



Chartist Mural John Frost Square Newport

Options Appraisal for Relocation

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Content/Quality Assurance

1.0 Introduction

2.0 Mural Construction

3.0 Options Review

Appendices

A. Outline Cost Plan

B. Historical Background

C. The Chartist Mosaic
A Special Report by Oliver Budd, March 2006

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1.0 Introduction

- 1.01 Mann Williams consulting engineers have been appointed by Newport City Council to investigate options, practicalities and potential costs for the relocation of the Chartist Mural located adjacent John Frost Square in the centre of Newport.
- 1.02 The mosaic mural commemorating the Chartist movement is located on the eastern wall of the pedestrian passageway between Upper Dock Street and John Frost Square as illustrated in the photograph below. The mosaic depicts the marching Chartists and the battle at the Westgate Hotel. A more detailed historical background is given in appendix B.



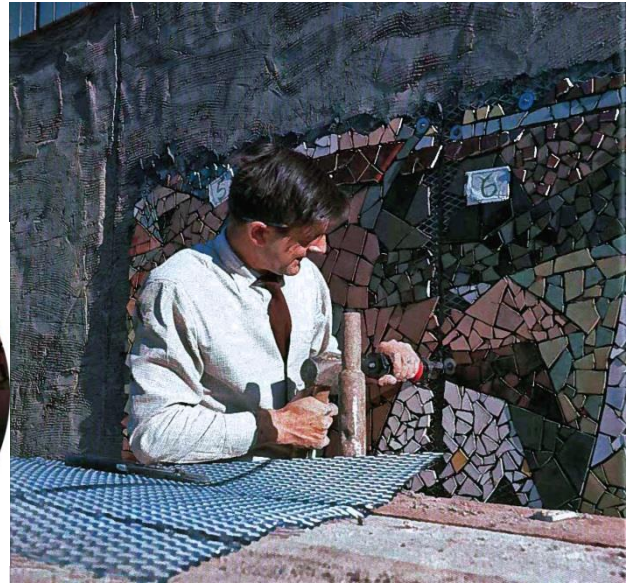
- 1.03 This work is of great significance and importance to Newport. The Chartist uprising is a key moment in Welsh history. It helped shape the current political landscape of Britain and its key players are Welsh heroes.
- 1.04 The mosaic is in the form of a narrative mural. Working from left to right the story unfolds of the march into Newport on November 4th 1839. Groups of Chartists are seen approaching the Westgate Hotel where the final scenes are played-out. Here the militia ambush the marchers, firing upon them through the windows of the Hotel in clouds of gun-smoke with the bloodied bodies of the dead and injured all around them. The animated poses of the figures and the expressions on the faces of the men add to the dramatic tension of the scene at the Hotel.
- 1.05 The mosaic was commissioned by Newport Borough Council in 1977 and was completed in 1978 by eminent mosaic artist Kenneth Budd. It has featured in many documentary films about Welsh history, notably "The Dragon has Two Tongues" and also in many books and articles. It features as images in archive collections across the world, is visited by tourists and is much loved by the people of Newport.

- 1.06 The mural contains an estimated 200,000 separate pieces of broken tile (used for clothes and the background areas) and Venetian smalti (used for finer details such as faces and hands). The mosaic covers an area of approximately 140m², originally being approximately 35m long by 4m high. An external section of approximately 4m length was originally located at the left hand end, but is currently not in place. The artist used the faces of local council officers in the mosaic giving an additional connection between Newport's past and its late c20th history.
- 1.07 The mosaic is fixed onto the pedestrian passageway wall that forms part of the retail development surrounding John Frost Square. The adjacent multi-storey car park to the east is a separate structure but is built tight to the rear face of the mural wall. The car park structure is due for demolition before the end of 2013, and the retail development containing the mural is due for demolition shortly afterwards. The exact dates are currently unknown.
- 1.08 It is understood that the original full-size "cartoons" or working drawings for the mural still exist and are held by the artist's son Oliver Budd. These are the drawings Kenneth Budd used when making the original mosaic and these drawings could prove useful in any subsequent repairs, relocation or reconstruction. They are certainly an historically significant and important element of the work.
- 1.09 The objective of this report is to collate known information relating to the mural and to carry out further investigations as necessary to enable an options appraisal to be progressed. This information and understanding of the existing mural would then enable a scheme for de-commissioning and relocation to be developed.
- 1.10 The Chartist Mural is a much treasured public artwork within Newport City Centre and hence a politically sensitive subject when discussing the de-commissioning of this artwork. The artists son Oliver Budd provided comment on the mural in 2006, and this is recorded in appendix C. His comments help to further illustrate the challenges to be faced with the artwork.

