Fieldtrip 1. November - December 2012

Fieldtrip 2. March - April 2013

Fieldtrip 3. October - December 2013

Fieldtrip 4. April - May 2014

Fieldtrip 5. September - November 2014
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new construction prohibited, repairs regulated

Tomb of Diwani Begum

Mosque of Diwani Begum
Intentions for Fieldtrip 1

These intentions were modified during each fieldtrip: refer to the front of each field trip diary to see the progression of ideas.

Question 1. What are the relationships between architectural remains and culture at the scale of building, neighbourhood and Tajganj? (consider construction, maintenance, use, symbolic value, archive of understanding).

1a. How does this build up depth in the urban order?

Intention formed from desktop study:
Through conducting collaborative surveys, interviews and making exercises:

1. Record the ways that the existence of a listed ‘monument’ affects its surrounding area.

2. Record the ways that the existence of an unlisted ‘monument’ affects its surrounding area.

3. Investigate how and why specific buildings have been repaired and modified over time.

4. Find out which local buildings are important to residents.

Produce:

1. Conservation “vocabulary” - set of available materials and techniques in the area.

2. Maps of Tajganj at different scales, picking out ‘historic’ fragments of importance.

3. Building studies (plan, section) of listed and unlisted buildings relating to community activity.
Question 2. Compare ASI, CURE/RAY, local opinions about important culture and the architecture underpinning it, or vice versa.

*Intention formed from desktop study:* Through conducting collaborative surveys, interviews and making exercises:

1. Investigate conflicts between the slum-upgrading programme and Agra’s heritage protection programme for Tajganj.

2. Find important memories and stories of local residents and compare these to what the ‘official’ heritage protection policies endeavour to protect.

Produce:

1. Comparative drawings of instances where architecture has perceived ‘heritage’ value at area/building scale.

2. Guidance documents for repair of unlisted sites with perceived ‘heritage value’.
Question 3. What are local/collective understandings of the conflicts between various interpretations of ‘heritage value’?

Intention formed from desktop study:
Through holding conservation skills workshops with residents:

Gauge understanding and develop it.

Produce:

Records of event: both material outcome of making and interviews/ discussions with participants.
Sites of “monuments” and “heritage houses” as identified by CURE and talking to owners and neighbours were visited. The owners were asked for permission to survey/photograph the structure.

The history of the building and the area was discussed in an attempt to collect local stories and values to compare to the official heritage protection strategies.

The construction of the building and the maintenance was discussed to try and establish which skills and materials were available or needed to be included in the workshops.

Wider surveys and conversations took place, regarding the surrounding area of the sites to establish commonly used construction materials and methods for work on buildings not identified as having ‘heritage value’.

Surveys and Interviews: Actions
Residents showed me unprotected historical structures that were important to them.
It is difficult to pin down the reasons why the identified sites on the heritage walk have been selected. In reality, there are very few Mughal sites. There are a large number of colonial-era houses and sites, corresponding to the areas outlined on the colonial-era maps as ‘settlements’. Some of these are identified as ‘heritage sites’ in ‘Agra: the Architectural Heritage (Peck 2011)’ and some are not. There is no obvious hierarchy.

Historical information given by residents is contradictory and also patchy. It is hard to trace the specific development of buildings and sites.

Heritage values of both local residents and the ASI are much more unclear than expected, because ‘heritage’ protection has created many more immediate problems to deal with. The ASI are so stretched to make sure that the city’s listed monuments aren’t encroached upon that basic, blanket rules are applied and enforced.

Due to this inflexibility in planning, local residents just try to ‘get by’ with ad-hoc building additions that can accommodate the growing population without drawing attention. The last thing local residents desire is any more buildings being protected under the AMASR Act. This influences the buildings they are likely to draw my attention to.

