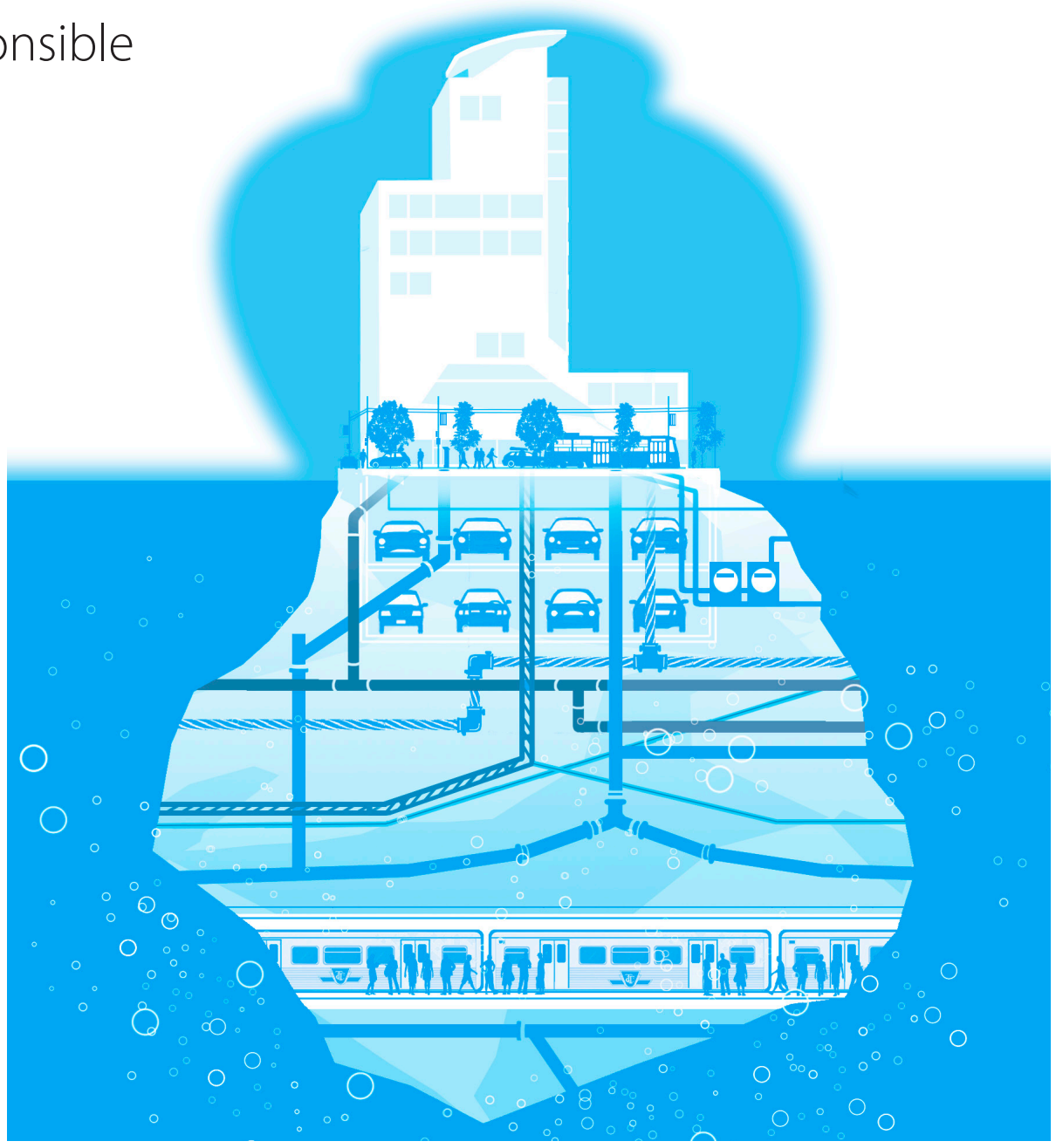
Shift happens

From the ground down

Why GTA home builders are responsible for getting to the core



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We're used to the sight of condominium towers all over downtown Toronto being built or already built. But more than likely, few of us are aware of the critical infrastructure and services, like sewer, water and transportation connections, which are prerequisites to the construction of each and every one of these buildings.

"When you do a development in the downtown core, you don't just dig a hole, put up a building, and that's it," says Steve Upton, incoming chairman of the Building Industry and Land Development (BILD) and vice president of development for real estate developer Tridel. "There are a lot of other things that a builder has to take into consideration to make sure the [structure] gets built and functions properly."

Upton, whose company is a leading builder of condominiums in the Toronto area, sheds light on the critical infrastructure underlying the construction of a downtown condo — how the project is planned and built, and who pays for the upgrade and expansion of vital services.

Tie in or upgrade

The most basic infrastructure needed for a condo building to function would be the systems for handling water, sewage and stormwater from rain or melting snow. But while these services are already in the ground at most sites in downtown Toronto, the developer must determine — through a feasibility study conducted prior to submitting a development application to city officials — if the existing systems' capacity is sufficient to service a new project. If they're inadequate, the developer has to upgrade the services.

"Sometimes the most important part of your home is the part you don't see: the systems that ensure health and safety for those living in that new home and community," Upton explains.

Other infrastructure required for condo buildings would be the gas lines, hydro service and fibre optic lines for telephone and Internet services. The developer also must assess the impact that the new building would have on local roads, traffic, transit, parking and pedestrians. For example, would roads or sidewalks need to be widened? What streetscaping fits the neighbourhood — for instance, planting trees or adding lighting? A developer would also be responsible for infrastructure requirements such as parking garages.

