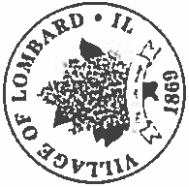




Public Works Committee Program Review

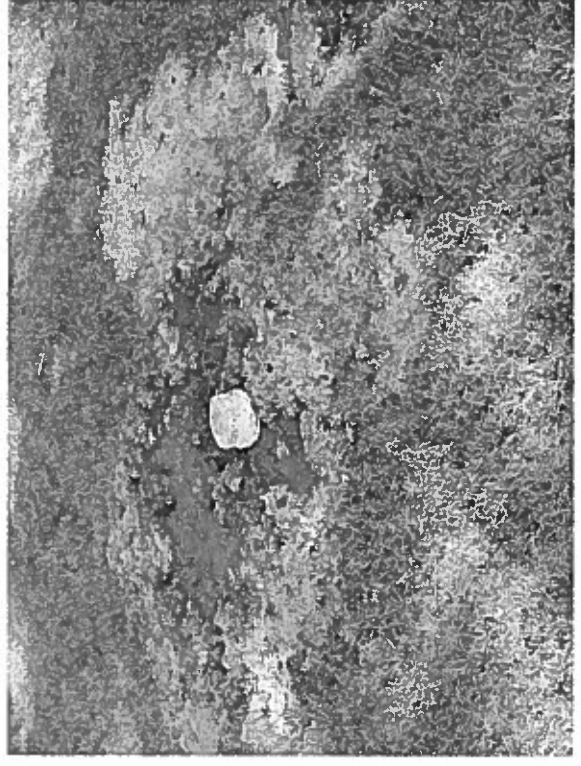
**Sewer Stub
October 2005**

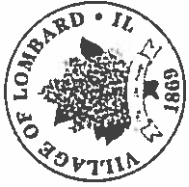


Agenda



- **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**

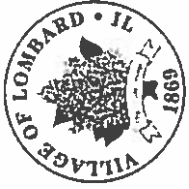




Background



- **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

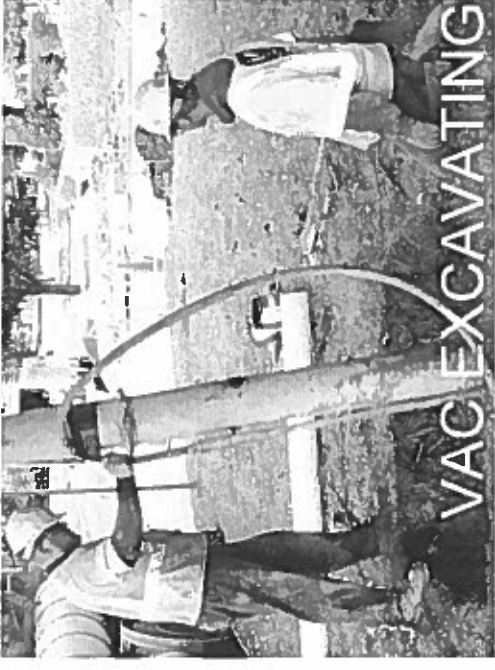
- **Includes:**
 - **In-House labor**
 - **Materials**
 - **Temporary patching**
 - **Restoration**
 - **Road patching**
 - **Parkway restoration**
 - **Landscape restoration**
- **per replacement**
 - **Parkway dig - \$2700**
 - **Driveway dig - \$4000**
 - **Street dig - \$7100**

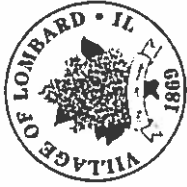


New Sewer Stub Program



- **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:	per repair
– Vac - A - Tee	• Vac-a-Tee \$650
• Labor	– Add'l Rodding \$200
• Materials	(Actual to Date) \$541)
• Sewer Stub Lining	• Lining -
• Restoration	– T-Liner \$4500
– Replacement digs	– Lateral Liner \$3000
• Critical assumption	• Parkway dig - \$2700
– 3 Per day (Obtained)	• Driveway dig - \$4000
	• Street dig - \$7100

