Traditional Building Skills Training Scheme

2014

EVALUATION REPORT FOR STAKEHOLDER CIRCULATION

An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht

Built Heritage and Architectural Policy
Department of Arts, Heritage and the Gaeltacht

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List of contents

Distillation of recommendations

1. The inter-disciplinary nature of the pilot projects, with local and national input from professionals, trainers and contractors in the public and private sectors, establishes the sort of best practice structure that should be followed in all future such schemes and in setting up conservation training by ETBs, ITs and other training providers. The methods of structuring short upskilling courses devised in this pilot should be made into a set of model structures to inform a variety of project promoters and training providers, including ETBs and ITs, and occasional training courses funded by EU programmes.
2. Modular training is recommended in traditional skills to accommodate potential trainees who must remain available for work but could afford the time and money to attend small clusters of intensive day/weekend training modules: awards can be built up by doing a series of modules. A smart card with the holder's PPS number could hold the details and verify completion and accreditation of the modules and major award(s), to assure future employers and clients of the awards gained.
3. The ability to assess prospective trainees for suitability is an acquired and essential skill which must be possessed by a member of the management team (without undue reliance on paperwork, although an application form specific to the training course is advisable). Close scrutiny of the existing practical skills of potential upskilling trainees could help to tailor course contents and levels in a productive way to give a rounded graduate.
4. Upskilling of unqualified general operatives with good hand skills should concentrate on conservation theory and judgement skills while recognising the relatively poor formal education attainment of many such operatives, and the need to help trainees to express themselves for assessment purposes.
5. The assembling of a steering group by each local authority is recommended in all such projects, to include external stakeholders from education, construction, rural development and heritage policy. The creation of steering groups or networks of local and regional stakeholders is advised to help to guide available training moneys towards similar locally-generated projects. The local training network should have a panel of local and national conservation practitioners and educators available to assist with presentations, demonstrations etc. with costs agreed in advance. This type of professional and contractor mentoring and skill transfer, which is encouraged by professional and contractor CPD requirements, could become part of a locally-adapted TBS training structure.
6. A national network of qualified trainers in traditional building skills and conservation specialisms should be formed to circulate information within the sector, from which a panel should be established of trainers who are prepared to give their time to short courses, so that local organisations could source trainers to give talks, demonstrations and workshops to training courses. These trainers may be self-employed or employed by educational institutions who would do such work as part of their own professional CPD requirements.
7. The Government Construction Contracts Committee (GCCC) should introduce training clauses in the public works suite of contracts to accommodate onsite training with associated lectures and discussion for trainees. Such onsite training would ideally form one module of an accredited award. Publicly-aided conservation projects and public sector capital works to historic buildings (including national monuments and historic properties managed by the OPW) should include a training element where feasible, whether stand-alone or in co-ordination with an accredited award.
8. Structured involvement on the part of public sector property managers and private sector construction interests in local steering groups or networks is recommended to allow for early identification of potential projects and properly specified and structured training. The CIF (Manpower, Education and Training committee, heritage contractors and specialist associations) should be represented on steering committees and participate by giving master classes or demonstrations to trainees particularly where member contractors are undertaking projects on publicly owned buildings.
9. Funding models should be structured so as to support project and training preparation in one calendar year and delivery in the following year, to enable organisers to advertise and select candidates in good time, to undertake any necessary preparatory work on site and to carry out lime and other outdoor training work in appropriate weather. This model should take the form of a rolling programme, to be well planned at local level to address both buildings' and skills' needs.

Summary of pilot scheme

The Department of Arts, Heritage and the Gaeltacht funded a pilot scheme to support education and training for traditional building skills through actions in the Action Plans for Jobs 2013 and 2014. The Traditional Building Skills Training Scheme was designed to enhance the capacity of certain repair projects to include a skills training element by allocating a maximum amount of €20,000 per project. The Department made €80,000 available in total, to be expended within the year 2014. A guidance circular, was issued to the relevant local authorities. A copy of this circular is attached as Appendix 1.

The scheme was run in three local authorities in 2014 which were approached by the Department: Fingal, Galway and Kilkenny. The scheme initially aimed to support four local authorities. Both Sligo and Longford county councils were also approached and expressed interest in taking part but could not follow through, principally as the lead-in period was too short for a project to be completed by year end. Two projects were funded in Kilkenny, as a private project promoter applied on foot of the council advertising the scheme on its website.

An important element of the scheme was to bring together local authorities, education and training institutions, social protection offices, the Office of Public Works, and contractor and community interests to support specific training in traditional building skills in order to sustain the repair and maintenance sector of the construction industry. Each project was managed by a local authority team headed by an architect or architectural conservation officer.

In Fingal, the project taught traditional joinery and carpentry skills and conservation theory to the local authority's direct workforce and students from Dublin Institute of Technology, to enable the Fingal workforce to dismantle, repair and rebuild a nineteenth-century conservatory at Ardgillan Castle, County Dublin.

In Galway the project was the masonry and plaster repair of elements of the mid-nineteenth-century Portumna Workhouse, by trainees from the live register and local building operatives, managed by a social enterprise.

In Kilkenny the local authority and Waterford Institute of Technology collaborated to give the students of the recently introduced BSc in Applied Conservation Skills a series of lectures and practical stone repair sessions at St Mary's Church, Kilkenny, which is now undergoing a major conservation and conversion project. Also in Kilkenny a private sector project took place to train contractors in practical stone conservation at the mediaeval St Nicholas's Church, Newtown Jerpoint, County Kilkenny.

Background

The Department submitted an action to the Action Plan for Jobs 2013 (no.315), to continue to provide support to the Traditional Building Skills Working Group. This group was then an ad-hoc committee which was initiated by conservation professionals, trainers and contractors in response to a UK report published in 2009 by the National Heritage Training Group *Traditional Building Craft Skills: Skills Needs Analysis of the Built Heritage Sector, Ireland*.[1]

Arising from initial discussions the Department convened a steering committee with representatives from the Office of Public Works, the Construction Industry Federation, FÁS (subsequently Solas) and Sligo County Council (representing the local authority sector) to discuss training needs for building conservation.

Purpose of operating a pilot training scheme

The pilot scheme was devised with two main purposes in mind. The first was to see if training models could be devised to upskill accredited and unaccredited construction operatives and craftspersons in conservation skills (both hand skills and 'head' or judgement skills). At present there are extremely few such accredited awards in Ireland: just two at NFQ 7, only one of which is currently available. Upskilling training is difficult for craftspersons to access in the current economic climate, by reason of construction employment models, training delivery models and financial constraints. The changeover from FÁS to Solas, the merger of the Further Education and Training Awards Council and the Higher Education and Training Awards Council, amongst other bodies into the Quality and Qualifications Authority of Ireland, and the creation of Education and Training Boards (ETBs), compounded the above industry constraints, and limited the extent to which new awards have been brought on stream in recent years. Clearly the responsibility for vocational education rests with the Department of Education and Skills while responsibility for labour-market activation rests with the Department of Social Protection. The relatively small fund provided by the DAHG could never substitute for the availability of appropriate training programmes to upskill construction workers with the conservation skills that this sector of construction requires. However, the flexibility of the terms of the pilot allowed the local authorities concerned to work up models in association with the local interests they identified.

The second main purpose followed on from the first: to create networks between actors and organisations which could instigate further training links and associations beyond the life of the pilot, using the local authority as the lynchpin. Such networks will be especially important to preparing for Rural Development Programme projects that may have a training element, and to unlock the potential of ETBs to devise locally-demanded training programmes.

This evaluation has two main aims: 1) to provide feedback to the Department of Jobs, Enterprise and Innovation on this element of Action 360 of the 2014 Action Plan for Jobs, and 2) to elaborate on the advantages and drawbacks of the models devised and the possibility of using them as templates for future upskilling programmes, subject to future discussion with education and construction industry stakeholders. With these aims in mind the evaluation lists a series of findings and recommendations.

[1] Available at http://www.citbni.org.uk/R--amp;-D/Traditional-Building-Craft-Skills-Research.aspx [accessed 8.12.15]

Acknowledgements

The Department of Arts, Heritage and the Gaeltacht recognises the exceptional level of commitment shown by everyone involved in this pilot and would like to thank all of those involved in each project.

The Department would like to thank those involved with the initial steering committee for Action 315 of the Action Plan for Jobs 2013: Paul McMahon, Senior Architect and Declan Forde, Industrial Personnel Officer from the Office of Public Works (both now retired); Martin McMahon, Assistant Manager, Apprenticeship and Construction Services; FAS/Solas; Robert Butler, Head of Training and Development, Construction Industry Federation; Seán Martin, Acting County Architect, Sligo County Council and Peter McCabe, Construction Manpower, Training and Safety Specialist and former chairman of the Registration Board of the Register of Heritage Contractors. The project was co-ordinated by Nessa Roche, Architectural Conservation Advisor, Built Heritage and Architectural Policy Section, with contributions from professional and administrative officers within the section.

Each county which took part in the scheme fielded a team from the local authority and training provider. At Fingal thanks are due to Fionnuala May, County Architect, Helena Bergin, Architectural Conservation Officer, Tricia Matthews, Training Officer, Operations Personnel, Mary Egan and Paul Smyth, Senior Executive Officers, all of Fingal County Council; Peter Murphy, Assistant Head, Construction Skills Department Dublin Institute of Technology (now retired) and Peter Clarke, lecturer, College of Engineering and Built Environment (retired). At Galway thanks are due to the steering committee of Máirín Doddy, Architectural Conservation Officer, Galway County Council; Ursula Marmion, the Irish Workhouse Centre, Portumna who project-managed the project; Laurik Mathieu, Matthieu and Mitchell Building Contractors, trainer / conservation specialist; Carmel Higgins, Assistant Manager and Padraic Lydon, Contracted Training Officer both of Galway-Roscommon Education and Training Board; Frank Geraghty, District Works Manager, Office of Public Works; Pat McAfee, Stonemason, Author and Lime Specialist; Paul Mullins, Acting Chairperson, South East Galway Integrated Rural Development Ltd; and Paul McMahon, retired Senior Architect, Office of Public Works. Christy Cunniffe Galway County Council Field Monuments Advisor, Peter Smyth of Ecological Building Solutions and Pierre Bani, UK and Ireland representative of Les Compagnons du Devoir also gave of their time freely. At Kilkenny St Mary's, thanks are due to Evelyn Graham, Project Liaison Architect and Aine Doyle, Architectural Conservation Officer, Brian Tyrell, Senior Executive Officer and Francis Coady, Clerk of Works, all of Kilkenny County Council; Terry Prenderville and Ian O'Neill, Course Leaders, Applied Conservation Skills BSc, and Sharon O'Brien, Acting Head of the School of Architecture, all of Waterford Institute of Technology; Coilín O'Drisceoil of Kilkenny Archaeology Ltd; Claire Walsh of Archaeological Projects Ltd; Niall McCullough of McCollough Mulvin Architects; Peter Cox and John Beatty of Carrig Building Fabric Consultants; Lisa Edden, Consulting Engineer; Pat McAfee, Stonemason, Author and Lime Specialist; Duggan Brothers Contractors; and Paddy Byrne, Foreman. At Kilkenny St Nicholas thanks are due to Evelyn Graham, Project Liaison Architect and Aine Doyle, Architectural Conservation Officer, both of Kilkenny County Council; Séamus Davis, Master Stonemason and trainer; Ivor McElveen, Conservation Engineer; Rex Bangerter, Project Archaeologist, ADCO Ltd; Shem Caulfield; and Joe and Maeve O'Connell.

Evaluation reporting requirements

The Traditional Building Skills Training Scheme required that the training project was to be evaluated upon completion by the local authority, with the involvement of the conservation professional, trainer/training provider, contractor and others (building owner etc. as relevant). Details from the training plan made in 2014 will assist in the evaluation of the outcomes. The local evaluation reports have been inserted into this evaluation.

The overall evaluation report will be circulated to the local authority, Department, SOLAS / training provider and other bodies concerned with the project.

Headings under which the local reports are compiled are set out on p.10.

Object of scheme (summarised from the circular)

- To enhance skillsets in built heritage conservation within and around the pilot local authority area by making trainees or qualified construction workers more capable of carrying out conservation and restoration projects and therefore improve their prospects of employment
- One or more capital conservation works project were to be carried out, to provide meaningful on-site training for trainees who may be already engaged on a training course
- Local authority was to work with local and national stakeholders to identify training opportunities, trainees and suitable historic structure for repair
- Eligible conservation works were to be designed and carried out by competent conservation professionals and contractors in line with statutory permissions / consents
- Training was to be in stone / carpentry / metal / roofing / lime / stained glass / thatch
- Training was to be provided by an appropriately qualified trainer with supervision of trainees on-site by conservation professional and contractor
- Training plan was to be submitted to DAHG which sets deliverables and was to be used to evaluate outcomes upon completion
- Accredited NFQ or equivalent training programme preferred
- Record of training project was to be made and evaluation report done

Financial summary

- €20,000 was allocated by DAHG for capital expenditure per local authority on one or more conservation works projects during 2014 with a training element attached
- Capital allocation could pay for workforce or consumables (no more than 50% on consumables) but not current expenses
- A minimum 10% of training project cost was to be paid by applicant / local authority. If applicant or structure owner is a commercial entity matching funds were required
- Where the local authority used its own resources or properties DAHG needed proof of payment of invoices etc. to the value of the project total
- Expenditure was required to be incurred and paid over to final beneficiary before drawdown from Department
- DAHG reserved the right to seek confirmation from the local authority that all relevant requirements of the revenue commissioners were fully met

SUMMARY PROJECT EVALUATION FORMS

Project Reporting Summary				
	Local Authority Name:	Fingal County Council		
	Lead name: *Fionnuala May, County Architect*		Contact details:	
Proj. no.	Conservation Training Project (name & address)	Applicant Name	Final Cost	Funding granted
1	Traditional skills for repair of Victorian glasshouse	Fingal Co Council		€5995.34

Evaluation report				
Number and type of training places	Project start and finish dates	Training Type	Final training programme report and evaluation Tick Y/N if attached	Employment statistics for trainees post programme Tick Y/N if attached
8 participants Direct workforce	7 Oct 2014 – 23 Oct 2014	4 one-day theory sessions and practical workshops in traditional carpentry/joinery skills		N/A for direct workforce
Up to 12 DIT wood technology students	14 Oct 2014 – 23 Oct 2014	3 half-day theory sessions in traditional carpentry/joinery identification		The DIT students were 2nd year degree students and so are still undergraduates

Project Reporting Summary				
	Local Authority Name:	Galway County Council		
	Lead name: *Máirín Doddy, architectural conservation officer*			Contact details:
Proj. no.	Conservation Training Project (name & address)	Applicant Name	Final Cost	Funding granted
1	Introduction to the conservation and repair of traditional buildings, with a particular emphasis on lime	Irish Workhouse Centre		Cost granted in full (20,000)

Evaluation report				
Number and type of training places	Project start and finish dates	Training Type	Final training programme report and evaluation Tick Y/N if attached	Employment statistics for trainees post programme Tick Y/N if attached
10 trainees – plasterers and stone/block/bricklayers	3 October - 29 November 2014	Four 2-day sessions each covering a Friday and Saturday with classroom, workshop and onsite components	Yes	Yes

Project Reporting Summary				
	Local Authority Name:	Kilkenny County Council		
	Lead name: *Evelyn Graham, Executive Architect*			Contact details: 056 7794028 / 087 1985138 evelyn.graham@kilkennycoco.ie
Proj. no.	Conservation Training Project (name & address)	Applicant Name	Final Cost	Funding granted
1	St Mary's Church, Kilkenny	Kilkenny Co Council	€5,971	€5,447
2	St Nicholas's Church, Newtown Jerpoint, Co Kilkenny	Séamus Davis	€	€10,000

Evaluation report				
Number and type of training places	Project start and finish dates	Training Type	Final training programme report and evaluation Tick Y/N if attached	Employment statistics for trainees post programme Tick Y/N if attached
1 15 WIT student places	08.10.14 to 27.01.15	BSc in Applied Conservation Skills Practical on-site training with lectures, workshops and demonstrations	Y	WIT course employment statistics not yet available
2 Four stone trainees	05.08.14 to 15.08.14	Two-week intensive on-site practical training course under supervision of master stonemason with lectures	Y	See attached evaluation report on St Nicholas project

Summary of projects using the evaluation headings

Headings for training evaluation

a. Method of advertising and recruiting trainees (if engaged individually and not as part of an existing education course):
b. Start and finish date of project:
c. Skills levels of trainees prior to engaging in the training project:
d. Type of training engaged in
e. Fulfilment of learning outcomes (attainment of skills acquisition objectives):
f. Summary of modules engaged in
g. Proportion of on-site and classroom training:
h. Numbers completing the project (if different to the numbers engaged initially) and numbers expressed as equivalent to FTE jobs numbers based on an eight hour day
i. Summary of building repairs engaged in and the contribution of the trainees to these repairs
j. Learning and development issues
k. Summary of trainee feedback (recorded anonymously)
l. Experience learned by the local authority, trainer, building owner/operator or contractor from the project
m. Update of trainee employment progress (as a result of the training project or otherwise)
n. Any other content considered relevant by the evaluation report authors

