NATIONAL PROPERTY FLOOD RESILIENCE (PFR) FRAMEWORK

SCOPE

Lot 2. SUPPLY AND INSTALLATION OF PROPERTY FLOOD RESILIENCE MEASURES

1. INTRODUCTION

Under this Lot, the *Contractor* shall implement the flood mitigation suggestions produced by the *Consultant* under Lot 1 within the PFR Survey Report that the *Consultant* will provide to the *Contractor.*

The *Contractor* shall use their skill and judgment to assess if the survey consultant suggestions are correct, complete and in line with SHEW.

The *Contractor* shall supply and install a range of standard and bespoke flood resistance or resilient products to protect properties from water ingress during flooding. Example of products include flood doors, barriers, airbricks, non-return valves, sump pumps and waterproofing treatments. Minor building works may be required e.g. raising property thresholds, wall construction, or for example pointing of brickwork and stonework using suitable mortars.

The *Contractor* must be able to source products from a range of third party suppliers or in-house.

The *Contractor's* brief shall include public meetings, inspection of properties, the design and installation of suitable PFR products. Additionally, the *Contractor* shall train the Homeowner and or Tenant, and produce a completion form signed off by the Homeowner.

This Scope should be read in conjunction with the British Standards or other equivalents documents. In the event of conflict, this Scope shall prevail.

Background information can also be found in Appendix O – PFR Process Flow chart.

2. DETAILS OF THE OBJECTIVES

2.1 The objective is to (using the Survey Report as a guide) make the properties at high risk of flooding more resistant and resilient.

2.2 The objectives for the *Contractor* are as follows:

a) ensure all site visits are carried out in accordance with the *Client's* Safety, Health and Environment Code of Practice.
b) carry out engagement with the Homeowners, the public and all interested parties to gain support for the PFR project. In particular gain approval by individual Homeowners to proceed with PFR works at their property
c) design supply and install Property Flood Resilience (PFR) measures at various *sites* to provide resistance and resilient measures to individual properties
d) provide training to Homeowners and Tenants on how to use the measures and complete property sign off paperwork.
e) contribute to carrying out successful PFR exercises

3. DETAILS OF THE *WORKS*

3.1 The *Contractor* shall carry out consultation at each *site* with the Homeowners and Tenants where delegated. This consultation shall consist of the following:

a) Attending a public Drop In session with the *Client* for each of the sites
b) Demonstrate a range of products available
c) Presentation of all options for installation taking into account the property type and Homeowners Tenants capabilities.
d) Discuss all product types and installation locations with the Homeowner including the location of any new chambers.
e) Arrange dates for Works Inspections as agreed with the *Client*
f) Provide timely updates to Homeowners and Tenants of work progress.
g) Gather information from the Homeowner on any private underground or overground services.
h) Discussion with the Homeowner about the requirements to make reasonable adaptations to allow for a resilient power supply (provided by others) in a private agreement with the Homeowner and the *Contractor*. *Works and funding for this will be by private arrangement and do not form part of this contract.*
i) After completion of the works, but before the end of the Defects Period the *Contractor* will attend a site PFR flood exercise and liaise with individual Homeowners on the use of their products.

3.2 The Design and Construction requirements are:

a) The *Contractor* shall use the PFR Survey Report as a basic design identifying what PFR measures are required for each property.

b) The *Contractor* shall carry out a Works Inspection to confirm in detail the *works* including all specific sizes of products required.

c) The *Contractor* shall use their own skill and judgment to identify what further or alternative measures are required and what proprietary items will suit the specific needs.

d) The property type, likely building materials (including any existing hazardous substances), listing and Tenants capabilities shall all be taken into consideration prior to recommendation. Refer to Appendix B.

e) The *Contractor* shall use their skill and judgment to overcome site specific issues that arise during the installation process.

f) The *Contractor* shall be responsible for the design of their proposed PFR measures under the CDM Regulations (2015). Refer to Appendix B. The *Contractor* shall discuss with the *Client* any changes that they propose to make to the design. Changes to the design must be accepted by the *Client* prior to being implemented.

g) In relation to works carried out as part of the contract. The *Contractor* is responsible for ensuring Gas Safety, HETAS and Building Regulation compliance. Gas Safety certification and HETAS certification for individual properties will be provided by the *Contractor*.

h) The *Contractor* shall be responsible for ensuring compliance with all relevant electrical regulations for any electrical works carried out through the contract. Certification, where required, will be provided by the *Contractor*.

i) The *Contractor* shall provide supervision for the *works* at each *site* to an appropriate level and duration to comply with the CDM Regulations Appendix B and in line with SHEW. The *Contractor* shall attend regular progress meetings with the *Client* at each of the *sites* in the construction phase. Frequency will be a maximum of 1 per week for each live site.

j) The *Contractor* shall provide the *Client* with a copy of the Homeowner's sign off document. The sign off document should record that that works have been completed to the Homeowner's property to their satisfaction and should be signed and dated by the Homeowner. The document should also record that adequate training for the installation and storage of the measures has been given.

k) The *Contractor* shall also provide the *Client* with a photographic record of each of the PFR measures fitted. This should be clearly presented on a property by property basis and be provided in full for each site location.

l) The *Contractor* shall attend a flood exercise day after the Completion but before the end of the Defects Period.

