Article 4

PRIVATE WASTEWATER DISPOSAL

Section 401 - Public Sewer Unavailable - Private Wastewater Disposal Required

Where a public sewer is not available, under the provisions of Section 307, the building lateral shall be connected to a private wastewater disposal system complying with the provisions of the Rules and Regulations of the NYSDOH, to be enforced by the Superintendent, and/or the Village of Chaumont and State Health Department.

Section 402 - Connection of Two Buildings to the Same Septic Tank Prohibited

No two separate permanent buildings, where the intended use for either is for a distinct and separate business or a dwelling place for a private family or families, shall be connected to the same individual septic tank and tile absorption field.

Section 403 - Construction Permit Application

A completed application form, containing results of percolation tests, computations, and a plot plan, including the design and cross-section of the wastewater disposal system, in relation to lot lines, adjacent and on-site well or water supply, and buildings, shall be submitted to the Superintendent. A fee, established by Article 12, shall accompany the application. The wastewater disposal system shall be designed by a professional engineer or architect, and shall be in accordance with the NYSDOH - "Standards for Waste Treatment Works", or NYSDEC "Standards for Commercial and Institutional Facilities", as appropriate.

Section 404 - Construction Permit

A written construction permit shall be obtained from the Superintendent before construction commencement. The Superintendent, or his designated representative, shall be permitted to inspect the construction work at any stage, without prior notice.

Section 405 - Preventing Nuisances - Rehabilitation Required

When the liquid or liquid-borne effluent from a private wastewater disposal system enters any watercourse, ditch, storm sewer, or water supply system, located in the Village of Chaumont, in such a manner, volume, and concentration so as to create a hazardous, offensive, or objectionable condition, in the opinion of the Superintendent, the Jefferson County Code Enforcement Office, the NYSDOH, or NYSDEC the owner of the premises upon which such wastewater disposal system is located, upon receiving written notice from the Superintendent, to do so, shall, within ninety (90) days, after receipt of such notice, repair, rebuild, or relocate such wastewater disposal system for the purpose of eliminating such hazardous, offensive, or objectionable conditions. The repair, rebuilding, or relocation of the system shall be accomplished in accordance with the rules and regulations of the Uniform Building & Fire Code, NYSDOH, NYSDEC and the Jefferson County Code Enforcement Office, at the owner's expense.

Section 406 - Sanitary Operation Required

The owner shall operate and maintain the private wastewater disposal system in a satisfactory manner at all times, at the owner's expense.

Section 407 - Septage Removal

Where a private wastewater disposal system utilizes a cesspool or a septic tank, septage shall be removed from the cesspool or septic tank, by a licensed hauler of trucked and hauled wastes, at three year intervals or more frequently as required to properly operate and maintain the system.

Section 408 - Direct Connection to New Public Sewers Required

At such time that a public sewer becomes available to a property, a direct connection shall be made to the public sewer, in compliance with this Law, and any cesspool, septic tank, and similar wastewater disposal facilities shall be cleaned of septage, by a licensed septage hauler, and finally either filled with clean sand, bank-run gravel, or dirt, or removed and properly disposed. When the connection is made to the public sewer, the connection to the private wastewater disposal facility shall be broken and both ends of the break shall be plugged, as appropriate. Alternatively, the septic

tank effluent may be piped or pumped to the sewer; the owner shall provide an easement to the septic tank for septage removal.

Section 409 - Additional Requirements

No statement in this Article shall be construed to prevent, or interfere with, any additional requirements that may be deemed necessary by the Superintendent, to protect public health and public welfare.

END OF ARTICLE 4

Article 5

NEW SEWERS or SEWER EXTENSIONS

Section 501 - Proper Design

New sanitary sewers and all extensions to sanitary sewers owned and operated by the Village of Chaumont shall be designed, by a professional licensed to practice sewer design in the State, in accordance with the Recommended Standards for Sewage Works, as adopted by the Great Lakes - Upper Mississippi River Board of State Sanitary Engineers ("Ten State Standards"), and in strict conformance with all requirements of the NYSDEC. Plans and specifications shall be submitted to, and written approval shall be obtained from the NYSDEC, before initiating any construction. The design shall anticipate and allow for flows from all possible future extensions or developments within the immediate drainage area.

If, however, there is inadequate capacity in any sewer which would convey the wastewater or if there is insufficient capacity in the POTW treatment plant to treat the wastewater properly, the application shall be denied. Sewer line and POTW treatment plant current use shall be defined as the present use and the unutilized

use which has been committed, by resolution, to other users by the Village of Chaumont Board.

Section 502 A - New Sewers Subject to Approval, Fees, Inspection, Testing, and Reporting

When a property owner, builder, or developer proposes to construct sanitary sewers or extensions to sanitary sewers, the plans, specifications, and method of installation shall be subject to the approval of the Board of Trustees. Said property owner, builder, or developer shall pay for the entire installation, including a proportionate share of the treatment plant, intercepting or trunk sewers, pumping stations, force mains, and all other Village of Chaumont expenses incidental thereto. Each street lateral shall be installed and inspected pursuant to Article 6, and inspection fees shall be paid by the applicant prior to initiating construction. Design and installation of sewers shall be as specified in Section 503, and in conformance with Paragraphs 3 through 6 of ASTM Specification C-12. The installation of the sewer shall be subject to periodic inspection by the Superintendent, without prior notice. The Superintendent shall determine whether the work is proceeding in accordance with the approved plans and specifications, and whether the completed work will conform with the approved plans and specifications. The sewer, as constructed, must pass the infiltration test (or the exfiltation test, with prior approval), required in Section 505, before any building lateral is connected thereto. The Superintendent shall be notified 30 days in advance of the start of any construction actions so that such inspection frequencies and procedures as may be necessary or required, may be established. No new sanitary sewers will be accepted by the Village of Chaumont Board until such construction inspections have been made so as to assure the Village of Chaumont Board of compliance with this Law and any amendments or additions thereto. The Superintendent has the authority to require such excavation as necessary to inspect any installed facilities if the facilities were covered or otherwise backfilled before they were inspected so as to permit inspection of the construction. The Superintendent shall report all findings of inspections and tests to the Village of Chaumont Board.

Section 502 B - Plans, Specification, and Pipe Test Results Required

Plans, specifications, and methods of installation shall conform to the requirements of this Article. Components and materials of wastewater facilities not covered in this Law, such as pumping stations, lift stations, or force mains shall be designed in accordance with Section 501, and shall be clearly shown and detailed on the plans and specifications submitted for approval. Force main details are covered in Section 506. When requested, the applicant shall submit, to the Superintendent and to the Jefferson County Code Enforcement Office, all design calculations and other pertinent data

to supplement review of the plans and specifications. Results of manufacturer's tests on each lot of pipe delivered to the job site shall also be furnished, upon request.

Section 503 A - Sewer Pipe

(1) Sewer pipe material shall be:

(a) Polyvinyl Chloride (PVC) Pipe - Heavy Wall (gravity sewers)

Pipe shall be made from Class 12454-B materials or better in accordance with ANSI/ASTM Specification D-1784.

