Northumbria Research Link

Citation: Paterson, Elaine (2009) Design and access statements as an assessment tool to promote quality sustainable development: reflections on practice in NE England. In: Sue-MOT Conference: Second International Conference on Whole Life Urban Sustainability and its Assessment, 22-24 April 2009, Loughborough, UK.

URL:

This version was downloaded from Northumbria Research Link: https://nrl.northumbria.ac.uk/id/eprint/3179/

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: http://nrl.northumbria.ac.uk/policies.html

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)





Design and Access Statements as an assessment tool to promote quality sustainable development: reflections on practice in NE England

Elaine Paterson

Northumbria University, UK

Planners play an important role in seeking sustainable urban design solutions, including making critical decisions on planning applications. Design decisions in planning have frequently been controversial and criticised as being subjective and too interventionist. Decisions on the design element of proposed developments are arrived at, by local planning authorities, using information provided by the applicant/developer, consideration of relevant local and national policy, observation by planners on site, views from the public and statutory consultees, negotiation between developers and planners and finally views of local councillors. This is a complex set of information and ways to clarify and expedite such decisions are needed. One recent attempt by the government to do this followed the Planning and Compulsory Purchase Act, 2004. Regulations came into force in August 2006 requiring developers to submit a Design and Access Statement (DAS) with most applications.

A DAS is intended to assist design decision making in the planning process by clarifying the design approach of the applicant from the outset, so facilitating greater common understanding by all concerned. It appears the government is currently supporting constructive intervention by planning authorities on design issues, and so reinforcing the legitimacy of democratically accountable design decisions. The government hope that DAS will make the process and outcome of decision making more open, rigorous and sustainable.

This paper seeks to briefly chart the background to government intervention in design decision making through planning. It then specifically investigates whether DAS are in fact perceived as improving decision making from the local planning authority perspective, as well as the developer perspective, using primary data from NE England. Comparisons are made with a recent national study by the Planning Advisory Service on DAS. This reveals different viewpoints on the extent to which the introduction of DAS is helping the design decision making process. Developers are more critical than LPAs, but all perceive some value in the process and offer views on potential improvements.

Keywords: design and access, design assessment, government intervention in design, planning applications, sustainable design, urban planning, sustainable development

Introduction

The planning application process, a key element of urban planning, covers many issues and design assessment is one issue currently attracting much attention. The nature of design assessment in the planning process, and the outcome of such assessment, directly affects quality of life in terms of urban environment.

There are various tools available to assist planners with design decision making including national and local design guides. These guides are useful but their purpose is largely to set out design criteria that may be acceptable to planners. Recent focus has been on how applicants can better convey their design concepts to planners.

One recent tool conceived to better enable applicants to convey the development of the design of their scheme is the Design and Access Statement (DAS). DAS was introduced as a legal requirement in 2006, through amendments to the General Permitted Development Order 1995, and pursuant to the Planning and Compulsory Purchase Act 2004. The government released Circular 1/2006: guidance on the changes to the development control system (DCLG, 2006) that describes the changes.

A DAS is an explanation by the applicant making a planning application of the design process behind the submission. The intention of the government is that DAS will improve the quality of development through assisting with better negotiation on design issues between planners and applicants and hence better planning decision making. All applications require a DAS except for changes of use, householder applications outside Conservation Areas and other designated areas, and engineering and mining operations. Although there is no statutory minimum information specified a DAS must cover the following:

- The proposed uses
- Amount of development
- Layout and scale
- Landscaping and appearance with reference to context
- Access and safety issues, with reference to relevant law.

Most of this information has been submitted with most planning applications for some time, but not in a systematic way, or in such a way that requires the applicant to justify the design and access elements.

The history of government intervention in design quality of development: relevant literature

The requirement for DAS follows from Planning Policy Statement (PPS) 1: Delivering Sustainable Development (ODPM, 2005). PPS1 encourages local planning authorities (LPA) to ensure good quality design as part of a sustainable environment. In recent years the government has gradually become more positive about LPA intervention in design. This is probably due in part to the increasing

emphasis on sustainable development generally, and also in part due to the influence of the Commission for Architecture and the Built Environment (CABE) set up in 1999.

