

The Utilities of Twinbrook

Diana Maxwell

AMST 278

April 6, 2008

The end of World War II brought thousands of soldiers home to their families, and caused a housing shortage to sweep across the United States. G.I. benefits and mortgages insured by the Federal Housing Administration (FHA) made home ownership an easier goal than it ever had been before, and thousands of developments sprang up to meet the demand for housing. In order for these new developments to subsist, utilities such as electricity, telephone, sewage disposal and water service had to be put in place. The FHA established what developers needed to do in their communities in order for the FHA to subsidize the development's mortgages, including regulations for installing utilities, but the predominant theme was follow the rules of whatever jurisdiction you're developing in. For Joseph Geeraert's development Twinbrook, this meant following the rules of Rockville, MD. The development of utilities in Twinbrook is closely tied with those of Rockville, and portrays, particularly with respect to the development of water and sewer systems, a picture of a small town struggling to respond to a massive influx of new citizens.

The FHA's Underwriting Manual is relatively vague in their electricity and telephone requirements. "Electricity is required in all developments. Wherever feasible installation of electric and telephone poles and lines should be required in utility easements using interior lot lines instead of in the streets."¹ The FHA goes on to recognize that many utility companies and local governments do this already for cosmetic reasons, and should be encouraged to do so if they do not already. Note the word feasible. In the case of Twinbrook, Geeraert must have deemed this not feasible, since the electric and telephone poles and lines run along the streets, rather than behind houses.

¹ U.S. Federal Housing Administration, *Underwriting Manual* (Washington, D.C.: GPO, 1947), 1382.

Electric supply in the city of Rockville, into which Twinbrook was incorporated, has been provided by the Potomac Electric Power Company (PEPCO) since 1903. PEPCO began building a new plant in suburban Maryland in 1956 in response to the growth in population in the area due to developments like Twinbrook. In 1959, a Twinbrook substation was built at the corner of Broadwood Drive and Burriss Street at a cost of \$100,000. The building was designed to be indistinguishable from its residential neighbors, complete with windows and a front porch.²

Telephone service, like electrical service, came to the Rockville area long before Twinbrook. Service in Rockville started in 1906 with forty customers. By 1933, telephone service was carried by the Chesapeake and Potomac (C&P) Telephone Company on a party line system. Dial telephones were introduced in late 1946 and early 1947. Officials made the inaugural call on December 28, 1946.³ At this point there were approximately 1600 phone lines in the Rockville area, and a new telephone company building was constructed on Jefferson Street. It would appear that some of these new lines were going to Twinbrook, since in 1949 the Rockville's mayor and council passed on installing a fire alarm system in Twinbrook because "plenty of telephone service is now available at Twinbrook."⁴ Demand outpaced supply in 1950 and the council allowed C&P to install temporary phone poles and booths at Ardennes Avenue and LeMay Road until permanent systems could be installed.⁵ The telephone system grew as Twinbrook did; a 2-5 numbering plan was introduced in December of 1953, and 1956 brought the elimination of the party line system, allowing users to directly dial between

² "Substation planned for Twinbrook," *Montgomery County Sentinel* October 1, 1959, p. A9.

³ "Officials inaugurate Rockville's dial telephone system last Saturday," *Montgomery County Sentinel* January 2, 1947.

⁴ Minutes of the Rockville, MD Mayor and Council 7 September 1949.

⁵ Minutes of the Rockville, MD Mayor and Council 21 December, 1951.

exchanges and make long distance calls to certain areas as well. Telephone service in Rockville switched to an electronic switching system in 1971, by which time C&P had approximately 16,000 customers.

The development of electric and telephone service to the citizens of Twinbrook is straightforward and relatively simple, particularly when compared to the creation of the water and sewer systems, both of which struggled greatly with the growing pains of the post-war housing boom.

The FHA Guidelines for water and sewer systems are far lengthier than those for electric and telephone service. Once again though, they leave much up to the developer and are flexible depending on what is feasible in a particular situation. The FHA required that a connection with a “satisfactory public water and sewerage system” be made whenever feasible, since existing water and sewer systems, whether run by a municipality or utility company “have generally proven to be the most reliable means of supplying adequate and continuous service at a reasonable cost.”⁶ If an existing system was not located near the new development, but could be extended into or adjacent to the tract, this extension and connection was required, as long as it did not cost substantially more per lot than an individual system. In addition, connection was required if a development site could not compete successfully with nearby sites without a connection to public systems. All connections to public systems were to comply with the municipality or company in charge of the system.

