Survey of Three Stakeholder Groups on Site Waste Management Plans

Report to Defra, Business Resource Efficiency and Waste (BREW) Programme
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Survey of three stakeholder groups on Site Waste Management Plans

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Executive summary

AEA Energy & Environment and the Building Research Establishment (BRE) have undertaken a survey on Site Waste Management Plans (SWMP) contacting three stakeholder groups: the Construction and Demolition (C&D) industry, local authorities and trade federations/associations. The aim of the survey was to identify the experience and understanding of SWMPs of each of these three groups, with specific regard to:

- Cost vs Benefit;
- Most and Least effective interventions;
- Willingness to set waste reduction targets (and to what level); and
- Waste audit trail.

The responses received from trade federations/associations were not suitable for proper analysis and as such the report focuses on the other two stakeholder groups.

Specific stakeholders that utilised SWMPs were identified where possible, and contacted for the survey. Only the C&D companies sample group all had experience of SWMPs. As a result the stakeholder group that most understood SWMPs was the C&D companies. It was found that C&D companies find the main benefit of SWMP to be financial reward, however there was no consensus as to whether this was in direct correlation to the volume of waste reduced on site. The savings made were unique to projects, due to variations in project type (i.e. house building, bridge building or demolition).

This variability of savings on different projects caused the majority of C&D companies to state that whilst they are willing to have targets set, the actual targets themselves should not be a flat percentage reduction. Local authorities had replied that targets should be included, although no consensus was found. It was noted that the average figure local authorities provided for an achievable target was considerably higher than that proposed by companies, however answers to previous questions indicated this was based on a desire to reduce waste rather than understanding of SWMPs.

Local authorities identified sustainability and corporate social responsibility as their main benefit of SWMPs followed closely by waste reduction. Local authorities recognised that financial reward was the main benefit to C&D companies, however other benefits specifically related to these companies were not identified.

All of the stakeholders were in favour of auditing SWMPs. Furthermore there was a consistent response that this should be carried out either by the C&D company or an outside consultancy. It is noted that should SWMPs be introduced the use of auditing would be a benefit as it could also aid monitoring of the use and impact of SWMPs in the UK.

The study found that a lack of data collection by C&D companies caused the understanding of the exact impacts and costs of SWMPs to be difficult to evaluate. The introduction of an audit process could provide the impetus for companies to collect data allowing for more in depth analysis of the impact and cost of SWMP to be achieved.
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1 Introduction
1 Introduction

The Business Resource Efficiency and Waste programme (BREW), contracted AEA Energy & Environment and the Building Research Establishment (BRE) to undertake a series of evidence gap projects on Site Waste Management Plans (SWMPs) and waste prevention targets. The aim of these projects is to identify best practice and examples of SWMPs in use. In conjunction, willingness of the construction and demolition (C&D) sector and local government to implement and regulate SWMPs in the UK has been gauged. The remit of this project is to develop and conduct a survey relating to current SWMP users.

The survey targeted three stakeholder groups that use or are involved with SWMPs:

- Construction and Demolition (C&D) companies;
- Local authorities; and
- Trade Associations and Federations.

The aim of the survey was to evaluate the three groups understanding and experience of SWMPs, in the context of:

- Cost vs Benefit;
- Most and Least effective interventions;
- Willingness to set waste reduction targets (and to what level); and
- Waste audit trail.

It is anticipated that this work will be part of a portfolio that can assist government in developing legislation, procedures and guidance for the introduction of SWMPs.

1.1 Background

Sustainability, waste, climate change and resource efficiency increasingly arise in public debates and the media. This rise in public awareness has led to increasing efforts to identify methods to achieve ‘green’ goals. The C&D industry is one of the areas where it is believed such savings can be achieved. BREW’s construction programme aims to improve resource efficiency through waste minimisation and management.

The C&D industry in the UK consumes more than 400 million tonnes of materials annually, and generates over 100 million tonnes of waste. There is increasing pressure on the industry to reduce the amount of materials used and recycle more. This poses a number of questions: what are the best ways to do this; how should the industry go about it; and what support is available?

In the Netherlands up to 90% of construction and demolition waste is re-used or recycled whereas the UK achieves a rate of 45%. There is significant potential for the C&D industry to make a difference through waste prevention, reduction and improved site waste management.

There are many opportunities for C&D contractors to make cost savings and to reduce waste. Establishing good waste minimisation and management practices would make a significant difference. Implementation of SWMPs is one way the construction industry can achieve these savings. The use of SWMPs are currently voluntary, although there is consideration of making them mandatory. The government is currently contemplating how SWMPs could be brought into the UK planning system.

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1 The construction industry mass balance: resource use, wastes and emissions RA Smith et al  www.trl.co.uk/viridis/800/mainpage.asp?page=82
Research, commissioned by WRAP 2006, showed that only 11% of 800 construction companies contacted used SWMPs, and only 3% were following the DTI’s 2004 guidelines for implementing SWMPs.

SWMPs are a vehicle to manage, audit, and validate waste reduction on C&D sites. SWMPs incorporate a variety of measures to help reduce or recycle site arisings as well as integrate with other legislative procedures. SWMP use a number of methods including:

- Predicting materials use and waste generation;
- Identifying reuse and recycling routes;
- Recording actual waste generation subsequent reuse/recycling;
- Updating of SWMP through the construction programme;
- Compliance with the Duty of Care/ Hazardous Waste regulations;
- Identification of waste reduction through procurement; and
- Review of the SWMP and continuous improvement.

The Department of Trade and Industry (DTI) has provided guidance on how to produce a SWMP. The document contains details of procedures and quality assurance systems, providing a template for stakeholders to utilise.

### 1.2 Methodology

#### 1.2.1 Development of questionnaires

Three different questionnaires were developed for the three different stakeholders. These questionnaires are reproduced in Appendix 1. The questions set to each of the stakeholder groups were tailored to answer each of the following objectives:

- Costs versus benefits of having a SWMP;
- Effective interventions for waste management;
- Willingness to set targets; and
- Auditing preferences.

#### 1.2.2 Stakeholders contacted

Forty-three C&D companies were identified that utilised a SWMP. The sample group chosen represented small, medium and large companies in both construction and demolition to make the results more representative of the whole industry.