The degree of government intervention in design through the planning service has always been controversial however. Since the 1947 Planning Act the role of planning in design control has been much criticised, especially during the 1960's with much high rise development being unpopular and unsympathetic to historic townscape. A key government response to the criticism at that time was to introduce the Civic Amenities Act in 1967 that allowed for Conservation Areas to be designated. Particular care was to be taken by planners regarding design of new development in Conservation Areas. Subsequent legislation has reinforced the importance of good design in Conservation Areas including the latest conservation act, The Planning (Listed Buildings and Conservation Areas) Act 1990. This act, and the related Planning Policy Guidance (PPG 15) on Planning and the Historic Environment (DoE, 1994), require all new development or alterations to existing development to "preserve or enhance the quality or appearance of the area". The focus on good quality design in Conservation Areas may, however, have been at the expense of other areas. It is significant that DAS are required for nearly all applications, although for householder applications outside Conservation Areas and other designated areas they are not required. So through DAS the government is still sending the message that Conservation Areas are more important, albeit in the case of DAS only where minor development is concerned.

The development industry and their agents, including architects, have been particularly critical of the role of planning intervention in design. The accusation that too much interference by planners in design causes delays in development decisions, and even loss of jobs, hit a chord with Margaret Thatcher when she was prime minister in the 1980's. This was in line with much Conservative Party philosophy of minimal government intervention generally, and failure to fully recognise the importance of planning intervention on behalf of the public as a democratic asset. In 1980 she introduced Circular 22/80 on Development Control that actively discouraged planners from intervening in design matters. This resulted in LPA's having a light touch on design intervention and being reluctant to refuse bad design as design reasons for refusal were often not supported by inspectors at appeal.

It was not until the 1990's when John Gummer, part of the Thatcher and then Major governments, became prominent on design issues and introduced documents such Quality in Town and Country (1994) that the implications of a low intervention approach were exposed as detrimental for environmental quality. The hard line of Conservative philosophy appeared to be waning by then. In 1992 the Audit Commission produced "Building in Quality" and for the first time suggested trying to measure quality of outcome, including design, as a balance to the predominant measures of the planning service based on speed of decision making. There is still much debate about how to measure quality (in terms of both outcome and process), but the fact that it is recognised as an important aspect to attempt to measure signifies that quality of development is a key priority. The introduction of DAS may even have the potential to help with measurement of quality of process if information on how DAS was used is recorded.

Since 2000 CABE has produced a considerable body of literature advocating a positive role for planning in design matters. "By Design" (CABE/DETR, 2000) is one of the most detailed design guidance documents ever produced at government level. It is fully illustrated and uses much of the urban design language and concepts developed by key authors on the subject over the past few decades, including Cullen (1961), Lynch (1971) and Bentley et al (1985). This guidance clearly indicates that a very detailed consideration of design issues within planning decision making is appropriate, and to be encouraged.

Between 2001 and 2007 CABE produced many documents relating good quality design to increased financial value of development, especially in the longer term. This has particular relevance for the development industry. Developers tend to question the importance of quality design and are mainly concerned with short term profit, but perhaps some of the CABE literature may eventually help to change the culture of the development industry in this respect.

Another approach by CABE to increase the importance of design issues in planning, and create greater certainty at an earlier stage, is to promote Design Coding for large developments. Design Codes are drawn up before a planning application is made by the developer, with public involvement, so that a systematic and joined up approach to design principles is taken at the outset. Design Codes have not yet been used widely in the UK as yet, but they appear to help create a more certain, coherent and holistic design approach especially for large housing developments according to CABE's summary study of a Coding pilot study in England "Design Coding — Testing its use in England" (CABE, 2005). Following from Design Coding CABE's next major drive, alongside DAS, was to formulate the "Building for Life" criteria (CABE, 2008). "Building for Life" criteria are intended to be used by LPA's and the development industry to assess the longer term sustainability of design of new housing development.

Given the progression of CABE's literature topics with a focus on promoting good quality design within a more systematic decision making process, the promotion of DAS was a logical step. In 2006 CABE's published "Design and Access Statements: How to Write, Read and Use Them" as a supplementary guide to the government circular 1/2006 (ODPM, 2006).