Pipe and accessories shall conform to the requirements of the following, with a minimum pipe stiffness of 46 PSI at a maximum deflection of five percent (5%).

ANSI/ASTM	D	3034	(4" - 15")
ASTM	F	679 Type I	(18" - 27")

(b) Polyvinyl Chloride (PVC) Pipe - Laterals

Pipe shall be schedule 40 SDR 21 PVC pipe. Installations shall be water tight.

(c) Polyvinyl Chloride (PVC) Pipe - Vacuum Sewers

Pipe shall be rubber ring joint SDR-21 PVC pipe. A certificate shall be provided by the pipe manufacturer, stating the pipe has been tested with air at 24 in. hg. vacuum with less than 1% per hour leakage, and is for such use.

(d) Acrylonitrile - Butadiene - Styrene (ABS) pipe.

Pipe and fittings shall conform to the requirements of ASTM Specifications D 2661.

(e) Other pipe materials

Other pipe materials require prior written approval of the Board of Trustees before being installed.

(2) The minimum internal pipe diameter shall be eight (8) inches for gravity sewers and three (3) inches for low pressure sewers.

(3) Joints for the selected pipe shall be designed and manufactured such that "O" ring gaskets of the "snap-on" type are used.

(4) Gaskets shall be continuous, solid, natural or synthetic rubber, and shall provide a positive compression seal in the assembled joint, such that the requirements of this local law are met.

(5) Joint preparation and assembly shall be in accordance with the manufacturer's recommendations.

(6) Wye branch fittings, as approved by the Superintendent, shall be installed, for connection of street laterals, in accordance with Section 606A.

(7) The vacuum sewage valves and appurtenances shall be as manufactured by AIRVAC, Rochester, Indiana, or acceptable substitute.

(8) Valve pits shall be manufactured by AIRVAC, Rochester, Indiana, or acceptable substitute. Wall thickness shall be 3/16". Pit covers shall be cast iron and shall be suitable for water traffic loading.

(9) Collections sumps shall be manufactured by AIRVAC, Rochester, Indiana, or acceptable substitute. Sumps shall have a 55 gallon capacity and be designed for water traffic loading at 2 feet depth of cover.

Elastomer connections shall be provided for the 4 inch gravity line(s). Holes for the seals shall be field cut. Sealing between the valve pit bottom and tank shall be made in the field using an approved silicone or butyl tape rubber sealant.

(10) DIVISION AND ISOLATION VALVES (4" 0 and 6" 0) for Mainline and Branch Vacuum Sewers.

Valves shall be the resilient eccentric seating type suitable for service in sewage under both vacuum and/or pressure.

Valves shall be constructed and rated in accordance with ANSI specifications B16.1 Class 125 (i.e. body wall thickness, flange dimensions, and body pressure rating). Valves shall be capable of sustaining a vacuum of 24 Hg, and each valve shall be tested and certified to two and nine tenths pounds pressure absolute (24" Hg) by an independent laboratory or by AIRVAC.

Valves shall be designed with round port capable of passing a hard solid sphere with an outside diameter equal to not less than eighty-five percent (85%) of the nominal valve size, without interference from the closure element.

The body, bonnet, closure element (segmental plug) and trunions shall be fabricated of cast iron equal to ASTM A126 Class B.

The closure element shall be covered with a precision molded Buna-N (NBR - a copolymer of butadiene and acrylonitile) facing to act as the resilient seating surface.

The mating seating surface shall be ninety percent (90%) pure nickel polished to a fourteen (14) RMS finish.

The upper and lower journals shall be provided with grit seals to protect the journal bearings.

The body and bonnet shall be provided with permanently lubricated, radial journal bearings of porous series 316 stainless steel to support the closure element journals.

Thrust bearings shall be the dual "O" ring design of Buna-N retained in a bronze replaceable cartridge suitable for vacuum and pressure.

Valves four inches (4") and smaller may be direct actuated, all six-inch (6") and larger manually actuated valves shall be provided with gear actuators.

The operating nuts (WN)and/or hand wheels (HW) shall be of cast iron equal to ASTM A126 Class B or ductile iron equal to ASTM A536 Grade 65-45-12. The connecting pin or keys shall be stainless steel. Nuts fabricated of aluminum are not acceptable.

Buried valves shall be provided with mechanical joint end connections with transition gaskets. Aboveground valves two and one-half inches (2 ½") and larger shall be flanged.

Buried valves shall be installed in valve boxes (road boxes) conforming to local standards, and the operating nut of all buried valves shall be extended to within six inches (6") plus or minus three inches (3") of the finished grade.

Valves shall be Model #AV 5000 Series as manufactured by Valmatic Valves and Manufacturing Company for AIRVAC or the "Cam-Centric" AV Series as furnished by Valmatic Valves and Manufacturing Company or approved equal.

(11) GAGE TAPS shall be installed at all six inch (6") vacuum main line isolation/division valves per AIRVAC requirements.

Section 503 B - Safety and Load Factors

Selection of pipe class shall be predicated on the following criteria:

Safety factor	-	1.5
Load factor	-	1.7
Weight of soil	-	120 lbs/cu. ft.
Wheel loading	-	16,000 lbs.

Utilizing the foregoing information, design shall be made as outlined in Chapter IX of the Water Pollution Control Federation Manual of Practice No. 9, latest edition, "Design and Construction of Sanitary and Storm Sewers", and the pipe shall have sufficient structural strength to support all loads to be placed on the pipe, with a safety factor as specified above.

PVC pipe shall not be encased in concrete due to their different coefficients of linear thermal expansion.

Section 503 C-1 - Gravity Sewer Pipe Installation

(1) Local utilities shall be contacted to verify construction plans and to make arrangements to disconnect all utility services, where required to undertake the construction work. The utility services shall later be reconnected. The work shall be scheduled so that there is minimum inconvenience to local residents. Residents shall be provided proper and timely notice regarding disconnection of utilities.

(2) The construction right-of-way shall be cleared only to the extent needed for construction. Clearing consists of removal of trees which interfere with construction, removal of underbrush, logs, and stumps, and other organic matter, removal of refuse, garbage, and trash, removal of ice and snow, and removal of telephone and power poles, and posts. Any tree which will not hinder construction shall not be removed, and shall be protected from damage by any construction equipment. Debris shall not be burned, but hauled for disposal in an approved manner.

(3) The public shall be protected from personal and property damage as a result of the construction work.

(4) Traffic shall be maintained at all times in accordance with applicable highway permits. Where no highway permits are required, at least 1/2 of a street shall be kept open for traffic flow.

(5) Erosion control shall be performed throughout the project to minimize the erosion of soils onto lands or into waters adjacent to or affected by the work. Erosion control can be effected by limiting the amount of clearing and grubbing prior to trenching, proper scheduling of the pipe installation work, minimizing time

of open trench, prompt grading and seeding, and filtration of drainage.