Thirty-one local authority (LA) planning departments were identified to achieve a good geographical mix for the UK and Northern Ireland as well as a rural and urban mix. Three LA’s were specifically targeted as they already have a requirement for SWMPs in their planning process. Within the LA the principle planning manager was contacted.

Eight trade associations were contacted although only one of the trade associations was willing to respond in any way to this survey. All the other trade organisations felt unable to comment until they had consulted their members, unfortunately the timescale of the project did not allow for this. The one organisation that did respond did not respond directly to the questionnaire instead providing general answers on subjects within the survey.
2 Analysis of Surveys
2   Analysis of surveys

2.1 Construction and Demolition Companies

The survey targeted 43 C&D companies located in the UK and Northern Ireland who utilise SWMP. These companies ranged in size from large multinationals to smaller regional firms. The following information presents each survey question with the responses from each of the companies interviewed.

**Question 1**

*How does an SWMP provide financial savings? Are these financial savings in direct correlation to the volume of waste reduced on site?*

![Figure 1:C&D company responses to how a SWMP provided them with financial savings](image)

The results indicate that lower waste disposal costs are the most important method of financial savings for the C&D companies contacted (Figure 1), with 44% respondents identifying it as such. There was no clear second most important method with better planning, reducing over ordering and waste awareness being acknowledged by 16% of respondents. 7% did not know how an SWMP provided financial savings.

Of the 43 companies that answered this question 40% did not know if the financial savings were in direct correlation to the volume of waste reduced on site, with the remainder split evenly between yes and no representing 30% of respondents each.
Question 2

Can you please estimate the percent reduction of the waste arisings occurring per project?

Table 1. Respondents estimate of percentage reduction of waste arisings occurring per project

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No percentage reduction in waste</td>
<td>4</td>
</tr>
<tr>
<td>&lt;10%</td>
<td>1</td>
</tr>
<tr>
<td>&lt;20%</td>
<td>1</td>
</tr>
<tr>
<td>&lt;30%</td>
<td>1</td>
</tr>
<tr>
<td>&lt;40%</td>
<td>2</td>
</tr>
<tr>
<td>&lt;50%</td>
<td>1</td>
</tr>
<tr>
<td>&lt;80%</td>
<td>2</td>
</tr>
<tr>
<td>Depends upon project</td>
<td>6</td>
</tr>
<tr>
<td>Don't know</td>
<td>17</td>
</tr>
<tr>
<td>No response</td>
<td>8</td>
</tr>
</tbody>
</table>

Over half of the respondents (58%, Table 1) did not know or would not provide an estimate for the reduction of waste arisings per project. A further 14% stated that waste reductions were dependent upon the project. There is no reduction in waste as a result of SWMPs according to 9% of the sample group. Whilst 18% believed there were savings, although there was no consensus as to the percentage saving that could be made with an even spread of these respondents over the options provided.

Question 3

Could you estimate the financial savings made as a percentage per project for Small projects costing less than £250k, Medium projects (£250k-£500k) and larger projects (£500k +)

Table 2. Financial savings from carrying out SWMP’s on small (<£250k), Medium (£250k-£500k) and large (£500+) projects.

<table>
<thead>
<tr>
<th>Response</th>
<th>Small (&lt;£250k)</th>
<th>Medium (£250k-£500k)</th>
<th>Large (£500+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% (No savings)</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1%</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3%</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4%</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5%</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10%</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>20%</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Not applicable</td>
<td>16</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Don’t know</td>
<td>15</td>
<td>18</td>
<td>32</td>
</tr>
</tbody>
</table>

For small projects 67% of those surveyed stated either not applicable or did not know what savings could be made for small projects (Table 2). Of the remaining respondents 12% stated that no savings could be made and 26% indicated some form of savings could be made, although these were evenly spread over the percentage options provided.

Medium projects were similar to small, with 77% of stakeholders replying not applicable or don’t know. Of the remaining stakeholders 16% believed that savings of some form could be made, these are evenly spread across the percentage saving categories provided. The final 7% of C&D companies did not think financial savings would arise.

For large projects 77% of respondents to the question stated that they don’t know what percentage financial savings they could make or that it was not applicable. Of those that did make an estimate 7% stated there would be no savings, whilst 16% stated they would.

A large number of the don’t know responses recorded in this question were as a direct result of C&D companies not having data as to the impact of their SWMP system. Furthermore, it must be taken into account that many companies would have replied don’t know as they operate projects of a certain size. For instance a company that focuses on large projects would not know the financial savings implications of a small or medium project, whilst the opposite is also true.
**Question 4**

*Please rank the top 3 following outlays in order of most onerous for implementing SWMP Highest first? What is the least onerous task when introducing SWMP’s?*

**Figure 2** Companies ranking of outlays in order of most onerous for implementing Site Waste Management Plans

![Bar chart showing companies ranking of outlays](chart-image)

- **Figure 2** show the companies ranking of outlays in order of most onerous for implementing SWMPs. The ranking has been decided based upon the number of respondents (the more respondents the higher the ranking).

**Table 3. Ranking of outlays in order of most onerous for implementing site waste management plans**

<table>
<thead>
<tr>
<th>Outlay</th>
<th>Number of respondents choosing this ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>Culture change</td>
<td>10</td>
</tr>
<tr>
<td>Training and awareness</td>
<td>7</td>
</tr>
<tr>
<td>Cost / administration / time</td>
<td>12</td>
</tr>
<tr>
<td>Lack of space</td>
<td>7</td>
</tr>
<tr>
<td>Local authority planning / developmental control</td>
<td>0</td>
</tr>
<tr>
<td>Client expectations</td>
<td>0</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
</tr>
</tbody>
</table>

NB/// Grading has been calculated by using the following weightings for each ranking. 1° = 3pts, 2° = 2pts and 3° = 1pt. The Outlay with the highest points score is graded number 1.

