

Appendix A
10 Mile Drain
Tracking Code [50000736]
Project Description

Water Quality Concerns/Issues

In the Fall of 2001, elevated levels of polychlorinated biphenyls (up to 150 mg/kg) were discovered in the Lange/Revere Street canals which are located along Lake St. Clair in the City of St. Clair Shores. Shortly thereafter, the conduit of the contamination to the canals was identified to be the 10 Mile Road Storm Drain.

After a great deal of investigation conducted by the City, County, State and EPA, a portion of the 10 Mile Drain in the vicinity of Bon Brae St. and Harper Ave. was identified as having the highest PCB concentration. This investigation included extensive sampling of the stormwater drainage network, completion of a corridor investigation to determine the potential responsible party, historical drain record review and interviews of the local residents.

A remediation effort followed that included removal of 6,000 cubic yards of hazardous (PCB concentration > 50 mg/kg) material (sediment, fish, vegetation and other debris) and 35,000 cubic yards of non-hazardous regulated material from the storm sewer network and canals. After the contamination persisted in the Drain, an additional 200 cubic yards of hazardous material was removed from the 10 Mile Drain sediment trap and 600 cubic yards of surface soils (mostly non-hazardous) were removed from residential yards.

Initially, it was hypothesized that the contamination was caused by a one-time dump to the storm sewer, and once the material was removed the contamination would cease. Unfortunately PCB contamination persisted in the sewers. After additional investigation, it appeared more likely that pocket(s) of contaminated material sitting around the storm sewer was slowly leaching into the sewer. In 2006 to alleviate further transport of contaminated material to the storm sewer and downstream canals, a liner was installed in the portion of the storm sewer with the most elevated PCB concentrations. The liner, along with three installed slurry walls, was to prevent any further migration of PCB contaminated material.

Project Goals and Objectives

The purpose of this project is to obtain more relevant information with regard to PCB impacts in an effort to better protect the public and the environment. This will be accomplished by conducting additional assessment and interim response activities throughout the drainage area. First, response activities will be undertaken to remove the sediment that has accumulated in various locations within the drain. This will be accomplished using weirs installed in the drain and an innovative sediment extraction system that will allow sediment removal without dewatering the drain. The second response activity will be to assess water and potential presence of oil in the backfill around the drain. This will be done using monitoring wells/sumps that will be installed along the drain. Investigation efforts will also be conducted to help the City and MDEQ gain a better understanding on the nature, extent and dynamics of the PCB contamination in the 10 Mile Drain.

Organizational Information

The City of St. Clair Shores is located along Lake St. Clair in the southeast corner of Macomb County, Michigan, north of the City of Detroit. The City has a population of 63,093 according to the 2000 United

States Census Bureau. This population is expected to decline in 2007 and beyond according to estimates made by the Southeast Michigan Council of Governments (SEMCOG). The City covers approximately 11.6 square miles of area and has over 14 miles of shoreline along Lake St. Clair including numerous canals occupied by hundreds, if not thousands, of homes.

Incorporated in 1951, the City operates under a Council/Manager form of government. Voters elect a mayor, currently Robert A. Hison, and six-member City Council who make up the legislative body of the City. The mayor and City Council are responsible for the adoption and implementation of ordinances, policies, budget guidelines and upholding the City Charter. The City Manager, currently Ken Podolski, administers the day-to-day operations of the City and makes recommendations to the Council.

St. Clair Shores has grown to a point where less than one percent of its total land area is vacant. The overwhelming majority (77%) of the land is utilized for residential purposes, 9% of the land is commercial and very small portion (1%) is classified as industrial. This illustrates that private citizens, rather than businesses, make up much of the tax base for the City.

There is no question that future years will be challenging for the City as expenditures are expected to continue to exceed revenues. The current five-year economic projection shows revenues increasing two percent or below, while expenditures increase 4 to 5% unless changes are made¹.

It is with these financial circumstances that this grant request was made to rectify a situation that poses a risk to the public and the environment.

Partners and Their Roles

Since the first discovery of the contamination, the City of St. Clair Shores has and will continue to partner with the following entities on this project.

