EUSWNC9L

Install engineering products or assets for water network construction LEGACY

Overview

This Standard is about installing engineering products or assets for water network construction. This includes interpreting technical specifications, selecting components and installation methods, assembling and installing components to accepted standards.

This Standard is for water network construction operatives who install engineering products or assets.

Performance criteria

You must be able to:

1. obtain relevant information from current drawings, records, work documents, manuals, and technical specifications
2. identify dimensions, lengths, widths, and quantities in line with Technical information
3. identify positions of utilities plant, services, buildings, kerbs and boundaries in line with technical information
4. select components appropriate for installation in compliance with work and quality specifications
5. identify and replace defective components, non-match components, and sub-standard components in line with organisational procedures
6. ensure sufficient labour, plant, equipment, materials and consumables are available for installation
7. deal with actual and predicted changes to planned use of resources in line with organisational procedures
8. make sure installation equipment operates as required
9. determine installation methods to be used that are appropriate to the work
10. carry out and review site-specific risk assessments in accordance with organisational policy
11. select and wear designated personal protective equipment (PPE)
12. make sure the condition of excavations conforms with instructions and specifications
13. select, prepare and operate installation equipment in accordance with the specification and manufacturer's instructions
14. position components in accordance with specifications taking adequate precautions to prevent damage to them
15. assemble components to industry standards using appropriate techniques,
16. protect installed assets with fine fill in accordance with specification and codes of practice
17. maintain proximity distances from other utilities apparatus in accordance with approved codes of practice
18. ensure installed assets are supported and anchored in accordance with codes of practice
19. connect to existing system using in-line squeeze off, side entry or top entry tee,

in accordance with codes of practice.

20. check quality of installations comply with quality and hygiene standards
21. follow organisational procedures to maintain the security and safety of systems and other people at all times
22. provide technical information to people who require it in line with organisational processes, confirming that they have understood it
23. complete required work documentation in line with organizational requirements
24. work on ‘permit to work’ designated activities in line with organisational procedures
25. refer problems and conditions outside your responsibility to appropriate people using approved procedures

Knowledge and understanding

You need to know and understand:

1. the importance of carrying out on-site risk assessments and the need for constant review
2. the importance of understanding and implementing a safe system of work (SSOW) document when working in excavations
3. organisations policy and procedures for meeting relevant statutory requirements, regulations, codes of practice
4. factors affecting, and means of confirming, the suitability of excavations
5. potential dangers in trenches and holes
6. relevant health, safety and environment legislation, procedures and codes of practice including those governing work in excavations, lone working, hazardous materials, accidents and personal protective equipment (PPE), confined space, working at height
7. dangers of taking actions that create confined spaces risks in excavations
8. installation methods and when they should be used including mains bursting, dead insertion, live insertion, soil displacement, directional drilling, open cut
9. the implications of using incorrect plant, tools, materials and system components
10. actions to be taken where plant, tools, materials and system components fail to meet required specification
11. faults associated with use of inappropriate installation methods and tools
12. range of isolation methods available and rationale for selection
13. the procedure for obtaining authorisation to proceed with connections and the implications of not obtaining it
14. the importance of obtaining necessary permissions for isolation of any part of utilities network
15. range of actions to be taken if work cannot proceed to schedule
16. means of determining appropriate safe remedial action if work cannot proceed
17. methods of accessing information obtainable from reference documents, regulations, codes of practice
18. organisational policy and procedures for meeting relevant statutory requirements, regulations, codes of practice
19. types and signs of defect likely to be present on sub-system and means of determining correct and safe action
20. the importance of compliance with current industry standards

21. mechanical and fusion welding techniques
22. how to provide clear technical information and check understanding
23. communication methods and procedures appropriate for how information will be used
24. how to identify problems that are outside of your responsibility including inaccuracies in technical information sources, damage or defects to tools, equipment or materials, work which is incomplete and not to schedule
25. who to report information to and when

EUSWNC9L

Install engineering products or assets for water network construction LEGACY

Developed by	Energy & Utility Skills
Version Number	2
Date Approved	01 Dec 2018
Indicative Review Date	01 Dec 2021
Validity	Legacy
Status	Original
Originating Organisation	Energy and Utility Skills
Original URN	EUSNCO212
Relevant Occupations	Engineering, Water Network Construction Operative, Water Network Construction Supervisor
Suite	Water Network Construction Operations
Keywords	utility, utilities, network, construction, water