



Hamworthy Park Paddling Pool

Project DN315318

PROCUREMENT PROCEDURE: UK OPEN

Appendix A Specification

Status:	ISSUED
Version:	1.00
Date:	12/11/2018

APPENDIX A

The specification comprises preamble and contract specific appendices.

PREAMBLE TO THE SPECIFICATION

1 The Specification referred to in the Tender shall be the 'Specification for Highway Works', published by the Stationery Office (formerly HMSO) as Volume 1 of the Manual of Contract Documents for Highway Works (www.dft.gov.uk/ha/standards/mchw/vol1) as modified and extended by the following contract specific items:

(i) Appendix 0/1: Contract-specific Additional, Substitute and Cancelled Clauses, Tables and Figures;

(ii) Appendix 0/2: Contract-specific minor alterations to existing Clauses, Tables and Figures;

(iii) The Numbered Appendices listed in Appendix 0/3;

Appendix 0/4 contains a list of the Drawings.

2 The relevant publication date of each page of the Specification for Highway Works is given in the Schedule of Pages and Relevant Publication Dates in Volume 1 Series 000 of the Manual of Contract Documents for Highway Works. (www.dft.gov.uk/ha/standards/mchw/vol1)

3 An Additional Clause as indicated by a suffix 'AR' in Appendix 0/1 is a Contract-specific alteration

4. A Substitute Clause as indicated by a suffix 'SR' in Appendix 0/1 is a contract specific alteration.

5 A Cancelled Clause indicated by a suffix 'CR' in Appendix 0/1 is a Contract-specific alteration.

6 Insofar as any of the Numbered Appendices may conflict or be inconsistent with any provision of the Specification for Highway Works the Numbered Appendices shall always prevail.

7 Any reference in the Contract to a Clause number or Appendix shall be deemed to refer to the corresponding Substitute Clause number or Appendix listed in Appendix 0/1 or 0/2.

8 Where a Clause is altered any original Table/Figure referred to in the Clause shall apply unless the Table/Figure is also altered. Where a Table/Figure is altered any reference in a Clause to the original Table/Figure shall apply to the altered Table/Figure.

9 Where a Clause in the Specification relates to work goods or materials which are not required for the Works it shall be deemed not to apply.

10 Any Appendix referred to in the Specification which is not used shall be deemed not to apply.

11 Other than where references to the Overseeing Organisation are made in the context of the Overseeing Organisation granting statutory or type approvals, the roles and functions of the Overseeing Organisation shall be undertaken by the Project Manager.

Where the Specification requires the provision of documentation to the Overseeing Organisation for statutory or type approval such documentation shall be provided to the Project Manager.

12 Where the Specification is used in conjunction with a Contract under which the Contractor is responsible for the design of any part of the Permanent Works, the delegation of the roles and functions of the Overseeing Organisation as stated in paragraph 11 above shall be further amended as follows:

(i) If any agreement, consent or approval required to be obtained from the Overseeing Organisation impacts on the health and safety of the general public, the environment or any property or equipment not owned or operated by the Contractor, such agreement, consent, approval shall be obtained from the Project Manager.

(ii) Where the Specification provides for the Overseeing Organisation to require a test, waive the requirement for a test or alter testing frequency, the party to whom the Overseeing Organisation's roles and functions have been ascribed by paragraph 11 shall be the Employer.

APPENDIX 0/1: CONTRACT-SPECIFIC ADDITIONAL, SUBSTITUTE AND CANCELLED CLAUSES, TABLES AND FIGURES INCLUDED IN THE CONTRACT

1 List of Additional Clauses and Tables
Clause No Title Page No

2 List of Substitute Clauses and Tables

3 List of Cancelled Clauses and Tables
Clause No Title

4 Additional Clauses and Tables
Clause No Title and Written Text

5 Substitute Clauses and Tables
Clause No Title and Rewritten Text

APPENDIX 0/3: NUMBERED APPENDICES REFERRED TO IN THE SPECIFICATION AND INCLUDED IN THE CONTRACT

This Appendix 0/3 is comprised of two lists, A and B, of Numbered Appendices as follows:-

List 'A' is a complete list of the Numbered Appendices referred to in the Specification for Highway Works for the series listed above. Those not adopted are marked 'Not Used'. Those identified by the letter C shall be completed by the Contractor.

LIST "A" – NUMBERED APPENDICES REFERRED TO IN THE SPECIFICATION FOR HIGHWAY WORKS

Table NG 0/1 **List of Numbered Appendices Referred to in the Specification for Highways works**

SHW Series No.	Completed by	Appx No.	Title
000			INTRODUCTION
Not used	(	0/1	Contract specific Additional, Substitute and Cancelled Clauses, Tables and Figures Included in the Contract
Not used	(Co) (	0/2	Contract specific Minor Alterations to Existing Clauses, Tables and Figures Included in the Contract
	(	0/3	List of contract specific Numbered Appendices Referred to in the Specification and Included in the Contract
	(	0/4	List of Drawings Included in the Contract
Not used	(	0/5	Special National Alterations of the Overseeing Organisations of Scotland/Wales/Northern Ireland
	(
100			PRELIMINARIES
	(	1/1	Temporary Accommodation and Equipment for the Overseeing Organisation
Not used	(	1/2	Vehicles for the Overseeing Organisation
Not used	(	1/3	Radio Communication System for the Overseeing Organisation
Not used	(	1/4	Working and Fabrication Drawings
	(	1/5	Testing to be Carried out by the Contractor
Not used	(	1/6	Supply and Delivery of Samples to the Overseeing Organisation
	(	1/7	Site Extent and Limitations on Use
Not used	(	1/8	Operatives for the Overseeing Organisation
	(	1/9	Control of Noise and Vibration
	(	1/10	Permanent Works to be Designed by the Contractor
Not used	(	1/11	Temporary Works Design
	(	1/12	Setting Out and Existing Ground Levels
	(	1/13	Programme of Works
	(	1/14	Payment Applications
Not used	(Co) (	1/15	Accommodation Works
	(Co)(C) (	1/16	Privately and Publicly Owned Services and Supplies

