April 2006

Water Master Plan
Final Report

rjngroup
Excellence through Ownership

Prepared for the
Village of Villa Park

TABLE OF CONTENTS

data\report\207toc

VILLA PARK LIST OF TABLES

data\report\207Tables

VILLA PARK LIST OF CHARTS

data\report\207Charts

VILLA PARK WATER MASTER PLAN REPORT

INTRODUCTION

This water master plan report has been prepared to provide an overview of the existing water distribution system within the Village of Villa Park. The operational behavior of the system has been analyzed, together with historical data, current growth projections, and any unusual anticipated demands.

Areas of the system recommended for improvement have been classified on a priority basis and a ten-year phased program developed. Wherever possible, the upgrades have been coordinated with the road improvement program.

Present-day value costs have been assigned to these improvements to assist in projecting funding demands.

SCOPE

The scope comprised the following components:

- Compilation of historical data including age of watermains and break history
- Model of existing system identifying pipe sizes, storage tanks, DuPage Water Commission (DWC) feeder points, and stand-by wells
- Review of water consumption records, including residential, commercial, and unaccounted flow. Analysis of major commercial users and their impact on demand and the operation of the system
- Evaluation of proposed or anticipated redevelopment as identified by the Village's Community Development Department, including annexation areas. Specific demands as they relate to the behavior of the model would be analyzed.
- Model runs would be undertaken to identify problem areas. Specifically the following areas would be addressed – under-sized pipes, dead-end lines, and fire protection. In addition, an emergency simulation would be undertaken to examine any points of vulnerability were the DWC feeder points to be compromised.
- Preparation of a 10-year plan that would prioritize recommended improvements. This plan would be coordinated, wherever possible, with the existing Public Works 10-year Capital Improvement Plan to minimize neighborhood disruptions.
- Preparation of thematic maps of the following:
  - Pipe age
  - Water break history
  - Hot spot soil locations
  - Water main map color coded by size
  - Proposed Water Improvement Plan
- As a result of the recommendations the Village Water Ordinance would be reviewed for compatibility and suggested modifications provided
- Wells and DWC feeder lines would be added to the Village's GIS database.

VILLAGE

The Village of Villa Park is a community of 22,517 located 20 miles west of Chicago in DuPage County. It encompasses an area of approximately 4.6 square miles.

The Village consists of residential users, commercial development located mainly along North Avenue, Roosevelt Road, and IL Rte. 83, and some industrial users adjacent to the railroads and east of IL Rte. 83.

VILLAGE USERS

From the most recent IEPA Water Inspection report (June 2005) the Village users are classified as follows:

Residential Customers	6,255
Commercial Customers	547
Industrial Customers	106
Number of Direct Services*	6,908

* There are two direct services outside the corporate limits.

WATER SUPPLY

The Village was previously serviced by their own system of wells. In 1992 it became part of the area that was provided with Lake Michigan water through the DWC. Most of the deep wells were abandoned at that time, but two have been maintained to provide emergency back-up.

The Village is served by water from DWC at three locations:

- Home Avenue
- Princeton
- Cornell

The supply at Home and Cornell is in the range of 600 - 800 gpm, at Plymouth the range is 400 - 500 gpm. The Village maintains a consistent flow rate from DWC. To achieve this the excess flow during the night (when demand is low) is pumped into 0.5 M gallon elevated storage tanks. During the day, as demand increases, the DWC supply is augmented with drawdown from the storage. In this way the fluctuations in pumpage from DWC are minimized.

In addition there is a two million gallon storage reservoir located at Cornell pump station and 300,000 gallon and 500,000 gallon reservoirs are located at Home Avenue

pump station that also provide storage during peak demand. The two wells that are maintained for emergency backup are:

- Well #7 - 1,420 ft. deep - Production capability 775 gpm
- Well #10 - 1,458 ft. deep - Production capability 700 gpm

There are also two interconnects with the neighboring communities of Lombard and Elmhurst that are maintained for emergency situations.

The Village's water supply is presented in Exhibit 1.

If the DWC supply were to be interrupted, Well #7 would discharge water to the distribution system (after chlorine treatment); Well #10 (after chlorine treatment) would discharge to the 2.0MG ground storage tank adjacent to the Cornell pump station or directly to the distribution system.

It is estimated that should there be a complete interruption in supply from all sources there would be sufficient storage capacity within the tanks and reservoirs for 1 ½ days.

The 2004 quarterly report and sampling requirements is presented in Appendix C.

WATER DISTRIBUTION

There have been two main growth periods in the development of the water main system – the 1920's and 1930's when mainly 6-inch lines were installed, and the 1950's when mainly 4-inch and 6-inch lines were installed. Periodic development in the last 50 years has seen a variety of pipe sizes installed – depending on location.

Table 1 identifies the length of the watermain in the Village by size. Table 2 identifies the length of the watermain by age. The size and age of the water distribution system are presented in Exhibits 2 and 3 and Charts 1 and 2.

In total, there are 79.16 miles of public watermain.

The village's standard fire hydrant and water valve / vault are presented in Appendix E.

Table 1

Village of Villa Park
Length of Water Main by Size

Size (inches)	Length (feet)	Length (miles)
4	21,165	4.01
6	234,504	44.41
8	85,789	16.25
10	46,001	8.71
12	30,487	5.77
TOTAL	417,946	79.16

Table 2

Village of Villa Park
Length of Water Main by Age

Year of Installation	Feet	Miles
Unknown	13,213	2.50
1920-1939	172,597	32.69
1950-59	123,526	23.40
1960-69	13,801	2.61
1970-79	24,574	4.65
1980-89	13,429	2.54
1990-99	31,904	6.04
2000-2005	24,902	4.72
TOTAL	417,946	79.16

Chart 1

Village of Villa Park
Watermain Inventory

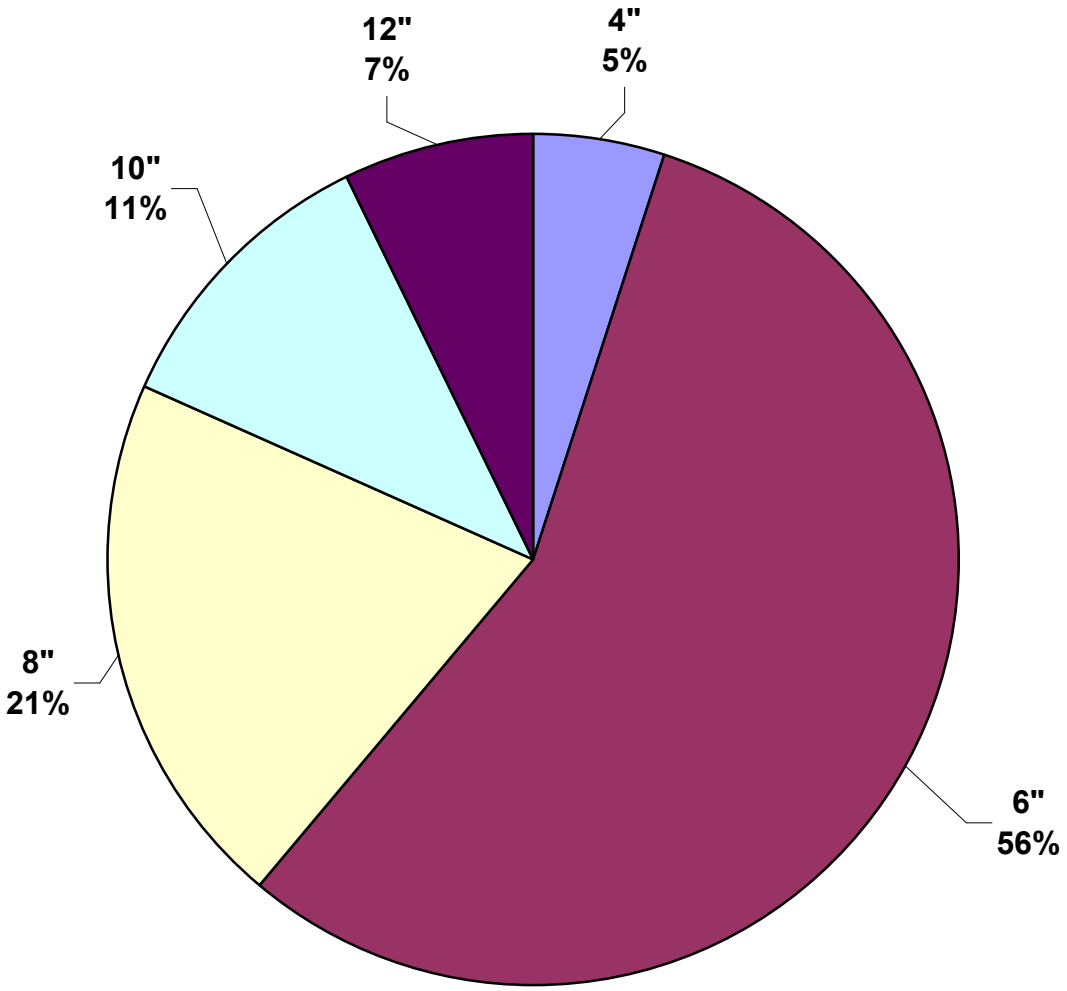
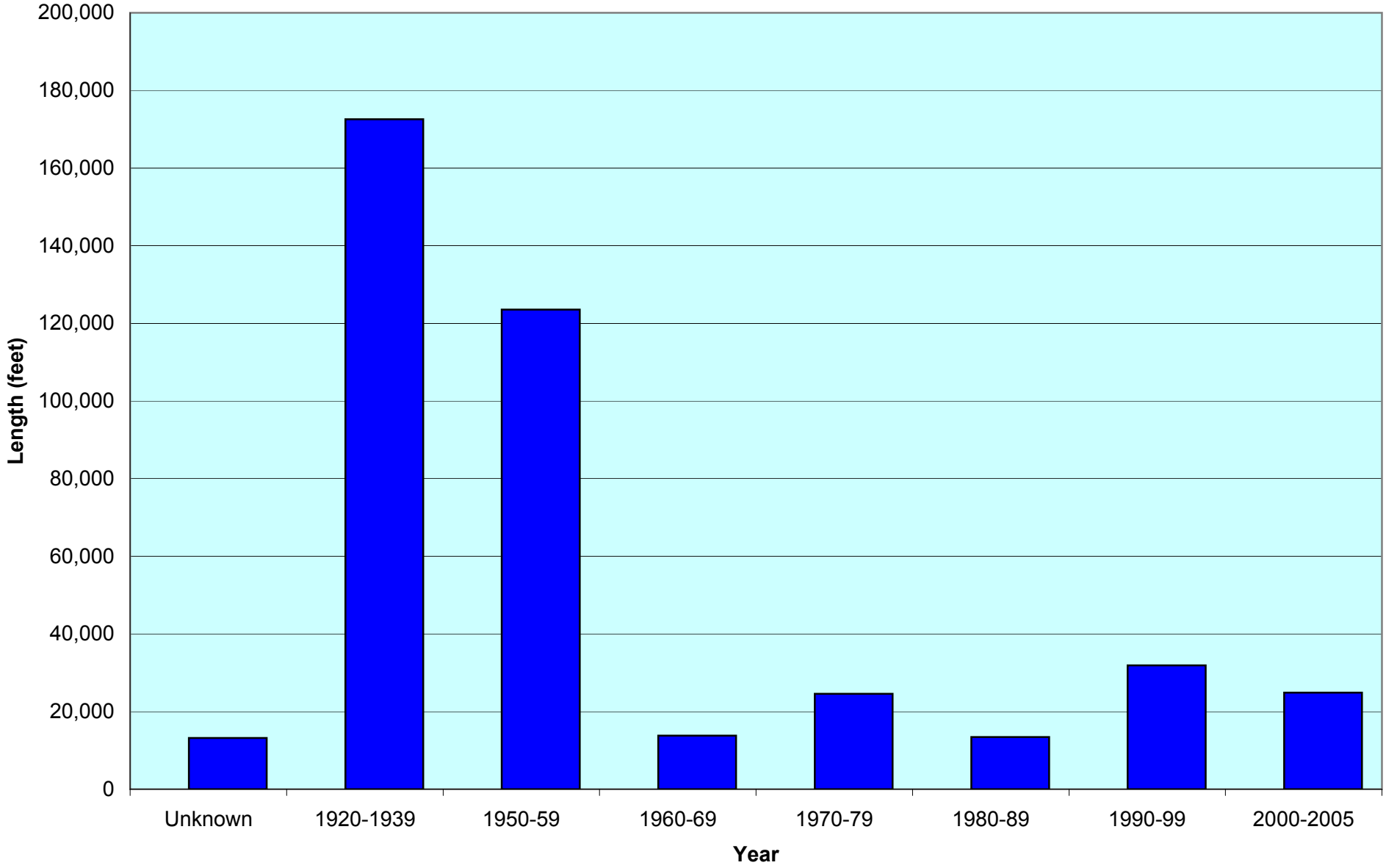


Chart 2

Village of Villa Park
Age of Water Mains



WATER REQUIREMENTS

The water consumption data by Village users since the establishment of the DWC supply is presented in Table 3. Usage for the most recent year (2004) is presented in Chart 3.

The annual consumption has two major components - residential and commercial.

Residential usage is seasonal with peaks during the summer exacerbated by:

- Lawn / yard watering
- Car washing
- Increased use of showers
- Pool filling

Annual variations can also be expected as wetter summers preclude the need for additional lawn / yard watering. The total monthly pumpage for the Village is presented in Chart 4 and daily pumpage by month in Chart 5. As would be expected, the peak demand for water is in the summer months of June, July, and August. From Chart 5 it can be seen that average daily pumpage for the whole community is about 2.0 million gallons a day. The capacity of all the storage facilities is 3.8 million gallons. During emergency situations there would be almost two days supply if usage restrictions were imposed. With rationing the facilities could be anticipated to provide at least three days supply without the initiation of the wells or inter-municipal connections.

Residential usage is approximately 230 g/day/household. However, this figure does not accurately represent variations, not only in seasonal consumption, but also diurnally. From previous sanitary flow monitoring (which is directly related to water consumption) there are significant peaks in the morning and evening demand, typically up to three times the average daily flow. Consequently, the highest demand on the distribution system is during the summer mornings and evenings when the Village demand may peak at 4,000 gpm. The Village enforces sprinkling restrictions during the summer months. Appendix F outlines the requirements.

NON-RESIDENTIAL USAGE

There are 653 non-residential customers in the Village. These include commercial, industrial, governmental, and educational facilities.

The consumption demands can vary significantly on a yearly basis, for the following reasons:

- Change of use by industrial premises
- Increased construction activity
- Maintenance at governmental facilities that have high water demands (public pools and wastewater treatment plant)

The Village's municipal usage for 2004 is given in Table 4.

The locations of large water users are shown on Exhibit 4 and the associated consumption data is presented in Appendix B.

Report\207-2

Table 3

Village of Villa Park
Water Consumption Data 1992 to 2004
(Million Gallons)

Year	Residential	Commercial	Municipal	Construction	Hydrant Uses	Allowed Leakage	Total Accounted	Total Pumpage	Unaccounted	Unaccounted %	Billed Usage
2004	492.39	132.13	15.33	10.22	1.83	54.75	706.65	708.10	1.45	0.21%	624.52
2003	519.03	111.69	33.95	0.37	1.83	54.75	721.61	722.34	0.73	0.10%	630.72
2002	519.76	121.18	18.62	0.37	1.83	54.75	716.50	725.26	8.76	1.21%	640.94
2001	527.06	118.26	19.35	0.00	2.92	54.75	722.34	728.54	6.21	0.85%	645.32
2000	519.40	128.48	18.62	1.10	5.48	54.75	727.81	754.09	26.28	3.48%	647.88
1999	520.86	130.67	20.08	10.22	5.48	54.75	742.05	761.39	19.34	2.54%	651.53
1998	458.81	195.64	12.78	0.00	2.19	51.10	720.51	731.83	11.32	1.55%	654.45
1997	443.11	214.26	9.86	0.00	4.02	54.75	725.99	731.46	5.48	0.75%	657.37
1996	482.17	149.65	9.13	0.00	5.48	53.29	699.71	734.38	34.68	4.72%	631.82
1995	528.89	133.59	5.84	0.00	7.67	53.29	729.27	742.05	12.78	1.72%	662.48
1994	492.75	114.98	10.59	5.84	8.03	53.29	685.47	784.39	98.92	12.61%	607.73
1993	473.41	116.44	9.13	2.19	7.30	53.29	661.75	711.75	50.01	7.03%	589.84
1992	517.21	120.45	8.03	0.37	7.67	52.56	706.28	748.98	42.71	5.70%	637.66

Chart 3

Village of Villa Park
Water Consumption by Usage
2004

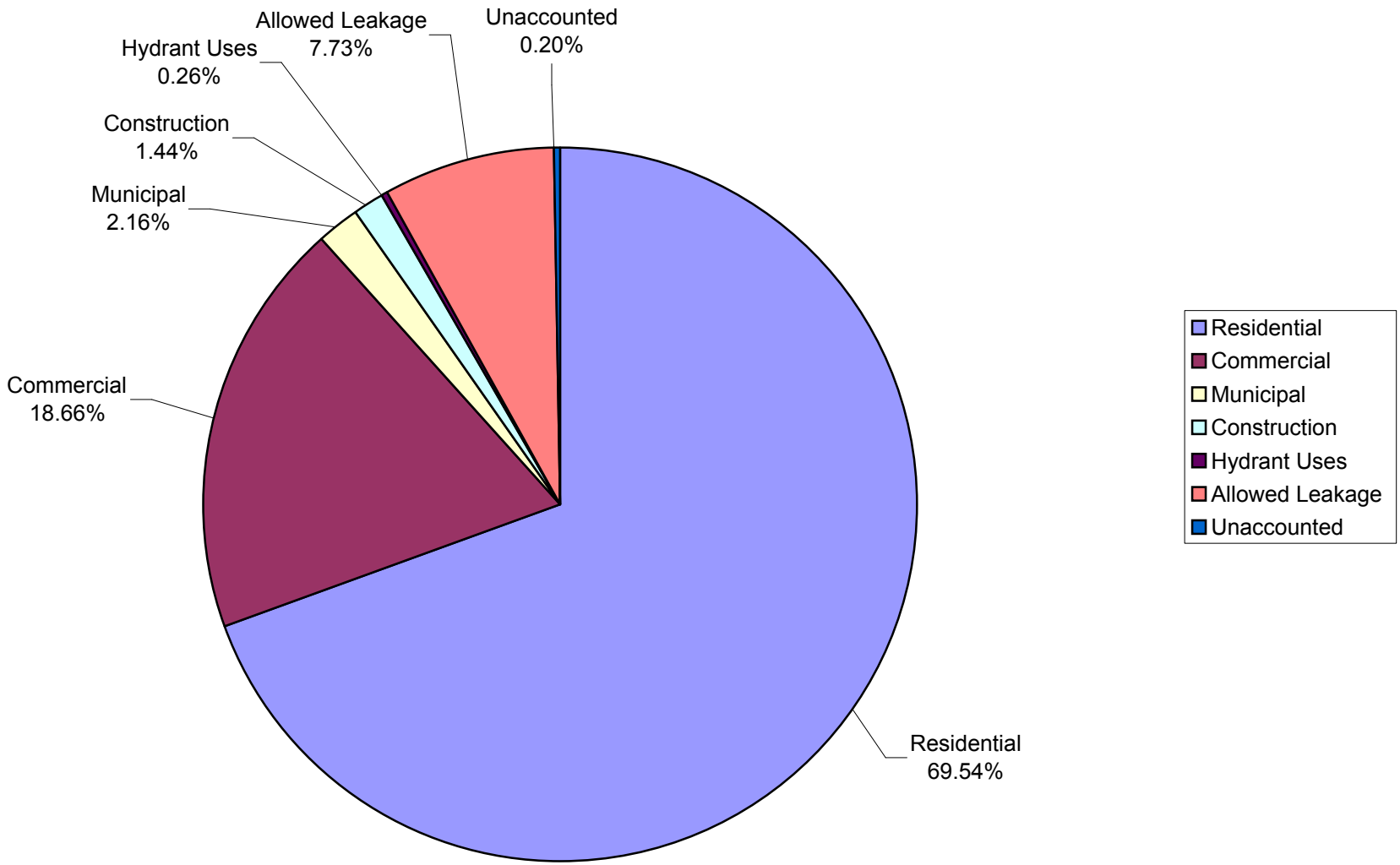


Chart 4

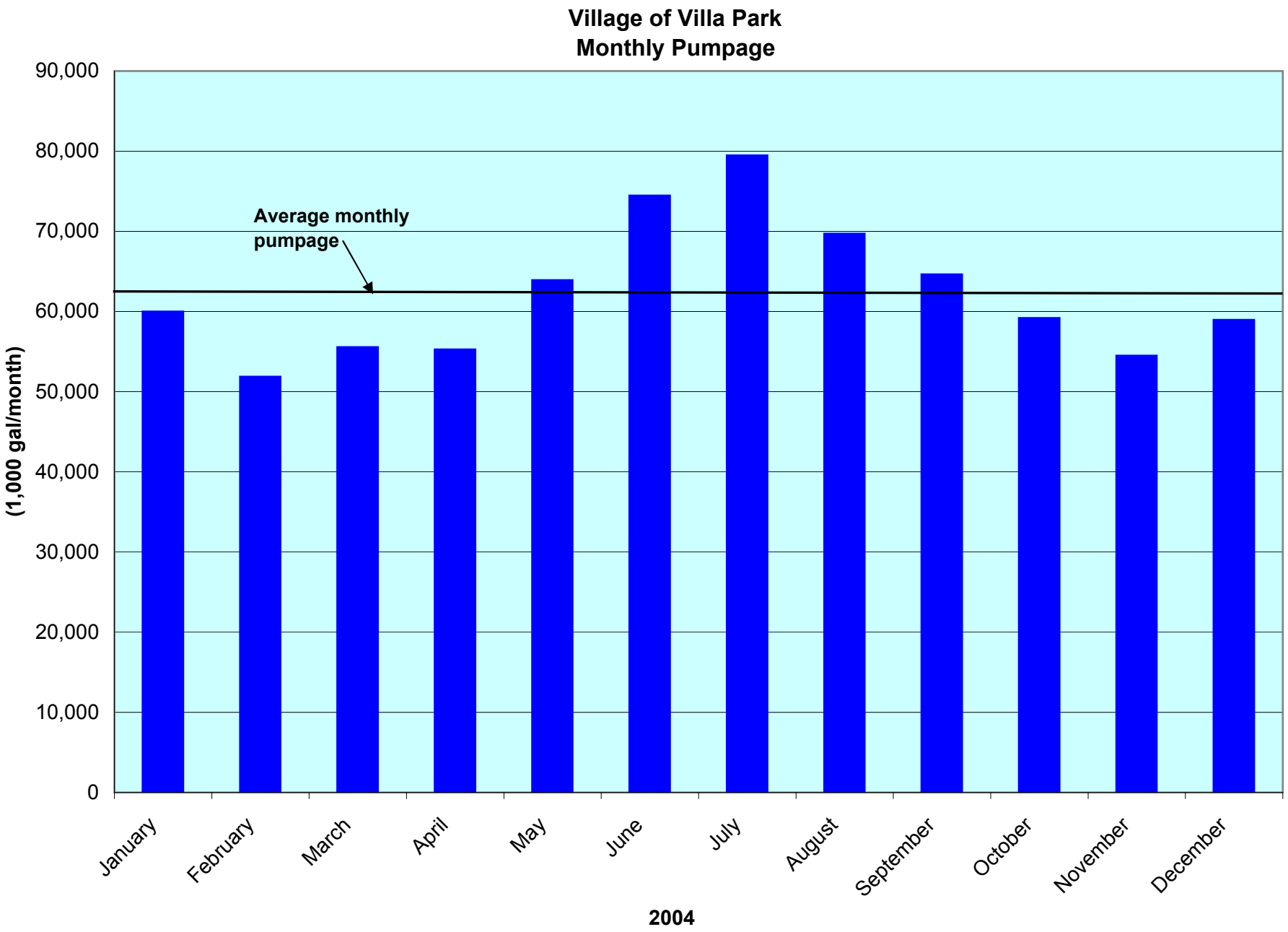

Village of Villa Park
Monthly Pumpage
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
(1,000 gal/month)
Average monthly pumpage
January
February
March
April
May
June
July
August
September
October
November
December
2004

Chart 5

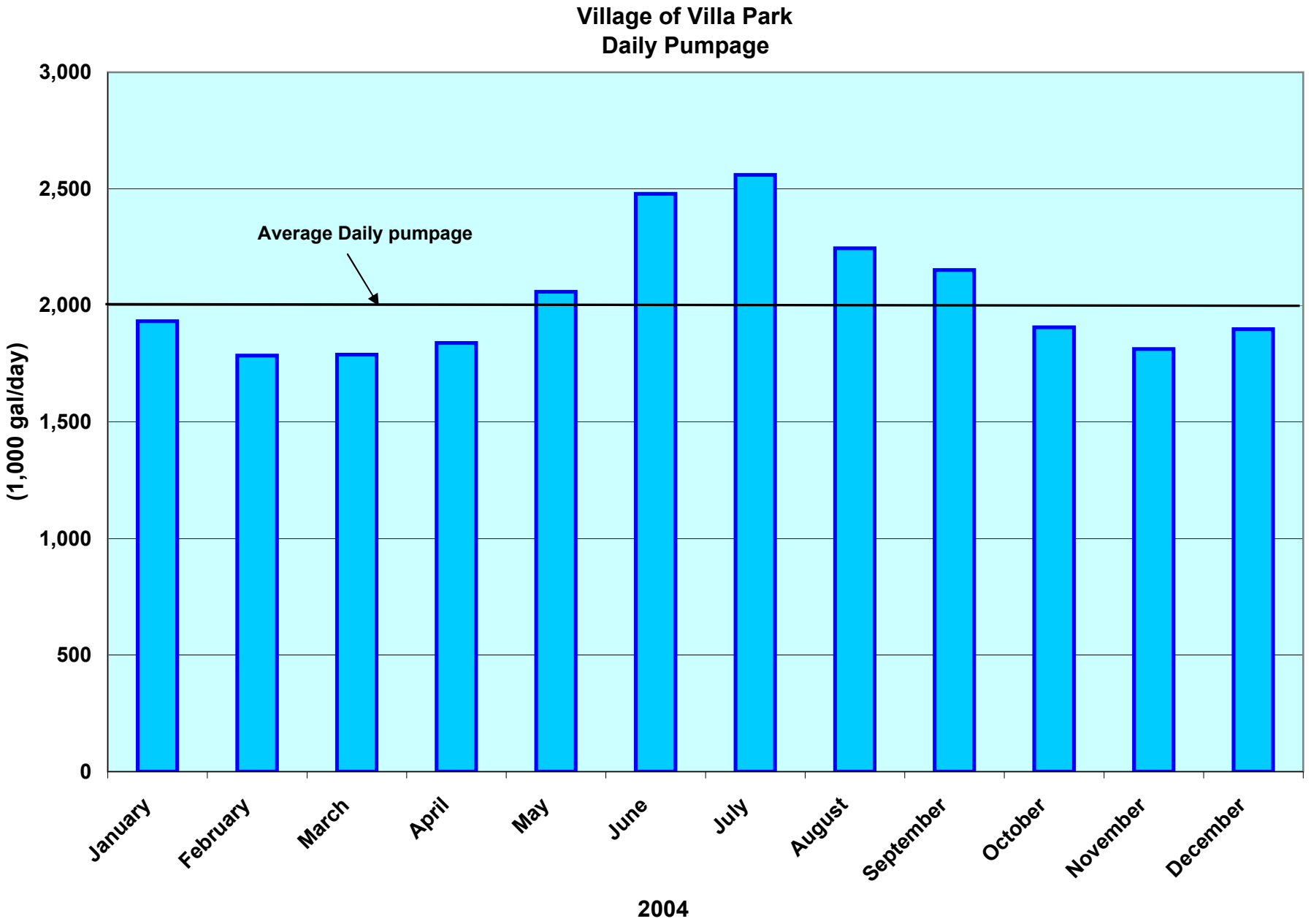

Village of Villa Park
Daily Pumpage
3,000
2,500
2,000
1,500
1,000
500
0
(1,000 gal/day)
Average Daily pumpage
January
February
March
April
May
June
July
August
September
October
November
December
2004

Table 4

Village of Villa Park
Village Usage 2004

Location	Annual Usage (Gallons)
Public Works #1	18,000
Vehicle Maintenance	53,000
Police Department	143,000
Fire Station #1	69,000
Fire Station #2	194,000
Fire Station #3	226,000
Parks & Recreation	60,000
Village Hall	244,000
Historical Society	9,000
North Terrace	42,000
Lions Community Center	353,000
Lufkin Pool	2,080,000
Jefferson Pool	1,797,000
51 S. Ardmore	15,000
35 W. Home Vehicle Storage	34,000
Iowa Community Center	305,000
Wet Weather Flow Treatment Facility	2,030,000
Tot Lot	6,000
Ellsworth Garden	8,000
Missle Square Park	70,000
Train Station	7,000
Tot Lot (South Villa)	10,000
Total	**7,773,000**
Average Daily Usage	21,296

FUTURE GROWTH

The Village's zoning map is shown in Exhibit 5.

