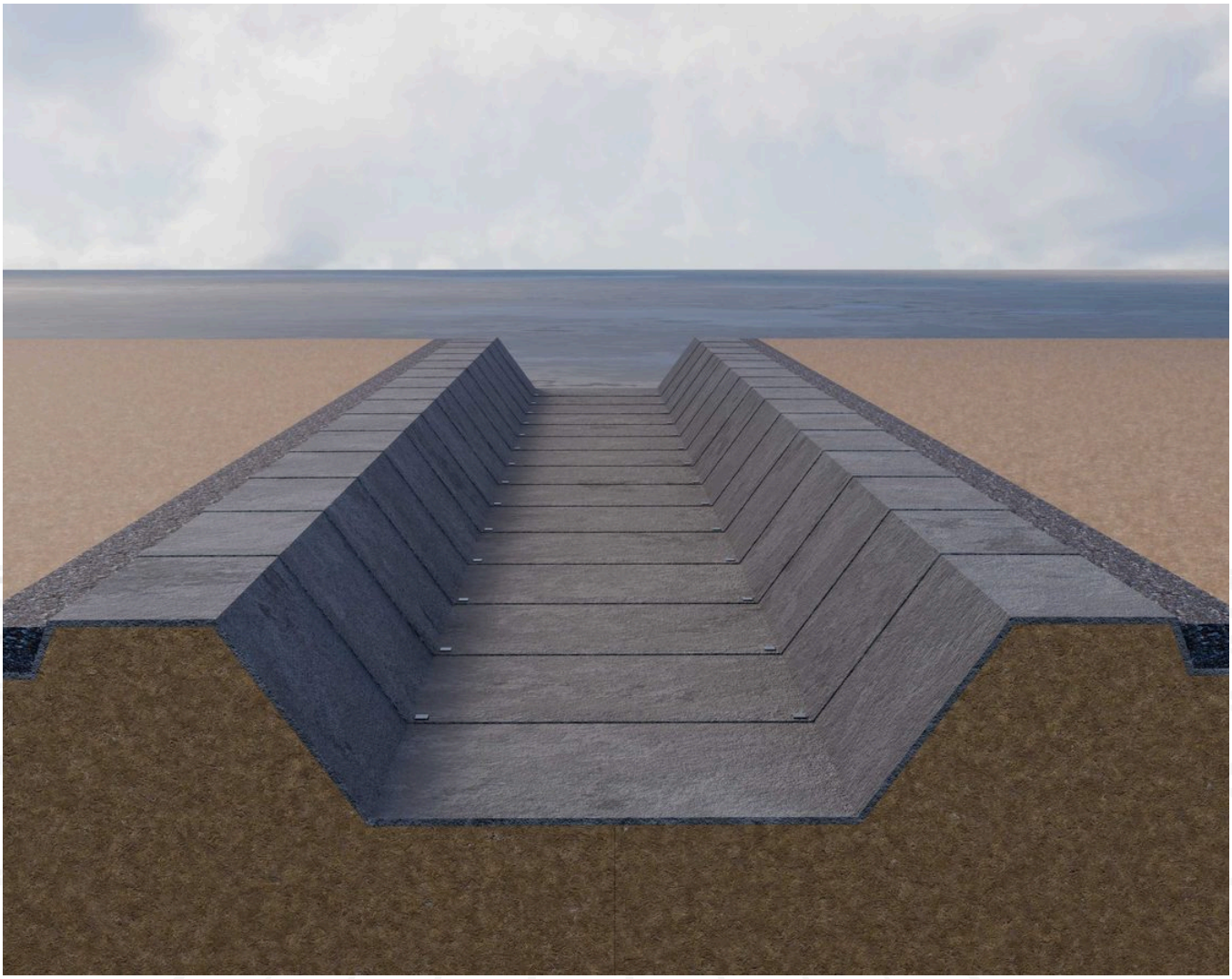
CONSTRUCK

SLOPE CEMWRAPDITCH

High-Performance GCCM Lining for Ditches and Surface-Water Drains



CST-CWD-BRO-00007
www.construck.me

CONSTRUCK SYSTEMS & TECHNOLOGY
Research and Development | Design | Manufacturing | Geotechnics

ConstruckSlope® CemWrap Ditch replaces bulky stone pitching with a roll-applied GCCM lining that hydrates in place to form a hardened protective surface. It follows the prepared ditch profile, protects exposed ground against runoff erosion and reduces the need to haul, distribute and individually place graded rock.



