



Fluid Containment Leaders

Manhole Restoration with Calcium Aluminate Cement

Calcium Aluminate Cement coating is a viable solution for restoration of significantly degraded manholes.

Significant water ingress, severe degradation can be resolved, whether below a busy roadway or inner city creek.





Scope of Shield Technology works:

Restoration of Manhole with Calcium Aluminate

Shield Technology shown here with its process of restoring a manhole with Calcium Aluminate Cement very close to an inner city creek and popular public park, with associated substantial risk to the environment and local stakeholders.

The man hole is 8 meters deep, (Approximately 6 m below water level) with significant erosion due to H₂S gas, seen overleaf. The concrete here has completely eroded to expose subsoil.

After initial externally controlled high pressure cleaning, the extent of water ingress can be determined. This is abated by applying hydraulic quick setting cementitious plug material to those areas.

Once infiltration is under control the initial application of Calcium Aluminate Cement is applied through Shield Technology's remote controlled pneumatic spinning head.

The spinning head provides an easy, non-man entry means of applying the Calcium Aluminate Cement. The material being slung onto the walls provides good consistent compaction of the CAC.

Completed application provides an H₂S corrosive resistant and structurally rehabilitated manhole.

