

From Grange to Town

Why build Grangetown and was it a success?

A presentation given on 5th August 2016

Ray Noyes



Grange Marshes from the south-east
1799

*"Mud and lonely marsh, bereft of all human comfort and desolate.
Large tracts of dirty mud stretch as far as the eye can see. Few poor souls can eek out a living here."*

At first sight, the Grange marshes was the last place anyone would consider constructing anything. The tidal Taff flooded the marsh routinely and it is recorded that the tide came to within 20 yards of the Ebenezer Chapel twice-daily.

Why risk investing every penny?

- Income from land had crashed.
- Investing in the Industrial Revolution made huge profits
- Investments in new inventions, in industry and commerce (the UK invented the concept of free trade) provided huge returns by trading globally.
- UK economy was the strongest in the world – the world's first superpower - with enormous earnings from the empire.
- Money was cheap. The UK was open for business, big time!

Why invest in the UK in the 1850s?

 The French Revolution 1789 - 1862

Franco-Prussian War, 1846

Swiss civil war, 1849

Belgian revolution, 1830

Italian wars of independence, 1849 - 1859

Dutch colonial wars

Swiss-Italian war, 1842

Greek war of independence, 1832.

French invasion of Spain, 1823

Hungarian revolution, 1849

Polish-Austrian war, 1829

On the European continent, almost every country was either at war with itself, or with others. Britain was the most stable, wealthy and inventive country at that time.

UK - the most civilised, inventive place in Europe!

Palmerston in 1854:

"Whilst we have seen thrones shaken, shattered, leveled, and in every country of Europe the conflicts of war have deluged the land with blood, this country alone has preserved a spectacle honourable to the people of England and worthy of the admiration of all mankind."

Hugely inventive Britain:

- 1838: first trans-Atlantic steamship crossing by SS Great Britain
- 1838: first pedal bicycle produced
- 1840: Penny Post created
- 1845: 10,000 miles of railway completed
- 1845: pneumatic tyre invented
- 1854: Bessemer process converts iron into steel
- 1857: police force created
- 1858: Queen Victoria sends first trans-Atlantic telegram
- 1859: Darwin publishes his 'On the Origin of Species'

Who invested in the grange?



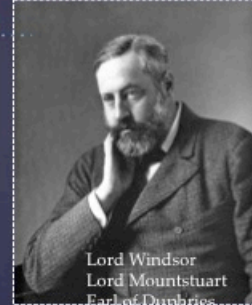
Harriet Clive
Harriet Windsor-Clive
Baroness Windsor (1855)



Robert Windsor-Clive,
Baron Windsor,
Earl of Plymouth (1905)

Intermarriages

1796 Charlotte Windsor marries John Stuart,
Earl of Windsor and Marquis of Bute



Lord Windsor
Lord Mountstuart
Earl of Duphries
3rd Marquis of Bute (1863)

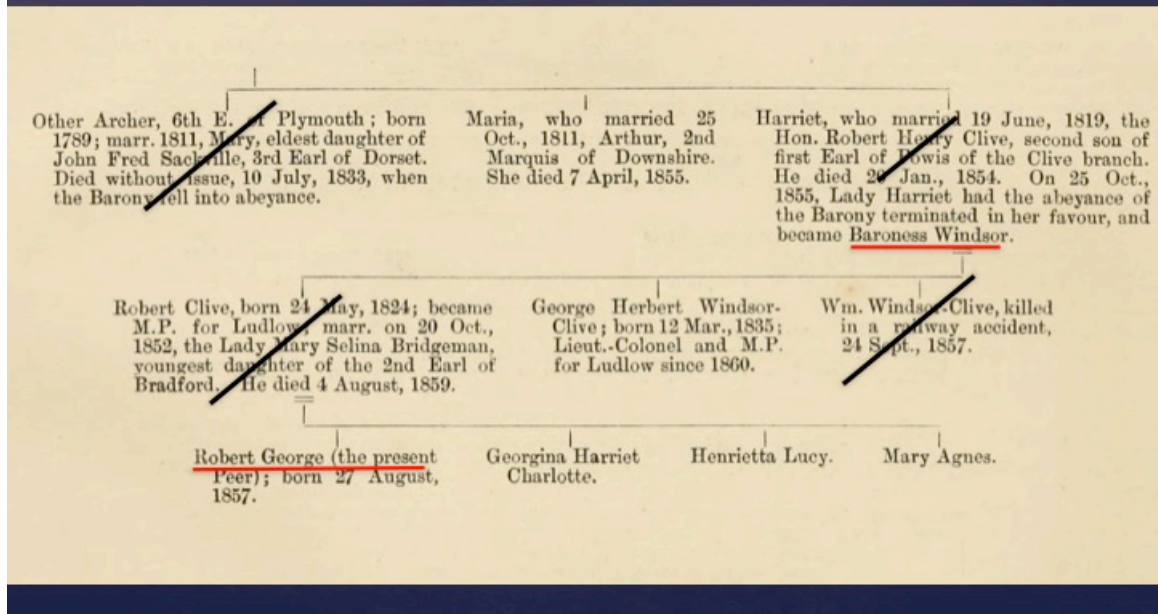
- Viscount Holmesdale
- Lord Amherst
- Earl Bradford
- Sir Augustus Paget
- + Several loans and guarantees by friends

