 CARLISLE CITY COUNCIL www.carlisle.gov.uk			
REPORT TO EXECUTIVE			
PORTFOLIO AREA: COMMUNITY ACTIVITIES			
Date of Meeting:		28th April 2003	
Public			
Key Decision:	Yes	Recorded in Forward Plan:	Yes
Inside Policy Framework			

Title: BITTS PARK PADDLING POOL

Report of: Parks and Countryside, Culture Leisure and Sport

Report reference: CLS47/03

Summary: Reviews the health and safety implications of the paddling pool under its present maintenance regime and considers several future options: including revamping or replacement with comparable water play features

Recommendations: That the opening of the paddling pool is delayed until health and safety implications have been assessed. That a choice be made between several options for a comparable water feature within the context of a revamped playarea.

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1.

2. BACKGROUND INFORMATION AND OPTIONS

1.1 The paddling pool in Bitts Park was installed in 1973. It is now 30 years old, is outdated and does not conform to current health and safety recommendations.

1.2 The maintenance of the paddling pool and sand pit, outlined in the Outdoor Recreation Contract for Leisure Management, was formerly the responsibility of

Leisuretime but since December 2002 following the formation of Carlisle Leisure Ltd, has passed to the Parks and Countryside section who also maintain the rest of the play equipment and the safety surfacing in Bitts Park.

1.3 The Contract specified that the pool was to be filled and emptied three times a week during the summer months. It was further specified that the water was to be treated with an appropriate chlorine additive and tested daily to ensure that the chloride was at the correct strength. The water in the pool was not continuously circulated and filtrated. The pool was left filled overnight without a cover. There is no formal supervision in the playarea, no fencing around the pool and no signs giving guidance to users. A full risk assessment has been made of the paddling pool – see Appendix A. The City Council would be liable if an accident should occur.

1.4 The Institute of Sport and Recreation Management (ISRM) has written a guidance note – "Paddling Pools Operation" – which recognises three groups of hazards relating to paddling pools

1.4.1 Drowning. In full day light with parents/carers in attendance this is a low risk. A full pool left overnight without adequate surround fencing or a pool cover would carry a high risk factor from drowning. Weekend revellers have been known to frequent the paddling pool after the pubs and clubs close. The ISRM guidance note considers a pool cover or "*.... alternatively, and a strong recommendation within this guidance note, the pool should be emptied of water after every use thus ensuring there is no risk of drowning accidents*" (Italics in ISRM note).

1.4.2 Hazards in the water – eg broken glass and other debris. It can be difficult to ensure the removal of all such hazards from the water; the only effective way is to empty and sweep the pool on a daily basis. Although the contract specifies that the paddling pool is to be inspected daily for litter and broken glass and any such hazards removed, effective elimination can only be achieved by a daily emptying and sweeping out. Bacteria and water-borne diseases could also be a hazard particularly if dogs can get into the pool. The guidance note says; "It is strongly recommended that the best way to ensure a pool is maintained in a safe bacteriological condition is by means of a continuous circulation and simple filtration system with automated chemical dosing through an erosion or similar type feeder. Paddling pools without any water circulation should endeavour to initiate a conversion as soon as possible, as otherwise there is little chance of operating the paddling pool safely." The water in the Bitts Park pool is not circulated or filtered. Although there is a total dog ban within Bitts Park playarea this is voluntary and there is no effective way of enforcing it.

1.4.3 Other factors with a high risk. A further publication – "Managing Health and Safety in Swimming Pools" from the Health and Safety Executive covers paddling pools as well. Supervision is not always deemed necessary for paddling pools but the following factors are recognised as being important – all of which relate to the paddling pool in Bitts Park.

- unaccompanied children under 15 would use the pool
- at peak times crowding could occur

- activities likely to generate high excitement
- an area greater than 170sqm is available for use (Bitts pool is 168sqm)
- have additional features posing risk eg other play equipment as in Bitts Park
- have food and drink available

Rules and signs are recognised as important even though children may not be able to, and probably will not read, or necessarily understand them.

