

050172



# **Public Works Committee Program Review**

**Sewer Stub  
12 April 2005**



# Agenda



- **April Meeting**
  - **Individual Support Programs**
    - **Sewer stubs**
- **Later Meetings**
  - **Village Wide Support Programs**
    - **Street light re-lamping**
    - **Traffic signal maintenance**
    - **Traffic sign maintenance**
    - **Lane marking maintenance**
    - **Street maintenance**
    - **Valve exercising**
    - **Leak detection**
    - **Water meter testing**





# Background



- **Programs other communities**
  - Resident responsible from house to main
  - Resident responsible to 5 foot line
  - Resident responsible to Right of Way.
- **IEPA reporting requirements**
  - Yes when blockage in main
  - No when blockage in the stub



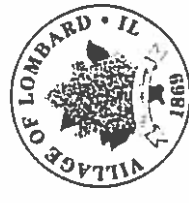
# Reasons for Program Review



- **Consuming most of available work-hours**
  - **Reduced or eliminated**
    - **Catch basin cleaning**
    - **Sewer flushing**
    - **Water Distribution System Maintenance**
- **Cost of the program**



# Old Sewer Stub Program



- **CY04 and earlier**
  - Two backups in 12 months
  - Due to tree roots or collapsed sewer
  - Replace sewer stub
- **Procedures**
  - Televises
  - Dig to replace pipe in parkway/roadway
  - Install clean-out
  - Restore area



# Old Sewer Stub Program Costs



**Annual cost - \$ 472K**

**Estimated costs**

**• Includes:**

- In-House labor
- Materials
- Temporary patching
- Restoration
  - Road patching
  - Parkway restoration
  - Landscape restoration
- Parkway dig - **\$2700**
- Driveway dig - **\$4000**
- Street dig - **\$7100**

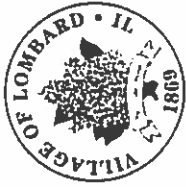


# New Sewer Stub Program



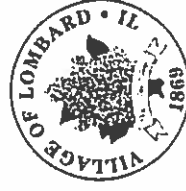
- **Test Program**
  - Two backups in 12 months
  - Due to tree roots
  - Install Vac - A - Tee
  - Based on condition
    - Do nothing
    - Line the stub
    - Replace the pipe
- **Procedures**
  - Install clean-out via hydrojetting
  - Area is restored immediately
  - Re-rod from Clean-out
  - Televis (decision point)
  - Do nothing/line the stub/replace the stub





