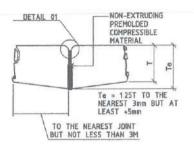
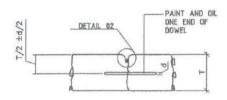


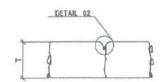
		DIMENSION	S AND SPACING	OFSTEEL DO	WELS	
PAVEMENT THICKNESS	DOWELS					
		CONTRACTION JOINTS	CONSTRUCTION JOINTS			rs
	DIAMETER (LENGTH	SPACING	DIAMETER #	LENGTH	SPACING
.5"-12" (191mm-305mm)	16 mm DRSB	18 in (460 mm)	12 in (305 mm)	1ln (25 mm)	18 in (460 mm)	12 in (305 mm)



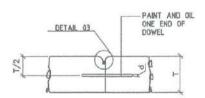
TYPE A (TA) - THICKENED EDGE (ISOLATION JOINT)



TYPE C (TC) - DOWELED CONTRACTION



TYPE D (TD) - DUMMY CONTRACTION

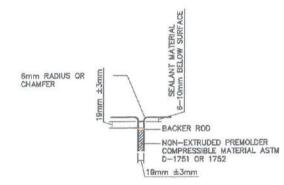


TYPE E (TE) - DOWELED CONSTRUCTION

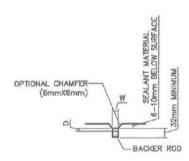


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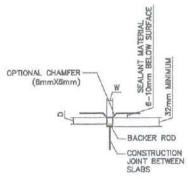
- 1. ALL STEEL DOWELS SHALL BE SUPPORTED AND HELD IN PLACE IN AN APPROVED ASSEMBLY.
- 2. ALL STEEL DOWELS SHALL BE OF GRADE 60 (60,000 psi / 414 MPa).
- 3. ALL FORMED JOINTS SHALL BE FINISHED WITH RADIUS OF 6mm OR 13mm.
- 4. ALL GROOVES OF CONTRACTION JOINTS SHALL BE SAWED WITHIN 24 HOURS.
- 5. WHERE PAVING OPERATIONS ARE DELAYED OR STOPPED, PROVIDE DOWELED CONSTRUCTION JOINT.
- CONCRETE BLOCKING SHALL BE 3.0m BY 3.0m, UNLESS OTHERWISE GOVERNED BY ABUTTING EDGE.
 ALL PAYING JOINTS SHALL BE FILLED WITH JOINT SEALANT AS SPECIFIED.
- B. PROVIDE PIN HOLDERS EVERY 1.5M AT TRANSVERSE JOINTS



DETAIL 01

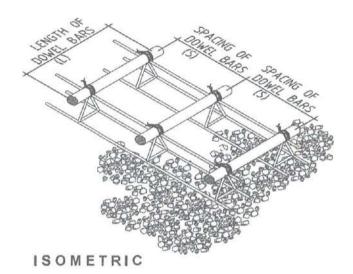


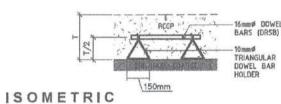
DETAIL 02



DETAIL 03



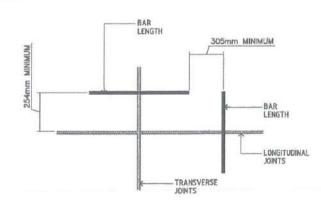






SECTION

DOWEL BAR HOLDER



POSITION OF DOWELS
AT EDGE OF JOINT





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CIVIL AVIATION AUTHORITY OF THE PHILIPPIN AERODROME DEVELOPMENT AND MANAGEMENT SERVI NAIA ROAD, 1346 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

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CHECKED BY:	EJDJR	- The

REVIEWED



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ARNEL F. BORLADO
Department Manager III, AED-ADN

RECOMMENDED APPROVAL



APPROVED:

CAPTAIN MANUEL ANYONIO L. TAMA

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BORONGAN AIRPORT DEVELOPMENT PROJECT COMPLETION OF VEHICULAR PARKING AREA

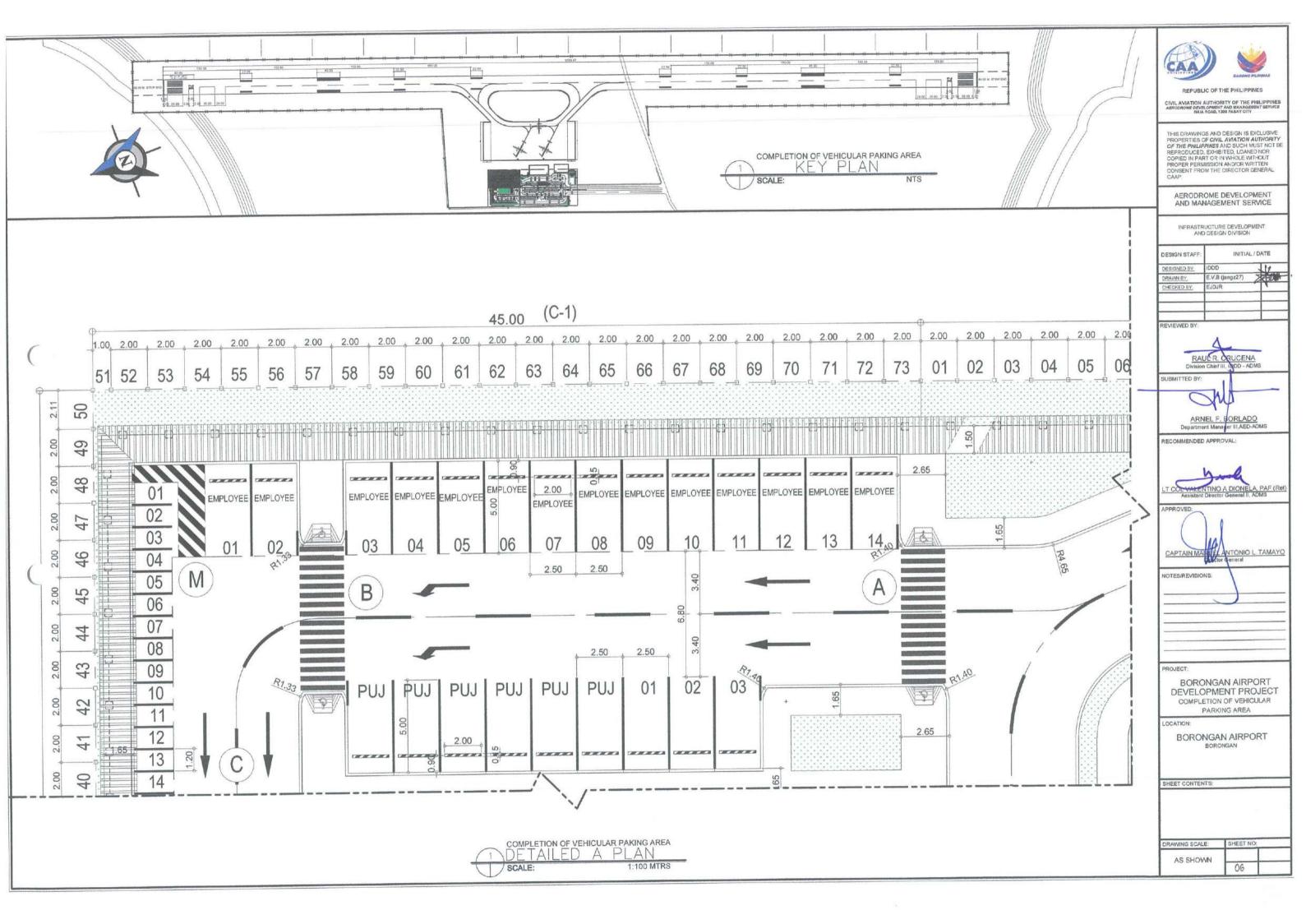
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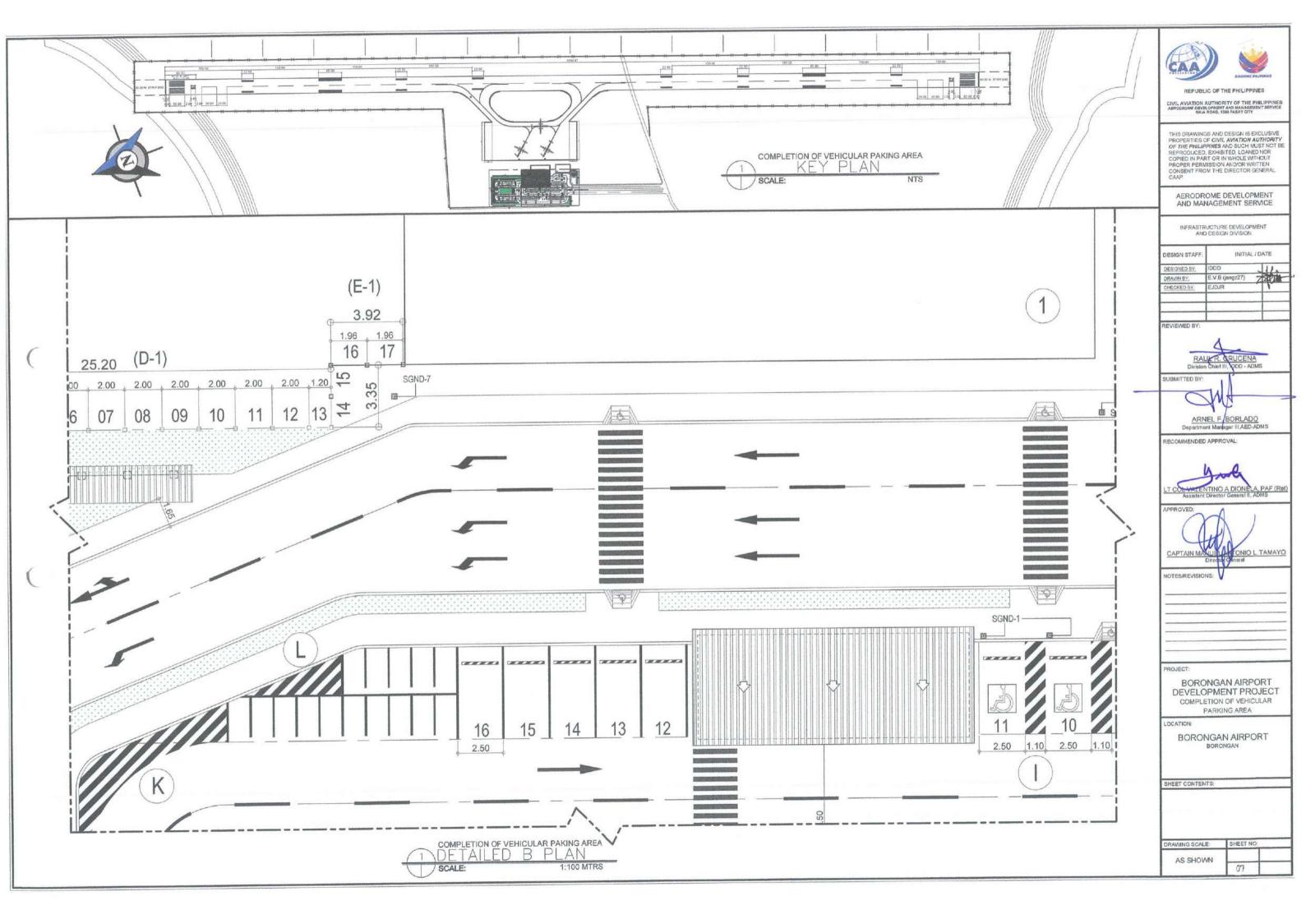
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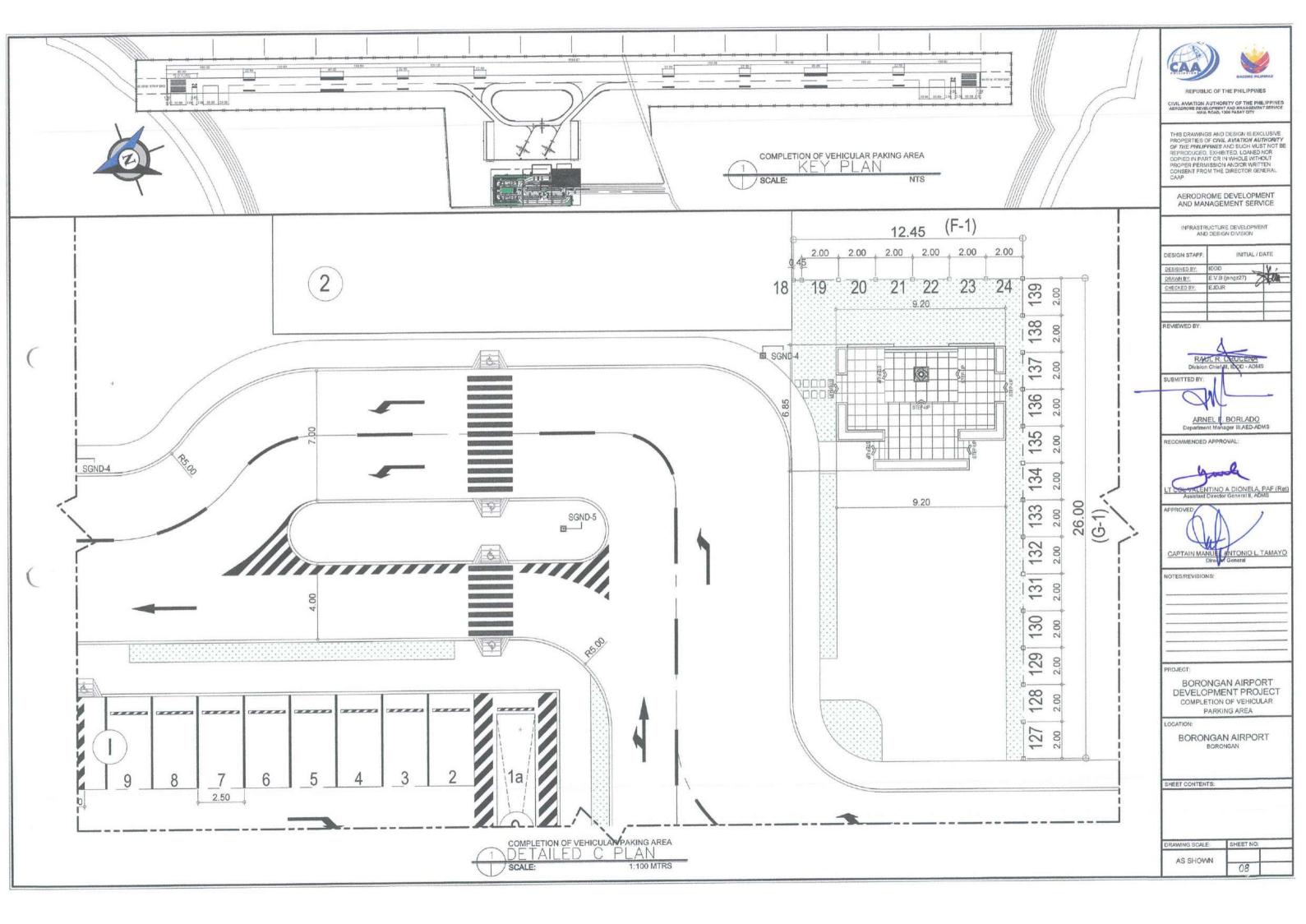
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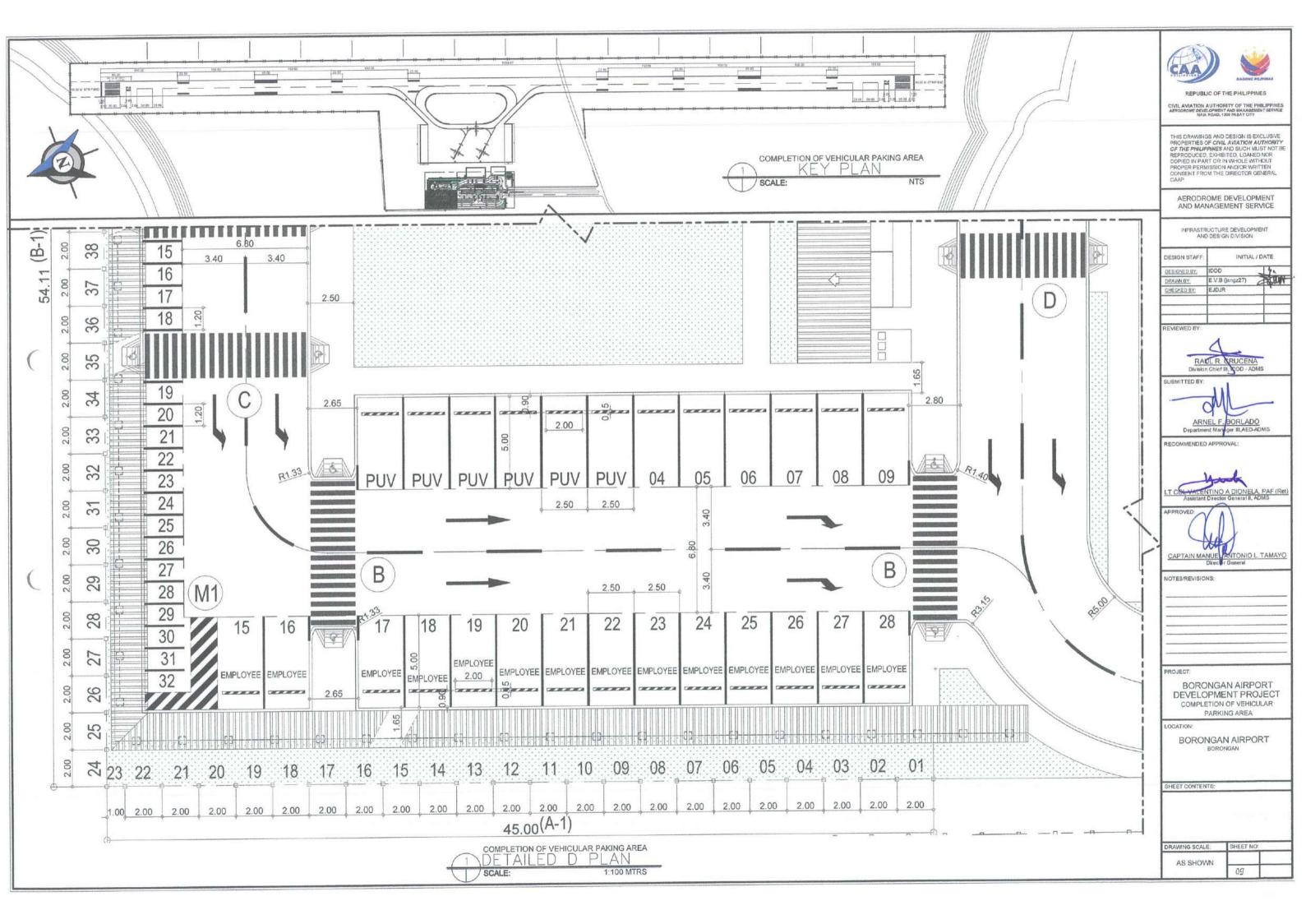
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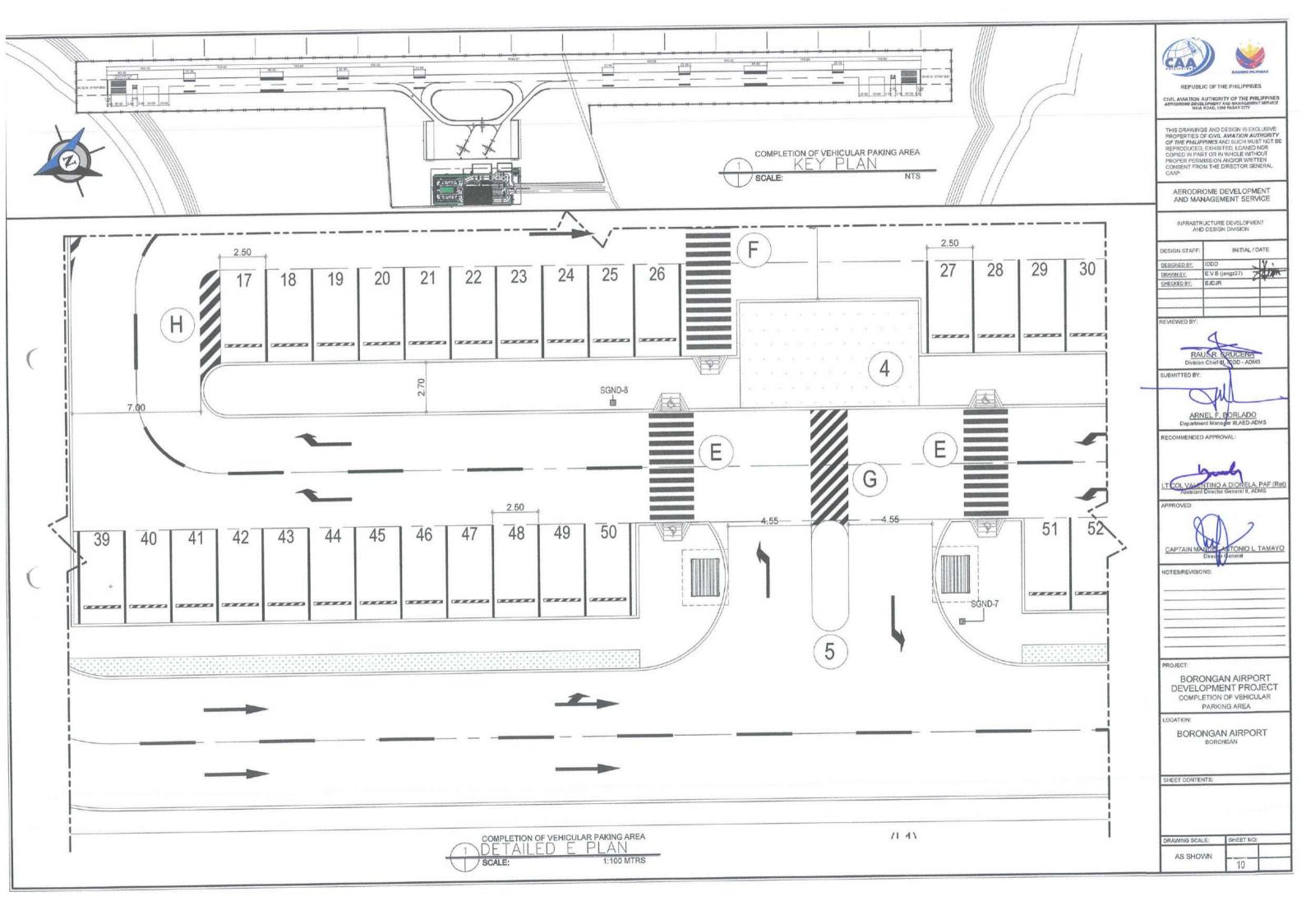
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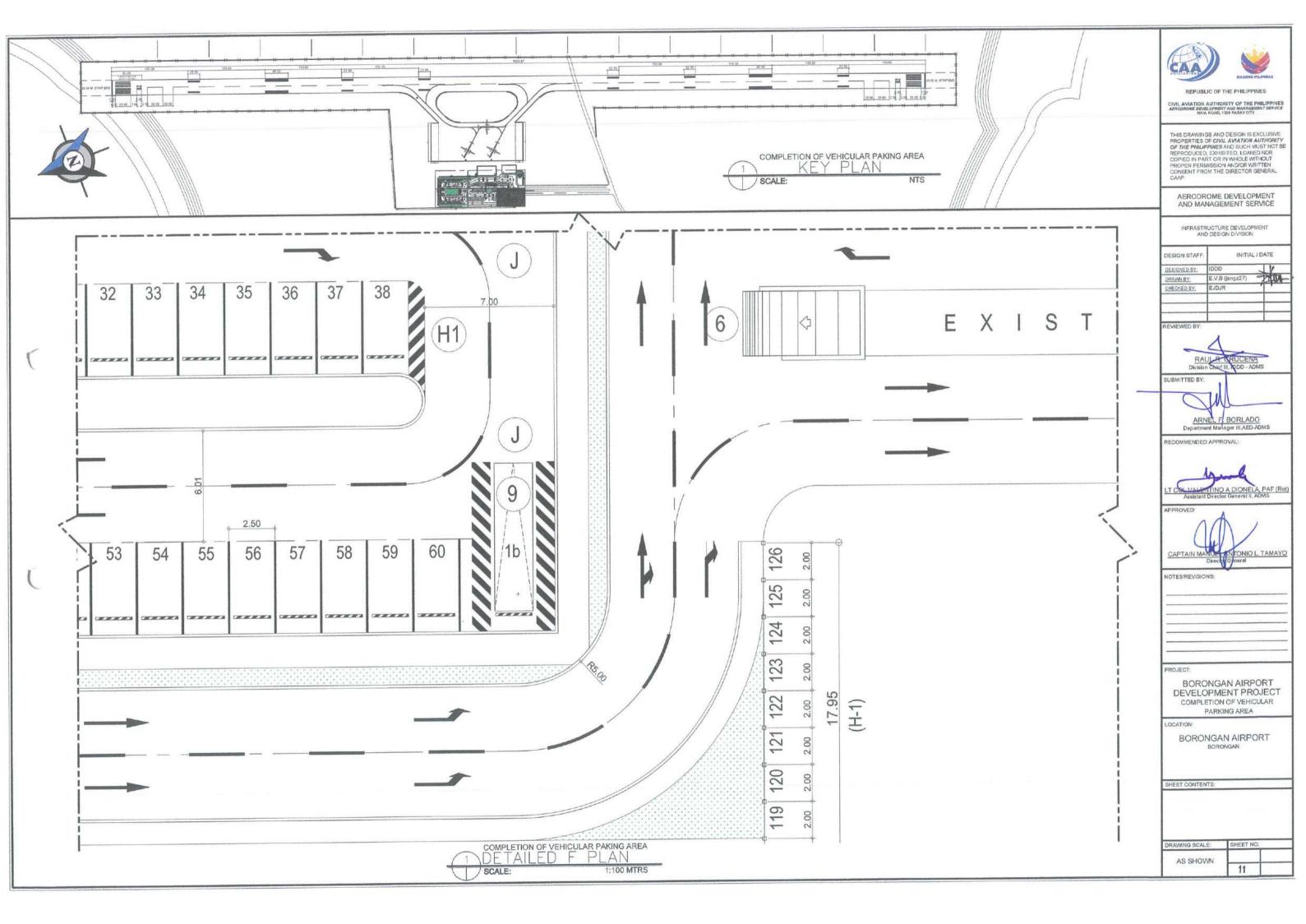


