



OUTRIGGER BACK OFFICE • FREE GUIDE

Civil Site Work, the Down and Dirty Guide

For the spouse, partner or office manager behind a site contractor. What it means when you hear "we're mobbing out to grade the pad and set storm." The lingo, the steps of a job, and the paperwork that keeps the money coming in.

- What civil site work is
- A job from bid to closeout
- The lingo, A to Z
- The equipment in the yard
- Dirt math and units
- The paperwork and the money
- Good questions to ask
- Where the money leaks

START HERE

What is civil site work?

The short version, so the rest of this guide makes sense.

Before a building, a road or a neighborhood can go up, somebody has to get the land ready. That's civil site work (also called **sitework** or **dirt work**). It covers everything outside the building and under the ground: clearing the land, moving dirt to the right heights, running the pipes, and building the base for the parking lot and roads.

A site contractor is usually a **subcontractor** working for a **general contractor (GC)**, or sometimes hired directly by the **owner** or **developer**. Public jobs (for a city, county or the state DOT) come with more paperwork and stricter rules than private jobs.

The main kinds of work

Work	What it means in plain English
Clearing and grubbing	Cutting down trees and digging out stumps and roots.
Erosion control	Silt fence, inlet protection and other things that keep mud from washing off the site when it rains. Inspected often.
Earthwork / grading	Moving dirt from high spots (cut) to low spots (fill) until the ground is at the right height and slope.
Underground utilities	Storm pipe (rain water), sanitary sewer (toilets and sinks), and water lines. Dug in, laid, and backfilled.
Fine grading	The final, careful shaping of the ground, to within an inch or so, right before stone or paving.
Base and paving	Stone base (GAB, crusher run) then asphalt or concrete for parking lots and roads. Curb and gutter often go in first.
Final stabilization	Grass, seed, straw or sod so the bare dirt stops washing away. Needed before the job can close out.

Why it matters to the office: site work is done in phases, often by the unit (cubic yards of dirt, feet of pipe, tons of stone). That's why billing, change orders and daily reports matter so much in this trade. If it isn't written down, it's hard to get paid for.

HOW A JOB GOES

A job from start to finish

Most site jobs follow these steps. Knowing where a job is tells you what paperwork is due.

- 1 Bid.** The contractor looks at the plans, figures how much dirt, pipe and stone, and sends a price (a bid or proposal) by the bid date. Many bids, few wins: that's normal.
 - 2 Award and contract.** The job is won. The GC or owner sends a contract or subcontract. Read the payment terms, retainage and insurance requirements before anyone signs.
 - 3 Paperwork before work starts.** Certificate of insurance (COI), W-9, sometimes a bond, a schedule of values, and submittals (product info for pipe, stone and structures, for the engineer to approve).
 - 4 Preconstruction meeting.** Everyone meets to go over the schedule, rules, contacts and how billing works. Great time to get the name and email of whoever pays the bills.
 - 5 Mobilization ("mob").** Moving equipment, trailers and crew to the site. Often billed as its own line item.
 - 6 Erosion control and clearing.** Silt fence and construction entrance go in first, then clearing and grubbing.
 - 7 Mass grading.** The big dirt moving: cut and fill until the site is close to the right heights. Compaction tests check the fill is packed tight enough.
 - 8 Underground utilities.** Storm, sewer and water lines go in. Then inspections and tests (pressure tests, camera inspections of pipe).
 - 9 Building pad.** The pad where the building will sit is brought to exact height and compacted, then handed over to the building crews.
 - 10 Curb, stone and paving.** Fine grading, curb and gutter, stone base, then asphalt or concrete. Often done near the end of the whole project.
 - 11 Punch list and stabilization.** A list of small fixes. Grass and seed go down. Erosion control comes out once the site is stable.
 - 12 Closeout.** As-built drawings, warranty letters, final lien waivers, and the final pay app to collect the **retainage** (money held back all job). Chase this: retainage is often the profit on the job.
-

THE LINGO

Site work lingo, A to Z

The words you'll hear on the phone and see on paperwork.

As-builts: Drawings showing where things were actually built, which can differ from the plans. Often due at closeout.

Backfill: Putting dirt back in a trench or hole after the pipe is in.

Bank yards: Dirt measured in the ground, before it's dug. It gets bigger (swells) once dug.

Benchmark: A known height point surveyors use to set every other height on the job.

