CONSTRUCTION OF NEW SCHOOL AT MARBO BASE COMMAND IN YIGO FINANCE, DESIGN, BUILD, MAINTAIN AND LEASEBACK (FDBML), PART II

TECHNICAL SPECIFICATIONS

Project No. 700-5-1019-L-YIG

I. BUILDING SYSTEMS, MATERIALS AND EQUIPMENT

The following descriptions and comparisons are organized by specification section. Civil, structural, mechanical and electrical discussion follow the architectural section.

Building construction shall be cast-in-place concrete or CMU walls and preferably with precast double tees and concrete topping for floor or roof slabs. The advantages of the precast double tees system is long spans allowing for flexible floor area, efficient construction schedule without the need for shoring to restrict interior finishing, and low maintenance.

A. Architectural

1. Miscellaneous Metals

- Stainless steel will be used to provide the best longevity for all exposed metals. Interior miscellaneous metals will be galvanized or prime coated steel.
- b. Concrete trellis must be utilized for classrooms window shading.

Carpentry

Hardwood shall be used for finish carpentry such as casework, doors and trim. Casework will be wood veneer faced with plastic laminate counter tops. Interior wood blocking will be treated lumber.

3. Insulation

- a. The model energy code allows an overall thermal value with an OTV not ot exceed 27.8 btu/sf. On this basis, a roof U-value of 0.10 (R-10) is adequate without any need for wall insulation.
- Roof insulation will be placed inside the building to avoid the need to protect it from the elements. For spaces with ceilings, unfaced 2-1/2" fiberglass board insulation pin impaled to the underside of the roof must be used.

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c. For the Hallways without ceilings (exposed structure), spray applied cementitious insulation will be used.

4. Roofing

Roofing materials over concrete slabs will be fluid-applied urethane. A heavy-duty multithane roof coating, 1-primer, 2-coats, 65 mils thick (off-white color) shall be used. Manufacturer will provide a 5-year warranty and shall be installed by a certified roof specialist.

5. Windows, Exterior Doors and Glazing

- Exterior windows and louvers will be aluminum with a color polyester
 (Kynar) finish. Fire-rated interior openings will have steel windows
- b. Exterior doors and frames will be aluminum entrance door. Interior doors will be solid core door wood with for paint finish veneer.
- c. Exterior glazing will be laminated security glass. Laminated glass is approximately 15% more expensive than tempered glass. It is cost effective for this project as storm shutters are not being provided.

6. Floor Finishes

Unglazed ceramic tiles will be used at classrooms, multi-used room, library and administrative areas. The service kitchen, serving line area and entrance locations for the classroom building will be quarry tile. Toilet rooms floors will be ceramic tiles. Exposed natural concrete at the mechanical/electrical rooms, bulk storage and exterior walkways will be sealed with a penetrating sealer.

7. Interior Wall Finish

Interior finishers will be fair-faced concrete at the interior face of the exterior and concrete walls. Corridor walls will have a 5-foot high concrete black wainscot for durability. Hardie board (cement board) will be waterproof type for damp areas and for tile backing. Acoustical insulation is required for all partitions. Wall finish will be paint.

8. Exterior Wall Finish

Exterior walls finish will be fair-faced concrete with a paint finish. Paint will be 100% acrylic emulsion by manufacturers providing a tropical formulation.

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9. Ceilings

Classrooms, administration, nurse's office and library ceilings and portions of the corridors will be 2' x 4' acoustical tile on metal suspension system. An open ceiling with exposed insulation, ductwork and lighting will be provided at hallways and the multi-use/cafeteria.

Toilet and Restrooms

Floors and walls will receive 8" x 8" ceramic tiles. Lavatory counters will be concrete faced. Toilet partitions will be concrete.

11. Fire Protection

Portable fire extinguishers will be provided at each classroom, kitchen, other occupied areas, mechanical/electrical rooms and at exit ways. Fire extinguisher cabinets serving public areas will be at secure locations or in locked cabinets. Extinguishers will 12-lb. multiple purpose dry chemical extinguisher (light hazard). Electrical room and mechanical rooms will have 10-lb bracket mounted multiple purpose dry chemical extinguisher. Extinguishers will be located within a maximum travel distance of 75-feet.

13. Signage

- a. An exterior school identification sign shall be installed. Additionally, individual building and room identification signage will be specified.
- b. Two flagpoles will be provided. They will be aluminum, clear finish, 30-foot exposed height, ground set with an external halyard system. One each 5 x 8 American and Guam flag shall be provided.

B. Civil

1. Storm Drainage Systems

- a. Runoffs considered in this design for disposal into percolation basins are from the developed area. Runoffs from undeveloped area of the properties will drain as is or remain on its present condition.
- b. The site drainage system will utilize underground percolation fields below play and landscape areas. The design of these percolation fields are based on a 20-year (5% exceedance) storm.
- c. Surface runoffs will be collected by means of drain inlets or catch basins. Underground drainage pipes will be used to convey storm

Attachment "B"

water from inlets to outlets. If needed, surface drainage swales and ditches will also be provided. These swales and ditches, if deemed necessary, will be provided with concrete lining or grouted rip-rap stones to prevent erosion.

d. Ponding Basin

2. Water Service

a. Provide storage water tank with pressure pumps with concrete housing for all the new schools:

Elementary School: 15,000 gallons reservoir
 Middle School: 15,000 gallons reservoir
 High School: 35,000 gallons reservoir

- b. Contractor shall verify closest waterline connection.
- 4. Wastewater System Improvements
 - a. Contractor shall verify closest sewer line connection.
- 5. Drop-Off Areas (Bus and Car)
 - a. The project site must have two (2) entry and exit points. Appropriate pavement marking and signs must be provided to designate the intended flow of traffic within these drop-off areas.
 - b. Bus loading and unloading.
- C. Structural Systems
 - Structural Design Criteria will be as follows:

U.B.C. - Uniform Building Code 2000

Building code Requirements for Structural Concrete (ACI 318-95)

Dead Loading

Normal Concrete Weight = 150 pcf

Double Tee Panel: Guam RMP Double Tees

a. 18" deep Standard Unit = 44 psf

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		b.	44" deep	Composite Unit Standard Unit Composite Unit	=======================================	82 psf 74 psf 112 psf
	2.	Pre-st	ressed Plank	Base Unit 3.5" thick	=	43.8 psf
				Composite Unit	=	81.0 psf
	3.	6 inch	CMU Walls	·	=	65 psf
	4.	Water	rproofing		=	8.0 psf
	5.	Ceilin	g		=	5.0 psf
	6.	Misce	llaneous (Utiliti	es)	=	3.0 psf
b.	Live L	oad	·	·		·
	1.	Class	rooms		=	40.0 psf
	2.	Roof I	Deck Live Load		=	12.0 psf

c. Seismic Load

1. Design Base Shear

V = ((Cv X 1) / R T) x W

Cv = Seismic coefficient I = Importance factor

R = Numerical coefficient representative of the inherent over strength and global ductility capacity of the lateral resisting system

T = Elastic fundamental period of vibration under consideration

W = Total seismic load

d. Wind Load

 Velocity - 175 mph as defined by UBC Exposure C

2. Foundation

All footings shall rest on the natural compacted soil. Where soft soils are encountered, these will need to be removed and replaced with compacted coral fill.

Type of Construction in General.

The structural system can be in concrete masonry unit or cast-in-place concrete. Contractor to submit design structural system including structural calculations.

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4. Wall System

The vertical load resisting system must composed of concrete bearing walls acting as shear walls. This is the primary lateral resisting element of the structure, the bearing wall system also provides support of the gravity loads from the roof. Cast-in-place concrete or concrete masonry walls are provided in two orthogonal directions to resist any translation and torsional action imposed on the building.

Longitudinal cast-in-place wall along the perimeter provide the lateral resisting element and the primary roof support. Transverse concrete walls at several locations will provide shear capability.

