.0%



#### SECOND AVENUE:

Pipe Material	Length (ft)	Rating
CORRUGATED PLASTIC PIPE	52	GOOD
CORRUGATED PLASTIC PIPE	44	GOOD
CORRUGATED PLASTIC PIPE	60	GOOD
CORRUGATED PLASTIC PIPE	60	GOOD
	Pipe Material   CORRUGATED PLASTIC PIPE   CORRUGATED PLASTIC PIPE   CORRUGATED PLASTIC PIPE   CORRUGATED PLASTIC PIPE	Pipe MaterialLength (ft)CORRUGATED PLASTIC PIPE52CORRUGATED PLASTIC PIPE44CORRUGATED PLASTIC PIPE60CORRUGATED PLASTIC PIPE60

Total Length of Stormdrain:	215	LF		
Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
Total Good Stormdrain:	215	LF	% Good =	100.0%
Total Fair Stormdrain:	-	LF	% Fair =	0.0%
Total Poor Stormdrain:	-	LF	% Poor =	0.0%

#### THIRD AVENUE:

Street Name	Pipe Material	Length (ft)	Rating
THIRD AVENUE	CORRUGATED METAL PIPE	21	FAIR
THIRD AVENUE	CORRUGATED METAL PIPE	30	FAIR
THIRD AVENUE	CORRUGATED METAL PIPE	57	FAIR
THIRD AVENUE		23	FAIR

Total Length of Stormdrain:	131	LF		
Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
Total Good Stormdrain:	-	LF	% Good =	0.0%
Total Fair Stormdrain:	131	LF	% Fair =	100.0%
Total Poor Stormdrain:	-	LF	% Poor =	0.0%

#### WEST STREET:

Street Name	Pipe Material	Length (ft)	Rating
WEST STREET	CORRUGATED METAL PIPE	332	FAIR
WEST STREET	CORRUGATED METAL PIPE	24	FAIR
WEST STREET	CORRUGATED METAL PIPE	23	POOR
WEST STREET	CORRUGATED METAL PIPE	220	FAIR
WEST STREET	CORRUGATED METAL PIPE	425	FAIR
WEST STREET	CORRUGATED METAL PIPE	60	FAIR

Total Length of Stormdrain:	1,083	LF		
Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
Total Good Stormdrain:	-	LF	% Good =	0.0%
Total Fair Stormdrain:	1,060	LF	% Fair =	97.9%
Total Poor Stormdrain:	23	LF	% Poor =	2.1%



#### WILLIAMS STREET:

Street Name	Pipe Material	Length (ft)	Rating		
WILLIAMS STREET	CORRUGATED METAL PIPE	44	POOR		
WILLIAMS STREET	CORRUGATED METAL PIPE	28	POOR		
WILLIAMS STREET	VITREOUS CLAY	60	FAIR		
WILLIAMS STREET	CORRUGATED METAL PIPE	60	FAIR		
	Total Length of Stormdrain:	192	LF		
	Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
	Total Good Stormdrain:	-	LF	% Good =	0.0%
	Total Fair Stormdrain:	120	LF	% Fair =	62.6%
	Total Poor Stormdrain:	72	LF	% Poor =	37.4%
	Total Length of Stormdrain:	5,212	LF		
	Total Excellent Stormdrain:	-	LF	% Excellent =	0.0%
	Total Good Stormdrain:	487	' LF	% Good =	9.3%
	Total Fair Stormdrain:	3,439	LF	% Fair =	66.0%
	Total Poor Stormdrain:	1,285	LF	% Poor =	24.7%



# **APPENDIX C - TABLE 8:**

#### STORMWATER STRUCTURE:

#### BRANDON ROAD:

Street Name	Manhole (ea)	Catch Basin (ea)	Ra	ating		
BRANDON ROAD	0	1		FAIR		
	Total Manholes:	-	EA			
	Total Catchbasins:		1 EA			
	Total Excellent Stormwater Structure:	-	EA		% Excellent =	0.0%
	Total GoodStormwater Structure:	-	EA		% Good =	0.0%
	Total Fair Stormwater Structure:		1 EA		% Fair =	100.0%
	Total Poor Stormwater Structure:	-	EA		% Poor =	0.0%

#### CHESTNUT STREET:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
CHESTNUT STREET	0	1	POOR
CHESTNUT STREET	0	1	POOR

Total Manholes:	-	EA		
Total Catchbasins:	2	EA		
Total Excellent Stormwater Structure:	-	EA	% Excellent =	0.0%
Total Good Stormwater Structure:	-	EA	% Good =	0.0%
Total Fair Stormwater Structure:	-	EA	% Fair =	0.0%
Total Poor Stormwater Structure:	2	EA	% Poor =	100.0%

#### FAIRVIEW AVENUE:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
FAIRVIEW AVENUE	0	1	GOOD
FAIRVIEW AVENUE	0	1	GOOD
FAIRVIEW AVENUE	0	1	GOOD
FAIRVIEW AVENUE	0	1	GOOD
FAIRVIEW AVENUE	0	1	GOOD
FAIRVIEW AVENUE	0	1	GOOD
FAIRVIEW AVENUE	0	1	FAIR

Total Manholes:	- EA		
Total Catchbasins:	7 EA		
Total Excellent Stormwater Structure:	- EA	% Excellent =	0.0%
Total Good Stormwater Structure:	6 EA	% Good =	85.7%
Total Fair Stormwater Structure:	1 EA	% Fair =	14.3%
Total Poor Stormwater Structure:	- EA	% Poor =	0.0%



# HILL COURT:

Street Name	Manhole (ea)	Catch Basin (ea)		Rating		
HILL COURT	1	0		POOR		
HILL COURT	0	1		GOOD		
	Total Manholes:		1	EA		
	Total Catchbasins:		1	EA		
	Total Excellent Stormwater Structure:		-	EA	% Excellent =	0.0%
	Total Good Stormwater Structure:		1	EA	% Good =	50.0%
	Total Fair Stormwater Structure:		-	EA	% Fair =	0.0%
	Total Poor Stormwater Structure:		1	EA	% Poor =	50.0%

#### JAMES STREET:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
JAMES STREET	0	1	POOR
JAMES STREET	0	1	POOR

Total Manholes:	- EA		
Total Catchbasins:	2 EA		
Total Excellent Stormwater Structure:	- EA	% Excellent =	0.0%
Total Good Stormwater Structure:	- EA	% Good =	0.0%
Total Fair Stormwater Structure:	- EA	% Fair =	0.0%
Total Poor Stormwater Structure:	2 EA	% Poor =	100.0%

#### MARSHALL TERRACE:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
MARSHALL TERRACE	0	1	GOOD
MARSHALL TERRACE	0	1	FAIR

Total Manholes:	- EA		
Total Catchbasins:	2 EA		
Total Excellent Stormwater Structure:	- EA	% Excellent =	0.0%
Total Good Stormwater Structure:	1 EA	% Good =	50.0%
Total Fair Stormwater Structure:	1 EA	% Fair =	50.0%
Total Poor Stormwater Structure:	- EA	% Poor =	0.0%



#### MILL STREET:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
MILL STREET	1	0	GOOD
MILL STREET	1	0	GOOD
MILL STREET	1	0	FAIR
MILL STREET	1	0	FAIR
MILL STREET	0	1	GOOD
MILL STREET	0	1	FAIR
MILL STREET	0	1	FAIR
MILL STREET	0	1	FAIR
MILL STREET	0	1	FAIR
MILL STREET	0	1	POOR
MILL STREET	0	1	FAIR
MILL STREET	0	1	FAIR
MILL STREET	0	1	GOOD
MILL STREET	0	1	GOOD

Total Manholes:	4	EA		
Total Catchbasins:	10	EA		
Total Excellent Stormwater Structure:	-	EA	% Excellent =	0.0%
Total Good Stormwater Structure:	5	EA	% Good =	35.7%
Total Fair Stormwater Structure:	8	EA	% Fair =	57.1%
Total Poor Stormwater Structure:	1	EA	% Poor =	7.1%

#### **OXFORD AVENUE:**

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
OXFORD AVENUE	0	1	GOOD
OXFORD AVENUE	0	1	GOOD

Total Manholes:	-	EA		
Total Catchbasins:	2	EA		
Total Excellent Stormwater Structure:	-	EA	% Excellent =	0.0%
Total GoodStormwater Structure:	2	EA	% Good =	100.0%
Total Fair Stormwater Structure:	-	EA	% Fair =	0.0%
Total Poor Stormwater Structure:	-	EA	% Poor =	0.0%



#### PINE STREET:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
PINE STREET	1	0	FAIR
PINE STREET	1	0	GOOD
PINE STREET	1	0	GOOD
PINE STREET	1	0	EXCELLENT
PINE STREET	0	1	GOOD
PINE STREET	0	1	FAIR
PINE STREET	0	1	FAIR
PINE STREET	0	1	GOOD
PINE STREET	0	1	FAIR
PINE STREET	0	1	FAIR
PINE STREET	0	1	GOOD
PINE STREET	0	1	FAIR

Total Manholes:	4 EA		
Total Catchbasins:	8 EA		
Total Excellent Stormwater Structure:	1 EA	% Excellent =	8.3%
Total Good Stormwater Structure:	5 EA	% Good =	41.7%
Total Fair Stormwater Structure:	6 EA	% Fair =	50.0%
Total Poor Stormwater Structure:	- EA	% Poor =	0.0%

#### PROGRESS AVENUE:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
PROGRESS AVENUE	0	1	POOR
PROGRESS AVENUE	0	1	GOOD

Total Manholes:	- EA		
Total Catchbasins:	2 EA		
Total Excellent Stormwater Structure:	- EA	% Excellent =	0.0%
Total Good Stormwater Structure:	1 EA	% Good =	50.0%
Total Fair Stormwater Structure:	- EA	% Fair =	0.0%
Total Poor Stormwater Structure:	1 EA	% Poor =	50.0%

#### PROSPECT AVENUE:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating		
PROSPECT AVENUE	0	1	GOOD		
	Total Manholes:	-	EA		
	Total Catchbasins:	1	EA		
	Total Excellent Stormwater Structure:	-	EA	% Excellent =	0.0%
	Total Good Stormwater Structure:	1	EA	% Good =	100.0%
	Total Fair Stormwater Structure:	-	EA	% Fair =	0.0%
	Total Poor Stormwater Structure:	-	EA	% Poor =	0.0%



# SECOND AVENUE:

Street Name	Manhole (ea)	Catch Basin (ea)		Rating		
SECOND AVENUE	0	1		EXCELLENT		
SECOND AVENUE	0	1		GOOD		
	Total Manholes:		- E	A		
	Total Catchbasins:		2 E	A		
	Total Excellent Stormwater Structure:		1 E	A	% Excellent =	50.0%
	Total Good Stormwater Structure:		1 E	A	% Good =	50.0%
	Total Fair Stormwater Structure:		- E	A	% Fair =	0.0%
	Total Poor Stormwater Structure:		- E	A	% Poor =	0.0%

#### THIRD AVENUE:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
THIRD AVENUE	0	1	GOOD
THIRD AVENUE	0	1	FAIR
THIRD AVENUE	0	1	FAIR

Total Manholes:	-	EA		
Total Catchbasins:	3	EA		
Total Excellent Stormwater Structure:	-	EA	% Excellent =	0.0%
Total Good Stormwater Structure:	1	EA	% Good =	33.3%
Total Fair Stormwater Structure:	2	EA	% Fair =	66.7%
Total Poor Stormwater Structure:	-	EA	% Poor =	0.0%

#### WEST STREET:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating
WEST STREET	0	1	GOOD
WEST STREET	0	1	GOOD
WEST STREET	0	1	GOOD
WEST STREET	0	1	FAIR
WEST STREET	0	1	GOOD
WEST STREET	0	1	FAIR

Total Manholes:	- EA		
Total Catchbasins:	6 EA		
Total Excellent Stormwater Structure:	- EA	% Excellent =	0.0%
Total Good Stormwater Structure:	4 EA	% Good =	66.7%
Total Fair Stormwater Structure:	2 EA	% Fair =	33.3%
Total Poor Stormwater Structure:	- EA	% Poor =	0.0%



#### WILLIAMS STREET:

Street Name	Manhole (ea)	Catch Basin (ea)	Rating		
WILLIAMS STREET	0	1	POOR		
WILLIAMS STREET	0	1	FAIR		
	Total Manholes:	-	EA		
	Total Catchbasins:	2	EA		
	Total Excellent Stormwater Structure:	-	EA	% Excellent =	0.0%
	Total GoodStormwater Structure:	-	EA	% Good =	0.0%
	Total Fair Stormwater Structure:	1	EA	% Fair =	50.0%
	Total Poor Stormwater Structure:	1	EA	% Poor =	50.0%
	Total Manholes:	9	EA		
	Total Catchbasins:	51	EA		
	Total Excellent Stormwater Structure:	2	EA	% Excellent =	3.3%
	Total Good Stormwater Structure:	28	EA	% Good =	46.7%
	Total Fair Stormwater Structure:	22	EA	% Fair =	36.7%
	Total Poor Stormwater Structure:	8	EA	% Poor =	13.3%


## **APPENDIX C - TABLE 9:**

SEWER MAIN:

### PIPE MATERIAL ABBREVIATIONS

AC	ASBESTOS COATED
PVC	POLYVINYL CHLORIDE
VC	VITREOUS CLAY

### ARDLOCK PLACE:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
ARDLOCK PLACE	AC	1958	117	FAIR
ARDLOCK PLACE	VC	1958	220	FAIR
ARDLOCK PLACE	VC	1958	121	FAIR
ARDLOCK PLACE	AC	1958	128	FAIR
ARDLOCK PLACE	AC	1958	62	FAIR
ARDLOCK PLACE	AC	1958	78	FAIR
ARDLOCK PLACE	AC	1958	188	FAIR
ARDLOCK PLACE	AC	1958	98	FAIR

### Total Length of Sewer Main: 1,012 LF

Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	1,012	LF	% Fair =	100.0%
Total Poor Sewer Main:	-	LF	% Poor =	0.0%

### **BRANDON ROAD:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
BRANDON ROAD	VC	1930	151	POOR
BRANDON ROAD	VC	1930	160	POOR
BRANDON ROAD	VC	1930	152	POOR
BRANDON ROAD	VC	1930	150	POOR
BRANDON ROAD	VC	1930	185	POOR
BRANDON ROAD	VC	1930	243	POOR
BRANDON ROAD	VC	1930	106	POOR
BRANDON ROAD	VC	1930	219	POOR
BRANDON ROAD	VC	1930	191	POOR
BRANDON ROAD	VC	1930	105	POOR
BRANDON ROAD	VC	1930	179	POOR
BRANDON ROAD	VC	1930	239	POOR
BRANDON ROAD	VC	1930	61	POOR

Total Length of Sewer Main:

2,141 LF

Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	-	LF	% Fair =	0.0%
Total Poor Sewer Main:	2,141	LF	% Poor =	100.0%



### CHESTNUT STREET:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
CHESTNUT STREET	AC	1961	186	FIAR
CHESTNUT STREET	VC		385	FAIR
CHESTNUT STREET	AC		163	FAIR
CHESTNUT STREET	VC		113	POOR

### Total Length of Sewer Main: 846 LF

Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	734	LF	% Fair =	86.7%
Total Poor Sewer Main:	113	LF	% Poor =	13.3%

### CURFEW LANE:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating		
CURFEW LANE	AC	1959	186	FAIR		
		Total Length of Sewer Main:	186	LF		
		Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
		Total Good Sewer Main:	-	LF	% Good =	0.0%
		Total Fair Sewer Main:	186	LF	% Fair =	100.0%
		Total Poor Sewer Main:	-	LF	% Poor =	0.0%

### **DIDONATO TERRACE**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating		
DIDONATO TERRACE	VCP		198	FAIR		
		Total Length of Sewer Main:	198	LF		
		Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
		Total Good Sewer Main:	-	LF	% Good =	0.0%
		Total Fair Sewer Main:	198	LF	% Fair =	100.0%
		Total Poor Sewer Main:	-	LF	% Poor =	0.0%

### **ELLIS AVENUE:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
ELLIS AVENUE	AC	1958	266	FAIR
ELLIS AVENUE	AC	1958	259	FAIR

Total Length of Sewer Main:	525	LF		
Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	525	LF	% Fair =	100.0%
Total Poor Sewer Main:	-	LF	% Poor =	0.0%



### FAIRVIEW AVENUE:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
FAIRVIEW AVENUE	AC	1957	119	FAIR
FAIRVIEW AVENUE	AC	1957	298	FAIR
FAIRVIEW AVENUE	AC	1957	260	FAIR
FAIRVIEW AVENUE	AC	1957	79	FAIR
FAIRVIEW AVENUE	AC	1957	114	FAIR
FAIRVIEW AVENUE	AC	1957	195	FAIR
FAIRVIEW AVENUE	AC	1957	97	FAIR
FAIRVIEW AVENUE	AC	1957	147	FAIR
FAIRVIEW AVENUE	AC	1957	245	FAIR
FAIRVIEW AVENUE	AC		145	FAIR

Total Length of Sewer Main: 1,698 LF

Total Excellent Sewer Main: LF % Excellent = 0.0% -Total Good Sewer Main: -LF % Good = 0.0% Total Fair Sewer Main: 1,698 LF % Fair = 100.0% Total Poor Sewer Main: % Poor = 0.0% -LF

### **FIFTH AVENUE:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
FIFTH AVENUE			131	POOR
FIFTH AVENUE			157	POOR
FIFTH AVENUE			137	POOR
FIFTH AVENUE			101	POOR
FIFTH AVENUE			70	POOR

Total Length of Sewer Main:

596 LF

Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	-	LF	% Fair =	0.0%
Total Poor Sewer Main:	596	LF	% Poor =	100.0%

#### FIRST AVENUE:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
FIRST AVENUE	VCP	1936	427	POOR
FIRST AVENUE	VCP	1936	197	POOR
FIRST AVENUE	VCP	1936	94	POOR
FIRST AVENUE	VCP	1936	197	POOR

Total Length of Sewer Main: 915 LF

Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	-	LF	% Fair =	0.0%
Total Poor Sewer Main:	915	LF	% Poor =	100.0%



### FOURTH AVENUE:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
FOURTH AVENUE	VC		203	POOR
FOURTH AVENUE	VC		167	POOR
FOURTH AVENUE	VC		124	POOR
FOURTH AVENUE			111	POOR