5. The risk assessment (see Appendix A) indicates that the health and safety implications are too high to consider reopening the paddling pool under the past maintenance regime. Possible options for the future of the pool are outlined below:

OPTIONS

1.5.1 Option A. Closure and removal of the paddling pool. This would eliminate all health and safety hazards but would remove a very popular play feature. The space left behind could be filled with new items of equipment if this was deemed suitable in the long term view of a revamped playarea. Estimated cost for removal and reinstating surfacing £12,000.

2. Option B. Refurbishment of paddling pool. Commercial and Technical Services have devised a programme of work so that the paddling pool could operate within current health and safety recommendations. This would include:

- Installation of a filtration/bromine dosing system and double pass UV lamp system to kill bacteria
- Installation of 1m high bow top railings with self-closing gates around the pool area
- Installation of appropriate guidance signs (a draft of the recommended guidance sign is included in Appendix B)
- Lift existing paving to pool sides and relay
- Recoating the pool surface with resin
- Increasing the size of the water main to the pool. This would be desirable to reduce the amount of time it would take to fill the pool, but would cost an additional estimated £7000

Estimated cost £21,000 (£28,000 if size of water main increased) .

1.5.3 There are staffing implications if the refurbishment option is pursued. The pool would need to be filled and emptied everyday, with the appropriate checks made on the filtration and chemical dosing systems. The water would need to be tested every hour to ensure that the correct amount of chemicals was in the water and that distribution was even throughout the pool. The pool would also need to be closed and the public prohibited from entering, if the dosage etc was not correct and therefore a

possible hazard. The playareas are currently inspected and maintained by a two person/one vehicle team who inspect all the playareas in the City once a week. It would not be possible for them to maintain the paddling pool at these levels and continue to inspect all the other playareas. The ISRM guidance note recommends supervision to reinforce the guideline rules. A temporary playarea/paddling pool attendant employed during the summer months when the pool was in use would be desirable. To cover total pool use an attendant would need to be employed 12 hours a day, 7 days a week, for the 5 month period May-September. Estimated staffing costs £10,800.

Secure storage for the chemicals involved and staff training in the handling of chemicals should also be considered as an ongoing cost.

A revamped paddling pool would not be completely accessible for children with disabilities.

1.5.4 Option C. Replacement with an interactive water feature. This feature comprises a series of jets, sprays and fountains operated by the user by foot studs let into the ground. Clean water from the mains flows out of the features and drains away instantly. There is no need for chlorination and no body of standing water where bacteria could accumulate. The ground would be covered with a non-slip rubber impact absorbing surfacing and the entire "wet" area would be enclosed by a fence with suitable guidance signs at the entrances, (See Appendix B). The feature would be in use from May to September with the above ground parts of the feature stored during the winter months. Maintenance should be minimal (regular drain clearance, installing in May and taking down in September) and should be within the capabilities of the existing playarea maintenance staff. It should be noted that the manufacturers recommend that a sandpit is not included in the same playarea.

The interactive water play feature would be fully accessible for children of all abilities.

A scheme drawn up by a manufacturer of this equipment is included at Appendix C.

Estimated cost £114,500

1.5.5 Option D. Replacement with Sand and Water play feature

The present sandpit and paddling pool would be replaced with two new play features placed side by side. The sand play feature would comprise a large sandpit with miniature digger and a wooden play unit on two levels incorporating scoops, funnels and pulleys. The sand play feature would be usable all year round.

The water feature would comprise a user-operated pump connected to fresh mains water and a series of interconnecting troughs and basins with dams and Archimedes screw type features for raising water from one level to another. There would also be mixing tables for sand and water together. The whole feature would be drained at the end of each day. The water would be shut off in the winter months.

