



CITY of NOVI CITY COUNCIL

Agenda Item B
June 21, 2010

SUBJECT: Approval to award a service contract for Sanitary Sewer Televising and Cleaning Services for CMOM Assessment Areas C1 and C2 to Metro Sewer Cleaners/Metro Environmental Services, Inc., the lowest qualified bidder, in the estimated amount of \$23,550.00.

SUBMITTING DEPARTMENT: DPS, Water and Sewer Division ³

CITY MANAGER APPROVAL: 

EXPENDITURE REQUIRED	\$23,550.00
ADDITIONAL AMOUNT REQUIRED	N/A
LINE ITEM NUMBER	592-592-00-936-500 (Water & Sewer Fund)

BACKGROUND INFORMATION:

The Water and Sewer Division of the Department of Public Services is continuing work initiated under the Capacity Management Operations and Maintenance (CMOM) program, which is a systematic process of evaluating the sanitary sewer system to: determine sources of inflow and infiltration from groundwater and surface water sources, remove those sources, and maintain the City's sanitary sewer capacity. The program was established as part of an overall asset management program for the sanitary sewer system as outlined in the attached technical memorandum from Orchard Hiltz & McCliment (OHM) dated June 20, 2010.

The City has been subdivided into 15 sub-districts to facilitate the assessment of the sanitary collection system. Areas G and B were assessed previously by cleaning and televising sewers and metering sanitary flows. The evaluation of Areas C1 and C2 is now ready to begin. (The OHM technical memorandum shows the master schedule for the overall implementation schedule for the entire sanitary sewer system.)

Televising of the sanitary sewer system is one of four components of the program which includes: 1) metering the flow; 2) identification of inflow and infiltration through smoke testing, manhole inspections and televising; 3) rehabilitation of manholes and pipes to decrease inflow and infiltration; and 4) post construction metering to determine effectiveness. The televising contract will provide data to city staff for sanitary sewer evaluation. This data along with smoke testing results and manhole investigations that the Water and Sewer Division will conduct in-house will be used to develop a scope for rehabilitation of any deficient structures and pipes.

A total of eight bids were received and opened on June 2, 2010, following a public bid solicitation period. The low bidder is Metro Environmental Services, Inc. Metro's bid is recommended as being in the best interest of the City as it is responsive (i.e., Metro has complied with all requirements of the bidding instructions) and it is the lowest price. Water

& Sewer Division staff has previously worked with Metro, to include successfully televising and cleaning of CMOM Assessment Area G in 2009, and therefore recommends award.

A summary of the eight accepted bids is as follows:

Bidder	Bid
Metro Environmental Services, Inc.	\$23,550.00
National Industrial Maintenance, Inc	\$32,640.00
EQ Industrial Services, Inc.	\$33,205.00
Aqua Group, LLC	\$38,250.00
Utility Services Authority, LLC	\$40,450.00
Young's Environmental Cleanup, Inc.	\$49,800.00
DownUnder Municipal Services, LLC	\$51,707.50
Inland Waters Pollution Control, Inc.	\$69,250.00

The work under this contract will begin in July and completed by August 2010. A bid tabulation sheet and agreement are attached.

RECOMMENDED ACTION: Approval to award a service contract for Sanitary Sewer Televising and Cleaning Services for CMOM Assessment Areas C1 and C2 to Metro Sewer Cleaners/Metro Environmental Services, Inc., the lowest qualified bidder, in the estimated amount of \$23,550.00.

	1	2	Y	N
Mayor Landry				
Mayor Pro Tem Gatt				
Council Member Crawford				
Council Member Fischer				

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Staudt				

City of Novi CMOM Program “Next Steps” Technical Memo June 20, 2008

Overall Program Goals

The City of Novi Capacity, Management, Operation and Maintenance (CMOM) program was developed to proactively manage the system and control peak flows. This is an important objective for the City due to their limited outlet capacity to Wayne County's North Huron Valley / Rouge Valley (NHV/RV) system. Rather than allowing the limited outlet capacity to be used for system inflow and infiltration (I/I), the City desires to manage and control I/I flows, thereby preserving available outlet capacity for future growth. It is anticipated that this is a more efficient and cost effective manner to operate and maintain the system than allowing the system to deteriorate and decay to the point of failure.

A CMOM is an infrastructure management tool for sanitary sewer systems that was developed by the EPA to serve as a guideline for communities to perform appropriate long-range planning, ensure adequate system capacity, improve operation and maintenance of the system, and ensure the integrity of the system. Implementation of a CMOM may be mandatory in the future and is expected to result in accomplishment of the following objectives in the City of Novi:

1. Provide confidence in the current state of the system
2. Ensure that adequate capacity is available for future growth
3. Meet customer and MDEQ expectations
4. Improve operational and maintenance efficiencies

The first phase of the CMOM program was completed in 2005 and focused on growth projections, a capacity assessment, and implementation of a sewer tracking system required by MDEQ under Part 41 Act 451 of 1994. Phase II was completed in 2007 and focused on performing a sewer system evaluation survey (SSES) in the high priority areas and in evaluating improved management tools. Phase III has focused on implementation of rehabilitation in a pilot area. Subsequent phases will focus on different sub-areas to continue the most cost effective methods of managing and improving the system. It is important that as much I/I removal as possible be completed prior to October 2011, which is when the regional system flow metering will be initiated for final sizing of the County's regional improvement program.