The labelling of heritage structures and non-heritage structures is considered odd behaviour by some residents who feel there are more pressing issues for someone working with an NGO to deal with. The exercise is not exposing conflicting ‘heritage values’ for this reason. People are not expressing strong opinions about their own idea of
Ad-hoc additions to pre-Independence structures
what is and isn’t an important building (aside from the fact that religious buildings are important) and so in order to try and expose opinions and values. I have decided to approach the subject from a new angle, instead of discussing ‘heritage’ in any way, I discuss prominent shared spaces with residents. What they are for, what their various features are for, whether they flood - and usually from this point I am at least allowed to go and survey these places.

Theme: Time
Gaining trust, building understanding - building commitment to understanding/involvement

Gaining Trust

As an outsider, some people are suspicious of my intentions. I am given little access to houses, and I cannot measure any homes. Worries about whether the information being given to the taxation department (houses are taxed per square metre) or planning authority (because most construction is done without the required planning application approval) limits my access.

Realising that people were not ready to show me their houses, property, or allow it to be photographed or drawn. I have decided to take a new direction with interviews and surveys. It is decided to engage with families to talk about the problems faced by people who own their old buildings, as well as informal conversations about the area generally and the past. Sometimes
Section through meeting in the chai store
this is allowed to happen in the house itself, and sometimes the conversation takes place in the chai store on the bazaar street. From these conversations, I can get an idea of the kind of construction and problems people are finding difficulty dealing with. However, the problem is not a lack of construction knowledge but rather lack of money to use these often more expensive techniques, and lack of knowledge about/faith in the planning system. However, to explore these ideas further. I have decided to go ahead with the conservation workshop on a similarly constructed structure to the houses (masonry, Lahori brick, lime mortar, sandstone).

Issues with interview - a lot of the time, the job of answering questions is either taken or given over to one or two people, often the men in the family. Some people are not confident to speak, write or communicate via drawings.

A longer timeframe has been put on this survey and information-gathering phase of the project because it has been so hard to get adequate information. The field trip could not be lengthened, and it has been recognised this phase will extend across the next field trip, and therefore run alongside the conservation workshop instead of lead up to it.
Well structure chosen for conservation repair workshop
Surveys and Interviews: Reflection on Method

Theme: ‘heritage value’ is a difficult subject to discuss

There was not much overlap in the way history was thought of/remembered between residents and ASI or Intach. If each could understand the other’s point of view, would this foster understanding at city scale?

Theme: Time and Iteration

Gaining trust, fostering understanding - building commitment to understanding/involvement

Cyclical time - the day/week/year has proven an important aspect of neighbourhood to understand. ‘Use’ mapping of the area looking at exactly who and how this relates to commitment (or confusion of ownership) has also proven to be important.

After carrying out informal interviews around the wells, I have decided to spend much more time in places, talking, surveying, building trust, before any further live projects.
“The rules are so strict because the ASI do not trust citizens to treat protected buildings responsibly. The rules are being broken because the value of monuments to citizens appears to be quite low. The rules are hard to enforce because there is not a community interest in significant buildings”.

- interview with a member of staff at INTACH (Indian National Trust for Arts and Cultural Heritage)
Visit to the ASI and UNESCO protected Red Fort in Agra: a mixture of preservation and reconstruction techniques have been used. Curational decisions have also been made, such as the bollard shown far right: a rough edge has been carved on the side facing a preserved part of the fort, while on the side facing a reconstructed part of the structure, Mughal motifs have been used.
Visit to ASI protected Humayan’s Mosque in Kachhpura: palette of preservational techniques observed here is the same as those used at the Red Fort: surkhee plaster (pink Coloured plaster), bare lahori bricks, new red sandstone pieces
1. Shiva Temple
Talk to the Baba, caretaker of the ancient temple at the start of the street, to hear the tales of the past.

Cross the courtyard to the Mughal well: the first of several that you will see on this walk, it quenched the thirst of many a traveller hundreds of years ago.

2. The Bazaar
Historically this market was famous for tobacco, gajak & guddani (a local sweet). It was also a wholesale cereal market, (Anaj Mandi). Look out for more Mughal wells.