Other outlays that were not selected in this instance include:
- Reorganisation, which outsourced construction (developer);
- Lack of co-operation from waste management companies;
- Environment Agency’s definition of waste preventing reuse off site;
- Classification / separation of hazardous waste;
- Location with no recycling facilities for waste;
- Dealing with Hazardous waste with the lack of facilities in Wales;
- Transfer stations are more interested in dealing with mixed waste rather than segregated waste as there is more profit for the transfer station to carry out the segregation;
- Legislation to get a crusher on site in order to recycle for oneself; and
Finding the right waste management company to carry out SWMP for them.

The grading system input (Table 3), shows that culture change is the most onerous outlay in implementing a SWMP for C&D companies in this survey. This was closely followed by training and awareness and cost / administration / time. Further down on the grading score was lack of space. The last two outlays were client expectations and local authority planning / development control, which were significantly lower than all the other outlays.

Cost / administration / time obtained the highest first ranking from the companies contacted followed by culture change, then training and awareness and lack of space tied. None of the other options were ranked first.

One of the sample group did not respond with any onerous outlay, four provided one response and eleven provided two.

Stakeholders identified Local authority planning / development control expectations as the least onerous task followed by client expectations (Figure 3). No response was the next most popular category. Cost / administration / time and training and awareness both received six responses each. Culture change received two responses only whilst lack of space was not considered to be the least onerous by any of the C&D companies contacted. Analysis of the least onerous rankings against the most onerous has been undertaken in Section 3.
Question 5

Please rank the top 3 benefits of a SWMP for your company and the least beneficial aspect of SWMP’s.

Figure 4 C&D companies ranking of the top three benefits of a SWMP

Financial
Waste reduction
Practice for legislation
Site waste management
Contractual requirements
Marketing
None
Don’t know

Table 4. Top three benefits of implementing a SWMP

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st(</td>
</tr>
<tr>
<td>Financial</td>
<td>12</td>
</tr>
<tr>
<td>Waste reduction</td>
<td>4</td>
</tr>
<tr>
<td>Sustainability and CSR</td>
<td>5</td>
</tr>
<tr>
<td>Practice for impending legislation</td>
<td>11</td>
</tr>
<tr>
<td>Site waste management</td>
<td>7</td>
</tr>
<tr>
<td>Contractual requirements</td>
<td>2</td>
</tr>
<tr>
<td>Marketing</td>
<td>0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
</tr>
</tbody>
</table>

NB// Grading has been calculated by using the following weightings for each ranking. 1st = 3pts, 2nd = 2pts and 3rd = 1pt. The Outlay with the highest points score is graded number 1.

Other benefits that were not selected in this section include:

- Tidy site;
- Provides a good management system;
- Provides data to help set Environmental Key Performance Indicators for Annual Report;
- Passes responsibility on to sub contractors;
- Paperwork; and
- Getting help to design out waste at the start of the project.

Financial reward was the most beneficial impact of implementing a SWMP being ranked first and by grading (Table 4). This was followed by waste reduction and sustainability and corporate social responsibility, these both received low first rankings but high second and third rankings (this can also
be seen in Figure 4). Practice for the implementation of legislation was fourth in the grading, however it was only one response less than financial in being ranked first. This shows that during the questionnaire eleven of the companies asked put “practice for impending legislation” first when ranking the top three benefits of a SWMP for their company. Site waste management was next in the ranking with a consistent number of responses at first, second and third. The other benefits highlighted were selected significantly fewer times than those already mentioned and included contractual requirement and marketing, in that order.

**Figure 5 C&D companies responses as to the least beneficial aspect of introducing a SWMP**

Fifteen of the respondents could not identify a least beneficial aspect of introducing a SWMP (Figure 5). This was followed by contractual requirements. Other respondents were evenly spread between the other options provided to them, except for waste reduction which no company identified as least beneficial. Analysis of least beneficial and most beneficial has been undertaken in Section 3.

**Question 6**

*What are the most effective waste management intervention measures implemented through your SWMP? And what are the least effective interventions?*
The most effective waste management intervention introduced by the use of a SWMP identified by the sample group was waste segregation (30%, Figure 6). Then there are two blocks of responses:

- The first is re-use of spoil (19%), project planning at the design stage (14%) and understanding waste stream (14%).
- The second is implementing contracts with subcontractors (9%), training and awareness (7%) and negotiating take back with suppliers (7%).

Of all the respondents 35% did not respond with a least effective method. 40% provided an answer specific to themselves that has been categorised as other. The remaining respondents identified segregation on small sites (12%), educating sub-contractors (7%) and paperwork (7%).

**Question 7**

*Could you estimate the cost savings made through waste prevention rather than physical waste management?*

88% of the businesses surveyed could not answer this question due to lack of information. Four respondents felt that waste prevention could potentially save more money than waste recycling and segregation. The remaining 12% provided a variety of answers ranging an estimate of 100% of soil and spoil to the ability to save £3k as a result of ordering pre-cut plasterboard. It was not possible to highlight a theme or pattern in the five responses received.

**Question 8**

*Could you estimate the waste reduction made through waste prevention rather than physical waste management?*

37 out of 43 respondents were unable to answer this question. Of those that responded there was a wide range of answers. Waste reduction ranged from 2% to 70%, however as with most responses this varied depending upon the material. For example, one respondent felt that 100% of waste soil and spoil could be prevented whilst another respondent felt that only 30% of soil waste could be prevented. Unfortunately the respondents did not state how these savings would occur.
Question 9

What do you think is a realistically achievable waste reduction target? Would you be willing to incorporate such a target into your SWMP?

Figure 7: Waste reduction targets that C&D companies stated were realistically achievable.

Approximately 42% of the C&D companies contacted replied that a 10% waste reduction target was realistically achievable, significantly more than for any other figure provided (Figure 7). Of the remaining respondents 16% thought the value should be less than this and 30% thought it could be more, whilst 14% did not respond.

The majority of companies surveyed were willing to have targets incorporated into SWMPs with 72% replying “yes” to this question. 19% replied “no” and 9% did not know or did not respond.

Question 10

Do you currently have an audit or post review exercise of your SWMP? When do you carry out audits of SWMP’s? In the future would you be willing to have your SWMP audited? If so which of the following would you be willing to carry this out?

