



Ms Beverly Duffy
Director
Inquiry into the Building the Education Revolution Program
General Purpose Standing Committee No. 2
Parliament House
Macquarie Street
Sydney, NSW 2000

MT10/1145

Dear Ms Duffy

Thank you for the additional questions from members of the Standing Committee received on 5 July 2010.

The NSW Department of Education and Training is pleased to be able to clarify the issues raised by the Standing Committee members through these additional questions.

We have also attached additional information that will hopefully add to the committee's understanding of the NSW Building the Education Revolution Program.

The Building the Education Revolution Program in NSW continues to make great progress towards its objectives to provide economic stimulus through the rapid construction and refurbishment of school infrastructure.

We are building learning environments to help children, families and communities participate in activities that will support achievement, develop learning potential and bring communities together.

The program is greatly improving the quality of facilities in our schools while supporting jobs in the construction industry. Over 91% of jobs generated in the program to date have gone to local workers with almost 10% of workers listed as apprentices or trainees thereby ensuring the growth of skills now and in our workforce of the future.

Yours sincerely

Michael Coutts-Trotter

**DIRECTOR-GENERAL OF EDUCATION AND TRAINING
MANAGING DIRECTOR OF TAFE NSW**

Mc July 2010

Additional Questions on Notice
Inquiry into the Building the Education Revolution Program
NSW Department of Education & Training

Questions from Hon Robyn Parker MLC:

1. *In the interim report of the Senate inquiry into Primary Schools for the 21st Century, the Committee majority considered that 'remaining P21 funds should be managed and administered locally by schools if they so choose' (p37). Is this an option? i.e. is it at all possible for any of the 109 NSW public schools which have not begun their P21 projects to change their mind to self-manage.*

The Primary Schools for the 21st Century program (P21) is well underway in NSW Government schools, with all 2,366 approved P21 projects having commenced. Of these, 2,282 (96%) projects have started on-site construction works.

Of the 84 projects yet to start construction, all but six (current as at 16 July 2010) would be contractually impacted by shifting funds to local management. A contractual implication could result in a cost to change delivery of the project, thereby reducing the amount of funding available to the school.

The remaining 78 projects are at varying levels of the tender award stage and have had architects and engineers prepare design and construction documentation.

Questions from Hon Christine Robertson MLC

2. *Can you provide the consultation, communication process and which projects occurred in the following schools in the planning and implementation of the BER program:*
 - (a) *Abbotsford Public School*
 - (b) *Mt St Thomas Public School*
 - (c) *Black Hill Public School*
 - (d) *Cattai Public School*
 - (e) *Nashdale Public School, and*
 - (f) *Tottenham Central School*

School Principals have been involved in the decision making process for their P21 Projects from the commencement of the program.

During the project nomination and submission phase of the program, school Principals were asked to submit an online nomination of the school's preferred projects. School Principals were responsible for consultation with their Parents and Citizens Association and school community. Based on these nominations, the BER Integrated Program Office consulted with schools via email and phone for their final project submission to proceed to the Department of Education, Employment and Workplace Relations.

The BER Integrated Program Office also has dedicated Principal Liaison Officers that are allocated regionally and are available for consultation with Principals. This is in addition to the BER Regional Program Directors and Managing Contractors.

In line with the commitment to transparency, the NSW BER Integrated Program Office has developed a dedicated BER website providing a wide range of information, including estimated cost breakdowns for each P21 project.

The following list shows the original approved projects for the listed schools:

School	Original approved projects
Abbotsford Public School	new Classroom Facilities
Mount St Thomas Public School	new Hall/COLA/Canteen
Black Hill Public School	new Classroom Facilities
Cattai Public School	i) new Library and ii) new COLA*
Nashdale Public School	new Classroom Facilities
Tottenham Central School	i) new Canteen and ii) Classroom Upgrade

*Subsequent to the Department of Education, Employment and Workplace Relations' approval, a variation has been approved to close the COLA project (project 2) at Cattai Public School, leaving one current approved project (new library).

3. *Can you outline the secondary round of the BER program and the way that these funds have become available?*

There is no secondary round to the BER program.

Questions from Dr John Kaye MLC:

4. *How many apprentices or construction workers employed on the P21 project at Black Hill public school were of Aboriginal descent?*

This project was self-managed. The school has reported to the BER Integrated Program Office there was one worker on site of Aboriginal descent.

5. *Merrylands East P&C received only 313 documents from 5436 documents concerning their P21 from an FOI application on 10 December 2009. The P&C viewed their BER P21 file on 3 June and noted less than 500 documents with some documents from an FOI omitted.*

6. *Where are the remaining documents and why won't they be released to the school's P&C?*

The initial Freedom of Information request was received on 10 December 2009.

Following investigations, the total number of pages identified (5436) were considered relevant to the request. The applicant was subsequently asked to amend the scope of their application in order for the department to be able to process it within a reasonable timeframe.

On 18 February 2010, the applicant agreed to reduce the scope of the application.

Documents and information considered relevant contained business affairs of a number of third parties. In accordance with section 32 of the Freedom of Information Act, the department consulted with these third parties and obtained their views in relation to releasing the documents.

