DoDEA FACILITIES MANAGEMENT GUIDE: **PARAMETRIC DESIGN CHARRETTE INSTRUCTION, VERSION 1.5**

DEPARTMENT OF DEFENSE EDUCATION ACTIVITY

November 10, 2015
FINAL

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ACRONYMS

A/E	Architect/Engineer
ACF	Area Cost Factor
AFCEC	Air Force Civil Engineer Center
AT/FP	Antiterrorism Force Protection
BLCC	Building Life-Cycle Cost
CAPM	Construction Agent Project Manager
CCN	Category Code Number
COR	Contracting Officer's Representative
DDESS	Domestic Dependent Elementary and Secondary Schools
DD Form 1391	Military Construction Project Data Sheet
DoDDS-Pacific	Department of Defense Dependent Schools-Pacific
DoDDS-Europe	Department of Defense Dependent Schools-Europe
DoDEA	Department of Defense Education Activity
FY	Fiscal Year
HQ	Head Quarters
LCCA	Lifecycle Cost Analysis
LID	Low Impact Development
MILCON	Military Construction
MSC	Major Subordinate Command(s)
NAVFAC	Naval Facilities Command
O&M	Operations and Maintenance
OSD	Office of the Secretary of Defense
P&D	Planning & Design
PDCR	Parametric Design Charrette Report
PDT	Project Delivery Team

PRV	Plant Replacement Value
SIOH	Supervision, Inspection and Overhead
USACE	United States Army Corps of Engineers
WBS	Work Breakdown Structure
UXO	Unexploded Ordnance

1.0 PURPOSE

The purpose of these instructions is to provide parametric design policy and guidance for Department of Defense Education Activity (DoDEA) Military Construction (MILCON) projects when Parametric Design Charrette directives are released. Parametric Design Charrette directives are intended to accelerate early execution of project design, provide better definition of customer requirements, improve customer involvement, and implement the use of parametric estimating, with a minimal expenditure of Planning and Design (P&D) funds. Below are the objectives of the Parametric Design Charrette:

- Verify that all information identified in the Planning Charrette Report is still correct, applicable to the project and all follow on actions have been completed.
- Obtain installation and User input and approval for a conceptual level building and site design of sufficient detail to perform the parametric cost estimate.
- Develop a parametric cost estimate with sufficient supporting documentation to be defensible and ensure an executable project.
- Develop project execution schedule, key milestones, and required follow on actions.
- Provide the Office of the Secretary of Defense (OSD) and the Congress sufficient detail to ensure that DoDEA has an executable project.

2.0 APPLICABILITY

These instructions apply to DoDEA, the US Army Corps of Engineers (USACE) Norfolk DoDEA Design Center, and Construction Agents having DoDEA Military Construction (MILCON) responsibilities to include USACE, Naval Facilities Command (NAVFAC), and Air Force Civil Engineer Center (AFCEC). They are intended to be used for DoDEA MILCON projects, as appropriate, when Parametric Design Charrette directives are released. Design directives authorize various stages of project design, indicate project scope and cost, and provide special instructions for the design of the project.

3.0 REFERENCES

DoD Directive 1342.6-M, Administrative and Logistics Responsibilities for DoD Dependents Schools, August 1995

Defense Federal Acquisition Regulation Supplement 236.601, September 20, 2011.

DoD Directive 4270.5, Military Construction, February 15, 2005

Title 10 U.S.C. Sec. 2807(b), Architectural and Engineering Services and Construction Design. Defense Federal Acquisition Regulation Supplement 236.601, September 20, 2011

Administrative Instruction, Planning, Designing and Constructing 21st Century School Facilities, 4300.01, 24 February 2015

DoDEA MILCON Program, Program Management Plan (PgMP) with HQUSACE, December 2012

DoDEA Sustainability and Energy Efficiency Program, 1 October 2013

DoDEA 21st Century Education Facilities Specifications

Installation Real Property Master Plan

DoDEA Master Plans (if available)

Department of the Army, Navy, and/or Air Force standards, when applicable

Approved Installation Design Guide (when applicable)

4.0 RESPONSIBILITIES

4.1. Department of Defense Education Activity, Headquarters (HQ DoDEA)

HQ DoDEA is responsible for program management by providing scope, direction, funding, and financial management of the entire DoDEA MILCON design and construction program. HQ DoDEA Facilities Branch, in coordination with each DoDEA Area Office Chief of Facilities, will determine which projects will be funded for a Parametric Design Charrette Report (PDCR). A Planning Charrette must be completed before a project is eligible for a Parametric Design Charrette. HQ DoDEA will issue P&D funding for the PDCR. HQ DoDEA will conduct a programmatic level review of all PDCR Reports before they are accepted and finalized.

4.2. DoDEA Area Offices (DDESS, DoDDS-Europe, DoDDS-Pacific)

The DoDEA Area Offices will provide a Project Manager (PM) who will coordinate with the School Superintendent and local logistical staff to discuss their involvement in the PDCR. The DoDEA PM will also ensure that the latest DoDEA school criteria and guidance documentation are available to the design team. The DoDEA PM is responsible for reviewing all PDCR design documents for technical, specification, and criteria (i.e., 21st Century Schools) compliance.

4.3. User

The User is defined as a representative(s) from the intended occupant of the facilities included in this project. This may consist of an individual, or team of individuals, that are integral in conveying and determining the requirements, the foundation of which are based on the Education Facility Specifications, of the group. The DoDEA PM can assist the User in determining the required representatives by describing the types of information and inputs required. This group should include school faculty and administration, District Superintendents Office, Information Technology, Safety/Security, and Logistics/Facilities.

4.4. Construction Agent

The Construction Agent Project Manager (CAPM), for USACE, NAVFAC, or AFCEC is responsible for the development and completion of the Parametric Design Charrette in accordance with PDCR directives and guidance instructions. The CAPM is responsible for selecting the required Project Delivery Team (PDT) members and managing all activities of the PDCR process to include coordination with the installation as directed by the DoDEA Area Office PM. The CAPM is responsible for managing the technical team (A/E or in-house team). The CAPM must get approval from HQ DoDEA to execute PDCRs with in-house resources. The CAPM should be proactive in engaging the Installation and ensuring their participation in the PDCR process. The CAPM, who may also serve as the Charrette facilitator, is held accountable for the final deliverables required upon completion of the PDCR. The CAPM will assess each project and determine which disciplines are required for successful project development and will determine whether the PDCR will be conducted utilizing in-house resources or contractor support. The PDCR team is typically composed of, but not limited to, a combination of the various disciplines listed below. The makeup of the charrette team will depend on the type and scope of the project. A single person can be responsible for multiple disciplines. The remaining team members are responsible for providing technical input during the charrette report development process and assisting in the deliverables preparation:

1) Facilitator/Project Manager*
2) Planner/Programmer*
3) Architect*
4) Structural Engineer
5) Mechanical Engineer
6) Civil Engineer*
7) Cost Engineer*
8) Leadership in Energy and Environmental Design (LEED) Accredited Professional.
9) Electrical Engineer

* = Required team members

4.5. Installation

The Installation is responsible for working with the DoDEA Area Office to confirm the project site. The Installation is responsible for preconstruction environmental surveys, AT, environmental, NEPA, UXO, cultural issues, real estate utilities, IS, economic analysis and other show-stopper issues that need to be addressed. Team participants may include a representative from the staff elements/office listed below:

1) Master Planning, or assigned Installation Project Manager (IPM)
2) Environmental
3) Information Management/Communications
4) Public Safety, Fire Department, Law Enforcement
5) Utilities and/or Maintenance
6) Real Property
7) Anti-Terrorism/ Force Protection (AT/FP)
8) Historic Preservation
9) Resource Management
10) Housing Office

4.6. DoDEA Design Center – Norfolk District Technical Manager (TM)

The Norfolk District TM supports both the Geographic PM and DoDEA Area Office PM as a technical subject matter expert. The Norfolk District TM shall provide design reviews on both functional and programmatic levels to verify compliance with DoDEA 21st Century Education Facilities Specifications, DoDEA Policy, and DoDEA Energy and Sustainability goals. The Design Center shall participate as a member of Project Delivery Teams (PDTs); attend select design meetings via either telecom, web or video conferencing to ensure best practices; and collect lessons learned for application to future projects. The Design Center will provide training as required on the PDCR process.

5.0 PROCEDURES

5.1. The PDCR Report Process

The process begins when the construction agent receives a Parametric Design Charrette directive from HQ DoDEA Facilities Branch and ends upon validation of the PDCR report by HQ DoDEA Facilities Branch. A sample Parametric Design Charrette Directive is provided as Appendix 1 in this document. HQ DoDEA will not issue a Parametric Design Charrette directive until a site has been approved by the Installation, a Planning Charrette has been completed and forwarded to the PDT, and the DoDEA Area Office PM has prepared and submitted the initial

DD Form 1390/1391 programming documentation.

5.1.1. Project Delivery Team (PDT)

When a Parametric Design Charrette directive is received by the Construction Agent, a PDT will be established with a designated team leader and representatives from the construction agent, the DoDEA Area Office, the Norfolk District DoDEA Design Center, and the A-E. The Installation will be involved throughout the PDCR Process and included as a member of the PDT. Whenever practical, the same design entity (in-house personnel and A-E firm) will be encouraged to do the complete design of a project, including both the PDCR and final design. This approach maintains continuous design responsibility, and reduced design cost, risk, and time.

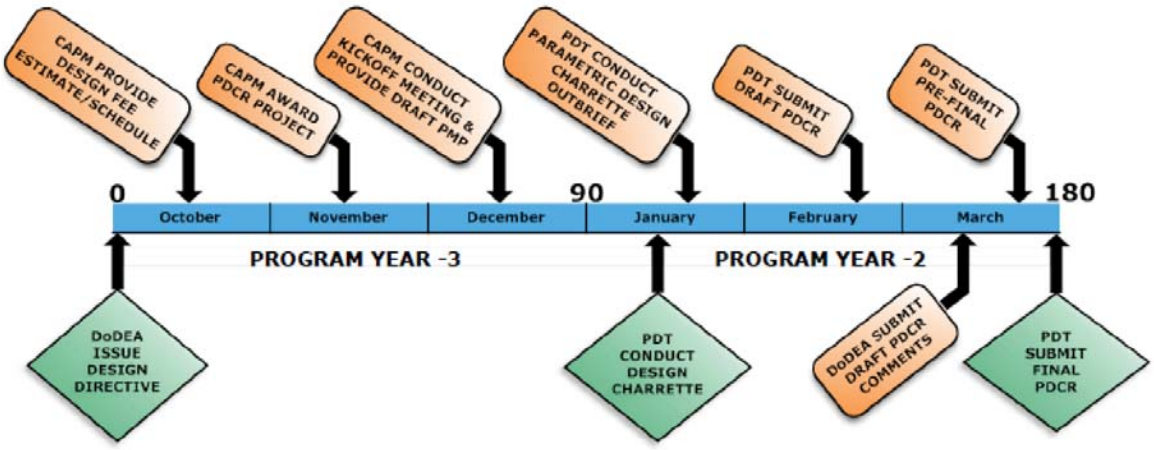
5.1.2. The Installation

When a PDCR directive is received by the construction agent, the Installation will be immediately notified by the CAPM. The design agency will ensure that the Installation is involved at every state of project development. Installation input is critical to validate accurate project requirements that can be translated and quantified.

5.1.3. Schedule

The PDCR schedule is framed by three key milestones.

- DoDEA HQ release of the PDCR Directive
- PDT Conduct PDCR
- PDT submit Draft/Final Report for approval



The schedule above represents the ideal scenario; program requirements may require a deviation of the schedule to meet execution timelines. Process and deliverable instructions for each milestone are included in the sections below.

5.1.3.1. Directive Issuance (Milestone 1)

The first phase of the process begins with the release of a Parametric Design Charrette directive to the construction agent. The directive authorizes the construction agent to begin site investigation work, prescribed pre-design effort, and selection/negotiation and award of an architect engineer contract utilizing a minimal expenditure of P&D funds. In direct collaboration with the Design Center and the DoDEA Area Office PM, the CAPM will select and assemble the PDT. The CAPM will initiate a project kickoff meeting to be attended by the DoDEA Area Office PM, a Design Center representative, and the A/E PM. The kickoff meeting may be held in person or by teleconference based upon project logistics and needs. The purpose of the kickoff meeting is to establish project roles and responsibilities, the schedule, and data collection.