Fingal County Council

a. Method of advertising and recruiting trainees: local authority tradesmen already in employment; liaison with DIT Bolton St (Peter Murphy, tutor, BSc in Wood Technology) to involve up to 12 BSc students to attend theory sessions
b. Start and finish date of project: 7 October to 23 October 2014; the trainer agreed to attend the construction stage of the glasshouse project in 2015 to provide ongoing expertise to the local authority workforce
c. Skills levels of trainees prior to engaging in the training project: varied – four were carpenters and one was a bricklayer
d. Type of training engaged in: four full days of half-day theory lectures and half-day practical workshops at Newbridge House, County Dublin given by Peter Clarke, retired joinery instructor, School of Trades DIT with Peter Murphy, current DIT School of Trades instructor present (the DIT students did not participate in the workshops due to insurance and health and safety considerations). The training purpose was to upskill the local authority workforce to dismantle, repair and reconstruct an unstable Victorian glasshouse, and in addition to train in the traditional handskills necessary to work on other historic joinery in the care of the council
e. Fulfilment of learning outcomes (attainment of skills acquisition objectives): DIT students are required to see a conservation project in progress and meet craftspeople involved in practical elements apart from undertaking conservation theory; this project (initial phase of glasshouse project) fulfilled some of these required outcomes. Fingal County Council personnel gained direct training in historic methods of timber repair so that they could form the core of a team that will restore the glasshouse in 2016
f. Summary of modules engaged in (compiled by Peter Clarke): Health and safety: correct use of machinery, dangers of paint stripping; introduction to protected structures – determining appropriate levels of intervention, minimum intervention and minimum loss of fabric should be observed and invasive forms of investigation avoided where possible; materials – selection of appropriate materials for the type of work to be undertaken, the conversion of timber and familiarity with, and understanding of its nature and behaviour; understanding that the choice of material and techniques for repair should respect, and have regard to the original, its appearance, texture and composition; joinery – stairs: 18th and 19th century stairs, dogleg, cut string, open string and geometrical stairs, the repair of stairs in place; handrails – have knowledge of hand railing to include scrolls, wreaths and repair to balusters; doors – history of doors used in buildings of architectural merit, their style and construction, sheeted doors, panelled, double margin doors, repairs and associated ironmongery; windows – windows of the 18th and 19th century, casement and double hung sash windows, their history and development, the manufacture of each type to include glass and glazing, the need for conservation and repair panelling – timber panelling, plain, raised, and raised and fielded, types of glues used in panelling and other joinery elements

	carpentry – floors: ground and upper floors, traditional methods of connecting joists to trimmer joists, the need for numbering floor boards when removing for repair or investigation roofs – domestic roofs, repairs to the ridge, rafters, hips and purlins, the use of lay boards in valleys and back gutters; architectural truss roof forms: queen-post, king-post and hammer-beam roofs site visit – to Ardgillan Castle
g.	Proportion of on-site and classroom training: 50% workshop and 50% classroom
h.	Numbers completing the project (if different to the numbers engaged initially) and numbers expressed as equivalent to FTE jobs numbers based on an eight hour day: DIT 12 completed; FCC: total 7 – 4 no. carpenters and 1 no. bricklayer and 2 no. foremen
i.	Summary of building repairs engaged in and the contribution of the trainees to these repairs: due to timescale and health and safety issues the capital project (dismantling and reconstruction of the glasshouse at Ardgillan Castle, County Dublin) had to be postponed to 2016
j.	Learning and development issues: Literacy issues arose, need acknowledge requirements and deal with quietly. Tick box option for responses better for qus than writing out text. The diversity of trades of the trainees meant that some were not exposed to conservation before; a lot was learned, still learning to be done re selection of timbers for the rebuilding phase of the project.
k.	Summary of trainee feedback (recorded anonymously): the course was enthusiastically received and very well attended and has boosted the morale of the Fingal attendees
l.	Experience learned by the local authority, trainer, building owner/operator or contractor from the project: Try get total involvement by craftspeople, decision making with input by all, not imposed wholly by project designer / manager; this gives the craftspeople a better and more broad knowledge of how conservation works and fits them up to become more competent at future conservation jobs. Careful selection of the personnel is key – an initial interest has to be there.
m.	Update of trainee employment progress (as a result of the training project or otherwise) The DIT students are now undertaking the third year of their degree programme. [DIT personnel have now changed due to retirements so is not clear if the students will visit the job on site as had been planned]. The glasshouse has been dismantled over the course of 2015 and is in storage in Ardgillan. A new workshop has been set up in the courtyard and work will commence in 2016. The seven personnel who undertook the training will be engaged in the work and the tutor, Peter Clarke, will be available to advise.
n.	Any other content considered relevant by the evaluation report authors: Craftsmen should be involved in the whole design and construction process in a conservation project, to get a greater understanding of conservation as the project proceeds, and know why machines, tools, methods of work are selected [etc.]. Two FCC craftsmen who attended the pilot were to be enrolled to the DIT site management degree course, as are well trained and will make good supervisors. However they had to withdraw due to other commitments and because it was a degree course and too academic for them. FCC is now guiding them towards some of the modular, more practical, courses provided by the Construction Industry Federation as they come up.

Fingal County Council final account

The Fingal project did not cost the allocated amount of €20,000 due to the decision not to commence dismantling and repair of the Victorian glasshouse.
The expenditure comprised:-

Trainer's fee	€3250	
Lecture room hire	€400	
Catering	€1082.58	
Joinery tools and equipment	€1262.76	
TOTAL		€5995.34

Galway County Council

a. Method of advertising and recruiting trainees: advertised in local and regional press, newsletters, Intreo office, social media, fliers, CIF informed; 19 applications received, places offered to 12 who had Safepass cards
b. Start and finish date of project: 3 October to 29 November
c. Skills levels of trainees prior to engaging in the training project: plasterers and brick/block/stone workers; two had served apprenticeships, one of whom had completed a FETAC level 5 in traditional stone walling; one trainee had completed a six month training course in the UK in plastering; all other participants had learnt on the job, some having learnt their trade in family-run construction businesses
d. Type of training engaged in: 16 training days in two-day periods (Friday and Saturday) from 3-4 October until 28-29 November (excepting the bank holiday weekend 25-26 October), from 8.30a.m. to 4p.m. all onsite or within the classroom at Portumna workhouse.
e. Fulfilment of learning outcomes: See 'f' below for outcomes of each unit.
f. Summary of modules engaged in: Unit 1: practical overview of conservation, restoration and redevelopment of stone buildings; *learning outcomes:* all trainees gained this. Unit 2: learn how to work in a safe manner; *learning outcomes:* achieved by all trainees. Unit 3: learn how to carry out repairs to an external lime render and learn about lime in general; *learning outcomes:* all trainees learnt about lime rendering in general, but only those who had prior knowledge of plastering would have been capable of carrying out repairs to external lime render on scheme completion. Unit 4: learn how to repair internal lime render and carry out repairs to lath and plaster ceiling and how to mix and apply limewash; *learning outcomes:* all trainees learnt how to mix and apply lime wash, again only those who had prior knowledge of plastering would have been capable of repairing internal lime render on course completion. Unit 5: learn how to build with stone using lime mortar and how to apply render using a compressor; *learning outcomes:* all trainees learnt how to mix and apply lime using a compressor. However, only those who had prior knowledge of working with stone would have been capable of building with stone using lime mortar on course completion. Interesting to note that the plasterers enjoyed working with stone, making the comment that they usually only begin their work when wall construction is complete. Unit 6: learn how to do lime parging to the underside of slate; *learning outcomes:* only 4 trainees got the opportunity to do some practice at this. We were probably a bit ambitious in including it in the training programme. We also encountered difficulty in getting somebody to specify a mix and method statement. In any case, we are now progressing with this project, having met a plasterer who has successfully carried out three lime parging projects and has shared his learning. The work will be carried out by one of people who participated on the TBSTS, a plastering who is now working at the workhouse under the Rural Social Scheme. (note we recently got a call from another participant, who has got a contract thanks to his participation on the course.) Additional training was also carried out as the scheme progressed: Christy Cunniffe, Field Monuments Advisor, gave an illustrated talk on graveyards with an

	emphasis on monuments and gravestones An introduction to energy efficiency in traditional buildings was given by Ursula Marmion (Irish Workhouse manager) and Peter Smyth, Ecological Building Solutions, and Laurik Mathieu, the contractor-trainer, did a demonstration on using hemp with lime Laurik also gave a short demonstration on repairing stone and trainees took part in a workshop on basic stone carving Classroom training sessions were themed under the headings conservation; lime, stone and energy efficiency. The sessions were prepared by Ursula Marmion and delivered by Ursula, supported by Laurik. The Department's Advice Series provided an excellent basis for these sessions, especially because they were downloadable and not copyrighted.
g.	Proportion of on-site and classroom training: one hour per day was spent on off-the-job training. *Learning outcomes:* the trainees really had an appetite for the classroom sessions and in particular enjoyed the guest speakers and Edward Byrne from the Traditional Lime Company.
h.	Numbers completing the project (if different to the numbers engaged initially): 12 trainees started and 10 completed the course.
i.	Summary of building repairs engaged in and the contribution of the trainees to these repairs: Block E: repair of external render, side facing women's yard; Matron's Quarters: repair of internal lime render and repair to lath and plaster ceiling; Women's Block, gable end: rebuilding of modern gate opening, rendering externally and limewash internally. All this work was done by the trainees under the supervision of the mason trainer.
j.	Learning and development issues: Assessment of trainees was done by orally answering questions in pairs to accommodate trainees with literacy difficulties.
k.	Summary of trainee feedback (recorded anonymously): trainees evaluated the course by responding to questions about knowledge before and after completing the course; trainee attendance was high, a good indicator of interest. Over 16 days 7 trainees completed all days; 2 attended 15 days and 1 attended 13 days. [see Portumna TBSTS report]
l.	Experience learned by the local authority, trainer, building owner/operator or contractor from the project: Had a longer lead-in time been available a greater degree of preparatory work could have taken place in advance; 10 trainees was too much for onsite work, for which three teams operated; face-to-face interviews and assessments would be preferable for recruiting trainees; skills practice on mock-ups should be done prior to working on the buildings themselves; recognised certification would be preferable to issuing local authority certificates of attendance
m.	Update of trainee employment progress: Two participants have got related work (plastering), one in the private sector and the other at the workhouse on the Rural Social Scheme.
n.	Any other content considered relevant by the evaluation report authors: a certificate of course completion was presented to the trainees. The certification was from Galway County Council.

Galway County Council final account

1 pallet St Astier NHL 3.5	885.60	
Plywood, lime, safety specs, tools, toolhire, polythene	959.47	
Moulded skirting	510.75	
2 loads of plastering sand	454.61	
2 loads building stone	1,230.00	
SE Galway IRD project manager 30 days @ €225 p.d	6,750.00	
Trainer 19 days @ €350 per day	6,650.00	
Lime, casein, paint, lime putty	1,300.11	
Workshop on traditional building materials	350.00	
Transport of scaffold	400.00	
Training manuals, travel, insurance	510.00	
Voluntary contribution: Sean Larkin, voluntary director, SE Galway IRD to supply, erect and maintain 2 no. scaffolding towers for the training scheme, valued at €2,500 [cost of hire of scaffolding]		
TOTAL		€20,000.54

Kilkenny County Council – St Mary's

a. Method of advertising and recruiting trainees: publicised on WIT website as part of BSc in Applied Conservation Skills course; paid advertisement on the regular KKCC page in the Kilkenny People; public relations statement released through the Kilkenny People; publicised through KKCC website and via the Kilkenny Heritage Forum
b. Start and finish date of project: commenced 8th October 2014; finished 28th January 2015 [TBSTS-funded work was completed by end November 2014 but further on-site participation continued under separate funding]
c. Skills levels of trainees prior to engaging in the training project: skills levels met the structured system of entry for the BSc in Applied Conservation Skills; tradespeople who hold the National Craft Certification Qualification and eligible CPD applicants were considered, dependant on experience and qualifications. All 15 students met the entry requirement, however not all were tradespeople
d. Type of training engaged in: Type of training engaged in: a combination of lectures by members of the current design team [Niall McCullough, McCullough Mulvin Architects; Peter Cox and John Beattie, Carrig Conservation; Claire Walsh, Archaeological Projects] and other professionals associated with St Mary's [Evelyn Graham, Kilkenny Co Council project liaison architect; Cóilín O'Drisceoil, Kilkenny Archaeology and leader of the Shee Mausoleum restoration project]; workshops / demonstrations on site [Lisa Edden and Pat McAfee on use of building limes and hot lime; Peter Cox, building fabric examination, assessment of materials and treatment]; practical on-site training: raking out and repointing section of wall
e. Fulfilment of learning outcomes (attainment of skills acquisition objectives): Fulfilment of learning outcomes (attainment of skills acquisition objectives): all the learning outcomes, as laid out in the WIT CE2 Submission Course document for the course, were met. Material analysis of sand and lime Hot lime demonstration and use Wall preparation Cutting out of existing mortar Care of organic matter Different pointing styles and applications Application of new mortars Care and protection of finished applications Health and safety issues all applied to
f. Summary of modules engaged in [see PDF St Mary's TBSTS evaluation report Feb 2015] Copies of relevant course material: Archaeological Projects: archaeological reports, historical reports / photos and presentation Carrig Conservation: monuments protection and cleaning methodology; plaster and paint analysis; mortar analysis; presentations McCullough Mulvin: drawings, reports, presentations Kilkenny Archaeology: Shee Mausoleum restoration pack; graveyard survey and reports; presentation Kilkenny Co Council Part 8 planning pack Co Manager's report

	Enabling Works Pack Building Investigation Reports: dendrochronology report; roof timber detailed survey; tower fabric detailed survey; asbestos report Conservation Plan Photographs
g.	Proportion of on-site and classroom training: 67% on site and 33% classroom
h.	Numbers completing the project: 15
i.	Summary of building repairs engaged in and the contribution of the trainees to these repairs: The cutting out and repointing repairs engaged in by the ACS trainees was carried out to an extremely high stand. Extra care was taken in cutting the existing mortar from the stonework, and with guidance form the lecturers and two of the group's masonry students, Brian and Joe, and no damage was caused to the existing stonework. The reporting was undertaken in the same professional manner. Batching of the mortar, mixing for a minimum period and all works covered and protected after each working session. The level of care and professional attitude from a mainly non-trade group was extremely rewarding from a teaching perspective.
j.	Learning and development issues: Feedback from the students was extremely positive, in the form of signed written submissions and in a presentation given in WIT on 28 January 2015. They all emphasised the benefits of working on a live project with 'real life' tasks and working environments. The students also gave positive feedback on the lectures and practical demonstrations which resulted in a realistic learning experience.
k.	Summary of trainee feedback (recorded anonymously): see PDF St Mary's TBSTS evaluation report Feb 2015, p.6
l.	Experience learned by the local authority, trainer, building owner/operator or contractor from the project see PDF St Mary's TBSTS evaluation report Feb 2015, p.7
m.	Update of trainee employment progress (as a result of the training project or otherwise): one trainee has won the Madelaine Gervais bursary to study in St Gemini, Italy, as part of the Historic Building Restoration and Analysis programme. A second has found employment with Kilkenny Archaeology Ltd.
n.	Any other content considered relevant by the evaluation report authors: the collaboration between DAHG, KCCC and WIT has proven to be a rewarding and highly beneficial experience for all the students and personnel involved. Hopefully this pilot project can be built on for further collaboration between the parties mentioned above. This type of initiative is vital if we are to take the training of architectural conservation forward. The onsite learning of the students was invaluable and therefore beneficial to all parties and enhancing the quality of the BSc in Applied Conservation Skills. It is hoped by all the staff at WIT that there will be further initiatives like St Mary's for our future courses. The involvement of KKCC and inclusion of training at the St.Mary's site attracted participants from a wider geographical area particularly Co. Kilkenny.

Kilkenny County Council St Mary's final account

Design team conservation consultant fee (Carrig Conservation, for two presentations and two workshops)	1,980.00	
Design team archaeologist fee (Archaeological Projects); one presentation and site inspection with trainees	250.00	
Design team lead architect fee (McCullough Mulvin); one presentation	500.00	
Shee Mausoleum Restoration Project lead fee (Kilkenny Archaeology); one presentation and walkabout with trainees	200.00	
1 day Workshop /demonstrations on site [Lisa Edden and Pat McAfee) on use of building limes and hot lime	1000.00	
Materials for temporary shelter for training panels	208.59	
Materials: Lime	108.24	
Tools	582.60	
Reference materials: 20 copies of McAfee, P *Lime Works* (Building Limes Forum Ireland/Associated Editions, Dublin 2009)	523.00	
Miscellaneous supplies: refreshments	170.05	
KKCC direct labour crew attendances €447.89 (not payable under TBSTS grant)		
TOTAL		**€5,522.98**

Kilkenny County Council – St Nicholas's

a. Method of advertising and recruiting trainees (if engaged individually and not as part of an existing education course): the course details were forwarded to a cohort of potential trainees who had qualified in a construction trade and/or had completed a course in traditional stonework skills (FETAC level 4 or VEC /ETB). It was necessary for participants to have a reasonable existing level of stonework skill and construction site experience for this course. Applicants were shortlisted and interviewed. Those selected showed a keen interest in conservation, a desire to increase their skillset in this field and to put the acquired skills to use by working in stonework conservation. Final selection was based on participants having the character, capacity and attitude necessary to successfully complete the course and put the acquired skills to use in the industry. The books *Irish Stone Buildings* and *Lime Works* (both by Pat McAfee) were given to the participants prior to commencement to increase their understanding of stonework built with lime and to establish a similar base level of knowledge among all participants.
b. Start and finish date of project: 05.08.14 to 15.08.14. Reading material circulated one month before commencement.
c. Skills levels of trainees prior to engaging in the training project: qualified carpenters (2), qualified block/bricklayer (1), experienced construction operative with talent for stone sculpture (1) [For details see St Mary's TBSTS evaluation report Feb 2015, p.10]
d. Type of training engaged in: Two weeks of mainly intensive practical training during which the two sidewalls of the southern end of St Nicholas's Church were conserved by the instructor and trainees.
e. Fulfilment of learning outcomes (attainment of skills acquisition objectives): All skills outlined in the training plan were acquired by all four participants. This was achieved through the onsite involvement of the instructor throughout the entire course and facilitated by the way the work plan was structured and implemented.
f. Summary of modules engaged in (with copies of relevant course material): Week 1: introduction; health and safety induction; tour of site with explanation of its archaeological and historical significance; overview of conservation project with explanation of three phases etc.; explanation and assessment of scope of works for training programme; introduction to tools and techniques to be employed on the course; methodology of cleaning and preparing structure for conservation. Week 2: trainees took a section each and completed their section with the help and guidance of the instructor
g. Proportion of on-site and classroom training: 85% onsite training and 15% classroom training. The presentations/lectures and Q&A sessions with Pat McAfee and Ivor McElveen were done in the classroom; the health and safety induction was done in the classroom and on site.
h. Numbers completing the project (if different to the numbers engaged initially) and numbers expressed as equivalent to FTE jobs numbers based on an eight hour day: four trainees started and completed the programme; FTE jobs equivalent = 40 days.
i. Summary of building repairs engaged in and the contribution of the trainees to these repairs: the two sidewalls of this section [nave] of the church were conserved during the

two weeks of the course (photographs are in the St Mary's TBSTS evaluation report Feb 2015 document]; during week 1 the trainees and instructor worked together on the first wall and completed its conservation; the second wall was divided into four equal sections; the trainees took a section each and completed their section with the help and guidance of the instructor; as the photos show, an excellent standard of conservation and a uniform finish was achieved.
j. Learning and development issues: the course was very satisfactory, in terms of outcomes for all involved. The trainees were able to progress to working on similar structures straight away and all gained employment in this field. The skills learned have a broad application as most permanent structures built here from the 8th to the 19th centuries are of similar construction to St Nicholas's and many are in a similar state of neglect and decay. One issues that could be addressed for the future development of courses similar to this is that of accreditation. Ideally a programme like this would be part of a longer, fully accredited apprenticeship in traditional stonemasonry which would have a series of modules that encompass all aspects of the trade.
k. Summary of trainee feedback (recorded anonymously): see p.18 of St Mary's TBSTS evaluation report Feb 2015.
l. Experience learned by the local authority, trainer, building owner/operator or contractor from the project: see p.10 of St Mary's TBSTS evaluation report Feb 2015.
m. Update of trainee employment progress (as a result of the training project or otherwise): all four trainees gained employment as a direct result of this training programme: they worked on Skerry's Castle, Callan, The Workhouse, Callan and New Ross town walls [more detail on p.11 of St Mary's TBSTS evaluation report Feb 2015].
n. Any other content considered relevant by the evaluation report authors: see detailed feedback on p.11 of St Mary's TBSTS evaluation report Feb 2015.

