

Homes in London, Ontario see the full mix of weather. A warm spell in January dumps rain on a frozen yard, then a cold snap locks everything back up. Spring arrives with saturated clay, summer storms hit hard and fast, and fall brings leaf-clogged gutters just when the soil is already holding a season's worth of moisture. If your downspouts discharge next to the foundation, all of that water has a way of finding your basement. A well designed French drain solves a narrow but critical problem here, moving roof runoff away from the house through a buried, gravel wrapped pipe that can work year round.

I have walked muddy yards on Adelaide North where the grass squished with every step, and I have seen neat little trenches perform like hidden creeks under a lawn during a thunderstorm. When a French drain is built to match local soil, freeze depth, and grading constraints, it is one of those low profile fixes that quietly prevents thousands of dollars in future headaches.

## **What a French drain actually does**

At its core, a French drain is a perforated pipe set in free draining stone and wrapped in a filter fabric. The assembly is buried at a shallow depth on a consistent slope. Water from your downspout enters either directly into the pipe or into the surrounding stone, then flows away from the house to daylight, a rain garden, a dry well, or a municipal storm connection where permitted. Think of it as a horizontal, gravel lined gutter under the lawn.

That simplicity hides a few design decisions that separate a drain that works for a season from one that works for 20 years. The pipe must be sized for the peak flow from your roof area. The trench must be sloped enough to move water without scouring fines into the system. The fabric must keep clay particles out while still allowing flow. And the outlet must sit low enough to drain by gravity in all seasons.

In London's heavy clay, the surrounding ground absorbs water slowly. A French drain here is more of a conveyance than a soakaway. It shines when paired with sound downspout management, proper lot grading, and a legal, well placed outlet.

## **Why London's soils and climate change the playbook**

Most of the city, especially north and east of the Thames, sits on clay or clay till. These soils are tight. While a sandy loam might swallow an inch of rainfall over a few hours, local clays can seal over after a storm and shed water like a parking lot. During freeze season, the top 20 to 40 centimetres can harden to the consistency of asphalt. That is why pooling shows up in January rains and early March melt.

Some practical implications for french drains in London, Ontario:

- Expect slow infiltration. Design the drain to carry water to an outlet, not rely on soaking it away within a metre of the trench.
- Keep the system shallow when possible. A shallow drain rides above frost more often and is easier to keep on grade. Deep systems invite frost heave in backfilled trenches unless compacted carefully.
- Plan for debris. Leaves and shingle grit accumulate quickly in fall. Cleanouts and baskets at the downspout help.
- Respect the lot grading plan. Many newer subdivisions have a Lot Grading Certificate with swales and rear yard catch basins. Cutting across those with an outlet can cause neighbour issues and city callbacks.

I have dug test holes in Old South that stayed wet for two days after rain, only 30 centimetres down. In that yard, a French drain tied to a shallow daylight outlet on the side lane worked. A dry well in the middle of the lawn

would have turned into a permanent bog.

## French drain or weeping tile, and how they relate

People in the trade hear “weeping tile” used for any drainage. Strictly speaking, weeping tiles in London, Ontario refers to the perforated footing drains that run around a house foundation, usually at the base of the footing, tied to a sump pit or storm service. They are meant to intercept groundwater at footing level and relieve hydrostatic pressure.

A French drain for downspout management is a separate, higher elevation system intended to carry roof runoff away before it even reaches the foundation. Tying a downspout into the weeping tiles sounds convenient, but it can overwhelm a sump pump during storms and push debris into the footing drains. Many basement moisture calls I have visited traced back to roof water connected to weeping tiles through an improvised Y fitting. The sump cycled non stop, and fine clay fouled the tiles. If you hear the pump run for long stretches after rain, take a careful look at where your downspouts go.

## Rules, permissions, and utilities to check

Before digging any trench, call Ontario One Call for locates. Gas, hydro, telecom, and municipal locates are free and typically flagged within five business days. You are not allowed to dig until you have them and have respected the clearance zones.