Start from scratch

Things are different, however, when building a community from scratch, such as those in the Kleinburg-Nashville area in the City of Vaughan. This part of the growing city was in need of infrastructure investment and it took the form of not just sewer and water systems but also some major transportation improvements.

The city planned for more than 8,000 people and jobs to come to this new community and worked with the development community to get the services in place in time for the new residents and businesses. The majority of the growth-related infrastructure, which cost about $37 million, was designed, constructed and funded by the developers of the new communities.

David Stewart of Vaughan-based TACC Developments says, "The process took about eight years to ensure that the 3,000 new homes of Nashville Heights, a community that will have schools, shops, parks, trails and a mix of housing, will also be served with the necessary water, sewer and transportation connections.

"To get the job done properly, our company recognizes that we have to work closely with municipal and regional partners, as well as residents' associations and conservation authorities because the requirements and benefits are across the board," says Stewart. "This project will generate over $200 million in development charges paid to the City of Vaughan, York Region and the school boards. These charges will help pay for new infrastructure, transit and other community improvements."

The cost of a new sanitary sewer was front-ended by the developers, and the municipality and the region applied development charge revenue to the related water system enhancements. Surrounding neighbourhoods also benefited from road improvements that came as a result of growth. For example, Hwy. 50 was widened, and Hwy. 27 and Major Mackenzie Dr. were improved.

Who pays?

When critical infrastructure needs to be expanded or upgraded to service a new condo development, the developer pays for it. "The city gives you a list of contractors, and you do it at your own cost," Upton says. "It can be expensive, but it's necessary in order to service your property."

As well, downtown developers are often required by the city to bury hydro lines below ground, an added cost that is typically borne by the builder.

In some cases, for instance, when a community is going to be built from scratch, the developer will front-end the cost of the incoming infrastructure. That means that the developer shares the cost and the risk with the municipality.

Builders also pay development charges, which are levies imposed by the city to fund growth-related capital costs across the municipality — childcare, parks and libraries; police, fire and emergency medical services; roads, transit, sewers and water and stormwater management.

Best laid plans…

If the developer can tie into existing services and infrastructure, building a condo downtown can entail a less costly and less arduous process. However, building downtown might also come with surprises that a developer with a new subdivision on a vacant field will not encounter.

"Sometimes you get in the ground and you don't know what you're going to find," Upton says. "The city's drawings and the things they've done engineering-wise over the years aren't always up to snuff. And when you get surprises, that's when the extra costs come in.

"When you're excavating to put in a stormwater pipe, for example, you don't want to go down and hit a gas main that you didn't know was there, [and] all of a sudden, you have to replace a whole gas-main piping system!"

In an area where new infrastructure has to be built to support future homeowners, there can be surprises too. Wildlife habitat, natural heritage and archeological areas have to be identified through development studies and planned for accordingly.

As the GTA continues to grow, improving and installing infrastructure becomes critical to residents' health, safety and quality of life.

This is the sixth in an eight-part series sponsored by BILD. Look for the next one on Sat., Dec. 8

Growing pains in York Region

Infrastructure critical to support upcoming population surge needs smoother assessment process, says BILD president

In anticipation of significant population growth, York Region is expanding its York Durham Sewage System (YDSS), which will serve both York and Durham regions. Currently under construction is the Southeast Collector (SEC) Trunk Sewer Project, a $570-million initiative involving twinning the existing sewage line through delivery of a new 15-kilometre tunnelled pipe extending from Markham to Pickering.

The region's Capital Construction Program also includes rehabilitating the existing 40-year-old sewage line and $900 million in upgrades to the Duffin Creek Water Pollution Control Plant.

The Southeast Collector endeavour is the first trunk sewer project in Ontario to undergo an individual environmental assessment — a rigorous process normally reserved for large-scale, non-routine infrastructure projects that have the potential, according to the Ministry of the Environment, for "significant environmental effects and major public interest."

Expansion of the York Durham Sewage System is critical to accommodate approximately 400,000 new York Region residents — or 150,000 housing units — expected by 2031 in the area serviced by the system.

"When the Southeast Collector Trunk Sewer Project was originally contemplated more than 10 years ago, the estimated cost was around $175 million; now it's over half a billion dollars," says BILD president and CEO Bryan Tuckey, who is a former Commissioner of Planning and Development Services with York Region. He also points out that the Region must "collect development charges to pay for that" — charges that will ultimately result in higher home prices. Project cost increases have occurred partly as a result of the Region's decision to use advanced tunnel-boring machines and treatment technologies to meet stringent regulatory requirements.

Southeast Collector project costs also include more than $15 million in enhancements planned for Markham and Pickering. Improvements already underway include Bob Hunter Memorial Park, Rouge Park, trails and wetlands, tree planting and planned scholarships.

If the province wants to encourage intensification as part of its Places to Grow policy, Tuckey says it needs to look at streamlining its environmental assessment and approvals process to help municipalities more efficiently and cost-effectively expand their infrastructure to accommodate future approved growth. Routine infrastructure projects such as wastewater trunk sewers and treatment plants could follow a more streamlined environmental assessment process similar to what the province has approved for rapid-transit projects.

Says Tuckey, "I think we have an environmental assessment process that could be better structured to assist municipalities completing critical infrastructure projects to service provincially mandated growth."