REPORT TO : **RECESS SUB-COMMITTEE, 6TH AUGUST, 2001**

REPORT ON : **MORGAN ACADEMY REINSTATEMENT – PROFESSIONAL CONSULTANTS**

REPORT BY : **DIRECTOR OF SUPPORT SERVICES AND DIRECTOR OF FINANCE**

REPORT NO: **478-2001**

1.0 PURPOSE OF REPORT

1.1. To provide information on the review of risks associated with the commissioning of Consultants to carry out the design, procurement and supervision of the Morgan Academy reinstatement.

1.2 To seek approval of the recommendations contained within this report to allow consultants and contractor to be commissioned and procured at an early date to minimise any delay to the completion of this project.

2.0 RECOMMENDATIONS

2.1 That approval be given to carry out the following:

2.1.1 purchase a 'Structural Defects Insurance' as directed by the Council's Risk Management officer;

2.1.2 appointment of Architect, Quantity Surveyor, Service Engineer, Clerk of Works, Planning Supervisor and Project Manager/Facilitator from the Architectural Services Division of the City Council;

2.1.3 appointment of Structural and Civil Engineer from the City Engineer's Division of the City Council;

2.1.4 appointment of Specialist 'Stonework Restoration' Architect with a record of good working relationship with Historic Scotland from the Private Sector;

2.1.5 appointment of Specialist Structural Engineer to advise on the restoration and rebuilding of existing stonework along with Specialist Architect. This may be awarded as a single appointment;

2.1.6 to enter into negotiations and procurement process for the appointment of a Contractor and Specialist Stone Restoration Sub-Contractor and to form a Partnership agreement with Client, Consultants and End Users.

3.0 FINANCIAL IMPLICATIONS

3.1 The Loss Adjusters, McLarens Toplis, appointed by the insurers, have confirmed their approval of the appointment of in-house consultants. They have also indicated their approval of a partnering arrangement as a cost effective procedure for progressing this reinstatement work.

3.2 McLarens Toplis are carrying out fee evaluations with the Private Sector, based on quality and price, and will ensure that consultancy fees for this project are agreed at competitive levels.

3.3 The cost of providing the Structural Defects Insurance will be of the order of £70,000 and it is intended that this cost will be absorbed within the in-house design team's fees.

3.4 Any delay in appointing the design team will impact on the ability to have the project completed prior to the date at which the insurance deadline expires. The financial consequences of this could range from £131,000 to £226,000 which would require to be met by the Education Department.

4.0 LOCAL AGENDA 21 IMPLICATIONS

The following Key Themes of Agenda 21 have been addressed:-

4.1 Resources are used efficiently and waste is minimised.

4.2 Local needs are met locally.

4.3 All sections of the community are empowered to participate in decision making.

4.4 Diversity and local distinctiveness are valued and protected.

5.0 EQUAL OPPORTUNITIES IMPLICATIONS

5.1 None

6.0 BACKGROUND

6.1 The Chief Executive has recommended that if the design work for this project is carried out using in-house staff then some form of insurance must be in place to cover any events that may occur due to a failure in the design of the new facility.

6.2 The Council's Principal Insurance Risk Management Officer has considered this matter and cannot purchase suitable Professional Indemnity Insurance where in-house staff carry out services for Dundee City Council.

6.3 Consideration was given to the formation of a separate company to carry out the design, procurement and supervision of the new building. This would allow Professional Indemnity Insurance to be purchased. The Legal Manager considered this issue and concluded that the Council does have legal powers to promote the establishment of this type of company, however there are complicated issues relating to staff, competition and tax amongst others.

In addition, the timescales involved in establishing the company and going through the necessary requirements for competition under EU procurement regulations would add approximately four months to the programme. The consequential loss insurance cover terminates in March 2004. This means that any such costs incurred thereafter would require to be met by the City Council and presumably the Education Department.

These costs are estimated to be as follows:

Transport	£10,000 per month
Portacabin Hire	£9,000 per month
Transferring to new school	£55,000

Therefore for a delay of four months it is estimated that these costs would amount to some £131,000. However, it may not be appropriate to open the new facility part way through a school year and the cost of delaying for a maximum say nine month period would be in the order of £226,000. In view of all of the above, it is considered that the formation of this type of company should not be recommended.

6.4 The City Architectural Services Officer and the City Engineer have considered the design implications for this new building and carried out risk assessments on all the key areas of design. The Risk Assessments did highlight a number of areas where the level of risk was found to be high and it was considered prudent to take some form of action to ameliorate the risk to the Council. See Appendix 'A'.