It would be constructed so as to ensure that it was usable by children of all abilities as

far as possible (eg it would be impossible to make the miniature digger available to children with posture problems, though the sand pit and both levels of the play feature in the sand pit would be accessible.) Estimated installation costs £22,000 (sand - £9,000 and water £13,000)

There are also staffing implications for the maintenance of this feature. The water feature would need to be emptied and cleaned and the drains cleared daily during May-September which would entail a man and a vehicle for an hour daily. The work would be funded from the playarea budget and carried out by Commercial and Technical Services. Estimated staffing costs £3,000, to be found within existing budgets.

1.5.6 The options for the future of the paddling pool and sandpit are only the first of many considerations about the long-term future of Bitts Park playarea. The entire playarea is old-fashioned and of limited play value and needs total refurbishment. The recent proposals to install a playunit accessible for children of all abilities are also part of the long-term renewal considerations. A revamped playarea would make a major contribution to retaining the Green Flag Award for Bitts Park in future years.

	A – Closure of paddling pool	B – Revamp of paddling pool	C – Interactive water Feature	D – Sand and Water Play
Initial cost	£12,000	£21,000 (£28,000) see report	£114,500	£22,000
*Play Value	0	8	8	10
Seasonal availability	-	May-September	May-September	Sand – all year round Water – May-Sept
*Play Value re seasonal availability	0	3	3	7.5
Age range	-	Up to 10	Toddler - adult	Toddler - 10
Staffing needs and cost	-	Daily attendant, May-September £10,800	Found within present resources	1 hr daily attendant, May-Sept £3,800
Water consumption and cost per	-	46 cubic metres	** 30 cubic metres	***5 cubic metres

day		£35	£22.70	£3.85
#Sewerage charge per day	-	£23.46	£15.30	£2.55
Electricity Consumption	-	-	Figures not available	-
Other Considerations	Removal will leave space to install further equipment	Purchase of chemicals, storage of chemicals, staff training	Not compatible with a sand pit. Putting up in May, taking down in Sept, storage through winter. Servicing of electrical/pumping systems.	Marginally larger sand consumption than at present

Table to Show Relative Merits of Options A-D

*Play value is judged subjectively on a scale of 1-10. It is an attempt to evaluate each option in what it can offer to the child in terms of enjoyment, physical and mental challenge, social interaction, learning of new skills etc

** This figure based on an estimated average of 3 hours daily use over the season

*** This figure based on an estimated average of 5 hours daily use over the season

Sewerage charges will be proportionally the same as water charges

All costs are estimated

1. CONSULTATION

1. Consultation to Date.

The Carlisle Citizens Panel answered questioned about Parks and Play Equipment in October 2002. When asked if they thought there should be a paddling pool in Bitts Park playarea, 76% answered Yes, 22% answered No, 1% did not answer. This clearly indicates that the paddling pool is a very popular feature, borne out by the heavy use it gets on sunny summer weekends.

When asked how they would rate the paddling pool in Bitts Park they replied:

Very good – 5%

Good – 27%

Average – 39%

Poor 21%

Very poor – 5%

Not answered – 2%

This would indicate that although well used it is not as good as it might be and there is definitely room for improvement.

General comments were invited on the playarea in Bitts Park, 20 of which were concerned with the paddling pool. Twelve of these were characterised by concerns for safety, especially when the pool was very busy and which could possibly be prevented by supervision of the area – eg teenagers riding bikes through the pool, fear of paedophiles, rowdy behaviour of older children frightening small children. Six were concerned with hygiene – dogs in the pool, toddlers in nappies and general dirty appearance of the water. Other comments suggested that the pool was an asset especially in summertime, though some respondents had visited the playarea in the summer and had found the pool empty.

