

Dylan Flowers
SVR
E14 7GG
Ross Way

Discover
Delve
Define
Develop
Deliver
Determine impact

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- o
- o

Defining the Subject Area:

The brief states that we must try to find problems on our street or in our immediate area. From this I had to make a decision between two very different options.

Salmon Lane:

A Fairly run down street with a few core amenities such as a church, a post office and a laundromat.

Ross Way:

A private street for the residents of the CQ development. The street is pretty pedestrianised and the only vehicles that use it are delivery vans and rubbish trucks.



Ultimately I decided to focus on Ross Way as I had more access to its stakeholders and was more likely to be able to make a real change in the area rather than a conceptual one.

The client

A2dominion manage a large amount of properties around London one of them being the CQ development which includes all buildings surrounding Ross Way. I have direct access to them through the development specific phone line, email or address.

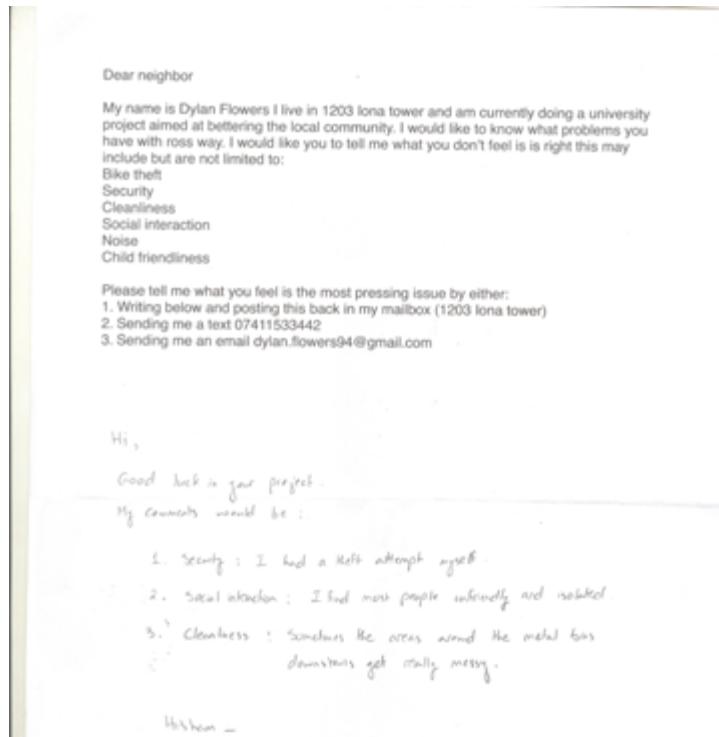
From speaking to neighbours and to the building staff the general consensus is that people are unsatisfied with the company and that it had taken a huge deal to get them to take action in the past. Therefore I had to make sure that when I approach them it is done with professionalism and preparation as to be taken seriously. Therefore I decided to contact them once I had fully developed my project as to not be brushed off as a student simply trying to make a grade.



Defining the problem

Surveys:

I placed surveys in the letterboxes of all the resident's but only got a few responses. Although it was evident that security seems to be the highest concern in the building.



Dylan – Flat 1203

My lists of priorities are as follows:-

- Security needs to be reinstated which will help stop drug dealing, local gangs hanging outside Iona Tower, bike theft, etc.
- CCTV needs to be monitored
- Poor service from the management company e.g. property manager and repairs team – needs addressing
- Cleanliness
- Window cleaning - missing apartment windows - process needs to be managed
- Stop residents dumping rubbish and to use bins provided
- Noise, anti social behavior – security would be a help with this problem
- Reception area does not resemble a private residence it is more like a council block which is in need of a lick of paint and care

Open forwarded message

From: "ADominion" <adominion@zeta.com>
Sent: Saturday, October 20, 2012 10:14:27 AM
To: "Mr Simon John Flowers" <smflower94@gmail.com>
Subject: Commercial Road Update

ADDominion

Commercial Road Update
27/09/2012 - 31/10/2012

Lets have a look at what's been happening on Commercial Road.