6.5 At the same time the Risk Management Officer carried out a further Risk Analysis, comparing the use of internal or external Consultants. This analysis notes that although Professional Indemnity Insurance may be obtainable from external consultants, the reliance on such insurance often provides a false security as when a claim is made against such a policy, this insurance is often no longer in place.

6.6 The Risk Management Officer has identified a Structural Defects Insurance policy, which offers the Council a form of cover which in many ways is superior to that offered by conventional Professional Indemnity Insurance. The cost of this insurance is expected to be in the order of £70,000 approximately 0.5% of the project cost and would attract an excess limit of around £50,000 per loss.

6.7 In addition to taking out the above insurance, it is recommended that an external Stone Restoration Architect and an independent Structural Engineer be appointed to deal with the specialist and high risk elements of the scheme. Both of these consultants would have in place Professional Indemnity Insurance to cover any aspects of the design in which they are involved.

6.8 The Risk Assessment sheets in Appendix 'A' have been reviewed to reflect the manner in which the Council is covered against each of the risks identified. It can be seen that there remain only two areas where some form of insurance would not be in place. Both of these risks are considered to be very low level and will be dealt with by ensuring that additional internal design checking is carried out. This will be over and above any normal design checks which are required by the in-house team's Quality Management Systems.

6.9 It is considered that the expertise and knowledge held within the technical Divisions of the Council on Education buildings is extensive and the working relationship between these departments is excellent. The Director of Education fully supports the commissioning of in-house consultants to carry out the design work for the new facility.

6.10 Further consideration has been given to the timescale for carrying out these works and it has been concluded that to achieve an opening date of Summer 2004 would require early commissioning of consultants and a fast track approach to Contractor procurement.

If in-house Consultants are not appointed for the design work it will be necessary to advertise in the EU Journal under the Public Procurement regime. This could involve a lengthy delay and would also require the appointment of an expert to assess any fee tenders received.

The procurement of a Contractor to act in a partnering arrangement would be the most likely course of action to enable the timescale to be met. The knowledge and experience in this type of arrangement, within the Council is, at the present time, far more extensive than that contained within the private sector consultancies.

7.0 CONCLUSION

7.1 That the recommendations made at Section 2.0 be approved as by using the in-house design team, combined with external consultants and backed up by Structural Defects Insurance, offers the most favourable option to the Council. In many respects, the knowledge contained in-house will be a benefit to the successful conclusion of this project. It is also considered that the commissioning of external consultants would have a critical effect on in-house staff morale and self esteem.

8.0 CONSULTATION

8.1 The Director of Education, Legal Manager, Principal Insurance Risk Management Officer, City Engineer and City Architectural Services Officer have been consulted on the contents of this report.

9.0 BACKGROUND PAPERS

9.1 No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than containing confidential or exempt information) were relied on to any material extent in preparing the above Report.

Patricia McIlquham **Director of Support Services**	**David Dorward** **Director of Finance**

JP/YM
11 June 2001

APPENDIX 'A'

MORGAN ACADEMY REINSTATEMENT
RISK ASSESSMENT
SUMMARY OF CONTENTS

CONTROL ACTION KEY

- ❑ Likely to be covered by Building Structural Defect Cover
- ❖ Likely to be covered by Contractors Insurance Policy
- ➢ Likely to be covered by Standard Fire Policy

♦ Damage to existing covered if it arises from/follows on from Insured damage to the new superstructure otherwise will be subject to independent check.

- (Bold Italics) Not covered by any of the above (2 items only – Page 3 and Page 10)

MORGAN ACADEMY – RISK ASSESSMENT

OVERALL RISK CATEGORISATION

SEVERITY / LIKELIHOOD	5	4	3	2	1
5	25 H	20 H	15 M	10 M	5 M
4	20 H	H	H	M	4 M
3	15 H	H	M	M	3 L
2	10 M	M	M	M	2 L
1	5 M	4 M	3 L	2 L	1 L

RISK LEVEL

HIGH 25-12
MEDIUM 4-10
LOW 1-3

Morgan/morg-riskasses

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
Foundations	Unknown ground conditions	❑ Differential settlement of structure.	4	3	12	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Damage to external façade.	4	3	12	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		• ***Environmental problems from arisings.***	1	3	3	Normal internal checking procedure.
	Existing wall foundations unknown.	❑ Differential settlement between old and new structures.	2	3	6	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Undermining of new or old foundation.	2	4	8	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❖ Damage due to vibration.	2	2	4	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)