(6) The trench shall be excavated only wide enough for proper installation of the sewer pipe, manhole, and appurtenances. Allowances may be made for sheeting, de-watering, and other similar actions to complete the work. Roads, sidewalks, and curbs shall be cut, by sawing or by other methods as approved by the Superintendent, before trench excavation is initiated.

(7) Under ordinary conditions, excavation shall be by open cut from the ground surface. However, tunneling or boring under structures other than buildings may be permitted. Such structures include crosswalks, curbs, gutters, pavements, trees, driveways, and railroad tracks.

(8) Open trenches shall be protected at all hours of the day with barricades, as required.

(9) Trenches shall not be open for more than 30 feet in advance of pipe installation nor left unfilled for more than 30 feet in the rear of the installed pipe, when the work is in progress, without permission of the Superintendent. When work is not in progress, including over night, weekends, and holidays, the trench shall be backfilled to ground surface.

(10) The trench shall be excavated approximately six (6) inches deeper than the final pipe grade. When unsuitable soils are encountered, these shall be excavated to a maximum depth of 2-1/2 feet below the final pipe invert grade and replaced with select materials.

(11) Ledge rock, boulders, and large stones shall be removed from the trench sides and bottom. The trench shall be over-excavated at least 12 inches for five (5) feet, at the transition from rock bottom to earth bottom, centered on the transition.

(12) Maintenance of grade, elevation, and alignment shall be done by some suitable method or combination of methods.

(13) No structure shall be undercut unless specifically approved by the Superintendent.

(14) Proper devices shall be provided, and maintained operational at all times, to remove all water from the trench as it enters. At no time shall the sewer line be used for removal of water from the trench.

(15) To protect workers and to prevent caving, shoring and sheeting shall be used, as needed. Caving shall not be used to backfill the trench. Sheeting shall not be removed but cut off no lower than one foot above the pipe crown nor no higher than one foot below final grade, and left in the trench, during backfill operations.

(16) The pipe barrel shall be supported, along its entire length, on a minimum of six (6) inches of crusher run max. 1/2 inch stone free of organic material. This foundation shall be firmly tamped in the excavation.

(17) Bell holes shall be hand excavated, as appropriate.

(18) Pipe shall be laid from low elevation to high elevation. The pipe bell shall be up-gradient; the pipe spigot shall be down-gradient.

(19) Joint preparation and assembly shall be in accordance with the manufacturer's written instructions.

(20) The grade and alignment shall be checked and made correct. The pipe shall be in straight alignment. Any negotiation of curves shall be at manholes, except when site conditions require alternative pipe laying procedures. These alternative procedures, including bending the pipe barrel, deflecting the joint, and using special fittings, shall require prior written approval of the plans and also written confirmation approval of need by the Superintendent after examination of the site conditions.

(21) When a smaller sewer joins a larger one the invert of the larger sewer shall be lowered sufficiently to maintain the same hydraulic gradient. An approximate method which may be used for securing this result is to place the 0.8 depth of both sewers at the same elevation.

(22) Crushed stone shall be placed over the laid pipe to a depth of at least six (6) inches. The embedment of thermoplastic pipe shall be in accordance with ASTM D2321 using class 1A or 1B backfill materials. Care shall be exercised so that stone is packed under the pipe haunches. Care shall be exercised so that the pipe is not moved during placement of the crushed stone.

(23) The migration of fines from surrounding backfill or native soils shall be restricted by gradation of embedment materials or by use of suitable filter fabric.

(24) The remaining portion of the trench above the pipe embedment shall be backfilled in foot lifts which shall be firmly compacted. Compaction near/under roadways, driveways, sidewalks, and other structures shall be to 95% of the maximum

moisture-density relationship, as determined by ASTM Specification D 698, Method D. Ice, snow, or frozen material shall not be used for backfill.

Section 503 C-2 - Vacuum Sewer Installation

(1) Installation of vacuum sewers, laterals and appurtenances shall be done in accordance with the written instructions provided by the manufacturer and the requirements of Section 503 C-1.

(2) All building sewers shall originate from a lateral from the vacuum valve pit wherever one is available. When one is not available the Village will install one and charge the property for at the cost to the Village. At 50°F or above and in dry conditions, an epoxy type saddle may be used. Below 50°F and in wet conditions, the clamp type saddle shall be used.

(3) New Vacuum valves:

When a vacuum valve pit is not available, a new vacuum valve pit, vacuum valve and appurtenances will be installed by the Village and charge the property owner the cost to Village.

Section 503 D - Cleanout Installation

(1) Cleanouts for low pressure sewers shall be placed at intervals of approximately 400 to 500 feet, at major changes of direction, where one collection main joins another main and at the upstream end of each main branch.

(2) The design of the cleanouts shall be as approved by the Superintendent.

Section 504 - Manholes and Manhole Installation

(1) Design of all manholes shall be submitted to the Superintendent and shall receive approval prior to placement.

(2) Manholes shall be placed where there is a change in slope or alignment, and at intervals not exceeding 400 linear feet except as authorized by the Superintendent.

(3) Manhole bases shall be constructed or placed on a minimum of six (6) inches of crusher run max. 1/2 inch stone free of organic materials.

(4) Manhole bases shall be constructed of 4,000 psi (28 day) concrete 8 inches thick, or shall be precast bases properly bedded in the excavation. Field constructed bases shall be monolithic, properly reinforced, and extend at least 6 inches beyond the outside walls of lower manhole sections. Precast manhole bases shall extend at least 6 inches beyond the outside walls of lower manhole sections.

(5) Manholes shall be constructed using precast minimum 4 foot diameter concrete manhole barrel sections, and an eccentric top section, conforming to ASTM Specification C-478, with the following exceptions on wall thickness:

Manhole Diameter Feet	Wall Thickness Inches
4	5
5	6
6	7
6-1/2	7-1/2
7	8
8	9

All sections shall be cast solid, without lifting holes. Flat top slabs shall be a minimum of 8 inches thick and shall be capable of supporting a H-20 loading.

(6) All joints between sections shall be sealed with an "O" ring rubber gasket, meeting the same specifications as pipe joint gaskets, or butyl joint sealant completely filling the joint.

(7) All joints shall be sealed against infiltration. All metal parts shall be thickly coated with bitumastic or elastomeric compound to prevent corrosion.

(8) No steps or ladder rungs shall be installed in the inside or outside manhole walls at any time.

(9) No holes shall be cut into the manhole sections closer than 6 inches from joint surfaces.

(10) Manholes which extend above grade shall not have an eccentric top section. The top plate shall be large enough to accommodate the cover lifting device and the cover.

(11) The elevation of the top section shall be such that the cover frame top elevation is 0.5 foot above the 100-year flood elevation (in a field), 0.5 foot above a lawn elevation, or at finished road or sidewalk grade.