Special detailing must provided for walls with openings.

For non-structural walls, use of reinforced concrete masonry construction may be provided.

5. Roof System.

Conventional cast-in-place system or Batter system. A pre-cast prestresses composite Long span Double Tees with concrete topping is the recommended alternative to the conventional cast-in-place system. The Batter system can be constructed with minimal time compared to conventional C.I.P. system. It maybe combined with C.I.P. concrete and masonry materials. A concrete pre-cast double tee composite joist can sustain a higher load capacity as well as the capacity as well as the capacity to span longer distances. It also a high degree of corrosive resistance in highly corrosive environment.

D. Mechanical System

Mechanical system include air conditioning, ventilation, interior plumbing system and fire sprinkler system.

1. Air Conditioning Systems.

Generally, systems will follow accepted industry practices as reflected in the latest issues of the American Society of Heating, Refrigerating, and Air—Conditioning Engineers (ASHRAE) handbooks.

Systems will be air-cooled to eliminate the need for make-up water and water treatment systems.

Ducted split systems with the fan- coil units in small closets will be used at

Attachment "B"

the Classrooms. The Cafeteria must utilize a package system located outside the building, distribution duct work will be located above the ceilings except in areas such as the Cafeteria which will expose the structure and services.

All exterior condenser units will be enclosed with fencing.

Mechanical Ventilation.

Mechanical Ventilation will be provided for all toilets, and other non-air conditioned enclosed spaces.

Interior Plumbing systems.

Conventional soil, waste and vent piping system will be used, using DWV plastic piping.

Water piping can be copper or chlorinated polyvinyl chloride.

Drinking fountains must be provided

Sinks must be provided in each classroom and must also function as a drinking fountain.

ADA fixtures must be provided at each toilet room

Fire Sprinkler System.

E. ELECTRICAL SYSTEM.

Contractor to verify the existing distribution power lines and possible power connection points for the new schools. Guam Power Authority will handle all necessary overhead upgrade work. The contractor will be responsible for the cost of the underground line extensions to service the schools.

1. Electrical Distribution

Power service to the facility will be from an existing pad mounted transformer. Service will be 208Y/120V, 3 phase, 4 wires, 60Hz, and will include:

Underground power service from the existing pad mounted transformer to automatic transfer switch the main switchboard to the emergency generator and also to the meter.

Attachment "B"

Underground distribution to main distribution panel board.

Distribution and branch circuit voltage will be:

- ●Distribution- 208/120 volts, 3 phase, 4 wire
- ●Power to major equipment 208 volts, 3 phase
- ●Fluorescent and HID lighting- 120 volts
- •Small Equipment and appliances 208/120 volts
- •Fluorescent task lighting at counters 120 volts
- General purpose outlets 120 volts

2. Lighting

Exterior lighting must be post mounted energy efficient metal halide fixtures for parking and driveways. Pole/fixture assembly must be specified to withstand 175 mph winds with 1.1 gust factor. Wall mounted HID fixtures must be used around the building perimeter for security lighting. Ceiling mounted HID fixtures must be used for covered walkways. Exterior light control must have two levels of automatic switching, The "Night Light" (Security Light) which is "ON" from dusk to dawn and the "Curfew Light" which is "ON" from dusk to a pre-set time before dawn.

Interior lighting fixtures must be energy efficient fluorescent and metal halide.

- General lighting applications must use luminaries with T8 fluorescent lamps and electronic ballast.
- For areas with high ceiling such as the Multi-use/Cafeteria and covered areas, metal halide fixtures will be used.
- Exit lights to be provided at egress doors and corridors must be light emitting diode type with built-in emergency battery.
- Task lighting at counters must be provided using slim type fluorescent fixtures with switch control and will be mounted under the overhead cabinets.
- General illumination in classrooms, large offices and open areas will have at least three levels of switching to save energy when natural lighting is available.
- Interior walkways must have automatic curfew lighting and security lighting controls.

Attachment "B"

Emergency lighting will be provided where required.

3. General Power

A minimum of four general use outlets will be provided in each classrooms. Outlets will be provided at ten (10) feet o.c. at offices. Outlets located outdoors and in wet locations will be weatherproof type with ground fault protection. Outlets in corridors will be heavy duty type.

Power outlets for computers will be isolated type with outlets in each general classrooms, and the library, one outlet per computer station in computer lab and in office areas.

4. Communication Systems

- Telecommunications provisions underground conduit will be provided from the GTA service pedestal to the telephone terminal board. Underground system will be provided from the terminal board to the telephone cabinets to individual outlets. Instruments, cables, and wires will be by GTA under separate contract with the government. Telephone outlets will be provided in offices, lobby, conference rooms, classrooms, and work areas.
- Public address/intercom system, clock and program bell provisions and intercom station will be provided in each classroom and office. Interior and exterior speaker system. master clock (equipment must be located in the administration area. Digital s lave clocks in each classroom, office, library, cafeteria, and work areas. Local area network (LAN) system provisions empty raceway system will be provided for LAN cables. Minimum of one LAN outlet must be provided for in each classroom, offices, cafeteria, library, and nurse station.
- Television system provisions conduit with pullwire for television service from pedestal to main TV cabinet. Cable television distribution from Main distribution frame (MDF) via underground conduit system to the library. Cable television outlets must be provided in each classroom.

5. Fire Alarm System

The fire alarm system must be automatic/manual system with audio/visual alarms throughout the facility. The fire alarm system will be an addressable

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analog type. Visual alarm will be provided in each public toilet. smoke detectors will be provided where required. Heat detectors will be provided in mechanical rooms. Duct smoke detectors must be provided where required.

6. Emergency Back-Up Power

Provide emergency back-up generator ,automatic transfer switch with concrete housing, spill containment.

Emergency Generator must have the same load capacity as the main distribution panel, with 3-days minimum capacity of diesel fuel.

7. All Lighting System

All lighting, electrical & mechanical equipment must be all energy efficient and must meet Guam Energy Code.

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TECHNICAL SPECIFICATIONS

Project No. 700-5-1019-L-YIG

I. SITE DEVELOPMENT FOR CONSTRUCTION OF NEW HIGH SCHOOLS AT MARBO BASE IN YIGO (FDBML)

The following must be considered when developing the preliminary high school layouts for Guam DOE:

- •Academic Support Areas: Space such as libraries, teacher workrooms, and computer labs should be located near or within classroom arrangements.
- Community Use: the use of public schools by the community is a major issue that affects school layouts in Guam. The facilities most frequently used by the public are:
 - 1. Cafeterias
 - 2. Outdoor Gathering Areas (amphitheaters, covered stadiums, covered courts)
 - 3. Aesthetic Fields and Court Sports

These facilities should be located near visitor and event parking areas. Security is also an issue; making school facilities more available to the public also makes them more vulnerable to vandalism. In the model conceptual plans, each site is organized so that facilities used by the public separate from the remainder of the campus.

Classrooms industrial arts facilities may be used for adult classes. One of the advantages of using courtyard buildings is that individual buildings can be opened after-hours to the public while keeping other academic facilities securely gated.

- •Classroom Arrangements: Developing smaller clusters of classrooms that are organized around a landscaped courtyard reduces the institutional feeling of a school and creates a more child-scaled environment. Clusters can be organized by grade level, academic subject, or learning teams. Educational programs can also affect classroom arrangements.
- •Energy Use: Classrooms can be sited to allow controlled lighting conditions (a north/south orientation) and reduced air conditioning costs. Landscaping can also be used to reduced air conditioning costs in classrooms and other areas.
- •General Support Areas: Administrative offices, dining halls, and auditoriums are areas that can be located away from classrooms, and closer to visitor parking areas. Along with some athletic facilities, these are often spaces visited or used by parents or the public. They should be located in areas accessible to the public, such as locations are near visitor parking lots, public roads, and public walkways.