Although these two great families became commercial rivals, they were interlinked by marriage.

The partition of land



The Clive, Windsor-Clive and Plymouth Families

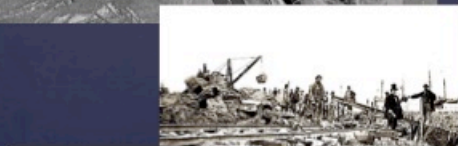


The Clive family suffered a number of deaths which meant that Harriet became Baroness Windsor. Her grandson, Robert, ran the Grangetown project after coming of age in 1878.

The Grand Plan



Docks
Harbour
Railways
Subway
Town(s)
Industrial Zone
Flood Barriers



How was Grangetown justified?

10 And whereas, by reason of the increase of the trade and commerce of the port of Cardiff and the extension of railways to or near to the building lands, and the intention to establish docks and shipping places and other works at or near to the mouth of the river Ely (which opens into Cardiff Harbour), and adjoining or near to 15 the building lands, and by reason also of the great increase of the population of Cardiff and its neighbourhood, a great demand for building land there has lately arisen, and there is reason for believing that the demand will continue and increase : 1857 Barones

1857 Baroness Windsor Act

Which were the 'building lands'?

Brickyard:	22 acres
Grange Farm:	148 acres
'Mudland' from the Crown (1837):	<u>131 acres</u>
	301 acres

Grangetown and Penarth housing was partly justified on the back of the expansion of Cardiff Docks.

Three Acts of Parliament

1857 Phase 1

A C T

For authorising the raising of Money on the Security of Estates in the County of Glamorgan, settled by the Will of the Right Honourable Other Archer, late Earl of Plymouth, deceased, and the Application of the Money for the Improvement of Parts of the Estates, in order to render them available as Building Lands; and for confining an Agreement with The Penarth Harbour, Dock, and Railway Company, heretofore called the Ely Tyd Tyd Harbour and Railway Company; and for other purposes.

[ROYAL ASSENT, AUGUST 25TH, 1857.]

1857 Aug 25th *W. H. St. John*

WHEREAS by an Indenture of Stentences, dated the thirty day of January, one thousand eight hundred and eleven, between the Right Honourable Other Archer, late Earl of Plymouth (whose name) is of the first part, the Right Honourable Lady Mary Scudell, spinster (now the Dowager Countess Anderson), of the second part, the Right Honourable Archibald Tait, Lord of Exchequer (then the Will of the Right Honourable Charles Lord Will-

York Place to Bromsgrove St
+ industrial zone (rope works,
gas works, iron works)

1865 Phase 2

[illegible]

To Llanmaes St & Newport St
+ raising more cash for roads
and more drainage.

1875 Paget Street

AN
A C T
For authorising the raising of Money on the Security of Estates in the County of Glamorgan, settled by the Will of the Right Honourable Oliver Arches, late Earl of Plymouth, deceased; and the Application of the Money for the Improvement of Parts of the Estates, in order to render them available as Building Lands, and for extending the Power of granting Mineral Leases conferred by the said Will; and for other Purposes.