From roadside drainage to perimeter ditches, **CemWrap® Ditch** provides a tough GCCM lining that protects banks and inverts against runoff erosion. Its **compact profile and roll-based installation** offer a practical alternative to bulky riprap, reducing individual stone handling and creating a defined surface for inspection and cleaning. Supplied as a **coordinated SPaaP® kit**, it brings the lining, fixings and connection details together for efficient installation.

What makes CemWrap® Ditch different?

- **Protection with a thinner profile** — protects the banks and invert without the depth of a conventional riprap layer.
- **Roll-based construction** — replaces individual stone placement with a lining installed along the prepared ditch.
- **A defined flow surface** — follows the formed geometry and provides a more regular surface than exposed rock.
- **Accessible inspection and cleaning** — makes the lining, joints and accumulated sediment visible.
- **Coordinated installation details** — brings the GCCM lining together with specified fixings, joints and edge restraints.

Where it is used

- **Roadside ditches** — protect drainage routes alongside roads.
- **Highway drainage ditches** — convey runoff along verges and embankment toes.
- **Perimeter ditches** — intercept runoff around facilities and developed sites.
- **Agricultural drainage ditches** — protect formed routes carrying surface runoff.



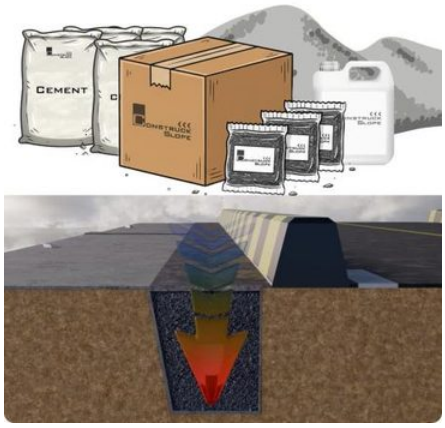
What problems it solves

- **Eroding banks and inverts** — covers exposed ground with a hardened protective lining.
- **Sediment washed downstream** — helps limit sediment generated by erosion of the ditch itself.
- **Loss of the formed profile** — protects the prepared drainage geometry against surface erosion.
- **Bulky stone logistics** — reduces reliance on quarried rock and individual stone handling.
- **Difficult maintenance access** — provides a defined surface for inspection, sediment removal and local repairs.

System, Components & Benefits



Construck® CemWrap20



ConstruckScreed™



Fixing accessories

With SPaaP, crews assemble a **pre-matched kit**—not a collection of parts—so quality is repeatable, approvals are simpler, and schedules stay short.

How the lining works

- **Hydrated CemWrap® skin** forms a continuous, low-permeability armor;
- **Trench shear-locks** at shoulders/toe secure the lining, preventing peel and under-scour at the highest shear zones.
- **Fixings** control construction and uplift loads; overlaps are **shingled with flow** to avoid step losses.

Benefits versus rip-rap / cast concrete

Hydraulic efficiency

smooth, continuous surface with fewer joints; stable section geometry.

Compact protection

protects the ditch banks and invert without the bulky stone layer required by riprap, preserving more of the formed drainage section.

Speed

rolls, small tools and simple trench locks → rapid production and early service.

Sustainability

fewer truck trips, less cement volume than slabs, minimal excavation.