Iona Tower update 28/09/2012 14:03
We are carrying out a general survey for residents of Iona Tower to test their views on whether or not they see in favour of introducing a flat entry lock to access the staircase and lift on the ground floor of the building.
This is being carried out in response to the concerns some residents have expressed about non-resident accessing the building.
The purpose of the survey is to gauge resident opinion and find out if there is support for this resolution. If we proceed further...
[GOALS & MEETINGS](#)

Iona Tower - roller shutter update 20/10/2012 13:52
The roller shutter on the entrance of Iona Tower will become operational by the end of this week.
Residents of Iona Tower will be able to access the side entrance to the building by using their keys to pass through the pedestrian entrance to the car park.
The introduction of the roller shutter has been put in place to deter loitering and help prevent the theft of bicycles from the bicycle storage areas.
[ALL THE ALIVE ITEMS](#)

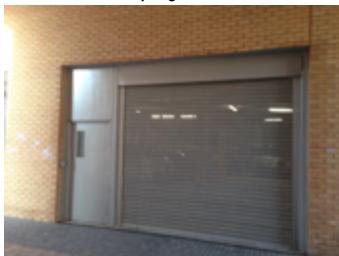
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Working out the problem

Analysis of existing security issues:

There is an obvious worry that it is too easy for non residents to enter the building. This has spurred on a community driven initiative to install keys on the lifts. I did not want to get involved in this issue as it is already being tackled.

In 2012 there was a number of bikes stolen from an allocated bike garage (including my own). As shown in the end of this email a rolling shutter was installed to deter bike theft but the garage still remains almost empty.



Sent from my iPad
Begin forwarded message:

From: "A2Dominion" <manager@system.dwellant.com>
Date: 31. Oktober 2013 07:41:27 MEZ
To: "Mr Simon John Flowers" <gillianflowers@gmail.com>
Subject: Commercial Road Update

A2Dominion

[Commercial Road Update](#)
27/09/2013 - 31/10/2013

[Latest from Commercial Road](#)

[Iona Tower](#) added 30/10/2013 14:03
We are carrying out a general survey for residents of Iona tower to cast their votes on whether or not they are in favour of introducing a fob entry lock to access the stairwell and lift on the ground floor of the building.
This is being carried out in response to the concerns some residents have expressed about non-resident accessing the building.
The purpose of the survey is to gauge resident opinion and find out if there is support for this installation. If we proceed further...
[Click to read more](#)

[Iona Tower - roller shutter](#) added 30/10/2013 13:52
The roller shutter on the entrance of Iona Tower will become operational by the end of this week.
Residents of Iona Tower will be able to access the side entrance to the building by using their fobs to pass through the pedestrian entrance to the car park.
The introduction of the roller shutter has been put in place to deter loitering and help prevent the theft of bicycles from the bicycle storage area.

[All the above items](#)

The date / time format is "English (United Kingdom)" and the time zone is "(UTC) Dublin, Edinburgh, Lisbon, London". To change these values go to [Your Information](#)

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Analysis of existing solutions:

Mini Brief

After looking at the racks that are provided in the bike shed and allot more sophisticated racks both in person and online, I decided to try to design my own secure bike rack.

I found a row of bike lockers outside the London Royal hospital. These are a very secure option but not perfect as they work by using padlocks rather than built in locks. They also take up a huge amount of space. This is not feasible for the amount of residents in the building.

Although it did lead me to look at; cycle-works.com a company that specialises in bike racks and sheds. Their racks gave me ideas on how I could design my own.

Notably the ability to get the bike away from the normal floor bound position. This could be achieved by raising or hiding the bike.



Royal London Hospital - Whitechapel



www.cycleworks.com

Outcome 1:

I built a maquette of how the bike locking system would work. My approach was to design the most secure bike rack ever regardless of feasibility or cost.

I tried to take the same approach that car manufacturers do when creating concept knowing for-well that the final result will be nowhere near as ambitious.

The system raises the bicycle into a compartment in the ceiling thus making the bike completely unattainable.

Although if it became a reality it would be practically impossible to steal a bike it is an impossible task.

Firstly my model making skills leave a lot to be desired so this prototype is not an accurate representation of what the final system would look like.

Secondly this type of project would need a whole team of engineers behind it, let alone funding.

After receiving sobering peer feedback I decided to scrap this as I realised that If I continued this method there would be no way the project would go beyond conceptual.



Stakeholders:

Finding out who all the stakeholders where was a really good way in which to work out who I can talk to and therefore who can help me gain a better insight in the problem.