(12) When located in a traveled area (road or sidewalk), the manhole frame and cover shall be heavy duty cast iron. When

located in a lawn or in a field, the manhole frame and cover may be light duty cast iron. The cover shall be 36 inches, minimum, in diameter. The minimum combined weight of the heavy duty frame and 36 inch cover shall be 735 +/- 5% lbs. The minimum combined weight of the light duty frame and 36 inch cover shall be 420 +/- 5% lbs. The mating surfaces shall be machined, and painted with tar pitch varnish. The cover shall not rock in the frame. Infiltration between the cover and frame shall be prevented by proper design and painting. Covers shall have "Sanitary Sewer" cast into them. Covers shall have lifting holes suitable for any lifting/jacking device. The lifting holes shall be designed so that infiltration is prevented.

(13) A drop of at least 0.1 foot shall be provided between incoming and outgoing sewers on all junction manholes and on manholes with bends greater than 45 degrees.

(14) Inverts and shelves/benches shall be placed after testing the manholes and sewers.

(15) Benches shall be level and slope to the flow channel at about 1 inch per foot.

(16) The minimum depth of the flow channel shall be the nominal diameter of the smaller pipe. The channel shall have a steel trowel finish. The flow channel shall have a smooth curvature from inlet to outlet.

(17) Manhole frames, installed at grade, shall be set in a full bed of mortar with no less than two nor more than four courses of brick underneath to allow for later elevation adjustment. In lieu of brick, grade rings may be used for elevation adjustment. Grade rings shall not exceed 6 inches in depth. The total number of grade rings shall not exceed 12 inches in height, however, in no event shall more than 3 grade rings be used.

(18) Manholes which extend above grade, shall have the frames cast into the manhole top plate. The top plate shall be securely anchored to the manhole barrel, by a minimum of six 1/2 inch corrosion resistant anchor bolts, to prevent overturning when the cover is removed. The anchor bolts shall be electrically isolated from the manhole frame and cover.

(19) Internal drop pipes and fittings shall be PVC plastic sewer pipe in compliance with ASTM D2241. Corrosion resistant anchors shall be used to attach the drop pipe to the inside surface of the manhole barrel.

Section 505 A - Infiltration/Exfiltration Testing

All sanitary sewers or extensions to sanitary sewers, including manholes, shall satisfy requirements of a final infiltration test before they will be approved and wastewater flow permitted by the Village of Chaumont. The infiltration rate shall not exceed 25 gallons per 24 hours per mile per nominal diameter in inches. An exfiltration test may be substituted for the infiltration test; the same rate shall not be exceeded. The exfiltration test shall be performed by the applicant, under the supervision of the Superintendent, who shall have the responsibility for making proper and accurate measurements required. The exfiltration test consists of filling the pipe with water to provide a head of at least 5 feet above the top of the pipe or 5 feet above groundwater, whichever is higher, at the highest point under test, and then measuring the loss of water, from the pipe section under test, by the amount of water which must be added to maintain the original level. However, under no circumstances shall the head at the downstream manhole exceed ten (10) feet or fill to within six (6) inches of the top of the downstream manhole. Should this condition prevail, the testing methods in Sections 505 F and/or 505 G shall be utilized. In this test, the test section must remain filled with water for at least 24 hours prior to taking any measurements. Exfiltration shall be measured by the drop of water level in a standpipe with a closed bottom end, or in one of the sewer manholes serving the test section. When a standpipe and plug arrangement is used in the upper manhole in the test section, there shall be some positive method for releasing entrapped air prior to taking any measurements.

Section 505 B - Test Section

The test section shall be as ordered or as approved, but in no event longer than 1,000 feet. In the case of sewers laid on steep grades, the test length may be limited by the maximum allowable internal pressure on the pipe and joints at the lower end of the test section. For purposes of determining the leakage rate of the test section, manholes shall be considered as sections of 48-inch diameter pipe, 5 feet long. The maximum allowable leakage rate for such a section is 1.1 gallons per 24 hours. If leakage exceeds the allowable rate, then necessary repairs or replacements shall be made, and the section retested.

Section 505 C - Test Period

The test period, during which the test measurements are taken, n shall not be less than two (2) hours.

Section 505 D - Pipe Lamping

Prior to testing, the section shall be lamped. Any length of pipe out of straight alignment shall be realigned.

Section 505 E - Deflection Testing

Also prior to testing, all plastic pipe, in the test section, shall be tested for deflection. Deflection testing shall involve the pulling of a rigid ball or mandrel, whose diameter is 95 percent of the pipe inside diameter, through the pipe. Any length of pipe with a deflection greater than 5 percent shall be replaced. The test section shall be flushed just prior to deflection testing. The test shall not be performed with a mechanical pulling device.

Section 505 F - Low Pressure Air Testing Alternative

In lieu of hydrostatic testing (exfiltration or infiltration), low pressure air testing may be employed. Low pressure air tests shall conform to ASTM Specification C 828. All sections to be tested shall be cleaned and flushed, and shall have been backfilled, prior to testing. Air shall be added until the internal pressure of the test section is raised to approximately 4.0 PSIG. The air pressure test shall be based on the time, measured in seconds, for the air pressure to drop from 3.5 PSIG to 2.5 PSIG.

Acceptance is based on limits tabulated in the "Specification Time Required for a 1.0 PSIG Pressure Drop" in the Uni-Bell PVC Pipe Association "Recommended Practice For Low-Pressure Air Testing of Installed Sewer Pipe".

Before pressure is applied to the line all connections shall be firmly plugged. Before the test period starts, the air shall be given sufficient time to cool to ambient temperature in the test section.

If the test section is below groundwater, the test pressure shall be increased by an amount sufficient to compensate for groundwater hydrostatic pressure, however, the test pressure shall not exceed 10 PSI, or a lower pressure as required by the Superintendent.

The pressure test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the Superintendent prior to testing.

Section 505 G - Vacuum Testing Alternative

In lieu of hydrostatic testing (exfiltration or infiltration), vacuum testing may be employed for testing of sewer lines and

manholes. Sewer lines and manholes shall be tested separately. All sewer lines to be tested shall be cleaned and flushed, and shall have been backfilled, prior to testing. The vacuum test shall be based on the time, measured in seconds, for the vacuum to decrease from 10 inches of mercury to 9 inches of mercury for manholes, and from 7 inches of mercury to 6 inches of mercury for sewers.

Acceptance of manholes is based on the following:

Manhole Depth	Manhole Diameter	Time to Drop 1" Hg (10" to 9")
10 ft or less	4 ft	120 seconds
10 ft to 15 ft	4 ft	150 seconds
15 ft to 25 ft	4 ft	180 seconds

For 5 ft diameter manholes, add 30 seconds to the times above.
For 6 ft diameter manholes, add 60 seconds to the times above.

If the test on the manhole fails (the time is less than that tabulated above), necessary repairs shall be made and the vacuum test repeated, until the manhole passes the test.

Acceptance of sewers (7" Hg to 6" Hg) is based on the time tabulated in the "Specification Time Required for a 0.5 PSIG Pressure Drop" in the Uni-Bell PVC Pipe Association "Recommended Practice For Low-Pressure Air Testing of Installed Sewer Pipe".

The vacuum test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the Superintendent prior to testing.

Vacuum sewage interface valves shall be installed in accordance with the manufacturers instructions and not prior to hook up of the home gravity lateral line.