SHW Series No.	Completed by	Appx No.	Title
Not used	(	1/17	Traffic Safety and Management
Not used	(	1/18	Temporary Highways for Traffic
Not used	(	1/19	Routeing of Vehicles
	(	1/20	Recovery Vehicles and Operation for Breakdowns
	(	1/21	Information Boards
	(	1/22	Progress Photographs
	(	1/23	Risks to Health and Safety
	(	1/24	Quality Management System
Not used	(	1/25	Temporary Closed Circuit Television (CCTV) System for the Monitoring of Traffic
Not used	(	1/27	Temporary Automatic Speed Camera System for the Enforcement of Mandatory Speed Limits at Road Works (TASCAR)
	(
200			SITE CLEARANCE
Not used	(	2/1	List of Buildings, etc. to be Demolished or Partially Demolished
	(	2/2	Filling of Trenches and Pipes
	(Co) (	2/3	Retention of Material Arising from Site Clearance
Not used	(	2/4	Explosives and Blasting
Not used	(	2/5	Hazardous Materials
300			FENCING
Not used	(Co)	3/1	Fencing, Gates and Stiles
400			ROAD RESTRAINT SYSTEMS (VEHICLE AND PEDESTRIAN)
Not used	(Co) (	4/1	Road Restraint Systems (Vehicle and Pedestrian)
Not used	(C) (	4/2	Information Required to Demonstrate Compliance of Road Restraint Systems to BS EN 1317-1, BS EN 1317-2, BS EN 1317-3 and DD ENV 1317-4: 2002
500			DRAINAGE AND SERVICE DUCTS
Not used	(	5/1	Drainage Requirements
Not used	(	5/2	Service Duct Requirements
Not used	(Co) (	5/3	Surface Water Channels and Drainage Channel Blocks
Not used	(	5/4	Fin Drains and Narrow Filter Drains
Not used	(	5/5	Combined Drainage and Kerb Systems
Not used	(	5/6	Linear Drainage Channel Systems
Not used	(	5/7	Thermoplastics Structural Wall Pipes and Fittings
600			EARTHWORKS
Not used	(	6/1	Requirements for Acceptability and Testing etc. of Earthworks Materials
Not used	(	6/2	Requirements for Dealing with Class U1B and Class U2 Unacceptable Materials (11/04)
Not used	(	6/3	Requirements for Excavation, Deposition, Compaction (Other than Dynamic Compaction)
Not used	(	6/4	Requirements for Class 3 Material
Not used	(	6/5	Geotextiles Used to Separate Earthworks Materials
Not used	(Co) (	6/6	Fill to Structures and Fill Above Structural Foundations
Not used	(	6/7	Sub-formation and Capping and Preparation and Surface Treatment of Formation
Not used	(	6/8	Topsoiling
Not used	(	6/9	Earthwork Environmental Bunds, Landscape Areas, Strengthened Embankments
Not used	(	6/10	Ground Anchorages, Crib Walling and Gabions
Not used	(Co) (	6/11	Swallow Holes and Other Naturally Occurring Cavities and Disused Mine Workings
Not used	(	6/12	Instrumentation and Monitoring
Not used	(	6/13	Ground Improvement
Not used	(	6/14	Limiting Values for Pollution of Controlled Waters (11/06)
Not used	(	6/15	Limiting Values for Harm to Human Health and the Environment (11/04)
700			ROAD PAVEMENTS - GENERAL
Not used	(Co) (	7/1#	Permitted Pavement Options (Schedules 1, 2, 3, 4 and 5)
Not used	(	7/2	Excavation, Trimming and Reinstatement of Existing Surfaces
Not used	(Co)(C)(T)(P) (	7/3	Surface Dressing - Performance Specification (Sheets 1, 2 and 3)
Not used	(	7/4	Bond Coats, Tack Coats and Other Bituminous Sprays (Sheets 1, 2 and Binder Data Sheet)
Not used	(	7/5	In Situ Recycling - The Remix and Repave Processes
Not used	(	7/6	Breaking Up or Perforation of Existing Pavement

SHW Series No.	Completed by	Appx No.	Title
Not used	(Co)(C)(T)(P) (	7/7	ROAD PAVEMENTS - GENERAL (Continued)
Not used	(	7/8	Slurry Surfacing Incorporating Microsurfacing (Sheets 1, 2 and 3)
Not used	(	7/9	Not Used
Not used	(C) (	7/10	Cold-Milling (Planing) of Bituminous Bound Flexible Pavement
Not used	(	7/11	Not used
Not used	(	7/12	Overband and Inlaid Crack Sealing Systems
Not used	(	7/12	Arrester Beds
Not used	(Co) (	7/13	Saw-Cut Crack and Seal Bituminous Overlays on Existing Jointed Concrete Pavements
Not used	(	7/14	Preparation of Jointed Concrete Pavements Prior to Overlaying and Saw-Cut and Seal of the Bituminous Overlay
Not used	(	7/15	Saw-Cut, Crack and Seat Existing Jointed Reinforced Concrete Pavements
Not used	(	7/16	Cracking and Seating of Existing Jointed Unreinforced Concrete Pavements and CBM Bases
Not used	(C) (	7/17	Cracking Plant and Equipment Progress Record
Not used	(Co) (	7/18	Site Specific Details and Requirements for Cold Recycled Bitumen Bound Material
Not used	(	7/19	Site Specific Details and Requirements for Recycled Cement Bound Material
Not used	(	7/20	Not Used
Not used	(Co)(C)(T) (	7/21	Surface Dressing - Recipe Specification (Sheets 1, 2 and Binder Data Sheet)
Not used	(	7/22	Repairs to Potholes
1000			ROAD PAVEMENTS - CONCRETE AND CEMENT BOUND MATERIALS
Not used	(T) (	10/1	Plant and Equipment for the Construction of Exposed Aggregate Concrete Surface
1100			KERBS, FOOTWAYS AND PAVED AREAS
Not used	(Co) (	11/1	Kerbs, Footways and Paved Areas
Not used	(Co) (	11/2#	Access Steps
1200			TRAFFIC SIGNS
Not used	(	12/1#	Traffic Signs: General
Not used	(Co) (	12/2	Traffic Signs: Marker Posts
Not used	(	12/3	Traffic Signs: Road Markings and Studs
Not used	(	12/4	Traffic Signs: Cones, Cylinders, FTDs and Other Traffic Delineators
Not used	(Co) (	12/5	Traffic Signs: Traffic Signals
Not used	(	12/6	Traffic Signs: Special Sign Requirements on Gantries
1300			ROAD LIGHTING COLUMNS AND BRACKETS, CCTV MASTS AND CANTILEVER MASTS
Not used	(Co) (	13/1#	Information to be Provided When Specifying Lighting Columns and Brackets
Not used	(C)(P) (	13/2	(Specification for Highway Works) Typical Lighting Column and Bracket Data Sheets 1 and 2
Not used	(P) (	13/3	Instructions for Completion of Lighting Column and Bracket Data Sheets
Not used	(Co) (	13/4	Information to be Provided When Specifying CCTV Masts
Not used	(C)(P) (	13/5	(Specification for Highway Works) Typical CCTV Mast Data Sheet
Not used	(P) (	13/6	Instructions for Completion of CCTV Mast Sheets
Not used	(Co/T) (	13/7#	Information to be Provided When Specifying Cantilever Masts
Not used	(C)(P) (	13/8	(Specification for Highway Works) Typical Cantilever Masts Data Sheets 1 and 2
Not used	(P) (	13/9	Instructions for Completion of Cantilever Masts Data Sheets
1400			ELECTRICAL WORK FOR ROAD LIGHTING AND TRAFFIC SIGNS
Not used	(	14/1	Site Records
Not used	(Co) (	14/2	Location of Lighting Units and Feeder Pillars
Not used	(	14/3	Temporary Lighting
Not used	(Co/C)	14/4	Electrical Equipment for Road Lighting
Not used		14/5	Electrical Equipment for Traffic Signs
1500			MOTORWAY COMMUNICATIONS
Not used	(Co)	15/1	Motorway Communications
Not used		15/2	Cable Duct Requirements