2. Following media reports on television and posters in the playarea, a further questionnaire was devised asking the public for their preferred option for the future of the paddling pool. A small display explaining the options was displayed in the foyer of the Civic Centre, over a period of 10 days. Questionnaires were available here and at the kiosk in Bitts Park, and on the web site. There were 261 responses which are detailed in Appendix D. The responses indicate that the paddling pool at present is very popular and that a water play feature of some description in Bitts Park would be even more popular than the existing paddling pool. The preferred options for replacement were:

Interactive water play feature – 67%

New sand and water play feature – 21%

Refurbishment of existing paddling pool – 10%

Closure and removal – 2%

1. RECOMMENDATIONS

3.1 It is recommended that the paddling pool should be delayed until the health and safety issues have been resolved.

3.2 Having studied the various alternatives, a preferred option should be chosen for installation, should funds become available.

2. REASONS FOR RECOMMENDATIONS

4.1 The risk assessment under its present maintenance regime deems the paddling pool to be of high risk. The health and safety hazards are numerous and dangerous. The paddling pool does not comply with recommendations.

4.2 Should funding become available, forward planning for the playarea as a whole will be facilitated by knowing which water feature, if any, is preferred.

3. IMPLICATIONS

- Staffing/Resources – An additional temporary member of staff would be recommended should the option of the refurbished paddling pool (option B) be adopted.
- Financial – None of the proposed options could be funded through the annual playarea budgets. The proposals for the future of the paddling pool need to be seen as part of a long-term refurbishment of the Bitts Park playarea as a whole, at an estimated cost of £250,000. Additional funding will need to be sought, possibly through the 2005 Lottery bids for which local authorities can apply
- Legal – There are no legal implications
- Corporate – There are no corporate implications
- Risk Management – The existing paddling pool and its maintenance regime presents a considerable risk, which needs to be reduced. The Council would be liable should an accident occur.
- Equality Issues – The proposed new replacement features (options C and D) will allow children of all abilities to play together.
- Environmental – A refurbished paddling pool with a continuous circulation and filtration system will use a lot of mains water and some power to run it.

The replacement interactive water feature, although more conscious of water conservation will also use a fair amount and will also need some electricity to run it.

The replacement sand and water play feature will use minimum amounts of water and will not require any electricity to run it.

- Crime and Disorder – There are no implications for crime and disorder

Bitts Park PLAYAREA – RISK ASSESSMENT - Continued PADDLING POOL. First written 07/02/03 – EA/KS/SH

The management and maintenance of this item have recently been transferred to Parks and Countryside from Leisuretime. The future of the item is unsure and will be considered along with the future of the entire playarea. The pool is filled during the summer months, the water changed 3 times a week – Monday, Wednesday and Friday. Closure of the paddling pool is very probable unless the health and safety issues can be resolved. Report to decide on options for paddling pool to go to Executive Committee on 28/4/03.

Item	Hazard	Prob.	Injury	Risk	Recommended Action
Paddling pool	Drowning. Water will be approximately 250mm deep when pool filled, no formal supervision at any time. Pool left filled and unattended over night.	2	4	8	Provide supervision at busy day light times. Empty pool over night. Neither of these actions are practicable under the present regime and staffing levels.
Paddling pool	Infection from water borne diseases	2	4	8	Chlorinate/disinfect water to prevent bacteria. Design of pool will not allow safe mixing of chemicals to ensure even distribution throughout water. Present maintenance regime and staffing levels also do not make this a practicable remedial action.
Paddling pool	High levels of excitement. Bitts Park paddling pool meets all criteria liable to generate these – see HSE guidance notes	2	4	8	Install perimeter fencing and gates around paddling pool. Install notices advising public of suitable behaviour in the paddling pool area
Paddling pool	Bicycles being ridden through pool – ride over small children	2	4	8	Enforce no bicycles in playarea ruling. Would need full-time attendant – present staffing levels would not make this practicable.
Paddling pool	Dogs in paddling pool – infection from water borne diseases	2	4	8	Enforce no dogs in playarea ruling Would need full-time attendant – present staffing levels Would not make this practicable
Paddling pool	Trip point on edge, stepping into and out of pool	2	3	6	No reasonably practicable remedy is apparent
Paddling pool	Sharp concrete edges to outer lip of pool edge could cut bare feet	2	2	4	Outer edges could be clad similar to inner edge. Consider when long-term future of pool decided.

