INTRODUCTION

There are two proposed developments at Morriston Hospital, Swansea between 2011 – 2014:

• Combined Services Department (CSD) (Nov ‘11 – Mar ‘13)

• HvS Phase 1B (P1B) (Nov ‘11 – July ‘14)

Note: An amount of road works will have to be completed prior to HvS (P1B) starting. This will indirectly impact upon the construction of CSD.

Outline of proposed developments:

- Combined Services Department (CSD) (Nov ‘11 – Mar ‘13)
- HvS Phase 1B (P1B) (Nov ‘11 – July ‘14)

Key

Outline of proposed developments: Footprint of CSD & HvS (Phase 1B): Road works:

Main entrance to the existing hospital

Main entrance to ALAC building

New Heli-Pad

Proposed New Main Entrance

New Multi-Storey Car Park

MORRISTON HOSPITAL - PHASING DIAGRAMS

Planning Approvals
CSD
Road works
HvS (P1B)

Construction
Road works
CSD
P1B

Drawing No: P024b-BAM-SK-PLAN

Job No.
HvS 0275

Drawing Issued: 17th Oct 2011

Revision: 00
Road works:
Traffic currently flows along the newly built road beside the multi-storey car park indicated thus:

Cars also park on the hospital site (on the proposed footprint of P1B) as indicated on the photo below. They access these spaces from the south through the hospital.
A number of buildings are earmarked for demolition:

- Old diabetes clinic
- 5 no. Estates offices as shown in the photo

This work will be carried out by the Health Board and is indicated thus:

Work on both CSD and the road works cannot start until this work is fully completed.
**ENABLING WORKS**

**PHASE 1: (7 WEEKS)**
7th NOV – 23rd Dec 2011

- Central car park closed & ‘heras’ fencing erected around central area & southern road area
- Construct turning circle near hospital entrance
- Construct pelican crossing to maintain pedestrian route to hospital entrance
- Traffic diverted along one-way system using alternative junction
- Remove raised pavement NW of fenced area
- Carry out service diversions

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**Outline of proposed developments:**
- Disabled car parking
- Main entrance drop off
- ALAC drop off

**Site area:**

**Existing hospital & ALAC building**

**Traffic flow:**

**Pedestrian flow:**

**Disabled Parking:**

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**Key**

- Entrance ONLY for:
  - Disabled car parking
  - Main entrance drop off
  - ALAC drop off

- Ambulance Drop-Off & Community Cars ONLY beyond this point

- Disabled Car Parking

- Form temp mini round about

- Drop Off ONLY

- Site compound set up (west of Estates)
- Removal of ramp
- Alternative entrance to car park
- Service diversions
- Initial excavation

- No entry by vehicles beyond this point: one way only

- Site Entrance

- Some disabled parking, number TBC

- This area will be made available to BAM fro 1st Jan 2012

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**Disabled Car Parking**

- Car parking west of ALAC building & north of REU suspended from 7th Nov ‘11

- DDA Compliant Pedestrian route

- Construct turning circle (to use in next construction phase)

- Construct turning circle (to use in next construction phase)

- Outline of proposed developments:
  - Disabled car parking
  - Main entrance drop off
  - ALAC drop off

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**Disabled parking to the rear of ALAC maintained**

**CSD Works taking place in this time frame:**
- Site compound set up (west of Estates)
- Removal of ramp
- Alternative entrance to car park
- Service diversions
- Initial excavation

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**No entry by vehicles beyond this point: one way only**

**Site Entrance**

**Some disabled parking, number TBC**

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**This area will be made available to BAM fro 1st Jan 2012**

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**Disabled car parking**

- Some disabled parking, number TBC

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**Ambulance Drop-Off & Community Cars ONLY beyond this point**

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**Disabled Car Parking**

- Car parking west of ALAC building & north of REU suspended from 7th Nov ‘11

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**MORRISTON HOSPITAL - PHASING DIAGRAMS**

