# Newsletter Building Limes Forum Ireland

Comments and articles in this newsletter do not necessarily reflect the views of the board or editor.

Building Limes Forum Ireland is a community of lime practitioners, specifiers, suppliers and producers of lime. The Forum exists to encourage expertise and understanding in the appropriate use of building limes, and education in the standards of production, preparation, application and aftercare. Building Limes Forum Ireland is connected and affiliated to Building Limes Forums across the world.

### Editorial

Welcome to the first Building Limes Forum Ireland Newsletter of 2016. This issue, originally scheduled as a year end edition, details some of the happenings that took place since the last issue in May 2015. Also included is a schedule of confirmed events for the year ahead. There are more events yet to be finalised and the details of these will follow later in the year. Yet again, thanks to all those who have contributed articles, hopefully the variety demonstrated in these conservation projects from around the country will inspire members. From the honesty of the tiling technique repair of a 15<sup>th</sup> century tower house in Co Wexford to the wigging used on the recently revealed fine jointed brickwork façade of the Shelbourne Hotel, there should be something for everyone. We accept articles throughout the year and members' suggestions on ways to improve the BLFI are always welcome; don't hesitate to contact us.

#### **Oiseen Kelly**

**BLFI Board** 

Your current hard working board members are:

		5
Lisa Edden		Chair
Grellan Rourke		Company Secretary
Una Ni Mhearain		Treasurer
Shane Nolan		Membership
Manfredi Anello		CPD / Training
Kevin Blackwood		Bursary
Helen Hossack		Northern Ireland
Oiseen Kelly		Events & Newsletter
Joe Kirwan		Technical & Standards
Patrick McAfee		Training
Ivor McElveen		HLM Project liaison
Also	Eszter Náda James Powe	

Thank you to Deirdre Bloomer who was our industrious, diligent Administrator for the last 3  $\frac{1}{2}$  years and a warm welcome to our new administrator Eszter.

### Website Upgrade

Over the last few months preparation has been underway which will see our website get a much needed upgrade both in how it works and how it looks. The intention of this is to make the online experience better for members while at the same time raising the profile of the BLFI by optimising our online presence. We will keep you all informed in the usual way before the new website is launched, in the interim any suggestions are welcome.

### Twitter Update



BLFI @BLF\_ie - 20 Jul 2015 IT'S HOT. Top of Russborough Lime Kiln at 5.30am Sun 19th 23 hours after start of burn.

Cooling down now.



During 2015 the BLFI dipped its' toe into the 'online social networking' pool by joining twitter. Many thanks to Triona Byrne who took on the responsibility of tweeting, re-tweeting, following, un-following and not forgetting the all important # hashtag-ing! With a growing number of followers we have started to create a little ripple in this big pool. So check us out **@BLF\_ie** or email us directly with any interesting information you would like tweeted.



### Comment From The Chair: It's been very busy!

## Dear fellow lime enthusiasts and indeed those of you who are new to lime,

I welcome you to this newsletter and also our Lime Slam, 3<sup>rd</sup> March 2016. Since our last news update we have been exceptionally busy. A case of no news is good news!?

We have organised and attended hot-mix lime mortar workshops, walking tours, lime burns, lime Jamborees, the BLF Conference and, alongside all of that, have been one of the main players in The Heritage Council / BLFI Erasmus 'Train the Trainer' project; we are also looking into a follow-up application for curriculum development in Building Lime Technology.

In the midst of all that at the end of October 2015 came a surprise, a very welcome end of year opportunity to embark on another step in the process of disseminating hot-mix information, developing a better understanding of building limes. With the generous help of The Department of Arts, Heritage & the Gaeltacht we gained sponsorship to: produce a Hot-mix Lime Mortar Guide (published Feb 2016), initiate investigation into field testing to help all of our understanding of the constituents of mortar mixes (the development of this is ongoing) and lastly to assist in updating our website (shortly to be launched).

Some of the main players in this work (my greatest thanks goes to these people) were Pat McAfee, Ivor McElveen, Joe Kirwan, James Powell, Yvonne Doyle, and Bill Revie. Back room, Tanya Turner and Wendy Williams were integral to getting the publication over the line and IT Monkey are beavering away on the website updates.

You may have gathered that some of the topics that are currently exercising us are:-

- Improving the understanding of Hot-mix Lime Mortar and encouraging its appropriate use in both repairs and new build, alongside the expansive palette of mortars.
- Encouraging and directing the intellectual content of curriculum development in Building Lime Technology such that we can have recognised courses in lime mortars in Ireland that encourage up skilling / c.p.d. of practitioners alongside specifiers.
- Recognising the emerging importance of historic earth and lime stabilised earth mortars, their correct replica, and use in building repairs to avoid mis-using a Lime based mortars where an earth mortar was the original constituent. This ties in with recent expansion of the organisation Earth Building UK to EBUKI, to include Ireland.

As you can see we have our hands full. We are always on the lookout for others who may wish to assist in this growing understanding of all things lime (and earth!) and I would welcome you to join and get involved. I hope you can catch up on more of the detail in the following articles.



Lisa Edden, Chair 2015-2016

# Ashley Pettit's take on the Cambridge BLF Conference 2015

Ashley is a BLF UK member based in the Isle of Man and has an insightful view of BLF events by virtue of his location on an island to the west of England! [Additions from Lisa Edden in green]