- •Landscape and Open Space: Shaping the land, especially near elementary school classrooms, extends the learning environment to the outside of the building. Classroom can be sited around a landscape courtyard, creating more a child-scaled environment in a larger school. Trees can also be used to create attractive pedestrian walkways, provide shade for buildings or play areas, screen undesirable views, and control harsh winds by creating windbreaks. Children typically need a place to play and expend energy; open spaces should be located near classrooms (if airconditioned) or dining halls. Landscaping a portion of the outdoor areas with large trees makes them liveable in a tropical climate. If it is not possible to afford all landscaping up-front, than develop a landscape master plan that can be implemented overtime. The landscaping portion of a project usually will be less than 10% of the overall site-planning budget.
- •Legal Requirements: Legal or regulatory requirements that may affect site layouts include zoning standards (setbacks, maximum site coverage, height limits, etc.) fire lanes, fire codes (K-2 classrooms should be occupy ground level) and ADA requirements.
- •Lighting: for both safety and security reasons, provide lighting in all school areas that will be used during evening hours.
- •Mechanical Systems: The organizational of mechanical space of large school facilities is outside the scope of this project. However, interviews with some of Guam's school facility managers indicates that the preference is for a decentralized system. The layouts show space within or near each courtyard building for mechanical equipment that services that area. Enclosed areas are preferable to open-air storage for security and noise reasons. We recommend that school architects conduct additional discussions with operational managers when designing future schools on Guam.
- •Physical Education and Athletics: Athletic fields require large areas of relatively flat land. Outdoor athletics activities are often noisy, and should be located away from classrooms; if used for marching band practice, locate away from residential areas. In order to maximize flexible use of fields by coaching staff, place them together whenever possible. Athletic spaces that are used for games, which the public attends, should be easy to find and placed near visitor or event parking lots.
- •Parking: Locate parking lots in areas with easy access to local streets. However, it is not desirable to locate parking lots in areas where they dominate public views to the school. Develop a landscape buffer between parking lots and other uses.
- •Pedestrian Walkways: All campus layouts prepared for this project create safe, walkable campus environments. Pedestrian walkways that connect the primary academic facilities are kept away from vehicular roads, and other pedestrian connections keep conflicts to a minimum. Whenever possible, create a pedestrian link between the school entry and public walkways or nearby public facilities. A clear, organized, and spacious walkway system helps to orient users and create a well-functioning environment. Walkways are often social gathering areas for students and teachers; provide shade trees and seating areas along

Attachment "C"

them. Because of Guam's frequent rains, all major walkways should be partially or fully covered. Design service roads and pedestrian walkways near athletic fields for dual use by pedestrians and service/emergency vehicles.

- •Social Needs: Often, areas that are not designated for specific classroom activities are overlooked in school planning programs. These include conference rooms, teacher/parent meeting rooms, faculty meeting areas, and small to large gathering areas for students. School programs should be modified whenever possible to meet social needs.
- •Vehicular Traffic: It is important to provide a substantial, on-campus area for the drop off and pickup of children by either bus or private auto. Ideally, children should be able to exit from the right hand side of the car onto a pedestrian walkway that leads to school facilities. For safety reasons, locate vehicular roadways away from school activity areas. If it is necessary to route service roads or fire lanes through or near the center campus, then limit deliveries to off-hours. If possible, locate faculty and staff parking lots away from the visitor lot and student drop off and pickup traffic; this allows teachers to avoid the heavy traffic associated with before and after-school activities.

Standards

The schools conceptual plans provided illustrate several design ideas that are incorporated into the conceptual site plans. Although defining design guidelines for future schools is outside the scope of this project, these examples begin to show what is possible.

Courtyards

Courtyards are a traditional way to organize buildings around a central open space. They are used extensively throughout the conceptual plans. Courtyard buildings and layouts create organized, smaller scale environments that relate to a child's developmental needs and to educational groups. For example, grade-level classrooms for elementary schools and learning teams for intermediate schools can be organized around an open courtyard. If properly landscaped, courtyards relatively small. A larger outdoor area, such as the one shown at Southern High, is too large to perform its function as a social and organizational feature.

Pedestrian Walkways

Because students and teachers walk from one area of campus to another, pedestrian walkways are the "glue" that holds a school together. Rain is frequent in Guam, so it is recommended that all major walkways be partially or fully covered. Keep covered walkways along the edge of courtyard buildings open for both aesthetic and security reasons.

Architectural Styles

There are many types of architectural styles appropriate for Guam's schools, and several are shown in this <u>section's color inserts</u>. Because of the island's tropical climate, sloped roofs and wide roofs overhangs are recommended. Colored roof tiles properly attached for typhoon winds shall be used effectively to link school architecture to island traditions.

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Athletic Stands

Developing attractive yet typhoon-proof stands for high school facilities present a challenge for Guam's educational architects. For flat, urban school sites, either push the stands up against aa gymnasium wall or hide the tall back side of athletic stands with trees or a tall hedge. When designing for sloped rural sites, a good way to blend concrete stands into the setting is to create terraced platforms for athletic fields. Then set the stands into the slope between the terraced fields.

Gates and Security

Security is a major issue for Guam's schools, and gates and fences often play a strong role in developing the physical character of a campus. This is especially true at public entries, public street edges, and campus interior locations where gates and fences either present a welcoming or unfriendly image for students, parents, and the public. Although security is an important issue, fences and gates or walls similar to those used at Tamuning Elementary School produce a positive image while maintaining security. When it is necessary to use metal-mesh fences in public areas, hide them with landscape materials.

Provide security lighting along side and rear perimeter walls, and keep a cleared area near the fence or wall for security reasons.

One of the best ways to keep a campus interior secure is to locate classroom, library, and cafeteria windows so that faculty and staff can observe outdoor activity areas. For courtyard layouts, keep interior courtyard windows large and limit exterior perimeter openings to high windows or louvered vents.

SITE SELECTION CRITERIA

Site development patterns affects the overall success of an educational facility. With a large public capital investment at stake, it pays to have site selection criteria and site development guidelines for each type of school facility. Typically, the expertise of a site planner and architect are needed when selecting school sites. When selecting a site for a new school facility, it is important to remember that the required acreage may be more than the minimum site listed on the conceptual site plans in this document. Actual sites may be oddly shaped or contain land that cannot be used because of steep topography, existing easements, or other reasons. In those cases, the site layout will be less efficient than the model plans.

Factors That Affect Site Planning

Whether a school facility will be used as an elementary, middle, or high school, the following factors apply.

•Location: A school site should be located near the population it serves, with proximity most important for elementary schools. Schools located near target populations make family participation in school activities easier and reduce transportation costs. If the proposed school site is adjacent to other public uses, then some of the school's facilities

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can be used off-hours for other purposes. Examples include the parking lot, dining hall, auditorium, and athletic fields or playgrounds.

- •Access: The size, location, condition, and traffic levels of existing roadways or bus routes that service a particular site affect the school's layout and operation. Nearby traffic or noise may produce safety hazards or an undesirable environment for teaching. Elementary and intermediate schools, in particular, should have adequate road access but should not be located off or near major highways. Pedestrian access is also important. If local walkways connect to the school's entry area and interior walkways, then students/parents can more easily walk to/form school
- •Adjacent Land Use: A school should be compatible with surrounding uses. School traffic or outdoor activities can negatively impact dense residential neighborhoods. This is less a problem with elementary or intermediate schools than it is with high schools. If a high school is located next to a residential area, then it is important to locate a buffer area along that boundary in order to maintain privacy and reduce noise for local residents. Adjacent land use that produce high levels of noise, traffic, or pollution. Most residential development, small-scale commercial activity, public uses, and natural preserves are compatible neighbors.
- •Size of the Site: The minimum site for elementary schools is 10 to 12 acres; for Intermediate schools 15 to 18 acres; for high schools 30 to 35 acres. Sites at the low end of the range require two or more story structures. If a site contains steep land, natural vegetation to be retained, or areas difficult to develop for technical reasons, a larger site is needed. In less developed areas, it may be necessary to control storm drainage by installing detention basins; this also increases land requirements. Larger sites can be developed as a park/school combination and include facilities used for other purposes. Finally, it is important that the site accommodate activities that requires large areas: (1) athletic facilities and outdoors play areas; (2) off-street loading requirements, particularly students drop off/pickup areas, and (3) off-street parking.