Following negotiations, a total of 313 pages were identified as being relevant to the request. The Notice of Determination provided to the applicant explained this and a schedule of exempt documents was also provided.

The Administrative Decisions Tribunal has ruled that 40 hours is an unreasonable diversion of resources. It took the Department 50 hours to process this application.

7. Merrylands East P&C has a letter from Ms Gillian Mitchell, Branch Manager (Federal Building the Education Revolution Office) that indicates that she received DET advice that no toilet block was being demolished at their school contrary to BER Office to the school. Who provided this misleading advice to Ms Mitchell that resulted in the school receiving a letter that added to the poor communication?

In the original concept plan, the existing toilet block was to be demolished and rebuilt where the demountable canteen is currently located. A detailed cost estimate for the first concept plan was developed and provided to the school Principal.

The school was not satisfied with this concept plan, so a second one was developed following extensive consultation with the school.

The second concept plan involved the demolition of a toilet block adjacent to the school administration building, with the provision of a new toilet block as part of the Hall/COLA building.

The final project scope is yet to be agreed with the school.

8. Why did a BER Officer call a United Nation Association of Australia World Environment Day (2009) garden and sustainability program a garden in an internal email correspondence on Monday 7 December 2009.

The comments made were inappropriate. The officer responsible has been counselled as per the department's code of conduct.

9. The estimated costs for the superstructure electrical services costs for a core 14

toilet block at Merrylands East is \$61 866. How many lights and light fittings are there in a core 14 toilet block and what is the cost of each light fitting?

Superstructure electrical services costs for the toilet block are more than the provision of lights and light fittings. Superstructure electrical services costs include the supply, installation and connection of electrical infrastructure.

\$9,000 has been allocated for the following:

- 3 switches for electronic security protection to the doors
- single power switch
- circuits for future hand dryers
- lockable switch for future rainwater pump
- 14 fluorescent lights with vandal proof diffusers
- 3 roof ventilators plus ventilator control panel
- a wall mounted buzzer with light outside the disabled toilet including panic button
- emergency light in disabled toilet

\$52,866 has been allocated for the provision of 5kW solar panels.

These costs are estimates for the first concept plan. The project will only cost the lesser of either the actual costs incurred or 105% of the benchmark value.

10. What happens to any IPO contingency costs if they are not used on the Merrylands East P21?

The BER Integrated Program Office sets aside 5% from every school's allocation as a contingency. Contingency funding is to cover costs of unforeseen risks which may emerge during construction such as buried asbestos-containing materials, soil contamination, archaeological remains, endangered species or unidentified topographical or geological issues.

If after delivering a school's full approved P21 project there is funding left over, including any unused contingency allocation, the BER Integrated Program Office talks to the school Principal about transferring this left over funding to another NSW public school whose P21 project needs top-up funding.

The Commonwealth Government's guidelines allow up to 5% of a school's funding allocation to be transferred following appropriate consultation. The BER Integrated Program Office can only transfer larger amounts with the school Principal's permission. The school Principal can, instead, choose to return the funding to the Commonwealth Government.

11. Site supervision costs for two projects at Merrylands East total \$169 184. How many people were going to be employed for site supervision? How many hours per day? What would be their role?

The Managing Contractor for this project has employed a team of over 130 experienced site supervision staff who are utilised across the South Western Sydney Region (the region this Managing Contractor has been allocated to manage the Primary Schools for the 21st Century works).

The Managing Contractor has a tiered structure for overseeing the construction works and determines the amount of site supervision required at various phases of the project.

The level of supervision required is assessed depending on a variety of factors including the project risk profile, Occupational Health and Safety requirements and the Managing Contractor's project management plan requirements.

The roles of the various team members extend beyond just the supervision of the project on site and include but are not limited to:

- Construction Manager
- Project Manager
- Project Engineer
- Site Engineer
- Services Engineer
- Foreman and Sub-Foreman
- Site Safety Officer

12. How did Hansen Yuncken arrive at \$77 445 for superstructure hydraulic costs? What do hydraulic costs involve?

Superstructure hydraulic costs include the supply, installation and connection of plumbing infrastructure. The allocation for this is for the following:

- 2 stainless steel wash troughs
- 1 stainless steel urinal
- 1 hand basin
- 15 water closets
- 1 shower
- 3 floor drains
- 1 hose cock

These costs are estimates for the first concept plan. The project will only cost the lesser of either the actual costs incurred or 105% of the benchmark value.

13. *Statutory planning, design, documentation and certification costs is estimated at \$75,000 for a core 14 hall. What is the cost for each item? What documentation does the school receive? Who receives the statutory and certification costs?*

The allocation for statutory planning, design, documentation and certification costs is for engaging a number of consultancy disciplines including:

- Architectural
- Engineering (civil, structural, hydraulic, electrical, mechanical)
- Acoustic engineering
- Geotechnical
- Environmental soil classification costs
- Town Planning consultant
- Building Code of Australia/Principal Certifying Authority consultant
- Environmental consultants
- Dilapidation surveys
- Heritage consultant
- Data capture consultant

The costs for these are aggregated across the schools in this Managing Contractor's Region. The Managing Contractor has lump sum prices for consultants for the program based on a defined scope of works. These costs have then been distributed equitably based on the proportion of Commonwealth funding for the project compared to the total regional funding. Site specific costs are then added to each project as required so individual costs per item are not able to be broken down by each line item.

