

## Safe Work Instruction – Installation of Water Services

**DO NOT** use this plant\* or complete this task unless you have been inducted in its safe use and operation by an Authorised Experienced Operator

This SWI may not cover all possible hazards and risks and should be referred to as a control measure in the risk assessment process. Additional training may be required for high risk plant. Site and task may change required PPE.

### PERSONAL PROTECTIVE EQUIPMENT



Eye protection must be worn



Long and loose hair must be contained or covered.



Hearing protection must be worn



Foot protection must be worn



Hand protection must be worn



P2 face mask must be worn when airborne dust or fumes are created



Protective body clothing must be worn



High visibility clothing must be worn



Half face mask respiratory protection must be worn

### POTENTIAL HAZARDS AND RISKS

- Struck by Moving Object**  
Injury to worker being struck by moving traffic
- Manual Task Injury**  
Manual task injury from incorrect manual handling techniques
- Electrical Shock or Burn**  
Electrical shock or burn from damaged or poorly maintained electrical leads and cables  
Electrical shock or burn from plant contact with live electrical conductors  
Electrical shock or burn from plant contact with overhead power lines
- Explosion**  
Explosion of gases, vapours or liquids
- Slip, Trips, Falls**  
Slip, trip, fall due to uneven or slippery work surfaces.  
Slip, trip, fall due to steep working surfaces
- Other**  
Burn injury  
Exposure to asbestos  
Exposure to radiation  
Injury due to plant malfunction or misuse  
Injury due to fall from heights

### PRE-OPERATIONAL SAFETY CHECKS

- ✓ Ensure to have a copy of the water service application with confirmation of the blue peg positioning
- ✓ If it is suspected utility lines are in the area, ensure you have the correct "Dial Before You Dig" plans available BEFORE you start work
- ✓ Complete site-specific risk assessment
- ✓ Complete the appropriate pre-operational plant checklist
- ✓ Ensure you are familiar with plant operations and controls
- ✓ Ensure that guards are fitted, secured and functional in accordance with manufacturers guidelines
- ✓ If a TCP is required, both standard and modified TCP's used must be documented. If there is any foreseen difficulty with the use of the generic TCP, the operator should consult with the coordinator to design a specific TCP for the job

**Note: At a minimum, the trucks 'Workmen Ahead' sign, flashing lights and PPE must be used. If at all possible, the truck should be parked off the road reserve**

- ✓ Locate any power, Telstra cables, gas, water and other utilities using cable locator and marker locations by applying potholing techniques before commencing backhoe excavations

### OPERATING PROCEDURES

- ✓ Keep clear of moving plant parts
- ✓ Operate plant to the conditions of the work area
- ✓ Ensure you are aware of the location of overhead powerlines. Always operate within the prescribed safe working distances of overhead powerlines utilising a spotter if required
- ✓ Refer to SafeWork NSW "Excavation Work" Code of Practice and SWI Trenching and Ground Support before commencing the following excavations –
  - For a Short Service: Excavate a trench 0.45m deep between the main and up to 1 meter inside the owner's boundary, at or as near as possible to the owner's boundary
  - For a Long Service (i.e. road crossing) : Excavate a trench 0.45 meters deep between the road crossing conduit and up to 1 meter inside the owners boundary as well as a trench between the main and the other side of the road crossing conduit on whichever side the crossing has been supplied by the developer

- For an Under bore: Excavate a trench 0.45-metre-deep between road and 1 meter inside owner's boundary. Also excavate a trench on the main side of the road at a size to allow for the under bore and main tapping procedures
- ✓ If the under bore is to be completed at a later time and the depth of the excavations are less than 1.5 meters, the trenches can be secured using star pickets and a well strained, sound, para-webbing
- ✓ If the excavation is greater than 1.5 meters deep, the trenches need to be boarded over and secured with well strained, sound para-webbing
- ✓ Shoring should be used in WATER CHARGED ground at all times
- ✓ In either case a length of poly is to be left in the trench for the road under boring contractor to feed through the under bore
- ✓ Ensure the pipe is centrally located in the trench
- ✓ When feeding the pipe through the under bore hole, the pipe preferably should be pulled using a machine

**Note: To facilitate the safe ingress and egress of the excavation ramps, steps and ladders are to be used**

- ✓ If tapping an Asbestos cement (AC) pipe, clean the area thoroughly with water prior to placing the tapping band in position. The tapping kit must have a positive purge or 'blow off' feature
- Note: The tool's pressure chamber protects against water leakage and catches AC debris making this a virtually dust free operation**
- ✓ Tap the main to the required service size as specified on the water service application. If tapping an AC, it is then essential to flush out the pressure chamber using the 'blow off' valve to purge out all AC particles to waste
  - ✓ Assemble the service as per standard water service drawings (i.e. 21755 number series)
  - ✓ Before completing the metre and standpipe installation, flush the service back to the metre cock to make sure there are no blockages (i.e. the flow rate is as expected)

#### ENDING OPERATIONS

- ✓ Fill in excavations and compact using shovel and appropriate machine for the job
- ✓ Restore excavations as near as possible to the original condition (topsoil, seed and/or turf if required)
- ✓ Complete the details of the type of service (i.e. left, right, centre) meter number, date and name of operator who carried out the work in the bottom of the water service application and return to coordinator for further processing
- ✓ Ensure plant is in good working order and stored in the appropriate location

#### DO NOT

- ✗ Do not use if plant is faulty. Attach an Out of Service tag and report fault to your supervisor
- ✗ Do not operate heavy plant and vibrating equipment near the edge of a trench as this will cause stress on the trench walls
- ✗ Do not leave plant running unattended
- ✗ Do not wear loose jewellery
- ✗ Do not use mobile phone while operating plant

**\*Plant in this SWI refers to any machinery, equipment, appliance, container, implement and tool.**