Section 506A - Force Mains

Force mains serving sewage lifting devices, such as grinder pumps and pump stations, shall be designed in accordance with Section 501. Additional design requirements are:

(1) Force main pipe material shall be:
   (a) Ductile Iron Pipe
   Pipe shall conform to ANSI A21.51. The minimum wall thickness shall be Class 52 (ANSI A21.50). The pipe shall be clearly marked with either "D" or "DUCTILE".

   Fittings shall conform to ANSI A21.10.
   Pipe and fittings shall be furnished with push-on joints conforming to ANSI A21.11.

Pipe and fittings shall be cement mortar lined and have an internal and external bituminous seal coating.

(b) Polyvinyl Chloride (PVC) Plastic Pipe

Pipe shall conform to ASTM D2241. Materials used in the manufacture of PVC pipe shall meet ASTM c1784. The minimum wall thickness shall be SDR-21. Fittings shall conform to ASTM D2241. Joints and gaskets shall conform to ASTM D2241, D1869, and F477.

(c) Other pipe materials

Other pipe materials require prior written approval of the Board of Trustees before being installed.

(2) Trenching, bedding, and backfilling shall be in accordance with Section 503 C.

(3) Joint preparation and assembly shall be in accordance with the manufacturer's written instructions.

(4) Anchorages, concrete blocking, and/or mechanical restraint shall be provided when there is a change of direction of 7-1/2 degrees or greater.

(5) Drain valves shall be placed at low points.

(6) Automatic air relief valves shall be placed at high points and at 400 ft intervals, on level force main runs.

(7) Air relief and drain valves shall be suitably protected from freezing.

(8) When the daily average design detention time, in the force main, exceeds 20 minutes, the manhole and sewer line receiving the force main discharge or the sewage shall be treated so that corrosion of the manhole and the exiting line are prevented. The corrosion is caused by sulfuric acid biochemically produced from hydrogen sulfide anaerobically produced in the force main.

(9) The force main shall terminate, in the receiving manhole, at a PVC plastic sewer pipe "T". The vertical arms of the "T" shall be twice the diameter of the force main. The upper arm shall be at least 4 feet long; the lower arm shall terminate in a PVC plastic sewer pipe 90 degree elbow in a flow channel directed to the manhole exit pipe. The "T" and its arms shall be securely fastened to the inside surface of the manhole wall using corrosion resistant anchors.

Section 506B - Force Main Testing

All force mains shall be subjected to hydrostatic pressure of 150 percent of the normal operating pressure. The duration of the test, at pressure, shall be at least 2 hours. Before conducting the test, the pipe shall be filled with water and all air shall be expelled. During the test, water shall be added, as needed, to maintain the test pressure. The amount of water added shall be recorded so as to calculate leakage. Leakage shall not exceed 25 gallons per day per mile per inch nominal pipe diameter. During the test, the owner and the Superintendent shall walk the route of the force main and examine the exposed pipe and the ground covering any backfilled pipe to discover leaks. Leakage in excess of that specified above shall be corrected with new material at the owner's expense and the test repeated. Any observed leaks shall be repaired at the owner's expense. Each test section length shall be as approved by the Superintendent, but in no event longer than one thousand (1,000) feet.

Section 506C - Vacuum Sewer Main, Branch, Laterals and Valve Pit Equipment

(1) **Vacuum Sewer Pipe Material:** For 3-inch diameter vacuum laterals, pipe shall be rubber ring joint or solvent weld Schedule 40, SDR-21, or ABS pipe.

Vacuum sewer pipe sizes 4-inch and 6-inch diameter shall be SDR-21 rubber ring joint.

For rubber ring joint pipe a certificate shall be provided by the pipe manufacturer, stating the pipe has been tested with air at 24 in. hg. vacuum with less than 1% per hour leakage, and is for such use.

(2) **Vacuum Sewer Fittings:** Fittings for vacuum sewers and crossover service connections shall be of the Drain Waste and Vent (DWV) piping type with solvent weld connections. Tee fittings shall not be used for vacuum service.

(3) **Gravity Lines:** (4"0 Sanitary Sewer Laterals - From Buildings to Vacuum Valve Pits): Gravity sewers laid to collect the sewage flow prior to the fiberglass sumps shall be schedule 40 SDR 21 PVC or ABS pipe. Installations shall be watertight.

(4) **Valve Pits and Covers:** Valve pits shall be manufactured by the filament winding fiberglass process. Pits shall be 3'-0" inside diameter at the bottoms and be conically shaped to allow fitting of a 23-1/2" diameter clear opening cast iron frame and cover. Valve pit depth shall be 3'-6". Wall thickness shall be 3/16". Pits shall be suitable for water traffic loading.

A fiberglass reinforced bottom shall be provided for field assembly to the pit by the installation contractor. Valve pit bottoms shall be ¼" thick at the edges and 5/16" at the center. Bottoms shall be molded by the resin inject process. Valve pit bottoms shall be provided with holes factory cut for the 3" suction, 5" cleanout/sensor pipe and sump securing bolt holds.

Valve pits shall be supplied with one 3" and one ¾" elastomer seals (3/4" on 'D' model valves only). Seals shall effectively seal all openings to prevent ingress or groundwater.

Pits shall be supplied with cast iron covers and frames designed for water traffic loading. Frame weight shall be not less than 90 pounds and lid not less than 100 pounds.

Concrete shall be required at all valve pit assemblies at time of installation. Larger collars may be required as recommended by valve pit manufacturer.

(3) **Collection Sumps:** COLLECTION SUMPS SHALL BE MANUFACTURED FROM FIBERGLASS AND HAVE A WALL THICKNESS OF APPROXIMATELY 3/16". Sumps shall be 55 gallon capacity and designed for water traffic loading at 2 feet depth of cover. Elastomer connections shall be provided for the 4-inch gravity line(s). Holes for the seals shall be field cut at the positions directed by the Superintendent. Sealing between the value pit bottom and tank shall be made in the field using an approved silicone or butyl tape rubber sealant.

(6) **Division & Isolation Valves (4:0 and 6:0):** Valves shall be the resilient eccentric seating type suitable for service in sewage under both vacuum and/or proessure.

Valves shall be constructed and rated in accordance with ANSI Specifications B16.1 Class 125 (i.e. body wall thickness, flange dimensions, and body pressure rating). Valves shall be capable of sustaining a vacuum of 24" Hg, and each valve shall be tested and certified to two and nine tenths pounds pressure absolute (24" Hg) by an independent laboratory.

Valves shall be designed with round port capable of passing a hard solid sphere with an outside diameter equal to not less than eighty=five percent (85%) of the nominal valve size, without interference from the closure element.

The body, bonnet, closure element (segmental plug) and trunions shall be fabricated of cast iron equal to ASTM A126 Class B.

The closure element shall be covered with a precision molded Buna-N (NBR - copolymer of butadiene and acrylonitile) facing to act as the resilient seating surface.

The mating seating surface shall be ninety percent (90%) pure nickel polished to a fourteen (14) RMS finish.

