

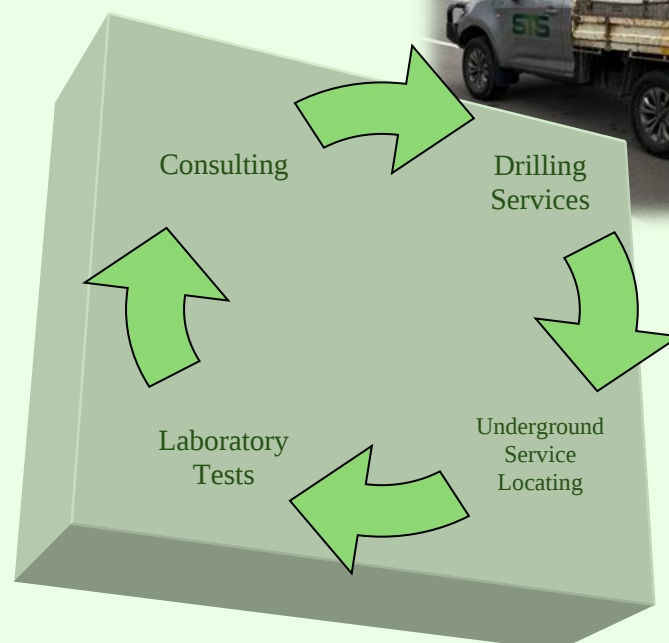
ABOUT STS GEOTECHNICS

Since 1988, STS Geotechnics (STS) has been providing high-quality geotechnical engineering and NATA-accredited laboratory testing services across NSW. We assist clients on a diverse range of projects, offering expertise in soil, aggregate, and rock testing, as well as geotechnical investigation, engineering, and engineering geology.

Our Geotechnical expertise covers all aspects of soil and aggregate laboratory testing, earthworks testing, engineering and engineering geology for small and large civil engineering projects, from planning and investigation stage and feasibility studies, geotechnical investigation and interpretations through to design, construction surveillance and construction operational phases.

STS implements and audits a comprehensive Quality Assurance system together with participation in various proficiency testing programs to ensure our product remains compliant with relevant standards and our reporting meets project deadlines.

OUR SERVICES



Drilling Services

- Site Classifications to AS2870
- Site Investigations to AS1726
- Coring Rock up to 15 metres
- Concrete Cutting
- Handheld coring from Rock Up to 2.0 metre
- Push Tube

Under Ground Service Locating

- Underground Service Locating
- Cable Locating
- Ground Penetrating Radar (GPR)
- Locating By GPS Services

OUR SERVICES

Consultant

- Bearing Capacity Inspections
- Foundation Inspections B59
- Slope Risk Assessments to AGS2007
- Sydney Water Assessments (SEA)
- Numerical Finite Element Analysis
- Preparation of Geotechnical and Hydrogeological monitoring plans
- Pavement Investigation and Design
- Seepage Analysis
- Acid Sulfate Soils (ASS) Assessments
- Salinity Assessments
- Design Declarations
- Groundwater Assessment and Seepage Analysis

Field Tests

- Plate Load Test
- Deflection Monitoring – Inclometers
- Dynamic Cone and Perth Sand Penetrometers
- Inclometers
- Sonic Velocity Tests
- Infiltration Testing
- Level 1 Supervision
- Level 2 Testing (Compaction)
- Compaction by sand replacement
- Proof Roll Inspections

LABORATORY TESTS

- Atterberg Limits and Linear Shrinkage
- Shrink Swell
- Maximum Dry Density and Optimum Moisture Content (MDD / OMC)
- CBR
- Concrete testing
- Particle Size Distribution & Hydrometer
- Stabilized UCS testing of pavement materials
- Rock UCS
- Particle Density

ADVANCE LABORATORY TESTS

- Large and Small Direct Shear Test
- Triaxial Test (UU, CU, CD)
- Oedometer/Consolidation Test
- Thermal Resistivity Test
- Soil Resistivity Test



STS Geotechnics Pty Limited

www.STSGEO.COM.AU

OUR EQUIPMENT

- ❖ Mini – Tight Access Diamond Drilling Rig Capable of NMLC/HQ & SPT up to 50m including Down Hole Hammer



OUR EQUIPMENT ■

- ❖ X1 Landcruiser Ute Mounted Rig PTO engine capable of drilling 15m.