[ACT, ADDED 1824, CHAPTER 108.]

WHEREAS the Right Honourable Oliver Arches, late Earl of Plymouth, by his will, dated the twenty-ninth day of February, one thousand eight hundred and thirty, as related in *Baroness Arches's Deeds Act 1837*, in that Act called "the *Arches Act 1837*," authorised the Earl Arches and John Downes and the survivors of them, and the executors or administrators of each survivor, during the minority of any person or persons, who by virtue of the limitations contained in his will should be entitled to the freehold or any beneficial and substantial enjoyment of the 10 manors and hereditaments in the county of Glamorgan, and elsewhere, devised by the said will, or any part thereof, since,

Bromsgrove St to Penarth Rd
and side streets

Phased construction



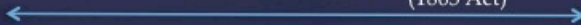
Phase 1: to Bromsgrove St
and Kent St
(1857 Act)



Phase 2: to Llanmaes st
and Newport St
(1865 Act)



Phases 3 & 4: Paget St & infill to the Taff
(1876 and 1882 Acts)



(Lower Grangetown)

Dire warnings of failure

Cardiff's Chief Engineer.

The marsh will not drain permanently and the sewers will need flushing tanks in each street.

Cardiff Health Board.

"Construction of the town on the grange should be halted except for the area north of Penarth Road and even then only to the west. The marsh vapours will bring sickness."

A surveyor after seeing the site in 1859.

"A dismal swamp, a stinking morass; even a village missionary, the water wagtail and the postman would quickly pass it by on their way to the ferry. Nothing good can come of this foolish enterprise."

The Windsors' site manager, Charles Burnand, Feb 1859:

"We are at a loss as to what to do. The men are having great difficulty. A good deal more must be done in the shape of trenches and much additional drainage, with concrete to the sewers, all of which trouble me greatly."

The Mudlands



The original housing scheme saw streets laid on the tidal foreshore, adjacent to a major sewage outfall and was withdrawn. It also planned for a new Penarth Harbour Road.

Mud



Irish wheelbarrow



Horse power



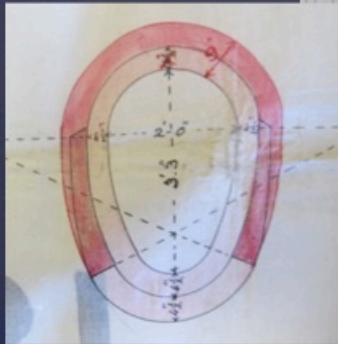
Shortage of bricklayers



Irish gang master's hut

Some contractors gave up. Largely Irish contractors took over, especially for roads and sewers.

The marsh refuses to give in



Concrete-reinforced main sewers.
Vents needed due to airlocks.

Clay movement cracked pipes - concrete reinforcing necessary

Flushing tanks needed, rain water connected to sewers

Flood barriers breached (not reinforced)

Marsh would not dry out, extra drainage needed (up to 1881)

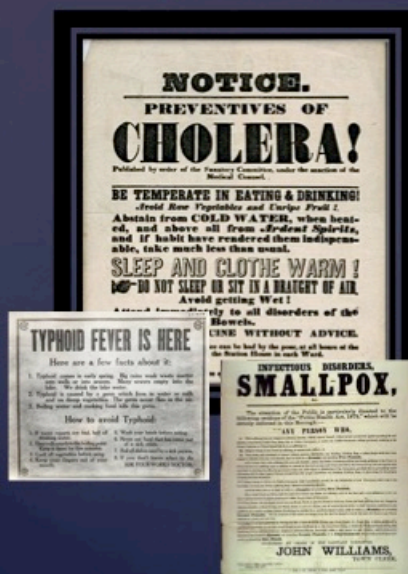
High tides flooded streets, yards and homes with sewage

Fresh water sources polluted due to faeces, urine and offal

Foundations sank, sewers collapsed

Lower Grangetown Problems

Poor public health due to poor housing and overcrowding



1849: 396 Cholera deaths in docks and nearby areas.
1869: Typhoid kills 59 in Grangetown

Enquiries blamed poor housing, overcrowding, bad sanitation,
infected water supplies, the sewage outfall, broken sewers.