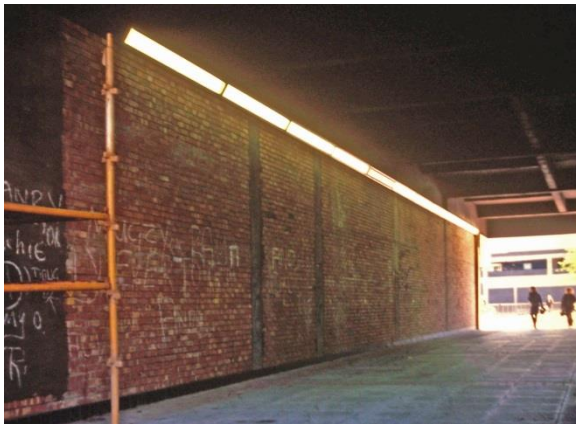
2.0 Mural Construction

- 2.01 The work which is currently present in the passageway is approximately 32 metres long and 3.9 metres high. It is made in fine Venetian “smalti” mosaic for the details and ceramic tile mosaic for the more general clothes and background elements.

The mosaic was set onto expanded aluminium sheets that were in turn bonded onto the passageway wall, with the addition of perimeter hilti type fixings to the substrate.

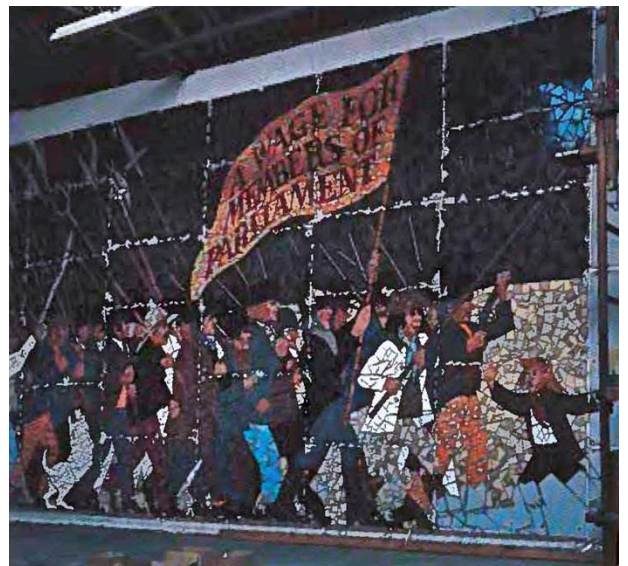


- 2.02



The backing wall is comprised of concrete cased steel columns with cavity brick panel infill. The photograph opposite shows the wall prior to fixing of the mosaic. The work was bonded to the wall with Bal Flex adhesive, a flexible cement-based product. In view of the fact that the mosaic is located in a covered area the substrate is predominantly dry, and it has remained generally well bonded. A few isolated areas of debonding have been noted and these will require further investigation to ensure they remain stable during any relocation works.

- 2.03 The photograph opposite shows the mosaic panels set on a frame prior to installation at John Frost Square. The individual panel assemblies can be identified in the photograph and indicate the typical sheet size and aspect ratio used. The BalFlex adhesive used to secure the mural sheets is a cement-based adhesive with a latex additive, which is designed to remain flexible. The sheets of aluminium lath were fixed onto the subway wall using additional screws and washers. After fixing the individual sheets to the backing wall the voids between sheets were blended with additional tiles and then the gaps between the individual tesserae were grouted with a cementitious grout.



- 2.04 The image below shows the artist, Kenneth Budd, in front of his Mural in 1978. The individual sheets have been installed but the infilling of the sheet margins has not been completed. This enables further illustration of the sheet sizes and aspect ratios used. It is noted that the sheet sizes vary according to the detail in the area of the mural.



- 2.05 It is noted that part of the left hand end of the mural was originally set outside of the covered pedestrian walkway. With poor detailing at the head of the mosaic it is understood that water penetrated behind the tiles with resultant debonding. It is understood that this section of the mural was dismantled and placed in storage, although this has not been confirmed. A section of the mural in this area, before it was dismantled is illustrated in the photograph opposite.



- 2.06 To the rear of the mural is located a multi-storey car park structure, which has been identified as being in a weakened condition through deficiencies in the original design compared to current standards, and also through deterioration of materials. It is currently closed to the public and is scheduled for demolition as noted previously. The photograph below shows the rear wall of a typical parking level which backs onto the rear face of the mural wall. It consists of brick panels set between concrete columns at regular centres.



- 2.07 As part of the investigation works the brickwork on a typical panel was broken out from the car park side, as illustrated in the photograph opposite. This revealed two half-brick skins to the car park structure, collar jointed with galvanised steel ladder reinforcement. A cavity between the two buildings exists, followed by the outer face of the retail development which consists of cavity brick panels of up to 7m long x 4.2m high. These brick panels span between concrete cased steel columns approximately 475mm square. The brick is set to give a flush face internally and externally. This gives a cavity width in the order of 250mm.

Concrete column.
Mural cavity wall
set between these
columns

Car park external
wall, 2 skins of
brickwork

Mural cavity wall outer
face (to be removed)

Mural cavity wall inner
face with mosaic tiles
bonded to opposite face



3.0 Options Review

3.01 In considering the options for the mural there are a number of key aspects that will need to be established in determining the heritage value and significance of the mural. These are summarised as follows:-

- Does the murals significance relate to its physical construction?
- Does the murals significance relate to the artist originating the work?
- Does the murals significance relate to its physical location within Newport?
- Does the murals significance relate to its presence in Newport regardless of location?
- Is a replica of the mural based on available original templates an acceptable solution?