3.3 The Post Installation requirements are:

The *Contractor* shall provide the property Homeowners with the following:

a) A warranty with a minimum period of 1 year for all measures supplied and fitted. Where manufacturer's warranty is greater the longest period shall apply.

b) Training on the operation, storage and maintenance of products fitted. A handover pack including written hard copies, plus electronic (if requested) for all products provided. To include a maintenance booklet detailing, maintenance requirements and the basic tools required to install all products.

c) Company contact details.

d) The *Contractor* shall provide the option to sign up to after sales service including maintenance agreements.

e) The *Contractor shall* provide training on the operation, storage and maintenance of products fitted. A handover pack including written hard copies, plus electronic (if requested) for all products provided. The pack is to include a maintenance booklet detailing, maintenance requirements and the basic tools required to install all products. The *Contractor* is to keep a stock of consumable spares for the PFR measures installed or to advise homeowners where spares can be purchased direct from the manufacturer/main supplier.

f) The *Contractor* shall attend a Flood Exercise day after the Completion but before the end of the Defects Period to provide advice and make adjustments to measures fitted as necessary.

3.4 Subcontracting

a) The *Contractor* shall request written approval from the *Client* prior to appointing any design consultant in connection with the *works.* The *Contractor* shall provide details of the designer's previous relevant experience, CVs of key staff, and client references. The *Contractor* shall allow 2 weeks from submission of satisfactory evidence to acceptance by the *Client.*

b) The *Contractor* shall provide the *Client* with details of proposed subcontractors and suppliers, including method statements and risk assessments, for acceptance prior to subcontractors commencing the *works*, and prior to suppliers providing services and materials in connection with the *works.*

c) The *Contractor* shall be satisfied of the quality of all subcontracted items of the *works* prior to submission for review, or prior to requesting an inspection by the *Client, Project Manager,* or *Supervisor.*

d) Requirements and vetting of HETAS, Gas inspections and works shall be carried out in accordance with the respective Lot 1 and Lot 2 scopes.

3.5 Additional requirements are:

a) The *Contractor* shall obtain any Highways approvals required.

b) The *Contractor* shall assist the Client in agreeing all product types and installation location with the Local Authority (Listed Building and Planning) and other statutory bodies (English Heritage and Natural England).

c) Where the *works* affect listed buildings, authorisation will be obtained by the *Client.*

d) The *Contractor* shall adhere to the *Client's* Safety, Health, Environment and Wellbeing (SHEW) Code of Practice (Oct 2017)

e) The *Contractor* shall act as Contractor and Designer under CDM for the installed measures.

f) Site specific Risk Assessment and Method Statements (RAMS) shall be provided to the *Client* for acceptance 2 weeks before commencement on *site*.

g) The *Contractor* shall provide welfare facilities at each site.

h) The *Contractor* shall develop the H&S File as sites progress in liaison with the *Consultant* under Lot 1.

i) The *Contractor* shall provide a draft H&S file in accordance with the *Client's* standard format, (template headings to be confirmed following Framework award), 2 weeks prior to sectional completion or completion of the package of *works* whichever is the sooner.

4. SPECIFICATION STANDARDS AND TESTING TO BE USED

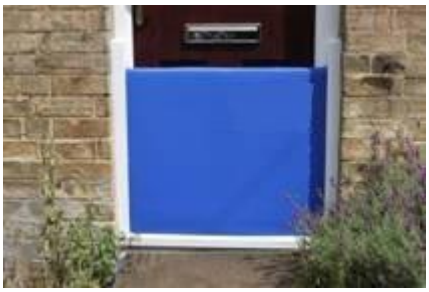
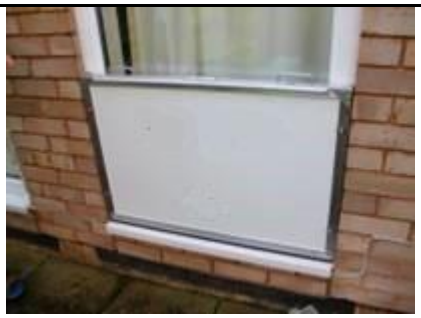
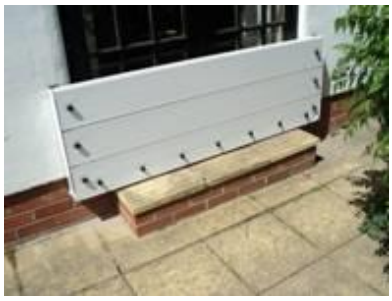
4.1 General Specification

Products where BSi tests for that type of product are available shall be tested to BSi PAS1188-1, BSi PAS 1188-2, BSi PAS 1188-3 or evidence is provided that they meet this recognised industry standard. Contractors must provide details of the test results for the Product (for the avoidance of doubt the product tested must be identical to the Product which is being offered for purchase by the Agency) being tested in accordance with a recognised industry standard ("Product Testing"). The Product Testing must include results setting out the Product's leakage rate in litres per hour per metre.

The *Contractor* shall, where insofar as possible, make all measures passive and require no additional interventions to be made ready for flood. The design of the measure should also take into consideration the ability of the Homeowners/Tenant to install/deploy measures where they are not passive especially where lifting of apparatus is concerned.