Over half of respondents (56%) carry out an audit or post review of their SWMPs, with a further 5% partially using such procedures. 37% of the sample group do not carry out an audit or post review exercise and 2.5% did not respond to this question.

Table 5. Timing of Audits

<table>
<thead>
<tr>
<th>Response</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>10</td>
</tr>
<tr>
<td>Every 6 months</td>
<td>3</td>
</tr>
<tr>
<td>Quarterly</td>
<td>5</td>
</tr>
<tr>
<td>At the end of a project</td>
<td>18</td>
</tr>
<tr>
<td>Monthly</td>
<td>2</td>
</tr>
<tr>
<td>Randomly</td>
<td>2</td>
</tr>
<tr>
<td>Not done</td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
</tr>
</tbody>
</table>

The majority of respondents carry out audits of SWMP’s at the end of projects (Table 5), however some of these respondents were also carrying out additional auditing on an annual basis as part of their ISO14001 (or equivalent standard) procedures.
Figure 8: Preferences of C&D companies for bodies to carry out auditing.

The majority of respondents preferred self-auditing, followed by the use of consultants (Figure 8). Both trade associations, and Local authority auditing received good support. Whilst clients the Environment Agency/DEFRA, or any accredited organisation received significantly lower backing.

Question 11

Do you utilise your own SWMP or the DTI’s voluntary code of practice?
If you use your own SWMP rather than the DTI’s voluntary code of practice, please state why?
Why do you utilise your own SWMP rather than the DTI’s voluntary code of practice?

Of the C&D companies contacted 60% stated that they utilised their own SWMP, 2.5% responded they used both and the remaining 37.5% use the DTI’s voluntary code of practice.

Table 6. Reasons for utilising own SWMP’s

<table>
<thead>
<tr>
<th>Response</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allows implementation with company procedures</td>
<td>7</td>
</tr>
<tr>
<td>Simplified system compared to DTI</td>
<td>14</td>
</tr>
<tr>
<td>Developed prior to DTI Code</td>
<td>5</td>
</tr>
<tr>
<td>Includes wider range of criteria</td>
<td>7</td>
</tr>
<tr>
<td>No response</td>
<td>10</td>
</tr>
</tbody>
</table>

NB/ A number of companies that stated they used the DTI’s voluntary code of practice initially then stated that they had adapted it, hence no response being 10 (27.5) and not 16 (37.5%)

The main reason for using a different system to the DTI’s voluntary code of conduct was that companies installed a more simplified system (33%, Table 6). The other three reasons were responded to by similar numbers of respondents.
2.2 Local Authorities Response to Questionnaires

Initially the 31 local authorities were asked if they were aware of the impending legislation in relation to SWMPs for the C&D industry. Less than half (12) of the local authorities surveyed were aware of the impending legislation, although two local authorities were partially aware of the legislation and the majority (17) of the local authorities were unaware of the impending legislation regarding SWMPs.

**Question 1**

*Do you require SWMPs?*

**If yes**

Is the requirement for a SWMP based on property, size, footprint, cost, location, other?

Do you require waste reduction or other targets to be met?

How are they evaluated?

Do you monitor progress during construction/demolition?

**If no**

Are you thinking of producing a Specific Planning Document (SPD) for SWMP

Is there a reason for your not requiring a SWMP for a planning application?

What method would you use to evaluate and monitor a SWMP if one was required?

Would you want targets to be set? For what?

Local authorities with or currently introducing a SWMP requirement

Three of the local authorities required SWMPs. Of these, two required SWMPs to be implemented for activities which involve 10 or more residential homes or more than 1000 m² of commercial development. The other Local Authority required SWMPs for developments above 5 or more residential homes or more than 1000 m² of commercial development. One other local authority was still drafting its specific planning guidance regarding SWMPs but indicated that it too would be introducing a requirement on SWMPs dependent upon the size of the development. The remaining 27 local authorities do not require a SWMP and are currently not planning on implementing one.

All four local authorities surveyed that either had implemented a requirement for SWMP or were in the process of implementation responded that they did not set any waste reduction targets or required any to be met.

Two respondents indicated that they had not started to receive or evaluate SWMPs. One respondent indicated that this would be the responsibility of Development Control Officers, whilst another indicated that a joint planning liaison and waste management services panel would receive the SWMPs for review.

Two local authorities felt that they would be unable to monitor progress due to a lack of resources. One of these respondents mentioned that monitoring progress would have to be left to trust. The third respondent felt that progress could be measured by asking for a BREEAM® assessor post construction certificate.

Local authorities without a SWMP requirement

Five local authorities indicated that they would be seeking to introduce a Specific Planning Document (SPD) for their SWMP. One local authority was undecided and the other 21 had no plans to do so.

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5 The BRE Environmental Assessment Model visit http://www.breeam.org/ for more information.
28% of local authorities are looking to introduce an SWMP in the near future (Table 7). Equally 28% were not aware of the need to introduce a requirement for a SWMP and another 28% rated the introduction of a SWMP as a low priority. 7% of the respondents were unsure of how to implement the requirements of a SWMP and a further 7% stated it was not their responsibility.

The majority of local authorities surveyed (82%) did not know how they would monitor the use of SWMP’s. Only 7% of respondents had a known system for monitoring, which was the use of planning enforcement. Two local authorities had no plans to introduce or monitor SWMPs due to a lack of resources mainly in staff time available.

58% of local authorities replied to the question regarding the setting of targets within a SWMP with the response of don’t know. 32% stated they would set targets, 7% said they would not and 3% replied that it would depend upon the development.

**Question 2**

*Can you please estimate the savings that could be made as a percentage per project from the effective implementation of SWMP’s for the following types of project?*

- Small projects costing less than £250 k
- Medium sized projects costing between £250 k and £500 k
- Large Projects costing more than £500 k

None of the respondents answered this question.

**Question 3**

*Can you please estimate the % reduction of the waste arisings occurring per project?*

The majority of respondents were unable to answer this question. Although one respondent felt that a reduction in waste arisings of 35% could be achieved through effective implementation of SWMPs whilst another felt that a 20% reduction could be achieved. Unfortunately it was not stated exactly how these savings occurred.

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The survey group included 2 County councils for whom implementation of a SWMP will not be required.
Question 4

Please rank the top three benefits of a SWMP and which is the least?

