14. Fencing Procedure

Method of works

Site set up:

- Assess pre-works information from client and/or the contracts manager
- Ensure WMS permit to dig form has been completed IAW risk assessment to include CAT and Genny scan.
- Cordon off area to avoid damage or injury from debris.
- PPE to be worn (gloves/eye protection). Wear face fitted FFP3 mask, where dust may arise. Regular breaks, undertake maintenance of tools.
- Ensure tools and equipment are not acting as a trip hazard.

Removal of old fence:

- Fence panels:
  - If panels fixed with screws to posts, carefully unscrew using screw driver or cordless drill with screw driver bit
  - If screws are worn down or panels fixed to posts with nails, a bar is to be used to pry the panels away from the posts
  - Once panels removed, they are to be carefully place to one side ready for disposal, ensuring there are no exposed screws that could be stood on
- Pales or vertical feather edged boards:
  - If pales fixed to rails with screws, carefully unscrew using screw driver or cordless drill with screw driver bit
  - If screws are worn down or panels fixed to posts with nails, a bar is to be used to pry the pales away from the posts
  - Once pales removed, they are to be carefully place to one side ready for disposal, ensuring there are no exposed screws that could be stood on
- Horizontal rails and posts:
  - Using a bar, pry rails from post and place to one side, ensuring no nails or screws are exposed that could be stood on. If rail needs to be cut while fixed to the post, extra care is to be taken to ensure rail does not drop and uncontrollably to the ground. If this is being completed as a one person job, clamps are to be used to ensure rail does not drop to ground
  - Post is to be cut as close to bottom of concrete base as possible. If a power saw is used, extra support on the post may be required to ensure it does not fall back on the blade or fall uncontrollably onto materials or property
  - Old concrete or spoil to be broken out of ground if specified by client or post is being replaced with like for like. Concrete to be broken out using 110V electric breaker or bolster and hammer as required. Old concrete or spoil to be disposed of unless used for backfill

Installation of new fence:

- Fence posts:
  - The end posts are to be installed first on the boundary line as specified by client.
  - If end post is being fixed to a wall-
    - Wall is to be checked to ensure suitable fixing can be established and wall is of sound structure to accept the bolt
    - Checks should be made to ensure nothing inside or behind the wall can be effected including electrical appliances
    - Asbestos register to be checked
    - Fence post to be pre-drilled where bolts will go in wall
    - Holes in post to be used to mark-up wall where bolts will be fixed in wall, using a post level

to ensure level
        - Holes to be drilled in the wall at the required depth to accept the masonry bolt. Accounting for the width of the fence post. Bolts must be fixed into the wall a minimum of 100% the size of the post. For example, a 75mm post will need a bolt going at least 75mm into the wall. Therefore, a 75mm post will require 150mm bolts. If shorter bolts are to be used these must be counter sunk into the post to ensure there is still the correct length into the wall.
        - Bolts will then be used to fix posts to wall, tightened with hand ratchet or impact driver
    - If end post is set in concrete-
        - Dig hole to suit fence post using post shovel to a depth of ¼ the length of the post minimum. For example, a 2.4m post will have an hole dug to 600mm
        - Post will be placed in hole with post level fixed to it on the boundary line set out, using timber fixing as a brace to prop level (or second person).
        - Postcrete is to be used in the hole as per manufacturer's instructions, mixing with water and ensuring product is tampered down with tamper
    - Once end posts are fixed or set, a string line is to be set up from one post to another.
    - Fence post installations are then to be measured out along the string line at intervals as specified by client or as a rule of thumb, 1.8-2m apart. Posts points are to be as evenly spread as possible
    - Once positions are marked out for each post, holes are to suit fence post using post shovel to a depth of ¼ the length of the post minimum. For example, a 2.4m post will have an hole dug to 600mm
    - Post will be placed in hole with post level fixed to it, using timber fixed as a brace to prop level and in line with the string line (or a second person)
- Fence panels:
    - Panels will be placed in between each post, level checked and fixed in position using galvanised screws
- Post and Rail/pales/palisade:
    - A horizontal tantalised length of timber (rail) will be clamped in position, spanning between 1 or 2 fence post bays. Levels will be checked with spirit level or if on a slope, measurements taken from top or bottom of posts
    - Rail may need to be cut before being fixed to half the width of the post if the rail is to be continuous, so the next rail can be butted against it on the same post
    - Once clamped into place, rails to be fixed with galvanised screws driven with cordless driver or Nails fired from nail gun
    - If upright boards or pales are to be fixed, a spacer is to be created for the gap between boards.
    - Boards or pales will be fixed level, one at a time at an even space between boards. Fixings will be galvanised screws or ring shank nails
- Feather edged fence:
    - Treated 150mm Gravel board to be fixed level (using spirit level if on level ground) at the bottom of posts, with a "noggin" between board and post the same width as the rails to be used
    - Posts are then to be measured and marked where rails will be fixed, evenly spread between gravel board and top of fence. A 120mm feather edged fence will require 2 rails and a 180mm fence will require 3 rails.
    - A horizontal tantalised length of timber (rail) will be clamped in position, spanning between 1 or 2 fence post bays. Levels will be checked with spirit level or if on a slope, measurements taken from top of post and top of gravel board
    - Rail may need to be cut before being fixed to half the width of the post if the rail is to be continuous, so the next rail can be butted against it on the same post
    - Once clamped into place, rails to be fixed with galvanised screws driven with cordless driver or Nails fired from nail gun
    - Feather edged fence boards will be fixed to the rails using ring shank galvanised nails, fired from a nail gun. Each board will sit vertically level on top of the gravel board and have an overlap of 1/3 of the size of the board. For example, a 150mm board will have a 50mm overlap giving 100mm exposed board
- Gates:
    - Gap where gate will be swung will need to be measured