- US EPA – who have provided technical resources and a great deal of financial resources for the many remedial efforts employed to date.
- MDEQ Water Bureau and Remediation & Redevelopment Division – who have provided resources and technical advice and will continue to provide guidance in interpreting the results of the monitoring data and investigation efforts during this project.
- 10 Mile Drain Board Macomb County Public Works Office – who, under Chapter 20 of the Michigan Drain Code, have operational responsibilities associated with the 10 Mile Road Storm Drain.
- Macomb County Public Works Office –who have spearheaded the support of the State and Federal agencies, along with the City, and who have undertaken some of the remedial actions and investigations implemented to date. For this current effort, MCPWO will provide oversight for the activities occurring within the Drain easement. They also will approve the design of the collection system.
- Macomb County Health Department and the Michigan Department of Community Health– who have provided information to area residents regarding the health risks associated with the PCB.
- Anderson, Eckstein & Westrick, Inc. (AEW), the city engineers for St. Clair Shores. AEW have been providing engineering expertise on this project and will continue to provide technical support for the

¹ According to the City's Comprehensive Financial Report for Fiscal Year 2006.

project. AEW will provide oversight and review plans and specification for all construction components of the project.

- Environmental Consulting & Technology, Inc. (ECT) – ECT has also been providing the City and County technical advice on this project from the onset and will continue in this role. ECT will conduct the monitoring and assessment activities, interpret the data and make recommendations to the City and County.

Project Sustainability

The City is committed to working with the State, Federal and county agencies to address the PCB contamination in the 10 Mile Drain beyond the scope of this grant. This commitment stems from a desire to protect the health of its citizens and the surrounding environment, and this commitment has been demonstrated by their past actions on this project. The effort undertaken during this project will dictate the need and type of future remedial activities and monitoring efforts. Since the scope and cost of future efforts have yet to be defined, the City can not commit to funding efforts that fall outside the scope of this grant. The City can only commit to continued cooperation with State and Federal agencies on this effort.

Project Summary

Extremely high levels of PCBs (up to 260,000 mg/kg) have been found in and around the 10 Mile Road Storm Drain which is located in St. Clair Shores, Michigan. Since that time, the City has been working in conjunction with the State, Federal and County agencies to locate the sourced of the contamination and stop the flow of contamination through the storm drain. Several activities have been undertaken to remedy this contamination, but ongoing efforts are required before the contamination can be considered contained. Two major activities will be completed under this grant which will reduce the migration of PCB-contaminated material to Lake St. Clair. First, an innovative cleaning effort will be employed to remove contaminated sediments from the drain. This effort will be employed first at the sediment trap and then at various upstream locations in the drain. Second, extensive environmental monitoring will be performed in the drain to gain further understanding of the nature and extent of the PCB contamination in the drain.

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Work Plan**

The goal of the effort being conducted under this work plan is two-fold. First, investigation efforts will be conducted to help the City and MDEQ gain a better understanding on the nature, extent and dynamics of the PCB contamination in the 10 Mile Drain. Second, response activities will be undertaken to a) remove the sediment that has accumulated in various locations within the drain, and b) assess any PCB product that may have accumulated in the groundwater surrounding the drain.

The City has drafted this Work Plan after technical input from representatives of the MDEQ Water Bureau and Remediation and Redevelopment Division. The City will continue to seek the MDEQ's guidance throughout the effort proposed in this work plan.

The 10 Mile Road and Harper Avenue storm drains are located along Jefferson Ave., 10 Mile Road, Bon Brae St. and Harper Ave. in the City of St. Clair Shores as shown in Figure 1. The drains discharge to the Lange/Revere canals which are located along the Lake St. Clair shoreline.

Task 1. Project Preparation and Sampling Plan Development

A Sampling Plan will be prepared to ensure that the type, quantity, and quality of the data collected will be sufficient to support decisions based on the data. This process will be described in the Sampling Plan which will be prepared by ECT and submitted to the MDEQ for review and approval. If modifications are required to the draft Plan, it will be revised with MDEQ guidance and resubmitted. ECT will obtain MDEQ approval on the Plan before any data collection is performed under this grant. The Plan will be completed two weeks after the contract is signed by the City and MDEQ.

Task 2. Targeted Drain Cleaning

2a. Development of Sediment Extraction System

Under the oversight of the Public Works Office, ECT will assemble and implement an economical method to maintain the sediment trap. (Economical means under \$50,000 for assembly and the first cleaning). In order to keep the cleaning economical, the cleaning will be performed without dewatering the drain. The design will include utilization of a diaphragm pump to vacuum sediments that have accumulated in the bottom of the sediment trap, filtration and activated carbon treatment.