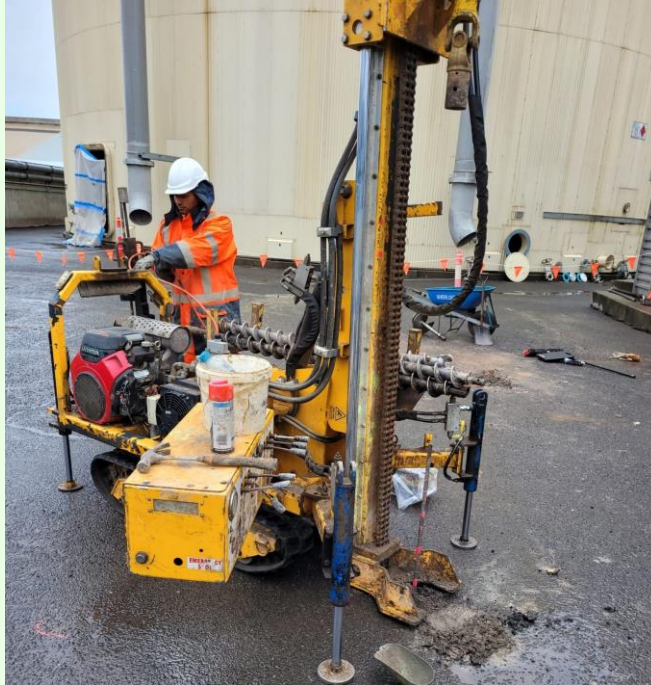


- ❖ X2 Christie Ute Mounted Drilling Rig – Lot Class Rig with Shrink Swell capabilities and CBR Augers

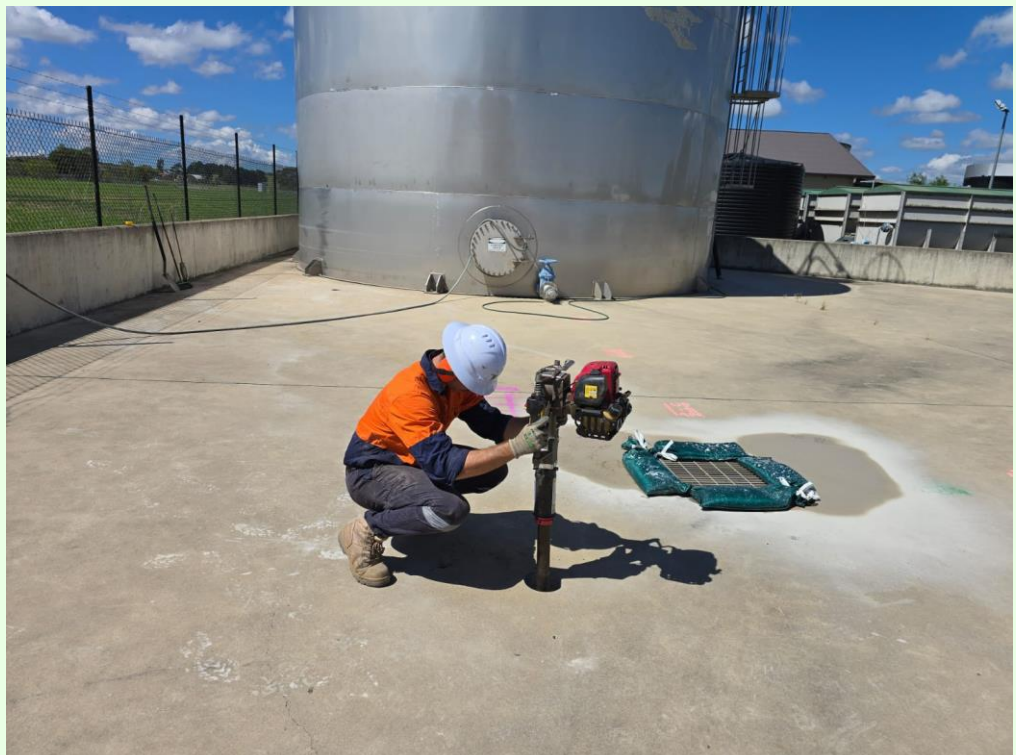


OUR EQUIPMENT

- **X1 Christie Tight Access Track Mounted Drilling Rig with Shrink Swell capabilities and CBR Augers**



- **X1 Hand Portable Push Tube petrol undisturbed sampling**



OUR EQUIPMENT

- ❖ Concrete **Core** drilling/ Horizontal Drilling from 50mm up to 300m diameter and Hand Portable Drilling up to 3.0m in bedrock



- ❖ underground Locators with Ground Penetrating Radar Capabilities.