Kilkenny County Council St Nicholas's final account

TRADITIONAL BUILDING SKILLS TRAINING- ST.NICHOLAS' CHURCH, JERPOINT		
Trainer fee for preparation of training syllabus and programme, method statement and project management of stabilisation and consolidation of the western side of the structure (gable end of the nave and associated buttresses and the top parts of the adjoining walls) (Séamus Davis, master stonemason and qualified trainer and heritage contractor; with input from Ivor McElveen, conservation engineer / training advisor, Rex Bangerter, project archaeologist, Shem Caulfield, St Nicholas committee member)		
Description	**Cost €**	
Trainer 80 hours @ €36 p.h.	2,880	
Tools/PPE/Stationery	1,200	
NHL mortar/quicklime/sand	1,420	
Lectures by professionals	500	
Scaffolding	2,000	
Photography & photographic record	750	
Course design & preparation	750	
Report (including professional input)	500	
TOTAL EXPENDITURE		**€10,000**

Department of Arts, Heritage and the Gaeltacht evaluation of the scheme

Issues raised and concerns encountered during this pilot

Funding concerns:

1. The lack of a regular funding stream to support projects in the conservation sector (and therefore to provide steady conservation work for contractors), means there is a shortage of employment opportunities available to those with advanced craft and conservation skills in the traditional skills / building conservation sector, and therefore little incentive for workers to upskill.
2. The money that DAHG provided to this pilot was an attraction to bring stakeholders together but is insignificant in terms both of a capital project and of a training course and cannot substitute for either a capital budget or regular, accredited training provision.

Training provision issues:

3. Greater involvement by local Intreo offices and Education and Training Boards would assist in pursuing small-scale training models: the recent changes in both local social protection offices and FAS/SOLAS / ETBs have led to difficulties in getting constructive engagement. The Galway project proved the exception, with the Intreo office advertising the project and GRETB involvement in the steering committee, and future liaison with the GRETB is now established.[2] Longford County Council had sought involvement of the local ETB but was unable to receive sufficient commitment to pursue a project.
4. Shortcomings in traditional building skills and conservation education were discussed with all of the pilot project managers and trainers; issues such as the absence of easily accessed information on training in conservation or a mason trainers' network were raised.
5. Public works contracts do not contain training clauses so in the case of St Mary's the goodwill of the main contractor is essential to allowing future WIT students access to the site to be involved in specific aspects of the repairs.
6. Some ETB / labour-market activation trainees prefer not to do classroom work, stemming perhaps from literacy / early school leaving issues, which required creative thinking on the part of trainers to help the individuals concerned to express themselves in doing classroom work and in the assessments.

Construction industry organisational issues:

7. There was not enough input by the construction industry itself – behind the scenes discussion has been taking place between DAHG and the CIF under the auspices of the Action Plan for Jobs, however regional CIF groupings were not active in this pilot.

Miscellaneous:

8. Fingal had hoped to commence the project earlier in the year which would have allowed sufficient time to include dismantling of the glasshouse, however internal management reorganisation followed the installation of a new chief executive, during which time the responsibilities of the relevant departments in the council were unclear, leading to delays.

[2] The ETB has now run the NFQ4 award in traditional stonewall skills at Portumna Workhouse, and is adding on a five-week conservation and restoration module (starting December 2015), which will not carry a specific certification other than an in-house certificate of attendance and covered modules. Information from Padraic Lydon, Contract Training Officer, GRETB.

Findings of the pilot

Organisation and content of training provision:

1. The level at which to pitch conservation upskilling training is important: whether it is desirable or feasible to accommodate the interested novice or should it be confined to those with either significant experience as a construction operative or who have craft qualifications.
2. The question of how to structure accredited training in conservation must be addressed: whether it is feasible to ask those with an advanced craft cert to carry out further training, as much as two extra years as suggested by one trainer, to achieve sufficient competence to take on a leading role in carrying out a contract. An add-on conservation component may generate interest on the part of SOLAS/providers and certified craftspersons, which would be offered to national craft cert holders only (or perhaps also to graduates of IT wood / metal technology awards). The question arises if streaming in conservation should be offered to newly certified craftspeople or just those who have had some experience on site. The feasibility of dividing the phase 6 of apprenticeships with specialist final phase training in conservation in particular crafts is worth examining.
3. The French *les compagnon du devoirs* system should be examined for relevance to Ireland (it comprises a two-year apprenticeship in masonry – without lime – may be followed by two more years which goes into deeper detail and includes management skills; one can do two further years to become fully qualified).
4. The inclusion of training (with meaningful participation on site and at lectures while carrying out the repair of a building) may be more difficult to do successfully in a publicly funded capital project than in a small (well managed) private / not-for-profit project, as the latter may prove more flexible than the former. The extra supervision required at all times; the scheduling of work by the project manager in consultation with the trainer and the site manager / foreman; the longer timescales required for tasks; the extra health and safety considerations where trainees might be working at height or with hazardous materials, or on a masonry ruin; the interaction with contractors and sub-contractors: all these factors are necessary to design into the process as at early a stage as can be done.
5. The way in which recognition of prior learning (RPL) is calculated and applied for upskilling qualifications is important to capture the knowledge, skills and approaches required in conservation work.
6. The syllabi for the NFQ4 and NFQ5 stonewall qualifications are strict and core specifications must be followed. There is the possibility of extending the course with a module / modules in conservation with a selection of the original candidates, being careful as to the candidate profile as the provider needs to be sure that these selected trainees will have the necessary attributes for an accreditation in conservation.
7. The flexibility that ETBs have to add modules to existing programmes could be applied to augment / make more applicable traditional building skills awards: ETBs can contract in providers who subcontract craft trainers. With regard to onsite work, ETBs can organise a memorandum of understanding / service level agreement with agencies to clarify who provides building and materials and get agreement on the areas of work to be covered.
8. An ETB will focus on addressing a local skills need if it is demonstrated. The key is the writing of a module for accreditation – it can take a year to prepare a course. Subject matter experts are necessary to develop programmes, with craft, professionals, contractors etc. represented; the syllabus is pulled together with all stakeholders. A provider has to be found to run a pilot. This technical work requires co-ordination between ETBI, SOLAS, CIF, local authorities and the OPW.
9. With unemployed trainees the question of candidate selection is important: e.g. literacy issues may inform the level at which to peg information and affect the speed of absorption of written information and ease of undergoing assessment.

10. Easily accessible practical information is not readily available to prospective trainees to help them make decisions as to upskilling, e.g. to let them know that retrospective qualification can be given by SOLAS if a person had completed the relevant trade levels block releases (the former junior and senior trades' certs prior to the introduction of the national craft certificate).
11. All of the pilot projects involved inter-disciplinary training. Each course contained trainees from several trades' and non-trades' backgrounds and each had expert training, presentations and input by craftspersons and professionals with diverse backgrounds such as architecture, engineering, archaeology, stonemasonry, joinery, architectural history and materials conservation. This mix of knowledge aided the trainees to understand the breadth of conservation and the need for all involved in a project to work in a collegiate manner, as no one trade or profession holds exclusive knowledge. In this regard the pilot scheme incorporated some of the most important, internationally recommended, requirements of conservation education.
12. Training onsite which is carried out as part of an accredited award must have access onsite to a classroom and WC facilities, and indoor training space for demonstrations/ practice. This will influence any modelling of future training schemes. Time and physical space should be given to practicing on mock-ups / ruinettes (especially constructed 'ruins' which have structural faults and can be diagnosed, repaired, dismantled and rebuilt as necessary). A maximum of one hour off-the-job training per day was successful at Portumna. The Fingal project divided each training day into mornings of lectures and afternoons in the workshop.
13. The small numbers involved in each project were important to their success. In order to carry out continuous assessment and to verify the growing competence of each trainee the contractor / supervisor / trainer must be able to give time and attention to each individual. This is especially important where trainees are working on part of the national patrimony.
14. At Portumna and St Nicholas's the trainees were divided into groups / single work units to carry out particular tasks. At St Nicholas the first task was done together while the second was done individually. The organisation of the work into small work groups rotating the various training tasks appears to have been successful and should influence any future models for such schemes.
15. Additional training in relevant areas should be considered in advance of a training project commencing, as due to bad weather or speedy progress talks or demonstrations may be needed to occupy down time, which should be of relevance to the trainees. At Portumna the trainees took part in a workshop on basic stone carving and talks were given on graveyards (with the emphasis on monuments and gravestones) by a field monuments advisor and energy efficiency, including the use of hemp and lime, by a contractor. At St Mary's a talk was given on flora and fauna habitats and ivy growth by the heritage officer.

Trainer feedback:

16. Not all qualified craft/tradespersons will be good enough and interested in conservation: estimates given by trainers ranged from 5% to 10% of the cohort.
17. Trainer feedback strongly noted that there is no substitute for the depth of craft training through an apprenticeship: short courses such as the pilot made possible are useful to upskill trainees but the fundamental head and hand skills that make a craftsperson can only be inculcated over a sustained period of time on site and in the classroom (a combination of on- and off-site training is essential to achieve competence.). Therefore, if the integrity of each craft skill is not to be jeopardised, upskilling should be an add-on to existing craft qualifications.

Public sector involvement:

18. The presence of at least one committed, hardworking conservation professional in the local authority to manage the pilot was a vital element to the success of the four projects. Equally the projects would not have succeeded without the interest of each trainer in getting involved with what was a quickly evolving project in each case (due to the short lead-in and the pilot nature of the project) which required flexibility and commitment.
19. Public sector co-operation (local authorities, public sector training providers and State bodies) was vital to the success of the initiative – there has been little such collaboration in the past but when introduced it has resulted in good networks being established which are likely to pay dividends: e.g. the Galway-Roscommon ETB has now run its 4S3136 traditional stonewall skills course in Portumna and engaged with the workhouse for the work experience elements; and WIT and Kilkenny County Council are re-running the practical sessions and lectures at St Mary's in the first semester of the 2015-2016 intake of the BSc in Applied Conservation Skills.
20. While the OPW was involved in the DAHG committee for the Action Plan for Jobs it didn't translate into training on an OPW-managed national monument. OPW did assist with the Galway project – in representation on the steering committee and in doing analysis of the mortar.
21. Co-ordination of training programme and contractor scheduling is vital to the success of onsite training, especially where there is a major capital project involved. The difficulty of delays in awarding the main contract at St Mary's was overcome in the St Mary's project by creative organisation, however without a training programme being worked into the public works contract via a training clause it is not advisable to recommend training to be incorporated into a capital project. The demands of ongoing maintenance and repair of a historic building may prove more amenable to certain types of upskilling training, as at Portumna Workhouse, or a small-scale phased project as at St Nicholas's or Ardgillan.
22. It is feasible to devise service level agreements between local authorities (and others) and private / NGO bodies or individuals in order to establish roles and responsibilities for one-off programmes of work – the Kilkenny City and County Council model is useful to indicate same and could form a useful precedent for any future such projects.

Construction industry organisation:

23. The seasonal nature of much conservation work, especially outside the main urban centres, militates against it being a specialisation for many contractors. Most have to carry out standard jobs in order to keep their business afloat and do conservation when the weather permits and projects are available. The season may expand with an increasing knowledge of hot lime mortar working but is still likely to limit the numbers of small and medium contractors specialising in conservation. Therefore contractors who train up a team may find that due to uncertainty and time lag the team is not available when needed, having taken alternative employment in the meantime. As a consequence contractors do not have the financial certainty to afford to purchase necessary plant and equipment.

Funding:

24. In France (according to the les compagnon du devoirs representative for the UK and Ireland) a percentage of a company's turnover must be set aside to fund training: this cache is available for a few years but after that is withdrawn – it is in a company's interest to use it to do training. It would be of interest to gauge Irish reaction to such a requirement.
25. The Portumna project found that the budget covered all costs and noted that if a private contractor had been contracted to carry out the work completed under the scheme, it would have cost in the region of €20,000 but no training would have been provided. At St Nicholas it was considered that the course dramatically increased participant skill levels and employability in a very short time for a very small cost.

Miscellaneous:

26. The lead-in timeframe to was too short (each project slipped apart from St Nicholas as this was scheduled to proceed anyway); Sligo and Longford were unable to take up the offer due to participate. Even where a local authority is resourced to carry out training this type of project differs from classroom training and requires significant co-ordination across LA departments (property / heritage / training etc.). Lead-in time can also ensure that preparatory work (such as demolition of concrete etc.) is carried out prior to trainee arrival.
27. Profiles of the previous construction / educational attainment of trainees and their present employment status was not sought by DAHG but some information was collated in the project review reports which is of some interest. Interest came from many trades and from qualified and non-qualified persons, with a mix of employed, unemployed and those on community employment schemes.
28. At Portumna a booking deposit was sought on offer of a place, which was refunded on successful completion of the course. This was done to encourage the successful applicants to stay the course. No adverse feedback was given by trainees on this requirement.
29. Unexpected benefits occurred: the contractor overseeing the training at Portumna is a graduate of the French *les compagnons du devoirs* system, and he invited the UK and Ireland representative to meet the steering committee and discuss its work. Also, one of the WIT students won a bursary to study in Italy and is now employed by the masonry sub-contractor at St Mary's, while another is employed on the St Mary's project by the contract archaeologist.

Recommendations for future training programmes

Organisation and content of training provision:

General training recommendations

1. Capital grants are usually allocated annually to various conservation projects throughout the country. If, for instance, one project per county required a training element, this could result in significant numbers of people receiving short-term training in conservation and repair, probably at no additional cost to doing the capital conservation works without a training element. The issue of accreditation for such short term training needs to be addressed. *From Portumna*
2. The Government Construction Contracts Committee (GCCC) should introduce training clauses in the public works suite of contracts to accommodate onsite training with associated lectures and discussion, learning from the experience gained in the St Mary's project.
3. The absence of in-depth training in the use of lime in conservation and possibly also in new build is an issue needing attention. This could perhaps be easily solved if the existing SOLAS plastering apprenticeship was adapted to include such training. *From Portumna*
4. Many unqualified general operatives have excellent hand skills, however they miss out on the broad range of judgement skills and theoretical knowledge imparted through the apprenticeship system. For such people upskilling may fruitfully concentrate on head skills, however it must recognise the relatively poor formal education attainment of many such potential trainees.
5. Training should include description on works to 'demystify' conservation method statements so they are legible to contractors and specialists and not just site professionals.

Training recommendations specific to the piloted models

6. This pilot has devised several methods of carrying out short upskilling courses that can be made into a set of model structures for NGO and other organisations to study and adapt as necessary for future such one-off short courses
7. An application form for this type of training would assist organisations to scrutinise candidates to best effect. Filling out the form should require some effort, to help assess the commitment of applicants to the course. A requirement to hand over a refundable deposit may also be good practice, but it would be beneficial to find out if this gives rise to any contractual obligations before making a decision. Face-to-face interviews should be done. It was noted at St Nicholas that the ability to assess prospective participants for suitability (without reliance on paperwork) is an acquired and essential skill which must be possessed by a member of the management team.
8. As well as prioritising applicants who have a current Safepass card (for speed of recruitment and demonstration of current competence) applicants should be asked if they have completed manual handling training within the past three years. Health and Safety induction should be site-specific.
9. Slight over-intake of trainees than the optimum is preferable, as there will be some attrition (in Portumna 12 were recruited and two dropped out as they got work). A top estimate of group numbers is about 10 trainees but this was considered too much at Portumna where a recommendation of 6 is given.
10. The types of course run in this pilot have concentrated on 'transferable skills': building on the existing hand skills of the trainees to impart particular knowledge and skills necessary for working with traditional materials and techniques, and introducing the concepts of conservation theory and judgements. The existing hand skills and knowledge of materials were found to be higher than expected at Portumna, allowing for more practical

conservation work to be carried out than anticipated. Closer interrogation of the existing practical skills of potential upskilling trainees might help to tailor course contents and levels more productively to give a rounded graduate.

11. The assessment procedures for evaluating the trainees' experience of the course should be standardised in any future scheme so as to compare outcomes and compile more reliable information and feedback. Attendance should be plotted, as an indicator of trainee interest.
12. The inter-disciplinary nature of the pilot projects, with local and national input, establishes the sort of best practice structure that should be followed in all future such schemes and in setting up conservation training by ETBs, ITs and other training providers such as through the LEADER programme.
13. The supply of relevant, up-to-date and where possible craft and site-specific documentation to the trainees is recommended and should form part of the estimation of costs. Portumna gave a training manual to each trainee, including copies of articles, presentations, information sheets and booklets and a list of contacts for further information. Kilkenny gave a copy of the standard guidance, *Lime Works* by Pat McAfee for the Building Limes Forum Ireland, to the trainees, as well as much information (drawings, reports, surveys and presentations) relating to the Part 8 application for the repair and conversion of the former church to a museum. This information was considered very useful by the St Mary's trainees.

Construction industry organisation:

14. Modular training is recommended in traditional building skills to accommodate potential trainees who must remain available for work but can afford the time and money to take small clusters of day/weekend training modules: awards can be built up by doing a series of short, intensive modules. A smart card with PPS number could hold the details and verify completion and accreditation of the modules and major award(s), to assure future employers and clients of the awards gained.

Public sector involvement and the creation of networks:

15. The assembling of a steering group by each local authority is recommended in any future scheme, to include external stakeholders from education, construction, rural development and heritage policy. At Portumna this group found it to be a useful forum for wider discussion on construction training amongst a mix of interests which rarely convene together.
16. The creation of networks of local and regional stakeholders would help to guide available training moneys towards similar locally-generated projects; conversely without a supply of such seed money as the pilot provided it might be difficult to maintain the enthusiasm shown by the diverse range of people and organisations involved in the pilot. As a community / cross-sectoral endeavour the pilot was the instigation for much voluntary effort and therefore achieved more than would a commercially tendered training project.
17. The voluntary time which was given to the pilot projects by conservation practitioners and educators is not sustainable in the long term. However, where the time of such people was paid for it was a reasonable (and eligible) expense in relation to the overall costs. The involvement of local and national conservation practitioners and educators in individual projects should be structured within a local training network, with costs agreed for making presentations etc. This type of skill transfer, which is encouraged by professional and contractor CPD requirements, could become part of a locally-adapted TBS training structure.
18. Structured involvement of the CIF (Manpower, Education and Training committee and heritage / other experienced conservation contractors in local areas) should be sought to aid any future scheme, for both presence on a steering committee and to give presentations or do masterclass demonstrations. Members of the Register of Heritage

Contractors (and the new Construction Industry Register Ireland) have CPD requirements, the fulfilment of which could be addressed in part by such involvement.