Assessing the use of DAS

There has been some concern that DAS is just another hurdle for developers and causes unnecessary delay, especially at the validation stage of a planning application, but recent case law suggests the Planning Inspectorate will not bow to pressure from the development industry on delay concerns and is taking DAS seriously. The most publicised case is Filton near Bristol (2007). A DAS was submitted with a mixed use scheme by Bovis Homes and an appeal against refusal of the scheme was dismissed partly on design grounds and inadequacies in the DAS. Such inadequacies included lack of evidence that the design would be high

quality and respect local character, lack of detail on location and scale and a lack of consistency with the design code for the scheme (Ricketts, S, 2007).

There are also concerns that any advantages of having a fuller explanation of the design process with the planning application makes little difference to the outcome of planning decisions (Planning Advisory Service, 2008). Together with the Planning Officers Society and CABE, the government funded, but independent, Planning Advisory Service (PAS) carried out a study to investigate such concerns. They reported in January 2008 with "Design and Access Statements - report from a learning group comprising 16 Local Planning Authorities".

The LPA's in the learning group represented both a geographical spread and a range of local authority types. It should be noted that only one NE authority was represented (South Tyneside), hence the NE region was under-represented overall in this study as most regions would have had two representatives. The learning group, akin to a focus group, involved development control and urban design officers, as well as occasional experts such as an access officer, building control officer or architect. The group met six times to share experiences, plus some follow up interviews were carried out with staff from four of the authorities. The main conclusion was that DAS can be an effective tool to improve the quality of a development and that DAS are particularly helpful in explaining a proposal to a Planning Committee.

A number of problematic areas were identified however:

- The quality of the statements themselves were sometimes poor and there is no consistent method for validating an acceptable statement
- The access information required at the planning stage versus the building control stage has become less clear
- The DAS requirement may cover too many small proposals
- statements can be too descriptive and not used pro-actively enough especially at pre-application stage
- There is insufficient evidence that ideas in DAS become translated into amended schemes or planning conditions
- The absence of sustainability issues in DAS and that without planning staff well trained in design issues the DAS may have little effect.

The main recommendations from the PAS suggested reducing the requirement for DAS by confining them to major applications and clarifying what constitutes an acceptable DAS. Also to get DAS to be used more pro-actively, which may mean better design training for staff, more use of DAS in pre-application discussions and clear reference to the DAS in conditions. The idea that "explicit reference be made to sustainability as one of the design considerations" was left without expanding on the practicality of this. Sustainability is not defined here and there must be a danger that this recommendation might make the DAS process more unwieldy and less well defined, especially in relation to other processes within planning decision making such as sustainability statements or Environmental Impact Assessment.

Study of DAS use in NE England: method

An in depth study of DAS in just one region of England, with both the LPA side and developer side involved, to help reduce bias, was considered a useful complement to the PAS study. The intention was both to confirm or otherwise the PAS findings (triangulate or corroborate to some degree) and to produce more detail to build up possible recommendations. It was also considered advisable to include a more representative sample of users of DAS including the developer side. The PAS study did not include the developer side, but did identify a number of useful points as a means to modify DAS based on LPA views. Further in depth studies in other regions of England would provide better data still, especially a region where the property market differs, and hence the negotiating power of the LPA on issues such as design may also vary. However the study of other regions was outside the scope of this paper.

Telephone interviews using semi structured questions, having been e mailed to respondents prior to the interview, were used to gather data. The semi structured questions were focussed but open, to enable in depth opinion based data to be gathered. The questions were wide ranging covering the current and possible future uses of DAS.

The sample for interview was based on one representative from each of 13 LPA's in the NE (either development control or urban design staff) and also one developer regularly operating in each of those authority areas. Mostly the same questions were asked of the LPA's and developers but some questions were only appropriate for the LPA, particularly those relating to how DAS was assessed. The category of "developers" included agents for developers, as well as developers themselves, but all of these were answering from a developer perspective

Analysis of the data was manual due to it's qualitative nature.

The questions asked covered the following:

Part 1 related to the perceived usefulness of DAS. The following topics were covered:

- Perception of the difficulties in assessing design quality and whether DAS has helped the process including negotiation
- The relationship between DAS and design policy
- The impetus that DAS may have on authorities to acquire improved design skills
- Whether DAS had made any difference to the number of amendments to design during the planning process, or the number of refusals of planning permission based on design reasons.

