

**Robert A. Ficano**  
County Executive

September 17, 2010

Tracey Balint, P.E., Project Engineer  
City of Rochester Hills  
1000 Rochester Hills Drive  
Rochester Hills, MI 48309

**RE: Rouge River National Wet Weather Demonstration Project  
Round I, Part "A" Grant Program for Control of Combined and Sanitary  
Sewer Overflows Activities  
Rochester Hills Rouge District Sanitary Sewer Evaluation Study (RXA-02)**

Dear Ms. Balint:

Enclosed are three copies of the proposed interagency agreement (IAA) between Wayne County and the City of Rochester Hills. This agreement will provide federal grant funds for the project "Rochester Hills Rouge District Sanitary Sewer Evaluation Study" under the Round X Part A subgrant program of the Rouge River National Wet Weather Demonstration Project (Rouge Project). Please review this agreement and its attachments. If the agreement is acceptable as presented, please have the appropriate official sign all three copies and return them to Mr. Razik Alsaigh at the following address:

Mr. Razik Alsaigh  
Wayne County Department of Public Services  
Water Quality Management Division  
415 Clifford, 7<sup>th</sup> Floor  
Detroit, Michigan 48226

Upon receipt of the signed agreement from your office, our department will forward the agreement to the Wayne County Commission and Wayne County Executive for review and approval. After signature by Wayne County, we will return one copy of the executed agreement for your records.

Please note that Article 8.2 of the IAA project specifies that your organization remain a member in good standing of the Alliance of Rouge Communities (ARC) for the duration of the agreement. If your organization chooses not to remain an ARC member during the term of the inter-agency agreement, Wayne County may terminate the agreement before project completion.

We would like to bring to your attention the final project summary report mentioned in article 1.3 of the IAA. This report should be completed at the end of the project. An important aspect of this report is the project evaluation. The evaluation should assess the project in terms of benefits to the Rouge River, project costs, and overall effectiveness of the project. Please work

with Mr. Alsaigh to identify the details required to complete the final project summary report and the project progress update schedule.

Also, please note article 3.1 of the IAA, which specifies that modifications to the internal distribution of monies allocated among project elements are only allowed upon written agreement of Wayne County. Such request should be made prior to expenditure of any funds related to the proposed modification. Similarly, per article 19.1, requests for changes to the project schedule must also be by written agreement between your organization and Wayne County.

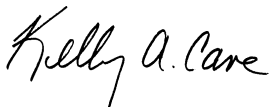
You should carefully review all provisions of the Rouge Project IAA. Recent changes to this document from previous versions include but are not limited to:

- Article 6.4 of the IAA, which specifies **revised fair share goals** for the Rouge Project grant under which this subgrant is funded. The federal regulation regarding Disadvantaged Business Enterprises (DBEs) has been changed and some firms that were considered as DBEs under the old regulation may not qualify as DBEs under the new regulation. All DBE contractors must be certified by Wayne County or an appropriate agency as specified by the Michigan Unified Certification Program (MUCP) (see [http://www.michigan.gov/mdot/0,1607,7-151-9625\\_21539\\_23108---,00.html](http://www.michigan.gov/mdot/0,1607,7-151-9625_21539_23108---,00.html) ). The DBE firm must also be certified as a MBE/WBE by Wayne County or the Michigan Department of Transportation.
- Articles 6.11 and 6.12 of the IAA, which clarify the procurement and contractual requirements for the Rouge Grant per the 40 CFR 31.

**Your project schedule is shown on page 3 of Attachment "A" to the IAA and all project costs should be incurred and project deliverables completed before October 31, 2011.** If you would like to discuss any of the provisions of this agreement, please call Mr. Razik Alsaigh at (313) 967-2283.

Thank you for your participation in the Rouge River Round X-Part A grant program for control of combined and sanitary sewer overflows activities. We look forward to continuing our support of your efforts to help restore the beneficial uses of the Rouge River.

Sincerely,



Kelly A. Cave, P.E.  
Director, Water Quality Management Division

cc: Razik Alsaigh, WCWQMD

**ROUGE RIVER NATIONAL WET WEATHER DEMONSTRATION PROJECT  
ROUGE RIVER GENERAL PERMIT PROJECTS  
GRANT AGREEMENT  
BETWEEN THE COUNTY OF WAYNE AND  
THE CITY OF ROCHESTER HILLS**

THIS AGREEMENT is entered into this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, between the County of Wayne, Michigan, a body corporate and Charter County ("County") and the City of Rochester Hills, a Michigan municipal corporation ("*Entity*").

**RECITALS**

WHEREAS, the County is the recipient of, and is responsible for the administration of certain federal grant funds referred to as the Rouge River National Wet Weather Demonstration Project Grant ("Grant").

WHEREAS, the United States Environmental Protection Agency ("USEPA") has established Grant conditions and regulations that require the County to act as the responsible party with respect to the Grant, including those provisions described within 40 CFR § 31.

WHEREAS, the USEPA will supervise the Grant and Grant conditions in order that the Grant be used in accordance with the requirements of the law.

WHEREAS, the parties have agreed to follow certain administrative procedures and cooperate on the various tasks to be undertaken in order for the County to comply with the Grant's requirements and objectives.

WHEREAS, the Rouge River National Wet Weather Demonstration Project ("Rouge Project") is a comprehensive watershed-wide program addressing wet weather pollution problems ranging from controlling combined sewer overflows ("CSO") to storm water runoff in the Rouge River.

WHEREAS, one of the purposes of the Grant is to enable the County and local units of government within the Rouge River Watershed to evaluate alternative approaches for controlling sources of water pollution.

WHEREAS, implementing the activities and projects for investigating and controlling CSOs and sanitary sewer overflows will further the Grant's goal to protect public health and improve water quality in the Rouge River.

WHEREAS, implementing the National Pollutant Discharge Elimination System (NPDES) Wastewater Discharge General Permit for Storm Water Discharges from Municipal Separate Storm Water Drainage Systems (MS4s) – Watershed General Permit (Permit No. MIG619000) or the NPDES Wastewater Discharge General Permit for Storm Water Discharges

from MS4s – Jurisdictional General Permit (Permit No. MIS049000) (“Storm Water General Permits”) issued by the Michigan Department of Natural Resources and Environment (“MDNRE”) for the local unit will further the Grant’s goal to improve water quality and recreational use of the Rouge River.