At this stage, the draft Program for Design (PFD), enrollment basis, and staffing documents that were initially developed during the planning charrette are revisited and finalized with approvals from HQ DoDEA, the Area Office, and the Design Center. The final version of all of the documents will be utilized by the PDT to execute the Parametric Design Charrette.

As established as part of the complete Planning Charrette process, the projected enrollment basis shall be based on the five (5) year average enrollment of the school. If the projected enrollment deviates from the five (5) year average, the DoDEA Area Office must provide justification. Examples of proper justification include:

- Restationing actions from the services that result in additional or a decrease in the number of school age dependents. Changes to schools located within the Continental United States must result from the addition of housing on the Installation to be a valid basis to increase the projected enrollment beyond the historical average.
- Consolidation of schools or grade structure changes. In this case the sum of the five (5) year enrollment averages will serve as the projected enrollment basis.
- An official change in enrollment eligibility for space required status.

The A/E PM will present their draft schedule to include tentative dates for the Parametric Design Charrette and the draft and final report milestones for review and approval. The DoDEA Area Office PM will provide a synopsis of the project and will identify any project challenges the PDT should be aware of. The DoDEA PM will provide all project documentation to the CAPM and PDT including the initial DD Form 1391 programming documents, Planning Charrette report and site approval documentation. The CAPM will provide DoDEA with a draft Project Management Plan (PMP) no later than 30 days after A/E selection.

Strict adherence to the instructions and templates provided is required by the PDT. Any submissions from the PDT to HQ DoDEA Facilities Branch that have not followed the instructions or have altered the templates provided will be automatically rejected.

5.1.3.2. PDCR (Milestone 2)

The second phase of the process begins once the project schedule has been coordinated and approved by the PDT. During this phase, the PDT is responsible for conducting a Parametric Design Charrette at the Installation where the project is sited. The charrette is a process where the PDT reviews and validates the facility and supporting infrastructure requirements to ensure the project meets all requirements and is within authorization. Part of the charrette process is to build a parametric cost estimate and draft programming documents for the project. This phase includes the execution of a parametric design with a focus on validation of facility requirements, criteria compliance, building and site functional relationships, supporting infrastructure, and associated costs.

Floor plan development will be minimal and limited to general massing and functional adjacencies. There should be no development of renderings or elevation drawings at this stage in the process. The PDT should place the most emphasis during the charrette on obtaining all project requirements and ensuring that adequate costs have been captured to support submission of a complete, accurate, and justifiable parametric estimate.

All parametric cost estimates should be produced in Uniformat which represents Work Breakdown Structure (WBS) costs according to a hierarchy of system elements, and is supported through various organizations. The key to successful estimating is ensure accurate cost data is available (through databases or other sources) that enable WBS quantities to be applied. The PDT will ensure WBS categories enable effective cost management, associated with the ability to compare current estimate breakdowns to previous estimate components—having lineage back to the project's programmed budget. DoDEA is required to utilize the cost estimate provided by the CAPM. No changes to the cost estimate are authorized without a written justification provided to HQ DoDEA Facilities Branch for approval.

All projects will be required to populate the Guidance Unit Cost (GUC) worksheet provided in Appendix 9 of this document. The worksheet will be based on the unit cost for the respective school type referenced in UFC 3-701-01(DoD Facilities Pricing Guide). The worksheet contains formulas that will automatically calculate the adjusted GUC based on user inputs of area cost factor, square feet and escalation. If the unit costs from the cost estimate developed as part of the PDCR is +/- 5% of the calculated adjusted GUC, then justification of the cost difference will be required.

The A/E will perform Lifecycle Cost Analysis (LCCA) that conforms to Sections 433 and 438 of Public Law 110-140, "Energy Independence and Security Act of 2007," December 19, 2007 and Subparts 436.1 through 436.24 of title 10, Code of Federal Regulations. An initial LCCA will be performed during the 15% Parametric Design to determine initial feasibility of all sustainability and energy efficiency strategies. In all subsequent design phases LCCA will be documented as part of the basis of design. If it is determined that a requirement is not life cycle cost effective, then the highest level of cost effectiveness that is feasible for that requirement will be accomplished based upon an LCCA for less than full compliance as determined by the A/E and approved by the PDT.

The A/E will be required to use the Applied Economics Office Engineering Laboratory National Institute of Standards software, BLCC (Building Life-Cycle Cost) 5, the latest version available, located at: http://www1.eere.energy.gov/femp/information/download_blcc.html. The output reports from the BLCC5 software will be an appendix item to the Charrette Report.

DoDEA schools should always be included in the Installation's master planning efforts. Any offsite infrastructure required to support the DoDEA specific project shall be brought to the attention of the DoDEA and Construction Agent Project Managers, prior to the DD Form 1391 development, to determine if it shall be included within the supporting facilities costs in block 9 of the DD Form 1391.

The DoDEA PM has the authority to approve up to $25,000.00 per utility line item for infrastructure located offsite. Any proposed offsite infrastructure identified above this threshold must be submitted to HQ DoDEA Facilities Branch for review and approval. In order for the costs to be considered, the installation must clearly demonstrate the need for the infrastructure, demonstrate why other alternatives are not feasible, and why cost sharing is not being considered.

The PDT should elevate any site conditions that have a high level of execution risk and cost uncertainty immediately to HQ DoDEA Facilities Branch. HQ DoDEA Facilities Branch can authorize the PDT to conduct additional analysis to mitigate risk such as a geo-technical study if warranted. The additional analysis must be conducted prior to the PDCR being finalized so that all associated documentation and cost data reflect the findings of the additional analysis.

The CAPM is responsible for scheduling the charrette in-brief with the Installation leadership to inform them of the process, goals and objectives, and to request their support. The CAPM will schedule a mid-week teleconference with HQ DoDEA to review progress and any scope discrepancies. The CAPM will schedule an out-brief with the Installation leadership to inform them on progress, and any scope discrepancies requiring coordination and resolution. The DoDEA Area Office PM will forward any scope discrepancy through the DoDEA chain of

command for resolution as soon as it is identified. A change in scope is defined as any changes to scope that are not solely predicated on compliance with current 21st Century Education Specifications, or other DoDEA criterion and federal law/mandates.

The PDT will maintain and circulate a sign in sheet for all meetings with stakeholders during the charrette. The PDT will include copies of the sign in sheet, the in-brief, and the out-brief in the appendices of the report. Refer to the detailed production instructions in section 5.1.3.3.

5.1.3.3. PDCR Draft/Final Report (Milestone 3)

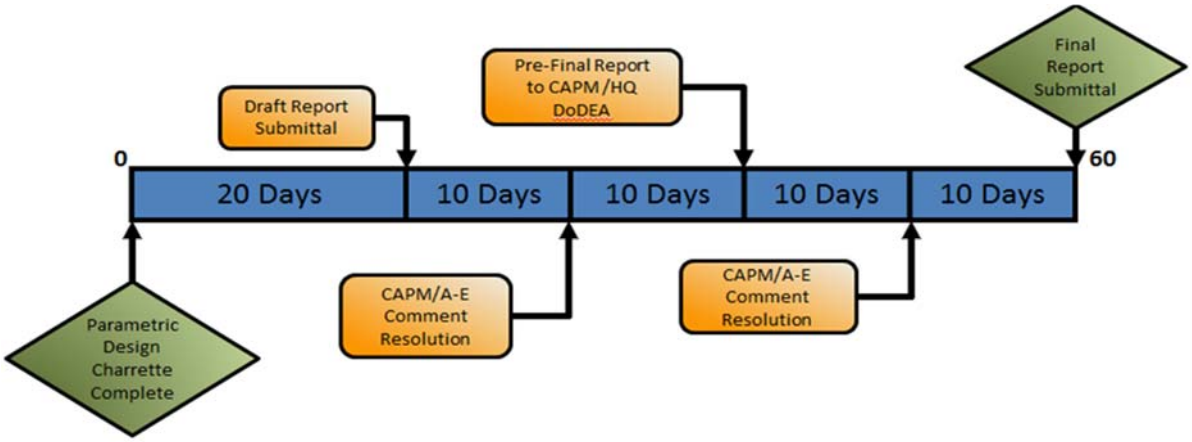
Once the Parametric Design Charrette has been completed, a Draft Report will be produced consisting of the following contents:

1.0 Introduction
2.0 Background
3.0 Requirement/ Authorizations Tabulation (Table 1)
4.0 Conceptual Adjacencies and Relationships
5.0 Schematic Floor Plans
6.0 Schematic Site Plan
7.0 Environmental Hazards
8.0 Supporting Infrastructure
9.0 Safety & Security
10.0 Sustainable Design/ LEED
11.0 Cost Estimate
12.0 DD Form 1391
Appendices

Please refer to the example detailed PDCR Report Table of Contents and Instructions Template in the appendices. All reports must follow the template, no deviations are permitted.

The Draft PDCR must be completed within twenty (20) working days of completion of the Parametric Design Charrette. The CAPM will provide an electronic version of the Draft Report for review and comment to the DoDEA Area Office PM, the Design Center, HQ DoDEA, DSO, and the Installation. The government review period will be three business weeks after receipt of the Draft Report. The CAPM will consolidate all government review comments and forward to the PDT for revision as applicable. The CAPM will provide a courtesy copy of the consolidated comments to the DoDEA Area office PM, Design Center, and HQ DoDEA. The review comments should be focused on ensuring accurate data and requirements have been collected and documented to form an accurate and adequate basis for the parametric cost estimate.

Upon receipt of the Draft Report review comments, the PDT will review the comments and revise the contents of the Draft Report as applicable. The CAPM will resolve any ongoing content and or cost issues through periodic teleconferences, as necessary with the PDT. The PDT will revise the Draft Report and submit a Pre-Final Report within ten (10) working days upon receipt of the Draft Report review comments from the CAPM. The CAPM will forward the Pre-Final Report to DoDEA HQ, with a review period of 10 days after receipt. Upon acceptance of the Pre-Final report the PDT will provide an electronic version of the Final Report to DoDEA Area office PM, Design Center, and HQ DoDEA.



The PDCR sign off (Appendix 6) form must be provided to DoDEA HQ which acknowledges concurrence to the findings and recommendations of the PDCR. Additionally, the PDT must also submit the QA/QC sign off that acknowledges that the product has been through a complete QA/QC review (Appendix 7).

6.0 DD Form 1390 and 1391 Preparation Instructions

The DD Form 1391 is used by the Department of Defense (DoD) to submit to Congress requirements and justification in support of funding requests for military construction. DD Form 1390 is a summary of projects by installation, Fiscal Year (FY) and program. DD Form 1390 also consolidates information on real property, personnel strength and installation missions. Both DD Form 1391 and DD Form 1390 are required for new construction over $750,000.

6.1. DD FORM 1390 Instructions

This section includes step by step instructions to complete DD Form 1390. The required DoDEA

template is attached as Appendix 6. One (1) DD Form 1390 is required per installation per fiscal year. If there are two or more DoDEA projects at a single installation then one (1) DD Form 1390 is required.

It is important to ensure consistency with repetitive data fields for DD Form 1390 and DD Form 1391.

Block 1. Component – DoDEA

Block 2. Date – Headquarters will enter in the date, per the directions below:

The Month should be for the month the DD Form 1391 is being submitted to OSD.

- February for President Budget Submittal
- September for BES and POM
- Be sure to spell out the month and use the four digit year. Do not use dashes or commas.
  - Example: January 2012
- Must be consistent with Block 2 of DD Form 1391

Block 3. Installation and Location - Enter in the official name of the installation, spell out the title. Spell out the Country or State.

- Example – Naval Support Facility Dahlgren, Virginia
- Example – Spangdahlem Air Base, Germany
- Must be consistent with Block 3 of DD Form 1391

Block 4. Command – DoDEA

Block 5. Area Construction Cost Index – Enter in the Area Cost Factor (ACF). ACFs are updated annually, and can be found in UFC 3-701-01 DoD Facilities Pricing Guide located at: http://www.wbdg.org/ccb/DOD/UFC/ufc_3_701_01.pdf

Block 6. Personnel Strength

a. As of Sep 30 - enter the current enrollment year
b. End of FY – enter the year of projected building occupancy
Permanent – If the project is constructing a support office enter the current loading numbers in row a. and the projected loading in row b.

