

STANDARD OPERATING PROCEDURE

SECTION: UTILITIES CONSTRUCTION SECTION NR: _____
 EFFECTIVE DATE: OCTOBER 22, 1992 SUBSECTION: _____
 REVISED 11/26/96
 REVISED 02/06/02
 REVISED 03/29/06
 AUTHORITY: RICHMOND UTILITY BD. SUBJECT: PRIVATE UTILITY DEV.

CONSTRUCTION AND ACCEPTANCE OF UTILITIES

POLICY: All new utilities constructed by private developers must comply with this policy in order to be accepted by the Richmond Water, Gas & Sewerage Works and be authorized to be connected to the City systems. All utilities shall be constructed in accordance to Richmond Utilities' infrastructure development manuals latest revision.

PURPOSE: The purpose of this policy is to insure all utilities meet state and local regulations for engineering, construction, materials, tested and compatibility with the Richmond Water, Gas & Sewerage Systems before they are accepted by the Richmond Water, Gas & Sewerage Works.

Procedure: (See Attached Utility Flow Chart)

- A. **PRE-CONSTRUCTION** (Must be completed before construction).
1. Infrastructure Development Agreement: Upon approval of the Richmond Technical Advisory Committee (TAC), the Developer, Engineer, and Richmond Utilities' shall sign the agreement, in accordance to RU infrastructure development manuals latest revision.
 2. Initial Conference: Upon notification by a developer of an intent to undertake a project, the Richmond Water, Gas & Sewerage Works will schedule a meeting of all parties involved to outline the procedures to be followed in developing the utilities for the project.
 3. Sewer Development Fees must be paid
 4. Preliminary Plan Review: Preliminary plans will be submitted to the Richmond Water, Gas & Sewerage Works for review. The developer will be notified of any comments and/or corrections necessary. The review will encompass approved materials and installation procedures.
 5. Final Plan Review/Approval: Final engineer plans (construction drawings) which have incorporated water, gas and sewer

comments from preliminary plan review will be reviewed.
Approval letter will be forwarded to the developer and project engineer.

6. Easements: Utility easements will be dedicated by plan, plat or deed.
7. State Approval: The Developer will submit construction drawings and specifications to the state for review and approval letter attached.

Kentucky Division of Water
Facilities Construction Branch
14 Reilly Road
Frankfort, KY 40601

8. Pre-Construction Meeting: Prior to purchase of materials and start up of construction this meeting must take place with the Developer, Engineer, Contractor, Owner, RU Superintendent, and Richmond Water, Gas & Sewerage personnel in attendance.

B. **CONSTRUCTION**: (May begin only after receipt of approval of plan and specifications by the Kentucky Division of Water-Facilities Construction Branch).

1. The Developer will Notify Richmond Water, Gas & Sewerage Works Construction Coordinator of construction start up date.
2. The engineer and/or Engineers representative in accordance to Richmond Utilities' technical manual latest revisions shall provide full time on site inspections, to insure compliance with approved plans and specifications.
3. Contractor will deliver "As Built" Drawings with field notes to Richmond Water, Gas & Sewerage Works office, and deliver copy to engineer to have Final "As Built" Drawings produced.
 - a. Prior to system activation, an inspection and punch list are to be generated by the engineer, contractor, and Richmond Utilities. The Engineer will notify the developer of all deficiencies and send a copy to all parties.
4. Test of System Integrity: Richmond Water, Gas & Sewerage Works personnel will observe testing of a system by contractor:
 - a. Water
 - (1) Pressure Testing: 150 lbs for 4 hours (AWWA Stds.)
 - (2) Disinfection
 - a) Starting Strength: 50 ppm chlorine
 - b) Ending Strength: At least 25 ppm chlorine
 - c) Time: 24 hours
 - (3) Depressure the new system, flush, dechlorinate, and isolate system. (RU personnel must witness valving off system.)

- (4) The water system must be sampled for bacteriological testing. All samples must be negative prior to activating the system. (Sewer must be activated prior to water activation.)
 - b. Sewer
 - (1) Lines RWG&S Specifications.
 - a) Low pressure air test.
 - b) Deflection Test – 30 days after installation.
 - c) Vacuum test – manholes.
 - (2) Manholes: RWG&S specifications, visual inspection, and vacuum testing.
 - (3) Lift Station (If applicable)
5. CONNECTION TO RICHMOND WATER, GAS & SEWERAGE WORKS SYSTEM: Utilities cannot be tied into the Richmond Water, Gas & Sewerage Works water and sewer systems until the system has been constructed and approved.
6. The Engineer shall develop final digital “As Builds” that accurately geo-reference with RU GIS base map. The engineer will also provide 24”X36” drawings, in accordance with RU Technical manuals latest revisions.
7. After RU has approved Engineers “As Builts”, a “Letter of Certification” by project engineers shall be delivered to the KY Division of Water stating system was constructed and tested in accordance with approved plans (copy to Richmond Utility Board).

C. REQUEST OF ACCEPTANCE SUBMITTAL AND ACTIVATION OF UTILITIES.

1. The developer will fill out and submit the Request of Acceptance of Donated Utilities form to the Richmond Utility Board requesting the system be accepted by the Richmond Water, Gas & Sewerage Works and must include the following:
 - a. Project Description.
 - b. Project cost (to determine the value of the system being donated to RWG&SW).
 - c. Shop Drawings (if applicable).
 - d. Manufacturing Manuals (if applicable).
 - e. Satisfactory evidence that all lawful obligations to contractors and suppliers have been met.
 - f. Digital Geo-reference AS-Builts.
 - g. Satisfactory evidence that easements (by plat description) have been recorded.
2. After receiving the Request of Acceptance form and all necessary attachments Richmond Utilities Activation Form will be filled out and signed by the Project Coordinator and the Water and Sanitary Sewer Department heads.

3. Project will be inspected by the project engineer and RU in accordance to RU technical manuals, latest revision to insure full compliance.
4. Conditional acceptance by RUB: The developer will be responsible for maintenance costs until final acceptance is granted, in accordance to RU infrastructure development manuals and the City of Richmond's Development Ordinance requirements.
5. Final acceptance – normally 12 months from conditional acceptance. Intermittent inspections shall be done in accordance to RU Infrastructure development manuals latest revision.