

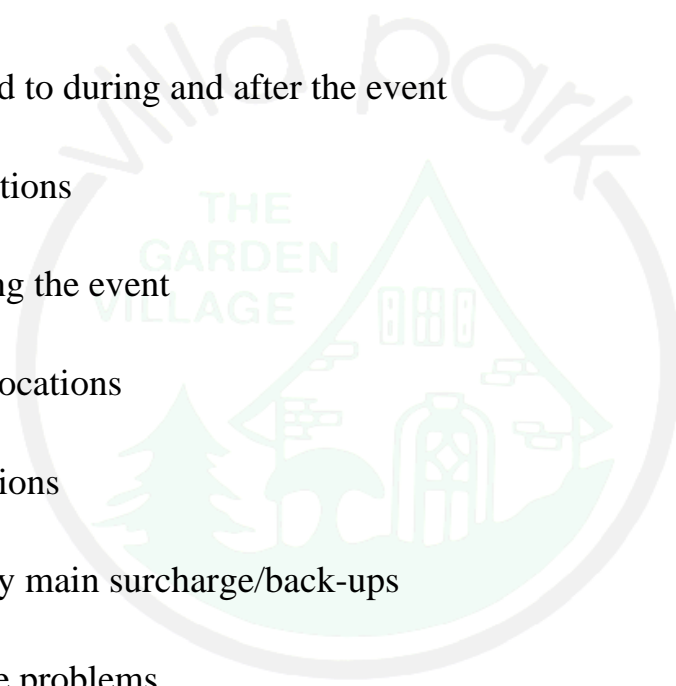
Storm Event



10/02/2006

Summary of Storm Event

•	Locations responded to during and after the event	110
•	Street flooding locations	65
•	Cleaned inlets during the event	49
•	Structure flooding locations	15
•	Yard flooding locations	16
•	Investigated sanitary main surcharge/back-ups	47
•	Sanitary service line problems	5
•	No problem found when responding	22



Summary of Previously Completed Projects

1992 Terry Kaye Subdivision relief storm sewer (\$273,835)

- Relief storm sewers on Euclid, Myrtle, and Terry Lane north of Sugar Creek

1992 Willowcrest Area Drainage Improvements – Phase I and II (\$1,207,461)

- Expansion of Jackson Detention Pond
- Construction of large retention basin at the Lufkin Lagoon site
- Construction of new storm sewers in the Willowcrest Subdivision, including disconnection of driveway drains from the sanitary sewer system and connection to the new storm sewer system

1996 Jackson Street Reconstruction (\$867,862)

- Construction of new storm sewers on Jackson Street between Addison Avenue and Ardmore Avenue
- Construction of an overflow storm sewer (in-house) to the Jackson detention basin

South Villa Lift Station upgrades

- Complete replacement and upgrade of existing lift station in 1998
- Installation of new SCADA system in 1998.
- Replacement of existing force main and construction of new force main in 2006

Summary of Previously Completed Projects

Private sector I/I removal program

- Village wide inspection of downspouts, sump pumps, and area drains illegally connected to the sanitary sewer system
- Village subsidized 50% of the cost to remove these connections until 1993.
- Village ordinance requires all buildings to be re-inspected when property is sold
- Currently Village does not require disconnection of foundation drains that are directly connected to sanitary service lines

South Villa Lift Station I/I study and follow-up corrective measures

- Village forces conducted flow monitoring, television inspection, manhole inspections. Consultant compiled results and presented report in 2002,
- Village followed-up with 48 manhole chimney seals, in-house sanitary sewer point repairs at 16 locations, with three other locations added to a Village road project on Harvard Avenue.
- Village hired a contractor to re-line the sanitary sewer main on Summit Avenue south of Monroe Avenue
- Eleven locations with private I/I violations (downspouts) were identified and corrected
- Follow-up smoke testing was conducted along Sugar Creek in 2005.
- Additional locations for corrective action were identified. All but one have been corrected

Summary of Recommended Actions

Sanitary Sewers

- 1) Further Infiltration/Inflow (I/I) studies of South Villa lift station sanitary basin
 - Televising sections of sanitary sewer main along Sugar Creek and tributaries that could not be televised in previous study (contractual, FY07-08 budget item).
 - Smoke testing of entire South Villa Lift Station Sanitary Sewer Basin (contractual, FY07-08 budget item).
 - Follow-up with additional flow monitoring, dye testing, and visual inspections to identify individual I/I sources (contractual, FY07-08 budget item).

- 2) Conduct private property I/I inspections and televise sanitary sewer services of all homes that reported sanitary sewer surcharge during 10/2/06 storm (see spreadsheet)
 - Televising 23 homes @ \$225 each (to be completed in FY06-07), residents will be responsible for completing any corrective actions.
 - I/I inspections proposed at 28 locations (9 completed)

- 3) Continue to require I/I inspections in conjunction with remodeling permits, plumbing permits, and with sale of properties.
 - During the last twelve months Public Work staff performed 405 inspections (6% of service connections). Per ordinance, a house cannot be legally occupied by a new homeowner until corrective actions are completed.