Students – If the project is constructing a school then enter the current enrollment for all schools currently located on the installation in row a. Enter in the schools projected enrollment plus current enrollments for all schools on the installation in row b.

Block 7. Inventory data –Two lines need to be completed. The rest will remain 0. For Authorization Requested in this Program, enter in the program amount of the project. If there are two or more projects, then enter in the sum of the program amounts.
Enter in the same number in the final line, grand total.

Need to ensure the program amounts are consistent with block 8 of DD Form 1391.

Block 8. Projects Requested in this Program– Provide the following information for each project.

- Category Code Number (CCN) - no less than three digits and no more than six digits. This number must be consistent with block 6 on DD Form 1391.

  - Schools
    - Navy/Marine Corps – 73061
    - Army – 73046
    - Air Force – 730787

  - Administration – (Freestanding District Superintendent Office (DSO) for example)
    - Navy/Marine Corps – 61010
    - Army – 61050
    - Air Force – 610811

  - Project Title - Enter then full name of the school then the action (Replacement, Consolidation, Renovation, Addition, and New). For school support facilities, such as a DSO, the title should reflect the future use of the new facility. Be sure this is consistent with block 4 of the DD Form 1391 and PFD.
    - Example - Bitburg Elementary School Replacement
    - Example - Faith Middle School Addition

  - Scope – Enter the total square footage, consistent with block 9 and the text in block 11, 12 in for DD Form 1391 and the PFD.
  - Cost – Enter the total program amount for each project.

- Design Start – Enter in the design start date, consistent with block 12 of form DD Form 1391. Abbreviate the name of the month using the first three letters.
- Status Complete – Enter the construction complete date, consistent with block 12 of form DD Form 1391. Abbreviate the name of the month using the first three letters.

Block 9. Future Projects

a. Included in following program – Enter in the title of any future DoDEA MILCON project on the subject installation programmed for the next fiscal year.
b. Planned in the next three years - Enter in the title of any future DoDEA MILCON

Block 10. Mission or Major Functions – Enter "Military Dependent Education"

Block 11. Outstanding pollution and safety deficiencies – Enter "none"

6.2. DD FORM 1391 Instructions

Step by step directions to fill out DD Form 1391 are provided below. The required DoDEA DD Form 1391 template is attached as Appendix 7.

Block 1. Enter "DoDEA"

Block 2. Headquarters will enter in the date, per the below directions:

- Enter the Month and Year – The Month should be for the month the DD Form 1391 is being submitted to Office of Secretary of Defense (OSD).
  - February for President Budget Submittal
  - September for BES and POM
  - Be sure to spell out the month and use the four digit year. Do not use dashes or commas.
    - Example: January 2012
  - Must be consistent with Block 2 of DD Form 1390

Block 3. Enter the official name of the installation, spell out the title. Spell out Country or State. Must be consistent with Block 3 of DD Form 1390.

- Example – Naval Support Facility Dahlgren, Virginia
- Example – Spangdahlem Air Base, Germany

Block 4. Project Title. - Enter the full name of the school then the action (Replacement, Consolidation, Renovation, Addition, and New). For school support facilities, such as a DSO, the title should reflect the future use of the new facility.

- Example - Bitburg Elementary School Replacement
- Example - Faith Middle School Addition

Block 5. Program Element – Completed by OSD

Block 6. CCN, no less than three digits and no more than six digits. This number must be consistent with block 8 Column 1 on DD Form 1390.

- Schools
  - Navy/Marine Corps – 73061
  - Army – 73046
  - Air Force – 730787
- Administration – (Freestanding DSO for example)
  - Navy/Marine Corps – 61010
  - Army – 61050
  - Air Force – 610811

Block 7. Project number as generated only by DoDEA HQ. Do not use a project number provided by the construction agent or any other party.

Block 8. Enter the estimated project cost in thousands of dollars. This number should be consistent with item 8, column 4, of DD Form 1390 and should match the costs included in the Total Request line item in Block 9.

Block 9. Block 9 of DD Form 1391 provides a summary of the estimated construction costs for the project. There are two major components, primary facility (five feet and within the building envelope) and the support facilities (outside the five feet building envelope). Section 5.1.3.2 provides detailed instructions for preparing cost estimates.

- **Primary Facility**

Enter the item, the CCN in parentheses, the unit of measure, quantity (if it is not lump sum) and the required tabular data to the right. Note, the CCN is not required for AT/FP and SDD and Federal Energy Acts Compliance. The items under primary facility could include one or more of the below (Note – Do not enter just “construction”);

- School Name (CCN)
- School Renovation (CCN)
- District Superintendent office (CCN)

- Area Office (CCN)
- Stadium (CCN)
- Field (CCN)
- AT/FP – Costs for AT/FP measures, within five feet of the building envelope, are included in the unit cost guidance when minimum standards are required and achieved. However, if the following conditions are present, then additional AT/FP costs can be entered as part of this line item:
  - Minimum standoff distances cannot be achieved
  - The structure is three stories or greater, thus, requiring progressive collapse measures.
  - Installation security determines additional measures are required, in addition to the minimum AT/FP standards, due to specific threat and vulnerability assessments.
- SDD And Federal Energy Acts Compliance – The cost to meet all federal energy and sustainability mandates regardless of LEED certification. Costs should be tabulated as no more than 3% of the primary facility cost. A detailed, per credit cost estimate is required during this phase of design.
- Special Costs line item includes additional functional features such as elevators and built in equipment. Please note; Temporary Facilities are listed under special costs, under the primary facility.
- All construction has to have a unit of measure of square feet, quantity and a unit cost.
- SDD and AT/FP can have a lump sum cost if details are provided in the cost estimate.

- **Support Facilities**

This section describes the items that are directly related to and are required to support the primary facility. Generally, these are items located greater than five feet from the building envelope. Only outside utilities should be listed under the supporting costs. Utilities within five feet of the building envelope should be included under the primary facilities. **All DoDEA DD Form 1391s should list supporting facilities in the same order below:**

- Special Construction Features – (piles, spread footings, seismic, fill, etc.) Line item details should be included as part of the basis of estimate is section 7 of the report.
- Canopies
- Electrical Utilities
- Communication Utilities
- Water/Sewer (includes storm drainage)
- Mechanical Utilities
- Site Preparation
- Roads, Sidewalks and Parking
- Site Improvements – Landscaping, seeding, sodding, playgrounds, fencing and lighting

- AT/FP – Outside of the five (5) foot building envelope, items such as blast mitigation, vehicle barriers, berms, etc., if required and validated by the HQ DoDEA Office of Safety and Security.
- Demolition – No lump sum, the number of buildings and approximate square footage totals must be identified in Block 10.
- Low Impact Development (LID) - Required by EISA 2007, all Federal facilities must use all known, available, and reasonable methods of storm water retention and/or reuse to prevent the off-site discharge of storm water runoff.

- **Totals**
  - Subtotal – Enter the sum of the costs for all primary and supporting facilities.
  - Contingency – 5% of the Subtotal.
  - Total Contract Cost – Sum of the Subtotal and the Contingency costs.
  - Supervision, Inspection and Overhead (SIOH) – Enter the appropriate rate in parentheses and the cost equivalent in the cost column. The rate is of the total contract cost. Rates are as follows:
  - CONUS – 5.7% of the total contract cost - For installations located within the contiguous 48 United States.
  - OCONUS – 6.5% of the total contract cost- For installations locate outside the contiguous 48 United States. This included Puerto Rico, Guantanamo Bay, Hawaii, Guam and Alaska.
  - If the project is Design/Build – Use 4.0% of the subtotal cost (before contingency)
  - Engineering During Construction (Design/Bid/Build) – 1% of the Total Contract Cost
  - Total Request – The sum of the Total Contract Cost, SIOH and design/build cost (if applicable). This total should be identical to the number in item 8. Enter the cost in thousands of dollars ($000) and round projects as shown in table 1 below.
  - Equipment from Other Appropriations (NON-ADD) – This is the sum of the O&M items listed in Block 12b.

TABLE 1 – Cost Rounding Guidance

Project Cost Estimate ($000)	Rounding Guidance ($000)
<1,000	Nearest 10K
1,000 to 5,000	Nearest 50K
5,000 to 10,000	Nearest 100k
10,000 to 15,000	Nearest 200K
15,000 to 20,000	Nearest 500K
>20,000	Nearest 1,000K

Block 10. Description of Proposed Construction. This is a technical narrative describing the 'bricks and mortar" and functional spaces of the facility. Include a full description of the project scope including demolition, utilities, special costs and other items. Do not list square footages for proposed facilities or utility quantities. For demolition, specify the number of buildings and the approximate total square footage to be demolished. The description in this block needs to tie directly back to the items listed in block 9. Standardized language is provided in the accompanying DD Form 1391 template (Appendix 5).

Specifically block 10 should include:

- Type of work (alteration, modernization, addition, new construction, other)
- Specify whether the project will be single or multi-story.
- Construction materials to be used for the foundation, floors, frame, walls and roof; pilings or special foundation features. Detailed design information is not required.
- Provide number of buildings and approximate square footage for any demolition.
- Describe special construction features and special costs.
- The DD Form 1391 template will provide standard statement concerning LEED and square foot deviations.
- Required environmental mitigation. Environmental documentation, such as Environmental Impact Statements (EIS), or environmental permitting costs, cannot be MILCON funded.
- Enter in the Air Conditioning load in tons. This input is required in the Financial Management Regulation (FMR) volume 2B, Chapter 6.

Block 11. Requirements. Block 11 is divided into several subsections, that require descriptions of the requirement, current situation, the impact if not provided and additional information. Do not use repetitive statements.

- **REQUIREMENT –** Enter in the project's total required square footage which should match the total SF listed under the primary facility line item in Block 9.
- **ADQT**- Enter in the portion of the total required square footage that is currently located in adequate facilities.
- **SUBSTD**-Enter in the portion of the total required square footage that is currently located in substandard facilities.
- **Project** - Provide a one sentence statement indicating what this project provides.

Example: This project constructs a Middle School by replacing the existing school (s) and associated support facilities.

- **Requirement**

Complete the sentence provided in the template.

Example: The new school is required to provide adequate academic facilities for 200 students in grades kindergarten through fifth. School population based on 2018 school year.

- **Current Situation**

Describe how and under what conditions the requirement is presently being met. Need to support the stated requirement above and specifically identify and describe the condition of the current assets and why they are unsuitable for continued use. Provide the condition of the school (utilize the text rather than the Q rating). List the systems that are failing or expired.

Sample current situation statement:

> The current Maxwell Elementary / Middle School is a 110,814 SF facility that was originally constructed in 1964. Following the original construction, additions included: a single story administrative and classroom expansion in 1987; separated kindergarten physical education building in 1987; classroom wing addition in 1991; maintenance facility addition in 1993; and a classroom, administration, media center and dining facility addition in 1998. The school has a poor facility condition rating; it is more economical to replace than to repair. The following systems are expired or are failing and in need of replacement; electrical branch circuits, casework, ceiling finishes, emergency and exit lights, interior and exterior doors, exterior windows, fire sprinklers, floor finishes, lighting, plumbing fixtures and piping, specialties, and HVAC systems. The facility does not meet the DoDEA's Education Facilities Specifications to include 21st Century Curriculum and educational objectives. The facility does not meet current AT/FP and ADA standards and does not meet current federal energy and sustainability mandates.

- **Impact if not provided**

Explanation requires the input from the Education side on how not replacing the facility will impact the learning environment and why the dependents of service members will not be receiving an adequate level of service in terms of education.

Describe the manner and extent to which mission accomplishment would be affected if the project were not approved.

Discuss in detail the effects of the current conditions on the ability to learn, the health of students and on maintenance costs. If enrollments are expected to increase, then discuss the accommodation of additional students in temporary facilities and how that will negatively affect the learning environment.