Police:



I wanted to talk to the police to fully understand the process of how someone should approach them and what they do from there to see if any steps I could iron out.

I talked to PC. Usif and Constable Hasseen Mohammed. I found that they seemed very reluctant to give me any information on the process that happens within the police. This was frustrating but I understand that for security reasons they can only give out so much information.

The main thing was the importance of registering your bike so that it is easier to find in a database should it turn up on advert.

From this experience I learnt that the problem needed to be ironed out in the prevention stage rather than once the bike has already gone missing.

Re-analysis of Bike garage

I took the key aspects of the Bikeoff design guidelines so that I could weigh them up to my facility

1. Length of stay	2. Location	3. Layout	4. Spacing	5. Access
Short stay parking that services multiple locations should be located in small clusters. Medium and long-stay parking requires higher security.	'Flyparking' (informal parking) is a good inadequate cycle parking provision. Cycle parking should be located as close as possible to the facility it serves.	Plan for expansion. Allow safe and easy access to parking and unparking without damage or hindrance to other users pedestrians or traffic.	Typically 8 standard bikes can be parked in the space of 1 car. Allow approx 1m per bike for 'pocket' schemes	Access to facility should never compromise user safety.
6. Surveillance	7. Maintenance	8. Signage	10. Charges	11. Scale of Provision
Where possible position racks in front of windows so parked bikes are visible to owners from within the building the parking serves. Lighting and surveillance promote usage by creating confidence amongst users, particularly those who have to access the facility at night. Lighting should cover parking and access routes. CCTV may provide a deterrent to thieves, but is only as effective as those who monitor it.	Damaged or vandalised cycles within a facility signal insecurity of cycle parking to potential users and thieves. Coin operated schemes are a bad idea as they promote theft and vandalism.	For a parking facility to be successful it must be easily noticeable. Signage may also be necessary to inform cyclists of how to use the facility or stands, indicate levels of risk, and communicate local knowledge and good practice in terms of consideration.	On-street parking should be provided free of charge. Off-street, secure, covered cycle parking may typically charge 50p a day.	Typically residential parking allocates spaces against number of bedrooms, business parking against number of employees and other usage against floor space.

Bike park Guidelines
According to: Bikeoff.org

1. Length of stay

Long stay Parking

2. Location

Within a closed off garage.



3. Layout

Allot of space for bikes



I then analysed the parking against these criteria. To highlight what was the main issues.

4. Spacing

Appropriate Spacing



5. Access

Covered gated access



6. Surveillance

Lighting is good. CCTV has blind spots and is only monitored at times when it is unlikely for a bike to be stolen.



7. Maintenance

"It took 3 months to fix the entrance"

- Paul Codling
Cleaner

8. Signage

Two signs one insignificant CCTV sign. And one sign removing responsibility from housing company.



10. Charges

Charge is included in building service charge.



11. Scale of Provision

4:1 bedroom to bike ratio which seems appropriate due to the amount of bikes in the parking.



PROBLEMS

Surveillance

Lighting is good. CCTV has blind spots and is only monitored at times when it is unlikely for a bike to be stolen.



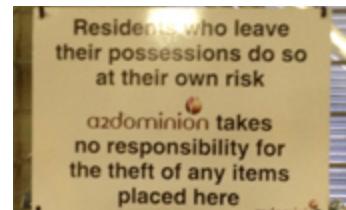
"Surveillance is only as good as those who monitor it"

The cctv is running and the Cleaner only glances at it now and then.

The video is on tape so people have records of the act but this can be bypassed with a Hoodie

Signage

Two signs one insignificant CCTV sign. And one sign removing responsibility from housing company.



This sign is a big problem as it informs thieves that the housing company do not act upon bike thefts giving them a sense of security.

Maintenance

"It took 3 months to fix the entrance"

- Paul Codling
Cleaner

Slow maintenance is another reason for thieves to feel comfortable even when the facility is in perfect order.



Signage

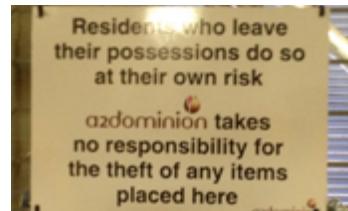
CCTV sign



I really thought that the sign-age was inadequate in the facility. Apart from sorting out the signs that are already there I learnt about the need to have a sign informing users of proper locking method.

