GENERAL NOTES

1. ALL CONSTRUCTION WORKS SHALL BE IN ACCORDANCE WITH THE LATEST NATIONAL BUILDING CODE OF THE PHILIPPINES AND THE DPWH STANDARD SPECIFICATIONS.

2. IN THE INTERPRETATION OF THESE DRAWINGS, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES OR SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.

3. THE CONTRACTOR SHALL COORDINATE WITH THE AR, ME, SE, EE AND OTHER UTILITY AND EQUIPMENT PLANS FOR THE EXACT SIZE, NUMBER AND LOCATIONS OF ALL SLEEVES OR OPENINGS THRU FLOOR SLABS, BEAMS AND WALLS. ANY DISCREPANCIES SHOULD BE RAISED TO THE ENGINEER FOR DECISION BEFORE PROCEEDING WITH WORK.

4. UNLESS OTHERWISE SHOWN, ALL DIMENSIONS ARE IN MILLIMETERS.

FOUNDATION

1. FOUNDATION IS DESIGNED WITH AN ASSUMED NET BEARING CAPACITY OF 200KPA. CONFIRMATION OF ACTUAL SOIL BEARING CAPACITY SHOULD BE PERFORMED PRIOR TO FULL FOUNDATION CONSTRUCTION.

2. EMBANKMENT INSIDE AND OUTSIDE THE BUILDING AREA SHALL CONFORM TO THE STANDARD ASTM SPECIFICATIONS. EXISTING UNSUITABLE MATERIALS SHALL BE REMOVED PRIOR TO START OF EMBANKMENT. ALL EMBANKMENT AND STRUCTURAL BACKFILLS SHALL BE COMPACTED TO 95% RELATIVE COMPACTION IN ACCORDANCE WITH ASTM REQUIREMENTS WITH A MAXIMUM LIFT OF 300mm.

3. PROVIDE TEMPORARY REMOVAL OF WATER FROM ANY SOURCE DURING CONSTRUCTION. DEWATERING SHALL BE CAREFULLY AND PROPERLY PERFORMED TO AVOID DISTURBING THE FOUNDATIONS AND SLAB BEARING SURFACES.

4. CONTRACTOR SHALL DESIGN, INSTALL AND MONITOR ALL EXCAVATION RETENTION SYSTEMS AS REQUIRED FOR PROTECTION OF ADJACENT PROPERTIES AND PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO MINIMIZE SETTLEMENT AND PREVENT DAMAGE TO ADJACENT EXISTING OR NEW CONSTRUCTION.

5. CONTRACTOR SHALL UNDERGO PROBING OPERATIONS TO LOCATE PRESENCE OF SOIL CAVITIES UNDER COLUMNS FOUNDATIONS AND SHALL EXECUTE THE NECESSARY REMEDIAL MEASURE BEFORE PLACING STEEL REINFORCEMENT AND CONCRETE.

DESIGN LOADS

1. DEAD LOADS
   - TOTAL SUPERIMPOSED LOAD — 1.0kPa
   - CONCRETE DENSITY FOR SELFWEIGHT: — 23.56kN/m^3
   - STEEL DENSITY DENSITY FOR SELFWEIGHT: — 77N/m^3
2. LIVE LOADS
   - CONCRETE ROOF SLAB — 1.6kPa
3. WIND LOADINGS(NSCP–2010/ASCE 7–10)
   - BASIC WIND SPEED: — 300KPH
   - EXPOSURE CATEGORY: — C
   - RISK CATEGORY: — I
4. SEISMIC LOADING:(NSCP–2010/UBC 1997
   - SEISMIC ZONE FACTOR — 0.4
   - SOIL PROFILE TYPE — SD
   - SEISMIC SOURCE TYPE — A
   - DISTANCE TO SOURCE — 10KM
   - OVERSTRENGTH FACTOR FOR SPECIAL MOMENT FRAME, R — 8
   - IMPORTANCE FACTOR — 1.5