Sample impact if not provided statement:

The continued use of deficient, inadequate, and undersized facilities that do not accommodate the current student population will continue to impair the overall education program for students. If a new facility is not provided, the substandard environment will continue to hamper the educational process and the school will not be able to support the curriculum and provide for a safe facility. The required maintenance and repair of expired and failing systems will continue to strain maintenance capabilities and budgets if the facility is not replaced.

- **Additional**

Under the additional section there are several subsections. First the following statement is included;

"This project has been coordinated with the installation physical security plans and all AT/FP measures are included."

- Economic Alternatives:

For school projects, utilize the below statement contained in the DD Form 1391 template.

"All known alternatives were considered during the development of this project. No other option could meet the mission requirements; therefore, no economic analysis was needed or performed. "

For administrative facilities, an economic analysis is required. The analysis must utilize the Economic Analysis Package (ECONPAK) and state net present values of each option. Alternatives to be considered include:

a. Status Quo – Provide a narrative of what is wrong with the operation today and projected O&M costs to maintain the facility.
b. Renovation – Can the existing facility or another available facility be renovated for less than 75% of the new construction cost?
c. Leasing/renting – Are there other nearby facilities or facilities owned by other agencies?
d. New Construction – Is new construction the only viable alternative.
e. Analysis/Results – Is the proposed project the best alternative?

- Joint Use Certification:

The following language is included in the DD Form 1391 template.

"This facility can be used by other components on an "as available" basis; however, the scope of the project is based on DoDEA requirements."

Insert: DODEA POC: (571) 372-1405

Block 12. Supplemental Data

- Site Approval – place an X in the appropriate box. Then enter in the date obtained or the expected site approval date. The date must be prior to the President's Budget submission for the FY of the project.
- Issues – After each of the lines, indicate yes or no if an issue exists. If yes, please add in a very brief explanation.
- Planning – Indicate, yes or no, if the project is consistent with the installation master plan and the year of the master plan. If no, explain the issues and mitigations.
- Host Nation approval – Fill in the country and date of approval. If not approved, list the actions needed to get approval, if applicable. If CONUS this is N/A.
- National Environmental Policy Act (NEPA) – Indicate if NEPA documentation is required and the current status. Select the level of NEPA, if it is required.
- Mitigation Issues – Indicate any issues with mitigating environmental concerns. If the answer is yes, include a very brief explanation.

Block 12A. Design Data. This section requires the input of major design and construction milestones. For schools, the target construction complete date is July 15, two years after the MILCON year. The July 15 date is to ensure the school is ready for occupancy at the start of the school year. Be sure to work backwards from this July 15 date to ensure design is completed with enough time to advertise and have the contractor mobilize.

- **Status:**
  - Design Start Date – Date when DoDEA issues instructions to the construction agent.
  - Parametric Cost Estimate Used to Develop Costs – For planning charrettes the answer is no. This is required to be updated to yes during the parametric design charrette.
  - Percent of Design completed as of 1 Jan (Year (YR)) – Enter in % complete as of the date. Must be at 15% prior to the President's Budget Submission.
  - 35% Design Date – Enter in date
  - 100% Design Date – Enter in Date
  - Type of Design Contract – All DoDEA projects shall be executed as Design-Bid-Build, unless extenuating circumstances prevent this type of acquisition. Use of other acquisition methods requires HQ DoDEA Facilities Branch approval.

- **Basis**
  - Standard or Definitive Design – In most cases the answer is no.
  - Date Design was Most Recently Used – If yes, above, provide the date.

- **Total Design Cost** – The total design cost will normally be 10% of the total programmed amount. Enter this amount in line C. Of the 10%, 6% should be allocated for contract and 4% for in house. The amount of C should be the sum of 5 and 6.

- **Contract Award date** – Allow at least three to four months after design is complete to accommodate time for advertisement and award of a contractor.

- **Construction Start Date** – Allow two months after award for the contractor to mobilize and get on site.

- **Construction Complete Date** – Anticipated BOD.

Block 12 B. O&M Appropriated Equipment
Coordinate with the appropriate personnel in logistics, IT, Education and Safety and Security to estimate O&M expenditures for the new school or Office. Refer to Appendix 11, for an estimating sheet provided by DODEA HQ.

Provide the FY ordering date and the cost for the following categories:

- Furnishings
- Kitchen
- IT
- Education Supplies
- Safety equipment
- Security equipment

APPENDICES

Appendix 1 – Sample Design Directive
Appendix 2 – PDCR Table of Contents and Instructions Template
Appendix 3 – Action Items List
Appendix 4 – DD Form 1390 Template
Appendix 5 – DD Form 1391 Template
Appendix 6 –Charrette Sign Off Template
Appendix 7 – DD1390/DD 1391 QA/QC Sign Off Template
Appendix 8 – O&M Appropriated Equipment Estimating Sheet
Appendix 9 – Guidance Unit Cost Worksheet

APPENDIX 1

PARAMETRIC DESIGN CHARRETTE DIRECTIVE

DEPARTMENT OF DEFENSE
EDUCATION ACTIVITY
4800 MARK CENTER DRIVE
ALEXANDRIA, VA 22350-1400

Date

MEMORANDUM FOR Construction Agent (ATTN: Name)

FROM: HQ DoDEA Facilities

SUBJECT: Parametric Design Charrette Authorization for FYXX, Project Name, Location

1. You are hereby authorized funds in the amount of $XXX,XXX to support development of a Parametric Design Charrette for the subject project:

Installation	Location
Program Year	20XX
DoDEA Project Number	XXXXXXX
Project Title	Use DD 1391 Title
Program Amount	$XX,XXX,XXX
Scope	XXX,XXX SF
Category Code	XXXXX
DoDEA Area Office Project Manager	PM Name
Project Manager Phone	XXX-XXX-XXXX
Project Manager Email	XXXX.XXXX@XX.dodea.edu

2. We request Construction Agent proceed with procurement of A-E services with the following instructions:

- Preparation of Parametric Design Charrette (15%) is authorized to validate the scope and cost in the DD Form 1391.
- The project is authorized for accomplishment of site investigation work, preparation of pre-design cost estimate, and other pre-design work.
- Construction Agent will stop work immediately and notify HQ DoDEA if site investigation work identifies unforeseen site conditions (i.e. Environmental Impacts/Hazards, underground obstructions, etc.) that may place the project in jeopardy.
- Selection and negotiation of an architect-engineer (A–E) contract for 35% and 100% design is authorized.
- The architect-engineer (A-E) may not proceed to the 35% and or 100% designs until the final 15% design deliverable has been accepted by HQ DoDEA.
- Also, we request that you provide a draft Project Management Plan (PMP) NLT 30 days after A-E selection.
- The project delivery team is required to utilize the DoDEA 21st Century Education Facilities Specifications, DoDEA Mandatory Design Guidelines, and DoDEA Sustainability and Energy Efficiency Program guidance and instructions in preparation of deliverables.

3. Parametric Design Charrette (15%) design directives are intended to accelerate early execution of project design, provide better definition of customer requirements, improve customer involvement, and implement the use of parametric estimating, with a minimal expenditure of Planning and Design (P&D) funds. This effort will further define and develop the

scope, site and cost requirements for this project. The goal is to develop the necessary supporting documentation for the project to help advocate for the required funding and support as the project moves through the corporate process.

4. Construction Agent and the contracted A/E do not have authority to negotiate or cut project scope with the users during the design process. Any potential funding and or site constraints shall be brought to the DoDEA Area Office PM attention for proper coordination and direction. The DoDEA Area Office PM will provide direction after proper coordination has occurred.

5. PM Name will serve as the DoDEA Project Manager for this project. If you have any questions or comments regarding this design directive, please contact PM Name. Thanks in advance for your design and construction efforts in support of this project.

CC:
DoDEA Area Office Facilities Branch Chief
DoDEA Area Office Project Manager

HQ Use Only-Approved By:

MILCON P&D FUNDING REQUEST FORM

PROJECT NAME:
LOCATION:
PROJECT NUMBER:
PROGRAMMED AMOUNT:

DODEA AREA OFFICE **AREA POC NAME**

APPROVED BY:

RECEIVING AGENCY POC: (Army COE, NAVFAC LANT, etc. add rows as needed)

Name:
Phone:
Email Address:

ADDRESS(ES) OF THE RECEIVING AGENCY('S):

Name:
Phone:
Email Address:

FUNDING BREAK DOWN (Important! Separate out, In-House Effort, A/E Services, Contingency, EDC, SIOH, PCAS, S&A, In-House Efforts in support of the "Planning Charrette with incorporation of "21st Century School" themes, total requirement, etc.):

	Requested Funding Amount	Previously Funded Total Amount	% Funded To Date
AGENCY FAD TOTAL (Current Request)	**$0.00**	$0.00	
AGENCY TOTAL FUNDED (Grandtotal):		**$0.00**	
Geographic District and Design Ctr Total		$0.00	**%**
In-House Support	$0.00		
Design Center			
In-House Support	$0.00		
A/E Services	$0.00	$0.00	
TOTAL	**$0.00**		

HAS A PLANNING CHARRETTE TAKEN PLACE?: **Date :**

HAS A PROJECT DEVELOPMENT REVIEW BEEN ACCOMPLISHED?:

ABOVE FUNDING WILL ACCOMPLISH: (Examples: xx % Design, Seed, Planning Charrette, Design Charrette, Contract Mod, Pre-Design Planning, etc)

(add lines as needed. Go to additonal sheets if needed)
i.e. Provide A/E services and In-house support for "Code 6" design effort.
Total for this request is $000,000

APPENDIX 2

PARAMETRIC DESIGN CHARRETTE REPORT TABLE OF CONTENTS AND INSTRUCTIONS TEMPLATE

APPENDIX 2 PARAMETRIC DESIGN CHARRETTE REPORT TABLE OF CONTENTS AND INSTRUCTIONS TEMPLATE

The instructions below provide the PDT a prescriptive outline with specific guidance to be utilized to ensure consistent, accurate, and concise reporting. The objective is to provide enough detail to establish a clear understanding of project requirements and their associated costs. The report is an executive summary level of detail and is not intended to be an all-inclusive design specification.

CONTENTS

CONTENTS

2.0 BACKGROUND (Provide a summary narrative of the bulleted topics below)

- Identify the building numbers age, and size of all facilities
- Identify any life safety issues and substandard degraded conditions
- Identify new educational program initiatives requirements
- Identify inadequate space to accommodate current enrollments
- Identify any new service mission requirements driving an increase to population numbers

(Example)

Blank Elementary School was constructed in 1971 (Building 1234), and is 40 years old. The school gymnasium (Building 4321) is a temporary building constructed in 1995 surpassing the five year temporary building time restriction by 11 years. The school was assessed this year and has a Q-4 (Failing –safe but more cost effective to replace) rating. The condition of the school is inadequate; the interior finishes are degraded and the Heating, Ventilation, and Air Conditioning (HVAC) and electrical systems are not sufficient and do not meet federally mandated energy performance requirements. The school was built with a capacity of 400 students and current enrollment over the last five years has been 450 students which does not comply with student/teacher ratios resulting in overcrowding of classrooms and multipurpose areas.

3.0 REQUIREMENT/ AUTHORIZATIONS TABULATION (Insert the following below)

The proposed Blank School has a projected population of XXX students and will meet the standards outlined in the DoDEA Facilities Education Specifications. The Blank School is authorized XXX,XXX gross square feet (GSF), as broken out by area, category code, and unit of measure in Table 1 below.

The projected population is based on 5yr average enrollment in the table below. Enter in the appropriate year and grades for the school. If the projected enrollment is not the 5 year average justification must be provided.

	Actual Enrollment															
YEAR	PK	KA	K	Gr1	Gr2	Gr3	Gr4	Gr5	Gr6	Gr7	Gr8	Gr9	Gr10	Gr11	Gr12	**Total**
20__																
20__																
20__																
20__																
20__																
Total																
5 Yr Avg																

Parking for the Blank School is authorized at a ratio of XXXXXX (insert new 21 Century Education Facilities Specification). Therefore the total parking authorization is XXX spaces. Five percent of the total spaces are required to be Americans with Disabilities Act (ADA) accessible.