These costs are covered in the schools project budget.

The Managing Contractor provides the BER Integrated Program Office with a copy of all reports and certifications.

These costs are estimates. The project will only cost the lesser of either the actual costs incurred or 105% of the benchmark value.

14. *Site electrical services cost \$182,345 and site hydraulic services cost \$118,146 for a core 14 hall at Merrylands East. How were these figures arrived and what is the actual works?*

Site electrical services include the supply and installation of in-ground electrical infrastructure. Site hydraulic services costs include the supply and installation of in-ground plumbing infrastructure.

Site hydraulics works include approximately:

- 65m of trenching and pipes for sewer drainage;
- 210m of trenching and pipes for water;
- 145m of trenching and pipes for gas;
- 260m of trenching and pipes for stormwater; and

- reinstatement of existing surfaces.

Site electrical works include approximately:

- 110m of trenching and electrical cabling for power as well as a new main switch board and five cable pits;
- 120m of trenching and data (communication) cabling for power as well as a new main switch board and 12 cable pits and;
- reinstatement of existing surfaces

The estimated costs for these were developed based on the plans for the project using the Managing Contractors internal cost planning team based on tendered schedules of market rates from subcontractors for the various elements of work. For some elements of work, over a dozen schedules of rates were received.

These costs are estimates for the first concept plan. The project will only cost the lesser of either the actual costs incurred or 105% of the benchmark value.

**NSW Department of Education and Training
General Purpose Standing Committee No. 2**

Responses to Questions on Notice

Additional Information

- TAB A Self Managing and the Building the Education Revolution (BER) Program – an overview
- TAB B Project budget maintenance
- TAB C Cost questions fact sheet
- TAB D Modular Design Range (MDR) buildings
- TAB E Use of local contractors
- TAB F School facilities standards
- TAB G BER Program overview
- TAB H Case studies
- Abbotsford Public School
 - Mount St Thomas Public School
 - Cattai Public School
 - Nashdale Public School
 - Tottenham Central School

Self Managing and the Building the Education Revolution (BER) Program – An Overview

All school Principals were provided with detailed information to assist them in making an informed choice about whether they wanted to self manage their projects in National School Pride (NSP) and the Primary Schools for the 21st Century (P21) Projects.

For National School Pride, Principals could choose to manage all the work themselves or have it managed by the local asset management unit.

For Primary Schools for the 21st Century, a review process of applications was put in place due to the large and complex nature of these projects.

National School Pride (NSP)

On 9 April 2009, the Deputy Director-General of Finance and Infrastructure, emailed Principals with some information on local procurement and local management of their BER projects. This letter was followed by correspondence from the BER Program Director on 22 May 2009 reminding schools that the option to self manage their BER projects was still available. The letter also included an information pack (which can be viewed on the BER website: http://www.ber.nsw.gov.au/wp-content/uploads/Principal_Project_Management_NSP.pdf) to assist Principals in making an informed decision about managing their NSP project.

Of the 2179 schools in the NSP Program, only 269 (12%) elected to self manage.

As a self manager a Principal accepted a number of responsibilities, one of which was program reporting. The reporting was critical as the Department was at risk of not receiving funding if a project was not completed and reported in accordance with the BER Guidelines. It also provided the NSP delivery team with advice on the progression of the school's project. This is an area that requires significant improvement for self managing schools.

Primary Schools for the 21st Century (P21)

All Principals were given the opportunity to locally manage their Primary Schools for the 21st Century (P21) project(s). In early May 2009, all schools were sent a BER Bulletin to advise them of the process to submit an expression of interest to self manage their P21 project(s). All schools submitting an expression of interest were provided with an Information Package via email.

Due to the risks associated with projects failing to meet the Commonwealth guidelines and the complexity involved in managing a major construction project, Principals were provided with



information to make an informed decision and then asked to complete an application to show how they would be able to meet them. These applications were assessed and approved by the Infrastructure Coordinator General.

Only four schools followed the application review process through to the end. These schools all received approval to self manage their P21 projects. No schools were declined. One school withdrew after the approval process.

The P21 Information Package can be viewed on the BER website: http://www.ber.nsw.gov.au/wp-content/uploads/Principal_Project_Management_P21.pdf.



Project Budget Management

The BER Program Office has successfully managed budget expenditure across the Primary Schools for the 21st Century (P21) program by:

- Working with school Principals at the Estimated Construction Sum (ECS) stage to ensure that each school's project fitted within the school's indicative funding allocation. In some cases this meant agreeing to project savings or changes with the school Principal; and
- Closely monitoring project costs throughout the construction stage, including the use of any contingency allowances to cover unforeseen costs, with the aim of identifying any savings as early as possible. Where savings were identified, we worked with the school Principal to deliver the approved project and include any additional optional scope items in line with the Australian Government's Guidelines.

We now have 99% of projects approved to proceed to construction and over 96% in construction. This gives us a sound understanding of how the program is tracking against budget.

Due to careful monitoring of the expenditure and the use of contingency funding across the BER Program, there is sufficient funding to deliver the approved project scope at every school.