Figure 9: Local authority response to the top three benefits of implementing a SWMP

Table 8. Local authority response to the top three benefits of implementing a SWMP

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Number of respondents</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>Overall Ranking *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability and CSR</td>
<td>17</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Waste reduction</td>
<td>10</td>
<td>14</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Practice for legislation</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Constituent satisfaction</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Site waste management</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Contractual requirements</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t know</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB/ Grading has been calculated by using the following weightings for each ranking: 1st = 3pts, 2nd = 2pts and 3rd = 1pt. The outlay with the highest points score is graded number 1.

Other benefits that were not selected in this section include:

- Reducing traffic through city centres;
- Making more efficient use of resources;
- Using less quarried materials due to increase in recycling;
- Another piece of legislation for local authorities to enforce; and
- Reduction in hardcore for landfill sites.

The majority of local authorities stated that sustainability and CSR was the main beneficial aspect of a SWMP (Figure 9 and Table 8). This was closely followed by waste reduction. Both of these received significantly higher responses than the other options available. Practice for legislation received the third highest number of respondents. Whilst financial benefit and voter satisfaction were lower down the list of benefits. Contractual requirements and site waste management received no responses.

Over half off the sample group (52%) did not know what the least beneficial aspect of a SWMP was. Whilst 18% replied it was financial and 10% stated voter satisfaction, contractual requirements and none respectively.
**Question 5**

*Please rank the top three benefits of a SWMP to a construction or demolition company, and which is the least?*

**Figure 10: Local authority perception of the main benefits of SWMP to C&D companies**

![Graph showing local authority perception of main benefits of SWMP to C&D companies]

**Table 9. Local authorities perceptions of major benefits of SWMP’s to C&D companies.**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Number of respondents</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Practice for impending legislation</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Sustainability and CSR</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Contractual requirements</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Waste reduction</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Marketing</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Site waste management</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Don’t know</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

The local authorities contacted identified the major benefit to a C&D company as the financial rewards of implementing a SWMP; it was both the most selected 1st option and had the highest score in the grading system (Figure 10 and Table 9). This suggests that the financial option had the highest result across the board from the C & D companies. The second most important benefit was that it provided practice for impending legislation. Sustainability and corporate social responsibility received the next most responses. After which contractual requirements, waste reduction and marketing were selected, in this order.

**Question 6**

*Do you consider the SWMP to be a burden on the planning department? Why do you consider the SWMP to be a burden on the planning department?*

Of the local authorities responding with either a yes or no as to SWMP being a burden, there was an even split (35%; 35%). However 27% of the respondents stated not necessarily and one (or 3%) stated that they did not know (Table 10). Two of the three LAs that have a SWMP requirement already...
replied that it was not necessarily a burden to the planning department whilst the other stated it was. Unfortunately the one that stated it was did not explain the reason for it being a burden. Whilst the two other respondents stated it depends on how far you take enforcement and on the approach taken.

| Table 10. Reasons why SWMPs are a burden on local authorities planning department |
|-----------------------------------------------|-----------------------------------------------|
| Response                                       | Number of respondents |
| Lack of personnel / training issues            | 8 |
| Diverting planners from main task              | 1 |
| Additional responsibilities                    | 3 |
| Will require involving other departments       | 1 |
| Difficulties in enforcement                    | 1 |
| If scope is clear and resources are provided it should not be burdensome | 6 |

Lack of personnel / training issues was considered to be the largest burden on the planning department of the local authorities surveyed, with 26% of the responses. Whilst 19% of respondents stated that if the scope is clear and resources are provided it should not be burdensome. The additional responsibility of SWMPs was raised by 10% of local authorities. Diverting planners from their main task, difficulties in enforcement and the need to involve other departments were all recognised by one authority.

**Question 7**

*What do you think is a realistically attainable target for waste reduction on a building project?*

![Figure 11: Local authority views on realistically attainable waste reduction target on a building project.](image)

Just under a third of the local authorities replied that they did not know what was a realistically attainable target for waste reduction under SWMPs (Figure 11). Whilst 36% of the local authorities thought that a reduction of 1%<29% was achievable and 29% believed that 30+% was an achievable goal. One respondent stated that the savings would be dependent on the project.

**Question 8**

*Do you think that construction and demolition companies should have voluntary or mandatory targets included in their SWMP?*

The majority (77%) of respondents stated SWMP targets should be mandatory. The remaining 23% were evenly split between voluntary targets and not knowing.
Question 9

*Do you think that SWMP’s should be audited and if so by whom?*

Only two local authorities did not state that SWMPs should be audited, these responded that they don’t know rather than no auditing should occur.

**Figure 12 Local authorities recommendations for a SWMP auditing body**

The most popular option for regulatory body amongst the local authorities contacted in this survey was other independent body (Figure 12). This was followed by self-audit and the use of an outside consultancy, with the same number of responses each. The fourth choice was for local authorities to carry out the role and the last one was for trade associations / federations.
2.3 Trade Federations and Associations

One trade federation / association, The Federation of Master Builders (FMB) was willing to reply to the survey in its own format rather than to the specific questions posed. Below is a transcript of the FMB's response.

1) Cost benefits

Financial savings made by companies are nearly impossible to estimate and will depend on the company, its current systems for waste management, and the actual building project in question. If anything, SWMP is likely to INCREASE costs, unless improved waste management results in better use of resources, recycling, etc. The increased cost may, however, be justified by the greater objectives of SWMP, particularly as long as an adequate threshold for the smallest businesses in maintained.

The same applies to % reduction in waste - this is difficult to estimate as it is site-specific.

The FMB currently has no information on how many members use a SWMP or other waste management systems.

Benefits to a company:

a) Financial - Likely to incur increased cost;
b) Marketing - If mandatory, SMWPs will level the playing field rather than create a commercial advantage because all businesses will have to apply it. Naturally, businesses that currently have a robust waste management system in place are likely to be more competitive in tendering;
c) Corporate Social Responsibility - Means very little to small businesses, or indeed local public clients who are more concerned with low price. Generally, CSR is for major contractors with a national profile, not small local businesses, although they may be active in their communities in other ways;
d) Waste reduction - Yes, likely to have a positive impact, although fly-tipping is also likely to increase;
e) Practice for impending legal obligation - question not clear; and
f) Contractual requirement - SWMPs and other systems useful for companies seeking public contracts (with local authorities, etc) but only in terms of voluntary aspects. Mandatory requirements are applied by all and become taken for granted in contractual requirements.