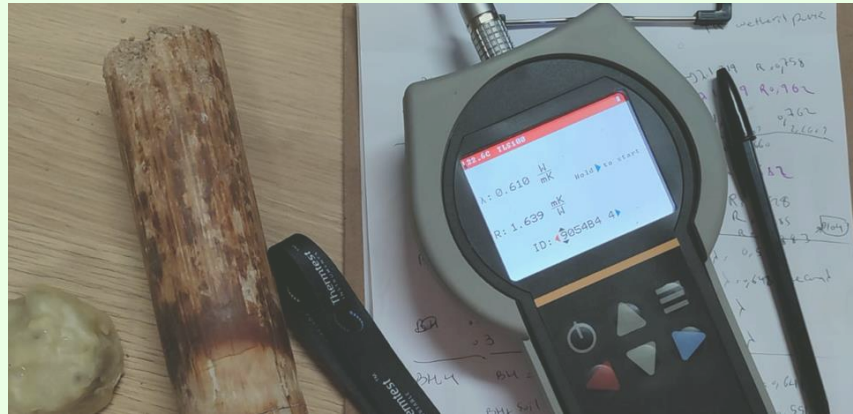


- ❖ Plate Load Testing (600mm, 750mm & 900mm)



OUR EQUIPMENT

❖ Thermal Resistivity



❖ Soil Resistivity



❖ Oedometer/Consolidation Test



OUR EQUIPMENT

❖ Direct Shear Test on Soil and Rock (300- and 100-mm Specimen)



❖ Triaxial Testing UU, CU and CD (50 mm, 60mm and 75mm Specimen)



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Unit 14, 1 Cowpasture Place, Wetherill Park, NSW, 2164.

T: 02 9756 2166 F: 02 9756 1137

Bumble Bee- Mini Rig Dimensions (AUGER DCP ONLY)

Height Drilling: 2.5 metres

Drilling Depth 5m in soil only.

Height Travelling: 1.5 metres

Width Drilling (Fully Extended @ 90° panel and legs @ 90°): 2.3m

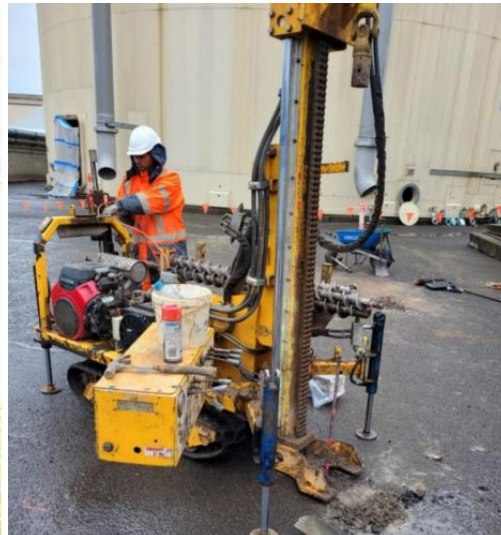
Width Drilling (Minimum - panel at 45° and legs @ 0°): 1.3m

Width Travelling: 0.72m

Length Drilling: 2.3m

Length Travelling: 2.8m

Track Pressure: 35 kPa or 0.35kg/cm²



Van Dimensions

Van Height: 2.7m —

Van Length: 6.0m

Van Width: 2.7m

Minimum clearance at rear of van to load/unload: 4.5m

Bluey- Mini Rig Dimensions (AUGER SPT + NMLC CORING + DTH)

Height Drilling: 3.65 meters (Adjusted to 3.0m) (or the lowest to 2.4m coring only)

Drilling Depth 50m including Rock Coring.