Sorry I had to leave on Saturday and I hope the gentle grumbling I heard about the short presentations Saturday morning were resolved on Sunday or over the evening meal, Richard Ball had hung out some unanswered questions that vexed the SPAB scholars. I would have liked to hear Alison's [Alison Henry Historic England] NHL update but had guite enough to think about from the sessions I attended. I thought it would be all Hot Limes but although most sessions mentioned it - it was lightweight aggregates and other ways of improving the performance of mortars that interested me more. Lucie Fusade research at Oxford on wood ash seemed to highlight that NHL mortars were less permeable than fat limes and mixing them with wood ash made them Sand seems to be much less perform much better. appropriate in renders (sorry James-much easier to have a separate term for the outside work) [reference to James Sterling's take that it's all plaster!] in timber frame construction and the chalk renders shown us by the Anglia Lime Company seemed to be right for use in the South. I do hope we get to Canterbury in 2017 [The BLF Conference] and can look at some more examples and maybe Simon Swann can be asked back to show us the Pulhamite work at Ramsgate (I am beginning to think we should be based at a seaside hotel and maybe visit Canterbury; there may be a suitable one in Folkestone/ Margate (Steve Medland [Builder, Carmarthen] can relive his days as a Mod for us). Michael Beare has always emphasised that the sand is as critical as the lime in construction mortars and they are as critical in dashes

used to protect buildings further North and in Scotland and the those areas facing storms from the Irish Sea including Wales and the Isle of Man, but maybe we have had too much focus on sands - as we reclaimed mortars from cement. New uses for limes include the now familiar Hemp limes with Ralph, and I was also forced to reconsider my scepticism for straw bale by Barbara Jones, but we do need to find good lightweight flexible renders for these buildings. We heard how Irene Polomar [Universidad de Alcalá, Madrid] is adding perlite to her new mortars for central Spain to improve thermal performance and I feel we can all experiment more, maybe also using hot mixes to reduce the effort in incorporating these lighter aggregates - and maybe even satisfy Mike Hardwick. The quality of all the presentations was excellent and each gave food for thought with some lively exchanges from the floor. The auction was fun and Ely was a delight. I hope Saturday's visit was as good, but I most want to go home and build rocky grottos blending coloured mortars to form new landscapes whilst waiting for more updates next year on all these hot topics, and maybe Lisa will have her 'We like it Hot' T-shirts in full production, if we can keep her away from reading her Lime Burning by Michael Wingate.'

There were more short presentations on the Sunday consisting of member's presentations including a talk from Joe Kirwan and I on the lime burn at Russborough (of which you will find more information elsewhere in this newsletter) and then updates from the various forums across the world again including an update on what the BLFI had been up to. In the afternoon there was an important debate on Hot-mix limes led by Craig Frew which was well attended but those with a sense for the benefit of coming to an historic town and looking for a more restful afternoon went on a walking tour of Cambridge led by John Preston, former Conservation Officer for Cambridge.

### **BLF Conference 2016**

This year's conference will be held in Liverpool 2<sup>nd</sup> – 4<sup>th</sup> September. The theme of this year's Gathering will be 'Lime and Aggregates' with an emphasis on hands-on sessions with plastering workshops and visual mortar analysis. Booking will open in May see the BLF website <u>www.buildinglimesforum.org.uk</u> It is hoped that delegates will bring (or send) samples of mortars typical of their area for comparison and possible analysis. So please collect samples of typical regional mortar with a note of provenance such as building location, age, known dates of relevant alteration and photographs. Samples of traditional local aggregates are also welcome.

### **BLFI Visit to The Shelbourne Hotel**

19 Nov 2015 by Susan Roundtree

BLFI members enjoyed a fascinating site visit to The Shelbourne Hotel in November. The visit was facilitated by Dermot Collier, Acol Ltd., the main contractor for conservation and façade repair works to this prominent 5\* hotel. The BLFI group of 26 people initially learned about the project in a specially set up 'pop-up' lecture space, then visited the on-site repair workshop and viewed the building works from the scaffold. The 'hands on' nature of the site visit was particularly useful and informative.



Repaired structure and lead work of the dormer windows

The morning started with a series of presentations on the project given by Dermot and other members of the project team – Jimi Johnson, Enda Mc Kenna and Noel Larkin – covering the building's history, the many façade problems encountered, survey work undertaken, repair of Roman Cement decorative elements, brickwork, dormer windows, roof and chimneys, sash windows and cathodic protection measures.

The façade problems were first identified when Roman cement elements started falling off the building following the severe winter weather of 2010. When the building was surveyed in detail problems were identified with rain water ingress, failure of brick pointing, some roof problems, window decay, chimneys and dormer window structural issues. The complexity of undertaking such extensive repair works in a live 5\* hotel required considerable and particular management and excellent communication skills.

Detailed recording of building fabric was carried out before the works started and is continuing during the project. The bay window areas on the St Stephen's Green façade were in the worst condition with water damage from defective cast iron gutter joints, corroded ferrous metal pins and damage to timber window heads.

# **Building Limes Forum Ireland**



Sash repair bracket for timber joints

A repair workshop was set up in the hotel's former garage on Kildare Street. Here the BLFI visitors were able to see Roman cement embellishments being cast in moulds for replacement. The castings are being made using 'Prompt' in a mix with fine Wexford sand.

The group also saw repairs being carried out to some of the very large sash windows from the facades. All the windows were visually assessed initially and tested for timber decay using a bradawl in 12 locations for each window. Window heads were representatively examined especially in vulnerable areas. In the workshop various types of sash and frame repairs were being carried out including re-puttying, removal of paint and the application of new paint finishes. Strengthening of top sashes was being undertaken using a bespoke stainless steel bracket specially designed to accommodate the sash horn detail.

From the scaffold the group were able to see brick repair works and repointing in progress. The hotel features four different types of brick – yellow C19th brick on the



Scaffolding on Kildare St., showing completed repointed façade with wigged pointing.

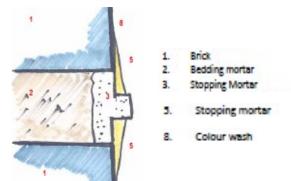


Large sash in on-site joinery workshop

Kildare Street façade, red C19th handmade brick on the St Stephen's Green façade, red machine-made early C20th brick on the top floor and 1950's wire cut red brick on some later annex buildings. The brickwork of the main facades on St Stephen's Green and Kildare Street is being repaired and re-pointed. Some bricks will be replaced.

