

## The Town of Monrovia Requirements for Transfer of Development Sewer Facility Effective May 1<sup>st</sup>, 2021

The Following items shall be required of all developers/ developments when requesting transfer of sewer facilities to the Town of Monrovia.

- 1: Construction plans must be signed and sealed by a licensed professional engineering firm. The Developer shall be responsible for all charges of the engineer during the plan approval process.
- 2: The **Developer** shall be responsible for the execution of any easements required by the Town to provide access to all lift stations and service lines not included in the recorded subdivision plat. Copies of all off-site easements are to be provided to the Town before development approval.
- 3: An W.W.O.C. Inspector will be assigned to the construction project and be responsible for the inspection of that project to completion and acceptance by the Town. Including inspecting all manholes (outlined in this document) and lift stations (specifications outlined in this document) of the sewer facilities prior to acceptance by the Town. The **Developer** shall be responsible for all costs associated with the inspection program by W.W.O.C. personnel.
- 4: **The W.W.O.C. Inspector must be notified of all construction times for sewer installation.** Failure to notify of construction and installation of sewer line that the Inspector cannot observe may require use of a tv camera to observe the installation after the fact and/ or re-excavation of the work. The **Developer** shall be responsible for all associated costs with inspection after the fact due to not informing the inspector of scheduled work being done.
- 5: The **Developer** shall provide at least one set of As-built drawings to the Town. All drawings will show the location and elevation of all manholes installed, lines installed, laterals for connection to proposed buildings and invert-elevations of all sanitary sewer and stubs.
- 6: All newly installed sewer lines that fail testing/ inspection shall be cleaned and televised by the **Contractor/ Developer** prior to acceptance by the Town. The **Developer** shall be responsible for all costs associated with cleaning and televising the lines.
- 7: The **Developer or Contractor** shall conduct Air testing, Vacuum testing, Mandrel testing and Hydrostatic testing (all tests outlined in this document) under the supervision of a W.W.O.C. inspector. The **Developer** shall be responsible for all costs associated with the W.W.O.C. inspector during the testing process.
- 8: The **Developer** shall provide the Town copies of all operational and maintenance manuals for all lift stations mechanical and electrical components.
- 9: The **Developer or Contractor** shall provide the Town a certification from the company installing the lift station, certifying that all pumps were thoroughly tested and started by a duly trained pump technician. An W.W.O.C. Inspector must be present at the initial pump start-up and testing of the equipment.
- 10: The **Developer** shall provide to the Town the account number and address for the electrical service to any lift station enabling the Town to assume payment of electrical expenses once the sewer facilities have been transferred to the Town.
- 11: **The Developer shall execute a Bill of Sale for Sewer Facilities substantially in the form as set forth in Exhibit A.**
- 12: **The Developer shall provide to the Town a detailed cost analysis of the assets being transferred to the Town.**
- 13: The **Developer** shall provide to the Town a **two-year Maintenance Bond** in the amount of Twenty percent (20%) of the sewer facility construction cost. This Bond to commence as close to the date of acceptance of the sewer facilities as possible. W.W.O.C. will keep track of the bond and reinspect the system just before the bond expires all findings will be reported to the Town.

## LINE CONDITION

The Sewer line will be clean for testing purposes. All construction debris, obstacles, sediment, etc. will be removed as a part of the normal construction process. A mechanical pipe plug must be installed at all new connections to Town Sewers. This plug may only be removed after the final walk thru. Removal of the plug prior to the final walk through will require all to be recleaned and televised prior to Town acceptance consideration and may include extending that cleaning to lines down-stream of project of construction waste. Associated charges will be the responsibility of the **Developer**.

## Lift Station Construction Specifications

For there to be consistency in construction design, appearance and operation of lift stations that are to be accepted by the Town the following specifications are considered as minimum standards for acceptance for development, sewer facilities possessing lift stations:

- 1: A concrete pad with a thickness of no less than 4" (four inches) covering the lift station area extending no less than 3' (three feet) past the wet well and valve vault.
- 2: Drives to the lift station shall be stone compacted and paved with the extreme minimum width of 10' (ten feet) designed to allow trucks to turn around and completely exit the thoroughfare route used to get to the station.
- 3: OMNI-SITE Alarm is to be installed as a part of the lift station installation.
- 4: All lift stations with static or erratic flow shall have a MULTI-TRODE pump activation/ high level alarm installed.