SHW Series No.	Completed by	Appx No.	Title
1600			PILING AND EMBEDDED RETAINING WALLS
Not used	(	16/1	General Requirements for Piling and Embedded Retaining Walls
Not used	(	16/2	Precast Reinforced and Prestressed Concrete Piles and Precast Reinforced Concrete Segmental Piles
Not used	(	16/3	Bored Cast-in Place Piles
Not used	(	16/4	Bored Piles Constructed using Continuous Flight Augers and Concrete or Grout Injection through Hollow Auger Stems
Not used	(	16/5	Driven Cast-in-Place Piles
Not used	(Co) (	16/6	Steel Bearing Piles
Not used	(	16/7	Reduction of Friction on Piles
Not used	(	16/8	Non-Destructive Methods for Testing Piles
Not used	(	16/9	Static Load Testing of Piles
Not used	(	16/10	Diaphragm Walls
Not used	(	16/11	Hard/Hard Secant Pile Walls
Not used	(	16/12	Hard/Soft Secant Pile Walls
Not used	(Co) (	16/13	Contiguous Bored Pile Walls
Not used	(	16/14	King Post Walls
Not used	(	16/15	Steel Sheet Piles
Not used	(	16/16	Integrity Testing of Wall Elements
Not used	(Co) (	16/17	Instrumentation for Piles and Embedded Walls
Not used	(	16/18	Support Fluid
1700			STRUCTURAL CONCRETE
	(Co) (	17/1	Schedule for the Specification of Designed Concrete
	(	17/2	Not Used
	(	17/3	Concrete - Surface Finishes
	(	17/4	Concrete - General
Not used	(	17/5	Buried Concrete
Not used	(	17/6	Grouting and Duct Systems for Post-tensioned Tendons
Not used	(	17/7	Precast Concrete Products
1800			STRUCTURAL STEELWORK
Not used	(Co)	18/1	Requirements for Structural Steelwork
1900			PROTECTION OF STEELWORK AGAINST CORROSION
Not used	(C)(P) (	19/1	(Specification for Highway Works) Form HA/P1 (New Works) Paint System Sheet
Not used	(C)(P) (	19/2	Requirements for Other Work
Not used	(C)(P) (	19/3	(Specification for Highway Works) Form HA/P2 Paint Data Sheet
Not used	(C)(P) (	19/4#	(Specification for Highway Works) Form HA/P3 Paint Sample Dispatch List: Sheets 1 and 2
Not used	(Co) (	19/5	General Requirements
2000			WATERPROOFING FOR CONCRETE STRUCTURES
	(Co) (	20/1	Waterproofing for Concrete Structures
2100			BRIDGE BEARINGS
Not used	(Co) (	21/1	Bridge Bearing Schedule
	(Co) (	22/1	Not Used
2300			BRIDGE EXPANSION JOINTS AND SEALING OF GAPS
Not used	(Co)	23/1	Bridge Deck Expansion Joints Schedule
	(Co)	23/2	Sealing of Gaps Schedule (Other than in Bridge Deck Expansion Joints)
2400			BRICKWORK, BLOCKWORK AND STONEMWORK
Not used	(Co)	24/1	Brickwork, Blockwork and Stonework

SHW Series No.	Completed by	Appx No.	Title
2500			SPECIAL STRUCTURES
Not used	(Co) (	25/1	Requirements for Corrugated Steel Buried Structures
Not used	(	25/2	Requirements for Reinforced Soil and Anchored Earth Structures
Not used	(	25/3	Requirements for Pocket - Type and Grouted - Cavity Reinforced Brickwork Retaining Wall Structures
Not used	(Co) (	25/4	Environmental Barriers
Not used	(	25/5	Requirements for Buried Rigid Pipes for Drainage Structures
2600			MISCELLANEOUS
	(	26/1	Ancillary Concrete
	(	26/2	Bedding Mortar
Not used	(	26/3	Cored Thermoplastic Node Markers
3000			LANDSCAPE AND ECOLOGY
Not used	(Co)(C)(P) (	30/1	General, sheets 1, 2 and 3
Not used	(	30/2	Weed Control
Not used	(Co) (	30/3	Control of Rabbits and Deer
Not used	(	30/4	Ground Preparation
Not used	(Co) (	30/5	Grass Seeding, Wildflower Seeding and Turfing
Not used	(Co)(C)(P) (	30/6	Planting, sheets 1 and 2
Not used	(Co) (	30/7	Grass, Bulbs and Wildflower Maintenance
Not used	(	30/8	Watering
Not used	(	30/9	Establishment Maintenance for Planting
Not used	(Co) (	30/10	Maintenance of Established Trees and Shrubs
Not used	(	30/11	Management of Waterbodies
Not used	(	30/12	Special Ecological Measures
5000			MAINTENANCE PAINTING OF STEELWORK
Not used	(C)(P) (	50/1	(Specification for Highway Works) Form HA/P1 (Maintenance) Paint System Sheet
Not used	(C)(P) (	50/2	Requirements for Other Work
Not used	(C)(P) (	50/3	(Specification for Highway Works) Form HA/P2 Paint Data Sheet
Not used	(C)(P) (	50/4#	(Specification for Highway Works) Form HA/P3 Paint Sample Despatch List: Sheets 1 and 2
Not used	(Co) (	50/5	General Requirements

Key & Guide to types of contract specific Numbered Appendices - who compiles/completes

Numbered Appendix to be compiled and/or completed by:

(Co) Compiler compiles: Identified in the Notes for Guidance examples by the term ‘Sample’ included in their title

(Co/C) Compiler partially compiles and Contractor completes and returns to Overseeing

Organisation (Co/T) Compiler partially compiles and Tenderer completes and returns with Tender

(C) Contractor completes and returns to Overseeing Organisation

(P) This indicates the Appendix is a national pro forma and format must not be altered

List ‘B’ gives the list of Contract Specific Numbered Appendices devised for the Contract