Cardiff Health Board tried to stop Grangetown being built, before it
created *exactly the same conditions* in which almost 400 people died.
The Windsor family refused to listen – Grangetown was in
Penarth not Cardiff. Mind your own business!

Blame also laid on sailors from foreign ports. Hamadryad ship
was later towed to a berth adjacent to the canal sea lock (1866).



Concerns unique to Grangetown

- It was to be built on a marsh that flooded constantly
- It would be adjacent to the notorious grange sewage outfall
- Its southern streets would be very near the heavily-polluted Taff estuary, which was basically an open sewer and which routinely flooded
- No plans for reinforcing flood barriers were proposed. 7 major floods recorded in 18th century, all reaching as far as Leckwith Common
- Much of lower Grangetown (phases 1 & 2) would be below high tide level so that sewage would flood the streets and houses
- Since Grangetown would be at or below sea level, the sewers would have insufficient 'fall' to flush away sewage except on low tides. (In 1850, Cardiff High Street was only ten feet above high tide. The grange was very much *below* high tide.)

Cardiff tries to stop construction

Daniel Jones, Cardiff's Chief Engineer (1853):

"If this foolish enterprise is allowed to proceed, we shall see the same degree of suffering this town has already witnessed. The conditions on the marsh and foreshore are entirely unsuited for the construction of homes. It must be stopped!"

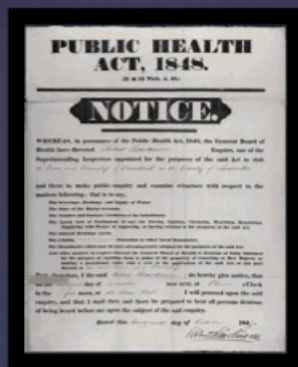
Chief Medical Officer, Dr Paine (1854):

"This new town must not be proceeded with. House after house will be erected and no proper provision for drainage made. Roads will be unprepared or unmettled, the soft natural material torn up by carts employed in hauling materials through the streets. The front of such houses will have lakes of stinking, stagnant water, putrid mud mixed with the faeces of animals and occupants alike; night soils thrown out by the occupants of every room, for each room contains a family."

The Inspector of Nuisances - writing about terraced cottages in general.

"Large quantities of filth are contributed by every house. The space behind houses allotted for a garden are filled with overflowing sewer soakings and often contain a foul open drain or gutter. The atmosphere of such districts becomes loaded with malarious exhalations requiring but certain conditions to mark its character so as to produce epidemic fevers, cholera, diarrhea and dysentery."

These authorities were from Cardiff; Grangetown would be in Penarth.



Public Health

In spite of the Public Health Act, by 1886, Grangetown had the highest incidence of chronic ill-health (mainly of the lungs), destitution, malnutrition, infant mortality and death in the whole of Cardiff.

Infant mortality 1875: 196/1000	Death rate Grangetown 1875: 15.9/1000
.. 2010: 4/1000	.. Cardiff 1875: 12.3/1000

Official inquiries blamed people of Grangetown



Personal Hygiene

In Grangetown's houses (phases 1 & 2) there was just one cold water tap, no bathroom and no provision for heating water or cooking except by a coal fire.

Besides a lack of washing facilities, overcrowding was a root cause of poor hygiene.



Health inspector's photograph dated 1915



Living room 1949



Grangetown's Poor

1879 Cardiff Health Board Report



In all of Cardiff, Grangetown had the highest number of persons 'offered the house'.
(Cardiff Workhouse report)

It had the greatest number thought 'healthy' enough to live outside and given 'outdoor relief' - pregnant women, those with young children, the insane and children whose fathers were in prison.



Street living



Evictions



Missing fathers

**195 Grangetown families received outdoor relief whilst living on the streets.
~ 24,000 days of outdoor relief were paid in 1879 alone.**

Grangetown becomes a scandal!