WHEREAS, illicit discharge elimination, public education and subwatershed management plan implementation are considered examples of the types of activities included in the Storm Water General Permits which will assist in restoring the water quality of the Rouge River.

WHEREAS, the *Rochester Hills Rouge District Sanitary Sewer Evaluation Study Project* set forth in this Agreement would further the goals of the Grant.

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS CONTAINED HEREIN, the parties hereby agree as follows:

**ARTICLE I  
SCOPE OF PROJECT**

1.1 The County will provide a portion of the Grant to *Entity* to enable the *Entity* to do the activities described in Attachment “A.”

1.2 The budget presented in Attachment “A” along with the scope of work presented in Attachment “A” specify the performance of the work as anticipated at the time the contract is signed.

1.3 The *Entity* agrees to submit a Final Project Summary Report at the project end to assist the County in the grant close-out process. The Final Project Summary Report should generally include:

- A. A summarized clear description of the project. In addition to the project description, the report should include the following: project objectives; major elements of the project; project products completed (project products are listed in Attachment “A”); and project highlights.
- B. Comments on how the completion of this project benefited or is projected to improve the Rouge River.
- C. A written set of recommendations to other local governments and agencies that evaluates the benefits and cost effectiveness of the project. The evaluation should consider the total project cost. The recommendations should also summarize how the project was evaluated and the evaluation results of the effectiveness of the project.
- D. Comments on how the results of this project are transferable to other communities or agencies.
- E. List of all task products completed. The list should include the official name of the products.

**ARTICLE II  
SCHEDULE OF WORK**

2.1 The time frame for completion of the project milestones is contained in Attachment "A."

**ARTICLE III  
FINANCIAL PROVISIONS AND BUDGET**

3.1 The detailed budget is contained in Attachment "A" and will be considered an approximation based on the best information available at the time of this Agreement. The internal distribution of the monies allocated among project elements may be modified by the *Entity* up to a total cumulative transfer among direct cost categories not to exceed 10% of the total budget without written approval by the County. Other modifications to the budget will be only upon written Agreement between the County and the *Entity*.

3.2 The County will provide funds from the Grant to partially fund the approved, allowed, and eligible costs for activities outlined in Attachment "A." The total amount to be provided by the County from the Grant for this project shall not exceed \$90,000.00. The *Entity* shall provide a minimum match of \$135,000.00 or 40 percent of approved costs, which may be satisfied by demonstrating either cash or in-kind services from non-federal sources.

3.3 The County will hold the final 10 to 20 percent of the total federal funds allowable to the *Entity* until the completion of the project as identified in Attachment "A" by the *Entity*. Upon completion of all the tasks by the *Entity*, the approval of the *Entity*'s task products by the County, and the approval of the *Entity*'s submittal of the documentation of the final project cost by the County, the remaining 10 to 20 percent of the federal funds will be reimbursed to the *Entity*.

**ARTICLE IV  
CONTRACT ADMINISTRATION AND PAYMENT**

4.1 This Agreement will be administered on a cost reimbursement basis. The *Entity* shall submit to the County project status reports and invoices on standard forms provided by the County.

4.2 All reports and invoices shall be submitted at least quarterly, no more than forty (40) days after each quarter end date. Reimbursements shall not be allowed without a status report submission.

4.3 Invoices must clearly identify:

- A. Total program outlays to the date of the invoice;
- B. The non-federal share of amount expended;
- C. The federal share of amount expended;
- D. The federal payments previously received;

- E. The reimbursements requested for the billing period;
- F. Project work element detail;
- G. Project direct costs and outside services;
- H. Time sheets for hourly employees and labor distribution sheets for salaried employees; and
- I. Documentation of all contractor costs.

4.4 The invoices must be certified for completeness and correctness by an appropriate *Entity* official.

4.5 All invoices will be paid by the County within thirty (30) days of receipt of funds from the USEPA.

4.6 The *Entity* will provide documentation to the County that demonstrates compliance with federal and state regulations before payments will be processed. The *Entity* will prepare all cost estimates for implementation of the planned activities, including a breakdown of eligible and ineligible cost items, with respect to grant funding. These cost estimates will be provided in a format to be established by the County.

4.7 The *Entity* will exercise the necessary contract oversight and administration of any subcontracts. These duties include, but are not limited to construction inspection and negotiating and executing change orders (where construction is to occur), monitoring project progress, responding to subcontractor or citizen complaints, coordinating between different subcontracts, and overseeing subcontractors' compliance with the approved project plans and specifications. These activities are to be done in accordance with procedures established by the Grant and by 40 CFR § 31.1, *et seq.*

4.8 All reports, invoices, and work products required under this Agreement will be transmitted to the Director of Water Quality Management Division, Department of Public Services, Wayne County, care of Mr. Razik Alsaigh, 415 Clifford, Detroit, Michigan 48226.

## **ARTICLE V AUDIT AND ACCESS TO RECORDS**

5.1 The *Entity* will maintain and retain financial records and supporting documentation in accordance with generally accepted accounting procedures and in accordance with the requirements of federal and state regulations.

5.2 The *Entity* will cooperate with and assist the County with respect to federal or state audit review related to the use of Grant funds. This cooperation shall include preservation of the necessary documentation and access to the records until federal and/or state audit resolution processes have been completed and notification of records disposal has been received by the County. The *Entity* will cooperate with the County with respect to evaluating audit findings of this Agreement.

5.3 The **Entity** will be responsible for the reimbursement of any funds required to be returned to the USEPA due to **Entity** actions or omissions, as determined by audit findings, and hold the County harmless from any repayment therefrom.

## **ARTICLE VI GENERAL PROVISIONS**

6.1 This Agreement is expected to be funded in part with funds from the USEPA. The **Entity** will not enter into any agreements with either the United States or any of its departments, agencies, or employees, which are or will be a party to this Agreement or any lower tier sub-agreement for monies related to this specific project. This Agreement is subject to regulations contained in 40 CFR. § 31 in effect on the date of the assistance award for this project.