Total Length of Sewer Main:

n: 605 LF

Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	-	LF	% Fair =	0.0%
Total Poor Sewer Main:	605	LF	% Poor =	100.0%

### **GEORGE STREET:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
GEORGE STREET	VC	1936	85	POOR
GEORGE STREET	VC	1936	162	POOR
GEORGE STREET	VC	1936	240	POOR
GEORGE STREET	VC	1936	359	POOR
GEORGE STREET	VC	1936	273	POOR
GEORGE STREET	VC	1936	145	POOR
GEORGE STREET	AC	1957	57	FAIR
GEORGE STREET	VC	1936	94	POOR

Total Length of Sewer Main:	1,416 LF	
Total Excellent Sewer Main:	- LF	% Excelle

				0.00/
tal Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	57	LF	% Fair =	4.0%
Total Poor Sewer Main:	1,359	LF	% Poor =	96.0%

### **GREEN STREET:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
GREEN STREET	VC	1926	277	POOR
GREEN STREET	VC	1926	316	POOR
GREEN STREET	VC	1926	427	POOR
GREEN STREET	VC	1926	197	POOR
GREEN STREET	VC	1937	94	POOR

Total Length of Sewer Main: 1,311 LF

Total Excellent Sewer Main: Total Good Sewer Main: Total Fair Sewer Main: Total Poor Sewer Main: 1,311 LI

-	LF	% Excellent =	0.0%
-	LF	% Good =	0.0%
-	LF	% Fair =	0.0%
1,311	LF	% Poor =	100.0%



### HILL COURT:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating	
HILL CIOURT	PVC	2000	197	FAIR	
		Total Length of Sewer Main:	197	LF	
		Total Excellent Sewer Main:	-	LF	% Excellent =
		Total Good Sewer Main:	-	LF	% Good =
		Total Fair Sewer Main:	197	LF	% Fair =
		Total Poor Sewer Main:	-	LF	% Poor =

Good = 0.0% % Fair = 100.0% 0.0% % Poor =

0.0%

#### JAMES STREET:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
JAMES STREET	VC	1954	124	FAIR
JAMES STREET	VC	1954	203	FAIR
JAMES STREET	VC	1954	176	FAIR
JAMES STREET	VC	1954	148	FAIR
JAMES STREET			36	FAIR

Total Length of Sewer Main: 687 LF

Total Excellent Sower Main:		1 6	% Excollent -	0.0%
TOTAL EXCENENT Sewer Main.	-	LI	70 LACENETIL -	0.076
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	687	LF	% Fair =	100.0%
Total Poor Sewer Main:	-	LF	% Poor =	0.0%

### MARSHALL TERRACE:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
MARSHALL TERRACE	AC	1964	185	FAIR
MARSHALL TERRACE	AC	1964	328	FAIR
MARSHALL TERRACE	AC	1964	248	POOR
MARSHALL TERRACE	AC	1964	86	FAIR
MARSHALL TERRACE	AC	1964	138	FAIR
MARSHALL TERRACE	AC	1964	40	FAIR
MARSHALL TERRACE	AC	1964	70	FAIR
MARSHALL TERRACE	AC	1964	326	FAIR

Total Length of Sewer Main:	1,421	LF		
Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	1,173	LF	% Fair =	82.5%
Total Poor Sewer Main:	248	LF	% Poor =	17.5%

### **MENZONE DRIVE:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating		
MENZONE DRIVE	AC	1958	140	FAIR		
		Total Length of Sewer Main:	140	LF		
		Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
		Total Good Sewer Main:	-	LF	% Good =	0.0%
		Total Fair Sewer Main:	140	LF	% Fair =	100.0%
		Total Poor Sewer Main:	-	LF	% Poor =	0.0%



### MILL STREET:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
MILL STREET	VC	1952	183	FAIR
MILL STREET	AC	1961	197	FAIR
MILL STREET	AC	1961	300	FAIR
MILL STREET	VC	1952	199	FAIR
MILL STREET	VC	1900	156	POOR
MILL STREET	PVC	1900	40	FAIR
MILL STREET		0	196	FAIR

### Total Length of Sewer Main: 1,271 LF

Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	1,115	LF	% Fair =	87.7%
Total Poor Sewer Main:	156	LF	% Poor =	12.3%

# OAK STREET:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating		
OAK STREET VC		57	POOR			
		Total Length of Sewer Main:	57	LF		
		Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
		Total Good Sewer Main:	-	LF	% Good =	0.0%
		Total Fair Sewer Main:	-	LF	% Fair =	0.0%
		Total Poor Sewer Main:	57	LF	% Poor =	100.0%

### **OXFORD AVENUE:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
OXFORD AVENUE		1900	325	POOR
OXFORD AVENUE		1900	121	POOR
OXFORD AVENUE	VC		458	FAIR
OXFORD AVENUE	VC		218	FAIR
OXFORD AVENUE	VC		378	FAIR
OXFORD AVENUE	VC		153	FAIR

Total Length of Sewer Main:	1,652	LF		
Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	1,207	LF	% Fair =	73.0%
Total Poor Sewer Main:	445	LF	% Poor =	27.0%



### PINE STREET:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
PINE STREET	VC	1957	70	FAIR
PINE STREET	VC	1937	339	POOR
PINE STREET	VC	1937	338	POOR
PINE STREET			130	POOR
		Total Length of Sewer Main:	877	LF
		Total Excellent Sewer Main:	-	LF

tal Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	70	LF	% Fair =	8.0%
Total Poor Sewer Main:	807	LF	% Poor =	92.0%

### **PROGRESS AVENUE:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
PROGRESS AVENUE	AC	1957	245	FAIR
PROGRESS AVENUE	AC	1957	246	FAIR
PROGRESS AVENUE	AC	1957	245	FAIR
PROGRESS AVENUE	AC	1957	152	FAIR
PROGRESS AVENUE	AC	1957	232	FAIR

Total Length of Sewer Main:

**Total Excellent Sewer Main:** LF % Excellent = 0.0% -Total Good Sewer Main: % Good = 0.0% _ LF Total Fair Sewer Main: 1,121 LF % Fair = 100.0% Total Poor Sewer Main: LF % Poor = 0.0%

1,121 LF

### **PROSPECT AVENUE:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
PROSPECT AVENUE	AC	1958	92	FAIR
PROSPECT AVENUE	AC	1958	218	FAIR
PROSPECT AVENUE	AC	1958	249	FAIR
PROSPECT AVENUE	AC	1961	221	FAIR
PROSPECT AVENUE	AC	1961	229	FAIR
PROSPECT AVENUE	AC	1961	37	FAIR

Total Length of Sewer Main: 1,047 LF

Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	1,047	LF	% Fair =	100.0%
Total Poor Sewer Main:	-	LF	% Poor =	0.0%

### **SAENGER STREET:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating		
SAENGER STREET	VC		221	POOR		
		Total Length of Sewer Main:	221	LF		
		Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
		Total Good Sewer Main:	-	LF	% Good =	0.0%
		Total Fair Sewer Main:	-	LF	% Fair =	0.0%
		Total Poor Sewer Main:	221	LF	% Poor =	100.0%



### SCHOOL COURT:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating	
SCHOOL COURT	VC		213	POOR	
		Total Length of Sewer Main:	213	LF	
		Total Excellent Sewer Main:	-	LF	% Excellent =
		Total Good Sewer Main:	-	LF	% Good =
		Total Fair Sewer Main:	-	LF	% Fair =
		Total Poor Sewer Main:	213	LF	% Poor =

% Good = 0.0% % Fair = 0.0% % Poor = 100.0%

0.0%

0.0%

0.0%

0.0%

100.0%

% Fair =

% Poor =

### SECOND AVENUE:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
SECOND AVENUE	PVC	2005	137	EXCELLENT
SECOND AVENUE	PVC	2005	137	EXCELLENT
SECOND AVENUE	VC	1942	145	POOR
SECOND AVENUE	PVC		190	POOR

Total Length of Se	ewer Main:	608	LF		
Total Excellent Se	ewer Main:	274	LF	% Excellent =	45.0%
Total Good Se	ewer Main:	-	LF	% Good =	0.0%
Total Fair Se	ewer Main:	-	LF	% Fair =	0.0%
Total Poor Se	ewer Main:	335	LF	% Poor =	55.0%

- LF

762 LF

### **SIXTH AVENUE:**

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating	
SIXTH AVENUE	VC	1936	252	POOR	
SIXTH AVENUE	VC	1936	248	POOR	
SIXTH AVENUE	VC	1936	262	POOR	
		Total Length of Sewer Main:	762	LF	
		Total Excellent Sewer Main:	-	LF	% Excellent =
		Total Good Sewer Main:	-	LF	% Good =

Total Fair Sewer Main:

Total Poor Sewer Main:

### THIRD AVENUE:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
THIRD AVENUE	VC	1942	98	POOR
THIRD AVENUE	VC	1942	248	POOR
THIRD AVENUE	VC	1942	153	POOR
THIRD AVENUE	VC	1942	278	POOR

Total Length of Sewer Main:	778	LF		
Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	-	LF	% Fair =	0.0%
Total Poor Sewer Main:	778	LF	% Poor =	100.0%



### VILLAGE STREET:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
VILLAGE STREET	VC	1900	246	POOR
VILLAGE STREET	VC	1900	98	POOR
VILLAGE STREET	VC	1900	107	POOR
VILLAGE STREET	VC	1900	63	POOR
VILLAGE STREET			353	POOR
VILLAGE STREET			198	POOR
VILLAGE STREET	VC	1900	130	POOR

Total Length of Sewer Main: 1,195 LF

Total Excellent Sewer Main: LF % Excellent = 0.0% -Total Good Sewer Main: LF % Good = 0.0% -0.0% Total Fair Sewer Main: -LF % Fair = Total Poor Sewer Main: 1,195 LF % Poor = 100.0%

### WARSAW AVENUE:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating		
WARSAW AVENUE			248	FAIR		
WARSAW AVENUE			487	GOOD		
		Total Length of Sewer Main:	735	LF		
		Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
		Total Good Sewer Main:	487	LF	% Good =	66.3%
		Total Fair Sewer Main:	248	LF	% Fair =	33.7%
		Total Poor Sewer Main:	-	LF	% Poor =	0.0%

### WEST STREET:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
WEST STREET	VC	1900	428	POOR
WEST STREET	VC	1900	304	POOR
WEST STREET	VC	1900	262	POOR
WEST STREET	VC	1900	283	POOR

Total Length of Sewer Main:	1,279	LF		
Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	-	LF	% Fair =	0.0%
Total Poor Sewer Main:	1,279	LF	% Poor =	100.0%



### WILLIAMS STREET:

Street Name	Pipe Material	Date of Installation	Length (ft)	Rating
WILLIAMS STREET	VC	2000	113	FAIR
WILLIAMS STREET	VC	2000	187	FAIR
WILLIAMS STREET	VC	2000	178	FAIR
WILLIAMS STREET	VC	1953	201	FAIR
WILLIAMS STREET	VC	1953	154	FAIR
WILLIAMS STREET	VC	1953	134	FAIR
WILLIAMS STREET	VC	1953	100	POOR
WILLIAMS STREET			326	POOR
WILLIAMS STREET			280	POOR

Total Length of Sewer Main:	1,674	LF		
Total Excellent Sewer Main:	-	LF	% Excellent =	0.0%
Total Good Sewer Main:	-	LF	% Good =	0.0%
Total Fair Sewer Main:	967	LF	% Fair =	57.8%
Total Poor Sewer Main:	707	LF	% Poor =	42.2%
Total Longth of Course Maine	27 204	15		
Total Length of Sewer Main.	27,384	LF		
Total Excellent Sower Main:	-	1 6	% Excollent -	1 0%
Total Excellent Sewer Main.	2/4	LF	% Excellent –	1.0%
Total Good Sewer Main:	487	LF	% Good =	1.8%
Total Fiar Sewer Main:	12,381	LF	% Fair =	45.2%
Total Poor Sewer Main:	14,243	LF	% Poor =	52.0%



### **APPENDIX C - TABLE 10**

SEWER MANHOLE STRUCTURE:

#### ARDLOCK PLACE:

Street Name	Cover	Cover Rating	Cover Rating Structure St		Overall Rating
ARDLOCK PLACE	1	EXCELLENT	1	EXCELLENT	EXCELLENT
ARDLOCK PLACE	1	GOOD	1	FAIR	FAIR
ARDLOCK PLACE	1	GOOD	1	GOOD	GOOD
ARDLOCK PLACE	1	GOOD	1	FAIR	FAIR
ARDLOCK PLACE	1	GOOD	1	GOOD	GOOD
ARDLOCK PLACE	1	GOOD	1	EXCELLENT	GOOD
ARDLOCK PLACE	1	GOOD	1	GOOD	GOOD
ARDLOCK PLACE	1	GOOD	1	FAIR	FAIR

Total Excellent Sewer Manhole:	1	EA	% Excellent =	12.5%
Total Good Sewer Manhole:	4	EA	% Good =	50.0%
Total Fair Sewer Manhole:	3	EA	% Fair =	37.5%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

3 EA

- EA

#### BRANDON ROAD:

Street Name	Street Name Cover Cover Rating		ver Cover Rating Structure Structure Ratin		Overall Rating
BRANDON ROAD	1	GOOD	1	EXCELLENT	GOOD
BRANDON ROAD	1	GOOD	1	GOOD	GOOD
BRANDON ROAD	1	GOOD	1	GOOD	GOOD
BRANDON ROAD	1	GOOD	1	GOOD	GOOD
BRANDON ROAD	1	GOOD	1	GOOD	GOOD
BRANDON ROAD	1	GOOD	1	EXCELLENT	GOOD
BRANDON ROAD	1	GOOD	1	EXCELLENT	GOOD
BRANDON ROAD	1	GOOD	1	GOOD	GOOD
BRANDON ROAD	1	FAIR	1	GOOD	FAIR
BRANDON ROAD	1	FAIR	1	GOOD	FAIR
BRANDON ROAD	1	GOOD	1	GOOD	GOOD
BRANDON ROAD	1	GOOD	1	GOOD	GOOD
BRANDON ROAD	1	FAIR	1	GOOD	FAIR
		Total Excellent Sewer Manhole:	-	EA	% Excellent =
		Total Good Sewer Manhole:	10	EA	% Good =
			•		

Total Fair Sewer Manhole:

Total Poor Sewer Manhole:

0.0% 76.9%

23.1%

0.0%

% Fair =

% Poor =



#### CHESTNUT STREET:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
CHESTNUT STREET	1	GOOD	1	GOOD	GOOD	
CHESTNUT STREET	1	GOOD	1	GOOD	GOOD	
CHESTNUT STREET	1	FAIR	1	FAIR	FAIR	
CHESTNUT STREET	1	GOOD	1	GOOD	GOOD	
		Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
		Total Good Sewer Manhole:	3	EA	% Good =	75.0%
		Total Fair Sewer Manhole:	1	EA	% Fair =	25.0%
		Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### ELLIS AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	<b>Overall Rating</b>
ELLIS AVENUE	1	POOR	1	GOOD	FAIR
ELLIS AVENUE	1	FAIR	1	GOOD	FAIR

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	-	EA	% Good =	0.0%
Total Fair Sewer Manhole:	2	EA	% Fair =	100.0%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### FAIRVIEW AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
FAIRVIEW AVENUE	1	GOOD	1	FAIR	FAIR
FAIRVIEW AVENUE	1	GOOD	1	GOOD	GOOD
FAIRVIEW AVENUE	1	GOOD	1	GOOD	GOOD
FAIRVIEW AVENUE	1	GOOD	1	GOOD	GOOD
FAIRVIEW AVENUE	1	GOOD	1	GOOD	GOOD
FAIRVIEW AVENUE	1	FAIR	1	GOOD	FAIR
FAIRVIEW AVENUE	1	GOOD	1	GOOD	GOOD
FAIRVIEW AVENUE	1	GOOD	1	GOOD	GOOD
FAIRVIEW AVENUE	1	GOOD	1	GOOD	GOOD

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	7	EA	% Good =	77.8%
Total Fair Sewer Manhole:	2	EA	% Fair =	22.2%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%



#### FIFTH AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
FIFTH AVENUE	1	FAIR	1	FAIR	FAIR	
FIFTH AVENUE	1	GOOD	1	GOOD	GOOD	
		Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
		Total Good Sewer Manhole:	1	EA	% Good =	50.0%
		Total Fair Sewer Manhole:	1	EA	% Fair =	50.0%
		Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### FIRST AVENUE:

*NO ISPECTION MANHOLES PAVED OVER

#### FOURTH AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	<b>Overall Rating</b>
FOURTH AVENUE	1	FAIR	1	GOOD	FAIR
FOURTH AVENUE	1	GOOD	1	GOOD	GOOD
FOURTH AVENUE	1	FAIR	1	GOOD	FAIR

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	1	EA	% Good =	33.3%
Total Fair Sewer Manhole:	2	EA	% Fair =	66.7%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### **GEORGE STREET:**

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
GEORGE STREET	1	GOOD	1	GOOD	GOOD
GEORGE STREET	1	GOOD	1	GOOD	GOOD
GEORGE STREET	1	GOOD	1	GOOD	GOOD
GEORGE STREET	1	GOOD	1	GOOD	GOOD
GEORGE STREET	1	FAIR	1	FAIR	FAIR
GEORGE STREET	1	GOOD	1	GOOD	GOOD
GEORGE STREET	1	GOOD	1	GOOD	GOOD
GEORGE STREET	1	GOOD	1	GOOD	GOOD
GEORGE STREET	1	FAIR	1	GOOD	FAIR

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	7	EA	% Good =	77.8%
Total Fair Sewer Manhole:	2	EA	% Fair =	22.2%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%



#### **GREEN STREET:**

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
GREEN STREET	1	GOOD	1	GOOD	GOOD	
GREEN STREET	1	GOOD	1	GOOD	GOOD	
GREEN STREET	1	GOOD	1	GOOD	GOOD	
GREEN STREET	1	GOOD	1	GOOD	GOOD	
		Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
		Total Good Sewer Manhole:	4	EA	% Good =	100.0%
		Total Fair Sewer Manhole:	-	EA	% Fair =	0.0%
		Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### HILL COURT:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
HILL COURT	1	EXCELLENT	1	EXCELLENT	EXCELLENT	
		Total Excellent Sewer Manhole:	1	EA	% Excellent =	100.0%
		Total Good Sewer Manhole:	-	EA	% Good =	0.0%
		Total Fair Sewer Manhole:	-	EA	% Fair =	0.0%
		Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### JAMES STREET:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
JAMES STREET	1	GOOD	1	FAIR	FAIR
JAMES STREET	1	GOOD	1	FAIR	FAIR
JAMES STREET	1	GOOD	1	GOOD	GOOD
JAMES STREET	1	GOOD	1	FAIR	FAIR

