

# ADB

# SCHEMATIC PERSPECTIVE



RTIC - General Santos National School of Arts and Trades (Region XII)

Tiongson St., Lagao, General Santos City

Focus Area: Warehouse Logistics Management with the Use of Big Data Analytics

Approx. Total Floor Area = 2,673.85 sq.m

Ground Floor =  $\pm 1,200.00 \text{ sq.m}$ Mezzanine Level =  $\pm 273.00 \text{ sq.m}$ Second Floor =  $\pm 1200.00 \text{ sq.m}$ 

Project Duration = 545 calendar days (18 months)







- 1. Professional Fees
- 2. General Requirements
- 3. Site Work
- 4. Concrete
- 5. Masonry
- 6. Metals
- 7. Wood & Plastic
- 8. Thermal & Moisture Protection
- 9. Doors & Windows
- 10. Finishes
- 11.Specialties
- 12. Equipment
- 13. Furnishing
- 14. Special Construction
- 15. Conveying Equipment
- 16. Mechanical/Plumbing
- 17. Electrical & Auxiliary
- 18.Other items needed to complete the project





### 1. Professional Fee

- 1. Detailed Architectural and Engineering Design/ Professional Fee
- 2. As Built of Existing Structures/ Building for Rehabilitation/ Renovation

#### **SURVEY AND TESTING**

- 1. Geodetic Survey
- 2. Geotechnical Investigation/ Soil Test
- 3. Location and Orientation of Facilities
- 4. Hydrology (if applicable)
- 5. Hydraulic (if applicable)
- 6. Seismic
- 7. Existing Environmental Conditions
- 8. Others







# 2. General Requirements

- 1. Permits and Fees
- 2. Overhead
- 3. Temporary Facilities and Controls
- 4. Equipment
- 5. Insurance
- 6. Bonds
- 7. Field Engineerings
- 8. Structural Test and Special Field Test
- 9. Management and Coordination
- 10. Construction Progress Documents
- 11. Temporary Construction Facilities and Controls
- 12. Utilities
- 13. Room Integrity Testing
- 14. Construction Waste Management
- 15. Product Requirements
- 16. Warranties and Bonds
- 17. Closeout Procedures

- 18. Operation and Maintenance Data
- 19. Functional Performance Testing (FPT) Coordination
- 20. Demonstration and Training
- 21. Environmental Management Plan
- 22. Shop Drawings for Approval, As-Built Plans for Occupancy Permit, Project Manual

#### **HEALTH AND SAFETY**

- 1. Environmental, Health and Safety Management
- 2. Others





### 3. Site Work

- 1. Site Preparation
- 2. Selective Demolition & Clearing
- 3. Earthworks & Retaining Structures
- 4. Site Drainage + Dewatering
- 5. Concrete Curbs, Gutters and Paved Walks
- 6. Road and Parking (Pavement)
- 7. Site Electrical and Transformers
- 8. Site Water Supply & Service Entrance
- 9. Integrated Pest Management
- 10. Hardscaping
- 11. Soft Landscaping
- 12. Demobilization & Clearing
- 13. Building Layout
- 14. Top Soil Stripping and Re-Use
- 15. Excavation
- 16. Fill/ Backfill Compacted
- 17. Termite Treatment
- 18. Others





#### 4. Concrete

- 1. Forms, Scaffoldings & Accessories
- 2. Footings
- 3. Grade Beams/ Footing Tie Beam
- 4. Columns, Beams and Girders
- 5. Shear/ Lower Ground Walls
- 6. Suspended Slabs
- 7. Lower Ground Floor Slabs & Slabs on Fill
- 8. Stairs
- 9. Cistern (Potable and Rainwater)
- 10. Concrete Gutters, Parapets and Ledges
- 11. Equipment Pads
- 12. RC Testing
- 13. Others

### 5. Masonry

- 1. CHB & Other Masonry Walls
- 2. Pre-Fabricated/ Pre-Cast Walla
- 3. Cast Stone Sills, Thresholds and Walls
- 4. Masonry Accessories
- 5. Others





### 6. Metal

- Structural Steel
- 2. Miscellaneous Structural Steel
- 3. Welding and Fasteners
- 4. Stainless Steel Hand and Grab Rails
- 5. Metal Rails and Railings
- 6. Factory- Applied Metal Coatings
- 7. Aluminum Tube Railings
- 8. Aluminum Equipment Screen
- 9. Fiberglass Gratings
- 10. Architectural Joint System
- 11. Gondola Lift (Installed at Roof Deck)
- 12. Others

### 7. Wood & Plastic

- 1. Miscellaneous Rough Lumber
- 2. Interior Woodwork, Baseboards & Miscellaneous
- 3. Wood Veneers
- 4. Reception and Security Desks
- 5. Others





### 8. Thermal & Moisture Protection

- 1. Slab. Deck and Gutter Waterproofing
- 2. Wall Waterproofing
- 3. Cistern Epoxy Waterproofing
- 4. Roofing Insulation, Double Sided
- Roofing Materials and Accessories
- 6. Translucent Roofing- Glass
- 7. Sheet Metal Flashing and Trim
- 8. Sheet Metal Roofing
- 9. Exterior Metal Wall System
- 10. Sprayed- Fire Resistive Materials
- 11. Through- Penetration Firestop Systems
- 12. Fire- Resistive Joint Systems
- 13. Joint Sealants
- 14. Expansion Joint Covers