4.2 Flood Gates and Barriers

Gates and Barriers Ref: B, C, D, E or F to be used to suit the opening width**.** (to BSi PAS 1188-2014 or evidenced that they meet this recognised industry standard).

Flood Door (Ref: A)	
Barrier with clips to pre-installed into frame (Ref: B)	
Free-standing barrier expanding into recess / door reveals (Ref: C)	
Barrier with Screws into pre-installed sockets (Ref: D)	
Barrier of multiple sections fitted to pre-installed frame (Ref: E)	

Single slot-in barrier with pre-installed frame (Ref: F)	

A barrier will include all fixings and all necessary modifications to existing door and surroundings and installation of required permanent fittings and frames, all necessary reinstatement, durable silicone based sealant around the frame, matching the existing and to the required protection height, and around sills to seal all gaps.

Installation works to comply with the following:

Title	**Date or Revision**	**Publicly available**
BSi PAS 1188-2014 (barriers & doors)	2014	Yes
BS EN 1504-2:2004 (repairs)	2004	Yes
BS 8102:2009 (waterproofing & sealants)	2009	Yes
BS EN ISO 11600: 2003+A1:2011. (Silicone sealant	2003	Yes

4.3 Flood Doors

Flood doors, Ref: A, can be UPVC, hardwood or composite (to BSi PAS 1188-2014 or evidenced that they meet this recognised industry standard), door details as agreed by the *Client*.

The doors are to be solid, or where not solid should consider how the ingress and egress of water can be managed in the voids of the door or frame.

The door shall include all necessary modifications to the existing door opening and if required a new threshold step. All required ironmongery is also to be included. The door or the fitting of the door shall be carried out in such a way that when the designed flood retention level is reached there is a means to allow floodwater to enter the property thus preventing structural damage from hydrostatic pressures outside the building.

Flood door installation works to comply with the following:

Title	**Date or Revision**	**Publicly available**
BSi PAS 1188-2014 (barriers & doors)	2014	Yes

BS EN 1504-2:2004 (repairs)	2004	Yes
BS 8102:2009 (waterproofing & sealants)	2009	Yes
BS EN ISO 11600: 2003+A1:2011. (Silicone sealant	2003	Yes

4.4 Airbrick replacements and covers, including vent covers.

Automatic closing airbricks are to be used unless otherwise agreed with the *Client.*

The replacement with automatic closing airbricks is to include removal and disposal of the existing and all necessary modifications to install the replacement.

Airbrick replacements are to match the colour of the existing walls or the airbrick being removed. It will include mortar colour and pointing which is to match that existing.

If the use of Airbrick covers is agreed by the Client the covers are to match the colour of the existing wall. Any alternative to the existing colour is to be agreed with the Client.

All cover frames are to be sealed with a suitable sealant.

Gas or solid fuel ventilation vents are NOT to be provided with covers. Where such vents exist within the identified flood zone, a certified Gas safe or HETAS Engineer is to be procured by the *Contractor*. These suitably qualified persons will advise on the re-routing of any ventilation or any other steps may be required. This information is to be provided by the *Contractor* at the time of their design recommendations. This is to allow the works required to be clearly identified and priced. Additionally, this could identify properties that currently do not comply with the required regulations.

Any works to gas or solid fuel ventilation carried out under this contract, shall be inspected certified and signed off by a suitably qualified person.

Homeowners who are issued with an improvement notice from the Gas safe or HETAS Engineer and do not comply will not be included in the PFR scheme.

All PFR Measures that are listed in the Works Inspection shall be suitable to work in sites where Radon and Landfill Gas has been identified.

4.5 Waterproofing applications for external walls

The waterproofing application must comply with BS EN 1504-2 (alternative standard wording BS), be able to inhibit the passage of water and water-borne contaminates whilst retaining the ability for water vapour to escape from the structure. The waterproofing is not to be a PVA based product.

The substrate must first be tested to ensure there is no colour reaction or deterioration.

4.6 Waterproof Render

The render system is to be designed to resist hydrostatic pressure must meet Grade 3 (No water penetration acceptable) of BS 8102:2009 (alternative standard wording BS) and the requirements of

Section 8 -Type A waterproofing protection for use in high water table areas (Protection against water ingress which is dependent on a separate barrier system applied to the structure).

4.7 Non-return Valves

Fully automatic valves to stop sewage or floodwater surging back up into the property may be of the push fit type inserted into foul drainage pipes within existing inspection chambers and/or installed in-line to existing waste and overflow pipes above ground level. These will be located externally where possible. The valves supplied are to be designed specifically for outdoor use to ensure that they are not susceptible to freezing in winter conditions. Any other location to external must be approved by the *Client*.

4.8 Full Port non-return valves

Full port non-return valves will be provided in existing chambers unless agreed with the *Client.* Valves will be fully open and allow solids to flow freely and unrestricted through the valve but in flood conditions when water surges back through the drainage system the gate is automatically deployed by the hydraulic pressure of water. Valves will be low maintenance and fully rod-able.