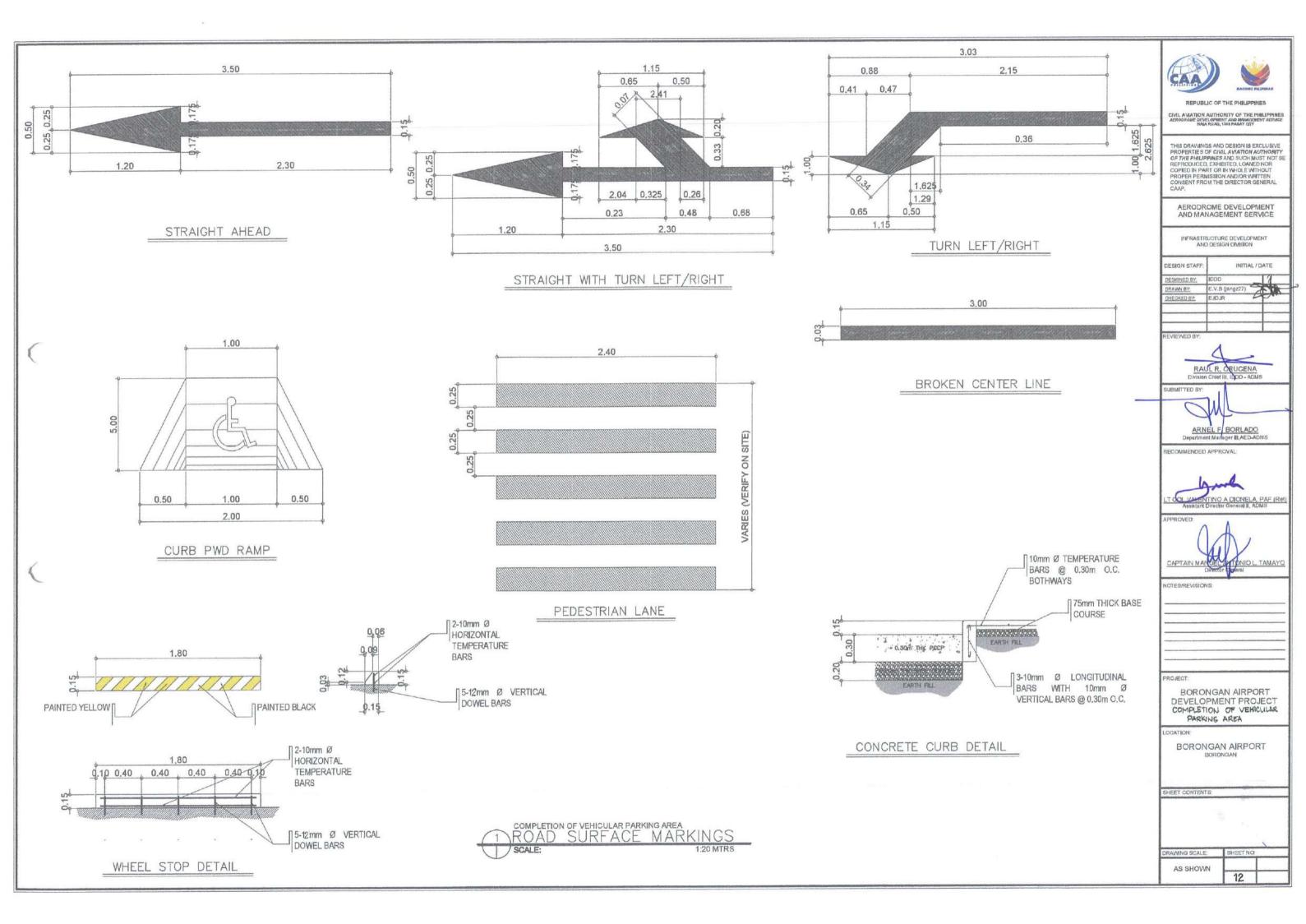


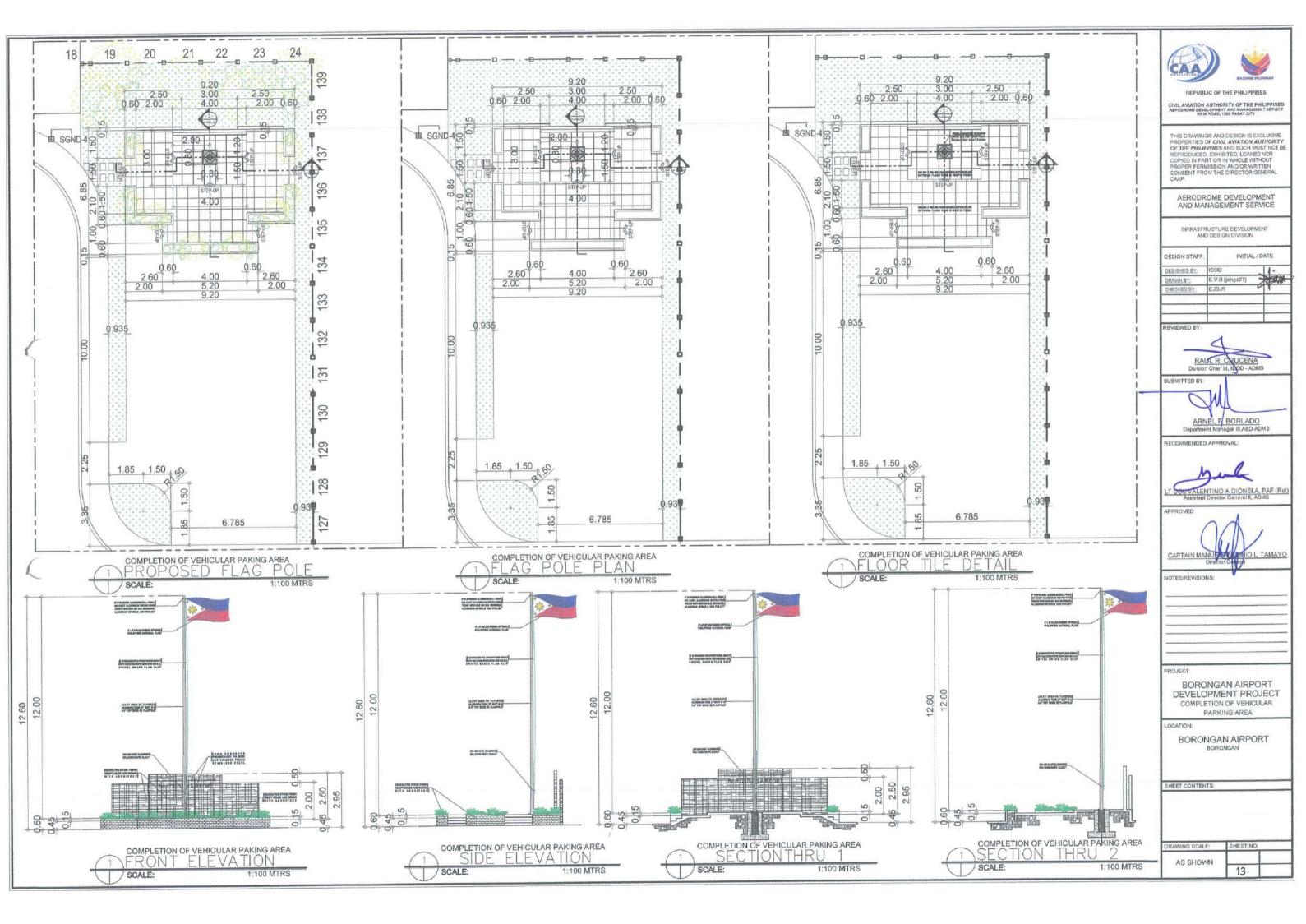


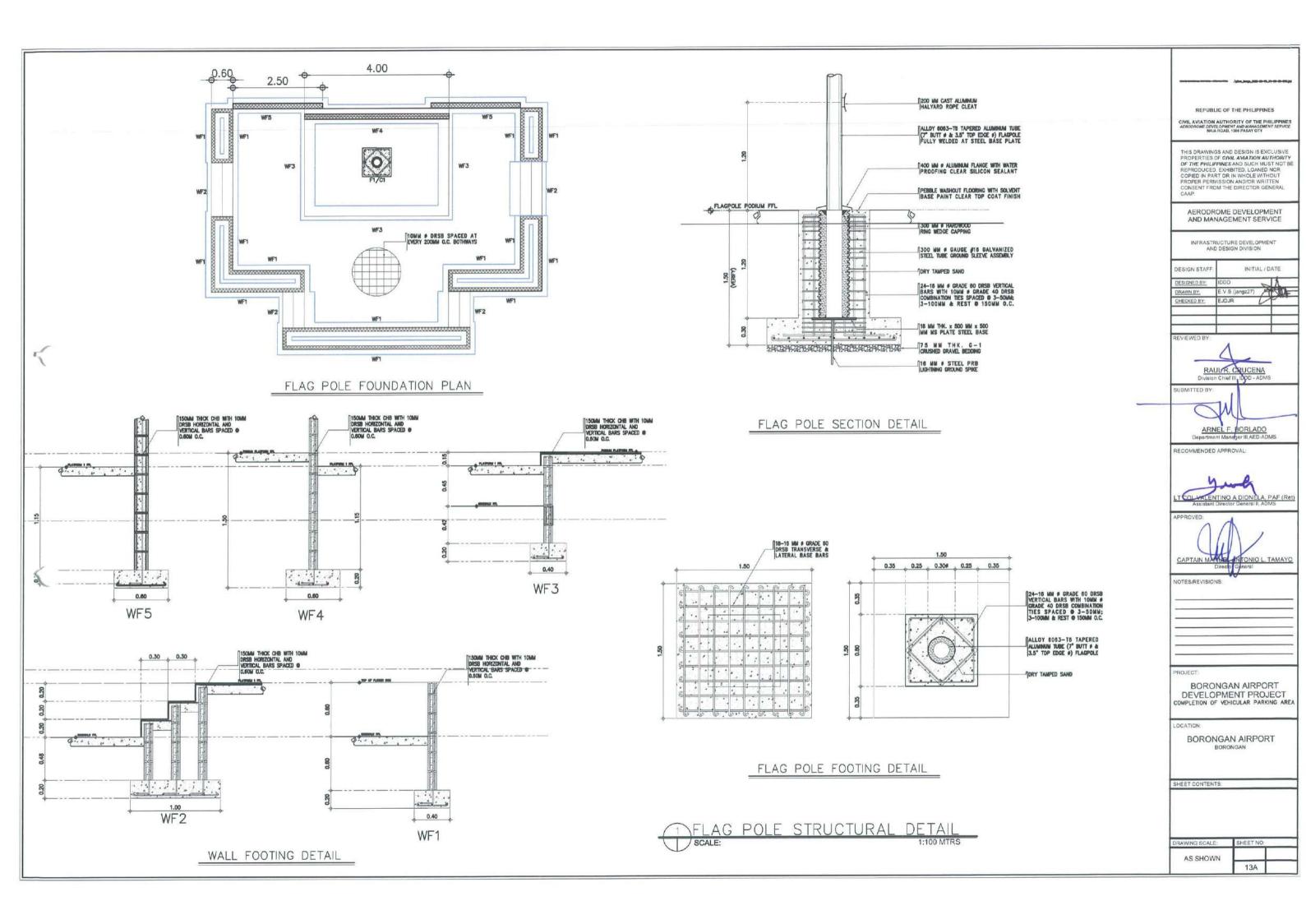


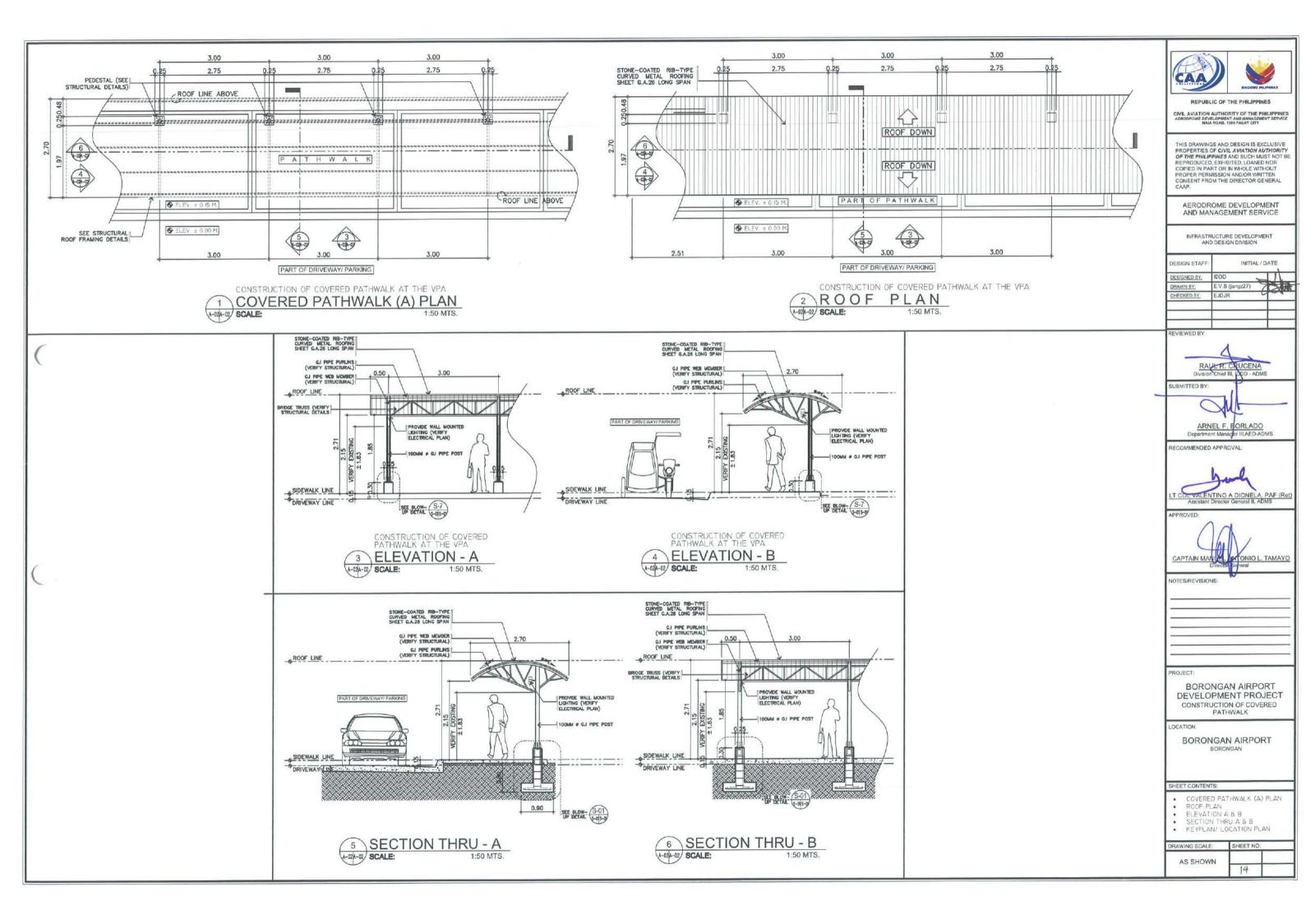


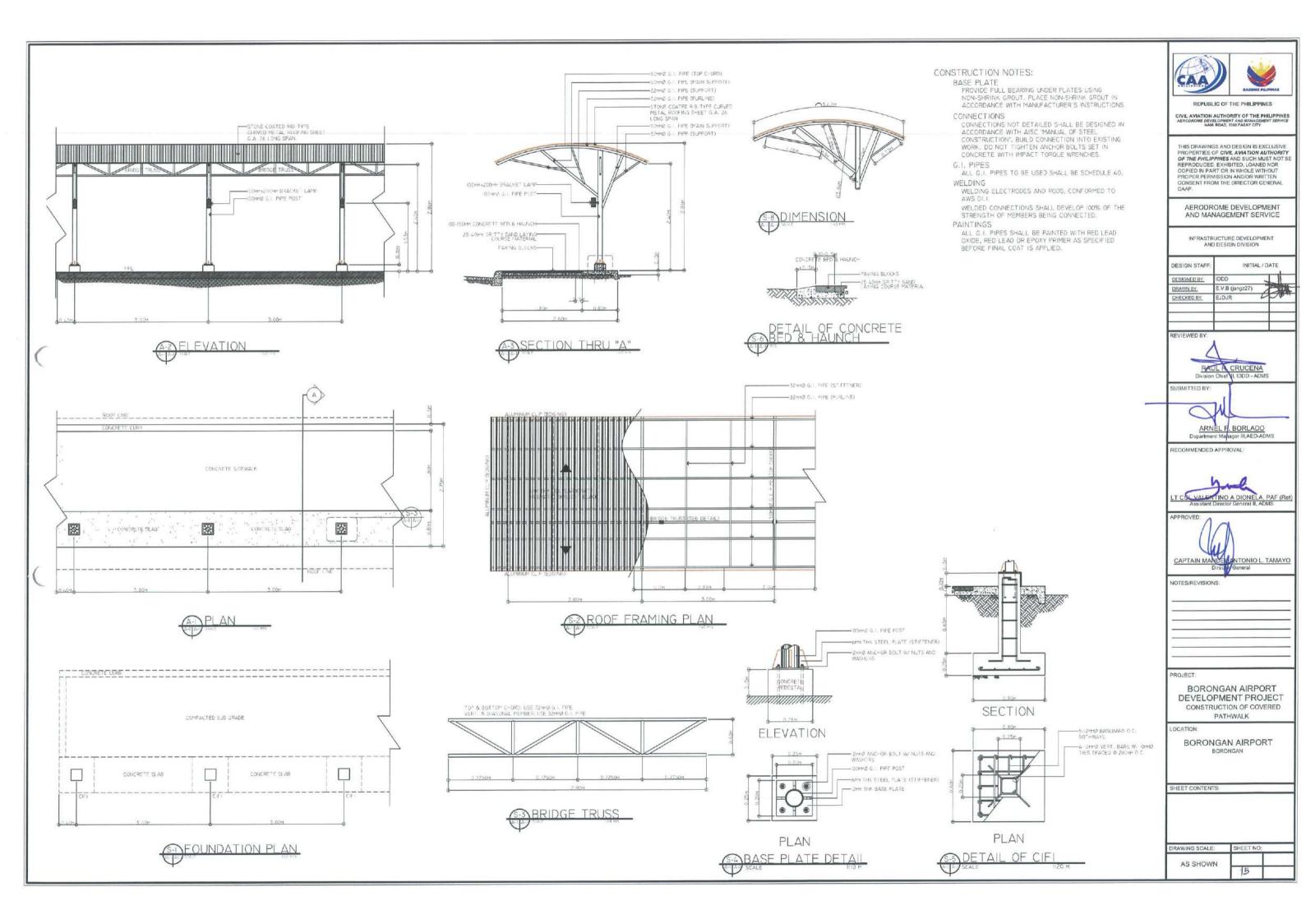


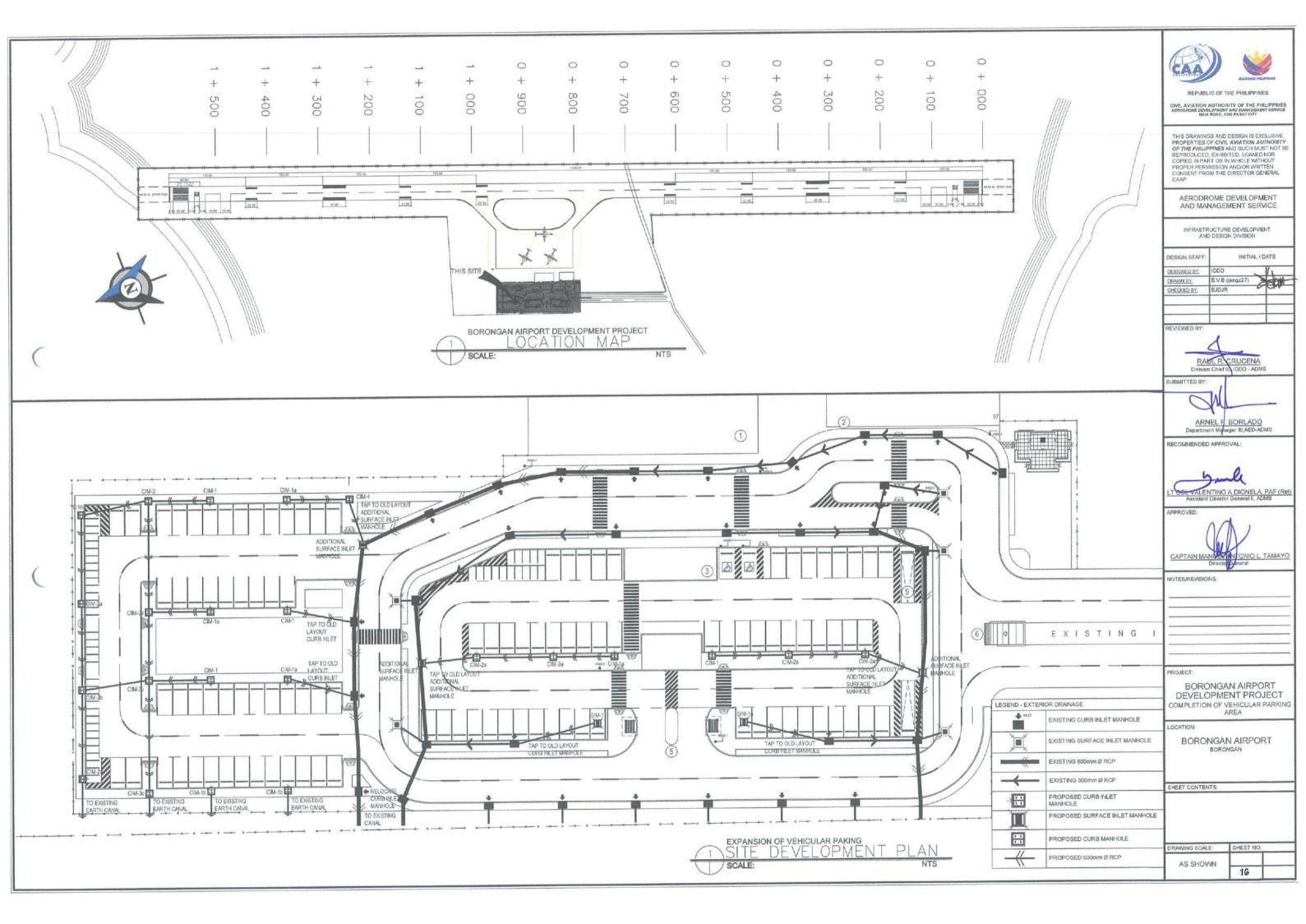


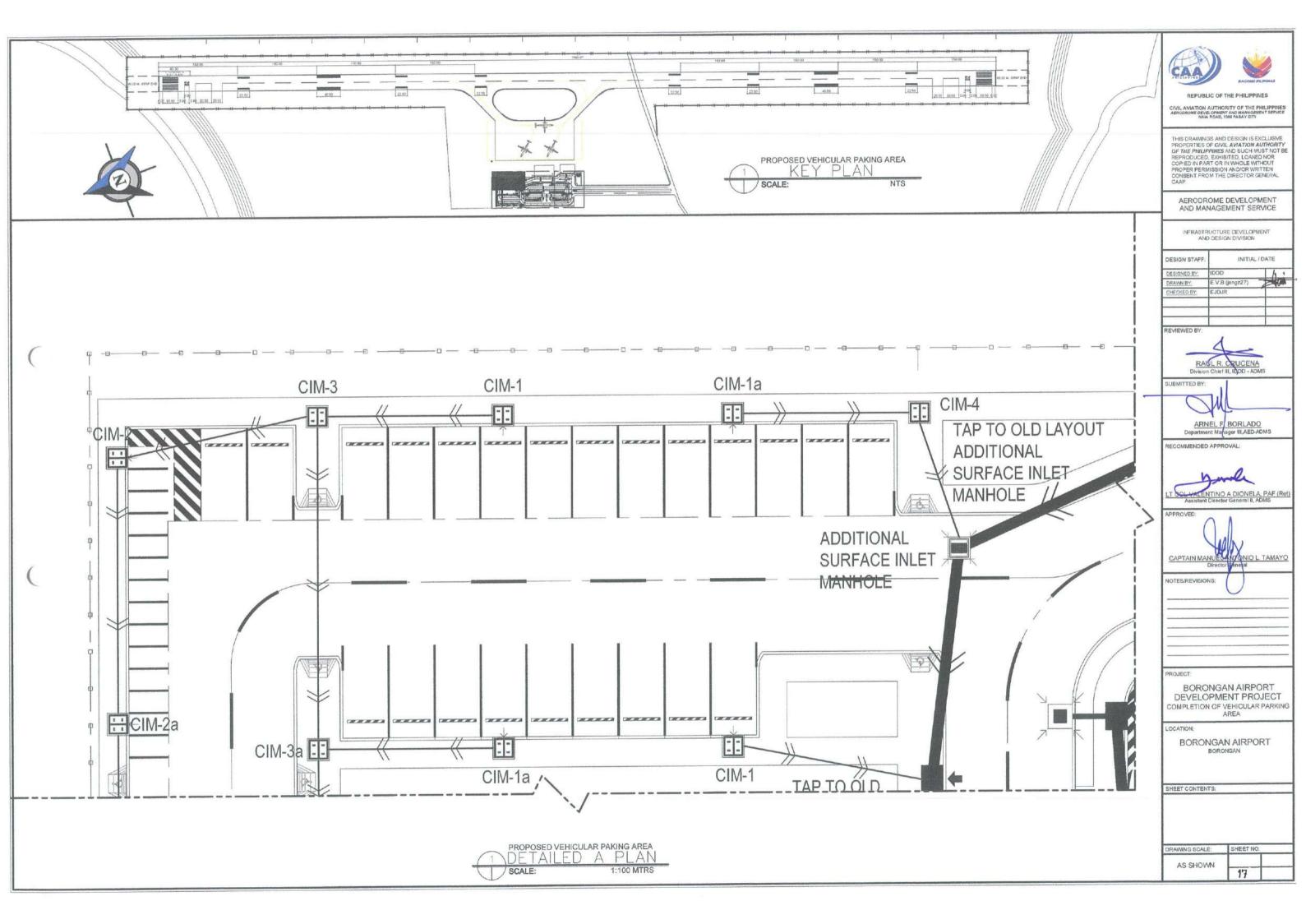


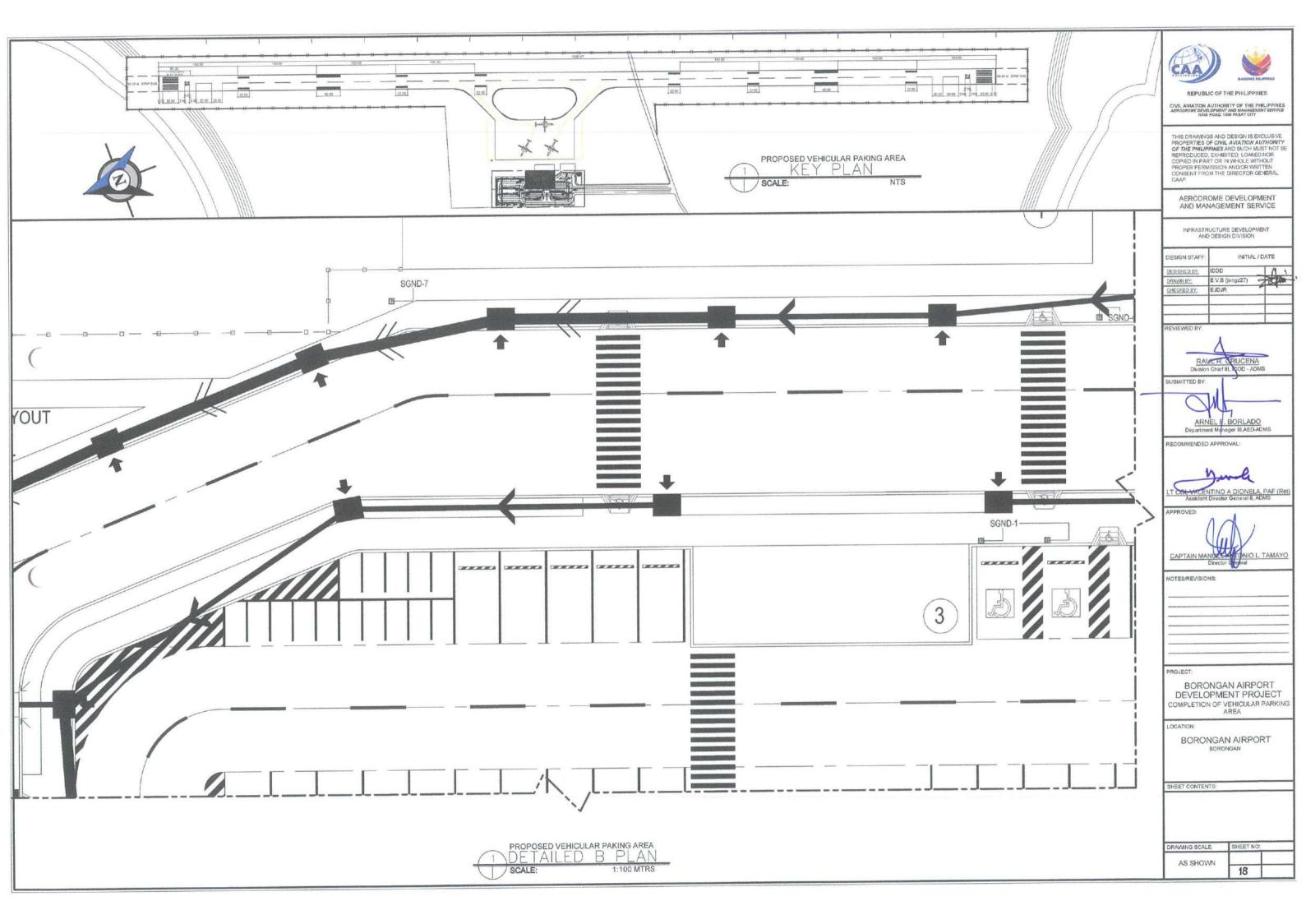


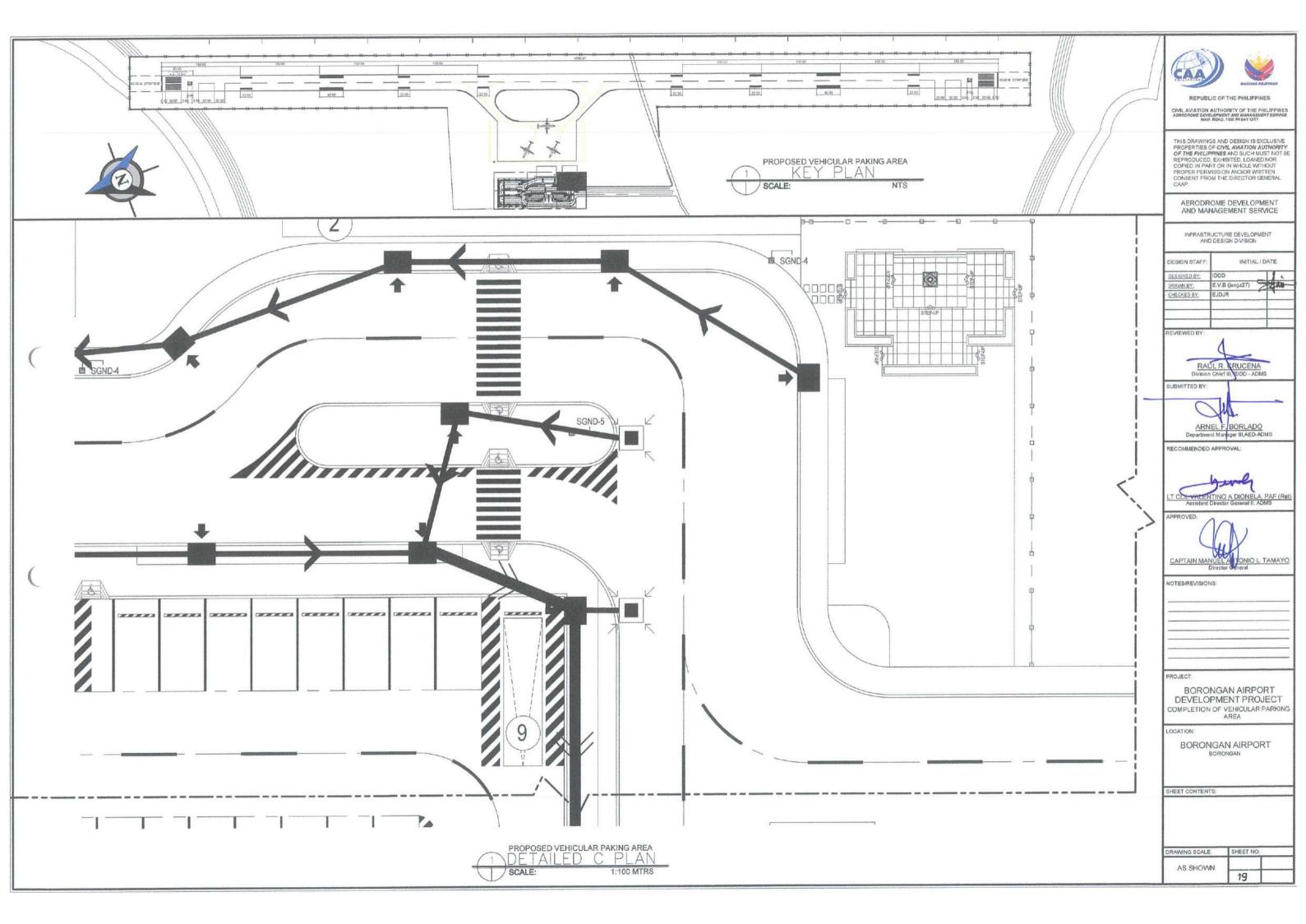


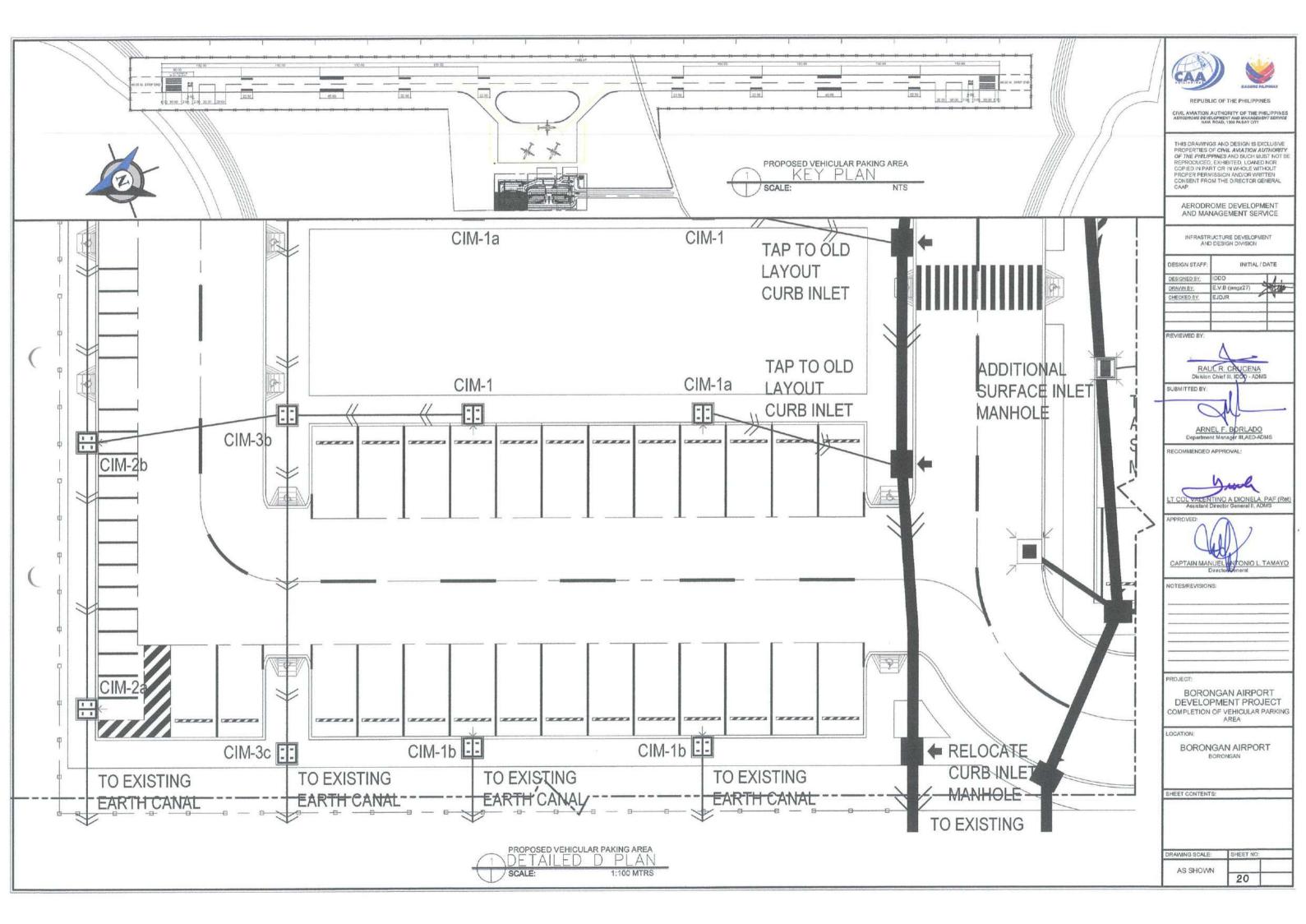


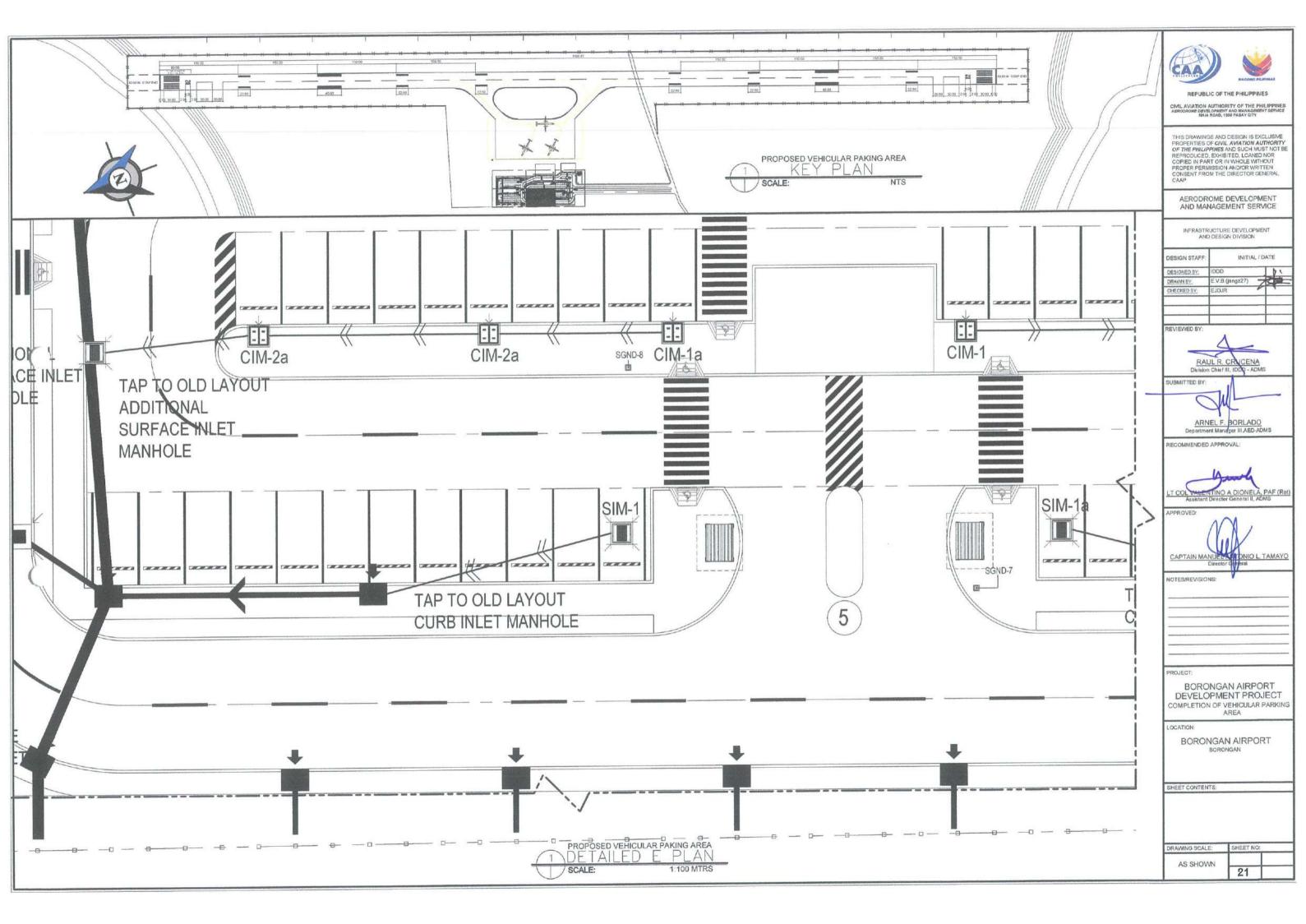


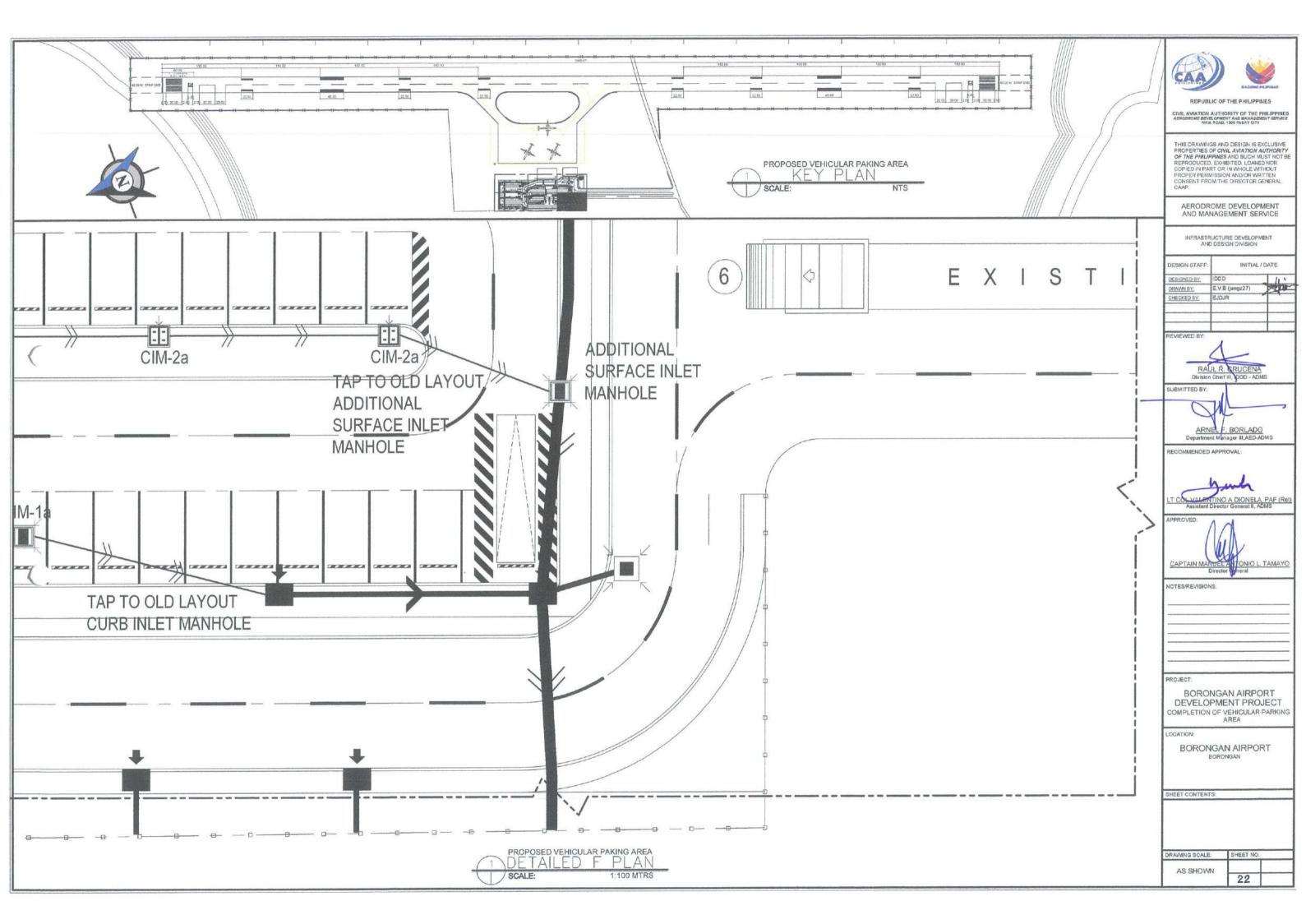