3. Shakti Temple
The temple’s unusual mosque-like dome represents a fusion in architectural design. Note the Sanjhi art forms made by young girls on the temple walls.

4. Now enter the historic heart of Bilojhpura.
Experience exquisite architecture and cultural heritage...

5. Mosque of Diwan Ji Begum
This mosque was built for the mother of Muntaz Mahal, and is older than the Taj Mahal. Local women flock to the graves of the renowned Sufi priests Faujaldin and Hazrat Khali Chisti to make a wish for good luck.
Leaflet produced for the proposed Taj Heritage Walk

6. Ancient Courtyard and Historic Houses

Hidden to most brings you to a beautiful community of exquisite houses with intricate architecture. If you get involved with the ongoing festivities held here...

7. Marble Inlay Workshop

The ancient art of marble inlay is still practiced within the splendor of this historic home. Note the detailed stone carving in the architecture.

8. Mandi Flower Market

This flower wholesale market functions at dawn. People from nearby villages sell their flowers to people in this neighborhood who make and sell flower garlands for temples, weddings and home decoration.

In this section of the walk, you will see and be invited to participate in Agra’s traditional livelihoods, such as flower garland creation, shoe making and zardoz...

9. Mughal Tomb of Diwan ji Begum

This is said to be the tomb of the mother of Mumtaz Mahal, Diwan ji Begum, which was originally situated in a spacious garden here. The tomb is octagonal, considered to be sacred.

It is interesting to see the light ducts placed at an angle to deliver light and ventilation to the basement.

10. Flower Chain Creation

Watch out for local crafts such as flower chain creation, shoe making and weaving along this street.

Right: Living Heritage - weaving, marble inlay and pigeon training
Marble workshop, Bilochpura
Weaving and flower garlanding, Bilochnpura and Diwanji ka Mohalla
Map made of identified Mughal and British-colonial structures on the Taj Heritage Walk route
Identified British-colonial era houses along the Taj Heritage Walk route
Identified British-colonial era houses along the Taj Heritage Walk route
Identified British-colonial era houses along the Taj Heritage Walk route
ASI protected Mosque of Diwani Begum (Shahi Masjid) in Biloerpura: palette of preservational techniques is the same as observed at Red Fort and Humayan’s Tomb.
Mosque of Diwani Begum (Shahi Masjid)
Interviews with residents about Mughal and Colonial-era structures in the area
Interviews with residents about Mughal and Colonial-era structures in the area
During interviews with residents, I was shown this newspaper article about the repair of the Tomb of Diwani Begum, and it has photographs of the structure and surrounding area as they were in the 1980s.
During interviews with residents, I was shown this newspaper article about the repair of the Tomb of Diwani Begum, and it has photographs of the structure and surrounding area as they were in the 1980s.
This is the area behind the Mosque of Diwani Begum now that it has been altered by the ASI (compare to previous photographs)
Photograph of the mosque before the ASI altered it
The same mosque since the ASI have altered it
The street level rooms under the mosque used to contain shops that helped to pay for the mosque’s upkeep: according to the ASI’s AMASR Act, shops are not allowed in a Protected Monument so they have been locked up.
Tomb of Diwani Begum in its Prohibited Zone in 2012
Well Repair Workshop: Actions

- Site chosen
- Structure chosen
- Appropriate craftspeople found to lead the workshop
- Participants selected who own pre-independence houses and structures
- Invites given by hand
- Initial repair design drawn to be implemented in the workshop
- Advice sheets created for participants based on survey findings - handed out at workshop
- Formal meeting with repair being demonstrated afterwards
Well Restoration Workshop
Well Repair Workshop: Notes on Resistance and Accommodation

Theme: Thoroughness / inclusion:

It is very difficult to talk to people sufficiently to feel that they would be happy for a ‘heritage’ structure on their property to be subject to a conservation workshop. As yet, an adequate method had not been found to ensure consensus of residents around a government owned ‘public’ space or structure - thoroughness/ inclusion of different points of view had not been achieved.