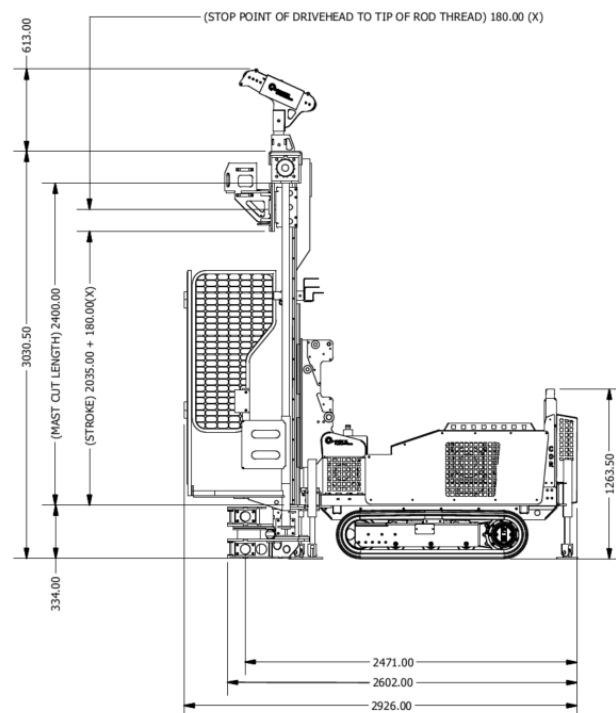
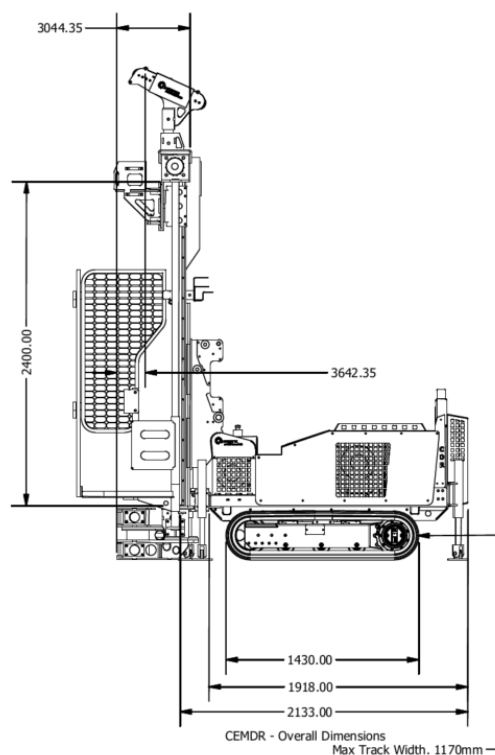
Height Travelling: 2.1 meters.

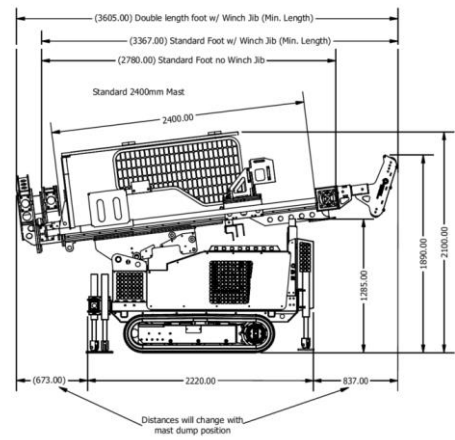
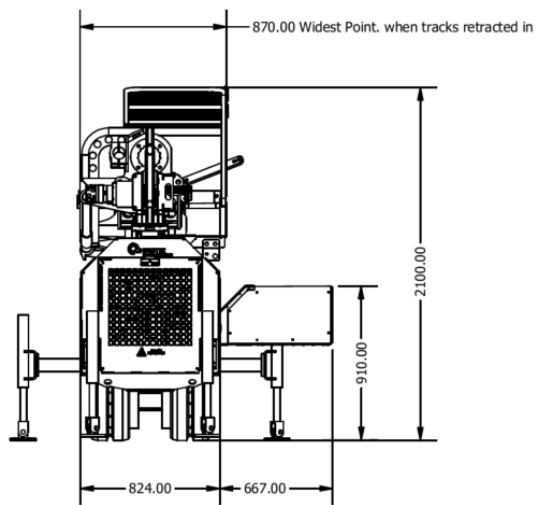
Width Travelling: 0.9m

Length Drilling: 2.9m

Length Travelling: 2.8m

Weight 1.8Tonnes





Christie Utility Dimensions Auger DCP

- Rig Height: 2.2m
- Drilling Depth :6m or prior refusal
- Rig Height with mast up: 3.9m
- Rig Width: 2.0m



Landcruiser Dimensions Auger DCP

- Drilling Depth 15m in clays. Can penetrate through weathered Rock.
- Rig Height: 2.2m.
- Rig Height with mast up: 4.5m
- Rig Width: 2.0m

