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**USE OF SPRINKLERS IN NEW SCHOOL BUILDINGS**

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**Responsible Cabinet Member(s) – Councillor Don Bristow**  
**Resource Management Portfolio**  
**Responsible Director(s) – Paul Wildsmith, Director of Corporate Services**

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**Purpose of Report**

- 1 This report requests Council to adopt, as policy, the inclusion of Sprinkler Systems in the future building of new Schools within the Authority.

**Background**

2. Currently there is no statutory requirement to install sprinklers within new Local Authority or Voluntary Aided school buildings, however they are strongly recommended by the County Durham and Darlington Fire and Rescue Service and the Council's Insurer's, Zurich Municipal.
3. One school within the Authority is fitted with a Sprinkler System, the new Alderman Leach Primary School that opened in February 2005. Sprinkler Systems have been included within the designs for the building of the new Skerne Park Primary School, as well as the PFI Houghton Education Village and Harrowgate Hill Primary School Developments. Officers are currently liaising with the Church of England Diocese with a view to including sprinklers within the design for the new Middleton St George Primary School, which is a Voluntary Aided School.
4. Cabinet and Officers support the benefit of having sprinklers within our schools and this report considers the Council's future policy in respect of fitting sprinklers within all new schools to be built.
5. Zurich Municipal, the largest insurer of schools, estimate that 90% of school fires, are as a result of arson attacks. They also state that for many years, the vast majority of school fires occurred 'out of school hours'. There is now increasing evidence of a trend towards fires occurring during normal school hours, hence the potential for loss of life or injury from fire to staff, pupils and other users of schools.
6. The Fire Service supports the installation of sprinklers within new school buildings as they are designed to ensure that each sprinkler head operates only if individually subject to heat or fire, thus reducing the cost of fires. Sprinklers are designed to contain fire at source, and in many cases, extinguish the fire, as well as raising the alarm at an early stage of fire development.

7. Losses from fires in buildings protected by sprinklers are therefore reduced, estimated to be one tenth of those in unprotected buildings. This results in less disruption, as by containing the spread of the fire and limiting the damage to adjoining classrooms within the school, there is a greater possibility of continued use of the school whilst repairs are being undertaken, without having to close the school or arrange for the use of temporary accommodation either on site or at another location
8. The use of sprinklers to contain fires has proved very beneficial to those schools that have invested in them who have experienced a fire. As well as the financial savings there are the benefits of less disruption to children's education and the saving of work that the children have undertaken during the year. Smoke damage is also limited within the building.
9. It is estimated that it costs about 2% of the total cost of a building to install a sprinkler system. As Zurich Municipal support the installation of sprinklers in new buildings they also offer Authorities reduced insurance terms for those schools where they are fitted, due to the reduced risk of severe financial losses.
10. As an example, the insurance premium for a school with an insurance value of £4m will currently cost approximately £4,800 a year. If it is fitted with a sprinkler system the premium is reduced to about £450 a year. In addition the policy excess of £25,000 for this school will reduce to nil in the event of any future property fire claim. The estimated cost of installing sprinkler systems within new Primary Schools to be built within the town is estimated to be about £85,000 to £100,000 for each school.
11. The Corporate Risk Management Group has suggested that the annual savings in insurance premiums achieved could be used to contribute towards financing Prudential Borrowing for the installation of sprinkler systems within the building of new schools. An example is shown below.

Cost of Sprinklers	£85,000 to £100,000
Life of Sprinklers	30 years
Prudential Borrowing Costs over 30 years	£5,300 p.a.
Contribution towards annual financing costs from savings made in fire premiums	£4,350
Shortfall	£950

12. As can be seen in the above example there will be a shortfall. This shortfall could be met either of two ways, by an annual contribution from Education's revenue budget or a one-off contribution of about 20% of the total capital costs at the outset this option would depend on capital resource levels at the time.
13. By Council adopting the fitting of sprinkler systems within the designs of new school buildings as policy, it will demonstrate to our Insurer's and the Durham and Darlington Fire and Rescue Service our commitment to a pro-active stance regarding fire safety in schools. It will also reduce disruption and financial losses in the event of a fire at these premises.
14. The retrospective installation of sprinklers within existing buildings is not currently being considered, as it is relatively expensive and more disruptive to the school.

## **Outcome of Consultation**

15. Consultation has been made with the County Durham and Darlington Fire and Rescue Service and the Council's Insurer's, Zurich Municipal; both Organisations support the Authority on this approach. Cabinet, Corporate Management Team, other Officer groups, Secondary and Primary School Head Teachers have also been consulted.

## **Legal Implications**

16. This report has been considered by the Borough Solicitor for legal implications in accordance with the Council's approved procedures. There are no issues which the Borough Solicitor considers need to be brought to the specific attention of Members, other than those highlighted in the report.

## **Section 17 of the Crime and Disorder Act 1998**

17. The contents of this report have been considered in the context of the requirements placed on the Council by Section 17 of the Crime and Disorder Act 1998, namely, the duty on the Council to exercise its functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, crime and disorder in its area. It is not considered that the contents of this report have any such effect.

## **Council Policy Framework**

18. The issues contained within this report are required to be considered by Council.

## **Recommendation**

19. Council are requested to:-
  - (a) Adopt as policy, including the installation of sprinkler systems within the design of new Local Authority school buildings
  - (b) Encourage the installation of sprinkler systems within the design of Voluntary Aided Schools
  - (c) Consider the inclusion of sprinkler systems in the design of other new Council buildings, as appropriate
  - (d) That the annual savings achieved from lower insurance premiums in buildings fitted with sprinkler systems be used to contribute towards the financing of Prudential Borrowing for sprinkler systems in new buildings.

## **Reasons**

20. The recommendations are supported by the following reasons:-
  - (a) The installation of sprinkler systems is strongly supported by the County Durham and Darlington Fire and Rescue Service and the Council's Insurer's, Zurich Municipal, and will demonstrate this Authorities commitment to a pro-active approach to fire safety

within schools.

- (b) In the event of a fire within those schools that are fitted with a sprinkler system, it will reduce financial loss and disruption to the School.

**Paul Wildsmith**  
**Director of Corporate Services**

### **Background Papers**

No background papers were used in the preparation of this report.

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