DWG.NO.	SD-GIS-7-01A	01	REV.
		05	0

ARCHITECTURAL SPECIFICATION

INTRODUCTION

The conceptual requirement of this building was initiated by combining all the specific concepts of the design which presents the scientific and mechanical functions, symbolic art and its dominance. The building is supposed to be designed considering energy conservation and sustainable architecture with low maintenance whilst maintaining the architectural value. Provided that there are any contradictory drawings, the contractor shall follow the architectural drawings as the main guideline and ask EGAT architect for advice and approval. The contractor shall be responsible if the architectural work that supposed to be notified in the architectural drawings is not shown or specified.

REMARK

1. All dimension is in the metric system.
2. The referenced levels are as shown in architectural drawings.
3. The ±0.00 m. is the road level in front of building.
4. size of the building can be design and shall be conform to proposal data
5. The height of specified rooms is for guideline.
6. Had there is any contradiction or deviation of the dimension, figures or marks, the contractor shall inform EGAT inspector and ask EGAT architect for advice.
7. The location of all the electrical board shall be in accordance with the electrical drawings.
8. The location of all the floor block-out shall be in accordance with the structural drawings.
9. In case there is contradiction between the location of the floor block-out, the electrical boards and architectural drawings, the contractor shall inform EGAT architect.
10. The contractor shall collect all documentation of guarantee from the manufactures and installers then submit to EGAT after the installation is complete.
11. The contractor shall select the manufactures and installers then submit for approval by EGAT
12. All details of material property shall principally conform to Specification No.3001 (Civil and Architectural work), if the characteristic and Specification No.3001 (Civil and Architectural work) notified differently then conform to the superior specification.

DRAWING LIST

DWG. NO.	SHEET NO.	TITLE
SD-GIS-7-01A	01/05	DRAWING LIST , SPECIFICATION
SD-GIS-7-01A	02/05	SPECIFICATION
SD-GIS-7-01A	03/05	GROUND FLOOR PLAN
SD-GIS-7-01A	04/05	GIS FLOOR PLAN
SD-GIS-7-01A	05/05	SECTION A , SECTION B

FLOOR FINISHING

SYMBOL	DESCRIPTION	CHARACTERISTIC	STANDARD
F1	SOLVENT FREE SELF LEVELING EPOXY FINISHED RC. FLOOR	- Material : Solvent free self leveling with solvent free primer - Thickness : Not less than 2.50 mm.thk. (excluding floor leveling) - Color : Specified later - Physical Properties (Epoxy) : *Compressive Strength >= 60 N/mm² *Tensile Strength >= 25 N/mm² *Flexural Strength >= 17 N/mm² *Chemical resistance : Non-Reaction - With 5 years guarantee of material and installation.	TIS 1026-2534(1991) ASTM C 579 or ASTM D 695 or BS 6319. ASTM C 307 or ASTM C 190 or BS 6319. ASTM C 580 or ASTM C 348 or BS 6319.
F2	SQUARE EDGE, UNPOLISHED CERAMIC TILE FINISHED RC FLOOR, WITH SAND WASHED BORDER	- Floor tiles shall be Grade A - Size : 24"X24'or as indicated in the drawings. - Product classification : Group Bla - Water absorption : E=< 0.5% - Chemical resistance, low concentrate acids and alkalis : Minimum class GLB - Color : specified later - Accessory Pieces : Unless otherwise specified on drawings, Provide caps, return, trimmers and other shapes required for complete finished installation - Sand washed border shall conform to characteristic of	TIS 2508-2555(2012) ISO 13006 ISO 10545-3 ISO 10545-13
F3	STAMPED CONCRETE	- Color hardener : Iron oxide pigment - Prevent the stamped surface from mould and lichens with Acrylic sealer. - Chemical resistance : Non-Reaction	
F4	SAND WASHED SYSTEM ON RC FLOOR	- 2-3 round sea grand without adulteration - Proportion of cement : gravels 1 : 3 - The finished floor must be waxed twice minimum	
F5	PLAN FINISHED RC FLOOR	- Materials in accordance with section CONCRETE FOR STRUCTURES of part civil work	

REMARK

- The 100 mm. wide aluminium-PVC floor skirting shall be installed on the interior wall in GIS room
- Every edge of the different level shall be covered with 50 mm. PVC-step nosing.
- The 20 mm. wide PVC groove joint shall be installed on the exterior wall.
- The contractor must submit model and color of aluminium-PVC, PVC-step nosing, PVC groove joint for approval by EGAT before installation.
- The thickness of stainless steel rail shall be not less 2.00 mm.thk.
- The high flexible cementitious waterproofing coating material shall be applied to the loading area to prevent moisture from the ground

  Specific properties
  - * Material : a cementitious, two component
    - Binder : cement
    - Resin : Polymer
  - * Tensile strength(ASTM D412-92) : > 1.2 N/mm²
  - * Elongation at break(ASTM D412-92) : > 250%
  - * Adhesion to concrete(DIN 1048, EN 1542 or ASTM 4541) : >0.55±0.05 N/mm²
  - * Resistance to water penetration(DIN 1048) : No water penetration
  - * Installed : 2 coated
  - * Crack Bridging : 4 mm.
  - * Non-toxic
  - * With 5 years guarantee of material and installation.
- Other standard except as specified must be submitted for approval by EGAT
- Other test reports may be required by EGAT if necessary