There are a number of areas that are being considered for redevelopment. Their potential impact was considered (wherever possible) and figured into the model. The developments are as follows:

1. West of Lincoln, on North Avenue

   This area is currently served by a private un-looped 6-inch service. This area is the most problematic to service efficiently as it is on the higher side of town. Should the unincorporated area to the north also become a development area, there may be a need for booster pumping.

2. Development Triangle – south of North Avenue, north of Illinois Central railroad bounded by North Villa Avenue on the east.

   The Village is looking at a TIF district for the entire North Avenue corridor. It would be advantageous to redevelop the area to make it suitable for larger users. The current dead-end lines on Michigan, Harvard, Yale, and Princeton would need to be looped and increased in size from 4-inch and 6-inch to 8-inch. The area to the east of Ardmore includes a portion that is currently unincorporated, however, it is bounded by existing watermains that are 8-, 10- and 12-inch in size, which will be sufficient for any proposed development.

3. Train Station Area at Terrace and Ardmore.

   The Village may expand this area to encompass some additional blocks. Depending on the extent of the development, the 6-inch mains may require upsizing to 8-inches.

4. South of Chicago Northwestern Railroad Tracks at Yale.

   This area is potentially a multi-story residential development. The existing 4-inch lines will need to be increased to 8-inches.

5. Ardmore Business Area (Park between Cornell and Ardmore).

   If this area is redeveloped, the 6-inch watermain on the east side will need to be increased to an 8-inch.

6. Unincorporated Area south of Harrison between Villa and Ardmore.

   It is proposed to provide all new homes with individual fire protection. Consequently, all new watermains in this area would need to be 8-inches. The existing watermains on Ardmore and Villa are currently 10-inches, however, the watermain on Harrison is currently 4- 6-inches and would ideally be replaced with an 8-inch.

7. Route 83 between Madison and Washington.

   The commercial business area is currently served by 6-inch and 8-inch watermain. Future development may require 8-inch watermain service throughout this area.

8. Robinette Area.

   This property is bounded by Wayside Drive to the west, Roosevelt to the south, Route 83 to the east and 1st Avenue to the north. The area is part of Oakbrook Terrace, however, if the site is to be developed, the water service will have to be provided by the Village of Villa Park, through an intergovernmental agreement. Currently there is an 8-inch main on Riordan, and a 6-inch main on Wayside. There is additionally an 8-inch main on Van Buren. This development will require an 8-inch looped main.

report\207-5

EVALUATION OF EXISTING SYSTEM

WATERMAIN REPLACEMENT PROGRAM

Watermains are recommended for replacement in the following situations:

- History of repeated breaks
- Pipe is undersized and does not provide adequate pressure or fire protection
- Main forms part of the Village's "skeleton" and requires upsizing to improve system performance

BREAK HISTORY AND PRIORITIZATION

Exhibit 6 indicates the history of watermain breakage by frequency and "hot spot" soil conditions. The areas subject to repeated breaks are predominately from the period 1950 to 1959 when it would appear that an inferior quality of watermain was installed.

Emergency repairs are both costly and disruptive. Consequently, it is recommended that those mains that have a history of breaks be prioritized for replacement.

Table 5 indicates the total length of watermain breaks, categorized by size and frequency.

Undersized Pipes and Dead-End Lines

The existence of undersized watermains and dead-end lines are a concern as they reduce the operating pressure and restrict the ability to provide fire flow.

Four-inch mains (mainly dating back to the 1950s) are of the greatest concern. Consequently these are recommended to be replaced with 8-inch watermain over the next ten years. Those subject to recurrent breaks have been previously prioritized; the remaining 4-inch pipe is 10,407 ft. The locations of the 4-inch watermains are shown on Exhibit 7.

The dead-end lines are listed on Table 6. The table indicates the location of the dead-end segment, together with any observations regarding ability to "loop" the main to improve service and provide the fire protection.

Exhibit 8 shows the location of all dead-end lines and recommended loops.

Table 5

Watermain Breaks
Summary of Pipe Size Lengths
(In feet)

Number of breaks		4"	6"	8"	10"
Over 40			2,501		
30 - 39			2,224		
20 - 29			2,831		
10 - 19		4,656	16,894	768	1,264
1 - 9		6,102	38,367	2,034	4,327
	TOTAL	10,758	62,817	2,802	5,591

Table 6

Hydrant Dead-Ends and Recommended Looping

(See Exhibit 8)

Location	Comments
1. Villa Nova (behind the restaurant)	Serves restaurant
2. Jewel (behind the store)	Cannot easily be looped – serves only Jewel
3. Illinois & Maple (on Illinois)	Short – not critical
4. Hill St. (1st hydrant west of Villa)	Unincorporated – can be addressed during Redevelopment – possible TIF area
5. Hill St. (2nd hydrant west of Villa)	Unincorporated – can be addressed during Redevelopment – possible TIF area
6. Schiller (west of Villa)	Unincorporated – can be addressed during Redevelopment – possible TIF area
7. Beach St. (west of Villa)	Cannot easily be looped would need an easement down to E. Maple – probably from 258 E. Maple
8. Hamilton to Plymouth	**Recommend extend north to E. Plymouth**
9. ABC Streets & N.W. tracks	**Recommend loop N of tracks if easement available. – probably 3 easements will be required**
10. Princeton (south of North Ave)	**Recommend loop N of tracks if easement available – easement from railroad is required**
11. Harvard (south of North Ave)	**Recommend loop N of tracks if easement available – easement from railroad is required**
12. Michigan (south of North Ave)	**Recommend loop N of tracks if easement available – easement from railroad is required**
13. North Ave & Kramer	Do not recommend improvement unless NW area developed
14. Terrace & Lincoln	Not critical
15. Iowa Community Center	**Urgent need of upgrading to 8" (from 4") and looping to Addison – possible in-house project**

16. Vermont & Lincoln	Not critical – recently upgraded to 6”
17. Lions Field & Wildwood	**17a. Serves ball-fields – Install new 8” watermain on Wildwood, then loop across Great Western Trail to connect with proposed 8” line at Townhouse development** **17b. Install new 8” watermain on E. Wildwood to connect to S. Euclid.**
18. Ovaltine Court	Upgrade D. E. main to 8” loop – difficult due to existing sanitary in the alley.
19. Kenilworth & Addison	Cannot easily be looped – possible emergency interconnect with Lombard for fire protection only – Upgrade to 8” when street is reconstructed
20. Jackson Jr. High School (behind the building)	Only serves the school – not critical – currently a private line – possibly incorporate into new west side backbone
21. Orchard Hill Ct	Short – not critical – upgrade to 8” when street is reconstructed
22. High Ridge (Islamic Center)	Already looped by private main – possible future loop to S. Ardmore
23. Walgreen’s (on Summit north of Roosevelt)	Unincorporated – can be addressed during Redevelopment
24. Summit & Harrison (South of Harrison)	Unincorporated – can be addressed during Redevelopment
25. Euclid & Riordan (south of Riordan)	Unincorporated – can be addressed during Redevelopment
26. Monterey & Riordan	Will be addressed during development of Robinette parcel
27. Fireside Trail (on Calduto)	Short – not critical – possible loop to Harrison connecting between 519 and 523 Calduto
28. Rt. 83 on Washington	Loop only if critical to the development of the Washington to Madison parcels – main on Rte 83 was recently upgraded to 8”. Washington can be upgraded to 8” in conjunction with street reconstruction

WATER MODEL

The computer model used for the analysis of the Villa Park water distribution system is EPANET 2. EPANET 2 is a computer program that simulates the hydraulic behavior of pressurized pipe networks. The EPANET 2 software is produced and maintained by US EPA and is public domain software.

The approach used to model the water system was to create a skeletal pipe network in the model comprised of large diameter water mains in the system. Water mains that are 12-inch and 10-inch in diameter are included in the skeletal network. Several 8-inch and 6-inch diameter water mains are also included in the skeletal network to close network loops. Exhibit 9 shows the extent of the skeletal model network.

The water model was calibrated using pressure tests conducted by Village Public Works staff. Pressure testing was conducted on December 12, 2005 at nine hydrants in the system. Static pressure tests were conducted on six of the hydrants tested. Fire flow pressure tests were conducted on three of the hydrants tested. The results of the pressure testing and a comparison with output from the water model is given in Appendix H.

EXISTING CONDITIONS

Under existing conditions, pressure within the system is dictated by the ground topography. The west side of town is 50 to 60 feet higher in elevation than the east side adjacent to Salt Creek (Exhibit 10). Consequently, pressures vary from 44 psi at North and Westmore to 70 psi at Jackson and Van Buren.

SEPARATE PRESSURE ZONES

If the Village were to investigate the feasibility of separate pressure zones, to provide any improvement, the zones would need to be orientated into an east and west side zone system. The DWC supplies are all close to Ardmore, the Village's central north-south axis which are better suited to provide north, central, and southern zones which would not address the large pressure variations from east to west. The long narrow zones that would be derived if the Village were divided along a north-south axis are also not ideal for pressure maintenance.

FIREFLOW SIMULATION

The lowest pressure area of town is west of Westmore and North Avenue therefore, two fireflow simulations were conducted to evaluate existing conditions and the impact of adding a 10-inch diameter backbone to the west side with:

1.) Fireflow (800 gpm) at Westmore and North Avenue and
2.) Fireflow at Westmore and North Avenue with no supply available from Princeton Feeder (worst case scenario).

Pressure at North Avenue & Westmore (psi)

	Normal Operation	Fireflow	Fireflow with Princeton Out of Service
Existing System	44.33	37.96	25.88
10" Diameter Backbone on the West Side	44.62	41.05	37.16

Therefore, adding a 10-inch diameter backbone on the west side has the effect of balancing the flow. If the Village anticipates developing west of Westmore it would be beneficial to increase the size of a western watermain. This recommendation is not a matter of urgency and it is proposed that these improvements be made as the phased capital improvements are planned.

Report\207-7

RECOMMENDED PLAN AND COSTS

RECOMMENDED PLAN

The recommended plan and its prioritization was developed for a 10-year time frame using the following methodology.

- Replace all lines that are subject to repeated breaks
- Replace all 4-inch mains
- Close loops in dead-end watermains where feasible
- Complete installation of east side backbone on Villa Avenue
- Provide extra protection Village-wide by developing a west side "back-bone"

There is approximately 15,200 additional feet of 4-inch watermain that does not have a history of severe breaks; however as this pipe is considered undersized to adequately maintain pressures, particularly during fire flow conditions, it is recommended that all of the 4-inch watermain be replaced over the next ten years.

COSTS OF RECOMMENDED PLAN

The basis for developing the cost estimates is as follows:

8-inch watermain	easement	$127 / ft.
	bituminous pavement	$140 / ft.
	concrete pavement	$150 / ft.
10-inch watermain	bituminous pavement	$152 / ft.

- All costs include pipe and all ancillaries - services, hydrants, valves, backfill, restoration over trench (including concrete sub-base where necessary) and 10% contingency
- All estimates for the ten-year plan are given as 2005 present value costs

The cost of replacing watermains with a history of breaks with 8-inch or larger mains (at 2005 prices including 10% contingency) is presented in Table 7. It is estimated that the total cost to replace all lines that have a history of breaks would be $11,713,260. It is therefore recommended to prioritize the replacement of these lines and consider only those segments with a history of 10 breaks or more for phased replacement.

In addition those streets known as the "ABC" streets (Beverley / Chatham, etc.) - between the two railroads - which have a history of less than 10 breaks should also be replaced, as this area has been shown to be vulnerable to rolling failures. (When one portion is replaced the adjacent water main is the next to break.) It is therefore only a matter of time before all of this area is subject to multiple breaks and should be considered a high priority for replacement. North Westmore also has a history of repeated breaks and is recommended for replacement. One section from Sunset to Plymouth has less than a 10 break history but is considered vulnerable to future breaks and is therefore recommended for replacement.

From the evaluation of the dead-end lines the following are recommended for improvement.

• Iowa at Community Center	Close loop to Addison (300 ft.)
• Hamilton	Close loop north to Plymouth (130 ft.)
• ABC Streets - North of Railroad tracks	Close loops through Terrace easement (2,050 ft.)
• Harvard to Michigan (South of North Ave.)	Close loop north of railroad tracks through easement (1,400 ft.)
• Lion's Park	Close loop to Euclid Close loop to Myrtle

A vulnerability of the system as a whole is the lack of a westside "back-bone". It is recommended that over a 10-year period improvements be made, continuing on from those currently planned for Westmore. This up-grade would increase the existing 6-inch mains to 10-inch on a route that would follow Westmore from Terrace to St. Charles, and then from St. Charles, south on Wisconsin to Roosevelt Road. At a minimum it is recommended that the mains be upsized north from Jackson Street, with the area from W. St. Charles to W. Terrace being the priority.

The costs of the recommended plan is $9,674,610 given in Table 8. The 10-year phasing including the Village's currently proposed capital improvement plan is presented on Table 9 and shown on Exhibit 11.

Table 7

Replacement Cost of All Break Lines

Number of breaks	
Over 40	375,200
30 - 39	336,100
20 - 29	401,860
10 - 19	3,432,000
1 - 9	7,168,100
TOTAL	**$11,713,260**

Table 8
Recommended Plan Costs

	4"	6"	8"	10"	Replacement Cost
# of breaks					
> 40		2,501			375,150
> 30 - 39		2,224			336,100
> 20 - 29		2,831			401,860
> 10 - 19	4,656	16,894	768	1,264	3,432,000
> 1 - 9		677			102,900
"ABC streets" not included above	772	3,385			618,600
4" mains not included above	14,387				2,108,500
New Loops:					
Hamilton to Plymouth			130		19,500
ABC Streets & NW tracks			2,050		307,500
Iowa to Addison @ community ctr			300		38,100
Harvard to Princeton N. of tracks			1,400		196,000
E. Wildwood Lions Park to S. Euclid			384		53,760
Lions Ball Park to Myrtle			136		19,040
West Side Backbone				12,250	1,665,600
				TOTAL	$9,674,610

Table 9

10-Year Plan - Recommended Improvements

STREET	CROSS STREET 1	CROSS STREET 2	SIZE	Length	NUMBER OF BREAKS	PROPOSED SIZE	COST/LF	COST	STREET SUBTOTAL	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
E HARRISON ST	S SUMMIT AV	S JULIA DR	6	266	10 to 19	8	140	37,240									37,240		
E HARRISON ST	S JULIA DR	S EUCLID AV	4	430	10 to 19	8	140	60,200									60,200		
E HARRISON ST	S EUCLID AV	S MYRTLE AV	4	263	10 to 19	8	140	36,820	134,260								36,820		
E MADISON ST	S SUMMIT AV	S MYRTLE AV	4	990		8	140	138,600	138,600	138,600									
E PARK BL (EXT)	CROSSING IL 83		4	198		8	200	39,600	39,600										39,600
E PLYMOUTH ST	N FULTON AV	N GERARD AV	6	338	40 or more	8	150	50,700		50,700									
E PLYMOUTH ST	N GERARD AV	N HAMILTON AV	6	345	40 or more	8	150	51,750		51,750									
E PLYMOUTH ST	N HAMILTON AV	N VILLA AV	6	274	40 or more	8	150	41,100	143,550	41,100									
E VERMONT ST	N ARDMORE AV	N BEVERLY AV	6	306	30 to 39	8	150	45,900		45,900									
E VERMONT ST	N BEVERLY AV	N CHATHAM AV	6	341	30 to 39	8	150	51,150		51,150									
E VERMONT ST	N CHATHAM AV	N DOUGLAS AV	6	339	30 to 39	8	150	50,850		50,850									
E VERMONT ST	N DOUGLAS AV	N ELLSWORTH AV	6	339	40 or more	8	150	50,850		50,850									
E VERMONT ST	N ELLSWORTH AV	N FULTON AV	6	343	40 or more	8	150	51,450		51,450									
E VERMONT ST	N FULTON AV	N GERARD AV	6	336	40 or more	8	150	50,400		50,400									
E VERMONT ST	N GERARD AV	N HAMILTON AV	6	331	10 to 19	8	150	49,650		49,650									
E VERMONT ST	N HAMILTON AV	N VILLA AV	6	287	10 to 19	8	150	43,050	393,300	43,050									
RR EASEMENT	N BEVERLY AV	N HAMILTON AV	NEW	2,050		8	150	307,500	307,500		307,500								
E WILDWOOD	LIONS PARK	S EUCLID AVE	NEW	384			140	53,760	53,760				53,760						
N ARDMORE AV	E SUNSET DR	E PLYMOUTH ST	4	381	10 to 19	8	150	57,150				57,150							
N ARDMORE AV	W VERMONT ST	E TERRACE ST	4	498		8	140	69,720	126,870			69,720							
N BEVERLY AV	E SUNSET DR	E PLYMOUTH ST	6	422		8	150	63,300		63,300									
N BEVERLY AV	E PLYMOUTH ST	E VERMONT ST	6	570		8	150	85,500		85,500									
N BEVERLY AV	E VERMONT ST	E TERRACE ST	6	278		8	150	41,700	190,500	41,700									
N BIERMANN AV	W NORTH AV	W RIDGE RD	6	792	10 to 19	8	150	118,800			118,800								
N BIERMANN AV	W RIDGE RD	W SUNSET DR	6	464	10 to 19	8	150	69,600	188,400		69,600								
N CHARLES AV	E OAK ST	E ELM ST	4	601		8	140	84,140					84,140						
N CHARLES AV	E ELM ST	E ST CHARLES RD	4	594		8	140	83,160	167,300				83,160						
N CHATHAM AV	E SUNSET DR	E PLYMOUTH ST	6	440	10 to 19	8	150	66,000		66,000									
N CHATHAM AV	E PLYMOUTH ST	E VERMONT ST	6	577	10 to 19	8	150	86,550		86,550									
N CHATHAM AV	E VERMONT ST	E TERRACE ST	6	380		8	150	57,000	209,550	57,000									
N DOUGLAS AV	E SUNSET DR	E PLYMOUTH ST	6	461		8	150	69,150		69,150									
N DOUGLAS AV	E PLYMOUTH ST	E VERMONT ST	6	525		8	150	78,750	147,900	78,750									
N ELLSWORTH AV	E SUNSET DR	E PLYMOUTH ST	6	421	10 to 19	8	150	63,150		63,150									
N ELLSWORTH AV	E PLYMOUTH ST	E VERMONT ST	6	542	10 to 19	8	150	81,300		81,300									
N ELLSWORTH AV	E VERMONT ST	UP RR	4	274		8	150	41,100	185,550	41,100									
N EUCLID AV	E DIVISION ST	E ELM ST	6	480	20 to 29	8	140	67,200					67,200						
N EUCLID AV	E ELM ST	E ST CHARLES RD	6	679	20 to 29	8	140	95,060	162,260				95,060						
N FULTON AV	E SUNSET DR	E PLYMOUTH ST	6	452		8	150	67,800		67,800									
N FULTON AV	E PLYMOUTH ST	E VERMONT ST	6	526	40 or more	8	150	78,900	146,700	78,900									
N GERARD AV	E PLYMOUTH ST	E VERMONT ST	6	503	10 to 19	8	150	75,450	75,450	75,450									

STREET	CROSS STREET 1	CROSS STREET 2	SIZE	Length	NUMBER OF BREAKS	PROPOSED SIZE	COST/LF	COST	STREET SUBTOTAL	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
N HAMILTON AV	E PLYMOUTH ST	E VERMONT ST	6	297		8	150	44,550		44,550									
N HAMILTON AV	E PLYMOUTH ST	E VERMONT ST	NEW	130		8	150	19,500	64,050	19,500									
N HARVARD AV	W NORTH AV	CCP RR	4	487		8	140	68,180								68,180			
N HARVARD AV	W SUNSET DR	W PLYMOUTH ST	4	529	10 to 19	8	150	79,350							79,350				
N HARVARD AV	W PLYMOUTH ST	W VERMONT ST	4	616		8	150	92,400							92,400				
N HARVARD AV	W VERMONT ST	JEFFERSON BALL FLDS	4	525		8	150	78,750	318,680						78,750				
N IOWA AV	W STONE RD	W RIDGE RD	6	445	10 to 19	8	150	66,750						66,750					
N IOWA AV	W RIDGE RD	W SUNSET DR	6	531	10 to 19	8	150	79,650						79,650					
N IOWA AV	W SUNSET DR	W PLYMOUTH ST	6	622	10 to 19	8	140	87,080						87,080					
N IOWA AV	W PLYMOUTH ST	W VERMONT ST	6	680	10 to 19	8	140	95,200						95,200					
N IOWA AV	W. VERMONT ST	COMMUNITY CTR	6	191	10 to 19	8	140	26,740		26,740									
COMMUNITY CTR EASM	N. IOWA AV	N. ADDISON RD	NEW	300		8	127	38,100	393,520	38,100									
N LINCOLN AV	W NORTH AV	W ROY DR	4	240		8	140	33,600											33,600
N LINCOLN AV	W ROY DR	W RIDGE RD	4	350	10 to 19	8	140	49,000											49,000
N LINCOLN AV	W RIDGE RD	W JAMES ST	4	273	10 to 19	8	140	38,220											38,220
N LINCOLN AV	W JAMES ST	W SUNSET DR	4	358	10 to 19	8	140	50,120											50,120
N LINCOLN AV	W SUNSET DR	W MERLE ST	4	323	10 to 19	8	140	45,220											45,220
N LINCOLN AV	W MERLE ST	W PLYMOUTH ST	4	359		8	140	50,260											50,260
N LINCOLN AV	W PLYMOUTH ST	W VERMONT ST	4	278		8	140	38,920	305,340										38,920
N MICHIGAN AV	W NORTH AV	CCP RR	4	346		8	140	48,440								48,440			
N MICHIGAN AV	W STONE RD	W RIDGE RD	4	257	10 to 19	8	140	35,980						35,980					
N MICHIGAN AV	W RIDGE RD	W SUNSET DR	4	501	10 to 19	8	140	70,140						70,140					
N MICHIGAN AV	W SUNSET DR	W PLYMOUTH ST	4	625	10 to 19	8	140	87,500						87,500					
N MICHIGAN AV	W PLYMOUTH ST	W VERMONT ST	6	663	10 to 19	8	140	92,820	334,880					92,820					
N PRINCETON AV	W NORTH AV	W SCHILLER ST	4	438		8	140	61,320								61,320			
N PRINCETON AV	W SCHILLER ST	CCP RR	4	324		8	140	45,360								45,360			
N PRINCETON AV	W RIDGE RD	W PLYMOUTH ST	4	897		8	150	134,550								134,550			
N PRINCETON AV	W PLYMOUTH ST	W VERMONT ST	6	585	10 to 19	8	150	87,750								87,750			
N PRINCETON AV	W VERMONT ST	W TERRACE ST	6	603	10 to 19	8	150	90,450								90,450			
N PRINCETON AV	RAILROAD	W DIVISION ST	4	79		8	140	11,060	430,490									11,060	
N VILLA AV	E PLYMOUTH ST	E VERMONT ST	6	460	20 to 29	10	152	69,920	69,920	69,920									
N WESTMORE AV	W NORTH AV	W RIDGE RD	6	652	30 to 39	10	152	99,104			99,104								
N WESTMORE AV	W RIDGE RD	W RIDGE RD	6	94	30 to 39	10	152	14,288			14,288								
N WESTMORE AV	W RIDGE RD	W SUNSET DR	6	492	30 to 39	10	152	74,784			74,784								
N WESTMORE AV	W SUNSET DR	W PLYMOUTH ST	6	677	1 to 9	10	152	102,904			102,904								
N WESTMORE AV	W PLYMOUTH ST	W VERMONT ST	6	611	10 to 19	10	152	92,872			92,872								
N WESTMORE AV	W VERMONT ST	W PLEASANT AV	6	309	10 to 19	10	152	46,968			46,968								
N WESTMORE AV	W PLEASANT AV	W TERRACE ST	6	699	10 to 19	10	152	106,248			106,248								
N WESTMORE AV	W TERRACE ST	W TERRACE ST	6	146	10 to 19	10	152	22,192	559,360		22,192								
N WISCONSIN AV	W PLYMOUTH ST	W VERMONT ST	6	583	10 to 19	8	140	81,620	81,620					81,620					
N YALE AV	W NORTH AV	W SCHILLER ST	4	402		8	140	56,280								56,280			
N YALE AV (UNDER TRA	W SCHILLER ST	W RIDGE RD	4	586		8	200	117,200								117,200			
N YALE AV	W RIDGE RD	W SUNSET DR	4	583		8	150	87,450							87,450				
N YALE AV	W SUNSET DR	W PLYMOUTH ST	4	480		8	150	72,000							72,000				
N YALE AV	W PLYMOUTH ST	W VERMONT ST	4	635		8	150	95,250							95,250				
N YALE AV	W VERMONT ST	W TERRACE ST	4	672		8	150	100,800	528,980						100,800				
N. of UP RR	N HARVARD AV	N YALE AV	4	394		8	140	55,160	55,160						55,160				
UP RR (S. OF TRACKS)	N YALE AV	N PRINCETON AV	4	483		8	140	67,620	67,620									67,620	

STREET	CROSS STREET 1	CROSS STREET 2	SIZE	Length	NUMBER OF BREAKS	PROPOSED SIZE	COST/LF	COST	STREET SUBTOTAL	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
CCP RR (N. OF TRACKS)	N HARVARD AV	N PRINCETON AV	NEW	1400		8	140	196,000	196,000									196,000	
S ARDMORE AV	E JACKSON ST	E VAN BUREN ST	10	411	10 to 19	10	152	62,472										62,472	
S ARDMORE AV	E VAN BUREN ST	E CONGRESS ST	10	428	10 to 19	10	152	65,056										65,056	
S ARDMORE AV	E CONGRESS ST	E HARRISON ST	10	425	10 to 19	10	152	64,600	192,128									64,600	
S EUCLID AV	E ST CHARLES RD	E WILDWOOD BL	4	780		8	140	109,200	109,200				109,200						
S EUCLID AV	E MONROE ST	E TERRY LN	6	1,008	10 to 19	8	140	141,120									141,120		
S EUCLID AV	E JULIA DR	E HARRISON ST	6	901	10 to 19	8	140	126,140	267,260								126,140		
S MYRTLE AV	E MADISON ST	E MONROE ST	6	318	10 to 19	8	140	44,520									44,520		
S MYRTLE AV	E MONROE ST	E TERRY LN	6	713	10 to 19	8	140	99,820									99,820		
S MYRTLE AV	E JULIA DR	E HARRISON ST	6	1,212	20 to 29	8	140	169,680	314,020				169,680						
S SUMMIT AV	E MADISON ST	E MONROE ST	6	416	10 to 19	8	140	58,240										58,240	
S SUMMIT AV	E MONROE ST	E FRANK ST	6	691	10 to 19	8	140	96,740										96,740	
S SUMMIT AV	E FRANK ST	E TERRY LN	6	921	10 to 19	8	140	128,940	283,920									128,940	
S VILLA AV	E TERRY LN	E JULIA DR	6	312	10 to 19	10	152	47,424											
S VILLA AV	E JULIA DR	E VAN BUREN ST	8	768	10 to 19	10	152	116,736	164,160										
W DIVISION ST	N ADDISON RD	N WISCONSIN AV	4	407		8	140	56,980										56,980	
W DIVISION ST	N WISCONSIN AV	N MICHIGAN AV	4	431		8	140	60,340										60,340	
W DIVISION ST	N MICHIGAN AV	N HARVARD AV	4	246		8	140	34,440	151,760									34,440	
W RIDGE RD	N HARVARD AV	N YALE AV	4	434		8	127	55,118							55,118				
W RIDGE RD	N YALE AV	N PRINCETON AV	4	457		8	150	68,550								68,550			
W RIDGE RD	N PRINCETON AV	N ARDMORE AV	4	425		8	150	63,750	187,418							63,750			
W VERMONT ST	N WISCONSIN AV	N MICHIGAN AV	6	323	10 to 19	8	150	48,450						48,450					
W VERMONT ST	N MICHIGAN AV	N HARVARD AV	4	366	10 to 19	8	150	54,900	103,350					54,900					
N WESTMORE AV	W ST CHARLES RD	W TERRACE ST	NEW	1,950		10	140	273,000				273,000							
S WISCONSIN AV	W ST CHARLES RD	PRAIRIE PATH	NEW	450		10	127	57,150							57,150				
S WISCONSIN AV	PRAIRIE PATH	W KENILWORTH	NEW	400		10	140	56,000							56,000				
S WISCONSIN AV	W KENILWORTH	W JACKSON ST	NEW	6,100		10	140	854,000								200,000	200,000	200,000	254,000
S WISCONSIN AV	W JACKSON ST	W ROOSEVELT RD	NEW	3,350		10	127	425,450	1,665,600								100,000	125,000	200,450
LIONS PARK (GWT)	E WILDWOOD	S MYRTLE	NEW	136		8	140	19,040	19,040				19,040						
S. CORNELL	PARK	HIGHLAND	CIP	508		10	152	77,216	77,216	77,216									
MICHIGAN	PARK	MADISON	CIP	2600		8	140	364,000	364,000		364,000								
OVALTINE	VILLA	EAST END	CIP	172		8	140	24,080	24,080				24,080						
S VILLA	WILDWOOD	PARK	CIP	863		10	152	131,176	131,176				131,176						
S VILLA	PARK	HIGHLAND	CIP	1100		10	152	167,200	167,200				167,200						
S VILLA	HIGHLAND	WASHINGTON	CIP	1,300		10	152	197,600	197,600				197,600						
S VILLA	WASHINGTON	MADISON	CIP	1,341		10	152	203,832	203,832				203,832						
										1,907,126	**1,419,260**	**399,870**	**705,320**	**800,090**	**829,428**	**1,041,830**	**845,860**	**1,227,488**	**799,390**
								TOTAL COST	**10,839,630**										

ORDINANCE

A copy of the current ordinance is included in Appendix G.

