Example of Design Stage Statement for Sewer Build-Over

Please note that this will not cover an application where the foundations involve piling within 15m of a Public Sewer.

This statement is Northern Ireland Water's advice to assist in complying with our expectations for a sewer build over as a minimum.

Part 1: Basic Information

Project Summary			
Project address:	*Insert address*	**Project reference no:**	*Insert job number*
Sewer Type Requiring Build-Over:	*Insert Foul, Storm or Both*	**Existing Pipe Material:**	*Insert uPVC, Clay, Iron or Concrete*

Part 2: Suggested Statement Template

Suggested Order of Operations **(NB: Subject to confirmation by the appointed contractor)**

- Utility Service markups (electric, BT, Gas, Water etc) will be requested and received prior to commencement of any works and given to the appointed builder.
- Services located within excavation and site area shall be identified and marked using suitable marker/pegs etc.
- Where applicable, permits to dig must be in place prior to any excavation.
- Ensure a competent person uses a calibrated CAT scanner to survey the working zone prior to any breaking of ground:
    - *Additional scanning shall take place during the works at regular depths as indicated by the equipment manufacturer's guidance until the NI Water sewer location is determined.*
    - *Once the location is determined the design of the proposed extension may require amendment in accordance with NI Water standards.*
    - *If the sewer location is different, then NI Water staff (designated assessor) should be contacted to agree amended proposals before construction works continue.*
- In advance of the replacement of any public sewer, the contractor is to notify NI Water through Waterline waterline@niwater.com regarding when the sewer is being replaced and the associated timescale to complete the replacement and return the flows within the sewers. In relation to flow transfers the following is noted:
    - *Contractor is to be aware of recent/near future weather conditions. Transfer of flows should be completed in dry conditions.*
    - *Flow transfers should take place during low flow conditions. Generally in housing developments this period occurs between mid-morning and early afternoon.*
- During the construction works the existing drainage (and hydraulic capacity) must be maintained at all times. The proposed contractor is to ensure that no damage (including existing manhole covers) or blockages occur to the existing foul and storm sewers. If any damage does occur the contractor will be responsible for:
    - *Cleaning any pollution incident;*
    - *Installing a suitable replacement compliant with NI Water Standards;*
    - *Notifying NI Water at the time of the damage / pollution incident by contacting Waterline via phone on 03458 770 003 and/or waterline@niwater.com.*
- If a contractor cannot locate the relevant public sewer during construction works the contractor will notify NI Water through Waterline at waterline@niwater.com.
- Excavations should proceed in accordance with HSE guidelines, Avoiding danger from Underground Services HSG47

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- The type of temporary support required (and relevant precautions) will be decided before digging any trench or other excavation.
- Edges of excavations will be protected with substantial barriers where people are liable to fall into them. To achieve this, use:
    - *Guard rails and toe boards inserted into the ground immediately next to the supported excavation side; or fabricated guard rail assemblies that connect to the sides of the trench box.*
    - *The support system itself, e.g. using trench box extensions or trench sheets longer than the trench depth.*
    - *Make sure excavations do not undermine the scaffold footings, buried services or the foundations of nearby buildings or walls.*
    - *Before digging starts, decide if extra support for the structure is needed.*
    - *Ensure surveys of the foundations and the advice of a structural engineer is sought if applicable.*
    - *Water entering the excavation needs to be channelled to sumps from where it can be pumped out; however, the effect of pumping from sumps on the stability of the excavation should be considered.*
- Any pipes other than PVC will be replaced by new PVC pipe and any pipes measuring 100mmØ in size will be replaced with a minimum pipe size of 150mmØ unless agreed otherwise.
- Contractor must ensure that the top of the foundations are a minimum of 150mm below the sewer invert level.
- The new foundations will be shuttered and filled with concrete (unless indicated and agreed otherwise).
- Drainage pipes will be laid to the required gradients (as per drawing or match the gradients) ensuring a 150mm deep bed of pea gravel is achieved.
- All fittings to be connected as per the manufacturer's instruction (for example push fit, screw fit with sealant or push fit with sealant).
- When the ducting and pipe work has been laid it is to be covered with a 150mm deep layer of pea gravel and a concrete lintel will be placed over the trench as per engineer's drawings.
- NI Water will at this stage will be contacted to inspect the works completed so far.
- A competent person who fully understands the dangers and necessary safeguarding precautions will inspect the excavation at the start of each shift.
- Excavations will also be inspected after any event that may have affected their strength or stability, or after a fall of rock or earth (soil slippage).
- A record of the inspections will be required and any faults that are found will be corrected immediately.
- A written report should be made following most inspections and should contain the following information:
    - *name and address of the person the inspection was carried out for;*
    - *location and description of the place of work or work equipment inspected;*
    - *date and time of the inspection;*
    - *details of any matter identified that could give rise to a risk to the health or safety of any person;*
    - *details of any action taken as a result of any matter identified;*
    - *details of any further action considered necessary; and*
    - *the name and position of the person making the report.*
- The trench can then be brought up to formation levels with the appropriate materials in accordance with drawing and design standards.

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- A compactor will be used as the level is brought up in accordance with the manufacturer's instructions (NB: care should be taken when compacting near the public sewer).
- Details on how the live flows will be managed throughout the construction and the method of connection will be confirmed by the contractor upon their appointment and notified to NI Water, (if not already identified in the Statement) prior to any works commencing on site to replace the pipes.
- It is noted that this list is not exhaustive, and any other relevant points must be included within the site-specific Construction Stage Method Statement (including piling).

Statement completed by:	
Title/Role:	
Date:	

Please note:
The contractor will also liaise with the appropriate Northern Ireland Water staff to ensure the necessary inspections are requested by submitting the appropriate application form (SBO-A236-Insp) and keep photographic records of the various stages of construction. Inspections can take up to 10 working days however we endeavour to attend site as soon as possible following your request for inspection. If due to an increased level of risk onsite exceeding that of a standard domestic construction, and following submission of a risk assessment, we will endeavour to prioritise the inspection and reschedule accordingly.

We must remind the applicant that the responsibility is of both the employer/client and the contractor to ensure that they have taken all necessary precautions to reduce the risk of danger to the public and employees.