RP Constructors, LLC | Civil Engineers & Constructors, LLC
Vertically integrated EPC · engineering, professional services & construction under one holding company
Licensed PEs on staff · AWWA & WEF members · UEI: FYKYJKZBHSU4 · CAGE: 817X5

TECH-WATER DESIGN-BUILD

Liquid cooling for AI / HPC data centers — and the water-smart partner that proves to communities their source & supply will be OK

Two ways we help: we design and build the closed-loop, direct-to-chip "tech-water" systems that cool the highest-density AI and HPC racks — and, as licensed engineers and water / wastewater professionals, we help developers and the small and mid-size communities near these projects prove their water will hold up: protecting source, supply, and infrastructure before the load ever arrives.

85+	10	$100M+	AWWA
EMPLOYEES	STATES	SINGLE-PROJECT BONDING	& WEF MEMBERS

PILLAR 1 — TECH-WATER DESIGN-BUILD

ENGINEERING — licensed mechanical & process (CEC); civil, structural, environmental. We take projects from concept to complete, buildable designs — and can step in to make a partial or underdeveloped design constructible.

DESIGN-BUILD & SELF-PERFORM — one contract; we build what we design — no engineer-to-installer hand-off gap.

CLOSED-LOOP, DIRECT-TO-CHIP — closed-loop primary and technical cooling media meet at the cooling distribution units (CDUs) before distribution direct to the server racks; continuous media monitoring keeps fluid specs in check.

FABRICATION & INSTALL offsite prefabrication to cut onsite install time and control the environment for a clean install of tech-water systems.

CONTROLS & CHEMISTRY — delta based flow control, bypass logic, and integration to the building management system (BMS); instrumented closed-loop water treatment.

COMMISSIONING — load-bank thermal proving to confirm the system holds temperature before the servers are energized.



RP / CEC FIELD TEAM
on site, South Texas



COMMISSIONING THE COOLING LOOP
AI / HPC deployment, South Texas

PILLAR 2 — WATER-SMART PROFESSIONAL SERVICES

Proving to communities that source & supply will be OK

A large data center can land as a single, high-impact load on a small water system — and a town's first question is whether its **source and supply can take it**. We answer that with real numbers, and we help shrink the draw itself.

- **Water-demand & impact assessment** — we quantify exactly how a new load affects source supply, treatment, distribution, and resiliency, so a community sees the real picture — not a worst-case rumor.
- **We lower the demand at the source** — the closed-loop, direct-to-chip cooling we design-build rejects heat with a fraction of the water an evaporative system consumes, so far less leaves the local supply.
- **Water reuse & alternative supply** — reclaimed water, industrial reuse, and raw-water options keep the draw off drinking-water systems where feasible.
- **Cooling-strategy guidance** — evaporative vs. air-cooled vs. closed-loop / hybrid, and what each choice means for a community's water and energy footprint.
- **Energy–water nexus & resilience** — coordinate with power providers and local planners on siting, phasing, and peak-demand / resilience planning.
- **Community & utility partnership** — transparent cooling-design and water-performance reporting; we help small systems engage developers and meet emerging disclosure rules.
- **Licensed PEs & operations support** — licensed professional engineers on staff, with operations support both in-house and through partners (we are not licensed operators). Backed by deep small- and mid-community water / wastewater experience: NPDES systems, lift stations, lagoon upgrades, and full design-build.

SOURCE & SUPPLY, ASSURED

Because we design **closed-loop, direct-to-chip cooling** and build in **water reuse**, the facilities we touch draw a fraction of the water an evaporative-cooled design would — and we put it in writing with a community water assessment from our licensed PEs. Less demand on the source, more certainty for the town.

Ahead of the Curve: States such as New York, New Jersey, and Minnesota are beginning to require disclosure or regulation of data-center water use. We help developers and utilities plan for that scrutiny now — with credible numbers and a transparent water story.

PROVEN ON AI / HPC — SOUTH TEXAS

G.01 — DELIVERED: Built the closed-loop tech-water backbone for the campus's first major tenant — a Fortune 500 AI compute leader (under NDA) — at 25 MW, now in start-up (scope grew more than 6× from under $1M). // **G.02 — JULY 2026:** ~30 MW expansion, distributed CDU loops with buffer tanks sized for AI load swings. // **PIPELINE:** owner converting the full campus — every megawatt needs this system.

BUILD THE COOLING. PROTECT THE WATER. ONE ACCOUNTABLE PARTNER.

From the data-center floor to the water system it depends on - we help developers move fast and help nearby communities prove their source, supply, and infrastructure will be OK. Let's talk before the next load lands.

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Turning trustworthy designs into reliable results.