Sediments will be removed from the drain using a diaphragm pump. The stormwater that will be withdrawn along with the sediments will be filtered using a 0.1 micron filter. This will remove the finer sediment particles that tend to clog the activated carbon filter. The permeate from the filter will then be sent through an activated carbon filter. The permeate from the activated carbon filter is expected to have a low enough PCB concentration, so that the water can be discharged according to NPDES permit.

A pilot study will be performed using sediments and water from the drain, prior to full scale implementation. Sampling will occur at various points along the treatment process to ensure the effluent has low enough PCB concentrations to meet NPDES regulations. If the pilot study proves successful, then it will be used to remove accumulated sediments from various manholes in the upstream portions of the drain and from the

outlet structure – the outlet structure being cleaned last. Should we not be able to dispose of the water within NPDES requirements, we will modify the treatment system with concurrence from the MDEQ to properly dispose of the water. Should off-site disposal of the water be required, this will be accomplished as described in Task 5.

2b. Permitting

Various permits/approvals will need to be obtained, such as 1) NPDES for the treatment effluent, 2) EPA approval to dry the sediments, 3) access agreement for use of a small portion of West Marine's parking lot and 4) waste characterization for the landfill. ECT will prepare these permits/approvals in sufficient time so that they are in place when the process is ready. Ninety days have been allowed for regulatory agency approvals.

2c. Sediment Disposal

The relatively small amount of sediments that are collected (a total of 30 cubic yards are expected) will be collected in drums and dried using cement kiln dust or lime. The drying agent will be mixed in the drums using an electric mixer. The resulting material will be disposed of at Wayne Disposal in Belleville following proper hazardous material handling guidelines.

2d. In-line Weirs

AEW will place weirs in the drain along Bon Brae and Harper, in consultation with MDEQ and ECT. The purpose of the weirs is to restrict sediment movement in the drain. A secondary benefit of the weirs is that they may help indicate where PCBs are entering the drain by creating sumps for sediments to settle out. The weirs will be placed approximately every 400 feet along Bon Brae and Harper at the nearest manhole locations. Twelve weir placements are anticipated – eight on Bon Brae, three on Harper and one on Lakeland. Should initial sampling indicate the need for more weirs, then more weirs will be added at locations approved by the MDEQ.

The weirs will be placed so that they can be easily sampled and maintained from the street-level. The weirs will be made using sand bags placed along the bottom of the drain. The specification and design of the weirs will be approved by the Public Works Office prior to installation.

Task 3. Monitoring Well/Sump Installation

The native soils surrounding the 10 Mile Drain consists primarily of thick clay strata with very low permeability characteristics. This is evident by 1) photographs taken during construction in the 1960s that showed vertical walls along the trench that was dug for placement of the pipe, and 2) soil borings drilled in 2005 by the Public Works Office, MDEQ and EPA. When the drain was constructed, a layer of gravel was placed at the bottom of the drain trench, the pipe was set on top of the gravel and the trench was backfilled with fill material. Although the clayey soil restricted water movement in and out of the trench, the gravel and fill around the drain will allow water movement along the drain trench and along other utility trenches, which were likely constructed in the same manner.

Based on the well samples collected by the Public Works Office in 2005, the water within the drain trench is contaminated at MW1, MW2 and MW3 at concentrations up to 80 µg/L. The surrounding backfill contained PCB concentrations as high as 41,000 mg/kg. Sediment samples from the drain have had PCB

concentrations as high as 260,000 mg/kg. This information seems to indicate that PCB product has accumulated in the trench and backfill material around and below the drain.

In addition, while the drain was dewatered during the EPA cleaning operations in 2002 and 2003, the interior of the drain was videotaped. Upon careful examination of the video it was noted that brown seepage was infiltrating the drain 82 feet east of M4335. This liquid looked similar to the free product that was found in one of the soil borings that contained elevated levels of PCBs. Therefore, it is suspected that this seepage contained elevated levels of PCBs. This phenomenon wasn't seen at any other location in the drain video. Since this portion of the drain was not lined during the 2006 remedial activities, there is a concern that PCB contaminated groundwater and sediments may be entering the drain at this location.