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	1	EA	% Good =	25.0%
Total Fair Sewer Manhole:	3	EA	% Fair =	75.0%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%



#### MARSHALL TERRACE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
MARSHALL TERRACE	1	GOOD	1	GOOD	GOOD
MARSHALL TERRACE	1	GOOD	1	GOOD	GOOD
MARSHALL TERRACE	1	POOR	1	FAIR	POOR
MARSHALL TERRACE	1	GOOD	1	FAIR	FAIR
MARSHALL TERRACE	1	GOOD	1	FAIR	FAIR
MARSHALL TERRACE	1	GOOD	1	GOOD	GOOD
MARSHALL TERRACE	1	GOOD	1	GOOD	GOOD
MARSHALL TERRACE	1	FAIR	1	EXCELLENT	FAIR

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	4	EA	% Good =	50.0%
Total Fair Sewer Manhole:	3	EA	% Fair =	37.5%
Total Poor Sewer Manhole:	1	EA	% Poor =	12.5%

#### MENZONE DRIVE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	<b>Overall Rating</b>
MENZONE DRIVE	1	GOOD	1	GOOD	GOOD
MENZONE DRIVE	1	GOOD	1	FAIR	FAIR

-	EA	% Excellent =	0.0%
1	EA	% Good =	50.0%
1	EA	% Fair =	50.0%
-	EA	% Poor =	0.0%
	- 1 1	- EA 1 EA 1 EA - EA	- EA % Excellent =   1 EA % Good =   1 EA % Fair =   - EA % Poor =

#### MILL STREET:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
MILL STREET	1	GOOD	1	GOOD	GOOD
MILL STREET	1	GOOD	1	EXCELLENT	GOOD
MILL STREET	1	GOOD	1	GOOD	GOOD
MILL STREET	1	GOOD	1	EXCELLENT	GOOD
MILL STREET	1	GOOD	1	EXCELLENT	GOOD
MILL STREET	1	GOOD	1	GOOD	GOOD
MILL STREET	1	GOOD	1	GOOD	GOOD
MILL STREET	1	GOOD	1	GOOD	GOOD
MILL STREET	1	GOOD	1	FAIR	FAIR
MILL STREET	1	GOOD	1	GOOD	GOOD
MILL STREET	1	GOOD	1	FAIR	FAIR

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	9	EA	% Good =	81.8%
Total Fair Sewer Manhole:	2	EA	% Fair =	18.2%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### OXFORD AVENUE:



% Poor =

0.0%

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
OXFORD AVENUE	1	EXCELENT	1	GOOD	GOOD	
OXFORD AVENUE	1	GOOD	1	GOOD	GOOD	
OXFORD AVENUE	1	GOOD	1	GOOD	GOOD	
OXFORD AVENUE	1	GOOD	1	GOOD	GOOD	
OXFORD AVENUE	1	GOOD	1	GOOD	GOOD	
		Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
		Total Good Sewer Manhole:	5	EA	% Good =	100.0%
		Total Fair Sewer Manhole:	-	EA	% Fair =	0.0%

PINE STREET:

<u></u>					
Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
PINE STREET	1	GOOD	1	GOOD	GOOD
PINE STREET	1	GOOD	1	GOOD	GOOD
PINE STREET	1	GOOD	1	GOOD	GOOD
PINE STREET	1	GOOD	1	GOOD	GOOD
PINE STREET	1	GOOD	1	FAIR	FAIR

Total Poor Sewer Manhole:

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	4	EA	% Good =	80.0%
Total Fair Sewer Manhole:	1	EA	% Fair =	20.0%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

- EA

#### PROGRESS AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
PROGRESS AVENUE	1	POOR	1	GOOD	FAIR
PROGRESS AVENUE	1	GOOD	1	GOOD	GOOD
PROGRESS AVENUE	1	GOOD	1	GOOD	GOOD
PROGRESS AVENUE	1	GOOD	1	GOOD	GOOD
PROGRESS AVENUE	1	GOOD	1	GOOD	GOOD

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	4	EA	% Good =	80.0%
Total Fair Sewer Manhole:	1	EA	% Fair =	20.0%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%



#### PROSPECT AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
PROSPECT AVENUE	1	GOOD	1	GOOD	GOOD
PROSPECT AVENUE	1	GOOD	1	GOOD	GOOD
PROSPECT AVENUE	1	GOOD	1	EXCELLENT	GOOD
PROSPECT AVENUE	1	GOOD	1	GOOD	GOOD
PROSPECT AVENUE	1	GOOD	1	GOOD	GOOD

Total Excellent Sewer Manhole:	- EA	% Excellent =	0.0%
Total Good Sewer Manhole:	5 EA	% Good =	100.0%
Total Fair Sewer Manhole:	- EA	% Fair =	0.0%
Total Poor Sewer Manhole:	- EA	% Poor =	0.0%

- EA

- EA

#### SECOND AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
SECOND AVENUE	1	GOOD	1	GOOD	GOOD	
SECOND AVENUE	1	GOOD	1	GOOD	GOOD	
		Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
		Total Good Sewer Manhole:	2	EA	% Good =	100.0%

Total Fair Sewer Manhole:

Total Poor Sewer Manhole:

### SIXTH AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
SIXTH AVENUE	1	FAIR	1	GOOD	FAIR	
SIXTH AVENUE	1	FAIR	1	FAIR	FAIR	
		Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
		Total Good Sewer Manhole:	-	EA	% Good =	0.0%
		Total Fair Sewer Manhole:	2	EA	% Fair =	100.0%
		Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### THIRD AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
THIRD AVENUE	1	FAIR	1	FAIR	FAIR
THIRD AVENUE	1	GOOD	1	GOOD	GOOD
THIRD AVENUE	1	GOOD	1	GOOD	GOOD
THIRD AVENUE	1	FAIR	1	GOOD	FAIR

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	2	EA	% Good =	50.0%
Total Fair Sewer Manhole:	2	EA	% Fair =	50.0%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

% Fair =

% Poor =

0.0%

0.0%



#### VILLAGE STREET:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
VILLAGE STREET	1	GOOD	1	GOOD	GOOD	
		Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
		Total Good Sewer Manhole:	1	EA	% Good =	100.0%
		Total Fair Sewer Manhole:	-	EA	% Fair =	0.0%
		Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### WARSAW AVENUE:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
WARSAW AVENUE	1	GOOD	1	GOOD	GOOD	
WARSAW AVENUE	1	GOOD	1	GOOD	GOOD	
		Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
		Total Good Sewer Manhole:	2	EA	% Good =	100.0%
		Total Fair Sewer Manhole:	-	EA	% Fair =	0.0%
		Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%

#### WEST STREET:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating
WEST STREET	1	GOOD	1	GOOD	GOOD
WEST STREET	1	GOOD	1	GOOD	GOOD
WEST STREET	1	GOOD	1	GOOD	GOOD

Total Excellent Sewer Manhole:	-	EA	% Excellent =	0.0%
Total Good Sewer Manhole:	3	EA	% Good =	100.0%
Total Fair Sewer Manhole:	-	EA	% Fair =	0.0%
Total Poor Sewer Manhole:	-	EA	% Poor =	0.0%



#### WILLIAMS STREET:

Street Name	Cover	Cover Rating	Structure	Structure Rating	Overall Rating	
WILLIAMS STREET	1	POOR	1	POOR	POOR	
WILLIAMS STREET	1	GOOD	1	GOOD	GOOD	
WILLIAMS STREET	1	FAIR	1	FAIR	FAIR	
WILLIAMS STREET	1	GOOD	1	POOR	POOR	
WILLIAMS STREET	1	FAIR	1	POOR	POOR	
WILLIAMS STREET	1	POOR	1	POOR	POOR	
WILLIAMS STREET	1	POOR	1	POOR	POOR	
		Total Excellent Sewer Manhole: Total Good Sewer Manhole: Total Fair Sewer Manhole: Total Poor Sewer Manhole:	- 1 5	EA EA EA EA	% Excellent = % Good = % Fair = % Poor =	0.0% 14.3% 14.3% 71.4%
		Total Excellent Sewer Manhole: Total Good Sewer Manhole: Total Fair Sewer Manhole: Total Poor Sewer Manhole:	2 81 32 6	EA EA EA EA	% Excellent = % Good = % Fair = % Poor =	1.7% 66.9% 26.4% 5.0%



# APPENDIX C - TABLE 11:

WATER MAIN:

### ARDLOCK PLACE:

Street Name	Length (ft)	Rating		
ARDLOCK PLACE	88	POOR		
Total Length of Water Main:	88	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	88	LF	% Poor =	100.0%

### BRANDON ROAD:

Street Name	Length (ft)	Rating		
BRANDON ROAD	2211	POOR		
Total Length of Water Main:	2,211	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	2,211	LF	% Poor =	100.0%

### **CHESTNUT STREET:**

Length (ft)	Rating		
1191	POOF	२	
1,191	LF		
-	LF	% Excellent =	0.0%
-	LF	% Good =	0.0%
-	LF	% Fair =	0.0%
1,191	LF	% Poor =	100.0%
	Length (ft) 1191 1,191 - - - 1,191	Length (ft)   Rating     1191   POOF     1,191   LF     -   LF	Length (ft)   Rating     1191   POOR     1,191   LF     -   LF   % Excellent =     -   LF   % Good =     -   LF   % Fair =     1,191   LF   % Poor =

### **CURFEW LANE:**

Street Name	Length (ft)	Rating		
CURFEW LANE	166	POOR	J	
Total Length of Water Main:	166	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	166	LF	% Poor =	100.0%



0.0% 0.0% 100.0% 0.0%

### **ELLIS AVENUE:**

Street Name	Length (ft)	Rating	
ELLIS AVENUE	648	FAIR	
Total Length of Water Main:	648	LF	
Total Excellent Water Main:	-	LF	% Excellent =
Total Good Water Main:	-	LF	% Good =
Total Fair Water Main:	648	LF	% Fair =
Total Poor Water Main:	-	LF	% Poor =

### FAIRVIEW AVENUE:

Length (ft)	Rating		
1555	POC	DR	
1,555	LF		
-	LF	% Excellent =	0.0%
-	LF	% Good =	0.0%
-	LF	% Fair =	0.0%
1,555	LF	% Poor =	100.0%
	Length (ft) 1555 1,555 - - - 1,555	Length (ft)   Rating     1555   POC     1,555   LF     -   LF     1,555   LF	Length (ft)   Rating     1555   POOR     1,555   LF     -   LF   % Excellent =     -   LF   % Good =     -   LF   % Fair =     1,555   LF   % Poor =

### **FIFTH AVENUE:**

Length (ft)	Rating		
742	FAIR		
742	LF		
-	LF	% Excellent =	0.0%
-	LF	% Good =	0.0%
742	LF	% Fair =	100.0%
-	LF	% Poor =	0.0%
	Length (ft) 742 742 - - 742 - 742 - 742 -	Length (ft)   Rating     742   FAIR     742   LF     -   LF     -   LF     742   LF     -   LF     -   LF     742   LF     -   LF	Length (ft)   Rating     742   FAIR     742   LF     -   LF   % Excellent =     -   LF   % Good =     742   LF   % Fair =     -   LF   % For =

### **FIRST AVENUE:**

Street Name	Length (ft)	Rating		
FIRST AVENUE	750	POOR		
Total Length of Water Main:	750	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	750	LF	% Poor =	100.0%

### FOURTH AVENUE:

Street Name	Length (ft)	Rating		
FOURTH AVENUE	758	FAI	R	
Total Length of Water Main:	758	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	758	LF	% Fair =	100.0%
Total Poor Water Main:	-	LF	% Poor =	0.0%



0.0% 0.0% 0.0% 100.0%

# GEORGE STREET:

Street Name	Length (ft)	Rating	
GEORGE STREET	1513	POOR	
Total Length of Water Main:	1,513	LF	
Total Excellent Water Main:	-	LF	% Excellent =
Total Good Water Main:	-	LF	% Good =
Total Fair Water Main:	-	LF	% Fair =
Total Poor Water Main:	1,513	LF	% Poor =

### **GREEN STREET:**

Street Name	Length (ft)	Rating		
GREEN STREET	995	POOR	λ.	
Total Length of Water Main:	995	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	995	LF	% Poor =	100.0%

### HILL COURT:

Street Name	Length (ft)	Rating		
HILL COURT	414	FAIR		
Total Length of Water Main:	414	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	414	LF	% Fair =	100.0%
Total Poor Water Main:	-	LF	% Poor =	0.0%

### JAMES STREET:

Street Name	Length (ft)	Rating		
JAMES STREET	778	POOR		
Total Length of Water Main:	778	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	778	LF	% Poor =	100.0%



0.0% 0.0% 100.0% 0.0%

### MARSHALL TERRACE:

Street Name	Length (ft)	Rating	
MARSHALL TERRACE	1502	FAIR	
Total Length of Water Main:	1,502	LF	
Total Excellent Water Main:	-	LF	% Excellent =
Total Good Water Main:	-	LF	% Good =
Total Fair Water Main:	1,502	LF	% Fair =
Total Poor Water Main:	-	LF	% Poor =

### **MILL STREET:**

Street Name	Length (ft)	Rating		
MILL STREET (ARDLOCK TO W MAIN)	548	FAIR		
MILL STREET (PINE TO VILLAGE)	2074	EXCELLENT		
Total Length of Water Main:	2,623	LF		
Total Excellent Water Main:	2,074	LF	% Excellent =	79.1%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	548	LF	% Fair =	20.9%
Total Poor Water Main:	-	LF	% Poor =	0.0%
OAK STREET:				
Street Name	Length (ft)	Rating		

Length (ft)	Rating		
462	POOR		
462	LF		
-	LF	% Excellent =	0.0%
-	LF	% Good =	0.0%
-	LF	% Fair =	0.0%
462	LF	% Poor =	100.0%
	Length (ft) 462 - - - 462 - 462 - 462	Length (ft)   Rating     462   POOR     462   LF     -   LF     462   LF	Length (ft)   Rating     462   POOR     462   LF     -   LF

### **OXFORD AVENUE:**

Street Name	Length (ft)	Rating		
OXFORD AVENUE	1788	POOR		
Total Length of Water Main:	1,788	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	1,788	LF	% Poor =	100.0%



100.0%

0.0%

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PINE STREET:

Street Name	Length (ft)	Rating	
PINE STREET	1218	EXCELLENT	
Total Longth of Water Main:	1 210	16	
Total Length of Water Main.	1,210	LF	
Total Excellent Water Main:	1,218	LF	% Excellen
Total Good Water Main:	-	LF	% Good
Total Fair Water Main:	-	LF	% Fai
Total Poor Water Main:	-	LF	% Poo

### **PROGRESS AVENUE:**

Street Name	Length (ft)	Rating		
PROGRESS AVENUE	806	POOR	J	
Total Length of Water Main:	806	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	806	LF	% Poor =	100.0%

### PROSPECT AVENUE:

I

Street Name	Length (ft)	Rating		
PROSPECT AVENUE	1121	POOR		
Total Length of Water Main:	1,121	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	1,121	LF	% Poor =	100.0%

### **SAENGER STREET:**

Street Name	Length (ft)	Rating		
SAENGER STREET	246	POOR		
Total Length of Water Main:	246	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	246	LF	% Poor =	100.0%

### SECOND AVENUE:

Street Name	Length (ft)	Rating		
SECOND AVENUE	746	POOR		
Total Length of Water Main:	746	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	746	LF	% Poor =	100.0%



0.0% 0.0% 0.0% 100.0%

### SIXTH AVENUE:

Street Name	Length (ft)	Rating	
SIXTH AVENUE	753	POOR	
Total Length of Water Main:	753	LF	
Total Excellent Water Main:	-	LF	% Excellent =
Total Good Water Main:	-	LF	% Good =
Total Fair Water Main:	-	LF	% Fair =
Total Poor Water Main:	753	LF	% Poor =

### THIRD AVENUE:

Street Name	Length (ft)	Rating		
THIRD AVENUE	758	POOR		
Total Length of Water Main:	758	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	758	LF	% Poor =	100.0%

### **VIEW STREET:**

Street Name	Length (ft)	Rating		
VIEW STREET	225	FAIR		
Total Length of Water Main:	225	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	225	LF	% Fair =	100.0%
Total Poor Water Main:	-	LF	% Poor =	0.0%

### VILLAGE STREET:

Street Name	Length (ft)	Rating		
VILLAGE STREET	768	EXCELLENT		
Total Length of Water Main:	768	LF		
Total Excellent Water Main:	768	LF	% Excellent =	100.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	-	LF	% Poor =	0.0%

### WARSAW AVENUE:

			_	
Street Name	Length (ft)	Rating		
WARSAW AVENUE	1084	POOR		
Total Length of Water Main:	1,084	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	1,084	LF	% Poor =	100.0%



### WEST STREET:

	Street Name	Length (ft)	Rating
WEST STREET		559	POOR
WEST STREET		435	POOR
	Total Length of Water Main:	994	LF

Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	994	LF	% Poor =	100.0%

## WILLIAMS STREET:

Street Name	Length (ft)	Rating		
WILLIAMS STREET	1171	POOR		
Total Length of Water Main:	1,171	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	-	LF	% Fair =	0.0%
Total Poor Water Main:	1,171	LF	% Poor =	100.0%

### WOODELL ROAD:

Street Name	Length (ft)	Rating		
WOODELL ROAD	210	FAIR	]	
Total Length of Water Main:	210	LF		
Total Excellent Water Main:	-	LF	% Excellent =	0.0%
Total Good Water Main:	-	LF	% Good =	0.0%
Total Fair Water Main:	210	LF	% Fair =	100.0%
Total Poor Water Main:	-	LF	% Poor =	0.0%

28,284	LF		
-			
4,060	LF	% Excellent = 14	1.4%
-	LF	% Good = 0	0.0%
5,047	LF	% Fair = 17	7.8%
19,176	LF	% Poor = 67	7.8%



### APPENDIX C - TABLE 12:

### WATER HYDRANT:

#### ARDLOCK PLACE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
ARDLOCK PLACE	0	1	2016	2846	EXCELLENT
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	1	EA	% Excellent =	100.0%
	Total Good Water Hydrant:	-	EA	% Good =	0.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%
BRANDON ROAD:					
Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
BRANDON ROAD	0	1	2010	2846	GOOD
BRANDON ROAD	0	1	2004		GOOD
BRANDON ROAD	0	1	2010	2846	GOOD
BRANDON ROAD	0	1	2008	2846	GOOD
	Iotal Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	4	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	4	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