3.02 All options, and ultimately the decision process of selecting the preferred option, needs to take into account all aspects relating to the practicalities of physical works and the availability of financial resources to carry out the works.

3.03 The practical challenges to be addressed in any relocation option are:-

- Protecting the mural during demolition of the adjacent car park
- Extraction of the mural as a series of manageable units, including the provision of rigid protection board and frames to prevent panels from flexing which being moved.
- Separating the mural from existing concrete column sections.
- Handling weight of extracted panels (approx. 5te panel weight)
- Finding suitable site to store panels or reassemble
- Local repairs to cut and damaged sections of mosaic

3.04 After consideration of a number of extraction options it was considered beneficial to utilise the existing structure above the covered passageway to provide support for lifting equipment. The geometry of the passageway, clear height and ability to release the mural panel were all reviewed and found to give a practical solution.

3.05 It was considered beneficial to extract the panel to a horizontal position, with the mural facing up, and to enable the panel to be lowered onto a travel bogie that could be moved out into John Frost Square to allow any further sub-division of the panels to occur prior to transportation.

4.0 Proposed sequence of Works

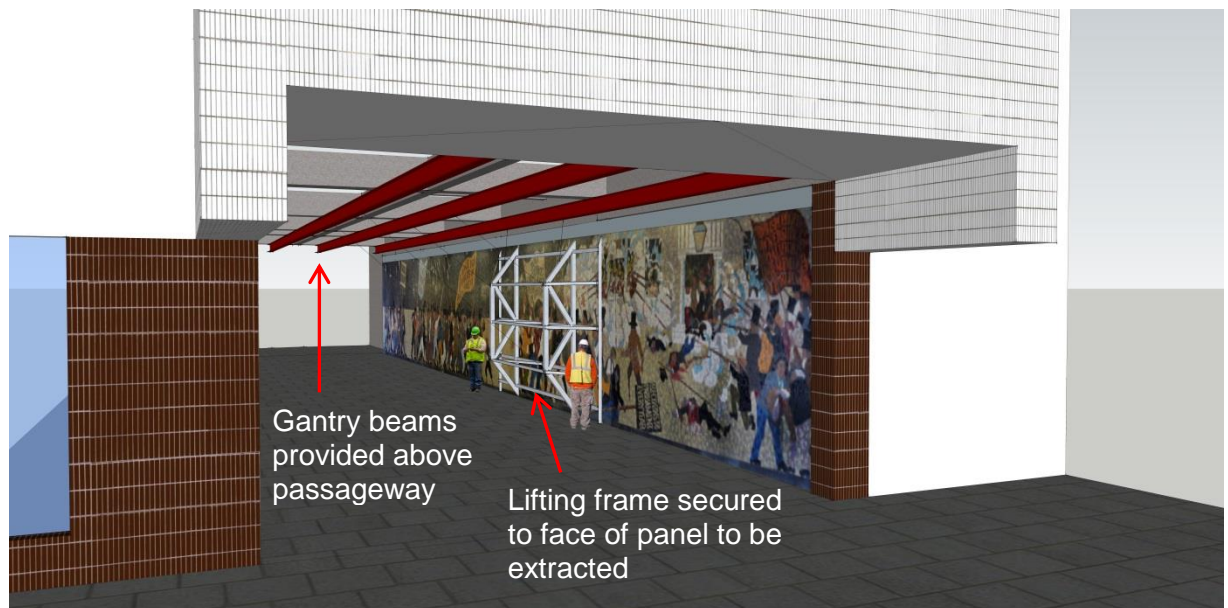
- 4.01 The following series of illustrations provide a suggested outline methodology for the relocation of the mural. Appendix A provides an outline cost plan for the anticipated works. It is noted that a number of design aspects require more detailed input and the issues of storage and relocation site remain to be defined; so at this stage the cost estimates should be considered as approximate. However the cost plan does provide guidance on the order of magnitude that should be expected on a relocation scheme.
- 4.02 The existing backing wall and column configuration is illustrated in the image below. There is approximately 29m of brickwork length x 4.2m approximate height. The concrete columns are approximately 475mm square. Temporary bracing frames would be secured to the rear face of each mural panel to act as lateral bracing and to form part of the transportation frame.



