

FEASIBILITY REPORT

for

SANITARY SEWER COLLECTION IMPROVEMENTS

in the

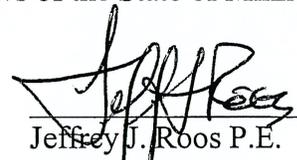
LAKE CHARLOTTE/LAKE MARTHA
SANITARY SEWER DISTRICT

in

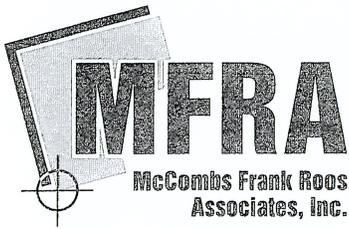
ROCKFORD TOWNSHIP
WRIGHT COUNTY, MINNESOTA

I hereby certify that I am a duly Registered Engineer under the laws of the State of Minnesota.

9.09.00
Date



Jeffrey J. Roos P.E.
Minnesota Reg. No. 10206



September 9, 2000

Wright County Board of Commissioners
c/o Brian Asleson, Assistant County Attorney
10 Second Street Northwest
Room 150
Buffalo, Minnesota 55313-1189

SUBJECT: Lake Charlotte/Lake Martha Sanitary Sewer District
Feasibility Report
MFRA #12845

Dear Board of Commissioners:

McCombs Frank Roos Associates, Inc., (MFRA) has completed the attached Feasibility Report for the work and costs involved with the construction of a sanitary sewer collection system in the proposed Lake Charlotte/Lake Martha Sanitary Sewer District (CMSSD).

The total cost of the project is \$2,395,221.12 which includes all associated hook-up fees for the existing homes in the initial phase of the project. This amount is proposed to be financed by the sale of government improvement bonds, the costs of which will then be apportioned to properties within the CMSSD.

It has been a privilege to serve the Wright County Board of Commissioners on this project. Please contact us if you have any questions regarding this project and report.

Very truly yours,

MFRA



Jeffrey J. Roos, P.E.

JJR:rth

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I. INTRODUCTION

The purpose of this report is to present to the Wright County Board of Commissioners an examination of the proposed Lake Charlotte/Lake Martha Sanitary Sewer Improvement Project, in terms of the nature and scope of the planned construction work, estimates of all associated costs, proposed financing methods and scheduling data. The components of this report comply with the requirements of Minnesota Statutes regarding public improvement projects, subordinate sewer districts and special assessments.

This report was initiated by action of the Wright County Board of Commissioners. The costs given in this report reflect prices bid on recent similar projects and the current ENR construction cost index of 6892.68.

II. PROJECT LOCATION

The area affected by this project will herein after be referred to as the Lake Charlotte/Lake Martha Sanitary Sewer District (CMSSD). It is located in Sections 5 and 6, T119N, R24W in Rockford Township. The proposed boundaries of the CMSSD are shown on Exhibit 1. The boundaries were established by estimating the service limits of the capacity of the proposed sanitary sewer collection system and by following existing property lines when possible. All projects costs will be apportioned to properties within the District.

III. BACKGROUND

The Wright County Board of Commissioners is considering the feasibility of creating a subordinate sewer district (SSD) for properties surrounding Lake Charlotte and Lake Martha in Rockford Township. This area has been actively pursuing sanitary sewer options for many years, the most recent effort being an SSD sponsored by Rockford Township. That effort was defeated in a referendum vote. Other options which have been discussed include a Chapter 429 special assessment type project and annexation of this area to the City of St. Michael followed by a St. Michael City improvement project.

At this time, a Wright County sponsored SSD appears to be the most viable option. One purpose of this report is to clarify some of the issues which may have caused the defeat of the previous attempt by Rockford Township.

Sanitary sewer service will be available from the City of St. Michael in the summer of 2001. St. Michael sewer lines will have been extended to the Rockford Township limits on Halsey Avenue Southeast and just north of the terminus of Gillard Avenue Southeast. These service lines have the capacity to serve approximately 235 residential equivalent units in the proposed SSD.