#### CHESTNUT STREET:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
CHESTNUT STREET	0	1	1977	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	1	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%



### ELLIS AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
ELLIS AVENUE	0	1	2006	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	1	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

### FAIRVIEW AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
FAIRVIEW AVENUE	0	1	2005	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	1	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

#### FIFTH AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
FIFTH AVENUE	0	1	2006	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	1	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

#### FIRST AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
FIRST AVENUE	0	1	2004	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	1	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%



### FOURTH AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
FOURTH AVENUE	0	1	2010	2846	GOOD
FOURTH AVENUE	0	1	2010	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	2	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	2	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

#### **GEORGE STREET:**

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
GEORGE STREET	0	1	2006	2846	GOOD
GEORGE STREET	0	1			FAIR
GEORGE STREET	0	1	2002	2846	GOOD

Total Not Functional Water Hydrant:	- EA		
Total Functional Water Hydrant:	3 EA		
Total Excellent Water Hydrant:	- EA	% Excellent =	0.0%
Total Good Water Hydrant:	2 EA	% Good =	66.7%
Total Fair Water Hydrant:	1 EA	% Fair =	33.3%
Total Poor Water Hydrant:	- EA	% Poor =	0.0%

#### **GREEN STREET:**

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
GREEN STREET	0	1	1985		GOOD
GREEN STREET	0	1	2002	2846	GOOD
GREEN STREET	0	1	1988	2846	GOOD

Total Not Functional Water Hydrant:	-	EA		
Total Functional Water Hydrant:	3	EA		
Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
Total Good Water Hydrant:	3	EA	% Good =	100.0%
Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
Total Poor Water Hydrant:	-	EA	% Poor =	0.0%



### HILL COURT:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating	
HILL COURT	0	1			GOOD	
	Total Not Functional Water Hydrant:	-	EA			
	Total Functional Water Hydrant:	:	L EA			
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%	
	Total Good Water Hydrant:	:	1 EA	% Good =	100.0%	
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%	
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%	

### JAMES STREET:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
JAMES STREET	0	1	1997	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	1	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

#### MARSHALL TERRACE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
MARSHALL TERRACE	0	1	1986	2846	GOOD
MARSHALL TERRACE	0	1			FAIR

Total Not Functional Water Hydrant:	- EA		
Total Functional Water Hydrant:	2 EA		
Total Excellent Water Hydrant:	- EA	% Excellent =	0.0%
Total Good Water Hydrant:	1 EA	% Good =	50.0%
Total Fair Water Hydrant:	1 EA	% Fair =	50.0%
Total Poor Water Hydrant:	- EA	% Poor =	0.0%



### MILL STREET:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
MILL STREET	0	1	2016	2846	EXCELLENT
MILL STREET	0	1	2016	2846	EXCELLENT
MILL STREET	0	1	2016	2846	EXCELLENT
MILL STREET	0	1	2016	2846	EXCELLENT
MILL STREET	0	1	2016	2846	EXCELLENT
MILL STREET	0	1	1986	8752	FAIR

Total Not Functional Water Hydrant:	- EA		
Total Functional Water Hydrant:	6 EA		
Total Excellent Water Hydrant:	5 EA	% Excellent =	83.3%
Total Good Water Hydrant:	- EA	% Good =	0.0%
Total Fair Water Hydrant:	1 EA	% Fair =	16.7%
Total Poor Water Hydrant:	- EA	% Poor =	0.0%

#### **OXFORD AVENUE:**

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
OXFORD AVENUE	0	1	198?	2846	GOOD
OXFORD AVENUE	0	1	1968	2846	GOOD
OXFORD AVENUE	0	1	1974	2846	GOOD
OXFORD AVENUE	0	1	2002	2846	GOOD

Total Not Functional Water Hydrant:	-	EA		
Total Functional Water Hydrant:	4	EA		
Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
Total Good Water Hydrant:	4	EA	% Good =	100.0%
Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

#### PINE STREET:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
PINE STREET	0	1	2016	2846	EXCELLENT
PINE STREET	0	1	210	2846	EXCELLENT
PINE STREET	0	1	2016	2846	EXCELLENT
PINE STREET	0	1	2016	2846	EXCELLENT

Total Not Functional Water Hydrant:	-	EA		
Total Functional Water Hydrant:	4	EA		
Total Excellent Water Hydrant:	4	EA	% Excellent =	100.0%
Total Good Water Hydrant:	-	EA	% Good =	0.0%
Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
Total Poor Water Hydrant:	-	EA	% Poor =	0.0%



#### PROGRESS AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
PROGRESS AVENUE	0	1	2003	2846	GOOD
			E A		
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	1	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

### PROSPECT AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
PROSPECT AVENUE	0	1	1971	2846	GOOD
PROSPECT AVENUE	0	1			GOOD
	Total Not Functional Water Hudrant		E A		

Total Not Functional Water Hydrant:	-		EA		
Total Functional Water Hydrant:	:	2	EA		
Total Excellent Water Hydrant:	-		EA	% Excellent =	0.0%
Total Good Water Hydrant:	1	2	EA	% Good =	100.0%
Total Fair Water Hydrant:	-		EA	% Fair =	0.0%
Total Poor Water Hydrant:	-		EA	% Poor =	0.0%

### SAENGER STREET:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
SAENGER STREET	0	1	1989	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	1	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

#### SECOND AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
SECOND AVENUE	0	1	2005	2846	GOOD
SECOND AVENUE	0	1	2005	2846	GOOD

Total Not Functional Water Hydrant:	- E	ΞA		
Total Functional Water Hydrant:	2 E	ĒA		
Total Excellent Water Hydrant:	- E	ĒA	% Excellent =	0.0%
Total Good Water Hydrant:	2 E	ĒA	% Good =	100.0%
Total Fair Water Hydrant:	- E	ĒA	% Fair =	0.0%
Total Poor Water Hydrant:	- E	EA	% Poor =	0.0%



#### SIXTH AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
SIXTH AVENUE	0	1	196?	2846	FAIR
SIXTH AVENUE	0	1	1984	18752	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	2	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
Total Good Water Hydrant:		1	EA	% Good =	50.0%
	Total Fair Water Hydrant:	1	EA	% Fair =	50.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

#### THIRD AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
THIRD AVENUE	0	1	2003	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	1	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	1	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

### VILLAGE STREET:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
VILLAGE STREET	0	1	2016	2846	EXCELLENT
VILLAGE STREET	0	1	1990	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	2	EA		
	Total Excellent Water Hydrant:	1	EA	% Excellent =	50.0%
	Total Good Water Hydrant:	1	EA	% Good =	50.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%

#### WARSAW AVENUE:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
WARSAW AVENUE	0	1	2002	2846	FAIR
WARSAW AVENUE	0	1			FAIR

Total Not Functional Water Hydrant:	-	EA		
Total Functional Water Hydrant:	2	EA		
Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
Total Good Water Hydrant:	-	EA	% Good =	0.0%
Total Fair Water Hydrant:	2	EA	% Fair =	100.0%
Total Poor Water Hydrant:	-	EA	% Poor =	0.0%



#### WEST STREET:

Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
WEST STREET	0	1	2003	2846	GOOD
WEST STREET	0	1	1981	2846	GOOD
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	2	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	2	EA	% Good =	100.0%
	Total Fair Water Hydrant:	-	EA	% Fair =	0.0%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%
WILLIAMS STREET:					
Street Name	Not Functional Count (ea)	Functional Count (ea)	Year	Model	Rating
WILLIAMS STREET	0	1	1990	2846	GOOD
WILLIAMS STREET	0	1	1987	2846	GOOD
WILLIAMS STREET	0	1		2846	FAIR
	Total Not Functional Water Hydrant:	-	EA		
	Total Functional Water Hydrant:	3	EA		
	Total Excellent Water Hydrant:	-	EA	% Excellent =	0.0%
	Total Good Water Hydrant:	2	EA	% Good =	66.7%
	Total Fair Water Hydrant:	1	EA	% Fair =	33.3%
	Total Poor Water Hydrant:	-	EA	% Poor =	0.0%
	Total Not Functional Water Hydrant:		EA		
	Total Functional Water Hydrant:	54	EA		
	Total Excellent Water Hydrant:	11	EA	% Excellent =	20.4%
	Total Good Water Hydrant:	36	EA	% Good =	66.7%

Total Fair Water Hydrant:

Total Poor Water Hydrant:

7 EA

- EA

% Fair =

% Poor =

13.0%

0.0%

**CCTV Inspection Reports** 



National Water Main Cleaning Co. 25 Marshall Street Canton, MA 02021 Office: 800-422-0815 Fax: 781-828-2473

# **NWMCC INSPECTION REPORT**

# PACP Rating Description

<u>1:</u>	Excellent Condition
	Minor Defects - Failure unlikely in the foreseeable future
<u>2:</u>	Good Condition
	Defects that have not begun to deteriorate - Pipe unlikely to fail for at least 20 years.
<u>3:</u>	Fair Condition
	Moderate defects that will continue to deteriorate - Pipe may fail in 10-20 years.
<u>4:</u>	Poor Condition
	Severe Defects that will become Grade 5 defects within the foreseeable future - Pipe will probably fail in 5-10 years.
<u>5:</u>	Immediate Attention
	Defects require immediate attention - Pipe has failed or will likely fail within the next 5 years or sooner.


National Water Main Cleaning Co. 25 Marshall Street Canton, MA 02021 Office: 800-422-0815 Fax: 781-828-2473

## NWMCC INSPECTION REPORT



## **Pipe Ratings**

			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	1								
2	0	4				0	2								
3	0	12	16	3422	2.7	0	0	8	5121	2.7	24	2.7	5.1		
4	0	0				0	0								
5	0	0				0	5								



NWMCC INSPECTION REPORT





### **Inspection Photos**

Street:

Start date/time:

Pipe segment ref.:

City:



 Photo:
 UNKNOWN-58-12032020-SSS-128.1 ft.-082331.JPG

 At:
 128.098 ft.
 SSS - Surface Damage Surface Spalling 1/.

 Joint:
 No



Photo: UNKNOWN-58-12032020-TBI-137.1 ft.-082435_1.JPG At: 137.105 ft. TBI - Tap Break-in Intruding 2/.

Joint: No



 Photo:
 UNKNOWN-58-12032020-JOM-143.3 ft.-082600.JPG

 At:
 143.31 ft.
 JOM - Joint Offset Medium

 Joint:
 No



 Photo:
 UNKNOWN-58-12032020-ISJ-134.9 ft.-082408.JPG

 At:
 134.903 ft.
 ISJ - Infiltration Stain Joint

 1/9
 Joint:
 Yes



Photo: UNKNOWN-58-12032020-TBI-137.1 ft.-082435.JPG At: 137.105 ft. TBI - Tap Break-in Intruding 2/.



 Photo:
 UNKNOWN-58-12032020-LD-144.0 ft.-082629.JPG

 At:
 144.01 ft.
 LD - Line Down

 Joint:
 No
 15 %



Photo: UNKNOWN-58-12032020-TF-157.5 ft.-082726.JPG At: 157.521 ft. TF - Tap Factory 9/. Joint: No



 Photo:
 UNKNOWN-58-12032020-MSC-197.8 ft.-083030.JPG

 At:
 197.751 ft.
 MSC - Miscellaneous Shape/Size Change

 Joint:
 No



 Photo:
 UNKNOWN-58-12032020-MSA-197.8 ft.-083112.JPG

 At:
 197.751 ft.
 MSA - Miscellaneous Survey Abandoned

 Joint:
 No
 SIZE CHANGE



	Structural:							O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	16								
2	0	0				0	12								
3	0	0	5	5100	5.0	0	12	40	3426	1.5	45	1.7	5.1		
4	0	0				0	0								
5	0	5				0	0								





AMH 'SMH98'

## **Inspection Photos**

City:	Street:	Start date/time:	Pipe segment ref.:		
DUDLEY MA	1ST AVE	20201203 09:30	98 - UNK		



 Photo:
 SMH98A-SMH98-12032020-HSV-7.2 ft.-091046.JPG

 At:
 7.206 ft. 1/. HSV - Hole Soil Visible

 Joint:
 No



Photo: SMH98A-SMH98-12032020-RFJ-48.1 ft.-091517.JPG At: 48.137 ft. RFJ - Roots Fine Joint 8/4

Joint: Yes



 Photo:
 SMH98A-SMH98-12032020-TF-45.0 ft.-091214.JPG

 At:
 45.034 ft.
 TF - Tap Factory

 12/.
 Joint:
 No



Photo: SMH98A-SMH98-12032020-RMJ-63.0 ft.-091554.JPG At: 63.048 ft. RMJ - Roots Medium Joint 8/4 Joint: Yes 20 %



Photo:	SMH98A-SN	/H98-12032020-TFD-74.4 ft091635_1.JP
At:	74.357 ft. 12/.	TFD - Tap Factory Defective
Joint:	No	ROOTS



Photo: SMH98A-SMH98-12032020-RMJ-83.8 ft.-091715.JPG At: 83.764 ft. RMJ - Roots Medium Joint 9/3 Joint: Yes 45 %

Distance: 115.1 ft.



 Photo:
 SMH98A-SMH98-12032020-TFD-115.1 ft.-091851.JPG

 At:
 115.088 ft.
 TFD - Tap Factory Defective

 12/.
 Joint:
 No
 ROOTS POSSIBLY CAPPED



Photo:	SMH98A-S	MH98-12032020-TFD-74.4 ft091635.JPG
At:	74.357 ft. 12/.	TFD - Tap Factory Defective
Joint:	No	ROOTS



Photo: SMH98A-SMH98-12032020-TF-95.0 ft.-091755.JPG At: 94.973 ft. TF - Tap Factory 12/.

Joint: No POSSIBLY CAPPED



Photo: SMH98A-SMH98-12032020-RFJ-129.6 ft.-091950.JPG At: 129.599 ft. RFJ - Roots Fine Joint 8/4 Joint: Yes



Photo: SMH98A-SMH98-12032020-TF-138.5 ft.-092010.JPG At: 138.506 ft. TF - Tap Factory 12/. Joint: No



Photo: SMH98A-SMH98-12032020-TFC-168.7 ft.-092136.JPG At: 168.729 ft. TFC - Tap Factory Capped 12/.



Photo: SMH98A-SMH98-12032020-TF-187.3 ft.-092238.JPG At: 187.343 ft. TF - Tap Factory 12/.



 Photo:
 SMH98A-SMH98-12032020-TF-143.4 ft.-092039.JPG

 At:
 143.41 ft.
 TF - Tap Factory

 12/.
 Joint:
 No



Photo: SMH98A-SMH98-12032020-DAGS-187.3 ft.-092313.JPG At: 187.343 ft. DAGS - Deposits Attached Grease 10/2

Joint: No 5%



 Photo:
 SMH98A-SMH98-12032020-TFC-204.7 ft.-092402.JPG

 At:
 204.657 ft.
 TFC - Tap Factory Capped

 12/.
 Joint:
 No



At: 217.967 ft. DAGS - Deposits Attached Grease 10/2 Joint: No 5 %



			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	4								
2	0	0				0	0								
3	0	0	5	5100	5.0	0	6	18	4232	2.3	23	2.6	5.1		
4	0	0				0	8								
5	0	5				0	0								





AMH 'SMH98A'



#### **Inspection Photos**

Street:

Start date/time:

Pipe segment ref.:

 Photo:
 SMH98B-SMH98A-12032020-RFJ-25.8 ft.-093421.JPG

 At:
 25.82 ft. 2/4 RFJ - Roots Fine Joint

 Joint:
 Yes

Photo: SMH98B-SMH98A-12032020-RMJ-43.6 ft.-093505.JPG At: 43.633 ft. RMJ - Roots Medium Joint 8/11

Joint: Yes 15 %

City:



 Photo:
 SMH98B-SMH98A-12032020-TFC-58.1 ft.-094041.JPG

 At:
 58.145 ft.
 TFC - Tap Factory Capped 12/.

 Joint:
 No



Photo: SMH98B-SMH98A-12032020-RFJ-99.2 ft.-094303.JPG At: 99.176 ft. RFJ - Roots Fine Joint 12/1

Joint: Yes



Photo: SMH98B-SMH98A-12032020-RML-139.5 ft.-095115.JPG At: 139.507 ft. RML - Roots Medium Lateral 12/. Joint: No 20 %



Photo: SMH98B-SMH98A-12032020-TFC-66.3 ft.-094119.JPG At: 66.251 ft. TFC - Tap Factory Capped 12/. Joint: No



Photo: SMH98B-SMH98A-12032020-TFC-119.0 ft.-094533.JPG At: 118.991 ft. TFC - Tap Factory Capped 12/.



Photo: SMH98B-SMH98A-12032020-TF-139.5 ft.-095103.JPG At: 139.507 ft. TF - Tap Factory 12/. Joint: No



Photo: SMH98B-SMH98A-12032020-RFJ-163.9 ft.-095752.JPG At: 163.926 ft. RFJ - Roots Fine Joint 10/. Joint: Yes



Photo: SMH98B-SMH98A-12032020-TBI-169.8 ft.-095816.JPG At: 169.83 ft. TBI - Tap Break-in Intruding 12/.

Joint: No



Photo: SMH98B-SMH98A-12032020-TF-204.0 ft.-095948.JPG At: 203.956 ft. TF - Tap Factory 12/. Joint: No



Photo: SMH98B-SMH98A-12032020-TBI-169.8 ft.-095816_1.JPG At: 169.83 ft. TBI - Tap Break-in Intruding 12/. Joint: No



Photo: SMH98B-SMH98A-12032020-TFC-174.7 ft.-095851.JPG At: 174.734 ft. TFC - Tap Factory Capped 12/.