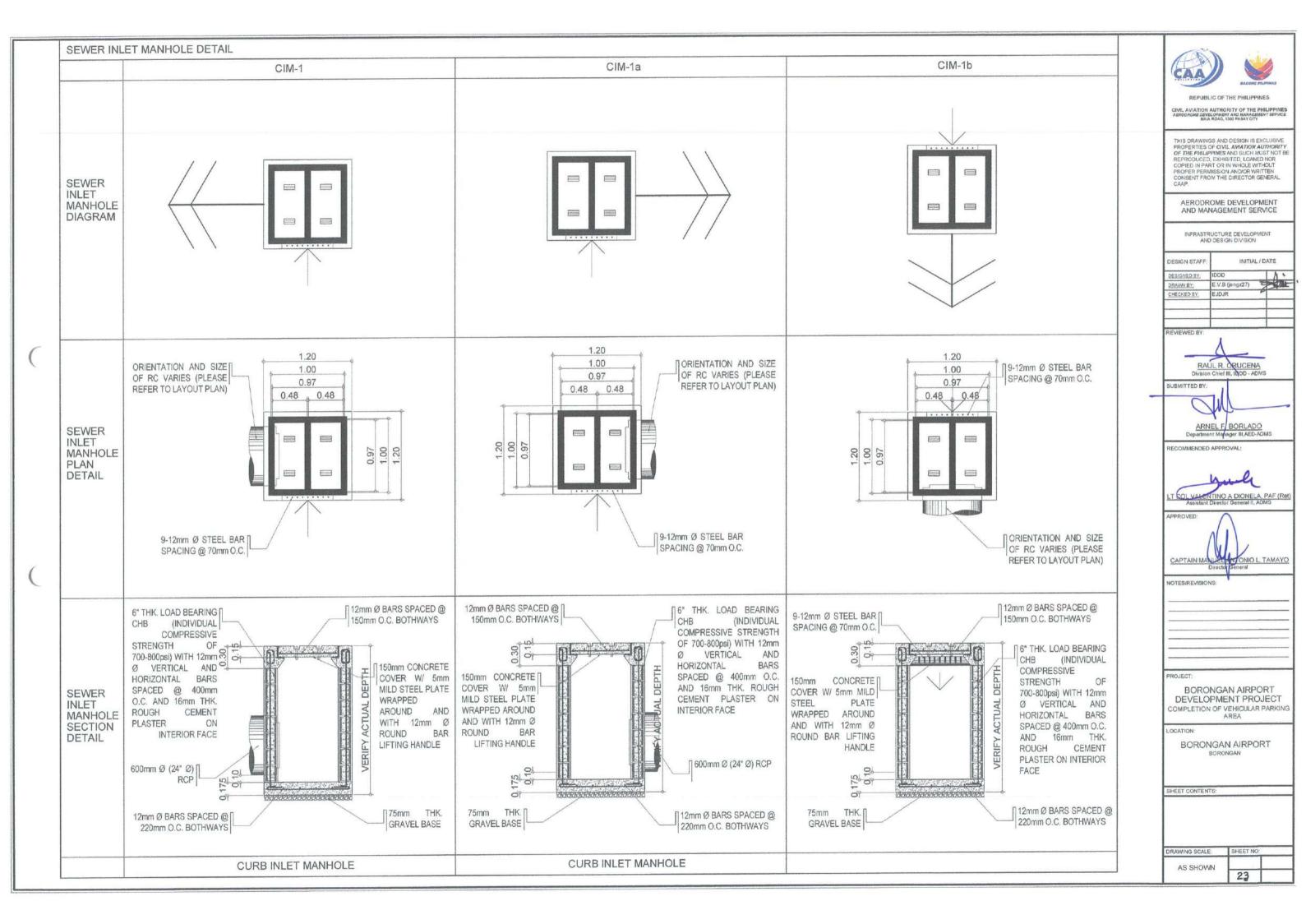


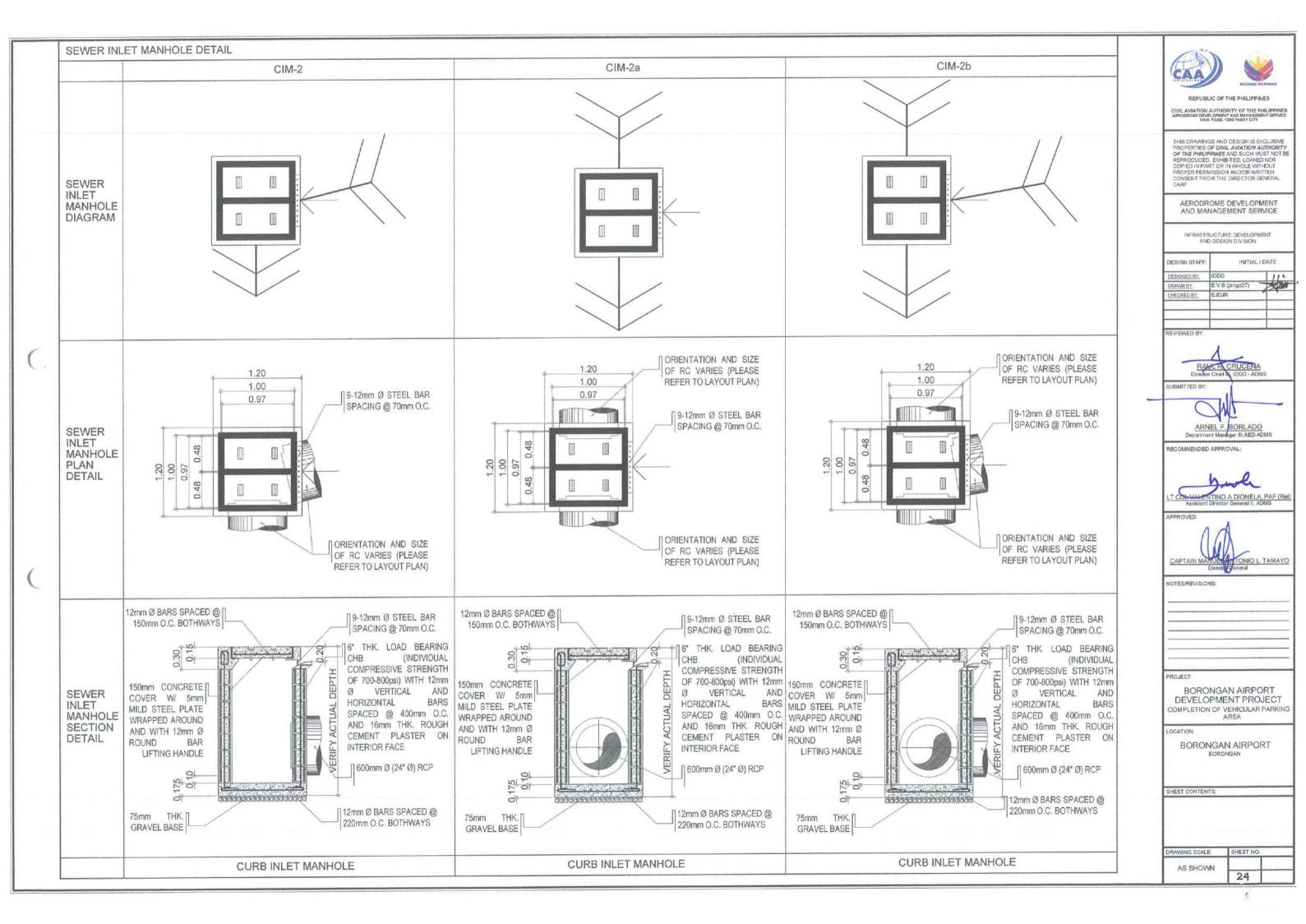


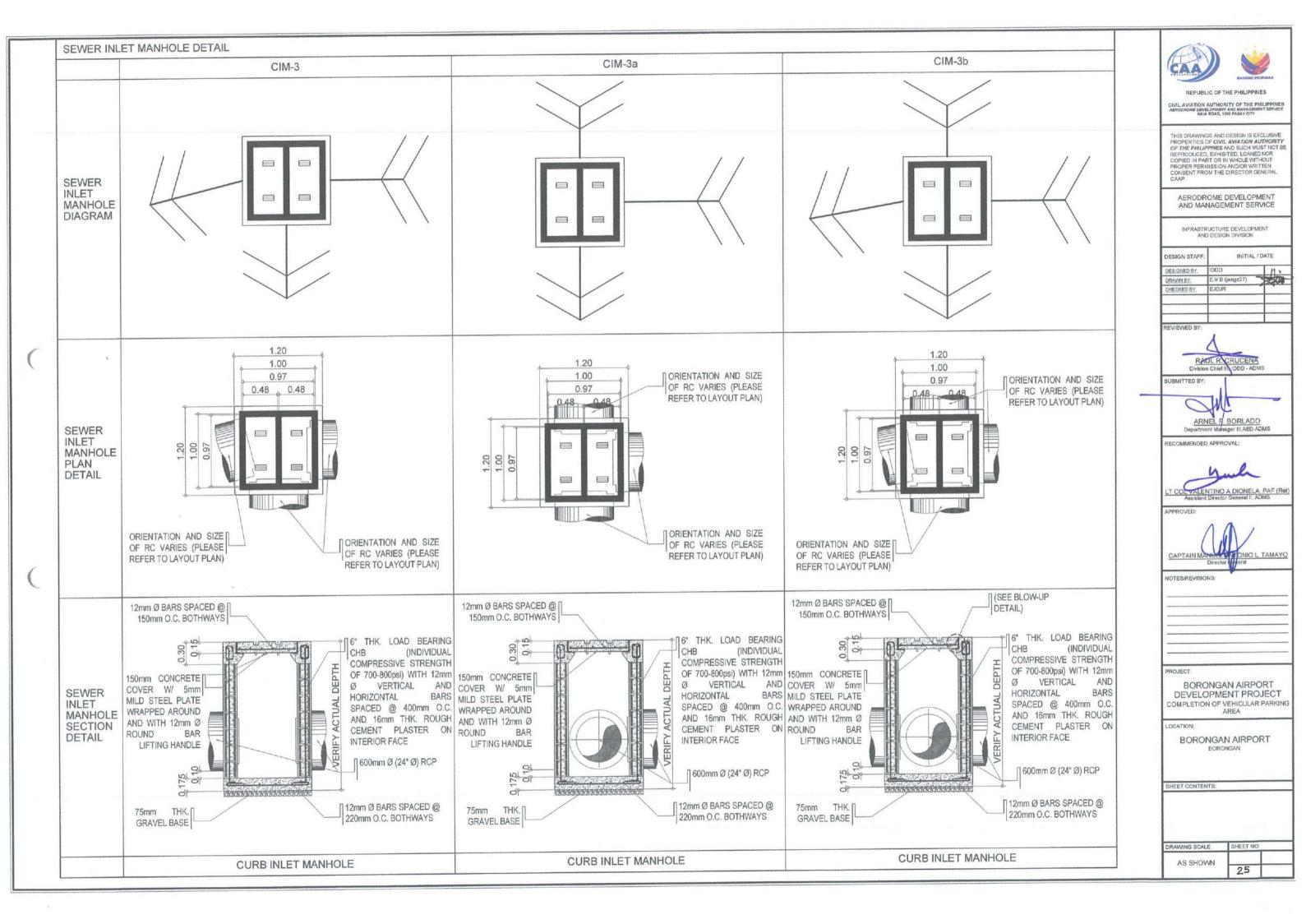


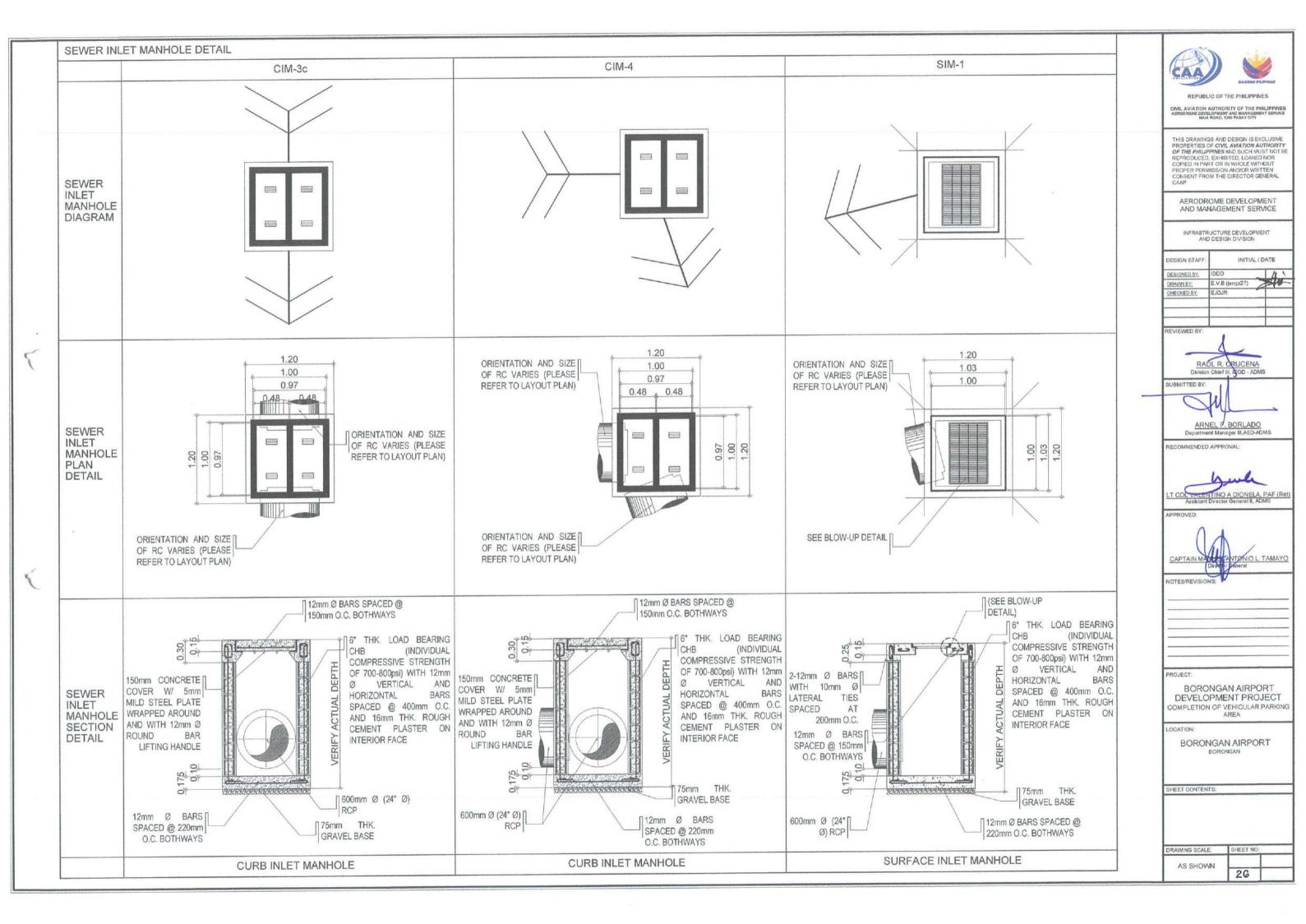


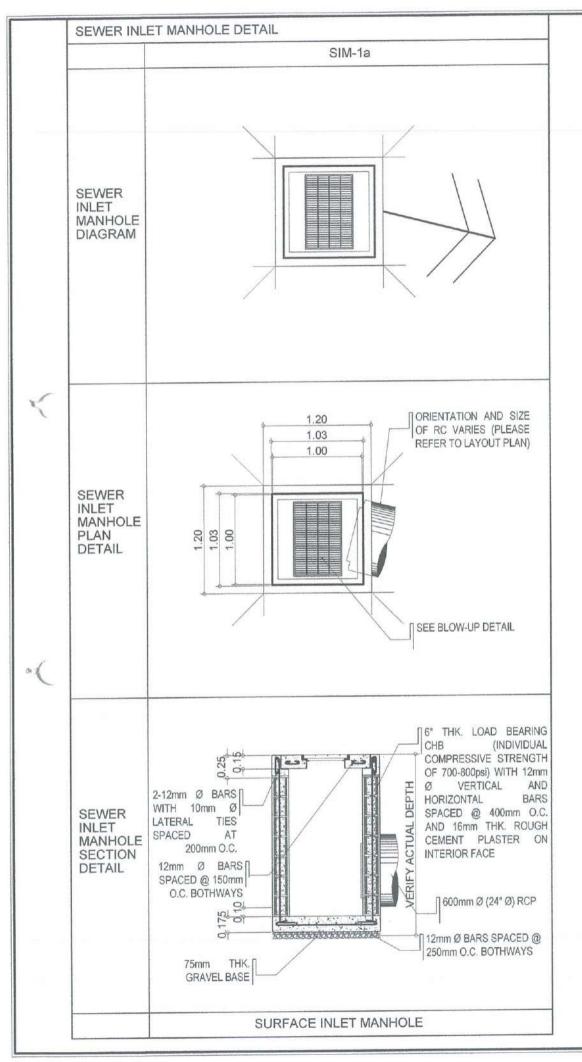






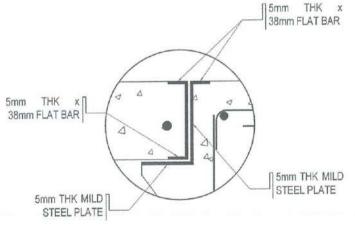




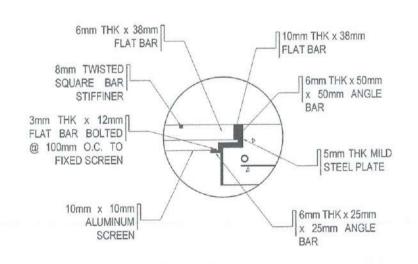


	DIMENSION				
INLET MANHOLE	WIDTH (M)	LENGTH (M)	DEPTH (M)	QUANTITY	
CURB INLET MANHOLE (CIM)					
CIM - 1	1.20	1.20	verify on site	4	
CIM - 1a	1.20	1.20	verify on site	4	
CIM - 1b	1.20	1.20	verify on site	2	