If a public system connection was not feasible, then a community water or sewer system could be developed with certain specifications. Essentially, these specifications require that the housing development be large enough to justify the construction costs of

⁶ FHA, *Underwriting Manual*, 1380.

a community system without over-burdening the residents, that it will adequately and properly serve the area, be maintained over time, comply with local and FHA requirements, and allow the community to compete with nearby developments.

If a connection to a public system and a community system was not available, a developer could turn to individual systems. However, it was noted that this should not be necessary, since “areas which can be provided with neither of these utilities [water and sewer systems] by public or community systems are rarely ripe for development.”⁷ Emphasis was placed on maintaining a safe and continually adequate water supply. An individual sewer system had to be in soil and silt conditions in order to function satisfactorily. For both individual water and sewer systems, the systems must be approved by local health authorities, and the sites must be able to compete successfully with nearby communities.

In Twinbrook, individual systems were anticipated at the beginning of development, but a public system, that which was most favored by the FHA, became the final water and sewer system. The Twinbrook developers originally planned for individual systems, with their homes sitting on half-acre lots with septic fields. The public system came into play after the State Board of Health approved plans for a sewer plant, and Rockville agreed to annex the development. The loss of the septic fields meant a reduction in lot size, which in turn meant an increase in the number of houses that could be built. Twinbrook had begun.

Families first moved into Twinbrook in late 1948. In 1949, Rockville’s Mayor and Council passed an ordinance to purchase the water and sewer facilities installed in Twinbrook from Twin-Brook Inc. A year later, the city of Rockville (then still considered

⁷ FHA, *Underwriting Manual*, 1380.

a town by most residents) was installing water and sewer mains in the newer areas of Twinbrook. This follows the pattern Rockville had set up. A developer would approach the town council near the completion of construction, and in exchange for having the water and sewer mains extended to their development the developer would agree to annex the area to Rockville. The city would issue bonds to pay for the system extensions, and would in turn increase their tax base, as another requirement for the annexation was that each new home owner paid their local Rockville taxes at the full rate.

This plan sounds solid on paper, but unfortunately didn't work in the long term, due to a lack of water, and an abundance of sewerage. Water in Rockville was supplied by several artesian wells, one built for every 200 houses. In Twinbrook, one such well stood at the corner of Atlantic Avenue and Vandegrift Avenue, and was primed every afternoon by a city worker.⁸ This was a system that worked for a small town, but that would not be enough for the thousands of new residents who moved to the area in the 1940s and 1950s. Shortages were reported in Rockville in the summer of 1946, when a combination of a low water table and pumps on three of the town's ten wells breaking (plus an inability to get new pumps) created a water deficiency. The community responded by pulling together a volunteer force to use fire department hose to pump water into municipal storage from Rock Creek. To prevent this from occurring, the Mayor and Council dug new wells, so that by 1949 there were 23 wells in Rockville, with plans to dig three more, paid for with municipal bonds.

Meanwhile, a lack of water was coupled with an increase in sewage. Rockville's sewer plant was built in 1939, and could process 325,000 gallons of sewage per day. Ten

⁸Eileen S. McGuckian, *Rockville: Portrait of a City* (Franklin, Tenn.: Providence House Publishers), 2001.

years later, this was not enough for the rapidly growing town, and the 1949 municipal bond to pay for new wells also would pay to construct an outfall sewer to the Cabin John disposal plant, which was run by the Washington Sewer and Sanitary Commission (WSSC). An agreement was made with the WSSC in 1950 to extend their line, which fed into the DC sewer line, to the Rockville corporate limits. This agreement became a formal contract in March 1951, but a trunk line wouldn't be finished until early summer of 1952. That same year the Council and Mayor considered expanding Rockville's sewer plant to double or triple its capacity, and consulted with engineers and the State Board of Health as to the involved costs. Ultimately the project was set aside until a larger tax base could be established, but the Council did issue another \$200,000 in municipal bonds to pay for water and sewer line extensions and to dig more wells. There was a clear attempt to deal with this mounting problem, but it was never quite enough, nor did it focus on long term solutions.