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**HvS Phase 1B & CSD External Continuity Plans**

**Drawing No:** P024b-BAM-SK-PLAN

**HvS 0275**

**17th Oct 2011**
Key
Outline of proposed developments:

- Entrance ONLY for:
  - Disabled car parking
  - Main entrance drop off
  - ALAC drop off

- Existing hospital & ALAC building

- Traffic flow:

- Pedestrian flow:

- Disabled Parking:

- Service diversion completed in this phase

- This area will be made available to BAM from 1st Jan 2012

- Some disabled parking, number TBC

- DDA Compliant Pedestrian route

- IN

- OUT

- Disabled Car Parking

- Drop Off ONLY

- Ambulance Drop-Off & Community Cars ONLY beyond this point

- CSD Works taking place in this time frame:
  - Remaining ground works
  - Steel frame erection using mobile crane (swing line indicated)

- Site Entrance

- No entry by vehicles beyond this point: one way only

- Site area:

- ENABLING WORKS

PHASE 2: (5 WEEKS)
1st Jan '12 – 5th Feb '12

- Site boundary altered to enable road construction

- Service diversions in and around area of enabling works completed

- Complete road construction indicated thus:
**MORRISTON HOSPITAL - PHASING DIAGRAMS**

**Key**

Outline of proposed developments: 

Site area: 

Existing hospital & ALAC building: 

Traffic flow: 

Pedestrian flow: 

Disabled Parking: 

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**ENABLING WORKS**

**PHASE 3: (5 WEEKS)**

5th Feb '12 – 18th Mar '12

- Alter site boundary to include for HvS Phase 1B & remainder of road construction in front of hospital entrance
- Patch in new road to turning circle at hospital entrance (on nights) indicated thus:
  - Complete construction of retaining wall & adjacent stair core
  - Complete snagging and inspections
  - Close off ‘old’ junction at Mynydd Wastad Road

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**Disabled Car Parking**

Disabled sized parking bays to the rear of ALAC

CSD Works taking place in this time frame:
- Remaining ground works
- Steel frame erection using mobile crane (swing line indicated)

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**Refuge Seating @ 60m intervals with roof**

**DDA Compliant Pedestrian route**

**Patch in turning circle to newly constructed road (on nights)**

**Complete construction of retaining wall + stair core**

**No entry by vehicles beyond this point: one way only**

**Single handrail (key clamp) to pavement on both sides of road**

**Some disabled parking, number TBC**

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**MORRISTON HOSPITAL - PHASING DIAGRAMS**

**HvS Phase 1B & CSD External Continuity Plans**

Drawing No: P024b-BAM-SK-PLAN

HvS 0275

17th Oct 2011
Footprint of CSD & HvS (Phase 1B):

Activities in this timeframe:
- CSD works will continue
- P1B works continue including excavation to formation, construction of tower crane bases and retaining wall along southern line

Outline of proposed developments:

Key

- Traffic flow:
- Bam hoarding line:
- Hoist Location:
- Tower crane base:
- Disabled Parking:

Some disabled parking, number TBC

Refuge Seating @ 60m intervals with roof

Works taking place in this time frame:
- Site mobilisation
- Tower crane bases constructed
- Excavate to formation
- Retaining wall constructed
- Traffic diverted back through main junction

Disabled sized parking bays to the rear of ALAC

Single handrail (key clamp) to pavement on both sides of road

Works taking place in this time frame:
- Slab construction (all floors)
- Steel frame erection completed using mobile crane (swing line indicated)

Disabled car parking

Entrance

Site Compound

DDA Compliant Pedestrian route

Both P1B & CSD continued: March ‘12
End of Financial Year

Activities in this timeframe:
- CSD works will continue
- P1B works continue including excavation to formation, construction of tower crane bases and retaining wall along southern line

Planning Approvals
- CSD Road works
- HvS (P1B)

Construction
- Road works
- CSD
- P1B

HvS Phase 1B & CSD External Continuity Plans

Drawing No: P024b-BAM-SK-PLAN

Job No. HvS 0275
Drawing Issued: 17th Oct 2011
Revision: 00
Footprint of CSD & HvS (Phase 1B):

Activities in this timeframe:
• Completion of the new build part of the CSD development
• Completion of first part of associated external works for CSD
• Erection of 2 No. tower crane for P1B
• Superstructure Phase 1 for P1B
• First quarter of the building envelope for P1B

Outline of proposed developments:

- Traffic flow:
- Bam hoarding line:
- Hoist Location:
- Tower crane base:
- Disabled Parking:

Key:

- Site Entrance
- DDA Compliant Pedestrian route
- Disabled sized parking bays to the rear of ALAC
- Tower Crane No. 1 (50m radius)
- Single handrail (key clamp) to pavement on both sides of road
- Site Entrance
- Refuge Seating @ 60m intervals with roof
- Works taking place in this time frame:
  - Superstructure Phase 1
  - 25% of building envelope
- Site Compound
- Entrance
- Tower Crane No. 2 (45m radius)
- Disabled car parking
- Entrance
- Site Compound
- Disabled sized parking bays to the rear of ALAC
- Site Entrance
- Tower Crane No. 1 (50m radius)
- Single handrail (key clamp) to pavement on both sides of road
- Site Entrance
- Refuge Seating @ 60m intervals with roof
- Works taking place in this time frame:
  - Superstructure Phase 1
  - 25% of building envelope

Planning Approvals
CSD
Road works
HvS (P1B)

Construction
Road works
CSD
P1B

disabled car parking

Site Compound

Works taking place in this time frame:
• Superstructure Phase 1
• 25% of building envelope

Some disabled parking, number TBC
Footprint of CSD & HvS (Phase 1B):

- Completion of the CSD refurbishment
- Completion of the final part of CSD externals
- P1B: Substructure Phase 2
- P1B: Superstructure Phase 2
- P1B: 55% of the building envelope complete
- P1B: 25% of the fit-out

Outline of proposed developments:

- Refuge Seating @ 60m intervals with roof
- DDA Compliant Pedestrian route
- Small amount of hoarding to allow 'link' works to be completed
- Works taking place in this timeframe:
  - Substructure
  - Superstructure
  - Envelope
  - Fit out

Once REU demolished, site hoarding is extended

Some disabled parking, number TBC

Planning Approvals
- CSD Road works HvS (P1B)

CSD COMPLETION & P1B PROGRESSED: MARCH '13
End of Financial Year

Activities in this timeframe:
- Completion of the CSD refurbishment
- Completion of the final part of CSD externals
- P1B: Substructure Phase 2
- P1B: Superstructure Phase 2
- P1B: 55% of the building envelope complete
- P1B: 25% of the fit-out

Key

Outline of proposed developments:

- Footprint of CSD & HvS (Phase 1B):
- Traffic flow:
- Bam hoarding line:
- Hoist Location:
- Tower crane base:
- Disabled Parking:
Footprint of CSD & HvS (Phase 1B):

Activities in this timeframe:
- CSD fully operational
- P1B: Substructure Phase 2 completed
- P1B: Superstructure Phase 2
- P1B: Building envelope complete
- P1B: Fit-out complete
- P1B: External works complete
- P1B: Commissioning complete
- Tower crane No.1 dismantled
- Tower crane No. 2 dismantled

Outline of proposed developments:

Key
- Refuge Seating @ 60m intervals with roof
- All remaining works completed in this time period
- Site Entrance
- DDA Compliant Pedestrian route
- Site Compound

Traffic flow:
- Bam hoarding line:
- Hoist Location: H
- Disabled Parking:

Planning Approvals
- CSD Road works HvS (P1B)
- Construction Road works CSD P1B

MORRISTON HOSPITAL - PHASING DIAGRAMS

P1B ENVELOPE & FIT OUT COMPLETE:
Apr ’13 – July ’14

Activities in this timeframe:
- CSD fully operational
- P1B: Substructure Phase 2 completed
- P1B: Superstructure Phase 2
- P1B: Building envelope complete
- P1B: Fit-out complete
- P1B: External works complete
- P1B: Commissioning complete
- Tower crane No.1 dismantled
- Tower crane No. 2 dismantled

Refuge Seating @ 60m intervals with roof

All remaining works completed in this time period
Footprint of CSD & HvS (Phase 1B):

Traffic flow:

- CSD fully operational
- P1B fully operational
- Site compound decanted
BAM World Wide Safety Day

On 23 October 2012 BAM became part of the Worldwide Safety Day campaign which was happening throughout all Europe.

At Morriston Hospital, Swansea all supervisors on BAM sites drove home the need to improve our safety performance by giving presentations to all local, regional, and construction site staff which also included our partners (co-makers, sub contractors and suppliers).

The Content of the Presentation

Christian Parton led the presentation to a site team of 79 people. After explaining the purpose of Worldwide Safety Day, nine key health and safety risks were discussed between the group and a specific toolbox talk was given on 'slips, trips and falls'.

After the feedback session everyone agreed that the safety on both sites was of a high standard.

The idea of a BAM Worldwide Safety Day is an excellent way of highlighting site safety. It was a good way of discussing the safety on site with everyone involved in both projects.

A combined total of 79 people took part in the BAM Worldwide Safety Day at Morriston Hospital.

Perfect Safety and Team Photographs

As part of the BAM Worldwide Safety Day a selection of perfect photographs were taken in order to highlight risks that can happen on some activities and how they are being controlled.

On our CSD site, a safety door system to the lift shaft openings is in place to restrict un-authorised access into lift shafts (access is gained by a lift operative only). Fixed signage to the doors informs operatives of the risks involved when entering, and emergency contact telephone numbers are shown.

On our Healthvision Phase 1b site, a trained banksman controls the traffic exiting site in order to protect pedestrians and public vehicles.

Purpose made crossing points with warning signs have been placed either side of the site entrance as a safe place to wait for pedestrians when a vehicle is entering / leaving site.
Easter Egg Donation
Morriston Hospital - Oakwood Ward, Paediatric Assessment Unit

Project team
BAM project civils
Christian Parton (Project Manager)
Eunice Williams (Planner)

Other organisations involved
Morriston Hospital – Children’s Ward

Keywords
Community
Community relations

Project details
BAM Construction are working again with the Abertawe Bro Morgannwg University Health Board on £9.5 million Combined Service Development at Morriston Hospital being built as part of the hospital’s redevelopment.

It will include a refurbishment and extension to the Artificial Limb and Appliance Centre (ALAC) to provide specialist clinical accommodation, purpose built for services such as the Rehabilitation Engineering Unit (REU), the Orthotics/Surgical Appliances Department and the Medical Electronics Department.

The existing ALAC unit will be refurbished and a new three-storey building constructed to provide specialist clinical accommodation.

The ALAC centre at Morriston Hospital is one of only three in Wales, the others being in Cardiff and Wrexham.

Community Relationship
Easter came early for the patients on the Children’s Wards at Morriston Hospital when the Easter Bunny came to see them.

BAM Construction organised the special visit in order to surprise the children and young people with Easter eggs. The company are currently working on the redevelopment at Morriston Hospital, and wanted to do something special for the paediatric patients.