Theme: Heritage Value and Contentious Space

It is decided that a Mughal or colonial well will be used for the conservation workshop because these are the oldest, most dilapidated ‘heritage structures’ around that are the least contentious (the other choices would be houses or religious sites). They are also constructed with the same materials as the identified ‘heritage houses’ in the area. I have not gained enough trust to work on a contentious structure.

The priest of the local Shiv temple is much more trustful of CURE & myself, allowing a full survey of the temple site, and use of the site for the conservation workshop. He is not worried about tax, planning or state interference, and he is not worried about gaining the support of his temple constituency - they trust him. He sees the conservation of a heritage structure (the mughal well in the garden) as a small part of a larger landscaping programme that he would like as much help with as possible. Accepting that there is now a religious bias to the workshop, I proceed.

Wells within 300m of a listed monument need planning permission from the ASI to repair,
Plan of the Well Restoration workshop: while residents sit in a polite circle near to the well, the mistry and a handful of people interested in plastering gather at the well itself.
whether publicly owned or not. Within 500m of the Taj Mahal is particularly sensitive, and directly beside the Taj Mahal I cannot even measure because permission is nearly impossible to obtain (behaviour in and around the Taj is tightly policed as there is a perceived terrorist threat). This leaves only a few wells available for the workshop.

**Theme: Active Involvement**

Participation - approx. 40 people came to the workshop (a high turnout). However, people sat in a circle formally. There was little interaction with the Raj Mistry (skilled mason), who repairs the well. It is unlikely that the participants have picked up the conservation skills to repair their houses from this workshop.

A Raj Mistry - skilled mason is found locally who has expertise in heritage conservation skills. However, most other participants leave him to do the repair work for this reason. He doesn't teach other people, they are more interested in discussing how heritage affects their lives, rather than the details of repair.

Politeness - participants were extremely polite, and answers to questions appeared to be second-guessing the things I/CURE might wish to hear. It is likely many conflicts were not exposed.

**Theme: Time**

The only time that could be scheduled for the workshop was at the end of my study trip, because of the time of year (Diwali, Muharram). This meant that an iterative programme, or even a follow up meeting to discuss successes and failures was not possible.
The priest in charge of the Shiv temple allows the workshop to take place in the temple garden.
Unfortunately there was no time to repeat and modify the workshop itself. This is a big flaw in the method at this point, especially as people were so polite, and perhaps discussions after the event with smaller groups could have exposed more.
Residents gather in a circle during the workshop
Well Repair Workshop: Reflection on Method

Theme: Thoroughness / inclusion:
The need to develop the idea of ‘inclusion’ from “inclusion-through-selecting-a-cross-section” to creating openness requires an investigation into different techniques for including people in interviews and meetings and also methods of identifying ‘gaps’ where people are being left out.

I aim to start with informal ‘on-the-spot’ conversations next time, before asking those people to invite others for a slightly more formal meeting at a convenient time and location (snowball sampling).

Theme: Conflicting Place Values
I had to accept the idea that the project could not happen in a ‘fair’ or neutral space and still be a useful workshop. Places that people care about are contentious, and for better participation I need to try working with a place people care about.
A Raj Mistry repairs the well structure
Theme: Active Involvement
I need to find a way to make residents feel comfortable to express complaints, unhappiness and criticise my approach.

There are shades of involvement dependent on whether individuals find the method of involvement interesting. For example, only people who were interested in brick repair and plastering could be deeply involved in the well restoration workshop.

“Gathering” itself - in a way that can facilitate honest discussion between residents would be a (very difficult) goal worth aiming for, from now on.
Photos shared during the workshop
Well Repair Workshop: Photographs

The mistry arranged for lahori bricks to be taken from an abandoned building nearby for use in the workshop (I was previously told that there was a ‘supplier’ for lahori bricks in the city) which means that the lahori bricks used by the ASI for their protected monuments come from other buildings (certain people’s heritage priorities are being put above others)
Participants write their feedback after the workshop
The design of old monuments should not be changed. We should not alter the original design of heritage buildings. That will be good for the society.