The upper and lower journals shall be provided with grit seals to protect the journal bearings.

The body and bonnet shall be provided with permanently lubricated, radial journal bearings of porous series 316 stainless steel to support the closure element journals.

Thrust bearings shall be provided on each side to support the closure element (segmental plug) fabricated of series 300 stainless with a TFE backing ring on the operating shaft side.

The operating shaft seals shall be the dual "O" ring design of Buna-N retained in a bronze replaceable cartridge suitable for both vacuum and pressure.

Valves four inches (4") and smaller may be direct actuated, all six inch (6") and larger manually actuated valves shall be provided with gear actuators.

The operating nuts (WN) and/or hand wheels (HW) shall be of cast iron equal to ASTM A125 Class B or ductile iron equal to ASTM A536 Grade 65-45-12. The connecting pin or keys shall be stainless steel. Nuts fabricated of aluminum are not acceptable.

Buried valves shall be provided with mechanical joint end connections with transition gaskets. Aboveground valves two and one-half inches (2 ½") and larger shall be flanged.

Buried valves shall be installed in valve boxes (road boxes) conforming to local standards, and the operating nut of all buried valves shall be extended to within six inches (6") plus or minus three inches (3") of the finished grade.

Valves shall be Model #AV 5000 Series as manufactured by Valmatic Valves and Manufacturing Company for AIRVAC or the "Cam-Centric" AV Series as furnished by Valmatic Valves and Manufacturing Company or approved equal.

(7) **Gage Taps:** Gage taps shall be installed at the downstream side of each 6" division valve or where otherwise directed by the Superintendent. Gage taps shall be installed within 1'-2' horizontally downstream from the 6" division valve. The gage tap assembly shall include a vacuum sewer main saddletop, ¾" SDR-7 (200 psi) polyethylene tubing, 3/8" barb adapter with cap, cast iron valve box and cover set in 6" deep x 6" radius concrete collar at grade.

(8) **Installation:** Installation of the vacuum sewer system shall be done in accordance with the written instructions provided by the manufacturer.

The installer/contractor shall be responsible for providing through the vacuum system manufacturer the services of a qualified (i.e.) trained and certified by the manufacturer) on-site field representative to advise and assist the contractor during installation and start-up. The vacuum system manufacturer's field representative shall have direct liaison with the Superintendent.

The installer/contractor shall deliver to the Superintendent a certification statement certified by the vacuum system manufacturer that equipment has been installed and started up in accordance with the manufacturer's requirements.

(9) **Vacuum Sewer Testing:**

(a) Daily Testing: At the completion of each day's work, all sewer mains and lateral connections laid that day shall be tested as follows: Plug all open connections with rubber stoppers or temporary caps, fitted to the pipe by 'no-hub' couplings. Apply a vacuum of 24" mercury to the pipes and allow the pressure to stabilize for 15 minutes. There shall be no loss of vacuum in excess of 1% per hour for a two-hour test period. As pipe is laid the new section will be tested in addition to the previous laid pipe on that main.

(b) Prior to Final Acceptance: The complete vacuum sewer system including the vacuum collection station shall be subjected to a vacuum of 24" mercury and allowed to stabilize for 15 minutes. There shall be no loss greater than 1% per hour over a four-hour test period. This test must be completed prior to the installation of any vacuum valves and must be witnessed by the vacuum equipment manufacturer's field representative and the Superintendent.

(10) **Installation of Vacuum Sewage Interface Valve:** Vacuum sewage interface valves shall be installed in accordance with the manufacturer's instructions and not prior to hook up of the home gravity lateral line.

(11) **Installation and Testing of Collection Sump, Sensor Line, and Valve Pit:** The 2" sensor line shall be air tested for leaks prior to installation in the valve pit bottom. Prior to fitting the valve pit bottom, the flanges and mating surfaces shall be clean and dry.

A liberal coating of silicone rubber or butyl tape sealant of approved type shall be applied to all sealing surfaces. Fit and tighten bolts and nuts.

PVC caps shall be solvent bonded to the stub-outs for the gravity line inlets to the holding tank. A stop shall be solvent bonded around the gravity line 6-89" from the end that is inserted into the holding tank.

To test the collection sump, first make a 3" test plug using a 3" PVC cap glued onto a 6" length of 3" pipe. Insert test plug into 3" grommet in pit bottom. Make a 4" test plug using a 4" PVC cap glued onto a 6" length of 4" pipe. Tap a 1/8" tubing connection and an air valve fitting into the 4" PVC cap. Insert into the 4" grommet in the pit bottom. Connect a 0-50" magnehelic gauge to the 1/8" tubing connection. Connect an air supply to the air valve fitting. Bring to 40" water gauge and water for leaks. Leadage must be under 1" water gage in one minute.

Alignment of the 3" pipes after cutout for the interface valve within the valve pit shall not exceed: vertical +/- ¼" and horizontal +/- 1/8".

All assembly and testing of the complete valve pit installation shall be carried out in accordance with the interface valve manufacturer's instructions.

(12) **Equipment Start-Up and Testing:** Before a request for final acceptance of the work the installer/contractor shall provide through the vacuum system manufacturer on-site equipment start-up and training.

Section 507 - Final Acceptance and Warranty/Surety

All sanitary sewers and extensions to sanitary sewers constructed at the applicant's expense, after final approval and acceptance by the Superintendent, and concurrence by the Village of Chaumont Board of Trustees, shall become the property of the Village of Chaumont, and shall thereafter be operated and maintained by the Village of Chaumont. No sanitary sewer shall be accepted by the Village of Chaumont until four (4) copies of as-built drawings have been so filed with the Superintendent and the Superintendent has approved the submitted drawings. Said sewers, after their acceptance by the Village of Chaumont, shall be guaranteed against defects in materials or workmanship for one (1) year, by the applicant. The guarantee shall be in such form and contain such provision as deemed necessary by the Village of Chaumont Board of Trustees, secured by a surety bond or such other security as the Village of Chaumont Board of Trustees may approve. Prior to formal acceptance the applicant shall provide the Village of Chaumont with either a valid easement of

deed acceptable to the Village of Chaumont that grants to the Village the legal right to own, maintain, and operate the sewers to be conveyed.

Section 508 - Liability Insurance Coverage During Construction Period

(1) All contractors engaged in connecting to public sanitary sewers, who perform any work within the Right of Way of any highway, shall file a bond or other security acceptable to the Village of Chaumont Board of Trustees in the amount of Five Thousand Dollars ($5,000.00) with the Village of Chaumont Clerk to indemnify the Village of Chaumont against loss, cost, damage or expense sustained or recovered on account of any negligence, omission or act of the applicant for such a permit, or any of his, or their agents arising or resulting directly or indirectly by reason of such permit or consent, or of any act, construction or excavation done, made or permitted under authority of such permit or consent. All bonds shall contain a clause that permits given by the Village of Chaumont Board of Trustees may be revoked at any time for just cause.