Bits Park PLAYAREA – RISK ASSESSMENT - Continued PADDLING POOL. Written 07/02/03 – KS/EA/SH

Item	Hazard	Prob.	Injury	Risk	Recommended Action
Paddling pool	Floor of pool is uneven with sharp, jagged edges between areas of concrete, joints crumbling. Cuts to bare feet	2	2	4	Repair crumbling joints. Consider when long-term future of pool decided
Paddling pool	Central drain cover loose, not fixed in and not so heavy that a child could not move it. Inspection pit beneath deep and water filled – small child could drown	1	4	4	No reasonably practicable remedy is apparent
Paddling pool	Central drain cover loose, not fixed in and not so heavy that a child could not move it. Inspection pit beneath deep and water filled – small child could trip in	1	3	3	No reasonably practicable remedy is apparent
Paddling pool	No water safety notices displayed	1	3	3	Provide notices according to HSE recommendations. Consider when long-term future of pool is decided.
Paddling pool	Concrete plinth surrounding mechanism and chamber for pool is raised above paving slabs, has sharp concrete edges, and padlock attachment could be a trip point.	3	1	3	Remove from vicinity of pool. No practicable remedy is apparent
Paddling pool	Drain cover on works as above left off unattended for 1-2 hours when pool being emptied and cleaned. Inspection pit below deep	2	4	8	Remove from vicinity of pool. No practicable remedy is apparent

KEY TO TABLES

Indicates the probability that an accident will happen as a consequence of the identified hazard:
 1 = Unlikely
 2 = Possible
 3 = Probable
 4 = Very Probable

Indicates the level of injury that could occur if an accident happened:
 1 = Slight, first aid may be required
 2 = Minor, first aid will be required
 3 = Moderate, medical attention required
 4 = High, accident reportable under RIDDOR

Records the hazard identified and, if a Standard failure, the EN reference

Indicates whether this hazard was identified in the RoSPA report

Indicates the level of risk as a consequence of the identified hazard. This is calculated as probability score X injury score

Suggests a remedy if known

SITE NUMBER	SITE NAME	ITEM	HAZARD IDENTIFIED	RoSPA?	PHOTO	PROBABILITY	INJURY	RISK LEVEL	RECOMMENDED ACTION
1	The Playground	Toddler Swings	Accessible nuts and bolts projecting more than 8 mm that are not permanently protected ~ EN 1176 ~ 1 ~ 4.2.5 [1998], beneath swing seat	✓	A	1	2	2	Use appropriate remedies from EN1176-1, Figure10