Bid bond / performance bond: Insurance-like guarantees, usually on public jobs, that the contractor will sign the contract and finish the work.

Borrow: Dirt brought in from somewhere else because the site doesn't have enough.

Catch basin / inlet: The box with a grate in a parking lot or curb where rain water goes in.

Change order (CO): Extra work, or less work, added to the contract with a price. Get it approved in writing before the work.

Compaction: Packing dirt or stone tight so it won't settle. Tested by a testing company (density tests).

Cut and fill: Digging down high ground (cut) and building up low ground (fill).

Daily report: The foreman's record of the day: crew, equipment, weather, work done, problems. Backs up change orders and delays.

Detention / retention pond: A pond that holds rain water and lets it out slowly (detention) or keeps it (retention).

Elevation: Height. "The pad is 2 feet low" means 2 feet below where it should be.

Erosion control / BMPs: Silt fence, inlet protection, rock entrances: the things that keep mud on site. BMP = best management practice.

Exclusions: What the bid does NOT include, like rock removal or permits. Protects the contractor from doing it for free.

Export / import: Hauling extra dirt off the site / bringing dirt in.

Fine grade: Final careful shaping, right before stone or paving.

Footprint / pad: The area where the building sits.

GAB / crusher run: Graded aggregate base: the gravel layer under asphalt. Names vary by state.

GC: General contractor: runs the whole project and usually pays the site sub.

Grade: The height and slope of the ground. "On grade" = right height.

GPS / machine control: GPS on the dozer or excavator that shows the operator exactly how much to cut or fill.

Invert: The inside bottom of a pipe. Pipe heights on plans are given as inverts.

Lien waiver: A paper giving up lien rights for an amount paid (or about to be paid). Usually swapped for each payment.

LF: Linear feet: how pipe and curb are measured and priced.

Lump sum: One fixed price for the whole job.

Manhole (MH): The round concrete structure on a sewer or storm line, for access.

Mob / demob: Mobilization: moving equipment onto the site, and off again.

Muck / unsuitable: Wet, soft or bad dirt that can't be built on and has to be dug out and replaced. Often a change order.

NOI / NOT: Notice of Intent and Notice of Termination: state stormwater permit filings at the start and end of a job.

Pay app: Pay application: the monthly bill on bigger jobs, showing percent complete for each line.

Proof roll: Driving a loaded dump truck over the ground to find soft spots.

Punch list: The list of small fixes at the end of a job.

Retainage: Money held back from each payment (often 5 to 10%) until the job is finished.

RFI: Request for information: a written question to the engineer when the plans are unclear.

Rock: The word nobody wants to hear. Rock costs far more to dig. Should be a bid exclusion or a unit price.

Sanitary sewer: Pipes for toilet and sink waste. Separate from storm.

Schedule of values (SOV): The contract price broken into line items. Pay apps bill against it.

Silt fence: The black fabric fence that keeps mud from leaving the site.

Stakes / staking: Wooden stakes surveyors put in to mark locations and heights.

Storm: Pipes and structures for rain water.

Submittal: Product info sent to the engineer for approval before ordering.

Subgrade: The dirt layer right under the stone base.

Swell and shrink: Dirt gets bigger when dug (swell) and smaller when packed (shrink). Why dirt math is tricky.

SWPPP: Stormwater pollution prevention plan, said "swip." Comes with regular inspections and records.

T&M: Time and materials: billing by hours and materials used instead of a set price. Needs signed tickets.

Takeoff: Measuring quantities from the plans to build a bid.

Tap: Connecting a new water or sewer line into the city's main line. Usually has fees.

Trench box: A steel box that keeps trench walls from caving in on workers. A big safety item.

Unit price: A price per unit (per CY, LF, ton). The final bill depends on real quantities.

Undercut: Digging out bad dirt below grade and replacing it with good dirt or stone.

IN THE YARD

The equipment, and the dirt math

So "the 336 is down and we need a lowboy" makes sense.

Machine	What it does
Excavator ("trackhoe")	The big digger with an arm and bucket. Digs trenches, loads trucks, sets pipe. Size is often called by model number (like a "336").
Dozer	Pushes dirt with a big blade. Main tool for grading.
Skid steer / track loader ("Bobcat")	Small do-everything machine with a bucket or attachments.
Wheel loader	Big front bucket. Loads trucks and moves stone.
Motor grader ("blade")	Long machine with a blade underneath. Fine grading for roads and stone.
Roller / compactor	Packs dirt, stone or asphalt. "Sheepsfoot" rollers have bumps for dirt; smooth drums for stone and asphalt.
Off-road truck / articulated truck	Hauls dirt around inside the site.
Dump truck / tri-axle	Hauls dirt and stone on the road. Often hired from trucking companies by the hour or load.
Water truck	Sprays water to keep dust down and help compaction.
Lowboy	The trailer that hauls heavy equipment between jobs.