**Any questions as to drives and/ or equipment can be directed to W.W.O.C. Inspection personnel at 317-225-3316**

## LIFT STATION FENCING AND MAINTENANCE RESPONSIBILITIES

- 1: **Developers or Contractors** are responsible for installing a fence that protects the new lift station function and provides safety to the public. The fence composition shall be wood and privacy-type in nature. The fence shall be at least 6' (six feet) in height, surround the perimeter of the pad, set in concrete, raised approximately 3" (three inches) above the cement pad and have two (2) 4' (four feet) swing doors with a lock system.
- 2: The area immediately outside the fenced area, excluding the gate area, is to be finish graded and sowed with grass. The area may be further landscaped with prior approval of the Town. On such occasions to "hiding" the station by use of shrubs, flowers and/ or tall grasses. If the indicated landscape materials are used by the Developer, Contractor or Property Owners Association, the materials must be planted a minimum of 10' (ten feet) from the fencing and roadway; must not interfere with the ingress and egress of the station; not be planted over existing sewer lines that the roots can eventually interfere with the flow of the line and the responsibility to replace dead material and maintain landscaping remains the responsibility of the **Developer, Contractor, or Property Owners' Association**.
- 3: The actual fencing once installed and accepted by the Town. Shall be maintained by the Town including stain/ sealant for the wood fencing that presents, in the opinion of the Town. A neutral appearance to the fencing A 3-4-year maintenance program will be implemented. Color, type of stain and sealant selection will rest solely at the discretion of the Town.

## MANHOLE INSPECTIONS

**Developer or Contractor** shall ensure all new manholes show no visible signs of leakage or that the construction of the manhole causes no concern for safety in entering or exiting the manhole.

**Developer or Contractor** shall ensure an internal/ external chimney seal manufactured by Adapter; Inc. is installed on any newly constructed manhole.

**Developer or Contractor** shall ensure any connection to an existing manhole be properly grouted and sealed to keep from leaking.

Manholes shall be inspected by W.W.O.C. Inspectors. Failed construction of new manholes or connections to existing manholes must be re-inspected by a W.W.O.C. Inspectors until such time as the inspection passes.

Significant issues surface, with manholes being covered up during the early stages of the project by primarily service contractors and landscape contractors. For this reason, manholes will be inspected prior to acceptance of the sewer facilities by W.W.O.C. Inspectors and two additional times prior to the expiration of the bond. Repair and or adjustment of manholes because of these inspections will be the responsibility of the **Developer or Contractor** or become a claim against the Bond.

### **MANHOLE VACUUM TESTING**

All new manholes must be air tested in accordance with ATSM C1244-93, Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test. The **DEVELOPER OR CONTRACTOR** is responsible for all equipment required for the proper testing of the manholes. "This test method is intended to be used as a preliminary test to enable the installer to demonstrate the condition of the concrete manholes **prior to backfill**. It may also be used to test manholes after backfilling." (ASTM C1244-93 1.1.2)

Testing for Town purposes will be performed at the time of the air and mandrel testing. The test head shall be placed at the top of the manhole. A vacuum of ten inches (10") of mercury shall be drawn on the manhole, the valve on the vacuum line of the test head closed and the pump shut off. The time measured for the vacuum to drop to nine inches (9") of mercury. The manhole shall pass if the time for the vacuum reading to drop from 10" to 9" of mercury meets or exceeds the values indicated in C1244-93 Table 1. **The DEVELOPER OR CONTRACTOR is responsible for any repairs needed and the manhole shall continue to be retested until a satisfactory test is obtained.**

The **DEVELOPER OR CONTRACTOR** shall provide the Town a minimum forty-eight (48) hours of notice prior to the proposed testing date to allow for scheduling of personnel. Inspectors may be contacted at the plant 1102 North West Union Church Rd. Monrovia, Indiana 46158 or 317-225-3316 or 765-318-3405 or 317-966-5511. The Town shall make every effort to work with the proposed schedule but reserves the right to postpone testing for a maximum period of one (1) week in the event of scheduling conflicts.

### **MANDREL TESTING**

**Developer or Contractor** shall perform the Mandrel Test prior to the Air Test unless otherwise approved by a W.W.O.C. Inspector for reason. The Mandrel Test and the Air Test shall be performed in the same general timeframe. Water lines shall be installed prior to test.

**Developer or Contractor** shall provide all necessary equipment to perform the testing including, but not limited to, a mandrel with its proving ring and string.

The test shall be conducted by a W.W.O.C. Inspector. Sewer lines shall be tested **no sooner than thirty (30) days** after completion of installation.

The Mandrel shall be a rigid device, cylindrical in shape and constructed with nine (9) or ten (10) evenly spaced arms or prongs that will pass through a five percent (5%) or less deflection of the base inside diameter of the pipe.