The current Village ordinance requires a minimum service size of 1-inch diameter. The following sections require revision to reflect the increased service size.

- Sec. 25-318. Tap Generally.
  This section will require rewording to reflect permissible tap size.

- Sec. 25-321. New Installation for water service.
  This section will need revising to remove references to smaller taps.

- Sec. 25-377. After Illinois Plumbing Code, 77 I11. Adm. Code 890
  Insert "latest revision."

In the event that the Village adopts an ordinance that requires all new residential property to be sprinklered the minimum service size would need to be 1 ½-inch diameter. In that case the following additional changes would be required.

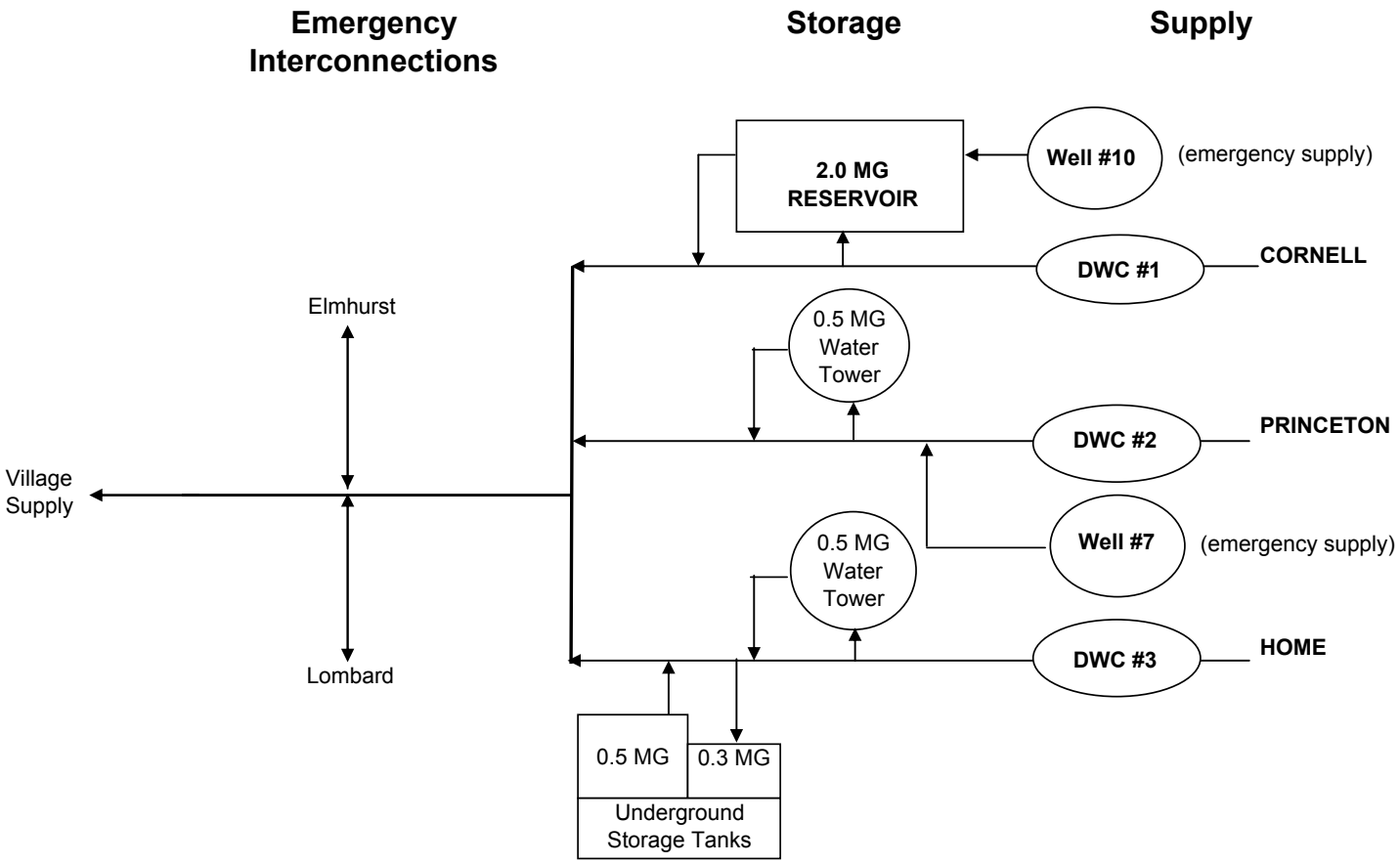
- Sec. 25-322. Repairs. (f)
  Replace one inch Type "K" with 1 ½-inch Type "K".

- Sec 25-337. Ownership and Maintenance – Water Meters
  (b) This section will require modification as the smaller meters are phased.

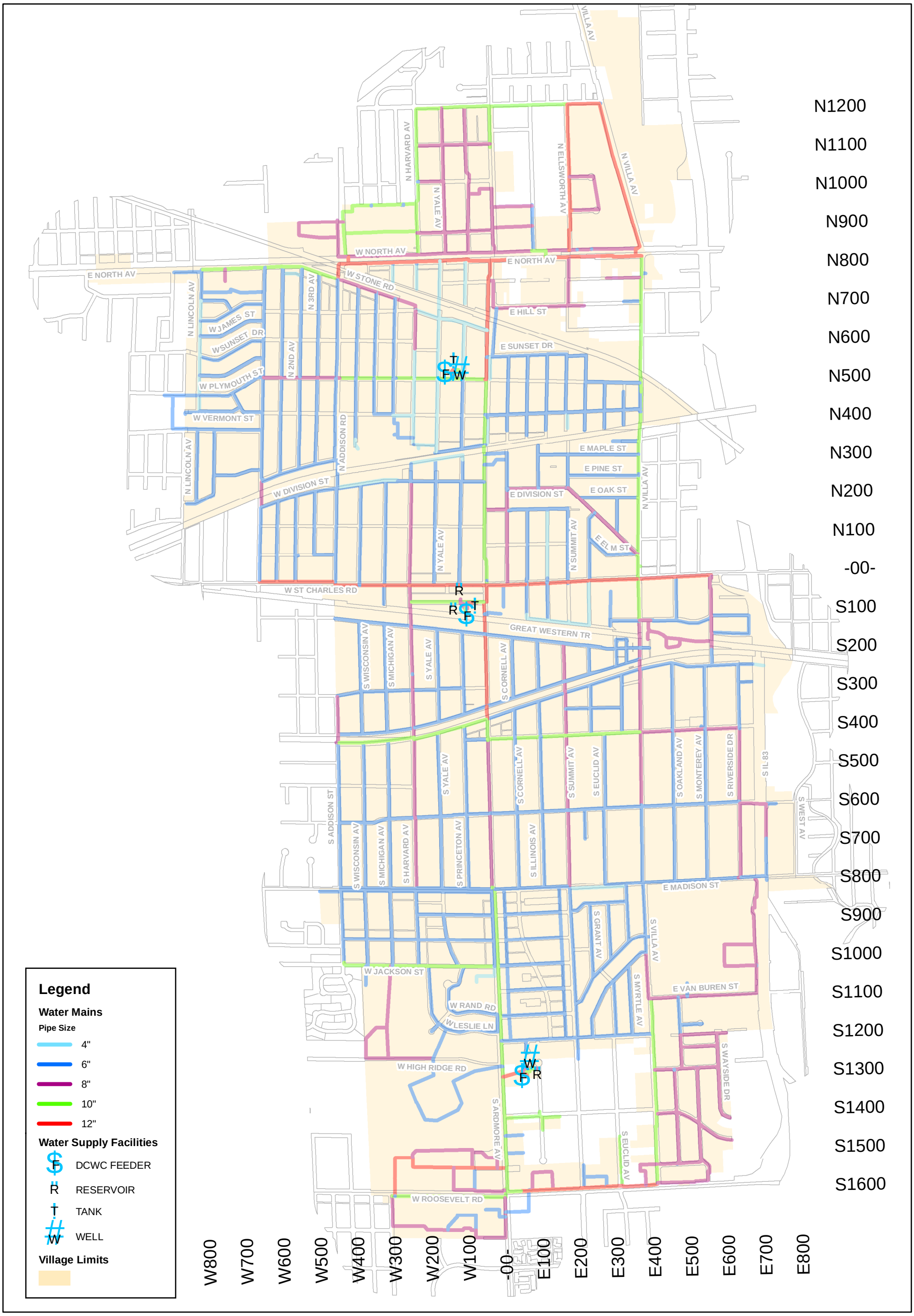
Report\207-6

EXHIBITS

EXHIBITS



Water Supply System
Exhibit 1



Legend

Water Mains

Pipe Size

- 4"
- 6"
- 8"
- 10"
- 12"

Water Supply Facilities

- DCWC FEEDER
- RESERVOIR
- TANK
- WELL

Village Limits

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

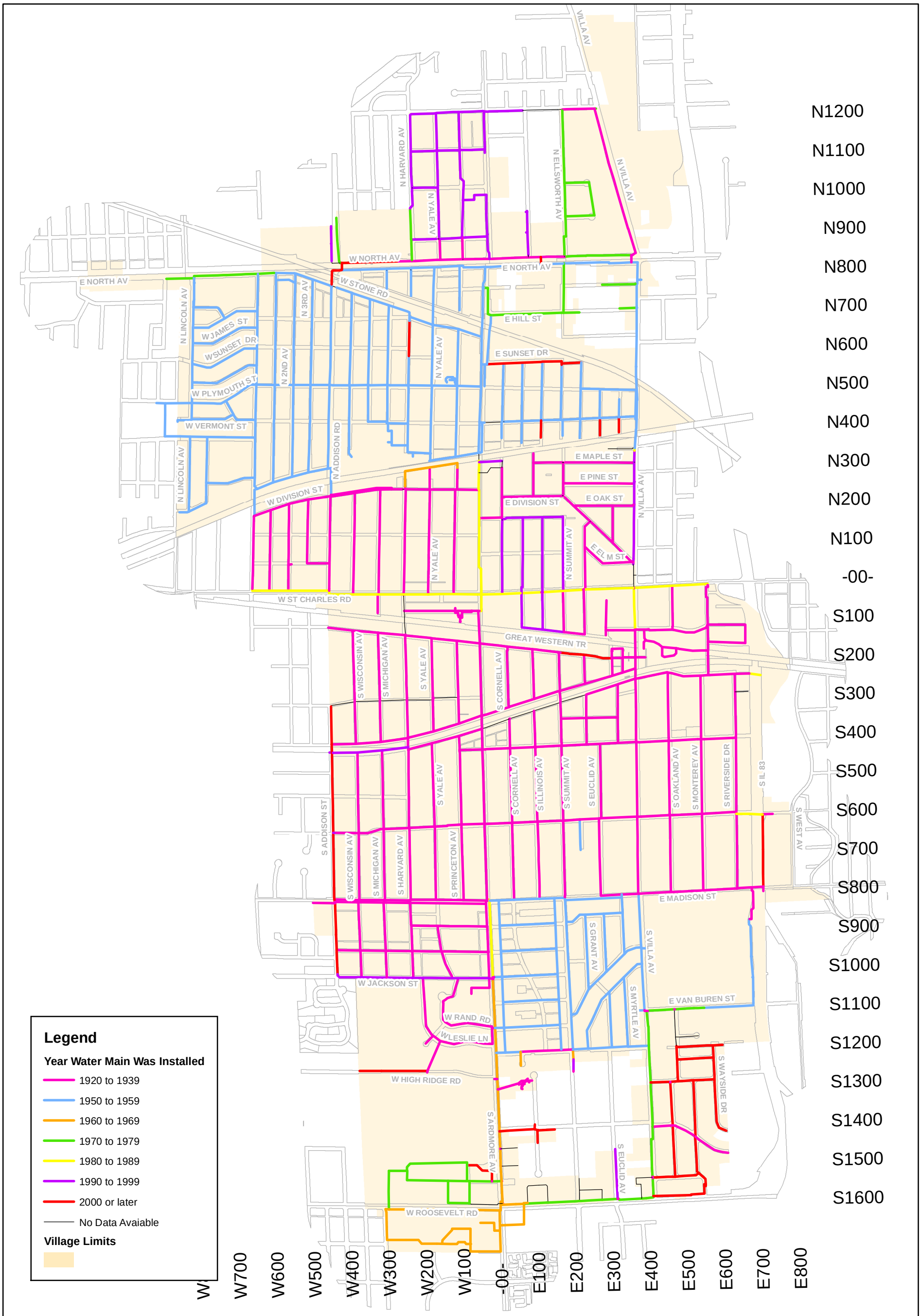
Village of Villa Park - Water Master Plan
Water Mains and Supply Facilities

0 500 1,000 Feet

April 13, 2006

villa park
THE GARDEN VILLAGE

EXHIBIT 2



rjn group
Excellence through Ownership

200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

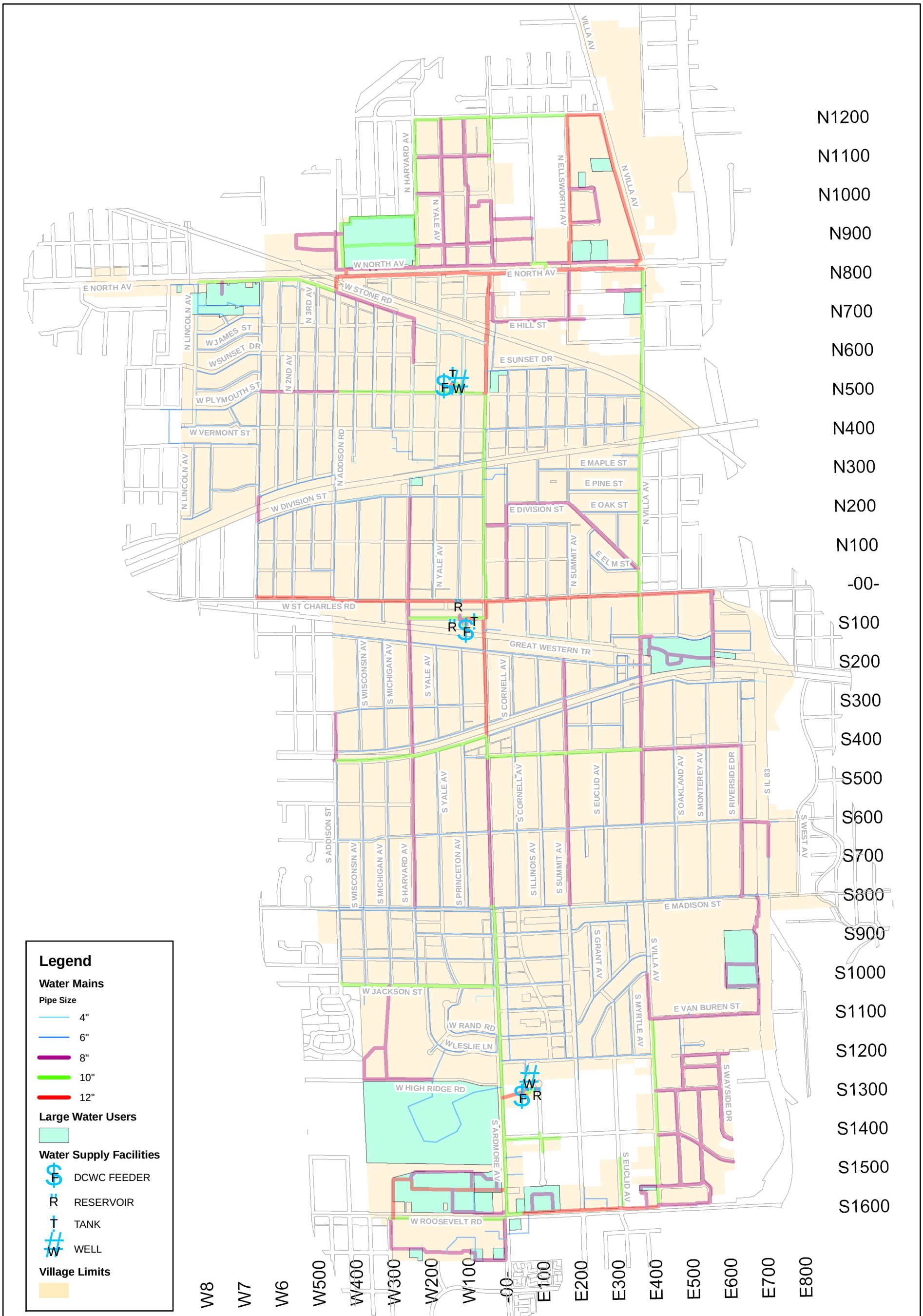
Village of Villa Park - Water Master Plan
Water Main Installation History

0 500 1,000 Feet

April 13, 2006

villa park
THE GARDEN VILLAGE

EXHIBIT 3



rjn group
Excellence through Ownership

200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

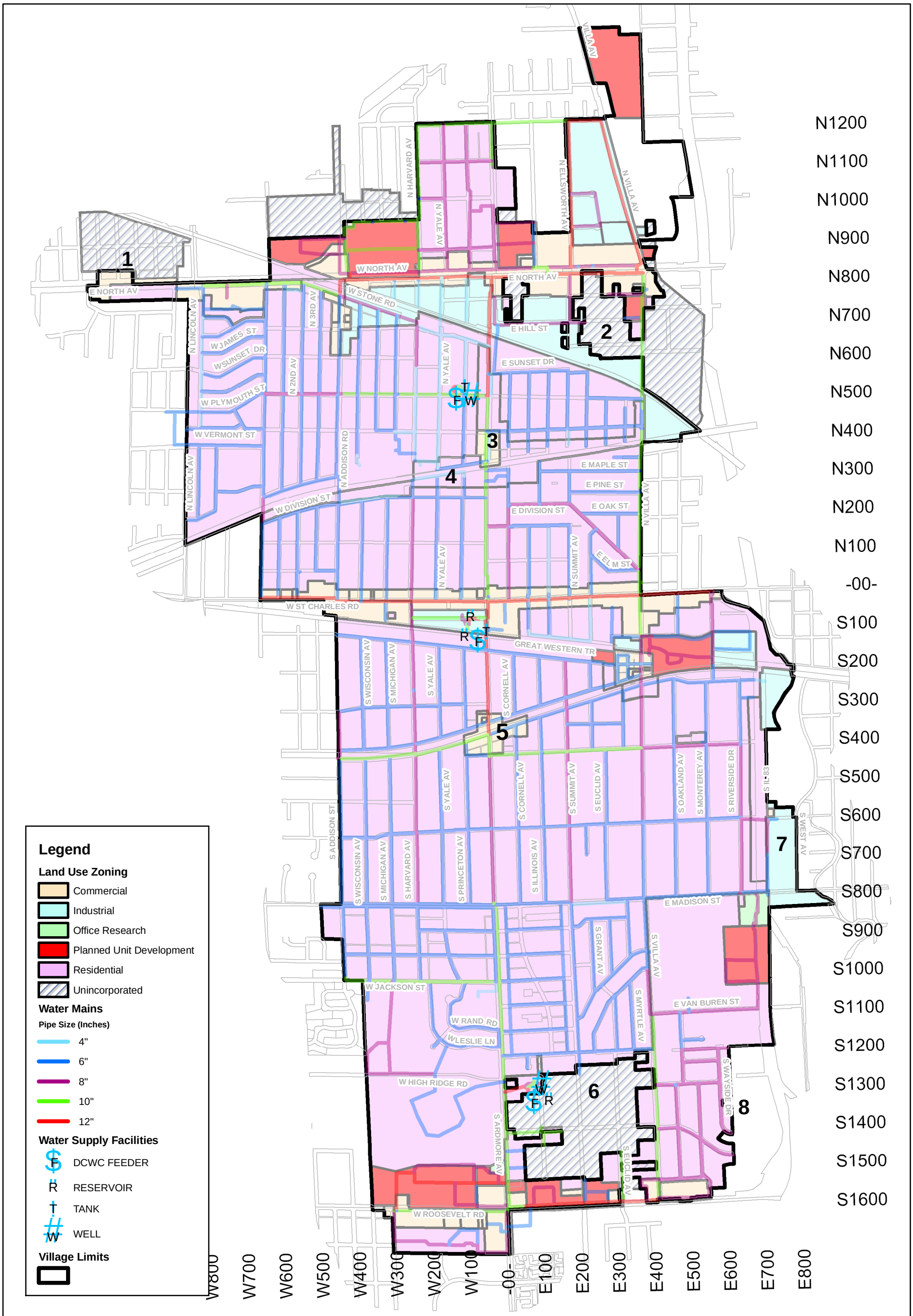
Village of Villa Park - Water Master Plan
Large Water Users

0 500 1,000 Feet

April 13, 2006

villa park
THE GARDEN VILLAGE

EXHIBIT 4



rjn group
Excellence through Ownership

200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

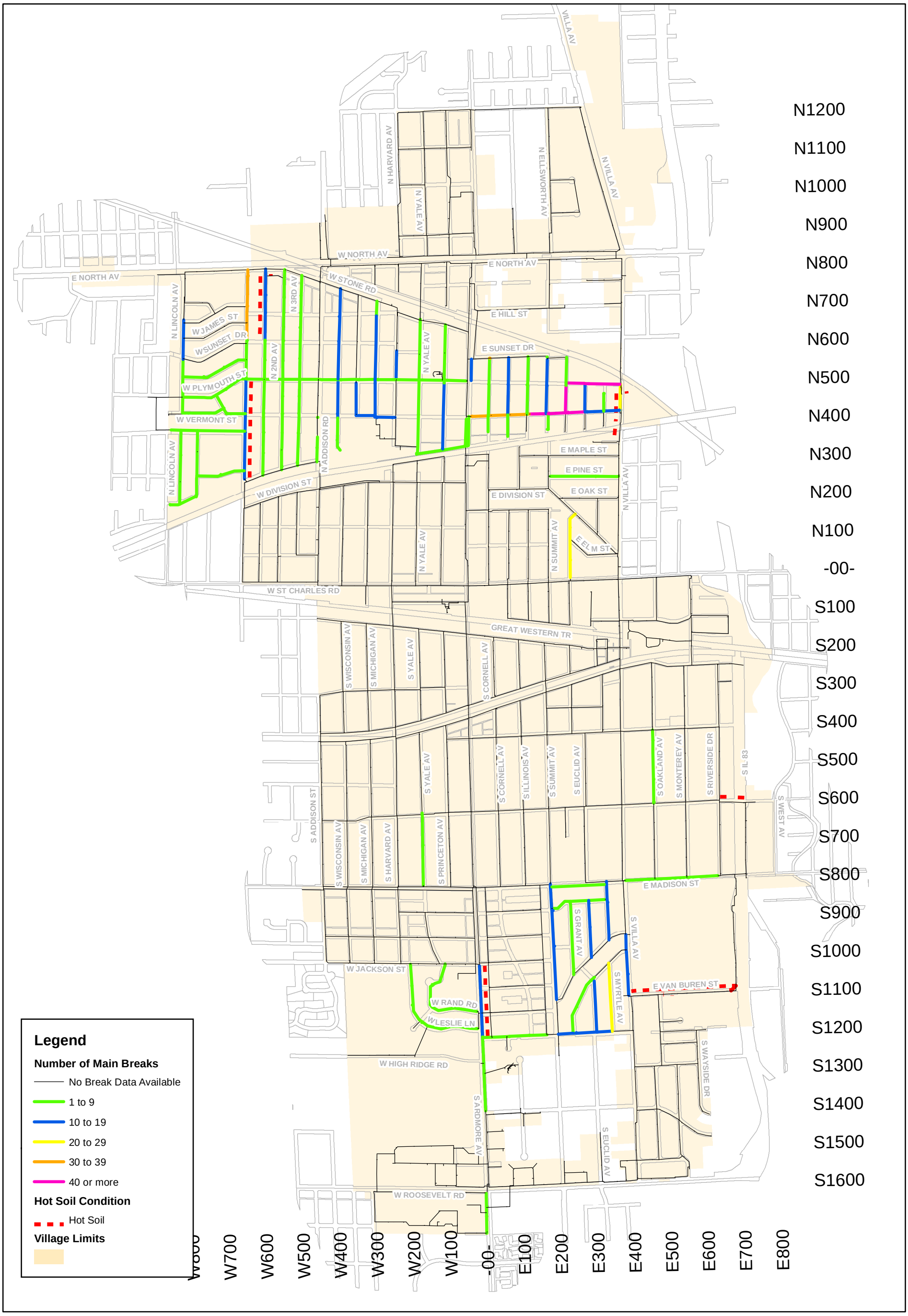
Village of Villa Park - Water Master Plan
Land Use

0 500 1,000 Feet

April 13, 2006

villa park
THE GARDEN VILLAGE

EXHIBIT 5



rjn group
Excellence through Ownership

200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

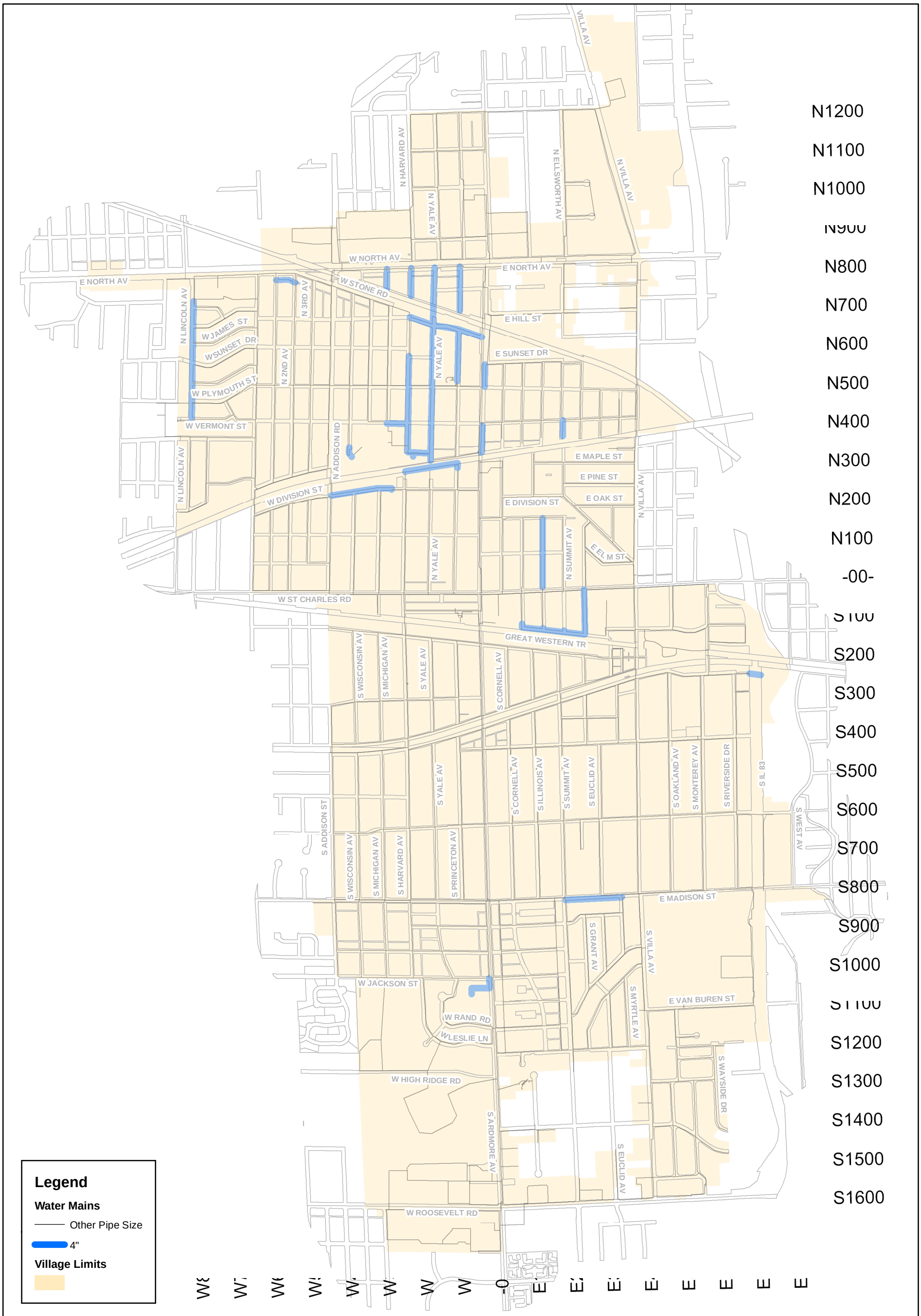
Village of Villa Park - Water Master Plan
Frequency of Main Breaks and Hot Spot Soil Conditions

0 500 1,000 Feet

April 13, 2006

villa park THE GARDEN VILLAGE

EXHIBIT 6



rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

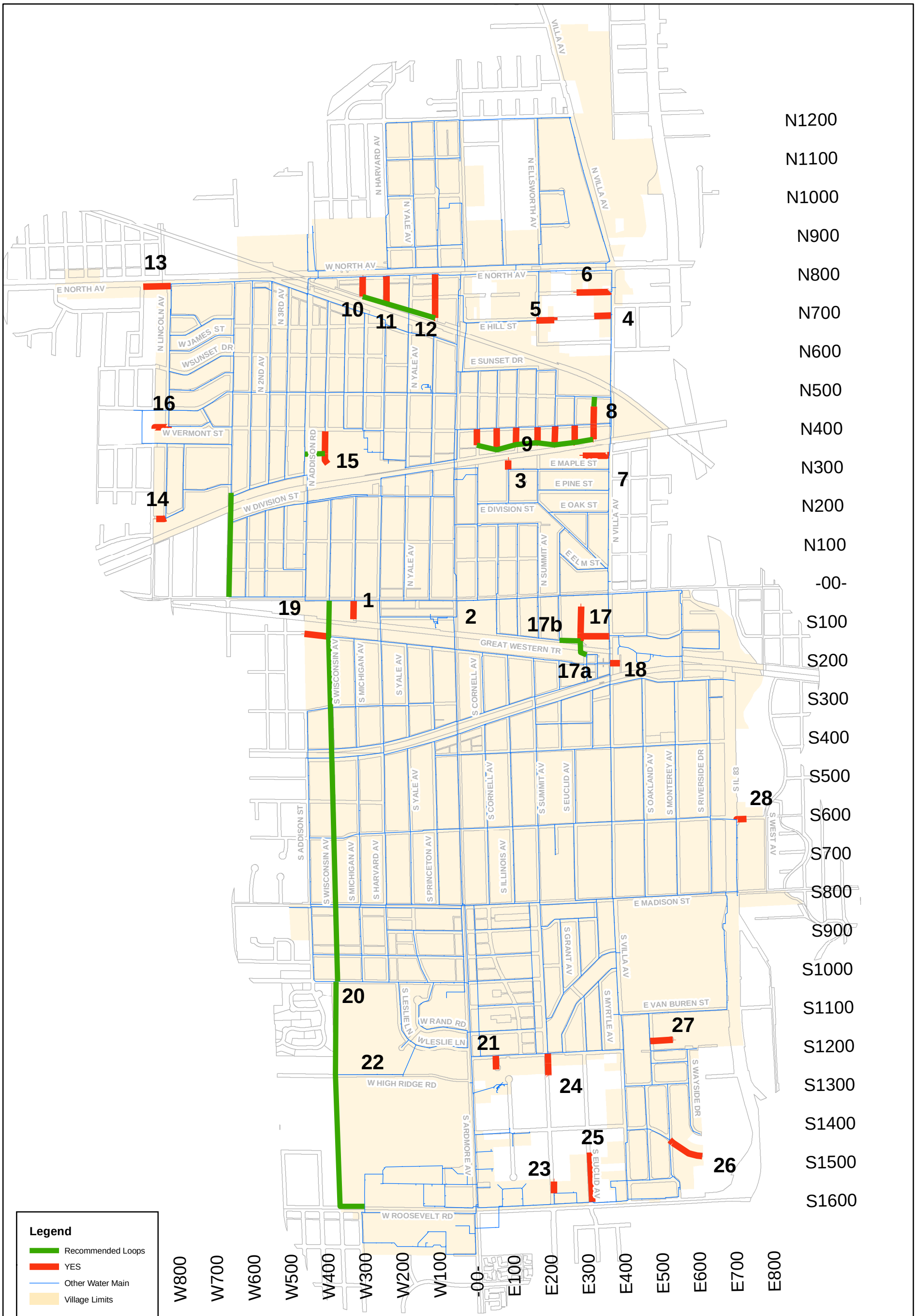
Village of Villa Park - Water Master Plan
4 Inch Water Mains

0 500 1,000 Feet

April 13, 2006

villa park
THE GARDEN VILLAGE

EXHIBIT 7



rjn group
Excellence through Ownership

200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

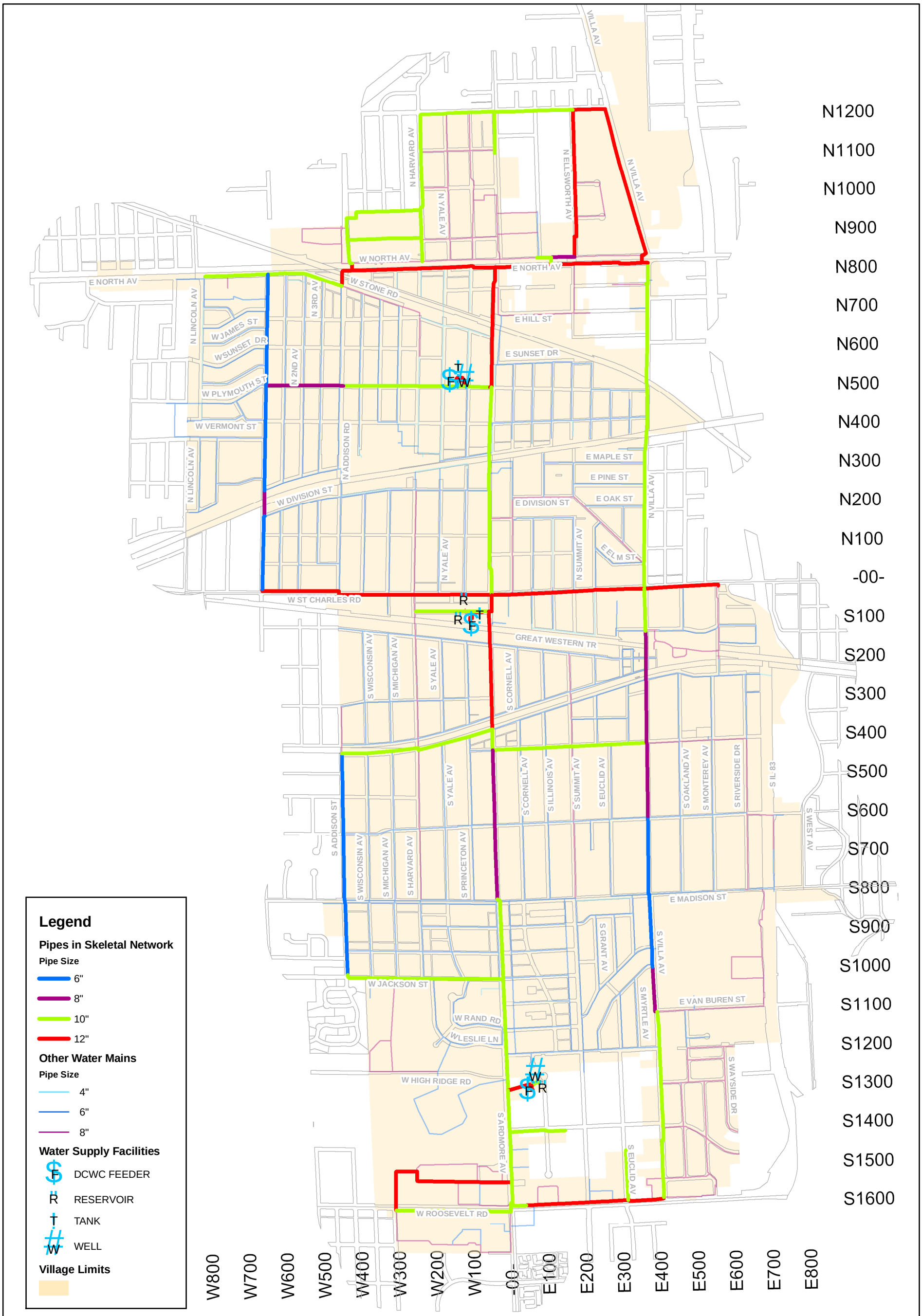
Village of Villa Park - Water Master Plan
Dead End Water Mains and Recommended Loops

0 500 1,000 Feet

April 13, 2006

villa park
THE GARDEN VILLAGE

EXHIBIT 8



Legend

Pipes in Skeletal Network

Pipe Size

- 6"
- 8"
- 10"
- 12"

Other Water Mains

Pipe Size

- 4"
- 6"
- 8"

Water Supply Facilities

- DCWC FEEDER
- RESERVOIR
- TANK
- WELL

Village Limits

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

Village of Villa Park - Water Master Plan
Skeletal Model Network

0 500 1,000 Feet

April 13, 2006

Villa Park THE GARDEN VILLAGE

EXHIBIT 9

N1200
N1100
N1000
N900
N800
N700
N600
N500
N400
N300
N200
N100
-00-
S100
S200
S300
S400
S500
S600
S700
S800
S900
S1000
S1100
S1200
S1300
S1400
S1500
S1600

W800
W700
W600
W500
W400
W300
W200
W100
-00-
E100
E200
E300
E400
E500
E600
E700
E800

Legend

Contour Lines

Elevation (MSL)

730
720
710
700
690
680
670
660
650

Water Supply Facilities

DCWC FEEDER
RESERVOIR
TANK
WELL

Villa Park Boundary

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

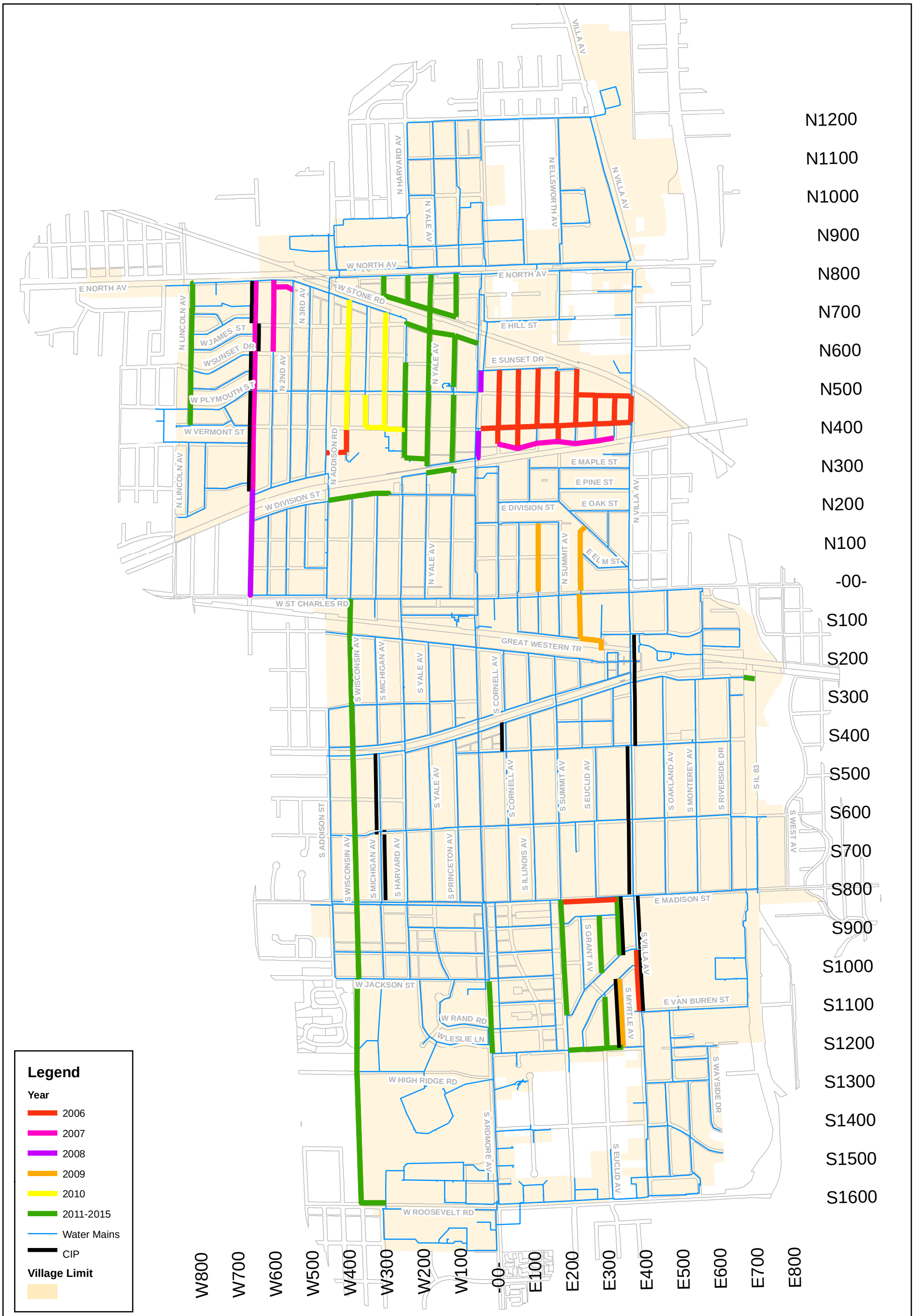
Village of Villa Park - Water Master Plan
Topographic Map

0 500 1,000 Feet

April 13, 2006

villa park
THE GARDEN VILLAGE

EXHIBIT 10



rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Illinois 60187
(630) 682-4700
www.RJN.com

Village of Villa Park - Water Master Plan
10-Year Plan - Recommended Improvements

0 500 1,000 Feet

April 13, 2006

villa park
THE GARDEN VILLAGE

EXHIBIT 11

APPENDICES

APPENDIX

A. EXHIBIT PHOTOS

B. TOP 25 WATER CONSUMERS 2004

C. 2005 WATER QUALITY REPORT AND SAMPLING REQUIREMENTS

D. DUPAGE WATER COMMISSION FACILITIES, INFORMATION, AND TESTING FOR 2005

E. VILLAGE STANDARD WATER VALVE IN VAULT AND FIRE HYDRANT

F. VILLAGE SPRINKLING RESTRICTIONS

G. VILLAGE OF VILLA PARK WATER ORDINANCE

H. WATER MODEL

data\report\207Appendix

APPENDIX

A. EXHIBIT PHOTOS

B. TOP 25 WATER CONSUMERS 2004

C. 2005 WATER QUALITY REPORT AND SAMPLING REQUIREMENTS

D. DUPAGE WATER COMMISSION FACILITIES, INFORMATION, AND TESTING FOR 2005

E. VILLAGE STANDARD WATER VALVE IN VAULT AND FIRE HYDRANT

F. VILLAGE SPRINKLING RESTRICTIONS

G. VILLAGE OF VILLA PARK WATER ORDINANCE

H. WATER MODEL

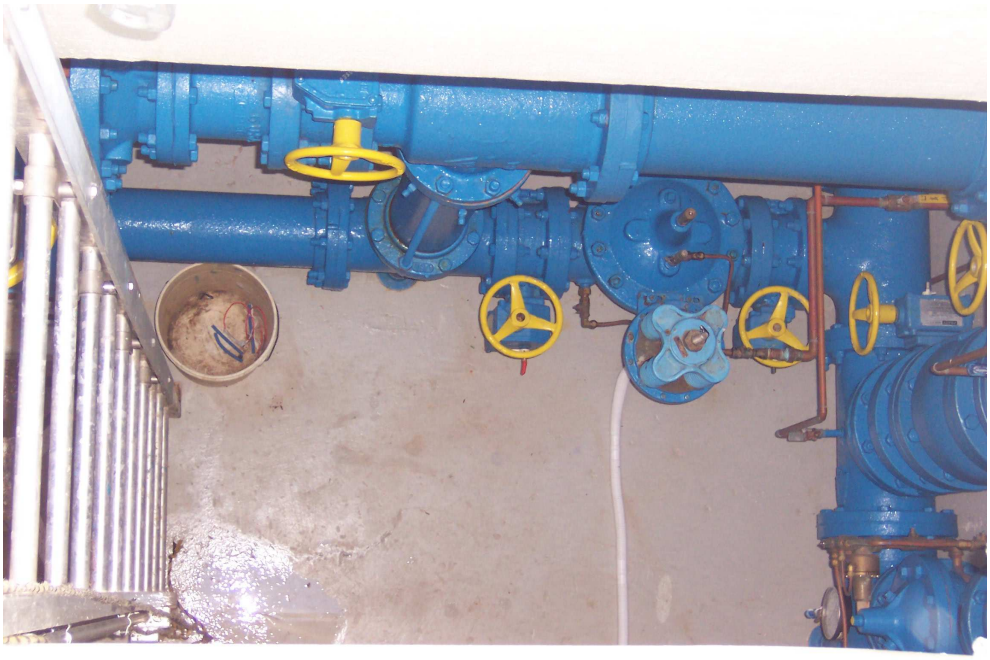
data\report\207Appendix

Appendix A

Villa Park Water Tower: Plymouth and Princeton

Waterous Fire Hydrant

Dupage Water Commission: Plymouth and Princeton



Pressure Adjusting Valve Vault: Home Ave.

Cornell Reservoir: 2,000,000 gallons

Booster Pump at Cornell

Appendix B

Village of Villa Park
Top 25 Water Consumers 2004

ADDRESS	NAME	Daily Average (gallons)
1649 S MICHIGAN	Krish Ramon	73,534
1050 N VILLA	Mickeys Linen & Towel	34,781
10 W ROOSEVELT	Accor Economy Lodge Site	26,164
2200 OVALTINE	Lincoln at Ovaltine	19,937
100 E ROOSEVELT	Courtyard LLC	18,304
629 W NORTH	Grande Coin Laundry	16,485
557 N ARDMORE	Maple Crossing	13,323
1250 S ARDMORE	Willowbrook H.S.	12,712
220 E NORTH	Supreme Lobster	11,608
300 W NORTH	North Park Mall	9,584
226 W ROOSEVELT	1st Chicago Pro Suite 106	9,449
200 E NORTH	Royal Management	8,603
712 N VILLA	Villa Garden LLC	7,488
1500 S ARDMORE	Willow Point Condos	7,123
226 E SIDNEY	QC Powder, Inc.	6,970
149 S MONTEREY	Wet Weather Flow Treatment	6,658
350 E ROOSEVELT	Suburban Lodge	6,156
10 E ROOSEVELT	Kappy's Restaurant	5,926
317 N HARVARD	Villa Park Manor Inc.	5,192
1 E ROOSEVELT	Oakbrook Terrace Citgo	4,910
900 S RT 83	Walmart	4,668
701 W NORTH	Safari Land	4,625
1650 S ARDMORE	Jolynn Brown	4,548
805 W NORTH	Rub A Dub	4,474
230 S VILLA	Mc Hone Enterprises	4,164
	TOTAL	**327,386**

Appendix C

VILLAGE OF VILLA PARK
2005 WATER QUALITY REPORT

May 2006

Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the period of January 1 to December 31, 2005. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Village of Villa Park is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water.

Este informe contiene información muy importante sobre el aqua usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

We are proud to report that the water provided by the Village of Villa Park meets or exceeds established water-quality standards.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Village Board meetings occur on Mondays. Please contact Village Hall for scheduled dates. Find out more about the Village of Villa Park on the Internet at [www.invillapark.com].

Water Source

The Village of Villa Park's source of drinking water is Lake Michigan. The lake water is treated at the City of Chicago Jardine Water Purification Plant. Since the quality of the raw water source is good, conventional treatment methods of disinfection, coagulation and sedimentation and sand filtration are adequate for producing water that is free of harmful contaminants. The water is purchased from the DuPage Water Commission and distributed to the residents of Villa Park. Each week water samples are collected from representative locations throughout the Village. The samples are delivered to an independent certified laboratory for microbiological analyses that include Total and Fecal Coliform Bacteria, and E.Coli Bacteria. None were detected in 2005.

Required Additional Health Information

In order to ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amount of some contaminants. The presence of contaminants does not necessarily indicate the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and ground water wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

An Explanation of the Water-Quality Data Table

The Chart in this report provides representative analytical results of water samples, collected from our system. Please note the following definitions:

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health MCLGs allow for a margin of safety.

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirement that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water. The data presented in this report is from the most recent testing done in accordance with regulations.

Key to Table

AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
TT = Treatment Technique
N/A = not applicable
ND= not detectable at testing limits
NTU = Nephelometric Turbidity Unit, used to measure cloudiness in drinking water
%<0.5 NTU = percent samples less than 0.5 NTU.
ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (ug/l)
#pos/mo= number of positive samples per month

Water-Quality Table Footnotes

Turbidity (NTU)

Turbidity is a measure of cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Sodium

There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

Unregulated Contaminants

A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

Fluoride

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2mg/l.

2005 WATER QUALITY DATA FOR THE CITY OF CHICAGO

Contaminants (units)	Date Tested	MCLG	MCL	Detected level	Range	Major Source	Violation
Microbial Contaminants							
Turbidity (%<0.3 NTU)	2005	N/A	TT	100.000%	N/A	Soil runoff. Lowest monthly percent meeting limit.	NO
Turbidity (NTU)	2005	N/A	TT=1NTUmax	0.095	0.08-0.12	Soil runoff. Highest single measurement.	NO
Inorganic Contaminants							
Barium (ppm)	2005	2	2	0.021	0.020-0.022	Discharge of drilling wastes; Discharge from metal refineries; Erosion of Natural deposits.	NO
Chromium (ppb)	2005	100	100	5.6	ND – 5.6	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	NO
Nitrate (as Nitrogen) (ppm)	2005	10	10	0.340	ND-0.340	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of Natural deposits.	NO
Nitrate & Nitrite (ppm)	2005	10	10	0.340	ND-0.340	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of Natural deposits.	NO
Unregulated Contaminants							
Sulfate (ppm)	2005	N/A	N/A	26.700	25.800-27.600	Erosion of Naturally occurring deposits.	NO
State Regulated Contaminants							
Sodium (ppm)	2005	N/A	N/A	7.500 (Highest Value)	7.300-7.500	Erosion of Naturally occurring deposits; Used as water softener.	NO
Flouide (ppm)	2005	4	4	0.959	0.920 – 1.03	Water additive which promotes strong teeth.	NO
Disinfectants/Disinfection By-Products							
TTHMs (Total Trihalomethanes) (ppb)	2005	N/A	80	16.100	10.000-22.500	By-product of drinking water disinfection.	NO
HAA5 (Haloacetic Acids) (ppb)	2005	N/A	60	8.350	5.500-10.700	By-product of drinking water disinfection	NO
Chlorine (as Cl2) (ppm)	2005	4.0	4.0	0.6961 (Highest Value)	0.6468-0.6961	Drinking water disinfectant	NO
TOC [Total Organic Carbon]						The percentage of TOC removal measured each month and the system met all TOC requirements set by IEPA	
Radioactive Contaminants							
Beta/Photon Emitters (pCi/l)	11/5/01	0	50	2.000	ND – 2.000	Decay on natural and man-made deposits.	NO

CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT SOURCE WATER ASSESMENT SUMMARY FOR THE 2005 COMSUMER CONFIDENCE REPORT (CCR)

The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of the source water to contamination. The Illinois EPA has completed the Source Water Assessment Program for our supply.

Source Water Assessment

A Source Water Assessment summary is included below for your convenience.

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection only dilution. This is the reason for mandatory treatment for all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas and shoreline point sources due to the influx of groundwater to the lake. Throughout history there have been extraordinary steps taken to assure a safe source of drinking water in the Chicagoland area. From the building of the offshore cribs and the introduction of interceptor sewers to the lock-and-dam system of Chicago's waterways and the city's Lakefront Zoning Ordinance. The city now looks to the recently created Department of the Water Management, Department of Environment and the MWRDGC to assure the safety of the city's water supply. Also, water supply officials from Chicago are active members of the West Shore Water Producers Association. Coordination of water quality situations (i.e., spills, tanker leaks, exotic species, etc) and general lake conditions are frequently discussed during the association's quarterly meetings. Also, Lake Michigan has a variety of organizations and associations that are currently working to either maintain or improve water quality. Finally, one of the best ways to ensure a safe source of drinking water is to develop a program designed to protect the source water against potential contamination on the local level. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of the watershed protection activities in this document are aimed at this purpose. Citizens should be aware that everyday activities in an urban setting might have a negative impact on their source water. Efforts should be made to improve awareness of storm water drains and their direct link to the lake within the identified local source water area. A proven best management practice (BMP) for this purpose has been the identification and stenciling of storm water drains within a watershed. Stenciling along with an educational component is necessary to keep the lake a safe and reliable source of drinking water.

Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at 312-744-6635.

If you have questions regarding the Village of Villa Park water system, or this report, please contact John Beckwith, Utilities Superintendent at the Public Works Department at 630-834-8505.

2005 WATER QUALITY DATA FOR THE VILLAGE OF VILLA PARK

Lead and Copper

Date Sampled: 7/8/2005

Definitions:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	# Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# Sites Over Copper AL	Likely Source of Contamination
0	15 ppb	6 ppb	2	1.3 ppm	1.3 ppm	0.04 ppm	0	Corrosion of household plumbing systems; Erosion of natural deposits

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maxium Contaminant Level Goal as feasible using the best available treatment technology.Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.mg/l: milligrams per litre or parts per million - or one ounce in 7,350 gallons of water.ug/l: micrograms per litre or parts per billion - or one ounce in 7,350,000 gallons of water.na: not applicable.Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water.Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

Disinfectants & Disinfection By-Products (Units)	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Likely Source Of Contaminant
Total Haloacetic Acids (HAA5) ppb	7/20/2005	11.7	3.4 - 11.7	N/A	60	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] ppb	10/12/2005	34.2	15.2 - 34.2	N/A	80	No	By-product of drinking water chlorination
Chlorine ppm	11/30/2005	0.592	0.56 - 0.592	MRDLG=4	MRDL=4	No	Water additive used to control microbes
Inorganic Contaminants (Units)	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Violation**	**Likely Source Of Contaminant**
Barium ppm	2/3/2005	0.073	Not Applicable	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride ppm	2/3/2005	1	Not Applicable	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
State Regulated Contaminants (Units)	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Violation**	**Likely Source Of Contaminant**
Iron ppb This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.	2/3/2005	260	Not Applicable	N/A	1000	No	Erosion from naturally occurring deposits
Manganese ppb This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.	2/3/2005	14	Not Applicable	N/A	150	No	Erosion of naturally occurring deposits
Sodium ppm There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.	2/3/2005	32	Not Applicable	N/A	N/A	No	Erosion of naturally occuring deposits; used in water softener regeneration
Zinc ppb	2/3/2005	7	Not Applicable	N/A	5000	No	Naturally occuring; discharge from metal factories

Appendix D

DuPage Water Commission

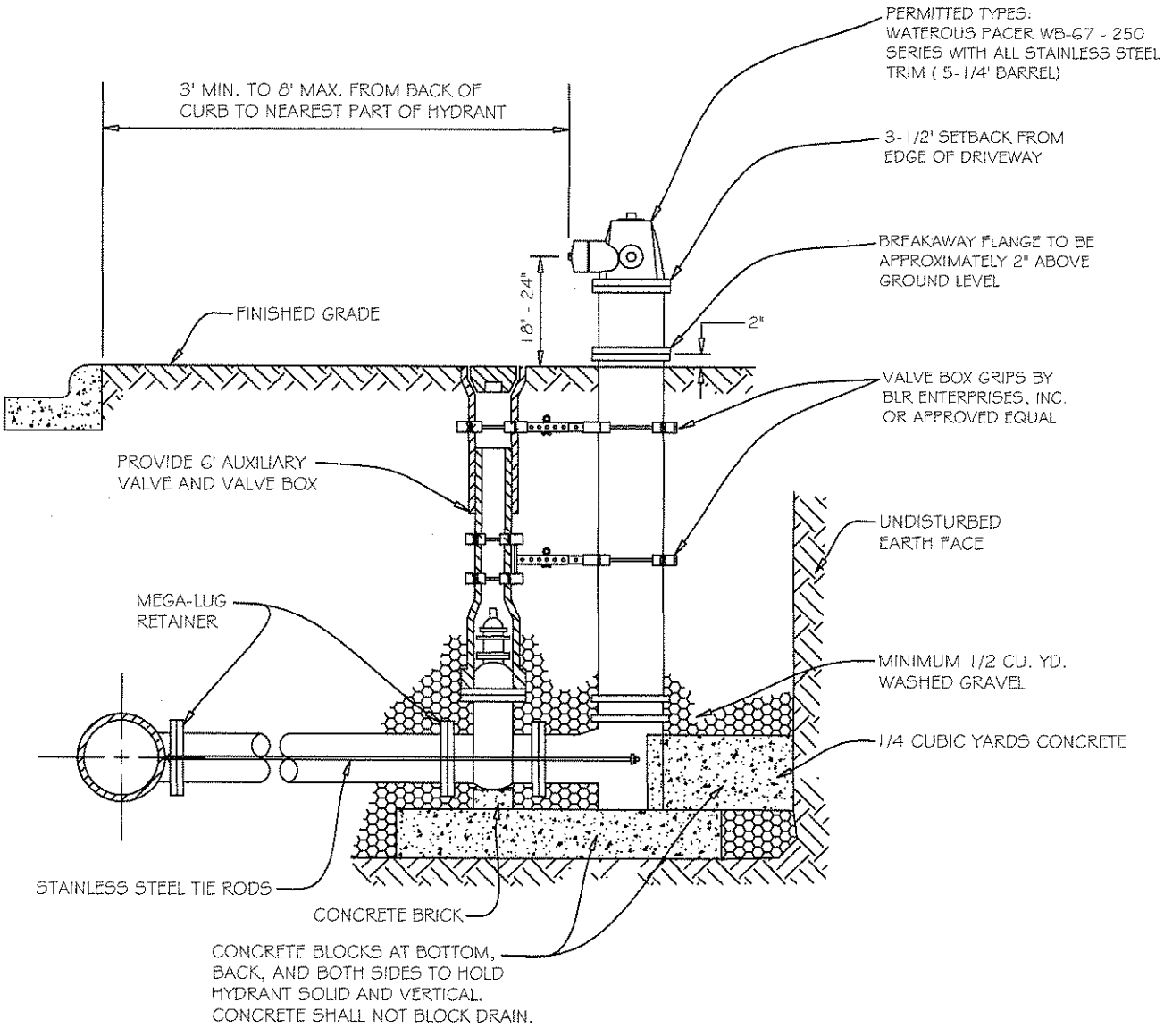
Commission Historical Usage

Service Area Supplied: 300 square miles. Water Use (in million gallons).