CIM - 2	1.20	1.20	verify on site	1	
CIM - 2a	1.20	1.20	verify on site	6	
CIM - 2b	1.20	1.20	verify on site	1	
CIM - 3	1.20	1.20	verify on site	1	
CIM - 3a	1.20	1.20	verify on site	1	
CIM - 3b	1.20	1.20	verify on site	1	
CIM - 3c	1.20	1.20	verify on site	1	
CIM - 4	1.20	1.20	verify on site	1	
SURFACE INLET MANHOLE (CIM)					
SIM - 1	1.20	1.20	verify on site	1	
SIM - 1a	1.20	1.20	verify on site	1	

WALET	EXISTING CURB INLET MANHOLE
	EXISTING SURFACE INLET MANHOLE
(EXISTING 600mm Ø RCP
+	EXISTING 300mm Ø RCP
¥::	PROPOSED CURB INLET MANHOLE
	PROPOSED SURFACE INLET MANHOLE
	PROPOSED CURB MANHOLE
-((_	PROPOSED 600mm Ø RCP







SURFACE INLET MANHOLE





REPUBLIC OF THE PHILIPPINES

CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
AEROPROME DE VELOPMENT AND MANAGEMENT SERVICE
NAME ROLD, 1959 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

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SUBMITTED BY:



RECOMMENDED APPROVAL



APPROVED:

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CAPIN	MANUEL ANTONIO L. TAMAYO