6.2 The **Entity** understands that the County has no funds other than the Grant funds to pay for the project costs. All costs other than the Grant funds associated with the activities which are the subject matter of this Agreement will be the responsibility of the **Entity**.

6.3 The **Entity** will cooperate with the County to ensure timely completion of the tasks undertaken as part of the project. Cooperation includes, but is not limited to sharing information and records, participation in applicable committees, and assisting in development and evaluation of water quality improvement alternatives.

6.4 The **Entity** warrants that it will comply with the provisions of 40 CFR § 31 and, as applicable, all provisions contained in the Grant. In the event there are any conflicts between the provisions of this Agreement and the terms of the Grant, the Grant terms will prevail. The fair share goals for the Grant as identified in that letter are as follows:

3% Minority Business Enterprise (MBE)    5% Woman Business Enterprise (WBE)

6.5 The **Entity** is responsible for securing all necessary permits from regulatory agencies and is responsible for obtaining any professional services necessary for the project activities. The **Entity** will act at all times in accordance with applicable federal, state, and local regulations, and will secure any permits and negotiate the terms of agreements in accordance with those requirements.

6.6 If the **Entity** secures any interest in lands, including easements, these acquisitions will be in accordance with applicable federal law and regulations including 49 CFR § 24 and state statutes related to the taking of interests in land.

6.7 With respect to construction projects, the **Entity** is responsible for conducting post-project evaluation and certifying that any construction meets the approved design criteria. These certifications will be submitted to Wayne County and the USEPA and MDNRE, where appropriate, in accordance with the Grant requirements and applicable regulations. If the project does not meet the design criteria, the **Entity** will be responsible for taking the necessary corrective measures.

6.8 The ownership of any facilities and/or infrastructure constructed and/or improved under this Agreement will remain with the **Entity**. The **Entity** agrees to operate and maintain the facility and/or infrastructure constructed and/or improved under this Agreement consistent with the Grant project goals and in accordance with the Grant conditions and requirements of applicable federal, state, and local ordinances, statutes and regulations.

6.9 The **Entity** warrants that it will comply with the provisions of 40 CFR § 31.32 relating to any equipment including computers and peripheral computer equipment purchased as part of this Grant assistance project.

6.10 Any amendment to this Agreement must be in writing, and signed and acknowledged by a duly authorized representative of each party.

6.11 The **Entity** warrants that it will comply with the provisions of 40 CFR § 31.36(d) relating to procurement of services as part of this Grant assistance project. For construction contracts the **Entity** shall use bid type contracts. For consulting contracts, the **Entity** shall use any of the four procurement procedures in the 40 CFR § 31. For most of the consulting contracts, the RFQ or RFP procurement procedure is the applicable one. The selection of the consultant can be based on qualification or on qualification and cost proposal. Upon consultant selection, procurement documentation must be submitted to the County. The procurement documentation should include:

- a. Rationale for method of procurement;
- b. Copy of advertisement, where it was published and for how long;
- c. Number of proposals received;
- d. Description of selection process (e.g., pre-established criteria of qualification, cost, or both); and
- e. Selection of type of contract to be used.

6.12 The **Entity** warrants that it will comply with the provisions of 40 CFR § 31.36(f) relating to contract cost or price of services as part of this Grant assistance project. Price/cost analysis must be performed by the **Entity** prior to award of any type of contract. The selected contractor must submit a cost proposal to the **Entity**, with cost identified by task. The cost proposal should consist of the following categories:

- a. Direct labor (with backup that establish this cost (hours and personnel));
- b. Overhead (backup to establish this rate);
- c. Other Direct Expenses (backup to establish this item);
- d. Subconsultant;
- e. Subconsultant Administrative Charge (if applicable);
- f. Total; and
- g. Fee (Fixed for a fixed fee contract).

The cost analysis consists of the **Entity** determining the reasonableness of the selected



contractor's proposed cost (i.e., is the allowable overhead rate used, are correct pay rates used for employees, are expense charges accurate). Price analysis consists of the **Entity** comparing proposed prices received with other proposals submitted for this job, an independent estimate from the **Entity's** experience or cost estimate from existing master plan. Copies of price/cost analysis documentation should be submitted to the County. After completing the price/cost analysis, any type of the contracts indicated below can be executed:

- a. Cost plus fixed fee contract;
- b. Fixed price (lump sum) contract;
- c. Catalog price contracts (e.g., geotechnical investigations where the price of the tests are established in the market); or
- d. For certain contracts where the above types are not applicable, the County will allow contracts with proscribed billing rates (per diem contracts), which establishes pay rates for professional categories (e.g., Engineer I, Engineer II, Project Engineer, Field Technical Help, etc.).

These above types of contracts are applicable for the main contractor and for sub-contractors. "Cost plus a percentage of cost" and "percentage of construction cost" methods of contracting shall not be used.

## **ARTICLE VII WAIVER OF BREACH**

7.1 No failure by a party to insist upon the strict performance of any term of this Agreement or to exercise any term after a breach, constitutes a waiver of any breach of the term. No waiver of any breach affects or alters this Agreement, but every term of this Agreement remains effective with respect to any other existing or subsequent breach.

## **ARTICLE VIII TERMINATION**

8.1 This Agreement will terminate after the final audit and final resolution of any issues related thereto as described within 40 CFR §104.1, *et seq.*

8.2 This Agreement may be terminated in whole or in part in writing by the County for its convenience and/or if the **Entity** does not remain a Member in good standing (if eligible) or Cooperating Partner of the Alliance of Rouge Communities (ARC), for any reason for the duration of this Agreement. The **Entity** must be given: (1) not less than thirty (30) calendar days written notice of intent to terminate; and (2) an opportunity for consultation with the County prior to termination.

8.3 This Agreement may be terminated in whole or in part in writing by the **Entity** for its convenience. The County must be given: (1) not less than thirty (30) calendar days written notice of intent to terminate; and (2) an opportunity for consultation with the **Entity** prior to termination.