19. More structured involvement on the part of OPW staff and on OPW properties, including to allow for properly specified and structured training on national monuments and historic properties, is recommended in any future scheme.
20. A panel of qualified trainers in particular traditional skills and conservation specialisms who are prepared to give their time should be formed, from which organisations could source trainers to give talks, demonstrations and workshops to training courses. These trainers could be self-employed or employed by educational institutions who would do such work as part of their own professional CPD requirements.
21. Several trainees at Kilkenny St Nicholas and Portumna have been employed on the Rural Social Scheme and the Tús scheme. There is potential for a more formal training link with existing labour-market activation schemes, which involve outdoor work in locations such as graveyards.

Funding:

22. Funding models should look to support project and training preparation in one calendar year and delivery in the following year, to enable organisers to advertise and select candidates in good time, to undertake any necessary preparatory work on site and to carry out lime and other outdoor training work in appropriate weather. This model should take the form of a rolling programme, to be well planned at local level to address both buildings' and skills' needs.

Next steps

1. This evaluation is to be returned to the Department of Jobs, Enterprise and Innovation as one of the reporting requirements of the Action Plan for Jobs 2014.
2. DAHG will use the pilot as a learning exercise in discussions with the Department of Education and Skills and other public and private sector stakeholders on a draft action plan to encourage training in traditional building skills and conservation education.

APPENDICES:

1. Traditional Building Skills Training Scheme
Guidance Circular 18.3.14

2. Relevant material generated by local pilot projects

B1: FINGAL COUNTY COUNCIL

B2: GALWAY COUNTY COUNCIL

B3: KILKENNY COUNTY COUNCIL

Traditional Building Skills Training Scheme

2014

GUIDANCE CIRCULAR

18.3.14

Contents

Abbreviations

ACA	Architectural Conservation Area
BHJLS	Built Heritage Jobs Leverage Scheme
DAHG	Department of Arts, Heritage and the Gaeltacht
DECLG	Department of the Environment, Community and Local Government
NFQ	National Framework of Qualifications
NIAH	National Inventory of Architectural Heritage
RPS	Record of Protected Structures

Executive Summary

Object of scheme:

- To enhance skillsets in built heritage conservation within and around the pilot local authority area by making trainees or qualified construction workers more capable of carrying out conservation and restoration projects and therefore improve their prospects of employment
- One or more capital conservation works project will be carried out, which will provide meaningful on-site training for trainees who may be already engaged on a training course
- Local authority will work with local and national stakeholders to identify training opportunities, trainees and suitable historic structure for repair
- Eligible conservation works will be designed and carried out by competent conservation professionals and contractors in line with statutory permissions / consents
- Training may be in stone / carpentry / metal / roofing / lime / stained glass / thatch
- Training is to be provided by an appropriately qualified trainer with supervision of trainees on-site by conservation professional and contractor
- Training plan is to be submitted to DAHG which sets deliverables and is used to evaluate outcomes upon completion
- Accredited NFQ or equivalent training programme preferred
- Record of training project to be made and evaluation report done

Financial details:

- €20,000 is allocated by DAHG for capital expenditure per local authority on one or more conservation works projects during 2014 with a training element attached
- Capital allocation can pay for workforce or consumables (no more than 50% on consumables) but not current expenses
- A minimum 10% of training project cost is to be paid by applicant / local authority. If applicant or structure owner is a commercial entity matching funds are required
- Where the local authority is using its own resources or properties DAHG will need proof of payment of invoices etc. to the value of the project total
- Expenditure must be incurred and paid over to final beneficiary before drawdown from Department
- DAHG will seek confirmation from the local authority that all relevant requirements of the revenue commissioners are fully met

Deadlines:

- **28 March 2014** notify acceptance of offer of inclusion in scheme
- **11 April 2014** submit proposal to DAHG
- **25 April 2014** confirmation of eligibility from DAHG
- **23 May 2014** submit training plan to DAHG
- **30 June 2014** submit progress report to DAHG
- **29 August 2014** confirm to DAHG that project is on target for completion
- **30 September 2014** notify DAHG of the amount of funding not yet drawn down
- **7 November 2014** latest submission to DAHG for reimbursement
- **27 February 2015** submission of final / evaluation report to DAHG

1. Background, Purpose and Operation of Scheme

This guide provides pilot local authorities with information in relation to the operation and administration of the Traditional Building Skills Training Scheme 2014.

1.1 Background

The historic built environment makes a significant contribution to economic prosperity by attracting investment, providing direct and indirect employment, as well as sustaining a traditional skills base for wider application. It is recognised that traditional building and conservation skills are essential to the on-going repair of our built heritage. However, the economic downturn has severely impacted upon the construction sector particularly in relation to the training of those working in the conservation of built heritage. There is a real need to revitalise this sector to create sustainable jobs and to contribute to economic regeneration.

The Department of Arts, Heritage and the Gaeltacht has committed itself to support education and training for traditional building skills in the Action Plans for Jobs 2013 and 2014. The Traditional Building Skills Training Scheme is a pilot programme listed in the Action Plan for Jobs 2014. It is designed to enhance the capacity of certain repair projects to include a skills training element. The scheme is being introduced in four local authorities in 2014 and will run in tandem with the Built Heritage Jobs Leverage Scheme.[3]

The role of the Department of Arts, Heritage and the Gaeltacht

The key areas of responsibility of Department of Arts, Heritage and the Gaeltacht (DAHG) regarding built heritage are to develop, promote and implement policies and legislation for its protection and to promote best practice in its conservation.

As set out in the *Planning and Development Acts* and Regulations, DAHG acts on behalf of the Minister of Arts, Heritage and the Gaeltacht in his function as a prescribed body for the purposes of architectural heritage protection, and provides a similar role with respect to archaeological and natural heritage protection.

Owners and occupiers are the primary custodians of structures, which are protected under the Planning and Development Acts. They, along with the planning authorities, are charged with the responsibility for their protection and for obtaining the right advice and skilled contractors when planning to do repairs or make changes.

[3] The Built Heritage Jobs Leverage Scheme, operated by the Department of Arts, Heritage and the Gaeltacht. See Circular BHJLS13/1, issued 18.12.13.

1.2 Purpose of Pilot Scheme

The Traditional Building Skills Training Scheme is a capital incentive scheme. As part of the **Action Plan for Jobs 2014** it aims to support specific training in traditional building skills in order to sustain the repair and maintenance sector of the construction industry.

The fund will supplement a number of conservation projects on historic structures, whilst providing appropriately designed and supervised on-the-job building skills training to assist trainees on an accredited traditional craft skills course or graduates of such a course, or time-served apprentices, who have gained up to level 6 in the National Framework of Qualifications (NFQ) or equivalent.

The focus of this scheme is on practical traditional skills training for people in further education or on the live register. As a result, local authorities are required to report to DAHG on the number and type of training places created under this scheme and to evaluate the progress of trainees after its completion.

1.3 Operation of the Scheme

The pilot scheme will operate for the duration of 2014, with final submissions by 27 February 2015. It will be administered by four pilot local authorities in accordance with the terms and conditions. As this is a new type of scheme, the Department will liaise with each local authority, local training providers, social welfare (Intreo) office, contractors and community interests so that one or more potential training projects are identified that are suited to the scheme.

Project proposals should be made to the Department by 11 April 2014 by each local authority. Information on the project should include location and status of the structure, names of the conservation professional and training partner, proposed training and conservation deliverables and evidence of compliance with regulatory requirements for the conservation works (please see attached sample confirmation letter). Proposals should conform to the terms and conditions of this circular. The Department will confirm those projects eligible to proceed and issue a confirmation letter to the local authority.

Each pilot local authority will provide to the Department by 30 June 2014 a progress report on the project or the relevant training element. Where a project has not commenced by this date the Department will liaise with the local authority to determine the feasibility of completion within the required timeframe. The Department may reallocate the funds to the same or a separate local authority if deemed necessary.

The training project, or the specific training element in a capital works project (as appropriate), must be completed sufficient to allow for reimbursement of expenditure by the authority from the Department on or before 7 November 2014.

The pilot scheme will extend to 27 February 2015 to allow for evaluation of the operation of the scheme and to follow the progress of the trainees. The evaluation will be carried out by the local authorities and project team as per item 3.12 below.

The evaluation report on the completed training programme must be submitted in hard and soft copy to DAHG, accompanied by photographs (before and after), video and other recording media together with a text collated by the project team.

2. Details of Scheme

2.1 Types of Eligible Structures

Eligible structures should ideally be on the local authority record of protected structures, be proposed for inclusion on the record or be located in an architectural conservation area. The local authority has the discretion to award funding for training works to a structure which does not fall into these categories, subject to confirmation by the Department that the structure is acceptable, for example a structure that is protected under the National Monuments Acts (the requirements of these Acts will apply).

2.2 Local Authority Administration of Projects

The local authority will work with the Department and interests such as local SOLAS / ETB course managers, Social Welfare (Intreo) offices, the National Monuments and Historic Properties services of the Office of Public Works, the Construction Industry Federation, local chambers of commerce, the local voluntary/community sector and other stakeholders within and adjacent to the functional area, to identify current or forthcoming conservation projects, training courses and potential trainees, including local authority-led projects. Other organisations which are identified as having the potential to fulfil the terms of the scheme will be invited to apply to the local authority (see item 3.6).

Each local authority will nominate a team to work on the scheme and will provide names and contact details to the Department. This team will include appropriate administrative and professional expertise. It should include the architectural conservation officer where this post is filled or otherwise the heritage officer, as well as the most senior local authority architect, or other senior construction professional where this person has a qualification or experience in building conservation. Representatives of the local stakeholders as outlined above should work with this team, ensuring however that no conflicts of interest arise. The team will assess applications and make allocations as per the terms and conditions in section 3 below, notifying the project details to the Department by 11 April.

Assessment of projects
It is a matter for the local authority to allocate funding for one or more projects based on a scheme of priorities which it will devise. This will deal with matters such as appropriateness of type(s) of training envisaged, whether the training is connected to an accredited course or not; the qualifications and experience of the training providers in traditional building skills training; the quality of the design of the project and credentials of the lead conservation professional; whether the property is protected under the Planning and Development Act 2000 (as amended) or the National Monuments Acts 1930-2004; whether or not the repairs will make a structure usable and/or amenable to future maintenance by the applicant or other users; the feasibility of completion of the project within the deadline, etc. The scheme of priorities will influence the assessment marking scheme. The local authority should ensure that training projects will concentrate on repair of fabric and will not affect the character of the structure concerned. The local authority must satisfy itself that the project team will be able to satisfactorily supervise the training activity, specifically the ability of the conservation professional and contractor(s) to work as trainers or to direct others who will be undertaking a training programme. Where a potential project is identified from the local authority's own list of capital works for 2014 it shall notwithstanding be assessed according to the scheme of priorities.

Applicant organisations should demonstrate that at least 10% of the training project cost will be met using their resources or other funds. Where the applicant organisation or structure owner is a commercial entity matching funds will be required. In the case of a local authority-led project, local authorities' own funds/contributions, or funding from other exchequer sources should be used as necessary to the supplement the allocation under this scheme. In the case of a community / voluntary organisation the quantum

and nature of voluntary input should be calculated. It should be noted that there is very limited scope for voluntary participation in a capital conservation project apart from administrative and other off-site input, such as recording the project.

2.3 Scope of Training Projects

Given the short lead-in period and necessity to allocate money as far as possible to actual works on site, it is recommended that priority is given to one or more conservation projects which already have been designed by a conservation professional, and which are scheduled to be completed within the calendar year 2014.

Alternatively it is envisaged that each local authority could allocate an amount under this scheme to allow an extra phase of work to take place which was not originally included as part of a capital works package. This additional work would be designed to give meaningful work experience / on-the-job training in building craft skills.

The type of structure suited to this scheme may range from masonry boundary walls to vacant or derelict buildings, with sufficient diversity of repairs required to provide a thorough introduction to the type of conservation works proposed. The work should preferably be carried out on structures which are not currently in use. The site area should be sufficiently large to accommodate the extra space needs of a training programme. Repair of existing fabric should be prioritised. New elements, apart from appropriately specified replacement of irreparable elements, will not be funded, however it is essential that the training project contribute to making the structure weather-tight. Works not in line with best conservation practice will not be funded.

Projects should be such that it is feasible to add a works package for training purposes without giving rise to the need to obtain any, or more, statutory permissions. These may be:-

- A local authority-led conservation project on a structure in the authority's control
- A conservation project undertaken by private, public sector or non-profit organisation on a building either in private or public ownership
- A conservation project which has sought provisional approval under the BHJLS.

As this is a capital scheme the fund can be assigned to a project workforce or consumables. Not more than 50% of the allocation to an individual project should be for consumables, to accord with the purpose of the scheme which is to incentivise skills training while assisting with the conservation of historic structures. The allocation should not be used to procure pre-works conservation reports, however the preparation of training project sign-off reports is eligible.

2.4 Procurement of Training

There are a number of ways in which training may be organised to suit the needs of the procuring organisation. For example:

- A local authority may tender for a works package for a building in its ownership or use which specifies a requirement for the contractor to provide on-site training. The allocation under this scheme can be used to top up the authority's own budget for the project
- A community organisation may wish to respond to the need of trainees on an accredited course to undertake appropriate work experience / placement. The organisation will apply for funding under the scheme to work in partnership with a SOLAS / Education and Training Board training centre (or other accredited training provider) which is running a validated traditional building skills training programme, to design a conservation work package or a body of repairs specifically to give appropriate, supervised on-the-job training for the trainees. The fund would be used to pay for workforce or up to 50% for consumables

- A local authority may work with a voluntary or community body or the Office of Public Works to undertake a specific body of repairs to a structure in public ownership, using the funds under this scheme to pay for the workforce or consumables.

This is not an exhaustive list of potential types of procurement.

2.5 Eligibility for Training Scheme

Potential trainees should be identified by the training provider, social welfare (Intreo) office, chamber of commerce, community organisation, contractor representatives or local authority, as relevant to the type of project envisaged. They may be currently unemployed, on a labour-market activation training programme or undertaking appropriate further education courses. Trainees could be recent graduates of an appropriate further education and training programme, such as the level 4 and level 5 Traditional Stone Wall Construction courses offered by SOLAS.[4] Employed trainees may require upskilling and in such cases the training scheme should preferably be NFQ accredited. In exceptional circumstances trainees who have not attended or graduated from an accredited further education course may be accepted, subject to Departmental approval.

Employers who are in receipt of Work Placement Programme, JobBridge, JobsPlus or other State incentives are not eligible for funding under this scheme for training these workers. Projects which have sought or received funding for training purposes from the RDP LEADER Programme are not eligible under this scheme (in line with RDP rules). This does not prohibit programmes which were previously in receipt of RDP funding from applying for funds under this scheme for a new phase of training.

Identified potential trainees must be assessed for suitability to partake in an on-the-job programme. The method of assessment should be set out in a training plan (see item 3.4). It shall be submitted by the training provider to the local authority within four weeks of obtaining confirmation of approval for the training project.

2.6 Type of Training

The training may be in stone masonry / stone wall repair / stone cutting / stone carving; carpentry / joinery; ironwork; roofing; sheet metalwork; plaster / lime; stained glass, or thatch. Training may take the form of on-the-job experience, site visits, presentations and/or master-classes using in-house or contracted expertise.

The additional work funded by this scheme must give meaningful training on site to the trainees. The level of difficulty and variety of work must be challenging and be directed towards furthering the existing competencies of the trainees. The training must include discussion and resolution of specific conservation issues, with trainees taught the basic principles and practice of conservation by reference to the repair and interventions being carried out to the structure at hand. The Department may provide assistance in the introduction of conservation principles.

The design team as well as the foreman / trainer / supervisor should be involved in developing awareness on the part of the trainees of the whole-of-building approach to diagnosis and treatment. While the training will concentrate on developing practical skills it should extend to examining how traditional buildings work, and inspecting fabric for signs of decay and damage. It is recommended that applicants consider liaising with the Office of Public Works or other State bodies to undertake site visits to conservation projects, to offer variety and complexity to the training experience, for example to view hot lime work or discuss conservation engineering solutions to address structural failure.

The relationship of the training element to the grant-funded capital works must be made clear in the training plan, for example, lime mortar skills training for which a grant will

[4] For a list of current courses see www.qualifax.ie

fund the supervised repointing of boundary walls; or sheet metal training for which the grant will fund the purchase of lead or copper gutters which trainees will re-lay.

3. Terms and Conditions

3.1 Acceptance of provisional approval

An application to a local authority for funding implies acceptance of these terms and conditions by the participating property owner, design team and training provider.

3.2 Types of Eligible Work

The types of work eligible for capital funding are set out in an appendix. All qualifying works should be in accordance with the standards of best practice as outlined in the *Architectural Heritage Protection Guidelines for Planning Authorities* (2011) and relevant volumes in DAHG's *Advice Series*.

The training must involve traditional building crafts. Proposals to conserve or restore moveable heritage are not eligible.

3.3 Limitations of Scope of Scheme

The scheme will not fund capital projects which are in receipt of State or European labour market activation funds, save in exceptional and justified circumstances and with the sanction of the Department.

The scheme will fund capital works only and not current expenses involved in the provision of training; all non-capital expenses will be disallowed.

The structure which will host the training project must be located within the functional area of the local authority, however the training provider may be based outside the area.

Works on the element of the project which is proposed to be carried out for training purposes shall not have commenced in advance of confirmation of approval.

3.4 Training Plan

The details of the training programme which will be associated with the capital works project must be set out in a training plan and submitted with a schedule of works not later than four weeks after obtaining confirmation of approval. This plan should be drawn up jointly by appropriately qualified conservation professionals and trainers / accredited training providers. It should note the training provider name, instructors' names and CVs, and numbers and existing training levels of trainees participating. It should state if the training is to be an integral part of an NFQ (or equivalent) accredited course or if it is connected in any other way with an existing traditional building skills training programme. The document should outline performance criteria and learning outcomes relevant to the skill type and level, under the headings of practical skills and conservation theory. It should set out the required entry level of the applicant trainees and the type(s) of assessment to be carried out on completion of the on-site training work. It should state the relationship between the training programme and the capital works project.

The proportion of on-the-job and off-the-job training and the expected minimum number of hours attendance per day for the duration of the project are to be set out. Where training is to be undertaken on a part-time basis (for example where trainees must also attend a training centre) the on-site period must coincide with scheduled attendance of the main / specialist contractor or conservation professional, or both.

Where weather conditions are adverse the project team should provide indoor space for classroom teaching or revision of conservation principles.

The conservation project shall be supervised and certified by a qualified and experienced conservation professional who undertakes to be available to partake as required in the training work. The contractor shall provide evidence of satisfactory completion of similar projects (and should state if they are on the Register of Heritage Contractors) and of experience in providing a setting for on-the-job training.

The training plan will chart the intended timescale for face-to-face involvement with the trainees by the trainer, the project conservation professional, the main or specialist contractor and the extent to which a local authority officer will monitor the project.

The project team should give an outline of any courseware to be circulated to the trainees, and submit names of publications with the training plan.

