

# Know

You Should



A Message from the American Concrete Pipe Association

Bulletin No. 125

## A New Dinnertime Subject: Concrete

By Jeri Tyler

How exciting is it to watch grass grow or concrete dry? Maybe we should rethink what is exciting because it could cost us money if we don't watch what is happening in our neighborhoods.

Every rainy season we hear horror stories of houses being flooded because too much water has drained from roads or hills and because of possible collapsed drainpipe nearby that couldn't handle the flow. Developers usually use corrugated steel pipes because they feel the cost is cheaper than the cost of concrete, but in the long run that's not true. Corrugated steel pipe or aluminum and plastic pipes usually have a service life of anywhere from 20 years to about 40 years. Concrete pipes used for storm water have a life of 100

years plus. Also concrete pipes do not have a coating that could possibly catch fire. "So what?" you are probably saying now as you read along.

Gwinnett County is generally looked up to, not only for its exceptional growth, but for

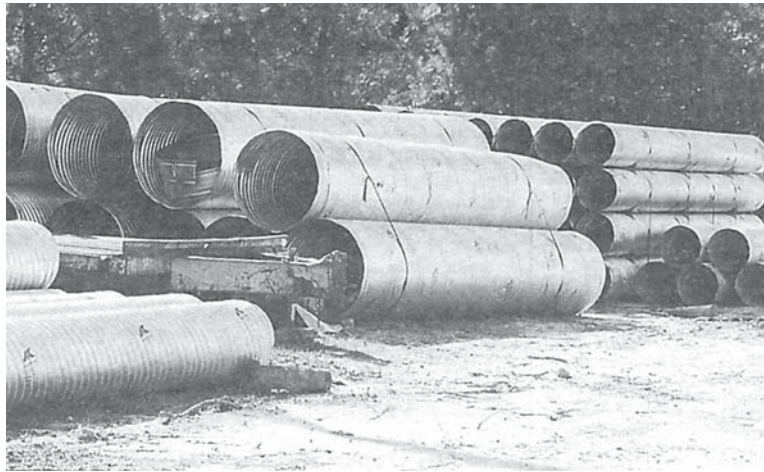
its quality growth and standard of living. These achievements could not be made without quality building codes and development regulations. But there is one problem. Most (95%) of the stormwater infrastructure products now being installed by the development community are usually flexible pipes, not concrete pipes. "So" you say. The reasons we should be concerned are many and most affect our pocketbooks.

As Gwinnett grows, new homeowners come looking for affordable housing, usually

thinking they are buying their "starter" home. Hopefully they plan to buy bigger and better homes. But sometimes the homeowner stays or sells this home to someone else who has great plans. Then the years have passed and 20

years doesn't seem like such a long time. Then the big rain comes; the drainpipes in your subdivision collapse and water is going in your home and your neighbor's home. The pipes have rusted or for whatever the reason, water

*continued on back*



*Corrugated steel pipe pictured here has a life span of 20-40 years versus concrete with a life span of 100 years.*

is damaging your property. By this time the original developer has moved on to develop other subdivisions, so who is going to help get this mess fixed? It is the county and that means each and every one of us who pay taxes are going to have to help get this problem fixed. Most storm drain replacements affect private property in some manner. If the cross drain is connected to a publicly maintained system and replacement is necessary, entire lawns can be damaged or destroyed. Shrubbery, trees, bushes and flowers often have to be replaced because someone installed a flexible storm drain. Sometimes there are detours around the replacement construction and that usually causes frustration for motorists. Emergency services can be impacted during detours since they are usually much longer. A five-minute fire call response time can easily be doubled. If a road is closed or a neighborhood is upended because of a stormwater system failure, the real repair cost is much more than just the time and materials involved. Needless to say, it disrupts people's lives.

Reinforced concrete pipe has proven itself time and again. We know it will last more than 100 years and does not begin deteriorating the minute it is delivered to the job site. It is also the product most recommended for stormwater projects by professional engineers and Gwinnett County has been using reinforced concrete pipe almost exclusively for the past several years on in-house drainage projects.

Once again you are probably saying "So?" The "so" is what can be done. We can encourage our public officials to adopt amendments to development regulations. Already the cities of Duluth, Lilburn, and Lawrenceville have adopted ordinances requiring that any pipe or culvert within the street right of way be reinforced concrete pipe.

There is also a storm water utility fee that could be adopted to offset the costs of infrastructure improvements. Most charges for a homeowner would be nominal with commercial and industrial fees somewhat higher depending on the amount of pavement from which water will drain. But this is a tough sell to homeowners. But just think about what has happened to other counties. In the November, 2001 edition of a local newspaper, it was reported that a "DeKalb county-commissioned study found a backlog of more than 2,000 repair orders." The study showed photos of corroded 20 to 30-year-old pipes and catch basins covered in trash. Additionally, county officials said they were being called about once a week to repair sinkholes. (County officials warned that failure to upgrade the storm water system could result in roads caving in or driveways and sidewalks collapsing.)

Paul O'Shield, a former Gwinnett County Supervisor in charge of replacing corroded pipe and now a spokesman for the concrete pipe industry, travels around Georgia. He speaks from experience and knowledge about the expense and problems of replacing and repairing steel, aluminum, and plastic pipes. O'Shield said, "They say these flexible pipes will last 50 years, but it's only been around for major Gwinnett county development for 20, so who knows? There were about 365,000 feet of flexible pipe installed by the development community last year. The problems and costs will escalate." He has talked with many people and has helped other cities in Georgia decide to revamp their development regulations. He said, "Why not leave the citizens and our children in Gwinnett a legacy of which we can be proud."

We are talking about money and mud. Ugh! True, it's not exciting, but it could be if the problems are yours.

*Jeri Tyler is a free-lance writer and community columnist for The Gwinnett Citizen. Through her involvement in her husband's building contractor firm she became familiar with different types of drainage products and the benefits of precast concrete pipe. The expansion of a local roadway and replacement of recently installed flexible pipe prompted her article. Reprinted with permission from The Gwinnett Citizen, published by The Snellville Citizen, Inc. © Copyright The Gwinnett Citizen, 2002.*