(2) Before commencing work, the above contractor shall file insurance certificates with the Village of Chaumont Clerk for the following coverages are made by insurers authorized to do business in the State of New York:

(a) Workman's Compensation and Employer's Liability Insurance as required by New York law

(b) Bodily Injury, Property Damage and Comprehensive General Liability policies having limits of not less than $1,000,000 each occurrence and $100,000 aggregate, including the following coverages: Premises-Operations, Independent Contractors, Products and Completed Operations; Broad Form Property Damage, Contractual Liability, Explosion and Collapse Hazard, Underground Hazard and Personal Injury with Employment Exclusion Deleted.

(c) Comprehensive automobile liability (including non-owned and hired automobiles) having limits of not less than:

i - Bodily injury - each person	$1,000,000
each occurrence	$1,000,000
ii - Property damage - each occurrence	$500,000

(d) Excess Liability Insurance in the amount of $2,000,000

(e) All insurance certificates must provide for thirty (30) days notice to the Village of Chaumont before

cancellation and naming the Village of Chaumont as an additional insured.

END OF ARTICLE 5

Article 6

BUILDING LATERALS, STREET LATERALS CONNECTIONS, and FEES

ion 601 A - Permit Required for Sewer Connections

No unauthorized person shall uncover, make any connection with pening into, use, alter, or disturb any public sewer or rtenance thereof without first obtaining a written permit from Superintendent.

ion 601 B - Inflow/Infiltration Prohibited

No person shall discharge or cause to be discharged any storm ing water or unpolluted industrial waters to any sanitary sewer. ming pool drains and sump pumps shall not be connected to any tary sewer.

Section 602 - Sewer Lateral Permits (Hook-up Fee)

There shall be two classes of sewer lateral permits and the respective hook-up fees are as follows:

(1) For residential, commercial, and institutional service, fee per hook-up is $75.00.

(2) For service to establishments producing industrial wastes fee per hook-up is $1,000.00.

In either case, a permit application shall be submitted to the Superintendent. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent, in the judgment of the Superintendent. The hook-up fees shall accompany the application.

Connections to existing manholes and vacuum pits shall be made as directed by the Superintendent.

Section 603 A - New Building Laterals

A separate and independent building lateral shall be provided for every building requiring sanitary facilities. When, however, there is a building behind a front building, the second building may use the front building's building lateral, if there is no other way to provide sanitary service to the back building.

New street laterals and/or building laterals shall not go under building basements. In like fashion, a building shall not be constructed over an existing lateral; the lateral shall be relocated after the Superintendent has approved plans showing the relocation. If relocation is not physically possible then the lateral shall be

(1) exposed and totally encapsulated in not less than three inches of concrete, or

(2) exposed and walled and the building rooms above positively ventilated outdoors.

No new manholes shall be constructed on the portion of the lateral under the building.

Section 603 B -Laterals Serving Several Buildings

When building laterals are to serve multiple dwelling structures, the building lateral shall be sized in accordance with the water use and with sound professional engineering judgment.

Section 603 C - Laterals Serving Complexes

Where a lateral sewer is to serve a complex of industrial, commercial, institutional, or dwelling structures, special design of the building lateral system shall be required. Such lateral sewer shall be connected to the public sewer through a manhole. The Superintendent shall determine if and where this connection to the public sewer is required. If required, a new manhole shall be installed in the public sewer pursuant to Section 503 D and 1007 and the lateral connection made and tested as directed by the Superintendent. Plans and specifications shall be prepared and submitted for approval pursuant to this Law.

Section 603 D - Dry Sewers

Dry Sewers shall be designed and installed in accordance with this Law.

Section 604 - Using Existing Building Laterals

Existing building laterals may be used in connection with new buildings only when they are found, on examination by the Superintendent, to meet all requirements of this local Law.

Section 605 - Lateral Pipe Materials

Building and street lateral pipe materials shall be one of the following:

Polyvinyl chloride (PVC) pipe and fittings conforming to ASTM Specification D-3034-73, "SDR-35 Polyvinyl Chloride (PVC) Sewer Pipe and Fittings". All pipe shall be suitable for gravity sewer service. Provisions shall be made for contraction and expansion at each joint with a rubber ring. The bell shall consist of an integral wall section stiffened with two PVC retainer rings which securely lock the solid cross-section ring into position. Minimum "Pipe Stiffness" (F/Y) at five percent (5%) deflection shall be 46 PSI when tested in accordance with ASTM Specification D-2412.

Any part of the building or street lateral that is located within five (5) feet of a water main or water service shall be constructed of cast iron soil pipe. Cast iron soil pipe may be required by the Superintendent where the building or street lateral is likely to be damaged by tree roots. If installed on fill or unstable ground, the building or street lateral shall be of cast iron soil pipe, although other pipe material may be permitted if such pipe is uniformly supported on a poured concrete cradle approved by the Superintendent. The distance between consecutive joints, as measured along the centerline of the installed pipe, shall not be less than

ten (10) feet, except under abnormal circumstances, in which case this dimension may be diminished, if approved by the Superintendent. The size and slope of building and street laterals shall be subject to approval by the Superintendent, but in no event shall the internal pipe diameter be less than 4 inches, nor shall the pipe slope be less than 1/4 inch per foot.

The street lateral shall include a full port curb stop with flow-through diameter equal to that of the lateral. A curb box shall be installed.

Section 606 A - Street Lateral to Public Sewer Connection

At the point of connection of a street lateral to a main sewer, a standard wye fitting and sufficient one-eighth (45 degree) bend fittings shall be used. The wye fittings shall be installed so that flow in the "arm" shall transition smoothly into the flow in the public sewer. No lateral connection shall be made to the public sewer which permits the flow into the public sewer from the lateral to enter at right angles. Tee fittings shall not be used for vacuum services.

The inside diameter of the fittings shall be same diameter as the street lateral inside diameter.

Section 606 B - Future Connection Locations; As-Built Drawings

The street lateral, including the wye and eighth bend fittings, shall be connected to the main sewer at the time of constructing the main sewer, for each proposed lot for either immediate or future development. Laterals installed for future development shall be fitted a standard plug approved for use by the Superintendent. All sewer connections shall be via a properly installed saddle on the main sewer pipe. No portion of the lateral pipe shall protrude into the main sewer pipe. The location of all lateral connections shall be field marked with a 2 inch by 6 inch corrosion and rot resistant board. The marker board shall extend from the depth of the lateral to a minimum of two (2) feet above grade. The location of all lateral connections shall be indicated on a drawing with a minimum of three (3) tie lines indicated. Four (4) copies of this drawing, showing the as-built location of these connections, shall be furnished to the Superintendent. A refundable deposit shall be placed with Village of Chaumont to assure receipt of these as-builts. The deposit shall be placed when application is made; the amount of the deposit shall be $100 per sheet of plans showing locations of lateral connections. No sanitary sewer shall be accepted by Village of Chaumont until four (4) copies of this record drawing have been so filed with the Superintendent and the Superintendent has approved the submitted drawings.