Many people lock up their bikes in a way where a few parts of the bike can be detached and the rest taken.

A2 dominion sign



"For a parking facility to be successful it must be easily noticeable. Signage may also be necessary to inform cyclists of how to use the facility or stands, indicate levels of risk, and communicate local knowledge and good practice in terms of consideration."

-Bike off.org

Look Mum no Hands



At the east London café/bike shop "Look mum no hands" I found this sign incorporated into the flower pots showing how to lock up a bike. It is tastefully done but very missible so its effectiveness could be questioned

Waterloo station



The sign above is placed by TFL on a bike rack outside Waterloo station. The sign is only two inches high and therefore again very missable.

Outcome 2:

Cage before sign



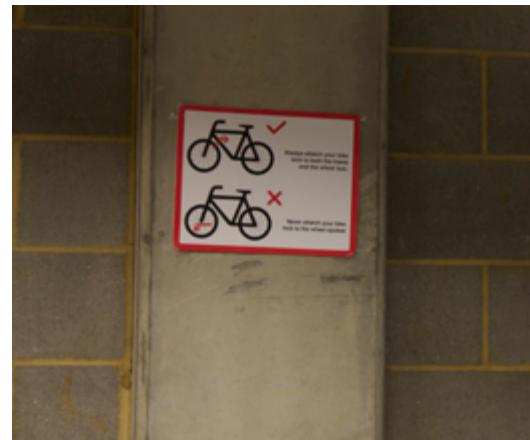
As evidenced within the cage there is no instructional sign-age. Whether to do with the lack of sign-age or not there are bikes that are not correctly locked up. I created a sign showing how to correctly lock up a bike when there is only one lock available. The problem with this outcome is it is very hard to judge its effectiveness



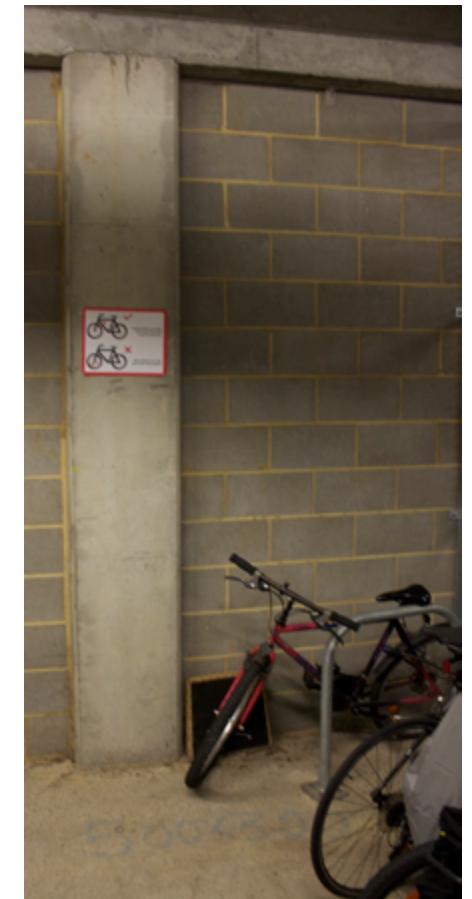
Unlocked bike

This is due to the fact that the majority of bike owners have correctly locked up their bikes and the ones that aren't locked correctly don't look very loved regardless. I do not think that an adjustment in sign-age should be disregarded completely but if it is to make a real difference it cannot be the only factor that is changed.

Cage after sign



Sign is viewable from outside



“Security Guard”:



Paul
Codling

I decided to interview Paul Codling who is registered as the buildings cleaner but undertakes security and grounds-keeping.

He has had 3 bikes stolen ,none from the bike cage though. none of the bikes where stolen from A2dominion property but this is an issue he holds dear to his heart.

The interview was very insightful and helped me get a better understanding of the company by one of its employees. The outlook on the company is very negative and Paul agrees.

There is a definite over-delay in communication between the residents and the company, even with its employees.

There were two major issues raised by Paul during the interview:

Issue 1:
Lack of Security Awareness by Residents

The majority of residents will let anyone into the building. Rarely will anyone second guess someone entering the building as they enter and the majority will even buzz people in with no idea of who they are.