Part 2 related to how DAS are assessed by the LPA. The following topics were covered:

- who decides whether DAS contains adequate information
- which officers carry out the assessment of DAS
- whether the LPA have any criteria against which DAS are assessed.

Part 3 related to how DAS might be improved. The following topics were covered:

- whether it is helpful to have "design" and "access" put together
- whether a closer relationship between national design guidance and a DAS requiring developers to self assess against policy criteria might help
- whether submission of more contextual information rather than a DAS would help whether there should be a requirement to have a design professional submit a DAS whether DAS should only be required for major applications
- Interviewees were also asked if they had anything else to add on how to improve DAS

The Results and Analysis of the NE England study

Interviewees engaged well with the questions asked and provided some interesting data. One in particular (Sunderland City Council) provided examples of good or promising practice. As the data yielded was qualitative in nature a descriptive reporting and analysis follows rather than a quantitative exposition.

On the difficulties of assessing design quality in planning the LPA's mentioned defining "good design", balancing different issues, developers only wanting to "tweak" design, assessing wider context and understanding how the design developed, getting the appropriate level of detail, leaving too much for reserved matters and the difficulty of defending design refusals on appeal.

It is clear that DAS can potentially help to address most of these concerns but not the definition of "good design" and some only if LPA's use DAS more pro-actively than appears to be the case at present. Given the volume of recent literature, especially from CABE, relating to what is "good design" it is perhaps of concern that some LPA's are still having difficulty with this.

On the developer side some of the perceived problems were inevitably different. The personal preferences of planners and planners just following previous development were seen as problematic, as well as poor understanding of design by planners. Communication between planners and designers and, surprisingly, too many important issues being left to conditions was seen as unhelpful. It might have been expected that developers would be happier with conditions rather than taking more time to negotiate and amend before permission was granted. The almost universal use of Computer Aided Design (CAD) was also seen as presenting a difficulty when attempting to convey quality of design. Again DAS should be able to assist in addressing some of these problem areas.

When asked whether DAS has in fact helped, a significant majority said it had, with one elaborating to say that justifying design in DAS helps raise the basic standard, but one thought it helped only sometimes for major applications. In contrast developers generally considered DAS a waste of time with only one giving a qualified positive answer. One said pre-application discussions were preferable, with the implication that these were totally separate from DAS, but of course they

should not be. DAS only becomes a legal requirement, however, at the point that the application is formally submitted. This raises the question of the timing of DAS submission – perhaps it should be earlier, at least in draft form.

On the question of whether DAS was more than just a formalisation of information already provided most LPA's said it did go beyond a mere formalisation, with one commenting that it helps speed up the process as there is now less need to ask for further information once the application is submitted. Developers, once again, were less positive, although one conceded that DAS did allow for reflection of the design process. One developer thought that DAS just amounted to doing the planners work for them.

Whether DAS has been an impetus for better design skills in LPA's resulted in most LPA's disagreeing that it had, and there was mixed views in LPA's as to whether DAS has resulted in more focus on design issues. Developers were not positive on this question and one commented that 3D images would be more helpful than DAS.

Despite the rather negative views in general on DAS from developers most appear to have engaged well with the process, at least the larger ones, according to the LPA's. Some smaller developers seem to find the process confusing. One developer view here is that DAS has made no difference in terms of engagement (but this may have been interpreted as engagement in design process with LPA's generally rather than DAS).

LPA's and developers consider that local and national design guidance is generally referred to in DAS, especially for larger schemes, but one pointed out that this does not necessarily mean that the guidance is adhered to.

On DAS and its use in negotiation on design a small majority of LPA's said DAS did not help. Several comments indicated potential here, however, with one saying DAS did help where the proposal was contrary to design guidance and another saying DAS would be more useful during negotiation at pre-application stage. Despite the fact that at present DAS is not required until an application is submitted Sunderland LPA said that a draft DAS was requested by that authority at pre-application stage. The Sunderland approach here appears to represent good practice.

Developers had mixed views on the negotiation question with a fairly even split of positive and negative views.