Each school's project is unique and the scope items to be added back in will differ from school to school. However, generally it means that elements, like rainwater tanks, covered walkways and solar panels, that may have been removed early on to align project scope and budget, will now be delivered.

TAB C

Cost Questions Fact Sheet

Construction costs

What do BER project costs cover?

BER projects need to cover the full costs of developing and delivering the school's project. This includes the actual cost of the building works as well as the costs of all pre-construction works, site investigation, concept design, detailed planning, statutory approvals, services, site works and more.

Many schools that have had construction works undertaken in the past by the Department of Education and Training may have only been aware of part of the actual costs of developing and delivering the project. This is because pre-construction, project design and development costs tend to be absorbed within the Department of Education and Training's normal business as usual activities.

What affects the cost of a project?

The cost of a construction project depends on the type and size of the building works being undertaken as well as a range of site specific issues that affect costs such as:

- a school being located in a heritage area, flood zone, bushfire affected area or on a sloping site
- the presence of ground contamination or poor ground conditions - for example, clay soils or the presence of rock
- insufficient capacity of existing site services - for example, a full upgrade of electrical infrastructure may be needed for a new building
- the school's location in a remote area where the costs associated with transporting resources are higher; or
- a school on a small site where the restricted access requires materials to be craned into position

The minimum quality requirements set by the Department of Education and Training's Schools Facilities Standards can mean that school projects are initially more expensive than domestic or commercial projects. Incorporating this quality upfront saves money in the long run. The Standards ensure school halls are fit for purpose and strike the right balance between the upfront cost of a building and the long-term cost of maintenance and cleaning.

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What can affect project costs once construction starts?

While site surveys and ground and service capacity investigations take place during pre-construction, it is not possible to know all the potential site risks until excavation is complete.

Unforeseen site risks can include buried asbestos, soil contamination, archaeological remains or endangered species. These risks may require new design elements or design changes. For instance, the foundation design may need to be reviewed if the soil topography is found to be different and as this may require deeper piers, it can increase the overall cost the project.

These issues can affect the construction program and require new or specialist resources which can increase costs. For example, the presence of buried asbestos or soil contaminants may require specialist excavators to be used. Any waste soil removed from the site will need to be specially treated and disposal costs can be high.

Why do costs vary so much? Why are square metre rates misleading?

The cost of the same type of project at different school sites will vary. This is because it is the site specific issues that drive construction costs. For example, a hall on a sloping site is going to be more expensive than the same hall on a flat site because the building foundations, among other things, will cost more.

The location of the school can impact on price as well. For example, a project in a remote location is likely to cost more because of the time and costs associated with moving resources and supplies to site. Similarly, a project in a tight small site can be more expensive because the restricted access may make it necessary to crane materials into position or re-locate temporary teaching accommodation several times.

For these reasons, crude direct comparisons between projects or square metre rate comparisons are misleading. These comparisons fail to take into account site specific issues. Square metre rates are very rough, often unreliable, and don't include the costs of site specific issues or associated building works such as design finalisation, statutory planning, power upgrades or temporary teaching accommodation.

Project Costs

How is value for money achieved?

Value for money is embedded in every part of a P21 project. The Managing Contractors were appointed through a competitive tender process. This process ensured that the successful Managing Contractors had the skill and experience to deliver high quality school building projects within the tight timeframes set by the Australian Government. It also ensured that the successful Managing Contractors were good value for money, as each bidder had to put their most competitive price forward to be successful.

The Managing Contractors are contractually bound to seek best value for money on every school project. Value for money is tested by ensuring that every school project is competitively tendered. The competitive tender process requires builders not only to provide their best price to win the work, but also to prove that they have the skills and experience to deliver the project to the quality and safety standards required.

The BER Program Office also benchmarks every school project using tender results for the school's project and tendered costs we have received for similar projects. The Managing Contractor will only be paid the lesser of either the actual costs incurred or a maximum of 105 per cent of the Benchmark Value, as assessed by the Program Office. The Benchmark Value process controls costs on every school project and ensures that the total amount paid is fair, reasonable and above all, good value for money in the current market.

What is a Preliminary Cost Estimate (PCE)?

A Preliminary Cost Estimate (PCE) is developed by the Managing Contractor soon after the Project Brief is issued by the BER Program Office. The PCE provides an early indication of whether the project is achievable in full or whether some changes may be needed because of site specific issues affecting project costs.

The Managing Contract uses the information in the PCE to begin working with the Principal to finalise the project scope and develop the Estimated Construction Sum.

What is the Estimated Construction Cost (ECS)?

The Estimated Construction Sum (ECS) is developed by the Managing Contractor and assesses whether the project is deliverable within the set timeframes and the school's budget. The Program Office uses the information in the ECS to approve construction.

The ECS is *an estimate* only of the costs of developing and delivering the school's project. The ECS is not the amount which will be paid to the Managing Contractor for the works undertaken. The amount that is paid to the Managing Contractor is determined through the Benchmark Value process.

The School's project scope is set when the ECS is approved by the Program Office. The school will get the project as described in the ECS even if the tendered cost exceeds the school's budget or the overall costs increase because of unforeseen risks.