Section 606 C - Special Manhole Requirements

When any street lateral is to serve a school, hospital, or similar institution, or public housing, or is to serve a complex of industrial or commercial buildings, or which, in the opinion of the Superintendent, will receive wastewater or industrial wastes of such volume or character that frequent maintenance of said building or street lateral is anticipated, then such street lateral shall be connected to the public sewer through a manhole. The Superintendent shall determine if and where this type of connection to the public sewer is required. Connections to existing manholes shall be made as directed by the Superintendent. If required, a new manhole shall be installed in the public sewer pursuant to Sections 504, and the lateral connection made thereto as directed by the Superintendent.

Section 607 - Laterals At and Near Buildings

Building laterals laid parallel to a bearing wall shall not be installed closer than three (3) feet to such wall. The building lateral shall enter the basement through the basement wall no less than twelve (12) inches above the basement floor. In no event shall any building lateral be placed below the basement floor, except with the expressed written approval of the Superintendent.

The building lateral shall be laid at uniform grade and in straight alignment insofar as possible. Changes in direction shall be made only with properly curved pipe and fittings. Changes of direction of 90 degrees or greater shall be made with a cleanout which extends to grade, terminating in a terminal box set in concrete. In building laterals, said cleanouts shall be provided such that the maximum distance between cleanouts is 75 feet. The ends of all building or street laterals, which are not connected to the interior plumbing of the building, for any reason, shall be sealed against infiltration by a suitable stopper, plug, or by other approved means.

Section 608 - Sewage Lifting

In all buildings in which any building drain is too low to permit gravity flow to the public sewer, wastewater carried by such drain shall be lifted by mechanical means and discharged to the building lateral, on approval of the Superintendent.

Section 609 - Lateral Pipe Installation

All excavations required for the installation of a building or street lateral shall be open trench work unless otherwise approved by the Superintendent. Pipe laying and backfilling, regardless of pipe material used, shall be performed in general accordance with paragraphs 3 through 6 of ASTM Specification C-12, except that trench

width, measured at the top of the installed pipe, shall not exceed the outside pipe diameter plus 14 inches and, except that no backfill shall be placed until the work has been inspected. The depth of cover over the pipe shall be sufficient to afford protection from frost, but not in any case shall such depth be less than four (4) feet. Where it is physically impossible to provide cover of four (4) feet, the depth may be reduced to a minimum of two (2) feet and the pipe shall be insulated, as approved by the Superintendent.

Section 610 A - Watertight Joints

All joints and connections shall be made watertight.

Section 610 B - PVC Push Joints

Joints for PVC sewer pipe shall follow the manufacturer's recommendations, using properly designed couplings and rubber gaskets pursuant to the published information relating thereto, and conforming to the applicable ASTM specification identified in Section 605.

Section 611 A - Building Lateral/Street Lateral Connection

(1) The connection of the building lateral to an existing street lateral shall be made at the property line where practicable. Except as provided under Article 5, if a street lateral has not previously been provided, the street lateral will be constructed from the existing public sewer to the property line, by a plumber, at the owner's expense. The street lateral shall be installed with a properly sealed and covered clean-out to grade located at the property line. The clean-out shall terminate in a metal box imbedded in concrete.

(2) The cost of constructing the street lateral from the existing public sewer to the property line shall be at the property owner's expense; all subsequent costs and expense incidental to the installation and connection of the building lateral shall also be borne by the owner.

(3) The property owner shall indemnify the Village of Chaumont from any loss or damage that may directly or indirectly be occasioned by the installation of the building lateral.

(4) It shall be the responsibility of the property owner to maintain, repair, or replace the building lateral, as needed.

(5) The method of connection of the building lateral to the street lateral will be dependent upon the type of sewer pipe material, and, in all cases, shall be approved by the Superintendent. After installation of the street lateral has

been approved by the Superintendent, the new street lateral shall become the property of the Village of Chaumont as provided in Section 507. Any subsequent repairs to the new street laterals shall be made by the Village of Chaumont at the Village of Chaumont's expense.

Section 611 B - Cleanout Repair/Replacement

If, in the judgment of the Superintendent, it is determined that a building lateral, without a property line clean-out, needs repair or replacement, the Village of Chaumont may install a clean-out at the property line, at the property owner's expense, such that the street lateral can be maintained independently of the building lateral.

Section 611 C - Street Lateral Replacement; Ownership

Any existing street lateral which, upon examination by the Superintendent, is determined to be in need of replacement will be replaced with a new street lateral with a property line clean-out. The replacement street lateral shall be constructed by a licensed plumber. The cost of constructing the replacement street lateral and clean-out shall be at the property owner's expense. Once the replacement street lateral and clean-out have been constructed and approved by the Superintendent, the new street lateral shall become the property of the Village of Chaumont as provided in Section 507. Any repairs to new street laterals shall be made by the Village of Chaumont at the Village of Chaumont's expense.

Section 612 - Testing

The street lateral, building lateral, or the combined lateral shall be tested for infiltration/exfiltration by

(a) any full pipe method described in Article 5, or

(b) by a suitable joint method, with the prior written approval of the Superintendent.

Section 613 A - Connection Inspection

The applicant for the building lateral permit shall notify the Superintendent when the building lateral is ready for inspection and connection is to be made to the street lateral. The connection shall be made under the supervision of the Superintendent.

The applicant for the street lateral permit shall notify the Superintendent when the street lateral is ready for inspection and connection is to be made to the main sewer. The connection shall be made under the supervision of the Superintendent.

Section 613 B - Trench Inspections

When trenches are excavated for the laying of building lateral pipes or for laying of street lateral pipes, such trenches shall be inspected by the Superintendent. Before the trenches are backfilled, the person performing such work shall notify the Superintendent when the laying of the building lateral is completed, and no backfilling of trenches shall begin until approval is obtained from the Superintendent.

Section 614 - Public Safety Provisions Required; Restoration of Disturbed Areas

All excavations for constructing building laterals shall be adequately protected with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed, in the course of the work, shall be restored in a manner satisfactory to the Superintendent. When installation requires disturbance of paved public roads and shoulders, restoration shall involve backfilling to road grade. Shortly thereafter the Village of Chaumont Department of Public Works (DPW) shall complete road and shoulder restoration to the Village of Chaumont Standards. The cost for such final road and shoulder restoration by the DPW shall be in addition to the fees paid with the application for the permit required in Section 602.

Section 615 - Interior Clean-Out

An interior clean-out fitting shall be provided for each building lateral at a readily accessible location, preferably just inside the basement wall. The fitting shall contain a 45-degree branch with removable plug or test tee, and so positioned that sewer cleaning equipment can be inserted therein to clean the building lateral.

The cleanout diameter shall be no less than the building lateral diameter.

Section 616 - Costs Borne by Owner

All costs associated with the provisions of this Article shall be borne by the property owner unless specifically stated or agreed to be a cost borne by the Village of Chaumont. The property owner shall indemnify the Village of Chaumont from any loss or damage that

may be directly or indirectly occasioned by the installation of the building and street laterals, and connections and appurtenances.

END OF ARTICLE 6