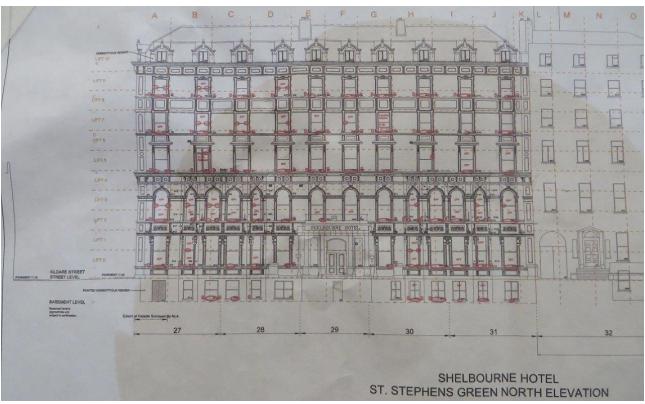


Wigged re-point above. Technique diagram below.



Ref: Wig/Tuck A Research Project on Historic Pointing Techniques & Facades Finishes in Dublin Shaffrey Assoc. Architects, Dr.Gerard Lynch & Dr.John Montague

## **Building Limes Forum Ireland**



The re-pointing style was selected based on historical research and material evidence and is a wigged joint. This is a joint where the base lime mortar pointing is formed with a slightly proud centre ribbon and a red 'wig' of colour to match the brick is applied to the rest of the joint to give the overall effect of a fine joint.

The group also saw repair works completed to the dormer windows which included structural repairs to the overall structures and frames, new windows to more closely match the original design and new lead work and flashings.

#### The BLFI members would like to thank Dermot Collier & all the project team members for facilitating this visit. Project Team: McCarthy (Project Management); Alastair Lyndsay (Conservation Architect); Noel Larkin (Chartered

Surveyor); Barrett Mahony CE (Structural Engineers); McFarlane (Cathodic Protection); Acol (Main Contractor)





Left: Moulds for Roman cement casts. Above: Turned out Roman cement casts, drying before being prepared for fixing

The Newsletter of the Building Limes Forum Ireland Edited by Oiseen Kelly 58.South William St. Dublin 2.Company No. 408076 Charitable Status 16338

Volume 2 Issue No 2 February 2016 Page 5 www.buildinglimesforumireland.com

# **Building Limes Forum Ireland**

### The Tiling Technique - A 'conservative' or 'honest' repair of a 15<sup>th</sup> century tower house, Clonmines, Co Wexford

by Ivor McElveen

Ivor McElveen Associates, Historic Building Consultants and Conservation Engineering Services, recently used the *Tiling Repair Technique* during a recent phase of conservation and stabilisation works at the 15<sup>th</sup> century tower house, known as the Black Castle, Clonmines, Co Wexford.

The tower house had experienced loss of cut stone comprising the window frames at some of the openings as well as further unravelling of adjoining rubble masonry. This resulted in the destabilisation of the surrounding masonry with risk of structural failure and further collapse. Due to a lack of information as to what precisely constituted the providence and design of the original cut stone and because of severe budgetary constraints, replacing the missing cut stone by replication was not practical and any such work would have been conjecture. Rubble masonry build-up of the void, caused by the missing vertical cut stone, missing lintels and cills, would have been archaeologically and architecturally incorrect. It would also have been structurally unsound. What was required was an insertion that would provide the same or similar structural support as the missing cut stone, at the same time, looking reasonably compatible, albeit an obvious repair.

After careful consideration of the overall conservation philosophy to be adopted, taking cognisance of the constraints, the tiling technique as advocated by the Society for the Protection of Ancient Buildings (SPAB) was chosen as the most suitable repair method.

The photographs (over) illustrate the use of local thin flagstone as a substitute for tiling; this provides structural columns in lieu of the original cut stone creating the window frame and gives the desired structural strength. The lintel support was created by cantilever detail. The insertion created is totally reversible and can be replaced with original material should funds and information become available. The advantages of this technique are that the necessary structural support is provided, the new materials which (easily identifiable) are sympathetic to the existing structure, and records of their placement and composition have been retained so that future repair materials can be repeated or modified. It is a most cost effective, workable, reversible honest repair. The *Tiling Repair Technique* has been widely used in the UK at Guilford and Wolvesey Castles (Winchester) and on deteriorated limestone in King Herod's Northern Palace, Masada, Israel.

It has also been used more recently on All Saints' Church, Ockham, Surrey, as shown over.

Since the original fallen cut stones were missing with no evidence as to their form, in line with the adopted conservation philosophy, the tiling repair technique with grey slate and traditional lime mortar was used to consolidate the opening. The flags were cut and fitted (slightly recessed from profile of original stonework) without disturbing existing stones and provided independent structural support as would have been provided by the original cut stone frame.



Mortar used throughout was a hot lime mix of 1:1:6 : Clogrennane kibbled quicklime: NHL 3.5: Wexford sand with aggregate to match existing. This 3 to 1 mix resulted in a 2:1 after expansion due to slaking quicklime.

The exception was the flaunched capping when 2:5 : NHL 3.5: Wexford sand + 5% by volume of magnesium stearate as a water proofer was used.

# **Building Limes Forum Ireland**



Many of the cut stones which would have framed the largest window on the western elevation were missing and required replacing or consolidation to prevent further loss, structural failure or collapse.



All Saints' Church, Ockham, Surrey. Grade 1 listed (Doomsday Record) known worldwide through its association with the eminent Franciscan theologian, philosopher and political theorist, William of Ockham (c.1285 - c.1349)

Tiling Repair Technique replacing missing original stone quoins.

# **Building Limes Forum Ireland**

**Russborough Lime Burn** July 15<sup>th</sup> - 19<sup>th</sup> 2015 by Lisa Edden

The story very much followed the tasks outlined in the email notices. So I have been very economical with the writing of this article and have just pulled out the relevant emails from May- July last year, sent out to the Lime Kiln volunteers, and added the odd note!

### 2015-05-27 Lime Kiln - pot lined - Lets burn it 4th July 2015

So it's done! And a big thank-you to Kevin Jordan of Limeworx. Kevin and his hand Anthony were at the kiln yesterday and put a coat about 10-20mm thick of fireclay and grog onto the inside of the pot, Kevin pushed it back this morning and he and I will take look over the next few weeks to see if it needs some more pushing back.

Kevin said it went on well, even if the end result isn't particularly pretty, and he was delighted with the material as a plaster (50% fire clay and 50% grog – crushed fire bricks). It needed very little water, less water giving them a great product. So book the date now, everyone, to come and see it burn 4<sup>th</sup> July 2015!