Historical Municipal Course of Action (Delay Spending)

The City desires to manage and control I/I flows, thereby preserving available outlet capacity for future growth. Accomplishing this objective requires a new way of thinking in City leadership and system management that is different than the default. The default method of managing a sewer system has occurred in many of the City's neighboring communities. It involves making very little capital investment in system management while the system is aging, and allowing it to deteriorate to the point of having significant system defects and requiring substantial capital improvements to fix. It is easy to find oneself following this strategy, since underground systems deteriorate slowly and are costly to inspect. The problem with this default management strategy is that it requires a major capital investment in the system to fix later, at a time when the community can least afford it, because they are built-out and there is very little revenue from growth. Additionally, the cost of the big capital project to fix the system is more expensive than it would have cost to properly maintain

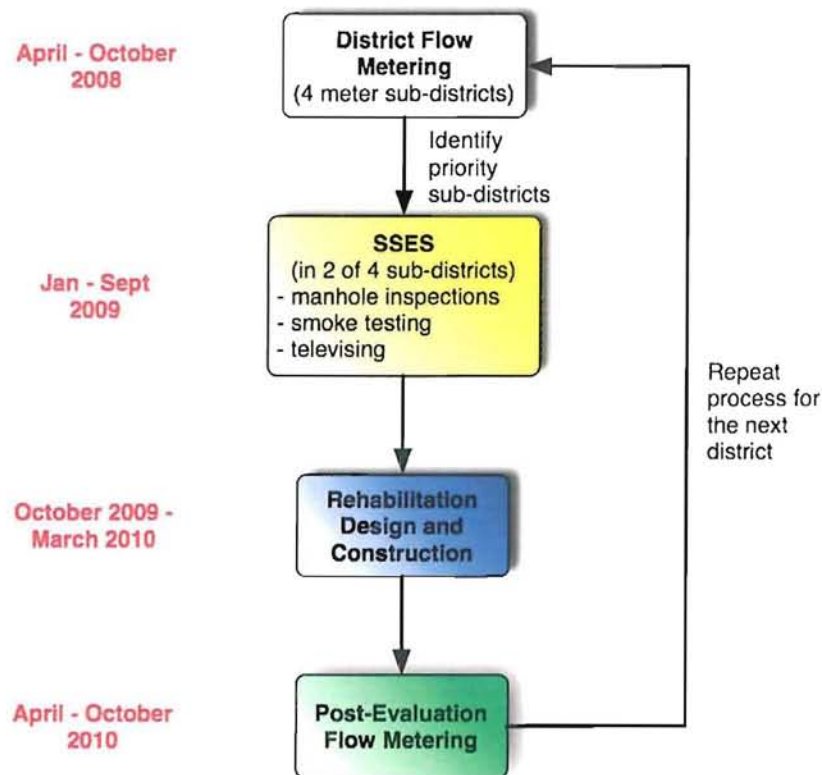
the system as it was aging. It is this default management of systems downstream of Novi, in part, that has driven the need for the NHV/RV regional tunnel project. This is a less than optimal way to operate the system, and it is the management strategy that the City of Novi hopes to avoid.

The City of Novi CMOM Process

The City desires to proactively manage the system to avoid the pitfalls of the default management strategy. This allows the City to make more efficient maintenance investments into the system. This section provides a process for the City to follow and outlines the next steps for the CMOM program to accomplish the objectives with proactively managing and investing in the system. Critical elements of such an asset management approach are contained in Figure 1.

Prioritized districts for implementing the CMOM program were established from the flow metering performed in the CMOM Phase I Study. These districts have been organized by year for initiation of the sub-district flow metering. This information is depicted on a map of the City in Figure 2 and shown on the schedule in Figure 3. The work in each district involves initial flow metering to identify priority sub-districts, followed by a Sanitary Sewer Evaluation Survey (SSES) in the priority high flow sub-districts. The SSES may include sewer televising, manhole inspections and smoke testing to locate specific system defects. System defects will be corrected through rehabilitation of the sewer system, and the effectiveness of the rehabilitation will be measured with post evaluation flow metering. An example of this process is shown on the schematic below for District G.