-Mo. Jaheer Pahalwan (Billochpura, Tajganj)

Every old building is very beautiful in Agra. It is our knowledge of the history.

-Rajendra Prasad Tiwari (Paktola, Tajganj)

We should not change the old design and old arts.

-Sameena (Telipada)

We want live here forever because our ancestors given us this heritage.

-Saroj/Parveen (Telipada)

During the meeting, we discussed about the old building. I don’t have heritage house, still I like to see them.

-Pushpa/Munni/Rajiya (Telipada)

In this meeting CURE a local NGO discuss with the people about the historical buildings. The all historic building should be renovated and we community people are with this initiative.

-Shumayla (Billochpura)
Well Repair Design: Actions

A design was created to correspond to ASI guidance for the Shiv Temple well to test whether this construction ‘vocabulary’ would be appropriate to apply to other ‘heritage’ structures in Tajganj.

The design was discussed with participants especially the Raj Mistry and altered accordingly.
Advice on pointing in John Marshall’s 1923 Conservation Manual used by the ASI
Well Repair Design: Notes on Resistance and Accommodation

The Mistry changed the design, choosing a different lime plaster mix and decided to plaster the whole structure according to tradition and using locally grown materials such as fibres and sugar. The design changed to a full restoration, rather than repair.

Detailed drawings turn out to be useless, all instructions have to be spoken instructions before and during the process.

The Mistry is paid for the day - the work is finished shoddily, despite his talent, because there are no funds for his ‘overtime’ after I leave.
The Raj Mistry changes the design, adding traditional ingredients such as jaghriee to the mortar, and plastering the entire structure.
Well Repair Design: Reflections on Method

Theme: Design authorship/leadership

When there are multiple ‘clients’ and values conflict - what should the architect keep control of? Which heritage values should an architect prioritise when the stakeholders are so varied?
The Raj Mistry repairs the structure with reclaimed bricks
### 25.0 CONSERVATION OF HERITAGE BUILDINGS

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Description</th>
<th>Unit</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.1</td>
<td>Raking out joints of stone masonry surface to the required width and depth, with due care and precaution, by mechanical/manual means, including prepping and cleaning the surface for re-pointing; including disposal of rubble to the dumping ground within 50 metre lead.</td>
<td>sqm</td>
<td>19.85</td>
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<tr>
<td>25.2</td>
<td>Providing and fixing double scaffolding system (cup lock type) on the exterior side of building/structure, up to 25 metre height, above ground level, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm dia M.S. tube, M.S. tube chapel, M.S. tube bracket, M.S. tube clip, with cup &amp; lock system with M.S. Tube, M.S. tube chapel, M.S. clamp and bracket system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work of cleaning and/or pointing and/or applying chemical and removing the behaviour. The scaffolding system shall be stiffened with bracings, runners, connecting with the building etc., wherever required, if feasible, for inspection of work at required locations with essential safety features for the workmen etc., complete as per directions and approval of Engineer-in-charge.</td>
<td>sqm</td>
<td>127.10</td>
</tr>
<tr>
<td>25.3</td>
<td>Cleaning the sand stone surface and removing dirt, dust, bird dropping, grease, oil, algae, fungus, monkey beats, vegetable growth etc., including providing, applying and washing the surface with liquid Ammonia Chemical of 5% solution and other chemical cleaning agent as approved by Archaeological Survey of India/ Engineer-in-charge, of approved brand and manufacturer, with the help of required scrubbers and also cleaning with machine operated water jet mixed with desired quantity of fine silica where ever required, without causing any scratching/damage to the stone surface and finally washing the surface with clean water with the help of pressure jet machine, complete in all respect, including taking all precautions to safeguard ventilators, windows, doors etc. as per directions of Engineer-in-charge.</td>
<td>sqm</td>
<td>62.70</td>
</tr>
<tr>
<td>25.4</td>
<td>Providing and applying antifungal wash treatment using 3% solution of sodium pentachlorophenate, of reputed brand and manufacturer, on cleaned sand stone surface as per direction of Engineer-in-charge.</td>
<td>sqm</td>
<td>28.80</td>
</tr>
<tr>
<td>25.5</td>
<td>Ruling / Fancy pointing on Red sand stone masonry surface with lime, surkhi and marble dust mortar in the ratio of 1:1.5:0.2 (One lime : 1.5 surkhi (50% red and 50% light yellow surkhi) : 0.2 marble dust), (The rate is inclusive of all materials &amp; labours involved except scaffolding).</td>
<td>sqm</td>
<td>104.20</td>
</tr>
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</table>
Well repair: materials and experts needed:

Brick Structure:

Cleaning and repointing
Surface area plaster to remove: 8 sqm
Surface area to clean and repoint: 22 sqm

Provision of pointing in lime-surkhee mortar 1:1:1 i.e. (1 Lime : 1 Sand : 1 Surkhi)

Brick replacement
Number of bricks (mughal size) needed: 300 mughal sized (unless we rebuild column).

lime-surkhee mortar 1:1:1 i.e. (1 Lime : 1 Sand : 1 Surkhi)

Stone paving

Cleaning and repointing
Surface area to clean: 32 sqm
Surface area to repoint: 2 sqm (a few cracks) ASI approved stone cleaning chemical

Antifungal wash treatment (3% solution of sodium pentachlorophenate)
lime, surkhi and marble dust mortar 1:1.5:0.5

Replaster a section, maybe one column?
Surface area: 6 sqm

Provison of 5 mm thick plaster in lime-surkhee mortar 1:1:1 i.e. (1 Lime : 1 Sand : 1 Surkhi)

Can we do something about the damp under water tank (see picture) to teach people about rainwater damage? I think preventing water damage is one of the most important things people in this settlement need to know about.

Repointing bricks 1 sqm

Tiling or repainting with waterproof treatment down into drain. 1 sqm

Minor drain repair?
Well Repair Design: Drawings and Photographs

Red sandstone platform: repair to cracks needed

Red sandstone and brick step around well: only minor repairs to cracks needed.

One pillar rebuilt in new bricks. Rebuild in mughal bricks.

Disused and broken drain: no repair needed

Red sandstone paving: good condition.

Red sandstone path: some repaving necessary to area indicated.

Main well structure: made of small mughal bricks. In bad state of repair, many bricks damaged or missing. Bricks need to be replaced using lime mortar, to prevent further damage from water/plants/structural weakness.

Potential water damage from water running down wall from taps: tiles/waterproof coating needed

New wall to street

Water tank for village use

Disused and broken drain: no repair needed

Subterranean structure appears in good condition

Potential water damage from water running down wall from taps: tiles/waterproof coating needed

Red sandstone platform: repair to cracks needed

Main well structure: made of small mughal bricks. In bad state of repair, many bricks damaged or missing. Bricks need to be replaced using lime mortar, to prevent further damage from water/plants/structural weakness.

Key:

- = damaged area
North Pillar: top three brick courses damaged and need replacing using lime mortar. Top half of plaster coating badly discoloured, and should be removed to determine full extent of damaged bricks. Red sandstone rail is broken, but not at risk of further damage. Could be left as is.

Many bricks missing from back of well structure, (an area 16 brick courses high x 6 bricks across, and several other holes, is missing one layer deep). This should be replaced with new bricks of the same mughal size using lime mortar.

An area has been repaired with new standard size bricks. These can be removed and replaced with mughal size bricks. Floor level is uneven. Area should be swept clean before filling holes with earth.