Within the P21 program, top up funding for over-budget projects can only come from another school's P21 funding allocation. The *budget transfers procedure* has been developed in consultation with the NSW Primary Principals Association (NSW PPA) to enable left over funding at one project to be transferred, with the Principal's permission, to another NSW public school project that needs it. More information on the budget transfer procedure is available in the Budget Transfers Information Sheet.

The Director-General of the Department of Education and Training, and Geoff Scott, on behalf of the NSW Primary Principals' Association, have issued a **joint memo** thanking Principals that have agreed to transfer left over money to another NSW Public school, and encouraging others to do the same.

Why does the ECS sometimes include Design and Price Risk Contingency?

The Managing Contractor can include an allowance at ECS stage for design and price risk contingency. This allowance covers any unforeseen costs that arise from design documentation changes which need to be made after the project is tendered.

Any unused part of the design and price risk allocation will be released to deliver the school's approved project scope. If this funding is not required, because the school is already receiving its full project, the Program Office will seek the Principal's support to transfer this left-over funding through the budget transfers procedure.

Will my project be competitively tendered?

Each school project will be competitively tendered. This competitive process requires builders not only to provide their best price to win the work, but to show that they have the skills and experience to deliver the school project and satisfy the standards for quality and safety. This process tests that best value for money is achieved on each school project in the current market.

What is the Benchmark Value?

The Benchmark Value (BMV) process is a key mechanism for controlling costs and ensuring that value for money is achieved on every school project.

The Managing Contractor is only entitled to be paid the lesser of either the actual costs incurred or a maximum of 105 per cent of the BMV. The Managing Contractor is liable for all costs that exceed 105 per cent of the BMV. This is a real incentive to keep costs down for the life of the program.

As each school project nears the construction halfway mark, the BER Program Office will compare the tendered costs for delivering the school's project with the costs included in the BER cost database for similar projects.

The BMV assessment is based on design documentation, preliminaries, substructure, superstructure, site works and site services. Each component is based on competitively tendered prices received by the Managing Contractor.

The BMV process controls costs on every school project ensuring that the total amount paid is fair, reasonable and, above all, good value for money in the current market.

What is the Actual Construction Sum?

The Actual Construction Sum (ACS) is the actual amount of money the Managing Contractor has had to pay to building sub-contractors and professional consultants to deliver the school's project from inception to completion.

The ACS is *not* necessarily the amount that is actually paid to the Managing Contractor because the Managing Contractor is only entitled to the lesser of either the ACS or a maximum of 105 per cent of the Benchmark Value.

What is Final Cost? How much is actually paid for my school's project?

The final cost or the actual amount paid to the Managing Contractor for the project will not necessarily be the ECS, the BMV or the ACS amount.

The final cost of the project or the actual amount paid to the Managing Contractor will be the lesser of either the actual construction costs incurred by the Managing Contractor or a maximum of 105 per cent of the Benchmark Value.

For example, the benchmark value for a project is \$100,000. The actual cost incurred by the Managing Contractor in delivering the project was \$120,000. The Managing Contractor is only paid \$105,000 because this is the lesser of the actual cost incurred and 105 per cent of the BMV. The Managing Contractor is required to cover the \$15,000 difference.

Funding break down

What costs need to be covered in the school's allocation?

The school's allocation is the amount of funding which the Australian Government has approved. The school's page on the BER Website shows the school's approved funding allocation.

Each school's P21 allocation needs to cover the full costs of developing and delivering the school's project. This includes the actual cost of the building but also the costs of all pre-construction works, site investigation, concept design, detailed planning, statutory approvals, services, site works and more.

What is the school's P21 construction budget?

The school's construction budget is the amount of the schools allocation that is left after the following allocations are set aside:

- 1.3% of the school's allocation for BER Program Office management costs. This covers the costs of managing the procurement of projects including contract administration, scope and nomination management, the variations process and reporting to the Australian Government and NSW National Building and Jobs Plan Taskforce.
- 5% of the schools allocation is set aside as a contingency for unforeseen risks and to cover the final cost of the project up to the maximum of 105% of the Benchmark Value. Unforeseen risks can include for example latent ground conditions, the late discovery of asbestos and poor weather conditions that affect construction timeframes.

Incentive Fee - The State-wide average for the incentive fee is 1.6 per cent. The Managing Contractor only receives the incentive fee if it delivers school project(s) on time and within the BMV in accordance with the contract.

What are the different costs and allocations?

Costs	State Average %
Managing Contractor Project Management	2.7%
Site Supervision	6.6%
Incentive	1.6%
Profit Margin	2.8%
BER Program Office Project Management	1.3%
Contingency	5%



TAB D

Modular Design Range (MDR) Buildings

In major upgrading or construction of new primary schools, the Department currently provides Component Design Range (CDR) buildings or Modular Design Range (MDR) Buildings.

The Department also utilises demountable buildings to serve a number of urgent and emergent accommodation needs, and to supplement permanent accommodation in new schools during periods of enrolment peaks in newly developed residential areas.