‘On behalf of the children and young people on Oakwood Ward, the Paediatric Assessment Unit and Ward M, I would like to thank the team at BAM for their kind donation of Easter eggs. The visit from the Easter Bunny was an extra special treat for all, and has cheered the patients up, helping them to make a speedy ‘recovery’
Nicola Lewis, Acting Lead Nurse for Paediatrics

‘At BAM, we’re always delighted to involve the community, and constructing something as important as the Combined Services Department (CSD) at Morriston Hospital is a great opportunity to create a fun event like this. It is a tough business on any construction site so it’s a very rewarding experience to see the faces of the children in the hospital as they receive their Easter Eggs from the BAM bunny!’
Christian Parton, BAM Senior Site Manager
Llangyfelach Primary School Case Study

Combined Services Department, Morriston Hospital, Swansea
Western Region

Initial contact with Primary School
Llangyfelach Primary School was contacted by BAM Construction as part of CSD’s Community Engagement activities. The headteacher, agreed that as the CSD project was very near to the location of the school, a presentation on safety on site would be helpful and appropriate. This would be specifically aimed at school children who were between the ages of 7 to 11 years. It was also agreed that the presentation would help the children to think about possible careers in construction.

The Content of the Presentation
By way of introduction, the children were asked if they were aware of the construction project that was on-going at Morriston Hospital. Almost every child confirmed that they were and also how many of their parents or relatives were involved in construction.

A large percentage confirmed some connection with construction.

The Safety Presentation
Christian then explained about the CSD project and what was involved in it. He explained the dangers on a site like CSD by way of using specific examples.

Finally, Christian explained how we deal with safety on site with particular emphasis on personal protective equipment. This was met with much enthusiasm by the children and it resulted in many questions from them. The children shared some examples of what they thought was unsafe on site and agreed that trespassing on site was dangerous.

Key Statistics
- Llangyfelach Primary School caters for 189 pupils
- 10 teachers
- 75 No. pupils involved in the assembly
- Ages 7-11 years

'The assembly presentation and links with BAM will benefit the pupils in two ways. Firstly it will help pupils understand the dangers of construction sites. Secondly, as we prepare pupils for their future working lives it will give pupils an insight into possible work and career opportunities in the construction industry.'

Mr Mike Flynn, Headteacher
Ysgol Plasmawr Building Game Case Study

Combined Services Department, Morriston Hospital, Swansea
Western Region

Background & Industry Involvement
The Building Game held at Ysgol Plasmawr Welsh Medium School, Cardiff was organised by Careers Wales in conjunction with BAM Construction and other external businesses.

Careers Wales enable Employers to work closely with schools and colleges by establishing links and setting up work-related learning activities. It supports community engagement by organising events which help to equip a young person with the skills they need to be able to get and keep a job and progress their careers. The Building Game event had particular relevance to the construction industry as it endeavored to shape a young persons’ view on the world of work and ultimately prepare future employees.

The Building Game
The pupils were divided into approx. 10 teams, five to six pupils each. Care was taken to ensure that these groups were mixed gender / ability teams and ‘non-friendship’ so as to best replicate the real working environment. Each team consisted of a Project Manager, Site Engineer, Quantity Surveyor, General Foreman and a Planner. Both the Project Manager and the Site Engineer were allowed to view the model for short periods. The model was contained within a box file. These team members then had to communicate what they saw to the QS who then had to buy the blocks. These blocks were kept in a separate location. Only the General Foreman could actually build the model with verbal direction from the members who viewed it. Finally, the Planner had to keep a record of the blocks ‘bought’ and total the amount.

Winning Team & Real Life Relevance
The winning team was the one whose model and budget best matched the actual model. All pupils enjoyed the event immensely & it gave real insight into team working and competitiveness. It also demonstrated the importance of communication within the ‘workplace’.

‘Our links with BAM and their involvement in the Building Game will no doubt benefit Ysgol Plasmawr’s Year 8 pupils. It was advantageous to have a BAM representative as they fully understood what we were trying to achieve and supported our ethos’

Anwen Phillips, Education Business Adviser, Careers Wales

Key Statistics
- Ysgol Plasmawr caters for 1028 pupils
- 65 teachers
- 72 pupils involved in the game
- Ages 12-13 years old (Year 8)
- 170,000 pupils have participated in an education business related activity organised through Careers Wales

One of the models contained within a box file which the pupils had to replicate

A completed model try one of the teams