Western Mail's 1879/80 campaign for saving Grangetown

"It is remarkable that no public movement has been set on foot for the relief of the people of Grangetown. Here, the inhabitants seem to be in greater want than in any other part of the borough. The iron works having closed, many out of work as a natural consequence, and poverty rife, it is compelling a number of people to adopt all sorts of measures for obtaining some kind of relief."

Soup Kitchens also notice the destitute

"Their wants being of an extreme character, a few enquiries in Grangetown led the manager of the soup kitchen [in St Mary Street] to believe that a vast amount of distress exists there."

John Batchelor becomes mayor and visits Grangetown in 1882

"They put up with dirt, filth and putrefaction; with dripping walls, rotting floors and broken windows; with all the nameless abominations of an insanitary hovel sitting over a fetid marsh, itself sodden with their own waste. They put up with the stink of their own diseased bodies; children are born and die in sickening numbers, some before they have uttered their first words."

For the love of God, something must be done!"

Overcrowding

Health inspector's housing report 1873 (after Grangetown Typhoid outbreak):

"The place was so foul I could hardly enter it. The filth was unbearable."

Police report 1866:

"... pigs, donkeys, cows, children and chickens have been in the habit of messing together in one dwelling and even in the same room."

Cardiff Chief Medical Officer for Health 1873:

"Not unusual to discover up to 18 persons lodging in a two-bedroomed cottage. Every room is a bedroom."

2,920 people found to be living in 222 houses.

An AVERAGE of 13 per house.

One accommodated 26 people, living in shifts.

Bad Design

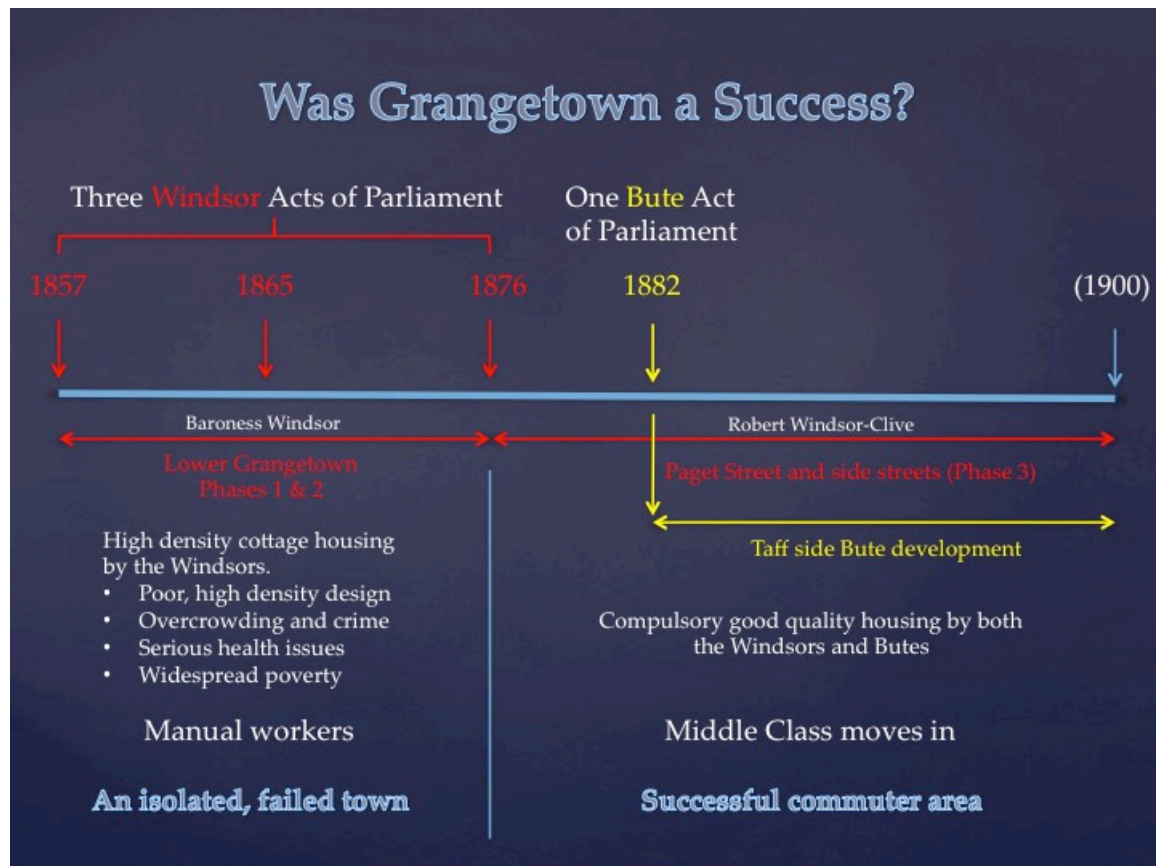
- Wooden floors over a wet marsh
- Poor damp courses and no concrete raft foundations
- Clay sewer pipes broke as clay dried out and floods struck
- Drinking water laid next to sewer pipes
- Sewerage system overloaded, requiring flushing tanks
- Well water contaminated by faeces, offal, urine and rotting vegetable matter in the streets
- Interconnected roof spaces allowed vermin to spread
- Bad ventilation – many chest complaints