CMOM Example Steps For District G

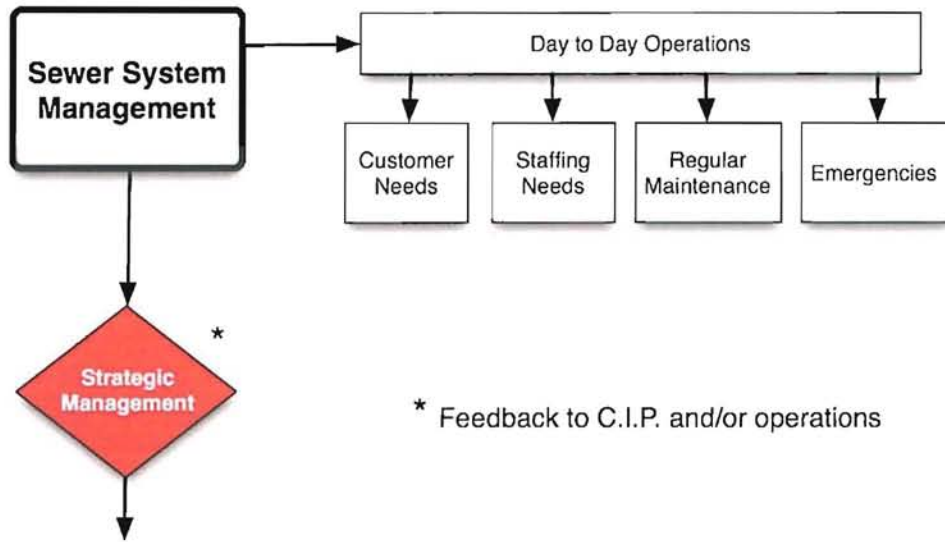


Recommendations – Next Steps

The City has made great strides in the CMOM program through their efforts to date. The work in the CMOM Phase I and II projects have laid the foundation for the program, and the CMOM Phase III pilot work has provided the necessary feedback to make the implementation of the program go smoothly. Based on the results of this work to date and the CMOM process described above, we offer the following recommendations.

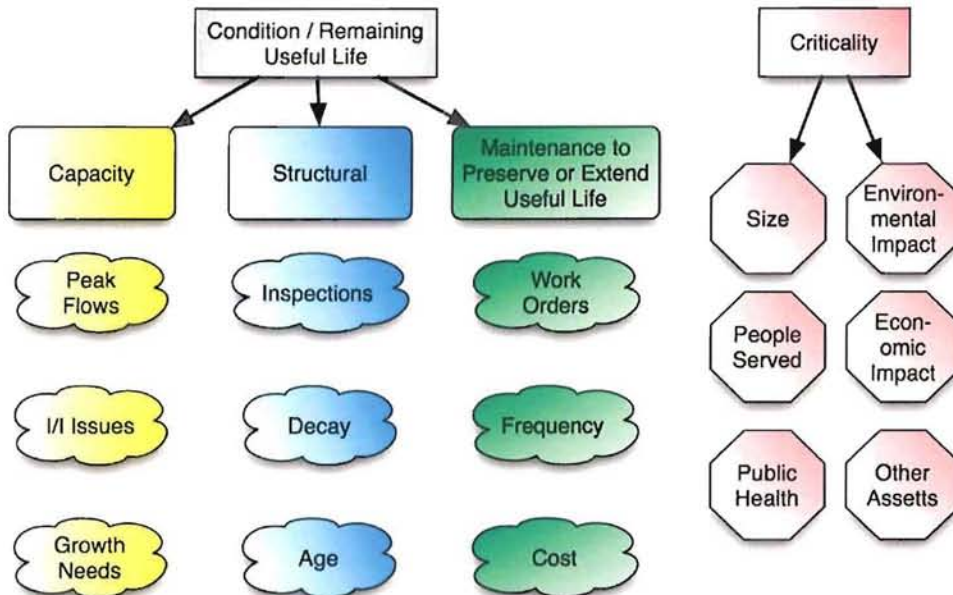
1. Continue to implement the CMOM program following the map and schedule shown in Figures 2 and 3. It will be important to complete the most critical areas prior to October 2011 when Wayne County will initiate the flow metering in the regional system to finalize the regional tunnel size and cost apportionment.
2. Perform the SSES in the areas identified in the "Area G Flow Analysis Technical Memo", and implement the recommendations from the pilot program contained in the "Country Place Sub-Area Rehabilitation Memo" (lessons learned).
3. If desired, the City should pursue a better quantification of monetary benefits of the CMOM program. Intuitively, an on-going investigation / repair / evaluation program makes good sense, but it does not fit in with the historical municipal perspective that is geared towards major capital projects after a system has reached its useful life. The most appropriate strategy should be developed while the City has a healthy capital reserve fund to support the chosen strategy.
4. Continue City management of the CMOM program and develop a City "champion" to lead the efforts:
 - a. Continue to manage as much of the CMOM program using City staff, rather than relying on consultants for the overall program management. The work done in the CMOM Phase I and II projects laid the groundwork for the City to manage the program in-house, and great strides have been accomplished towards this goal already. The City is now managing the overall program, performing the flow metering and coordinating the investigation, design and construction in-house.
 - b. The continuing work will involve significant efforts that are fairly routine. The City can evaluate whether this work is more appropriately performed by City staff or through the consultant procurement process. It may be desirable to use consultants to perform SSES work, design and construction observation. The City should lead the overall management and many of the technical aspects of the program. This CMOM program is critical for the successful long-term management of the City's sewer system, and a City leader needs to champion these efforts. This may require identifying a new role within the City or a new position for this champion. Some degree of specialized experience from a consultant may still be desirable in guiding and /or evaluating these efforts.