### 2015-06-20 Lime Kiln - Michael Wingate - Small Scale Lime Burning

### (The email had numerous pdf's from Small scale Lime burning attached!).

Dear Lime burners. Here's some reading homework. I'm assuming that we will have a grate and will treat this burn as an Intermittent fired mixed feed kiln.

### 2015-06-23 Lime Kiln – Burn date now 18<sup>th</sup> July 2015

Dear All. For various reasons not least the fact that our erstwhile Lime kiln repairer and the man with the most knowledge is laid up with a broken femur – GET WELL SOON STAFFORD—we have switched the Burn date to 18<sup>th</sup> July. Ed Byrne will now be our leading lime burner with many keen assistants alongside. What we need now are volunteers to help with all these processes. Thank-you to Joe Kirwan and Eoin Madigan for putting their hands up very promptly. Anyone else keen to help during any part of the works please do get back to me. There are jobs for all and hopefully a lot of fun and interest to be had

Programme:-

<u>Period 30<sup>th</sup> June – 10<sup>th</sup> July</u> install piece of wrought iron as supplied by Michael Calnan Blacksmith. This forms part of grate at base of kiln - we need stonemason with small bucket of lime mortar for this. At same time thoroughly inspect kiln to check rodding eye unblocked and site secure. So we just need a few people to team up for say two hours one evening



Russborough Lime Kiln, up and running

<u>Wednesday 15<sup>th</sup> or Thursday 16<sup>th</sup> July</u> light tempering fire using some of ash wood beside kiln to warm kiln through. We need 5 -7 people to load and light. At same time I will start drawing water to the water tank as it is currently empty.

Friday 17th July 10.00am - 5pm load kiln.

Some fuel supplies being donated by Eoin / Joe & others on site in quarry including limestone cobbles for burning. So people with 4x4 pickups or hitches and trailers and the odd wheelbarrows welcome and also hands to load materials. There is also general tidying up to be done etc so bring your work gloves, high-viz vests & get stuck in. We had serious help this day – Thank-you all

#### Saturday 18th July - THE BIG DAY

Very early light kiln – as early as possible depending how well loading has gone the day before.

Continue tidy up while people gather – good time to come and find out all about what has gone on.

Constant tending of the kiln to ensure draw correct and burn going OK.

(This is where we will especially miss Stafford and will be relying on Ed's experienced eye)

In fact another Ed = Eddie Farrelly was on hand from 6am to late to mind the kiln through the whole burn

Hopefully draw out the first quick lime from this kiln in more than 65 years from 4pm.

There will be BBQ food and other food to purchase from the café on site.

Or bring a mug and a tea bag and have a cup of tea down by the kiln.

We will finish up in the main about 6pm. However there will be attendance at the kiln late into if not all of Saturday night – This will not be a party! but to ensure all is safe.

Thank-you to Eoin Madigan and Seamus May for carrying out this duty, staying until the early hours and allowing me away home to a proper bed.

## **Building Limes Forum Ireland**



Eddie Farrelly, Eoin Madigan and Michael loading

#### Sunday 19th July

Attendance to clean up and make sure all quick lime bucketed safely and off site. Attendance the next day was primarily myself and Eddie Farrelly but there was little to do as it was too hot to touch.

#### 2015-07-20 Lime Kiln – We burnt

Dear All Lime Kiln Volunteers and Donators

Hopefully I've managed to get all 100+ of you volunteers & donators on the bcc list here. We have done it! With great help yet again from some very enthusiastic Volunteers and also Stafford on the end of the telephone giving well timed crucial advice - THANK-YOU ALL SO MUCH. We tempered the kiln Thursday, loaded Friday with approx. 3 tonne Limestone and 2 tonne timber and lit it Saturday 6.30am and minded it all day and night. We had visits all Saturday afternoon from 1pm to 6pm and again that evening - we didn't count but I'd say at least 60 people (probably a lot more) visited to see this momentous occasion

23 hours later it looked like this - this is the stone glowing, most of timber burnt out at this stage. Still at over 350 degrees Celsius (probably more like 600°C) at



All hands on deck to load the Kiln

4pm Sunday. By Tuesday we hope that the kiln and contents will have cooled down enough and also the wind will have died down a bit. We propose to draw the lime (hopefully all dissociated and not too much limestone!) out sometime from Tuesday afternoon to Thursday afternoon. If you are particularly interested in this part please contact me. I hope to gather all photos over the next few days and will set up a separate Dropbox of the burn from the re-build photos. Full details of the whole process will form part of a newsletter article at a later date.

#### THANK-YOU ALL AGAIN. Watch this space for Dropbox links etc.

Removal and bucketing of the quicklime was carried out by Kirwan Contactors with attendance from Ed Byrne Wednesday 22<sup>nd</sup> July when all had fully cooled. The Dropbox of photos of the burn can be found at

https://www.dropbox.com/sh/fwh5miwodujxc7a/ AAAigu9tOZYnTGSDpj9nSuYRa?dl=0

That pretty much how it went, as you can see in the photos and what a good time we all had.

The only health and safety issue was someone tripping over a wheelbarrow during the loading process!



The Newsletter of the Building Limes Forum Ireland Edited by Oiseen Kelly 58.South William St. Dublin 2.Company No. 408076 Charitable Status 16338



Far left: Lisa Edden & Eddie Farrelly tending the burn & above some of the visitors, watching the burn

Volume 2 Issue No 2 February 2016 Page 9 www.buildinglimesforumireland.com

# **Building Limes Forum Ireland**

### The Hot-mix Solution to Killahara Castle

Killahara is a tower house situated in Dovea about 4 miles from Thurles in County Tipperary. It was built for the O'Fogartie clan in the mid 1500's and passed to the Purcells who were dispossessed as forfeiting Papists in the late 1640's. The roof was removed at that time. In the 1850's a partial restoration was attempted followed by another in 1903, all to be destroyed by a fire set by Black and Tans in 1921.

