Site Location: Farmborough near Bath

Project: New Foul & Stormwater Drainage Infrastructure Systems

Task: Construction

Work to be undertaken:

- Installation of new Foul & Stormwater Drainage Systems to Client supplied drawings, Clients Construction Management Plan, associated documents & detailed schedules, to include the construction of new manholes, benching, concrete bed and surround new pipelines, reinstate trenches made in Adopted roads to Highway standard.

Methods

- **Site preparation, excavations, construction**
  - Fully brief all members of your team by way of induction and toolbox talk
  - Site engineer to mark out the extents of the excavation.
  - All plant and operators are to be suitably trained and certificated
  - Using existing services drawings check for any buried services. Check for any physical evidence of any services not shown on the drawings. Carry out a CAT survey of the area and mark on the ground any services.
  - Protect tarmac road surfacing from plant damage by way of ply or similar
  - Although Road Closure, take extra precautions for local residents/stray dogs etc.
  - Zone off area for excavation from other trades using orange barriers/road pins
  - Cover deep excavations/exposed chambers with clearly marked covers
  - Before any machine excavation hand excavate trial holes to accurately locate any services within the excavation.
  - The line and level of the excavation will be controlled either by profile boards, laser level, pipe laser or a standard depth below ground level.
  - Trench support to be used on excavations over 1.3m
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THE POPLARS, OLD LANE, FARMBOURGH, BA2 0BW

FOUL & STORMWATER SEWER WORKS METHOD STATEMENT

- Construction of all runs in Compliance with the Sewers For Adoption 6th Edition standard specification including backfill, manholes and air testing each section as completed.
- Excavation will generally be carried out by a suitably sized 360 deg. Excavator and breaker as required as per plant list.
- Concrete to be placed with combination of excavator bucket and lorry chutes. Wash out procedures to be either into provided skip or temporary Type 1/ excavations.
- When complete, area to be reinstated, cleaned and tidied before handover.

Fence and site security erection
  - Zone off working area before any construction work commences
  - Keep delivery area separate from general access of staff where possible
  - Make sure all fencing is supported securely against high winds

Special underground services notice
  See underground services drawing and comply with Pre-excavation checklist
  - Before using mechanical excavators always locate gas pipes by hand dug trial holes.
    - You must not use a mechanical excavator within 0.5 metres of a low/medium pressure gas pipe within 3.0 m of an intermediate pressure gas pipe
    - Any concrete blocks near gas pipes must not be removed as they may be part of an anchoring system – if in doubt contact National Grid on 0800 688 588.
    - Gas pipes must be supported as agreed and detailed in the risk assessment.
    - Take care to avoid trench collapse. Trench sheets must not be placed against metallic gas pipes.
    - To avoid injury you must use Personal Protective Equipment (PPE) as detailed in the risk assessment.
    - Do not use any exposed gas pipe as a hand hold or step.
    - Report all damage, no matter how slight. A gas pipe that has been struck, but appears undamaged, may have caused a leak in a building with a risk of explosion and injury or loss of life.
  - Lifting (Manual and Mechanical)
    - Do not attempt to lift or move materials your own safe capability (recommended <25Kg) or that of the equipment you are using. Ask for help or use mechanical assistance if available.
    - Ensure mechanical lifting equipment is in good order, being used by competent operatives and clear of other personnel.
    - Ensure lifting chains and straps are in good condition and securely fixed.
    - For work involving crane lifting ensure a lifting plan and banksman are supplied
    - Use Banksman where possible.
  - Working at height
    Not applicable
  - Diversion of live sewers
    - Where the trench excavation passes through a concrete or tarmac surfaced area the edges of the trench will be marked across the hard standing and the surfacing saw cut with a road saw. An HAV assessment is to be carried out and the saw operator advised of the daily vibration exposure. After saw cutting the trench width the surfacing will be broken up using a hydraulic breaker mounted on the excavator, anybody working in the close proximity of the breaker must wear ear protection.
    - Sewer materials will be as per drawings for S104 Adoptable Drainage Layout Sept 2013 and compliant with Sewers for Adoption (6th edition) and our quotation.
    - Constructed sections will be laid dry and then final connection to existing made
    - A temporary diversion with over pumping may be setup for continuity of service as required.
    - Manholes are constructed as per Water Industry standard drawings, client drawing and our quotation.
    - Diversion and manhole constructions will be carried out in parallel to live running service. Air tests to be carried out as each section is commissioned.
    - All plant operators are to be suitably trained and certificated. After the excavation is approximately 1m deep a further CAT survey should be carried out to check for deeply buried services.
    - Dependant on the condition of the ground being excavated and the location the sides of the trench will either be battered to a safe angle or trench shoring installed. The shoring will consist of either trench sheets, waler and struts or trench boxes. A suitably sized ladder is to be provided for access into the excavation once the shoring has been installed, the ladder is to be securely tied.
Granular pipe bedding will be placed in the trench and graded to level. Pipes will be lifted into the trench using lifting slings which have been tested and inspected. Plastic pipes may be placed in the trench manually. When pipe cutting is carried out using a Stihl saw a vibration assessment is to be carried out for maximum daily usage. Gloves and goggles should also be worn.