DATES	AVERAGE DAILY	MAXIMUM DAILY
5/1/93 - 4/30/94	71.4	78.9
5/1/94 - 4/30/95	75.8	105.1
5/1/95 - 4/30/96	81.0	103.4
5/1/96 - 4/30/97	80.7	102.2
5/1/97 - 4/30/98	82.6	106.6
5/1/98 - 4/30/99	87.6	110.7
5/1/99 - 4/30/00	92.1	139.1
5/1/00 - 4/30/01	89.4	107.0
5/1/01 - 4/30/02	86.8	124.0
5/1/02 - 4/30/03	88.7	126.3
5/1/03 - 4/30/04	86.4	104.5

Gross Daily Pumping Capacities (in million gallons)
Lexington Pumping Station 210
DuPage Pumping Station 185
Water Storage
Ground Storage Lexington Pumping Station 30
Ground Storage DuPage Pumping Station 30
Standpipes 32.5
Metering Stations
79
Distribution System
Miles of main in system (12" - 90") 152.6

Appendix E



GENERAL NOTES:

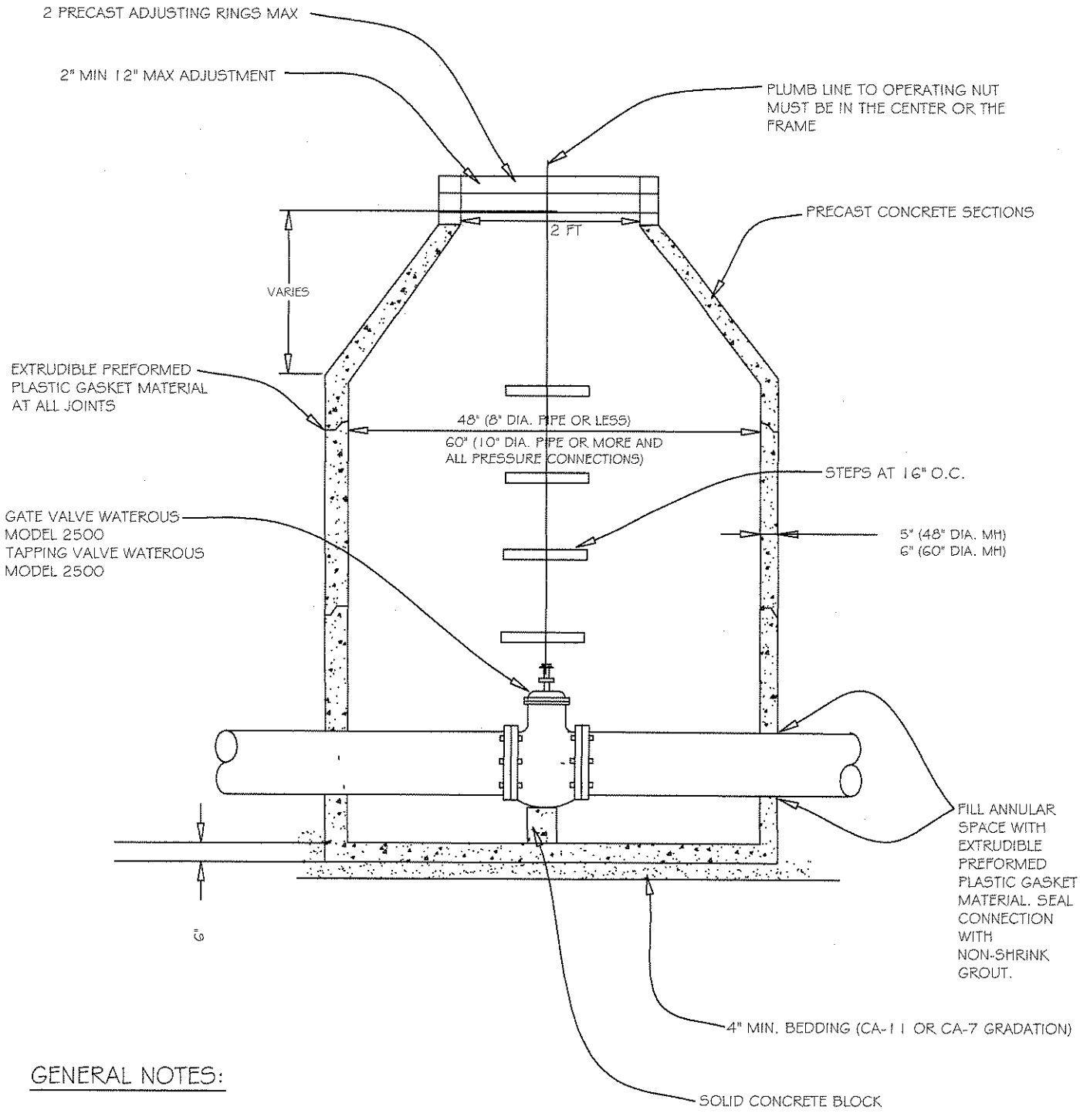
1. MAXIMUM BARREL EXTENSIONS ARE 18 INCHES AND SHALL BE WATEROUS EXTENSION FOR WATEROUS HYDRANTS.
2. ALL HYDRANTS ARE TO BE SUPPLIED WITH A 6" FLANGED AND MECHANICAL JOINT AUXILIARY VALVE THAT CONFORMS TO AWWA 500-80. ALL TRIM BOLTS ARE TO BE STAINLESS STEEL.
3. ALL BELOW GRADE FASTENERS TO BE STAINLESS STEEL:
   A. BOLTS AND THREADED RODS - GRADE #304
   B. NUTS AND WASHERS - GRADE #300
4. MEGA-LUG RETAINERS MUST BE INSTALLED ON ALL MECHANICAL FITTINGS.

NOT TO SCALE

REV:		DATE:	FIRE HYDRANT SETTING
REV:	RMS	DATE: JUL 2004	
DRAWN BY:	VV	DATE: JAN 2003	

VILLAGE OF VILLA PARK

WATER - 04



GENERAL NOTES:

1. ALL BELOW GRADE FASTENERS TO BE STAINLESS STEEL:
   A. BOLTS AND THREADED RODS - GRADE #304
   B. NUTS AND WASHERS - GRADE #300

2. FRAME AND LID:
   NEENAH R-1015-2000 FRAME
   NEENAH R-1015-2001 SELF SEALING LID
   "WATER" TO BE CAST INTO COVER

NOT TO SCALE

REV:		DATE:
REV:	RMS	DATE: JUL 2004
DRAWN BY:	VV	DATE: JAN 2003

WATER VALVE IN VAULT

VILLAGE OF VILLA PARK

WATER - 14

Appendix F

French Market Celebrates 4th Season in Villa Park

Villa Park's French Market will celebrate its 4th season when it opens on Sunday, April 30th. Open every Sunday from 8 a.m. to 1 p.m. at the corner of Park Boulevard and Ardmore Avenue, the French Market has offered a wide variety of specialty products including fresh flowers and plants, fresh produce, pottery, hand-made soaps and many more items. For those interested in becoming a vendor at the market, contact Leslie Cahill at 630.784.0862.□

The French Market will be open until October 30th.
Come, Check It Out!

PUBLIC WORKS DEPT. MOVES INTO NEW BUILDING

Villa Park's Public Works Department officially relocated into the former Police Station at 11 West Home Avenue and claimed the building as their new Public Works Operations Center in April of this year. After months of intense remodeling, the new Public Works Operations Center is fully operational and open to the public. The Public Works Operations Center will house the Village's engineering, streets, sewer, water and forestry activities. The old Public Works buildings located adjacent to the Village Hall will be demolished to make room for additional parking.□

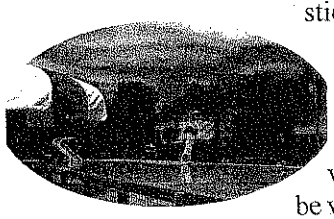
All Nicor Gas Employees Wear Identification

Ask To See It Before Allowing Anyone Into Your Home

If you receive an unexpected visit from someone stating he/she is an employee or contractor working on behalf of Nicor Gas and wants to enter your home, please request to see their company-issued photo identification badge before allowing them into your home. The identification card features the employee's photo, name and the Nicor Gas' logo on the front side and on the backside states the company's address and toll-free customer care telephone number, 1-888-Nicor4u.□

Pool Passes and Renewal Stickers on Sale Now!

If you purchased a pass in 2004, all you need to do is purchase a 2005 sticker. Simply complete the application and bring it and your pass to either the Community Recreation Building or the Iowa Community Center and we will place the 2005 sticker on your pass. Your pass will not be valid until the sticker is affixed. Please Note: You will need a new pass if you are adding a person to your household pass, moving from a child pass to an adult pass or an adult pass to a senior pass. These will be issued at no additional cost.



New passes may be purchased by completing a Pass Application form and submitting it to the Community Recreation Building or the Iowa Community Center via the fax or mail and then having your picture taken at the Iowa Community Center. Passes will not be issued until photos are taken.□

Odds & Ends

Seasonal collection of brush and yardwaste is scheduled to begin April 1, 2005 through mid-December 12, 2005. Residents are reminded that brush must be tied into bundles no longer than 4 feet and no larger than 18 inches in diameter. Brush bundles must not exceed 50 pounds in weight. No limbs over 4 inches in diameter can be accepted. Yardwaste disposal stickers are not required for the disposal of brush bundles.

All other yardwaste must be disposed of in a 30-gallon biodegradable Kraft paper bags or 35 gallon waste cans and require one landscape disposal sticker per bag or can. Paper bags or cans of landscape waste must not exceed 50 pounds in weight.

For more information on landscape and solid waste disposal, visit the Village of Villa Park's web site at *www.invillapark.com*□

Sprinkling Restrictions

Sprinkling restrictions will once again be in affect between May 15 and September 15 and are as follows:

No sprinkling between the hours of noon and 6 p.m.

Even numbered addresses can water on even numbered calendar dates and odd numbered address can water on odd numbered calendar dates except no sprinkling between noon and 6 p.m.

Sprinkling permits are available from the Community Development Dept. for property owners with newly planted sod or grass.□

Pools Open Daily

June 3-August 23
12:00-8:00 p.m.

Appendix G

Chapter 25

WATER, SEWERS AND SEWAGE DISPOSAL*

ARTICLE I. IN GENERAL

Sec. 25-101. Application for service.

Any person desiring the use of and service supplied by the combined waterworks and sewerage system shall make application for either water or sewerage service, or both water and sewerage service, on a form furnished by the village clerk.
(Ord. No. 1198, § 2, 10-26-70)

Sec. 25-102. Security deposit.

(a) To secure the payment of bills, a security deposit shall be required from each applicant for each home or commercial unit to be served. When the owner of a residence and/or a commercial unit to be served does not occupy that residence or commercial unit, a security deposit shall be required from that owner as well as the tenant occupying the premises. The security deposit shall be thirty dollars ($30.00) for single family homes or per unit in the case of multiple family dwellings.

(b) In cases where the amount of water used by commercial industrial users or the character of sewage from an industrial plant, building or premises is such as to present a greater risk of loss and cost of collection, then it is hereby made the duty of the village to increase the

*Cross references—Buildings and building regulations, Ch. 7; environmental control board, Ch. 2, Art. XXV; housing code, Ch. 12; detergents containing phosphates, § 16-109; swimming pools, Ch. 22.

amount of the security deposit required of the user, applicant, or the owner of said premises in such amount so as not to exceed the maximum amount which may be charged in any succeeding quarterly period.

(c) The security deposit of the applicant shall be applied to the final bill. The village may refund the deposit of single family owner occupied residences upon request and upon evidence of prompt payment of the account for a period of four (4) consecutive years.
(Ord. No. 1198, §§ 2, 4, 5, 10-26-70; Ord. No. 1926, §§ 3—5, 8-18-80)

Sec. 25-103. Connection charges.

(a) It shall be unlawful to connect any premises with any part of the Village sanitary sewerage system without first having paid any and all charges, fees, costs and expenses, whether imposed by ordinance, by agreement, or otherwise, including but not limited to connection fees ("Type A" and "Type B"), special connection fees, and recapture fees, of the village, and any connection fees as may be required by the ordinances of the Salt Creek Drainage Basin Sanitary District then in force and effect and due proof shall be required as to such payment to Salt Creek Drainage Basin Sanitary District.

(b) It shall be unlawful to connect any premises with the village water system unless and until any and all charges, fees, recapture fees, whether imposed by ordinance, agreement, or otherwise, including a connection fee ("Type A" and "Type B") for the same is paid the village at the time a building or water connection permit is applied for.

(c) There be and there is hereby established rates or charges for the connection of premises to the village sewerage system which shall be known as "Type A" and "Type B" sewerage connection charges, which are as follows:

(1) "Type A" sewerage connection charges are for maintenance, improvement and expansion of the system of mains and interceptor sewers and apply to all properties and are as follows and shall be computed at the highest charge yielded by computation under paragraphs a, b or c below:

a. For single and multi-family residences: A basic charge of fifty dollars ($50.00) per each unit plus fifty dollars ($50.00) for each bedroom, but not less than one hundred dollars ($100.00). One room apartments shall be considered as one bedroom apartments and pay one hundred dollars ($100.00) hereunder.

b. For commercial, institutional and industrial premises:

1. A basic charge of twenty-five dollars ($25.00) for each fixture including lavatory, wash basin, shower, work basin, drain outlet or similar fixture, and garbage grinders up to three-fourths horsepower but no total charge for any one premises shall be less than two hundred dollars ($200.00); or,

2. Alternate charges, if greater than 1. above, of forty dollars ($40.00) per capita based on the population equivalent loading factor to be determined by the highest of the following criteria:

(i) Suspended solids 0.2 pounds per day per capita.

(ii) Five (5) day B.O.D. 0.17 pounds per day per capita.
(iii) Average flow one hundred (100) gallons per day per capita.
(iv) Actual number of residents and/or employees. Employees are to be counted as a population equivalent of one-half person each or one-third if more than one shift is counted.

c. Nothing before the contrary withstanding the minimum sewerage connection charge for all residential, commercial, institutional and industrial premises shall be not less than an amount of nine hundred thirty-five dollars ($935.00) multiplied by the number of acres or fraction of the premises to be connected.

(2) "Type B" sewerage connection charges are to defray the pro rata expense of lateral or other sewers directly serving individual properties which are installed in the right-of-way adjacent to these properties, and are as follows:

a. A connection charge in addition to those provided by subsection (1) above to be charged to each premises to be connected to the village sewerage system to be computed and determined on the basis of twenty-five dollars ($25.00) per foot of sewer line passing adjacent to the premises, except that in cases where the said sewer line is used, connected or tied into by premises on both sides of any street or highway right-of-way the said charge shall be only fifteen dollars ($15.00) per foot due to the increased contribution available through use of said line for abutting properties on both sides.

b. The "Type B" sewerage connection charge for corner lots shall be computed first along the narrow frontage as measured along the right-of-way line of the abutting street or highway and second along the longer frontage of said lot abutting the other street or highway except that the first one hundred fifty (150) feet of depth along said longer frontage shall not be counted in computing said charge.

(d) There be and there is hereby established rates or charges for the connection of premises to the village water system which shall be known as "Type A" and "Type B" water connection charges, which are as follows:

(1) "Type A" water connection charges are for maintenance, improvement and expansion of the system of wells, storage and transmission facilities and apply to all properties and are as follows and shall be computed at the highest charge yielded by computation under paragraphs a, b or c below:

a. For single and multi-family residences: A basic charge of fifty dollars ($50.00) per each unit plus fifty dollars ($50.00) for each bedroom, but not less than one hundred dollars ($100.00). One room apartments shall be considered as one bedroom apartments and pay one hundred dollars ($100.00) hereunder.

b. For commercial, institutional and industrial premises: A basic charge of twenty-five dollars ($25.00) for each fixture including lavatory, wash basin, shower, work basin, drain outlet or similar fixture, and garbage grinders up to three-fourths

horsepower but no total charge for any one premises shall be less than two hundred dollars ($200.00). However, fixtures for sprinkler systems shall not be counted for this purpose.

c. Nothing before the contrary withstanding the minimum water connection charge for all residential, commercial, institutional and industrial premises shall be not less than an amount of nine hundred thirty-five dollars ($935.00) multiplied by the number of acres of fraction of the premises to be connected.

(2) "Type B" water connection charges are to defray the pro rata expenses of eight (8) inch diameter or smaller watermains directly serving individual properties which are installed in the right-of-way adjacent to these properties and are as follows:

a. A connection charge in addition to those provided by paragraph 1. above to be charged to each premises to be connected to the village water system to be computed and determined on the basis of fifteen dollars ($15.00) per foot of water line passing adjacent to the premises, except that in cases where the said water line is used, connected or tied into by premises on both sides of any street or highway right-of-way the said charge shall be only ten dollars ($10.00) per foot due to the increased contribution available through use of said line for abutting properties on both sides.

b. The "Type B" water connection charge for corner lots shall be computed first along the narrow frontage as measured along the right-of-way line of the abutting street or highway and second along the longer frontage of said lot abutting the other street or highway except that the first one hundred fifty (150) feet of depth along said longer frontage shall not be counted in computing said charge.

(e) "Type B" sewer and water connection charges will not apply where the owner of the property installs or has installed sewer and water lines or has paid for this cost by special assessment, special service area, recapture fee, or otherwise. Where the village has entered into a recapture agreement for the extension of sewer or water lines, the higher fee shall prevail—except that in a case involving trunk or arterial extensions, the village board may waive the recapture fees in favor of the "Type B" fees. There shall be no connection charge made, levied or assessed against any governmental premises.

(f) *Roosevelt Road/Euclid Avenue Sanitary Sewer Extension.* A special connection fee in the amount of twenty thousand dollars ($20,000.00) is hereby imposed upon each of the parcels set forth hereinafter, to be commonly referred to as the "Roosevelt Road/Euclid Avenue Sanitary Sewer Non-Construction Special Connection Fee." Said fee shall be assessed against each of the three (3) parcels specified herein upon application for connection to the Villa Park municipal waste water system or the waste water system line located in the Village of Villa Park between the west side of Summit Avenue and the west side of Euclid Avenue on the north side of Roosevelt Road. This special connection fee shall cover the cost of acquisition of necessary easements for the construction of the sanitary sewer main in that location. The Roosevelt Road/Euclid Avenue Sanitary Sewer Nonconstruction Special Connection Fee is separate and

apart from any other fees or charges or constructions costs and specifically does not include any recapture fee or "Type A" or "Type B" charges or any other fee or charges as may be set forth in the Villa Park Municipal Code.

Parcel 1: Lots 27 and 28 (except the north 60 feet thereof) in Riordon's Subdivision, a subdivision in the east one-half of the southwest quarter of Section 15, Township 39 North, Range 11, East of the Third Principal Meridian, according to the plat thereof recorded May 16, 1945, as Document No. 477866, in DuPage County, Illinois.

PIN: 06-15-306-011 and 06-15-306-028

Parcel 2: Lots 25 and 26 in Riordon's Subdivision, a subdivision in the east one-half of the southwest quarter of Section 15, Township 39 North, Range 11, East of the Third Principal Meridian, according to the plat thereof recorded May 16, 1945, as Document No. 477866, in Dupage County, Illinois.

PIN: 06-15-306-020, 06-15-306-024 and 06-15-306-025

Parcel 3: Lots 23 and 24 in Riordon's Subdivision, a subdivision in the east one-half of the southwest quarter of Section 15, Township 39 North, Range 11, East of the Third Principal Meridian, according to the plat thereof recorded May 16, 1945, as Document No. 477866, in DuPage County, Illinois.

PIN: 06-15-306-029

(g) A special connection fee, to be commonly referred to as the Roosevelt Road/Euclid Avenue Sanitary Sewer Construction Fee in the amount specified hereinafter shall be and are hereby assessed against each of the parcels designated by either legal description of PIN and in the amounts designated. This special connection fee is in furtherance and in aid of certain recapture agreements approved by Resolution No. 94-75 and Resolution No. 94-76, and not in derogation thereof. In the event of a conflict between the provisions of this paragraph and such recapture agreement, the recapture agreement shall prevail. The Roosevelt Road/Euclid Avenue Sanitary Sewer Construction Fee is separate and apart from any other fees or charges or connection fees, including "Type A" charges and "Type B" charges, or any other special connection fee which might be provided for by the Villa Park Municipal Code.

Parcel 1: Lots 27 and 28 (except the north 60 feet thereof) in Riordon's Subdivision, a subdivision in the east one-half of the southwest quarter of Section 15, Township 39 North, Range 11, East of the Third Principal Meridian, according to the plat thereof recorded May 16, 1945, as Document No. 477866, in DuPage County, Illinois.

PIN: 06-15-306-011 and 06-15-306-028
The sum of $16,267.42, together with interest at the rate of 5% per annum from date of acceptance.

Parcel 2: Lots 25 and 26 in Riordon's Subdivision, a subdivision in the east one-half of the southwest quarter of Section 15, Township 39 North, Range 11, East of the Third Principal Meridian, according to the plat thereof recorded May 16, 1945, as Document No. 477866, in DuPage County, Illinois.

PIN: 06-15-306-020 and 06-15-306-024 and 06-15-306-025
The sum of $11,844.41, together with interest at the rate of 5% per annum from date of acceptance.

For the parcels identified by:

PIN 06-15-306-019:	.0954 × $44,888.64	$4,282.37	Together with interest
PIN 06-15-306-018:	.0958 × 44,888.64	4,300.33	at the rate of 5% per
PIN 06-15-307-008:	.1445 × $44,888.64	6,486,40	annum from date of
PIN 06-15-307-007:	.09465 × $44,888.64	4,248.70	acceptance.
PIN 06-15-307-006:	.0952 × $44,888.64	4,273.39	
PIN 06-15-307-005:	.09465 × $44,888.64	4,248.70	

PIN 06-15-307-004: .09465 × $44,888.64 4,248.70

(h) *North Side Sanitary Sewer Extension / Exemption from certain connection fees.*

(1) *Project area.* The project area includes all property within the corporate limits of the Village of Villa Park abutting Yale Avenue from North Avenue to Armitage Avenue and along Belden Avenue between Harvard Avenue and Ardmore Avenue, Sidney Avenue between Yale Avenue and Princeton Avenue, Adele Avenue between Yale Avenue and Harvard Avenue, Armitage Avenue between Ardmore Avenue and Princeton Avenue, Ardmore Avenue between Belden Avenue to Armitage Avenue, Ardmore Avenue from Twin Lakes Park to an existing sanitary sewer three hundred ten (310) feet south, Harvard Avenue between North Avenue and Armitage Avenue, and Princeton Avenue between Adele Avenue and Armitage Avenue.

(2) *"Low and moderate income,"* as used herein, shall mean a total gross income (before deductions) of all family members (one or more persons) residing at the property to be connected which does not exceed the maximum allowable gross income for a family of that number of members as established in the Income Guidelines adopted and approved by the County of DuPage or the DuPage County Development Department, Income Guidelines effective January 18, 1995, or any superseding or modifying amendments as may become effective.

(3) *Application.* Any individual seeking to connect to the North Side Sanitary Sewer Extension within the project area shall furnish with the permit or connection application, such information and documentation as may be necessarily required by the Department of Community Development or the Department of Public Works to determine the eligibility of the applicant for exemption from the Type "B" sanitary sewer connection fee provided hereinafter, which information and documentation shall include not less than the following:

a. Most recent Federal Income Tax Return; and

b. Copy of title policy or equivalent showing ownership in the name of the applicant.

In addition, the applicant may be required to furnish items such as utility bills, property tax bills, or an affidavit of ownership and income containing such information as may be reasonably necessary to assure that the applicant is eligible for the exemption. All information furnished by the applicant to determine eligibility shall be confidential and, to the maximum extent permitted by law, shall not be disclosed except upon express written consent of all interested persons.

Each applicant for connection to the North Side Sanitary Sewer Extension within the project area shall be advised, upon submittal of an application for a permit, of the availability of the exemption from the Type "B" sanitary sewer connection fees. Each applicant shall submit the necessary documentation to establish eligibility, or in lieu thereof, shall execute an acknowledgment properly notarized that the applicant has been fully and completely advised of the availability of the exemption and declines to furnish the necessary information. Any person executing the acknowledgment shall

be deemed ineligible for the exemption. No connection to the sanitary sewer shall be permitted unless and until the applicant has submitted the appropriate acknowledgment or has made application for the exemption with all requested information and a determination has been made.

(4) *Eligibility.* Properties which are owned and occupied by a family of low or moderate income, upon furnishing proper and acceptable proof of eligibility, shall be exempt from the Type "B" sanitary sewer connection fees specified in section 25-103(c), above.

(5) *Interpretation; application; inconsistency.* This section and the definitions and terms used herein, shall be interpreted and applied in accordance with any federal, state or county rules, regulations, laws or ordinances applicable to the Community Development Block Grant program ("other regulations") and in the event of any inconsistency between such other regulations and the provisions of this section, the provisions of such other regulations shall govern.

(i) *North Side Water Main Extension/Exemption from certain connection fees:*

(1) *Project area.* The project area includes all property within the corporate limits of the Village of Villa Park abutting Yale Avenue from Adele Avenue to Armitage Avenue, along Belden Avenue between Harvard Avenue and Ardmore Avenue, Sidney Avenue between Harvard Avenue and Yale Avenue, Adele Avenue between Ardmore Avenue and Harvard Avenue, Armitage Avenue between Ardmore Avenue and Harvard Avenue, Ardmore Avenue between Twin Lakes and Armitage Avenue, Harvard Avenue from Armitage Avenue to an existing water main three hundred thirty (330) feet south of the south right-of-way line of Sidney Avenue, and Princeton Avenue between Adele Avenue and Armitage Avenue.

(2) *"Low and moderate income,"* as used herein, shall mean a total gross income (before deductions) of all family members (one (1) or more persons) residing at the property to be connected which does not exceed the maximum allowable gross income for a family of that number of members as established in the Income Guidelines adopted and approved by the County of DuPage or the DuPage County Development Department, Income Guidelines effective January 18, 1995, or any superseding or modifying amendments as may become effective.

(3) *Application.* Any individual seeking to connect to the North Side Water Main Extension within the project area shall furnish with the permit or connection application, such information and documentation as may be necessarily required by the Department of Community Development or the Department of Public Works to determine the eligibility of the applicant for exemption from the Type "B" water connection fee provided hereinafter, which information and documentation shall include not less than the following:

a. Most recent Federal Income Tax Return; and

b. Copy of title policy or equivalent showing ownership in the name of the applicant.

In addition, the applicant may be required to furnish items such as utility bills, property tax bills, or an affidavit of ownership and income containing such information as may be necessary to assure that the applicant is eligible for the exemption. All information furnished by the applicant to determine eligibility shall be confidential and, to the maximum extent permitted by law, shall not be disclosed except upon express written consent of all interested persons.

Each applicant for connection to the North Side Water Main Extension within the project area shall be advised, upon submittal of an application for a permit, of the availability of the exemption from the Type "B" water connection fees. Each applicant shall submit the necessary documentation to establish eligibility, or in lieu thereof, shall execute an acknowledgment properly notarized that the applicant has been fully and completely advised of the availability of the exemption and declines to furnish the necessary information. Any person executing the acknowledgment shall be deemed ineligible for the exemption. No connection to the water main shall be permitted unless and until the applicant has submitted the appropriate acknowledgment or has made application for the exemption with all requested information and a determination has been made.

(4) *Eligibility.* Properties which are owned and occupied by a family of low or moderate income, upon furnishing proper and acceptable proof of eligibility, shall be exempt from the Type "B" water connection fees specified in section 25-103(d), above.

(5) This section and the definitions and terms used herein, shall be interpreted and applied in accordance with any federal, state or county rules, regulations, laws or ordinances applicable to the Community Development Block Grant program ("other regulations") and in the event of any inconsistency between such other regulations and the provisions of this section, the provisions of such other regulations shall govern.

(j) *Villa Avenue sanitary sewer main extension/exemption from certain connection fees.*

(1) *Project area.* The project area includes all property within the corporate limits of the village abutting Villa Avenue from a point two hundred thirty (230) feet north of the north right-of-way line of Riordan Road to Blackstone Place and Villa Avenue from a point one hundred forty-four (144) feet south of the south right-of-way line of Van Buren Street to a point seventy-eight (78) feet north of the north right-of-way line of Harrison Street.

(2) [*Low and moderate income defined.*] 'Low and moderate income,' as used herein, shall mean a total gross income (before deductions) of all family members (one (1) or more persons) residing at the property to be connected which does not exceed the maximum allowable gross income for a family of that number of members as established in the income guidelines adopted and approved by the County of DuPage or the DuPage County Development Department, Income Guidelines effective January 18, 1995, or any superseding or modifying amendments as may become effective.

(3) *Application.* Any individual seeking to connect to the Villa Avenue sanitary sewer within the project area shall furnish with the permit or connection application, such information and documentation as may be necessarily required by the department of community development or the department of public works to determine the eligibility of the applicant for exemption from the Type "B" sewer connection fee provided hereinafter, which information and documentation shall include not less than the following:

a. Most recent Federal Income Tax Return; and

b. Copy of title policy or equivalent showing ownership in the name of the applicant.