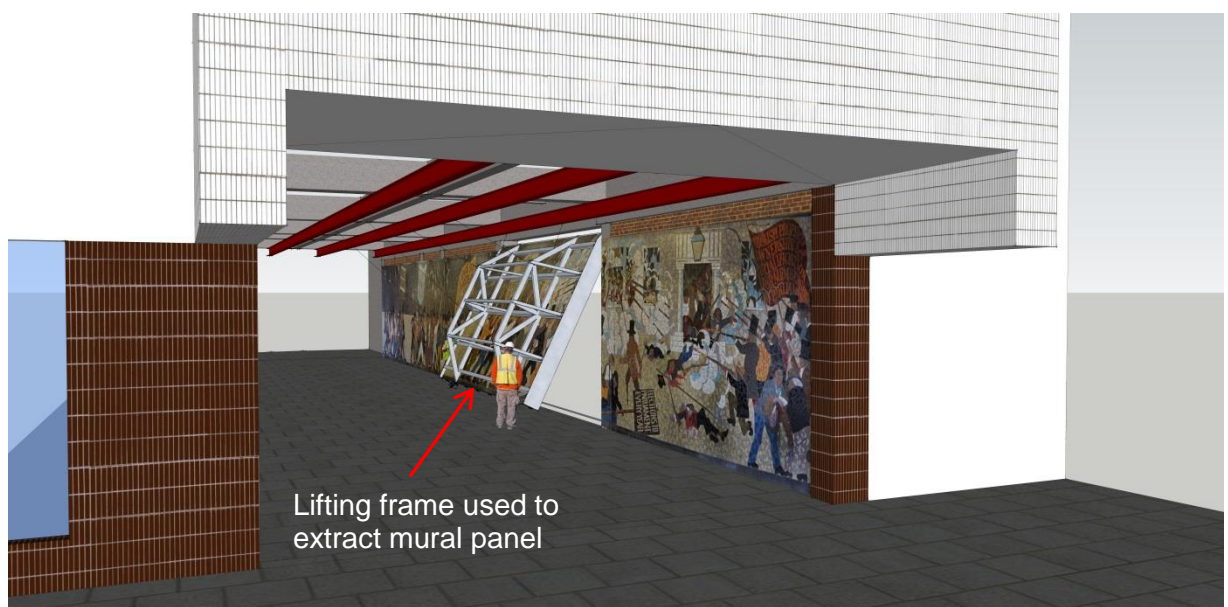
- 4.03 The mural extends across the full length of wall to the east side of the passageway as shown in the illustration below.



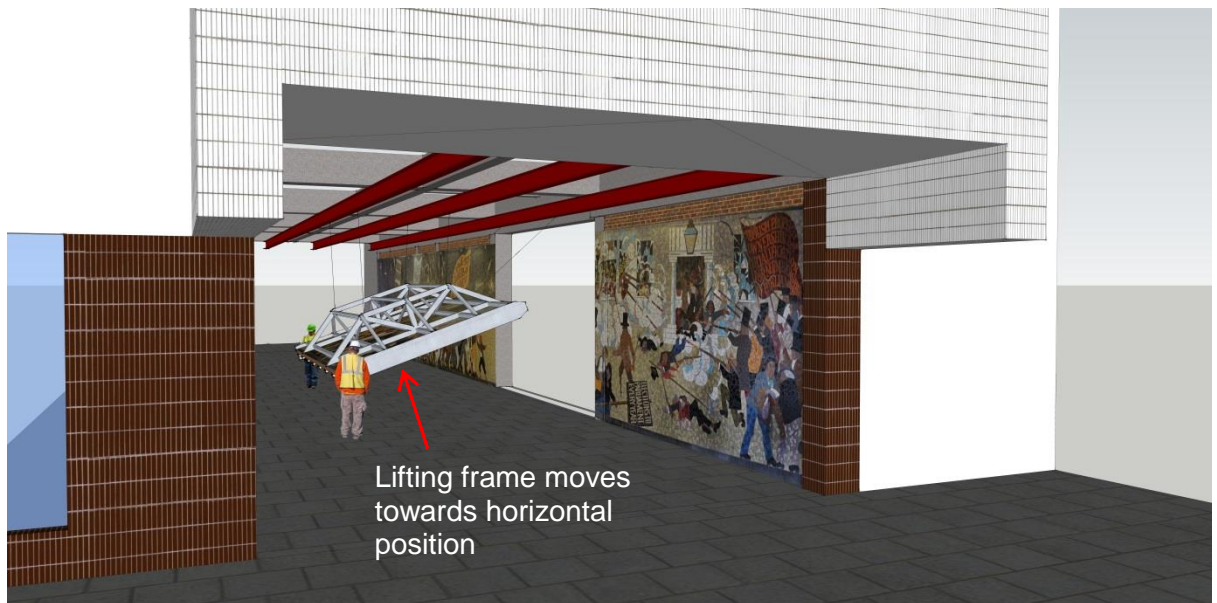
- 4.04 With a backing steel frame in place on each of the brick panels prior to demolition of the car park the brick panels are extracted using a lifting frame set against the protected front face of the mural. Three first floor level gantry/runway beams are installed to provide robust lifting points.



- 4.05 The perimeter of each brick panel between columns is carefully diamond sawn and inner and outer frames linked to form a rigid lifting assembly. Winches connected to the first floor level runway beams are used as controlled lifting points. The extraction process moves the panel gradually towards a horizontal configuration with the mural facing upwards.