Topography: Nearly flat or mildly rolling land is easier to develop than a site with steep slopes. A minimum slope of 1 to 2% is required for good site drainage, and a slope of 2% to 5% provides good drainage and maximum development flexibility. Land with a 10% slope can be graded for athletic fields and school facilities, but extensive grading affects cost and increases land requirements. Conversely, a site with slope variations and natural vegetation is more attractive than a nearly flat site.

•Site Development Cost: Steep topography and underdeveloped services (roads, utilities) increase site development costs. Depending on the services required, site development costs could vary from 8% to 12% of the entire building construction cost excluding land. If a school site is small, and also has steep slopes, extensive grading and retaining wall construction will increase development costs. A small site also requires multi-story structures that may needs elevators for ADA (American Disability Act) compliance and sprinkler system for K-2 classroom located above the ground floor.

Attachment "C"

- •Utilities: Construction costs will be less if water, gas, electrical power, and storm/sanitary sewer lines are available near the school site. Check to determine if the line capacity is adequate to meet school needs. If on-site treatment fields for wastewater must be provided without cesspools (check Department of Health rules), then more land is needed for leaching fields.
- •Soil Types: Unless soil types are known, it is wise to take test boring to determine whether existing soils will drain properly or support building loads. Problems soils limit available building sites and produce additional excavation or other cost for a school construction project.
- •Environment Factors: A number of environmental conditions may determine what proportion of a site is usable or even whether the are should be used for school facility. The presence of hazardous waste, high noise levels, adjacent industrial facilities, or high voltage transmission lines may eliminate a site from consideration. If there are wetlands on a proposed site, the extent and location of the wetlands should be determined prior to land purchase. Wetlands usually must be preserved, and their size and location may have a negative impact on the school layout or its functional operations.

I. DEFINITIONS

1. Owner

The term "Owner" as used herein means the Government of Guam, Agana, Guam, and shall include the Governor of Guam, and/or his authorized representatives.

2. Contracting Officer

The term "Contracting Officer" as used herein means the Director of Public Works of the Government of Guam and shall include his authorized representatives.

Contractor

The term "Contractor" as used herein means the financier, party or parties who or which shall have duly entered into a contract with the Government of Guam to perform the work herein contemplated or his or their authorized assignee.

4. Notice

The term "Notice" as used herein shall mean and include all written notice demands, instructions, claims, approvals and disapprovals required to obtain compliance with contract requirements. Any written notice by either party to the contract shall be sufficiently given if delivered to or at the last know business address of the person, firm, or corporation constituting the other party to the contract, or to his, their, or its duly authorized agent, representative, or officers, or when enclosed in a postage prepaid envelop addressed to such last known business address and deposited in a United States mail box. The Contractor must provide and maintain a post office address within the Territory of Guam and file the same with the Contracting Officer.

II. FDBML CONTRACT

1. Contract Documents

- (a) The contract documents consist of the Agreement, the Request for Proposal (Part I & II) including all addenda and alterations made in the documents prior to their execution.
- (b) The contract documents shall be signed by the Owner and Contractor in as many original counterparts as may be mutually agreed.

GENERAL CONDITIONS

- (c) Anything called for by one of the contract documents and not called for by the others shall be of like effect as if required or called for by all. Any discrepancies between the contract documents shall be called to the attention of the Contracting Officer before proceeding with work affected thereby.
- (d) It will be conclusively presumed that the Contractor has read, examined and agreed to each and every term, conditions, provisions, covenant or agreement proposals and contract, to the work to be carried on, said documents being on file in the Division of Capital Improvement Projects, Department of Public Works, Tumon, Guam.

III. OFFEROR RESPONSIBILITIES

1. Site Condition

(a) Offerors should visit the site and shall be responsible for having ascertained pertinent conditions such as location, accessibility, and general character of the site or building, the character and extent of existing work within or adjacent to the site, and any other work being performed thereon at the time of the submission of his proposal. No extra compensation will be made by reason of any misunderstanding or error as regards to the site, the conditions thereof, accessibility or the amount of kind of work to be performed.

2. Award of Contract

- (a) The contract will be awarded as soon as possible to the best responsive and responsible offeror whose proposal meets the needs of the Government of Guam to the best degree, provided it is in the interest of the Owner to accept his bid.
- (b) The Owner reserves the right to waive any informality in bids received when such waiver is in the interest of the Owner. The Owner also reserves the right to accept any item in the bid and to reject any item in the bid unless otherwise specified by the Owner.

3. Cancellation of Award

The Owner reserves the right to cancel the award of any contract at any time before the execution of same.

GENERAL CONDITIONS

IV. DUTIES OF CONTRACTING OFFICER AND CONTRACTOR SAFETY MEASURES

1. Authority of Contracting Officer

The Contracting Officer shall give all orders and directions contemplated under this contract relative to the execution of the work. The Contracting Officer shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid or under this contract and shall decide all questions which may arise in relation to paid work and the construction thereof. The Contracting Officer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract the determination or decision of the Contracting Officer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

The Contracting Officer shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute.

Any difference or conflicts in regard to their work which may arise between the Contractor under this contract and other Contractors performing work for the Owner shall be adjusted and determined by the Contracting Officer.

2. Contractor's Obligations

The Contractor shall, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract within the time herein specified in accordance with the plans and drawings of the work covered by this contract and any and all supplemental plans and drawings, and in accordance with the directions of the Contracting Officer as given from time to time during the progress of the work. He alone shall be responsible for the safety, efficiency and adequacy of his plant, appliances and methods, and for any damage which may result from their failure or their improper construction, maintenance or operations. The Contractor shall observe, comply with and be subject to all terms, conditions, requirements, and limitations of the contract and specifications and shall do carry on and complete the entire work to the satisfaction of the Contracting Officer and the Owner.

3. Superintendence by Contractor

The Contractor shall give his personal superintendence to the work or have a competent foreman or superintendent, satisfactory to the Contracting Officer, on the

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work at all times during progress with authority to act for him.

4. Subcontracts

- (a) Nothing contained in the contract shall be construed as creating any contractual relationship between any subcontractor and the Owner. The diffusion or sections of the contract are not intended to control the Contractor in dividing the work among subcontractors or to limit the work performed by any trade.
- (b) The Contractor shall be as fully responsible to the Owner for the acts and omissions of subcontractors and of persons employed by them, as he is for the acts and omissions of persons directly employed by him.
- (c) The Contractor shall be responsible for the coordination of the trades, subcontractors, and material men engaged in his work.
- (d) The Contractor shall, without additional expense to the Owner, utilize the services of specialty subcontractors on those parts of the work which are generally performed by specialty subcontractors.
- (e) The Owner will not undertake to settle any differences between the Contractor and his subcontractors or between subcontractors.
- (f) The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work including waiver of mechanics liens to bind subcontractors by the terms of the General Conditions and other contract documents insofar as applicable to the work of subcontractors and to give the Owner any exercise over the Contractor under any provisions of the contract documents.

5. Subletting

Subletting part of the work is permitted. However, bidder must note that subletting in excess of the following is not allowed:

- (a) Where the subletting is for both labor and material, total cost of sublet work shall not exceed 49% of the contract amount.
- (b) Where subletting is for labor only, sublet work cost shall not exceed 20% of the total contract amount. Information concerning subcontracts must form a part of the bid documents and shall be submitted on standard "Subcontract" information form.