TABLE 1 AUTHORIZATIONS TABULATION (Insert area requirements from DoDEA Education Facilities Specifications in the format below):

Area Description	Primary Category Code	SF	SM	Remarks
Learning Impaired Moderate/Severe				
1. Learning Impaired Moderate/ Severe	Insert Service Code for School Here	1,800	167	Insert comments on any special requirements/ breakouts
2. OT/PT Laboratory	Insert Service Code for School Here	900	84	Insert comments on any special requirements/ breakouts
3. Learning Setting/Instructional Storage	Insert Service Code for School Here	200	19	Insert comments on any special requirements/ breakouts
4. Restroom, Student - Both Sexes	Insert Service Code for School Here	200	19	Insert comments on any special requirements/ breakouts
	Sub-Total	**3,100**	**289**	
Music - ES				
1. Music Room	Insert Service Code for School Here	1,250	116	Insert comments on any special requirements/ breakouts
2. Music Storage Room	Insert Service Code for School Here	250	23	Insert comments on any special requirements/ breakouts
	Sub-Total	**1,500**	**139**	

Total Net SF	Total From All Sub-Totals	Total From All Sub-Totals	
Net To Gross Allowance	XXX	XXX	Use current DoDEA Education Facilities Specification allocation
Total Authorization	XXX	XXX	

4.0 CONCEPTUAL RELATIONSHIPS AND ADJACENCIES

A. Space Adjacency (Insert the following below)

Each school type with its grades configuration will have a specific layout to provide appropriate space adjacencies. Space adjacencies should reflect the DoDEA 21st Century Education Facilities Specifications requirements. The adjacencies contained within the floor plan in Figure 1 are conceptual in nature to help formulate the basis of project cost. The designer of record will ultimately be responsible for ensuring the school has appropriate and functional adjacencies.

5.0 SCHEMATIC FLOOR PLANS (Provide a summary narrative of the bulleted topics below)

- General description of the construction materials/methods for the building envelope, structure, and finishes used as a basis of cost
- General description of the floor plan adjacencies and interior finishes used as a basis of cost
- Document conformance to 21st Century Education Facilities Specifications, and any installation specific design guidelines
- Content is intended to provide an overview not a complete room by room description of finishes and specifications

(Example)

Based on site constraints, adjacency requirements, and building area limitation, the schematic design for the Blank School has an asymmetrical footprint. The overall dimensions are approximately 340 feet long (in the east to west direction) by 350 feet wide (in the north to south direction). It is proposed to be situated on a very uneven site with a considerable amount of slope change; careful consideration to the topography will need to be employed during the

design phase of the project. The proposed Elementary School is a two story structure with several single story volumes. The entire second floor will be accessible by both stairs and elevator. Delivery aisles and maintenance drives are required to serve the mechanical rooms, school supply area, and food service receiving area.

The cost estimate is based on the Elementary School being designed and built using concrete masonry units (CMU) with brick veneer at pedestrian level and cementious stucco Finish System construction for the exterior envelope. Exterior walls are furred out with 3 5/8" metal studs and full batt insulation for energy compliance. The roof systems are a combination of flat roof for the majority and sloped standing seam for accent. The slope of the accent roofs will match that of adjacent buildings. The materials will be consistent on all facades of the facility. Mechanical screen wall materials should match those of the Elementary School. The perimeter walls will be articulated with score lines or reveals to create a sense of proportion and scale (reference the Blank AB Architectural Compatibility Plan, March 2008). The entire facility will be handicap accessible and comply with requirements of the Uniform Federal Accessibility Standard and ADA Accessibility Guidelines. All exterior finishes will comply with the Installation Architectural Compatibility Plan, March 2008. All interior finishes will comply with the DoDEA Education Facilities Specifications – Elementary School.

Many different functions in the Elementary School have an adjacency requirement to other functions. These adjacencies are addressed in the DoDEA Education Facilities Specifications –Elementary School design guidance document. These should be carefully considered during the design phase. In addition to adjacency requirements, the Elementary School has functions that must be located on the first floor when possible.

FIGURE 1 SCHEMATIC FLOOR PLAN (Insert using the following bulleted format requirements below):

- Scale floor plan to print on 11" X 17", Landscape orientation
- Include a rooms legend that corresponds with the areas identified in Table 1 Authorizations Tabulation and include the GSF total for each area
- Show second floor volumes on a separate 11" X 17" sheet
- Do not include placement of FFE, this is a conceptual level plan only

6.0 SCHEMATIC SITE PLAN (Provide a summary narrative of the bulleted topics below)

- General description of the site and the orientation of the facility on the site.
- Indicate concurrence with the installation master plans and document site approval date
- Indicate concurrence with installation environmental requirements
- Include a discussion of all site features and adjacencies
- Include a discussion of vehicular and pedestrian ingress/ egress features and compliance with 21st Century Education Facilities Specifications
- Indicate the installation required standoff distances
- Indicate the disposition of the existing facilities, are they going to be demolished, retained, or turned over to the installation. Provide a table indicating the disposition of all existing facilities.

(Example)

The proposed site for the new Blank School is located on the former housing complex, on the north side of Franklin Boulevard near the Main Gate. The footprint of the new Blank School will occupy the center one-third of the site, with the front of the building facing to the east. The play area will occupy the west portion of the site.

The proposed Blank School is in compliance with the Installation master plan and is appropriately sited in an area zoned for community support functions. The site plan developed for this charrette is compatible with future comprehensive plan capital improvement project concepts adjacent to the school to include future housing development and playing fields. All NEPA documentation is complete and applicable environmental clearances have been provided.

Parking for staff and visitors is proposed to be at the eastern edge, in the front of the school. The bus loading and unloading area will be located on the northern edge of the site requiring a covered walkway connecting to a main entrance to the school. Two parent drop locations are included, one on the south side of the school, and one for kindergarten students on the southwest side of the school. Both parent drop locations require connectivity to a covered walkway into a primary entrance to the school. Primary access for school buses will be located off Lincoln Boulevard. The entry point for the bus route will be one-way access, 16 feet wide. The road will be controlled with a drop arm or traffic light to slow traffic during peak traffic hours. The bus drop off zone is sized for nine buses and will provide three entry points to the school through covered walkways. The buses will exit the bus drop off zone and continue east and then south on the existing two-way access road back to Lincoln Boulevard avoiding traffic conflicts with the staff and visitor parking areas.

The minimum standoff distance from the Elementary School to adjacent roads and parking areas is a minimum of 10 meters (33 feet). There must be a 10 meter unobstructed space around the entire perimeter of the Elementary School for fire access and visibility. Please refer to Section 9 Safety and Security for detailed requirement.

All existing facilities will be demolished with the project (indicate if any of the facilities will contain lead based paint and or asbestos):

DISPOSITION OF EXISTING FACILITIES		
Demolition	Retain	Turn Over to Installation
Building # 1598 (45,567 SF)	None	None

FIGURE 2 SCHEMATIC SITE PLAN (Insert using the following bulleted format requirements below):

- Scale floor plan to print on 11" X 17", Landscape orientation
- Include all buildings and roadways within the immediate vicinity of the school site and label them for orientation
- Include a North Arrow and scale bar.
- Show all critical dimensions to include setbacks from the school to roads, parking and adjacent structures and clearly identify all proposed construction features used as a basis for cost.
- Aerial imagery in the background is preferred but not required

7.0 Environmental Hazards

Provide a discussion on how environmental hazards and constraints discovered during the Planning Charrette process have been mitigated. Be sure to cover the site and the site vicinity. Cover the following:

- UXO concerns – Project area should be thoroughly investigated for potential UXO if there is potential for discovery. UXO mitigation costs may be prohibitive depending on quantity and type of UXO encountered.

(Example)

Investigation for possible UXO at project site determined that potential for discovery is low to nonexistent due to no history of UXO on site for either storage or training.

- Floodplains –Site should be located outside of the 100 year flood plain. New development in the 100 year flood plain requires a permit and adoption of measures to avoid short and long term adverse impacts associated with flood plain occupancy and development.

(Example)

After review of local, state, and federal regulations and FEMA mapping it was determined that the project is located outside of the 100 year flood plain.

- Cultural Resources – Project should be in compliance with National Historic Preservation Act policy. Federal projects are required to identify, evaluate and register "historic properties" and requires Federal agencies to evaluate the impact on all federally funded or permitted projects. Projects affecting historic structures must be coordinated with the State Historic Preservation Office (SHPO) and be appropriate for these resources.

(Example)

A Section 106 submission for the project site was submitted to the SHPO for review and comment. Results of SHPO review determined that no historic properties will be affected.

- Wetlands – Site should be located outside of known wetland areas. New development is required to minimize the destruction of wetland and to preserve and enhance natural and beneficial values of wetlands. Development within wetlands or wetland buffers may require delineation, permitting and mitigation.

(Example)

A wetland delineation report was prepared and determined that the project does not occupy or disturb any known wetlands or wetland buffers.

- Critical zones/buffers (stream beds, coastal areas) – Project should be located outside of any Coastal Zone Management Area or riparian buffer. New development should be evaluated for its effect on coastal and riparian resources for consistency with local, state or federal regulations.

(Example)

After review of available documentation and consulting with affected regulatory agencies it was determined that the project is not occupy or disturb any Coastal Zone Management or Riparian buffer areas.

- Vegetation – Project should not be located in areas that will impact any Forest Impact Buffers, or threatened, endangered and rare flora species areas. If avoidance is not possible then similar areas with that listed species should be conserved.

(Example)

Project will affect a small portion of a delineated Forested Buffer. Proposed conservation of similar Forested Buffer in adjacent site was accepted and approved by regulatory agencies.

- Operational constraints (other than AT/FP) (Airfield flight paths, explosive arcs, etc.) – Project should be located as not to encroach on operational constraints such as Airfield Primary and Clear Zone Surfaces, Approach/ Departure and Transitional surfaces, Explosive Distance Arc's, Solid Waste Landfills or other site specific Land Use Controls.

(Example)

A determination was made after review and consultation with all potential effected parties that the project will not encroach or constrain any current or planned future operations.

- Hazardous Materials Storage - Hazardous materials and waste storage should comply with the latest guidelines and regulations of the Resource Conservation and Recovery Act (RCRA), Army Regulation 200-1 and COMAR Title 26, Subtitle 12 – Disposal of Controlled Hazardous Substances.

(Example)

All hazardous wastes shall be managed as specified and regulated in the latest Hazardous Materials Management Procedures Program (HMMP). Practices detailed in the HMMP will be followed in reference to receipt, distribution, storage and use of all hazardous materials for the project.

8.0 Construction Phasing

A Site Access

- Provide a description of the proposed construction haul route to get vehicles and materials to and from the site.
- Describe the gates that will be used and any specific requirements or constraints related to the proposed route to include any installation imposed quiet hours, closures, or reduction in utilization. Describe any impact to the project duration as a result of reduced utilization of the haul route or gate access.

(Example)

Construction vehicles will utilize the commercial gate and traverse Grant Avenue to get to the construction site and adjacent laydown area. The Installation will not allow construction vehicle traffic on weekends. Should the project require a recovery schedule, the Installation is willing to grant exceptions for Saturdays with enough advance notification. Typically construction traffic will be allowed through the commercial gate from 0700 to 1800 hours Monday through Friday. There will be no impact to the schedule with the restrictions described above.

B Laydown Area

- Describe the area that will be utilized for construction laydown and specific requirements or constraints related to the site to include any installation imposed quiet hours or reduction in utilization. Describe requirements to restore the site after completion of the project.

(Example)

The construction laydown area is west of and immediately adjacent to the proposed construction site for the school. The five acre site is adequate for staging the required vehicles and materials. The site will be secured by the construction contractor with temporary fencing throughout the duration of the project. The area will be restored to the condition it was provided to the contractor at the completion of the project. The hours of construction operation are the same as for the access road above.

C Temporaries/Swing Space

- Provide a statement identifying if the project will require temporaries or swing space during construction.
- Describe the number of temporaries, the location, and any requirements for supporting infrastructure.
- Describe the planning assumptions that support swing space during construction. Include the enrollment and capacity analysis that supports the ability to provide the swing space. Include a statement that confirms that the swing space analysis has been approved by Education leadership.