Where an existing training programme (other than an RDP-funded project) will be funded under this scheme, the relationship of the training programme to the works project, or connection between personnel involved in both, is to be made clear.

The training plan must quantify the equivalent FTE jobs numbers involved, based on an eight hour day.

The training plan will require that the training project shall be evaluated upon completion. The plan shall cover matters such as fulfilment of learning outcomes; numbers completing the project (if different to the numbers engaged initially); learning and development issues and other relevant matters. Each trainee shall be offered the opportunity to give feedback during the course, which will be recorded and summarised (anonymously) in the evaluation report. Where trainees are placed in a job as a result of the training project, this should be stated. The evaluation will be collated by the project team (professional(s), contractor(s) and trainer), and circulated to the local authority, Department, SOLAS / training provider and other bodies concerned with the project as per item 3.12 below.

3.5 Permissions

Where the applicant is not the owner of the structure which is to be used for training purposes, the applicant will need to obtain and submit to the local authority a letter from the owner declaring that the applicant has the owner's permission to carry out the work and the training programme. Local authorities should satisfy themselves regarding the status of the property owner and seek appropriate evidence of ownership of a property prior to processing the applications. All parties should have appropriate insurance to cover the training element.

In cases where the structure is in the ownership of a local authority the application can be made by a designated officer of that authority countersigned by the relevant Director of Services.

All statutory permissions, consents or notifications must be complied with in advance of a project being accepted by the local authority into this scheme. For details please see item 2.5 of the Built Heritage Jobs Leverage Scheme Circular BHJLS13/1.

3.6 The Application Process

Where the local authority is not itself proposing a project, applications for funding under this training scheme must be made by the applicant organisation directly to the relevant local authority by a deadline set by the authority but no later than 11 April, 2014, by which date the authority will submit the project proposal(s) to DAHG for confirmation of eligibility. The authority may submit a proposal after the deadline to DAHG, however the project must be such that it can be carried out in line with these terms and conditions.

Applicants and local authorities should be aware that proposed works should accord with best practice standards as outlined in DAHG's *Architectural Heritage Protection Guidelines for Planning Authorities* (2011) and in the DAHG's conservation *Advice Series* publications. Due regard must also be given to the Archaeological and the Planning Process guidelines issued by the National Monuments Service, and guidance leaflets issued by National Parks and Wildlife in relation to habitats and species where appropriate.

3.7 Overview by local authority

Each pilot local authority will assemble a traditional building skills training team in partnership with local interests as indicated in paragraph 2.2 above. The authority will advertise, assess and approve applications for consideration under the scheme. It will inspect and certify works to ensure they have been completed in accordance with best conservation practice and inspect the training to ensure that it is carried out in line with expectations.

It is recommended that eligible applications received by the local authority should be assessed in a timely manner. Where an application form is not fully completed, an applicant should be notified as soon as possible and requested to submit any outstanding information. All eligible applications should be assessed under the following criteria: significance of the structure, suitability of the works to provide training in traditional building skills, relevance of the proposed training to the built heritage needs of the area and quality of training plan devised for the purpose.

Local authorities should ensure that conservation works proposed by the applicants will be overseen by appropriately qualified conservation professionals. The Department recognises that there may be exceptions to this where the specific expertise lies with the practitioner, e.g. a thatcher.

Local authorities should satisfy themselves that trainees will not be charged for participation in the training programme.

The pilot local authorities are requested to post an electronic copy of this circular on their websites.

3.8 Notification of Projects

The local authority is required to submit one or more project proposals to the Department by 11 April 2014. The information required is summarised in the sample confirmation letter. This information must be accompanied by a cover note verifying its accuracy and completeness, signed by the relevant Director of Services.

The authority should notify successful applicants as soon as possible after confirmation from the Department. This notification should detail the level of funding approved, the timeline for the completion of works and the terms and conditions of the award in sufficient time to enable the applicant to complete the training and recoup funding by the required deadlines.

Projects awarded funding under this scheme will be published on the Department's website www.ahg.gov.ie and should also be published on the authority's own website.

3.9 Monitoring of Project Progress

It will be a matter for the local authority to monitor progress of projects to ensure that works will be completed, the training undertaken and the claim for funding is submitted by the applicant to the authority by the required deadlines. Where the training programme is not proceeding in accordance with the deadlines an authority may, at its own discretion, withdraw the award of funding for the project and reallocate to another project. The Department must be informed of all reallocations of funding.

The Department may carry out inspections of structures and projects supported under this scheme if deemed necessary.

3.10 Reallocation of Funding

Where a project which was awarded funding has not commenced training by 29 August 2014, the relevant local authority, in consultation with the Department, reserves the right to reallocate funding to another project. The Department reserves the right to reallocate funding to another pilot local authority.

For any funding that is not yet drawn down by successful applicants by 30 September 2014, this should be indicated in the progress form submitted to DAHG.

3.11 Record of Project

Local authorities should seek applicants/owners' permission at acceptance stage to use images for the Department (if requested) to advertise or publicise this scheme. Permission should be obtained at the commencement of the project from the trainees and others involved on site to take photographs of the training in progress.

The project shall be recorded by appropriate means to illustrate it as a future training tool. A written summary with photographs / video shall be submitted to the local authority and Department by 27 February 2015.

3.12 Evaluation of Project

The local authority shall summarise its evaluation of the project in progress and upon completion, to be attached to the Project Progress Form, to inform the Department as to the future administration of this scheme.

The sign-off report will be collated by the project conservation professional, trainer and contractor and submitted not later than 27 February 2015. It shall state the number and type of trainees who completed each project if these differ from projections at the application stage, whether or not skills acquisition objectives were met / NFQ accreditation obtained and state the proportion of on-site and classroom training time. The sign-off report shall include trainee feedback on the course and give an update on trainee employment progress following completion of the project. The report shall summarise the repairs carried out to the building, and the contribution to these repairs made by the trainees. The report shall be accompanied by hard and soft copies of the record made of the project and digital media of visual records (photographs, video etc) made to aid future skills training. Copies of the report shall be circulated to the local authority, DAHG, SOLAS / training provider, and other identified stakeholders.

APPENDICES

1. Recoupment of Funding

Recoupment process overview and details

The recoupment process is almost identical to that set out in Circular BHJLS13/1, issued on 18.12.13 in respect of the Built Heritage Jobs Leverage Scheme (see section 4). The one exception is that professional fees allowable as eligible expenditure (section 4.3) may include fees related to training and the preparation of training plans and reports. This is made clear in Appendix 3 below (Qualifying Works).

Claims to DAHG may be submitted at any time before 4pm, Friday, 7 November 2014 upon completion of works. Any funding unclaimed by the due date will be forfeit.

Local Authorities may submit claims for reimbursement at any stage to DAHG from April to 7 November 2014 once payment to the applicant has been made by the LA.

The Recoupment Claim Form is set out at the end of this circular.

2. General information

The general information contained in the Built Heritage Jobs Leverage Scheme circular BHJLS13/1 on financial and administration matters applies also to this scheme.

Attention is drawn in particular to the local authority procurement process and financial management requirements, as set out by the Department of Finance.

For further information regarding the operation of this scheme, local authorities may contact the Built Heritage and Architectural Policy Section of the Department of Arts, Heritage and the Gaeltacht at BuiltHeritage@ahg.gov.ie. Potential applicant organisations should refer to the relevant section of the local authority in the first instance in relation to the application and assessment process.

3: QUALIFYING WORKS

Qualifying works for the purposes of the training scheme include:

Roofs	Repair (or renewal) of roof structures, coverings and features Works should use appropriate materials and detailing; the salvage and re-use of existing slate and other materials from the structure should be a priority Repairs to thatched roofs must use appropriate traditional materials and detailing Works to renew damaged or missing metal sheeting, gutter linings and flashings (of materials such as lead, copper or zinc) should be to appropriate detailing. Where there is a risk of theft of metalwork from a roof, the use of suitable substitute materials as an interim solution may be considered acceptable. In some circumstances, it may be necessary to redesign the substrate to the sheeting to comply with current good practice; however the visual and physical implications need to be carefully considered before changes are made Roof features such as dormer windows, skylights, chimneystacks and pots, cupolas, balustrades, etc. should be retained and appropriately repaired
Rainwater disposal	Repair or replacement of rainwater goods Lead and cast-iron rainwater goods should be repaired or, where this is not feasible, replaced on a like-for-like basis to ensure efficient disposal of rainwater from the building. However, where there is a risk of theft or vandalism, the use of suitable substitute materials as an interim solution may be considered acceptable Overflows and weirs to rainwater disposal systems should be provided so that, in the case of a blockage, water is visibly shed clear of the structure
External walls	Works to repair external walls Works to repair walls including surfaces and decorative elements, wall coverings or claddings; works to remedy defects or problems that have the potential to create serious future damage if left untreated, such as foundation settlement, chimney collapse, fungal attack on timber, or salt migration within the fabric Works to deal with issues of damp such as the provision of ventilation, and the creation of French drains (subject to the requirements of the National Monuments Service in the case of archaeologically sensitive sites) Works to repair or replace elements set in walls such as panels, ironwork or fixtures
External joinery	Repairs to external joinery Works to prevent water ingress Repairs to significant elements of external joinery such as windows, doors and associated elements Draught-proofing works to windows and doors in accordance with the *Advice Series* may qualify (See 'Energy Efficiency Improvements' over)
Interiors	Repair and conservation of internal structure and features This includes repairs to internal structural elements such as floors, walls, staircases and partitions Works to conserve significant decorative historic features such as wall and ceiling plasterwork, interior joinery and fittings and decorative elements as appropriate

Qualifying works (continued):

Historic ruins	Works to stabilise or protect masonry or other elements at risk
ACAs	Works to structures which contribute to the character of an ACA Repair works to the exterior of a structure which contributes to the character of an ACA or repairs to its main structural elements This includes the reinstatement of architectural features where appropriately detailed and specified such as sash windows, shopfronts, railings or similar only where the reinstatement is essential to the design and character of the historic building, townscape or street. It should not include works of conjectural reconstruction and details of features should be based on sound physical or documentary evidence Works such as repair and/or redecoration schemes for multiple buildings may be considered where this is an objective of the planning authority
Temporary works	Works to reduce the risk to a structure from collapse or partial collapse, weather damage, fire, vandalism and unauthorised access. Such works should ensure the maintenance of adequate ventilation of the structure and the protection of significant features of the building from endangerment In exceptional circumstances, where it is considered necessary to remove fixtures or features of interest for safe-keeping, this shall be conditional on the inclusion of acceptable proposals for their secure storage for later reinstatement within a stated timeframe
Other works	A case may be made by the applicant and/or the local authority for other works not listed above which they deem to be of exceptional importance
Professional fees	Professional fees incurred for the portion of works funded to include surveys and method statements indicating methods and sequence of works, training plans, on-site supervision and monitoring of works and training, reasonable travel and subsistence costs and sign-off report on project. Grants do **not** cover expenditure on public sector salaries or expenses, fees or expenses paid to trainees, or pre-works conservation reports

2.7 Non-Qualifying Works include:

Routine works	Routine maintenance and minor repairs Works of this nature are considered to be the duty of the owner/occupier and should be carried out on a regular basis to protect a structure from endangerment
Alterations	Alternations and improvements All new works to a structure, for example the installation or renewal of damp-proofing, loft conversion and extensions do not qualify

Demolition	Demolition Works to demolish or remove any part or element of a protected structure do not qualify except where the project involves careful dismantling prior to reinstatement or the removal of later work which alters or obscures the original design of the building
Restoration	Restoration and Reconstruction Works of conjectural reconstruction where there is no sound physical or documentary evidence of the earlier state of the structure of element
Non-essential	Non-essential works Works that are not essential to secure the conservation of the structure
External Walls	External walls and damp–proofing The removal of render from a previously rendered exterior and associated repointing are excluded except where these are inappropriate later interventions that are damaging the historic fabric The application of tanking or waterproof plasters to combat damp problems Works to install a new damp proof course , whether a physical or a chemical one
External joinery	External joinery The fitting of double-glazed units into the existing or new sashes or casements The fitting of storm glazing The replacement of historic glass with energy-efficient glass
Energy efficiency	Energy efficiency The installation of micro-renewables such as photo-voltaic panels or wind turbines The application of external wall insulation does not qualify except where an insulated render can be applied that would not require the removal of historic render and would be of a thickness appropriate to the architectural detailing of the building. ○ The application of internal wall insulation will not qualify except in circumstances where no architectural features will be impacted upon and where the 'breathability' of the overall structure is not adversely affected. ○ Insulation of solid floors will not qualify except where the historic floor has previously been lost.
Salaries / expenses	Expenditure on public sector salaries or expenses, fees or expenses paid to trainees, or pre-works conservation reports

SAMPLE PROJECT PROGRESS FORM

Project Reporting Schedule to be submitted by Local Authorities to DAHG during 2014									
	Local Authority Name:								
	Lead name:				Contact details:				
Project No	Conservation Training Project (name & address)	Applicant Name	File Ref	Total estimated Cost	Provisional Funding granted	Number and type of training places	Projected start date	Projected finish date	Scheme Type
1									
2									

Report No 1 (30 June)				Completion Report (7 November)				Evaluation report (27 February 2015)		
Deadline for submission of training plan 23 May										
Progress of Works	Amount claimed by applicant	Progress of Training Programme Tick Y/N if commentary attached	No. of training days undertaken (1 day = 8 hours)	Final Progress Report Tick Y/N if attached	Total amount claimed by applicant	Provisional Training Programme Report Tick Y/N if commentary attached	Total no. of training days undertaken (1 day = 8 hours)	Final project report (if timescale differs from training project) Tick Y/N if attached	Final training programme report and evaluation Tick Y/N if attached	Employment statistics for trainees post programme Tick Y/N if attached
1										
2										

Initial Training Programme Evaluation Comments

To be made by local authority after inspection and attached to the project progress reporting form submitted to DAHG at each progress stage and upon completion
(Continue on a separate sheet if necessary)

Recoupment claim form for completion by local authority

IMPORTANT

Please complete this form for the total amount of recoupment sought from DAHG under the scheme. A claim may be made at any time before the deadline date of 7 November, 2014. Any funding unclaimed by this date will be forfeit.

This form must be submitted in hardcopy to DAHG and should be accompanied by the completion report.

Proof of payment of funding to applicant or expenditure by the local authority (where it has used its own resources / properties) must also accompany this form, e.g. Agresso payment or similar financial system, which clearly shows the final beneficiaries' name, amount paid and date of payment.

1. Claim Details

Local authority Name:		
Local authority Tax Clearance Cert Number:		Expiry Date:
Total amount of claim:	€	
Total amount expended by local authority on project **OR** total amount paid out by local authority to applicant organisation(s):	€	
Total amount of private funds expended:	€	
Total value of *in-kind* contribution by local authority or applicant organisation(s):	€	
Savings: *(if any)*	€	

2. Declaration by Local Authority

I certify that the data supplied is accurate, that the projects have been inspected by the local authority and comply with the terms and conditions for payment under Circular TBSTS 14/1 and that the funding allocated to these projects has been already paid to the successful applicant by the local authority and/or has been expended by the local authority.

	Claim prepared by*	Claim verified by**
Name (Block Capitals):		
Position:		
Telephone:		
Email Address:		
Signature:		

Date:		

* Claim must be prepared by the Architectural Conservation Officer or equivalent
** Claim must be verified by County Manager or Director of Services

Please return completed hardcopy form to the Built Heritage and Architectural Policy Section, Department of Arts, Heritage and the Gaeltacht, Custom House, Dublin 1. Please contact tel. 01 888 2141 or 053 911 7448 or builtheritage@ahg.gov.ie if you have any queries.

For official use only:

Relevant material generated by local pilot projects

APPENDIX B1: FINGAL COUNTY COUNCIL

APPENDIX B2: GALWAY COUNTY COUNCIL

APPENDIX B3: KILKENNY COUNTY COUNCIL

APPENDIX B1: FINGAL COUNTY COUNCIL

Fingal County Council Training Plan

Fingal County Council Historic Joinery Repair Training Scheme

Local authority traditional building skills team names and contact details • County Architect - Fionnuala May Tel: 01-8905068 Email: fionnuala.may@fingal.ie • Architectural Conservation Officer - Helena Bergin Tel: 01-8906709 Email: helena.bergin@fingal.ie • Senior Executive Officer & Head of Balbriggan/Swords Operations Area - Paul Smyth Tel: 01-8905826 Email: paul.smyth@fingal.ie & Senior Executive Officer & Head of Malahide/Howth Operations Area – Mary Egan Tel: 01-8905846 Email: mary.egan@fingal.ie
Scheme of priorities established to assess projects: N/A – Only one project being put forward
Name and contact details of applicant organisation: Fingal County Council, County Hall, Main Street, Swords, Co. Dublin Contact via Fionnuala May (see above)
Structure owner (if different) and confirm of consent: N/A
Name and address of structure: Historic Houses owned by Fingal County Council (i.e. Malahide Castle, Ardgillan House, Newbridge House).
Protected status (individual structure, area, or monument): Protected Structure RPS Nos. 383 (Malahide Castle), 94 (Ardgillan House), 494 (Newbridge House) Recorded Monument RMP Nos. DU012-030 (Malahide Castle) and DU012-060 (Newbridge House)
National Inventory of Architectural Heritage reference: 11344019 (Malahide Castle), 11310001 (Ardgillan House), 11329001 (Newbridge House)
S.482 of the Taxes Consolidation Act (if applicable): N/A
Statutory notifications (Planning, Monuments and Wildlife Acts compliance): N/A
Summary description of training project: Fingal County Council wishes to establish a training scheme to provide information and knowledge as well as practical experience in the repair of historic joinery. The training project will seek to up-skill existing Fingal County Council direct labour staff to give them the skills and experience to work on the historic fabric of council owned historic properties. It is intended to utilize the fully equipped carpenters workshop as well as the training facilities (IT and lecture room) at Malahide Castle. The training will be revolve around the repair and reconstruction of the timber glasshouse at Ardgillan House (which originated from Seamount House in Malahide) which has fallen into

disrepair. Fingal County Council has a condition report, measured survey and detailed record of this structure to inform the work programme.

Summary description of conservation works:
The condition report for the glasshouse (see attached) sets out a method statement for the works to the glasshouse and this will direct the conservation works. Some of the timbers are beyond repair and so the trainees will learn how to identify what is salvageable and what has to be replaced, the correct historic profiles and reproduction of these.

Summary assessment of the suitability of the capital project to provide training in traditional building skills:
The capital project is specially focused on providing training in the traditional building skill of historic joinery to enable participants to repair or reproduce historic joinery details and profiles for this or other historic buildings

Start and finish date of proposed works and of proposed training programme (if differ):
September 2014. We would perceive 4 to 6 training sessions so a finish date of late Oct or Nov for lectures and demonstration but the hands-on training through the repair and reconstruction of the glasshouse.