Amendments to design during the planning process and refusals on design grounds do not seem to have increased or decreased significantly since the introduction of DAS, according to both the LPA's and developers. This indicates that DAS does not appear to be being used to full potential, or, as indicted by one LPA respondent, that other tools such as design guides are really much more significant. Only one LPA thought that there were more amendments since DAS due to the thought process being more open.

On the validation and assessment of DAS most said a planning technician does the validation (ensuring that enough information is provided) but planning officers,

either the development control case officer or the urban design officer actually assesses the DAS (considers its content in relation to the scheme submitted). CABE criteria and Circular 1/2006 are used to assess DAS by some LPA's, but two said no criteria were used and one (Sunderland) had its own supplementary planning guidance on DAS. Sunderland again appears to be ahead in terms of good practice here as local guidance is generally recognised to be helpful to both the LPA and developers, creating greater clarity and consistency within an authority.

As to the future of DAS, starting with whether it is desirable to have "design" and "access" together, most LPA's agreed it was, and one added especially regarding safety issues. Developers were less enthusiastic with one saying sometimes and another saying the access part is more useful at the building control stage. Certainly many access issues are dealt with at the building control stage, but there are many general access issues that require consideration at the planning stage, most obviously how pedestrians and vehicles will access a development and by what mode.

Having a requirement for developers to assess their scheme against policy in a DAS was favoured by the majority of LPA's, especially for large schemes, but not by developers. More contextual information with DAS was also favoured by the majority of LPA's, but developers considered they were already doing enough. Sunderland City Council is already asking for 3D Sketchup illustrations.

Whether a requirement that a design professional must submit DAS would help with quality of statements and outcome met with a majority of LPA's giving a qualified positive answer – for major applications, but hard to enforce. Developers were mixed on this with just half agreeing. Although some developers were represented by architects in this study there were few. It might be expected that a majority of architects would agree with a requirement for a design professional involvement.

In contrast to the results from the PAS (2008) study the majority of both LPA's and developers did not agree that DAS should be for major applications only. Three LPA's said that small applications can be just as influential as some large ones. One developer suggested that there should be a DAS with all contentious applications, whether large or small, and another developer wanted DAS abolished altogether.

Other information added by LPA's included reference to a more joined up approach on the topic of design. There has been a considerable amount of design guidance produced recently by various bodies, some of which has unclear status, to the extent not only developers are confused but also LPA's. Other comments include suggestions to remove DAS for all householder applications (currently DAS is required for householder applications in Conservation Areas and other designated areas), avoid a tick box approach and slim down the information required in DAS. Developers mainly just wanted clearer guidance on DAS with a formal minimum standard, although one thought it was too time consuming and only amounted to "padding". The downside of a formal minimum standard could be many DAS being drafted only to this minimum which may prevent excellence.

Conclusions

The NE study has produced some useful data, only some of which corroborates the PAS study. Both studies show that not all of the original intentions of Circular 1/2006 or the CABE guidance on DAS is being carried out, especially those relating to improving quality of outcomes. DAS has only been in operation for just over two years at the time of gathering the primary data for the NE study, and would only have been operational for just over one year when the data was gathered for the PAS study. These timescales are clearly a limitation for both studies, especially the PAS study, and it may be that with more time some of the problems may be addressed without any radical further intervention by central government.

One of the main recommendations from the PAS study was to require DAS for major applications only, but the NE study did not fully corroborate this point with the majority of LPA's and developers wanting to keep them for smaller applications as well, except for a minority saying all householder application should be removed from the DAS requirement. It is especially interesting that developers indicated appreciation of the impact of smaller development. Having said that, developers were fairly negative (more so that LPA's) about the way DAS was operating, indicating scope for improved practice. Without improved practice at local level the original intentions of central government and CABE to use DAS to help improve quality of outcome will not occur.

Improved practice might include LPA's producing local supplementary planning guidance on DAS, as Sunderland City Council has done. This could provide information on what level of detail is expected in DAS, who does what in terms of validation, use of DAS in negotiation to secure design amendments and how DAS may be linked to planning conditions. It would also seem desirable to have at least a draft DAS for pre-application meetings, as in Sunderland, although the PAS study suggests pre-application discussions should focus on design principles and rationale, using diagrams not DAS.