The sewer lines shall be pre-strung with the string intended to pull the mandrel to allow for a faster test.

The **Developer or Contractor** shall uncover and repair all failed lines. Failed lines **MUST** be re-inspected by an W.W.O.C. Inspector until such time as the lines pass.

## AIR TESTING

Testing of sewer lines shall be conducted in the presence of the W.W.O.C. Inspector by the **Developer or Contractor**. All water lines shall be installed prior to test.

**Sewer lines shall be tested no sooner that thirty (30) days from completion of installation.**

**Developer or Contractor** shall provide all tools and equipment necessary to perform the test including, but not limited to, mechanical and pneumatic plugs, air control panel, shut-off valve, pressure regulation valve, pressure relief valve and input pressure gauge. No less than two (2) hoses shall be used for the airing of the line and the constant air monitoring.

Continuous monitoring pressure gauge must read from zero (0) to at least ten (10) psi with minimum divisions of one-tenth (.10) psi and an accuracy of plus or minus four-hundredths (.04) psi.

Sewer lines shall be inspected as to specifications and requirements outlined and provided.

**Developer or Contractor** shall perform all necessary work in locating and repairing leaks to failed lines. Failed lines **MUST** be re-inspected by an W.W.O.C. Inspector until the line passes testing.

## HYDROSTATIC TESTING

**Developer or Contractor** shall provide all necessary tools including, but not limited to, a hydrostatic water pump, a pneumatic or mechanical plug and a hose to fill force main and read continuous monitoring pressure gauge.

Continuous monitoring pressure gauge shall read from zero (0) to at least on hundred fifty (150) psi with minimum diversion of ten (10) psi.

Lines shall be pumped to one and one half (1 ½) times the Pump Shutoff Head of the force main. Lines shall be allowed thirty (30) minutes for stabilization and be tested for one hundred twenty (120) minutes. Lines shall be allowed to drop no more than ten (10) gallons per inch diameter per mile per day.

Sewer lines shall be tested in the presence of an W.W.O.C. Inspector by the **Developer or Contractor**. Failed lines shall be re-inspected until lines pass.

**Locating leaks and repair of the same is the responsibility of the Developer or Contractor.**

**EXHIBIT A**

**Bill of Sale – Sewer Facilities**

KNOW ALL MEN BY THESE PRESENTS, that \_\_\_\_\_,

An Indiana Corporation (“Grantor”), for and in consideration of the sum of Ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is herby acknowledged, hereby bargains, sells, transfers, assigns, and sets over unto the Town of Monrovia, a duly formed Town pursuant to I.C. 13-3-3 et seq. (“Grantee”), its successors and assigns, all of its right, title and interest in and to the sewer mains and facilities (the “Sewer Facilities”) described in the “as-built” sewer plans attached hereto as Exhibit 1 and made a part of hereof, including whether or not set in the “as-built” sewer plans:

- (a) All sewer mains, pipes, and conduits, lift stations, manholes, all necessary or incidental auxiliary, or feeder, service mains, pipes and conduits and other facilities, appliances, apparatus, and structures convenient or proper for the purpose of rendering sewage disposal service.
- (b) All rights and records, including without limiting accounting records relating to the installation, construction, acquisition, operation, maintenance, repair, inspection, and renewal of the Sewer Facilities.
- (c) All rights-of-way, licenses, contracts, permits and other rights and authority held by Grantor in connection with its ownership of the Sewer Facilities, and electrical components.
- (d) All operational and maintenance manuals for all lift stations’ mechanical and electrical component.

TO HAVE AND TO HOLD the Sewer Facilities, together with all incomes, revenues, rents, issues, and profits thereof hereafter accruing unto Grantee, its successors, and assigns, forever.

The Grantor hereby covenants with the Grantee that the Grantor is the lawful owner of, and has good and marketable title to, the Sewer Facilities for the use to which they are devoted; that the Sewer Facilities are free from encumbrances; that Grantor has good right to transfer the Sewer Facilities; and that Grantor will warrant and defend the Sewer Facilities against the lawful claims and demands of all persons claiming by, through or under Grantor including indemnifying Grantee for all its costs and expenses incurred by grantee for defending any claims and demands of any and all persons claiming by, through or under Grantor including Grantee’s attorney’s fees.

It is understood wherever in this instrument reference is made to either of the parties hereto, it shall be held to include the successors and assigns of such party the same as if in each and every case so expressed.

IN WITNESS WHEREOF, \_\_\_\_\_ has Executed this Bill of Sale – Sewer Facilities on this \_\_\_\_\_ day of \_\_\_\_\_,

GRANTOR

\_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

ATTEST: