



Hamworthy Park Paddling Pool

Project DN315318

PROCUREMENT PROCEDURE: UK OPEN

Appendix D Pre Construction Information

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Introduction

Objectives

The Pre-Construction Information provides the health and safety focus for the design and construction phase of a project. It sets out to ensure that the design and construction of the works are effected in a safe way that complies with current health and safety legislation, in particular the requirements of the Construction (Design and Management) Regulations 2015.

This information is included as part of the documentation issued to designers and contractors and is to be developed by the successfully appointed Principal Contractor prior to work commencing. No work is to commence until the Principal Contractor's Construction Phase Plan has been assessed for its adequacy.

On receipt of instructions to proceed, the Principal Contractor is under a legal duty to administer, implement and update the Construction Phase Plan throughout the contract period as required by changes in design or circumstances.

Health and Safety Information

During the pre-construction phase of a project, the Pre-Construction Information brings together health and safety information obtained from the Client and Designer and Principal Designer if one is appointed (for projects involving more than one Contractor).

The Construction Phase Plan during construction will draw on the Principal Contractor's health and safety policy and assessments, the Pre-Construction Information prepared by the Principal Designer and the details on the management and prevention of health and safety risks created by Contractors and Sub-Contractors. The Construction Phase Plan will continue to provide a co-ordinating mechanism as construction progresses. The Principal Contractor will be required to maintain the Construction Phase Plan up to date for the duration of the Contract.

Hazard Identification

The hazards identified in this Pre-Construction Information are those identified during the initial design stage of the project. Further risk assessments must be prepared by the Principal Contractor.

The hazards identified as a result of these risk management procedures shall be considered by the Principal Contractor during the development of the Construction Phase Plan that shall be submitted for review prior to any works commencing.

The Principal Contractor is required to take appropriate measures to control the risks created by these hazards, and any others he might recognise, and to prepare detailed method statements for managing these aspects of the works throughout the Contract.

1 Description of the Project

1.1 Introduction

Borough of Poole is seeking an experienced, competent partner to build a modern paddling pool facility that is high-quality, sustainable and user-friendly to enable and encourage leisure opportunities for the young people of Poole.

Borough of Poole's purpose is to improve the quality of life for the people of Poole. The Council prioritises protecting and enhancing Poole's beautiful environment in a sustainable way. The Council is committed to improving the quality of parks and open spaces and their facilities and, in doing so, ensuring that Poole's public spaces are safe, clean, protected, attractive and easy to use.

Borough of Poole acknowledges that residents perceive parks and open spaces to be a top factor for a good place to live; therefore we endeavour to provide good quality, accessible open spaces and leisure opportunities across the town in which young people can thrive and achieve their full potential.

Financial pressures placed on Local Authorities have increased the need for improved sustainability of parks and open spaces and their associated services and facilities. It is anticipated that a modern facility will generate annual financial savings to the Council, help to improve aesthetic appeal and operational elements, and deliver a long-term sustainable future for the paddling pool.

1.2 Project description and programme details

The project is to demolish the existing pool slab and the older slab beneath it, a remnant element of the original pool constructed; and build a new concrete slab that will be pinned to pile foundations.

The existing structure is undergoing differential settlement, due to poor ground conditions and ground water pressure from nearby tidal action, leading to a clear series of cracking. As the settlement is localised to the eastern side of the pool the structure is now unable to be adequately filled without overtopping on the lower side. Reinforced piles are to be installed to improve ground stability and a new reinforced concrete slab installed with movement joints to create flexibility.

The new structure will consist of a 350mm thick slab of 35.3m diameter, thereby fitting within the existing plan area of the pool. The new structure will be supported on piles. Due to the diameter of the pool, its slab will be cast in sections over multiple pours. There are to be six radial expansion joints which are 9.4m in length, these divide the outer segments into equal proportions. These meet at one central expansion joint which is 51.8m in circumference (16.5m diameter). These sections will be connected via water tight movement joints. The slab will be designed to minimise changes to the existing water filtration system.

Design working life of the structure shall be 50 years.

The piles are to be designed by the contractor to resist predicted vertically downward loads of approximately 200kN per pile. Piles are much cheaper than the slab so the ideal cost-effective solution would be to increase the number of these if necessary, opposed to slab thickness. The current number of piles is 109 with diameter of 250mm. The depth of these may also be increased depending on the loads produced by superstructure modelling.

The slab will be designed to minimise changes to the existing water filtration system. The location of the beach slope is to be moved to the west of the pool.

Wherever possible, materials will be sourced with consideration to sustainability and the environment with renewable/recycled materials being considered as part of the design specification process. Demolition waste will be reused on site if possible, e.g. crushed concrete from the existing slabs may be reused in the build-up of the ground prior to the piling. Remaining concrete will be removed from site, processed and recycled. Reinforcement and other metals will be removed from site and recycled.

See drawing 70044842-WSP-SGN-DR-CB-0011.

1.3 Key Dates

Planned start date on 28th January 2019.

Planned completion date by 18th April 2019.

The minimum time to be allowed between appointment of the Principal Contractor and instruction to commence work on site:

4 weeks have been allowed for mobilisation.

1.4 Location Details and Map

OS Grid References:

- Hamworthy Park: SY 997002
- Paddling Pool: SY 99739013

See drawing 70044842-WSP-SGN-DR-CB-0001.

1.5 Contacts:

Duty Holder	Name	Organisation	Address	Other contact details	
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Duty Holder	Name	Organisation	Address	Other contact details	
Designer	Azulay	Poole	Country Park, Poole, Dorset BH17 7BJ	(M)	07814 423828
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Designer	Sarah Wood	WSP	Town Hall Annexe, St Stephen's Road Bournemouth BH2 6EA	(T)	01202 371640
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Principal Contractor				(T)	
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2 Site Information & Management Requirements

2.1 Background & Site Information

Hamworthy Park is a borough-wide, Green Flag Park, and one of Poole's premier tourist attractions that boasts views across Poole Harbour to Brownsea Island. The park is made up of a promenade with beach huts, open space, children's play area and paddling pool, as well as being licensed for outdoor events. Concessions on site include Harbour Challenge Outdoor Activity Centre and Hamworthy Park Café, with other facilities such as a tennis court, outdoor exercise equipment, public toilets and car park.

Hamworthy Park, found in Hamworthy East ward and neighboured by Hamworthy West and Poole Town, attracts a high number of visits each year. The paddling pool is the major attraction and unique selling point of the park. It is the only facility of its kind in the town with feedback from stakeholders and visitors highlighting its importance as a local asset and reason for visiting the park.

The paddling pool is open seasonally from May to September. It is unsupervised and free-to-access. During peak periods, the pool can generate bather loads of approximately 300+. At the end of the season the pool is drained and left empty.

The pool is managed by the Council's Recreation Development team with an appointed contractor providing day-to-day operational support. Annually, in spring, prior to the pool opening, the walls, floor and surrounding tarmac areas are cleaned by the contractor and any essential repair works are carried out. This can involve painting the base of the pool.

It is not uncommon for the pool to be closed several times throughout the season to remove broken glass that has resulted from acts of vandalism. This can result in the pool being unavailable for use for a number of days whilst it is drained, thoroughly cleaned and re-filled.

The Friends of Hamworthy Park serves as one of the primary stakeholders and community groups in the park. The Friends have been instrumental in facilitating fundraising efforts to enable the project to proceed, and play a key role in engaging and sharing the views of local residents.

2.2 Existing ground levels and demolition information

See drawing 70044842-WSP-SGN-DR-CB-0010.

2.3 Planning and management of the construction work, including any health and safety goals

The following arrangements relate to the planning and management of the design work and construction work:

- There will be regular liaison between the Client representatives, Principal Designer, Designers and Principal Contractor/Contractors.
- This Pre Construction Information document will be issued to all those designing and those constructing the work.

Health and Safety Goals:

- To undertake the work safely and without risk to health for those constructing the work and the public.

2.4 Arrangements for communication and liaison between parties

Regular liaison has been and will continue to be held between Client, Principal Designer and Designer representatives where Health and Safety is an integral part of the discussions. This co-operation and co-ordination will continue through the construction phase to include the Principal Contractor and Contractors.

2.5 Welfare provisions

The Principal Contractor will provide all necessary welfare facilities for the workforce, including providing electrical power and running water. It is not anticipated that local mains supplies are available.

An allocated fenced compound area or areas which can be used for welfare facilities can be seen on drawing 70044842-WSP-SGN-DR-CB-0001 and Appendix 4 Site Compound Location.

Parking at site is restricted, with workforce vehicular access only via the main gate along Lulworth Avenue. A speed limit of 5 mph is enforced to all contractor vehicles and construction plant, with the use of hazard lights, whilst crossing the Park.

2.6 Security arrangements

The area for which the Principal Contractor will be responsible is clearly defined on drawing 70044842-WSP-SGN-DR-CB-0001. Public access to the site shall be cordoned off, and only authorised persons will be allowed into any construction area.

There is no existing facility for storage of plant or equipment on site. It is the contractor's responsibility to ensure that the necessary arrangements are in place to facilitate his needs.

The on-site car park is locked at night and reopened in the morning. The primary function for this is to prevent car parking spaces being used by local workers and preventing them from being available to people wishing to visit the Park. It also serves to prevent any vehicular access to the Park during the night. Only authorised staff have vehicular access to the rest of the Park so they are able to carry out their duties.

3 Environmental Restrictions and Existing On-Site Risks

3.1 Safety Hazards:

3.1.1 *Boundaries and access, including temporary access*

Hamworthy Park is situated in the lower Hamworthy area of the Borough of Poole to the west of Poole Bridge approximately 1 mile (1.6 km) from the town centre.

The Park lies on the northern shores of Poole Harbour. It originally constituted an area of salt marsh and mud flats that have been drained and filled. In reclamation the site has been slightly elevated so it lies above Mean High Water Level but remains almost entirely level throughout. This gives the site a characteristic two-dimensional orientation, which aids panoramic views over much of the central to western reaches of the Harbour.

The mudflats underlying the Park consist largely of tertiary alluvial deposits washed down from the Sherwood and Piddle rivers draining into the Harbour. Sandy deposits emanate from the cliff profile at Rockley Point approximately 1.0 mile (1.6 km) to the west; these are of Pleistocene age being specifically from the Bagshot Beds. The site has been overlain using inert local fill when the site was reclaimed.

The area at the eastern end of the Park has been identified by the Institute of Terrestrial Ecology as an area of upper salt marsh and reed bed in a medium sensitivity part of the harbour. The upper salt marsh succession backed by a large deep ditch along the railway embankment provides an interesting and varied habitat for amphibians.

The topography of Hamworthy Park results in it being prone to flooding. Therefore the Park includes flood defences comprising of a grass bund running across the rear of the Park, with ramped access points at the Lulworth Avenue and Branksea Avenue entrances. A culvert and small footbridge is situated at the eastern end of the Park between the boat compound and the old Power Station Outfall.

See Appendix D1 – Site Surrounding Areas.

Note: All contractors are assumed to have visited the site before tendering, to evaluate access restrictions.

3.1.2 *Restrictions on deliveries or waste collection or storage*

The normal working hours within the site shall be Monday to Friday between 07:00 hours and 19:00 hours, Saturdays between 0800 hours and 1700 hours. Work outside of normal working hours, including Sundays or Bank Holidays, may be permitted with prior approval from the Project Manager, if required for the purposes of the programme.

Deliveries are to be at off peak times only, before 07:30, between 09:30 and 15:00 or after 18:00. This is to reduce the impact on traffic during peak times.

Waste materials are to be separated into hazardous and non hazardous skips. Skips are to be the closed and lockable type. Waste transfer notes for hazardous waste and substances/materials will be required and kept available for inspection.

Any petrol, diesel or paints are to be kept in a bunded area, gas bottles and flammables are to be stored in a lockable cage.

3.1.3 *Adjacent land uses*

The total area of Hamworthy Park is 10.03 hectares which can be geographically sub-divided as follows:

- Northern area - hosting the main Railway Line running from Poole to Weymouth, owned by Network Rail, as well as the Holes Bay SPA.
- Lulworth Avenue marks the largest part of the Northern boundary in the Park.
- Promenade and beach running virtually the whole length of the southern boundary of the Park.
- Eastern area - comprised of the boat compound and adjacent grassed area, beach and the Old Power Station Outfall.
- Central eastern area - an area of level grassland terminating at the boat compound and containing Harbour Challenge, Sky Surfer (play equipment) and a Rebound Wall.
- Central area (Activity Area) an area predominantly of built facilities comprising Cafeteria, Public Conveniences, Paddling Pool and Plant Room and the Children's Play Area.
- Western area - an area of approximately 4.05 hectares, predominately of grass with some kick-about goals, shrub beds and tennis court. Outside of Hamworthy Park, along Lulworth Avenue, is the access route to the Royal Marines Base, as well as through traffic for two public Junior schools nearby.
- Tarmac surfaced access road and car park 0.2 hectares in size.

3.1.4 *Existing storage of hazardous materials*

No existing hazardous materials are stored on site.

3.1.5 *Location of existing services particularly those that are concealed – water, electricity, gas etc.*

No services are accessible for use on site. The contractor must provide resources such as water and electricity as required, including for welfare facilities.

3.1.6 *Ground conditions, underground structures or water courses where this might affect the safe use of plant*

The paddling pool is located in close proximity to the sea and consequently the water table under the park is high, challenging the facility in recent years. Borehole

investigations commissioned in April 2018 confirmed that the standing water level is 0.7m below the top of the existing concrete slab. See Appendix D2 – Borehole Location Plan and Appendix D3 – Ground Investigation Factual Report. As the pool is left empty September to May, the pressure from the water table on the sub-structure causes additional structural complications.

The location of Hamworthy Park, adjacent to Poole Harbour, results in an increased risk of erosion. Groynes provide some erosion control to the beach and promenade. The promenade in turn provides some defence from flooding to the rest of the Park.

The Borough of Poole adopted the policy of 'Holding the Line' to protect the coast line within Poole Harbour. In 2004/5 work was carried out by the Environment Agency, after consultation with the Borough of Poole, to create a flood defence at the northern edge of the Park to protect neighbouring houses and Lower Hamworthy by maintaining, upgraded or replacing when funding permits.

No contaminants may enter the water course adjacent to the sites. All contaminants must be contained, and disposed of appropriately.

Efforts must be made by the contractor to take all reasonable precautions to minimise the risk of water course contamination, for example the use of drip trays and spill kits.

3.1.7 *Information about the existing structures*

The paddling pool, renovated in 1999, is a large, circular shape measuring 35.4m in diameter with a 100mm thick top concrete base. A water cannon play feature is located at one side of the pool and a mushroom feature was once located on another side.

As a result of the topography and hydrology of the site, the paddling pool is subject to movement and subsequent damage caused by a high water table. Pressure from the water table on the base of the pool has resulted in cracking of the concrete surface. The drain in the pool sits higher than the pool floor which allows standing water to enter the cracks and freeze during the winter, worsening the problem further.

The plant room is considered to be in good working order with equipment running correctly. Minor improvements may be necessary, however it is anticipated that the majority of plant infrastructure will remain unchanged.

Treated water currently fills the pool from wall and floor inlets on the western side of the facility and is drawn off to the filtration plant through floor and wall outlets located in the opposite half of the pool.

A tank, which helps to maintain pool water levels, is located in a chamber at the side of the pool and connected to the pool by a small bore pipe.

3.2 Health Hazards

3.2.1 *Asbestos, including results of surveys*

None present.

3.2.2 *Existing storage of hazardous materials*

No existing hazardous materials are stored on site.

3.2.3 *Existing structures containing hazardous materials*

None present.

3.2.4 *Health risks arising from Client's activities*

Not known.

4 Significant Design and Construction Hazards

4.1 Significant Design Assumptions and Suggested Work Methods

The Principal Designer must be satisfied with the hazard elimination considerations made by the designer(s). A review of arrangements between these parties and the client is highly recommended.