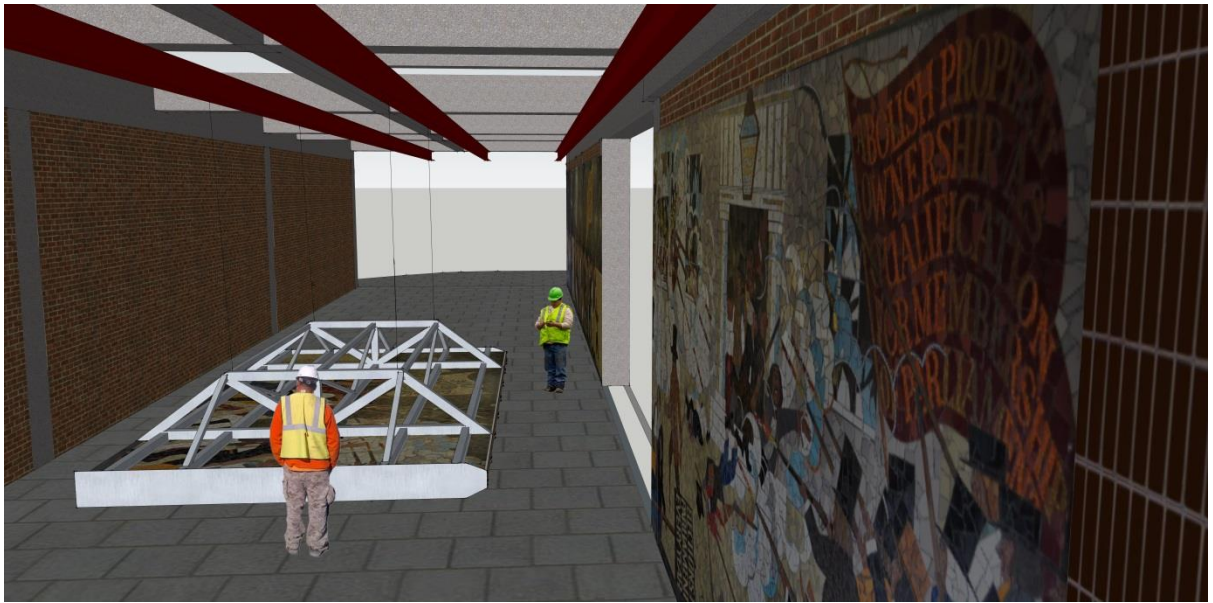
- 4.06 The lifting and extraction process continues to move the panel towards a horizontal and central position within the passageway.



- 4.07 The panel reaches a horizontal configuration.



- 4.08 The panel is lowered onto a tracked or wheeled bogie assembly to enable the panel to be towed or winched out into John Frost Square to be divided into sub-panels as necessary for transportation.



- 4.09 Panel assembly on travel bogie moved clear of passageway. Frame removed to enable lifting frame to be reused on next panel.



Appendix A

Outline Cost Plan

The following schedule provides a more detailed sequence of operations with associated budget costing allowances.

A large number of unknown factors remain in the assessment of likely costs for a scheme to extract and relocate the mural. The proposed site for the mural is currently unknown.

This cost plan identifies the key elements of works required to protect, conserve, extract, relocate and repair the mural.

Allowances for all elements of the works have been included, but will require updating as further information becomes available

Newport, Chartist Mural

Relocation - Draft cost plan

Issue v.1.02

Approximate Overall Length brickwork	29	m	
Approximate Overall Wall Height	4.2	m	
Height of Mural	3.9	m	
Number of column locations	6		Note:- only 5 bays have mural on
Approx column width	475	mm	
Number of Bays	5		