MORGAN ACADEMY – RISK ASSESSMENT

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
	Inadequate new foundations	❑ Differential settlement between old and new structures.	3	3	9	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Undermining of new or old foundation.	2	4	8	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❖ Damage due to vibration.	3	2	6	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
Foundations	Existing basements	❑ Collapse of existing basement walls.	2	4	8	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		➢ Gas build up – explosion.	1	5	5	Covered by Standard Fire Policy

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
Existing Masonry Walls	Inadequate tie-in between new superstructure and existing facades.	♦ Damage to existing masonry.	4	3	12	External Consultant with P.I. to design/check.
		♦ Damage to new finishes.	4	2	8	Special independent internal checking procedure.
		♦ Moisture penetration.	4	3	12	External Consultant with P.I. to design/check.
	Instability of existing/rebuilt masonry façade	♦ Total collapse of external walls.	1	5	5	Special independent internal checking procedure.
		♦ Partial collapse of external walls and stone including chimneys.	4	4	16	External Consultant with P.I. to design/check.
		♦ Local damage to new superstructure.	3	3	9	Special independent internal checking procedure.
	Removal or partial removal of existing internal cross walls.	♦ Collapse or partial collapse of existing façade.	3	4	12	External Consultant with P.I. to design/check

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
Existing Masonry Walls	Poor condition of existing internal walls	♦ Collapse due to altered loading regime.	3	4	12	External Consultant with P.I. to design/check.
		♦ Partial collapse of façade.	1	4	4	Special independent internal checking procedure.
	Remodelling and reconstruction of interior with restricted access over and through the existing stone walls.	❖ Existing walls could be damaged during building works.	2	3	6	The contractor will be responsible for on site safety and safe working methods. Contractor's insurance will cover this item.

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
New SuperStructure	Inadequate design of structural frame	❑ Total collapse of superstructure with consequential damage to existing building.	1	5	5	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Local failure of superstructure.	2	4	8	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Excessive deflection of superstructure.	2	3	6	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		➢ Premature failure due to fire.	2	5	10	Covered by Standard Fire Policy.
		❑ Progressive collapse.	2	5	10	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
	Overall structural instability	❑ Racking failure and consequential damage to finishes.	2	3	6	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Total collapse.	1	5	5	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
New Super Structure	Inadequate new suspended floors	❑ Excessive deflection and damage to finishes.	2	3	6	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Structural failure of floors.	1	5	5	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		➢ Premature failure due to fire.	1	5	5	Covered by Standard Fire Policy.
	Inadequate new wall construction	❑ Collapse of walls.	2	4	8	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Cracking and damage to finishes.	4	2	8	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
	Materials	♦ *Life of materials is less than anticipated at design stage* and could result in future building closure while remedial work is carried out. Because of the Historic importance of the building the life span of the building will be indeterminate but the life use as a school may be less and will be confirmed with the Client.	2	2	4	Special independent internal checking procedure. (A design review of all materials to be completed from a life cycle and sustainability aspect).

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
Roof	Inadequate Structural Design	❑ Collapse of roof.	1	5	5	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Failure due to uplift.	1	4	4	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Damage to wall heads.	2	3	6	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Damage to roof cladding material.	2	3	6	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)
		❑ Partial failure of upper level walls.	1	4	4	Check carried out by independent consultant. Approved by Insurer (included within cost of Insurance)

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
Roof	Reinstatement of pitched roofs to main three elevations.	➢ Roof voids could allow the spread of flame and smoke.	2	5	10	Covered by Standard Fire Policy
	Voids within new roof space.	➢ Roof voids could allow the spread of flame and smoke.	2	5	10	Covered by Standard Fire Policy
	Reinstatement of existing roofs and all associated flashings not detailed correctly.	❑ Building could allow water ingress.	3	3	9	Will be included as extension to Standard Building Defects Cover
	Height and depth of plan form.	• ***Annual maintenance inspection could be difficult to carryout and if not regularly done could result in failure of roof system.***	1	2	2	Normal internal checking procedure. (Maintenance arrangements to be considered at early design stage).

SECTOR	HAZARDS	RISKS	LIKELIHOOD	SEVERITY	TOTAL	CONTROL ACTION
Existing Tower	Unknown condition of existing structure.	♦ Failure of cast iron columns.	2	5	10	Special independent internal checking procedure.
		♦ Failure of walls supporting cast iron columns.	1	5	5	Special independent internal checking procedure.
		♦ Failure of wrought iron beams.	2	5	10	Special independent internal checking procedure.
		♦ Failure of foundations.	1	5	5	Special independent internal checking procedure.
		♦ Stability of tower leading to collapse or partial collapse.	1	5	5	Special independent internal checking procedure.
		♦ Connection with new construction leading to cracking and water penetration.	3	3	9	Special independent internal checking procedure.