In addition, the applicant may be required to furnish items such as utility bills, property tax bills, or an affidavit of ownership and income containing such information as may be necessary to assure that the applicant is eligible for the exemption. All information furnished by the applicant to determine eligibility shall be confidential and, to the maximum extent permitted by law, shall not be disclosed except upon express written consent of all interested persons.

Each applicant for connection to the Villa Avenue sanitary sewer main extension within the project area shall be advised, upon submittal of an application for a permit, of the availability of the exemption from the Type "B" sanitary sewer connection fees. Each applicant shall submit the necessary documentation to establish eligibility, or in lieu thereof, shall execute an acknowledgment properly notarized that the applicant has been fully and completely advised of the availability of the exemption and declines to furnish the necessary information. Any person executing the acknowledgment shall be deemed ineligible for the exemption. No connection to the sanitary sewer main shall be permitted unless and until the applicant has submitted the appropriate acknowledgment or has made application for the exemption with all requested information and a determination has been made.

(4) *Eligibility.* Properties which are owned and occupied by a family of low or moderate income, upon furnishing proper and acceptable proof of eligibility, shall be exempt from the Type "B" sewer connection fees specified in subsection 25-103(d), above.

(5) [*Compliance with other regulations.*] This section and the definitions and terms used herein, shall be interpreted and applied in accordance with any federal, state or county rules, regulations, laws or ordinances applicable to the Community Development Block Grant program ("other regulations") and in the event of any inconsistency between such other regulations and the provisions of this section, the provisions of such other regulations shall govern.

(k) *Westlands Phase II and III Sanitary Sewer and Water Main Extension/exemption from certain connection fees.*

(1) *Project area.* The project area includes all property within the corporate limits of the village abutting Oakland Avenue from Harrison Street to Blackstone Place, Monterey Avenue from Kohlberg Court to Roosevelt Road, Wayside Drive from Harrison Street

south to the village limits, Harrison Street from Oakland Avenue east to the village limits; Lane Drive from Oakland Avenue to Wayside Drive, Kohlberg Court from Villa Avenue to Wayside Drive, Riordan Road from Villa Avenue east to the village limits, and Blackstone Place from Villa Avenue to Monterey Avenue.

(2) *Low and moderate income defined.* "Low and moderate income," as used herein, shall mean a total gross income (before deductions) of all family members (one (1) or more persons) residing at the property to be connected which does not exceed the maximum allowable gross income for a family of that number of members as established in the income guidelines adopted and approved by the County of DuPage or the DuPage County Development Department, Income Guidelines effective March 2000, or any superseding or modifying amendments as may become effective.

(3) *Application.* Any individual seeking to connect to the Westlands Phase II and III Sanitary Sewer and Water Main Extension within the project area shall furnish with the permit or connection application such information and documentation as may be necessarily required by the department of community development or the department of public works to determine the eligibility of the applicant for exemption from the Type "B" sewer connection fee and/or Type "B" water connection fee provided hereinafter, which information and documentation shall include not less than the following:

a. Most recent Federal Income Tax Return; and

b. Copy of title policy or equivalent showing ownership in the name of the applicant. In addition, the applicant may be required to furnish items such as utility bills, property tax bills, or an affidavit of ownership and income containing such information as may be necessary to assure that the applicant is eligible for the exemption. All information furnished by the applicant to determine eligibility shall be confidential and, to the maximum extent permitted by law, shall not be disclosed except upon express written consent of all interested persons. Each applicant for connection to the Westlands Phase II and III Sanitary Sewer and Water Main Extension within the project area shall be advised, upon submittal of an application for a permit, of the availability for the exemptions from the Type "B" sanitary sewer and/or Type "B" water connection fees. Each applicant shall submit the necessary documentation to establish eligibility, or in lieu thereof, shall execute an acknowledgment properly notarized that the applicant has been fully and completely advised of the availability of the exemption and declines to furnish the necessary information. Any person executing the acknowledgement shall be deemed eligible for the exemption. No connection to the water main and/or sanitary sewer main shall be permitted unless and until the applicant has submitted the appropriate acknowledgment or has made application for the exemption with all requested information and a determination has been made.

(4) *Eligibility.* Properties which are owned and occupied by a family of low or moderate income, upon furnishing proper and acceptable proof of eligibility, shall be exempt from the Type "B" water connection and/or Type "B" sewer connection fees specified in subsections 25-103(c) and 25-103(d) above.

(5) *Compliance with other regulations.* This section and the definitions and terms used herein shall be interpreted and applied in accordance with any federal, state or county rules, regulations, laws or ordinances applicable to the community development block grant program ("other regulations") and in the event of any inconsistency between such other regulations and the provisions of this section, the provisions of such other regulations shall govern.

(l) This section shall not affect, supersede or modify any contract, agreement, annexation agreement or ordinance previously entered into or adopted providing specifically for connection charges to the village sanitary sewer systems and the same shall remain in effect until they expire by their own terms.

(Ord. No. 1809, §§ 1—5, 7, 9-5-78; Ord. No. 2741, §§ 1—6, 12-12-94; Ord. No. 2767, §§ 2, 3, 4-24-95; Ord. No. 2809, § 2, 1-15-96; Ord. No. 2881, §§ 2, 3, 5-12-97; Ord. No. 2962, §§ 2, 3, 10-19-98; Ord. No. 3066, § 2, 11-20-00)

Sec. 25-104. Rates and Charges—Established.

(a) The wastewater service charge for the use of and for services supplied by the wastewater facilities shall be comprised of operation and maintenance and equipment replacement costs. The total unit service charge shall be computed by apportioning these total costs to a cost per one thousand (1,000) gallons of water consumption. The wastewater service charge shall be computed by the following formula: CW = (Vu) CU + CS:

Where CW = Amount of waste service charge ($) per billing period

Vu = Water consumption volume for the billing period

CU = Basic user rate in $ per 1,000 gallons

CS = Amount of surcharge if applicable

(b) The following rates and charges are hereby established:

(1) *Water rates:*

a. For property users within the village, three dollars ninety-five cents ($3.95) per one thousand (1,000) gallons;

b. For property not located within the village corporate limits, seven dollars ninety cents ($7.90) per one thousand (1,000) gallons.

(2) *Sewer rates: for all users of the village wastewater treatment and collection system, a charge per one thousand (1,000) gallons based on the following schedule:*

Effective Date	*Rate*
Current rate	$1.15
As of 12/1/00	1.30
5/1/01	1.33
5/1/02	1.37
5/1/03	1.40

Effective Date	*Rate*
5/1/04	1.43
5/1/05	1.47
5/1/06	1.51
5/1/07	1.55
5/1/08	1.58
5/1/09	1.62
5/1/10	1.66

(3) For every onsite meter reading conducted by village personnel, a five dollar ($5.00) meter reading charge shall be added to the rates and charges to be paid by the customer under subparagraphs (b)(1)a. and (b)(1)b. hereinabove.

(c) The adequacy of the wastewater service charge shall be reviewed not less often than annually by certified public accountants. The wastewater service charge shall be revised periodically to reflect a change in local capital costs, if applicable, or a change in operation and maintenance costs, including replacement costs.

(d) Each user will be notified at least annually in conjunction with a regular bill of the rate and that portion of the user charges which are attributable to wastewater collection and excess flow treatment services.

(e) There shall be no minimum charges.

(f) The owner of the premises and the occupant thereof and the user of either water or sewage service or both water and sewage service shall be jointly and severally liable to pay for the service on said premises; such service is furnished to the premises by the village only upon the condition that the owner of the premises, the occupant and the user of the service are jointly and severally liable therefor.

(g) The rates established in subsection (b) of this section shall be effective for all bills based on meter readings taken on or after the appropriate effective date, as set forth in subsection (b).

(h) Billing schedule. Except as provided hereinafter, all bills shall be rendered based upon a quarterly billing cycle. Any user being served by a water service (meter) line of two (2) inches or larger in diameter may be billed on a monthly basis, as determined by the village manager, but in all events, such users shall be billed not less than quarterly.
(Ord. No. 1198, § 3, 10-26-70; Ord. No. 1682, § 1, 12-20-76; Ord. No. 2012, § 1, 1-4-82; Ord. No. 2098, § 1, 1-23-84; Ord. No. 2112, § 1, 5-29-84; Ord. No. 2146, § 1, 5-28-85; Ord. No. 2287, § 1, 5-23-88; Ord. No. 2321, § 1, 1-3-89; Ord. No. 2398, § 2, 2-12-90; Ord. No. 2473, § 1, 4-1-91; Ord. No. 2571, §§ 1—4, 5-18-92; Ord. No. 3064, § 2, 11-13-00)

Sec. 25-105. Same—Due date; penalty for later payment.

All bills for service shall be written quarterly and shall be payable within twenty (20) days. If payment of the full amount of the bill is not made within said period, then a service charge of five (5) per cent shall be added to the amount due.
(Ord. No. 1198, § 3, 10-26-70; Ord. No. 1270, § 2, 11-15-71; Ord. No. 1926, § 2, 8-18-80)

Sec. 25-106. Same—Duty of clerk.

The village clerk shall render bills for service pursuant hereto and for all rates and charges in connection therewith and to collect all money due thereon.
(Ord. No. 1198, § 7, 10-26-70)

Sec. 25-107. Same—Lien for nonpayment.

In the event the charges for either water or sewerage service, or both water and sewerage service, are not paid within forty (40) days after rendition of the bill for such quarterly service, such charges shall be deemed and are hereby declared to be delinquent; and, thereafter, such delinquencies shall constitute liens upon the real estate for which such service is supplied; and the village clerk or some person designated by him is hereby authorized and directed to file sworn statements of such delinquencies in the office of the recorder of deeds of the county; and the filing of such statements in such office shall be deemed notice for the payment of such charges for service.
(Ord. No. 1198, § 4, 10-26-70)

Sec. 25-108. Same—Discontinuance of service.

If the charges for water or sewerage service or both are not paid within forty-seven days (47) days after rendition of the bill for such service, then the village clerk shall order such service discontinued, and such service shall not be reinstated until all past bills, including service charges, are paid in full together with an additional cost of fifty dollars ($50.00) for reinstating such service between 8:00 a.m. and 4:00 p.m. Reinstatement of service at any other time shall be at a cost of seventy-five dollars ($75.00).
(Ord. No. 1198, § 6, 10-26-70; Ord. No. 1270, § 3, 11-15-71; Ord. No. 2398, § 3, 2-12-90)

Sec. 25-109. Handling and use of funds.

(a) *Segregation of revenues.* All revenues and moneys derived from the operation of the waterworks system and sewerage system shall be held in segregated funds as set forth hereinafter.

(b) *Waterworks system.*

(1) All revenues and moneys derived from the operation of the waterworks system shall be held in a segregated fund by the village clerk, separate and apart from private funds and separate and apart from all other funds of the village and delivered to the village treasurer not more than five (5) days after receipt of the same or at such more frequent intervals as may from time to time be directed by the corporate authorities.

(2) Except as otherwise provided, the village treasurer shall receive all such revenues and all other funds and moneys incident to the operation of the water system as same may be delivered to the treasurer and deposit the same in a separate fund designated as the *water supply fund* of the village. Said treasurer shall administer such fund in every respect in the manner provided by the provisions of Article 11 of the Illinois Municipal Code and all laws amendatory thereof and supplementary thereto.

(3) Except as otherwise provided, any surplus which results from the water rates and charges therefor shall be used for water system improvements only.

(c) *Sewerage system.*

(1) All revenues and moneys derived from the operation of the sewerage system shall be held in a segregated fund by the village clerk, separate and apart from private funds and separate and apart from all other funds of the village and delivered to the village treasurer not more than five (5) days after receipt of the same or at such more frequent intervals as may from time to time be directed by the corporate authorities.

(2) Except as otherwise provided, the village treasurer shall receive all such revenues and all other funds and moneys incident to the operation of the sewer system as the same may be delivered to the treasurer and deposit the same in a separate fund designated as the *wastewater fund* of the village. Said treasurer shall administer such fund in every respect in the manner provided by the provisions of Article 11 of the Illinois Municipal Code and all laws amendatory thereof and supplementary thereto.

(3) Except as otherwise provided, any surplus which results from the sewage rates and charges therefor shall be used for sewer system improvements only.

(Ord. No. 1198, §§ 8, 9, 10-26-70; Ord. No. 1682, § 1, 12-20-16; Ord. No. 2398, § 4, 2-12-90)

Secs. 25-110, 25-111. Reserved.

Sec. 25-112. Duty of treasurer to keep records, accounts, etc.

(a) The village treasurer shall establish a proper system of accounts and shall keep proper books, records and accounts in which complete and correct entries shall be made of all transactions relative to the waterworks and sewerage systems, and at the regular annual intervals he shall cause to be made an audit by an independent auditing concern of the books to show the receipts and disbursements of the waterworks and sewerage systems.

(b) The annual audit report shall reflect the revenues and operating expenses of the wastewater facilities, including replacement costs, to indicate that sewer service charges under the user charge system are adequate. In this regard, the financial information to be shown in the audit report shall include the following:

(1) Flow data showing total gallons received at the wastewater plant for the current fiscal year.

(2) Billing data to show total number of gallons billed per fiscal year.

(3) Debt service for the next succeeding fiscal year if any.

(4) Number of users connected to the system.

(5) Number of nonmetered users.

(6) A list of users discharging nondomestic and industrial wastes and volume of waste discharged if any.

(Ord. No. 1198, § 10, 10-26-70; Ord. No. 2398, § 5, 2-12-90)

Sec. 25-113. Notice to public.

A copy of the water and sewage rates and charges properly certified by the village clerk is filed in the office of the county recorder of deeds, and shall be deemed notice to

all owners of real estate of their liability for service supplied to any user of the service of the waterworks and sewerage systems on their properties. (Ord. No. 1198, § 11, 10-26-70)

ARTICLE II. EXTENSION POLICY*

Sec. 25-201. Definitions.

As used in this article, the following terms shall have the following meanings:

Applicant: Any person who shall seek an extension of water mains in place or sanitary sewers in place for the purpose of serving territory within the village not served at the time an extension of service may be sought.

Engineer: The engineer employed by the village as a consulting engineer, whose duties include general supervision of all new construction of water mains and sanitary sewers within the village, the preparation of specifications and plans for said new construction, the estimating of costs therefor, securing state permits from and general supervision of such construction.

Sanitary sewer: Any sewer line serving or capable of serving more than one user for sanitary sewer within the village.

Water mains: Any pipeline serving or capable of serving more than one user of water within the village.

Sec. 25-202. Extension application.

(a) Any applicant desiring water service or sanitary sewer service to any territory not theretofore furnished such service shall make an application in duplicate, in writing, for an extension of such existing service in the manner hereinafter provided, and such application shall show the following specific facts and contain the following information:

(1) A legal description of the boundaries of the territory to be served.

(2) The application shall be accompanied by a plat or map showing such legal boundaries, together with all streets, alleys, easements or thoroughfares included within the territory, and the lot lines and numbers of all lots platted therein. The plat shall be drawn to suitable scale and shall be referenced to section lines or known survey monuments of record so as to be readily identifiable on the ground. Such plat shall further show, by appropriate marking thereon, the location, size and material of all water mains or sanitary sewers traversing said area for the purpose of serving the same.

(3) An estimate of the total number of users of water or sanitary sewer service within the area covered by said application, and such estimate shall be divided into three (3) parts, namely:

*Cross reference—Financing municipal projects, § 2-201.

a. Those users presently residing therein;
b. The number of users expecting to connect within one year from the date of application;
c. The total number of users to be ultimately served within said area.

(4) Where any use in the territory sought to be served is for other than residential purposes, such use shall be stated in the application and the estimated average daily consumption of water by such user shall be shown therein.

(b) The application shall be signed by the applicant and all drawings or engineering data attached to such application shall be signed and dated by the engineer or individual who prepared the same for the applicant.

(c) Every application shall be filed in duplicate with the manager.

Sec. 25-203. Application fee.

Every applicant shall pay to the manager, at the time of the filing of said application, the sum of ten dollars ($10.00) as a filing fee.

Sec. 25-204. Manager's duty.

Immediately upon the filing of an application under this article with the manager, accompanied by the filing fee as herein provided, the manager shall forward one copy thereof to the engineer, and the manager shall further present the remaining copy thereof to the corporate authorities at their next regular meeting.

Sec. 25-205. Engineer's duty.

Upon receipt of an application pursuant to this article, the engineer shall make such studies thereof on the ground as he may deem necessary, and shall, from such studies, determine the size of water mains and sanitary sewer pipe to be installed to serve the territory included within such application, and such water mains and sanitary sewer pipe shall be of sufficient size to supply the entire territory with the maximum number of users therein as specified in said application, and the engineer shall determine not only the size of the water mains and sanitary sewer pipe, but also their exact location, whether that be the location shown on the plat attached to the application or otherwise. Upon determining the facts aforesaid, the engineer shall further estimate the cost of installing the water mains and sanitary sewer pipe required to properly serve the territory included within such application, and such estimate of costs shall include not only the cost of labor and material to install said water mains and sanitary sewer pipe, but also all supervision, engineering or legal fees and all other expenses incident to the construction thereof, including the cost of repaving any street or relaying any sidewalk which may be destroyed or damaged in connection with such work, and the engineer shall thereupon submit to the corporate authorities all such estimates so prepared by him, together with his recommendation as to whether or not such additional mains and sanitary sewer pipe should be constructed.

Sec. 25-206. Action by corporate authorities.

Upon receipt of such estimates from the engineer, together with a copy of the application, the corporate authorities shall duly consider the same and shall determine as to whether or not the extension of water mains and/or sanitary sewer pipe required under such application shall be made, and if the corporate authorities shall determine that such extension shall be made, they shall authorize the same under the terms and conditions hereinafter set forth in this article.

Sec. 25-207. Deposits.

Unless otherwise specified by the corporate authorities, the applicant, upon receipt of advice that the corporate authorities has approved his application, shall deposit with the manager the entire estimated cost of the extension required under such application, such deposit to be made within ten (10) days after receipt of advice of the approval thereof.

Sec. 25-208. Easements.

Should any portion of the water mains and sanitary sewer pipe to be constructed under such application be over private property, then and in such event, the applicant shall also deposit with the manager fully executed easements from the owner or owners of such property, said easement to be correctly described and to show easement width, or widths, giving the village the right to construct, maintain and renew water mains and/or sanitary sewer pipe over such private property in perpetuity.

Sec. 25-209. Construction of water mains or sanitary sewer pipes.

After any deposit herein required has been made and all easements required have been furnished, the village shall proceed to construct the water mains and/or sanitary sewer pipes required in the estimate of the engineer and such extension shall be either by contract or by private individuals as may be in each case determined by the corporate authorities and the entire expense of such extension shall be paid by the village out of the funds deposited by the applicant.

Sec. 25-210. Completion and payment for the work.

When water mains and/or sanitary sewer pipe have been completed, the village shall cause the same to be inspected by proper public authority, and upon acceptance thereof shall refund to the applicant any moneys remaining out of said applicant's deposit not expended in and about the work occasioned by such application, but if the amount deposited shall not be equal to the total cost of said extension, then the corporate authorities may require the applicant to pay to the village an additional amount so that the total cost of said extension shall be fully borne by the applicant.

Sec. 25-211. Ownership of water mains or sanitary sewer pipes.

All water mains and/or sanitary sewer pipes constructed under any application as herein provided for shall be and become the sole and exclusive property of the village and all easements granted for said water mains shall be held and construed to be easements to the village and no applicant or any other person holding by, through or under him, shall ever claim or seek to claim any right, title or interest in any such water main and/or sanitary sewer pipe or any easement constructed or held under said application.

Sec. 25-212. Operation of water mains and/or sanitary sewer pipes.

When the extension required under any application shall have been completed, and approval of such extension shall have been received from proper public authority, the village shall proceed to operate said water mains and/or sanitary sewer pipes in the same manner as other water mains and/or sanitary sewer pipes within the village are operated, and connections may be made thereto in the same manner and under the same rules and regulations as connections will be made in other portions of the village and said water mains and/or sanitary sewer pipe including connections, shall be and become a part of the water distribution and sanitary system owned and operated by the village.

ARTICLE III. WATER SYSTEM*

DIVISION 1. GENERALLY

Sec. 25-301. Superintendent defined.

As used in this article, the term *superintendent* shall mean the person designated to enforce the provisions of this article.

Sec. 25-302. Interference with system.

No unauthorized person shall interfere in any manner with any hydrant or stopcock, or deposit any material in any stopcock box, or turn any stopcock, or do any act to obstruct the use thereof or injure in any manner, or use or interfere with any property of the waterworks.

State law reference—Power of city to prevent injury to water system, Ill. Rev. Stat. Ch. 24, § 11-125-1.

Sec. 25-303. Turning on service.

The water supply to any premises shall not be turned on without the approval of the superintendent.

---

*Cross reference—DuPage Water Commission, Ch. 2, Art. XIX.

Sec. 25-304. Records.

The superintendent shall keep a record of all official actions taken by him.

Sec. 25-305. Right of village to turn off water.

The village reserves the right to turn off the water for nonpayment of water bills or for making repairs at any time.

Sec. 25-306. Resale of water or common connections prohibited.

No person shall take or use village water from premises other than his own, and no person shall sell water for his own premises for any purpose. Except as otherwise provided no connection for the furnishing of water to any premises shall hereafter be made to the service line for the furnishing water to any other premises, even though the ownership of both properties may be the same.
(Ord. No. 444, § XIII, 5-15-40; Ord. No. 980, § 1, 2-20-67)

Sec. 25-307. Article to be contractual.

The provisions of this article and all water rates shall be considered a part of the contract with every person who is supplied with water.

Secs. 25-308—25-315. Reserved.

DIVISION 2. SERVICE PIPES AND CONNECTIONS

Sec. 25-316. Service pipe specifications.

All water service pipes shall be of copper or ductile iron of such size, design and specifications as will properly service the proposed use of the property to be serviced and as approved by the director of public works or his designee. The connection of the building waterline into the public water main shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the village or the procedure set forth in appropriate specifications of the American Society of Testing Materials, Water Pollution Control Federal Manual of Practice No. 9, and Standard Specifications for Water and Sewer Main Construction in Illinois.
(Ord. No. 2398, § 6, 2-12-90)

Sec. 25-317. Depth of service pipes.

All water service pipes shall be at least four and one-half (4½) feet below the surface of the ground.
(Ord. No. 2378, § 7, 2-12-90)

Sec. 25-318. Tap—Generally.

All taps must be inserted at or near the top of the water main or pipe, and in no case shall they be within fifteen (15) inches of the bell or hub. Saddles may be required in lieu of direct connections at the discretion of the director of public works or his designee. In no case shall a tap which is inserted in any main of six (6) inches or less exceed three-fourths (¾) of an inch in size, and in no case shall such tap exceed one (1) inch in diameter and in all other cases shall be of such size in accordance with the installation instructions of the director of public works or his designee.
(Ord. No. 2398, § 8, 2-12-90)

Sec. 25-319. Same—Making.

The actual tapping into the water system shall be made by village employees or a licensed plumbing contractor approved by the village and then only under the supervision of the director of public works or his designated agent.
(Ord. No. 2398, § 9, 2-12-90)

Sec. 25-320. Excavations; fees; penalty.

(a) All materials removed from the streets in making excavations for water taps shall be deposited in such a manner as to occasion the least inconvenience to the public and provide for the passage of water through gutters. Suitable barricades shall be erected around the excavation and amber lights maintained if the excavation is not filled in before nightfall. All excavations for water main and water service lines and water main and water service line connections shall be as provided in this article or to the extent that it is consistent with Standard Specifications for Water and Sewer Main Construction in Illinois, May 1986, or the most current edition published by the Illinois Department of Transportation.

(b) Prior to any excavation, the property owner shall secure all necessary permits as are appropriate and pay the fees according to the following fee schedule:

Permit for excavation in a parkway (per opening)	$20.00
Permit for excavation in a street (per opening)	20.00

(c) In addition, the property owner or developer, prior to excavation in a parkway or street shall provide an appropriate public improvement guarantee as required by Appendix D of the Village Code to ensure proper restoration of the street and/or parkway. In the event that restoration of either the street or the parkway or both is satisfactorily completed and approved, the guarantee shall be refunded. In the event that the restoration is not made and approved by the village, any applicable bond shall be forfeited; and any person, firm or corporation to whom the permit has been issued, together with the owner of the promises serviced, shall be responsible for any and all additional repairs above and beyond those secured by the guarantee. In addition to the forfeiture of the guarantee, any person failing to restore the

parkway or street to the satisfaction of the director of public works or his designee shall be deemed guilty of a violation of this article and subjected to a five hundred dollar ($500.00) fine for each and every day that the restoration is not made.
(Ord. No. 2398, § 10, 2-12-90; Ord. No. 3053, § 5, 8-28-00)

Sec. 25-321. New installations for water service.

(a) All excavations done in connection with the installation of a water service pipe and the costs of the service pipe and the installation shall be done at the expense of the person desiring the connection. In addition, the applicant for a new water service connection shall pay the following fees; except that as to fees set forth in subparagraph (2), these fees will be paid only if the village performs the tapping. These fees are in addition to such other fees and charges as may be otherwise provided in this chapter:

Water permit	$20.00

(1) Water taps (¾" to 1½"):

¾-inch tap	$160.00
1-inch tap	200.00
1½-inch tap	280.00

(2) Water taps (2"): The director of public works or his designee may in his sole discretion determine that the following size taps shall be performed by the village; and if the village performs the service, the fee for tapping, in addition to such other fees and charges as may be otherwise provided in this chapter, shall be as follows:

4 × 2	$ 958.75
6 × 2	1,007.50
8 × 2	1,087.50
10 × 2	1,525.00
12 × 2	1,535.00

(b) All taps not installed by the village shall be performed by a licensed plumbing contractor approved by the village and retained by the property owner and then only under the supervision of the director of public works or his designated agent and according to his direction. The fee schedule set forth above for the above listed tap(s) include the following materials: Corporation stop, curb stops, tapping saddles, and buffalo boxes and labor to install the corporation stop and tapping saddle are also included. All excavations(s) and labor and responsibility for the installation of any curb stop, buffalo box and necessary copper piping from the water main to the premises are to be made by a licensed plumbing contractor approved by the director of public works or his designated agent and retained by the property owner at the property owner's expense.
(Ord. No. 2398, § 11, 2-12-90)

Sec. 25-322. Repairs.

(a) Service pipes from the water main to the shut-off box and the shut-off box itself shall be kept in good repair at the expense of the village. All repairs on service lines between the shut-off box and the meter setting as well as repairs in the plumbing system of the building served, except meters, shall be made by and at the expense of the owner of the premises served.

(b) In case of emergency the village may repair any service pipe and if such repairs are the responsibility of the owner of the premises served, the costs of such repairs shall be repaid to the village by the owner of the premises served. An emergency would be considered anything that would affect life, health or public safety, such as life support systems requiring water, schools, etc. Authorization for such emergency repairs must originate in the village manager's office.

(c) Upon the arrival of the operator at the address the water department employee will immediately determine the responsibility for the leak by placing a shut-off rod on the curb stop and turn the valve off. If the leak stops, the leak is between the shut-off box and the house and is the homeowners responsibility to repair. If the leak continues to flow, it is between the shut-off box and the main and is the responsibility of the village to repair it.

(d) If the leak in the opinion of the superintendent is of a nature that excessive water will be wasted or constitutes a safety hazard such as freezing on sidewalks or streets, service shall be discontinued immediately.

(e) The village will hook up water from a neighbor for temporary service providing both parties are agreeable.

(f) Service lines of lead or galvanized pipe shall not be repaired but must be replaced in their entirety with ~~three-fourths~~ ONE-inch Type "K" copper for single-family residences and appropriate size Type "K" copper, or ductile iron for commercial and industrial services. Antisiphon device(s) shall also be installed if required by the Illinois State Plumbing Code and then in accordance with governing regulations.

(g) Repairs to the homeowner's service shall be made only by a licensed plumber and then only after taking out the proper permit and posting any and all requisite bonds.

(h) The village will furnish a current list of approved contractors that are on file with the building department. By furnishing the list, the village is not recommending any contractor and will not be held responsible for the contractor's performance.
(Ord. No. 2398, §§ 12—14, 2-12-90)

Secs. 25-323—25-335. Reserved.

DIVISION 3. WATER METERS

Sec. 25-336. Required.

(a) Except as provided in subparagraph (b), no water shall be taken for the village's water system except through a village water meter.

(b) During the period of any construction for which appropriate permits have been obtained and upon the request of the contractor or developer, the contractor or developer shall be allowed to utilize village water from the village's water supply system without a water meter but only in accordance with direction of the director of public works or his designee and then only on payment of the fees set forth hereinafter:

Builder's water (residential/single-family dwelling)	$ 50.00
Builder's water (commercial/multifamily dwelling)	100.00

Water being supplied pursuant to this subparagraph (b) shall be used strictly and solely for construction purposes. If at any time during the period of construction and in the sole and exclusive opinion of the director of public works or his designee that use of unmetered water by the contractor or developer is being misused, wasted or is for purposes other than construction-related activities, then the director of public works or his designee shall have the right to terminate water service to the property, and all fees paid for the builder's water shall be forfeited. Water service may be resumed upon installation of water meters and payment of charges in connection therewith.
(Ord. No. 1198, § 6, 10-26-70; Ord. No. 2398, § 15, 2-12-90)

Sec. 25-337. Ownership and maintenance.