It was an abandoned ruin when the present owners took possession in 2006. The task they set themselves at that time was to restore the castle as a fine dwelling while conserving the original building including the two subsequent restoration attempts.

The tower house was generally structurally sound with the stone work including the stairs in a stable condition. The necessary Planning Permission and Ministerial Approvals were successfully sought and the roof, floors, fenestration and services were reinstated, allowing for additional habitat improvements. This work was undertaken by Patrick Noel Ryan of Heritage Construction, with Ivor McElveen Associates, Conservation Engineers, acting as consultants.

At the time of undertaking the works (2008) external render was not contemplated although there was a great deal of moisture in the building after being roofless for a few hundred years.



Furthermore, the stonework was largely sound and there was no obvious evidence of there ever having been rendering. This led to the hope that there would not be a problem with dampness once the building had its roof back on, and had been given a year or two to dry out fully. And indeed, there was a great improvement.

By 2013, having been used for some time as holiday accommodation, the building was by now a very comfortable residence. The dampness had indeed receded substantially. But it was not completely gone and it was clear that it was not going to resolve itself completely. There were times when some sections of walls, particularly the SW corner, were exceedingly damp causing some crumbling and flaking of the whitewashed inner surfaces.

The owners had been resistant to the idea of applying an external lime render or harling because of the fine stonework. But it was impressed on them that as most, if not all, of these buildings would have had external render at one time, a hot-mix lime harling solution was proposed. The idea of using native lime and of resurrecting the original hot-mix lime masonry craft had a big influence on the decision.

The lime specifications and methodologies developed during Phase I of the HLM Project were adhered to, being basically the proven Scottish experience of creating a feeble hydraulic mortar by gauging nonhydraulic quicklime with an NHL.

Exemplar panels with various mixes using particular sands and limes to see what worked best were prepared. When all were satisfied with performance and texture work commenced, and over a period of approximately 8 weeks the entire building was completed.



Photos showing condition before extensive works in 2008

The Newsletter of the Building Limes Forum Ireland Edited by Oiseen Kelly 58.South William St. Dublin 2.Company No. 408076 Charitable Status 16338

# **Building Limes Forum Ireland**



Photographs of the completed external render above & below the improved internal walls and main door surround detail

#### Noel Ryan reports as follows, on the process he undertook:

We started at Killahara Castle in early September preparing the walls to take the harling by cleaning down and weeding, filling out joints as reauired.

Our mix for our picking up/tack coat was 1:1:6. One NHL lime 3.5; one quick lime (supplied by Clogrennane Lime ), and six course sand; 3 mm coat. This was left a good 3-5 days curing, protected and maintained.

Our straightening coat or scratch coat was 1:1:7 as we found the 1:1:6 approach on this coat was a little too lime rich and caused cracks while drying out; 12 mm max coat. We gave this coat a rough brush leaving an open texture to grab the finish coat .Our finish coat was applied within a few days of applying the straightening coat, while still green. The mix for our finish coat was 1:1:3:3 one NHL one guick lime 3 course sand and 3 8mm down chipping; 15 mm max.

We found the hybrid hot-mix lime mortar a pleasure to use and if a mortar generally feels good to the mason, it usually feels right on the wall. The result has been most satisfactory and performance of the render excellent, despite the time of year and adverse weather.

The owners are very happy with the result. The interior of the building has continued to become very noticeably drier in the months since completion. This has been achieved through the winter of 2015, one of the wettest on record. The aesthetics too are very pleasing. This render is not garish and does not draw frowns from neighbours. It blends in with the building and the landscape it arose from. The owners would highly recommend the process to others.







Volume 2 Issue No 2 February 2016 Page 11 www.buildinglimesforumireland.com

## **Building Limes Forum Ireland**

### The Lime Jamboree, A BLFI and National Heritage Week Event sponsored by

Wexford County Council By Yvonne Doyle & Ivor McElveen January 2016.





## Held at the Irish National Heritage Park, Ferrycarrig, Co. Wexford on the 28<sup>th</sup>, 29<sup>th</sup> & 30<sup>th</sup> August 2015.

In celebration of National Heritage Week 2015 the BLFI presented a Lime Jamboree, a three day event held at The *Irish National Heritage Park*, which was sponsored by Wexford County Council.

A major attraction of the Lime Jamboree was the building of a medieval piggery using a replica medieval mortar mixer. As hot-mix mortars were used throughout, the event was accompanied by a Demonstration Workshop under the auspices of the HLM Project at which over 70 attended. Both the piggery, with piglets in residence, and the medieval mortar mixer are now on permanent display. The Irish National Heritage Park proved to be a very appropriate and delightful setting for the event.

National Heritage Week is celebrated annually in Ireland; it is a part of European Heritage Days which is celebrated in over 40 European countries. In 2015, 24 countries agreed to come together to share a common theme to help raise the profile and awareness of the value of *Industrial and Design Heritage* to people across Europe. It is the largest cultural event in Ireland with almost 1,000 organisations and individuals involved in hosting special events. The week attracts an annual audience of approximately 400,000 people and has awareness nationally at 52%. As such it was considered an ideal time to host this special event and a very appropriate medium to promote the HLM Project as well as a very practical and realistic introduction of hot-mix lime mortars.

The event came to fruition at the request of Wexford County Council, reflecting their aspirations for education and knowledge. It was also a result of their very generous sponsorship.

The Lime Jamboree was principally to better inform the public on work practices surrounding heritage structures. The choice of location at The Irish National Heritage Park was a no brainer given its facilities, activities and most importantly, the recent installation of Pat Hickey's medieval mortar mixer. The medieval mixer was in perfect keeping with Ireland's Industrial and Design



Heritage, which was the theme of Heritage Week 2015. Indeed, the revival of authentic lime mortars made from native materials, and the craft and skills used in their making, was well illustrated at the Lime Jamboree. Industrialisation often results in the loss of a craft, a loss of a skill, loss of a social value and a way of life, an irretrievable loss to posterity, as Minister Brendan Howlin pointed out in his opening speech.