APPENDIX 0/4: LIST OF DRAWINGS INCLUDED IN THE CONTRACT

Drawing Number	Drawing Title
70044842-WSP-SGN-DR-CB-0001	Site Layout
70044842-WSP-SGN-DR-CB-0010	Existing Arrangement and Demolition
70044842-WSP-SGN-DR-CB-0011	Proposed General Arrangement
70044842-WSP-SGN-DR-CB-0021	Central Section Concrete Outline and Reinforcement Details
70044842-WSP-SGN-DR-CB-0021-BBS	Central Section Bar Bending Schedule
70044842-WSP-SGN-DR-CB-0022	Outer Segment Type A Concrete Outline and Reinforcement Details
70044842-WSP-SGN-DR-CB-0022-BBS	Outer Segment Type A Bar Bending Schedule
70044842-WSP-SGN-DR-CB-0023	Outer Segment Type B Concrete Outline and Reinforcement Details
70044842-WSP-SGN-DR-CB-0023-BBS	Outer Segment Type B Bar Bending Schedule
70044842-WSP-SGN-DR-CB-0024	Outer Segment Type C Concrete Outline and Reinforcement Details
70044842-WSP-SGN-DR-CB-0024-BBS	Outer Segment Type C Bar Bending Schedule
70044842-WSP-SGN-DR-CB-0031	Pile Setting Out Layout
70044842-WSP-SGN-DR-CB-0041	Slab joints and Finishing Details

APPENDIX 1/1: TEMPORARY ACCOMMODATION AND EQUIPMENT FOR THE OVERSEEING ORGANISATION

The area designated for the Contractors compound is shown on drawing number 70044842-WSP-SGN-DR-CB-0001

Location of Temporary Site Accommodation and Welfare Facilities are to be within this area unless agreed in advance with the Project Manager.

Upon completion of the works, the compound, materials, machinery and associated site huts shall be removed from site and any works for the reinstatement of the land to its condition prior to the implementation of this permission shall be carried out within one month unless otherwise agreed in writing by the Project Manager

The contractor is to take into account the surrounding land use so as to minimise any disturbance or nuisance.

All temporary site accommodation required shall be maintained by the Contractor throughout the works and be secured against access by the public.

The Contractor shall make available, within his office accommodation, a desk for the use of the Project Manager or his representatives.

The Project Manager and his staff shall have use of the Contractors welfare facilities.

The Contractor shall make available to the Project manager and his staff as required any surveying equipment required for checking of setting out lines and levels.

APPENDIX 1/5: TESTING TO BE CARRIED OUT BY THE CONTRACTOR

Clause	Material	Test	Frequency of Testing	Test Certificate	Comments
Series 1600					
1602 to 1606, 1610 to 1615, 1617AR	Concrete, Grout, Reinforcement, Prestressing, Steelwork, Welding, Protection against corrosion			Required	Sampling/testing to be carried out in accordance with 1600 and 1700
1608	Integrity testing	Integrity testing	Each pile		As detailed in appendix 16/8
1609	Static load testing of piles	Maintained load test	2 no working pile load tests	Required	As detailed in Appendix 16/9
Series 1700					
1702, 1704	Cement types as stated in sub clause 1702.1			Required	Certificate to be provided monthly for each type of cement. Quality management and product certification schemes apply
	Aggregates				Results of routine control tests from the factory production control system operated by the producer to be provided – see Annex H

					of BS EN 12620. Product certification scheme applies.
1707	Concrete	Cube strength (N)	Frequency in Appendix 17/1	Required	
	Fresh concrete	Consistence	Each batch	Required	
1712	Reinforcement				
	Steel bars			Required BS 4449	Product certification scheme applies
	Steel fabric			Required BS 4483	
	Stainless steel			Required BS 6744	

APPENDIX 1/7: SITE EXTENT AND LIMITATIONS ON USE

The area of the site is deemed to be the areas shown on drawings numbered 70044842-WSP-SGN-DR-CB-0001 and shall be extended beyond the limits shown to include those areas of highway that the Project Manager deems necessary for the execution of temporary traffic management measures. Refer to Appendix 1/13 for restrictions on the availability of the site.

Roads, accesses, rights of way, railway crossings, etc., which are being used by construction traffic shall at all times be kept clean and clear of all dirt, mud and material dropped from vehicles or from tyres arising from such use. The Contractor shall provide, maintain and use suitable equipment for this purpose. Where necessary, paths shall be swept every week.

In carrying out the Works the Contractor shall ensure that all highway drains, ditches and grips be kept clear of any spoil, mud, slurry or other material likely to impede the free flow of water therein. The Contractor shall remove any such contamination immediately when instructed to do so.

In determining a location for his site compound, the Contractors attention is drawn to restrictions that may be imposed by the Environment Agency regarding proximity to the harbour. A proposed compound area is shown on drawing number 70044842-WSP-SGN-DR-CB-0001

No contractors vehicles are to be parked in the public car park at Hamworthy Park.

APPENDIX 1/9: CONTROL OF NOISE AND VIBRATION

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 these hours, including Sundays or Bank Holidays, may be permitted with prior approval from the Project Manager, if required for the purposes of the programme.

The Contractor must produce a comprehensive noise and vibration plan setting out how work will be carried out to current best practice and with due regard to the relevant national standards for control of noise and vibration on construction sites. Method statements for any particularly noisy operations should include control measures for noise and vibration.

APPENDIX 1/10: STRUCTURES TO BE DESIGNED BY THE CONTRACTOR

The Overseeing Organisation will require two weeks to accept any designs under this Appendix.

Work Item or Element	Location	Design Specification
Piles	Below new pool slab	<p>Design of piles on grid defined on Pile Setting Out, drawing 70044842-WSP-SGN-DR-CB-031 in accordance with BS EN 1997-1 and BS EN 1992-1 and associated current National Annexes.</p> <p>The design of the slab has assumed no moment connection with the piles. The piles should be designed similarly</p> <p>Refer to drawing 70044842-WSP-SGN- DR-CB-031 for pile loads from slab analysis.</p> <p>The Ground Investigation report can be found in Appendix D3 of the Pre Construction Information</p>
Sump Cover and Frame	Within new pool slab	<p>New covers are required for the 0.6x0.6m sumps. This may be a proprietary product or designed, fabricated and supplied for the purpose. If a proprietary product it shall conform to class B125 of BS EN 124:2015</p> <p>The cover and frame shall be of durable materials (such as grade A4 or 316 stainless steel, or composite material) to the satisfaction of the Overseeing Organisation. The frame shall be capable of being securely fastened to or cast into the slab. The cover shall be:</p> <ul style="list-style-type: none">• Removable• Lockable• Have a 20% minimum open area• Have a maximum open slot width of 4mm or hole diameter of 5mm• Shall sustain an applied uniformly distributed load of 3kN/m2 or a load of 10kN applied as a patch 0.1x0.1m <p>A set of keys for the covers shall be supplied.</p>

APPENDIX 1/12: SETTING OUT AND EXISTING GROUND LEVELS

Setting out details are shown on Drawing No 70044842-WSP-SGN-DR-CB-031
Existing ground levels are shown on Drawing No 70044842-WSP-SGN-DR-CB-0001 and 010

APPENDIX 1/13: PROGRAMME OF WORKS

In accordance with Clause 31 of the Conditions of Contract the Contractor shall provide the Programme of Works in the form of a Network Diagram or Bar Chart produced as a result of a Critical Path Analysis and must abide by the constraints below. It shall show the level of detail appropriate to each stage of the works and all activities and restraints, each of which shall be given a short title. All events shall be numbered and annotated with earliest and latest event dates. The programme shall be submitted with the tender documents.