Name, description and National Framework of Qualifications reference (if relevant) of training course:
N/A

Training provider name, qualifications and contact details:
Fingal County Council will be the training provider. Peter Clarke, Former Lecturer with Dublin Institute of Technology (now retired) has been consulted with and has agreed to work with Fingal County Council in a private capacity to develop the training programme. It is also intended to consult with Sven Habermann, Manager of Conservation Letterfrack.

Anticipated number and employment status of trainees:
The participants will be Fingal County Council direct labour staff. It is envisaged that there will be about 10 participants.

Architectural conservation professional name, qualifications and contact details:
Fionnuala May, County Architect and G1 accredited Conservation Architect. Dip.Arch., B.Arch.Sc., M.U.B.C., MRIAI

Main contractor and sub-contractor name and contact details:
N/A. Fingal County Councils own direct labour

Cost of training project or of training element of works project:
To follow

Proportion of fund to be spent on consumables:
To follow

Other EU/ Exchequer funding / tax reliefs sought, obtained or refused for this capital works or training programme:
None

Applicant organisation / local authority financial or in-lieu contribution towards project:
Fingal County Council will be providing the necessary resources or finances for this project

The focus of the training scheme was to introduce traditional skills to Fingal County Council tradesmen who will be working on a project in 2015 to repair the Victorian glasshouse at Ardgillan Castle.

Course Information

Newbridge House was the venue for both the classroom and practical aspect of the training. There was a site visit organised on one of the days to Ardgillan to view the glasshouse which will be the focus of the work post the successful completion of the training.

The following were the participants David Curley, Darragh Sheppard, Nigel Hammond, Tom Lannon, C. Moore, Thomas Sherwin, Thomas Markey and Francis Rooney .Students from DIT attended the classroom element of the course. They also attended the field trip to Ardgillan.

The trainer was Peter Clarke formally of the School of trades DIT Bolton Street.

Project time table

7th October				
Morning	Theory	Newbridge House	Core Participants	No Students
Afternoon	Practical	Newbridge Workshop	Core Participants	No Students
14th October				
Morning	Theory	Ardgillan Castle	Core Participants	Up to 12 students
Afternoon	Practical	Newbridge Workshop	Core Participants	No Students
21st October				
Morning	Theory	Newbridge House	Core Participants	Up to 12 Students
Afternoon	Practical	Newbridge Workshop	Core Participants	No Students
23rd October				
Morning	Theory	Newbridge House	Core Participants	up to 12 Students
Afternoon	Practical	Newbridge Workshop	Core Participants	No Students

Project Content

The aim of the course

The course is aimed at specialized craft persons, in this case Carpenters and Joiners. It is possible that they have already received their normal trade qualifications and are now seeking further training in order to become more efficient in the area of conservation.

- **Health and Safety**

Correct use of wood working machinery in a workshop setting
Danger of stripping old (may be lead based)

- **Introduction to protected structures**

- **Determining appropriate levels of intervention**

Minimum intervention and minimum loss of fabric should be observed and invasive forms of investigation avoided where possible.

- **Materials**

Selection of appropriate materials for the type of work to be undertaken.
The conversion of timber and familiarity with, and understanding of its nature and behavior.

Understanding that the choice of material and techniques for repair should respect, and have regard to the original, its appearance, texture and composition.

- **Joinery**

Stairs:
18th and 19th stairs, dogleg, cut string, open string and geometrical stairs. The repair of stairs in place.

- **Handrails**

Have knowledge of hand railing to include, scrolls, wreaths and repair to balusters.

- **Doors**

History of doors used in buildings of architectural merit, their style and construction. Sheeted doors, paneled, double margin doors. Repairs and associated ironmongery.

- **Windows**

Windows of the 18th and 19th century. Casement and double hung sash windows, their history and development. The manufacture of each type to include glass and glazing, the need for conservation and repair.

- **Panelling**

Timber paneling, plain, raised and raised and fielded. Types of glue used in paneling and other joinery elements.

- **Carpentry**

Floors:
Ground and upper floors, traditional methods or connecting joists tot trimmer joists. The need for numbering floor boards when removing for repair or investigation.

- **Roofs**

Domestic roofs, repairs to the ridge, rafters, hips and purlins. The use of lay boards in valleys and back gutters.
Architectural truss roof forms: Queen–post, King-post and hammer-beam roofs.

- **Site Visit**

A site visit to Ardgillan Castle.

Course Outcome

The course was enthusiastically received and very well attended and has boosted the morale of the Fingal Attendees.

The Ardgillan project is scheduled to commence on Q1 2015.


RECORD
POWER


D.I.T.

APPENDIX B2: GALWAY COUNTY COUNCIL

Galway County Council Training Plan

Workhouse Traditional Building Skills Training Scheme (Pilot) 2014

Location: Irish Workhouse Centre, Portumna

Background: The Traditional Building Skills Training Scheme (TBSTS) is a pilot programme being run by the Department of Arts, Heritage and the Gaeltacht in conjunction with four local authorities in 2014. Galway County Council has been selected as one of the four local authorities. The Council has facilitated the setting up of the Workhouse TBSTS Steering Committee and a project manager has been appointed who together with a conservation/restoration professional will be responsible for the delivery of the training scheme. The broad aim of the scheme, as stated in the Guidance Circular issued by the Department is "to enhance skillsets in built heritage conservation within and around the pilot local authority area by making trainees or qualified construction workers more capable of carrying out conservation and restoration projects and therefore improve their prospects of employment."

Organisation of Training: Up to ten trainees will take part in the training. They will be together for in class tuition and will be divided into three groups for work based training. Trainees will be assessed throughout each unit on the development of their practical skills. They will also be assessed on theory. These assessments may be written or oral. In class tuition will form the theoretical backdrop to the practical work and will look at various aspects of conservation and restoration including the importance of using lime, how lime works, the different types of lime, what aggregates to use, how weather affects lime, putting together a method statement etc. Working with stone, using limewash and limebased paints will also form part of in class tuition.

Training Programme Outline

Unit 1

Learning Outcome: *Trainees get a practical overview of conservation, restoration and re-development of stone buildings.*

Methodology:

- Walk through workhouse buildings looking at work done to date.
  Walk to be guided by Laurik Mathieu, Mairin Doddy & Ursula Marmion.
- Illustrated Talk on the principles of conservation and restoration. Mairin Doddy.

Unit 2

Learning Outcome: *Trainees know how to work in a safe manner.*

Methodology:

- Health & Safety Induction – Site Specific. Ursula Marmion & Laurik Mathieu
- Manual Handling Training - Eric Flaherty

Unit 3

Learning Outcome*: Trainees learn how to repair external lime render.*

Location: Block E, former workhouse refectory & chapel. External render is in need of repair.
Learners will work on external wall facing women's yard.

Key Learning Points - Participants learn how to:

- Identify what render is sound and what render needs to be replaced
- Carefully remove render that is beyond repair
- Identify and removing modern sections that have be rendered with cement
- Carefully wash down the façade
- Mix lime
- Rake out loose joints
- Re-point where necessary - repairs to revels
- Apply lime render - Base Coat
- Apply lime render - 2nd Coat
- Apply lime render - Finish Coat
- Mix limewash
- Apply lime wash
- Protect work

Unit 4

Learning Outcome: *Trainees implement learning by carrying out a restoration project.*

Location: Matron's Quarters (2 rooms) in former Women's Block at Workhouse

Key Learning Points - Participants learn how to:

- Prepare lath & lime plaster ceiling for painting, repair hairline cracks
- Examine existing historic paintwork, identify type of paint and layers
- Repair internal lime rendered walls
- Understand what type of paints are suitable for use on ceiling, walls and timberwork
- Repair fire places & floors
- Apply paint to ceiling
- Apply paint to walls
- Apply paint to timberwork

Unit 5

Learning Outcome: *Trainees learn how to build with stone using lime mortar.*

Location: Gable end of former Women's Block. There is a large modern opening in this gable, fitted with a double galvanise gate. Gate will be removed and the opening closed up using stone, thus restoring the gable. The exterior will be rendered and the interior limewashed.

Key Learning Points - Participants learn how to:

- Examine the existing stone work, so as to match the new work to it - internal & external
- Select stone
- Shape stone
- Lay stone - use of pinning stone
- Use lime mortar for bedding
- Apply external render
- Point the internal joints of the new stone work so as to match existing
- Apply limewash to the internal section

Unit 6

Learning Outcome: *Trainees learn how to do lime parging.*

Location: Former Women's Block

Key Learning Points - Participants learn how to:

- Select aggregate suitable for lime parging
- Mix lime for parging
- Apply & build up layers of lime
- Achieve a smooth finish
- Make up limewash and limewash the lime parging and roof timbers

Trainees will be awarded certification on successful completion of the course.
A training manual will be compiled during the duration of the course.

Traditional Building Skills Training Scheme, Portumna.

Work based training continues over all weekends on:

- Repairs to external lime render (2/3 complete)
- Stone work at gable (1/2 complete)
- Restoration of matron's quarters (started)
- Lime parging

Also some basic work stone carving and stone cutting

Theory over all weekends on:

- The principles of conservation
- Stone
- Lime
- Energy Efficiency

Also one-to-one sessions for trainees who want to put together/update their CVs

Guest Speakers:

Fri. 31st Oct.

11.20 a.m. Guest Speaker: Christy Cunniffe, Field Monuments Advisor, Galway County Council
Essential Information for Practitioners working on Historic Sites and Archaeological Monuments

Fri. 14th Nov.

11.20 a.m. Guest Speaker: Edward Byrne, Traditional Lime Company, *Traditional Building Materials* followed by demo on using spray gun to apply lime

Fri. 28th Nov.

11.20 a.m. Guest Speaker: Peter Smyth, Ecological Building Systems
Energy Efficiency in Stone Buildings

One more guest speaker (hopefully) to be confirmed.

Training takes place on all Fridays and Saturdays in November from 9 a.m. to 5 p.m. with the scheme concluding on Sat. 29th November.

The Workhouse Traditional Building Skills Training Scheme 2014
Evaluation Report

The Traditional Building Skills Training Scheme (TBSTS) was a pilot programme run by the Department of Arts, Heritage and the Gaeltacht in conjunction with four local authorities in 2014. The broad aim of the scheme was to enhance skillsets in built heritage conservation so as to improve the employment prospects of the participants.

Under the scheme, Galway County Council facilitated the setting up of a training programme at the Irish Workhouse Centre in Portumna, Co. Galway. A Steering Committee was formed to bring together interested parties to advise on the scheme and in particular, to see how such initiatives could be developed and introduced into an accredited system for construction workers, working on traditionally built structures.

The Workhouse scheme provided *An Introduction in the Conservation & Repair of Traditional Buildings, with a particular emphasis on lime.* 10 trainees, all construction workers, worked on a number of real capital conservation projects. Conservation theory was an integral part of the 16-day training scheme.

A WIN WIN SCHEME

Trainees, who were either plasterers or stoneworkers, with little or no previous experience of working on historic buildings, worked under guidance on a number of diverse projects using lime. The quality of the work was good overall. On completion of the scheme, most trainees would have been capable of working on similar projects on their own. In addition, they had a good grasp of basic conservation theory and an understanding of how stone buildings work as well as a desire to learn more.

A budget of €20,000 was allocated to this scheme. This covered all costs. It is most interesting to note that if a private contractor had been contracted to carry out the work completed under the scheme, it would have cost in the region of €20,000 but no training would have been provided.

TWO RECOMMENDATIONS

Capital grants are usually allocated annually to various conservation projects throughout the country. If for instance one project per county had a training element, this could result in significant numbers of people receiving short-term training in conservation and repair, probably at no additional cost to doing the capital conservation works without a training element. The issue of accreditation for such short term training needs to be addressed.

The absence of in depth training in the use of lime in conservation and possibly also in new build is another issue needing attention. This could perhaps be easily solved if the existing plastering apprenticeship was adapted to include such training. This apprenticeship comes within the scope of the Statutory Apprenticeship system organised by SOLAS.

Training Location
Training took place at the Irish Workhouse Centre in Portumna, Co. Galway. This Centre is located in the former Portumna Workhouse. The complex, consisting of the seven main original workhouse buildings, had lain derelict for decades. A conservation report commissioned in 2001 found that the buildings were not beyond repair and reuse provided that work began soon. Conservation work, headed up by the community based, local development company, South East Galway IRD, started in 2004. Extensive conservation and restoration has been carried out and is on-going. This work has been funded by Galway County Council, the Heritage Council, the Department of the Environment, Galway Rural Development, fundraising, voluntary contributions and traded income. Dermot Nolan, Conservation Engineer, provides advice and supervision to the project. Work has been carried out by private contractors and participants in various employment programmes.
In 2012, the workhouse opened as a visitor centre, the aim being to tell the story of the workhouse in Ireland. As the centre is also a conservation work in progress, some information is given on this as part of the general guided tour. The centre has also received a good number of visits from both individuals and groups, specifically interested/involved conservation projects.

Evaluation: The workhouse was an ideal venue for this scheme. The centre has excellent welfare facilities, classrooms and indoor training space for demonstrations/practice. The work carried out at the workhouse to date, provided trainees with a wide range of real examples of conservation and restoration. The workhouse provided trainees with meaningful on-site work on real conservation projects.

Project Manager & Trainer/Conservation Specialist
Ursula Marmion was appointed as project manager for the Workhouse TBSTS. Laurik Mathieu was appointed as trainer/conservation specialist. Ursula has managed the Irish Workhouse Project from the onset. Consequently, over the years, she has learnt about many aspects of conservation and repair. She has also taken part in courses on stone wall building, lime, energy efficiency and timber decay. In terms of academic qualifications, Ursula holds a BA, a Higher Diploma in Education and a Masters in Rural Development. Laurik Mathieu is a qualified and experienced stonemason and lime specialist. Laurik did his apprenticeship in France, where he trained under the Compagnons du Devoir. Laurik has gained extensive experience, working on historic structures both in France and in Ireland. His work in France also involved the training of apprentices.

Evaluation: Ursula and Laurik worked well as a team in the delivery of the Workhouse TBSTS. Ursula's organisational skills ensured that the scheme ran efficiently. Her experience as a teacher was useful in the classroom sessions. Laurik's experience and practical approach ensured that trainees benefitted greatly from on-the-job training. Both Ursula and Laurik underestimated the amount of time involved in preparing for the delivery of the scheme and would fine tune some elements, should similar schemes be run in the future. (see further)

Organisation, Promotion & Recruitment
It was agreed that up to ten trainees would take part in the training, which would take place from
9 a.m. to 5 p.m. on Fridays and Saturdays in October and November, excluding the October bank holiday weekend.
It was hoped that this timetabling would suit people who were working, as well as people who were under or unemployed.

The training scheme was advertised in a number of ways, all of which were free of charge:

- Articles in local and regional press: *Connacht Tribune, Nenagh Guardian, Midland Tribune, Galway Advertiser, Galway Independent, Clare Champion & Clare People.*
- Local Parish Newsletters
- Intreo Office
- Irish Workhouse Centre & Portumna Facebook Pages
- Construction Industry Federation informed
- Fliers distributed locally at filling stations and hardware stores

A UK based magazine, *The Natural Stone Specialist,* also picked up on the scheme and did an article.

A total of 43 enquiries were received, mostly via phone and some via e-mail: contractors (4), two Galway based, one from Mayo and one from Monaghan; archaeologists (2); plasterers (7); people with experience in stone/block/brick (10); general construction workers (9); carpenters (3), others not working in construction (7) and one person offering training.

The project manager communicated with all those who made inquiries, informing them that in the event of over application, preference would be given to people residing/working in County Galway. Applicants were also required to have a current Safe Pass. Application forms were sent to those who werel interested. A total of 19 applications were received. 6 did not have Safe Pass cards and one had made no effort whatsoever in filling out the application form. Places were offered to the remaining 12 applicants. They were asked to forward a booking deposit of €50. This would be refunded on successful completion of the course.

Evaluation: The timetabling of the course worked well. Ideally such training should take place earlier in the year, when there is no risk of frost and a lesser risk of rain. However, as it happened the weather was reasonable good and did not have an overly adverse impact on works. (It had been intended to hold the TBSTS in County Galway at a different location. However, this did not materialise, hence the late start with the Workhouse scheme). While it was agreed that there be 10 participants on the course, in was decided to recruit 12 trainees, in case anybody dropped out. Two people did drop out, both for work reasons, so this worked well. To help assess the commitment of applicants to the 16 days training, the application form required some effort. The project manager also spoke with all applicants over the phone. This method of recruitment worked well, as 9/10 applicants were suitable for the course. One person did not really have the ability or dexterity for the training but did complete the course (his wife had completed the application form).

The Trainees

Age Profile:
25-30: 1 trainee 31-35: 1 trainee 40-45: 5 trainees 50-56: 3 trainees

Trade/Skill:
Plasterers (6) Stone/Block/Brick (4)

Note that two people had served apprenticeships under ANCO; one of these participants had also completed a course in traditional stone walling (FETAC Level 5) One person had completed a six month training course in the UK in plastering. All the other participants had learnt on the job, some having learnt their trade in family run construction businesses.

Employment status of participants:
- 7 employed in Community Schemes
- 1 employed full-time in construction
- 1 working part-time in construction
- 1 unemployed

Prior to the economic downturn, 7 of the participants had worked all their lifes in construction. It is interesting to note, that 5 of these participants are now working in community employment schemes.
These schemes usually operate on week-on, week-off basis. In the off week, participants, were when possible, picking up jobs in construction.

The Training

Trainees were together of in class tuition and demonstrations. They were divided into three groups for work based training.

Unit 1

Learning Outcome: *Trainees get a practical overview of conservation, restoration and re-development of stone buildings.*

Methodology:

- Walk through workhouse buildings looking at work done to date. Walk was guided by Laurik Mathieu & Ursula Marmion.
- Illustrated Talk on the principles of conservation and restoration. Mairin Doddy.

Evaluation: This worked well. There was plenty of discussion during the walk through and a lot of examples of different conservation work done to date. It was useful to have the practical examples before the theory. Learning outcome achieved.

Unit 2

Learning Outcome: *Trainees know how to work in a safe manner.*

Methodology:

- Health & Safety Induction – Site Specific. Ursula Marmion & Laurik Mathieu
- Manual Handling Training. Eric Flaherty

Evaluation: This section went fine. Some of the trainees had completed manual handing training with the past three years, so only does who had not done so took this section.

Unit 3

Learning Outcome*: Trainees learn how to carry out repairs to an external lime render and learn about lime in general.*

Location: Block E, former workhouse refectory & chapel. External render is in need of repair.