IV. PROJECT DESCRIPTION

The proposed sanitary sewer collection system is a low pressure system, identical to the collection system being installed in the adjacent lake areas in St. Michael. It consists of lateral force mains, individual service lines and individual pumping stations.

The lateral force mains would be located in street right-of-ways whenever possible. At some locations, there will be lateral lines located on easements when it is not economically feasible to follow the streets. The location of the individual service lines and individual pumping stations will be determined by field visits with each property owner.

The entire system will be designed and constructed in accordance with the standards and regulations of the Minnesota Pollution Control Agency, Minnesota Department of Health, and Minnesota Department of Natural Resources.

V. PROJECT COSTS

There are several cost elements associated with the installation of the sanitary sewer collection system. They are described below and itemized on Table 1.

A. St. Michael Wastewater Treatment Facility (WWTP):

The costs of constructing the St. Michael WWTP are financed by hook-up charges levied at the time a connection permit is requested. The charges are based on a factor called a residential equivalent unit (r.e.u.). An r.e.u. is the average amount of sewage generated by a single family home or approximately 275 gallons per day. It is the minimum charge levied for any connection.

The policy for hook-up charges in the City of St. Michael was established in 1996 when the new WWTP was constructed. Existing homes paid a lower rate than that for new building permits. It has been proposed by the City of St. Michael that the same policy be used for the CMSSD. The rates would be \$1,623 per r.e.u. for existing homes and \$3,707 for new building permits. These are year 2000 rates. The rates are adjusted annually to reflect the change in the ENR construction cost index.

B. Hanover Interceptor:

All units served by the Hanover Interceptor are levied a connection charge at the time a connection permit is requested. The charge is also based on r.e.u.'s and adjusted annually. The year 2000 rate is \$106 per r.e.u.

All sewage collected from the lake areas in Rockford Township and St. Michael is pumped easterly along County Road 34 and discharged into the Hanover Interceptor.

- C. Lake Area Trunk Sewer Charge:
When designing the Lake Area Trunk Sewer, the City of St. Michael included and reserved the capacity to serve the CMSSD. St. Michael is requesting that the reimbursement for that capacity be paid in an initial lump sum amount of \$688,031.82 for the first 190 r.e.u.'s and then after that at a rate of \$3,621.22 per r.e.u. up to a maximum total of 235 r.e.u.'s.
- D. Local Lateral Collection System:
The CMSSD Lateral Collection system will cost approximately \$589,887.30 for the Phase 1 work shown on Exhibit 2. The cost of that system will be apportioned to all parcels served in Phase 1 at the estimated rate of \$3105 per parcel.
- E. Individual Service Package Costs:
Each property with an existing home would be charged for the following items which are included in the service package:
- a. Service line from the lateral line up to the grinder station
 - b. A grinder pump station at the service entrance to the house
 - c. Abandonment of existing tanks.
 - d. The costs for this package will be unique to each site and depend upon the distance from the lateral line to the house and the depth of the grinder pump station. Costs for this package in the recent St. Michael project ranged from \$5,300 to \$8,900. The average was approximately \$7,000.
- F. Home Owner Expenses:
There are costs related to the project which will not be a part of the CMSSD project, but which will totally be the responsibility of the homeowner. The homeowner will need to arrange for a plumber to do any interior work on the house system and arrange for an electrician to make modifications, if necessary, to the house electrical panel.

Table One summarizes the above described costs.

TABLE ONE
COST SUMMARY PER REU (SINGLE FAMILY HOME)
PHASE ONE – CMSSD SANITARY SEWER

| | | |
|----|-------------------------------|--------------------|
| 1. | St. Michael WWTP Hook-up | \$ 1,623.00 |
| 2. | Hanover Interceptor Hook-up | \$ 106.00 |
| 3. | Lake Area Trunk Sewer Charge | \$ 3,621.22 |
| 4. | Local Lateral System | \$ 3,105.00 |
| 5. | Individual Service Package | <u>\$ 7,000.00</u> |
| | Estimated Cost Per House | <u>\$15,155.22</u> |
| | Estimated Cost Per Vacant Lot | \$ 6,726.22 |