Ground water levels at the site are tidally influenced; this variation may affect the timing of excavation and foundation construction tasks.

Constraints

Account should be taken of the following constraints.

- i) Poole Harbour is designated as an SPA, RAMSAR site and SSSI
- ii) Traffic safety and management requirements. Refer to Appendix 1/17
- i)iii) Overwintering birds – Overwintering birds – mitigation measures will be required during the winter period. Measures are to be agreed with Borough of Poole Biodiversity Officer. If there are three consecutive days with temperatures never exceeding 0C, and the following day is **forecast** to stay below 0C then no demolition or piling works are permitted until the day after the air temperature exceeds 0C.
- iv) Deliveries to be timed to be outside of school start (8.15 -9 am) and finish (2.45 – 3.30 pm) times in term time only unless agreed in advance with the Project Manager
- v) Access to the café shall be maintained at all times.

APPENDIX 1/14 PAYMENT APPLICATIONS

The payment applications submitted to the Overseeing Organisation in accordance with the Conditions of Contract by the Contractor shall, whenever dealing with matters covered by the Activity Schedule, be set out under headings similar to those in the Activity Schedule and shall separately identify each item. Items not described in the Schedule but appropriate for inclusion as agreed work shall be shown separately. The Contractor shall allow the Overseeing Organisation to inspect invoices for goods or materials included in the statement as may be required.

APPENDIX 1/16: PRIVATELY & PUBLICLY OWNED SERVICES AND SUPPLIES

A summary of NRSWA C2 records is contained in Appendix D5 of the Pre-construction Information

APPENDIX 1/17 TRAFFIC SAFETY AND MANAGEMENT

Responsibility for Traffic Safety and Management:

1.1 The Contractor is responsible for the Traffic Safety and Management, all associated work and all aspects noted in this Appendix. Refer to Appendix 1/13 for constraints.

1.2 The Contractor will be responsible for all works necessary to implement any traffic management required to undertake the works. This will include advertisement in accordance with Borough of Poole requirements, erection of advance notification signs and signing. All proposals for these works are to be submitted to the Project Manager for approval prior to implementation.

1.3 The contractor's attention is drawn to the need to assess the risks and develop and operate safe working practices when vehicles and plant are reversing on site, whether or not they are on part of the highway. Rule 129 of The Highway Code 1993 is relevant but the contractor's practices and procedures should take account of the different conditions on site.

Traffic safety and management requirements

1.4 The Contractor shall produce preliminary traffic management layouts at 1:500 scale for approval by the Borough of Poole. The drawings shall be presented at the inaugural meeting for discussion. The preliminary layouts shall show proposed phasing of the traffic management in accordance with the programme, and also details of the Contractor's overall proposals for traffic management including:

- All signing (including advance signing) and coning with Chapter 8 referencing;
- Temporary alteration of permanent road markings;
- Temporary Safety Barriers (where applicable);
- Temporary Traffic Signals;
- Minimum lane widths;
- Working areas;
- Safety zones;
- Site access and egress positions and reference numbers;
- Additional signing, over and above that included in the standard Chapter 8 layouts, as appropriate for the works location.

1.5 A speed limit of 5 mph shall be applied to contractors vehicles and construction plant crossing Hamworthy Park. All vehicles to use hazard lights whilst crossing the park.

1.6 A banksman shall accompany large vehicles

2. Traffic Safety Officer:

2.1 The Contractor shall, during the Commencement of the Works, have appointed a Traffic Safety Officer who shall be a direct Employee (not a subcontractor). The role of Traffic Safety Officer requires suitably experienced personnel, qualified in all aspects of traffic management safety and holding a current NRSWA 1991 Supervisors qualification

(Monitor signing, lighting and guarding). The Traffic Safety Officer does not have to be on site at all times but should be available to attend within two hours.

2.2 The Traffic Safety Officer shall be available at all times when traffic management is installed and call-out details shall be passed to the overseeing organisation as part of the Health & Safety Plan.

3. Traffic Management Programme:

3.1 The Contractor shall submit to the Overseeing Organisation for their approval a detailed traffic management programme for each Traffic Management Operation to be performed.

4. Notice Requirements

Notice required by the Project Manager for him to arrange for:

- | | | |
|------|---------------------------------------------------------------------------------------------------------------|---------|
| i) | Authorising of non-prescribed signs: | 4 weeks |
| ii) | Authorising temporary traffic signals: | 14 days |
| iii) | The turning off of permanent traffic signals
in order to implement proposed traffic
management schemes: | 7 days |
| iv) | road closure (subject to the restriction of clause 1/13) | 6 weeks |

5. Public Highways and car parks, including footpaths, verges and landscaped areas, are the responsibility of:

Transportation Services, Borough of Poole
Civic Centre, Poole, BH15 2RU
(01202) 262000

Access to frontages from the highway shall be maintained for as long as is practicable. Any period of closure of access shall be for as short a duration as is possible.

Under no circumstances shall an access to a frontage be blocked off overnight. At least 24 hours and no longer than 48 hours before the Contractor is to start work outside of a property, the contractor shall inform the residents, by letter, of his intention to start work.

APPENDIX 1/21 INFORMATION BOARDS

The contractor shall provide and maintain two information boards to be erected on the site boundary fencing. The boards may be secured to the compound perimeter fencing or be on free standing temporarily erected posts.

The boards shall be erected within seven days of the site compound being substantially completed.

The boards shall be A2 in size and shall contain:
A summary of works being carried out

Photographs/diagrams as appropriate

The notice boards shall be updated every two weeks.

Details of the content shall be agreed with the Project Manager

APPENDIX 1/22 PROGRESS PHOTOGRAPHS

The following photographic records are required

- i) The condition of the site and land adjacent to the site that will be affected by the works or over which the Contractor will require access is to be recorded prior to the commencement of any works on site. This record is to be agreed with the Project Manager.
- ii) A set of referenced digital progress photographs is to be provided monthly consisting of 30 photographs at locations to be agreed with the project manager.

The photographs shall be provided digitally, referenced to date taken in the file title, with a minimum resolution of 300dpi, and provided on labelled and date referenced CD/DVD.

APPENDIX 1/23 RISKS TO HEALTH AND SAFETY

Known site-specific construction hazards

The park is a pedestrian area where the public are not expecting the presence of vehicles, as such there is the potential for them to be less cognisant of the potential hazard and behave differently. The CLOCS standard for HGV visibility is therefore required for vehicles > 3.5t delivering or removing material to/from this site.

There are limited details of the existing pool wall, the outlines are shown on drawing 70044842-WSP-SGN-DR-CB-0010. There is the potential for instability / local failure if loaded by large equipment used for demolition / excavation, or piling within of the existing pool area. Piles could be installed prior to excavation of pool area.