 Photo:
 SMH98B-SMH98A-12032020-HSV-210.8 ft.-100124_1.JPG

 At:
 210.761 ft.
 HSV - Hole Soil Visible

 1/9
 Joint:
 No



 Photo:
 SMH98B-SMH98A-12032020-HSV-210.8 ft.-100124.JPG

 At:
 210.761 ft.
 HSV - Hole Soil Visible

 1/9
 Joint:
 No



Photo:SMH98B-SMH98A-12032020-MSA-210.8 ft.-100213.JPGAt:210.761 ft.MSA - Miscellaneous Survey AbandonedJoint:NoOBSTRUCTION EXTERNAL PIPE



Photo: SMH98B-SMH98A-12032020-OBP-210.8 ft.-100038.JPG At: 210.761 ft. OBP - Obstruction External Pipe or Cable 2/8

Joint: No 25 %



			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	0								
2	0	0				0	0								
3	0	0	0	0000	0.0	0	3	7	4131	3.5	7	3.5	4.1		
4	0	0				0	4								
5	0	0				0	0								





#### **Inspection Photos**

Street:

WARSAW ST

Start date/time:

20201203 11:30

Pipe segment ref.:

79 - 80

Photo:SMH79-SMH80-12032020-MSA-57.9 ft.-105439.JPGAt:57.944 ft.MSA - Miscellaneous Survey AbandonedJoint:NoOBSTACLE

Joint: No 25 % 2X4 FROM LATERAL

**OBN - Obstruction Construction Debris** 

57.944 ft.

10/2

At:

City:

DUDLEY MA



 Photo:
 SMH79-SMH80-12032020-TFD-57.9 ft.-105256.JPG

 At:
 57.944 ft. 9/. TFD - Tap Factory Defective

 Joint:
 No
 WOOD INTRUDING



	Structural:							O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	1								
2	0	0				0	0								
3	0	6	6	3200	3.0	0	0	1	1100	1.0	7	2.3	3.2		
4	0	0				0	0								
5	0	0				0	0								





### **Inspection Photos**

Street: DUDLEY MA WARSAW ST

City:

Start date/time: 20201203 12:04 Pipe segment ref.:



78 - 79



Photo: SMH78-SMH79-12032020-TF-14.0 ft.-113327.JPG At: 14.011 ft. 3/. TF - Tap Factory Joint: No



Photo: SMH78-SMH79-12032020-JOM-60.2 ft.-113755.JPG At: 60.246 ft. JOM - Joint Offset Medium Joint: No



Photo: SMH78-SMH79-12032020-DFBR-24.2 ft.-113414.JPG At: 24.219 ft. **DFBR - Deformed Flexible Bulging Round** Joint: No 5%



Photo: SMH78-SMH79-12032020-TF-61.5 ft.-113729.JPG At: 61.547 ft. 9/. TF - Tap Factory Joint: No



 Photo:
 SMH78-SMH79-12032020-LL-92.6 ft.-114005.JPG

 At:
 92.571 ft.
 LL - Line Left

 Joint:
 No
 10 %



 Photo:
 SMH78-SMH79-12032020-MSA-93.6 ft.-114029.JPG

 At:
 93.572 ft.
 MSA - Miscellaneous Survey Abandoned

 Joint:
 No
 BEND



			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	3				0	13								
2	0	2				0	0								
3	0	3	8	3121	1.6	0	0	13	1A00	1.0	21	1.2	3.1		
4	0	0				0	0								
5	0	0				0	0								





## **Inspection Photos**

City:	Street:
DUDLEY MA	JAMES ST

Start date/time: 20201203 12:52

Pipe segment ref.: 144A - 144



t: 34.827 ft. 8/4

Distance: 22.2 ft.

Joint: Yes



Photo: SMH144A-SMH144-12032020-RFJ-22.3 ft.-120658.JPC At: 22.317 ft. RFJ - Roots Fine Joint 2/4



 Photo:
 SMH144A-SMH144-12032020-TF-48.5 ft.-121239.JPG

 At:
 48.537 ft. 1/. TF - Tap Factory

 Joint:
 No



Photo: SMH144A-SMH144-12032020-TF-53.5 ft.-121302.JPG At: 53.541 ft. TF - Tap Factory 11/. Joint: No



Photo: SMH144A-SMH144-12032020-RFJ-87.5 ft.-121555.JPG At: 87.467 ft. RFJ - Roots Fine Joint 8/4

Joint: Yes



 Photo:
 SMH144A-SMH144-12032020-CC-102.1 ft.-121641.JPG

 At:
 102.078 ft.
 CC - Crack Circumferential

 1/2
 Joint:
 Yes



 Photo:
 SMH144A-SMH144-12032020-FC-60.0 ft.-121447.JPG

 At:
 60.046 ft.
 FC - Fracture Circumferential

 1/4
 Joint:
 Yes



Photo: SMH144A-SMH144-12032020-TF-92.2 ft.-121607.JPG At: 92.171 ft. TF - Tap Factory 12/.



Photo: SMH144A-SMH144-12032020-FL-127.2 ft.-121734.JPG At: 127.197 ft. FL - Fracture Longitudinal 8/. Joint: No



 Photo:
 SMH144A-SMH144-12032020-TFC-130.9 ft.-121754.JPG

 At:
 130.9 ft. 12/. TFC - Tap Factory Capped

 Joint:
 No



Photo: SMH144A-SMH144-12032020-TF-163.3 ft.-121935.JPG At: 163.325 ft. TF - Tap Factory 12/.

Joint: No



 Photo:
 SMH144A-SMH144-12032020-CC-169.5 ft.-122014.JPG

 At:
 169.53 ft.
 CC - Crack Circumferential

 7/12
 Joint:
 No



 Photo:
 SMH144A-SMH144-12032020-CC-158.9 ft.-121901.JPG

 At:
 158.922 ft.
 CC - Crack Circumferential

 1/4
 Joint:
 Yes



Photo: SMH144A-SMH144-12032020-RFJ-167.0 ft.-121957.JPG At: 167.028 ft. RFJ - Roots Fine Joint 10/.

Joint: Yes



 Photo:
 SMH144A-SMH144-12032020-AMH-178.4 ft.-122045.JPG

 At:
 178.437 ft.
 AMH - Manhole

 Joint:
 No
 MH144



	Structural:							O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	7								
2	0	2				0	0								
3	0	3	9	4131	3.0	0	3	19	5141	1.9	28	2.2	5.1		
4	0	4				0	4								
5	0	0				0	5								





#### Start date/time: City: DUDLEY MA **OXFORD AVE** 20201204 12:39 235 -241 Distance: 12.2 ft. Distance: 30.3 ft. TB - Tap Break-in/Hammer Clock from: 10 o'clock TFC - Tap Factory Capped Clock from: 9 o'clock Clock to: Clock to: Rating: Rating: Dimension 1:6 Dimension 1:6 Dimension 2: Dimension 2 %: %: Photo: SMH235-SMH241-12032020-TB-12.2 ft.-125553.JPG Photo: SMH235-SMH241-12032020-TFC-30.3 ft.-125642.JPG

At: 30.323 ft. 9/. TFC - Tap Factory Capped Joint: No



Photo: SMH235-SMH241-12032020-TF-78.7 ft.-125841.JPG 78.66 ft. 9/. TF - Tap Factory At: Joint: No

## **Inspection Photos**

Street:

Pipe segment ref.:





Photo: SMH235-SMH241-12032020-TF-61.8 ft.-125751.JPG 61.847 ft. 3/. TF - Tap Factory At: Joint: No



 Photo:
 SMH235-SMH241-12032020-TBI-80.3 ft.-125903_1.JPG

 At:
 80.261 ft.
 TBI - Tap Break-in Intruding 10/.

 Joint:
 No



Photo: SMH235-SMH241-12032020-CM-94.3 ft.-125956.JPG At: 94.272 ft. CM - Crack Multiple 8/11



 Photo:
 SMH235-SMH241-12032020-TBI-95.7 ft.-130017.JPG

 At:
 95.673 ft.
 TBI - Tap Break-in Intruding

 12/.
 Joint:
 No



Photo: SMH235-SMH241-12032020-TBI-80.3 ft.-125903.JPG At: 80.261 ft. TBI - Tap Break-in Intruding 10/. Joint: No



Photo: SMH235-SMH241-12032020-TBI-95.7 ft.-130017_1.JPG At: 95.673 ft. TBI - Tap Break-in Intruding 12/.



 Photo:
 SMH235-SMH241-12032020-LL-105.6 ft.-130102.JPG

 At:
 105.581 ft.
 LL - Line Left

 Joint:
 No
 10 %



 Photo:
 SMH235-SMH241-12032020-TFC-107.8 ft.-130124.JPG

 At:
 107.783 ft.
 TFC - Tap Factory Capped 3/.

 Joint:
 No



Photo: SMH235-SMH241-12032020-RFJ-122.8 ft.-130239.JPG At: 122.794 ft. RFJ - Roots Fine Joint 9/3

Joint: Yes



Photo: SMH235-SMH241-12032020-RFJ-149.4 ft.-130417.JPG At: 149.414 ft. RFJ - Roots Fine Joint 9/3 Joint: Yes



Photo: SMH235-SMH241-12032020-RFJ-114.6 ft.-130205.JPG At: 114.588 ft. RFJ - Roots Fine Joint 2/. Joint: Yes



Photo: SMH235-SMH241-12032020-TF-149.3 ft.-130618.JPG At: 149.314 ft. TF - Tap Factory 9/.

SAENGER ST CONNECTION ?



Photo: SMH235-SMH241-12032020-FM-149.7 ft.-130659.JPG At: 149.715 ft. FM - Fracture Multiple 11/2 Joint: No



Photo: SMH235-SMH241-12032020-TF-162.1 ft.-130523.JPG At: 162.124 ft. TF - Tap Factory 9/. Joint: No



Photo: SMH235-SMH241-12032020-TB-191.4 ft.-130901.JPG At: 191.447 ft. TB - Tap Break-in/Hammer 12/.

Joint: No



 Photo:
 SMH235-SMH241-12032020-TF-225.0 ft.-131048.JPG

 At:
 224.972 ft.
 TF - Tap Factory

 2/.
 Joint:
 No



 Photo:
 SMH235-SMH241-12032020-TFC-170.4 ft.-130755.JPG

 At:
 170.43 ft. 1/. TFC - Tap Factory Capped

 Joint:
 No



Photo: SMH235-SMH241-12032020-TF-199.8 ft.-130941.JPG At: 199.753 ft. TF - Tap Factory 10/.



Photo: SMH235-SMH241-12032020-TF-269.2 ft.-131236.JPG At: 269.206 ft. TF - Tap Factory 12/. Joint: No



 Photo:
 SMH235-SMH241-12032020-MWLS-297.8 ft.-131348.JPG

 At:
 297.828 ft.
 MWLS - Miscellaneous Water Level Sag

 Joint:
 No
 10 %



Photo: SMH235-SMH241-12032020-TB-302.0 ft.-131436.JPG At: 302.031 ft. TB - Tap Break-in/Hammer 12/.

Joint: No



Photo: SMH235-SMH241-12032020-TF-359.1 ft.-131732.JPG At: 359.075 ft. TF - Tap Factory 1/. Joint: No



 Photo:
 SMH235-SMH241-12032020-TFC-300.4 ft.-131413.JPG

 At:
 300.43 ft.
 TFC - Tap Factory Capped

 12/.
 Joint:
 No



Photo: SMH235-SMH241-12032020-TF-340.4 ft.-131622.JPG At: 340.361 ft. TF - Tap Factory 12/.



Photo: SMH235-SMH241-12032020-TB-379.7 ft.-131827.JPG At: 379.691 ft. TB - Tap Break-in/Hammer 11/. Joint: No


Photo: SMH235-SMH241-12032020-TB-417.2 ft.-131950.JPG At: 417.219 ft. TB - Tap Break-in/Hammer 10/. Joint: No



Photo: SMH235-SMH241-12032020-TFC-465.5 ft.-132155.JPG 465.456 ft. TFC - Tap Factory Capped At: 2/.

Joint: No



Photo: SMH235-SMH241-12032020-TBI-499.1 ft.-132336_1.JPG 499.082 ft. TBI - Tap Break-in Intruding At: 12/. Joint: No



SMH235-SMH241-12032020-TFC-419.5 ft.-132015.JPG Photo: At: 419.521 ft. TFC - Tap Factory Capped 1/. Joint: No



Photo: SMH235-SMH241-12032020-TF-490.9 ft.-132304.JPG 490.876 ft. TF - Tap Factory At: 11/.

Joint: No



SMH235-SMH241-12032020-TBI-499.1 ft.-132336.JPG Photo: 499.082 ft. TBI - Tap Break-in Intruding At: 12/. No

Joint:



 Photo:
 SMH235-SMH241-12032020-AMH-549.2 ft.-132549.JPG

 At:
 549.221 ft.
 AMH - Manhole

 Joint:
 No
 MH241



			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	0								
2	0	0				0	0								
3	0	0	0	0000	0.0	0	0	4	4100	4.0	4	4.0	4.1		
4	0	0				0	4								
5	0	0				0	0								



#### **Inspection Photos**

City:	Street:	Start date
DUDLEY MA	ARDLOCK ST	20201204

e/time: 4 13:25 Pipe segment ref.: 176 - 175



Photo: SMH-176-SMH-175-12042020-TF-68.6 ft.-124444.JPG At: 68.552 ft. TF - Tap Factory 12/. Joint: No



Photo: SMH-176-SMH-175-12042020-RMB-148.4 ft.-124840.JPG At: 148.414 ft. RMB - Roots Medium Barrel 6/10 Joint: No 35 % AT MH



Photo: SMH-176-SMH-175-12042020-AMH-148.9 ft.-125012.JPG 148.914 ft. AMH - Manhole At: Joint: No MH175



			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	0								
2	0	0				0	2								
3	0	0	0	0000	0.0	0	0	2	2100	2.0	2	2.0	2.1		
4	0	0				0	0								
5	0	0				0	0								



#### **Inspection Photos**

City:	Street:
DUDLEY MA	ARDLOCK PL

Start date/time: 20201204 13:25 Pipe segment ref.: 175 - 178



Photo:	SIVIN	11/8-51	MH1/5-12042020-DAG5-5.9 π132/58.JPG
At:	5.90 11/1	5 ft.	DAGS - Deposits Attached Grease
Joint:	No	5 %	



Photo: SMH178-SMH175-12042020-MSC-17.5 ft.-132928.JPG 17.513 ft. MSC - Miscellaneous Shape/Size Change At: Joint: No



Photo: SMH178-SMH175-12042020-TF-15.9 ft.-132835.JPG At: 15.912 ft. 9/. TF - Tap Factory No Joint:



Photo: SMH178-SMH175-12042020-MSA-17.5 ft.-133022.JPG 17.513 ft. MSA - Miscellaneous Survey Abandoned At: Joint: No SIZE CHANGE AND BEND



National Water Main Cleaning Co. 25 Marshall Street Canton, MA 02021 Office: 800-422-0815 Fax: 781-828-2473

## **NWMCC INSPECTION REPORT**

### PACP Rating Description

<u>1:</u>	Excellent Condition
	Minor Defects - Failure unlikely in the foreseeable future
<u>2:</u>	Good Condition
	Defects that have not begun to deteriorate - Pipe unlikely to fail for at least 20 years.
<u>3:</u>	Fair Condition
	Moderate defects that will continue to deteriorate - Pipe may fail in 10-20 years.
<u>4:</u>	Poor Condition
	Severe Defects that will become Grade 5 defects within the foreseeable future - Pipe will probably fail in 5-10 years.
<u>5:</u>	Immediate Attention
	Defects require immediate attention - Pipe has failed or will likely fail within the next 5 years or sooner.



National Water Main Cleaning Co. 25 Marshall Street Canton, MA 02021 Office: 800-422-0815 Fax: 781-828-2473

## NWMCC INSPECTION REPORT



			Structura	al:				O&M:				Over	rall:	
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk
1	0	0				0	0							
2	0	0				0	0							
3	0	0	0	0000	0.0	0	0	0	0000	0.0	0	0.0	1.0	
4	0	0				0	0							
5	0	0				0	0							



### **Inspection Photos**

City: Street: DUDLEY, MA MILL ST

Start date/time: 20210614 09:57

Pipe segment ref.: MH178-US



			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	0								
2	0	0				0	0								
3	0	0	0	0000	0.0	0	0	0	0000	0.0	0	0.0	1.0		
4	0	0				0	0								
5	0	0				0	0								



### **Inspection Photos**

City: DUDLEY, MA Street: MILL ST Start date/time: 20210614 10:26

Pipe segment ref.: MH175-MH178



			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	0								
2	0	0				0	0								
3	0	0	0	0000	0.0	0	0	0	0000	0.0	0	0.0	1.0		
4	0	0				0	0								
5	0	0				0	0								



### **Inspection Photos**

City: DUDLEY, MA Street: MILL ST Start date/time: 20210614 10:46

Pipe segment ref.: MH57-MH180



			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	0								
2	0	0				0	0								
3	0	0	0	0000	0.0	0	0	0	0000	0.0	0	0.0	1.0		
4	0	0				0	0								
5	0	0				0	0								



### **Inspection Photos**

City: DUDLEY, MA Street: MILL ST Start date/time: 20210614 11:14

Pipe segment ref.: MH180-MH175



			Structura	al:				O&M:			Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	0								
2	0	0				0	0								
3	0	0	0	0000	0.0	0	0	0	0000	0.0	0	0.0	1.0		
4	0	0				0	0								
5	0	0				0	0								



### **Inspection Photos**

City: DUDLEY, MA Street: ARDLOCK PL Start date/time: 20210621 08:24

Pipe segment ref.: MH175-MH178R



			Structura	al:				O&M:				Ove	rall:	
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk
1	0	0				0	0							
2	0	0				0	0							
3	0	0	0	0000	0.0	0	0	5	5100	5.0	5	5.0	5.1	
4	0	0				0	0							
5	0	0				0	5							



Some observations have distance greater than the pipe length

Stopped at 75.6 ft. with flow on 6/21/2021 8:30:54 AM

#### **Inspection Photos**

City: DUDLEY-MA

Street:	
ARDLOCK-PLACE	

Start date/time: 20210621 08:32

Pipe segment ref.: MH181-MH182



 Photo:
 MH181-MH182-20210621-082405-082633.JPG

 At:
 19.115 ft. 3/. TBI - Tap Break-in Intruding

 Joint:
 No



 Photo:
 MH181-MH182-20210621-082405-082849.JPG

 At:
 74.157 ft.
 AMH - Manhole

 Joint:
 No
 DOWNSTREAM MANHOLE



			Structura	al:				O&M:			Overall:			
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk
1	0	0				0	0							
2	0	0				0	0							
3	0	0	0	0000	0.0	0	0	0	0000	0.0	0	0.0	1.0	
4	0	0				0	0							
5	0	0				0	0							