(a) All water meters shall be the property of and maintained by the village's waterworks and sewerage department.

(b) In addition to all other fees for permits, water taps, or any bonds required to be posted, there shall be a charge for the village providing a water meter in accordance with the following schedule:

5/8″ × 3/4″ meter with meter interface unit, outside remote and connections	$240.00
3/4″ × 3/4″ meter with meter interface unit, outside remote and connections	265.00
Full 1″ meter with meter interface unit, outside remote and connections	310.00
Full 1½″ meter with meter interface unit, outside remote and connections	518.00
Full 1½″ turbo meter with interface unit, outside remote and connections	667.00
Full 2″ meter with meter interface unit, outside remote and connections	665.00
Full 2″ turbo meter with meter interface unit, outside remote and connections	765.00
Full 2″ compound meter with meter interface unit, outside remote and connections	1,513.00
Full 3″ turbo meter with meter interface unit, outside remote and connections	1,048.00
Full 3″ compound meter with meter interface unit, outside remote and connections	1,928.00
Full 4″ turbo meter with meter interface unit, outside remote and connections	1,722.00
Full 4″ compound meter with meter interface unit, outside remote and connections	3,005.00
All other size meters—Actual cost + ten (10) percent overhead.	

(c) Prior to the installation of any water meter and in addition to the water meter charge set forth above and any other charges imposed by this article, a security deposit shall be made in accordance with the following schedule:

(1) 1″ water service line and smaller: Actual cost.

(2) Commercial or multifamily, 1½″ up: Actual cost but not to exceed five hundred dollars ($500.00).

Said deposit may be utilized to defray in whole or in part any costs to repair or replace a water meter as provided in section 25-338. In the event that the deposit is used to defray the cost of repair or replacement of a meter, it shall be the responsibility of the property owner to deposit such additional funds as will provide a security deposit for each water meter installed or repaired in accordance with the above schedule.
(Ord. No. 2398, § 16, 2-12-90; Ord. No. 2765, § 1, 4-17-95; Ord. No. 3070, § 1, 12-11-00)

Sec. 25-338. Duty of owner to preserve and protect.

When a water meter has been installed on the premises to be served, it shall be the duty of the owner of the premises, the occupant and user of the service to preserve and protect such meter from damage by freezing, excessive heat, mechanical injury and from theft; and the owner of the premises, the occupant and the user of the service shall be jointly and severally liable to pay the costs of repairing or replacing meter if damaged or lost for any of the foregoing reasons. The village may utilize any portion of the deposit made pursuant to the preceding section and in the event that the owner fails or refuses to pay for the repairs incurred under this section or refuses or fails to pay additional funds to provide the appropriate security deposit, the village may terminate water service to the premises.
(Ord. No. 1198, § 6, 10-26-70; Ord. No. 2398, § 17, 2-12-90)

Sec. 25-339. Number, location and access.

There shall be a single water meter for each building or structure which is under unified ownership (e.g., single family dwellings, apartment buildings, commercial buildings, etc.). Where a building or structure is under multiple ownership (e.g., condominiums), a water meter for each separately owned unit shall be supplied.

Notwithstanding the foregoing, if the superintendent determines that the installation by the village of water meters in the manner heretofore provided is impractical because of cost, fixture configuration, etc., for any particular building, the superintendent shall have the authority to have the water meter(s) installed in the most practical number and manner permitted under the circumstances.

All water meters shall be placed in the buildings so as to afford easy access for installation, inspection, repair and reading. If such access is not provided for a period of thirty (30) days, and if notice by mail has been given to the owner of the premises, the occupant and the user of the service that access has not been provided and is desired, then after a period of thirty (30) days from the last notice so given, the service may be discontinued after notice and an

opportunity to be heard have been provided. If the water service is terminated, it shall not be reinstated until the required access is provided and payment made of fifty dollars ($50.00) for reinstating such service between 8:00 a.m. and 4:00 p.m. Reinstatement of service at any other time shall be at a cost of seventy-five dollars ($75.00).
(Ord. No. 1198, § 6, 10-26-70; Ord. No. 2398, § 18, 2-12-90; 2790, § 2, 9-11-95)

Sec. 25-340. Testing and repair; correction of bill.

A person upon whose premises there is located a water meter may request that the public works department test the meter. Upon making such a request, a person shall pay a deposit of twenty-five dollars ($25.00) if the size of the water service line is less than two (2) inches in interior diameter. For water meters connected to a service line of two (2) inches of interior diameter or greater, the person making the request shall submit a deposit of two hundred dollars ($200.00). The department or a testing service retained by the department shall then test the meter in accordance with the latest specifications adopted by the American Waterworks Association. If the test shows that the meter is not measuring water correctly in accordance with such specifications, then the meter shall be repaired and reinstalled or replaced by another meter at the expense of the village, and the deposit submitted under this section shall be credited to the account of the applicant or be refunded to the applicant upon demand. The village manager or his delegate shall have the authority to adjust disputed bills for water and sewer service, If, however, the test shows that the water meter is measuring water correctly in accordance with such specifications, any deposit made under this section shall become the property of the village as and for the reimbursement for the costs of the testing.
(Ord. No. 1198, § 6, 10-26-70; Ord. No. 2398, § 19, 2-12-90)

Secs. 25-341—25-350. Reserved.

DIVISION 4. EMERGENCY WATER USE PLAN

Sec. 25-351. Generally.

The corporate authorities, acting at either a regular or special meeting called for that purpose, may declare a water shortage crisis to exist in the village. In the event a water shortage crisis is declared by the corporate authorities, the corporate authorities shall also declare which water use restrictions are to be in effect, and said restrictions shall be those set forth in either section 25-352, 25-353 or 25-355 of this division or any or all of these sections in order to reduce water demand. The provisions of sections 25-354 and 25-356 shall apply whenever a water shortage crisis is declared. Nothing contained herein shall preclude the corporate authorities of the village from subsequently modifying, rescinding or extending the water use restrictions in effect should circumstances warrant.
(Ord. No. 1738, §§ 1, 2, 10-3-77; Ord. No. 2293, § 1, 6-13-88)

Sec. 25-352. Residential external use ban.

All nonessential external uses of water, including but not limited to: Lawn sprinkling, watering or irrigating of shrubbery, trees, lawns, grass, plants, vines, gardens, vegetables, flowers; filling of nonmunicipal swimming pools; car washing (when not a part of any established commercial car-washing business); outside cleaning with water, including washing of sidewalks, driveways, outside of buildings or other outdoor surfaces; or for the operation of any ornamental fountain or other structure making a similar use of water are prohibited.
(Ord. No. 1738, § 2(A), 10-3-77; Ord. No. 2416, § 2, 5-14-90)

Sec. 25-353. Industrial use restrictions.

(a) The use of all water cooled air conditioning systems shall be prohibited.

(b) All swimming pools, public and private, shall be closed.

(c) All commercial laundromats shall be closed.

(d) All industries consuming large amounts of water on a regular and daily basis, shall be subject to closing, depending upon the severity of the water shortage.

(e) All commercial car washing shall be prohibited.
(Ord. No. 1738, § 2(B), 10-3-77)

Sec. 25-354. Consumer education program.

The village shall report the status of a water shortage weekly by means of radio and newspapers, and if practical, direct mailing to the public.
(Ord. No. 1738, § 2(D), 10-3-77)

Sec. 25-355. Consumer per capita consumption restriction.

There will be a sixty-gallon per day per capita maximum water consumption allocation, during this period. All water meters will be checked monthly to ensure compliance.
(Ord. No. 1738, § 2(C), 10-3-77)

Sec. 25-356. Termination of service.

The village may terminate water service, during the period of such declared water shortage crisis, to any person or firm found to be in violation of this division, after conducting a hearing with regard to said violation, giving the alleged offender due notice and an opportunity to be heard. This action may be taken in addition to any penalty that may be imposed for a violation of this division.
(Ord. No. 1738, § 2(F), 10-3-77)

Secs. 25-357—25-365. Reserved.

DIVISION 5. WATER CONSERVATION PLAN

Sec. 25-366. Scope.

Any building being serviced with village water shall be governed by this division, regardless of whether said building is within or without the corporate boundaries of the village.
(Ord. No. 1737, § 1(A)(3), 10-3-77; Ord. No. 1917, § 2, 7-7-80)

Sec. 25-367. Exterior water use protection.

(a) Except as provided in subparagraphs (b) and (c) below, beginning on May 15 of each year and continuing through September 15 of each year, water from the village municipal water distribution system may only be used for the watering or sprinkling of lawns as follows:

(1) All buildings with even-numbered addresses (i.e., addresses ending in 0, 2, 4, 6 or 8) may use water from the village water distribution system for lawn sprinkling on even-numbered calendar dates from 12:01 a.m. to 12:00 noon and from 6:01 p.m. to 12:00 midnight on that even-numbered day.

(2) All buildings with odd-numbered addresses (i.e., addresses ending in 1, 3, 5, 7 or 9) may use water from the village water distribution system for lawn sprinkling on odd-numbered calendar dates from 12:01 a.m. to 12:00 noon and from 6:01 p.m. to 12:00 midnight on that odd-numbered day.

(b) During the first four (4) weeks after new sod or new seed has been placed, property owners who have received the appropriate sprinkling permit from the village department of community development may use water from the village water distribution system for the sprinkling of newly sodded areas or newly seeded areas without restriction, and sprinkling for such areas shall be exempt from the provisions of subparagraphs (a)(1) and (2) above. The fee

for such permit shall be ten dollars ($10.00) and shall state on its face the expiration date of the permit. The permit shall be kept on the premises and displayed upon request to any authorized representative of the village. Sprinkling pursuant to this exemption shall be limited to those areas of the lawn that are newly sodded or newly seeded. Sprinkling of areas of established lawns shall be done in compliance with subparagraph (a) above. All lawn sprinkling after the expiration date of the permit shall be done only in conformity with subparagraph (a) above.

(c) There shall be no restrictions as to hours or days when water from the village water distribution system may be used for other outside water uses, including but not limited to the watering of:

(1) Gardens, trees, shrubs or other outdoor plants and other outside uses where such watering or sprinkling is done by a person using a hand-held watering device; or

(2) Trees, plants and shrubs by means of root feeders; or

(3) Trees, plants and shrubs by means of drip feeders.

(d) The village reserves the right to further limit or suspend the use of water for sprinkling or irrigation of lawns or other nonessential uses whenever the corporate authorities shall declare that a water shortage crisis exists as provided in section 25-351 of this division.

(Ord. No. 1737, § 1(A)(1)—(3), 10-3-77; Ord. No. 1917, § 2, 7-7-80; Ord. No. 2398, § 20, 2-12-90; Ord. No. 2416, § 1, 5-14-90)

Cross reference—Community development department, § 7-101.

Sec. 25-368. Industrial use restrictions.

(a) All carwashes are hereby required to install recycling equipment.

(b) All industry shall be required to install recycling equipment of all water used for cooling purposes.

(c) The installation of the recycling equipment required under this section shall be done within six (6) months of the opening of the business or the conversion of the premises to such case.

(Ord. No. 1737, § 1(B), 10-3-77)

Sec. 25-369. Metering of sources.

All municipal water service shall be metered.
(Ord. No. 1737, § 1(C), 10-3-77)

Sec. 25-370. Cessation of sewer flushing and street cleaning with potable water.

The village will cease to flush sewers and clean streets with potable water. In lieu thereof, the village will use water extracted from detention ponds which are located upon public property.
(Ord. No. 1737, § 1(D), 10-3-77)

Sec. 25-371. Plan to reduce unaccounted water use.

(a) An annual inspection and certification of all master meters pertaining to the municipal water system will be conducted under the auspices and direction of the village.

(b) The village has established a meter replacement program, whereby any meter older than five (5) years of age will be replaced by December 31, 1979, after which period the village will maintain a program, whereby the meters will be either recalibrated and rebuilt, or replaced, on a regular and customary basis.

(c) All municipal buildings shall be metered.

(d) Accurate records and monitoring shall be kept for all public services which require water, including, but not limited to the following:

(1) Firefighting and training;

(2) Public and private constructions;

(3) Municipal use;

(4) Water main flushing;

(5) Leakage (such as water main breaks and service leaks);

(6) Unaccounted for water.
(Ord. No. 1737, § 1(E), 10-3-77)

Sec. 25-372. Consumer education program.

(a) The village does hereby establish the third week of July in each year as "Water Awareness Week," whereby, consumer education material will be displayed by the water and sewer department and the environmental control board.

(b) The water and sewer department will furnish, throughout each year, consumer education material relative to water conservation. This will be accomplished through the news media and separate mailings.
(Ord. No. 1737, § 1(G), 10-3-77)

Sec. 25-373. Reserved.

Editor's note—Ord. No. 2230, adopted April 27, 1987, repealed § 25-373, pertaining to responsibility for leaks.

Sec. 2-374. Reserved.

DIVISION 6. CROSS-CONNECTION CONTROL PROGRAM

Sec. 25-375. Purpose, applicability and definitions.

(a) *Purpose.* The purposes of this program are:

(1) To protect the public water supply system from contamination or pollution by isolating within the customer's water system contaminants or pollutants which could backflow through the service connection into the public water supply system;

(2) To promote the elimination or control of existing cross-connections, actual or potential, between the public or consumer's potable water system and nonpotable water systems, plumbing fixtures and sources or systems containing substances of unknown or questionable safety.

(3) To provide for the maintenance of a continuing program of cross-connection control which will prevent the contamination or pollution of the public and consumer's potable water systems.

(b) *Definitions.* For purposes of interpretation and enforcement of this Division 6, the following definitions shall apply:

Agency: The Illinois Environmental Protection Agency.

Approved: Backflow prevention devices or methods approved by the Research Foundation for Cross-Connection Control of the University of Southern California, Association of State Sanitary Engineers, American Water Works Association, American National Standards Institute, or certified by the National Sanitation Foundation.

Auxiliary water system: Any water source or system on or available to the premises other than the public water supply system and includes the water supplied by the system. These auxiliary waters may include water from another purveyor's public water supply system; or water from a source such as wells, lakes, or streams, or process fluids; or used water. These waters may be polluted or contaminated or objectionable or constitute a water source or system over which the water purveyor does not have control.

Backflow: The flow of water or other liquids, mixtures, or substances into the distribution pipes of a potable water system from any source other than the intended source of the potable water supply.

Backflow prevention device: Any device, method, or type of construction intended to prevent backflow into a potable water system. All devices used for backflow prevention in Illinois

must meet the standards of the Illinois Plumbing Code and the Illinois Environmental Protection Agency.

Consumer or *customer:* The owner, official custodian or person in control of any premises supplied by or in any manner connected to a public water system.

Consumer's water system: Any water system located on the customer's premises. A building plumbing system is considered to be a customer's water system.

Contamination: An impairment of the quality of the water by entrance of any substance to a degree which could create a health hazard.

Cross-connection: Any physical connection or arrangement between two (2) otherwise separate piping systems, one of which contains potable water and the other a substance of unknown or questionable safety or quality, whereby there may be a flow from one system into the other.

Direct cross-connection: A cross-connection formed when a water system is physically joined to a source of unknown or unsafe substance.

Indirect cross-connection: A cross-connection through which an unknown substance can be forced, drawn by vacuum or otherwise introduced into a safe potable water system.

Double check valve assembly: An assembly composed of single, independently acting check valves approved under ASSE Standard 1015. A double check valve assembly must include tight shut-off valves located at each end of the assembly and suitable connections for testing the watertightness of each check valve.

Fixed proper air gap: The unobstructed vertical distance through the free atmosphere between the water discharge point and the flood level rim of the receptacle.

Health hazard: Any condition, device or practice in a water system or its operation resulting from a real or potential danger to the health and well being of consumers. The word "severe" as used to qualify "health hazard" means a hazard to the health of the user that could be expected to result in death or significant reduction in the quality of life.

Inspection: A plumbing inspection to examine carefully and critically all materials, fixtures, piping and appurtenances, appliances and installations of a plumbing system for compliance with requirements of the Illinois Plumbing Code, 77 Ill. Adm. Code 890.

Nonpotable water: Water not safe for drinking, personal, or culinary use as determined by the requirements of 35 Ill. Adm. Code 604.

Plumbing: The actual installation, repair, maintenance, alteration or extension of a plumbing system by any person. Plumbing includes all piping, fixtures, appurtenances and appliances for a supply of water for all purposes, including without limitation, lawn sprinkler systems, from the source of a private water supply on the premises or from the main in the street, alley or at the curb to, within and about any building or buildings where a person or persons live, work or assemble. Plumbing includes all piping, from discharge of pumping units to and including pressure tanks in water supply systems. Plumbing includes all piping, fix-

tures, appurtenances, and appliances for a building drain and a sanitary drainage and related ventilation system of any building or buildings where a person or persons live, work or assemble from the point of connection of such building drain to the building sewer or private sewage disposal system five (5) feet beyond the foundation walls.

Pollution: The presence of any foreign substance (organic, inorganic, radiological, or biological) in water that tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.

Potable water: Water which meets the requirements of 35 Ill. Adm. Code 604 for drinking, culinary, and domestic purposes.

Potential cross-connection: A fixture or appurtenance with threaded hose connection, tapered spout, or other connection which would facilitate extension of the water supply line beyond its legal termination point.

Process fluid(s): Any fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, pollutional, or system hazard if introduced into the public or a consumer's potable water system. This includes, but is not limited to:

(1) Polluted or contaminated waters;

(2) Process waters;

(3) Used waters originating from the public water supply system which may have deteriorated in sanitary quality;

(4) Cooling waters;

(5) Questionable or contaminated natural waters taken from wells, lakes, streams, or irrigation systems;

(6) Chemicals in solutions or suspension;

(7) Oils, gases, acids, alkalis and other liquid and gaseous fluids used in industrial or other processes, or for firefighting purposes.

Public water supply: All mains, pipes, and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use and which serve at least fifteen (15) service connections or which regularly serve at least twenty-five (25) persons at least sixty (60) days per year. A public water supply is either a "community water supply" or a "non-community water supply."

Reduced pressure principle backflow prevention device: A device containing a minimum of two (2) independently acting check valves together with an automatically operated pressure differential relief valve located between the two (2) check valves and approved under ASSE Standard 1013. During normal flow and at the cessation of normal flow, the pressure between

these two (2) checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the device, and each device shall be fitted with properly located test cocks.

Service connection: The opening, including all fittings and appurtenances, at the water main through which water is supplied to the user.

Survey: The collection of information pertaining to a customer's piping system regarding the location of all connections to the public water supply system and must include the location, type and most recent inspection and testing date of all cross-connection control devices and methods located within that customer's piping system. The survey must be in written form, and should not be an actual plumbing inspection.

System hazard: A condition through which an aesthetically objectionable or degrading material not dangerous to health may enter the public water supply system or a consumer's potable water system.

Used water: Any water supplied by a public water supply system to a consumer's water system after it has passed through the service connection and is no longer under the control of the water supply official custodian.

Water purveyor: The owner or official custodian of a public water system.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-376. Water system.

(a) The water system shall be considered as made up of two (2) parts: the public water supply system and the consumer's water system.

(b) The public water supply system shall consist of the source facilities and the distribution system, and shall include all those facilities of the potable water system under the control of the director of public works up to the point where the consumer's water system begins.

(1) The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the public water supply distribution system.

(2) The public water supply distribution system shall include the network of conduits used to deliver water from the source to the consumer's water system.

(c) The consumer's water system shall include all parts of the facilities beyond the service connection used to convey water from the public water supply distribution system to points of use.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-377. Installation standards.

In addition to any other requirements imposed by the Village Park Municipal Code or by state or federal regulations, all plumbing installed within the village shall be installed in accordance with the Illinois Plumbing Code, 77 Ill. Adm. Code 890. If in accordance with the Illinois Plumbing Code or if in the judgment of either the director of public works or his designee, an approved backflow prevention device is necessary for the safety of the public water supply system, then the director of public works or his designee will give notice to the water customer to install such an approved device immediately. The water customer shall, at his own expense, install such an approved device at a location and in a manner in accordance with the Illinois Plumbing Code, Illinois Environmental Protection Agency, and all village ordinances, and shall have inspections and tests made of such approved devices upon installation and as required by the Illinois Plumbing Code, Illinois Environmental Protection Agency, and village ordinances.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-378. Unpermitted connections.

(a) No person, firm or corporation shall establish or permit to be established or maintain or permit to be maintained any connection whereby a private, auxiliary or emergency water supply other than the regular public water supply of the village may enter the supply or distribution system of the village, unless such private, auxiliary, or emergency water supply and the method of connection and use of such supply shall have been approved by the director of public works or his designee and the Illinois Environmental Protection Agency.

(b) Connections between potable water systems and other systems or equipment containing water or other substances of unknown or questionable quality are prohibited except when and where approved cross-connection control devices or methods are installed, tested and maintained to insure proper operation on a continuing basis.

(c) No physical connection shall be permitted between the potable portion of a supply and any other water supply not of equal or better bacteriological and chemical quality as determined by inspection and analysis by the agency.

(d) There shall be no arrangement or connection by which an unsafe substance may enter a supply.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-379. Surveys and investigations.

(a) It shall be the duty of the director of public works or his designee to cause surveys and investigations to be made of industrial and other properties served by the public water supply system of the village to determine whether actual or potential hazards to the public water supply may exist. Such surveys and investigations shall be made a matter of public record and shall be repeated at least every two (2) years, or oftener, as the director of public works or his designee shall deem necessary. Records of such surveys shall be maintained and available for review for a period of at least five (5) years.

(b) The consumer, if ordered by the director of public works or his designee, shall procure the services of an approved cross-connection control device inspector for the inspection of the presence or absence of cross-connections within the consumer's premises, and testing, repair and maintenance of cross-connection control devices within the consumer's premises and shall be responsible for all costs related thereto.

(c) The approved cross-connection control device inspector, the director of public works, or his designee, shall have the right to enter at any reasonable time any property served by a connection to the public water supply or distribution system of the village for the purpose of verifying the presence or absence of cross-connections.

(d) On demand of the director of public works or his designee, any consumer or the owner, lessees, or occupants of any property served by a connection to the public water supply or distribution system of the village shall furnish to the director of public works or his designee any information which they may request regarding the piping system or systems or water use on such property. The refusal of such information, when demanded, shall, within the discretion of the director of public works or his designee, be deemed evidence of the presence of improper connections as provided in this ordinance. The director of public works or his designee shall have the right to enter any property served by a connection to the water supply or distribution system of the village and the consumer's premises shall be open at all reasonable times to such persons for the verification of information submitted by the inspected consumer to the public water supply custodian regarding cross-connection inspection results.

(e) It shall be the responsibility of the water consumer to arrange periodic surveys of water use practices on his premises to determine whether there are actual or potential cross-connections to his water system through which contaminants or pollutants could backflow into his or the public potable water system. All cross-connection control or other plumbing inspections must be conducted in accordance with Ill. Rev. Stat. 1991, ch. 111, ¶ 1103.

(f) It is the responsibility of the water consumer to prevent backflow into the public water system by ensuring that:

(1) All cross-connections are removed, or approved cross-connection control devices are installed for control of backflow and back-siphonage.

(2) Cross-connection control devices shall be installed in accordance with the manufacturer's instructions.

(3) Cross-connection control devices shall be inspected at the time of installation and at least annually by a person approved by the Agency as a cross-connection control device inspector (CCCDI). The inspection of mechanical devices shall include physical testing in accordance with the manufacturer's instructions.

(4) Testing and records.

a. Each device shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer.

b. Records submitted to the community public water supply shall be available for inspection by Agency personnel in accordance with Ill. Rev. Stat. 1991, ch. 111½, ¶ 1004.

c. Each device shall have a tag attached listing the date of most recent test, name of CCCDI, and type and date of repairs.

d. A maintenance log shall be maintained and shall include:

1. Date of each test;
2. Name and approval number of person performing the test;
3. Test results;
4. Repairs or servicing required;
5. Repairs and date completed; and
6. Servicing performed and date completed.

(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-380. Where protection required.

(a) An approved backflow device shall be installed on all connections to the public water supply as described in the Illinois Plumbing Code, 77 Ill. Adm. Code 890 and the agency's regulations, 35 Ill. Adm. Code 680. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises, where in the judgement of the director of public works, actual or potential hazards to the public water supply system exist.

(b) An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises where the following conditions exist:

(1) Premises having an auxiliary water supply, unless such auxiliary supply is accepted as an additional source by the director of public works and the source is approved by the Illinois Environmental Protection Agency.

(2) Premises on which any substance is handled which can create an actual or potential hazard to the public water supply system. This shall include premises having sources or systems containing process fluids or waters originating from the public water supply system which are no longer under the sanitary control of the director of public works.

(3) Premises having internal cross-connections that, in the judgment of the director of public works and/or the cross-connection control device inspector, are not correctable, or intricate plumbing arrangements which make it impractical to determine whether or not cross-connections exist.

(4) Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross-connection survey.

(5) Premises having a repeated history of cross-connections being established or re-established.

(c) An approved backflow device shall be installed on all connections to the public water supply as described in the Illinois Plumbing Code, 77 Ill. Adm. Code 890 and the Agency's regulations, 35 Ill. Adm. Code 653. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving, but not necessarily limited to, the following types of facilities unless the Director of Public Works determines that no actual or potential hazard to the public water supply system exists:

(1) Hospitals, mortuaries, clinics, nursing homes.

(2) Laboratories.

(3) Sewage treatment plants, sewage pumping stations or storm water pumping stations.

(4) Food or beverage processing plants.

(5) Chemical plants.

(6) Metal plating industries.

(7) Petroleum processing or storage plants.

(8) Car washes.

(9) Pesticide, or herbicide or extermination plants and trucks.

(10) Farm service and fertilizer plants and trucks.

(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-381. Type of protection required.

(a) The type of protection required under section 25-380(b)(1), (2), and (3) of this Division 6 shall depend on the degree of hazard which exists as follows:

(1) An approved fixed proper air gap separation shall be installed where the public water supply system may be contaminated with substances that could cause a severe health hazard.

(2) An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention assembly shall be installed where the public water supply system may be contaminated with a substance that could cause a system or health hazard.

(3) An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention assembly or a double check valve assembly shall be installed where the public water supply system may be polluted with substances that could cause a pollution hazard not dangerous to health.

(b) The type of protection required under section 25-380(b)(4) and (5) of this Division 6 shall be an approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention device.

(c) Where a public water supply or an auxiliary water supply is used for a fire protection system, reduced pressure principle backflow preventers shall be installed on fire safety systems connected to the public water supply when:

(1) The fire safety system contains antifreeze, fire retardant or other chemicals;

(2) Water is pumped into the system from another source; or

(3) Water flows by gravity from a nonpotable source; or water can be pumped into the fire safety system from any other source;

(4) There is a connection whereby another source can be introduced into the fire safety system.

(d) All other fire safety systems connected to the potable water supply shall be protected by a double check valve assembly on metered service lines and a double detector check valve assembly on unmetered service lines.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-382. Backflow prevention devices.

(a) All backflow prevention devices or methods required by this ordinance shall be approved by the Research Foundation for Cross-Connection Control of the University of Southern California, American Water Works Association, American Society of Sanitary Engineering, or American National Standards Institute or certified by the National Sanitation Foundation to be in compliance with applicable industry specifications.

(b) Installation of approved devices shall be made in accordance with the manufacturer's instructions. Maintenance as recommended by the manufacturer of the device shall be performed. Manufacturer's maintenance manual shall be available on-site.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-383. Inspection and maintenance.

(a) It shall be the duty of the consumer at any premises on which backflow prevention devices required by this ordinance are installed to have inspections, tests, maintenance and repairs made in accordance with the following schedule or more often where inspections indicate a need or are specified in the manufacturer's instructions:

(1) Fixed proper air gap separations shall be inspected to document that a proper vertical distance is maintained between the discharge point of the service line and the flood level rim of the receptacle at the time of installation and at least annually thereafter. Corrections to improper or by-passed air gaps shall be made within twenty-four (24) hours.

(2) Double check valve assemblies shall be inspected and tested at time of installation and at least annually thereafter, and required service performed within five (5) days.

(3) Reduced pressure principle backflow prevention assemblies shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer, and required service performed within five (5) days.

(b) Testing shall be performed by a person who has been approved by the agency as competent to service the device. Proof of approval shall be in writing.

(c) Each device shall have a tag attached listing the date of most recent test or visual inspection, name of tester, and type and date of repairs.

(d) A maintenance log shall be maintained and include:

(1) Date of each test or visual inspection;

(2) Name and approval number of person performing the test or visual inspection;

(3) Test results;

(4) Repairs or servicing required;

(5) Repairs and date completed; and

(6) Servicing performed and date completed.

(e) Whenever any backflow prevention device required by this division is found to be defective, it shall be repaired or replaced at the expense of the consumer without delay in accordance with the provisions of this division.

(f) Backflow prevention devices shall not be by-passed, made inoperative, removed or otherwise made ineffective without specific authorization by the director of public works.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-384. Booster pumps.

(a) Where a booster pump has been installed on the service line to or within any premises, such pump shall be equipped with a low pressure cut-off device designed to shut off the booster pump when the pressure in the service line on the suction side of the pump drops to twenty (20) psi or less.

(b) It shall be the duty of the water consumer to maintain the low pressure cut-off device in proper working order and to certify to the director of public works, at least once a year, that the device is operable.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-385. Disconnection of service; violations; liability for costs and expenses.