Issue 2:
Maintenance.
It takes a huge time for A2dominion to process maintenance. A few weeks ago the underground parking gate was broken and two cars were broken into.

This interview was a great insight into how hard it would be to get the housing company to make a move. Therefore whatever I create must have most of the work done for A2dominion to make it more likely to pick up.



Diary

At this point in the project I was feeling somewhat perplexed as how to round off any of my projects into a tang-able design solution. There are obvious solutions to the problem:

- No Green button
- Quicker maintenance
- Better sign-age
- More aware residents

But to get any of these solutions put in place I need to convince the housing company and residents that the current setup is sufficient.

In late 2013 after 6 months A2dominion installed a rolling shutter into the previously completely open garage.



Since then no bike thefts have been reported to security but I feel that this is more to do with the lack of use due to the previous thefts.

The police and A2dominion have something in common. They wait for the crime to come to them rather than taking proper preventative action.

When trying to think up a way to convince the client that any of these solutions are needed a standard report discussing why these would be beneficial seemed so uninspiring.

I needed to find a way to start enjoying this project again.

Outcome 3:

The Bike thieves' guide V1

I realised that I had been ignoring a key stakeholder. The bike thief. Previously I wanted to get them involved by hiding a microphone on myself and trying to talk to local gang members. I realized that this method of research could:

- a: Be seen as racist
- b: Get me nowhere
- c: Get me stabbed

Since discarding that idea I put them to one side but then brought them back in through a joke.

The joke was that all my solutions were aimed at the residents and housing company. If they where put in place how will the local bike thieves of Limehouse feed their families?



Timing

Timing is extremely important. Too quiet of a time and you won't make it into the building and too busy you have a high risk of getting caught. Below are three times with three different plans of attack.

07:00 Seven in the morning is good as there is a steady flow of people coming out the building to let you in but the security guard is not on duty yet. At this time you can often get buzzed in if you pretend to be a postman.

20:00 At night in the evening there is enough people that if you stand around long enough you will be let in although there is a risk of looking suspicious. On the plus side it is dark which will help conceal your identity.

02:00 2 in the morning is the quietest time on the street but you will have to find a way in without someone letting you in.

Breaking in

Note that you have arrived at the entrance one of the cages you must open the door. The door is on a system whereby you must touch a key fob to enter but press a large green button to exit. You can break this system with a simple coat hanger.



Step 1: Take out your trusty coat hanger
Step 2: Unwind it and bend it like a bow or a U shape.



Step 3: Insert the cord above the button.
Step 3: Bring the cords down beneath the button and press it to push the button. If it works you should hear a beep and you can now enter.

Tool-Kit



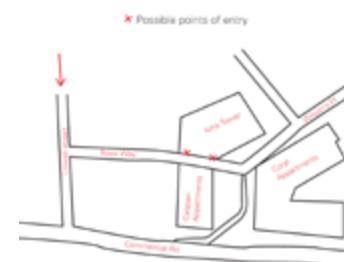
The hoodie is such an effective crime outfit that the UK government considered banning it. One minute you just your average person trying to stay comfortable and then pull up the hood and you can feel more CCTV cameras. There is a specific moment you must put the hood on but we'll get to that later.

Bolt cutters are your average bike thieves tool. A good one should be able to cut through most padlocks and chain locks. You may want to change this tool for a hacksaw depending on the lock you are trying to break.

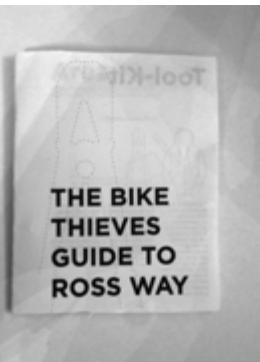
There is also more than meets the eye about this simple coat-hanger. The metal is malleable yet strong, and they are often stored in a hubcap that can help for grip.

Area

When doing the job it is vital you know the area. If you look lost you will raise suspicion.



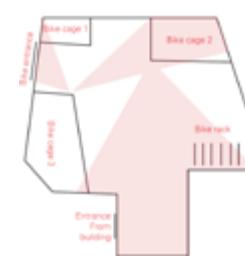
You want to enter and exit the area through the more dimly lit back streets above Lovelstree rather than the busy well lit Commercial Rd.