Some observations have distance greater than the pipe length

Stopped at 56.9 ft. with flow on 6/21/2021 8:44:11 AM

#### **Inspection Photos**

City: Street: DUDLEY-MA ARDLO

ARDLOCK-PLACE

Start date/time: 20210621 08:47

Pipe segment ref.: MH182-MH184



 Photo:
 MH182-MH183-20210621-083201-083504.JPG

 At:
 47.036 ft. 9/. TBA - Tap Break-in Activity

 Joint:
 No



 Photo:
 MH182-MH183-20210621-083201-083553.JPG

 At:
 56.043 ft.
 AMH - Manhole

 Joint:
 No
 DOWNSTREAM MANHOLE



	Structural:					O&M:						Overall:			
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk	
1	0	0				0	0								
2	0	0				0	0								
3	0	0	0	0000	0.0	0	0	0	0000	0.0	0	0.0	1.0		
4	0	0				0	0								
5	0	0				0	0								

Stopped at -126.8 ft. with flow on 6/21/2021 9:24:36 AM



#### **Inspection Photos**

 City:
 Street:
 Start date/time:
 Pipe segment ref.:

 DUDLEY-MA
 ARDLOCK-PLACE
 20210621
 09:26
 MH184-MH177



 Photo:
 MH184-MH177-20210621-084703-085740.JPG

 At:
 117.99 ft.
 AMH - Manhole

 Joint:
 No
 DOWNSTREAM MANHOLE



	Structural:							O&M:		Overall:				
Grade	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Defects	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index	LoF	Risk
1	0	0				0	0							
2	0	0				0	0							
3	0	0	0	0000	0.0	0	0	0	0000	0.0	0	0.0	1.0	
4	0	0				0	0							
5	0	0				0	0							



#### Distance: 75.0 ft. Distance: 198.0 ft. TB - Tap Break-in/Hammer Clock from: 2 o'clock Clock to: TB - Tap Break-in/Hammer Clock from: 12 o'clock Clock to: Rating: Rating: Dimension 1:6 Dimension 2 Dimension 2: %: Photo: MH177-MH176-20210621-092638-093127.JPG Photo: MH177-MH176-20210621-092638-094731.JPG At: 74.957 ft. TB - Tap Break-in/Hammer At: 197.952 ft. TB - Tap Break-in/Hammer 12/. 2/. Joint: No Joint: No

Street:

ARDLOCK-PLACE

#### **Inspection Photos**

Start date/time:

20210621 09:26

Pipe segment ref.:

MH177-MH176

Photo: MH177-MH176-20210621-092638-094801.JPG At: 205.457 ft. AMH - Manhole Joint: No DOWNSTREAM MANHOLE

City:

DUDLEY-MA

Distance: 205.5 ft. AMH - Manhole Clock from: Clock to: Rating: Dimension 1: Dimension 2:

DOWNSTREAM MANHOLE

%:

**Fairview Service Cards** 

JOB 1696 11/2/02 12 Fairview Ave Main break . Used 42" p of blue brute main is 5' deep. OD7:25 7:05 OVER JOB 1799 10/30/08 Main break 18 Fairview ave Main break. Main is transite, REPAI replace broken main with 6" blue brue, Used 45" of pipe and two couplings. O.D. 4'6" deep over 3-18-16 JOB 1891 FAIRVIEW AVE + WARSAW AVE MAIN BREAK ON FAIRVIEW AVE 4' FROM WARSAW AVE LINE GATE MAIN is 4'6" DEEP 0.0. 7:05 72" OF PLASTIC OVER



# **APPENDIX D**

Public Improvement Data Street Name: Ardlock Place (please use a separate form for each street) Zoning or Land Use: Industry 43 <u>Infrastructure age</u> Water line: 1900 +/-Sewer line: 1959 Road surface: Unknown Lighting: N/A Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Fair – The road surface has significant cracking and minor settlement.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Fair – Water lines starting to age and need regular maintenance and repair.
Existing Sidewalk	N/A
Curbing	Fair – Bituminous curb has segments with of significant cracks and minimal revel height. Curbing is not continuous.
Drainage	N/A
Parking Lot:	N/A
Lighting:	N/A
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Sewer main and water main are in need of increasing maintenance due to age of infrastructure.

Public Improvement Data Street Name: Brandon Road (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1930 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14. Component Condition Road Surface Good – The road surface has minor cracking. Water Lines Poor - Water main likely in poor structural condition due to age. Sewer Lines Poor – Sewer main is likely to be in poor structural condition due to age. Existing Sidewalk Good – Minor cracking and patches crossing sidewalk. Sidewalk ramps are present but not ADA compliant expect next to the library. Curbing Good – Minor deficiencies in bituminous curb face. N/A Drainage Parking Lot: N/A Lighting: Eight overhead street lights on telephone poles are present. Trees/Landscaping: N/A Park/Playground: N/A Other: N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – The surface features are generally in good condition but underground utilities are in need of repairs and the lack of drainage infrastructure is problematic.

Public Improvement Data Street Name: Chestnut Street (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: 1900 +/-Sewer line: Unknown Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.						
<u>Component</u>	<u>Condition</u>					
Road Surface	Good– The road surface has minor cracking and a trench patch from gas installation.					
Water Lines	Poor - Water main likely in poor structural condition due to age.					
Sewer Lines	Fair – Sewer Lines starting to age and may need regular maintenance and repair.					
Existing Sidewalk	N/A					
Curbing	N/A					
Drainage	Poor – Structures that are present have sediment build up, are of deteriorating condition and lack curbing—signs of previous erosion and flooding along street.					
Parking Lot:	N/A					
Lighting:	Three overhead street lights on telephone poles are present.					
Trees/Landscaping:	N/A					
Park/Playground:	N/A					
Other:	N/A					

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – The surface features are generally in good condition but underground utilities are in need of repairs.

Public Improvement Data Street Name: Curfew Lane (please use a separate form for each street) Zoning or Land Use: Industry 43 <u>Infrastructure age</u> Water line: 1900 +/-Sewer line: 1959 Road surface: Unknown Lighting: N/A Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.				
<u>Component</u>	Condition				
Road Surface	Fair – The road surface has significant cracking and settlement.				
Water Lines	Poor - Water main likely in poor structural condition due to age.				
Sewer Lines	Fair – Sewer Lines starting to age and may need regular maintenance and repair.				
Existing Sidewalk	N/A				
Curbing	N/A				
Drainage	N/A				
Parking Lot:	N/A				
Lighting:	N/A				
Trees/Landscaping:	N/A				
Park/Playground:	N/A				
Other:	N/A				
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Sewer main					

and water main are in need of increasing maintenance due to age of infrastructure.

Public Improvement Data Street Name: Didonato Terrace (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: N/A Sewer line: N/A Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight

Describe the condition of each applicable component using the category definitions found on pages 11-14. Condition **Component** Road Surface Fair – The road surface has significant cracking, settlement and uneven pavement. Roadway is also part of / used as parking lot. N/A Water Lines Sewer Lines Fair – VCP pipe changes pipe size in the middle of mainline. Some structural and operation and maintenance deficiencies are present. N/A **Existing Sidewalk** Curbing Fair – Concrete curbing has significant waring and settlement. Drainage N/A N/A Parking Lot: Lighting: One overhead street light on telephone pole is present. Trees/Landscaping: N/A Park/Playground: N/A Other: N/A Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Fair - Surface features suffer from significant damage.

Public Improvement Data Street Name: Donna Lane (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: N/A Sewer line: N/A Road surface: Unknown Lighting: N/A Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.

<u>Component</u>	Condition				
Road Surface	Poor – The road surface is craked, uneven with numerous areas of exposed subbase. Appears to require full reconstruction.				
Water Lines	N/A				
Sewer Lines	N/A				
Existing Sidewalk	N/A				
Curbing	N/A				
Drainage	N/A				
Parking Lot:	N/A				
Lighting:	N/A				
Trees/Landscaping:	N/A				
Park/Playground:	N/A				
Other:	N/A				
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Poor – Surface features suffer from significant damage.					
Public Improvement Data Street Name: Ellis Ave (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1947 Sewer line: 1958 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ☐ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Excellent – Roadway Surface is of recent construction.
Water Lines	Fair – Water lines starting to age and need regular maintenance and repair.
Sewer Lines	Fair – Sewer Lines starting to age and may need regular maintenance and repair.
Existing Sidewalk	N/A
Curbing	Good – Minor deficiencies in bituminous curb face.
Drainage	N/A
Parking Lot:	N/A
Lighting:	Two overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Good – The surface features are generally in good condition but	

aging underground utilities may be in need of repairs.

Public Improvement Data Street Name: Fairview Avenue (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1957 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14. Component Condition Road Surface Fair – Road surface has minor cracking, settlement around structures and potholing. Water Lines Poor - Water main likely in poor structural condition due to age. Sewer Lines Fair – Transite sewer lines starting to age and need regular maintenance and repair. Existing Sidewalk N/A Good – Minor cracking and deficiencies in bituminous curb face. Curbing Drainage Fair – Catch Basins have minor debris and minor deficiencies at frames. The DPW has indicated continued drainage problems. Parking Lot: N/A Lighting: Five overhead street lights on telephone poles are present. Trees/Landscaping: N/A Park/Playground: N/A Other: N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Sewer main and water main are in need of increasing maintenance due to age of infrastructure. Drainage infrastructure needs replacement.

Public Improvement Data Street Name: Fifth Avenue (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1948 Sewer line: Unknown Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Excellent – Roadway surface is of recent construction.
Water Lines	Fair – Water lines starting to age and need regular maintenance and repair.
o	
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition due to age.
Existing Sidewalk	Ν/Δ
Curbing	N/A
Drainage	N/A
Parking Lot:	N/A
Lighting:	One overhead street light on telephone note is present
Lighting.	One overhead street light on telephone pole is present.
Trees/Landscaping:	N/A
1 0	
Park/Playground:	N/A
Other:	N/A
Overall Definer (Everyland / Devid / Devid briefly state when Dein The surface for time and the line of the line o	
underground utilities are in need of repairs.	

Public Improvement Data Street Name: First Avenue (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1936 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.	
<u>Component</u>	Condition
Road Surface	Fair – The road surface has significant cracking, settlement, patching, and deterioration along edges.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition and a possible source of groundwater/stormwater inflow due to age.
Existing Sidewalk	Fair – Sidewalk has cracking and settlement. Sidewalk abruptly ends and cars are parked on sidewalk.
Curbing	Poor – Curbing has deteriorated to a point where it is barely still present.
Drainage	N/A
Parking Lot:	N/A
Lighting:	One overhead street light on telephone pole is present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Averall Pating: (Eventent / Cood / Eair / Boor) briefly state why Boor Surface features suffer from significant demons Course	

Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Poor – Surface features suffer from significant damage. Sewer main and water main are in need of replacement due to age of infrastructure.

Public Improvement Data Street Name: Fourth Avenue (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1949 Sewer line: Unknown Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Excellent – Roadway surface is of recent construction.
Water Lines	Fair – Water lines starting to age and need regular maintenance and repair.
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition due to age.
Existing Sidewalk	N/A
Curbing	Good – Short section of bituminous berm with minor cracking.
Drainage	N/A
Parking Lot:	N/A
Lighting:	Two overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Fair – The surface features are generally in good condition but	

underground utilities are in need of repairs.

Public Improvement Data Street Name: George Street (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1936 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14. Component Condition **Road Surface** Good – The road surface has some cracking. Water Lines Poor - Water main likely in poor structural condition due to age. Sewer Lines Poor - Sewer main is likely to be in poor structural condition and a possible source of groundwater/stormwater inflow due to age. **Existing Sidewalk** N/A Curbing Good - Minor deficiencies in bituminous curb face and minor cracking. Drainage N/A Parking Lot: N/A Lighting: Three overhead street lights on telephone poles are present. Trees/Landscaping: N/A Park/Playground: N/A Other: N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – The surface features are generally in good condition but underground utilities are in need of repairs and the lack of drainage infrastructure is problematic.

Public Improvement Data Street Name: Green Street (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1926 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.	
<u>Component</u>	Condition
Road Surface	Good– The road surface has minor cracking and a trench patch from gas installation.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition and a possible source of groundwater/stormwater inflow.
Existing Sidewalk	Fair – Bituminous sidewalks have minor cracking with grass growth, some uneven pavement caused by tree roots and some settling. Ramps are only sometimes present and not ADA compliant.
Curbing	Fair – Bituminous curb has segments with significant deficiencies in curb face, cracks with grass growth, settlement and/or of significant deterioration.
Drainage	N/A
Parking Lot:	N/A
Lighting:	Five overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Sewer main and water main are in need of replacement due to age of infrastructure.

Public Improvement Data Street Name: Hill Court (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1948 Sewer line: 2000 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Good– The road surface has minor cracking and patch around manhole.
Water Lines	Fair – Water lines starting to age and need regular maintenance and repair.
Sewer Lines	Fair – PVC Sewer Lines is a known area of infiltration.
Existing Sidewalk	N/A
Curbing	N/A
Drainage	Good – Catch basin is in good condition with minor deficiency is in cement under invert due to invert being installed in a higher location. Condition unkown in DMH and
Parking Lot:	outlet in private property. N/A
Lighting:	One overhead street light on telephone poles is present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – The surface features are generally in good condition but underground utilities are in need of increasing maintenance.

Public Improvement Data Street Name: James Street (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1954 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Fair – The road surface has cracking and minor settlement. Some areas of cracking starting to degrade and will likely become potholes over the winter.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Fair – Sewer Lines starting to age and may need regular maintenance and repair.
Existing Sidewalk	N/A
Curbing	Fair – Short segment of bituminous curbing with minor deficiencies in curb face.
Drainage	Poor – Catchbasins showing deficiencies and have sediment buildup with standing water.
Parking Lot:	N/A
Lighting:	Three overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Sewer main and water main are in need of increasing maintenance due to age of infrastructure. Drainage infrastructure is in need or repair.	

Public Improvement Data Street Name: Love Court (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: N/A Sewer line: N/A Road surface: Unknown Lighting: N/A Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 □ Physical Deterioration of Public Improvement or
 □ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Good – The road surface has minor cracking and settlement.
Water Lines	N/A
Sewer Lines	N/A
Existing Sidewalk	N/A
Curbing	Good – Minor cracking with vegetation and minor deficiencies in bituminous curb face.
Drainage	N/A
Parking Lot:	N/A
Lighting:	N/A
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Good – The surface features are generally in good and no underground utilities are present.	

Public Improvement Data Street Name: Marshall Terrace (please use a separate form for each street) Zoning or Land Use: General Residential <u>Infrastructure age</u> Water line: 1959 Sewer line: 1964 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/a

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Fair – The road surface has significant cracking, settlement and patching.
Water Lines	Fair – Water lines starting to age and need regular maintenance and repair.
Sewer Lines	Fair – Sewer Lines starting to age and may need regular maintenance and repair.
Existing Sidewalk	N/A
Curbing	N/A
Drainage	Poor – Structures that are present have sediment build up and are of deteriorating condition. Signs of previous flooding and confirmed drainage issues by DPW.
Parking Lot:	N/A
Lighting:	Four overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Sewer main	

and water main are in need of increasing maintenance due to age of infrastructure. Drainage infrastructure requires replacement.

Public Improvement Data Street Name: Menzone Drive (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: N/A Sewer line: N/A Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14. Component Condition Road Surface Poor – The road surface is cracked, uneven with areas of settlement. Appears to require full reconstruction. Water Lines N/A Sewer Lines N/A Existing Sidewalk N/A Curbing N/A Drainage N/A Parking Lot: N/A Lighting: Two overhead street lights on telephone poles are present. Trees/Landscaping: N/A Park/Playground: N/A Other: N/A

Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Poor – Street requires reconstruction based on evaluation of current surface conditions.

Public Improvement Data Street Name: Mill Street (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: Unknown Sewer line: 1961 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.

Physical Deterioration of Public Improvement
or

The public improvement is not contributing to

 $\hfill \square$  The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14. Component Condition Good – The majority of roadway surface is of recent construction. Some road surface Road Surface has minor cracking and a trench patch from gas installation. Water Lines Excellent – Water line is of recent construction. Sewer Lines Fair – Sewer Lines starting to age and may need regular maintenance and repair. Existing Sidewalk Good – Some bituminous sidewalk is of recent construction. Some has Minor cracking and patches. Some ramps are present but not ADA compliant. Curbing Good – Minor deficiencies in bituminous curb face. Drainage Fair – Structures that are present have sediment build up, and are showing signs of deterioration. Parking Lot: N/A Lighting: Seven overhead street lights on telephone poles are present. Trees/Landscaping: N/A Park/Playground: N/A Other: N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Good – The surface features are generally in good condition. The water main is of recent construction but other aging underground utilities may require repairs.

Public Improvement Data
Street Name: Oak Street
(please use a separate form for each street)
Zoning or Land Use: Business/General
Residential
Infrastructure age
Water line: 1900 +/-
Sewer line: 1900
Road surface: Unknown
Lighting: Unknown
Sidewalk & curbs: Unknown
Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Good– The road surface has minor cracking and a trench patch from gas installation.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition and a possible source of groundwater/stormwater inflow due to age.
Existing Sidewalk	Fair – Bituminous sidewalks have minor cracking with grass growth and some uneven pavement/. Ramps are not present.
Curbing	Fair – Granit curbing has minor chipping and areas of settlement / minimal revel height.
Drainage	N/A
Parking Lot:	N/A
Lighting:	Two overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Sewer main and water main require replacement due to age of infrastructure.	

Public Improvement Data Street Name: Oxford Avenue (please use a separate form for each street) Zoning or Land Use: Light Industry 43 Infrastructure age Water line: 1900 +/-Sewer line: 1900 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14. Component Condition Road Surface Good – The road surface has minor cracking. Water Lines Poor - Water main likely in poor structural condition due to age and severely undersized. Sewer Lines Fair – Based on the sewer main section that was inspected via CCTV, the sewer is in fair condition with some structural and operation and maintenance defects. **Existing Sidewalk** Poor – The cement concrete sidewalks display cracking and patching. Bituminous sidewalks have significant cracking with grass growth, uneven pavement and settling. Ramps are only sometimes present and not ADA compliant. Fair – Granite curbing shows chipping and settlement. Curbing Drainage Good – Catchbasin at bottom of hill before the bridge have no visible deficiencies. Parking Lot: N/A Lighting: Five overhead street lights on telephone poles are present. Trees/Landscaping: N/A Park/Playground: N/A N/A Other:

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Poor – Surface features suffer from significant damage. Water main requires replacement due to age of infrastructure and capacity.

#### Public Improvement Data Street Name: Pine Street (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: Unknown Sewer line: 1937 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.