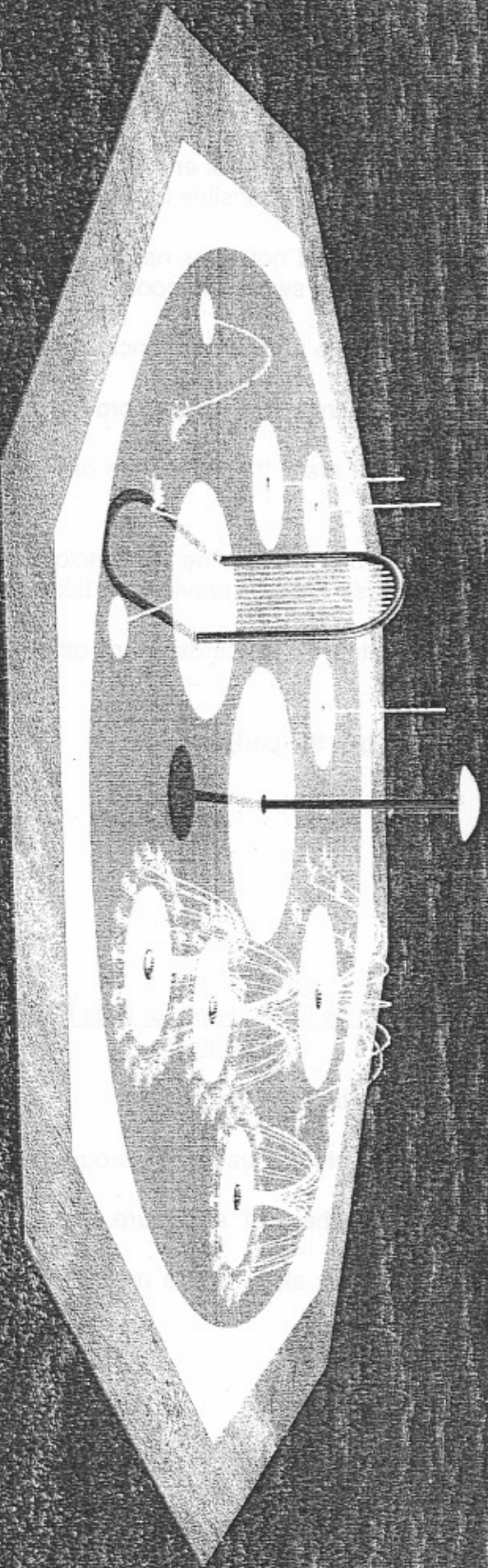
Regulations and Signs to be Considered for Bitts Park Paddling Pool

1. This paddling pool is for the use of young children only.
2. All children inside the paddling pool enclosure must be accompanied by a responsible person who is responsible for the child at all times
3. Babies and children should not wear nappies in the paddling pool but a purpose made costume for swimming pool use.
4. No dogs are allowed in the pool or pool enclosure.
5. Glass bottles, glass and china must not be brought into the pool enclosure.
6. No running in the pool area; the surrounds of the paddling pool may be slippery.
7. No food or drink to be brought into the pool enclosure and no litter to be left around the pool. Use the bins provided or take your litter home.
8. No bicycles, roller skates, skateboards or any other similar equipment in the pool enclosure.
9. No swimming or diving in the paddling pool

Regulations and Signs to be Considered for Bitts Park Interactive Waterplay Feature

1. No dogs are allowed in the "wet" enclosure.
2. Glass bottles, glass and china must not be brought into the "wet" enclosure.
2. No food, drink or litter in the "wet" enclosure.
3. No bicycles, roller skates, skateboards or any other similar equipment in the "wet" enclosure.

BITTS PARK CARLISLE WATER ODYSSEY AQUATIC PLAYGROUND



Water
Odyssey

THE CARLISLE
PLAYGROUND
DESIGN

Water Odyssey Division of The Fountains Group, Inc.
P.O. Box 807, San Marcos, TX 78666, 512-382-1156
www.waterodyssey.com

The new feature is designed to occupy the area presently used by the paddling pool

Q1	Do your children, or children you look after, use the Paddling Pool in Bitts Park Play Area?	
	Yes	223
	No.....	38
Q2	Do you want a water play feature in the Bitts Park playarea?	
	Yes	248
	No.....	12
Q3	Which of the following options would you prefer?	
	<i>Closure and removal of the paddling pool.....</i>	6
	<i>Refurbishment of existing paddling pool.....</i>	26
	<i>A new interactive water play feature</i>	174
	<i>A new sand and water play feature.....</i>	55
Q4	Comments:	
	10	

Q1	Do your children, or children you look after, use the Paddling Pool in Bitts Park Play Area?	
	Yes	85%
	No.....	15%
Q2	Do you want a water play feature in the Bitts Park playarea?	
	Yes	95%
	No.....	5%
Q3	Which of the following options would you prefer?	
	<i>Closure and removal of the paddling pool.....</i>	2%
	<i>Refurbishment of existing paddling pool.....</i>	10%
	<i>A new interactive water play feature</i>	67%
	<i>A new sand and water play feature.....</i>	21%
Q4	Comments:	
	4%	