(Example)

The project will require the use of temporary facilities for grades 1-4 and the 5th grade will be accommodated in swing space available in the existing middle school. 14 Temporary classroom buildings are required as well as a temporary kitchen with adequate seating for 50 students for three meal periods. A modular temporary gym will also be required on the temporary facilities campus.

The temporary facilities campus will be located to the north of the project site off of Lincoln road. All supporting infrastructure and utilities are available at the site and only minor site work will be required, as well as 20 temporary parking stalls and a bus loop.

The existing middle school has a validated capacity of 400 students. The middle school currently has an enrollment of 350 students. The five year average enrollment is 355 students. The current enrollment of the 5th grade is 86 students. The five year average for the 5th grade is 100 students. The existing middle school has adequate space available to house the fifth grade population. The swing space plan has been reviewed and approved by the school administration and Center of Excellence.

9.0 SUPPORTING INFRASTRUCTURE (Provide a summary narrative of the topics below)

A Site Preparation/Grading

- General description of the site topography including slope and terrain conditions
- Describe any natural or manmade features that will be demolished with the project
- Provide a summary of the proposed Low Impact Development (LID) sustainable storm water management strategy to include conceptual cut/fill requirements

(Example)

Currently the site elevation drops approximately 11 feet from the west to the east. Sufficient grading will be required to minimize earthwork. Retaining walls will be utilized at the northwest portion of the access road to accommodate for the elevation differences. To minimize the environmental impacts LID Storm water management will be accomplished by adding storm sewers to collect water running across the pavements. Site grading cut and fill should be balanced as well to limit importing fill materials to the site. Sufficient grading is required to channel rainfall away from the building foundation through shallow, grassy drainage swales to area catch basins or roadway basins that will then be connected to the existing storm water drainage system via reinforced concrete pipe and open channels.

B Structural (Loads & Seismic)

- General description of the site geology and soil conditions
- Provide a summary of construction requirements used as a basis of cost to

mitigate any unique site constraints

(Example)

The two-story Elementary School foundation will require additional support (special foundations) due to the poor soil conditions on the installation. The additional support will consist of strategically located pre-stressed straight cylinder concrete piles with reinforced concrete caps. Depth and locations will be determined during the design phase based on results of soil investigation and analysis performed at the site of the new Elementary School.

C Water/Sewer

- General description of the schematic plan to provide potable water and fire suppression to the site to include approximate size of lines and connection distances used as a basis for cost
- General description of the sewer conveyance and approximate size and method of disposal/discharge used as a basis for cost.

(Example)

An 8-inch water line from the west extends into the site from the water tanks north of Building 490 along the north side of the site and loops south to tie into the water line in Franklin Boulevard. The northwest leg of the line will need to be moved approximately 250 feet south to make room for the footprint of the Elementary School. Fire flow tests in the area show static and residual pressures as low as 45 and 10 psi, respectively, at a flow rate of 335 gallons per minute (gpm). According to UFC 3-600-01, all parts of the building exterior must be within 350 feet of a hydrant, which results in the addition of three hydrants to service the Elementary School.

The wastewater collection system piping is old and was evaluated in 1999 as having major rainwater infiltration problems. A new five-year five-phase Operation and Maintenance plan is in place for scheduled replacement. Upgrades to the proposed site are planned for fiscal year 2010 (FY10) and FY11. The Elementary School will be serviced by an 8-inch gravity sewer line in Franklin Boulevard that flows west then north along Washington Road, then west along Sanders Road to Lincoln Boulevard. Approximately 270 feet of new 6-inch service lateral with associated cleanouts will be constructed to support the new Elementary School.

D Pavements

General description of all pavements anticipated on the site and composition.

(Example)

Pavements for site access, site circulation, service entry area, and parking for the Elementary School will be installed as a part of this facility. All circulation roads require a 12 foot wide lane in each direction. All circulation roads are proposed to be made of 3 inches of asphalt over 6 inches of aggregate base. Typical sections will include curbs and gutters. Parking lot pavement is proposed to consist of 3 inches of asphalt over 6 inches of aggregate base. Hardened playground will also be paved with 1-1/2 inches of asphalt over 4 inches of aggregate base.

E Electrical

- General description of the electrical service on the installation
- General description of any site related distribution system improvements required
- General description of the anticipated electrical systems directly associated with the facility used as a basis of cost.

(Example)

Electric service on base is provided from two substations and a combination of overhead and underground distribution circuits. Each substation has two 15/20 megavolt Ampere (MVA) transformers feeding metal clad switchgear with vacuum breakers on the outgoing feeder circuits. The total demand on the base is currently approximately 25 MVA. Anticipated distribution system improvements associated with the site include:

- Approximately 2,575 feet of new duct-bank
- Approximately 2,575 feet of new 3-phase, 15kV cable
- Three electric man-holes
- Three pad-mounted switches
- One 37.5kV pad-mounted transformer to serve an existing sewer lift station
- Three connections to existing overhead circuits

A single line diagram of the proposed equipment arrangement for the school has been prepared and included in the appendices.

It is proposed that most of the lighting loads be served at 277 V, motor loads (larger than 1 horsepower [HP]) be served at 480 V, and receptacle and miscellaneous loads be served at 120 V. The electric service equipment was sized

based on HVAC loads, motor loads, and other loads as shown on the single line diagram. As a comparison, the load was also estimated using nominal Watts per square foot data from Table D5010-1151 in the 2009 R.S. Means Electrical Cost Data book. Watts per square foot data for elementary schools are as follows:

- Lighting, 3 Watts
- Devices, 1.9 Watts
- HVAC, 5.3 Watts
- Miscellaneous, 1.3 Watts

The total estimate is 11.5 Watts per square foot. The anticipated building size is approximately 131,458 square feet, for a total electrical load estimate of approximately 1400 kW. This estimate is consistent with the estimate established in the single-line diagram.

F Communications

- General description of the communication infrastructure on the installation
- General description of any site related distribution system improvements required
- General description of the anticipated communications infrastructure directly associated with the facility used as a basis of cost.

(Example)

Communication infrastructure on base consists of a dedicated duct-bank and manhole system with both copper cable and fiber optic cable distribution. It is anticipated that a 100-pair copper cable and a 12-strand fiber optic cable will be adequate for the Elementary School requirements. It is estimated that approximately 500 feet of new duct-bank and a new communications vault will be constructed to serve the new Elementary School. In addition to the fiber optic connection to the base network, it is anticipated that approximately 2,000 feet of 12-strand fiber optic cable will be installed from the elementary school to the school (in existing duct-bank) to connect to the school system network.

G HVAC

- General description of the anticipated heating, ventilation, and air conditioning construction requirements used as a basis of cost.

(Example)

HVAC for the new Elementary School is anticipated to consist of two air-cooled chillers with a capacity of 250 tons each. Heating equipment will consist of two hot water boilers with a capacity of 3,100 thousand British Thermal Units per

hour (mBh) each. There will be four air handling units with a heating and cooling coil that will serve the school, one of which will be a dedicated unit for the gymnasium. There will also be variable air volume boxes with heating coils serving the different spaces in the building. An alternative system for classrooms is to provide unit ventilators with heating and cooling coils instead of variable volume boxes.

The controls will include a thermostat for each unit and will be a programmable remote wall-mounted type. It will also include a humidistat. The chillers will use environmentally friendly hydro fluorocarbon refrigerant and will be selected for their low noise sound level capability. Special coil coatings will be specified to mitigate coil corrosion and substantially lengthen equipment life. The ventilation requirement for the space will be in compliance with latest version of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 62.

H Fire Protection

- General description of the emergency vehicle site access and response requirements
- General description of the anticipated structural requirements used as a basis of cost

(Example)

In accordance with DoD Instruction 6055.6, the Elementary School will be serviced by the nearest fire station on the Installation. Responding fire and emergency services vehicles require 33 feet (10 meters) of unobstructed access from all four sides of the facility. An automatic sprinkler system that complies with requirements of National Fire Protection Association (NFPA) 101, Life Safety Code, is required. The sprinkler system will be a wet-type zoned system supported by four fire hydrants located on the site.

Areas containing hazardous quantities of combustible supplies, service equipment (except air-handling equipment) subject to possible explosion, and commercial refrigerating machinery, will be enclosed by construction having not less than a one-hour fire-resistant rating. Openings in such construction will be protected by self-closing or smoke-activated fire doors. The service entry for the fire lines and the fire riser will be located in the mechanical room. The fire alarm and detection system will be provided for the Elementary School in accordance with NFPA 72 and 101. The fire alarm will connect directly to building 671, Fire Department 911 Center.

FIGURE 3 SCHEMATIC SITE UTILITY PLAN (Insert using the following

bulleted format requirements below):

- Scale floor plan to print on 11" X 17", Landscape orientation
- Include all buildings and roadways within the immediate vicinity of the school site and label them for orientation
- Include a North Arrow and scale bar.
- Show all existing and proposed utilities to include water, sewer, storm, electric, and communications lines.
- Provide a legend that distinguishes existing from proposed by utilizing a combination of color and line types.

10.0 SECURITY/FORCE PROTECTION (FP)

- General description of the security and FP requirements
- General description of any structural and or supporting infrastructure requirements required for security and FP used for the basis of cost
- Statement documenting understanding and consensus of the installation anti-terrorism requirements
- Statement documenting controlled or uncontrolled perimeter status for the installation
- Confirm the explosive weight with the Installation Anti-Terrorism Officer and the DoDEA Office of Safety and Security

(Example)

The site is in compliance with all applicable anti-terrorism/force protection (AT/FP) criteria as outlined in Unified Facilities Criteria (UFC) 4-010-01 DoD Minimum Anti-terrorism Standards for Buildings and the Physical Security and Antiterrorism Design Guide for DoDEA Educational Facilities. Automated active barriers are required for access roads that provide entry and egress to loading docks (service roads). Manually operated active barriers are required for emergency service access roads. Situation where service and emergency access roads are synonymous will be outfitted with an automated active barrier. It was confirmed with the Installation Antiterrorism office during the charrette that the site is located within a controlled perimeter and that Explosive Weight II will be used to determine minimum standoff distances. Minimum standoff distances as identified in UFC 4-010-01, Table B-1 in concert with the applicable wall type, Controlled or Uncontrolled Perimeter, and identification of Explosive Weight II as prescribed in Table B-2 apply. Tables B-1 and B-2 also apply to the minimum standoff distance from the Elementary School to adjacent roads, parking areas, trash containers (Standard 1), and unobstructed spaces (Standard 2).

Drive-Up/Drop-Off Areas and Bus Loops that infringe upon minimum standoff distances will be marked in accordance with the Manual on Uniform Traffic Control Devices as prescribed in UFC 4-010-01, Standard 3.
The ground safety office requires crosswalks and signage at all key intersections, parking lots and crossings within the perimeter of the school site. The USACE has identified that within the last four years the security engineering requirements for new construction include structural support of frames, doors, and windows. It is recommended that the design agent coordinate with the installation and the DoDEA safety/security offices early in the design process to establish the design specifications required for the project.

11.0 SUSTAINABLE DESIGN/ LEED (Insert the following narrative and include a description of the bulleted items below)

A Applicability

All DoDEA projects are required to meet the requirements of the DoDEA Administrative Instruction Sustainability and Energy Efficiency Program. This program applies to the execution of all DoDEA military construction (MILCON) projects, sustainment, restoration and modernization (SRM) projects that include the replacement or improvement of building energy systems (including the building envelope, lighting, and HVAC), and minor construction projects that exceed 25% of the current replacement value and includes the replacement or improvement of building energy systems (including the building envelope, lighting, and HVAC). This regulation will apply to construction activities outside the continental United States (OCONUS) to the extent possible considering mission objectives and Host Nation Agreements.

Projects shall be registered with GBCI by the geographic district/region in the pre-design stage using the current LEED for Schools rating System. The geographic district/region shall provide project and GBCI data sheet access to the Designer of Record once under contract. All new facilities must apply for certification at no less than a LEED Silver level under the U.S. Green Building Council's most applicable current LEED rating system, or apply for a comparable rating under no less than an equivalent green building rating system, so long as a third party provides such rating.