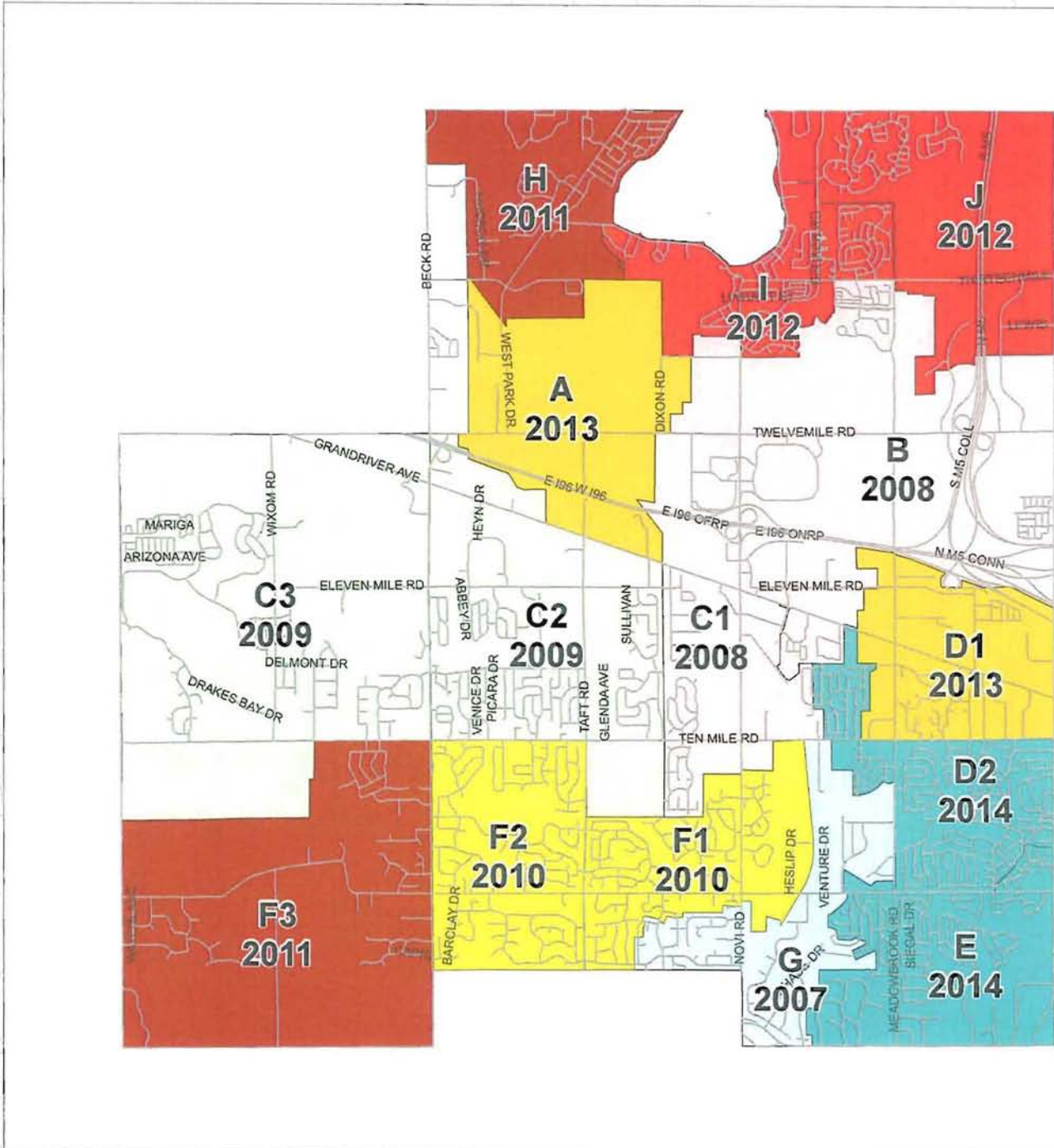
Figure 1
Management of Sanitary Sewer Systems
OHM Sanitary Sewer Infrastructure Assessment Chart



* Feedback to C.I.P. and/or operations

Risk = Probability of Failure X Consequence of Failure





**FIGURE 2
CMOM PHASE III
METER
LOCATION
SCHEDULE**

Legend

MeterSchedule

- G (2007)
- B (2008)
- C1 (2008)
- C2 (2009)
- C3 (2009)
- F1 (2010)
- F2 (2010)
- F3 (2011)
- H (2011)
- I (2012)
- J (2012)
- A (2013)
- D1 (2013)
- D2 (2014)
- E (2014)