Where it is neither possible to fit within existing chambers nor install push fit non return valves then a new chamber, with suitable cover, is to be installed constructed to suit the valve, ground and surcharge loadings, all as agreed with the Client.

4.9 Dewatering pumps

4.9.1 Skimmer Pumps (hand held puddle pumps)

Portable pump able to pump water down to 1mm. The pump will have a check valve (non return valve) to prevent back flows, able to operate for extended periods with little or no water, supplied with 10 metres of heavy duty rubber 230 volt power cable with RCD trip protection, and 10 metres (or to suit need of the property) minimum 25mm diameter outlet pipe. Minimum free passage 6mm. Minimum flow rate 175 litres per minute.

4.9.2 Electric Sump Pumps:

Permanent electric sump pumps shall, where possible, be located outside the property. An internal sump is to be provided within the property in the sub-floor void space with permanent pipework to the external sump pump and chamber. The sump pump shall be supplied with automatic float switches. The limit switches on the floats shall be set to maintain flood water below the suspended floor construction & damp proof course level only and not to drain the water from the sub-floor void completely. Installation details are to be agreed with the *Client.*

The pump is to be supplied and installed with heavy duty rubber 230 volt power cable with RCD trip protection and a 100mm maximum diameter outlet pipe. Minimum free passage to be 9 mm. Minimum flow rate of 480 litres per minute. Hard wired installation will require electrical certification.

Chambers and chamber covers to allow access for maintenance of the pumps shall be of adequate size to allow the removal of the pumps. New chambers, with suitable covers, are to be installed constructed to suit the ground and surcharge loadings, all as agreed with the Client.

4.10 Pan-seal/Toilet Bungs/Toilet Stoppers:

Pan-seals and toilet bungs are to prevent sewage backflow coming back up the toilet in flood conditions. Bungs or stoppers are preferred but may not be suitable for all applications. Bungs may be of the inflatable device to fit in the U bend. Pan Seals of the type which fit directly below the pan rim and inflated to create the required seal. Bungs and Pan Seals are to be provided with a suitable hand pump and connection.

4.11 Flood gates in garden walls or embankments:

Barriers Ref: B, C, D, E or F can be used to suit the opening width**.** The barrier will include all fixings and all necessary modifications to existing wall or embankment including and permanent fittings, frames, posts, sills and any required post foundation.

Alternatively if agreed by the *Client* hardwood or composite flood gates specifically designed for the purpose can be used. (Currently not available with BS approval).

4.12 Wet Tests

10% of PFR products fitted to openings on a site basis are to be wet tested. Refer to Appendix E.

5. CONSTRAINTS ON HOW THE CONTRACTOR PROVIDES THE *WORKS*

5.1. Use of the Site

a) The *Contractor* shall identify a suitable location for use as a site compound during the *works* and submit proposals to the *Client.*

b) The *Contractor* may only use the Site for purposes connected with the *works*.

c) The *Contractor* shall make all adequate provisions to allow the Homeowner / Tenant unhindered access to their property at all time.

5.2 Access to the Site

a) The *Contractor* shall make arrangements for access to the Site for the duration of the *works*.

b) The *Contractor* shall determine the most appropriate and achievable access routes for the construction of the *works* and submit his proposals to the *Client* as part of the design.

c) The *Contractor* shall protect all access routes used during *works* and reinstate these to pre-*works* condition or better.

5.3 Deliverables

a) The *Contractor* shall submit all deliverables to the *Client* for acceptance. The *Contractor* shall allow a minimum of two weeks for review of all draft deliverables by the *Client*, and ensure sufficient time is included to address any comments arising.

5.4 Parking

a) The *Contractor* shall provide adequate parking for site based personnel and visitors within his site compound.

5.5 Pollution, ecological and environmental impacts

a) The Preliminary Environmental Information Report is provided as 'Other Information'; this presents the current consideration of pollution, ecological and environmental impacts.

The *Client* is committed to the environmental principles of stewardship and sustainability and has corporate goals to maintain and enhance the water environment.

The *Contractor* shall provide the *works* in accordance with environmental best practice. The *Contractor* shall produce a suitable Environmental Risk Assessment to identify the possible risks from their activities and appropriate measures to minimise or eliminate them. Permitting and / or exemption of activities that are coved in the Environment Permitting Regulations shall be consider and the relevant permissions obtained prior to works starting on site.

Whilst working in a river channel, drainage course or flood plain, the *Contractor* shall take all necessary measures for the adequate discharge of flood waters and for the continued operation of all land drainage systems in the area.

b) The *Contractor* shall prepare, for acceptance of the *Client*, a Pollution Emergency Plan prior to the commencement of the construction works which will include a 24 hour call out procedure with the associated telephone numbers.

5.6 Occupied premises and users

a) The *Contractor* shall not gain access to any occupied premises or third party land that is outside the Site without the prior written consent of the *Client*.

5.7 Confidentiality

a) The *Contractor* shall not disclose information in connection with the *works* except when necessary to carry out their duties under the contract or their obligations under the contract.

b) The *Contractor* may publicise the services only with the *Client's* prior written agreement.

5.8 Security and protection on the site

a) The *Contractor* shall establish a liaison procedure with the Environment Agency's flood resilience team to obtain advance flood warnings.