WALL FINISHING

SYMBOL	DESCRIPTION	CHARACTERISTIC	STANDARD
1	PLAIN-PLASTERED PAINTED CLC OR AAC WALL, RC WALL, RC COLUMN, RC BEAM, AND RC PARAPET	- RC Wall, RC Column, RC Beam, and RC Parapet Materials in accordance with section CONCRETE FOR STRUCTURES of part civil work - For CLC , AAC , insulation concrete block or equivalents characteristic ▪ Size : indicated in the drawings. ▪ Density >= 600 kg/m³ ▪ Compressive strength >= 40 kg/m² ▪ Fire resistance : > 2 hr ▪ Thermal conductivity : < 0.12±0.02 watt/m/C°	TIS 1505-2541 TIS 1510-2541 TIS 2601-2556
2	METAL SHEET WALLING (DOUBLE SKIN)	- Double skin wall with Bolt system - Aluminium-zinc alloy coated not less than 150 g/m² (AZ150) - The base metal(BMT) thickness shall not be less than 0.42 mm. - The Minimum yield strength of 550MPa (G550) - Finish coating *Front side : Primer not less than 5 micron and not less than 17-20 micron polyester resin on the top coat *Back side : not less than 10 micron polyester resin on the back side - Color is specified later - With 10 years guarantee of installation.	TIS 1128-2535 ASTM A792 or AS2728 or AS1397 AS 3566 Class 3 (Bolt)
3	4 MM.THK ALUMINIUM COMPOSITE WITH FR	- Skin Material: Aluminium Alloy 3,XXX Series - Core Material: fire rate material consisting of Aluminium trihydroxide which achieve the B1fire test - Finishing : Color specified later - Coating System : *Front side : Kynar 500 Resin based Polyvinylidene Difluoride(PVDF) or equivalent on the top side *Back side : Polyester Based Stove Enamel - Coating Layer: 2 or 3 coats not less than 25 micron - Production method : Hot-Melt Bonding - Nominal Thickness : 4.0 mm. - Weight : 7.60 ±0.06 kg/m² : 4.0 mm. - Standard Panel Sizes:1250 ±20x2440±50 mm. - Tensile strength : >5.0 kg/mm² : 4.0 mm. - Yield strength : >4.5 kg/mm² : 4.0 mm. - Elongation : >5% - Impact Resistance : >1600 kg(Maximum Load) - Deflection temperature : >113 ℃ - Toxicity Test : PASS - With 10 years guarantee of material and 5 years guarantee of installation.	ECCA(European Coil Coating Association) AAMA(American Aluminium Manufacture Association) BS476 part6 BS476 part7 UL94 ASTM E8 ASTM D638 ASTM D732 ASTM D648 ASTM E119 ASTM E108
4	EXTRUDED ALUMINIUM LOUVERS	- Model : Aluminium grilles - Highest quality extruded aluminium alloy to type 6063 or aluminium sheet or plate type AA3105 or/and AA1100 - Systems consist of horizontal blades, vertical supports constructed - All aluminium louver supporting frames, blades end cap and associated components shall be manufactured from aluminium grade 6063-T5, AA3105, AA1100 or combination of above mentioned alloy. Recycled or reprocessed aluminium will not be acceptable - With the exception of fixing hardware,all components are to be manufactured from aluminium or stainless steel 304 to prevent corrosion - The aluminium extrusion main structure shall be not less than 2.00 mm.thk.or galvanized steel not less than 1.5 mm.thk - All aluminium louver major components shall be finished with a power coating system or acrylic stove enamel system paint finish - Finishing : Color specified later	AA(Aluminium Association,U.S.A.) EN Standard ASTM standard JIS standard CABINET NO. VS RUN NO. 1810

REMARK

- The CLC or AAC Block shall be not less than 10 cm. after plastered and shall be plastered on every sides
- For 3 Silicone sealants and adhesives shall be of the highest quality and tested for strength, adhesion, weatherproofing non-staining and durability for this specific application. Submit test data to the EGAT for approval. Provide custom color silicone as requireed by EGAT
- For 3 the silicone sealant shall have a 10 year guarantee of material
- Other standard except as specified must be submitted for approval by EGAT
- Other test reports may be required by EGAT if necessary

FOR BIDDING ONLY

ISO 9001 TSE-TSP : 2008

CAD CENTER

DO NOT AMEND MANUALLY

REV.NO.	JOB NO.	JOB DESCRIPTION	DRAWN	INITIATED	VERIFIED	VALIDATED	RECOMMENDED	CONCURRED	APPROVED	DATE
0	-	NEW STANDARD 115 kV GIS BUILDING	RUSSAMEE M.	JARUEK KH.	-	-	-	-	-	-

$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$Filename
$$$$$$$$$$$$$Date
$$$$$$$$$$$$Name

ELECTRICITY GENERATING AUTHORITY OF THAILAND

DRAWN: RUSSAMEE M.	VALIDATED: CHIEF , TRANSMISSION SYSTEM CIVIL ENGINEERING DEPARTMENT	DRAWING NAME: STANDARD 115kV GIS BUILDING	
INITIATED: JARUEK KH.	RECOMMENDED: ASSISTANT DIRECTOR,TRANSMISSION SYSTEM ENGINEERING DIVISION	DESCRIPTION OF DETAIL DRAWING: DRAWING LIST , SPECIFICATION	
VERIFIED	CONCURRED: DIRECTOR,TRANSMISSION SYSTEM ENGINEERING DIVISION		
APPROVED: ASSISTANT GOVERNOR-TRANSMISSION SYSTEM ENGINEERING	DATE 28/7/18	JOB NO. -	REPLACING DWG.NO.
		DWG.NO. SD-GIS-7-01A	01 REV. 05 0