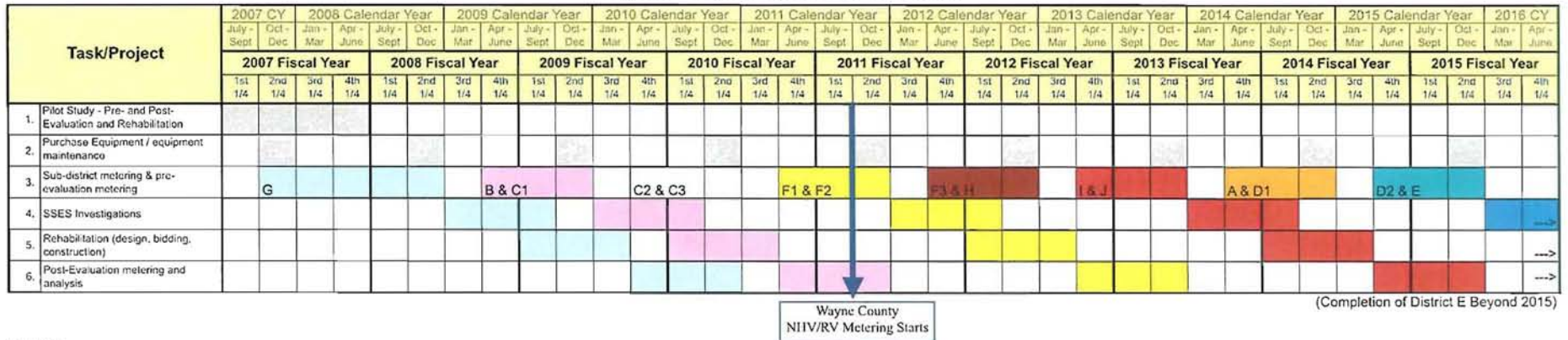


OHM
Advancing Communities

34000 PLYMOUTH ROAD
LIVONIA, MI 48150
734.522.6711
734.522.6427 (fax)

Data provided by City of Novi, OHM, and Michigan and the Michigan State Office of Surveying, Survey and Mapping. OHM will warrant the accuracy of the data and of the map. This warrant is intended to assist the appropriate local location of the mapped features. Ohio, Pa, Georgia and other states of the user's jurisdiction.

Figure 3: CMOM Implementation Schedule



NOTES

- The annual equipment and maintenance items are for purchase of additional bands, and general meter maintenance/repair as necessary
- It is recommended to evaluate the effectiveness of the program on an annual basis

Company Name Metro Environmental Services, Inc.



CITY OF NOVI
SANITARY SEWER CLOSED CIRCUIT TELEVISIONING
BID FORM

The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with the City of Novi to perform the work, for the prices and times specified in this Invitation to bids. Bidder accepts all terms and conditions of the Invitation to bid.

In submitting this Bid, Bidder represents that Bidder:

- is familiar and satisfied with the potential site conditions that may affect cost, progress, and performance of work
- is familiar and satisfied with all applicable federal, state, and local Laws and Regulations
- has given written notice when beginning work in the City of Novi of all conflicts, errors, ambiguities, or discrepancies discovered in the Invitation to bid documents
- acknowledges that the quantities provided in the Bid Form are only estimates, and in some cases included in order to establish a unit price in the event the work is necessary, and that actual quantities may increase, decrease, or be zero based on actual work required
- will complete any required inspections by certified technicians using NASSCO's Pipeline Assessment and Certification Program (PACP) for identifying observations

The City of Novi reserves the right to accept any Bid, to reject any or all Bids, and to waive defects or irregularities in any Bid for any reason or no reason at all. The City of Novi also reserves the right to award some, none, or the entire contract.

Bidder will complete the work outlined in the Invitation to bid for the following prices:

BASE BID – SANITARY SEWER CLOSED CIRCUIT TELEVISIONING & CLEANING PROJECT

Item	Description	Estimated Quantity	Unit		Unit Price		Total Amount
1	Sanitary Sewer Video Inspection, 6-12 inches	28,000	LFT	\$.45	\$	12,600.00
2	Sanitary Sewer Cleaning, 6-12 inches (as needed)	15,000	LFT	\$.70	\$	10,500.00
3	Vactor waste debris removal and disposal	30	CU YD	\$	15.00	\$	450.00
					BID TOTAL:	\$	23,550.00

ALTERNATE A – OTHER SERVICES (AS NEEDED)

(ALTERNATE A is a one (1) year contract with two (2) renewal options in one (1) year increments)

Item	Description	Estimated Quantity (minimum)	Unit		Unit Price		Total Amount
1	Sanitary Sewer Video Inspection, 8-11 inches	2,000	LFT	\$		\$	
2	Sanitary Sewer Cleaning, 8-11 inches (as needed)	2,000	LFT	\$		\$	
3	Sanitary Sewer Video Inspection, 12-16 inches	2,000	LFT	\$		\$	
4	Sanitary Sewer Cleaning, 12-18 inches (as needed)	2,000	LFT	\$		\$	
5	Sanitary Sewer Video Inspection, 19-24 inches	2,000	LFT	\$		\$	
6	Sanitary Sewer Cleaning, 19-24 inches (as needed)	2,000	LFT	\$		\$	
7	Sanitary Sewer Video Inspection, 25-30 inches	2,000	LFT	\$		\$	
8	Sanitary Sewer Cleaning, 25-30 inches (as needed)	2,000	LFT	\$		\$	
9	Sanitary Sewer Video Inspection, 31-36 inches	2,000	LFT	\$		\$	
10	Sanitary Sewer Cleaning, 31-36 inches (as needed)	2,000	LFT	\$		\$	
11	Sanitary Sewer Video Inspection, 37-44 inches	2,000	LFT	\$		\$	
12	Sanitary Sewer Cleaning, 37-44 inches (as needed)	2,000	LFT	\$		\$	
13	Sanitary Sewer Video Inspection, 45-54 inches	2,000	LFT	\$		\$	
14	Sanitary Sewer Cleaning, 45-54 inches (as needed)	2,000	LFT	\$		\$	