TABLE TWO
ESTIMATED PROJECT COST
PHASE ONE – CMSSD SANITARY SEWER
128 HOUSES – 62 VACANT LOTS

| | | | | |
|----|------------------------------|-------------------|---|----------------------|
| 1. | St. Michael WWTP Hook-ups | 128 at \$1,623.00 | = | \$ 207,744.00 |
| 2. | Hanover Interceptor Hook-ups | 128 at \$ 106.00 | = | \$ 13,568.00 |
| 3. | Lake Area Trunk Charge | | = | \$ 688,031.82 |
| 4. | Local Lateral System | | = | \$ 589,887.30 |
| 5. | Individual Service Packages | 128 at \$7,000.00 | = | <u>\$ 896,000.00</u> |
| | Total Project Cost | | = | \$2,395,221.12 |

VI. PROJECT FINANCING

The project financing will depend upon the rules adopted by the CMSSD for apportioning project costs. If all the costs for Phase One are financed, the amount would be the total project cost of \$2,395,221.12. The financing would be accomplished by the sale of public improvement bonds.

Recommended rules for apportioning the costs are as follows:

1. All existing houses and buildable vacant lots be charged the base rate of \$6,726.22 per lot for the Lake Area Trunk Charges (\$3,621.22) and local lateral system (\$3,105.00). A buildable vacant lot is defined as an existing parcel with topography and dimensions that would allow the construction of a home.
2. All existing houses be required to connect to the collection system and pay the additional hook-up charges (\$1,729,00) and service package costs.
3. All apportionments for the Phase One project will have a repayment period of 20 years and an annual interest rate to be set by the CMSSD Board.
4. New homes built on existing vacant lots will be required to connect to the system and pay all connection charges and service package costs on a lump sum basis at the time of building permit application.

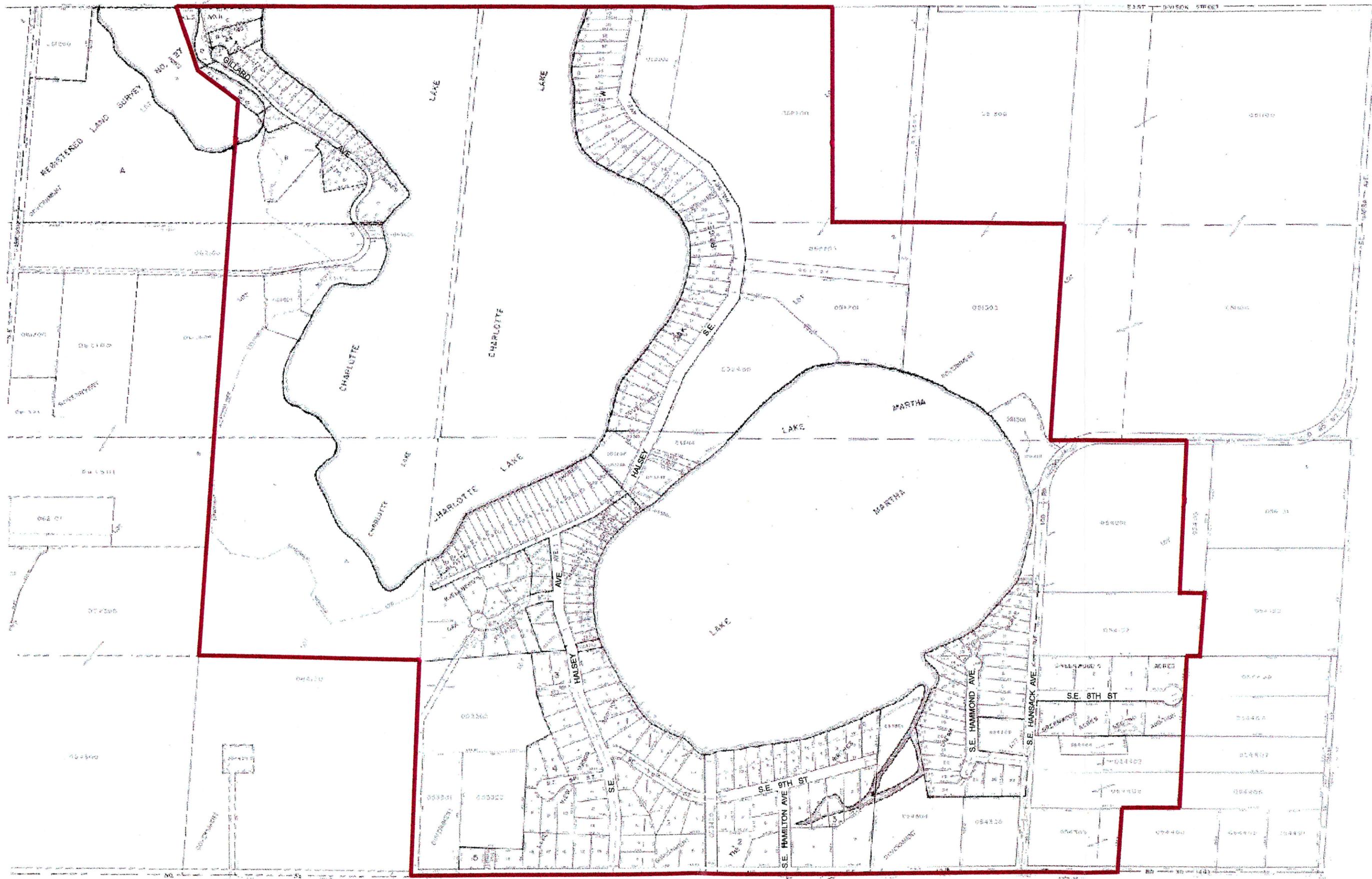
Exhibit Two shows the areas involved in Phase One and Phase Two of the CMSSD. The Phase One is the area that will receive cost apportionments from the proposed project. The Phase Two area is one or more future projects which will serve the remaining areas of the CMSSD. The following continued list of rules would apply to those future areas.