		Number	Unit	Rate	Total
1	Investigations				
1.01	Opening up works on site	1	Item	£2,500	£2,500
2	Mural Survey and recording				
2.01	Site supervision of opening up works, inspection and recording of existing structure	1	Item	£2,500	£2,500
3	Mural extraction scoping exercise, scheme design, cost estimating and feasibility review				
3.01	Initial feasibility study and provision of report with outline scheme	1	Item	£2,500	£2,500
3.02	Outline cost plan	1	Item	£1,000	£1,000
3.03	Attendance of project review meetings	6	Item	£500	£3,000
4	Detailed design works				
4.01	Enabling works design stage in preparation for Car Park demolition (rear of mural protection only)	1	Item	£5,000	£5,000
4.02	Detailed design and detailing of protection and extraction frames and associated work to mural wall	1	Item	£15,000	£15,000
5	Enabling works construction in preparation for Car Park demolition				
5.01	Extra-over temporary works support and protection to facilitate access to rear of mural wall	1	Item	£50,000	£50,000
5.02	Extra-over allowance on working practices local to mural wall to minimise vibrations / damage risk	1	Item	£5,000	£5,000
5.03	Passageway side temporary timber strutting against wall face during installation				
5.04	Careful removal of car park brickwork collar jointed 215 thick brick wall, and cart away	113.1	m ²	£125	£14,138
5.05	Removal of single skin (102mm) brickwork to rear face of mural cavity wall, and cart away	121.8	m ²	£75	£9,135
5.06	Cut exposed wall ties to rear face of mural brickwork and remove	250	Item	£5	£1,250
5.07	Allow for local patch pointing and consolidation of rear face of brickwork and removing projecting mortar	50	m ²	£70	£3,500
6	Stabilisation and protection works to rear of Mural Wall Panels prior to Car Park demolition				
6.01	Screw fix 12mm ply protection board with 10mm semi-compressible board to rear face of brickwork	113.1	m ²	£85	£9,614
6.02	Provide lateral/horizontal principal restraint steelwork fixed to columns, with vertical secondary support	113.1	m ²	£200	£22,620
6.03	Provide M10x100 hilti HY70 resin fixings to rear face of brickwork on max 600mm horiz, 1m vertical grid	200	item	£8	£1,600
7	Enabling and preparation works to shopping mall area prior to installation of extraction temporary works				
7.01	Surface clean of existing mural using macro steam ('Doff' or similar)	124.2	m ²	£60	£7,453
7.02	Local temporary 'holding' repairs, consolidation and pinning in preparation for removal of panels	35	m ²	£125	£4,375
7.03	Set up guides on column line and diamond saw panels on column lines	42	m	£50	£2,100
7.04	Application of protective facing board with foam filler to take up undulations in surface relief to mosaic	124.2	m ²	£75	£9,316
8	Mural faced brick panel extraction				
8.01	Installation of extraction works systems and assemblies on each mural bay	5	Item	£1,500	£7,500
8.02	Perimeter release of mural panel	5	Item	£500	£2,500
8.03	Removal of 4 courses of brickwork to head of mural panel	8.7	m ²	£50	£435
8.04	Insertion of hit-miss base support rail to underside of panels, including materials	29	m	£250	£7,250
8.05	Lattice steel panel lifting frame (1 frame with ability to adapt for variations in panel lengths)	1	Item	£5,000	£5,000
8.06	Overhead steelwork for installation below first floor level in passageway	95.6	m	£250	£23,888
8.07	Lifting winches (hire) and connections (fabrications)	6	Item	£1,000	£6,000
8.08	Travel bogie assembly to traverse brick panel out from passageway	1	Item	£2,500	£2,500
8.09	Extraction of mural panels and transportation to handling area	5	Item	£3,000	£15,000
8.10	Diamond sawing extracted panel to provide smaller transportation modules	29	m	£200	£5,800
8.11	General assembly, disassembly and adjustments to support platforms to facilitate cutting and transporation	1	Item	£3,500	£3,500
9	Removal of column face remnants of mural				
9.01	Protection works to column face. Bonded protection board	9.3	m ²	£250	£2,316
9.02	Diamond sawing to rear face of mural to remove	9.3	m ²	£120	£1,112
9.03	Removal on to transportation frame	5	Item	£400	£2,000
10	Transportation to storage or new assembly location				
10.01	Transportation frames and packaging in addition to backing frames	1	Item	£5,000	£5,000
10.02	Transportation to Storage	1	Item	£10,000	£10,000
10.03	Transportation to new location	1	Item	£10,000	£10,000
11	Storage				
11.01	Storage rental charges	30	weeks	£500	£15,000
12	Reassembly				
12.01	Backing structural Wall 35m long x 4m high	140	m ²	£300	£42,000
12.02	Ground surface treatment, alterations and making good	35	m	£500	£17,500
12.03	Crane / Lifting equipment	5	days	£1,200	£6,000
12.04	Refix panel sections	15	Sections	£2,000	£30,000
12.05	Repairs and patching to cut lines on mosaic based on approx 100mm wide strip, pre-removal and reinstate	68	m	£500	£34,000
12.06	Reinstatement of missing area of mural	15	m ²	£1,500	£22,500
12.07	Stainless steel fixings, dowels and pinning for reconnection of panels	1	Item	£5,000	£5,000
12.08	Provisional allowance for recreating missing area of mural	16	m ²	£1,800	£28,800
13	Contractor overheads and profit as percentage of construction items 5-10 and 12 above	15.0%	of	£435,700	£65,355
14	Construction works contingency	10.0%	of	£435,700	£43,570
15	Consultants fees for site supervision and contract administration	8.0%	of	£435,700	£34,856
				Total (excluding VAT)	£625,981

Appendix B

Historical Background



The mosaic details the Chartist Revolt, an important event in the history of Newport.

". . . . there was a scene, dreadful beyond expression - the groans of the dying - the shrieks of the wounded, the pallid, ghostly countenances and the bloodshot eyes of the dead, in addition to the shattered windows, and passages ankle-deep in gore. . . ."

So runs the eyewitness description of Thomas Watkins, a special constable on duty inside the Westgate Hotel, of the aftermath of the Chartist attack on the morning of November 4th, 1839. Outside, where twenty-five minutes earlier 5,000 armed men had thronged the streets, abandoned weapons littered the deserted square. Under the portico of the Mayor's house nearby a dying man was pleading for help - he received none, and spent another hour and a half in agony before he was finally dead. "Y Cyfodiad" - the Chartist Uprising - was over.

Chartism grew out of the discontent at the failure of the 1832 Parliamentary Reform Act. It was still only people of property who had the right to elect Members of Parliament. In May 1838 the London Working Men's Association published the "People's Charter".



1. All men over 21 to be given the right to vote
2. Voting to be conducted by secret ballot
3. The establishment of 300 constituencies of an equal number of voters
4. Parliamentary elections to be held every year
5. The ownership of property to be abolished as a qualification for a Member of Parliament,
6. Members of Parliament must be paid a wage for their work

Throughout 1838, support for the Charter spread rapidly throughout the industrial areas of South Wales. Chartist lodges were springing up everywhere, largely due to the missionary zeal of Henry Vincent, one of the most charismatic speakers of his day, and William Edwards, known as the Newport Baker. It seems likely that the earliest lodge in the Blaenau Gwent area was formed towards the end of 1838 at the Star Inn at Dukestown. Zephaniah Williams lived nearby and his friend and fellow radical, John Morgan, was the innkeeper.