To address the potential for PCB materials believed to be around the drain and to adequately monitor and evaluate the water levels inside the trench and the potential for migration, ECT will install two additional monitoring wells in the project area, as well as continue to monitor the existing wells. One well will be installed at Lakeland and Harper (MW5). A second well will be installed near the intersection of Bon Brae and Harper (MW6) at a location just east of the junction chamber at the connection location of the drain. The general well locations are depicted in Figure 2. The exact locations will be determined in the field and depend on the location of other utilities.

The first well (MW5) will be installed in the storm drain backfill material. This will be a typical well installed using a GeoProbe rig. MW6 will be installed as a collection/migration sump. The purpose of the sump is to provide a collection/migration area for PCB-contaminated product, which is believed to be surrounding the drain. Site conditions indicate that the 10 Mile Drain pipe, and its associated junction chamber located at Harper and Bon Brae are the deepest man made features in the area, thus having created a logical lowest point for the collection/migration of higher density PCB containing oil materials or product. With the permeable backfill materials used (sand and gravel), PCB containing oils may have been trapped in these low areas and have slowly been dissolving and moving down the trench corridors.

In an effort to better evaluate these conditions, the collection sump will be placed along-side (parallel to) the drain and be sized approximately 3 feet wide by 10 to 15 feet long. The sump will be excavated with a backhoe with its base to be approximately 1 – 2 feet deeper or lower than the bottom of the drain trench (15 to 16 feet in total depth). The sump will be backfilled with gravel and will allow for a direct hydraulic connection with the gravel base located below the pipe. The purpose of the collection/migration sump is to provide a deeper permeable collection point for the natural migration of the PCB materials. The sump will be filled with gravel to a height just above the bottom of the drain, so as to hydraulically connect it to the drain trench. A slotted pipe will be placed along the bottom of the trench to maximize the collection possibilities and will be connected to a riser pipe of 4 to 6 inches in diameter. The pit will be backfilled using the material from the excavation, and the riser pipe will be set flush-mount to the road surface. The road surface will be repaved. A sketch and specifications of the design will be provided to AEW for review and approval prior to implementation. The base of the 10 Mile drain structure in this area is located approximately 14 feet below the road surface. The well/trench will be excavated using standard excavator equipment after the concrete slab surface is removed by saw-cutting and concrete breaker equipment. Soil and water conditions will dictate the level of shoring or trench stabilization that will be necessary (trench boxes, dewatering, shoring). Should conditions indicate the need for one or more additional well/sumps,

then placement will be performed with MDEQ concurrence (a likely location for an additional well/sump will be in the vicinity of the brown seepage observed 82 feet east of M4335).

Following final construction, the wells will be properly developed by ECT, by surging or pumping techniques, as appropriate. Wells will be developed until the purge water is relatively sediment free, and screening parameters of turbidity, temperature, dissolved oxygen, pH, ORP, and specific conductance have stabilized. Well development will not begin until each well has been allowed to settle at least 24 hours following the completion of construction. All monitor well construction details will be recorded by ECT field logbooks.

All of the wells (MW1 – MW6) will be sampled as discussed in Task 4. Any product or material collection is described in Task 5 (Optional Tasks – Limited PCB Material Collection/Disposal).

The well/sumps will be abandoned by ECT at end of the grant period, unless a funding source is identified for continued maintenance of them.

Task 4. Environmental Monitoring

The scope of the monitoring will include 1) Continuous monitoring of the static water level at various locations, and 2) groundwater, sediment and stormwater sampling for PCBs. These monitoring activities will occur for up to three years at the frequency described below. All samples will be analyzed for PCBs using method SW 8082.

<u>Monitoring Activity</u>	<u>Frequency</u>
Groundwater levels	Continuous
Groundwater sampling	Twice per year
Sediment sampling	Twice per year
Stormwater sampling	Twice per year
Sump Monitoring	Monthly

4a. Sediment Sampling

Sediment samples will be collected from the drain at every manhole along Bon Brae, Harper and upstream on Lakeland. In addition, sediment sampling will occur at the outlet of the drain. Sediment samples will be collected using a petite Ponar dredge. The dredge is expected to sample the upper 6" of sediment from the bottom of the drain. Since the most recent analytical data indicates that PCB concentrations are higher in the area closest to Harper Ave. and Bon Brae St., this area will be sampled last.