#### 9. Doors & Windows

- 1. Metal Doors and Windows
- 2. Metal Doors and Windows Frames
- 3. Roller Shutters with Pedestrian Access. See Material Specs for Packing/ Cold Facilities
- 4. Stainless Steel Frames
- 5. Custom Steel Doors and Frames
- 6. Interior Aluminum Frames
- 7. Frameless Glass Doors Tempered with Frosting
- 8. Flush Wood Doors
- 9. Access Doors and Frames
- 10. Overhead Coiling Doors
- 11. Aluminum Framed Entrances
- 12. Aluminum Windows
- 13. Hardware
- 14. Door Hardware
- 15. Finish Hardware

- 16. Automatic Door Operators
- 17. Glazing
- 18. Glazed Aluminum Curtain Walls
- 19. Windows & Doors Testing
- 20. Clear Coating Anti-Heat Gain, UV Protection
- 21. Others







#### 10. Finishes

- Plaster/ Plaster Walls
- 2. Off the Form Smooth Rubbed Ceiling Finish
- 3. Fiber Cement Ceiling on Light Gauge Metal Frame
- 4. Acoustic Ceiling Panels
- Gypsum Wall Boards and FCS on Light Gauge Metal
- 6. Aluminum Composite Panels complete with Framing
- 7. Epoxy Flooring
- 8. Homogenous Granite Floor Tiles
- 9. Homogenous Granite Wall Tiles
- 10. Vapor Transmission Testing for Concrete
- 11. Concrete Floor Treatment (Polished Concrete)
- 12. Concrete Densifier and Sealer
- 13. Carpet Floor Tiles- at least 6mm thk.
- 14. Exterior Painting
- 15. Interior Painting, Varnishing & Accessories
- 16. Others





### 11. Specialties

- 1. Louvers and Vents
- 2. Impact Resistant Wall and Door Protection Warnings, Occupational and Biosafety Signage, Fire Exit Routes
- 3. Interior Signages
- 4. Metal Lockers
- 5. Fire Extinguisher Cabinets
- 6. Fire Extinguisher
- 7. Operable Panel Partitions
- 8. Toilet and Bath Accessories
- 9. Signages, Wayfinding
- 10. Others

### 12. Equipment

- 1. Loading Dock Equipment
- 2. Contractor Furnished & Installed Laboratory Equipment
- 3. Fume Hoods and Exhaust Devices
- 4. Biological Safety Cabinets
- 5. Room Air Visual Indicator
- 6. Pumps and Accessories
- 7. Others







# 13. Furnishing

- 1. Window Treatment (Roller Blinds)
- 2. Restroom and Pantry Countertop (Quartz/ Solid Surface)
- 3. Furniture System/ Built-Ins Counters

# 14. Special Construction

1. Seismic Protection For Equipment

# 15. Conveying Equipment

1. Elevator/ Lift







### 16. Mechanical/ Plumbing

#### SANITARY & STORM WATER SYSTEM

- 1. Plumbing Pipes and Fittings
- 2. Sanitary & Storm Drain Accessories
- 3. Plumbing Fixtures
- 4. Septic Tank/ STP
- 5. Plumbing Pipe Testing

#### **DOMESTIC WATER SUPPLY**

- 1. Pipes, Fittings & Individual Meters
- 2. Water Supply Accessories
- 3. Potable Water Supply Tanks
- 4. Rain Water Supply Tanks
- 5. Water Pipe Testing
- 6. Plumbing Fixtures and Trims
- 7. Drinking Fountain and Water Coolers
- 8. Others

#### FIRE PROTECTION SYSTEM

- 1. Complete Fire Standpipe System
- 2. Fire Water Supply Tanks
- 3. Fire Sprinklers
- 4. Fire Detection and Alarm System
- 5. Fire Pipe Testing
- 6. Others

#### **VENTILATION SYSTEM**

- 1. Ventilation System
- 2. Air conditioning System
- 3. Metal Ducts & Duct Accessories
- 4. Testing, Adjusting and Balancing







### 17. Electrical & Auxiliary

- 1. Electrical Service Entrance
- 2. Overcurrent Protective Device Coordination
- 3. Grounding and Bonding
- 4. Lightning Protection
- 5. Electrical Testing
- 6. Hangers and Supports for Electrical Systems
- 7. Electrical Identification
- 8. Conductors and Cables
- 9. Raceways
- 10.Cable Trays
- 11. Lighting Control Devices
- 12. Generator (Emergency Power Supply) Silent Type, including housing/ enclosure complete with exhaust and padding.
- 13. Variable Frequency Controllers
- 14. Transient Voltage Suppression
- 15. Enclosed Switches and Circuit Breakers
- 16. Transfer Switches
- 17. Electrical Distribution System
- 18. Switchboards
- 19. Panel Boards

- 20. Enclosed Bus Assemblies
- 21. Low Voltage Transformers
- 22. Fuses
- 23. Interior LED Lighting Fixture & Accessories
- 24. Exterior LED Lighting Fixture & Accessories
- 25. Voice and Data Communications
- 26. Security Systems/ RFID
- 27. Fire Alarm
- 28. Public Address System
- 29. Telephone MTTC, Wiring & Devices
- 30. WIFI Wiring, Hub and Router
- 31. Data Rack/s
- 32. Lighting Protection System
- 33. Miscellaneous & Electrical Auxiliaries Testing
- 34. Energization
- 35. Others







# 18. Other items needed to complete the project

Qualification of Design and Build Contractor and Other Requirements where stipulated under Section 6: Employer's Requirements Item 10.