NOTES/REVISIONS:

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BORONGAN AIRPORT DEVELOPMENT PROJECT COMPLETION OF VEHICULAR PARKING AREA

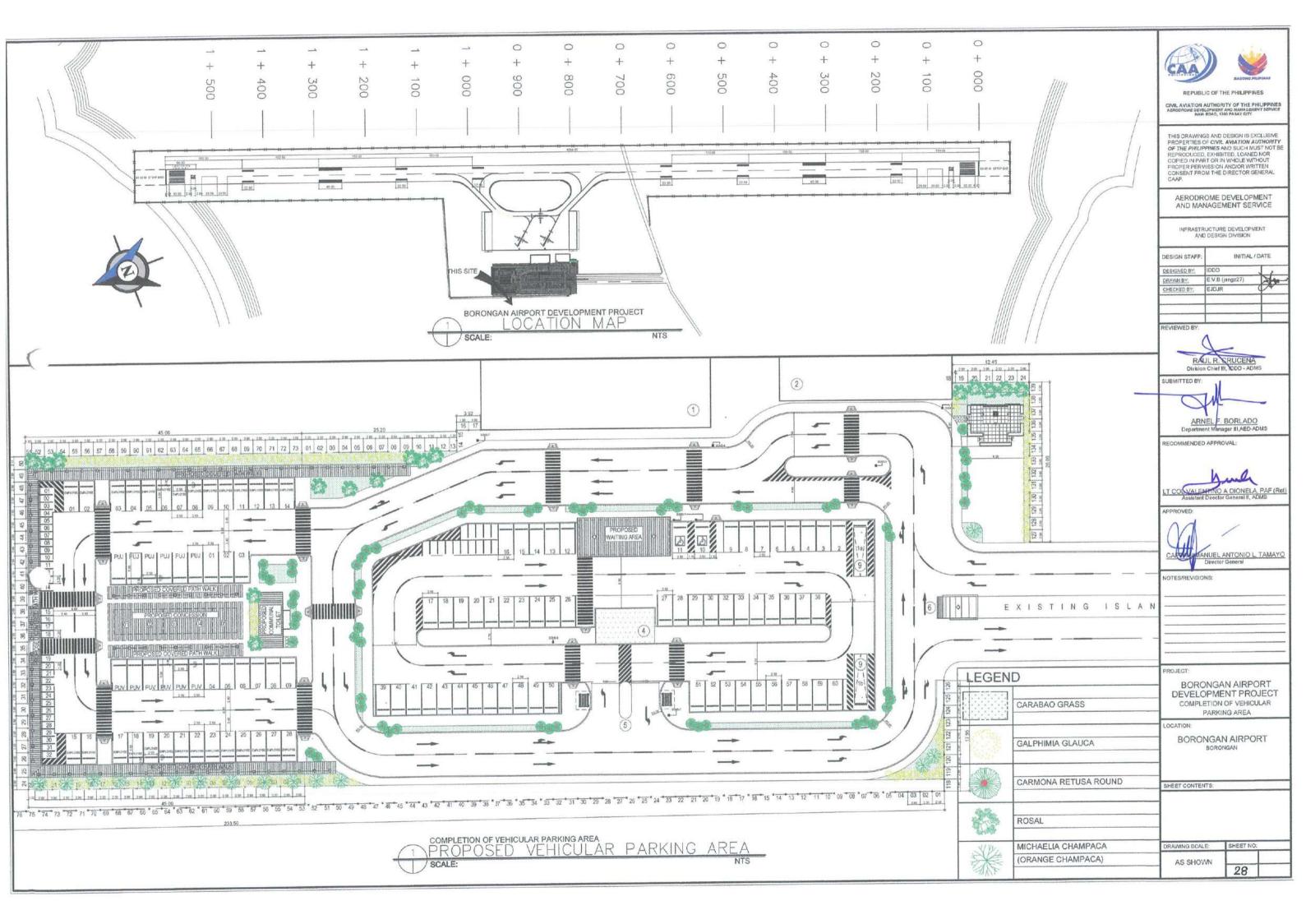
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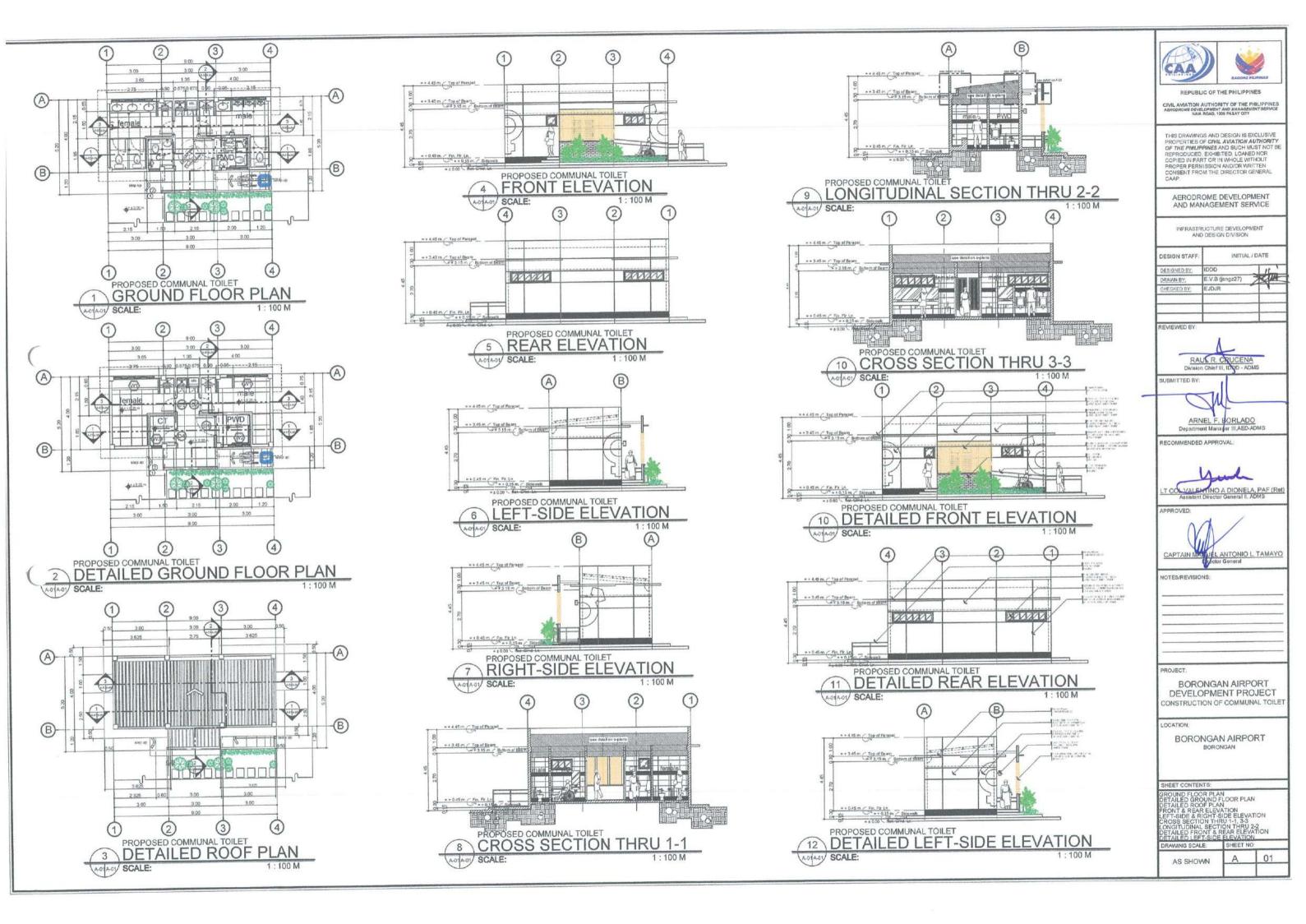
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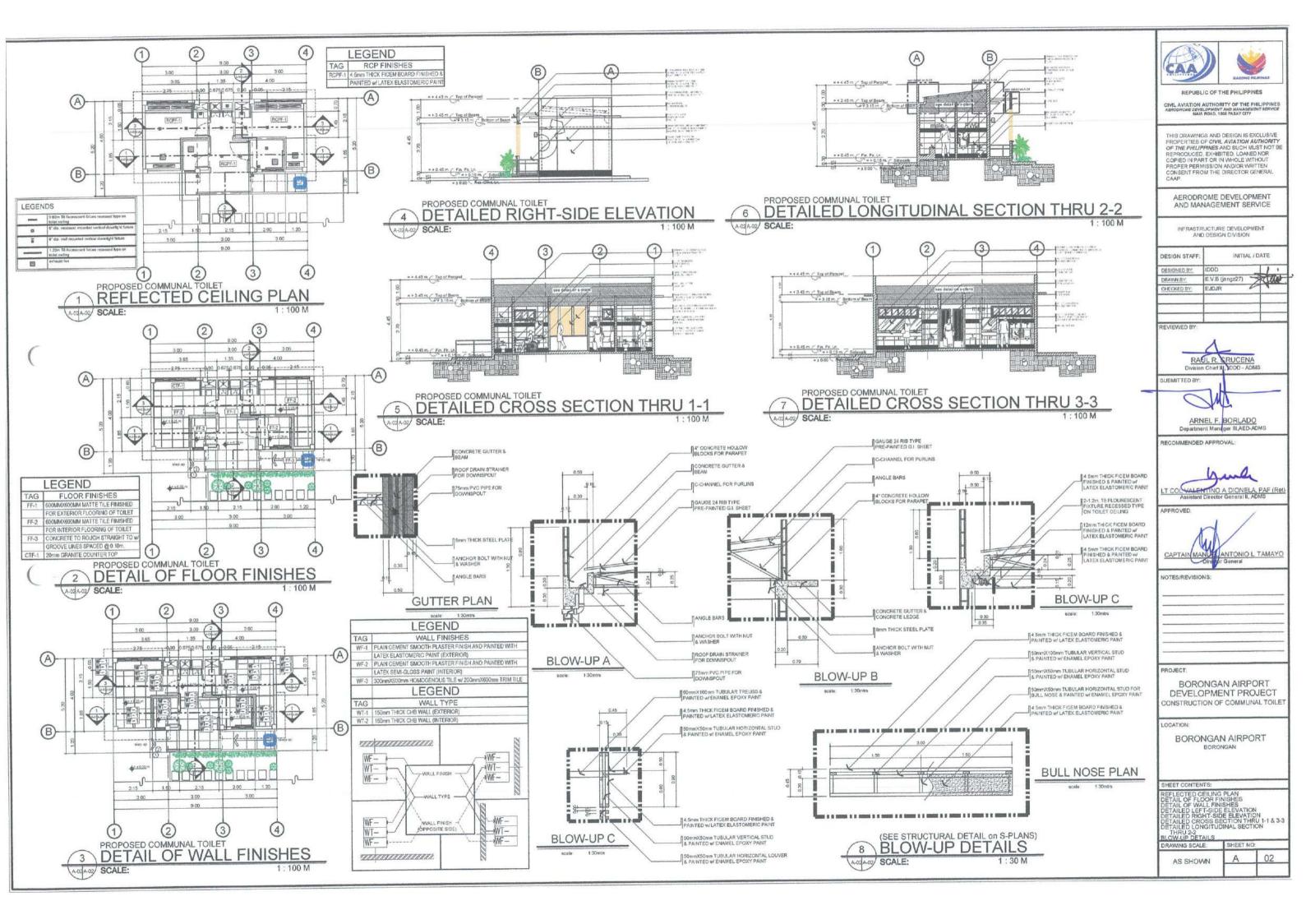
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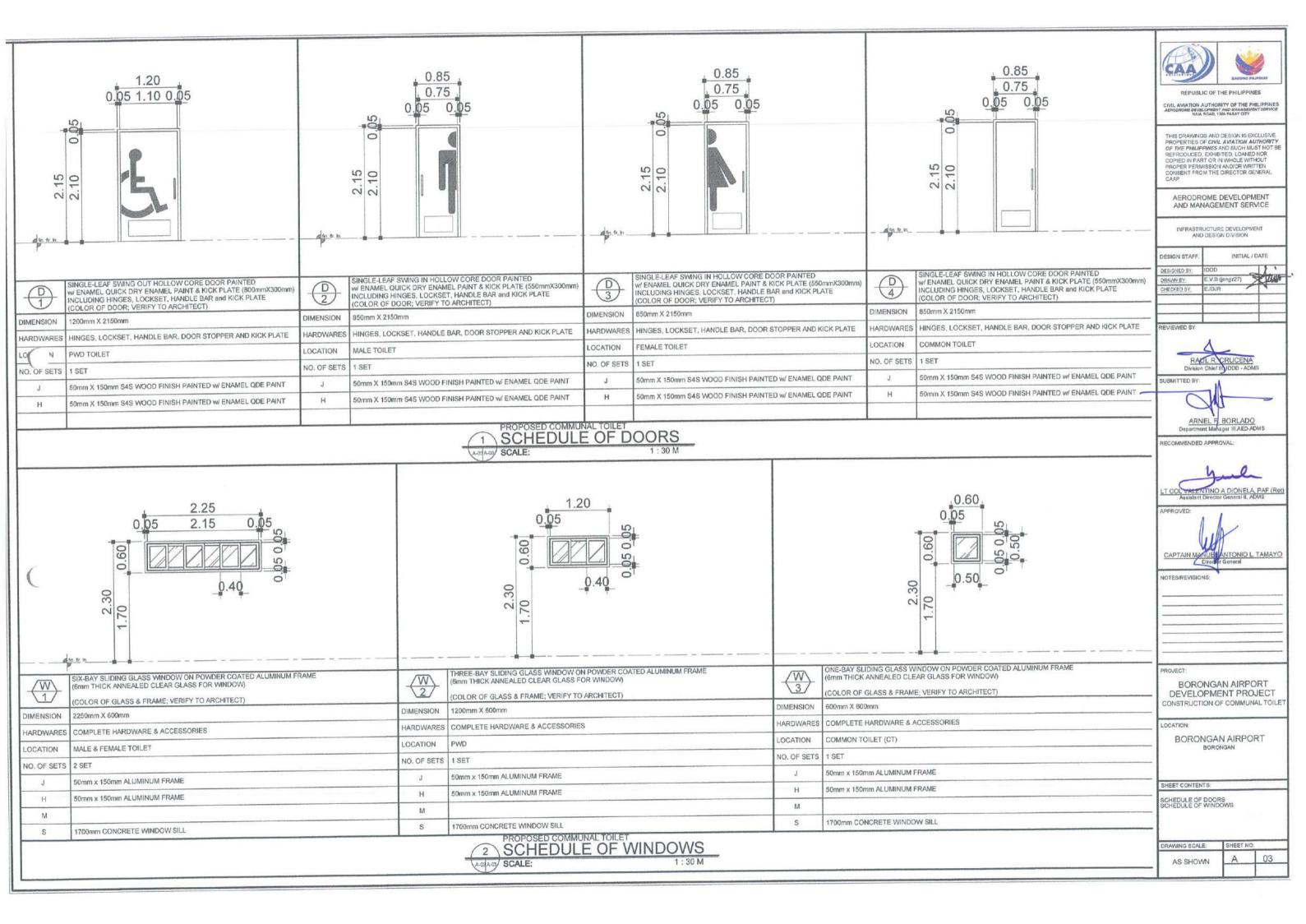
DRAWING SCALE: SHEET NO:

AS SHOWN 27









CONSTRUCTION NOTES:

STEEL:

REINFORCING STEEL BAR:

PROVIDE THE FOLLOWING UNLESS INDICATED OTHERWISE:

ALL MAIN REINFORCING BARS SHALL BE DEFORMED CONFORMING TO ASTM A706.

B. YIELD STRENGTH

THE MINIMUM YIELD STRENGTH OF REINFORCEMENT TO BE USE CORRESPONDING TO THE STRUCTURAL MEMBER SHALL BE ENUMERATED BELOW:

FOOTINGS/ FOOTING TIE BEAMS COLLIMNS/ REAMS

Ev = 60 000 Ps

SLABS (ON GRADE AND SUSPENDED)

Ev = 40 000 Ps ASTM 36 GRADE 36 (Fy = 248 KPa, 36 Ksi) FOR ROOF RAFTERS.

STEEEL TRUSS:

A. DOUBLE ANGLE SHALL BE PLACED BACK TO BACK WITH 6mm THK GUSSET PLATE AT CONNECTION.

B SPLICE PLATE SHALL BE 10mm THK STEEL PLATE.

C. WELDED CONNECTION SHALL DEVELOP 125% OF THE STRENGTH OF MEMBERS BEING CONNECTED

@ BOLTS, NUTS, AND WASHERS:

PROVIDE THE FOLLOWING UNLESS INDICATED OTHERWISE:

A. BOLTS: ASTM A 307, GRADE A; ASTM A 325 TYPE 1 OR TYPE II.

B. NUTS: ASTM A 563, GRADE A; HEAVY HEX STYLE, EXCEPT NUTS UNDER 1-1/2 INCH MAYBE PROVIDED IN HEX STYLE.

C. WASHERS: ANSI B 18.22.1, TYPE B.

CONCRETE

'X DESIGN SHALL CONFORM TO ACI 211.1 AND ACI 301. THE MINIMUM 28-DAY CYLINDER COMPRESSIVE

RENGTH SHALL BE: FC = 24.00MPa (8500Psi) FOUNDATIONS, COLUMNS, BEAMS, SUSPENDED SLABS.

Fc' = 24.00 MPa (3500Psi) SLAB ON FILL, GRADED SLABS.

* CEMENT

CEMENT FOR THE CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF "SPECIFICATIONS FOR PORTLAND CEMENT" (ASTM C150, LATEST EDITION).

*** CONCRETE AGGREGATES**

A. FINE AGGREGATE

FINE AGGREGATES SHALL CONSIST OF NATURAL PORAC SAND. FINE AGGREGATES SHALL CONSIST OF HARD, TOUGH, DURABLE, UNCOATED PARTICLES. THE STIPULATED PERCENTAGE OF FINES IN THE SAND SHALL BE OBTAINED EITHER BY THE PROCESSING OF NATURAL SAND OR BY THE PRODUCTION OF A SUITABLY GRADED MANUFACTURED SAND.

B. COARSE AGGREGATE COARSE AGGREGATES SHALL CONSIST OF GRAVEL, CRUSHED GRAVEL OR ROCK, OR A COMBINATION OF GRAVEL AND CRUSHED GRAVEL OR ROCK, APPROVED BY THE STRUCTURAL ENGINEER. THE COARSE AGGREGATE, AS DELIVERED TO THE SITE, SHALL HAVE UNIFORM AND STABLE MOISTURE CONTENT.

THE SIZES OF COARSE AGGREGATE TO BE USED IN THE VARIOUS PARTS OF THE WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING OR AS DIRECTED BY THE STRUCTURAL ENGINEER

GENERAL USE

FOOTINGS

SIZES 3/11

25mm OR 19mm 1" OR 3/4" 19mm

R.C. BEAMS, COLUMNS, SLABS, WALLS, WALL FOOTING, LINTEL BEAMS

WATER USED IN MIXING CONCRETE SHALL BE CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, SALTS, ALKALIS, ORGANIC MATERIALS OR OTHER SUBSTANCES DELETERIOUS TO CONCRETE OR STEEL.

D ADMIXTURE

ADMIXTURES TO BE USED IN CONCRETE SHALL BE SUBJECT TO PRIOR APPROVAL OF THE STRUCTURAL ENGINEER. USE DARACEM RM AND/OR PRIMEPLAST R1 SUPER PLASTICIZERS FOR ALL CONCRETE MIX. SUPER PLASTICIZERS SHALL BE ADDED ONLY AFTER THE MIX HAS COMPLIED WITH THE SLUMP REQUIREMENT OF NOT MORE THAN 50mm.

CONCRETE SLAB ON FILL:

THE CONCRETE SLAB ON FILL SHALL BE LAID ON A PREPARED FOUNDATION CONSISTING OF A SUB GRADE AND GRANULAR FILL WITH THICKNESS EQUAL TO THE THICKNESS OF OVERLYING SLAB EXCEPT AS INDICATED OTHERWISE. A. SUBGRADE SHALL BE ROLLED, RAMMED, AND TAMPED TO A THOROUGHLY COMPACTED FOUNDATION

FOUNDATION:

A. ALLOWABLE BEARING CAPACITY SHALL BE 130 KPA FOR DL + LL + EQ COMBINATION. B. EXCAVATION FOR FOOTINGS SHALL BE CARRIED TO A DEPTH AS SPECIFIED IN THE PLANS.

REINFORCED CONCRETE BEAM:

A. UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS, CAMBER ALL R.C. BEAMS AT LEAST 6mm FOR EVERY4.5M OF SPAN EXCEPT CANTILEVERS WHICH SHALL 18mm FOR EVERY 3M OF SPAN.

B. IF THERE ARE TWO (2) OR MORE LAYERS OF REINFORCING BARS, USE 25mm DIAMETER SEPARATORS SPACED AT 900mm O.C.

C. TOP BARS SPLICES SHALL BE LOCATED AT MIDSPAN AND BOTH BAR SPLICES AT COLUMN SUPPORTS.

D. PROVIDE AT LEAST 10mm Ø STIRRUPS SPACED AT 150mm O.C. AT BEAM SUPPORTS, THE FIRST STIRRUP LOCATED 50mm FROM THE FACE OF THE COLUMN UNLESS CLOSER SPACING IS SPECIFIED IN THE STRUCTURAL PLANS.

CHB WALL:

A. VERTICAL AND HORIZONTAL REINFORCEMENT UNLESS OTHERWISE SPECIFIED, THE VERTICAL AND HORIZONTAL REINFORCEMENTS FOR CHB SHALL BE 10mm Ø AT 600mm FOR ALL WALL THICKNESS. LAP SLICES SHALL BE 300mm LONG (MINIMUM).

WHERE CHB WALLS ADJOIN R.C. COLUMNS AND BEAMS, PROVIDE DOWELS ON R.C. COLUMN AND BEAMS PRIOR TO POURING TO MATCH CHB WALL REINFORCEMENT. THE DOWELS SHALL BE 12mm BARS AT 400mm O.C., UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

C. ANCHORS

WHERE COLUMNS AND BEAMS HAVE BEEN POURED WITHOUT THE CHB WALL DOWELS, PROVIDE 16mm Ø EXPANSION BOLTS AT 400mm O.C. THESE ANCHORS SHALL BE DRILLED AND HAMMERED IN PLACE. NO CHIPPING-OFF OF CONCRETE COLUMNS AND BEAMS IS ALLOWED UNLESS OTHERWISE PERMITTED BY THE STRUCTURAL ENGINEER.

CONCRETE PROTECTION FOR REINFORCEMENT:

THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING BARS, FOR BUNDLES, THE MINIMUM COVER SHALL EQUAL THE EQUIVALENT DIAMETER OF THE BUNDLE BUT NEED NOT BE MORE THAN 2 INCHES ON THE TABULATED

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH

EXPOSED TO EARTH, WEATHER OR CORROSIVE SUSTANCE

20mm Ø AND LARGER 16mm Ø AND SMALLER

NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND, SLABS WALLS, AND JOINTS $25 \mathrm{mm} \ \varnothing$ AND SMALLER

BEAMS, GIRDERS AND COLUMNS PRINCIPAL REINFORCEMENT TIES STIRRUPS OR SPIRALS

STANDARD HOOK:

KEBARS a. A SEMI-CIRCULAR TURN PLUS AN EXTENSION OF AT LEAST 4 DIAMETERS BUT NOT LESS THAN 62mm AT THE FREE END OF THE BAR. b. A 90 DEGREE TURN PLUS AN EXTENSION OF AT LEAST 12 BARS DIAMETER AT THE FREE END OF THE BAR.

MINIMUM DIAMETERS OF BEND MEASURED ON THE INSIDE OF THE BAR SHALL BE AS FOLLOWS:

WELDING:

WELDING ELECTRODES AND RODS, CONFORMED TO AWS D1.1

WHEN USED, SHALL DEVELOP A RESISTANCE EQUAL TO AT LEAST 125% OF THE TENSILE CAPACITY OF THE BAR BEING SPLICED.

B BUTT-WELDED SPLICE

BUTT-WELDED SPLICE
WHEN USED, SHALL BE CONSIDERED 75% EFFICIENT. THE REMAINING 50% CAPACITY TO DEVELOP 125% OF THE TENSILE CAPACITY
OF THE BAR SHALL BE PROVIDED FOR BY AN ADDITIONAL WELDED LAP SPLICE CONNECTION ON THE SAME JOINT.

DETAILS/ REQUIREMENTS
DETAILS OF ALL WELDED SPLICES SHALL BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL BY THE STRUCTURAL ENGINEER.
ONLY CERTIFIED WELDERS SHALL BE ALLOWED TO PERFORM WELDING OPERATIONS. THESE WELDERS SHALL SUBJECT TO THE APPROVAL OF THE PROJECT MANAGER

• SHOP PAINT STRUCTURAL STEEL, EXCEPT AS MODIFIED HEREIN. DO NOT PAINT STEEL SURFACES EMBEDDED IN CONCRETE, GALVANIZED SURFACES, OR SURFACES WITHIN ½" OF THE TOE OF THE WELDS PRIOR TO WELDING. PRIOR TO ASSEMBLY, PAINT SURFACES WHICH WILL BE CONCEALED OR INACCESSIBLE AFTER ASSEMBLY. DO NOT PAINT IN FOGGY OR RAINY WEATHER: WHEN THE AMBIENT TEMPERATURE IS BELOW 45°F OR OVER 95°F; OR WHEN PAINT MAY BE EXPOSED TO TEMPERATURES BELOW 40°F WITHIN 48 HRS AFTER APPLICATION, UNLESS APPROVED OTHERWISE.

SSPC SP 6, EXCEPT AS MODIFIED HEREIN. SSPC SP 3 OR SP 6 FOR STEEL SURFACES EXPOSED IN SPACES ABOVE CEILINGS, ATTIC SPACES, CRAWL SPACES, FURRED SPACES, AND CHASES. IN ADDITION, MAINTAIN STEEL SURFACES FREE FROM RUST, DIRT. OIL, GREASE, AND OTHER CONTAMINANTS THROUGH FINAL ASSEMBLY. B. PRETREATMENT:

IMMEDIATELY AFTER CLEANING, PROVIDE THE METAL SURFACES WITH ONE COAT OF MIL. SPEC. DOD-P-15328 PRETREATMENT TO A DRYFILM THICKNESS OF 0.3 TO 0.5 MIL. FED. SPEC. TT-C-490 PRETREATMENT MAY BE APPLIED TO SSPC SP 6 CLEANED SURFACES, IN ACCORDANCE WITH FED. SPEC. TT-C-490.

IMMEDIATELY AFTER THE PRETREATMENT COATING HAS DRIED, APPLY PRIMER TO A MINIMUM DRY FILM THICKNES

OF 2.0 MIL. REPAIR DAMAGED PRIMED SURFACES WITH AN ADDITIONAL COAT PRIMER





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NAME ROAD, 1306 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

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TINO A DIONELA, PAF (Ret)

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TYTONIO L. TAMAYO CAPTAIN MA

OTES/REVISIONS

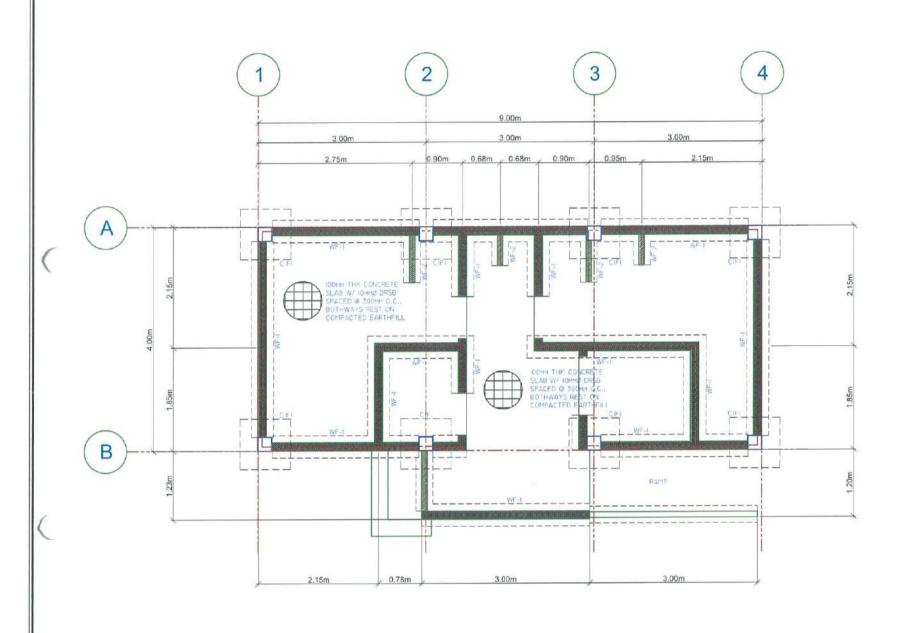
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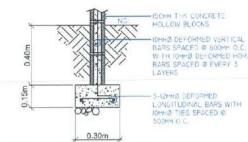
BORONGAN AIRPORT

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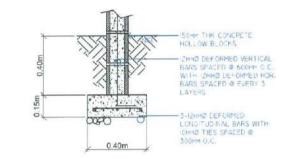
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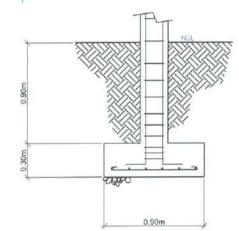




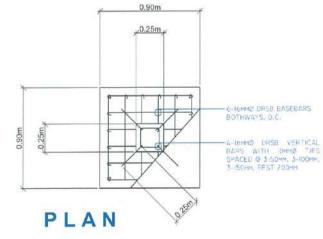








SECTION









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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIL ROOD, 1918 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE				
DESIGNED BY	IDDD	-IV.			
DRAWN BY:	E.V.B (JANSZ27)	904			
CHECKED BY	EJDJR	DOI.			