Cllr George Lawlor, Cllr Ger Carthy(Mayor of Wexford), Minister Brendan Howlin, Ivor McElveen, Diarmuid Houston & Tony Larkin (Respectively Head of Planning & Director of Services, Wexford County Council)

Friday, the first day, was specifically for masons and specifiers (architects, engineers, surveyors and others) with a Workshop Demonstration modelled on the successful BLFI – HLM Project events held at Drimnagh Castle. The Workshop Programme was approved for CPD accreditation from the RIAI, Engineers Ireland and the Heritage Contractors.

The Saturday & Sunday were dedicated to the Public with a *Show* & *Tell* which included a short & entertaining theatrical style informative performance by actors in period costume accompanied by demonstrations from practitioners. These were held *on-the-hour-every-hour* followed by a visit to the building of the medieval piggery, which was being built by our team of masons using traditional techniques, tools and materials, led by Pat McAfee.

# **Building Limes Forum Ireland**

Visitors learned about daily life in the 10<sup>th</sup> Century and even got to try on the armoury of the day and meet the piglets awaiting their new home. A scribe was onsite in the Monastic Scriptorian recording the week-end's events. There were many other activities for the children to enjoy in the park including the other ancient sites, archery, adventure playgrounds, forest trails and much more besides.

Over the entire week-end, as an example of traditional masonry work, the group of volunteers built a medieval piggery.

#### MAIN OBJECTIVE OF THE EVENT

The main purpose was to introduce and demonstrate the preparation and use of traditional hot-mix lime mortars and plasters to masons, specifiers, those involved in building conservation and also to the general public. The event was also to publicise the HLM Project, a BLFI practical research initiative into the use of indigenous quicklime to produce hot-mixed mortars which are now having a positive impact on the conservation repair of our heritage structure.

Rarely acknowledged earth mortars were also demonstrated, with and without the use of quicklime, which are to be found in so many of our old buildings in walls, floors and even plasters.

#### THE PEOPLE

Brendan Howlin TD, Minister for Public Expenditure and Reform officially opened the Lime Jamboree and was accompanied by Michael Starrett, CEO of the Heritage Council.

Wexford County Council representatives who attended event over the week-end were; Cllr. Leo Carty, Mayor of Wexford, Tony Larkin, Director of Services, Diarmuid Houston, Head of Planning, Cllr. Tony Dempsey, Cathaoirleach and Cllr George Lawlor.

#### LECTURERS / DEMONSTRATION TUTORS

Nigel Copsey, BLF UK & Earth Stone & Lime Company Phil Brown, BLF UK member & Cornish Lime Company Pat McAfee BLFI Member, Stonemason & Author Pat Hickey, BLFI member & Stone Mason Ivor McElveen, BLFI Member & Conservation Engineer Kevin Holbrook, BLFI Member & Plasterer Roy Thorpe, BLFI Member & Plasterer Paddy Byrne, BLFI Member & Plasterer Lisa Edden, BLFI Chair & Conservation Engineer

#### **EVENT ORGANISERS**

Ivor McElveen, Yvonne Doyle, Patrick Hickey, Pat McAfee & Maura Bell, INHP Manager & the INHP team. Extracts from the Opening Speech by the Minister:

Indeed, the revival of authentic lime mortars, made from native materials, and the craft and skill in their making, is to be welcomed. For industrialisation often results in the loss of a craft, a loss of a skill and a way of life to posterity. It is perhaps a paradox of our industrial heritage that it has often been created at the expense of our crafts. This has been nowhere more evident than in the building industry, and the Building Limes Forum Ireland is to be commended for pursuing the revival of hot-mix lime mortars and putting on this most educational demonstration for us today. It is a prime example of living heritage and the chosen venue of the Irish National Heritage Park is most appropriate. It has not escaped my notice that the revival of indigenous and inexpensive hot-mix lime mortars results in import substitution and in job creation - two of the driving economic principles of this Government. Indeed, just because the Normans built many of the castles and cathedrals we see around us. it does not mean that we are obliged to import building limes from France and elsewhere to repair them! This most entertaining re-enactment of mortar making is heartily in keeping with celebrating our heritage with a Jamboree of merrymaking, which means a festive gathering of speeches and entertainment'.

South East Radio broadcasted live from the park for part of the day on Saturday and The Heritage Council's Heritage Week film crew visited and documented the event on the Sunday. Follow this link to see video footage of event from Amelia's, The Heritage Council https://www.youtube.com/watch?v=V9WJxnRM\_vE

#### THE DEMONSTRATION WORKSHOP The days programme included:

A H&S briefing by Yvonne Doyle; a discussion on the HLM Project and Phase II by Ivor McElveen; an examination and discussion of the materials involved in hot-mix lime & earth mixing by Nigel Copsey and Phil Brown. The afternoon consisted of practical demonstrations of stonemasonry and bricklaying using various hot-mix lime mortars, earth mortars & plastering led by Pat McAfee, Nigel Copsey, Kevin Holbrook, Roy Thorpe and Paddy Byrne. The demonstrations were done in tandem with input from specifiers & others involved with the Hot Lime Mortar Project.



The Newsletter of the Building Limes Forum Ireland Edited by Oiseen Kelly 58.South William St. Dublin 2.Company No. 408076 Charitable Status 16338

Volume 2 Issue No 2 February 2016 Page 13 www.buildinglimesforumireland.com

# **Building Limes Forum Ireland**



Plastering demonstrations at Fridays workshop by Kevin Holbrook while Helen Hossack looks on.



Minister Howlin giving Pat Hickey's Historic Mortar Mixer a go & laying stone with a hot-mix lime mortar



The Piglets (minus one escapee!) with Yvonne Doyle, Tony Larkin (Wexford County Council) Minister Brendan Howlin and Cllr Ger Carthy (Mayor of Wexford)



Ivor McElveen, Minister Brendan Howlin, Maura Bell (INHP Manager), Cllr Ger Carthy (Mayor of Wexford), Cllr George Lawlor & Michael Starrett (CEO of The Heritage Council)



Volunteer and expert stone masons at work with Nigel Copsey to the left, Pat McAfee being camera shy went missing!



And the public came to see what all the fuss is about...