2) Effective interventions

Unable to comment - prevention and physical management likely to incur increased financial cost, but this may be justified by reductions in waste.

3) Targets

Percentage targets for building projects - please do not encourage rigid targets that are based on pseudo-science or statistical averaging. A realistic amount of waste reduction will depend on the project, its nature, the contractor's abilities, and many other things.

Setting waste reduction targets - Yes, "in-principle" targets can be useful for awareness-raising but specific targets should not be linked to penalties.

Voluntary/mandatory targets - Mandatory targets sound like a bad idea, and likely to be counter-productive to the aims of SWMPs. Penalties must not be linked to rigid, specific targets. There may be a way to apply some type of proportionality (i.e. Project X should apply an X-type reduction in waste), but simple percentage targets sound highly impractical.

4) Audit process

In general terms, auditing means added time- and financial cost, especially to smaller businesses. Yet, some type of audit might be necessary to give waste management more formality.
a) Self-audit - Possibly, depends on how this would be achieved. This may be the most realistic option;

b) Outside consultancy audit - No. Costs are likely to be excessive and the market for consultancy services is likely to produce unanticipated perversions of what this exercise aims to achieve;

c) Trade federation - No. Insufficient resources and flies in the face of association-contractor relations. Contractors are the paying customers of associations, and for associations to "police" their members in this way would have an effect on this relationship; and

d) Local government development authority - Possible in principle, but the generally slow, bureaucratic nature of such public bodies may have a significantly negative effect on the operation of audits.
3 Discussion
3  Discussion

Understanding of SWMPs varies between stakeholder groups (i.e. C&D companies and local authorities) as well as within stakeholder groups. A number of these have been highlighted within this survey. Unfortunately due to the lack of responses received for the trade associations no analysis was possible.

The following are the salient points found for C&D companies and local authorities from the survey carried out:

**Cost vs Benefit**

| C&D Companies: | SWMPs provide more benefits than costs; the main benefit is financial savings. |
| LA: | Sustainability and CSR is the most identified benefit of SWMPs. There was no consensus on whether they would be a burden on the planning department |

**Most and least effective interventions**

| C&D companies: | Waste segregation was identified as the best intervention technique to employ. No specific technique was clearly identified as being the least effective. |
| LA: | |

**Willingness to set waste reduction targets (and to what level)**

| C&D Companies: | The majority are willing for targets to be set, although there was no consensus on the level to be set. Many stated that a flat level would not be appropriate as each project was different. |
| LAs: | They believe that targets should be set. There was no consensus on the level that should be set, although, in general, it was higher than what C&D companies believed could be achieved. |

**Waste audit trail**

| C&D Companies: | Most believe auditing should occur and nearly two thirds already carry out self-audits. Companies were most willing to have self-auditing or outside consultancy auditing occur. |
| LAs: | There was general consensus that auditing should occur, however respondents did not identify one specific body that should carry it out. |

The study indicates that there is confusion between all stakeholders of the costs, benefits and requirements for SWMPs, especially for local authorities. Questions relating to targets and auditing highlighted the lack of historical use of SWMPs and data collection, as answers were either spread across all options or focused on ‘don’t know’. The information obtained from trade federations was insufficient to be used in this discussion as only one federation replied, and this was in a format different to the questionnaire sent.

3.1  Cost vs. Benefits of SWMPs

Cost and benefits as expected are different for C&D companies and local authorities. C&D companies identified financial reward as the main benefit whilst LAs stated waste reduction. These are the responses one would expect, as companies are inherently required to make money whilst LAs need to reduce waste arisings.
Figure 13: Local authorities and C&D companies responses for the most important benefit to C&D companies from implementing a SWMP

NB/. Local authority responses have been increased proportionally to total the same value as the C&D companies.

A large number of companies stated that implementing a SWMP was important as it provided practice for impending legislation. Whilst few respondents identified contractual requirements and marketing as benefits, the fact that any did indicates increasing awareness of waste by clients.

Figure 13, above, shows that local authorities recognised the financial benefit of SWMPs as being of greatest importance to C&D companies. However the number responding to this was almost double that of C&D companies and other benefits were not identified correctly, especially when second and third most important benefits are taken into account.

These variations in responses reflect the lack of understanding of SWMP benefits to C&D companies by local authorities. The most interesting of these misalignments was waste reduction, which companies identified as the second most important, compared to local authorities who rated it as the fifth most important benefit for companies. When this is taken into account with LAs second most important benefit of SWMP to themselves being waste reduction, it indicates that there is significant potential for both parties to work together and achieve the same goal through implementing SWMPs.

LAs stated the main benefit of implementing a SWMP was achieving sustainability and CSR, followed by waste reduction and providing practice for impending legislation. Financial reward and constituent satisfaction were not seen as major benefits of SWMPs, whilst none responded to contractual requirements. This highlights the fact for local authorities the benefits of SWMP are physical rather than financial, as would be expected.
The greatest financial benefit identified by C&D companies was the reduction in waste disposal costs (Figure 14). However companies did not agree on the amount of financial savings and the percentage waste reductions that could be made. Review of the survey responses and the comments made indicate that this was because some companies had not carried out data gathering and analysis of SWMPs.

Examples provided by companies of the types of savings that can be achieved through use of a SWMP included a utility company that made 80% savings through waste prevention, a firm that found 100% of soil and spoil waste could be averted through waste prevention. Others stated that 2% savings could be made through waste prevention and that using made to measure plasterboard saved approximately £3k per project. These examples further reinforce the financial and waste reduction benefits that can be achieved through a SWMP, and the industries heterogeneous nature, in terms of both size and work, of the companies surveyed.