The sewer and water situations came to a head in 1953, when crises with both utilities erupted. The summer of 1953 brought drought conditions to Rockville, and on Saturday, June 27 the Mayor and Council enacted a water ordinance, which made it illegal to use water for "the sprinkling of lawns, the washing of cars, or the watering of gardens" between noon and midnight.⁹ The ordinance was in effect from June 27 to October 31, 1953. Later that same day Rockville ran out of water for a few hours. A special meeting of the mayor and council met the next afternoon. The problem, explained city manager John McDonald, was water sprinklers. People in the newer subdivisions of the city, such as Twinbrook, had caused the water to be pumped out of storage tanks faster than it could be refilled, because they were using their sprinklers. Employees from

⁹ Minutes of the Rockville, MD Mayor and Council, June 27, 1953

the water department had toured “Twinbrook, Meadowbrook, and Silver Rock and had found over 300 water sprinklers going in this area alone.”¹⁰

The problem seemed to be a bit beyond water sprinklers, but in any case the water ordinance remained in effect through the very dry summer. On July 15 the Mayor Council adopted a revised ordinance that made it illegal to use water for anything other than normal domestic or household use or for the purpose of fire protection” at any time of day or night, through October 31.¹¹ That meant no sprinkling lawns, watering gardens, washing cars, or filling pools (wading or otherwise). In the mean time, the council started to work on getting more water. By August members of the council had written letters to the WSSC, the Maryland Park and Planning Commission, and the Army Corps of Engineers to inquire as to the feasibility of tying in to their water systems. The council and the WSSC were in talks by late August to purchase water. The cost would be 27 cents per thousand gallons, up to a million gallons per day, plus the cost of meter reading and a service charge of \$425 annually. The WSSC would bring a water line up from Waverly Sanitarium to the Rockville corporate line, and Rockville would be responsible for connecting the lines within the city. By the time the water use ordinance was up in October, the situation had not improved greatly, so the city encouraged (but didn’t legally enforce) conservation of water use. The water situation was at least somewhat solved with the plans to purchase water from the WSSC, but Rockville would soon have another major utility problem.

1953 was not a good year for utilities in Rockville. Not only were there severe water shortages, but on December 1, 1953, the State Board of Health issued an injunction

¹⁰ Ibid

¹¹ Minutes of the Rockville, MD Mayor and Council, July 15, 1953

against the city of Rockville because of a major sewer problem. Effective January 31, 1954, no further sewer connections could be made in the Cabin John drainage area.¹² This essentially halted construction on the west end of Rockville, where a new development was being planned. The sewage plant at Cabin John was overloaded, and could barely support the population, let alone the 200 new households this development would bring. Once again Rockville's leaders faced a crisis, although this time they were expecting it. During the November 24, 1953 meeting of the Mayor and Council, in which they reviewed plans for the new west-end development of Hungerford, the developer stated that the project would more than overload the sewer system, and he forewarned that "it will be only a matter of time before they [the State Board of Health] tell Rockville something must be done."¹³ The Mayor noted that there was indeed a problem, and a motion was passed to continue working in conjunction with consultants to develop a plan to fix the sewer. The plan that was reached was for a temporary connection from 500 Rockville homes to connect into the WSSC's Rock Creek line. The \$6,000 cost of doing this would be paid for by the west-end developers, and would give Rockville time to create a more permanent solution with the WSSC.

Following the water and sewer crises of 1953, the residents of Rockville were ready for a change in political leadership. The Citizens for Good Government (CGG) was a new non-partisan political group launched before the local elections in the spring of 1954. The group wanted a new group of people in office who would be more responsive to citizen's needs. The slate was led by mayoral candidate Dickran Hovsepian, a

¹² McDonald, John G., *Sewer Report: Cabin John Valley*, n.p., 1954

¹³ Minutes of the Rockville, MD Mayor and Council, November 24, 1953

Twinbrook resident. The election was a contentious one, but in the end the CGG won out, and the local government received almost a complete overhaul.