# Proposed Sewer Stub Program

## Costs



**Annual costs - \$294K**

**Estimated costs**

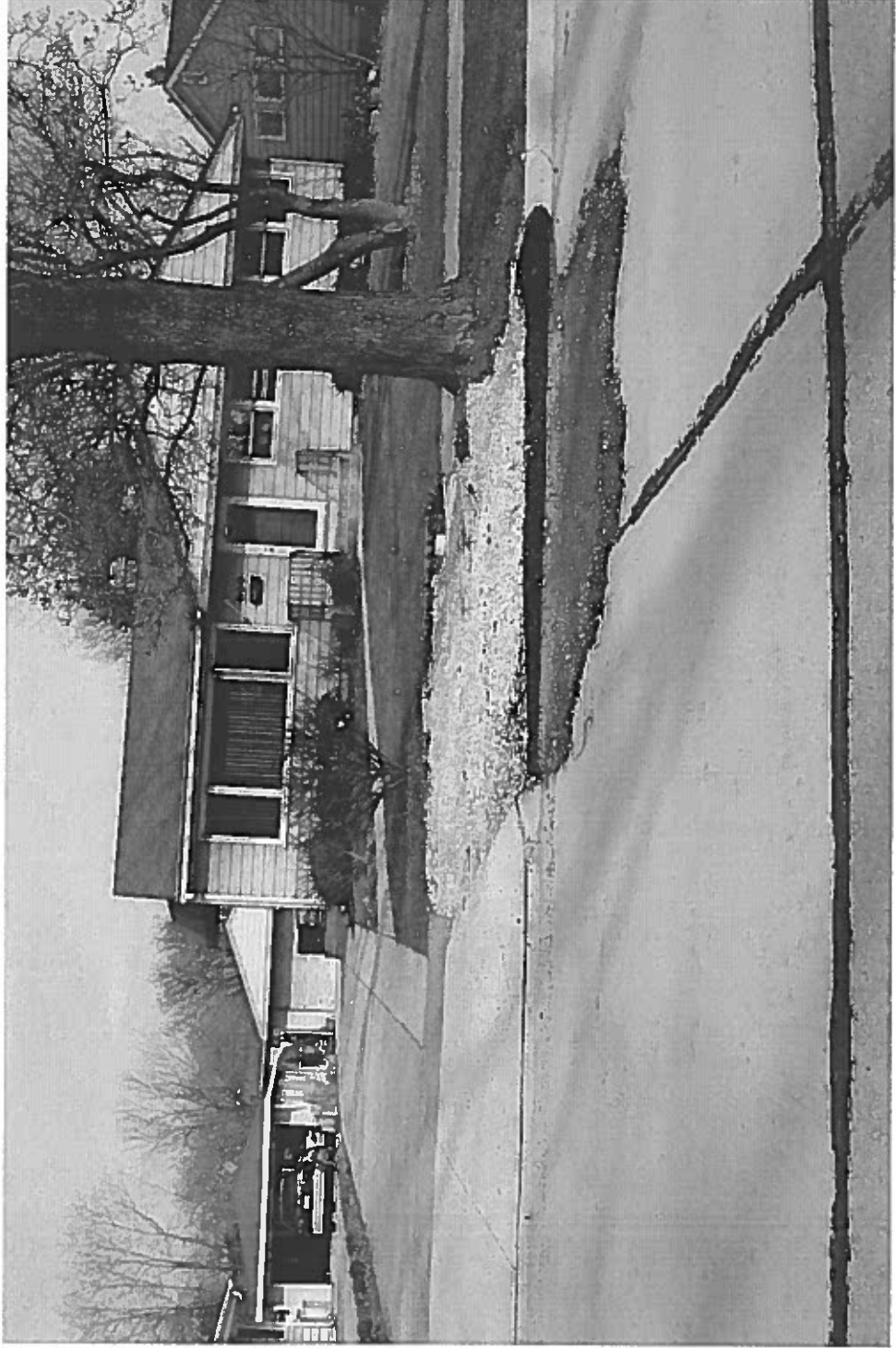
- **Includes:**
  - **Vac - A - Tee**
  - **Labor**
  - **Materials**
  - **Sewer Stub Lining**
  - **Restoration**
  - **Replacement digs**
  - **Critical assumption**
    - **3 Per day**
- **per repair**
  - **Vac-a-Tee**      **\$650**
  - **Add'l Rodding**      **\$200**
  - **Lining -**
    - **T-Liner**      **\$4500**
    - **Lateral Liner**      **\$3000**
  - **Parkway dig -**      **\$2700**
  - **Driveway dig -**      **\$4000**
  - **Street dig -**      **\$7100**