After printing a crude prototype I realised that I had stumbled upon the beginnings of something great here. I realized that I could use this guide aimed at the thieves as my proposal to the housing company. This is exactly the kind of alternative design solution I was looking for.

CCTV

At this point you should be in the bike parking area. Have your hood up as there are cameras. The areas in red are the areas visible to the cameras. Therefore it is better to go to cage 3 as it is not in sight of the cameras.



Cutting Locks

Now if everything has gone to plan you should be able to take out your bolt cutters and cut the lock in.



Escape



Humour can be a very powerful tool in design I have used it before in a project I did about Kevin Bacon. It is very common that if you push a joke into something real it can have some amazing results. Especially in social design when you are trying to get people to have a reaction humour is a great social activator.

Outcome 3: Feedback

I showed outcome 3 to many of my peers and tutors and received some great constructive feedback, but two people really stood out. This may have been due to the fact that they had never seen the project so had a pair of fresh eyes.



Akhil
Morjaria
Pancentric Digital

I met Akhil at the mentorship evening. He is a recent graduate working in quite exiting digital design. Therefore his advice was to make it bigger. He liked the idea of making a ruckus. Talking with him I decided to make enough copies to give one out to everyone in the building anonymously. This would hopefully stir things up enough to get the community speaking.



Megha
Wadhawan
STBY

Megha is an extremely qualified service designer and she helped me realise what I would need to do to be taken seriously. She helped me realise that my approach is quite aggressive and if I wanted A2dominion to get on board I could not see them as my enemy. I also needed the book to include solutions to the problem rather than just proof that the problem existed.

By combining both these practitioners advice I was able to make my project both exiting and realistic. The next step was to delve deeper into solutions to take a friendlier approach to the project.

The biggest problem: THE BIG GREEN BUTTON



The cages work with the same key fob system as the rest of the building.

-To enter you touch your key fob.

-To exit you press a button.



This works on a door as you must already be in the building to press the button. Although in a cage the button is easier to reach. Especially with its large profile.



Previous thieves have cut the gate to be able to reach in and press the button. As shown above

This is a prime example of poor maintenance. It took months before the hole was patched up but in no way were measures to prevent this happening in the future put in place. This is what I call a “band-aid” approach (the plaster not Bob Geldof’s charity) . Where a problem is simply covered up rather than addressed.

Becoming the thief: THE BIG GREEN BUTTON



Previous thieves used clippers to get in but I thought a break in could be done with a simple coat-hanger.



My first attempt did not work as the coat-hanger was not strong enough.



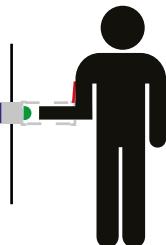
My second method of threading the wire above and below the button worked within seconds.

I did not inform security. Nobody stopped me.



Outcome 4: The green button protector

Pressing the button from the inside

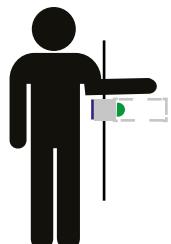


I designed a feasible way to protect the green button from being pressed from the outside without having to alter the electrical engineering.

The system is a tunnel that you put your hand down to press the button. This means it is impossible to press the button without being the correct side of it. I created a working proof of concept and took it to ocean builders supplies as they have allot of links with workmen.

They liked my design and said with the amount of metal needed the system could be created 3 times for under 300 pound including labour.

Pressing the button from the outside



I feel that this is an extremely valuable outcome as housing companies are often open to hiring workmen but rarely someone to design a solution. Although I am not a product designer I am a problem solver and love working with my hands so this was an interesting part of the project. I also found it very valuable to create a physical representation of my idea to be able to work out the kinks.

Although I do not think my design is perfect and definitely would need a professional to look at it before creating it. The point is to simply show it is possible to come to an economical and realistic solution to a previously ignored problem.