5. Lots in future phases will be required to pay an adjusted base rate (\$6,726.22 plus annual adjustment) plus a portion of the cost of extending the lateral lines to the lot, plus service package cost, plus adjusted hook-up charges. Houses existing as of the date of the creation of the CMSSD will pay the lower St. Michael WWTP hook-up rate. The annual adjustment will be based on the three-year average of the ENR construction cost index for the Minnesota area. The adjustment will be the average of the previous three year increases.
6. No new homes can be constructed in any future phase of the CMSSD without extending and connecting to the CMSSD sanitary sewer collection system.
7. Future lot subdivisions will be required to pay the adjusted base rates for all the lots at the time of subdivision approval plus all costs of extending the lateral lines to the lots. New homes will pay a hook-up fee and service package costs at the time of building permit application.

VII. PROJECT SCHEDULE

The project schedule has been laid out such that all statutory notices and time lines can be met and such that a project can be initiated in year 2001.

| | |
|--|--------------------|
| Draft report submitted to Wright County | September 12, 2000 |
| Informal area meeting held with residents | October 3, 2000 |
| Final report presented to Wright County Board | October 10, 2000 |
| Formal public hearing held | October 30, 2000 |
| Approval of resolution creating CMSSD | November 14, 2000 |
| Publication of CMSSD resolution | November 27, 2000 |
| Effective date of CMSSD creation | January 1, 2001 |
| Referendum (if necessary) | February 6, 2000 |
| Wright County Board orders preparation of plans, specifications and bid documents. | February 13, 2001 |
| Bids are received | April 18, 2001 |
| Improvement Bonds are sold | May 1, 2001 |
| Apportionments are levied | May 1, 2001 |
| Contract is awarded | May 8, 2001 |
| Construction completed | November 19, 2001 |