There was disagreement among the C&D companies as to the benefits of a SWMP on different sized projects. Some respondents felt that savings could be the same no matter the size of the project, whist many stated that the smaller the project the smaller the benefit. Indeed the smallest projects may incur costs and no benefits according to a stakeholder. Companies that stated smaller projects were more inefficient often stated a lack of space, waste arisings and economies of scale (i.e. in skip hire) as the main issues. As stated previously some of the respondents have not undertaken review of their SWMPs and as such there is little or no evidence, for these assertions. When the question was posed to local authorities about the savings (waste or financial) that could be made as a result of a SWMP none were willing to provide an answer.
The cost of SWMPs for C&D companies are ranked in Table 4 and when the results were graded this indicated that companies found the changing the culture the most onerous issue for SWMP implementation. Followed by training and awareness and then cost / administration / time outlays. All three of which can be significantly influenced by how SWMPs are introduced by Government and companies.

The fourth most important issue was the lack of space to physically carry it out on site. Comments indicate this was an issue for smaller projects where space is at a premium; further investigation would be required to understand the implication to cost and benefit in the light of this.

Comparison of the most and least onerous responses from C&D companies can be seen in Figure 15 above. This shows the disagreement between stakeholders on cost/administration/time, training and awareness and culture change as a result of SWMPs, with them being ranked as both least and most onerous. There is consensus on lack of space which is solely identified as a difficulty, whilst client expectations and the local planning authority are not considered onerous.

### 3.2 Effective interventions

C&D companies identified waste segregation as the most beneficial intervention that can be implemented. Re-use of spoil, project planning at the design stage and understanding of waste streams were also selected frequently. It was noted by one of the companies that the size of the firm would impact the answers provided to this question, for instance a large company would be much more interested in sustainability and CSR.

C&D companies identified that the use of contractual requirements was the least beneficial aspect of introducing a SWMP. From the comments received it appears there was some misunderstanding as to what was meant by contractual requirements as some believed it to be with sub-contractors on site and others understood it to mean between the client and the company. Either way this provides two points of interest, firstly there is a need to ensure sub-contractors buy into the SWMP and secondly the ability for clients to drive the use of SWMPs.

The use of contractual requirement from the client to the contractor to have a SWMP provides a good example of a market mechanism being installed to increase the uptake of SWMP. If this were to occur with all or the majority of C&D projects than the companies offering there services would implement a SWMP system to ensure they won the contracts.
The survey indicated that many companies either did not use or amended the DTI voluntary code of practice SWMP plan. This is not necessarily bad because as stated earlier the C&D industry is extremely heterogeneous with a wide range of company sizes and core functions in the market place. As such producing one SWMP for all would be difficult, to have a base model for each company to amend specific to their requirements is probably best, which is what is occurring with the DTI’s voluntary code of practice.

### 3.3 Targets

C&D companies and Local authorities both had majorities in favour of the introduction of targets in SWMPs. However when asked about the specific level at which the targets should be set there was variation between the two stakeholder groups, with LAs identifying a higher figure on average than C&D companies. Figure 16 below shows a comparison of the realistically achievable targets identified by the two stakeholder groups.

#### Figure 16 Comparison of the responses from local authorities and C&D companies on realistically achievable targets for waste reduction.

The majority of C&D companies believed that a 10% waste reduction target was achievable. A number of companies actually believed a higher percentage could be achieved, whilst seven thought a lower percentage was better. A third of local authorities did not respond to the question on targets, the rest bar four all thought that 10% or more was an attainable target. This is interesting as the majority of local authorities were not willing to estimate the waste savings a C&D company could make, indicating the answer to this is more what the local authority would want rather than what they believe the C&D companies can realistically achieve.

A number of the C&D companies stated that the setting of flat targets would be a problem for them. Firstly there was the issue that different sized projects and types of work would be able to achieve different levels of reduction. Furthermore a flat rate would penalise those companies that already achieved high levels of waste reduction, as making further savings would be difficult. Furthermore a flat rate might reduce innovation in achieving waste reduction and reward waste recycling rather than waste prevention. Waste prevention by better design can often be hard to measure whereas recycling volumes are easy to measure.

The survey indicates that 2 of the main stakeholder groups believe the introduction of targets would be beneficial, however there is not consensus on level at which they are set and how they are apportioned to different projects. The introduction of targets and their method of use requires a large
amount of information and understanding of SWMPs, these are a separate project each and not within the remit of this report.

3.4 Audit process

Auditing was looked at from two perspectives current status of auditing and future development of auditing. Almost all respondents (both C&D companies and local authorities) felt that SWMP’s should be audited. 61% of the C&D companies contacted stated they already used or partially used an auditing procedure. The majority of C&D companies carried an audit out at the end of the project. Although the majority (77%) of local authorities felt that SWMPs should be mandatory to encourage uptake by the building industry, there was less agreement on how they should be audited. A third of local authorities felt that with appropriate training they could undertake this task there was also awareness that other bodies could undertake this task such as the Environment Agency, outside consultancies and other independent bodies. A third of local authorities felt that companies could audit their own SWMPs.

Many companies are willing to carry out self-audits whilst a number are already including audits as part of their internal quality and environmental reporting standards. The majority of respondents were also willing to be audited by outside consultancies. The introduction of an auditing requirement for SWMPs will cause companies to collect more data on the impacts and costs of SWMPs to them, which in turn can be used to aid understanding of SWMPs and promotion of best practice.

There was a general view amongst stakeholders that industry was unlikely to take up SWMPs in any significant numbers unless it became mandatory. It was also felt that if it was important enough to legislate for SWMP’s to be carried out then it was certainly important enough to ensure that auditing occurred. One respondent pointed out that a large number of house builders are still not using BREEAM standards. Other respondents were more wary of enforcing SWMPs arguing that they would be difficult to enforce and that different projects would need to achieve different standards.
Conclusions
4 Conclusions

There is potential for SWMPs to provide both C&D companies and local authorities with significant benefits. The survey found that C&D companies that utilise a SWMP find them a benefit, mainly financially, and not overly onerous. Few local authorities have implemented a requirement for SWMP in the planning process at present, with more looking to adopt them. There was a significant portion of local authorities that did not rate the introduction of SWMP highly. It was highlighted that should the benefits of SWMPs, especially waste reduction, be identified to local authorities then more would potentially be interested in its uptake.