City rules change, and they vary by subdivision and whether you are on a storm sewer. London has encouraged downspout disconnection from sanitary and certain storm connections in older neighborhoods to reduce sewer surcharging during storms. Some areas require downspouts to daylight onto the surface or discharge to a dedicated storm system. Discharging onto a sidewalk or neighbour’s property is not allowed, and directing water to the boulevard can get you a notice. When in doubt, ask the city’s stormwater department or consult reputable drainage contractors in London, Ontario who deal with inspectors weekly.

## Sizing the system to your roof and storm reality

The right size starts with the roof area feeding a downspout. A typical two storey home with 180 square metres of roof can send 45 to 90 litres per minute to a single downspout during a summer cloudburst. That range is based on 50 to 100 mm per hour short duration intensities, which are common in southwestern Ontario storms. A 4 inch (100 mm) perforated pipe can move that volume on a 1 percent slope if it is flowing half to full, but the stone envelope around the pipe also stores and meters flow.

The practical recipe that consistently works in London clay:

- Pipe: 100 mm perforated PVC or HDPE corrugated with a smooth interior. In tight backyards, PVC holds grade better. Corrugated is faster to install but kinks if you force bends.
- Stone: 19 mm (3/4 inch) clear crushed stone, not pea gravel. Clear stone carries water and resists clogging. Fill at least 150 mm under and 150 mm over the pipe.
- Fabric: non woven geotextile in the 4 to 8 oz range. Too tight, and it blinds off in clay. Too loose, and fines migrate.
- Slope: 1 to 2 percent from the downspout to the outlet. That is 10 to 20 mm of drop for every metre. Over short runs you can push to 0.5 percent if the outlet is well lower, but you are cutting into your safety margin.

- Depth: pipe crown 150 to 200 mm below finished grade, deep enough to protect from mowers and shallow enough to avoid frost pockets along the trench.

Those numbers are not pulled from a brochure. They are the ones that have survived freeze cycles and leaf loads without turning into a linear puddle.

## Where to send the water

The outlet is the make or break. A lovely trench without a good endpoint becomes a cold, wet disappointment.

In many London lots, the best endpoint is daylight at a lower side yard or the front ditch. That requires the outlet to sit lower than the inlet and the lawn to slope in your favour. End with a rodent screen, a short splash pad of river rock, and a turf guard to prevent mower damage.

Where daylight is impossible, consider a properly sized dry well, but use caution. In London clay, a dry well must be large enough to buffer a whole downspout event. A 1 cubic metre stone pit holds roughly 0.4 cubic metres of water once you account for the stone's void ratio. That is 400 litres, or six to nine minutes of a heavy burst. If the soil barely takes water, the pit just delays the inevitable. A small rain garden can be a better option. Even in clay, a shallow basin with deep rooted natives drinks and transpires water faster than bare ground. Place it away from the foundation, and give it an overflow to a safe point.

Do not connect a French drain to the sanitary sewer. Do not route it where it will cross a neighbour's yard without an easement. Do not end it in a swale that carries your neighbour's surface drainage during a storm.

## Step by step, the build that holds up

If you have the patience to set lasers, haul stone, and stay tidy, you can build a French drain over a weekend. Here is a condensed sequence that respects local conditions.

- Call Ontario One Call for utility locates and confirm municipal rules for outlets. Sketch your trench path, slope targets, and outlet point.
- Set string lines or a laser level to establish a consistent fall from the downspout to the outlet, aiming for 1 to 2 percent. Pull sod carefully so it can go back cleanly.
- Excavate a trench roughly 300 mm wide. Scrape to subgrade, removing soft spots. Tamp the bottom, then place 100 to 150 mm of 3/4 inch clear stone as a bedding course.
- Lay non woven fabric across the trench and up both sides with enough width to wrap the top later. Bed the pipe on the stone, perforations down for PVC, and check slope every 1.5 to 2 metres. Add a cleanout near the downspout.
- Cover the pipe with stone to at least 150 mm above crown, wrap the fabric snugly over the top, backfill with screened soil, and reset the sod. Protect the outlet with a screen and stone splash pad.

Expect to use 1 to 1.5 tonnes of clear stone for a 10 metre run. On clay, that weight matters. Keep wheelbarrow travel off the trench edges to avoid sloughing.