Outcome 5: Development

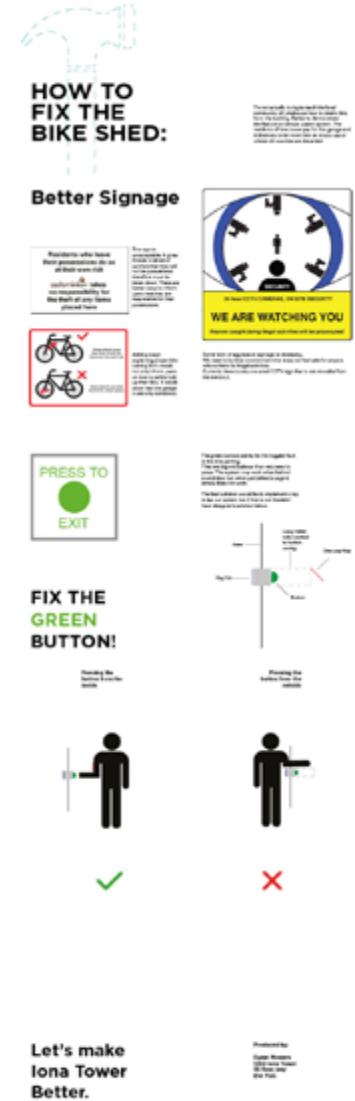


Outcome 3 was by far my best outcome but much like Russell Brands revolution it was way too aggressive and offered little solution.

There is merit in the previous outcomes but they are fairly insignificant on their own. Therefore I wanted to incorporate them in a more positive section of "The bike thieves' guide to Ross Way."

The positive section is "How to fix the bike shed" I make a slight change in the colour scheme as to indicate that it is the lighter section of the booklet. I then go on to offer up solutions rather than problems. I also scrapped the idea of being anonymous as it impedes conversation.

For this same reason I put a comments section on the back and encouraged residents to write on it and return it to my letterbox.



Outcome 5: Printing



I wanted to print 100 copies of the booklet so full CMYK printing was too expensive. I decided to make use of the courses risograph and altered the design to use as few colours as possible while maintaining the shift in tone.

The process chosen meant that there were alignment issues but luckily my design was pretty forgiving. I also really liked the texture the risograph produced as it added to the home-grown feel rather than a corporate handout.

The fold binding took 2 hours but the only way in which this would be successful is if I had power in numbers.

I am happy with the look and feel of the book. It has the right balance of home grown as not to be disregarded as junk-mail but enough design aesthetic to be taken seriously.