5.9 Security and identification of people

a) The *Contractor* shall ensure that the construction *works* do not compromise the security of properties within or adjacent to the Site.

b) The *Contractor* is wholly responsible for the security of the compound, passage of vehicles, personnel/pedestrians and security of neighbouring properties which may be affected by the works, including personnel, plant, equipment and materials used in the delivery of the *works*.

5.10 Protection of existing structures and services

a) The *Contractor* shall avoid damage to highways, roads, properties, land, trees and other vegetation, boundaries and any other features of the apparatus of statutory undertakers, the

Highways Authority and others. In the event of damage the *Contractor* shall undertake repairs to pre-construction condition.

b) The *Contractor* shall restore any fencing that he is permitted to remove, and repair any fencing or gates that may be damaged as a result of his operations.

c) Debris burning shall not be permitted under any circumstances

d) The *Contractor* shall repair any structure or service damaged during the execution of the works. The *Contractor* shall make safe and restore any structure to its operative condition to the satisfaction of the *Client* and the owner. The requirements of this Clause shall extend to any structure and service wherever it may be.

5.11 Protection of the works

a) The *Contractor* protects the *works*, Material, Plant and Equipment liable to damage either by the weather or by the method used for carrying out the construction of the *works*. Damage attributable to the *Contractor's* activities shall be determined by the *Client* and remedied by the *Contractor*. The cost of making good any damage shall be met by the *Contractor.*

5.12 Cleanliness of the Site

a) The *Contractor* shall take all reasonable steps to minimise dust nuisance during the construction of the w*orks* in accordance with pollution emergency plans.

b) The *Contractor* prevents vehicles entering and leaving the Site depositing mud or other debris on the surface of adjacent roads, pavements or footpaths, and removes promptly any materials deposited.

c) The *Contractor* keeps the Working Areas tidy and promptly removes rubbish, waste and surplus. Materials, Plant and Equipment are positioned, stored and stacked in a safe and orderly manner.

5.13 Traffic Management

a) The *Contractor* is responsible for any traffic safety and management, including obtaining road closure, opening, or traffic signals consents and nominates one of his site staff to be responsible for all related activities.

b) Before any work in, or affecting the use of, any highway or road is commenced, the *Contractor*'s proposed method of working, including any special traffic requirements, is agreed with and confirmed in writing to, the *Client*, and all relevant authorities.

c) Where appropriate the *Contractor* shall produce a Traffic Management Plan to be submitted to the *Client* prior to construction of the *works*. Traffic movement to and from the Site is to be the minimum necessary and delivery and removal of Materials and Equipment shall avoid peak traffic hours.

d) The Traffic Management Plan is to include, but is not limited to, the following:

- Access routes to be taken by heavy vehicles, noting any height or weight restrictions.
- Structural assessment of any weak farm crossings/culvert/bridges which need to be crossed.
- Timings for heavy load movements.
- Vehicular routing.
- Parking restrictions for construction vehicles on the public highway surrounding the site.
- Pedestrian walkways around the site.
- Storage areas.
- Timetable for removal of site compound equipment.

e) The *Contractor* co-operates with the relevant authorities concerning *works* in, or access to, the highway. The *Contractor* informs the *Client* of any requirements or arrangements made with the relevant authorities.

5.14 Condition survey

a) At least 2 weeks prior to taking possession of the Site, the *Contractor* shall undertake a condition surveys of all highways, property, land and any other features which may be affected by the *works* including boundaries, gates, fences, walls as well as land and surfaces within the working areas, access routes, compounds and all private properties and structures adjacent to the working areas. The *Contractor* shall make a note of any existing damage and bring this to the attention of the Homeowner or Tenant. The *Contractor* shall provide a copy of the condition survey to the *Client.*

b) The *Contractor* shall repeat the condition survey on completion of the *works* and provide a copy to the *Client.*

c) Photographs, surveys and inventories must be date stamped and copies held by the *Contractor*. The *Contractor* shall provide these to the landowner(s) affected, the *Client*, the *Client's* estates officers, the *Client* and the *Supervisor*.

d) The *Contractor* shall undertake condition surveys with the *Supervisor*, and any others invited by the *Contractor*, *Client* or *Supervisor*. The *Contractor*, *Client* and *Supervisor* notify each other in advance if any others are invited. The *Contractor* will remedy damage attributable to his activities. The cost of making good any damage shall be met by the *Contractor.*

e) The *Contractor* shall give at least 1 week notice to the *Client* and *Supervisor* prior to undertaking any condition survey.

5.15 Consideration of Others

a) The *Contractor* shall register the site and act in accordance with the Considerate Contractor Scheme. As such the *Contractor* shall work to limit the impacts of the *works* on local residents and the land uses. The *Contractor* shall identify a named individual to act as the initial point of contact for local residents and enquiries from the general public.

5.16 Control of site personnel

a) The *Contractor* shall ensure that all persons working on or visiting the Site hold a valid and current Construction Skills Certification Scheme (CSCS) card. Persons without this card shall be escorted at all times by a member of the site team.

b) A visitors' book will be maintained by the *Contractor* in which the date, the time in, the time out, evidence of a specific Health and Safety induction, CSCS number, and the name and company of the person visiting shall be noted.

c) The *Contractor* shall make appropriate arrangements for the control of people working and visiting the Site.