Methodology: Learners work on external wall facing women's yard. (Laurik)
Classroom session: Illustrated Talk on Lime (Ursula & Laurik)
Demonstration: Slaking Quicklime (Laurik)
Classroom session: Looking at analysis of existing render (kindly carried out by OPW)
Talk and Demonstration with Edward O'Byrne, Traditional Lime Company

Practical: Key Learning Points - Participants learn how to:

- Identify what render is sound and what render needs to be replaced
- Examine composition of existing render
- Carefully remove render that is beyond repair
- Identify and removing modern sections that have be rendered with cement
- Carefully wash down the façade
- Mix mortar
- Rake out loose joints
- Re-point where necessary - repairs to revels
- Apply lime render - Base Coat
- Apply lime render - 2nd Coat
- Apply lime render - Finish Coat

Theory: Key Learning Points – Participants learn about:

- The reasons for using lime
- How lime is made
- The lime cycle
- Different types of lime
- Selecting Sand

- Mixing Mortar
- Protection of works
- Understanding a method statement

Evaluation: This unit went well. However, it would have been better if trainees had worked on practice panels applying render rather than working directly on walls. When this job was finished, a classroom session was spent on method statements, with the trainees themselves describing the work they had done, step by step to make up the method statement for this job. This really helped to demystify the "method statement" which some of the trainees considered to be just the remit of the architect/engineer.

Unit 4

Learning Outcome: Trainees learn how to repair internal lime render and carrying out repairs to lath & plaster ceiling. Trainees learn how to mix and apply limewash.

Location: Matron's Quarters (2 rooms) in former Women's Block at Workhouse

Key Learning Points - Participants learn how to:

- Prepare lath & lime plaster ceiling for painting, repair hairline cracks
- Examine existing historic paintwork
- Repair internal lime rendered walls
- Understand what type of paints are suitable for use on ceiling, walls and timberwork
- Repair fire places
- Apply paint to ceiling
- Apply limewash to walls
- Apply paint to timberwork
- Carry out repairs to timber floor & skirting boards

Evaluation: Trainees did an excellent job repairing the ceiling and repairing the internal lime rendered walls, which were in poor condition. Some limewashing was attempted, but the weather was too cold, so this was left and will be done later by workhouse staff.
Laurik demonstrated how to make limewash, using pigments to match the colour to existing.

Unit 5

Learning Outcome: *Trainees learn how to build with stone using lime mortar and how to apply render using a compressor.*

Location: Gable end of former Women's Block. There is a large modern opening in this gable, fitted with a double galvanise gate. Gate will be removed and the opening closed up using stone, thus restoring the gable. The exterior will be rendered and the interior limewashed.

Methodology: On-the-job training; classroom session on "stone"

Key Learning Points - Participants learn how to:

- Examine the existing stone work, so as to match the new work to it - internal & external
- Select stone
- Shape stone
- Lay stone
- Use of pinning stones
- Use lime mortar for bedding
- Apply external render
- Point the internal joints of the new stone work so as to match existing
- Apply limewash to interior
- Learn how to use compressor
- Theory: Types of stone; building styles

Evaluation: This unit went well. The plasters also worked on this. They found it good to get an understanding of working with stone. Again it was too cold to apply the limewash.

Unit 6

Learning Outcome: *Trainees learn how to do lime parging* to the underside of slate.
Location: Former Women's Block.

Methodology: Given that limeparging is seldom done nowadays, it was difficult to find somebody to specify what mix and method of application should be used. To overcome this, contact was made with a plasterer who had experience in doing lime parging. Also, the original lime parging mix was analysed.
The plasterer attended one of the training sessions. With the trainees, he explained how he had successfully carried out lime parging, what mix and method of application. Existing lime parging at the workhouse was also examined.

Evaluation: This unit was very useful in showing how important it is to do research and to speak to people who have experience. Even the experts don't have all the answers and sometimes conservation can be about trial and error, observing how things perform overtime. It was decided to do just two sample panels of lime parging.

Units 1-6 formed the original workplan. However, **additional training** was carried out as the scheme progressed.

- The Scottish Lime Trust have a training DVD on *Traditional Masonry Building Repair*. This was shown to trainees. They found it very good.

- Christy Cunniffe, Fields Monuments Advisor, gave an illustrated talk on graveyards, with the emphasis on monuments and gravestones. The trainees found this interesting. Given that 7 of the trainees are currently employed on community schemes, it is likely

that they may be working in graveyards, so this was an excellent awareness building exercise.

- While it was not intended originally to cover energy efficiency in traditional buildings, it was felt that an introduction to this topic was necessary for trainees to get an understanding of adapting traditional buildings for modern usage. To this end, Ursula gave an introductory talk on the topic. Peter Smyth from the company Ecological Building Solutions made a presentation to the group and Laurik did a demonstration and talk on using hemp with lime.

- Laurik also gave a short demonstration on repairing stone and trainees took part in a workshop on basic stone carving.

Assessment
Trainees were divided into pairs. 20 questions based on the course content were asked orally. Trainees were required to write the answers. One pair scored 18/20. The others answered all the questions correctly. It was decided to do this exercise in pairs, as one person had literacy difficulties.

CV Preparation
Given that the training was about improving the employment prospects of trainees, Ursula worked with people who want to compile/update their CVs. 6 trainees availed of this.

Certification
Certificates of course completed issued by Galway County Council were presented to trainees.

Follow Up
Since completing the course, two of the participants have got related work. Both are experienced plasterers. One has been in contact with Laurik for advice as he was doing an external lime render. The other person has started work at the workhouse under the Rural Social Scheme. He will be continuing with the lime parging.

Evaluation by Trainees
Attendance can often be the best indicator of how people are finding a course. Attendance at the Workhouse TBSTS was very good:

Fridays & Saturdays - 16 days
- Started with 12 people
- Finished with 10 people
- 1 person attended 13 days
- 2 people attended 15 days
- 7 people attended 16 days

Trainees were asked to fill out an evaluation form at the end of the course. The questions and the averaged responses are given below.

1. On a scale of 1-10, how would you rate your knowledge about the conservation and repair of traditional stone buildings before starting this course? Answer 3.75

2. On a scale of 1-10, how would you rate your knowledge about the conservation and repair of traditional stone buildings having completed the course? Answer 7.4

3. On a scale of 1-10, how would you rate the course in general? Answer 8.6

4. On a scale of 1-10, how would you rate your knowledge of working with lime before the course?
   Answer 3.6

5. On a scale of 1-10, how would you rate your knowledge of working with lime after the course?
   Answer 8

6. On a scale of 1-10, how would you rate your knowledge about energy efficiency in traditional buildings before the course? Answer 2

7. On a scale of 1-10, how would you rate your knowledge of energy efficiency in traditional buildings after the course? Answer 6

8. How confident would you feel in doing an external lime render on your own, similar to the one done on the course? This question answered by plasterers only.
   Fairly Confident (1) Confident (2) Very Confident (3)

9. How confident would you feel repairing stone wall using lime mortars? This question answered by stone workers only.
   Confident (3) Very Confident (3)

   Note that some trainees answered both 8 & 9.

10. On a scale of 1-10, how did you enjoy the course? Answer 8.9

Evaluation by Project Manager & Trainer/Conservation Specialist

- Trainees had to do some boring preparatory work at the start of the course (removal of concrete). They were not happy about this, as there was quite a bit of work in it and no learning value for them. Ideally, this work could have been done in advance by workhouse staff.

- It would have been better to carry out training earlier in the year.

- The trainees found the theory component, guest speakers and demonstrations very interesting. It was a job however, keeping ahead of them in preparing presentations etc. Should similar training be carried out in the future, the groundwork has now been done.

- On average, there was one hour off-the-job training per day. This worked well.

- 10 trainees was too much. While this number was fine for off-the –job training, it was difficult to ensure the quality of training and work, with three teams operating. In the event of similar training taking place in the future, 6 trainees would be better, obviously with less work projects. Also, when recruiting, face-to-face interviews would be preferable.

- It would have been better to do some skills practice prior to working on the buildings themselves.

- Again should such schemes be available in the future, it would be better to assess trainees individually, in both practical skills and theory.

- It would be great if accredited courses (FETAC Level 3 or 4) were available, so that certificates of competency, recognised nationally and internationally could be awarded to participants.

Training Manual
A training manual to accompany work based training was given to trainees towards the end of the course. It included the following:

- Copy of Presentation on Mothballing, Principles of Conservation & Legal Protection of Structures
- Health & safety information sheet on working with lime
- Method Statements for on-the-job training as described in Units 1-6 above

- Articles on *The Use of Lime & Cement in Traditional Buildings & Repointing Rubble Stonework*, Historic Scotland (INFORM, Information for Historic Building Owners).
- *Lime Mortars in Traditional Buildings (*Short Guide), Historic Scotland
- Copy of presentation on Stone, based on *Ruins, The Conservation and Repair of Masonry Ruins* – Advice Series (Department of Arts, Heritage & Gaeltacht)
- Copy of presentation based on *Energy Efficiency in Traditional Buildings* –
- Advice Series (Department of Arts, Heritage & Gaeltacht
- List of contacts etc. for further information

The Steering Group
Mairín Doddy, Architectural Conservation, Galway County Council, facilitated the setting up of a steering group to bring together interested parties to advise on the scheme and in particular, to see how such initiatives can be developed and introduced into an accredited system for construction workers, working on traditional buildings.

The steering group brought together a range of expertise and met twice, once before the course started and once after.

Steering Group Members:

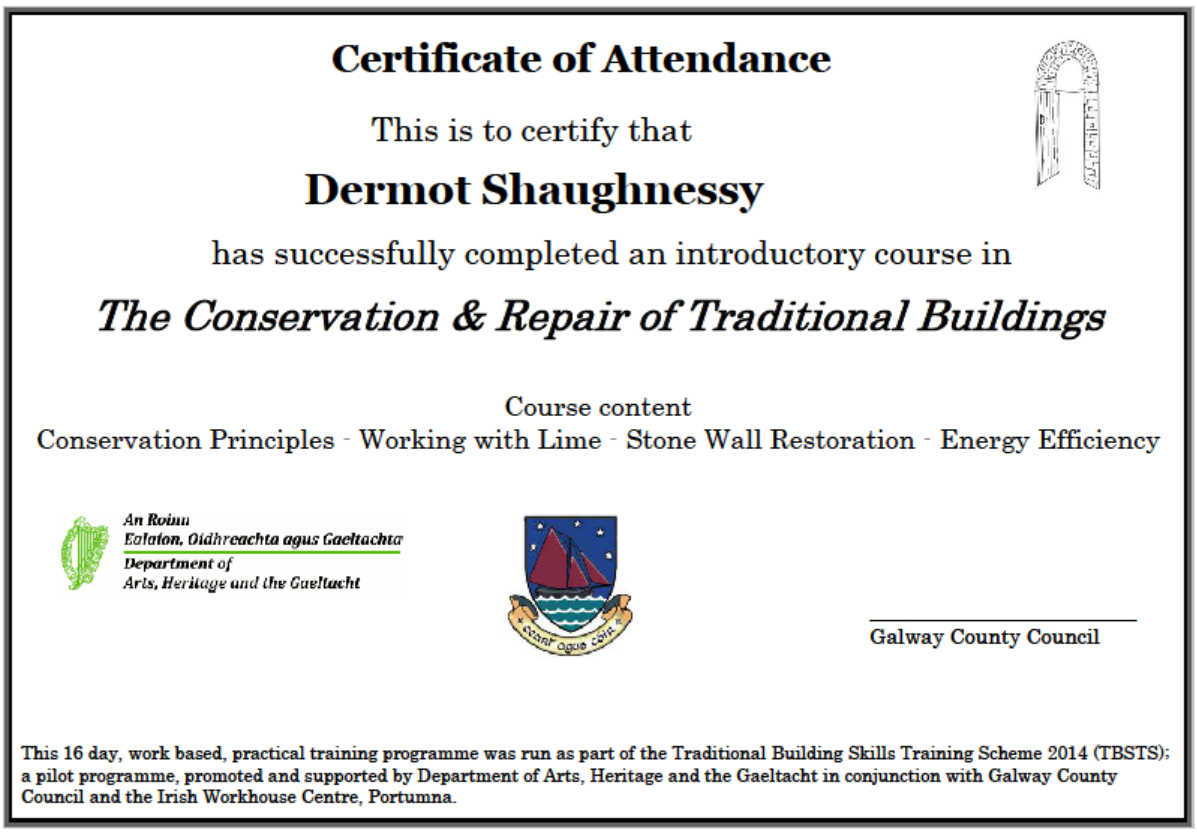
Nessa Roche	Architectural Conservation Advisor, Department of Arts, Heritage and the Gaeltacht
Mairín Doddy	Architectural Conservation Officer, Galway County Council & Chair, Assoc. of Arch. Conservation Officers
Carmel Higgins	Assistant Manager, Training Centre, Galway & Roscommon Educational Training Board
Padraic Lydon	Contracted Training Officer, Galway & Roscommon Educational Training Board
Frank Geraghty	District Works Manager, Office of Public Works
Pat McAfee	Stone mason, Author & Lime Specialist
Paul Mullins	Acting Chairperson, South East Galway Integrated Rural Development Ltd. (IRD)
Laurik Mathieu	Trainer for TBSTS & Mathieu & Mitchell Building Contractors
Ursula Marmion	Project Manager TBSTS Portumna, Manager SE Galway IRD
Paul McMahon	Conservation Architect

The second meeting was attended by Pierre Bani from Les Compagnons du Devoir, who gave a presentation to the group on how they provide training in traditional building skills. The meeting was also attended by Frank McCormack from the company Irish Natural Stone Products. Frank spoke about the challenges facing the Irish stone industry today. He voiced particular concern about the importing of stone, when Irish product is available.

The main concerns of the steering group were the lack of training in traditional building skills and the need for accreditation. There was discussion around the role that SOLAS via the Educational Training Boards might have in this regard in the future. Various models that could be adopted were discussed, for instance adapting the existing plastering apprenticeship to include training in the use of lime. This would work for new apprentices. A modular training system could be developed for existing tradespeople, who want to learn about working on historic structures. A system of shorter accredited courses could be developed to give validation to courses such as those run under the TBSTS pilot. It is clear that the issue of accredited training is one which has to be addressed at national level.

Value for Money

A budget of €20,000 was allocated to the Workhouse Scheme. This covered all costs. Had the work been contracted out to a private builder, it would have cost approximately €20,000 with no training element provided. So, not only was necessary conservation work carried out on an important, protected structure, but training in traditional building skills was provided at no extra cost.



Certificate of Attendance

This is to certify that

Dermot Shaughnessy

has successfully completed an introductory course in

The Conservation & Repair of Traditional Buildings

Course content

Conservation Principles - Working with Lime - Stone Wall Restoration - Energy Efficiency

An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht

Galway County Council

This 16 day, work based, practical training programme was run as part of the Traditional Building Skills Training Scheme 2014 (TBSTS); a pilot programme, promoted and supported by Department of Arts, Heritage and the Gaeltacht in conjunction with Galway County Council and the Irish Workhouse Centre, Portumna.

Building up skills in Portumna

A FREE training scheme for construction workers in the restoration of old stone buildings will be held in Portumna over the coming months.

The Traditional Building Skills Training Scheme (TBSTS) is a pilot programme being run by the Department of Arts, Heritage and the Gaeltacht, in conjunction with four local authorities, among them Galway County Council.

The council has facilitated the setting up of the Workhouse TBSTS at the Irish Workhouse Centre in Portumna. A project manager has been appointed who, together with a conservation and restoration specialist, will deliver the training.

The broad aim of the scheme is "to enhance skill-sets in built heritage conservation within and around the pilot local authority area by making trainees or qualified construction workers more capable of carrying out conservation and restoration projects and therefore improve their prospects of employment".

The scheme in Portumna will be hands-on, practical, work-based training with up to 10 trainees taking part. The course will take place on Fridays and Saturdays in October and November, excluding the bank holiday weekend.

Trainees will get a practical overview of the conservation, restoration and redevelopment of old stone buildings. The principles of restoration are the same for a cottage, farmhouse, castle or a church but one of the biggest mistakes people make when working on stone buildings is the use of cement-based renders, which cause dampness.

Because lime renders allow stone buildings to breathe, it will form the basis of the training programme in Portumna.

Trainees will learn how to repair old lime render, how to do new lime render and how to work with stone and lime. Certification will be awarded to participants who successfully complete the course.

The closing date for receipt of applications for the scheme is Monday, September 22.

For further information contact the Irish Workhouse Centre, Portumna on 090 9759200 or by email at info@irishworkhousecentre.ie.

■ **Gort's John Moran and Pat Finn of Oranmore were at Scariff Show at the weekend.** Photograph by John Kelly

APPENDIX B3: KILKENNY COUNTY COUNCIL

Kilkenny County Council St Mary's Training Plan

Traditional Building Skills Training Pilot- St. Mary's, Kilkenny in collaboration with W.I.T. Applied Building Conservation Skills Bsc

Evelyn Graham, Project liaison architect, Kilkenny County Council

ST.MARY'S HALL, KILKENNY – REVISED TRAINING PLAN DETAILS

1. SKILL TYPES TO BE IMPARTED IN THE TRAINING PROGRAMME

CONSERVATION PRACTICE ON SITE
Description of Module
The aim is to provide a basic understanding of practical conservation techniques available to the trainee with regard to maintenance and repairs of older buildings and to create a conservation plan which sets out the significance of a site. The module explains how the historic significance will be retained in any future use, repair, alteration, development or management.

PRACTICAL CONSERVATION WORKSHOP
Description of Module
The aim is to provide a basic understanding of practical conservation techniques available to the trainee with regard to maintenance and repairs of older buildings. The module introduces the learner to specific materials and techniques required to undertake conservation projects.

2. PROGRAMME

The Pilot Training Module for TBSTS 2014 is set to commence at St.Mary's on Wednesday 8th October 2014 & will continue each Wednesday for 6 weeks (excluding 29th October) with the final session on 19th November
This pilot will be completed in advance of the main contract works which are scheduled to commence in December 2014 for an 18 month period:

WEEK	DATE	ACTIVITY	SPEAKER 1	SPEAKER 2	COMMENTS
1	8.10.14	Site Induction: Awareness of sensitivity of the building fabric and the graveyard Surveying & recording Photography	Evelyn Graham, Project Liaison Architect KKCC: Project overview	Aine Doyle, Conservation Officer KKCC: Planning & Conservation issues	
2	15.10.14	Conservation techniques Identification of materials	John Beatty, Carrig Conservation: Site/building investigations & relocation of monuments	Claire Walsh, Archaeological Projects: Archaeology for main project in former Chancel &	

				North aisle	
3	22.10.14		Niall McCullough, Director-McCM: Intervention & change	Cóilín Ó Drisceoil, Kilkenny Archaeology: Restoration of Shee Mausoleum	
4	05.11.14	Practical workshops on selected external wall panels focusing on conservation techniques			
5	12.10.14	Practical workshops			
6	19.10.14	Practical workshops			

3. **SCOPE OF TRAINING**
   Conservation theory & practice: delivered by St.Mary's Design team, KKCC & WIT trainers
   Practical work: Raking/repointing selected section of boundary wall
   Assessments include: On site practical work portfolio/assignments/examinations the requirements for practical assessment work for the course are a photographic and a written portfolio of all the practical works they undertake, as well as the recognition of the materials and the tools as per WIT course requirements
4. **H & S ISSUES**
   Risk assessment to be carried out by WIT/KKCC
   Welfare & lecture facilities available at City Hall
   P.P.E. supplied by WIT
5. **INSURANCE**
   Covered by WIT
6. **PROVISION OF TOOLS, PLANT & MATERIALS**
   Tools provided by WIT
   Plant hired by KKCC
   Material to be ordered by WIT & invoiced to KKCC
   Deliveries coordinated through Evelyn Graham, KKCC
7. **SUPERVISION/MONITORING**
   Terry Prenderville, Ian O'Neill & Michael White, WIT
8. **PROJECT COORDINATION**
   Evelyn Graham, Project Coordinator for
   WIT staff & trainees
   Guest speakers
   Liaison with KKCC staff
   Stores for deliveries
   Site Access/Keys
   Parking on site
9. **RECOUPMENT OF FUNDS**

All invoices must be with E.G. by 1st November in order to meet DAHG deadline of 7th November for recoupment of funds.