Physical Deterioration of Public Improvement
or

 $\hfill \square$  The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.		
<u>Component</u>	Condition	
Road Surface	Excellent – Roadway surface is of recent construction.	
Water Lines	Excellent – Water Lines are of recent construction.	
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition and a possible source of groundwater/stormwater inflow due to age.	
Existing Sidewalk	Good – Bituminous sidewalks are of recent construction. Ramps are present but not ADA compliant.	
Curbing	Excellent – Bituminous curb is of recent construction with minor deficiencies in curb face.	
Drainage	Fair – Structures that are present have sediment build up, and are showing signs of deterioration. CMP is rusted, many grates are broken and mortar/ bricks, specifically around frame have seen deterioration.	
Parking Lot:	Good – The parking lot has some cracking with early signs of vegetation growth.	
Lighting:	Four overhead street lights on telephone poles are present.	
Trees/Landscaping:	N/A	
Park/Playground:	Good – Basketball court has minor cracking and some signs of pooling water but park is in overall good condition.	
Other:	N/A	

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Good – The surface features are generally in good condition. The water main is of recent construction but other aging underground utilities may require repairs.

Public Improvement Data Street Name: Progress Avenue (please use a separate form for each street) Zoning or Land Use: Light Industry 43, Business/General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1957 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Fair – The road surface has significant cracking, settlement and patching. Signs of pooling water following a rain event.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Fair – Sewer Lines starting to age and may need regular maintenance and repair.
Existing Sidewalk	N/A
Curbing	N/A
Drainage	Fair – Structures have sediment build up and vegetation grown over the grate. They are showing signs of deterioration, including rusted CMP.
Parking Lot:	N/A
Lighting:	One overhead street lights on telephone pole present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Sewer main.	

water main and drainage are in need of increasing maintenance due to age of infrastructure.

Public Improvement Data Street Name: Prospect Avenue (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1958-1961 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14. Component Condition Road Surface Excellent – Roadway surface is of recent construction. Water Lines Poor - Water main likely in poor structural condition due to age. Sewer Lines Fair – Sewer Lines starting to age and may need regular maintenance and repair. N/A Existing Sidewalk N/A Curbing Drainage N/A – Some sediment build up along street from flooding/pooling. Parking Lot: N/A Lighting: One overhead street lights on telephone pole present. Trees/Landscaping: N/A Park/Playground: N/A Other: N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – The surface features are generally in good condition but underground utilities may require repairs.

Public Improvement Data Street Name: Saenger Street (please use a separate form for each street) Zoning or Land Use: Light Industry 43 Infrastructure age Water line: 1900 +/-Sewer line: 1900 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition	Describe the condition of each applicable component using the category definitions found on pages 11-14.	
<u>Component</u>	Condition	
Road Surface	Fair – The road surface has significant cracking, settlement and patching. Signs of pooling water following a rain event.	
Water Lines	Poor - Water main likely in poor structural condition due to age.	
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition due to age. Sewer is connected to the main trunkline with only a T connection.	
Existing Sidewalk	N/A	
Curbing	N/A	
Drainage	N/A	
Parking Lot:	N/A	
Lighting:	One overhead street light on telephone pole present.	
Trees/Landscaping:	N/A	
Park/Playground:	N/A	
Other:	N/A	

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Sewer main and water main are in need of replacement due to age of infrastructure.

Public Improvement Data Street Name: School Court (please use a separate form for each street) Zoning or Land Use: Light Industry 43 <u>Infrastructure age</u> Water line: N/A Sewer line: Unknown Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Good– The road surface has minor cracking and a trench patch from gas installation.
Water Lines	N/A
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition due to age. Sewer is connected to the main trunkline with only a T connection.
Existing Sidewalk	N/A
Curbing	N/A
Drainage	N/A
Parking Lot:	N/A
Lighting:	One overhead street light on telephone pole present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Water main	

are in need of replacement due to age of infrastructure. Erosion present.

Public Improvement Data Street Name: Second Avenue (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1942 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ☐ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Good – Roadway surface is of recent construction and has a trench patch that is settling and some signs of erosion/ settlement near hydrant valves.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition due to age.
Existing Sidewalk	N/A
Curbing	Good – Minor deficiencies in bituminous curb face. Curb only in front of one property.
Drainage	Good – Infiltration catch basins are of recent construction.
Parking Lot:	N/A
Lighting:	Two overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Rating: (Excellent / Good / Fair / Poor) briefly state why. Good – The surface features are generally in good condition but	

aging underground utilities require repairs.

Public Improvement Data Street Name: Sixth Avenue (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1936 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.

<u>Component</u>	Condition
Road Surface	Excellent – Roadway surface is of recent construction.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition due to age.
Existing Sidewalk	N/A
Curbing	N/A
Drainage	N/A
Parking Lot:	N/A
Lighting:	Two overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – The surface features are generally in good condition but underground utilities may require repairs.

Public Improvement Data Street Name: Third Avenue (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1900 +/-Sewer line: 1942 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14. Component Condition Road Surface Excellent – Roadway surface is of recent construction. Water Lines Poor - Water main likely in poor structural condition due to age. Sewer Lines Poor – Sewer main is likely to be in poor structural condition due to age. N/A Existing Sidewalk N/A Curbing Drainage Fair – Structures have sediment build up and water prevents inspection. Outlet into private property with signs of flooding. Parking Lot: N/A Lighting: N/A Trees/Landscaping: N/A Park/Playground: N/A Other: N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – The surface features are generally in good condition but underground utilities may require repairs.

Public Improvement Data Street Name: View Street (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: 1966 Sewer line: N/A Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.	
<u>Component</u>	Condition
Road Surface	Fair – The road surface has some cracking that vegetation has started to grow through and erosion along edges.
Water Lines	Fair – Water lines starting to age and need regular maintenance and repair.
Sewer Lines	N/A
Existing Sidewalk	N/A
Curbing	Good – Minor deficiencies in bituminous curb face.
Drainage	N/A
Parking Lot:	N/A
Lighting:	One overhead street light on telephone pole is present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Water main may require increasing maintenance due to age of infrastructure.

Public Improvement Data
Street Name: Village Street
(please use a separate form for each street)
Zoning or Land Use: Industry 43,
Business/General Residential
Infrastructure age
Water line: Unknown
Sewer line: 1900
Road surface: Unknown
Lighting: Unknown
Sidewalk & curbs: Unknown
Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Good – The road surface has minor cracking and deterioration started along ages due to erosion/ pooling water.
Water Lines	Excellent – Water line is of recent construction.
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition and a possible source of groundwater/stormwater inflow due to age. Connects to the main trunk line via private property.
Existing Sidewalk	Poor – Bituminous sidewalk has no berm, major cracking and settlement. Sidewalk is acting as a collection area for stormwater.
Curbing	N/A
Drainage	N/A
Parking Lot:	N/A
Lighting:	Three overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A
Overall Pating: (Everyllent / Cood / Fair / Paer) briefly state why. Fair - Overfees factures outfar from some demonstrations	

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – Surface features suffer from some damage. Water main is of recent construction Sewer main is need of replacement due to age of infrastructure and location.

Public Improvement Data Street Name: Warsaw Avenue (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1900 +/-Sewer line: Unknown Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 □ Physical Deterioration of Public Improvement or
 □ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.	
<u>Component</u>	Condition
Road Surface	Good – The road surface has minor cracking.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Good– Some sewer lines are of newer construction some sewer lines starting to age and may need regular maintenance and repair.
Existing Sidewalk	N/A
Curbing	Good – Minor deficiencies in bituminous curb face.
Drainage	N/A
Parking Lot:	N/A
Lighting:	One overhead street light on telephone pole present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Good – The surface features are generally in good condition but aging underground utilities may require repairs.

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight



Describe the condition	of each applicable component using the category definitions found on pages 11-14.
<u>Component</u>	Condition
Road Surface	Fair – Some of the road surface has significant cracking and minor settlement.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Poor – Sewer main is likely to be in poor structural condition and a possible source of groundwater/stormwater inflow due to age.
Existing Sidewalk	Poor – Bituminous sidewalk has major cracking, settlement and walking hazards that make it not walkable in some areas. Ramps are only sometimes present and not ADA
Curbing	Fair – Bituminous curb has segments with of significant cracks and setteling.
Drainage	Fair – Structures have sediment build up, and are showing signs of deterioration. CMP is rusted, a grate is broken and there is ponding around the structure.
Parking Lot:	N/A
Lighting:	Three overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Poor – Surface features suffer from significant damage. Sewer main, water main and drainage require replacement due to age of infrastructure.

Public Improvement Data Street Name: Williams Street (please use a separate form for each street) Zoning or Land Use: Business/General Residential Infrastructure age Water line: 1900+/-Sewer line: 1953 Road surface: Unknown Lighting: Unknown Sidewalk & curbs: Unknown Other Relevant Data: N/A

Please check the appropriate box.
 ☑ Physical Deterioration of Public Improvement or
 ☑ The public improvement is not contributing to

slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.	
<u>Component</u>	Condition
Road Surface	Poor – The road surface is cracked, uneven with areas of settlement. Appears to require full reconstruction.
Water Lines	Poor - Water main likely in poor structural condition due to age.
Sewer Lines	Fair – Sewer Lines starting to age and may need regular maintenance and repair. Connects to main trunk line via private property.
Existing Sidewalk	Poor – Bituminous sidewalk has now berm, major cracking and settlement.
Curbing	N/A
Drainage	Poor – Structures that are present have sediment build up, are of deteriorating condition and lack curbing—signs of previous erosion and flooding along street.
Parking Lot:	N/A
Lighting:	Two overhead street lights on telephone poles are present.
Trees/Landscaping:	N/A
Park/Playground:	N/A
Other:	N/A

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Poor – Streets and curbs may require reconstruction based on evaluation of current surface conditions. Sewer main and water main require increasing maintenance due to age of infrastructure.

Public Improvement Data Street Name: Wooddell Road (please use a separate form for each street) Zoning or Land Use: General Residential Infrastructure age Water line: 1969 Sewer line: N/A Road surface: Unknown Lighting: N/A Sidewalk & curbs: N/A Other Relevant Data: N/A

Please check the appropriate box.
 ➢ Physical Deterioration of Public Improvement or
 ☐ The public improvement is not contributing to slum and blight



Describe the condition of each applicable component using the category definitions found on pages 11-14.

<u>Component</u>	Condition	
Road Surface	Excellent – Roadway surface is of recent construction.	
Water Lines	Fair – Water lines starting to age and need regular maintenance and repair.	
Sewer Lines	N/A	
Existing Sidewalk	N/A	
Curbing	Good – Minor deficiencies in bituminous curb face.	
Drainage	N/A	
Parking Lot:	N/A	
Lighting:	N/A	
Trees/Landscaping:	N/A	
Park/Playground:	N/A	
Other:	N/A	

**Overall Rating:** (Excellent / Good / Fair / Poor) briefly state why. Fair – The surface features are generally in good condition but underground utilities may require repairs.



## **APPENDIX E**





V:\Proiects\D\D5011\MXD\DudlevMA InfrastructureAssessment\ConditionFigures\StormwaterSystemImprovements DudlevMA 11x17.mxd [Exported By: kiw. 2/2/2021. 10:30:38 AM]



## **APPENDIX** F



rojects\D\D5011\MXD\DudleyMA_InfrastructureAssessment\ConditionFigures\DudleyMA_Aerial_PriorityProjects.mxd [Exported By: kjw, 2/2/2021, 10:32:39 A

# TOWN OF DUDLEY, MA JERICHO-BRANDON INFRASTRUCTURE PLANNING PROJECT

## PRIORITY PROJECTS **JANUARY 2021**

LIST OF DRAWINGS			
SHEET NC.	DRAWING NO.	DRAWING TITLE	
1	G-C01	COVER SHEET AND .IST OF DRAWINGS	
2	C-101	OXFORD AVENUE LAYOUT	
3	C-102	CHESTNUT, GREEN, OAK, & WEST WATER LAYOUT - 1	
4	C-103	CHESTNUT, GREEN, OAK, & WEST WATER LAYOUT - 2	
5	C-104	CHESTNUT, GREEN, OAK, & WEST DRAINAGE LAYOUT - 1	
6	C-105	CHESTNUT, GREEN, OAK, & WEST DRAINAGE LAYOUT - 2	
7	C-106	CHESTNUT, GREEN, OAK, & WEST SIDEWALK LAYOUT - 1	
8	C-107	CHESTNUT, GREEN, OAK, & WEST SIDEWALK LAYOUT - 2	
9	C-108	VILLAGE, MILL, ARDLOCK SEWER LAYOUT	
10	C-109	VILLAGE, MILL, ARDLOCK SIDEWALK LAYOUT	
11	C-110	FIRST AVENJE LAYCUT	
12	C-111	FAIRVIEW AVENUE LAYOUT - 1	
13	C-112	FAIRVIEW AVENUE LAYOUT - 2	



PREPARED BY: Tighe&Bond

PREPARED FOR: TOWN OF DUDLEY JONATHAN RUDA, TOWN ADMINISTRATOR

LOCATION MAP

## CONCEPTUAL DESIGN NOT FOR CONSTRUCTION

CENTRAL MASSACHUSETTS REGIONAL PLANNING COMMISSION

### **COMPLETE SET 13 SHEETS**




Last Saved: J Plotted On:Fi Tighe & Bone





Last Saved: Plotted On:F















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	Jericho- Brandon Infrastructure Planning Project
	Town of Dudley Dudley,MA
LEGEND PROPOSED WATER WATER HYDRANT TO BE INSTALLED	MARK DATE DESCRIPTION MARK DATE DESCRIPTION PROJECT NO: D5011-007 DATE: 01/28/2021 FILE: Priority Projects.dwg DRAWN BY: ELD CHECKED BY: MPW APPROVED BY: JPV FAIRVIEW AVENUE LAYOUT-1
0 40' 80' SCALE: 1" = 40'	scale: 1" = 40' C-111





# **APPENDIX** G

### Cost Estimate Summary

Project	Subtotal
Oxford Avenue Project (Estimated Construction + Contingency +Construction Engineering)	\$879,895.00
Oxford Avenue Project (Design Engineering)	\$114,800.00
Oxford Avenue Project - Project Total	\$995,000.00
Chestnut, Green, Oak, & West Water Project - Phase 1 (Estimated Construction + Contingency +Construction Engineering)	\$573,580.00
Chestnut, Green, Oak, & West Water Project - Phase 1 (Design Engineering)	\$74,800.00
Chestnut, Green, Oak, & West Water Project - Phase 1 Total	\$648,000.00
Chestnut, Green, Oak, & West Water Project - Phase 2 (Estimated Construction + Contingency +Construction Engineering)	\$631,825.00
Chestnut, Green, Oak, & West Water Project - Phase 2 (Design Engineering)	\$82,400.00
Chestnut, Green, Oak, & West Water Project - Phase 2 Total	\$714,000.00
Chestnut, Green, Oak, & West Water Project - Project Total	\$1,362,000.00
Chestnut, Green, Oak, & West Drain Project (Estimated Construction + Contingency +Construction Engineering)	\$868,300.00
Chestnut, Green, Oak, & West Drain Project (Design Engineering)	\$113,300.00
Chestnut, Green, Oak, & West Drain Project - Project Total	\$982,000.00
Chestnut, Green, Oak, & West Sidewalk Project (Estimated Construction + Contingency +Construction Engineering)	\$530,230.00
Chestnut, Green, Oak, & West Sidewalk Project (Design Engineering)	\$69,200.00
Chestnut, Green, Oak, & West Sidewalk Project - Project Total	\$599,000.00
Village, Mill, Ardlock Sewer Project (Estimated Construction + Contingency +Construction Engineering)	\$587,940.00
Village, Mill, Ardlock Sewer Project (Design Engineering)	\$76,700.00
Village, Mill, Ardlock Sewer Project - Project Total	\$665,000.00
Village, Mill, Ardlock Sidewalk Project (Estimated Construction + Contingency +Construction Engineering)	\$337,775.00
Village, Mill, Ardlock Sidewalk Project (Design Engineering)	\$44,100.00
Village, Mill, Ardlock Sidewalk Project - Project Total	\$382,000.00
First Avenue Project (Estimated Construction + Contingency +Construction Engineering)	\$385,105.00
First Avenue Project (Design Engineering)	\$50,200.00
First Avenue Project - Project Total	\$435,000.00
Fairview Avenue Project (Estimated Construction + Contingency +Construction Engineering)	\$725,350.00
Fairview Avenue Project (Design Engineering)	\$94,600.00
Fairview Avenue Project - Project Total	\$820,000.00
Total	\$6,240,000.00

#### Oxford Avenue Project

Mobilization and Demobilization Traffic Control Test Pits	LS LS CY CY	1 1 150	\$25,000.00 \$5,000.00	25,000.00 5,000.00
Traffic Control Test Pits	LS CY CY	1 150	\$5,000.00	5,000.00
Test Pits	CY CY	150		
	CY		\$100.00	15,000.00
Excavation Below Normal Grade – Unsuitable Material		30	\$40.00	1,200.00
Gravel Borrow	CY	30	\$45.00	1,350.00
Sand Borrow	CY	100	\$40.00	4,000.00
Ordinary Borrow	CY	100	\$22.00	2,200.00
Silt Sack	EA	2	\$200.00	400.00
6-Inch Ductile Iron Pipe & Fittings	LF	110	\$75.00	8,250.00
8-Inch Ductile Iron Pipe & Fittings	LF	440	\$80.00	35,200.00
10-Inch Ductile Iron Pipe & Fittings	LF	0	\$90.00	-
12-Inch Ductile Iron Pipe & Fittings	LF	1600	\$110.00	176,000.00
6-Inch Gate Valves with Boxes	EA	7	\$1,500.00	10,500.00
8-Inch Gate Valves with Boxes	EA	2	\$1,750.00	3,500.00
10-Inch Gate Valves with Boxes	EA	0	\$2,000.00	-
12-Inch Gate Valves with Boxes	EA	1	\$2,250.00	2,250.00
Hydrant	EA	6	\$5,000.00	30,000.00
Existing Hydrants Removed	EA	5	\$500.00	2,500.00
1-inch Copper Tubing for Water Service	LF	1050	\$30.00	31,500.00
1-inch Water Service Corporation	EA	44	\$600.00	26,400.00
1-inch Water Service Curb Stop, Box and Coupling	EA	44	\$500.00	22,000.00
Abandonment of Existing Water Mains	LF	20	\$170.00	3,400.00
Removal of Existing Water Gate Box	EA	11	\$175.00	1,925.00
Doghouse SMH	EA	2	\$6,500.00	13,000.00
Permanent Bituminous Concrete Trench Repair- School/Saenge	er TON	120	\$150.00	18,000.00
Permanent Bituminous Concrete Trench Repair - Oxford	TON	770	\$150.00	115,500.00
6" Reflectorized Yellow Line (Painted)	LF	700	\$1.00	700.00
Cement Concrete Sidewalk Repair	SY	50	\$65.00	3,250.00
Bituminous Concrete Sidewalk/Driveway Repair	TON	31	\$220.00	6,820.00
Bituminous Concrete Curb Repair	LF	50	\$15.00	750.00
Granite Curb Removal and Resetting	LF	250	\$30.00	7,500.00
Loam & Seed	SY	50	\$10.00	500.00
Temporary Connections	LS	1	\$15,000.00	15,000.00
		Estimated Cons	struction Subtotal:	\$588,595.00
		l	Police Detail (5%):	\$29,400.00
	Estimated Cor	C Instruction and Con	ontingency (25%): tingency Subtotal:	\$147,100.00 \$765,095.00
	Co	Instruction Phase I	Engineering (15%):	\$114,800.00
Estimated Construction	n + Contingency	+ Construction Eng Design E	gineering Subtotal:	\$879,895.00 \$114,800.00