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6. Assignments

The Contractor shall not assign the whole or any part of this contract or any monies due or to become due hereunder without the written consent of the Owner and of all the sureties executing any bonds on behalf of the Contractor in connection with said contract. In case the Contractor assigns the whole or any part of said contract or assigns all or any part of any monies due or to become due under said contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due the Contractor or otherwise shall be subject to all of the terms and conditions of said contract or supplemental thereto, the rights and remedies of the Owner thereunder or arising by operation of the law and to the liens of all persons, firms, and corporations for services rendered or materials supplied in connection with the performance of said contract.

7. Equal Opportunity

- (a) The Contractor will not discriminate against any employee or applicant for employment because of race, religion, sex, color, age, economic status, or national origin. The Contractor will take affirmative action to insure that qualified applicants are employed and that employees are treated during employment without regard to their race, religion, sex, color, age, economic status, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoffs or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.
- (b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, religion, sex, color, age, economic status, or national origin.
- (c) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Contracting Officer, advising the said labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965 and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

8. Hiring of Apprentices

The Contractor shall, except of good cause shown, hire for performance of work

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under this contract, to the extent possible, apprentices in each occupation to be employed in the performance of work under this contract in accordance with the Executive Order No. 30-7.

9. Minimum Wage Rate

All persons employed on this project shall be paid not less than minimum wage applicable to the corresponding skill or craft as determined by the Department of Labor, Government of Guam. Prevailing wage rates of Department of Labor, Government of Guam are attached herewith and shall be deemed a part of the contract documents.

10. Laws, Permits and Regulations

- (a) Building permit for the project shall be secured by the Contractor. Building permit and plan checking fees shall be paid for by the Contractor.
- (b) The Contractor shall pay all fees and charges for connection to outside service and use of property other than the site of the work for storage of materials or other purposes.
- (c) The Contractor shall comply with all laws, ordinances, regulations and building code requirements applicable to work hereunder unless in conflict with contract requirements. If the Contractor ascertains at any time that any requirement of this contract is a variance with applicable laws, ordinances, regulations, or building code requirements, he shall promptly notify the Contracting Officer and any necessary adjustment of the contract shall be made as specified under Changes in Work.

11. Contractor's and Subcontractor's Insurance

- (a) The Contractor shall not commence work under this contract until he has obtained all the insurance required hereunder and such insurance has been approved by the Owner. The Contractor shall not allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved. Approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.
- (b) Workman's Compensation and Employer's Liability Insurance-The Contractor shall take out and maintain during the life of this contract the statutory Workman's Compensation and Employer's Liability Insurance for all of his employees to be engaged in work on the project under this contract and in case any such work is sublet, the Contractor shall require the subcontractor similarly to provide Workman's Compensation and Employer's Liability Insurance for all of the latter's employees to be engaged in such work.

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- (c) Bodily Injury Liability and Property Damage Liability Insurance-The Contractor shall take out and maintain during the life of this contract such Bodily Injury Liability and Property Damage Liability Insurance as shall protect him and any subcontractor performing work covered by this contract from claims for damages for personal injury including accidental death, as well as from operations under this contract, whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by either of them, and the amounts of such insurance shall not be less than:
 - (1) Bodily Injury Liability Insurance in an amount not less than One Hundred Thousand Dollars (\$100,000.00) per person for injuries including wrongful death and in an amount not less than Three Hundred Thousand Dollars (\$300,000.00) for injuries including wrongful death resulting from one accident.
 - (2) Property Damage Insurance in an amount not less than Fifty Thousand Dollars (\$50,000.00) for damages resulting from any one accident and in an amount not less than One Hundred Thousand Dollars (\$100,000.00) for damages resulting from all accidents.
- (d) Owner's Protective Liability Insurance The Contractor shall take out and furnish to the Owner and maintain during the life of this contract complete Owner's protective liability insurance in amounts as specified in paragraph 11 (c), above for bodily injury liability insurance and for property damage liability insurance.
- (e) Fire Insurance The Contractor shall insure the building or other work included in this contract against loss or damage by fire and against loss or damage covered by the standard extended coverage insurance endorsement, in an insurance company or companies acceptable to the Owner, the amount of the insurance at all times to be at least equal to the amount paid on account of work and materials and plus the value of work or materials furnished or delivered but not yet paid for by the Owner. The policies shall be in the names of the Owner and the Contractor, and their interests may appear. Certificates of the insurance company as to the amount and type of coverage, terms of policies, etc., shall be delivered to the Owner before monthly partial payments are made.

12. Accident Prevention

(a) Precaution shall be exercised at all times for the protection of persons (including employees) and property. The safety provisions of applicable laws, building and construction codes shall be observed. Machinery equipment and all hazards shall be observed. Machinery equipment and all hazards shall be guarded or eliminated in accordance with the safety provisions of the latest edition of the

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Manual of Accident Prevention in Construction published by the Associated General Contractors of America to the extent that such provisions are not in contravention of applicable laws.

(b) Should typhoon warnings be issued, the Contractor shall secure the site and take every practicable precaution to minimize damage and/or danger to persons, to the work, and to the adjacent property. These precautions shall include closing all openings, removing all loose materials, tools and/or equipment from exposed locations, and removing or securing scaffolding and all other temporary work.

13. Protection of Work and Property

The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work and that of adjacent property (as provided by law and the contract documents) from damage. All passageways, guard fences, lights and other facilities required for protection by laws and regulations and local conditions must be provided and maintained.

14. Responsibility of Contractor to Act in Emergency

In case of an emergency which threatens loss of injury or property and/or safety of life, the Contractor shall act, without previous instructions from the Owner or Contracting Officer, as the situation may warrant. He shall notify the Contracting Officer thereof immediately thereafter of any compensation claimed by the Contractor. Substantiating documents regarding expenses shall be submitted to the Owner through the Contracting Officer and the amount of compensation shall be determined by agreement or arbitration.

15. Mutual Responsibility of Contractors

If the Contractor or any of his subcontractors or employees cause loss or damage to any separate contractor on the work, the Contractor agrees to settle with such separate contractor by agreement, if he will so settle. If such separate contractor sues the Owner on account of any loss so sustained, the Owner shall notify the Contractor who shall indemnify and save harmless the Owner against any expenses or judgement arising therefrom.

16. Use of Premises and Removal of Debris

The Contractor expressly agrees to undertake at his own expense

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- (a) to take every precaution against injuries to persons or damages to property;
- (b) to comply with the regulations governing the operation of premises which are occupied and to perform his contract in such a manner as not to interrupt or interfere with the operation of other facilities;
- (c) to perform any work necessary to be performed after regular working hours or on Sundays or legal holidays without additional expense to the Owner;
- (d) to store his apparatus, materials, supplies, and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors;
- (e) to place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work;
- (f) to frequently clean up all refuse, rubbish, scrap materials and debris caused by his operation so that at all times the site of the work shall present a neat, orderly and workmanlike appearance. No burning will be permitted;
- (g) to effect all cutting, fitting, or patching of his work required to make the same conform to the plans and specifications, and except with the consent of the Contracting Officer, not to cut or otherwise alter the work of any contractor;
- (h) before final payment to remove all surplus materials, false work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, to put the site in a neat, orderly condition and to thoroughly clean and leave reasonably dust free all furnished surfaces.

17. Obstructions

The Contractor shall at his own expense remove all obstructions, the removal of which shall be necessary for the proper reception, performance, construction, installation and completion of all work under this contract.

18. Site of Contractor's Operations

The Contractor shall confine all construction operations within the vicinity of the site and shall arrange his work so that all construction materials and equipment are placed in such manner and location that there may be a minimum of interference or inconvenience inflicted upon the public and employees of the Government.

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19. Barricades

The Contractor shall erect, install and maintain all temporary public walks, warning signs, barricades or other protective means in and around the site as deemed necessary or as may be ordered by the Contracting Officer for the effective protection of the public from injury and shall be held strictly liable for their safety.