	Description	Unit		Unit price	
15	Emergency Vactor Hourly Rate with driver (7:00 AM-4:00 PM)	ONE	HR	\$	
16	Emergency Vactor Hourly Rate with driver (after 7:00 AM-4:00 PM)	ONE	HR	\$	
17	Emergency Televising Hourly Rate with driver (7:00 AM-4:00 PM)	ONE	HR	\$	

18	Emergency Televising Hourly Rate with driver (after 7:00 AM-4:00 PM)	ONE	HR	\$	
19	Confined Space Entry	ONE	DAY	\$	
20	Easement Machine Use with operator Hourly Rate (any time)	ONE	HR	\$	
21	Mobilization Charge (when minimum footage not met)	ONE	DAY	\$	
22	Bypass Pumping (0-300 gal/minute)	ONE	LFT	\$	
23	Bypass Pumping (300-800 gal/minute)	ONE	LFT	\$	
24	Vactor waste debris removal and disposal	ONE	CU YD	\$	

Comments/Exceptions _____

We acknowledge receipt of the following addenda: Addendum #1 & Addendum #2

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price bid items will be based on actual quantities of work performed.

Company (Legal Registration) Metro Environmental Services, Inc.

Address 1025 Metro Dr./P.O. Box 725

City Walled Lake State Mi Zip 48390

Telephone (248)960-1111 Fax (248)669-0960

Representative's Name (please print) John Schumacher

Representative's Title Operations Manager

Representative's Signature *John Schumacher*

E-mail j.schumacher@metrosewer.net

Date 6-2-10



CITY OF NOVI

SANITARY SEWER CLOSED CIRCUIT TELEVISION
CONTRACTOR QUALIFICATIONS QUESTIONNAIRE

Failure to answer all questions could result in rejection of your bid.

Name of Firm Metro Environmental Services, Inc.
Address: P.O. Box 725/1025 Metro Drive
City, State Zip Walled Lake, Mi. 48390
Telephone (248)960-1111 Fax (248)669-0960
Mobile (248)255-1341
Agent's Name (please print) John Schumacher
Agent's Title Operations Manager
Email Address: j.schumacher@metrosewer.net
Website www.metrosewer.net

1. Organizational structure: Corporation, Partnership, etc. Corporation
2. Firm established: 29 years/1981
3. How many full time employees? 17 Part time? 4
4. Do you have 24-hour emergency service? yes
5. 24-hour/7-day Emergency Telephone Numbers
(248)960-1111 (248)255-1341
6. Provide your procedure for handling night and weekend calls. Once call is received the 24 hr On-Call Service Tech is notified & dispatched directly to the site. If special equipment is needed they will be dispatched to the shop first.
7. Can you meet our emergency response requirement of one hour from receipt of call?
Yes If not, what is the time frame for your response? _____
8. Address of your local facility 1025 Metro Drive, Walled Lake, Mi.
9. Are you able to provide insurance coverage as required by this bid? Yes
10. List the scope of services (type of work) you are able to perform.
CCTV-mainline/laterals, high pressure jet, vector, vac/jet, off road easement jetting, catch basin cleaning, confined space entry, by pass pumping, industrial off road vector, parking lot & street sweeping, excavation, electric cable service, electronic locate buried lines, hydro excavation, TCLP testing, lift station cleaning, septic tank pumping, portable toilets, catch basin/manhole rehabilitation, grouting, spot line repair

11. List any professional licenses/certifications you/your employees have obtained that would be applicable to this contract.

OSHA-Confined Space Certified, PACP Pipeline/MH Training,
Forklift/Manlift, CDL A/B Tanker Driver Endorsements, Licensed
Industrial Waste Hauler, Licensed Septic Hauler, OSHA-Workplace,
Construction & Employee Safety Certified

12. Provide a list of mobile service technicians, and all other professional staff to be assigned to this contract. Include name, title, license number, years of experience, full/part time, on-call availability, qualifications, and experience.