CemWrap Ditch - engineered protection for banks and invert



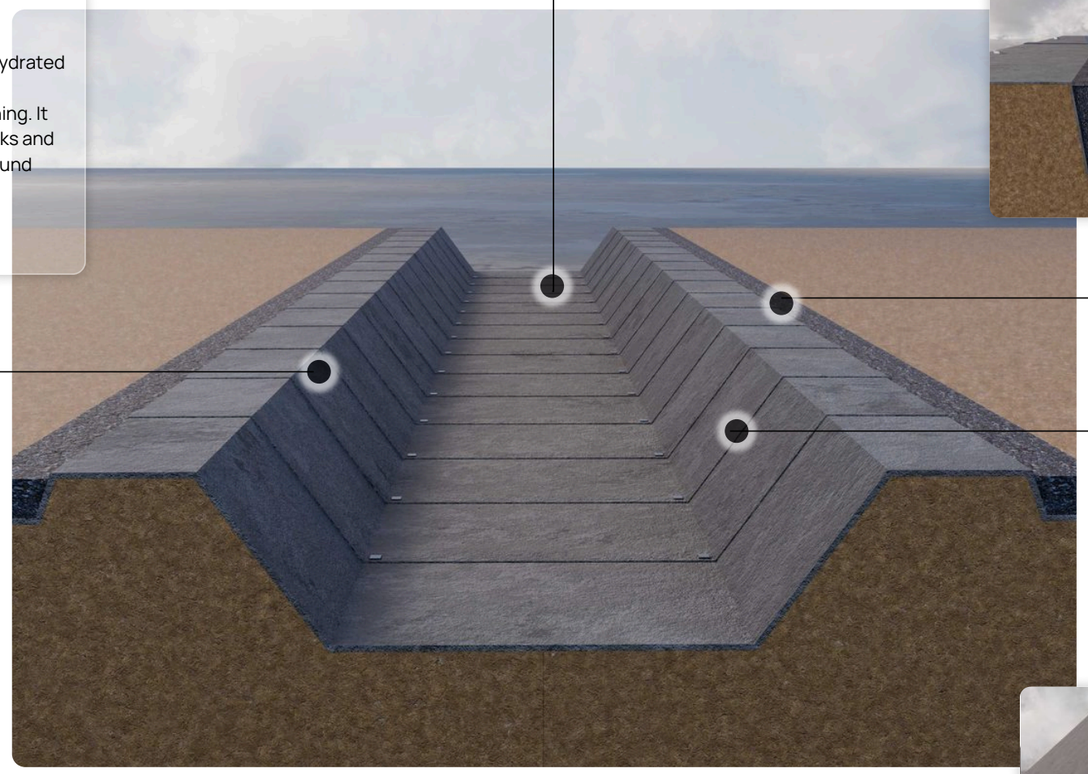
Weather and erosion protection

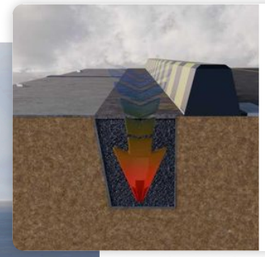
Hydrated CemWrap20 forms a hardened cementitious surface that protects prepared ditch banks and invert against rainfall and runoff erosion.



CemWrap20®

CemWrap20® hardens when hydrated to form a thin, durable, weather-resistant concrete lining. It follows the prepared ditch banks and invert, protecting exposed ground against runoff erosion.





Secure edge restraint

Specified crest or edge restraints secure the lining at ditch shoulders. Trench details and fixings follow the issued design and ground conditions.



CemWrap20 joint (overlap zone)

Adjacent CemWrap20 panels overlap in the direction of flow. Complete the specified fixing and joint treatment to maintain lining continuity and protect the connection.





Performance, SPaaP® & Spec Snapshot

Engineered protection for ditch banks and inverts

Protection against runoff erosion

Hydrated GCCM forms a hardened lining over the prepared ground, protecting the ditch banks and invert against surface erosion.

Compact lining profile

A thin GCCM lining replaces a bulky riprap layer, leaving more of the formed ditch section available to convey runoff.

A defined drainage surface

The lining follows the prepared ditch geometry. Specified joints and edge restraints complete the protection at connections and boundaries.

Straight-from-factory quality

Manufactured GCCM provides consistent material dimensions and properties, with installation checks focused on preparation, joints, restraints and hydration.

SPaaP® for Drainage— why "Slope-Protection-as-a-Product" matters

- **Factory-controlled components** → repeatable performance, less site variability
- **One crew, one kit, one warranty path** → no split responsibilities
- **Pre-performance**-tested bill of materials → faster approvals, simpler QA
- **Straight-from-factory to slope** → compressed schedules & fewer delays.