Dirt math and units

Unit	What it means
CY (cubic yard)	How dirt is measured. $1 \text{ CY} = 3 \text{ ft} \times 3 \text{ ft} \times 3 \text{ ft} = 27 \text{ cubic feet}$. A tri-axle carries roughly 14 to 18 CY.
SY (square yard)	How paving and stone areas are measured. $1 \text{ SY} = 9 \text{ square feet}$.
LF (linear foot)	How pipe, curb and silt fence are measured.
Ton	How stone and asphalt are bought. Stone is very roughly 1.4 to 1.5 tons per CY.
Swell	Dirt grows about 20 to 30% when dug, so 100 CY in the ground can be 125 CY in the trucks.
Shrink	Dirt packs down when compacted, so it takes more loose dirt to fill a hole than the hole's size.
EA (each)	Counted items: manholes, inlets, fire hydrants.

These are rough rules of thumb to help you follow the conversation. Real numbers depend on the soil and the material. The estimate and the supplier's ticket are what count.

THE OFFICE SIDE

The paperwork and the money

Where most site contractors lose money: not in the dirt, but in the paperwork.

How site jobs get billed

- **Lump sum:** one price. Billed in pieces as work gets done.
- **Unit price:** price per CY, LF or ton. The bill depends on real quantities, so tickets and daily reports matter.
- **Pay app:** on bigger jobs, a monthly bill showing percent complete for each line of the schedule of values. Usually due by a set day each month (often the 20th to 25th). Miss it, and the payment slips a whole month.
- **T&M:** hours and materials, with a ticket signed by the customer each day.
- **Retainage:** 5 to 10% held back on every payment. Track it per job and bill for it at the end.

Paperwork that follows every job

- ☐ Signed contract or subcontract
- ☐ Certificate of insurance (COI) sent to the GC
- ☐ W-9 sent to the GC
- ☐ Schedule of values (if pay apps)
- ☐ Submittals approved
- ☐ Daily reports, every day
- ☐ Trucking and material tickets
- ☐ Change orders, approved in writing
- ☐ Lien waivers, with each payment
- ☐ SWPPP inspection records
- ☐ Test reports (compaction, pipe tests)
- ☐ As-builts and final paperwork at closeout

Where the money leaks

- **Extra work with no change order.** "While you're here, can you..." Write it down that day and get it approved.
- **Rock and bad dirt.** If it wasn't in the bid, it should be a change order.
- **Late pay apps.** Miss the cutoff and wait another month.
- **Forgotten retainage.** Months after the job, nobody asks for it.
- **Lost tickets.** On unit-price jobs, no ticket means no proof.
- **Expired insurance certificates.** Some GCs hold payment until a current COI is on file.
- **Equipment down time** nobody tracked.

Good questions to ask at the end of the day

- "Which jobs are we billing this month, and when are the pay apps due?"
- "Did anything extra happen on site this week? Did anybody approve it in writing?"
- "Who do I call about payment on this job?"
- "How much retainage is being held on each job?"
- "Are any jobs near the end, so we can start the closeout paperwork?"

Please read. This guide is general education, not legal, tax or financial advice. Rules for liens, bonds, stormwater and payment differ by state and change. Check with your attorney, CPA and insurance agent before you rely on anything here.

WANT IT DONE FOR YOU?

Rather be in the field?

Outrigger Back Office does the office side of site work every day: pay apps, change orders, lien waivers, COIs and closeout paperwork.



You run the job. We run the office.

Outrigger Back Office handles invoices, change orders, past-due follow-up, sub paperwork, renewals, field forms, payroll hours and new-hire paperwork for small contractors, all from an email at your own business name.

Start with a free Office Checkup call. We'll look at where your paperwork stands and tell you what we'd fix first.

outriggerbackoffice.com · 770.790.7160 (call or text)

Copying: You may print and share this guide freely, as long as it stays whole and unchanged. © 2026 Outrigger Back Office. Version 1
· October 2026.