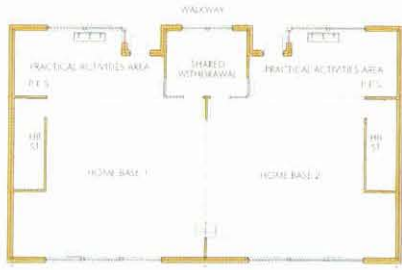
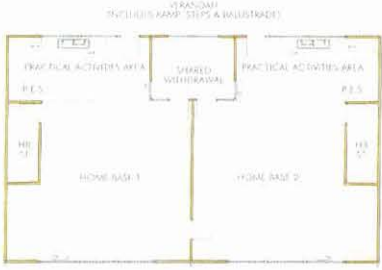
The CDR buildings have been developed as the result of Education Facilities Research over a number of years to incorporate an internal layout that supports the delivery of primary education programs within a permanent, long term building structure delivered by planning and on-site construction methods. The MDR buildings were developed to provide effective learning spaces that could be delivered on site in a short time frame and have a pre-fabricated component. They incorporate that same internal layout as CDR buildings and are not demountable buildings.

The MDR classroom building contains two classrooms (homebases). Within each classroom the internal space includes a Practical Activities Area and Shared Withdrawal Area, classroom store and cabling infrastructure. The classrooms are 90 square metres (including the Practical Activities Area). The building can be altered to include an operable wall to support educational delivery methods such as team teaching. Furniture and floor coverings are the same as those in the CDR classrooms.

The MDR building design takes into account the need for appropriate levels of lighting, cross ventilation and insulation to ensure comfort conditions for students and teachers.



Building Element Overview

Element	CDR Primary Classroom Building	MDR Primary Classroom Building
Size & Layout	<p>Home base units consist of home base, practical activities Area, Store and shared withdrawal</p> 	<p>Home base units consist of home base, practical activities area, store and shared withdrawal . (Similar internal dimensions)</p> 
Wall Cladding	Combination of face brickwork and colorbond corrugated metal.	Combination of Fibre cement panelling and colorbond corrugated metal. (Brickwork to subfloor skirt is optional)
Wall Linings	Pin board wall lining 2100mm from finished floor level with painted plasterboard above pin board. Ceramic tiled splashback to practical activities trough.	Painted plasterboard wall lining with pin board panels to two walls within Home Base. Ceramic tiled splashback to practical activities trough.
Roofing	Colorbond corrugated metal roof sheeting with ½ round gutters and rectangular downpipes	Colorbond corrugated metal roof sheeting with quadrant gutters and rectangular downpipes
Ceiling Linings	Painted plasterboard with fluorescent light fittings, ceiling fans, skylight diffuser panels and roof vent registers.	Painted plasterboard with fluorescent light fittings and ceiling fans. (Skylight panels and roof ventilators replaced by high level louvered glazing.)
Flooring	Carpet to home base and store with sheet vinyl to practical activities area. (Substructure is reinforced concrete slab.)	Carpet to home base and store with sheet vinyl to practical activities area. (Substructure is plywood sheet flooring on galvanised steel support structure.
Doors	Solid core doors with steel door frames and commercial standard furniture	Solid core doors with steel door frames and commercial standard furniture.
Heating	Gas heaters to home base, electric heater to withdrawal area.	Gas heaters to home base, electric heater to withdrawal area.
Cooling	Ceiling Fans (Mechanical cooling when located west of 33 degree isotherm)	Ceiling Fans(Mechanical cooling when located west of 33 degree isotherm)
Furniture	As per schedules in Public School Facilities Standard (PSFS)	As per schedules in PSFS.



TAB E

USE OF LOCAL CONTRACTORS

Managing contractors were assessed based on their capacity to deliver value for money as well as their willingness and ability to engage local suppliers as part of the tender process.

Several methods have been used to encourage engagement of local contractors , including:

- an on-line registration for local builders and suppliers established by the Department of Education and Training. This was then collated and provided to Managing Contractors;
- encouragement – through Bulletins to School Principals and other communication – for schools to provide to Managing Contractors local quotes they had already obtained; and
- jobs forums that were held across the State explaining the BER Program and encouraging local tradespeople to be involved.

Current data shows that of all workers on Primary Schools for the 21st Century projects across the state, 91.5% are local. Local is defined as approximately within 150km or two hour travel from home address of the employee to the site.

Contractors and suppliers from other states and territories may from time to time be engaged on projects within NSW, just as NSW businesses have opportunities to perform BER work in other jurisdictions across Australia. Across the program finding a balance between local employment and value for money is achieved wherever possible.

E

TAB F

Schools Facilities Standards

All new building projects at the Department of Education and Training (DET), including those delivered under BER, comply with the Schools Facilities Standards. The Schools Facilities Standards meet and sometimes exceed those set by Australian Building Code and Regulations. The Australian Building Code contains technical provisions for the design and construction of buildings and other structures, covering matters such as structure, fire resistance, access and egress, services and equipment, and energy efficiency as well as certain aspects of health and amenity.

The minimum quality requirements set by the Schools Facilities Standards mean school projects can initially be more expensive than domestic or commercial projects. However, incorporating the Standards offers good value for money over the life of the building and means schools are not only safe but that they are also durable, long lasting and cost effective to maintain and clean throughout their life.