#### CONCLUSION

The Heritage Week Lime Jamboree at the Irish National Heritage Park proved a great success and was very well attended over the course of the whole week-end by the general public. It was a great occasion and fascinating for all to see how building was done in medieval times, and particularly the making of the mortar for the Piggery from which one piglet escaped to the delight of many children! There was also an excellent and well attended Demonstration Workshop on hot-mix lime mortars and much camaraderie, which the BLFI is all about!

# **Building Limes Forum Ireland**

### Hot-Mix Lime Mortars Workshop 2015 Drimnagh Castle

Newsletter

On June 4th 2015 a day long workshop was held in Drimnagh Castle on Hot-Mix Lime Mortars and included an Earth Demonstration Workshop. This was a follow on from the hugely successful Hot-Mix Lime Mortar event also held in Drimnagh the previous Autumn, giving those who missed out another chance to see and hear all about the HLM Project. On the day Ivor McElveen launched the HLM Report, concluding Phase 1 of this important research project.



The morning session commenced with a short briefing in the Great Hall moving swiftly to the courtyard where the various demonstration areas were all set up. The day comprised a series of practical demonstrations with the assistance of a group of stonemasonry, bricklaying & plastering instructors expertly led by Pat McAfee and Kevin Holbrook. This was in tandem with the input of specifiers & others involved with the HLM Project. We saw hot-mix lime mortar being used for building stone, with hair for internal plastering backing coats, gauged with natural hydraulic lime. Gauged hot lime mortar for use as an external render was demonstrated as was an earth mortar gauged with quicklime.

All in all another informative event which generated much discussion on the day and afterwards.



Many thanks to Willie Tynan who photographed the event. This selection is well representative of the day which stayed dry and fine, and includes event organisers and demonstrators; Lisa Edden, Ivor McElveen, Pat McAfee, Yvonne Doyle, Kevin Hollbrook, Eddie Farrelly, Damien Condon and Eoin Madigan





Volume 2 Issue No 2 February 2016 Page 15 www.buildinglimesforumireland.com

# **Building Limes Forum Ireland**



Walking Tour 2015 - Limerick City

The annual Walking Tour took place in Limerick City last June, hosted locally by Tom Cassidy, the Conservation Officer for Limerick City and County Council. Thanks are also due to Emma Gillece from the Limerick Chapter of the Irish Georgian Society who joined us on the day. This free informal annual event for members and their guests always makes for an interesting outing and with an unexpected break in the weather we got to see Limerick at its best, in the sunshine.

We started at the gate to the Romanesque door of St. Mary's Cathedral, Merchants Quay where Tom set the scene with a brief history of the development of the early mediaeval settlement through to the laying out of the Georgian city beyond. We started towards the Georgian 'Opera' quarter where we viewed stabilisation works and some of the recently 'saved' buildings. At Toms request the U.L. School of Architecture kindly opened their FAB LAB in Rutland Street for us where we were met by architect Seamus Bairead. It was inspiring to see their fantastic 3-D printed model of the city, along with many exhibits and proposals exploring ways the city should and / or could develop.

We walked on though the Georgian city stopping to discuss repairs and revisions to 77 O'Connell Street and 7 The Crescent, meeting the architect Declan Gilleece, along the way. Strolling on to Pery Square and past the Peoples Park and we were lucky enough to gain access to 6 and 7 Mallow Street, two interconnected town houses undergoing major works. These buildings recently changed hands and were being transformed from a warren of bedsits, in a vacant and dangerous condition, into high quality residential units. Not for the faint-hearted, it was good to see life being brought back into these great houses which have managed to retain many of their original features and character, against the odds. Wandering back through the Saturday shoppers, via the "bows' with their street art and after managing to take in Fla's Art Decco pub interior, we finally rested. We lunched in the Hunt Museum, regarded as the most distinguished 18th century building in the city. Originally the Customs House, it is an elegant Palladian-style building designed by the Italian architect, Davis Ducart, in 1765, becoming a museum in 1996, after extensive works by the OPW. Ordinarily the walking tour ends at

this point but Limerick and Tom had more to offer, so taking to the road (in cars!) we got a glimpse of the greater city, taking in the Tait Drapery Factory & Mungret College, both historic building complexes. The repair and re-use of these vacant buildings should contribute greatly to the social and urban fabric of their respective areas. Finally, many thanks to the members and their guests who turned up for this hopefully memorable day.



### Mud Mortar in Malawi



In the space of five and a half days eight pupils from the 4th and 5th Years, High School Dublin, built mud brick walls up to roof level of three houses, and completed the roof and floors of another, in the village of Kuti, District of Salina, Malawi. Working with local builders within the community, they were on a Habitat for Humanity project whose motto is; 'a hand up, not a hand out.' The houses, which have a lifespan of eighty years, can accommodate a family of up to twelve people. They are given to the poorest families in the village with the youngest member becoming the legal owner. The materials used for the walls are red mud bricks with mud and water as mortar, all sourced and made locally, and constructed with double brick common bond. This is vernacular parexcellence with an international flavour. No Planning Permission or Building Regulations, no fuss, no bother. For Health and Safety they used common sense. If they had had lime, they would have used it. A community got much needed housing and young people experienced hands-on practical building experience, team work and had a fantastic time. www.habitatireland.ie



Cia Meagher & Clara Devine laying a new floor



### DCT finds a new home on Upper Ormond Quay By Graham Hickey

After 15 years based at 4 Castle Street, Dublin Civic Trust has reactivated its core role as a revolving building conservation trust by moving home and taking on a fresh building restoration project at No.18 Upper Ormond Quay. The premises faces directly onto the river Liffey at the corner of East Arran Street and is known to many as the former Watts Brothers gun makers and fishing tackle suppliers. The building is one of the last intact merchant houses on the guays, with an arcaded ground floor shopfront and living accommodation upstairs. It was constructed in the early 1840s as a wine, tea and spirit merchants while incorporating a much older c.1760s house to the rear on East Arran Street. The building will be formally launched later in the year when essential conservation works, including structural stabilisation, gets underway. The aim of the project is to revitalise public and professional interest in the built heritage of the city through research and investigation, active demonstration of traditional skills, as well as regular site access and educational seminars and lectures. The process will be documented online and via regular media engagement. The support of the building conservation sector and beyond is fully invited and much appreciated. The Trust looks forward to launching the project later in 2016.