John Schumacher- Operations Mgr., 25 yrs, CDLA, Glen Ranstadler- Plbg Tech, 10 yrs
Andrew Mapes- Fleet Mgr, PACP, 10 yrs, CDLA, Scott Randstadler- CDLA, Tanker, 10 y
Cliff Turner- Sr. Tech, PACP, 25 yrs, CDLA, Kyle Gotferson-Jet Specialist, 5 years
Paul Ferriby- Sr Tech, 22 years, CDLA
Rob Hayes- Video Insp. Tech, 10 years, PACP, CDLA

13. List large equipment which is available to your firm to perform this contract:

(2) Guzzlers for backyard cleaning
(5) Vactor 2100 for sewer & storm cleaning
(3) CCTV truck mounted systems w/software. (1) portable off road system
(2) backyard easement cleaning machines
(2) truck mounted sewer jets, (2) trailer mounted bypass pump systems

14. **References:** Provide at least three (3) current references that are comparable in scope to this bid. References from municipalities would be desirable.

Company City of Wixom
Address 49045 Pontiac Trail, Wixom, Mi. 48393
Phone (248)624-0141 Contact name Mike Howell

Company City of Dearborn
Address 2951 Greenfield, Dearborn, Mi. 48126
Phone (313)943-3038 Contact name Sam Shilbayeh

Company City of New Baltimore
Address 36535 Green Street, New Baltimore, Mi. 48047
Phone (586)725-2151 Contact name Thomas Gunst

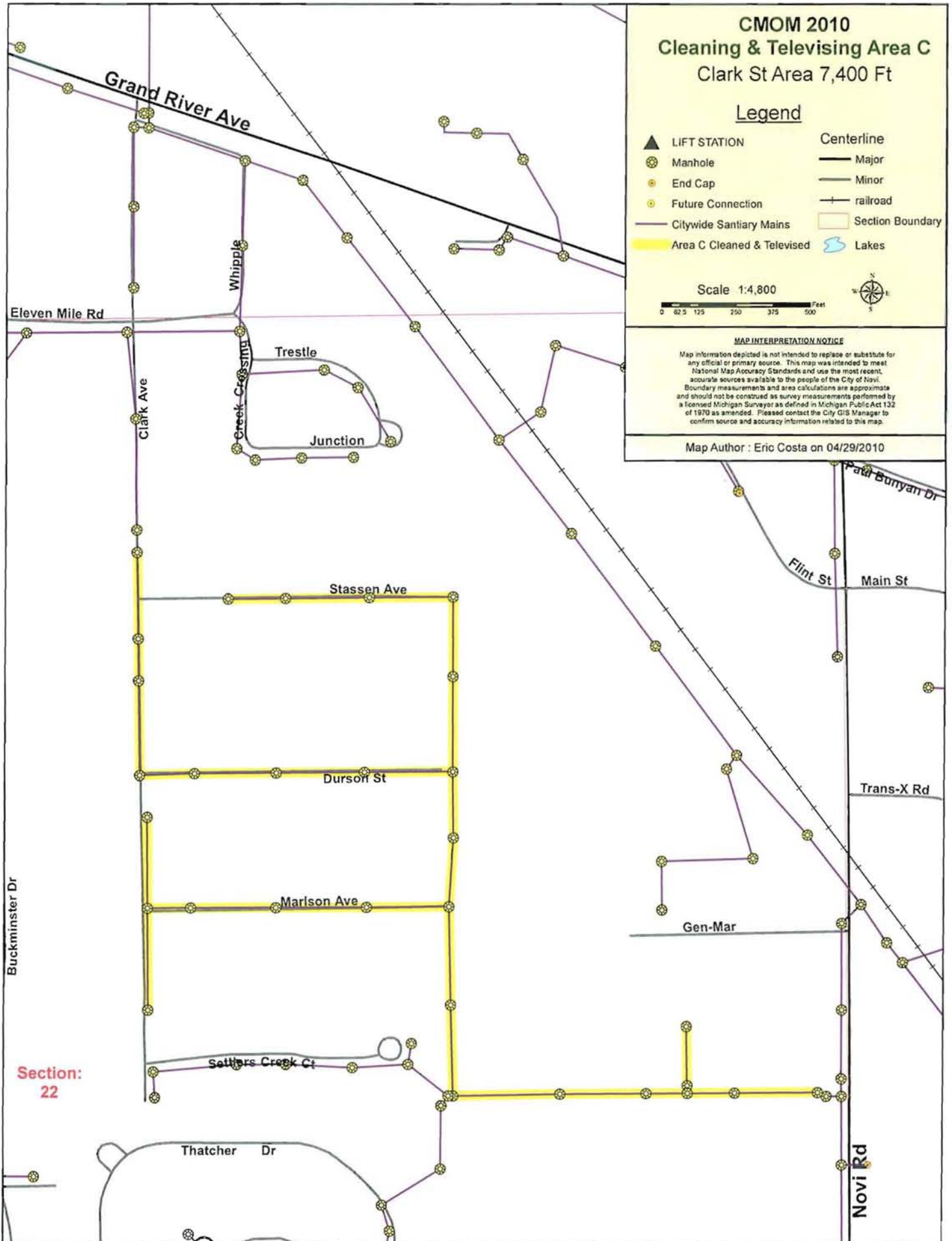
15. Provide any additional information you would like to include which may not be included within this Questionnaire. You may attach additional sheets.