Our standard designs have been refined through feedback on the experiences of hundreds of teachers and thousands of student.

Our Facilities Standards Committee includes representatives from the Department of Education and Training – Schools and TAFE, Principals, representatives from the P&C, Primary and Secondary Principals Associations and NSW Teachers Federation, technical and maintenance experts from the Department of Services, Technology and Administration and the Department of Education and Training.

F

BER PROGRAM OVERVIEW

Building the Education Revolution (BER) is a \$16.2 billion national investment by the Commonwealth Government with the following objectives:

1. **Provide economic stimulus through the rapid construction** and refurbishment of school infrastructure.
2. **Build learning environments** to help children, families and communities participate in activities that will support achievement, develop learning potential and bring communities together.

CURRENT PROGRESS ON THE BER PROGRAM (March 2009 to 16 July 2010):

Primary Schools for the 21st Century (P21)

- **2,366 approved projects**
- **2,282 (96%) construction starts**
- 639 (27%) project works finished & fit for use – (95% completion), and of these 312 (13%) projects are completed under the contract – (100% completion)
- Close to **7,880 estimated average daily number of on-site workers** over the P21 program
- Just under **4,400 apprentices** have registered to be involved in the P21 Program with just under **3,000** having worked on the program accumulating just over **612,000 hours of work**.

National School Pride (NSP)

- **2,170 approved projects**
- 2,179 (100%) projects physically started
- **2,179 (100%) projects completed**
- Over **2,820 estimated average daily number of on-site workers** over the NSP program

Science and Language Centres

- **118 approved projects**
- 118 (100%) construction starts
- **118 (100%) project works finished & fit for use – (95% completion)**, and of these 5 (4%) projects are completed under the contract – (100% completion)
- Close to **700 estimated average daily number of on-site workers** over the SLC program
- Just over **280 apprentices** have registered to be involved in the SLC Program with just over **180** having worked on the program accumulating just under **37,000 hours of work**.

IN TOTAL THE BER PROGRAM HAS SINCE MARCH 2009:

- Secured close to **\$3.5 billion in Commonwealth funding** (7 times the size of DET's annual business as usual capital program)
- Commenced over 4,660 projects – to be delivered over two years
- More than 4,500 (98%) projects with construction starts on site
- Just over 2,900 (63%) project works finished & fit for use



TAB H

CASE STUDIES

of schools appearing before the committee

- Abbotsford Public School
- Mount St Thomas Public School
- Cattai Public School
- Nashdale Public School
- Tottenham Central School

Abbotsford Public School

Abbotsford Public School has an approved Primary Schools for the 21st Century (P21) project of New Classroom Facilities. This project has a total funding of \$2.9m: \$2.5m through the BER Program and an additional \$400,000 from the Department of Education and Training (DET).

Following a review by the NSW BER Coordinator of the School's P21 project, the decision was made to proceed with the approved project to demolish an old block of classrooms and replace them with new facilities. These classrooms are inadequate for current and future education standards and will be replaced by four new classrooms that are around 50 percent larger in size. These new facilities will have practical activities areas, withdrawal space to facilitate individual instruction, enhanced display areas and significant storage space. They will also feature a retractable wall between each pair of classrooms, to allow for group teaching and learning. Additionally, through the tender process the Managing Contractor will build not only the four classrooms but also a Special Programs Room within the School's BER funding allocation.

Since original BER plans were prepared for this school an extra kindergarten class enrolled for next year, therefore an extra special programs room to accommodate the Italian language and music program classes will be provided. This will be funded by the State Government. The project to demolish the existing classrooms has been accepted by the school community.

Mount St Thomas Public School

Mount St Thomas Public School has an approved Primary Schools for the 21st Century (P21) project of New Hall/COLA/Canteen, funded to the value of \$2.5m.

The school Principal endorsed a project to construct a 14 Core hall with an approximate floor space of 190m² in May 2009. This is considered an appropriate sized hall for a school of 312 stable enrolments and can easily fit the entire student body of primary school students seated on the floor. The project is already underway.

The school is receiving a 14 Core hall with canteen and covered outdoor learning area. The functional floor space of the hall is 190sqm. The functional floor space includes the hall raised platform (stage) and hall floor. The functional floor space does not include access routes to the sides and rear of the raised platform, nor the store rooms, toilets or other areas within the hall.

Based on the design documentation, the fully enclosed covered area (FECA) of the hall is 314sqm. This includes the functional floor space plus of 190sqm plus the area of the store rooms, toilets and access areas. The covered outdoor learning area provides a further 156sqm of shelter for students. The fully enclosed covered area of the canteen is 37sqm. Therefore, the gross floor area (GFA) of the building is 507sqm

The school has made representations to increase the size of the hall to the largest available: 21 core. To increase the hall to this size would have required more funding than was available under the school's funding of \$2.5 million: the local Managing Contractor reports that a 21 Core hall in the region approach \$3 million. The Minister advised the school that the size could be increased if it could afford the extra cost, however it could not.

The school hall is designed to function primarily as a teaching and learning space for classes such as music, dance and PE, as part of the school curriculum. The hall also functions as a performance space and can accommodate student audiences of up to 420 students seated on the floor. The 2010 enrolment at Mount St Thomas is 310 students.