- A frame will be made up square using the same timber used as the rails or as specified to fit the gap with enough room for expansion. Frame will also have cross timbers for support
- Boards or pales will be fitted as per the same methods above, fixing to the gate frame as if it was a rail.
- Gate will be swung using hinges of size suitable to support the weight of the gate.
- Other fixings such as bolts, latches and closers may be required as specified by client

- Tidy area and remove all waste including offcuts
- Ensure concrete is covered with soil and cover with grass seed if required

See additional docs

Permit to dig
CAT and Genny Procedure
COSHH

Risk Assessment

Hazard	Control Measures
Falls from height	See Working At Height If working on a banking or slope, additional control measures may be required which may include fall restraint. This will be picked up in the on-site risk assessment
Slips Trips and Falls	The site will remain tidy at all practicable times. All designated access/egress routes shall be kept free of slip and trip hazards, and obstructions. All equipment is switched off and/or isolated when unattended. All material that could potentially cause injury is either secured behind barriers or removed from site. The need for good housekeeping is to be explained in the site induction.
COSHH	When using any chemicals, the COSHH safety data sheet will be followed to ensure that the safe working practice is followed. This includes storage and use, including the correct use of PPE. Common material sheets are within this document. Additional MSDS may be required for extra chemicals/substances on this contract.
REG 8	Care is to be taken when working near any flues. WMS and subcontractors are to ensure that no flues/ventilation points are blocked (ie taped off/netted etc), and that Reg 8 Gas Safety is adhered to at all times. Any damage at the time of working to any flue/air duct –terminal or debris entering the flue/air duct, condensate pipework, gas installation pipework, gas meter & housings or any part of the heating installation must be reported: Turn off the effected appliance / installation /energy supplies and make safe. After all work is completed re-inspect all flue terminals / installations for damage. Ensure there is no venting appliance in place before any works to the flue/removal of masonry flue.
Manual Handling	Correct lifting techniques are to be used at all times when moving equipment,

	materials or any heavy loads. Paying particular attention when lifting (stable stance, good grip, keep load close to your waist and do not flex your back). 2 person lift to be adopted when lifting large fence posts or other heavier materials. Site supervisor to ensure that mechanical assistance, ie trucks etc are used if objects are too heavy to safely manually handle.
Hygiene	Good personal hygiene is a necessity washing of hands prior to any breaks (food – ingestion).
Vibration	If there are any tasks with expected high levels of vibration. WMS shall use vibration calculator to work out if operatives are likely to exceed action levels. WMS have assessed these site and there are no excessive vibrating works that are likely have trigger times that will exceed the HSE 100 points. Subcontractors will also assess in their RAMS. Regular breaks between works involving high levels of vibration shall be taken.
Noise	If high levels of noise are expected, ear defenders and control measures are to be introduced if lower noise action value is expected to be exceeded (80dB weekly average or 135dB peak). If there are concerns that noise levels are above this, further investigation will be carried out.
Respirable Dust	Control measures are to be implemented when any operations are being undertaken that could give rise to respirable dust. Particular attention is to be made to silica dust. When drilling and cutting, dust extraction is to be used to ensure operatives are not working above the 8hr control limit (0.1mg/m3) and FFP3 masks that have been face fitted to the individual are to be worn.
Asbestos	All operatives are to be Asbestos awareness trained. Asbestos surveys are to be sourced and referred to before any works commence. Tradesmen are to remain vigilant at all times when onsite and if any additional suspect materials are identified, site manager is to be informed immediately
Excavations	See Cat and Genny Procedure