The existing pump manhole to which the existing Aco drains connect and the new pool drain pipe will be connected to is approximately 6m deep. The cover is also large and heavy. Suitable controls will be needed to complete the connection of the drain pipe to the manhole.

Construction hazards relating to the works specified

As soon as dust is noticeably emanating from the works action shall be taken to eliminate the dust at its source.

The following substances Hazardous to Health have been identified that may be used on the site or that may arise during construction of the works:

LOW RISK SUBSTANCES

- L002 - Sand
- L003 - Natural Aggregates

MODERATE RISK SUBSTANCES

- M012 - Cement
- M013 - Cementitious Mortars and Grouts
- M014 - Concrete
- M018 - Dust from cutting cement, concrete, etc.

The precautions for handling, use and emergency procedures for the hazardous materials listed above are included in specific data sheets in Annexes A, B and C of the Highways Agency Advice Note SA8/94. The Contractor shall adhere to the advice listed on the data sheets.

The Contractor shall be familiar with the relevant legislation, 'Control of Substances Hazardous to Health Regulations 1988', which governs the use of the substances listed therein.

Attention is drawn to the possible presence of hazardous materials in the existing structure to be demolished.

The Contractor shall not permit the use of any of the following materials in the works:

- High alumina cement
- Wood wool slabs as permanent formwork
- Calcium chloride in admixtures for use in structural concrete
- Calcium silicate bricks or tiles
- Asbestos
- Lead
- Urea formaldehyde foam
- Slip bricks
- Vermiculite plaster
- Crocidolite
- Lightweight or air-entrained concrete blocks
- Sands and gravels containing lignite
- Polyisocyanurate or polyurethane foam
- Polytetrafluoroethylene (PTFE)
- Glass reinforced concrete
- Materials that are generally composed of mineral fibres either man-made or naturally occurring which have a diameter of 3 microns or less and a length of 200 microns or less or, which contain any fibres not stabilised or otherwise sealed to prevent fibre migration.

APPENDIX 1/24 QUALITY MANAGEMENT SYSTEM

The Contractor's system for managing quality shall be described in a Quality Plan that shall be submitted to the Project Manager for acceptance prior to commencement on site.

The Quality plan shall cover the following items:

- i) Contractors organisation and management
- ii) Contractors method statements and construction procedures
- iii) Contractors construction quality control
- ii) Organisations Quality Plans

Items i) and iii) of the Quality Plan shall be submitted to the overseeing Organisation for its acceptance not later than 21 days after the award of the Contract.

The Contractor shall submit other parts of the Quality Plan prior to commencement of any related work or activity and to a timetable included in item i)

Method statements are required for the works and shall be submitted for acceptance 14 days prior to commencement of the particular operation, and once accepted shall form part of the Quality Plan.

The method statements are to reflect the activities on site, depending on the construction type.

The Contractor shall provide additional method statements for works items not listed in the Pre-construction Health and Safety Plan, as required, at the request of the Project Manager or their representative.

i) CONTRACTOR'S ORGANISATION AND MANAGEMENT

This section of the Quality Plan shall include:

- Definition of the Contract and its documentation.
- The organisation of the Contract, including the line of command and communication links between parties involved in the Contract.
- Names, roles, responsibilities and authority of principals and key personnel.
- Control of liaison and meetings with third parties.
- Identification of the Contractor's own staff responsible for overseeing each major activity.
- The main Contractor's control of subcontracts.
- Document control.
- Programme for submission of method statements and Organisations' Quality Plans. The Quality Plan shall identify procedures (which may be a part of the Contractor's general procedures) that cover the topics listed below. Copies of these procedures shall be made available to the Project Manager on request.
- The quality plans for subcontractors and suppliers of work, goods and materials which are the subject of quality management schemes.
- Procedure for the preparation, review and adjustment of programmes for the effective progression of the Works and the recording of this.
- Control and approval of purchases of materials.
- Control of off-site activities (where appropriate).
- Procedures for the regular review and recording by the Contractor of the quality of the Works.
- Control of personnel selection, based on their care, skill and experience.

- Management review/audits to monitor and exercise adequate control over the implementation of the quality plan.
- Any other relevant item.

ii) CONTRACTOR'S METHOD STATEMENTS AND CONSTRUCTION PROCEDURES

This section of the Quality Plan shall:

- Include detailed method statements for each major activity whether directly controlled or subcontracted.
- Identify the relevant construction procedures in the Contractor's own Quality Management System (and provide copies on request).

The method statements shall identify hold points and invoke:

- Work instructions
- Quality control procedures
- Compliance testing/inspection arrangements
- Work acceptance procedures

for all activities that might affect the quality of the permanent and temporary works.

iii) CONTRACTOR'S CONSTRUCTION QUALITY CONTROL

This section of the Quality Plan shall include:

- Statement of the Contractor's organisation for quality control.
- The Quality Plan shall identify procedures that cover the topics listed below. Copies of these procedures shall be made available to the overseeing organisation on request
- Arrangements for 'receiving' and 'in-process' testing.
- Control of test laboratories.
- Control of test, measuring and inspection equipment.
- Document control.
- Procedure for monitoring and recording the inspection, test and approval status of the constructed/installed work.
- Procedures for tests and inspections for the purpose of the Contractor certifying that prior to covering up, each part of the Works is complete and conforms to the Contract.
- Procedure for the review of work submitted for review but not accepted as conforming to the Contract.
- Procedure for the collation of quality records as identified in BS EN ISO 9001 and provision of copies when requested by the Project Manager.

iv) ORGANISATIONS' QUALITY PLANS

The Quality Plan shall include:

- Definition of the product or service to be provided.

- The organisation organogram shall describe the line of command and stating the name of the senior manager responsible for the contracted Work and the name of the Organisation's on-site Management representative. Contact addresses, telephone numbers etc shall be provided.
- Identification of the relevant parts of the Organisation's quality system relevant to the product or service being provided. (Copies to be provided to the Overseeing Organisation on request).
- The control of personnel selection (at works and on site), including special requirements for skilled personnel e.g. certification of welders, training of operatives, experience requirements etc.

Specific procedures for the following:

- Receipt and examination of certificates of conformity and test results for purchased products (*).
- Product identification and traceability (*).
- Handling, storage, packaging and delivery to site and storage and handling on Site (*).
- Quality records.

Where available and appropriate, copies of the Organisation's quality system/general procedures may be acceptable for items above marked with (*).