Before the Ponar is lowered, sediment depth information will be collected at each manhole and at the outlet structure to determine the rate of accumulation of sediment. The depth will be monitored using a sludge gun equip with a photoelectric diode. When material interrupts the diode, an alarm will trigger and the elevation to the sediment surface will be recorded. These elevations will be compared to the measure invert drain elevation, and the sediment depth will be calculated. All elevations will be referenced to the north edge of the manhole lid frame.

The initial sampling event will determine the location of the weirs and the sites for subsequent sediment sampling rounds. The weir locations and sampling sites will be identified in the first summary report, with rationale for choosing them. MDEQ concurrence will need to be obtained prior to proceeding with weir placement and sample locations.

4b. Water Sampling

Stormwater samples will be collected from the outlet of the 10 Mile Drain. Samples will be collected directly into lab bottles using a sampling pole.

Sump monitoring will be performed monthly. The purpose of this monitoring is to determine the presence of PCB product. If oil is found in collected samples, continued monitoring will provide information relevant to the rate of product collection, which may dictate the need for periodic removal and disposal as described in Task 5 (Optional Tasks – Limited PCB Material Collection/Disposal).

Groundwater samples will be obtained from the 6 monitoring wells (MW1 – MW6). Each well will be purged and sampled using low flow procedures.

4c. Static Water Level Monitoring

Continuous level loggers have been operating in monitoring wells MW1 – MW4 since 2006. Additional level loggers will be installed by ECT in the new wells, MW5, MW6 and MW7. All level loggers will be programmed to collect static water level data hourly. The loggers will be downloaded by the City on a monthly basis. The City will provide ECT the downloaded data in an Excel® compatible format for review and analysis.

The four level loggers currently operating in the project area are owned by the MDEQ. An additional level logger (In-Situ miniTrolls® or equivalent) will be installed in any newly constructed monitoring wells.

The water level will also be monitored in the Bon Brae section of the 10 Mile Drain near Harper Ave. and in the Harper storm drain south of Bon Brae. This will be accomplished with area/velocity meters or equivalent device. The meters will be calibrated and downloaded on a quarterly basis at a minimum.

Finally, Lake St. Clair level data will be obtained from the National Oceanic and Atmospheric Administration (NOAA) stations located in St. Clair Shores (Station No. 9034052) or at Windmill Pointe (Station No. 9944049). NOAA collects level data every 6 minutes at these stations. The website address for this information is <http://www.great-lakes.net/envt/water/levels/levels-cur/stclairwlc.html>.

Task 5. Optional Tasks Depending on Early Determinations

Any items under this task (or other scope adjustments) will require MDEQ concurrence prior to implementation.

Preliminary conclusions or specific results from early project assessment and investigation activities may already indicate or suggest various conditions that may alter the project scope. This task addresses various potential scope changes, as indicated below.

- Monitoring/Sampling Frequency. The frequency of water sampling or sediment sampling/collection may increase should it be determined by the improved weir setup that sediment in certain areas is accumulating at a faster rate than expected. The term faster is used in a relative sense from one location to another. Once sediment accumulates one-half of the height of the weir invert, the sediment should be removed to reduce the possibility of overtopping the weir.

- Drain Observation/Repair. Should assessment activities indicate an unusual buildup (significantly more sediment in one location verses other locations) of PCB impacted sediment in a given area, a conclusion may be drawn that the drain structure has been adversely compromised in that given section of the pipe. This being the case, a physical inspection of that section of pipe may be necessary, with possible minor repair to eliminate/minimize PCB material and sediment intrusion. A minor repair is considered sealing a joint or bulk-heading a tap.
- Additional Monitoring Wells/Sumps. Assessment activities and well/sump monitoring may reveal the need for the placement of additional wells/sumps in the target investigation area, specifically along Bon Brae, east of Harper (area of suspect PCB oil infiltration into the pipe or further east). This being the case, a second monitoring well/sump may be installed as outlined in Task 3.
- Limited PCB Material Collection. Should the monitoring of the wells and sump(s) indicate any buildup or preferential migration of distinctive PCB product, collection and disposal of this material may occur using basic product bailing or low level pumping techniques. Collected materials will be containerized, appropriately stored and disposed of according to TSCA regulations. The collection rate will depend on the rate of product collection in the sumps as determined by the monthly monitoring. It is expected that if product is encountered, the product will be removed on a quarterly basis and stored in appropriate 55 gallon drums at the secure Martin Retention Basin yard pending approved transportation and disposal.
- End-of-Pipe Sediment Collection. Should assessment activities indicate a greater than expected sediment buildup in the end-of-pipe area, the frequency of sampling and collection may increase.
- Hazardous Disposal of the Liquids from the Drain Cleaning. Should sediment removal operations as discussed in Task 2a require off-site disposal of PCB impacted water, this can be accomplished using Frac tank storage followed by appropriate transportation of the water to an approved treatment/disposal facility.
- Other Scope Adjustments. Other unforeseen adjustments to this work plan may be necessary based on conditions encountered. Any work plan modifications will be presented by the City to the MDEQ for approval before they are implemented.