### Chestnut, Green, Oak, & West Water Project - Phase 1

Item	Unit	Quantity	Unit Cost	Subtotal
Mobilization and Demobilization	LS	1	\$25,000.00	25,000.00
Traffic Control	LS	1	\$5,000.00	5,000.00
Test Pits	CY	100	\$100.00	10,000.00
Excavation Below Normal Grade – Unsuitable Material	CY	30	\$40.00	1,200.00
Gravel Borrow	CY	30	\$45.00	1,350.00
Sand Borrow	CY	50	\$40.00	2,000.00
Ordinary Borrow	CY	50	\$22.00	1,100.00
Silt Sack	EA	6	\$200.00	1,200.00
6-Inch Ductile Iron Pipe & Fittings	LF	20	\$75.00	1,500.00
8-Inch Ductile Iron Pipe & Fittings	LF	1980	\$80.00	158,400.00
6-Inch Gate Valves with Boxes	EA	2	\$1,500.00	3,000.00
8-Inch Gate Valves with Boxes	EA	5	\$1,750.00	8,750.00
Hydrant	EA	2	\$5,000.00	10,000.00
Existing Hydrants Removed	EA	2	\$500.00	1,000.00
1-inch Copper Tubing for Water Service	LF	600	\$30.00	18,000.00
1-inch Water Service Corporation	EA	33	\$600.00	19,800.00
- 1-inch Water Service Curb Stop. Box and Coupling	EA	33	\$500.00	16.500.00
Abandonment of Existing Water Mains	LF	20	\$170.00	3.400.00
Removal of Existing Water Gate Box	EA		\$175.00	1 400 00
Permanent Bituminous Concrete Trench Renair		530	\$150.00	79 500 00
Bituminous Concrete Sidewalk/Driveway	TON	24	\$220.00	5 280 00
Bituminous Concrete Sidewaik Driveway		0	\$15.00	5,200.00
	LF CV	20	\$13.00	-
	ST	30	\$10.00	300.00
Temporary Connections	LS		\$10,000.00	10,000.00
		Estimated Cons	truction Subtotal:	\$383,680.00
		F	Police Detail (5%):	\$19,200.00
	Estimated Cons	Co truction and Cont	ontingency (25%): ingency Subtotal:	\$95,900.00 \$498,780.00
	Con	struction Phase E	ngineering (15%):	\$74,800.00
Estimated Construct	ion + Contingencv + (	Construction Enai	neering Subtotal:	\$573.580.00
	<u> </u>	Design E	ngineering (15%):	\$74,800.00
			Project Total	\$648,000.00

### Chestnut, Green, Oak, & West Water Project - Phase 2

Item	Unit	Quantity	Unit Cost	Subtotal
Mobilization and Demobilization	LS	1	\$25,000.00	25,000.00
Traffic Control	LS	1	\$5,000.00	5,000.00
Test Pits	CY	100	\$100.00	10,000.00
Excavation Below Normal Grade – Unsuitable Material	CY	30	\$40.00	1,200.00
Gravel Borrow	CY	30	\$45.00	1,350.00
Sand Borrow	CY	50	\$40.00	2,000.00
Ordinary Borrow	CY	50	\$22.00	1,100.00
Silt Sack	EA	3	\$200.00	600.00
6-Inch Ductile Iron Pipe & Fittings	LF	70	\$75.00	5,250.00
8-Inch Ductile Iron Pipe & Fittings	LF	2020	\$80.00	161,600.00
6-Inch Gate Valves with Boxes	EA	4	\$1,500.00	6,000.00
8-Inch Gate Valves with Boxes	EA	3	\$1,750.00	5,250.00
Hydrant	EA	4	\$5,000.00	20,000.00
Existing Hydrants Removed	EA	4	\$500.00	2,000.00
1-inch Copper Tubing for Water Service	LF	900	\$30.00	27,000.00
1-inch Water Service Corporation	EA	35	\$600.00	21,000.00
1-inch Water Service Curb Stop, Box and Coupling	EA	35	\$500.00	17,500.00
Abandonment of Existing Water Mains	LF	20	\$170.00	3,400.00
Removal of Existing Water Gate Box	EA	9	\$175.00	1,575.00
Permanent Bituminous Concrete Trench Repair	TON	560	\$150.00	84,000.00
Bituminous Concrete Sidewalk/Driveway	TON	40	\$220.00	8,800.00
Bituminous Concrete Curb Repair	LF	100	\$15.00	1,500.00
Loam & Seed	SY	150	\$10.00	1,500.00
Temporary Connections	LS	1	\$10,000.00	10,000.00
		Estimated Cons	truction Subtotal:	\$422,625.00
		I	Police Detail (5%):	\$21,100.00
	Estimated Cons	C truction and Cont	ontingency (25%): ingency Subtotal:	\$105,700.00 \$549,425.00
	Con	struction Phase E	ngineering (15%):	\$82,400.00
Estimated Construct	ion + Contingency + (	Construction Engi	neering Subtotal:	\$631,825.00
		Design E	ngineering (15%):	\$82,400.00
			Project Total	¢7°14,000.00

# Chestnut, Green, Oak, & West Drain Project

Item	Unit	Quantity	Unit Cost	Subtotal
Mobilization and Demobilization	LS	1	\$20,000.00	20,000.00
Traffic Control	LS	1	\$5,000.00	5,000.00
Earth Excavation	CY	4750	\$35.00	166,250.00
Drainage Structure Abandoned	EA	8	\$500.00	4,000.00
Precast Drainage Manhole	EA	9	\$4,500.00	40,500.00
Precast Catch Basin	EA	12	\$3,500.00	42,000.00
18" Corrugated Plastic Pipe	LF	2520	\$90.00	226,800.00
Stormwater Outlet	LS	1	\$10,000.00	10,000.00
Permanent Bituminous Concrete Trench Repair	TON	390	\$150.00	58,500.00
Loam & Seed	SY	710	\$10.00	7,100.00
Sediment Control Barrier	LF	100	\$6.50	650.00
		Estimated Cons	truction Subtotal:	\$580,800.00
		F	Police Detail (5%):	\$29,000.00
	Estimated Cons	Co struction and Cont	ontingency (25%): ingency Subtotal:	\$145,200.00 \$755,000.00
	Con	struction Phase E	ngineering (15%):	\$113,300.00
Estimated Construction + Contingency + Construction Engineering Subtotal:				\$868,300.00
		Design E	ngineering (15%):	\$113,300.00
			Project Total	\$982,000.00

# Tighe&Bond

# Chestnut, Green, Oak, & West Sidewalk Project

Item	Unit	Quantity	Unit Cost	Subtotal
Mobilization and Demobilization	LS	1	\$15,000.00	15,000.00
Traffic Control	LS	1	\$5,000.00	5,000.00
Unclassified Excavation	CY	1250	\$40.00	50,000.00
Processed Gravel	CY	730	\$45.00	32,850.00
Silt Sack	EA	12	\$200.00	2,400.00
Portland Cement Concrete Wheelchair Ramps	EA	23	\$1,500.00	34,500.00
Sign Removed and Reset	EA	3	\$110.00	330.00
Bituminous Concrete Curb	LF	5450	\$15.00	81,750.00
Bituminous Concrete Sidewalk/Driveway	TON	560	\$220.00	123,200.00
New Signage	EA	7	\$150.00	1,050.00
Loam & Seed	SY	450	\$10.00	4,500.00
Sediment Control Barrier	LF	100	\$6.50	650.00
12-inch Reflectorized White Line (Painted)	LF	1700	\$2.00	3,400.00
		Estimated Const	truction Subtotal:	\$354,630.00
		P	Police Detail (5%):	\$17,700.00
	Estimated Con	Co struction and Conti	ontingency (25%): ingency Subtotal:	\$88,700.00 \$461,030.00
	Сог	nstruction Phase E	ngineering (15%):	\$69,200.00
Estimated Construction	+ Contingency +	Construction Engi	neering Subtotal:	\$530,230.00
		Design Er	ngineering (15%):	\$69,200.00
			Project Total	\$599,000.00

# Village, Mill, Ardlock Sewer Project

Item	Unit	Quantity	Unit Cost	Subtotal
Mobilization and Demobilization	LS	1	\$20,000.00	20,000.00
Traffic Control	LS	1	\$5,000.00	5,000.00
Test Pits	CY	250	\$100.00	25,000.00
Excavation & Backfill	CY	3370	\$40.00	134,800.00
Gravel Borrow	CY	400	\$45.00	18,000.00
Coring into Existing Manholes	EA	2	\$800.00	1,600.00
8-inch PVC Gravity Sanitary Sewer Pipe	LF	960	\$100.00	96,000.00
6-inch PVC Sewer Service Pipe and Fittings	LF	380	\$80.00	30,400.00
PVC Service Pipe Wyes	EA	14	\$60.00	840.00
Service Connection Chimney	EA	14	\$1,000.00	14,000.00
Sewer Service Direct to Manhole	EA	4	\$250.00	1,000.00
Permanent Bituminous Concrete Trench Repair	TON	280	\$150.00	42,000.00
Bituminous Concrete Sidewalk/Driveway	SY	10	\$220.00	2,200.00
Bituminous Concrete Curb Repair	LF	120	\$15.00	1,800.00
Loam & Seed	SY	60	\$10.00	600.00
		Estimated Const	ruction Subtotal:	\$393,240.00
		Р	olice Detail (5%):	\$19,700.00
	Estimated Cons	Co truction and Conti	ntingency (25%): ngency Subtotal:	\$98,300.00 \$511,240.00
	Con	struction Phase Er	igineering (15%):	\$76,700.00
Estimated Construction	+ Contingency + (	Construction Engi	neering Subtotal:	\$587,940.00
		Design Er	igineering (15%): Project Total	\$76,700.00 \$665.000.00
				<i>w</i> 000,000.00

# Tighe&Bond

# Village, Mill, Ardlock Sidewalk Project

Item	Unit	Quantity	Unit Cost	Subtotal
Mobilization and Demobilization	LS	1	\$10,000.00	10,000.00
Traffic Control	LS	1	\$5,000.00	5,000.00
Unclassified Excavation	CY	420	\$40.00	16,800.00
Processed Gravel	CY	230	\$45.00	10,350.00
Silt Sack	EA	3	\$200.00	600.00
Portland Cement Concrete Wheelchair Ramps	EA	10	\$1,500.00	15,000.00
Cement Concrete Sidewalk	SY	600	\$65.00	39,000.00
Granite Curb	LF	1200	\$50.00	60,000.00
Sign Removed and Reset	EA	0	\$110.00	-
Bituminous Concrete Curb	LF	1100	\$15.00	16,500.00
Bituminous Concrete Sidewalk/Driveway	TON	80	\$220.00	17,600.00
New Signage	EA	6	\$150.00	900.00
Loam & Seed	SY	230	\$10.00	2,300.00
Sediment Control Barrier	LF	50	\$6.50	325.00
12-inch Reflectorized White Line (Painted)	LF	750	\$2.00	1,500.00
Pedestrian Activated Warning Sign - RRFB	PR	2	\$15,000.00	30,000.00
		Estimated Const	ruction Subtotal:	\$225,875.00
		P	olice Detail (5%):	\$11,300.00
		Co	ontingency (25%):	\$56,500.00
	Estimated Cons	truction and Conti	ngency Subtotal:	\$293,675.00
	Con	struction Phase Ei	ngineering (15%):	\$44,100.00
Estimated Construction	+ Contingency + (	Construction Engi	neering Subtotal:	\$337,775.00
		Design Ei	ngineering (15%):	\$44,100.00
			Project Total	<b></b> ⊅38∠,000.00

### First Avenue Project

Item	Unit	Quantity	Unit Cost	Subtotal
Mobilization and Demobilization	LS	1	\$15,000.00	15,000.00
Traffic Control	LS	1	\$5,000.00	5,000.00
Test Pits	CY	100	\$100.00	10,000.00
Excavation Below Normal Grade – Unsuitable Material	CY	250	\$40.00	10,000.00
Gravel Borrow	CY	170	\$45.00	7,650.00
Sand Borrow	CY	50	\$40.00	2,000.00
Ordinary Borrow	CY	50	\$22.00	1,100.00
Silt Sack	EA	2	\$200.00	400.00
6-Inch Ductile Iron Pipe & Fittings	LF	20	\$75.00	1,500.00
8-Inch Ductile Iron Pipe & Fittings	LF	790	\$80.00	63,200.00
6-Inch Gate Valves with Boxes	EA	1	\$1,500.00	1,500.00
8-Inch Gate Valves with Boxes	EA	4	\$1,750.00	7,000.00
Hydrant	EA	0	\$5,000.00	-
Existing Hydrants Removed	EA	0	\$500.00	-
1-inch Copper Tubing for Water Service	LF	300	\$30.00	9,000.00
1-inch Water Service Corporation	EA	14	\$600.00	8,400.00
1-inch Water Service Curb Stop, Box and Coupling	EA	14	\$500.00	7,000.00
Abandonment of Existing Water Mains	LF	10	\$170.00	1,700.00
Removal of Existing Water Gate Box	EA	3	\$175.00	525.00
Raise SMH Cover	EA	3	\$1,500.00	4,500.00
Sewer Main Repair	LS	1	\$10,000.00	10,000.00
Permanent Bituminous Concrete Trench Repair	TON	220	\$150.00	33,000.00
Portland Cement Concrete Wheelchair Ramps	EA	4	\$1,500.00	6,000.00
Sign Removed and Reset	EA	0	\$110.00	-
Bituminous Concrete Curb	LF	1050	\$15.00	15,750.00
Bituminous Concrete Sidewalk/Driveway	TON	120	\$220.00	26,400.00
New Signage	EA	0	\$150.00	-
Loam & Seed	SY	70	\$10.00	700.00
12-inch Reflectorized White Line (Painted)	LF	140	\$2.00	280.00
Temporary Connections	LS	1	\$10,000.00	10,000.00
		Estimated Cons	truction Subtotal:	\$257,605.00
		I	Police Detail (5%):	\$12,900.00
	Estimated Cons	Contection and Cont	ontingency (25%): ingency Subtotal:	\$64,400.00 \$334,905.00
	Con	struction Phase E	ngineering (15%):	\$50,200.00
Estimated Construc	tion + Contingency +	Construction Engi	neering Subtotal:	\$385,105.00
		Design E	Project Total	\$50,200.00 \$435,000.00

#### Fairview Avenue Project

Item	Unit	Quantity	Unit Cost	Subtotal
Mobilization and Demobilization	LS	1	\$20,000.00	20,000.00
Traffic Control	LS	1	\$5,000.00	5,000.00
Test Pits	CY	150	\$100.00	15,000.00
Excavation Below Normal Grade – Unsuitable Material	CY	30	\$35.00	1,050.00
Excavation	CY	600	\$35.00	21,000.00
Gravel Borrow	CY	630	\$45.00	28,350.00
Sand Borrow	CY	100	\$40.00	4,000.00
Ordinary Borrow	CY	100	\$22.00	2,200.00
Silt Sack	EA	8	\$200.00	1,600.00
Drainage Structure Abandoned	EA	0	\$500.00	-
Precast Drainage Manhole	EA	3	\$4,500.00	13,500.00
Precast Catch Basin	EA	3	\$3,500.00	10,500.00
18" Corrugated Plastic Pipe	LF	340	\$90.00	30,600.00
Stormwater Outlet	LS	1	\$5,000.00	5,000.00
6-Inch Ductile Iron Pipe & Fittings	LF	40	\$75.00	3,000.00
8-Inch Ductile Iron Pipe & Fittings	LF	1960	\$80.00	156,800.00
6-Inch Gate Valves with Boxes	EA	5	\$1,500.00	7,500.00
8-Inch Gate Valves with Boxes	EA	1	\$1,750.00	1,750.00
Hydrant	EA	0	\$5,000.00	-
Existing Hydrants Removed	EA	0	\$500.00	-
1-inch Copper Tubing for Water Service	LF	700	\$30.00	21,000.00
1-inch Water Service Corporation	EA	28	\$600.00	16,800.00
1-inch Water Service Curb Stop, Box and Coupling	EA	28	\$500.00	14,000.00
Abandonment of Existing Water Mains	LF	20	\$170.00	3,400.00
Removal of Existing Water Gate Box	EA	4	\$175.00	700.00
Permanent Bituminous Concrete Trench Repair	TON	560	\$150.00	84,000.00
Bituminous Concrete Driveway Repair	SY	70	\$35.00	2,450.00
Bituminous Concrete Curb Repair	LF	150	\$15.00	2,250.00
Loam & Seed	SY	370	\$10.00	3,700.00
Temporary Connections	LS	1	\$10,000.00	10,000.00
		Estimated Cons	truction Subtotal:	\$485,150.00
		F	Police Detail (5%):	\$24,300.00
	Estimated Cons	Co struction and Cont	ontingency (25%): ingency Subtotal:	\$121,300.00 \$630,750.00
	Con	struction Phase E	ngineering (15%):	\$94,600.00
Estimated Construct	tion + Contingency +	Construction Engi	neering Subtotal:	\$725,350.00
		Design E	ngineering (15%): Project Total	\$94,600.00 \$820,000.00