Zephaniah Williams, John Frost of Newport and William Jones of Pontypool were the acknowledged leaders of the Monmouthshire Chartists. Zephaniah Williams was the moving force behind the spread of Chartism in Blaenau Gwent, and it was he who led the Blaenau Gwent Chartists through the torrential rain on their ill-fated march to Newport on that cold and windy night of November 3rd, 1839.

Throughout the spring and summer of 1839 the level of Chartist activity in the area intensified. Increasingly worried by the rise in Chartist numbers, the local ironmasters and clergy organised an anti-Chartist meeting at Coalbrookvale for April 29th. Crawshay Bailey was in the chair and George Brewer (owner of the Coalbrookvale Ironworks) and John Brown (Cwmcelyn and Blaina Ironworks) also attended. Bailey made an impassioned speech attacking the Chartists, finishing defiantly:

"I owe all that I have to my own industry and I would risk my life rather than lose my property".

The answer came two days later when a huge rally gathered on the Star Field, Dukestown (now the Twyn Star Housing Estate) with almost 5,000 people in attendance. Bands played and banners fluttered, the chief speakers arrived in a four-wheeled chaise decorated with flags. Tension increased when Capel Hanbury Leigh, Crawshay Bailey and Thomas Powell all agreed to refuse employment at their works to known Chartists, and furthermore the Royal Oak at Coalbrookvale was declared out of bounds to all of Bailey's employees.

Then, on May 9th, Vincent, Edwards and others were arrested and taken to Newport. A riot broke out, and the men were subsequently imprisoned at Monmouth Gaol. On Whit Monday, May 20th, 30,000 people attended a huge rally at Blackwood and a petition was set up for Vincent's release. Another rally at Coalbrookvale on July 1st attracted a crowd of 10,000 and by July 12th, when a petition was presented to Parliament; over a million signatures had been gathered. The petition was rejected.

Chartists had always fallen into two camps - the "moral force" men (of whom Zephaniah Williams was one) and the "physical force" men - those prepared to take up arms to gain the Charter. With the failure of the petition the physical force faction gained the upper hand. On August 12th, the largest gathering of the whole of the 19th Century took place when the Chartists met at the Star Field, Dukestown, when over 40,000 attended.

The leader of the Chartist uprising in Newport of 1839 which threatened to result in a nationwide revolution was a prosperous businessman who had been jailed for libel in a dispute over his uncle's will. John Frost blamed solicitor Thomas Prothero for William Foster's decision to exclude him from the legacy. Threatened with a longer prison term if he continued his campaign, Frost turned his wrath towards a friend of Prothero, local landowner Sir Charles Morgan. He wrote a pamphlet accusing Sir Charles of mistreating his tenants, calling for free elections as the only way of curbing the power of the ruling classes. Frost became a leading political activist and was elected one of Newport's first ever councillors in 1835. He was also appointed a magistrate and elected mayor, although he was soon replaced as mayor because of his aggressive behaviour. Frost turned his attention to the campaign for the People's Charter for electoral reform, and was sacked as a magistrate for advocating violence.

In 1838 the arrest and conviction of Henry Vincent for making inflammatory speeches fuelled a wave of violence, and Frost toured the nation calling for a massive protest against Vincent's imprisonment.

On 4 November 1839, Frost arrived in Newport with 3,000 marchers to find that the authorities had arrested and were holding several Chartists at the Westgate Hotel. The authorities in Newport had chosen the Westgate Hotel as their head-quarters and, having succeeded in taking some Chartist stragglers prisoner during the night, they housed them under the guard of about 60 special constables and thirty soldiers of the 45th Regiment of Foot under the command of Lt. Gray. Abandoning the original plan of attacking the workhouse at the top of Stow Hill, John Frost now decided to head directly to the Westgate to try and free the prisoners.

Filing down Stow Hill, the Chartists arrived at the Westgate at about 9.30 a.m. The crowd called for the release of the prisoners and soon a scuffle started on the porch of the Hotel. Whether accidentally or not is unclear, but a musket was discharged. The Chartists rushed in through the front door of the hotel. As they started firing and hammering at the shutters of the hotel windows, the fight went on in the main hall. Mayor Phillips had hoped to avoid a clash but the situation was now beyond his control.

The order was given for the soldiers to load their guns and the bottom shutters of the hotel's front windows were removed. At this point the mayor and a Sergeant Daily were injured. The soldiers now filed past the windows firing into the crowd and inflicting heavy casualties. The Chartists outside fled for cover. In the passage, those still inside continued fighting and trying to free the prisoners. Opening the door and ordering the constables to step aside, the soldiers filled the passage with musket fire. The battle of the Westgate had lasted about 25 minutes, 22 people lay dead or dying and upwards of 50 had been injured.