THE FOREGOING QUESTIONNAIRE IS A TRUE STATEMENT OF FACTS:

Signature of Authorized Company Representative: *John Schumacher*

Representative's Name (please print) John Schumacher

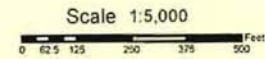
Date 5-25-10



CMOM 2010
Cleaning & Televising Area C
 Flint St Area 14,430 Ft

Legend

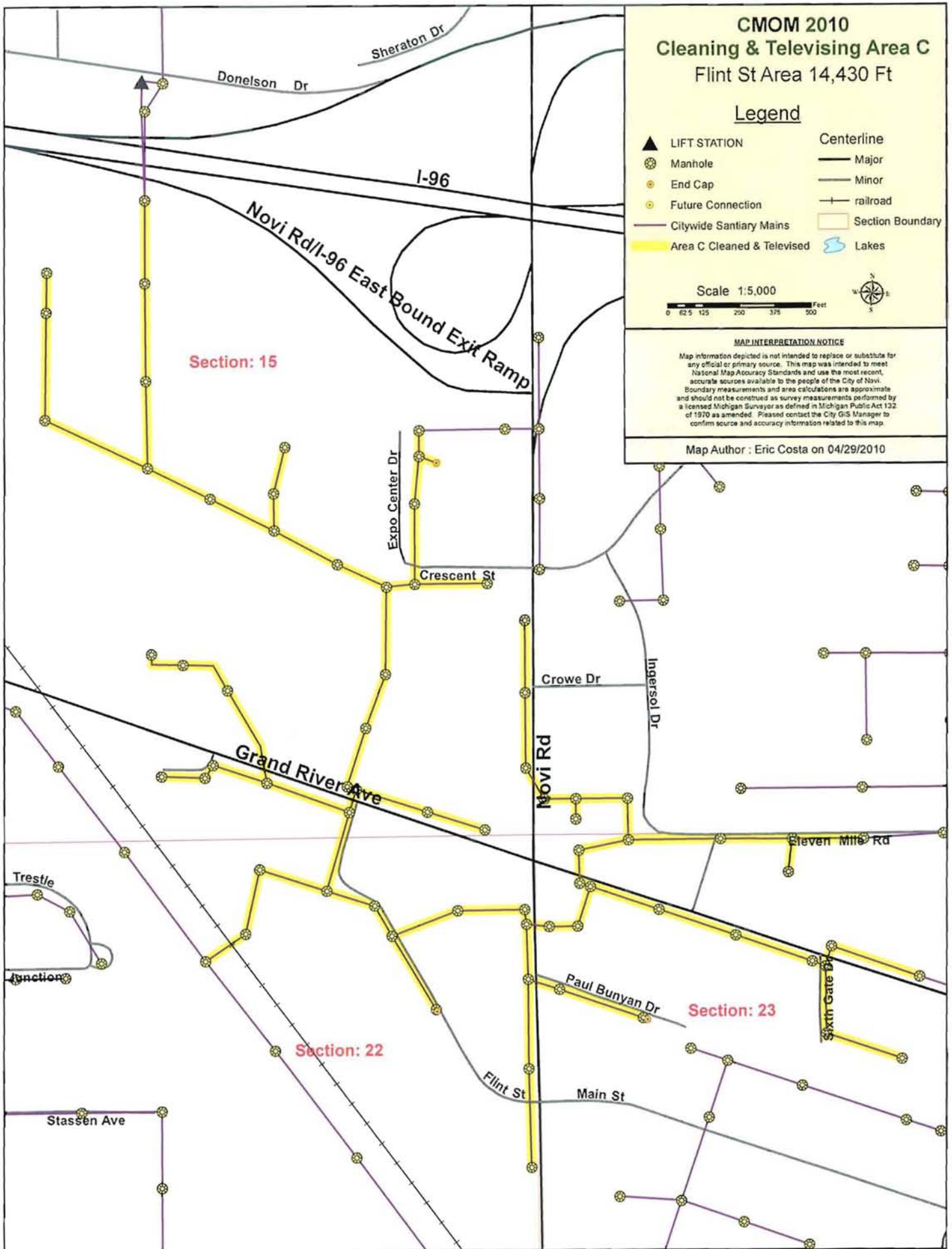
- | | | |
|---|----------------------------|--------------------|
| ▲ | LIFT STATION | Centerline |
| ● | Manhole | — Major |
| ○ | End Cap | — Minor |
| ○ | Future Connection | + railroad |
| — | Citywide Sanitary Mains | □ Section Boundary |
| ■ | Area C Cleaned & Televised | ☁ Lakes |



MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

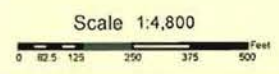
Map Author : Eric Costa on 04/29/2010



CMOM 2010
Cleaning & Televising Area C
 Town Center Area 6,834 Ft

Legend

- | | |
|------------------------------|--------------------|
| ▲ LIFT STATION | Centerline |
| ● Manhole | — Major |
| ○ End Cap | — Minor |
| ○ Future Connection | — railroad |
| — Citywide Sanitary Mains | □ Section Boundary |
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Map Author : Eric Costa on 04/29/2010

