

PROJECT REQUIREMENTS / PARAMETERS

Title: **DESIGN AND BUILD OF FIVE (5) STOREY ORTHOPEDIC INSTITUTE BUILDING WITH HELIPAD**

Location: SPMC COMPOUND, J.P. LAUREL AVE., BAJADA, DAVAO CITY

Scheme: DESIGN & BUILD

Projected Duration: 840 CALENDAR DAYS

General Parameter: Design and Build of Five (5) Storey Orthopedic Institute Building with Helipad

Specific Requirements:

- I. Details of the Design shall include, but not limited to, the following hospital requirements:

a. Ground Floor E.R. Complex (Left Wing)

- i. Operating Theaters (Laminar Flow)
 - 1. 2 – Operating Rooms;
 - 2. Doctor's Lounge with Locker Room;
 - 3. Ante Rooms;
 - 4. Equipment's Storage Room;
 - 5. Nurse Station
 - 6. Hallways
- ii. Patient's Examination Area
 - 1. Lobby;
 - 2. Triage;
 - 3. Admitting;
 - 4. Casting Room;
 - 5. Billing;
 - 6. Cashier;
 - 7. Stretchers Alcove;
 - 8. Female/Male Comfort Rooms;
 - 9. Nurse Station with Locker Room, Toilet, Medication Room;
 - 10. Clean Linen Room;
 - 11. Soiled Linen Room;
 - 12. Equipment Storage Room.
- iii. Laboratory
- iv. Medical Records and Files Room
- v. E.R. Supply & Storage Room
- vi. Pharmacy
- vii. Social Worker
- viii. Female/Male Toilet
- ix. Reception Counter
- x. Radiology Area
 - 1. 2 - X-ray Room;
 - 2. Control Room;
 - 3. Toilet;
 - 4. Dark Room;
 - 5. Reading Room

b. Ground Floor OPD (Right Wing)

- i. Rehabilitation Medicine consultation Area
 - 1. Consultation Area;
 - 2. Treatment Room;
 - 3. Hydro Room
 - 4. Casting Room;
 - 5. Rectification Room;
 - 6. Draping Room;
 - 7. Storage Room
- ii. Clinical Areas
 - 1. 2 - Trauma Clinic;
 - 2. Pediatric Orthopedic Clinic;
 - 3. Adult Orthopedic Clinic;
 - 4. Hand and Sports Clinic;
 - 5. Spine Clinic

- iii. Waiting Area - 90 to 100 Person Capacity
- iv. Ambulatory Surgery & Casting Room

c. Ground Floor Ingress, Egress, Maintenance and Passage Areas

- i. 2 - Utility rooms
- ii. 2 - Electrical rooms
- iii. 2 - Mechanical Pad
- iv. Hallways
- v. Stairwells & Emergency Exits
- vi. Ramp
- vii. Elevators – 2 units

d. Second Floor (Left Wing)

- i. Operating Theaters (Laminar Flow)
 - 1. 4 – Operating Rooms;
 - 2. Doctor's Lounge with Locker Rooms, Toilet, Call Room, Dining Area
 - 3. Ante Rooms;
 - 4. Central supply Room;
 - 5. Oxygen Manifold & Air Compressor Room;
 - 6. Soiled Linen Room;
 - 7. Nurse Station with Dining Area, Locker Room, Toilet, Medication Room, Clean Linen Room and Wash Basins;
 - 8. Hallways
- ii. Pre- Induction Room
- iii. Patient's Pre- Holding Area - 3 bed capacity
- iv. Post Anesthesia Care Unit (PACU) - 8 bed capacity
- v. Clean Case Charity Ward (Female) - 12 bed capacity
 - 1. Toilet & Bathroom
- vi. Clean Case Charity Ward (Male) - 9 bed capacity
 - 1. Toilet & Bathroom
- vii. Spine Ward (Female) - 8 bed capacity
 - 1. Toilet & Bathroom
- viii. Nurse station with Dining Area, Locker Room, Toilet & Medication Room
- ix. Soiled Linen Room

e. Second Floor (Right Wing)