5.17 Waste materials

a) The *Contractor* shall provide a suitable assessment for the removal and disposing of any hazardous materials by suitable licensed and regulated parties.

5.18 Deleterious and hazardous materials

a) Refer to CDM Appendix B including existing fixed materials at the property.

The *Contractor* shall consider the existing fixed materials that would be disturbed as a part of the works. An appropriate assessment should be carried out to identify the type and hazards and an appropriate additional measure needed to mitigate the risk for the *Contractor* and the Homeowners/ Tenants. This process is described in Appendix B. Refer to RAMS 3.16.

6. SERVICES AND OTHER THINGS PROVIDED BY THE *CLIENT*

6.1 Services and other things for the use of the *Client* or visitors to be provided by the *Contractor* at the Site Compound

a) The *Contractor* shall provide the following on the Site for the duration of construction:

- Parking.
- Meeting room.
- Storage facilities.
- Medical facilities and first aid.
- Sanitation, with provision for segregated male and female WC.
- Security.
- Sign boards and other signage.
- Safety equipment and services.
- Fences, screens and hoardings.
- Maintenance of access roads.
- Utilities, e.g. Water and power.

Specific details of what is to be provided shall be included in the Construction Phase Plan.

6.2 Services and other things to be provided by the *Client*

a) The *Client* shall provide the *Contractor* with access to the Site.

b) The *Contractor* shall pay all third party costs associated with applications for consents, approvals, agreements and licences in connection with the *works*.

NEC4 Engineering and Construction Short Contract

Lot 2

National Property Flood Resilience Framework

A contract between	**The Environment Agency** **Horizon House** **Deanery Road** **Bristol** **BS1 5AH**
And	**Lakeside Flood Solutions Ltd.**
For	**Supply and installation of flood resilience measures for properties in SSD – Kings Somborne (Hampshire)**
	Contract Forms - **Contract Data** - **The *Contractor's* Offer and *Client's* Acceptance** - **Price List** - **Scope** - **Site Information**

Contract Data

The *Client's* Contract Data

	The *Client* is	
Name	Environment Agency	
Address for communications	Chichester Office, Oving Road, Chichester PO20 2AG	
Address for electronic communications	[redacted]	
The *works* are	Supply and installation of flood resilience measures as per Lot 2 of PFR Framework. Site location – Kings Somborne (Hampshire)	
The *site* is	As per Property List	
The *starting date* is	16/10/2023	
The *completion date* is	14/06/2024	
The *delay damages* are	Nil	Per day
The *period* for reply is	2	weeks
The *defects date* is	52	weeks after Completion
The *defects correction period* is	4	weeks
The *assessment day* is	the last working day	of each month
The *retention* is	[redacted]	%
The United Kingdom Housing Grants, Construction and Regeneration Act (1996) **does** apply.		
The *Adjudicator* is : the person appointed as follows:		
In the event that a first dispute is referred to adjudication, the referring Party at the same time applies to the Institution of Civil Engineers to appoint an *Adjudicator*. The application to the Institution includes a copy of this		

definition of the *Adjudicator*. The referring Party pays the administrative charge made by the Institution. The person appointed is also *Adjudicator* for later disputes.

Contract Data

The *Client's* Contract Data

The interest rate on late payment is	0.5	% per complete week of delay.
For any one event, the liability of the *Contractor* to the *Client* for loss of or damage to the *Client's* property is limited to	£100,000	
The *Client* provides this insurance	None	

Only enter details here if the *Client* is to provide insurance.

Insurance Table

Event	Cover	Cover provided until
Loss of or damage to the *works*	The replacement cost	The *Client's* certificate of Completion has been issued
Loss of or damage to Equipment, Plant and Materials	The replacement cost	The Defects Certificate has been issued
The *Contractor's* liability for loss of or damage to property (except the *works*, Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of the *Contractor*) arising from or in connection with the *Contractor's* Providing the Works	Minimum £5,000,000 in respect of every claim without limit to the number of claims	
Liability for death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law	
Failure of the *Contractor* to use the skill and care normally used by professionals providing works similar to the *works*	Minimum £5,000,000 in respect of every claim without limit to the number of claims	6 years following Completion of the whole of the *works* or earlier termination

The *Adjudicator nominating body* is	The Institution of Civil Engineers
The *tribunal* is	litigation in the courts

The *conditions of contract* are the NEC4 Engineering and Construction Short Contract June 2017 with October 2020 amendments and the following additional conditions

Only enter details here if additional conditions are required.