To accomplish this goal, DoDEA will document Sustainability Program costs on DD Form 1391, with a separate line item under primary facility costs identified as "SDD AND FEDERAL ENERGY ACTS COMPLIANCE". These costs will be programmed at no more than five percent of the primary facility cost and specific detailed costs are must be provided in the cost estimate.

Estimated design and construction costs for implementing LID shall be documented in the

project cost estimate as a separate line item. A break out of the costs in the cost estimate will be required to ensure we are adequately capturing costs of compliance. A straight percentage will no longer be acceptable.

A LEED Accredited Professional has evaluated the proposed Elementary School for potential to achieve LEED Silver certification and the results are documented in the LEED Checklist for New Construction V3.0 contained in Table 2 below. A summary of the preliminary LEED strategy follow Table 2. The individual credit costs are provided in the appendices.

TABLE 2 LEED CHECKLIST (INSERT CHECKLIST)

B Sustainable Sites

Credits Summary:

(Example)

Credit 1 – Site Selection

- To comply, the project must not be within 100 feet of wetlands (CFR 40, Parts 230-233 and Part 22), within 50 feet of a water body, or on habitat of federal or state threatened or endangered species. The site complies with the requirements and there is no premium for site selection.

C Water Efficiency

Credits Summary:

(Example)

Credit 1.2 – Water Efficient Landscaping

- Install landscaping that does not require irrigation. Pervious areas on the site will be planted with native shrubs which will not require irrigation.
- The project will include a U.S. manufactured synthetic turf that will not require irrigation.

D Energy and Atmosphere

Credits Summary:

(Example)

Credit 1 - Optimize Energy Performance

- Average industry cost for a 260,000 SF building is $150,000 for 7-8 points and $750,000 for 12-13 points. This unit cost was used to estimate the cost of improvements associated with optimized energy performance.
- As mandated by the DoDEA Administrative Instruction Sustainability and Energy Efficiency Program 40 percent energy reduction on new construction (17 LEED points).

- Building energy analysis software (e.g., eQUEST, DOE-2, Trane Trace 700 etc.) may be used to identify energy efficiency measures.
- Energy efficient measures may include high-efficiency lighting (e.g., 1W/SF, dimmable ballasts, daylight sensors, occupancy sensors, etc.), premium efficiency motors, high-efficiency chillers (0.49kW/ton), variable frequency/ speed drive fans and pumps, exhaust heat recovery units, wall/roof insulation and sealing/caulking creating large overall R values, high-performance glazing on windows, etc.).
- Net Zero Energy will not be achievable for this project without significant cost to the project. Renewable energy such as wind technology is not suitable for this site due to the Airfield criteria and the existing elevation of the site.

E Materials and Resources

Credits Summary:

(Example)

Credit 2.1 – Construction Waste Management

- Recycle or salvage 50 percent of non-hazardous construction and demolition debris.
- This credit is achievable by stating in the specifications. Minimum premium anticipated.

F Indoor Environmental Quality

Credits Summary:

(Example)

Credit 3.1 – Construction Indoor Air Quality Management Plan- During Construction

- During construction, meet Sheet Metal and Air Conditioning Contractors National Association guidelines, and protect stored materials. This can be achieved at no cost.
- This can be part of the contract specification and the credit can be achieved at no additional cost.

G Innovation and Design Process

Credits Summary:

(Example)

Credit 1.1 – Innovation in Design – Maximize Open Space

- A vegetated open space area will be provided adjacent to the building that is double in area to the building footprint.
- This credit is achievable by vegetating areas between standoff distances between parking, roads, and the building. Minimum premium anticipated.

12.0 COST ESTIMATE (Provide a summary narrative of the bulleted topics below)

- Provide a description of all assumptions used to establish the basis of the costs included
- Should include at a minimum the Parametric Model utilized and the year of the cost model
- Description of all markups and assumptions to include but not limited to yearly inflation, mid- point of construction, area cost factors, local resource/materials trends, and any other assumption used to base the total cost included in the DD Form 1391.
- Provide Plant Replacement Value (PRV) analysis and calculations for all structures proposed to be demolished. Analysis should show that the cost of renovating the structures will exceed the PRV by more than 50%.
- LCCA analysis for sustainable technologies. BLCC5 output.

13.0 DD FORM 1390/1391 (Insert completed template from Appendix 5 and 6)

All projects will be required to populate the Guidance Unit Cost (GUC) worksheet provided in Appendix 9 of this document. The worksheet will be based on the unit cost for the respective school type referenced in UFC 3-701-01(DoD Facilities Pricing Guide). The worksheet contains formulas that will automatically calculate the adjusted GUC based on user inputs of area cost factor, square feet and escalation. If the unit costs from the cost estimate developed as part of the Parametric Design Charrette is +/- 5%, then justification of the cost difference will be required.

DoDEA is required to utilize the cost estimate provided by the CAPM. No changes to the cost estimate are authorized without a written justification provided to HQ DoDEA Facilities Branch for approval.

APPENDICES

- **Charrette Agenda**
- **Sign-In Sheets**
- **In-Brief Slides**
- **Out-Brief Slides**

- **Staffing Authorization Document**
- **Parametric Cost Estimate WBS summary (Uniformat)**
- **LEED Per-Credit Costs**
- **Back-up calculations**
- **Owners Project Requirements**
- **BLCC5 Output**

APPENDIX 3

ACTION ITEMS LIST

ACTION ITEMS LIST

Action	Responsible Party	Suspense
1.		
2.		
3.		
4.		

APPENDIX 4

DD FORM 1390 TEMPLATE

1. COMPONENT	**FY 20__ MILITARY CONSTRUCTION PROGRAM**	2. Date
DoDEA		INSERT DATE - HQ

3. Installation and Location	4. COMMAND	5. AREA CONSTRUC-TION COST INDEX
INSERT INSTALLATION NAME, STATE or COUNTRY	DoDEA	ENTER IN ACF

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30 SEP 20__						##				##
b. END FY 201_						##				##

7. INVENTORY DATA ($000)

TOTAL ACREAGE	0
INVENTORY TOTAL AS OF	0
AUTHORIZATION NOT YET IN INVENTORY	0
AUTHORIZATION REQUESTED IN THIS PROGRAM	TOTAL PA AMOUNT
AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM	0
PLANNED IN NEXT THREE PROGRAM YEARS	0
REMAINING DEFICIENCY	0
GRAND TOTAL	TOTAL PA AMOUNT

8. PROJECTS REQUESTED IN THIS PROGRAM

CATEGORY CODE	PROJECT TITLE	SCOPE	COST ($000)	DESIGN START	STATUS COMPLETE
ENTER NUMBER	ENTER TITLE FROM 1391	XXX,XXX SF	XX,XXX	From Block 12 Sept 13	From Block 12 June 17

9. FUTURE PROJECTS

a. INCLUDED IN FOLLOWING PROGRAM

None

b. PLANNED IN NEXT THREE YEARS

None

10. MISSION OR MAJOR FUNCTIONS

Military Dependent Education

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

None

APPENDIX 5

DD FORM 1391 TEMPLATE

1. COMPONENT DoDEA	**FY 20__ MILITARY CONSTRUCTION PROJECT DATA**	2. Date INSERT MONTH/YR HQ
3. INSTALLATION AND LOCATION OFFICIAL INSTALLATION NAME, COUNTRY or STATE	4. PROJECT TITLE: NAME OF FACILITY, ACTION	

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	SERVICE BASED	FROM HQ DoDEA	TOTAL COST

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
PRIMARY FACILITIES				**00,000**
SCHOOL NAME or FACILITY NAME(CCN)	SF	00,000	000.00	00,000
RENOVATION (if applicable) (CCN)	SF	00,000	000.00	0,000
SUPPORT FACILITY (CCN) (if applicable)	SF	00,000	000.00	0,000
SDD AND FEDERAL ENERGY ACTS COMPLIANCE	LS			000
ANTITERRORISM (AT/FP) MEASURES (If Required)	LS			000
SPECIAL COSTS (TEMP FACILITIES) (If Required)	LS			0,000
SUPPORTING FACILITIES				**0,000**
SPECIAL CONSTRUCTION FEATURES (If Required)	LS			000
CANOPIES	LS			000
ELECTRICAL/GAS UTILITIES	LS			000
COMMUNICATION UTILITIES	LS			000
WATER/SEWER/UTILITIES (Includes storm drainage)	LS			000
MECHANICAL UTILITIES	LS			000
SITE PREPARATION	LS			000
ROADS, SIDEWALKS AND PARKING	LS			000
SITE IMPROVEMENTS	LS			000
AT/FP	LS			000
DEMOLITION (If Required)	SF	00,000	000.00	000
LOW IMPACT DEVELOPMENT(Federal Requirement)	LS			000
ENVIRONMENTAL MITIGATION (Includes historic, tree, and wetland mitigation costs ONLY IF REQUIRED)	LS			000
ESTIMATED CONTRACT COST (sum of primary and supporting)				**00,000**
CONTINGENCY PERCENT (5%)				0,000
SUBTOTAL				**00,000**
SUPERVISION, INSPECTION & OVERHEAD (5.7% OR 6.5%)				0,000
DESIGN/BUILD(4% of subtotal IF applicable)				0,000
ENGINEERING DURING CONSTRUCTION (1%) (of subtotal)				000
TOTAL REQUEST (sum of total contract cost, SIOH and design build)				**00,000**
EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD)				**0,000**

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Construct a (single or multi-story, elementary, middle, or high) school composed of (foundation type), (frame type), and (exterior materials). Interior construction will consist of (wall materials and must include operable/movable partition walls). Interior spaces include (list interior spaces – neighborhoods, studios, learning hubs, staff collaboration areas, a career technical education lab, computing center, science labs, art room, music suites, OT/PT, a commons area, performance space, information center, a physical education area with gymnasium, food service, administrative offices, guidance counseling center, a special education office, health services area, maintenance support, central storage area, technology service center), and other required areas for a fully functioning (TYPE) school. The project includes site improvements such as (list – examples include – tie to block 9 -signage, fencing, paving, landscaping, covered walkways, exterior lighting, utilities, and playground area). Cafeteria, food service and information center areas were sized for the future (TYPE ES, MS, HS) School population.

1. COMPONENT DoDEA	**FY 20__ MILITARY CONSTRUCTION PROJECT DATA**	2. Date INSERT MONTH/YR HQ

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
OFFICIAL INSTALLATION NAME, COUNTRY or STATE	NAME OF FACILITY, ACTION

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	SERVICE BASED	FROM HQ DoDEA	TOTAL COST

The project includes related infrastructure such as (examples: water, sewer, electrical, staff and visitor parking areas, parent drop off lane, mechanical rooms, emergency access lanes, bus loading/unloading areas, and delivery areas.

The project will require demolition of # buildings for approximately (SF).

Provide additional descriptions on special construction and costs such as environmental mitigation, special costs.

Sustainable principles will be maximized in the design, development and construction of the project in accordance with Executive Order 13123 and other applicable laws and executive orders. Energy conservation and environmentally safe measures will be incorporated in this project wherever feasible, practical or required by regulation. Energy and natural resource conservation measures will be maximized in the design to the extent possible. In accordance with Leadership in Energy and Environmental Design (LEED) for Schools, Silver certification (CONUS) certifiable (PACIFIC) will be the goal for this project.

Facilities will be designed in accordance with DoDEA Education Facilities Specifications, Americans with Disabilities Act (ADA) Accessibility Guidelines/Architectural Barriers Act (ABA), National Fire Protection Association (NFPA) Life Safety Code, (Include applicable Host Nation standards if required), Standards of Seismic Safety for Federally Owned Buildings, and energy and water conservation standards.

Air Conditioning Load: 000 Tons

11. REQUIREMENT: 00,000 SF (From PFD) ADQT: 00,000 SF SUBSTD: 00,000 SF

PROJECT:
Replace the existing (school type ES, MS, HS) facility by constructing a new (school type) facility.

This project constructs a new (school type or building type).

REQUIREMENT:

The new school is required to provide adequate academic facilities for (000) students in grades (enter in grade levels). School population based on (20XX)(Year should be the year of occupancy) school year.

Admin facility (Area office, DSO)(Only include if project is for a DSO)
An adequate and efficiently configured facility is required to provide administrative support for (number of schools), (# of teachers) (# of students/parents). The (organization) provides (enter in mission of the organization).

