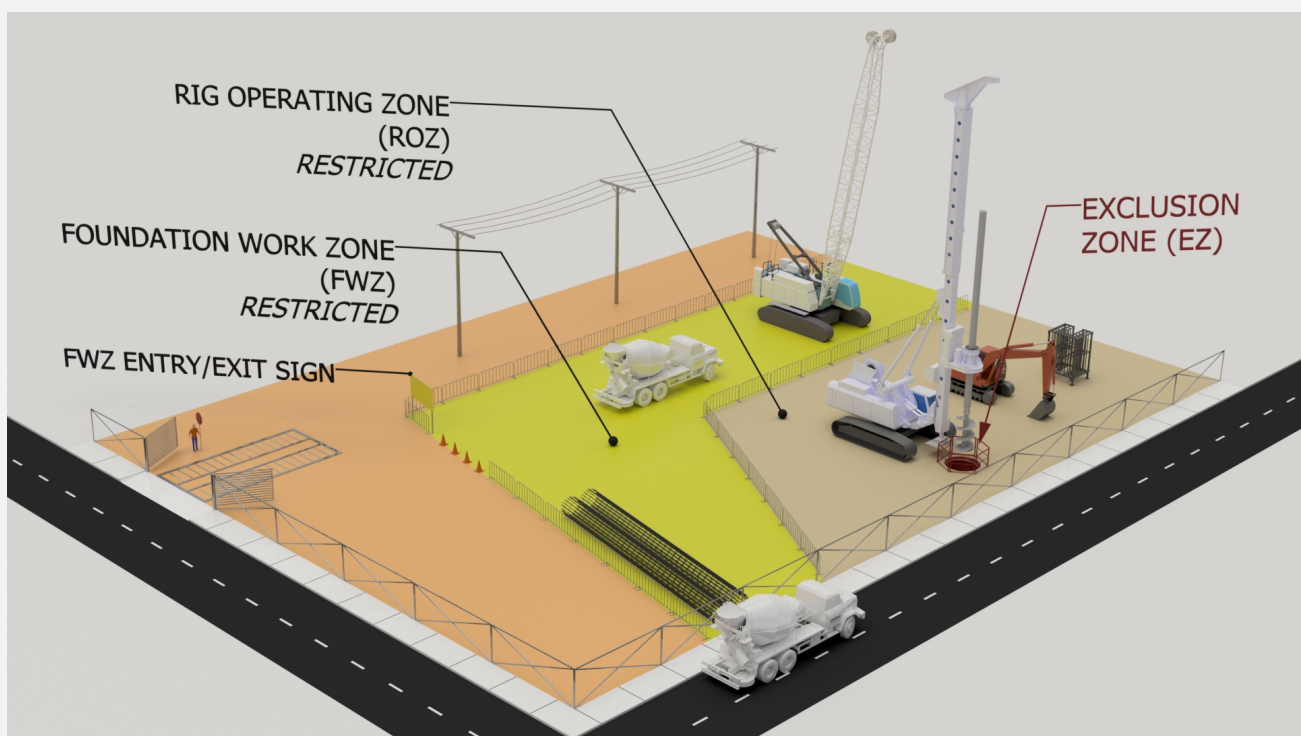


SITE CONTROL ZONES



Key Recommendation

The following **3 control zones** be established and maintained throughout the Works

Zone 1: Exclusion Zone (EZ) The high risk zone in the immediate vicinity of the piling augur/hammer.

- **No person can enter the EZ, while the piling rig is operating**
- The EZ is to be defined by temporary fencing/barricading (size/type to be described in SWMS)

When the piling rig is stationary **and** not operating **and** positive visual communication established with the piling rig operator, the **EZ** reverts to a **Rig Operating Zone**

Zone 2: Rig Operating Zone (ROZ) The zone around the foundation rig and ancillary equipment.

- **Restricted to the foundation operators and workers and approved other workers (see below)**
- The ROZ is to be defined by temporary fencing/barricading

Approved other workers must be at all times supervised by a foundation crew member and must be conducting necessary work (e.g. geotechnical engineers, surveyors, transport drivers). They may enter the ROZ after obtaining visit-specific approval from the Foundation Supervisor provided they are supervised and;

- Have successfully completed ZoneSAFE, the online foundation industry induction (when available), and;
- Have undertaken the site induction and been inducted into the foundation company's SWMS, and;

ZONE 3: Foundation Work Zone (FWZ) The complete area required by the foundation contractor.

- **Restricted to foundation operators and workers and other authorised workers**
- The FWZ is to be defined by temporary or fixed barriers. May include portions of site hoardings

Other authorised workers must be conducting legitimate work, and **either be escorted by a designated foundation worker, or have;**

- Successfully completed ZoneSAFE, the online foundation industry induction (when available); and
- Undertaken the site induction and been inducted into the foundation company's SWMS.