A significant point to arise from the PAS study was that sustainability criteria should be included in DAS due to the national importance of climate change. PAS states that this has implications for various aspects of design including orientation, layout, materials, form and window type. The use of the term sustainability did not arise explicitly in the NE study. Due to the increasingly wide interpretation of the concept it would seem difficult to build this further into DAS than it already is implicitly, without losing focus and possibly causing confusion with other aspects of the planning decision making process. As DAS already includes aspects such as layout and form it could be argued that sustainability is implicitly integrated at present.

Apart from the issues of DAS for major applications only, availability of (draft) DAS at pre-application stage and sustainability issues in DAS, the other key messages from the PAS study were either corroborated by, or did not contradict, the findings from the NE study. These other common key messages include the

need for greater clarity on aspects of access, especially the level of information needed at the planning stage and then the building control stage. Also more active engagement including more use of DAS in negotiation and conditions, strong leadership on design issues together with a culture of design excellence in LPA's as well as in the development industry. The latter point, so fundamental to sustainable development, has been made in various CABE publications, by Carmona, M and Sieh, L (2005) and by Paterson, E (2006), but it is a complex task to implement although happening slowly. A culture change can only be effected over a period of time with multiple tools, one of which is DAS, as well as political will. As this happens it is hoped that one of CABE's (2008) mantra's "design should be good enough to approve, not bad enough to refuse" becomes mainstream thinking in LPA's. DAS could be a significant step towards this.

This paper has strong links to three of the conference themes:

- a) Urban planning and design for sustainability in that DAS are intended to improve communication between key players in delivering sustainable design through planning
- b) Quality of life in the urban environment in that DAS aim to help to secure improvements to the design of the finished development, so enhancing quality of the environment
- c) Measures, assessment theory, complexity and uncertainty in that DAS is intended to facilitate better informed assessment in a complex area of government intervention in the market. DAS should also help reduce uncertainty regarding developer intentions.

Bibliography

Audit Commission (1992) "Building in Quality: a Study of Development Control" HMSO, London

Bentley et al (1985) "Responsive Environments" Architectural Press, Oxford

CABE/DETR (2000) "By Design" HMSO, London

CABE (2005) "Design Coding: Testing its use in England" CABE, London

CABE (2006) "Design and Access Statements: How to Write, Read and Use Them" CABE, London

CABE (2008) "Building for Life: Criteria for Assessment of New Housing Development" CABE, London

Carmona, M and Sieh, L (2005) "Measuring Quality in Planning: Managing the Performance Process" Taylor and Francis, London

Cowan, R (2008) "Design and Access Statements Explained" Thomas Telford Ltd, London

Cullen, G (1971) "The Concise Townscape" Architectural Press, Oxford

DCLG (2006) Circular 1/2006 "Guidance on the Changes to the Development Control System" HMSO, London

DoE (1980) Circular 22/80 "Development Control – Policy and Practice" HMSO, London

DoE (1994) "Quality in Town and Country" HMSO, London

DoE (1994) PPG 15 "Planning and the Historic Environment" HMSO, London

Lynch, K (1961) "The Image of the City" MIT Press, Cambridge, Massachusetts

ODPM (2005) PPS 1 "Delivering Sustainable Development" HMSO, London

PAS (2008) "Design and Access Statements" Report from a Learning Group comprising 16 LPA's. IDA, London

Paterson, E (2006) "Quality New Development in English Market Towns: Case Studies examining the role of Town Planning" Journal of Urban Design Vol 11, no 2 pp225-241

Ricketts, S (2007) "Advice on Design and Access Points to Potential Traps" Legal Report, Planning Resource, 12.10.07

List of acronyms

DAS (Design and Access Statements)

DCLG (Department of Communities and Local Government)

PPS (Planning Policy Statement)

DoE (Department of the Environment)

LPA (Local Planning Authority)

CABE (Commission for Architecture and the Built Environment)

PPG (Planning Policy Guidance)

ODPM (Office of the Deputy Prime Minister)

DETR (Department of the Environment, Transport and the Regions)

PAS (Planning Advisory Service)

CAD (Computer Aided Design)