# Circle Ave Traditional Stub Dig



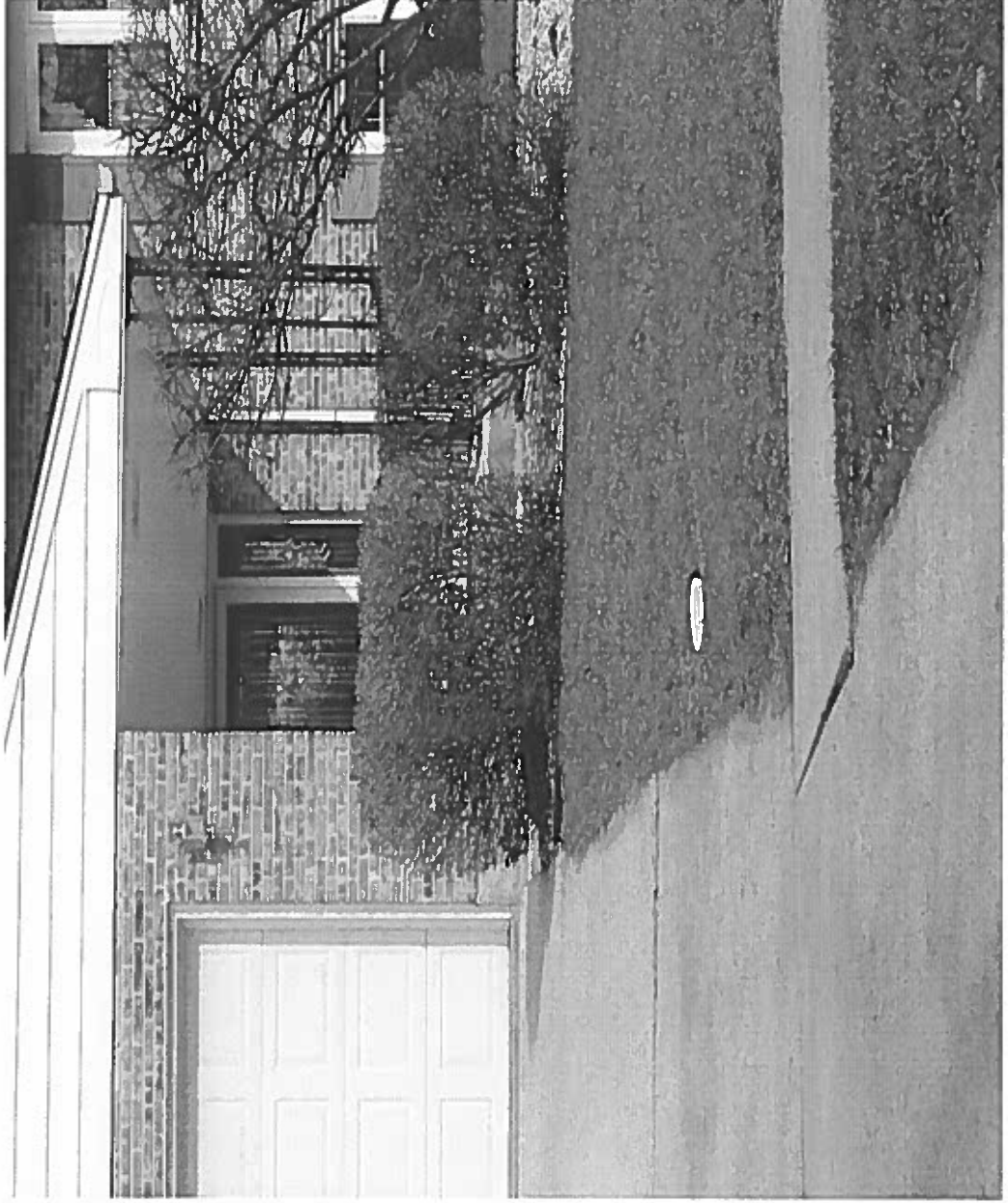
# Hammerschmidt Traditional Stub Dig



# Circle Ave Vac-A-Tee



# Circle Ave Vac-A-Tee





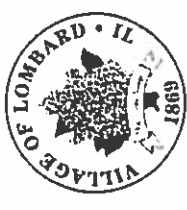
# Program Timeline



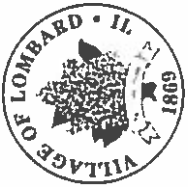
- **Began new program - January, 2005**
- **Tested T-liner**
- **First systems review April**
- **Test lateral liner**
- **6 month review**
- **Annual review**



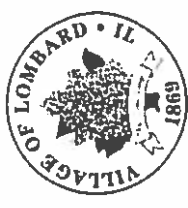
# Lessons Learned to Date



- **Install a Vac - A - Tee**
  - **On 2nd back up**
  - **Blockage cannot be opened by rodding from house**
- **T- Liner best used when the problem is at the main/service connection**
- **Lateral liner best used when the stub has the problem**
- **Can do 3 Vac-A-Tee per day**
- **Use panel system to bring truck onto grass**
- **Trailer to hold equipment, tools, etc.**
- **Cut existing sod carefully - crew can leave site landscaped**
- **Works in winter (frozen ground) but wear wet weather gear**
- **Vacuum hose connections freeze and can hold together - sometimes!**
- **Reduces physical stress (sprains/strains) on employees**



# Staff Recommendation



- **Retain sewer stub program for now**
- **Staff returns with assessment**
  - **6 Month**
  - **12 month**