CURRENT SITUATION:

The current (list school name) is a 00,000 SF facility that was originally constructed in 19XX. List any major additions and or alterations since the original construction and the year added. The school has a (insert poor or failing based upon rating – no Q rating) facility condition rating; it is more economical to replace than to repair. The following systems are expired or are failing and in need of replacement; List failing or expired systems. The facility does not meet the DoDEA's Education Facilities Specifications to include (list curriculum areas or supporting functions such as parking that are deficient and rationale). The facility does not meet current (insert AT/FP, ADA, NFPA as applicable) and does not meet current federal energy and sustainability mandates.

1. COMPONENT DoDEA	**FY 20__ MILITARY CONSTRUCTION PROJECT DATA**	2. Date INSERT MONTH/YR HQ

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
OFFICIAL INSTALLATION NAME, COUNTRY or STATE	NAME OF FACILITY, ACTION

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	SERVICE BASED	FROM HQ DoDEA	TOTAL COST

IMPACT IF NOT PROVIDED:

The continued use of deficient, inadequate, and undersized facilities that do not accommodate the current student population and will continue to impair the overall education program for students. If a new facility is not provided, the substandard environment will continue to hamper the educational process and the school will not be able to support the curriculum and provide for a safe facility. The required maintenance and repair of expired and failing systems will continue to strain maintenance capabilities and budgets if facility is the not replaced.

ADDITIONAL:

This project has been coordinated with the installation physical security plans and all AT/FP measures are included.

Economic Alternatives:

For Schools state the following:
All known alternatives were considered during the development of this project. No other option could meet the mission requirements; therefore, no economic analysis was needed or performed.

For non-school projects (see DoDEA Facilities Management Guide for detailed instructions) Delete this section if the project is for a school:
a. Status Quo
b. Renovation/Modernization
c. Lease
d. New Construction
f. Analysis/Results

JOINT USE CERTIFICATION:

This facility can be used by other components on an "as available" basis; however, the scope of the project is based on DoDEA requirements.

DoDEA POC (571) 372-1405

12. Supplemental Data:

Site Approval: Yes [X] Obtained Date: (List the Month and Year)

No [ ] Expected Date: (If no list the Month and Year anticipated)

Issues: (state no issue or BRIEFLY explain the issue below)

a. DDESAB, AICUZ, Airfield, EMR, or wetlands
b. Endangered species/sensitive habitat
c. Air quality
d. Cultural/archeological resources
e. Clearing of trees
f. Known contamination at selected site
g. Operational problems
h. Traffic patterns impact
i. Existing utilities upgrade

1. COMPONENT DoDEA	**FY 20__ MILITARY CONSTRUCTION PROJECT DATA**	2. Date INSERT MONTH/YR HQ
3. INSTALLATION AND LOCATION OFFICIAL INSTALLATION NAME, COUNTRY or STATE	4. PROJECT TITLE: NAME OF FACILITY, ACTION	

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	SERVICE BASED	FROM HQ DoDEA	TOTAL COST

j. Ordnance sweep required prior to construction

Planning:
Consistent with Installation Master Plan: Yes or no – If no why, issues

Host Nation Approval: Country, date of approval if applicable

National Capital Region Approval: Date of approval, if applicable

NEPA Documentation Complete: Y or N, or not required
Level of NEPA: (pick one) Categorical Exclusion, Environmental Assessment, Environmental Impact Statement, Memorandum of Negative Decision

Mitigation Issues:

a. Wetlands replacement/enhancement – Y or N
b. Hazardous Waste – Y or N
c. Contaminated soil/water – Y or N
d. Other – Y or N

A. Design Data (Estimated):

(1) Status:	
(a) Design Start Date	Abbreviated MO/YR
(b) Parametric Cost Estimate Used to Develop Costs	(YES if Code 3 complete)
(c) Percent of Design Completed as of 1 Jan 201_	15% if Code 3 complete or 5% if only a Code 0 complete
(d) Expected 35% Design Date	Abbreviated MO/YR
(e) 100% Design Completion Date	Abbreviated MO/YR
(f) Type of Design Contract:	Design/Bid/Build
(2) Basis:	
(a) Standard or Definitive Design - (YES/NO)	NO
(b) Date Design was Most Recently Used	N/A
(3) Total Design Cost (c)=(a)+(b) OR (d)+(e):	
(a) Production of Plans and Specifications	
(b) All Other Design Costs	
(c) Total Design Cost (10% of the PA)	0,000
(d) Contract (60% of the 10% in line c)	0,000
(e) In-house (40% of the 10% in line c)	0,000
(4) Construction Contract Award Date	Abbreviated MO/YR
(5) Construction Start Date	Abbreviated MO/YR
(6) Construction Completion Date	Abbreviated MO/YR

B. Equipment associated with this project which will be provided from other appropriations: (The table below should be populated with the numbers generated from the O&M Appropriated Equipment Estimating Sheet.)

1. COMPONENT DoDEA	**FY 20__ MILITARY CONSTRUCTION PROJECT DATA**	2. Date INSERT MONTH/YR HQ

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
OFFICIAL INSTALLATION NAME, COUNTRY or STATE	NAME OF FACILITY, ACTION

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	SERVICE BASED	FROM HQ DoDEA	TOTAL COST

Equipment Nomenclature	Procuring Appropriation	Fiscal Year Appropriated Or Requested	Cost ($000)
Furnishings	O&M	20XX	000
Kitchen	O&M	20XX	000
IT	O&M	20XX	000
Education Supplies	O&M	20XX	000
Safety Equipment	O&M	20XX	000
Security Equipment	O&M	20XX	000

APPENDIX 6

PARAMETRIC DESIGN CHARRETTE SIGN OFF TEMPLATE

Parametric Design Charrette Validation Form

Project Data

Project Number:	
Project Title:	
Installation:	
Dates of the Charrette:	

Parametric Design Charrette Team Members – Approval and Concurrence:

Title/Organization	Printed Name	Phone/Email	Signature
Installation Commander (or delegated representative)			
Master Planner			
Environmental Officer			
Force Protection Officer			
Engineering/Public Works			
Information Systems			
Construction Agent PM			
Design Center PM			
DoDEA Area Office PM			

APPENDIX 7

DD 1390/DD1391 QA/QC SIGN OFF TEMPLATE

DD1390 and 1391 QA/QC Checklist

This checklist is to be completed by the Construction Agent PM, Design Center PM and DoDEA Area Office PM. All will sign and attest to performing the QA/QC actions below.

1. **Be sure to use the guidance provided in the DoDEA Facilities Management Guide for Planning Charrettes and Parametric Design Charrettes.**

2. **DD Form 1390 – check all for accuracy and consistency, specifically:**

   - **The latest DD Form 1390 template provided as part of the DoDEA Guidance was used. Do not create or alter the template.**
   - **The date is consistent between the DD1390 and DD1391**
   - **The Installation and Location is consistent between the DD1390 and DD1391**
   - **The as of date (6a) and end date (6b) is consistent with Block 12 of the DD1391**
   - **Verify the Civilian student numbers are the sum of all schools on the installation in 6a. 6b. is the sum of all installation schools plus the new project.**
   - **The Authorization Requested in this program and the Grand Total is consistent with the DD 1391**
   - **The Category Code numbers are correct per the DoDEA Facilities Management Guide guidance.**
   - **The correct Area Cost Factor is listed in block 5.**
   - **The Project title is consistent with the DD1391 and follows the DoDEA Facilities Management Guide guidance.**
   - **The scope, cost, design start and status complete is consistent with the DD 1391.**

3. **DD Form 1391 – check all for accuracy and consistency, specifically:**

   - **The latest DD Form 1391 template provided as part of the DoDEA Guidance was used. Do not create or alter the template.**
   - **The text box over the form has been deleted.**
   - **The date is consistent with the DD1390**
   - **The Installation and Location is accurate and consistent with the DD1390**
   - **The Category Code numbers are correct per the DoDEA Facilities Management Guide guidance and consistent with the DD1390.**
   - **The Project Number is entered and accurate**
   - **The Project Cost is consistent between the DD1390 and DD1391**
   - **Block 9. Cost Estimates numbers calculate correctly and the contingency, SIOH and EDC fees are calculated in the correct order, per the guidance.**
   - **Block 9 contingency, SIOH and EDC fees are correct per the DODEA Guidance**
   - **Block 9 line items are consistent with the Charrette Cost estimate.**
   - **Text in Block 10 and 11 meets the requirements found in the DoDEA Facilities Management Guide for Planning (O&M) Charrettes and Parametric Design Charrettes.**
   - **Text in Blocks 10 and 11 are consistent with quantities listed on Block 9.**
   - **Block 11 – Ensure the enrollment is consistent with the enrollment on the PFD.**
   - **Block 12 supplemental data is correctly provided**
   - **Site Approval has occurred**
   - **Block 12 Design data and dates are correct and consistent with the DD1390**
   - **Block 12B – Equipment numbers have been generated per DoDEA Guidance**
   - **Block 12B – The sum is consistent with the non-add line item in block 9**

DD1390/DD1391 QA/QC has been performed and the items above are ready for DoDEA HQ Review.

TITLE	Printed Name	Phone/Email	Signature
Construction Agent PM			
Design Center PM			
DoDEA Area Office PM			

APPENDIX 8

O&M APPROPRIATED EQUIPMENT ESTIMATING SHEET

DoDEA Equipment Appropriations

Only Enter in fields in Yellow

PROJECT TITLE	
FISCAL YEAR	
PROJECTED ENROLLMENT	0
SCHOOL CONFIGURATION (based on the highest grade)	Middle School

PROGRAM AREA	Value
IT	
Network Equipment	$ 350,000.00
PC Hardware	$ -
Bandwidth Start Up	$ 30,000.00
Bandwidth First Year	$ 240,000.00
Printers	$ -
Software	$ -
TOTAL	**$ 620,000.00**
Furnishings	
Furniture/Office Equipment	$ -
TOTAL	**$ -**
Kitchen	
Durables	$ -
Equipment	$ -
TOTAL	**$ -**
Education Supplies	
Education Equipment	$ -
Text Books	$ -
Band Equipment	$ -
Information Center	$ -
Supplies and Materials	$ -
TOTAL	**$ -**
Safety Equipment	$ 5,000.00
Security Equipment	$ -

APPENDIX 9

GUIDANCE UNIT COST WORKSHEET

DoDEA GUIDANCE UNIT COST WORKSHEET		
* NOTE: The adjusted guidance unit cost is only applicable to the primary facility. An explanation of what is included in the guidance unit cost is provided in UFC 3-701-01, Section 2-3.2.		
		Directions
Project Title		Self explanatory
Program Year		Self explanatory
Building SF	-	Manual entry. Based on PFD requirements
Guidance Unit Cost	$ -	Manual entry. Found in table 2 of UFC 3-701-01 or provided by DoDEA HQ.
Area Cost factor	0	Manual entry. Found in table 4-1 of UFC 3-701-01
Reference Size	-	Manual entry. Found in table 2 of UFC 3-701-01. Need to convert SQ M to SQ Ft.
Size Ratio	#DIV/0!	Calculated Entry - Do not enter in any values
Size Adjustment Factor	0	Manual entry - Based on the size ratio - The adjustment factor is found in UFC 3-370-01, Table 1
Escalation	0	Manual entry - Found in table 4-2 of UFC 3-701-01. Select the projected midpoint of construction.
Adjusted Guidance Unit Cost	0.00	Automatic calculation - Do not enter anything.
Unit Cost from Charrette Cost Estimate	0	Manual entry - results of plannign charrette cost estimate.
Deviation (% of UFC Calculated UC)	#DIV/0!	Automatic calculation - Do not enter anything.

Example

Project Title	Pierce Terrace ES Replacement
Program Year	2016
Building SF	76,744
Guidance Unit Cost	$ 223.00
Area Cost factor	0.82
Reference Size	80,998
Size Ratio	0.9475
Size Adjustment Factor	1.011
Escalation	1.0687
Adjusted Guidance Unit Cost	197.57
Unit Cost from Charrette Cost Estimate	205.38
Deviation (% of UFC Calculated UC)	104%