1876 expansion enforces new designs



The Marquis Builds – a little





There are a number of ways of answering this question. In terms of the extremely ambitious aim of building Penarth Docks, the Ely Harbour, Penarth town and both parts of Grangetown, not to mention connecting railways, it was a success. There were severe financial over-runs to the project - in Grangetown largely due to the difficulties taming the marshy land - but overall the project was completed satisfactorily. The major failure, however, was the inability, except for the gas works, of attracting large scale industry to the Ferry Road industrial zone.

In terms of the people who lived in the first two phases of the project, it could not, however, be claimed to have been successful. Initially, there was no public transport, so that the early population may have felt as though they were somewhat trapped there. Very few shops had been provided and many sprang up in the front rooms of houses. Epidemics of serious diseases and (in the late 1860s/early 70s) extreme poverty meant that the area was considered by many (especially authorities in Cardiff) an abject failure. Overcrowding in very modest cottages led to the spread of disease and a high level of crime.

Access to a large *per capita* number of pubs did not help keep down crime or antisocial behaviour. The police station was one of the first public buildings constructed.

Efforts to cure these problems were half-hearted. The Windsors did not see it as their role to solve them: their interest was the investment. Things did not improve until early Grangetown was compulsorily taken over by the Borough of Cardiff in an attempt to improve public health and to reduce crime.

It may also be questioned whether the Windsors' fierce determination to hold onto 'our town on the Grange' led to the exacerbation of these problems. For example, they refused initially to allow Cardiff to supply Grangetown or Penarth with high standard drinking water, threatening instead to set up their own water (and gas) companies. Warnings by Cardiff's Chief Engineer and its health officials concerning foundation problems, sewerage system problems and risks to public health were largely ignored. Robert Windsor was even warned by his own

legal team that some of the measures he was considering, in order to push Cardiff out of Grangetown, were illegal. For example, he tried to obstruct the Cardiff Water Company laying water mains along Penarth Road to supply Llandough, but was forced to give in due to legal action. "Cardiff has done nothing but lay obstacles in our way" was his opinion and it was an attitude that led to quarrels that reached the courts.

However, by the time Paget Street and its side streets were built by the Windsors, and the area adjoining the Taff built by the Butes, public health was top of the agenda for such developments and new, radical changes to design and construction standards were imposed by law. These measures resulted in housing that was attractive architecturally, both inside and out, and endowed with facilities such as bathrooms, ensuring that personal hygiene was improved.

These later houses were also significantly larger, often with four bedrooms (three bedrooms and a box room). Running water, both hot and cold, was provided; ceilings were higher, ensuring better ventilation; self-flushing sewerage systems had been provided and other services, including gas, were laid on as part of the construction. (Sewers, for example, were constructed first, along back lanes, the streets following on afterwards. Potable water was provided to the *front* of houses not the back, ensuring the important separation of the two systems.)

Once the 1880s and 1890s arrived, Grangetown was attractive to the middle class and became a desirable commuter town which was now under the management of Cardiff Borough. Good transport links, a wide range of shops, schools, places of worship, parks, all provided an environment in which families could thrive. By this time, Grangetown had indeed become a success, giving rise to a special culture all its own.