## How French drains blend with broader backyard drainage

A French drain is one tool in the box. Good backyard drainage in London, Ontario starts with grading, not gadgets. You want a gentle surface fall, roughly 2 to 5 percent away from the house for the first two metres. If

fence lines trap water, create shallow swales that guide it to front or rear catch points. If a neighbour's lot sits higher, a low berm along the property line may be needed to prevent cross flow.

In some cases you pair a French drain under a swale. The swale carries everyday water after light rains, and during big events, the subsurface pipe helps move flow before the swale spills into a catch basin. In rear yard catch basin subdivisions, keep your trench parallel to the designed surface path so you do not rob the basin's ability to collect sheet flow.

## Winter, freeze, and the January rain test

The toughest day for a drainage system in London is a mid winter warm rain on snow. Snowmelt plus rainfall dumps water into the gutters, but the ground is frozen near the surface. A French drain that relies on infiltration stops working. One that relies on gravity to move water to daylight still works if the stone envelope and pipe are not frozen solid.

Three tactics help:

- Keep the drain shallow and free draining so it sheds cold air sinks in shoulder seasons.
- Use a daylight outlet with a short, open stone apron so the last half metre is easy to thaw with the first sun.
- Maintain your gutters and leaf guards so you enter the winter with clean downspouts. Ice builds on debris.

I have chipped open more than one outlet in February with a mattock. A clear, short run to daylight thaws with a kettle of hot water and a few minutes of sun. An over deep outlet packed in wet soil stays locked for days.

## Maintenance that homeowners actually do

If a system needs monthly tinkering, it will not get it. Design simple, then set two calendar habits.

Flush the cleanout in spring and late fall. A 10 minute garden hose flush moves shingle grit and seeds along to the outlet. If the flow backs up, you will know before the next thunderstorm.



Walk the outlet after every big rain. Clear the rodent screen and make sure the apron is intact. A plugged outlet turns the trench into a bathtub. On one job near Commissioners and Highbury, the only failure in five years came from a child's tennis ball jammed into the screen. The fix took 30 seconds.

Replace gutter screens or baskets when they sag. They are cheap and save you from sending seeds and twigs into the pipe.

## Costs, timelines, and realistic expectations

For a typical single downspout run of 10 to 20 metres in an open side yard, DIY material costs usually land between CAD 450 and 900. That covers 100 mm pipe, fittings, one or two cleanouts, 1 to 3 tonnes of 3/4 inch clear stone, fabric, and a rodent screened outlet. Renting a compact plate tamper and a laser level adds another CAD 80 to 150 for a day.

Hiring drainage contractors in London, Ontario for that same run commonly prices in the CAD 1,200 to 3,000 range, depending on access, sod restoration, and whether an engineered outlet is needed. Tight backyards, tree root work, or hand dig only sites sit at the higher end.

Time on site for a straightforward job is one day with a two person [Extra resources](#) crew and a mini skid steer for stone. DIY often stretches to a weekend, mostly due to careful grade setting and cleanup.

A well built French drain should run quietly in the background for a decade or more. In London clay, plan on refresh work at year 10 to 15 if tree roots or fines start to slow things. You will know from slower outlet trickles after storms.

## Mistakes that burn money

I see the same errors repeatedly in our area.

Putting landscape fabric at the very bottom of the trench under the bedding stone. That creates a bathtub liner and invites standing water. The fabric belongs around the stone envelope, not below it.

Using pea gravel. It compacts into a smooth, low void matrix and slows flow. Clear crushed stone interlocks and holds voids.

Setting too flat a grade. Builders sometimes try to hug the lawn to keep sod disruption minimal. A 0.25 percent fall over 15 metres in clay is begging for backups. Stretch the slope or shorten the run to a closer outlet.

Connecting to the weeping tile. It is tempting when the sump is right there, but footing drains are not a trash chute for roof debris. Keep systems separate unless a qualified designer and the city approve a storm tie in.

Ending the outlet in a fence line depression that freezes. The right outlet saves the whole job. Walk the property with a hose and watch water move before you dig.

## Where french drains make the biggest difference

Not every downspout needs a French drain. If your yard falls cleanly away 2 to 3 percent from the house and you can set a splash block and 2.4 metre extension, keep it simple. But in four common London cases, a French drain pays back its cost.