8.4 If termination is effected by the County or the *Entity*, an equitable adjustment in the Agreement price will be made. The equitable adjustment for any termination will provide for payment to the *Entity* for services rendered and expenses incurred prior to termination. Equitable adjustment also will include termination settlement costs reasonably incurred by the *Entity* and approved by the County, relating to personnel hired specifically for activities related to this Agreement, provided such costs are eligible and allowable under the terms of the Grant.

8.5 Upon receipt of a termination notice pursuant paragraphs 8.2 or 8.3, above, the *Entity* will: (1) promptly discontinue all services affected (unless the notice directs otherwise), and (2) deliver or otherwise make available to the County all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may be accumulated by the *Entity* in performing this Agreement, whether completed or in process.

8.6 Upon termination pursuant to paragraphs 8.2 or 8.3, above, the County may take over the work and prosecute the same to completion by Agreement with another party or otherwise.

8.7 All notices of termination will be sent certified mail, postage prepaid and return receipt requested as follows:

If to the County:

Attn.: Director, Water Quality Management Division  
Wayne County Department of Public Services  
415 Clifford  
Detroit Michigan 48226

If to the *Entity*:

Tracey Balint, P.E., Project Engineer  
City of Rochester Hills  
1000 Rochester Hills Drive  
Rochester Hills, MI 48309

## **ARTICLE IX LIABILITY**

9.1 All liability, loss, or damage as a result of claims, demands, costs, or judgments arising out of activities of the *Entity* will be the sole responsibility of the *Entity* and not the responsibility of the County. Nothing herein will be construed as a waiver of any governmental immunity by the *Entity*, its agencies, or employees have as provided by statute or modified by court decisions.

9.2 All liability, loss, or damage as a result of claims, demands, costs, or judgments arising out of activities of the County will be the sole responsibility of the County and not the responsibility of the *Entity*. Nothing herein will be construed as a waiver of any governmental immunity by the County, its agencies, or employees have as provided by statute or modified by court decisions.

9.3 The provisions of Article IX shall survive the expiration or any termination of this Agreement for a period of three (3) years.

## **ARTICLE X INSURANCE**

10.1 The **Entity** or its contractors', at its expense, must maintain during the term of this Agreement the following insurance:

- A. Professional Liability/Errors and Omissions coverage with minimum limits of One Million Dollars (\$1,000,000.00) on a claims made basis and Two Million Dollars (\$2,000,000.00) aggregate with three year tail insurance coverage.
- B. Workers' Compensation Insurance which meets Michigan statutory requirements.
- C. Commercial General Liability Insurance with minimum limits of One Million Dollars (\$1,000,000.00) per occurrence and One Million Dollars (\$1,000,000.00) aggregate for bodily injury and property damage.
- D. Commercial Automobile Liability Insurance (including hired and non-owned vehicles) with minimum limits for bodily injury of One Million Dollars (\$1,000,000.00) per occurrence and with minimum limits for property damage of Five Hundred Thousand Dollars (\$500,000.00) per occurrence.

10.2 The insurance must be effected under valid and enforceable policies, issued by recognized, responsible Michigan insurers which are well-rated by national rating organizations. Commercial General Liability and Commercial Automobile Liability Insurance policies must name the County as an additional named insured. The additional insured coverage shall be primary, non-contributory coverage and must not be canceled or materially changed without at least thirty (30) days prior notice from the **Entity** to the County. The **Entity** must submit certificates evidencing the insurance to County prior to commencing project services, and at least thirty (30) days prior to the expiration dates of expiring policies.

## **ARTICLE XI NON-DISCRIMINATION**

11.1 In connection with the performance of project services under this Agreement, the **Entity** must comply with:

- A. Titles VI and VII of the Civil Rights Act (42 U.S.C. §§ 2000d et. seq.) and the United States Department of Justice Regulations (28 C.F.R. Part 42) issued pursuant to those Titles.
- B. The Age Discrimination Act of 1985 (42 U.S.C. §6101-07).

- C. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. §794).
- D. The Americans with Disabilities Act of 1990 (42 U.S.C. §12101 et. seq.) and its associated regulations.
- E. The Michigan Civil Rights Act (P.A. 1976 No. 453) and the Persons With Disabilities Civil Rights Act (P.A. 1976 No. 220).
- F. The anti-discrimination provisions of the Wayne County Code governing “Ethics in Public Contracting.”

11.2 *Entity* must notify any contractor of the obligations relative to non-discrimination under this Agreement when soliciting the contractor. *Entity* will include the provisions of this Article in any subcontract agreement.

11.3 The *Entity* is responsible for complying with all federal and state laws and regulations regarding competitive bidding.

## **ARTICLE XII ASSIGNABILITY**

12.1 This Agreement will be binding upon and inure to the benefit of the parties hereto and their respective heirs and assigns.

12.2 Neither of the parties hereto may assign this Agreement without the prior written consent of the other.

## **ARTICLE XIII VALIDITY**

13.1 If any provision of this Agreement or the application to any person or circumstance is, to any extent, judicially determined to be invalid or unenforceable, the remainder of the Agreement, or the application of the provision to persons or circumstances other than those as to which it is invalid or unenforceable, is not affected and is enforceable, provided the invalid provision does not substantially alter the Agreement or make execution impractical.

## **ARTICLE XIV ENTIRE AGREEMENT**

14.1 This document, including any attachments, contains the entire Agreement between the parties.

14.2 Neither party has made any representations except those expressly set forth herein.

14.3 No rights or remedies are, or will be acquired, by either party by implication or otherwise unless set forth herein.

**ARTICLE XV  
PATENTS, COPYRIGHTS, AND RIGHTS IN DATA**

15.1 If this Agreement involves research, developmental, experimental, or demonstration work and any discovery or invention arises or is developed in the course of, or under this Agreement, the *Entity* and the County shall retain joint authority to patent or license.

15.2 The parties agree that any plans, drawings, specifications, computer programs, technical reports, operating manuals, and other work submitted, or which are specified to be delivered under this Agreement, or which are developed or produced and paid for under this Agreement are subject to the rights of both parties and both parties shall retain an irrevocable license to reproduce, publish and use in whole or in part and to authorize others to do so.