6. Data Interpretation and Reporting

ECT will summarize the monitoring data in brief summary reports and present the reports to the City, County and MDEQ for discussion. The concentrations and spatial distribution of PCBs will be analyzed, along with the static water levels within and outside of the slurry walls. The analysis of the data will be focused on answering the following questions:

1. Has the PCB contamination been controlled, or is it still entering the drain;
2. Where are PCBs entering the drain;
3. What are the concentrations of PCBs in the drain;
4. Are the monitoring wells detecting PCB product;
5. What is the rate of sediment accumulation in the drain;
6. Is the sediment extraction system effective; and
7. How do the PCB concentrations in the stormwater compare to regulatory limits.

These brief summary reports will include a summary and interpretation of the monitoring data, and any other remediation activities conducted in the project area. These reports will be reviewed by the City and submitted to the MDEQ every six months.

The first summary report will be submitted within 30 days of receipt of the analytical data from the first monitoring event. This first report will identify areas where contaminated sediment exists, recommend future monitoring locations, and recommend weir placement locations. Subsequent reports will be submitted within 30 days of subsequent 6-month sampling events.

Near the end of the grant period (three years, according to the attached schedule), a draft final report will be prepared by ECT and submitted to the City for review. Any requested edits to the report will be made and it will be submitted to the MDEQ Project Administrator within 45 days of the end of the contract. The final report will be prepared with MDEQ guidance and will include any planned follow-up activities. Also, a project fact sheet will be prepared and submitted to the MDEQ within 30 days of the end of the contract period. The fact sheet will be a one to two page summary of the activities performed under the grant. Five copies of the final report will be submitted to the MDEQ, one to the Project Administrator and four to the Administrative Unit. In addition, the City will receive 5 copies of the final report and a CD containing an electronic version of the report for posting to the City's website.

Task 7. Grant Administration

The City will prepare progress reports on a quarterly basis and submit them to the MDEQ Project Administrator for processing. These progress reports will be derived from the efforts reported by the City's contractors and consultants and their associated invoices. The quarterly reports will include both a narrative and financial section that describes the effort performed during the period and the associated reimbursement amount. These reports will be broken out by work plan task. The quarterly reports will be submitted within 30 days of the end of the quarter.

The City will also submit a release of claims statement to the MDEQ at the end of the grant period and any required post-audit documentation.

As the grantee, the City is responsible for completing the efforts outlined in this work plan. Not having the necessary expertise in-house, the City will rely on their consultants, ECT and AEW, to complete much of the effort outlined in this work plan. The table below summarizes the responsible parties and deliverables for each task:

Task	Responsible Contractor	Deliverables*
1 – Project Planning & Sampling Plan Development	ECT	Approved Sampling Plan
2 – Targeted Drain Cleaning a. Development of a sediment extraction system b. Permitting c. Waste disposal d. In-line weirs	ECT ECT ECT AEW	Volume of sediment removed from the drain NPDES-required monitoring data Final approvals / permits Specs and sketches of sediment extraction system

Task	Responsible Contractor	Deliverables*
3 – Monitoring Well Installation	ECT	Sketches of collection sump Two new monitoring wells, one with collection/migration sump Completed well logs
4 – Environmental Monitoring a. Sediment sampling b. Water sampling c. Static water level monitoring	ECT ECT ECT	Shown in Task 6
5 – Optional Tasks	ECT AEW	Increase in monitoring frequency, if necessary Drain observation/repair, if necessary Additional monitoring wells/sumps, if necessary Limited PCB material collection/disposal, if necessary End-of-Pipe sediment collection increase, if necessary Other as determined by client and MDEQ
6. - Data Interpretation and Reporting	ECT	Brief summary reports – every 6 months Final report 1 – 2 page fact sheet
7 – Reporting and Grant Administration	City	Quarterly status reports Release of claims statement Post-audit documentation

*All deliverables will be provided in electronic and hard copy format.