With the defeated Chartists streaming back up the valleys, the search began for the leaders of the "Newport Insurrection". The leaders were tried at Monmouth for High Treason, found guilty and condemned to death. On the grounds of a legal technicality brilliantly argued by the defending barrister, Sir Frederick Pollock, the death sentence was commuted and on February 2nd, 1840 Frost, Williams and Jones set sail for Tasmania to begin their new sentence of transportation for life.

In March 1854 they were pardoned conditionally, and in 1855 unconditionally. Both Jones and Williams remained in Australia. After eleven years in exile Frost was granted a pardon, but initially forbidden to return to Britain. He spent the next two years touring the United States lecturing on the unfairness of the British Government, which may have persuaded the authorities to relent and allow him to return to Britain where he was hailed a hero. Frost spent his final years writing in support of electoral and penal reform, dying in 1877 at the age of 93. He is commemorated in Newport by John Frost Square, which has a mural depicting the Chartist rebellion (above). There are also statues marking the scene of the protest outside the Westgate Hotel (left).

Despite the defeat at the Westgate Hotel, the struggle for the People's Charter continued. By now, all but one of the Charter's six points are enshrined in law as the rights of every citizen.

Appendix C

The Chartist Mosaic - A Special Report by Oliver Budd, March 2006

The following report was issued by Oliver Budd, the son of the original artist Kenneth Budd. Observations and comments made by the author of this report in relation to statements made by Oliver Budd are noted in the right hand margin

Oliver Budd Report text from March 2006

Comments/Observations

Over the past years a number of development proposals have threatened the future of this work. Now it would seem that the area will be developed and the loss of the Capitol car park will necessitate the destruction of the Chartist mural.

This work is of huge significance and importance to Newport. The Chartist uprising is a key moment in Welsh history; it helped shape the current political landscape of Britain and its key players are Welsh heroes.

The mosaic is in the form of a narrative mural. Working from left to right the story unfolds of the march into Newport on November 4th 1839. Groups of Chartists are seen approaching the Westgate Hotel where the final scenes are played-out. Here the militia ambush the marchers and the result is carnage.

The mosaic was commissioned by Newport Borough Council in 1977 and the following year it won an environmental award. It has featured in many documentary films about Welsh history, notably "The Dragon has Two Tongues" and also in many books and articles. It features as images in archive collections across the world, is visited by thousands of tourists and is much loved by the people of Newport.

The Newport Museum have cards and publications featuring the work and most importantly there is an educational package available to schools designed to teach children the history of the Chartists, using the mosaic as a visual guide.

The work is 35 metres long and 4 metres high. It is made in fine Venetian "smalti" mosaic (details) and ceramic tile mosaic (clothes and background). The mosaic was set onto expanded aluminium sheets that were in turn bonded onto the subway wall. This wall is comprised of concrete structural piers with brick infill (I have transparencies showing the structure before the mosaic was installed)

The subway roof joists visible below sit on the concrete piers in the wall structure:

The work was bonded to the wall with Bal Flex adhesive. This is a flexible cement-based product and because in this case the substrate has remained dry, the mosaic has been very well bonded for the last thirty years.

The only way the original mosaic could be saved is by removing the car park structure around the work then cutting the whole wall (including the wall structure behind the mosaic) up into huge blocks, moving these to a new site, re-assembling them and making good the cut joints to restore the work.

This one option for the saving of the original work would be a major engineering feat and hugely expensive. Also a site would have to be found that could contain a structure of over 140m² weighing more than 200 tons.

The mosaic and a 200mm thick backing structure would weight nearer to 50-70 tonnes

A more appropriate solution would be to re-create the original either as a complete work (if the new development can accommodate a large enough wall) or as a series of “vignettes” or smaller areas set sequentially onto wall areas of the new development. These would tell the story of the Chartist Uprising and will remain authentic to the original in one major respect.

The fact that I retain the original full-size “cartoons” or working drawings is the big plus in the equation. These are the very same drawings Kenneth used when making the original and by carefully selecting groups of figures from them we could re-create separate panels true to the artistry of the original work. I attach some graphics to show how this may work.

As to costs for the re-creation of the mosaic we are very fortunate in having these original drawings. To re-draw a mural of these dimensions would take months of work, the cost implications of which are obvious.

The “re-creation” costs involved therefore would be the re-jigging of the original cartoons to make “groups” of figures or adjust total dimensions. The re-creation of the mosaics to these drawings (at this stage we can of course alter things like background colours to give the work a more contemporary look) would be followed by the installation of the mosaics into the new development.

The only way that whichever preferable outcome will work is if the City and the developers involve us as consultants in the earliest possible stages of planning. This is a large and prestigious work of art that will need to be carefully incorporated into the structure of the development and not just stuck on any available wall at the last minute. It should be borne in mind that quite apart from the planning stages required the re-creation of the whole, or large elements of this work, could easily take over a year to complete.

I enclose estimates to the re-creation of this work as simply costs per m² and for general guidance only. I would encourage any meetings or dialogue to discuss these outcomes in more detail.

OLIVER BUDD – MARCH 2006

An opinion of the authors son that might form part of future options and considerations for the mural

The quote for recreation of the mural in 2006 was £1500 per m2. Based on RPI inflation this would equate to approx. £1900 per m2, and for 140m2 = £266,000. The wall substrate is assumed to be additional to this figure.