15.3 This Agreement is funded in part by the USEPA and is therefore subject to the reporting and rights provisions of 40 CFR § 30 Subpart D including Appendix B and Appendix C.

15.4 This clause shall be included in all subcontracts.

**ARTICLE XVI  
JURISDICTION AND GOVERNING LAW**

16.1 This Agreement, and all actions arising from it, must be governed by, subject to, and construed according to the law of the State of Michigan.

**ARTICLE XVII  
EFFECTIVE DATES**

17.1 This Agreement becomes effective and shall allow for billing of costs incurred immediately upon signing by both parties. This Agreement, unless extended by mutual written agreement, expires on November 30, 2011. Should the USEPA require reimbursement by the County of funds transferred to the *Entity* for costs incurred prior to this Agreement, the *Entity* shall be responsible for any such reimbursement.

17.2 This Agreement may be executed in counterparts, each of which will be deemed an original but all of which together will constitute one Agreement.

**ARTICLE XVIII  
PARTY REPRESENTATIVES**

18.1 The County's representative for this Agreement is the Director of Water Quality Management Division, Department of Public Services, Wayne County. The *Entity* representative for this Agreement is the City Engineer for the City of Rochester Hills. Either party may assign alternate representatives upon written notification of the other party.

**IN WITNESS WHEREOF**, the parties have caused this Agreement to be signed on the date first above written.

COUNTY OF WAYNE, MICHIGAN

CITY OF ROCHESTER HILLS,  
MICHIGAN

By: \_\_\_\_\_  
ROBERT A. FICANO  
Its: Wayne County Executive

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

# **ATTACHMENT "A"**

City of Rochester Hills

## **Rochester Hills Rouge District Sanitary Sewer Evaluation Study (RXA-02 Subgrant)**

### **Project Scope:**

The sanitary sewer system in the southwest corner of the City of Rochester Hills is located in the Rouge Main 1-2 subwatershed. See Appendix "A". Basement flooding and sanitary sewer overflows (SSO's) have occurred; data at the receiving pump station indicates inflow and infiltration are likely problems within the system. Under this project, the City will complete an inflow and infiltration (I&I) study in this area to determine the extent and magnitude and what impacts it may have on the sanitary sewer system and the environment. If the extent and magnitude is found to be severe, and potentially contributing to the sewer overflows, the study will provide a valuable tool for the planning, budgeting, prioritization and scheduling of the correction.

Rochester Hills does not have data 'reporting' that SSO's have occurred in this area, but data does show an increase in levels of bacteria after wet weather events. This data has been collected and tested. Also, a Sanitary Sewer Evaluation Study was performed in 2002 by the City. A portion of the area proposed for the current study was included. Only 40% of that area was monitored for I&I and smoke testing was not performed. Results from that study (manhole inspections, sewer inspections) indicated I&I problems within that area. The proposed study will look at a larger area and try to isolate the areas with severe I&I. It is important to perform this study at this time, as there appears to be an existing I&I problem that may only get worse as time goes by.

There is metering at the Grant Pump Station, which includes a majority of the City's sanitary sewer system located within the Rouge watershed. The pump station has a rain gauge as well. The City has recently purchased flow metering equipment and it will be utilized to identify the areas within the Rouge Drainage District that have I&I. The Oakland County Water Resources Commissioner collects sewage flow data with meter number 1093. August 2008 meter data indicated a 121 gallons per capita flow estimate for the Rouge Drainage District, which exceeds design conditions by 20%.

The study area includes approximately 28 miles of separated sanitary sewer (size and age varies) and 640 sanitary sewer manholes. Metering will be performed to locate areas within the system that potentially have inflow and infiltration problems. Appendix B includes maps showing where the City will install the metering equipment. This equipment will be moved

throughout the Rouge Drainage District to quantify flow in other locations in order to narrow down the areas in which will then be inspected and televised. Once the inspections have been completed, a report will be developed identifying where and what kind of improvements are needed.

**Task Description:**

- Task #1:** Flow metering will commence in Fall 2010 and continue until sufficient wet weather events have occurred and data collected in order to narrow down the areas that have potential for inflow and infiltration to the City's sanitary sewers in the Rouge Drainage District. Appendix B includes maps showing where the City will install the metering equipment in the Rouge Drainage District. During the metering period it is anticipated that the meters may be relocated to narrow down sources in high wet weather flow events. Metering may occur in all or portions of the locations shown on the maps in Appendix B, depending on the initial metering results.
- Task #2:** Perform manhole inspections starting with the areas identified under Task #1 as being most impacted by wet weather events to determine the location of and the severity of inflow and infiltration. Each manhole inspection will be documented on a separate inspection report which will include recommendations for repairs.
- Task #3:** Concurrently with Task #2, perform video inspection and when necessary, sanitary sewer line cleaning to facilitate the video inspection to identify structural defects such as offset joints, cracks, missing pipe sections, etc. Each run of sewer main will be reviewed and recommended improvements will be given.
- Task #4:** Smoke testing will be used in areas which were identified through the manhole and video inspections as having inflow and/or infiltration sources other than those found in Tasks 1 through 3.
- Task #5:** Once the work items described above tasks has been completed, a report will be prepared compiling the testing results and identifying and prioritizing proposed repairs/improvements to reduce inflow/infiltration in the Rouge Drainage District including cost estimates for recommended improvements.



**Project Schedule:**

Anticipated start date: late October 2010

<b>Task Number &amp; Description</b>	<b>Start Date</b>	<b>Completion Date</b>
#1, Flow Metering	October 2010	March 2011*
#2, Manhole Inspections	March/April 2011	May 2011
#3, Sanitary Sewer Line Cleaning & Televising	March/April 2011	May 2011
#4, Smoke Testing	May / June 2011	July 2011
#5, Report Compilation	July 2011	October 2011

\*Provided sufficient wet weather events have occurred.