APPENDIX 1/70 : ENVIRONMENTAL PROTECTION ACT 1990, DUTY OF CARE

1. The Employer may be defined as a co-producer or broker of waste (depending on circumstances) as far as the Environmental Protection Act 1990 is concerned.
2. Pursuant to this Act, the Contractor shall comply with the following:
 - 2.1 Obtain a Controlled Waste Transfer Note from the Employer prior to the commencement of the Works.
 - 2.2 Provide a copy of the Waste Management Licence (or evidence of a valid exemption) for the recipient of the surplus material to be disposed off-site.
 - 2.3 Provide a copy of the Registered Waste Carrier Certificate for all carriers (including sub-contract hauliers, owner drivers and self-employed drivers) or surplus material to be disposed off-site. Also, make available original certificates for inspection by the Overseeing Organisation upon request.
 - 2.4 Make available to the Overseeing Organisation for inspection, copies of all Controlled Waste Transfer Notes.
3. A list of licensed waste management sites is available from the Environment Agency (formerly the Waste Regulation Authority), whose address is as follows:

Environment Agency
Rivers House
Sunrise Business Park

Higher Shaftesbury Road
BLANDFORD
DT11 8ST

APPENDIX 1/71 CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS

The management of Health and Safety on the works shall be undertaken in conformity with the requirements of the Construction (Design & Management) Regulations 2007 (The CDM Regulations) and the corresponding Approved Code of Practice.

The appointed Contractor shall be the Principal Contractor for the Works on Site. The Principal Contractor shall develop the Pre-Construction Information in accordance with the requirements of the CDM Regulations prior to the commencement of Works on Site. This development of the Construction Phase Plan shall set out the arrangements which, taking account of the risks of health and safety involved, will ensure, so far as it is reasonably practicable, the health and safety of all persons at work on the project or who might be affected by the Works. The consideration of health and safety risks in the Principal Contractor's development of the Construction Phase Plan shall not be limited to those particular risks identified in the Pre-Construction Information but shall include consideration of all reasonably foreseeable risks. The development of the Construction Phase Plan shall include the arrangements for the management of the construction works and for monitoring compliance by all persons with the requirements of relevant statutory provisions.

A copy of the Pre-Construction Information is in Appendix D. The Designers Risk Assessment is included in this document as Appendix D6.

The Construction Phase Plan must be adequately developed by the Principal Contractor, as far as is reasonably practicable allowing for any phasing of works, etc., and submitted to the Project Manager for comment not less than one week before the commencement of Works on Site. In the case of phased works the Plan relating to the work content of any phase must be adequately developed and submitted for approval prior to the commencement of work on the project.

Construction work shall not commence until the Construction Phase Plan has been accepted by the Project Manager as conforming to the requirements of the CDM Regulations.

The Principal Contractor shall be deemed to have included in his Tender for:

- conformance with the duties of the Principal Contractor in accordance with the CDM Regulations;
- conformance by the Principal Contractor and other contractors, with the duties of the designer in accordance with the CDM Regulations, where design work is carried out by the Principal Contractor or any other contractor;
- the provision for adequately controlling the risks to health and safety arising out of matters identified in the Construction Phase Plan;
- the monitoring and control of all contractors in respect of health and safety;
- the carrying out of all duties under all relevant statutory health and safety legislation; including the recommendations of all relevant health and safety codes of

practice, guidance and advisory notes produced by the Health and Safety Executive or other relevant authorities, trade bodies etc.

All contractors shall complete appropriate assessments of the risks to health and safety in respect of their works as required under applicable statutory legislation, including the Management of Health & Safety at Work Regulations 1999 and the Control of Substances Hazardous to Health Regulations 2002.

The Principal Contractor shall review, and revise as necessary, the project Construction Phase Plan in line with any information received from other contractors or any changes in the requirements of the project. Any changes shall be promptly advised to all relevant contractors, the CDM Co-ordinator and the Project Manager as appropriate.

The Principal Contractor will be responsible for co-ordinating co-operation between contractors, employees and self employed persons who are at work on the construction of the project.

The Principal Contractor shall ensure, so far as is reasonably practicable, that all contractors, employees and self employed persons conform with the requirements of the project Construction Phase Plan.

The Principal Contractor shall appoint a competent person on the site to manage health and safety during construction.

The Principal Contractor shall ensure, so far as is reasonably practicable, that all persons employed on, or visiting, the site are adequately informed instructed, trained, supervised and equipped such that they are able to carry out their duties safely.

The Principal Contractor shall take the steps necessary to ensure that only authorised persons are allowed into any construction area.

The Principal Contractor shall produce "as-built" records during the course of the work. He shall ensure that similar information is produced by all sub-contractors and suppliers. This information is to be passed to the Project Manager within one calendar month of completion – in digital.

The Health and Safety File will contain all the necessary information for the proper maintenance, repair and operation of the completed works. Details of construction methods and materials that may present significant residual hazards with respect to cleaning, maintenance or demolition will be included together with Layout Drawings, specifications, manufacturer's literature, operating and maintenance instructions, loading limitations, guarantees, warranties, certificates, as-fitted Layout Drawings and all other relevant details.

APPENDIX 2/1: LIST OF BUILDINGS, ETC, TO BE DEMOLISHED OR PARTIALLY DEMOLISHED

Demolition details are shown on drawing number 70044842-WSP-SGN-DR-CB-0010

APPENDIX 2/3: RETENTION OF MATERIAL ARISING FROM SITE CLEARANCE

Components and materials arising from site clearance shall be the property of the Contractor except where otherwise noted. Materials shall be removed from site as work proceeds when materials are not to be reused or recycled for site use.

APPENDIX 2/5: HAZARDOUS MATERIALS

Contaminated Ground

Where areas are unexpectedly encountered that appear to be contaminated (either visually or on the basis of odour) during the works the Contractor shall inform the Project Manager immediately to obtain further instruction.

APPENDIX 3/1 FENCING GATES AND STILES

Temporary Fencing

Public access to the site shall be cordoned off. All work areas and boundaries shall be protected and made secure by use of fencing or hoarding. Refer to drawing 70044842-WSP-SGN-DR-CB-0001 and Appendix 1/7 for details of site extent and boundaries. Temporary fencing and hoarding should allow passers-by to view the works unless another site constraint makes this impossible.. Temporary fencing should always be highly visible to warn of public hazard and prevent public entry to areas of the site where public safety cannot be controlled. Approved temporary fencing shall include 2m high fully enclosed hoarding, or 2m high temporary Heras fencing or equal approved.

APPENDIX 5/2 SERVICE DUCT REQUIREMENTS

For the purpose of installation ducts will be considered as Pipes for Drainage in the Specification for Highway Works.

All ducts will be sealed with an approved cap stopper or expanding foam to prevent ingress of any foreign matter to the duct. All duct seals will be inspected by the Project Manager before backfilling.

A draw cord should be left in the bottom of each duct with an additional length of 1m for every 20m of duct. Draw ropes in ducts are to be free (i.e. not captive or tangled with the installed cables) and the Contractor may be required to demonstrate this to the Project Manager.

The ducting will not be bent on site. Standard factory made bends will be used where required.

Purpose made couplers, adaptors and bell-mouths appropriately coloured will be used as required. The coupler or adaptor will be so designed that it does not interfere with the smooth inside face of the ducting.