20. Electrical Energy

The Contractor shall make all necessary applications, pay all fees and charges, obtain necessary permits and provide and maintain his own electrical power and light as required and necessary in the progress of any branch of the work. He shall provide all temporary wiring necessary.

21. Water

The Contractor shall make all necessary applications, pay all fees and charges, obtain necessary permits for construction of temporary water required for use on this project. The nearest available source of water tap shall be verified by the Contractor. The Contractor shall be responsible for all expenses required for conveying water to the site from the available nearest source.

22. Signs

The Contractor shall erect a sign at the project site at his own expense. The location of sign shall be as directed by the Contracting Officer. Size of signs, lettering, and other pertinent data that should appear on the sign will be furnished by the Contracting Officer to the Contractor.

V. QUALITY OF WORK

1. Engineering and Layout

The Contractor shall provide competent engineering services to execute the work in accordance with the contract requirements.

2. Shop Drawings, Materials and Workmanship

Unless otherwise specified, all materials and equipment incorporated in the work under the contract shall be new. All workmanship shall be first class and by persons qualified in the respective trades.

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Shop Drawings

- (a) The Contractor shall submit, for the approval of the Contracting Officer, shop and setting drawings and schedules required by industry practice or that may be requested by the Contracting Officer and no work shall be fabricated by the Contractor, save at his own risk, until such approval has been given.
- (b) Drawings and schedules shall be submitted in quadruplicate (unless otherwise specified) accompanied by letter of transmittal which shall give a list of the numbers and dates of the drawings submitted. Drawings shall be complete in every respect and bound insets.
- (c) The Contractor shall submit all drawings and schedules sufficiently in advance of construction requirements to allow ample time for checking, correcting, resubmitting and rechecking.
- (d) The drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission. If the shop drawings show variations from the requirements of the contract because of standard shop practice or other reasons, the Contractor shall make specific mention of such variation in his letter of transmittal in order that if applicable, suitable action may be taken for proper adjustment. Otherwise, the Contractor will not be relieved of the responsibility for executing the work in accordance with the contract even though such shop drawings have been approved.
- (e) The approval of shop and setting drawings will be general and, except as otherwise provided in paragraph 2 (e), shall not be construed (1) as permitting any departure from the contract requirements; (2) as relieving the Contractor of the responsibility for any error in details, dimensions or otherwise that may exist; (3) as approving departures from additional details or instructions previously furnished by the Contracting Officer.

3. Standards

- (a) Any material specified by reference to the number, symbol or title of a specific standard, such as a commercial standard, a Federal specification, a trade association standard or other similar standard, shall comply with the requirements in the latest revision thereto in effect on the date of Request for Proposals, except as limited to type, class or grade or modified in such reference.
- (b) The standard referred to, except as modified in the specifications, shall have full force and effect as though printed in the specifications. These standards are

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not furnished to proposers for the reason that the manufacturers and trades involved are assumed to be familiar with their requirements. The Contracting Officer will furnish, upon request, information as to how copies of such standards may be obtained.

(c) Reference in the specifications to any article, device, product, material, fixture, form, or type of construction by name, make or catalog number shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition; and the Contractor, in such cases, may at his option use any article, device, product, material, fixture, form of type of construction which in the judgment of the Contracting Officer expressed in writing is equal to that specified.

4. Samples

- (a) The Contractor shall furnish for the approval of the Contracting Officer any samples required by the construction specifications or that may be required by the Contracting Officer of any and all materials or equipment he proposes to use and shall prepay all shipping charges on the samples.
- (b) No materials or equipment of which samples are required to be submitted for approval shall be used on the work until such approval has been given by the Contracting Officer, save only at the Contractor's risk and expense.
- (c) Each sample shall have a label indicating the material represented, its place of origin and the names of the producer, the Contractor and the building or work for which the material is intended. Samples of finished materials shall be so marked as to indicate where the materials represented are required by the drawings or specifications.
- (d) A letter in duplicate submitting each shipment of samples shall be mailed under separate cover by the Contractor and contain a list of the samples, the name of the building or work for which the materials are intended, and the brands of the materials and names of the manufacturers.
- (e) The approval of any sample shall be only for characteristics or for the named in such approval and no other. No approval of a sample shall be taken in itself to change or modify any contract requirement. When a material has been approved, no additional sample of that material will be considered and no change in brand or make will be permitted. Approval of samples of hardware in good condition may be suitably marked for identification and used in the work.
- (f) Failure of any material to pass the specified tests will be sufficient cause for refusal to consider under this contract any further samples of the same brand or make of that material.

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(g) Test samples as the Contracting Officer may deem necessary will be procured from the various materials or equipment delivered by the Contractor for use in the work. If any of these test samples fail to meet the specifications requirement, any previous approvals will be withdrawn and such materials or equipment shall be subject to removal and replacement by the Contractor with materials or equipment meeting the specification requirements, or at the discretion of the Owner, the defective materials and equipment may be permitted to remain in place subject to a proper adjustment of the contract price. The cost of the tests will be borne by the Owner except where laboratory tests as hereinafter specified are required by the specifications.

5. Laboratory Tests

(a) Laboratory tests of materials and finished articles to be incorporated in the work shall be made by bureaus, laboratories or agencies approved by the Contracting Officer, and the reports of such tests shall be submitted to the Contracting Officer. The cost of the testing shall be paid for by the Contractor.

6. Methods

The Contractor shall use proper and efficient methods and appliances for the performance of all the operations connected with work embraced under these specifications, drawings and contract to secure a rate of progress which will secure completion of the work within the time specified. If, at any time before commencement of work, or during the progress thereof, such methods, equipment or appliances are inefficient or inappropriate for securing said quality of work or said rate of progress, the Contracting Officer may order the Contractor to increase their efficiency or to improve their character, and the Contractor must conform to such order. The failure of the Contracting Officer to demand such increases of efficiency or improvement shall not relieve the Contractor or his sureties from the obligations to secure such quality of work and said rate of progress and the completion of the work as required herein.

7. Labor and Materials

The Contractor shall furnish all labor, materials and equipment for the execution of the work according to the drawings, specifications and contract, and where no specifications are contained therein for whatever may be necessary, shall do all that may be termed ordinary, customary or essential to a job to be well and reliably completed. This includes concealment of all pipes and other rough items of installation if not clearly so shown on the drawings in a manner acceptable to the Contracting Officer. Structural safety shall not be impaired by such concealment. Work not particularly detailed, marked or specified shall be of equal quality as similar parts that are detailed, marked or specified. All material finished for and used in the job shall be of kind and grade specified and where not specifically called

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for at least of customary standard grade. All work shall be executed in accordance with their trades. Full structural safety is essential and the Contractor guarantees to accomplish same for the entire work.

8. Guarantee of Work

- (a) Except as otherwise specified all work shall be guaranteed by the Contractor against defects resulting from the use of inferior materials, equipment, or workmanship for one year from the date of final completion of the contract or from full occupancy of the building by the Owner, whichever is earlier.
- (b) If within any guarantee period, repairs or changes are required in connection with guaranteed work which, in the opinion of the Contracting Officer, is rendered necessary as the result of the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the terms of the contract, the Contractor shall promptly upon receipt of notice from the Owner and without expense to the Owner:
 - (1) Place in satisfactory condition in every particular all of such guaranteed work and correct all defects therein; and
 - (2) Make good all damages to the building or site or equipment or contents thereof which, in the opinion of the Contracting Officer, is the result of the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the terms of the contract.
- (c) In any case wherein fulfilling the requirements of the contract or of any guarantee embraced in or required thereby the Contractor disturbs any work guaranteed under another contract, he shall restore such disturbed work to a condition satisfactory to the Contracting Officer and guarantee such restored work to the same extent as it was guaranteed under such other contract.
- (d) If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, the Owner may have the defects corrected and the Contractor and his surety shall be liable for all expense incurred.
- (e) All special guarantees applicable to definite parts of the work shall be stipulated in the specifications or other papers forming a part of the contract and shall be subject to the terms of this paragraph during the first year of the life of such special guarantee.