**Project Cost:**

**Project Cost Summary Table**

<b>Task Number &amp; Description</b>	<b>Estimated Hrs</b>	<b>Position to Perform Work</b>	<b>Cost / Hr (with Fringes)</b>	<b>Total Cost per Task</b>
#1, Flow Metering	140	Engineering Aide	\$40.00	\$5,600
	140	Engineering Tech	\$45.00	\$6,300
	120	Const Inspector	\$50.00	\$6,000
	120	Project Engineer	\$70.00	\$8,400
	120	Licensed Surveyor	\$80.00	\$9,600
#2, Manhole Inspections	160	Const. Inspector	\$50.00	\$8,000
	160	DPS Crew	\$200.00	\$32,000
#3, Sanitary Sewer Line Cleaning & Televising	340	Const Inspector	\$50.00	\$17,000
	340	TV Crew	\$200.00	\$68,000
#4, Smoke Testing	160	Engineering Aide	\$40.00	\$6,400
	160	Engineering Tech	\$45.00	\$7,200
	160	Project Engineer	\$70.00	\$11,200
#5, Report Compilation	120	Engineering Aide	\$40.00	\$4,800
	250	Project Engineer	\$70.00	\$17,500
	120	Admin Coord	\$60.00	\$7,200
	120	Licensed Surveyor	\$80.00	\$9,600
<b>TOTAL PROJECT COST</b>				<b>\$225,000</b>

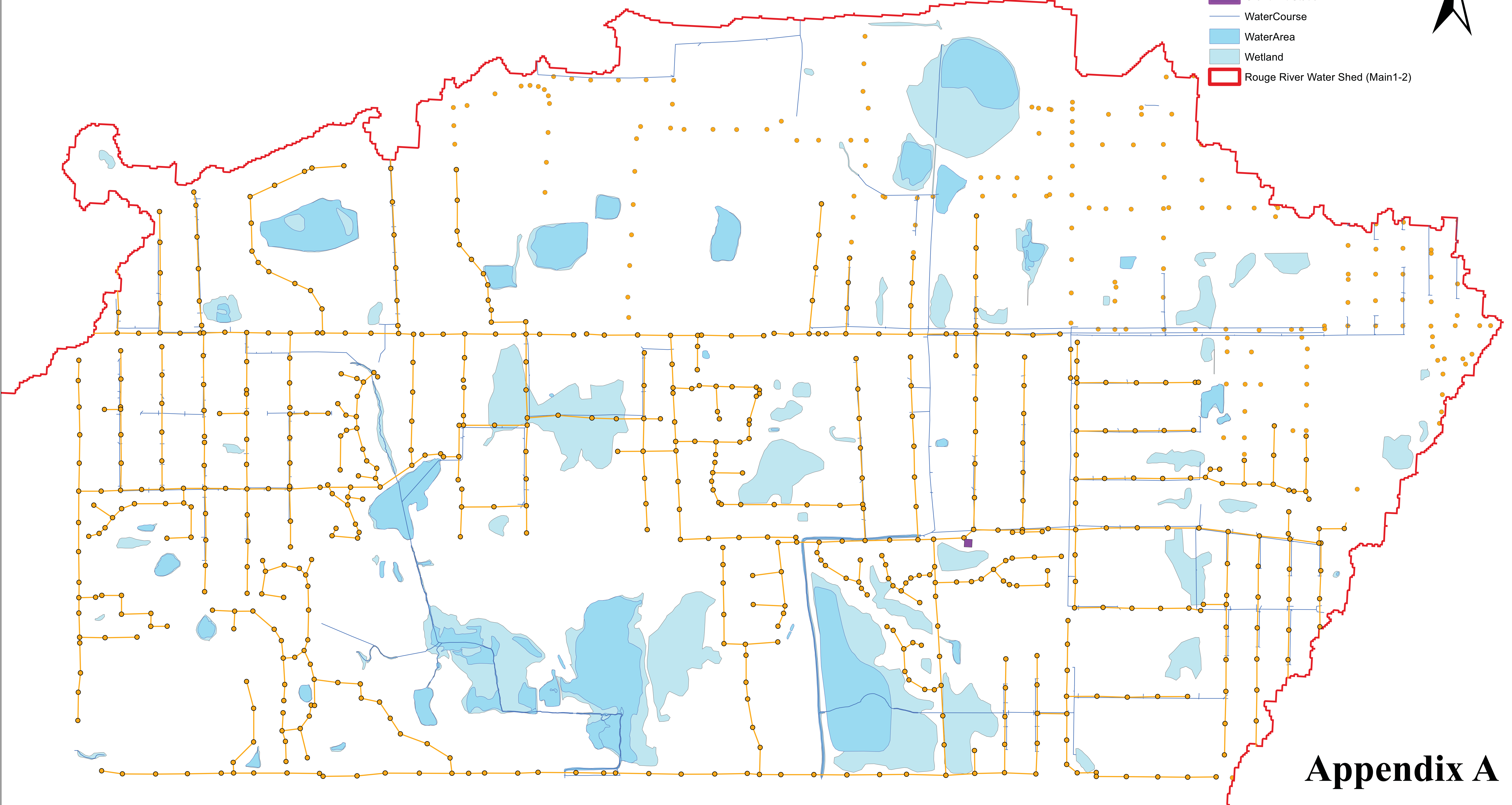
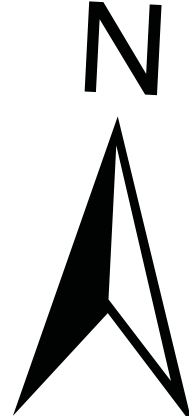
**Project Funding Percentage = 40%**