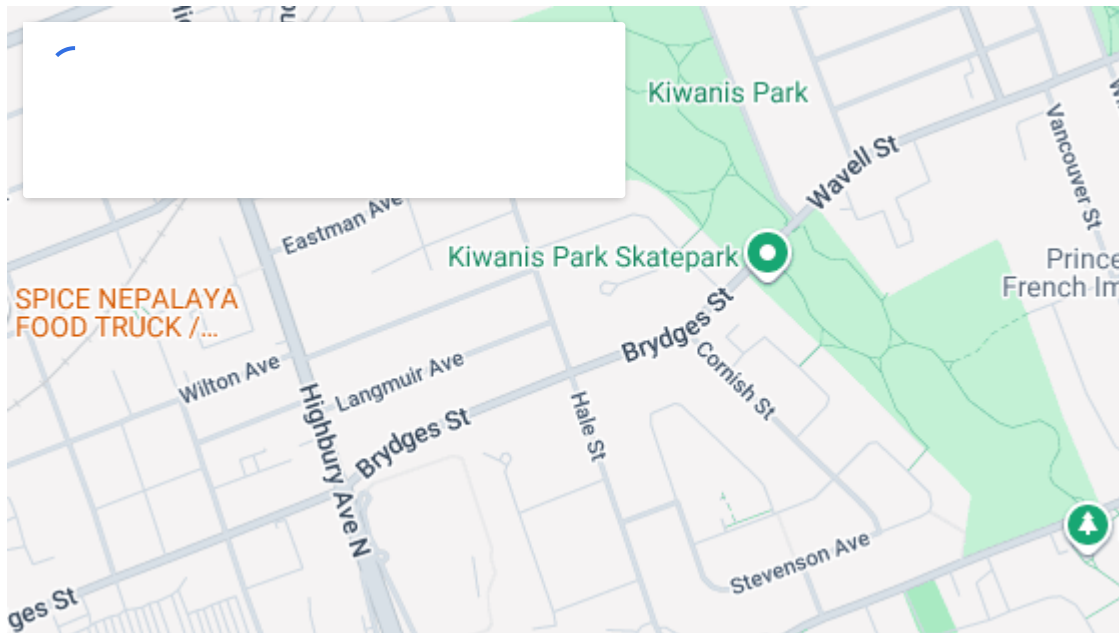
Tight side yards between houses built after 2000, where surface extensions stick into walkways and snow blowers keep taking them out. A buried line keeps the path clear.

Old neighbourhoods with settled walks that tilt toward the foundation. Moving the downspout discharge past the walk protects the joint from seepage.

Lots with shallow topsoil over clay where surface water lingers for days. The pipe adds conveyance so the lawn is usable after a storm.

Homes where the rear yard rises toward the house. In those, a French drain can run laterally along the wall, picking up downspouts and carrying water to the lower front.

When homeowners search for french drains London Ontario or backyard drainage London Ontario, they usually land in one of these situations.



## Integrating with other systems

If you already have a sump discharge on the side yard, consider coordinating outlets so they do not fight each other. A sump line that dumps right where a French drain tries to carry flow is a recipe for soggy turf. Stagger outlets or raise one apron slightly so they do not cross feed. If your property includes a rear yard catch basin owned by the city, do not tie into it without permission. You can, however, shape your surface swale to feed it and set your French drain parallel to support the surface grade.

Homes with rain barrels should include an overflow. Barrels fill in 10 to 20 minutes during a summer storm. The overflow should enter the French drain through a screened wye or splash into the stone at a shallow inlet box. Without that, the barrel becomes a fountain at the foundation.

## A brief word on materials and small choices

Small choices add up to long term performance. For pipe, I favour PVC SDR 35 or sewer and drain pipe where budgets allow. It holds slope and resists root intrusion at joints when glued properly. If you use corrugated HDPE, select the variant with a smooth inner wall and use full depth couplers, not the light duty snap rings. For fabric, non woven felt like material works better in clay than the woven, plastic like landscaping fabric you see under mulch. It is more forgiving, and it keeps fines out without sealing.

Use solid pipe for the first metre from the downspout to minimize infiltration of surface fines. Then transition to perforated. Set a vertical cleanout with a screw cap near the transition. Keep your trench at least a metre from the foundation when possible. That stand off reduces the chance of creating a preferential water path along the wall.