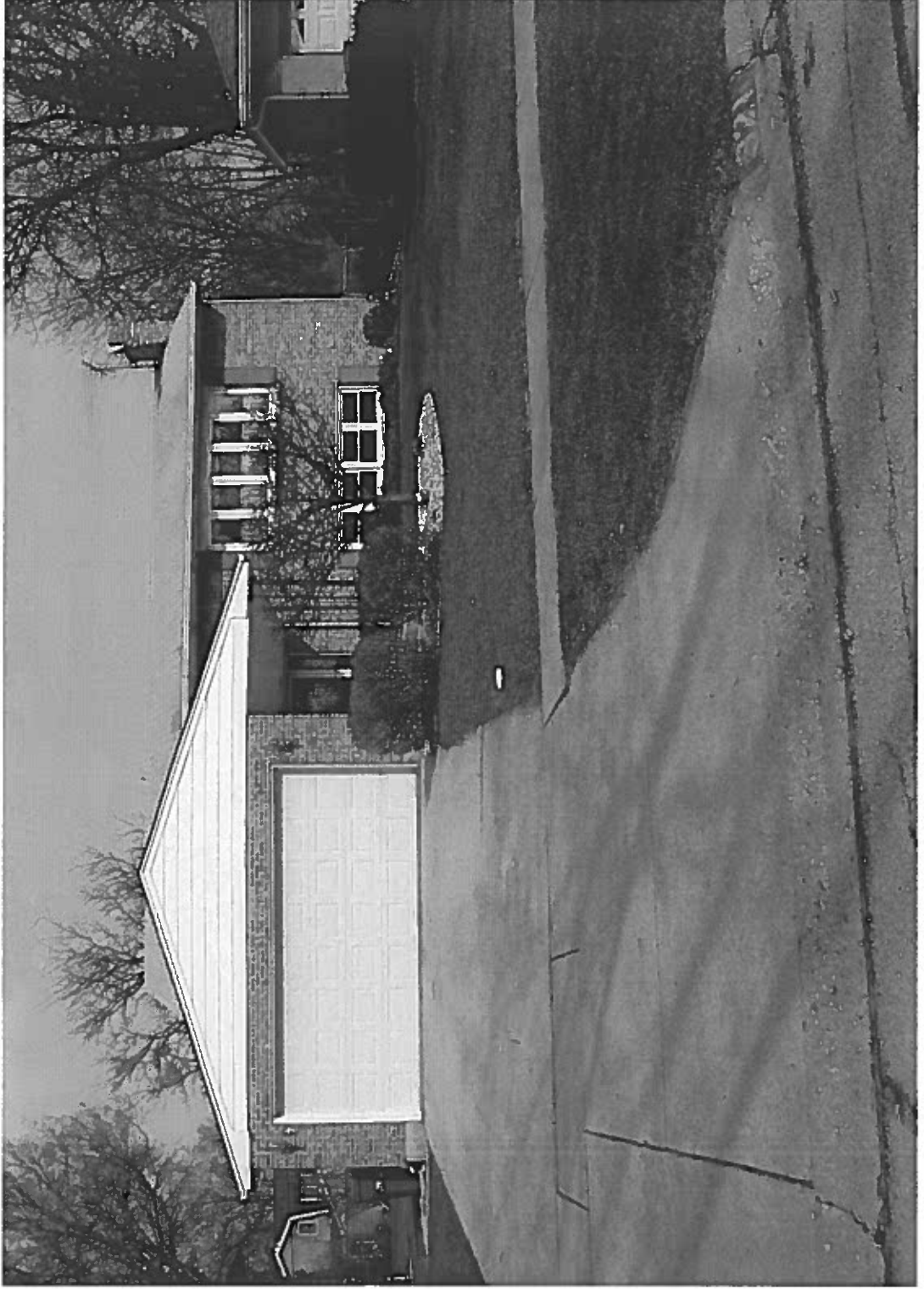
Circle Ave Traditional Stub Dig



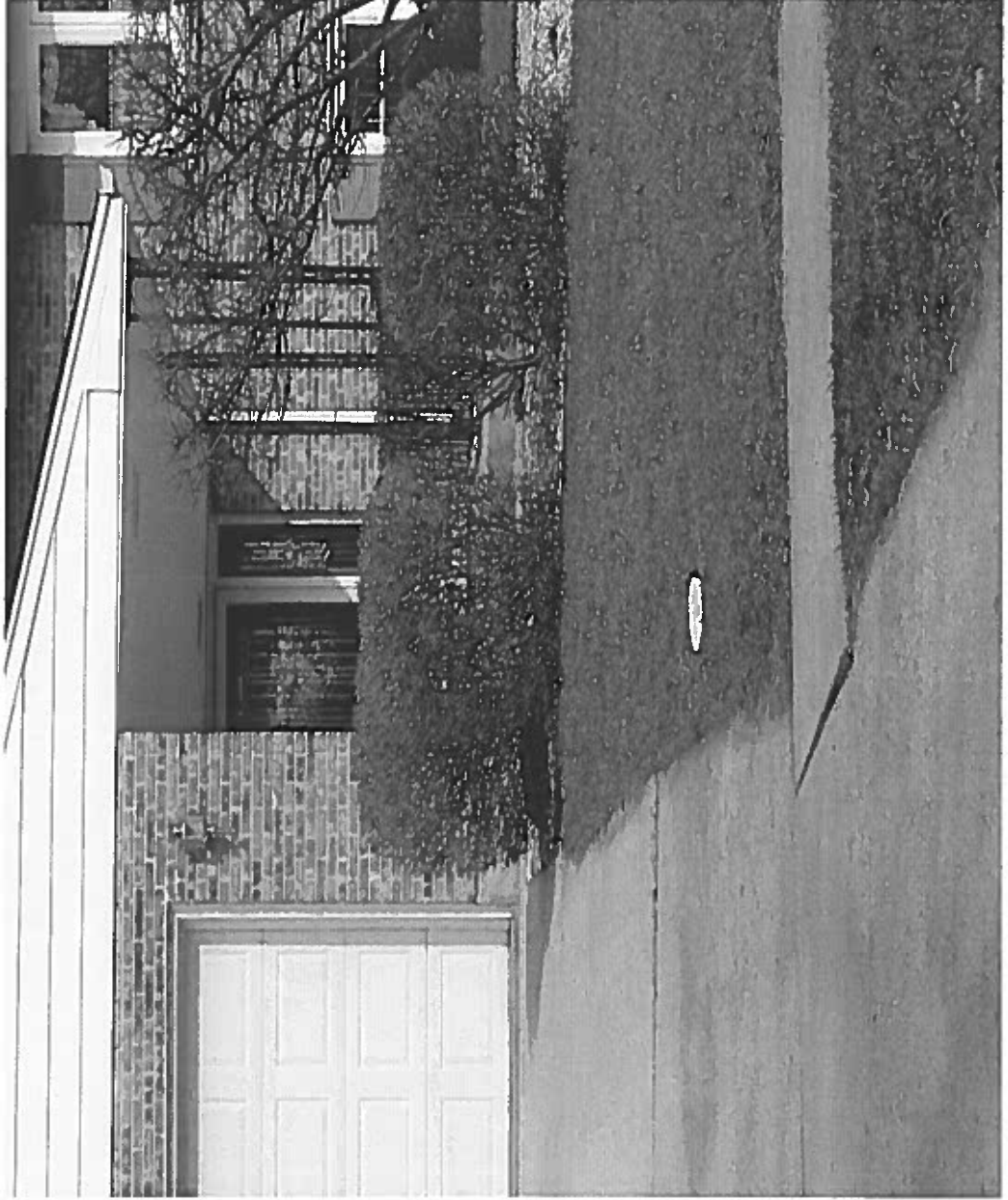
Hammerschmidt Traditional Stub Dig

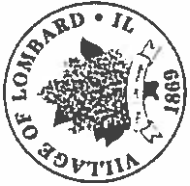


Circle Ave Vac-A-Tee



Circle Ave Vac-A-Tee





Program Timeline



- **Began new program - January, 2005**
- **Tested T-liner**
- **Systems review April, July, and October**
- **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 in 6 Months**