Printing



Cutting



Binding

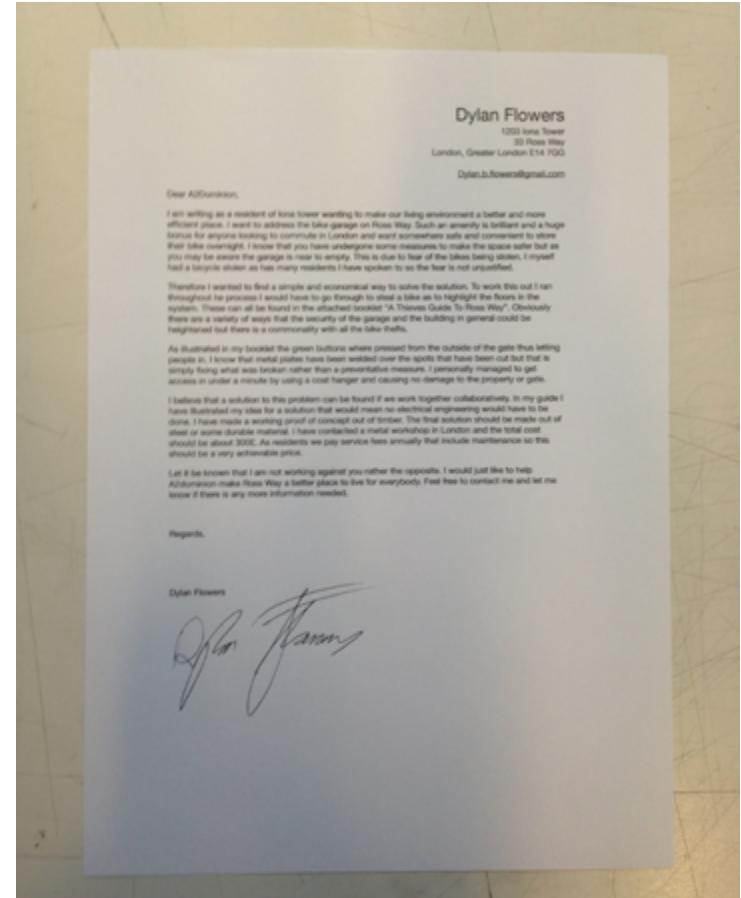


Finished product

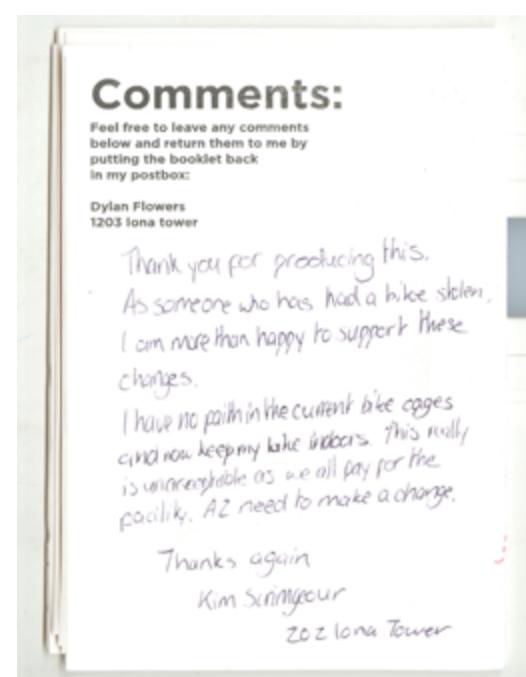
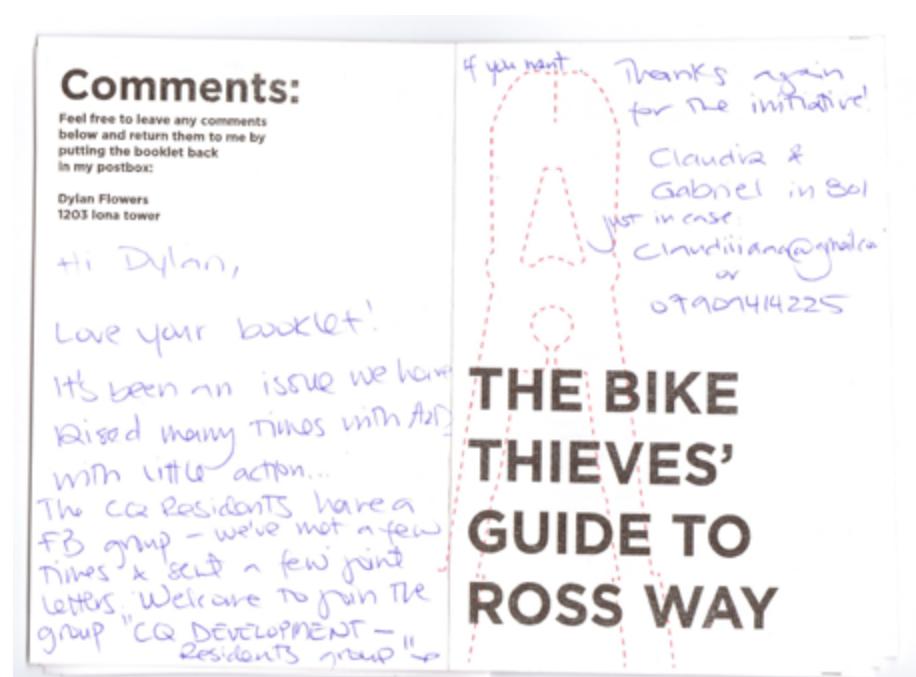
Outcome 5: Distributing

My flatmate and I placed a copy of the booklet in every letterbox in the building. Hopefully this would build a presence of the issue amongst the community.

I then posted a copy to A2dominion headquarters in Ealing along with a signed letter. The aim of the letter is to professionalise the project and explain it more. I tried to combine a bureaucratic and design approach for the best result.



Outcome 5: Response



Unfortunately I have not had a response yet from A2dominion. I had some issues re-entering the country after Christmas which delayed when I could post out my letter. This may be why although the letter has been at their offices for long enough for a response.

Fortunately I have had a positive response from my neighbours. Two neighbours have made comments and given the guides back. I have contacted the people that replied and they have said that once A2dominion reply they will happily sign their name to my response.

I have also been approached by security saying how much they love the guide and will do all they can to help it along.

I was also pleased when the guard described his experience of reading the booklet.
"At first I got a bit mad because you were teaching people how to steal a bike, but as I read on I loved it."
-Paul Codling