Under the guidance of the CGG, working with the temporary plans already set in place, the water and sewer problems were met head on. An editorial from March of 1956 outlines the problems that were solved in 1955. An agreement had been signed with the WSSC for town sewage disposal, whereby Rockville would bear the brunt of cost of building a sewer line through the Cabin John valley to connect into the WSSC's District of Columbia sewer plant, and there were plans in the works to build a line to the Potomac River for water.¹⁴ In June of 1956 the city was waiting for \$30,000 to pay for engineering costs from the federal government before starting work on the Potomac line. As councilman John Oxley noted, "We've got to get the water line to the Potomac or else stop annexing more territory."¹⁵ Rockville was working to get more water for its citizens, but in the mean time the city began to require a bit more before allowing annexation. When Geeraert wanted to annex his Meadowbrook development into Rockville, the city required a written agreement that the WSSC would provide water for the subdivision. The Potomac line was finished in 1958 at a cost of \$2.6 million, and members of the CGG posed for ceremonial pictures taking a drink from the drinking fountain near the courthouse¹⁶. With the sewer and water systems finally in place, Rockville continued to grow, and the city dealt with sewer and water problems in a more systematic manner. For example, the city manager was authorized to help negotiate with the WSSC for construction of a trunk line into Twinbrook Park after a sewer pump breakdown in caused

¹⁴ "Moving Forward" *Montgomery County Sentinel*, March 29, 1956.

¹⁵ "Vote on city water may be held soon" *Montgomery County Sentinel*, June 7, 1956.

¹⁶ McGuckian, *Rockville: Portrait of a City*.

raw sewage to overflow onto Twinbrook Parkway.¹⁷ As the decade drew to a close, the WSSC began work on a \$28 million Potomac River water filtration plant, and a \$1 million county sewer program extended from the lower limits of the Rockville system to the Potomac River interceptor.¹⁸

Young families flocked to Twinbrook following World War II, taking advantage of low-income, FHA insured mortgages, and expanding the community of Rockville. Developers were drawn there in the first place because of the inexpensive land and ease of annexation into the city of Rockville. During the post-war housing boom, developers in Rockville could get the necessary building permits and approval on water and sewer hook-ups from the city within a few weeks, in comparison with months in negotiation with Montgomery County, and the city had no subdivision regulations until 1956.¹⁹ Since the FHA required developers who wanted their subdivisions to be insured to follow all local regulations, it's no wonder that so many large developments sprang up near Rockville, with its lax or altogether missing regulations. After all, development is all about making money, and the easiest way to do that is to quickly get people into houses you built. The influx of people to Twinbrook and other subdivisions in Rockville greatly overtaxed the city's previous water and sewer systems, but also brought about a change in local government that was a necessary step on the city's journey from small town to All American city.

¹⁷ "City backs sewer line," *Montgomery County Sentinel* April 10, 1958. p.A3

¹⁸ "Work to start on big new water plant," *Montgomery County Sentinel*, March 6, 1959, p. B7. and "Giant Sewerage program given county council," *Montgomery County Sentinel* p. Sept. 1, 1960.

¹⁹ "Rockville loses some attraction for sub-dividers," *Montgomery County Sentinel*, May 3, 1956.

Bibliography

Federal Housing Administration, *Underwriting Manual*, Washington, D.C.: GPO, 1947.

Hanchett, Thomas W., "The Other 'Subsized Housing': Federal Aid to Suburbanization, 1940-1960s," in John F. Bauman, et al., eds., *From Tenements to the Taylor Homes: In Search of an Urban in Twentieth-Century America*. (University Park: Pennsylvania State University Press, 2000, 163-79.

McDonald, John G., *Sewer Report: Cabin John Valley*, n.p., 1954.*

McDonald, John G., *Water Report through May 10, 1954*, n.p., 1954.*

McGuckian, Eileen S., *Rockville: Portrait of a City*. Franklin, Tenn.: Providence House Publishers, 2001.

Minutes of the Rockville, MD Mayor and Council Meeting, September 7, 1949*

Minutes of the Rockville, MD Mayor and Council Meeting, December 21, 1951*

Minutes of the Rockville, MD Mayor and Council Meeting, June 27, 1953*

Minutes of the Rockville, MD Mayor and Council Meeting, July 15, 1953*

Minutes of the Rockville, MD Mayor and Council Meeting, November 24, 1953*

The Montgomery County Sentinel, Rockville, MD. Selections from 1948-1960†.

*Located in the Peerless Rockville archives. Also of use at Peerless Rockville were the files on “Utilities” and “Local Government.”

†Compiled by students of Dr. Richard Longstreth’s Spring 2008 Historic Preservation class at George Washington University.