All ducts will be tested with a mandrel as HCD I2.

APPENDIX 17/1: SCHEDULE FOR THE SPECIFICATION OF DESIGNED CONCRETE

	Mix Reference 1 Insitu Slab C35/45	Mix Reference 2 Precast Sumps
Intended working Life of Structure	120 years	120 years
Nominal Cover to Reinforcement (mm)	55mm +(Δc, 15mm)	55mm +(Δc, 15mm)
Applicable Exposure Classes (Excluding DC- Class)	XC3/4, XS1, XD3, XF3	XC3/4, XS1, XD3, XF3
Designed or Prescribed (D or P)	D	D
Required Compressive Strength Class of Concrete	C35/45	C40/50
Minimum Cement Content (kg/m ³)	360	380
Max. Free Water / Cement Ratio (kg/m ³)	0.45	0.45
Cement / Combination Group	IIB-S, CEM1-SR0 and SR3	IIB-S, CEM1-SR0 and SR3
Maximum Aggregate Size (mm)	20	10
Chloride Class	CI 0.30	CI 0.30
Consistence Class	-	-
Maximum Cement Content (kg/m ³)	550	550
Required Admixture	None	None
Air Entrainment Required	4.5%	None
Min. or Max. Temp. of Fresh Concrete °C	Min. 5°C and Max. 20°C	Min. 5°C and Max. 20°C
Sampling and Testing	1. Four cubes from 32m ³ or 4 batches whichever represents the lesser volume. Test certificates required. 2. Consistence test from each batch. Test records required 3. Air content from each batch. Test records required	1. Four cubes from each batch. Test certificates required.
Other Requirements	1. Freeze- Thaw resisting aggregates 2. Where IIB is specified, IIB+SR may be used. 3. To prevent drying shrinkage, cement content should be maximum 400 kg/m ³ or mix should not contain fly ash or micro silica.	

Notes:

All Designed Concretes shall conform to BS 8500-2

All constituent materials shall be obtained from a single consistent source

Aggregates shall be free of any impurities that may cause staining

The mix proportions and the grading shall be maintained constant

APPENDIX 17/3: CONCRETE – SURFACE FINISHES

Tolerances

To achieve acceptable fit of structural steel, tolerances for cast in situ concrete are as follows:

- i. The tolerance in finished member size and finished levels shall not exceed + or – 5mm.
- ii. Deviation from intended position +/- 10mm
- iii. Deviation from intended level +/- 5mm
- iv. Deviation from vertical or near vertical plane 2mm/metre
- v. Deviation from individual dimensions +/- 10mm
- vi. Deviation from intended horizontal or near horizontal plane; no gap below a 2m straight edge should exceed 3mm
- vii. Notwithstanding the above, abrupt irregularities or combinations of opposite tolerances will not be acceptable.

Finishes

Element	Finish
Inner face of upstand wall	F3
Top face of upstand wall	U2
Top face of slab	Refer to requirements below; price on Burlap drag with depth of striations 0.5-1.0mm

The top face of the pool slab is required to be brought to a dense even non-slip surface with no abrupt irregularities that is suitable for use by young bathers with bare feet

The Contractor shall allow for the provision of an initial 4 No 0.6 x 0.6m test panels to demonstrate the results of 4 finishing techniques. The timing of the finishing technique and where practicable the intensity of the technique shall be recorded. These shall be:

Burlap Drag

Medium Acid etch

Medium High Pressure water jet

A fourth panel of the contractor's choice

These panels shall be reviewed with the Overseeing Organisation and 2 selected for further consideration.

The Contractor shall then allow for the provision of a further 4 0.6m x 0.6m test panels to trial variations on the timing or intensity of the surfacing finishing process. These variations shall be agreed in principle with the Overseeing Organisation. Once agreed the Contractor shall provide a quotation for the difference in cost of these finishes to the 'default' Burlap drag option.

The finish for the top face of the slab shall then be selected, with due regard to appearance, performance, repeatability and cost by the Overseeing Organisation from these 4 panels. The panel selected will be used as a reference for the finishing of the slab and should therefore be retained, and protected, on site until completion of the works.

APPENDIX 17/4: CONCRETE GENERAL

- 1 Cement combinations as defined by SHW clause 1702.1 are permitted.
- 2 Refer to Appendix 1/5 for details of sampling and testing.
- 3 The use of approved retarding agents shall be permitted as a means of reducing operations involving vibration.
- 4 Carbon steel reinforcement shall be ribbed grade B500B to BS4449:2005. Carbon steel reinforcement to be provided where indicated with the notation "B" on the contract drawings as listed in Appendix 0/4.
- 5 All reinforcement shall be cut and bent in accordance with BS8666:2005.
- 6 Stainless steel tying wire (1.2mm diameter) to be used for fixing all reinforcements.
- 7 Spacers, blocks and chairs to be used for fixing reinforcement shall be in accordance with SHW Clause 1714.1.
- 8 Objects made of ferrous materials shall not be left on finished exposed concrete surfaces so as to avoid staining.
- 9 Welding of reinforcement other than steel fabric reinforcements will not be permitted.

APPENDIX 23/2: SEALING OF GAPS SCHEDULE

- 1 Slab reinforcement is not to pass through joints.
- 2 All joints between slabs shall be provided with a water stop on the underside such as Fosroc 'Rearguard S' or similar approved
- 3 For design purposes the maximum shade air temperature has been taken as 33°C and the minimum shade air temperature as -8°C.
- 4 For design purposes it has been assumed that the joints are sealed at a temperature of between 2°C and 15°C. If it is proposed to carry out this task at a temperature outside this range due consideration shall be made and recorded about the necessary changes to the requirements below.
- 5 The maximum total movement range has been calculated as 10mm. Based on Movement Accommodation Factor (MAF) of 25% joint widths shall be 40mm. If the Contractor proposes a product with a higher MAF, this will be considered favourably as a means of reducing the joint width above.
- 6 Joint sealant shall be provided, placed and tooled in accordance with all respects of the manufacturer's instructions. This may be placed in-situ or pre-formed. If placed in-situ, where practicable they shall be placed in one continuous length.

- 7 Joint sealant to be resistant to chlorine at concentrations typical for a public pool of this type during normal use and for shorter periods the higher concentrations occurring during a in 'shock' treatment.
- 8 Joint filler board or backing shall be a non-absorbent closed cell polyethylene filler designed for the purpose.
- 9 The contractor may choose between a placed in-situ or preformed product, and shall submit their proposal to the Overseeing Organisation no less than 3 weeks before the product or alternative needs to be ordered, or any change to the joint width needs to be made. Examples of each product type are listed below. If, as in (b) below the MAF exceeds 25% advantage shall be taken of this and a narrower joint formed.
 - a. Fosroc Thioflex 600
 - b. Emseal Submerseal (MAF = 50%)
- 10 Joint sealant shall all be of a consistent colour and either grey, white or black.