(a) The director of public works is hereby authorized and directed to deny or discontinue, after reasonable notice to the occupant(s) thereof, the water service to any premises or property wherein:

(1) Any backflow prevention device required by these regulations is not installed, tested, maintained and repaired in a manner acceptable to the director of public works; or

(2) The backflow prevention device has been removed or by-passed; or

(3) An unprotected cross-connection exists on the premises or property; or

(4) A low pressure cut-off required by these regulations is not installed and maintained in working order; or

(5) Any connection in violation of the provisions of this division is known or believed to exist.

In addition, the director of public works is also directed to take such other precautionary measures as he may deem necessary to eliminate any danger of contamination of the public water supply distribution mains.

(b) Water service to such premises or property shall not be restored until such conditions or defects have been corrected or eliminated in conformance with the provisions of this division and to the satisfaction of the director of public works, and the required reconnection or reinstatement fee (see section 25-108 of this code) is paid to the village.

(c) Immediate disconnection with verbal notice can be effected when the director of public works is assured that imminent danger of harmful contamination of the public water supply system exists. Such action shall be followed by written notification of the cause of disconnection. Immediate disconnection without notice to any party can be effected to prevent actual or anticipated contamination or pollution of the public water supply, provided that, in the reasonable opinion of the director of public works or the Illinois Environmental Protection Agency, such action is required to prevent actual or potential contamination or pollution of the public water supply.

(d) Neither the village, nor its director of public works, employees, officials, officers, agents or assigns shall be liable to any persons, firms, corporations, partnerships, associations, or any customer or consumer of the village for any injuries, damages, expenses, economic loss, lost revenues, or lost profits which may result from the termination of said customer's or consumer's water supply in accordance with the terms of this ordinance, whether or not said termination of the water supply was with or without notice.

(e) Any person found to be violating any provision of this division shall be served with written notice stating the notice of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violation.

(f) Any person violating any of the provisions of this ordinance, in addition to the fine provided, shall become liable to the village for any expense, loss or damage occasioned to the village by reason of such violation, whether the same was caused before or after notice.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-386. Liability for contamination.

The consumer or customer responsible for back-siphoned or back pressured material or contamination through backflow, if contamination of the potable water supply system occurs through an illegal cross-connection, or an improperly installed, maintained, or repaired device,

or a device which had been bypassed, is liable for all costs and expenses incurred in connection with the clean-up of the potable water supply system, including but not limited to:

(1) Any and all costs incurred by the village in connection with the operation, maintenance and staffing required to respond to such contamination at the rate of one hundred dollars ($100.00) per hour (or any fraction thereof) per vehicle, and the hourly rate of pay, together with all benefits, taxes, administrative overhead, workers' compensation claims, and any other expense or cost, for each employee who participates in any clean-up of any potable water supply system;

(2) Any and all costs incurred by the village for equipment and materials used, damaged, lost, spent, destroyed, or rendered irreparable in connection with any clean-up of any potable water supply system;

(3) Any and all costs, expenses, and liability set forth above, incurred by any federal, state, or local governmental agency involved in any clean-up of any potable water supply system.

(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-387. Penalties.

Any person, firm, or corporation who violates, disobeys, omits, neglects, or who resists enforcement of any of the provisions of this Division 6 shall be fined not less than one hundred dollars ($100.00) nor more than five hundred dollars ($500.00) for each offense, and each day upon which such a violation continues shall constitute a separate offense.

(Ord. No. 2617, § 1, 2-1-93)

ARTICLE IV. SEWERS AND SEWAGE DISPOSAL

DIVISION 1. GENERALLY

Sec. 25-401. Definitions.

Unless the context specifically indicates otherwise, the meaning of terms used in this article shall be as follows:

Act: The Federal Water Pollution Control Act, as amended, Thirty-Third U.S. Congress (Public Law 95-217).

Administrator: The administrator of the United States Environmental Protection Agency.

Basic user charge: The basic assessment levied on all users of the public sewer system.

BOD (biochemical oxygen demand): The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty (20) degrees Celsius expressed in milligrams per liter (mg/l).

Building drain: That part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer beginning five (5) feet outside the inner face of the building wall.

Building sewer: The extension from the building drain to the public sewer or other place of disposal.

Capital improvement charge: A charge levied on users to improve, extend or reconstruct the sewage treatment works.

Clarification of word usage: Shall is mandatory; *may* is permissible.

Combined sewer: A sewer which is designed and intended to receive wastewater, storm, surface and groundwater drainage.

Commercial user: Transit lodging, retail and wholesale establishments or places engaged in selling merchandise or rendering services.

Compatible pollutant: Biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria, plus additional pollutants identified in the NPDES permit.

Control manhole: A structure located on a site from which industrial wastes are discharged. Where feasible, the manhole shall have an interior drop. The purpose of a *control manhole* is to provide access for the village representative to sample and/or measure discharges.

Sec. 25-373. Reserved.

Editor's note—Ord. No. 2230, adopted April 27, 1987, repealed § 25-373, pertaining to responsibility for leaks.

Sec. 2-374. Reserved.

DIVISION 6. CROSS-CONNECTION CONTROL PROGRAM

Sec. 25-375. Purpose, applicability and definitions.

(a) *Purpose.* The purposes of this program are:

(1) To protect the public water supply system from contamination or pollution by isolating within the customer's water system contaminants or pollutants which could backflow through the service connection into the public water supply system;

(2) To promote the elimination or control of existing cross-connections, actual or potential, between the public or consumer's potable water system and nonpotable water systems, plumbing fixtures and sources or systems containing substances of unknown or questionable safety.

(3) To provide for the maintenance of a continuing program of cross-connection control which will prevent the contamination or pollution of the public and consumer's potable water systems.

(b) *Definitions.* For purposes of interpretation and enforcement of this Division 6, the following definitions shall apply:

Agency: The Illinois Environmental Protection Agency.

Approved: Backflow prevention devices or methods approved by the Research Foundation for Cross-Connection Control of the University of Southern California, Association of State Sanitary Engineers, American Water Works Association, American National Standards Institute, or certified by the National Sanitation Foundation.

Auxiliary water system: Any water source or system on or available to the premises other than the public water supply system and includes the water supplied by the system. These auxiliary waters may include water from another purveyor's public water supply system; or water from a source such as wells, lakes, or streams, or process fluids; or used water. These waters may be polluted or contaminated or objectionable or constitute a water source or system over which the water purveyor does not have control.

Backflow: The flow of water or other liquids, mixtures, or substances into the distribution pipes of a potable water system from any source other than the intended source of the potable water supply.

Backflow prevention device: Any device, method, or type of construction intended to prevent backflow into a potable water system. All devices used for backflow prevention in Illinois

Sec. 25-369. Metering of sources.

All municipal water service shall be metered.
(Ord. No. 1737, § 1(C), 10-3-77)

Sec. 25-370. Cessation of sewer flushing and street cleaning with potable water.

The village will cease to flush sewers and clean streets with potable water. In lieu thereof, the village will use water extracted from detention ponds which are located upon public property.
(Ord. No. 1737, § 1(D), 10-3-77)

Sec. 25-371. Plan to reduce unaccounted water use.

(a) An annual inspection and certification of all master meters pertaining to the municipal water system will be conducted under the auspices and direction of the village.

(b) The village has established a meter replacement program, whereby any meter older than five (5) years of age will be replaced by December 31, 1979, after which period the village will maintain a program, whereby the meters will be either recalibrated and rebuilt, or replaced, on a regular and customary basis.

(c) All municipal buildings shall be metered.

(d) Accurate records and monitoring shall be kept for all public services which require water, including, but not limited to the following:

(1) Firefighting and training;

(2) Public and private constructions;

(3) Municipal use;

(4) Water main flushing;

(5) Leakage (such as water main breaks and service leaks);

(6) Unaccounted for water.
(Ord. No. 1737, § 1(E), 10-3-77)

Sec. 25-372. Consumer education program.

(a) The village does hereby establish the third week of July in each year as "Water Awareness Week," whereby, consumer education material will be displayed by the water and sewer department and the environmental control board.

(b) The water and sewer department will furnish, throughout each year, consumer education material relative to water conservation. This will be accomplished through the news media and separate mailings.
(Ord. No. 1737, § 1(G), 10-3-77)

must meet the standards of the Illinois Plumbing Code and the Illinois Environmental Protection Agency.

Consumer or *customer:* The owner, official custodian or person in control of any premises supplied by or in any manner connected to a public water system.

Consumer's water system: Any water system located on the customer's premises. A building plumbing system is considered to be a customer's water system.

Contamination: An impairment of the quality of the water by entrance of any substance to a degree which could create a health hazard.

Cross-connection: Any physical connection or arrangement between two (2) otherwise separate piping systems, one of which contains potable water and the other a substance of unknown or questionable safety or quality, whereby there may be a flow from one system into the other.

Direct cross-connection: A cross-connection formed when a water system is physically joined to a source of unknown or unsafe substance.

Indirect cross-connection: A cross-connection through which an unknown substance can be forced, drawn by vacuum or otherwise introduced into a safe potable water system.

Double check valve assembly: An assembly composed of single, independently acting check valves approved under ASSE Standard 1015. A double check valve assembly must include tight shut-off valves located at each end of the assembly and suitable connections for testing the watertightness of each check valve.

Fixed proper air gap: The unobstructed vertical distance through the free atmosphere between the water discharge point and the flood level rim of the receptacle.

Health hazard: Any condition, device or practice in a water system or its operation resulting from a real or potential danger to the health and well being of consumers. The word "severe" as used to qualify "health hazard" means a hazard to the health of the user that could be expected to result in death or significant reduction in the quality of life.

Inspection: A plumbing inspection to examine carefully and critically all materials, fixtures, piping and appurtenances, appliances and installations of a plumbing system for compliance with requirements of the Illinois Plumbing Code, 77 Ill. Adm. Code 890.

Nonpotable water: Water not safe for drinking, personal, or culinary use as determined by the requirements of 35 Ill. Adm. Code 604.

Plumbing: The actual installation, repair, maintenance, alteration or extension of a plumbing system by any person. Plumbing includes all piping, fixtures, appurtenances and appliances for a supply of water for all purposes, including without limitation, lawn sprinkler systems, from the source of a private water supply on the premises or from the main in the street, alley or at the curb to, within and about any building or buildings where a person or persons live, work or assemble. Plumbing includes all piping, from discharge of pumping units to and including pressure tanks in water supply systems. Plumbing includes all piping, fix-

tures, appurtenances, and appliances for a building drain and a sanitary drainage and related ventilation system of any building or buildings where a person or persons live, work or assemble from the point of connection of such building drain to the building sewer or private sewage disposal system five (5) feet beyond the foundation walls.

Pollution: The presence of any foreign substance (organic, inorganic, radiological, or biological) in water that tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.

Potable water: Water which meets the requirements of 35 Ill. Adm. Code 604 for drinking, culinary, and domestic purposes.

Potential cross-connection: A fixture or appurtenance with threaded hose connection, tapered spout, or other connection which would facilitate extension of the water supply line beyond its legal termination point.

Process fluid(s): Any fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, pollutional, or system hazard if introduced into the public or a consumer's potable water system. This includes, but is not limited to:

(1) Polluted or contaminated waters;

(2) Process waters;

(3) Used waters originating from the public water supply system which may have deteriorated in sanitary quality;

(4) Cooling waters;

(5) Questionable or contaminated natural waters taken from wells, lakes, streams, or irrigation systems;

(6) Chemicals in solutions or suspension;

(7) Oils, gases, acids, alkalis and other liquid and gaseous fluids used in industrial or other processes, or for firefighting purposes.

Public water supply: All mains, pipes, and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use and which serve at least fifteen (15) service connections or which regularly serve at least twenty-five (25) persons at least sixty (60) days per year. A public water supply is either a "community water supply" or a "non-community water supply."

Reduced pressure principle backflow prevention device: A device containing a minimum of two (2) independently acting check valves together with an automatically operated pressure differential relief valve located between the two (2) check valves and approved under ASSE Standard 1013. During normal flow and at the cessation of normal flow, the pressure between

these two (2) checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the device, and each device shall be fitted with properly located test cocks.

Service connection: The opening, including all fittings and appurtenances, at the water main through which water is supplied to the user.

Survey: The collection of information pertaining to a customer's piping system regarding the location of all connections to the public water supply system and must include the location, type and most recent inspection and testing date of all cross-connection control devices and methods located within that customer's piping system. The survey must be in written form, and should not be an actual plumbing inspection.

System hazard: A condition through which an aesthetically objectionable or degrading material not dangerous to health may enter the public water supply system or a consumer's potable water system.

Used water: Any water supplied by a public water supply system to a consumer's water system after it has passed through the service connection and is no longer under the control of the water supply official custodian.

Water purveyor: The owner or official custodian of a public water system.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-376. Water system.

(a) The water system shall be considered as made up of two (2) parts: the public water supply system and the consumer's water system.

(b) The public water supply system shall consist of the source facilities and the distribution system, and shall include all those facilities of the potable water system under the control of the director of public works up to the point where the consumer's water system begins.

(1) The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the public water supply distribution system.

(2) The public water supply distribution system shall include the network of conduits used to deliver water from the source to the consumer's water system.

(c) The consumer's water system shall include all parts of the facilities beyond the service connection used to convey water from the public water supply distribution system to points of use.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-377. Installation standards.

In addition to any other requirements imposed by the Village Park Municipal Code or by state or federal regulations, all plumbing installed within the village shall be installed in accordance with the Illinois Plumbing Code, 77 Ill. Adm. Code 890. If in accordance with the Illinois Plumbing Code or if in the judgment of either the director of public works or his designee, an approved backflow prevention device is necessary for the safety of the public water supply system, then the director of public works or his designee will give notice to the water customer to install such an approved device immediately. The water customer shall, at his own expense, install such an approved device at a location and in a manner in accordance with the Illinois Plumbing Code, Illinois Environmental Protection Agency, and all village ordinances, and shall have inspections and tests made of such approved devices upon installation and as required by the Illinois Plumbing Code, Illinois Environmental Protection Agency, and village ordinances.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-378. Unpermitted connections.

(a) No person, firm or corporation shall establish or permit to be established or maintain or permit to be maintained any connection whereby a private, auxiliary or emergency water supply other than the regular public water supply of the village may enter the supply or distribution system of the village, unless such private, auxiliary, or emergency water supply and the method of connection and use of such supply shall have been approved by the director of public works or his designee and the Illinois Environmental Protection Agency.

(b) Connections between potable water systems and other systems or equipment containing water or other substances of unknown or questionable quality are prohibited except when and where approved cross-connection control devices or methods are installed, tested and maintained to insure proper operation on a continuing basis.

(c) No physical connection shall be permitted between the potable portion of a supply and any other water supply not of equal or better bacteriological and chemical quality as determined by inspection and analysis by the agency.

(d) There shall be no arrangement or connection by which an unsafe substance may enter a supply.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-379. Surveys and investigations.

(a) It shall be the duty of the director of public works or his designee to cause surveys and investigations to be made of industrial and other properties served by the public water supply system of the village to determine whether actual or potential hazards to the public water supply may exist. Such surveys and investigations shall be made a matter of public record and shall be repeated at least every two (2) years, or oftener, as the director of public works or his designee shall deem necessary. Records of such surveys shall be maintained and available for review for a period of at least five (5) years.

(b) The consumer, if ordered by the director of public works or his designee, shall procure the services of an approved cross-connection control device inspector for the inspection of the presence or absence of cross-connections within the consumer's premises, and testing, repair and maintenance of cross-connection control devices within the consumer's premises and shall be responsible for all costs related thereto.

(c) The approved cross-connection control device inspector, the director of public works, or his designee, shall have the right to enter at any reasonable time any property served by a connection to the public water supply or distribution system of the village for the purpose of verifying the presence or absence of cross-connections.

(d) On demand of the director of public works or his designee, any consumer or the owner, lessees, or occupants of any property served by a connection to the public water supply or distribution system of the village shall furnish to the director of public works or his designee any information which they may request regarding the piping system or systems or water use on such property. The refusal of such information, when demanded, shall, within the discretion of the director of public works or his designee, be deemed evidence of the presence of improper connections as provided in this ordinance. The director of public works or his designee shall have the right to enter any property served by a connection to the water supply or distribution system of the village and the consumer's premises shall be open at all reasonable times to such persons for the verification of information submitted by the inspected consumer to the public water supply custodian regarding cross-connection inspection results.

(e) It shall be the responsibility of the water consumer to arrange periodic surveys of water use practices on his premises to determine whether there are actual or potential cross-connections to his water system through which contaminants or pollutants could backflow into his or the public potable water system. All cross-connection control or other plumbing inspections must be conducted in accordance with Ill. Rev. Stat. 1991, ch. 111, ¶ 1103.

(f) It is the responsibility of the water consumer to prevent backflow into the public water system by ensuring that:

(1) All cross-connections are removed, or approved cross-connection control devices are installed for control of backflow and back-siphonage.

(2) Cross-connection control devices shall be installed in accordance with the manufacturer's instructions.

(3) Cross-connection control devices shall be inspected at the time of installation and at least annually by a person approved by the Agency as a cross-connection control device inspector (CCCDI). The inspection of mechanical devices shall include physical testing in accordance with the manufacturer's instructions.

(4) Testing and records.

a. Each device shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer.

b. Records submitted to the community public water supply shall be available for inspection by Agency personnel in accordance with Ill. Rev. Stat. 1991, ch. 111½, ¶ 1004.

c. Each device shall have a tag attached listing the date of most recent test, name of CCCDI, and type and date of repairs.

d. A maintenance log shall be maintained and shall include:

1. Date of each test;
2. Name and approval number of person performing the test;
3. Test results;
4. Repairs or servicing required;
5. Repairs and date completed; and
6. Servicing performed and date completed.

(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-380. Where protection required.

(a) An approved backflow device shall be installed on all connections to the public water supply as described in the Illinois Plumbing Code, 77 Ill. Adm. Code 890 and the agency's regulations, 35 Ill. Adm. Code 680. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises, where in the judgement of the director of public works, actual or potential hazards to the public water supply system exist.

(b) An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises where the following conditions exist:

(1) Premises having an auxiliary water supply, unless such auxiliary supply is accepted as an additional source by the director of public works and the source is approved by the Illinois Environmental Protection Agency.

(2) Premises on which any substance is handled which can create an actual or potential hazard to the public water supply system. This shall include premises having sources or systems containing process fluids or waters originating from the public water supply system which are no longer under the sanitary control of the director of public works.

(3) Premises having internal cross-connections that, in the judgment of the director of public works and/or the cross-connection control device inspector, are not correctable, or intricate plumbing arrangements which make it impractical to determine whether or not cross-connections exist.

(4) Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross-connection survey.

(5) Premises having a repeated history of cross-connections being established or re-established.

(c) An approved backflow device shall be installed on all connections to the public water supply as described in the Illinois Plumbing Code, 77 Ill. Adm. Code 890 and the Agency's regulations, 35 Ill. Adm. Code 653. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving, but not necessarily limited to, the following types of facilities unless the Director of Public Works determines that no actual or potential hazard to the public water supply system exists:

(1) Hospitals, mortuaries, clinics, nursing homes.

(2) Laboratories.

(3) Sewage treatment plants, sewage pumping stations or storm water pumping stations.

(4) Food or beverage processing plants.

(5) Chemical plants.

(6) Metal plating industries.

(7) Petroleum processing or storage plants.

(8) Car washes.

(9) Pesticide, or herbicide or extermination plants and trucks.

(10) Farm service and fertilizer plants and trucks.

(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-381. Type of protection required.

(a) The type of protection required under section 25-380(b)(1), (2), and (3) of this Division 6 shall depend on the degree of hazard which exists as follows:

(1) An approved fixed proper air gap separation shall be installed where the public water supply system may be contaminated with substances that could cause a severe health hazard.

(2) An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention assembly shall be installed where the public water supply system may be contaminated with a substance that could cause a system or health hazard.

(3) An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention assembly or a double check valve assembly shall be installed where the public water supply system may be polluted with substances that could cause a pollution hazard not dangerous to health.

(b) The type of protection required under section 25-380(b)(4) and (5) of this Division 6 shall be an approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention device.

(c) Where a public water supply or an auxiliary water supply is used for a fire protection system, reduced pressure principle backflow preventers shall be installed on fire safety systems connected to the public water supply when:

(1) The fire safety system contains antifreeze, fire retardant or other chemicals;

(2) Water is pumped into the system from another source; or

(3) Water flows by gravity from a nonpotable source; or water can be pumped into the fire safety system from any other source;

(4) There is a connection whereby another source can be introduced into the fire safety system.

(d) All other fire safety systems connected to the potable water supply shall be protected by a double check valve assembly on metered service lines and a double detector check valve assembly on unmetered service lines.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-382. Backflow prevention devices.

(a) All backflow prevention devices or methods required by this ordinance shall be approved by the Research Foundation for Cross-Connection Control of the University of Southern California, American Water Works Association, American Society of Sanitary Engineering, or American National Standards Institute or certified by the National Sanitation Foundation to be in compliance with applicable industry specifications.

(b) Installation of approved devices shall be made in accordance with the manufacturer's instructions. Maintenance as recommended by the manufacturer of the device shall be performed. Manufacturer's maintenance manual shall be available on-site.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-383. Inspection and maintenance.

(a) It shall be the duty of the consumer at any premises on which backflow prevention devices required by this ordinance are installed to have inspections, tests, maintenance and repairs made at least annually or more often where inspections indicate a need or are specified in the manufacturer's instructions:

(1) Fixed proper air gap separations shall be inspected to document that a proper vertical distance is maintained between the discharge point of the service line and the flood level rim of the receptacle at the time of installation and at least annually thereafter. Corrections to improper or by-passed air gaps shall be made within twenty-four (24) hours.

(2) Double check valve assemblies shall be inspected and tested at time of installation and at least annually thereafter, and required service performed within five (5) days.

(3) Reduced pressure principal backflow prevention assemblies shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer, and required service performed within five (5) days.

(b) Testing shall be performed by a person who has been approved by the agency as competent to service the devices. Proof of approval shall be in writing.

(c) Each device shall have a tag attached listing the date of most recent test or visual inspection, name of tester, and type and date of repairs.

(d) A maintenance log shall be maintained and include:

(1) Date of each test or visual inspection;

(2) Name and approval number of person performing the test or visual inspection;

(3) Test results;

(4) Repairs or servicing required;

(5) Repairs and date completed; and

(6) Servicing performed and date completed.

(e) Whenever any backflow prevention device required by this division is found to be defective, it shall be repaired or replaced at the expense of the consumer without delay in accordance with the provisions of this division.

(f) Backflow prevention devices shall not be by-passed, made inoperative, removed or other wise made ineffective without specific authorization by the director of public works.

(g) The director of public works shall maintain a database of backflow prevention devices, including the name and address of the consumer. The director shall cause annual reminder notices for testing of the devices to be sent to consumers, shall cause inspection reports to be reviewed and verified, an may periodically cause field tests to be performed on devices in use. Each commercial or industrial consumer shall pay an annual fee of fourteen dollars and forty cents ($14.40) pursuant to this program, which fee shall be included on a pro-rated basis in the consumer's water bill.
(Ord. No. 2617, § 1, 2-1-93; Ord. No. 3257, § 9, 7-12-04)

Sec. 25-384. Booster pumps.

(a) Where a booster pump has been installed on the service line to or within any premises, such pump shall be equipped with a low pressure cut-off device designed to shut off the booster pump when the pressure in the service line on the suction side of the pump drops to twenty (20) psi or less.

(b) It shall be the duty of the water consumer to maintain the low pressure cut-off device in proper working order and to certify to the director of public works, at least once a year, that the device is operable.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-385. Disconnection of service; violations; liability for costs and expenses.

(a) The director of public works is hereby authorized and directed to deny or discontinue, after reasonable notice to the occupant(s) thereof, the water service to any premises or property wherein:

(1) Any backflow prevention device required by these regulations is not installed, tested, maintained and repaired in a manner acceptable to the director of public works; or

(2) The backflow prevention device has been removed or by-passed; or

(3) An unprotected cross-connection exists on the premises or property; or

(4) A low pressure cut-off required by these regulations is not installed and maintained in working order; or

(5) Any connection in violation of the provisions of this division is known or believed to exist.

In addition, the director of public works is also directed to take such other precautionary measures as he may deem necessary to eliminate any danger of contamination of the public water supply distribution mains.

(b) Water service to such premises or property shall not be restored until such conditions or defects have been corrected or eliminated in conformance with the provisions of this division and to the satisfaction of the director of public works, and the required reconnection or reinstatement fee (see section 25-108 of this code) is paid to the village.

(c) Immediate disconnection with verbal notice can be effected when the director of public works is assured that imminent danger of harmful contamination of the public water supply system exists. Such action shall be followed by written notification of the cause of disconnection. Immediate disconnection without notice to any party can be effected to prevent actual or anticipated contamination or pollution of the public water supply, provided that, in the reasonable opinion of the director of public works or the Illinois Environmental Protection Agency, such action is required to prevent actual or potential contamination or pollution of the public water supply.

(d) Neither the village, nor its director of public works, employees, officials, officers, agents or assigns shall be liable to any persons, firms, corporations, partnerships, associations, or any customer or consumer of the village for any injuries, damages, expenses, economic loss, lost revenues, or lost profits which may result from the termination of said customer's or consumer's water supply in accordance with the terms of this ordinance, whether or not said termination of the water supply was with or without notice.

(e) Any person found to be violating any provision of this division shall be served with written notice stating the notice of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violation.

(f) Any person violating any of the provisions of this ordinance, in addition to the fine provided, shall become liable to the village for any expense, loss or damage occasioned to the village by reason of such violation, whether the same was caused before or after notice.
(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-386. Liability for contamination.

The consumer or customer responsible for back-siphoned or back pressured material or contamination through backflow, if contamination of the potable water supply system occurs through an illegal cross-connection, or an improperly installed, maintained, or repaired device, or a device which had been bypassed, is liable for all costs and expenses incurred in connection with the clean-up of the potable water supply system, including but not limited to:

(1) Any and all costs incurred by the village in connection with the operation, maintenance and staffing required to respond to such contamination at the rate of one hundred dollars ($100.00) per hour (or any fraction thereof) per vehicle, and the hourly rate of pay, together with all benefits, taxes, administrative overhead, workers' compensation claims, and any other expense or cost, for each employee who participates in any clean-up of any potable water supply system;

(2) Any and all costs incurred by the village for equipment and materials used, damaged, lost, spent, destroyed, or rendered irreparable in connection with any clean-up of any potable water supply system;

(3) Any and all costs, expenses, and liability set forth above, incurred by any federal, state, or local governmental agency involved in any clean-up of any potable water supply system.

(Ord. No. 2617, § 1, 2-1-93)

Sec. 25-387. Penalties.

Any person, firm, or corporation who violates, disobeys, omits, neglects, or who resists enforcement of any of the provisions of this Division 6 shall be fined not less than one hundred dollars ($100.00) nor more than five hundred dollars ($500.00) for each offense, and each day upon which such a violation continues shall constitute a separate offense.
(Ord. No. 2617, § 1, 2-1-93)

ARTICLE IV. SEWERS AND SEWAGE DISPOSAL

DIVISION 1. GENERALLY

Sec. 25-401. Definitions.

Unless the context specifically indicates otherwise, the meaning of terms used in this article shall be as follows:

Act: The Federal Water Pollution Control Act, as amended, Thirty-Third U.S. Congress (Public Law 95-217).

Administrator: The administrator of the United States Environmental Protection Agency.

Basic user charge: The basic assessment levied on all users of the public sewer system.

BOD (biochemical oxygen demand): The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty (20) degrees Celsius expressed in milligrams per liter (mg/l).

Building drain: That part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer beginning five (5) feet outside the inner face of the building wall.

Building sewer: The extension from the building drain to the public sewer or other place of disposal.

Capital improvement charge: A charge levied on users to improve, extend or reconstruct the sewage treatment works.

Clarification of word usage: Shall is mandatory; *may* is permissible.

Combined sewer: A sewer which is designed and intended to receive wastewater, storm, surface and groundwater drainage.

Commercial user: Transit lodging, retail and wholesale establishments or places engaged in selling merchandise or rendering services.

Compatible pollutant: Biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria, plus additional pollutants identified in the NPDES permit.

Control manhole: A structure located on a site from which industrial wastes are discharged. Where feasible, the manhole shall have an interior drop. The purpose of a *control manhole* is to provide access for the village representative to sample and/or measure discharges.

Appendix H

Pressure Testing Conducted on December 12, 2005

	Pressure Test Results				Model Output
Hydrant Location	Main Size (in)	Static Pressure (psi)	Residual Pressure 1/ (psi)	Flow Rate 1/ (gpm)	Static Pressure (psi)
Beneath elevated tank at Plymouth station	10	48			48
Beneath elevated tank at Home Ave station	12	50			50
1311 S. Ardmore near Cornell Reservoir	10	67			67
On Addison north of North Ave west of 270 W. North	10	47	40	770	46
SW corner of N Villa Ave. & Armitage Ave	12	61	54	890	60
520 S. Ardmore	8	48			48
726 S. Villa Ave	8	57			59
SE corner of Roosevelt Rd. & Michigan Ave.	10	42	32	710	49
NE corner of Addison Rd & Washington Blvd.	6	42			45

1/ Fire Flow Test was Conducted