10. **RECORDING OF TRAINING PROGRAMME**
Video recording / photographs / written documentation in collaboration with WIT

Evelyn Graham, Dip.Arch., B.Arch.Sc.,MRIAI,
Project Co-Ordinator & Liaison Architect,
Kilkenny County Council

Email: **evelyn.graham@kilkennycoco.ie**
Phone: **056 7794028** **Mobile 087 1985138**

3rd October 2014

PROJECT CO-ORDINATOR EVELYN GRAHAM, KILKENNY COUNTY COUNCIL
TRAINING PARTNERS SHARON O'BRIEN, IAN O'NEILL, TERRY PRENDERVILLE,WIT
DESIGN TEAM MCM, CARRIG CONSERVATION, ARCAHEOLOGICAL PROJECTS etc.
MAIN CONTRACTOR TO BE SELECTED FOLLOWING STAGE 2 TENDERING PROCESS
SUB-CONTRACTORS TO BE SELECTED FOLLOWING STAGE 2 TENDERING PROCESS
PROJECT ADVISORS COLM MURRAY, HERITAGE COUNCIL

Hot Lime Mortars and Pointing

With Lisa Edden, structural engineer and Patrick McAfee, stonemason 12th November 2014

Time	Programme	Description	Materials/equipment/on-site facilities
9.30	**Introduction**	Welcome and outline of programme	
9.35	**Safety**	PPE, eye protection	All participants to bring safety glasses, work boots, high vis jacket/coat/vest, safety helmet, work boots and gloves
9.50	**Materials**	Description of materials	Work bench 1 bucket (min)quicklime NHL-1 bag Sand Clay? Water
10.10	**Preliminary**	**Flora and fauna habitats** Bats, birds, insects, fish,protected species of flora and fauna. Ivy growth **Philosophy of approach** Deciding when to point Removal or not of existing sand and cement pointing/renders etc **Testing** Visual, identification of mortar types including hot lime mortars and clay Taking a sample for testing in order to replicate	Pre-raked out (if possible) existing wall with plant growth, missing stones, exposed wall top and mortar loss at wall base (if possible) Lump hammer, plugging chisels, soft brush, water spray Sieves Measuring containers Water

		Tests –(discussion of) lime content, lime type, lime:sand ratio, capillary, crystallisation, absorption, sieve analysis. Introduction to clay tests	
10.40	**Preparation**	Selective raking out, depth and profile of raking, dampening	Lump hammers Plugging chisels Assume wall pre-raked out?
10.50	**Mixing**	Discussion of various mix types including NHL, hot lime and hybrid mixes. Clay mixes Batching materials, mixing by hand, water content	Shovels (2) Sheet of plywood Barrow Buckets –large (2) Ditto-small (1) Water
11.10	**Application**	Pointing methodology	Jointing irons Hawks Pinnings
11.45	**Finishing**	Optimum time for finishing Finishing techniques	Churn brush Unlikely that we can finish as mortar will be too soft
12.00	**After-care**	Dampening etc	Water spray bottle Discussion only as mortar too soft
12.15	**Protection**	Covers/insulation, rain, frost, sun, wind	Hessian, plastic sheeting
12.20	**Wall bases**	Wash out at wall bases, undermining of foundations	Existing wall with mortar loss at base
12.40	**Wall tops**	Pointing methodology and repairs to wall tops	Existing exposed wall top
1.00	**Local repairs-missing stones**	Replacement of individual stones and repairs to minor collapse of wall faces. Rough racking	Existing wall with missing stones
1.15	**Summary Questions & Answers**		
1.30	**Finish**		

TRADITIONAL BUILDING SKILLS TRAINING SCHEME COMMENCED ON 8TH OCTOBER 2014 AT ST.MARY'S HALL, KILKENNY

Kilkenny County Council is delighted to announce that the pilot Traditional Building Skills Training Scheme 2014 sponsored by Department of Arts Heritage & the Gaeltacht, commenced at St.Mary's on 8th October. St Mary's is undergoing an extensive conservation/ restoration project that will see the former church of Ireland premises restored and transformed into a civic museum. The County Council has teamed up with Waterford Institute of Technology to make this training scheme available to a group of 15 students from the B.Sc. Applied Conservation Skills programme. The course started with a tour of the site and introductory lecture from Kilkenny County Council Project Liaison Architect, Evelyn Graham.

Construction work on the main contract is due to commence at St. Mary's Church in December to facilitate the change of use from the old church hall to a civic museum. It is planned to continue with on-site practical conservation training during the course of the building project, in collaboration with the main contractor and the project design team. The work at St Mary's is complex, challenging and extremely varied and will give the trainees competence on a "real project" that will be far reaching and be of great benefit in their future careers. Key training components include stone masonry, raking & re-pointing, plaster/lime work, monument conservation, carpentry / joinery, roofing and conservation best practice. A report of the training "pilot" scheme will be published on completion.

Evelyn Graham giving project overview to students on first day of training programme

Artist's impression

The W.I.T. students have access to the live project and are carrying out supervised works on the historical structure as well as attending lectures and demonstrations at the site. The project is giving the students invaluable experience within the conservation sector and feedback from the students & WIT tutors so far has been very positive. The first stage of programme is as follows:

WEEK	DATE	ACTIVITY	SPEAKER 1	SPEAKER 1
1	8.10.14	1.Site Induction: Awareness of sensitivity of the building fabric and the graveyard 2.Project overview	Evelyn Graham, Project Liaison Architect KKCC: Project overview	Aine Doyle, Conservation Officer KKCC: Planning & Conservation issues
2	15.10.14	1.Site/building investigations Conservation techniques Identification of materials 2.Archaeology for main project in former Chancel & North aisle 3.Tour of site	Peter Cox, Carrig Conservation Consultants	Claire Walsh, Archaeological Projects
3	22.10.14	1."Intervention & change" Lecture on design, conservation & re- development of St.Mary's 2.Restoration of Shee Mausoleum & history of site 3.Site inspection	Niall McCullough, Director McCullough Mulvin Architects, Lead consultant.	Cóilín Ó Drisceoil, Kilkenny Archaeology.
4	05.11.14	1.Practical workshops on exemplar wall panels 2.Focus on conservation techniques & materials	Ian O'Neill & Terry Prenderville, WIT Course Tutors	Peter Cox, Carrig Conservation
5	12.11.14	1.Practical workshops continued including "Hot Lime" demonstration 2.Re-pointing	Patrick McAfee, Stone Mason & Instructor	Lisa Edden, Conservation Engineer, Building Limes Forum of Ireland.
6	19.11.14	1.Conservation, relocation & storage of monuments 2.Practical workshops continued	John Beattie, Carrig Conservation	Ian O'Neill & Terry Prenderville, WIT Course Tutors
7	26.11.14	1.Practical workshops continued 2.Review of works to date	Ian O'Neill & Terry Prenderville, WIT Course Tutors	Peter Cox, Carrig Conservation

For further queries on this project please contact:

St Mary's teams up with WIT to help museum status

NEWS REPORTER
news@kilkennypeople.ie
facebook.com/kilkenny-people

St Mary's medieval church and burial grounds, off High Street, Kilkenny is to be restored and transformed into a civic museum with Waterford Institute of Technology (WIT) Applied Conservation students teaming up with Kilkenny County Council to help the process.

Regarded as having the finest group of medieval tombs and vaults in Ireland, the site is of huge international importance reflecting the status of the burgesses who controlled Kilkenny in Tudor times.

Over the next two years, St Mary's will undergo an extensive conservation and restoration project that will see the former home to the Freemasons in the region restored and transformed into a civic museum.

Because the church was so prominent in the life of the city over the centuries it was the favoured graveyard to be buried in by the wealthy merchant families of the time (the Rothes, Shees and Archers).

The students from WIT's Department of Architecture will have access to the live project and will be able to carry out supervised works on the historical structure as well as attending lectures and demonstrations at the site. The project will give the students invaluable experience within the conservation sector.

Speaking about the project, Evelyn Graham, Kilkenny County Council Project Liaison Architect said, "We are very excited about the project and the link with the WIT students and the Architecture department."

This collaborative project between the Institute's Department of Architecture and Kilkenny County Council is a pilot "Traditional Building Skills" training scheme funded by Department of Arts Heritage & the Gaeltacht.

Inspecting the tomebstones at St Mary's.

TRADITIONAL STONEWORK TRAINING

St. Nicholas Church Jerpoint Thomastown

Traditional Stonework Training programme at St. Nicholas church Jerpoint Thomastown.

Summary:
The course is designed to provide a relevant foundation of knowledge, practical and subject-specific skills in stone work on historical buildings. It will enable participants to understand the developing technologies and organisational procedures associated with conservation stonemasonry. Participants will learn how to retain and maintain the

values and techniques of the craft through conserving and restoring the character and appearance of stone work in historic buildings.
The training programme will greatly improve the knowledge of trainees by combining on-site training by a qualified and experienced stonework instructor and stonemason with a number of lectures by some of the country's leading experts on conservation, archaeology and stonemasonry.
Four trainees will receive 80 hours of specialist stonework training.

The course will commence and finish in July 2014.

Brief biography of trainers and instructors.

Seamus Davis

Seamus Davis is a master stonemason. He has over 25 years of practical experience gained in Ireland, the UK, and the USA. Throughout his career he has practised and promoted the conservation of built heritage using traditional materials and methods. He has demonstrated the use of hot and cold lime mortar mixes to industry professionals at events organised by the Building Limes Forum Ireland, and has trained several apprentices. He is a qualified and experienced trainer and currently teaches stonework for Kilkenny VEC. Heritage/conservation projects he has completed include:
- Camden Lock Railway Station, London, England
- Fairbrook Mill House, Kilmeaden, Co. Waterford
- St. Marys Church, Thomastown, Co. Kilkenny
- Walled Rose Garden, Mount Juliet Estate, Thomastown, Co. Kilkenny
- Longfield House, Boherlahan, Co. Tipperary
- Phase 2, St. Nicholas' Church, Thomastown, Co. Kilkenny

Ivor McElveen.

Ivor McElveen BAI MA CEng FIEI is a Chartered Engineer with over 40 years experience in the public and private sectors, is a Fellow of the Institution of Engineers of Ireland and recipient of the First John Ashurst Prize awarded by English Heritage from West Dean College, Chichester. He holds a Postgraduate Diploma in Applied Building Repair and Conservation from Trinity College Dublin and was awarded a Gratias Agit Laureate by the Czech Government in 2011 in recognition of services rendered to the Czech nation and serves on the International Scientific Committee on the Analysis and Restoration of Structures of Architectural Heritage (ISCARSAH) of ICOMOS and is a former Chairman of the Building Limes Forum Ireland.

Examples of recent work experience on medieval structures, incorporating structural assessments, ruin consolidation, and masonry repairs, etc.:

- Rinn Duin (2009 – 2013)
- Clonmel Town Walls Capital Works Programme (2010 – 2012)
- Cashel Town Walls Capital Works Programme (2009)
- Fethard Town Walls Capital Works Programme (2009 – 2013)
- The National Gallery, Dublin (2007)
- Black Freren House, Kilkenny (2009)
- Talbot Tower, Kilkenny (2008 – 2013)
- Medieval wall at the Rose Garden, Parade, Kilkenny Town (2008)
- Killahara Castle, Dovea, Co. Tipperary (2007 – 2009)
- Medieval hall house and 16th century castle, Fethard, Co. Tipperary (2003 – 2007)

- St Canice's Steps & Arch, Kilkenny (2012 – 2013)
- St Patrick's Church, Wexford (2013)
- Phase 2, St. Nicholas' Church, Thomastown, Co. Kilkenny (2013)

Rex Bangerter.

Rex Bangerter MA is a project archaeologist for ADCO Ltd, who also undertakes freelance archaeological work, within both the public (DAHG) and private sectors. He is an experienced, fully licence eligible, archaeologist who has undertaken a wide range of heritage projects throughout Ireland and abroad. He has undertaken detailed structural surveys of a wide range of medieval buildings and structures, including that of a medieval merchant's house at South Quay, Drogheda, Co. Meath, and a series of bridges across the Broadmeadow Estuary in Co. Dublin. Rex has an active interest in Thomastown and specifically the settlement site at Newtown Jerpoint. He is a member of the Thomastown Community River Trust (TCRT) and has completed a series of local TCRT heritage projects that include: the Archaeological Survey of Island Weir, River Nore, Thomastown (2009), the Thomastown Industrial Heritage Project (2010), and the systematic and thorough archaeological investigation of the River Nore and Little Arrigle River at Newtown Jerpoint (2012). [5] [6] The latter project constituted the first archaeological work to be carried out at these locations and provided the archaeological evidence of extant bridge remains within the River at the settlement site. Most recently he formed part of the management team responsible for the oversight of second phase of conservation work undertaken at St. Nicholas Church.

Pat Mc Afee.

Pat mcAfee is a stonemason of vast experience, an author, and a recognised authority on all aspects of stonemasonry. He lectures extensively both at home and abroad. He has been at the forefront of the revival of traditional methods and in the education and training of practitioners
He is perhaps best known as the author of three wonderful books, which are essential reading for anyone with an interest in Irish stonework;
Irish Stone Walls
Stone Buildings
Lime Works

INTAKE:

1. **Intended trainee numbers.**

   4 TRAINEES.
2. **Required skills entry level of applicants.**

   Trainees will require a reasonable level of experience in working with stone. They will have an interest in conservation and a desire to develop their skill set and understanding of conservation issues relating to stone work. Trainees will have already completed a FETAC or BTEI accredited stonework course or have qualified through Fas/Solas in a construction trade.
3. **Method of assessment of applicants**

Applicants will be assesed by interview.

4. **Quantity of equivalent FTE jobs numbers, based on an Eight hour day**

The course will be the equivalent of eight FTE jobs based on a five day eight our working day week.

5. **LEVEL OF PROGRAMME:**

The programme is geared primarily towards upskilling existing trades and crafts persons. It will be of equivalent standard to a Fetac Level 5/6.

6. **OUTLINE OF PERFORMANCE CRITERIA.**

During and on completion of the course participants will be measured and assessed in their ability to.

1. Make a detailed assesment of the conservation work to be undertaken.
2. Select and source suitable materials.
3. Develop a methodology for the work to be carried out.
4. Draw up a safety plan for the intended work.
5. Complete a portion of practical work.
6. Have an understanding of conservation issues relating to stonework.

7. Learning outcomes – skills acquisition objectives

Participants will have learned and have competence in.
Visual assessment of a stone structure
Assessment of conservation measures required
Recording of existing structural detail
Removal of ivy and vegetation
Assessment of individual sections of a structure
Numbering and recording of individual stone placement
Method of disassembly of stonework sections
Preparation of existing walls before rebuilding
Raking out and cleaning of stonework joints
Sequenced recording of all work

Training in use of lime mortars .

Sourcing and matching of sand and aggregates
Hot and cold mortar mixes
Selection of specific mixes/products
Strengths and ratios
Additives and their uses
Protection from elements

Training in conservation stonework.

Laying stone in exact original formation
Identifying and matching stonework style
Bonding and jointing of stonework
Pointing, repointing, patch-pointing
Sympathetic repair
Butressing
Selection of suitable stone
Dressing of stone
Capping of exposed surfaces; ergonomics & aesthetics
Correct finishing of masonry joints

8. Attendance.

Expected minimum hours attendance per day is 8 hours, full time 5 day week.

An adjacent indoor space for teaching/revision and for duration of inclement weather is provided.
Canteen and toilet facilities are provided.

9. Outline of the intended timescales for face-to-face involvement with the trainees

Stonework Instructor - 68 hours
The project conservation professionals -12 hours
Monitoring by local authority officer –as decided by local authority

10. Courseware.

Courseware and lecture notes will be provided
Prescribed reading text- "Lime Works" by Pat mcAfee

11. Recording.

Still photography will be employed to record the training programme along with a written record. Photographs will be taken at all stages to provide an accurate and detailed record.

12. Assessment

Assesment will be carried out during and on completion of the course. participants will be assessed on their practical skills carried out during and/or upon completion of the training programme. Theory assessment will be by written examination and practical on-site evaluation. The instructor will ensure that each trainee is competent in each aspect of conservation before moving on to the next task. Ongoing continual assessment of their work throughout the course will ensure that all trainees will have achieved a high level of competency on completion.

13. Evaluation

An evaluation of this entire pilot programme will be undertaken upon completion. Input will be gathered from all stakeholders in the process.
An evaluation (anonymous) by each trainee will be provided.
Follow –up evaluation will assess the value of the programme in improving the employability of the trainees.
An evaluation report will be compiled and sent to the relevant governing bodies.

14. Health and Safety/PPE

All trainees will have successfully completed a Safe Pass Course and a Manual Handling Course before the training programme commences.
Trainees will be provided with all required PPE and instructed in its correct use.
An on-site induction of trainees will be carried out before training commences.

SYLLABUS.

TIME: 2 WEEKS TOTAL 80 HOURS

1. EQUIPMENT, TOOLS and their uses 3 HOURS
2. MATERIALS/ STONE ;selection and dressing 4 HOURS
3. MATERIALS/ LIME MORTARS AND AGGREGATES 4 HOURS
4. PRINCIPLES OF CONSERVATION WITH REF TO STONE. 3 HOURS
5. HISTORIC METHODOLOGY AND FINISHES. 4 HOURS.
6. HEALTH AND SAFETY and INDUCTION 3 HOURS
7. SURVEY /ANALYSIS. 4 HOURS
8. PREPARATION AND SETTING OUT. 4 HOURS
9. PRACTICAL WORK UNDER SUPERVISION. 44 HOURS.
10. LECTURES. 4 HOURS.

ASSESMENT.

11.	ASSESMENT INVIGILATED	3 HOURS.
12.	ASSESMENT OF PRACTICAL WORK.	ONGOING

Images from conservation stonework in progress St Nicholas Church Jerpoint Thomastown during 2013.