Two courses of bricks at top are missing, and should be replaced after removing damaged plaster layer from top. Plaster coating to top of well structure badly broken and discoloured. This should be removed to determine full extent of brick damage beneath, likely to be top two courses.

Structure weakened due to missing bricks resulting in some holes, which need to be repaired with lime mortar. This section of wall on the street is permanently damp due to taps running from public water tank. Tiles/damp proof treatment to tank wall could prevent future damage. Repair cracks in red sandstone paving.

South Pillar: top three brick courses damaged and need replacing using lime mortar. Top half of plaster coating badly discoloured, and should be removed to determine full extent of damaged bricks. South Pillar: see above.
Well structure pre-repair
Well structure before and after repair
LIME MORTARS FOR PLASTERING:

1:2-LIME:POZZOLANA MATERIAL

- SAND
  - COURSER VARIETY - BASE 2 LAYERS
  - FINER QUALITY - FINAL LAYERS
- POZZOLANA MATERIAL
  - BRICK POZZOLANA - SURKHI
- BINDING AGENT AND WORKABILITY AGENTS
  - BEL FRUIT, JAGGERY, NUTMEG JUICE, METHI AND NATURAL GUMS
- STRENGTHENING MATERIAL
  - URHAR & MOONG DAL (BASE LAYERS), JUTE, SUN, ANIMAL HAIR ETC
- SMOOTH LUSTROUS FINISH
  - MILK, CURD, EGG WHITE, MARBLE POWDER, PANIER ETC

LIME POINTING
FINELY GROUNDED MIX
RICH MIX - 1:2

LIME PLASTERING
EXTERIOR FINISH

MOONG DAL
LIME MORTARS FOR CONCRETING:

1:3 LIME:POZZOLANA MATERIAL/SAND
1:2:3 LIME:SAND:POZZOLANA MATERIAL

☐ BASE MATERIAL - BRICK BATS
☐ SAND - COURSER VARIETY
☐ POZZOLANA MATERIAL - BRICK POZZOLANA - SURKHI
☐ FLY ASH

☐ BINDING AGENT AND WORKABILITY AGENTS - BEL FRUIT AND METHE.

☐ STRENGTHENING MATERIAL - URHAR & MOONG DAL(BASE LAYERS)

MORTAR MIXER- MIXING SLAKED LIME + SUKHJUTE FIBRES
SOURCE:ASI SITE-PURANA QILA, DELHI

LIME CONCRETING
Discoveries about the Urban Order

Surveys and Interviews

This is a highly populated, densifying area constrained by outdated legislation and infrastructure and there is a lack of money for building other than ad-hoc. This creates a world of very good quality old buildings with very bad quality additions, and good quality old buildings being knocked down for the materials, or in order to build a structure that can take more storeys.

Workshop

Everybody who comments on the feedback form after the workshop puts their name, and their basti name. The basti one lives in is somehow linked to identity.

There is a topography of planning regulations and ‘gaps/ loopholes’, regarding heritage. The neighbourhoods survive entirely in the space between what is ‘allowed’ in legislation, and what the majority of people enforcing these laws believe is acceptable. This is dangerous because that space shrinks. Almost everybody owned a house that they did not want to be surveyed for this reason: I therefore have to work hard to gain their trust.

There are a lot of conflicts regarding site ownership as open space dramatically reduces. There is also a huge confusion of ownership in “shared space” where government is technically in charge of its maintenance, but does not deliver. Consensus of an adequate number of residents would take more time to ascertain.
Within the Prohibited zone, buildings are found to often be in disrepair.
It was found that the least of the constraint to conserving heritage in Tajganj is a lack of construction knowledge. Perceived ‘tradition’ is diminishing for complex reasons, and as a side effect of this, commitment to places is reducing.

**Restoration Design for Case Study Site**

Big differences in opinion were found as to how a ‘heritage structure’ should be repaired.
Diagrams made after the fieldtrip of various recommended attitudes to conservation