SITE CONTROL ZONES

Check-list for Zone Planning

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Risk assessment

- ✓ Safety-in-Design outcomes
- ✓ Principal Contractor requirements
- ✓ Supervision
- ✓ Piling crew skill, experience, certification
- ✓ Work shifts
- ✓ Piling crew management (fatigue, drug & alcohol)
- ✓ Plant certification and maintenance
- ✓ Rigging and lifting equipment type and certification
- ✓ Ancillary plant and equipment
- ✓ Working platform
- ✓ Material deliveries & storage
- ✓ Waste disposal
- ✓ Vehicle & pedestrian movements
- ✓ Concurrent site activities
- ✓ Site security
- ✓ Plant and pile zone security out-of-hours
- ✓ Site access control
- ✓ Adjacent properties, public areas
- ✓ Underground and overhead services
- ✓ Noise and vibration
- ✓ Dust/silica control

☐

Safe Work Method Statement

- ✓ Outcomes of risk assessment
- ✓ Identify key risks and controls
- ✓ Identify methods of defining and controlling Zones (EZ, ROZ, FWZ)
- ✓ Piling team involvement/consultation
- ✓ Principal Contractor consultation
- ✓ Approval by Principal Contractor
- ✓ Approval by Project Manager/Piling Supervisor(s)
- ✓ Piling team and other workers induction (including ZoneSAFE, when available)

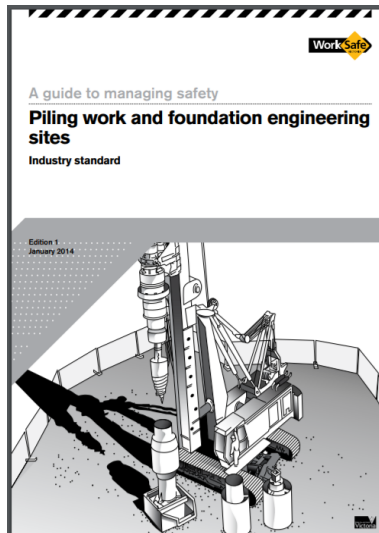
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Change Management

- ✓ Changed or changing site conditions, work by others
- ✓ Weather
- ✓ Design changes
- ✓ Program, sequence changes
- ✓ Outcomes of incident investigations
- ✓ Industry safety alerts
- ✓ Regular review and updating, as needed, of risk assessment
- ✓ Regular review and updating, as needed, of SWMS
- ✓ Review and updating of working platform certificates
(review any backfilling, material changes, new work areas)
- ✓ Review of excavation permits and protection of services
- ✓ Daily Pre-starts
- ✓ Induction and training of new workers (Including PC and other Contractors')

SITE CONTROL ZONES

Primary Reference Document – The Piling Industry Standard Ed 1 January 2014



This *Site Control Zones* Good Practice Recommendation is intended to supplement the *Piling work and foundation engineering sites* aka the *Piling Industry Standard* (illustrated left).

The *Piling Industry Standard* and any subsequent updates is to take precedent over this Good Practice Recommendation in the event of any conflict.

Acknowledgements

1. Piling & Foundation Specialist Federation- Safety Committee
2. Member companies' Safety zone presentations – P&FSF Safety Forum August 2018

Disclaimer

A key value of the PFSF members is a commitment to share information to improve safety in the foundation industry. Whilst careful consideration is given to our recommendations, all users of our recommendations need to carefully access their own work places and practices to conduct their foundations activities safely. The provision of this recommendation is to highlight risks, hazards and potential solutions. The final methods and controls are the responsibility of each piling company.

APPENDICES: Examples of Good Practice in action

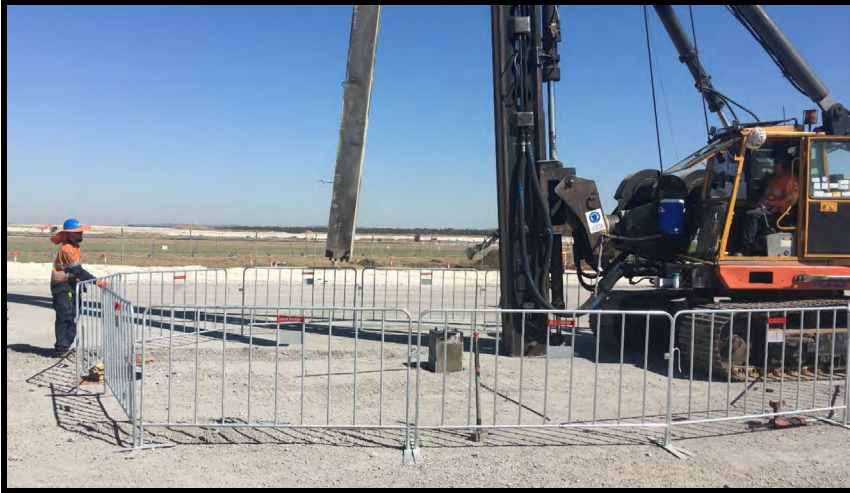



Appendix A: Exclusion Zone (EZ) Examples

Appendix B: Rig Operating Zone (ROZ) Examples

Appendix C: Foundation Work Zone (FWZ) Examples

SITE CONTROL ZONES

Appendix A: Exclusion Zone (EZ) - Examples

	<p>Pitching Pre-cast</p>
	<p>Bored (Self-supported)</p>
	<p>Bored (Casing < 1 metre)</p>
	<p>Bored (Before Concreting)</p>




SITE CONTROL ZONES

Appendix B: Rig Operating Zone (ROZ) - Examples

	<p>Driven Steel</p> <ul style="list-style-type: none"> Physical barrier Clear signage at entry point
	<p>Segmental Bored</p> <ul style="list-style-type: none"> Physical barrier Light-weight, easy to relocate
	<p>Small Segmental Bored</p> <ul style="list-style-type: none"> Physical barrier Light-weight, easy to relocate

SITE CONTROL ZONES

Appendix C: Foundation Work Zone (FWZ) - Examples

	<ul style="list-style-type: none"> • Manned entry control • Lightweight barriers • Clear signage
	<ul style="list-style-type: none"> • Water-filled road barriers
	<ul style="list-style-type: none"> • Lightweight barriers • Clear signage