- i. Clean Case Pediatric Ward (Female) - 9 bed capacity
 - 1. Toilet & Bathroom
- ii. Clean Case Pediatric Ward (Male) - 12 bed capacity
 - 1. Toilet & Bathroom
- iii. Lobby
- iv. Intensive care Unit
 - 1. 2- Mini ICU
 - 2. Internal Medicine Care Unit (IMCU) - 7 bed capacity
- v. Nurse Station with Dining Area, Locker Room, Toilet & Medication Room
- vi. Ward's Supply Storage Room

f. Second Floor Ingress, Egress, Maintenance and Passage Areas

- i. Janitor's Closet
- ii. 2 - Electrical rooms
- iii. 2 - Mechanical Pad
- iv. Hallways
- v. Stairwells & Emergency Exits
- vi. Connecting Bridge going to Oncology Building
- vii. Ramp
- viii. Elevators – 2 units

g. Third Floor (Left Wing)

- i. Suite Room – 1 Unit
 - 1. Toilet & Bathroom;
 - 2. Wardrobe
- ii. Private Room – 12 Units
 - 1. Toilet & Bathroom;
 - 2. Wardrobe

- iii. Nurse station with Dining Area, Locker Room, Toilet & Medication Room (Private & Suite Rooms)
- iv. Treatment Room
- v. Soiled Linen Room (Private and Suite Rooms)
- vi. Dirty Case Ward (Female) - 13 bed capacity
 - 1. Toilet & Bathroom
- vii. Dirty Case Ward (Male) - 11 bed capacity
 - 1. Toilet & Bathroom
- viii. Dirty Case Pediatric Ward (Female) - 13 bed capacity
 - 1. Toilet & Bathroom
- ix. Dirty Case Pediatric Ward (Male) - 10 bed capacity
 - 1. Toilet & Bathroom
- x. Nurse Station with Dining Area, Locker Room, Toilet & Medication Room (Wards)
- xi. Ward's Supply Storage Room

h. Third Floor (Right Wing)

- i. Isolation Rooms (Laminar Flow)- 8 Units
 - 1. Ante Room;
 - 2. Toilet & Bathroom;
 - 3. Wardrobe;
 - 4. Wash basin
- ii. Lobby
- iii. Storage Room
- iv. Soiled Linen Room (Isolation Rooms)
- v. Head Nurse Office
 - 1. Toilet
 - 2. Locker Room

i. Third Floor Ingress, Egress, Maintenance and Passage Areas

- i. Janitor's Closet
- ii. 2 - Electrical rooms
- iii. 3 - Mechanical Pad
- iv. Hallways
- v. Stairwells & Emergency Exits
- vi. Ramp
- vii. Elevators – 2 units

j. Fourth Floor (Left Wing)

- i. Semi-Private Room – 6 Units
 - 1. Toilet & Bathroom;
 - 2. Wardrobe
- ii. Nurse station with Dining Area, Locker Room, Toilet & Medication Room (Semi-Private Rooms)
- iii. Storage Room (Semi-Private Rooms)
- iv. Soiled Linen Room (Semi-Private Rooms)
- v. Equipment's Storage Room
- vi. Clean Case Ward (Female) - 10 bed capacity
 - 1. Toilet & Bathroom
- vii. Clean Case Ward (Male) - 15 bed capacity
 - 1. Toilet & Bathroom
- viii. Diabetic Foot Ward (Female) - 11 bed capacity
 - 1. Toilet & Bathroom
- ix. Dirty Case Pediatric Ward (Male) - 10 bed capacity
 - 1. Toilet & Bathroom
- x. Soiled Linen Room (Wards)
- xi. Nurse Station with Dining Area, Locker Room, Toilet & Medication Room (Wards)
- xii. Orthopedic Office
 - 1. Chairman's Office;
 - 2. Chief Resident's Office;
 - 3. Training Officer;
 - 4. Toilet & Bathroom

k. Fourth Floor (Right Wing)