Summary of Recommended Actions

Sanitary Sewers (continued)

- 4) Overhead sewer/check valve installation incentive program
 - Identify homes that could benefit from the installation of check valves or overhead sewers (8 identified to date, see spreadsheet)
 - Partially subsidize the installation of check valves and/or overhead sewers - **Requires a Village Board Policy Decision**
 - (Overhead sewer installation costs up to \$10,000. A reimbursement program could be proposed in FY07-08 budget).
- 5) Examine methods to waterproof or re-locate portions of sanitary sewer system located within 100-year floodplain of Sugar Creek (Actual recommendations will depend on results of smoke testing).

Summary of Recommended Actions

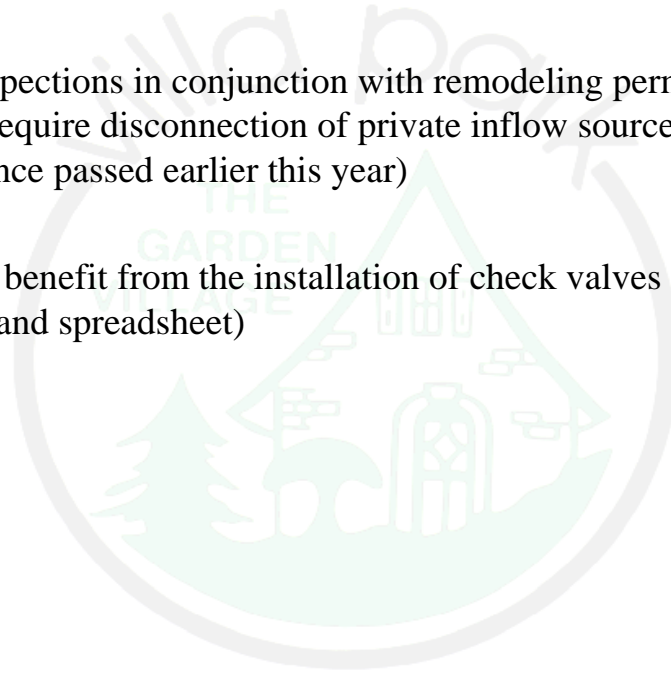
Combined Sewers

- 1) Continue programming of sewer separation projects in conjunction with future road projects.
 - Cornell - Park to Madison (completed)
 - South Villa - St. Charles to Madison (proposed)
 - Michigan - Park to Madison (proposed)
- 2) Investigate feasibility of removing intersection inlets from the combined sewer system in areas where future road projects are not currently programmed
 - Two locations completed in-house during last 24 months
- 3) Install rear yard inlets and connect them to an available storm sewer to relieve high groundwater conditions (See overland flooding, drainage program).
- 4) Conduct I/I inspections and televise sanitary sewer services of all homes that reported sanitary sewer surcharge during 10/2/06 storm (See overland flooding, drainage program)

Summary of Recommended Actions

Combined Sewers (continued)

- 5) Continue to require I/I inspections in conjunction with remodeling permits, plumbing permits, and with sale of properties. Require disconnection of private inflow sources when storm sewers become available (per new ordinance passed earlier this year)
- 6) Identify homes that could benefit from the installation of check valves or overhead sewers (see Sanitary Sewers, item #2 and spreadsheet)





Village of Villa Park

20 South Ardmore Avenue, Villa Park, Illinois 60181-2696

DEPARTMENT OF PUBLIC WORKS

VYDAS JUSKELIS, P.E. • Public Works Director

Phone (630) 834-8505
Fax (630) 834-8509
TDD (630) 834-8589

John Resident
20 South Ardmore Avenue
Villa Park, IL 60181

December 1, 2006

Dear Mr. Resident:

The Village of Villa Park is in the process of conducting an Inflow and Infiltration (I/I) study of the sanitary sewer system. As part of this study an inspection of your property must be conducted to verify: (a) whether there is a sump pump on your property; (b) whether or not that the sump pump is in compliance with Municipal Code; and (c) whether any other I/I sources exists (e.g. downspouts or area drains connected to the sanitary sewer). Your property is located in an area where sources of storm water inflow must be separated from the sanitary sewer system.

Please contact this office within thirty (30) days (December 31, 2006) to schedule an inspection of your property. You will be informed at the time of inspection if your property is in compliance with Municipal code, or if not, the measures that need to be taken to bring your property into compliance.