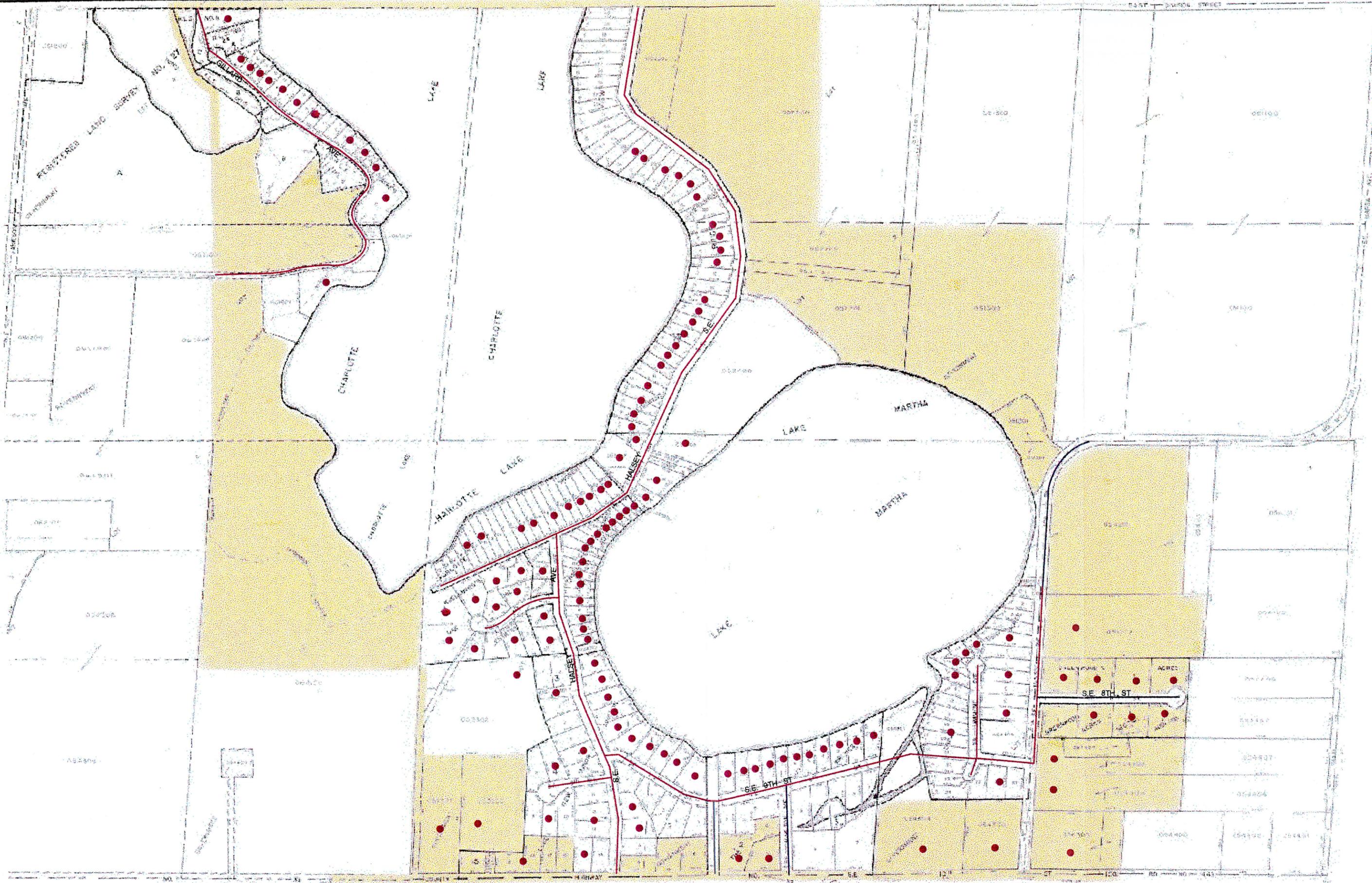
Legend
 — Proposed CMSSD Boundry

EXHIBIT I PROPOSED CMSSD BOUNDRY



September 2000





Legend

- Phase I Lateral
- Future Lateral
- Existing House
- Future Service Area

EXHIBIT 2
PROPOSED CMSSD SANITARY SEWER COLLECTION SYSTEM



September 2000