The companies are willing to have targets set and to be audited both of which local authorities agreed with. There is however disagreement within and between the stakeholder groups on the level at which targets should be set and how the targets should be imposed on a project, both of these will require further work to be answered. Responses received from companies identified that the setting of targets has the potential to be reduce the positive effects of SWMP for both themselves and local authorities. All the stakeholders identified self-auditing or the use of consultants as the best method to audit SWMP implementation.

There is an apparent lack of understanding by stakeholders of SWMPS and their impact on all relevant parties. The information obtained indicated that this was due to a lack of data collection and reporting on SWMPs. The main reason for this was that C&D companies had only recently implemented SWMPs and most LAs do not have a requirement for SWMPs at present.
Appendices

Appendix 1: Questionnaires
Appendix 1

Layout of Questionnaires used in study

Contents

Questionnaire for Construction / Demolition Companies
Questionnaire for Local Authorities
Questionnaires for Trade Associations and Federations
Questionnaire 1 Questionnaire for Construction / Demolition Companies

1/ How does an SWMP provide financial savings? Are these financial savings in direct correlation to the volume of waste reduced on the site?

2/ Can you please estimate the percent reduction of the waste arisings occur per project?

3/ Can you please estimate the financial savings made as a percentage per project for:
   • Small (>£250K)
   • Medium (£250K-£500K)
   • Large projects (<£500K)?

4/ Please rank the top three following outlays in order of most onerous for implementing site waste management plans, which is the least onerous:
   • Cost/administration/time
   • Training and awareness
   • Culture Change
   • Lack of Space
   • Client Expectations
   • Local Authority Planning/Development Control
   • Other (please specify)

5/ Please rank the top three benefits of a SWMP for your company, and which is the least beneficial:
   • Financial
   • Marketing
   • Sustainability and Corporate Social Responsibility
   • Waste reduction
   • On site waste management
   • Practice for impending Legal obligation
   • Contractual requirement
   • Other (please state)

6/ What are the most effective waste management intervention measures implemented through your SWMP? And the least effective?

7/ Please estimate the cost savings made through waste prevention compared to physical waste management?

8/ Please estimate the waste reduction made through waste prevention compared to physical waste management?

9/ What do you think is a realistically achievable waste reduction target:
   • None
   • 1%
   • 5%
   • 10%
   • 30%
   • 50+%?

Would you be willing to incorporate such a target into your SWMP?

10/ Do you currently have an audit or post review exercise of your SWMP? How does this function? In the future would you be willing to have your SWMP audited by, please feel free to answer more than once):
   • Self Audit
   • Outside consultancy audit
   • Trade federation/association audit
   • Local authority (Planning authority, building control)
   • Other (please state)

11/ Do you utilise your own SWMP or the DTI's voluntary code of practice? If you use your own SWMP why do you do so?
**Questionnaire 2 Questionnaire for Local Authorities**

1/ Do you require building and demolition companies to use a SWMP?

**If No**
- Are you thinking of producing a SPD for SWMP?
- Is there a reason for your not requiring a SWMP for a planning application?
- What method would you use to evaluate and monitor a SWMP if one was required?
- Would you want targets to be set? For what?

**If Yes**
- Is the requirement for a SWMP based on property:
  - Size
  - Footprint
  - Cost
  - Location
  - Other?
- Do you require waste reduction or other targets to be met?
- How are they evaluated?
- Do you monitor progress during construction/demolition?

2/ Can you please estimate the financial savings made as a percentage per project for
  - Small (>£250K)
  - Medium (£250K-£500K)
  - Large projects (<£500K)

3/ Can you please estimate the % reduction of the waste arisings occur per project?

4/ Please rank the top three benefits of a SWMP, and which is the least:
  - Long term Financial
  - Voter satisfaction (marketing)
  - Sustainability and Corporate Social Responsibility
  - Waste reduction
  - Putting system in place for impending Legal obligation
  - Contractual requirement
  - Other (please state)

5/ Please rank the top three benefits of a SWMP to a construction or demolition company, and which is the least:
  - Financial
  - Marketing
  - Sustainability and Corporate Social Responsibility
  - Waste reduction
  - Practice for impending Legal obligation
  - Contractual requirement
  - Other (please state)

6/ Do you consider the SWMP to be a burden on the planning department?

7/ What do you think is a realistically attainable target for waste reduction on a building project?
  - None
  - 1%
  - 2.5%
  - 5%
  - 10%
  - 15%
  - 30%+

8/ Do you think that construction and demolition companies should have voluntary or mandatory targets included in their SWMP? Why?
9/ Do you think the SWMP should be audited? If so which of the following should carry out this function, please fell free to answer more than once:
  • Self Audit
  • Outside consultancy audit
  • Trade federation/association audit
  • Local government development authority
  • Other (please state)
Questionnaire 3 Questionnaire for Trade Associations and Federations

1/ How many of your members use a SWMP? Do they use them for all projects?

2/ Please estimate the financial savings made as a percentage per project for
   - Small (>£250K)
   - Medium (£250K-£500K)
   - Large projects (<£500K)

3/ Please estimate the percent reduction of the waste arisings occur per project?

4/ Please rank the top three benefits of an SWMP to your members, and the least:
   - Financial
   - Marketing
   - Sustainability and Corporate Social Responsibility
   - Waste reduction
   - Practice for impending Legal obligation
   - Contractual requirement
   - Legislation
   - Other (please state)

5/ Which is better prevention or physical management?

6/ What in your mind is the best and the worst intervention a site can introduce both in terms of cost savings and waste reduction.

7/ What do you think is a realistically attainable target for waste reduction on a building project?
   - None
   - 1%
   - 2.5%
   - 5%
   - 10%
   - 15%
   - 30 +%

8/ Would you encourage member to set waste or other reduction targets? What would you recommend?

9/ Do you think that construction and demolition companies should have voluntary or mandatory targets included in their SWMP? Why?

10/ Should a SWMP audited? If so which of the following should carry out this function:
    - Self Audit
    - Outside consultancy audit
    - Trade federation/association audit
    - Local government development authority
    - Other (please state)