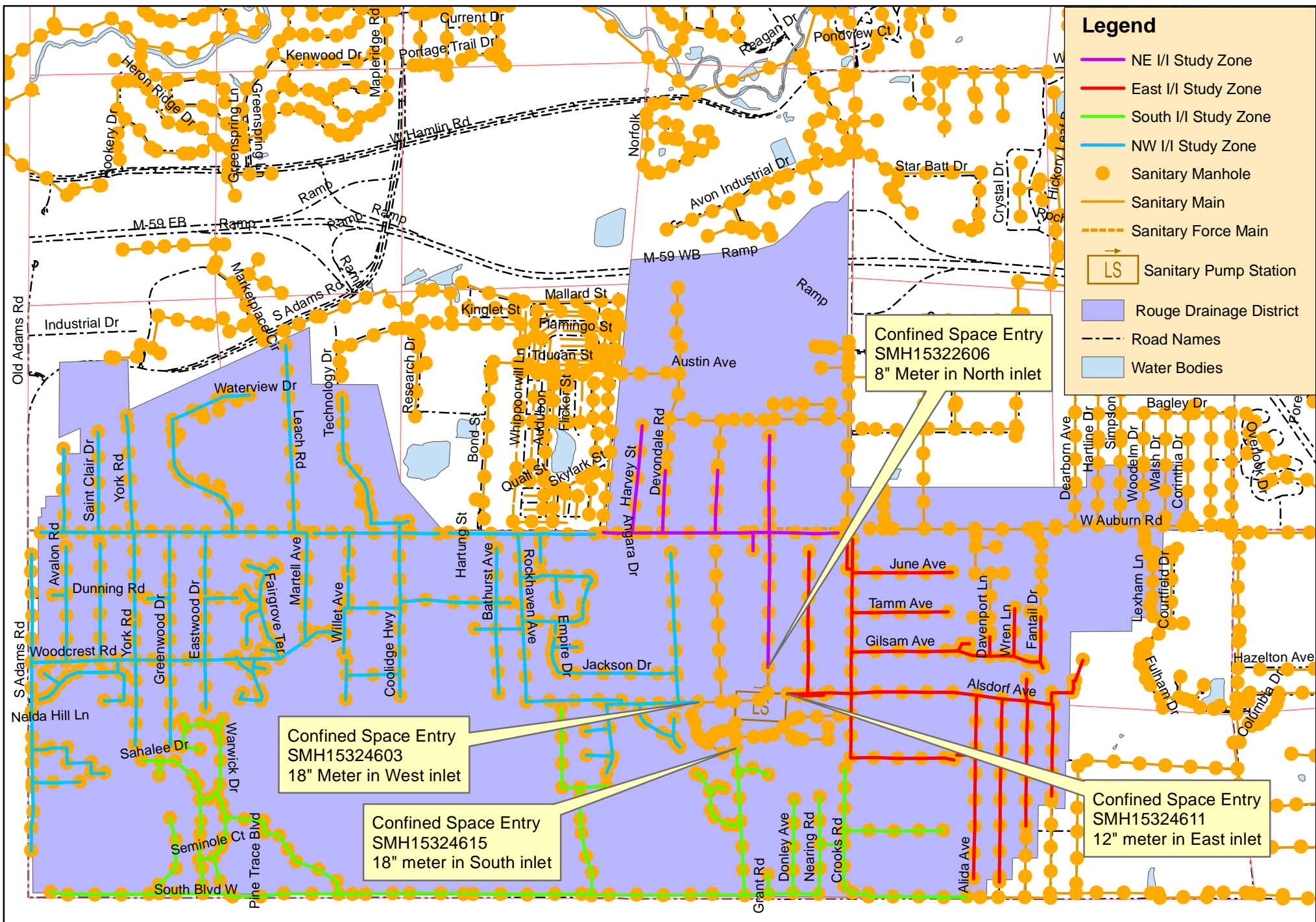
**Project Maximum Federal Funding = \$90,000**

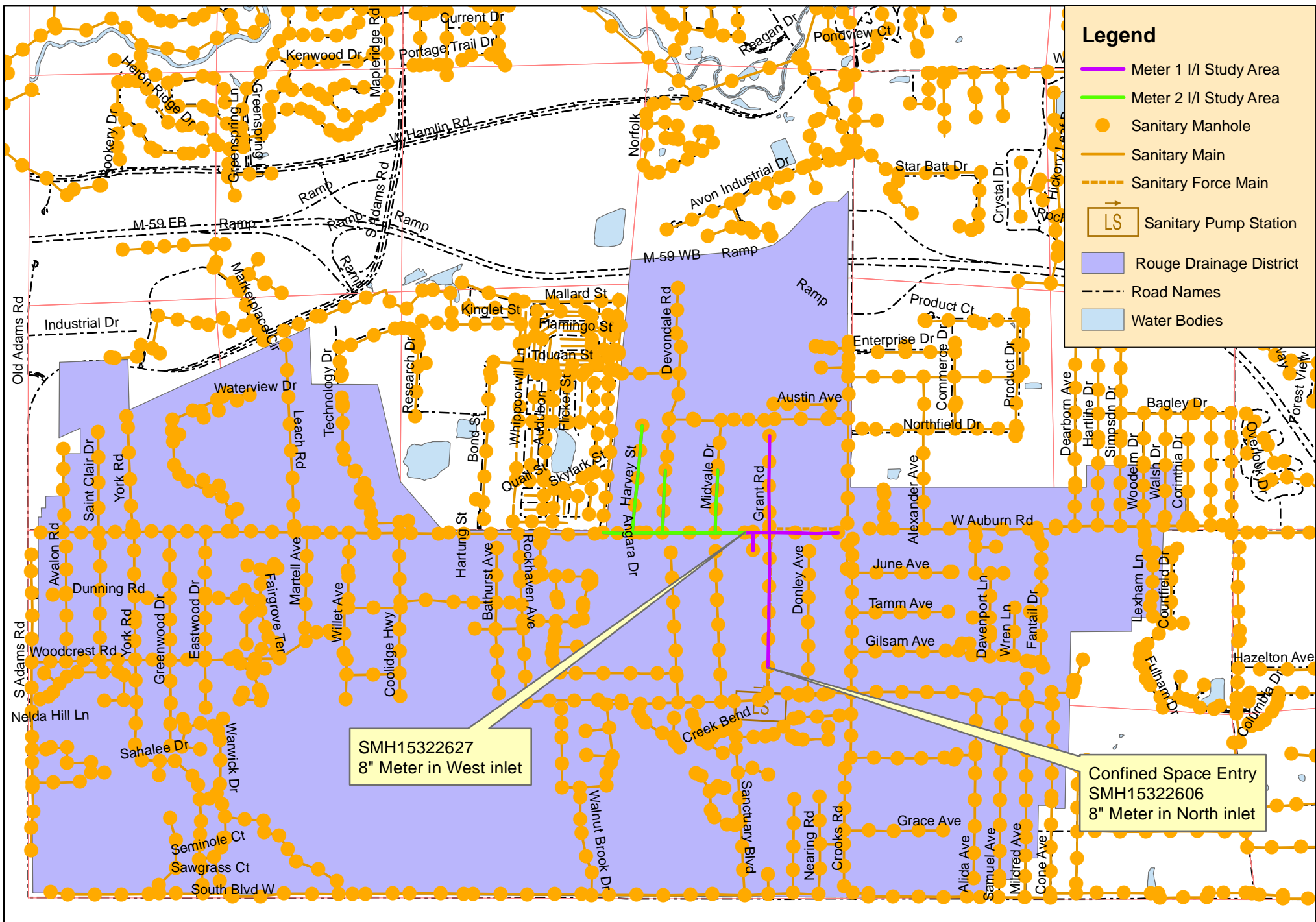
# City of Rochester Hills Proposed I&I Study Area