After the pipes have been jointed pipe lengths should generally be air tested before they are covered with bedding material and backfilling the trench.

Trenches will be back filled as per supplied design. Each layer being fully compacted with vibrating compaction plant. HAV assessments should be carried out for the plant used or remotely operated plant used.

Within deep excavation, manholes or confined spaces a gas monitor will be used to check the atmosphere before entry and during work. In relevant cases qualified operatives with Confined Space tickets will be used.

Excavated spoil or heavy materials should not be stored close to the edge of the trench and moved to nominated stockpile area.

Excavations should be fully fenced when left unattended to prevent any persons falling into excavation.

Cut over will take place only during dry weather with dry weather forecast. Winway homes and Wessex Water Inspector to be notified prior to going live. Contingency overpumping and temporary services will be put in place as necessary.

Work involving drainage and sewage/ contaminated soils

- See separate Risk Assessment and Controls

Work adjacent to or under OverHead Power Lines (OHPLs)

When assessing the risks from OHPLs, consider these four key questions:

- What are the risks?
- Who could be affected by them?
- Do the existing control measures remove or significantly reduce the risks?
- Can anything further be done? Good management will reduce the risk of accidents happening. By planning carefully and putting controls in place, workers, contractors or visitors to the site should not come into contact with OHPLs.

- Know the safe operating distances.
- Plan your work so it avoids high-risk areas.
- Use alternative access points and routes which avoid OHPLs.
- Find out the maximum height and vertical reach of all your machinery and equipment and that used by contractors. Inform people Limit access
- If you have to work near OHPLs, use barriers and goalposts to limit access.
- Ensure only machines of a certain height can pass under the barriers.
- Check the poles carrying the OHPLs and report any abnormalities to the electricity company. They should be fitted with climbing guards. If they are not, contact the electricity company for advice.
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FOUL & STORMWATER SEWER WORKS METHOD STATEMENT

Key contacts
Toolbox talk/ Inductions received by:

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Name</th>
<th>Signed</th>
<th>Contact number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works Supervisor</td>
<td>Andy Ford</td>
<td></td>
<td>07730476278</td>
</tr>
<tr>
<td>Health and Safety rep</td>
<td>&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operatives</td>
<td>Adam Lockwood/ Paul Haywood/ Mike Jones/ Les Kulbacki/ Lee Oliver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Agent</td>
<td>Erwin Davis</td>
<td></td>
<td>07704605530</td>
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<tr>
<td>Wessex Water Inspector</td>
<td>Andy Lanning</td>
<td></td>
<td>07770 697974</td>
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1.0 References

Client supplied documentation:

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<tr>
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<tr>
<td>Soil sample sheet</td>
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<td>COSSH datasheets</td>
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<td>Detailed drawings for works</td>
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<tr>
<td>Relevant Permits (to dig/ hot works etc)</td>
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5.0 Plant and Equipment

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<td>360° Large excavator (13tonne)</td>
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<tr>
<td>Compressor/ Breaker</td>
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<td>Diesel bund storage/ spill kit</td>
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FOUL & STORMWATER SEWER WORKS METHOD STATEMENT

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4.0 Other Considerations

6.1 Hours of operation

- Normal hours of operation will be 07.30 – 17.30 Monday to Friday. Deliveries or additional working will be undertaken by arrangement.

7.0 Appendices

7.1 Appendix 1 – Risk Assessment upon request
7.2 Appendix 2 – Permit to Dig (Winway)