Some photos of a completed 14 Core hall have been included for the information of the committee (see following page).

NSW Department of Education and Training – Core 14 Hall





Cattai Public School

Cattai Public School has an approved Primary Schools for the 21st Century (P21) project of a New Library to replace the demountable facility at the school. This project is funded to the value of \$870,000.

Initially Cattai Public School had two approved projects: New Library and New COLA. Project applications were submitted prior to initial site assessment by the Managing Contractor and therefore it was not possible to know with certainty the specific site conditions that could affect the value of a project.

At Cattai Public School, builders have had to confront a number of additional challenges that make engineering a structure such as this more complex. The school sits on a flood plain and is in an area at risk of bush fires – two factors that make it more difficult both to find appropriate sites for new constructions, and to design and build structures that can adapt to local conditions. This means that to construct a project of this nature, land must be levelled, retaining walls built, and bushfire protection undertaken. The original scope of works was an early estimate of what could be provided but in this case these additional works have meant that some features, such as the second approved project of New COLA, have had to be deleted to provide the school's main project, the new MDR library.

In relation to landscaping at Cattai Public School, a total of around \$19,000 was spent on landscaping for the school's P21 project. This included \$270 on 30 pot plants. The landscaping component of the project came in nearly \$4,000. The Regional Program Director (RPD) had provided costs breakdowns and has met with the school Principal to explain all estimated costings.

To date a total of 2334 hours have been worked on the Cattai Public School BER Primary Schools for the 21st Century Project. The project has supported 8 apprentices and sourced 73% of its workers from the local area.

The works at the school have now reached 100 % completion, i.e. all defects complete and all documentation received from the Managing Contractor.

Nashdale Public School

Nashdale Public School has an approved Primary Schools for the 21st Century (P21) project of New Classroom Facilities funded at \$907,000.

At a very early stage of discussions the possibility of providing the school with both an Modular Design Range (MDR) 2x classroom block as well as a BER Design Range (BDR) classroom building was mooted but never part of the formal scope of works. Over the course of estimating costs for the project, it was determined that both structures could not be funded within the school's \$850,000 P21 budget. The Principal was informed of this in December, though in June 2009 a program of works to provide only the MDR building had already been signed off by the Principal.

In relation to concerns raised regarding the double glazing of MDR windows, in line with the NSW Department of Education and Training's School Facilities Standards (SFS), this is not provided. The School Facilities Standards meet and sometimes exceed those set by Australian Building Code and Regulations. For instance, the Standards incorporate child safety measures and dictate that all windows must be made of shatterproof laminated glass with no glazing below 100 centimetres. They also dictate that low volatile organic compound paints must be used to retain a high level of indoor air quality.

The School Facilities Standards overrides the Cabonne local council requirements.

Under the provisions of the State Environmental Planning Policy (Infrastructure) 2007, if there is an inconsistency between the Schools Facilities Standards and a provision of the development control plan of the local council, the SFS prevails.

The classroom at Nashdale Public School will be getting air conditioning, contrary to what has been reported.

The school has indicated that they would have preferred to self manage however believed that they would not be able to as they were not able to raise a 10% deposit. Every school that submitted an expression of interest to self manage, received an application form and a Local Project Management Information Pack. The Information Pack made it clear that there was no requirement for a 10% deposit.

As a result of the School Principal and school community indicating their interest in delivering the installation of the MDR and additional works through the Department of Education and Training Asset Management Unit (AMU), the project has been taken over by the Regional AMU. It is hoped that greater value for money will be achieved through this delivery mechanism, so that there are additional funds for associated works. The Principal and P & C representative will be invited to sit on the tender evaluation panel.

Tottenham Central School

Tottenham Central School received \$600,000 for construction of a new canteen facility and \$250,000 for an upgrade of classroom facilities under the Primary Schools for the 21st Century (P21) Program. These projects were both nominated by the school via the web based nomination form set up for schools at the commencement of the program.

There has been extensive consultation with the school on the scope of works, including it being changed several times to meet its requirements.

The canteen is sufficient in size to meet the needs of school to serve healthy meals to students and it replaces a demountable with a new, permanent facility. The BER Program will purchase whitegoods to fit the current canteen and the new facility will be fitted with air conditioning.

There was a considerable amount of associated works completed as part of this project including:

- playground drainage - playground drainage works were required as the playground is approximately 11 metres from serving area and the area would 'pond'. Drainage works were undertaken to address this;
- new awning, fixing concrete pavements as well as the awning area in front of the canteen;
- a significant upgrade to the electrical and data supply.

To date a total of 2642 hours have been worked on the Tottenham Central School BER Primary Schools for the 21st Century Project. The project has supported 11 apprentices and sourced 100% of its workers from the local area.

The Parents and Citizens Association of Tottenham Central School have requested that the new canteen be extended by between 0.5m and 2.0m, The BER Integrated Program Office has requested that quantity surveyors prepare cost estimates for such an extension. This information will be compiled in a report and provided to the school as it is available.

The School has been advised that the canteen will be extended to meet its unique circumstances.

The demountable will be retained at the school for an alternative purpose as advised by the Director- General of Education and Training.