1 / S 1 GENERAL NOTES

SCALE NTS

CONCRETE

1. CONCRETE MINIMUM ULTIMATE CYLINDER COMPRESSIVE STRENGTHS AT 28 DAYS SHALL BE :
   - fc' = 21 Mpa (3000 Psi) — COLUMNS, SLABS, BEAMS, GIRDERS, FOUNDATIONS RETAINING WALLS
   - fc' = 17.5 Mpa (2500 Psi) — LEAN CONCRETE AND OTHER NON–STRUCTURAL ELEMENTS
2. AGGREGATE SIZE SHALL BE AS FOLLOWS :
   - 20mm MAX. — BEAMS, GIRDERS, WALLS, AND COLUMNS
   - 25mm MAX. — FOOTINGS AND SLABS ON GRADE
3. MINIMUM CONCRETE COVER FOR REINFORCING BARS SHALL BE NOT LESS THAN :
   - 75mm — UNFORMED CONCRETE DEPOSITED AGAINST GROUND
   - 50mm — FORMED CONCRETE AGAINST GROUND OR EXPOSED TO WEATHER FOR BARS LARGER THAN 16mm IN DIAMETER
   - 40mm — FORMED CONCRETE AGAINST GROUND OR EXPOSED TO WEATHER FOR BARS OF 16mm DIAMETER AND SMALLER
   - 40mm — BEAMS AND COLUMNS NOT EXPOSED TO GROUND OR TO WEATHER
   - 20mm — SLABS AND WALLS NOT EXPOSED TO GROUND OR TO WEATHER
   - 75mm — CONCRETE EXPOSED TO SEWAGE
4. ALL REINFORCING STEEL DOWELS, ANCHOR BOLTS, AND OTHER INSERTS SHALL BE SECURED IN POSITION PRIOR TO POURING CONCRETE.
5. CONCRETE CYLINDERS SHALL BE TAKEN FOR EACH DAY'S POUR AND EACH 50 CU. MTRS. OR FRACTION THEREOF CAST IN ACCORDANCE WITH A.S.T.M. C31 AND TESTED IN ACCORDANCE WITH A.S.T.M. C39.

REINFORCING STEEL

1. GRADE :
   A.S.T.M. A615 GRADE 60 FOR ø16mm AND LARGER BARS DEFORMED BARS(fy = 415 MPa)

   A.S.T.M. A615 GRADE 40 FOR ø10mm AND SMALLER BARS DEFORMED BARS (fy = 275 MPa)
2. ALL BARS SHALL BE BENT COLD UNLESS PERMITTED BY THE STRUCTURAL ENGINEER.
3. THE MINIMUM LAP LENGTH ARE SHOWN ON THE TABULATION.
4. ALL REINFORCING SHALL BE SUPPORTED IN CONFORMANCE WITH "THE MANUAL OF STANDARD PRACTICE DETAILING REINFORCED CONCRETE STRUCTURE (ACI 315 LATEST EDITION).
5. ALL REINFORCING BARS SHALL BE CLEANED THOROUGHLY OF ALL LOOSE RUST, SOIL OR OTHER MATERIAL IMMEDIATELY PRIOR TO PLACING CONCRETE.
6. A FULL WELDED SPLICE SHALL HAVE BARS BUTTED AND WELDED TO DEVELOP IN TENSION AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH fy OF THE BAR.
7. ALL WELDING OF REINFORCEMENT SHALL CONFORM TO THE PROVISIONS OF THE STRUCTURAL WELDING CODE REINFORCING STEEL, AWS D 1.4
8. A FULL MECHANICAL CONNECTION (REBAR SPLICER) SHALL DEVELOP IN TENSION OR COMPRESSION. AS REQUIRED, AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH fy OF THE BAR. IF USED, SUBMIT SAMPLE FOR APPROVAL OF THE DESIGNER.

KALINGA STATE UNIVERSITY
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