Z1.0	Sub-contracting

Z1.1	The *Contractor* submits the name of each proposed sub-contractor to the *Client* for acceptance. A reason for not accepting the sub-contractor is that their appointment will not allow the *Contractor* to Provide the Works. The *Contractor* does not appoint a proposed subcontractor until the *Client* has accepted him.
Z1.2	Payment to subcontractors and suppliers will be no more than 30 days from receipt of invoice.
Z2.0	Environment Agency as a regulatory authority
Z2.1	The Environment Agency's position as a regulatory authority and as *Client* under the contract is separate and distinct. Actions taken in one capacity are deemed not to be taken in the other.
Z2.2	Where statutory consents must be obtained from the Environment Agency in its capacity as a regulatory authority, the *Contractor* is responsible for obtaining these and paying fees. The *Client's* acceptance of a tender and the *Client's* instruction or variation of the works does not constitute statutory approval or consent.
Z2.3	An action by the Environment Agency as regulatory authority is not in its capacity as *Client* and is not a compensation event.
Z3.0	Confidentiality & Publicity
Z3.1	The *Contractor* may publicise the works only with the *Client's* written agreement
Z4.0	Correctness of Site Information
Z4.1	Site Information about the ground, subsoil, ducts, cables, pipes and structures is provided in good faith by the *Client* but is not warranted correct. The *Contractor* checks the correctness of any such Site Information they rely on for the purpose of Providing the Works.
Z5.0	The Contracts (Rights of Third Parties) Act 1999
Z5.1	For the purposes of the Contracts (Rights of Third Parties) Act 1999, nothing in this contract confers or purports to confer on a third party any benefit or any right to enforce a term of this contract.
Z6.0	Design
Z6.1	Where design is undertaken, it is the obligation of the *Contractor* to ensure the use of skill and care normally used by professionals providing similar design services.
Z6.2	The *Contractor* designs the parts of the works which the Scope states they are to design.
Z6.3	The *Contractor* submits the particulars of their design as the Scope requires to the *Client* for acceptance. A reason for not accepting the *Contractor's* design is that it does not comply with either the Scope or the applicable law. The *Contractor* does not proceed with the relevant work until the *Client* has accepted his design
Z6.4	The *Contractor* may submit their design for acceptance in parts if the design of each part can be assessed fully.
Z7.0	Change to Compensation Events
Z7.1	Delete the text of Clause 60.1(11) and replace by: The *works* are affected by any one of the following events • War, civil war, rebellion revolution, insurrection, military or usurped power • Strikes, riots and civil commotion not confined to the employees of the *Contractor* and sub-contractors • Ionising radiation or radioactive contamination from nuclear fuel or nuclear waste resulting from the combustion of nuclear fuel • Radioactive, toxic, explosive or other hazardous properties of an explosive nuclear device • Natural disaster • Fire and explosion • Impact by aircraft or other device or thing dropped from them
Z8.0	Framework Agreement
Z8.1	The *Contractor* shall ensure at all times during this contract it complies with all the obligations and conditions of the Framework Agreement made with the *Client.*
Z9.0	Termination

Z9.1	Payment on Termination Replace Clause 92.3 with "If the *Contractor* terminates for Reason 1 or 6, the amount due on termination also includes 5% of any excess of a forecast of the amount due at Completion had there been no termination over the amount due on termination assessed as for normal payments".
Z10 Z10.1 Z10.2 Z10.3	Data Protection Schedule 11 – Data Protection Schedule of the Deed of Agreement shall be incorporated into this Agreement. A request or instruction pursuant to Schedule 11 by the *Project Manager* shall be treated as being a request or instruction by the *Client*. For the avoidance of doubt, reference to Supplier in Schedule 11 is reference to the *Contractor.*
Z11 Z11.1	Liabilities and Insurance Civil data protection claims and regulatory fines for breaches of Data Protection Legislation are excluded from any limit of liability stated.
Z30.0	Material Price Volatility The *Client* recognises the ongoing pricing uncertainty in relation to materials for the period from 1 July 2021 to 30 June 2023 the *Client* will mitigate this additional cost through this clause. Payment is made per assessment based upon a general average material proportion within assessments, calculated at 40%.
Z30.1	Defined terms a) The Latest Index (L) is the latest index as issued by the *Client*. The L, which is at the discretion of the *Client*, is based upon the issued consumer price index ((CPI) based upon the 12-month rate) before the date of assessment of an amount due. b) The Price Volatility Provision (PVP) at each date of assessment of an amount due is the total of the Material Factor as defined below multiplied by L for the index linked to it. c) Material Factor (MF) 40% is used, based on a general average material proportion across our programme. The volatility provision is only associated with material element. No volatility provision is applicable to any other component of costs.
Z30.2	Price Volatility Provision Through a Compensation Event the *Client* shall pay the PVP. PVP is calculated as: Assessment x MF x L = PVP If an index is changed after it has been used in calculating a PVP, the calculation is not changed and remains based upon the rate issued by the *Client*. The PVP calculated at the last assessment before 30 June 2023 is used for calculating the price increase after that date.
Z30.3	Price Increase Each time the amount due is assessed, an amount for price increase is added to the total of the Prices which is the change in the Price for Work Done to Date for the materials component only (and the corresponding proportion) since the last assessment of the amount due multiplied PVP for the date of the current assessment.
Z30.4	Compensation Events The *Contractor* shall submit a compensation event for the PVP on a monthly basis (where applicable) capturing Defined Cost only for the PWDD increase in month. Forecasted costs should only be considered for the June 2023 period compensation event.