- i. Consultation Rooms
 - 1. 2- Trauma Consultation Room;
 - 2. Pediatric Consultation Room;
 - 3. Spine Consultation Room;
 - 4. Hand & Sports Consultation Room;
 - 5. Hand Washing Area;
 - 6. Waiting Area
- ii. Library
- iii. Lobby
- iv. Resident's Call Room
 - 1. Toilet & Bathroom
 - 2. Closet
- v. Audio Visual Room – 100 Person Capacity
 - 1. Sound System Control Booth
- vi. Toilet

l. Fourth Floor Ingress, Egress, Maintenance and Passage Areas

- i. Janitor's Closet
- ii. 2 - Electrical rooms
- iii. 2 - Mechanical Pad
- iv. Hallways
- v. Stairwells & Emergency Exits
- vi. Ramp
- vii. Elevators – 2 units

m. Roof Deck

- i. 2-Elevator Machine Rooms
- ii. Water Supply Reservoir
- iii. Stairwells & Emergency Exits
- iv. Elevators – 1 units
- v. Ramp
- vi. Mechanical Room

II. Design Output & Plans:

a. Architectural Requirements

- i. Plans
 - 1. Perspective, Vicinity Map, & Site Development Plan
 - 2. Floor Plans with Area Tabulation & Schedule of Finishes
 - 3. Elevations & Sectional Views with Specifications
 - 4. Reflected Ceiling Plans
 - 5. Schedule of Doors & Windows
 - 6. Stairwells Detailed Plans, Elevations & Sections
 - 7. Elevator Plans, Elevations & Sections
 - 8. Detailed Plans of Comfort Rooms
 - 9. Detailed Plans of Counters & Cabinets
- ii. Specifications

b. Structural Requirements

- i. Soil Investigation Report
- ii. Structural Analysis & Design Report
 - 1. Superstructure: Steel, Reinforced Concrete, or Composite Framing
 - 2. Substructure: Reinforced Concrete Foundation
- iii. Plans
 - 1. Construction Notes
 - 2. Foundation Plan & Details
 - 3. Schedule of Columns with Details
 - 4. Schedule of Beams with Details
 - 5. Floor Framing Plans
 - 6. Schedule of Floor Slabs with Details
 - 7. Roof Framing Plan & Details

c. Electrical Plans

- i. General Notes & Standard

- ii. Specifications
- iii. Lighting Layout
- iv. Power Layout
- v. Schedule of Electrical Load and Design Computation
- vi. Single Line Riser Diagram
- vii. Auxiliary System (Cabling System Only)
 - 1. Structural Cabling / LAN Layout
 - 2. Telephone/PABX System
 - 3. CCTV System


d. Mechanical Plans

- i. General Notes & Standards
- ii. Specifications
- iii. Schedule of Mechanical Load and Design Computation
- iv. Air-conditioning System
- v. Fire Protection System & Fixtures
 - 1. Fire Protection Layout Plans per floor
 - 2. Water Storage Tank Detail
 - 3. Pump Detail
 - 4. Fire Alarm System Riser Diagram
 - 5. Details of Fire Alarm Fixtures
- vi. Medical Gas Lines Layout
- vii. Heat, Ventilation and Air-conditioning System for Operating Theaters and Isolation Rooms
 - 1. Mechanical Layout
 - 2. Detail of Mechanical Fixtures
 - 3. Schedule of Loads of Mech. Fixtures
- viii. Waste Water Treatment Plant
 - 1. Mechanical Layout
 - 2. Detail of Mechanical Fixtures
 - 3. Schedule of Loads of Mech. Fixtures
 - 4. Detail of Waste Tank

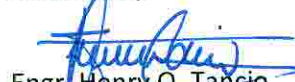
e. Plumbing and Sanitary Plans

- i. General Notes & Standards
- ii. Specifications
- iii. Design Computation
- iv. Waterline Layout
- v. Sanitary & Drainage Layout
- vi. Isometric Layout
- vii. Septic Vault Plans & Details
- viii. Catch Basin Plans & Details


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