9. Defective Work

No work or material which may be defective in construction or quality or deficient in any of the requirements of the drawings and specifications will be considered

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accepted as a consequence of the failure of the Contracting Officer or the inspectors to discover or to point out said defects or deficiencies during the construction; nor will the presence of inspectors on the work relieve the Contractor from the responsibility of securing the quality and progress of work as required by these specifications.

Any defective work that may be discovered before the completion of the work or within such time as required by the bond shall be replaced by work and materials that shall conform to the spirit and intent of the drawings, specifications and contract. The fact that the Contracting Officer or his representatives may have overlooked defective work shall not constitute the acceptance of work. NO PAYMENT WHETHER PARTIAL OR FINAL SHALL BE CONSTRUED TO BE AN ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS.

The Contracting Officer may at any time by order given in writing stop any work not being done according to drawings and specifications and any order so given shall not in any way relieve the Contractor from completing his contract and shall not in any way terminate, cancel or abrogate the contract or any part thereof, and the Government of Guam shall not in any way be responsible for the delay due to stopping the work as aforesaid.

VI. INSPECTION OF WORK

1. Access to the Work

The Contracting Officer and his representatives shall have access at all times to the work for inspection whatever it is in preparation or progress and the Contractor shall provide proper facilities for such access and inspection.

2. Inspectors

Inspectors may be placed by the Contracting Officer to supervise each and every subdivision of the work or any parts or process thereof. The Contracting Officer and the inspectors shall have free access to all parts of the work at all times and shall be given every facility, information and means of thoroughly inspecting the work done and the materials used or to be used.

The inspectors shall at all times be free to perform their duties and any intimidation of any inspector by the Contractor or the employees thereof shall be sufficient reason, if the Owner shall so decide, to annul the contract.

As-Built Drawings

An approved set of drawings and specifications shall be maintained at the site with

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all changes or deviations from the original drawings neatly marked thereon in brightly contrasting color. This shall be a separate set of drawings not used for construction purposes which shall be kept up to date as the job progresses and shall be made available for inspection by the Contracting Officer at all times. Upon completion of the contract this set of drawings shall be delivered to the Contracting Officer. An electronic CAD file (non-PDF) of the shop drawings shall also be submitted for review and approval prior to final acceptance of the project.

4. Inspection

- (a) All materials and workmanship (if not otherwise designated by the specifications) shall be subject to inspection, examination and testing by the Contracting Officer at any and all times during manufacture and/or construction and at any and all places where such manufacture and/or construction are carried on. The Contracting Officer shall have the right to reject defective material and workmanship or require its correction. Rejected workmanship shall be satisfactorily corrected, and rejected materials shall be satisfactorily replaced with proper materials and the Contractor shall promptly segregate and remove the rejected materials from the premises. If the Contractor fails to proceed at once with the replacement of rejected materials and/or the correction of defective workmanship, the Owner may, by contract or otherwise, replace such materials and/or correct such workmanship and charge the cost to the Contractor, or may terminate the right of the Contractor to proceed as provided in paragraph 5 of Section VII, Time for Performance, the Contractor and surety being liable for any damage to the same extent as provided in said paragraph 16 for termination thereunder.
- (b) The Contractor shall furnish promptly, without additional charge, all reasonable facilities, labor and materials necessary for the safe and convenient inspection and tests that may be required by the Contracting Officer. All inspections and tests shall be performed in such manner as not to unnecessarily delay the work. Special, full-size and performance tests shall be as described in the specifications. The Contractor shall be charged with any cost of inspection when material and workmanship are not ready at the time inspection is requested by the Contractor.
- (c) Should it be considered necessary or advisable by the Contracting Officer at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out same, the Contractor shall on request promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any material respect due to the fault of the Contractor or his subcontractors, he shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements involved in the examination and replacement, the cost of conducting the test plus 15 percent shall be allowed the Contractor and he shall in addition, if completion of the work has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

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5. Final Inspection

When the work is substantially completed the Contractor shall notify the Owner, in writing, that the work will be ready for final inspection and test on a definite date which shall be stated in such notice. The notice shall be given at least ten (10) calendar days in advance of said date and shall be forwarded through the Contracting Officer who will attach his endorsement as to whether or not he concurs in the Contractor's statement that the work will be ready for final inspection or tests on the date given but such endorsement shall not relieve the Contractor of this responsibility in the matter.

VII. TIME FOR PERFORMANCE

1. Prosecution of the Work

The Contractor agrees that said work shall be prosecuted regularly, diligently and without interruption at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed by and between the Contractor and the Owner that the time for completion of the same takes into consideration the average climatic range and usual industrial conditions prevailing in the locality.

2. Suspension of Work

The Owner will furnish all land and rights-of-way necessary for the carrying out of this contract and the completion of the work herein contemplated. Should the Owner be prevented or enjoined from proceeding with the work or from authorizing its prosecution, either before or after the commencement by reason of any litigation, the Contractor shall not be entitled to make or assert any claim for damage by reason of said delay, or to withdraw from the contract except by consent of the Owner, but time for completion of the work will be extended to such time as the Owner determines will compensate for the time lost by such delay determination to be set forth in writing.

3. Climatic Conditions

- (a) When so ordered by the Contracting Officer, the Contractor shall suspend any work that may be subject to damage by climatic conditions.
- (b) Contract Completion Time. The allowable work days for this contract were calculated after allowing for the following number of lost days in each month. Time extension on account of inclement weather will be allowed only if the daily report of the Contracting Officer's inspector indicates lost days beyond the limits shown below. Time extension on account of inclement weather on Saturday and Sunday

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shall be granted only if the Contractor confirms in writing at least seven (7) days in advance his intention to work on weekends.

Month	Non-WorkingDays	Month	Non-Working Days
Januar	06	July	10
Februa	04	August	11
March	04	Septemb	11
April	03	October	09
May	04	Novemb	07
June	06	Decemb	07

4. Progress Report

The Contractor shall submit monthly progress report in triplicate to the Contracting Officer briefly setting forth work accomplished.

- 5. Owner's Right to Stop Work or Terminate Contract, Delays, Damages
 - (a) If:
 - (1) The Contractor shall be adjudged bankrupt or make an assignment for the benefit of creditors;
 - (2) A receiver or liquidator shall be appointed for the Contractor or for any of his property and shall not be dismissed within 20 calendar days after such appointment, or the proceedings in connection therewith shall not be stayed on appeal within the said 20 calendar days;
 - (3) The Contractor shall refuse or fail, after Notice of Warning from the Contracting Officer, to supply enough properly skilled workmen or proper materials; or
 - (4) The Contractor shall refuse to prosecute the work or any part thereof with such diligence as will insure its completion within the period herein specified (or any duly authorized extension thereof) or shall fail to complete the work within said period, or;
 - (5) The Contractor shall fail to make payments as specified to persons supplying labor or materials for the work, or;
 - (6) The Contractor shall fail or refuse to regard laws, ordinances or the instructions of the Contracting Officer or otherwise be guilty of a substantial violation of any provisions of this contract, then, and in any such event, the Owner, upon the certificate of the Contracting Officer that sufficient cause

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exists to justify such action, and without prejudice to any other rights or remedy he may have may, with 10 calendar days notice to the Contractor. terminate the employment of the Contractor and his right to proceed, either as to the entire work or (at the option of the Owner) as to any portion thereof as to which delay shall have occurred, and may take possession of the work and complete the work by contract or otherwise as the Owner may deem expedient. In such case the Contractor shall not be entitled to receive any further payment on that work until the work is finished. If the unpaid balance of the compensation to be paid the Contractor hereunder shall exceed the expense of so completing the work (including compensation for additional managerial, administrative, and inspection services and any liquidated damages for delay), such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor and his sureties shall be liable to the Owner for such excess. If the right of the Contractor to proceed with the work is so terminated, the Owner may take possession of and utilize in completing the work such materials, supplies, plant, and equipment as may be on the site of the work and necessary therefor. The expenses incurred through the Contractor's default shall be certified by the Contracting Officer.