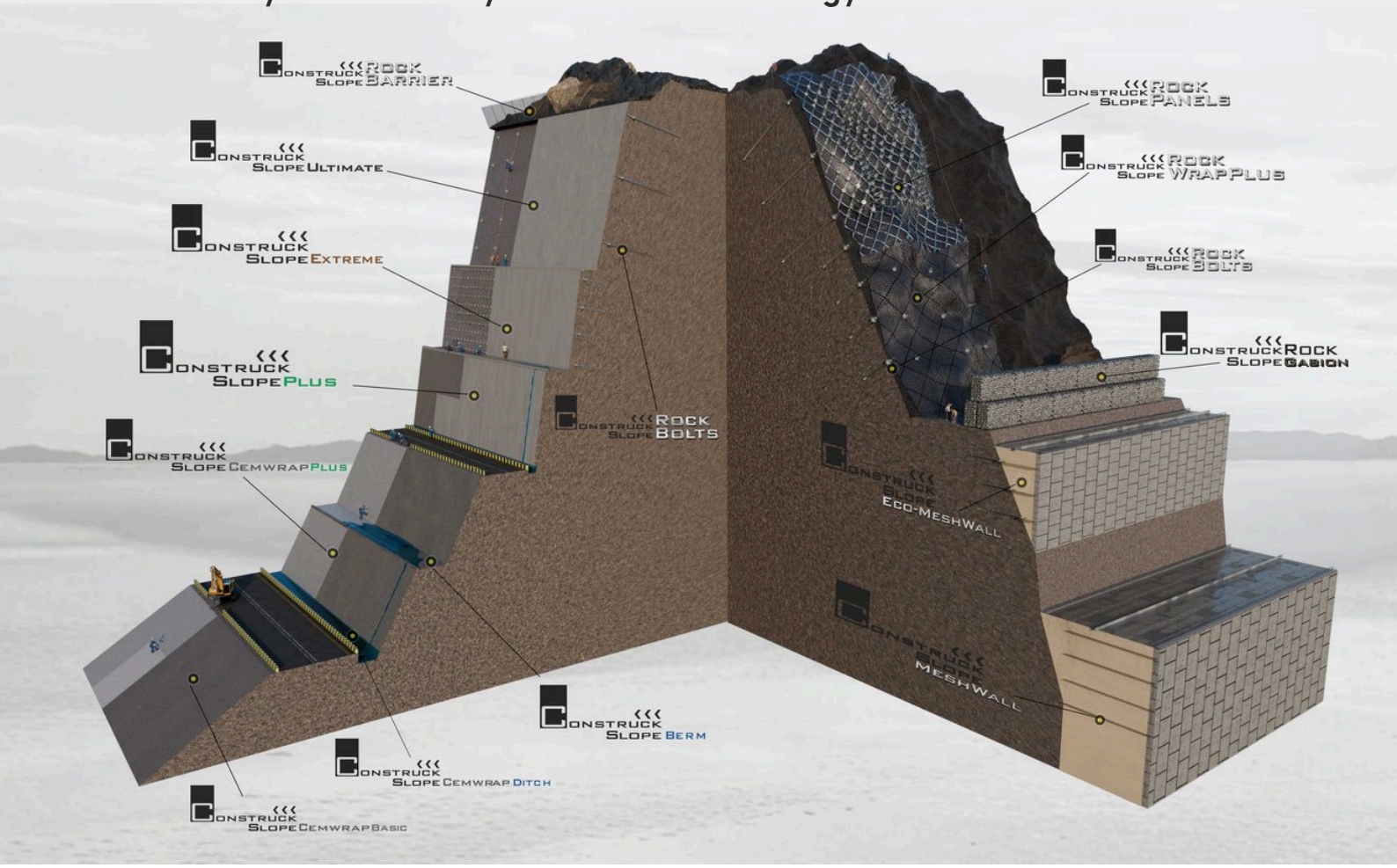
Advantages

- Replaces **rip-rap/concrete/form mattress** with a **lighter, faster, watertight** composite.
- **A thinner protective layer** — protects the formed profile without a thick stone lining.
- **Accessible maintenance** — a visible surface supports inspection, sediment removal and local repairs.
- **Sustainable construction:** reduced haulage, cement mass and energy.
- **Low maintenance:** easy patching; no stone loss or slab joint spalls.





The Widest Range of SPaaP® in the World, Powered by Construck Systems and Technology.



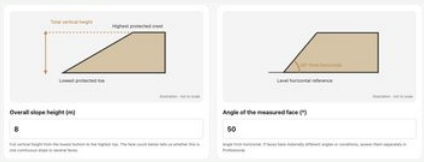
Digital support

Better decisions. A stronger project.

Explore the options, strengthen the technical basis and connect the people, information and delivery behind your Construck system.

Construck Calc

Understand the ground.
Build the technical case.



Actual Quick Check interface / sample geometry.

Quick Check
A free first step into relevant systems, preliminary quantities and indicative cost.

Professional
Bring surveys, ground conditions and existing studies into a project-specific assessment.

A further stability study
A project-specific stability study is included for each slope we take forward for protection.

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ProjectSuite

One connected platform.
Support from start to finish.



Actual development workspace / sample records.

Manufacturer expertise, local support
Connect technical teams and authorised local partners around the selected Construck system.

Supply and construction, coordinated
Keep technical preparation, material supply and installation quality in the same workflow.

Sustainability and handover
Relate environmental estimates to project quantities and retain useful information for the asset.

construck.me/project-suite

Quick Check is preliminary guidance. Professional assessment and support follow the agreed scope and required approvals.













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