4.2 Arrangements for Co-ordination of Ongoing Design Work and Design Changes

The procedures for the consideration and acceptability of the health and safety implications of Contractor prepared designs shall follow the principles of prevention and protection and take into account those issues highlighted in this Pre Construction Information.

Details of health and safety hazards, which cannot be eliminated, are to be submitted to the Principal Designer, together with the proposals for mitigation or control, in sufficient time to allow adequate consideration by the Principal Designer.

Procedures for dealing with unforeseen events during the project which result in substantial design changes and which might affect the project are as follows:

- The Designer / Principal Designer is to be immediately informed by the Principal Contractor of the circumstances relating to the event.
- The health and safety issues arising from any unforeseen occurrence are to be submitted to the Designer / Principal Designer as soon as is practicable.
- In the event that any re-design is required, for whatever reason, the health and safety implications of the modified design shall be submitted for consideration to the Designer / Principal Designer in due time before execution.

The Principal Contractor is to confirm the arrangements for monitoring and reviewing the compliance with health and safety issues in the Construction Phase Plan.

4.3 Information on Significant Risks Identified During Design

4.3.1 *Common place Hazards*

Common place site hazards not specifically identified are considered to be within the expertise of a competent contractor and must be controlled by normal good site management practice.

4.3.2 *Specific construction hazards*

The existing features surrounding the current pool are; fencing, planted areas, stone walls, gates, play area equipment and existing drainage including pumping

station. The slab beneath the current structure slab, from previous the paddling pool, is a construction hazard.

The existing shared footpaths around the park will need to be protected during the works as the public will have access. Operatives must be aware of cyclists and pedestrians when walking across/along the footpath. The paddling pool area itself will be closed off to the public and only operatives and Council officers will be allowed on site.

Access and egress via Lulworth Avenue needs to be carefully considered due to the busy nature of the road – more prominently at school drop-off and pick-up times. The contractor must provide a traffic management plan for approval by the project manager.

4.3.3 *Method Statements*

The Principal Contractor will be required to demonstrate by safety method statements incorporating appropriate Safety Management Systems and Procedures, his assessment of the risks to employees and others arising from the above hazards (and any others he might recognise) and how he intends to manage and control these risks.

The Construction Phase Plan and / or method statements shall also include the Principal Contractor's proposed sequencing of the works for consideration and acceptance by the Client.

4.4 Materials Requiring Particular Precautions

4.4.1 *Hazardous materials*

Common materials (such as concrete, mortar) and plant fuels used during construction will present health and/or safety hazards. These are considered to be within the experience of a competent contractor, and should be controlled by the application of COSHH, and other relevant procedures.

5 The Health and Safety File

5.1 Layout and format

The Health and Safety File is defined as a file appropriate to the characteristics of the project, containing relevant health and safety information to be taken into account during any subsequent project.

The contents of the Health and Safety File will accord with the requirements of 'Managing health and safety in construction' (HSE, L153, dated 2014).

The Principal Contractor shall collate all appropriate information as it becomes available, and this shall subsequently be passed to the Principal Designer for inclusion in the File.

All information should be issued in an electronic format. The format of the electronic data issued is to be as follows: all documents and product data sheets are to be in PDF format, Design Team drawings are to be in PDF and AutoCAD DWG format.

The Principal Contractor is urged to implement an early procedure that advises Contractors and materials suppliers of the detailed requirements for this record information.

5.2 File Contents

The Health and Safety File will contain the following information:

- (a) brief description of the work carried out
- (b) any residual hazards which remain and how they have been dealt with (for example, surveys or other information concerning contaminated land; water bearing strata; buried services, etc.)
- (c) key structural principles (for example, bracing, sources of substantial stored energy - including pre- or post-tensioned members) and safe working loads, particularly where these may preclude placing scaffolding or heavy machinery
- (d) hazardous materials used (for example pesticides; special coatings which should not be burnt off, etc.)
- (e) information regarding the removal or dismantling of installed plant and equipment (for example any special arrangements for lifting, other special instructions for dismantling etc.)
- (f) health and safety information about equipment provided for cleaning or maintaining of the structure
- (g) information and as built drawings of the structure, its plant and equipment (for example, the means of safe access to and from valves, etc.)