With DCT sadly no longer located at Castle St., the BLFI wish them the very best with their new building and thank them for the many years they have provided us with a home.



Photo reference: www.buildingsofireland.ie/niah

### BLFI Bursaries 2014-2018

The application must have an educational nature, practical or theoretical, and must relate to the use of lime. For example it could be used to attend a specialist course, either short-term or long-term, be theoretical and/or practical. It could also be used to undertake a specialist internship or a practical experience master class, and so very flexible in remit. The result should lead to better qualification and/or experience and a better understanding in the use of lime in construction. It should be relevant to the applicant's work or future direction.

#### Bursary

Up to  $\underbrace{\epsilon}2,000$  will be available per annum for a period of 5 years from 2014.  $\underbrace{\epsilon}10,000$  will be set aside as a special fund so the bursary will be guaranteed for this period. It is important to demonstrate to the Charities Office that the BLFI have a commitment to relevant specialist education in the broad sense, not just on a year-to-year basis. There will be two bursaries of  $\underbrace{\epsilon}1,000$  each although the Selection Committee reserves the right in a special case to award one bursary of  $\underbrace{\epsilon}2,000$ . The process will be reviewed by the BLFI Committee after a 3-year period. If applications are not compliant with the terms of the bursary, it may not be awarded in a particular year. In such cases any monies will go back into the fund for future bursaries.

#### Who can apply?

All members of the BLFI with at least 2 years' membership. In the 5-year period a bursary cannot be awarded more than once to the same person.

#### What does it cover?

The bursary must be used to cover course fees / internship costs, travel & accommodation.

#### Timescale for application

Application by 1<sup>st</sup> April of the relevant year. A decision by the Selection Committee will be made by the 30<sup>th</sup> April. The Selection Committee will be made up of the full BLFI Committee and 2 externs.

#### **Application Submission**

Successful applicants must submit a report, presentation, organise a demonstration or as otherwise agreed upon completion of the proposal for which the bursary is awarded.

#### **Application Form**

There is no application form as such. Please make a written application detailing the proposal with a one page CV including contact details. Canvassing the Selection Committee with disqualify any application.**info@blfi.net** 

# Newsletter Building Limes Forum Ireland



Comments and articles in this newsletter do not necessarily reflect the views of the board or editor.

### 2016 Calendar of Events

March 3 <sup>rd</sup>	Lime Slam Helen Roe Theatre RSAI 63 Merrion Sq. Dublin
April 7 <sup>th</sup> - 8 <sup>th</sup>	European Network of Building Lime Forum (Inaugural Meeting) Bologna Italy
April 14 <sup>th</sup>	BLFI Testing Workshop & AGM with Guest Speaker (To Be Confirmed)
April 12 <sup>th</sup> - 13 <sup>th</sup>	Irish Walled Towns Network Maintenance Course Drimnagh Castle, Dublin 12
May 7 <sup>th</sup> - 8 <sup>th</sup>	Irish Georgian Society Traditional Building Skills Weekend (Details pending)
May 11 <sup>th</sup> - 15 <sup>th</sup>	Mulranny Stone Workshop Mayo County Council (Details pending)
June 11 <sup>th</sup> / 18 <sup>th</sup> /25 <sup>th</sup>	Walking Tour Walled City of Derry (Details pending)
June 17 <sup>th</sup> - 19 <sup>th</sup>	Tir Chonaill Stone Festival Glencolmcille Co. Donegal
July 19 <sup>th</sup> - 21 <sup>st</sup>	Earth Building UK & Ireland Clayfest 2016 Solway Cumbria
August 20 <sup>th</sup> - 28 <sup>th</sup>	National Heritage Week (Details pending)
September 2 <sup>nd</sup> - 4 <sup>th</sup>	BLF Annual Conference & Gathering Liverpool

### **Other Events of Interest**

**Conserving your Dublin Period House course with Walking Tour - Spring 2016**. (IGS & DCC) Experts present a series of talks on the history & significance of Dublin's period houses & practical advice on their conservation. For all periods & types of houses, providing an A to Z for their care and conservation. Talks commence on Tuesday 1st March 2016, and continue every Tuesday for 12 weeks, from1pm to 2pm, in the Helen Roe Theatre, RSAI, 63 Merrion Sq, Dublin 2.  $\in$ 15 each payable at the door, or booked in advance at a reduced rate of  $\in$ 125 for all talks.

### What is Building Limes Forum Ireland?

The Building Limes Forum encourages expertise and understanding in the use of building limes. It aims to achieve this goal by:

- exchanging, collating and disseminating information, through publication of a regular journal and by holding meetings and conferences;
- encouraging practical research and development through field studies, trials, monitoring and analysis;
- encouraging development of appropriate industrial and craft skills and techniques;
- educating building professionals, builders, conservators, craftsmen and women, and property owners in the appropriate use of lime in building through demonstrations, publications and courses;
- developing contacts with institutions and individuals outside the forum and in other countries that have relevant experience or knowledge.

### **Communicating With Your Forum**

If you would like to respond to any of the topics on this or future newsletters or if you would like to get involved please contact us by post or by email on **info@blfi.net** 

### **Buildings Limes Forum**

The Building Limes Forum was established in the UK in 1992. The Irish regional branch was established in 1999, and formally constituted as the Building Limes Forum Ireland in 2005. It is affiliated with the BLF UK. It is a voluntary organisation with no commercial ties, the majority of members being actively concerned with the repair of historic buildings and some in new build. The Forum acts as an information network, and publishes newsletters and an annual journal of the BLF.

### Membership

The BLFI is currently looking for new members. Membership of the Building Limes Forum offers:

- the opportunity to participate in conferences, courses, workshops, demonstrations and visits organised by the Forum;
- an informal network of contacts that is prepared to share information and to discuss matters of general interest to members;
- a means of supporting the stated aims.

An application form for membership of the BLFI can be downloaded on **www.buildinglimesforumireland.com**