Budget

The work plan budget is divided among the city's engineering and environmental consultants as shown in the table above and on the budget form. The city is supplying some of the project effort as described in Tasks 4 and 7, but are not requesting any grant funding to supplement this effort. Likewise, the oversight effort provided by the County does not require any grant funding. The estimate budget detail can be found below.

Figure 1. Project Area

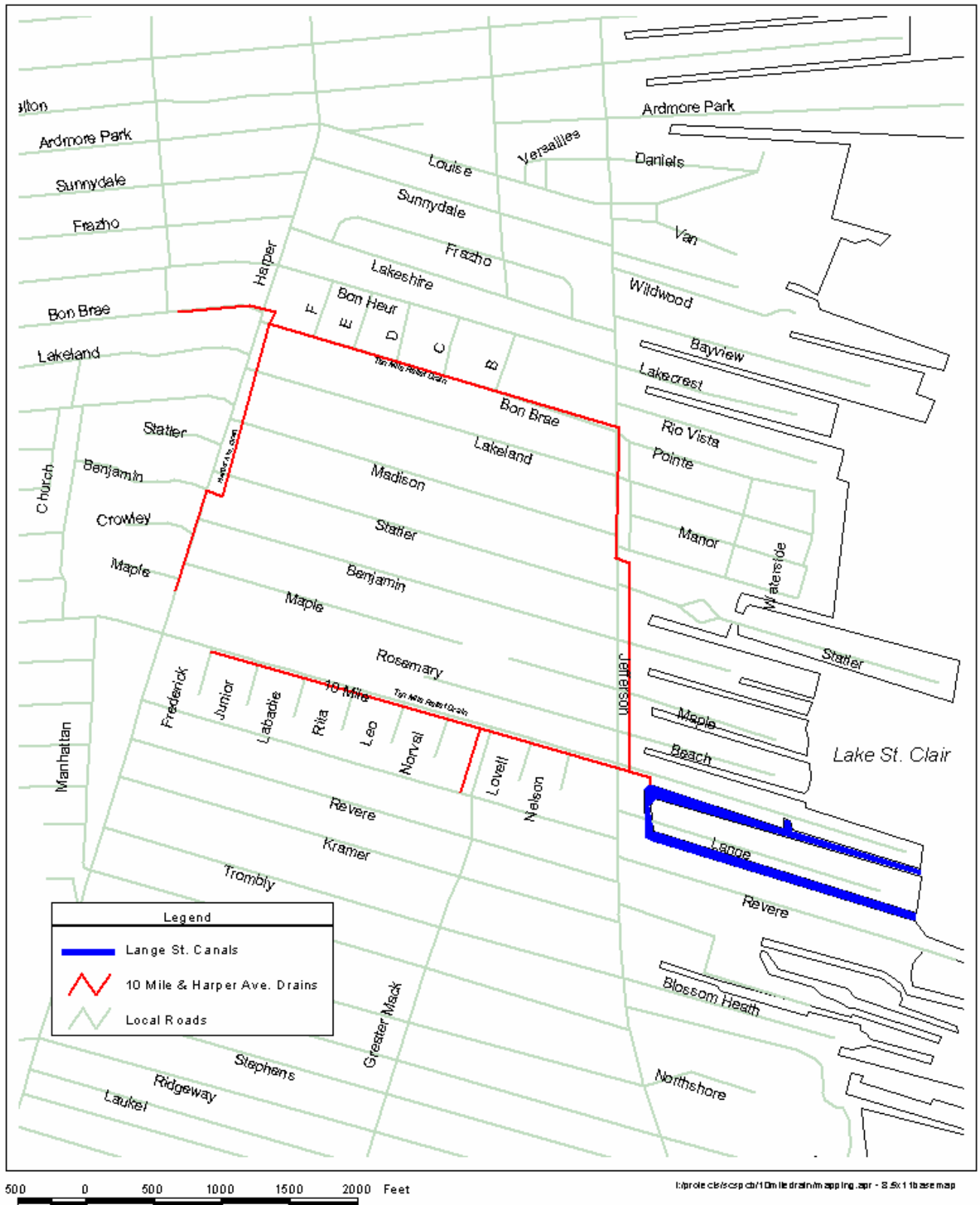


Figure 2. Monitoring Locations