- (b) If the Owner does not terminate the right of the Contractor to proceed, the Contractor shall continue the work, in which event the Contractor shall pay to the Owner as fixed, agreed, and liquidated damages for each calendar day of the delay until work is completed or accepted the amount as set forth in the section of the specifications and the Contractor and his sureties shall be liable for the amount thereof.
- Provided that the right of the Contractor to proceed shall not be terminated, (c) or the Contractor charged with liquidated damages because of any delays in the completion of the work due to unforeseeable cause beyond the control and without the fault or negligence of the Contractor including, but not restricted to, acts of God or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather, or delays of subcontractors due to such cases, if the Contractor shall, within ten days from the beginning of any such delay (unless the Owner shall grant a further period of time prior to the date of final settlement of the contract) notify the Owner in writing through the Contracting Officer of the causes of delay, who shall ascertain the facts and the extent of the delay and extend the time for completing the work when in his judgment the findings of facts justify such an extension, and his findings of fact thereon shall be final and conclusive on the parties hereto subject only to arbitration as specified herein.

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VIII. CLAIMS, PAYMENTS

1. Contractor's Title to Materials

No materials or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies for which he accepts partial payments.

Claims

The Contractor agrees whenever required to do so by the Owner to furnish satisfactory evidence that all persons, firms or corporations who have done work or supplied materials under these specifications have been paid or have been duly notified of the completion of the work and have been secured to their satisfaction before the said Contractor shall be entitled to final payment.

In case such evidence is not furnished or in case any claim is filed with the Owner or any suit or action is instituted against the Owner as defendant or garnishes or against the Contractor in connection with the work performed or to be performed under the drawings, specifications or contract, the Owner may retain from the money due or to become due to the Contractor such sum or sums as in the judgment of the Contracting Officer will fully protect the Owner from loss, charge or expense by reason of such claim, suit or action. The Owner without prejudice to any other and further rights, may make any and all deductions for any loss, charge or expense sustained by it to which it would be entitled under the contract specifications or bond, or otherwise before paying over the balance of the sum or sums retained as aforesaid, if any, to the Contractor, his creditor, or any successful claimant against the Contractor.

No payment made or retained under this contract shall be held to relieve the Contractor and/or his sureties from his and/or their obligations under this bond to hold harmless and indemnify the Owner or its agents from any and all loss, charge or expense by reason of any unpaid claim whatsoever

3. Waiver of Mechanics Liens

Contractor waives any right that he now has or in the future may have to claim a mechanic's lien against the real property or improvements thereon which are the subject of this contract, to secure payment for labor and materials furnished or to be furnished by him under this contract.

4. Schedule of Values

Within three days after receipt of notice to proceed, the Contractor shall submit for

GENERAL CONDITIONS

approval a schedule of the estimated values of the main branches of the work totaling the amount of the contract. The format to be used will be furnished by the Contracting Officer.

5. Taxes

The Contractor shall, without additional expense to the Owner, pay all applicable taxes. The successful bidder will be required to comply with the applicable sections of Titles 11 and 21 of the Guam Code Annotated, as regards to licenses and taxes. In addition to the general contractor's liability, subcontractors are also subject to these provisions. Subcontractors are also required to possess Guam Service Licenses. The Contractor will be required to submit a list of his subcontractors and the monetary amount of each subcontract.

6. Materials, Services and Facilities

It is understood that except as otherwise specifically stated in the contract documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature whatsoever necessary to execute, complete and deliver the work within the specified time.

7. Patents

The Contractor shall hold and save the Owner and his officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses, for or on account of any patented or unpatented invention, process, article or appliance manufactured or used in the performance of the contract including its use by the Owner, unless otherwise specifically stipulated in the contract documents.

8. Payment by Contractor

The Contractor shall pay -

- (a) for all transportation and utility services not later than the 20th day of the calendar month following that in which such services are rendered;
- (b) for all materials, tools, and other expendable equipment to the extent of 90 percent of the cost thereof, not later than the 20th day of the calendar month following that in which such materials, tools and equipment are delivered at the site of the project, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in or on which such materials, tools and equipment are incorporated or used;

GENERAL CONDITIONS

(c) to each of his subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his subcontractors, to the extent of such subcontractor's interest therein.

9. Extras

Except as otherwise herein provided, no charge for any extra work or materials will be allowed unless the same has been ordered in writing by the Owner and either the price is stated in such order or a definite acknowledgment is made that a change in price is involved subject to later determination.

IX. MISCELLANEOUS

Prohibited Interests

- (a) No member of or Delegate to Congress or Resident Commissioner or Governor's Office or Lieutenant Governor's Office or Employees of the Government of Guam and their relatives or immediate family members, shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.
- (b) No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve, or to take part in negotiating, making, accepting or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer, or inspector of or for the Government of Guam authorized to exercise any legislative, executive supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

2. Disputes

(a) Except as otherwise provided in this contract, any disputes arising under this contract shall be decided by the Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Contracting Officer shall be final and conclusive. The provision shall not be pleaded in any suit involving a question of facts arising under this contract as limiting judicial review of any such decision to cases where fraud by such official or his representative is alleged. Provided, however, that any such decision shall be final and conclusive unless the same is fraudulent or capricious or arbitrary or so

GENERAL CONDITIONS

grossly erroneous as necessarily to imply bad faith or is not supported by substantial evidence.

(b) This "Disputes" clause does not preclude consideration of questions of law in connection with decisions provided for in paragraph (2) above. Nothing in this contract, however, shall be construed as making final the decision of any administrative official representative or board on a question of law.

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SPECIAL PROVISIONS

- General Intention. It is the declared intention and meaning to provide and secure the Contruction of New High School at Marbo Base Command in Yigo, Finance, Design, Build, Maintain, Leaseback (FDBML), Project No. 700-5-1019-L-TER.
- 2. Bid. The Contractor and each and every subcontractor shall read the General Conditions immediately following these special provisions, and by the act submitting a bid, shall be deemed to have accepted all conditions contained therein.
- 3. Specification and Standards. The specifications and standards referenced in this specification (including addenda, amendments and errata listed) shall govern in all cases where the references thereto are made. In cases of difference between the referenced specifications or standards and this specification or its accompanying drawings, this specification and its accompanying drawings shall govern to the extent of such difference, otherwise the referenced specifications and standards shall apply. Extra care shall be exercised to refer in requests for quotation in orders and in subcontracts to the referenced specifications and to all modifications thereof.
- 4. Time for Completion. It is hereby understood and mutually agreed, by and between the Contractor and the Government of Guam, that the date of beginning, rate of progress and the time for completion of the work to be done hereunder are essential conditions of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on date to be specified in the Notices to Proceed for the design within forty five (45) calendar days and construction and shall be completed within ninety (90) calendar days.

SPECIAL PROVISIONS

Prevailing Wage Rates for Temporary Alien Employment Certification Government of Guam

EFFECTIVE JANUARY 01, 2001

OCCUPATION	HOURLY
Bricklayer	\$11.75
Carpenter	\$11.70
Cement Mason	\$11.34
Construction Helper	\$9.34
Construction Labor	\$8.50
Electrician	\$14.07
Heavy Equipment Mechanic	\$14.14
Heavy Equipment Operator	\$13.32
Iron Worker	\$10.38
Painter	\$14.60
Pipe Fitter	\$16.80
Plasterer	\$9.95
Plumber	\$14.31
Refrigeration Mechanic	\$16.24
Roofer	\$10.96
Sheet-Metal Mechanic	\$14.11
Surveyor Helper	\$10.74
Truck Driver	\$13.80
Welder	\$15.97
Warehouseman	\$12.00

PREVAILING WAGE RATES