Assessment Date	Defined Cost?	Forecasted Cost?
31st Jul 21	In period costs only	No
31st Aug 21	In period costs only	No

30th Sept 21	In period costs only	No
31st Oct 21	In period costs only	No
30th Nov 21	In period costs only	No
31st Dec 21	In period costs only	No
31st Jan 22	In period costs only	No
28th Feb 22	In period costs only	No
31st Mar 22	In period costs only	No
30th Apr 22	In period costs only	No
31st May 22	In period costs only	No
30th Jun 22	In period costs only	No
31st Jul 22	In period costs only	No
31st Aug 22	In period costs only	No
30th Sept 22	In period costs only	No
31st Oct 22	In period costs only	No
30th Nov 22	In period costs only	No
31st Dec 22	In period costs only	No
31st Jan 23	In period costs only	No
28th Feb 23	In period costs only	No
31st Mar 23	In period costs only	No
30th Apr 23	In period costs only	No
31st May 23	In period costs only	No
30th Jun 23	In period costs only	No
31st Jul 23	In period costs only	No
31st Aug 23	In period costs only	No
30th Sept 23	In period costs only	No
31st Oct 23	In period costs only	No
30th Nov 23	In period costs only	No
31st Dec 23	In period costs only	No
31st Jan 24	In period costs only	No
28th Feb 24	In period costs only	No
31st Mar 24	In period costs only	Forecasted costs for remainder of contract

The Defined Cost for compensation events is assessed using

- the Defined Cost at base date levels for amounts calculated from rates stated in the Contract Data for People and Equipment and

- the Defined Cost current at the date the compensation event was notified, adjusted to the base date by 1+PVP for the last assessment of the amount due before that date, for other amounts.

Contract Data

The *Contractor's* Contract Data

	The *Contractor* is	
Name	Lakeside Flood Solutions Ltd.	
Address for communications	Unit 2E, Invest House, Bruce Road, Fforestfach Industrial Estate, Swansea, SA5 4HS	
Address for electronic communications	[redacted]	
The *fee* percentage is	0	%
The *people rates* are	As per Pricing Schedule	
category of person	unit	rate
Supervisor	Hour	[redacted]
Craftsman	Hour	
Labourer	Hour	
Project Manager	Hour	
Framework Director	Hour	
The *published list of Equipment* is		N/A
The *percentage for adjustment for Equipment* is		N/A

Contract Data

The *Contractor's* Offer and *Client's* Acceptance

The *Contractor* offers to Provide the Works in accordance with these *conditions of contract* for an amount to be determined in accordance with these *conditions of contract*.		
The offered total of the Prices is		[redacted] As per Pricing Schedule 'Total Price' Summary tab
	Enter the total of the Prices from the Price List.	
Signed on behalf of the *Contractor*		
Name	[redacted]	
Position		
Signature		
Date	11/10/23	
The *Client* accepts the *Contractor's* Offer to Provide the Works		
Signed on behalf of the *Client*		
Name	[redacted]	
Position		
Signature		
Date	11/10/2023	

Price List

Item Number	Description	Unit	Quantity	Rate	Price
Pricing Schedule					
As per Price List document: PFR Lot 2 Pricing Schedule_KS - LFS 16.08.23_revised BH v3					
				The total of the Prices	[redacted]

The method and rules used to compile the Price List are PFR Framework pricing schedule.

See Lakeside Notes on Pricing Schedule (Tab 3)

Scope

1. Description of the *works*

Please refer to the beginning of this document

NATIONAL PROPERTY FLOOD RESILIENCE (PFR) FRAMEWORK - Lot 2. SUPPLY AND INSTALLATION OF PROPERTY FLOOD RESILIENCE MEASURES - SCOPE

2. Drawings

Drawing Number	Revision	Title
N/A		

3. Specifications

Title	Date or Revision	Tick if publicly available
Minimum Technical Requirements	V12 (Dec 2021)	

CDM Regulations		☑
SHEW CoP	V5 (Jan 2023)	
PFR Framework Lot 2 Scope	As per the framework	
CIRIA - Code of Practice for Property Flood Resilience	Edition 2, 2020	

4. Constraints on how the *Contractor* Provides the Works

The Contractor must have permission from the Client prior to engaging with a homeowner.

Working times

The *Contractor* will be permitted to work between 7.30am and 6.00pm on weekdays (Monday to Friday)

No work shall be executed outside these times or on Saturdays, Sundays or public Holidays without the prior written approval of the *Client*. Arrangements should be made and agreed with individual property owners, residents or tenants for working start and finish times.

5. Requirements for the programme

The *Contractor* submits his programme with the *Contractor's* Offer for acceptance. The *Contractor* shows on each programme which he submits for acceptance (in form of Gantt chart showing the critical path, proposed order and timing to undertake the works and proposed plant and labour resources) the following:

(a) Period required for mobilisation/ planning & post contract award

(b) starting date

(c) Each of the activities listed within the Price List

(d) Any key third party interfaces: lead in periods for materials and sub-contractors; time required to obtain consents/waste permits; stated constraints; *Contractor's* risks.

(e) Completion date

6. Services and other things provided by the *Client*

Item	**Date by which it will be provided**
N/A	

7. Site Information

Please see attachment for Surveys

Proposed sub-contractors

	Name and address of proposed subcontractor	Nature and extent of work
1.	Form of Contract:	
2.	Form of Contract:	
3.	Form of Contract:	
4.	Form of Contract:	