Sincerely

Richard A. Cermak
Sewer Superintendent

Summary of Recommended Actions

Overland Flooding Mitigation Measures

- 1) Schedule precautionary jetting of selected storm sewers, especially on Jackson Street and in the Willowcrest subdivision.
 - 7 locations completed, 2 remaining scheduled
- 2) Investigate and verify functionality of Jackson Street storm sewer system and Jackson School detention basin. Check capacities of outlet pipe for Jackson basin.
 - Scheduled
- 3) Provide “Drainage Problem Correction Policy” packets and applications to all private property that experienced overland flooding during the 10/2/06 storm.
 - 16 packets mailed, 1 deposit received to date (follow-up phone calls)
- 4) Follow-up engineering investigation to Drainage Program applicants (\$250 deposit required, Village to provide 50% funding for corrective measures.)
 - 5 candidate locations tentatively identified

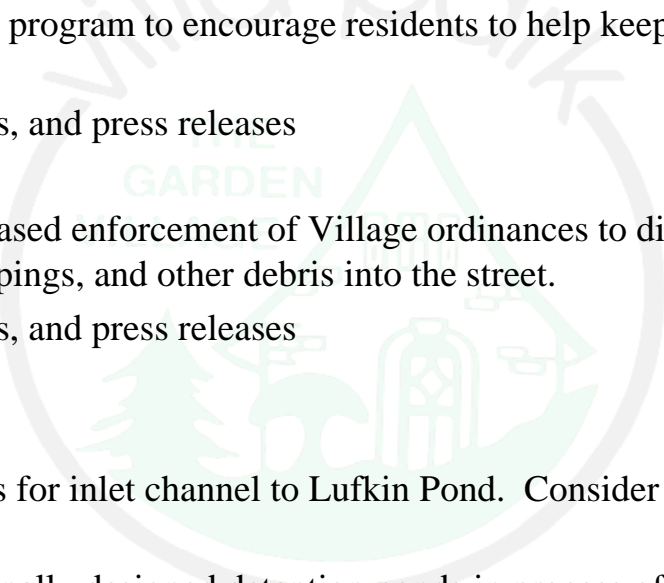
Summary of Recommended Actions

Overland Flooding Mitigation Measures (continued)

- 5) Raise curbs at southeast crosswalks on Jackson Street and Rand Road and at Leslie. This will reduce the amount of overland storm water spilling over from Jackson Street to Rand Road.
 - Scheduled
- 6) Install warning signs in low-lying areas subject to flooding, especially in floodplains. The signs will be delineated with floodwater depths.
 - 8 locations identified
- 7) Install high capacity inlets (leaf friendly) at selected locations
 - 12 locations identified
- 8) Verify that the driveway inlets of homes with below-grade driveways are tied to the storm sewer and not the sanitary sewer. Determine whether check valves would be needed during times when storm sewer is running full (see spreadsheet).
 - 6 locations identified for dye testing (1 completed)

Summary of Recommended Actions

Overland Flooding Mitigation Measures (continued)

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- The logo for Waterbury Village Garden is a circular emblem. It features a stylized house with a chimney, a tree, and a garden. The text "Village Garden" is written in a circular path around the central illustration. The logo is light green and semi-transparent, overlaid on the text.
- 9) Consider a public outreach program to encourage residents to help keep curb inlets near their home free of leaves and debris.
 - Use web, newsletters, and press releases
 - 10) Public education and increased enforcement of Village ordinances to discourage residents from directing leaves, grass clippings, and other debris into the street.
 - Use web, newsletters, and press releases
 - Issue P-Tickets
 - 11) Review design calculations for inlet channel to Lufkin Pond. Consider capacity improvements to overland channel
 - Consultant that originally designed detention ponds in process of retrieving information from archives (possible future budget item)

Summary of Recommended Actions

Overland Flooding Mitigation Measures (continued)

- 12) Consider flood control study of Sugar Creek basin to identify need, size, location, and cost of possible reservoir that would temporarily hold peak storm water flows from Sugar Creek (possible future budget item)
 - Identify possible need for project in Du Page County Natural Hazards Mitigation Plan
 - Preliminary study could be included in evaluation of proposed Sugar Creek floodplain maps
- 13) Install permanent rain and stream gauges at appropriate locations on Sugar Creek.
 - Request funding assistance from Du Page County (possible future budget item)
- 14) Continue enforcement of Village and County Storm Water and Fill Ordinances for new construction
 - Swales required on all side yards for all new residential construction
 - Runoff to be directed to a swale or dedicated drainage way
 - Storm water detention required for all new construction greater than 2-lot residential
 - Storm water best management practices required if there is no suitable downstream drainage outlet
 - Overland flood routing for 100-year storm must be identified on site plans

Summary of Recommended Actions

Emergency Response Procedures

- 1) Integrate Incident Command and NIMS procedures and terminology into Public Works Departmental emergency procedures
 - Level 2 and Level 3 response procedures will be revised to be NIMS compliant
- 2) Clarify role of DuComm relative to emergency calls during storm events.
- 3) Review procedures for receiving and dispatching storm event related calls received through the police non-emergency phone number.
 - Consider public works employee deployment at police station during Level 2 and Level 3 responses to assist with answering phones
- 4) Consider developing list of “high-priority” locations to be checked at various times before, during, and after storm events.
 - 8 locations identified
- 5) Provide pre-printed forms to assist with proper documentation of all storm-related calls received by Village personnel
 - Completed, new forms successfully used in recent storm event.