### Legend

- Sanitary Sewer Manhole
- Sanitary Sewer
- Grant Lift Station
- WaterCourse
- WaterArea
- Wetland
- Rouge River Water Shed (Main1-2)







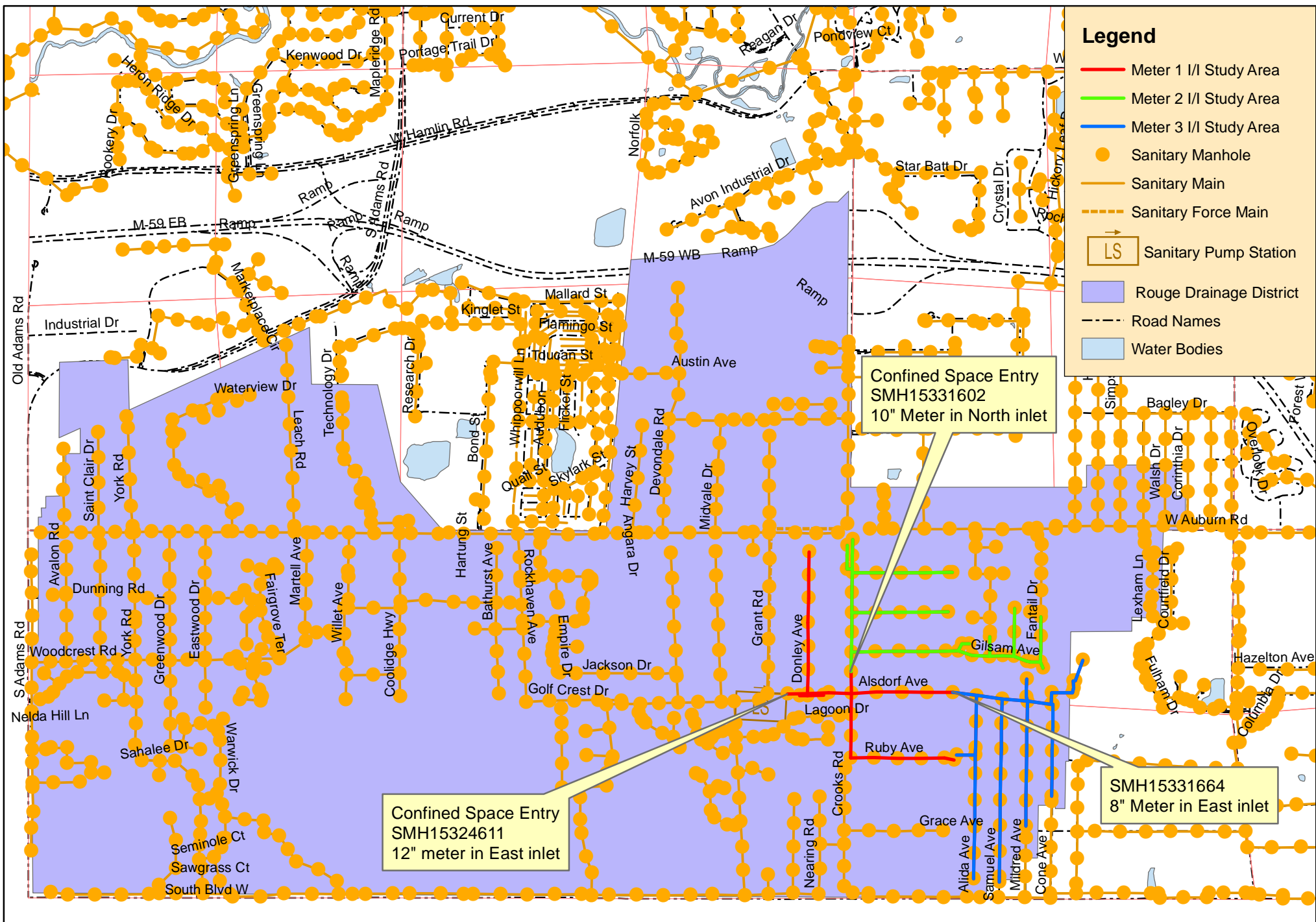
### Legend

- Meter 1 I/I Study Area
- Meter 2 I/I Study Area
- Sanitary Manhole
- Sanitary Main
- - - Sanitary Force Main
- LS Sanitary Pump Station
- Rouge Drainage District
- - - Road Names
- Water Bodies

SMH15322627  
8" Meter in West inlet

Confined Space Entry  
SMH15322606  
8" Meter in North inlet





### Legend

- Meter 1 I/I Study Area
- Meter 2 I/I Study Area
- Meter 3 I/I Study Area
- Sanitary Manhole
- Sanitary Main
- - - Sanitary Force Main
- LS Sanitary Pump Station
- Rouge Drainage District
- - - Road Names
- Water Bodies

Confined Space Entry  
SMH15324611  
12" meter in East inlet

Confined Space Entry  
SMH15331602  
10" Meter in North inlet

SMH15331664  
8" Meter in East inlet