If tree roots are nearby, choose glued PVC and avoid cutting large roots. In older parts of Byron and Wortley, silver maple roots love corrugated joints. When you must cross a root path, sleeve the perforated section in solid pipe for a short distance to discourage intrusion.

## When to bring in a pro

Most homeowners can handle a simple run to daylight. Bring in a contractor when the yard is flat for long distances, when utilities crowd your best path, when your only outlet appears to be a municipal storm structure, or when you want to combine the work with regrading or patio rebuilds. Reputable drainage contractors in London, Ontario will know the local inspectors, the quirks of neighbourhood soils, and the right call when your trench meets a surprise. Ask for references from the last year, not just glossy before and after photos from a sunny day.

If you suspect your basement moisture is more than downspout splashback, consider a broader assessment. Sometimes the conversation should shift from French drains to repairing or replacing weeping tiles in London, Ontario, especially if the home predates modern footing drains. A French drain solves roof water at the surface. It will not fix rising groundwater or a failed sump.

## Closing thought from the muddy side of the shovel

The best French drains I have built in London are the ones I never hear about again. They sit quietly under a green strip of lawn, moving storm water past the foundation and out to a harmless spot. The recipe is consistent, but the details on site vary a lot. Walk the yard with a level, pay attention to slope, do not skimp on stone, and pick an outlet that stays clear in February. Done right, your downspouts disappear from your worry list, and your basement stays a place for kids, hobbies, and quiet winter evenings, not towels and box fans.

## Ashworth Drainage — Business Info (NAP)

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### Hours:

Monday: 9:00 AM – 5:00 PM

Tuesday: 9:00 AM – 5:00 PM

Wednesday: 9:00 AM – 5:00 PM

Thursday: 9:00 AM – 5:00 PM

Friday: 9:00 AM – 5:00 PM

Saturday: Closed

Sunday: Closed

**Open-location code (Plus Code):** XRR3+HV London, Ontario

**Map/listing URL:** <https://maps.app.goo.gl/9kaoXAxRtJRP1ThS9>

**Embed iframe:**

**Socials (canonical https URLs):**

Facebook: <https://www.facebook.com/ashworthdrainage/>

X: <https://twitter.com/ashworthrules>

Instagram: <https://www.instagram.com/ashworthdrainage/>

<https://www.ashworthdrainage.ca/>

Ashworth Drainage provides basement waterproofing and foundation repair services in London, Ontario and surrounding areas in Southwestern Ontario.

The company helps homeowners address wet basements, water intrusion, and drainage issues with solutions that fit the property's conditions.

Service requests can include foundation repair, waterproofing options, sump pump and drainage-related work, and related assessments.

Ashworth Drainage is based at 514 Hale St, London, ON N5W 1G8.

To reach the team, call (519) 660-9375 or email [info@ashworthdrainage.ca](mailto:info@ashworthdrainage.ca).

Business hours are Monday to Friday 9:00 AM–5:00 PM, with the office closed Saturday and Sunday.

For directions and listing details, use the map listing: <https://maps.app.goo.gl/9kaoXAxRtJRP1ThS9>.

## **Popular Questions About Ashworth Drainage**

### **What does basement waterproofing help prevent?**

Basement waterproofing is intended to reduce water intrusion and moisture problems that can lead to dampness, leaks, odors, and damage over time.

### **How do I know if I may need foundation repair?**

Common signs can include visible cracks, water seepage, shifting or uneven areas, or recurring moisture problems; an on-site assessment is usually the best way to confirm causes and options.

### **What areas does Ashworth Drainage serve?**

Ashworth Drainage serves London, Ontario and surrounding areas in Southwestern Ontario.

### **What are Ashworth Drainage's hours?**

Monday–Friday 9:00 AM–5:00 PM; Saturday closed; Sunday closed.

### **How can I contact Ashworth Drainage?**

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## **Landmarks Near London, ON**

- 1) [Kiwanis Park](#)
- 2) [Western Fair District](#)
- 3) [Covent Garden Market](#)
- 4) [Victoria Park](#)
- 5) [Budweiser Gardens](#)
- 6) [Museum London](#)
- 7) [Fanshawe Conservation Area](#)