EVIEWED BY:



ARNEL F. BORLADO
DEPARTMENT MANAGER III,AED-ADMS

RECOMMENDED APPROVAL



IN MANUEL ENTONIO L. TAMA

PROJECT:

BORONGAN AIRPORT DEVELOPMENT PROJECT (CONSTRUCTION OF TOLLET)

LOCATION

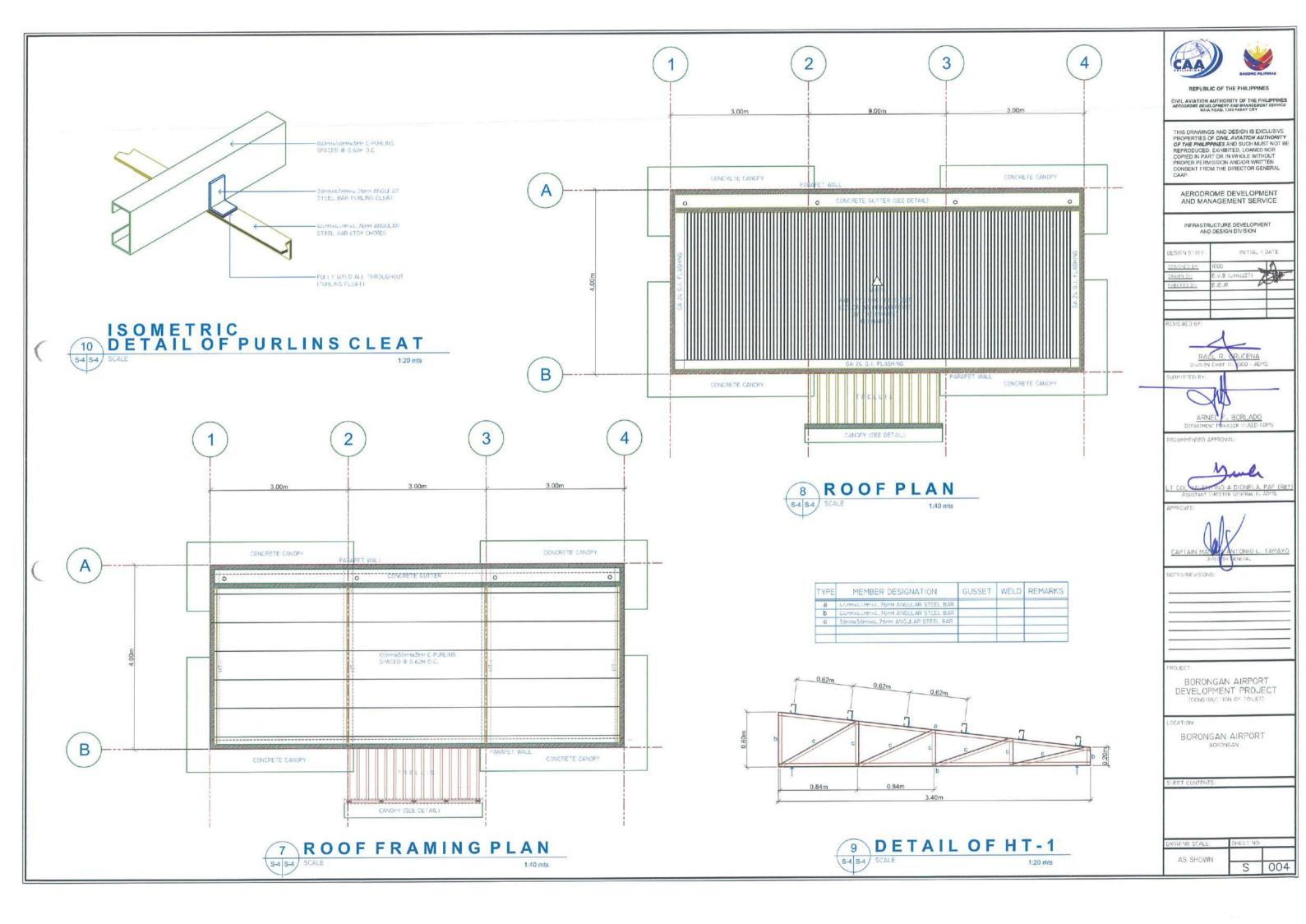
BORONGAN AIRPORT

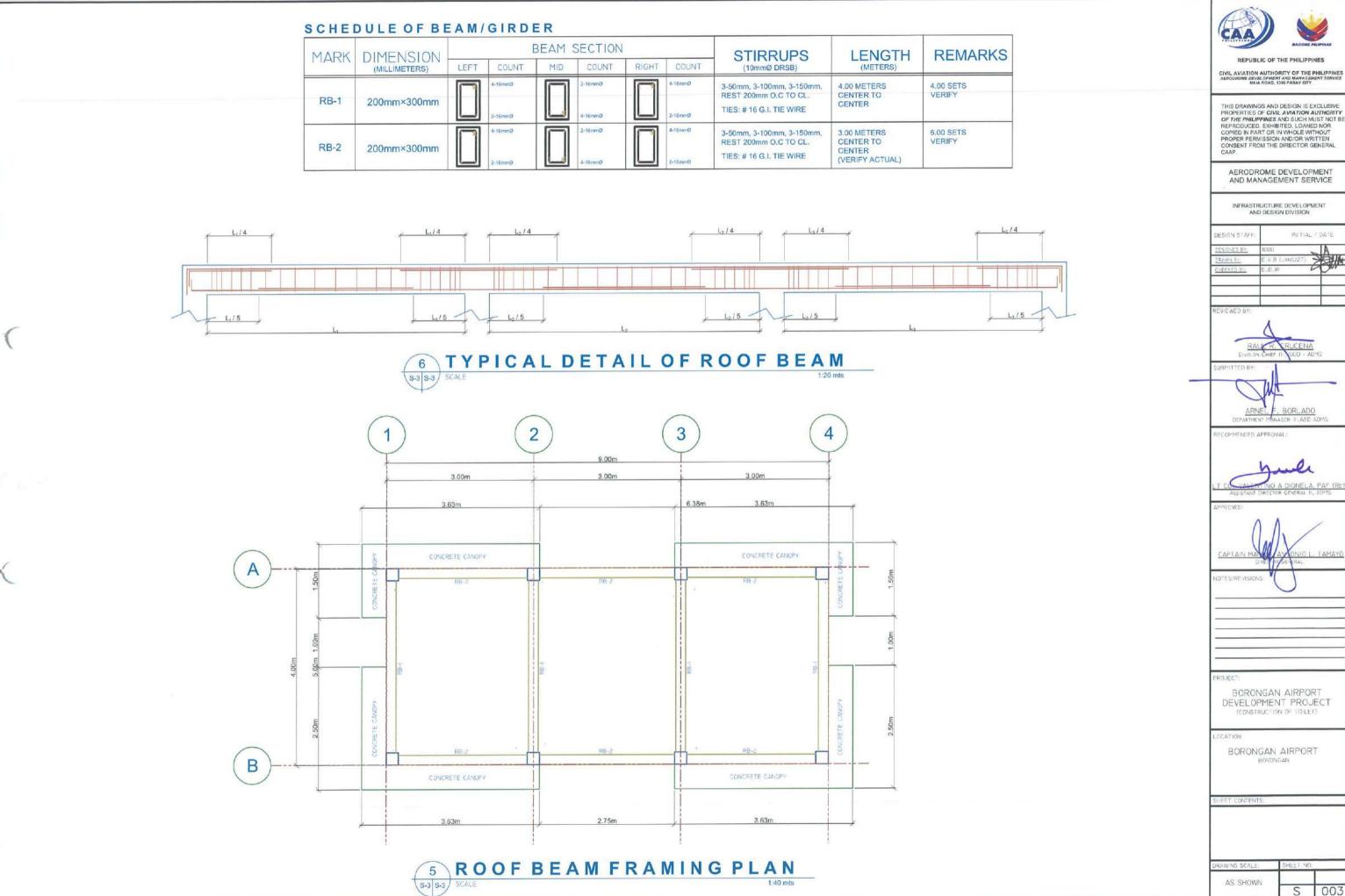
SHEET CONTENTS:

DRAWING SCALE: SHEET NO:

AS SHOWN

S 002









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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

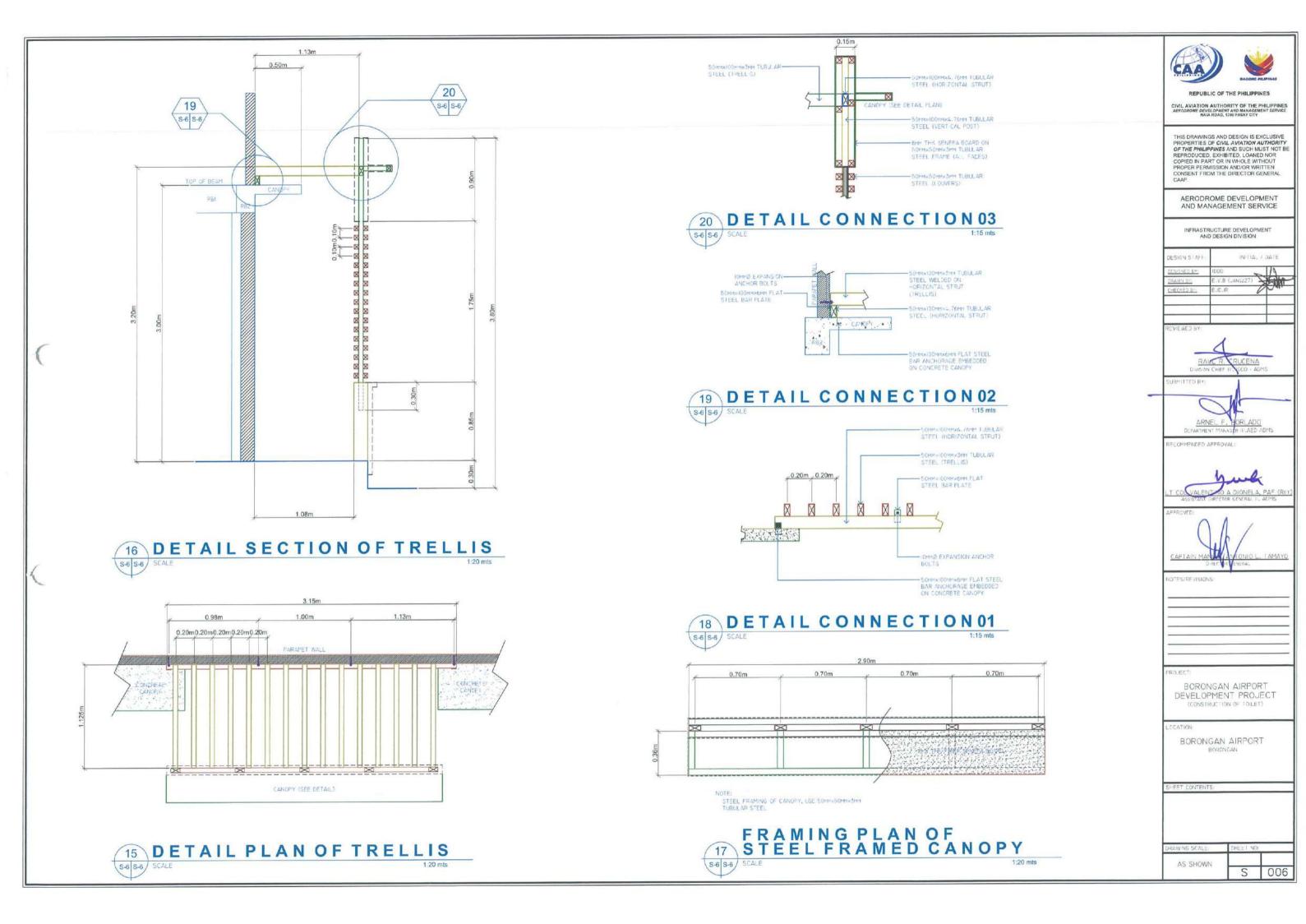
DESIGNED BY: IDDE	
	1
DRAWN BY: E.V.B	(UANG227)
CHECKED BY: EUDJ	2

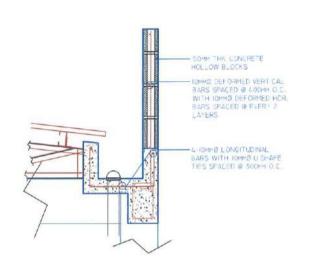


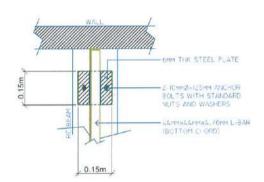
BORONGAN AIRPORT DEVELOPMENT PROJECT

BORONGAN AIRPORT

S 003





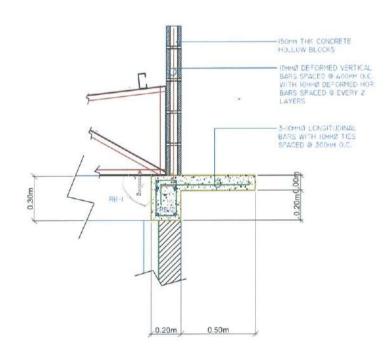


12 DETAIL REINF. OF CONCRETE GUTTER S-5 S-5 SCALE

> 0.10m 0.30m 0.10m R.C. CANOPY 0.30m 0.20m

11 SECTION OF CONCRETE GUTTER S-5 S-5 SCALE

14 PLAN OF STEEL BASE PLATE



13 DETAIL OF CONCRETE CANOPY





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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

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DESIGNED BY:	IDDD	
DRAWN BY	E.V.B (JANG227)	MA
CHECKED BY:	EJDJR /	79





ECOMMENDED APPROVAL:





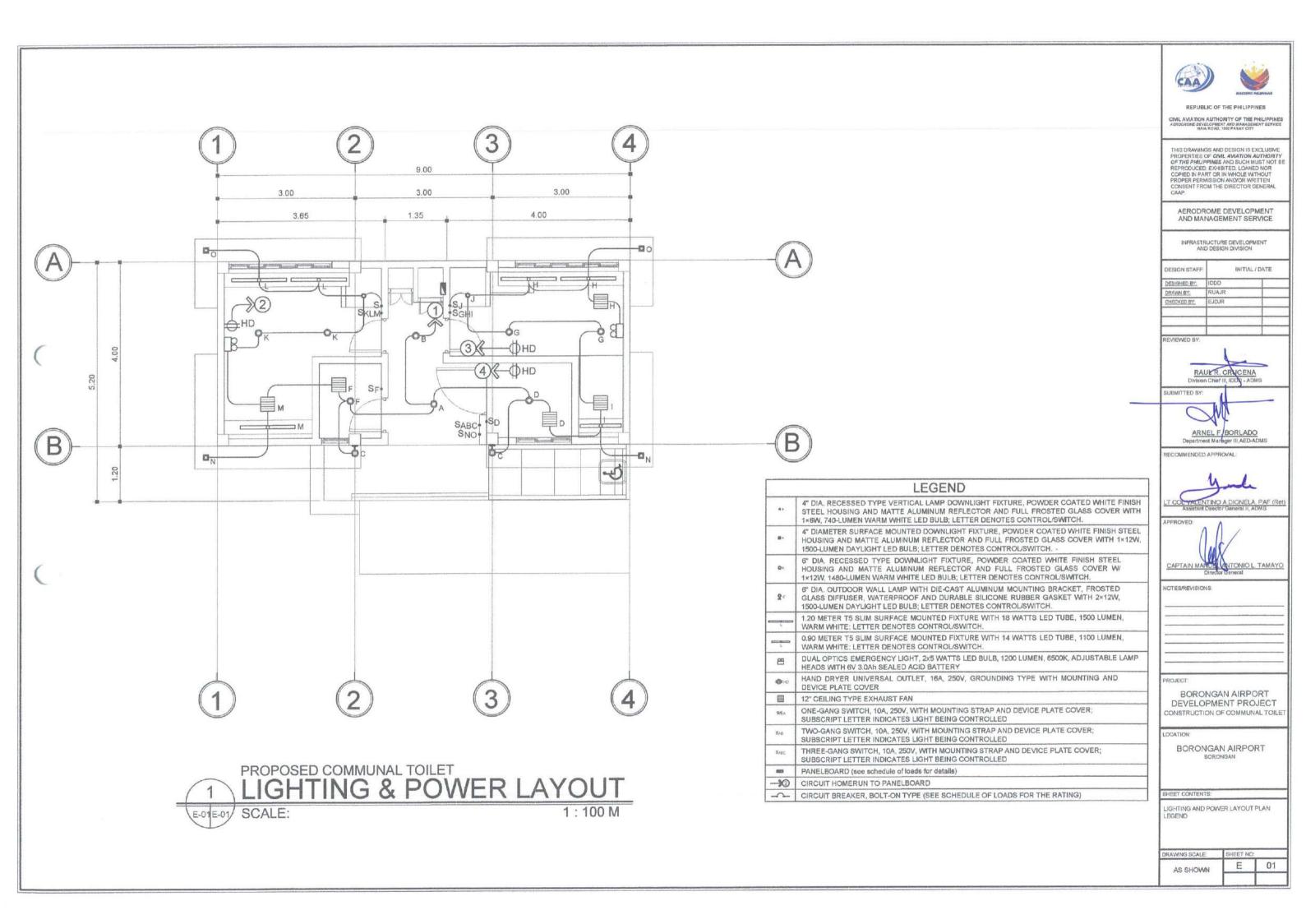
ROJECT

BORONGAN AIRPORT DEVELOPMENT PROJECT (CONSTRUCTION OF TO'LET)

BORONGAN AIRPORT BORONGAN

AS SHOWN

S 005



GENERAL NOTES & SPECIFICATIONS:

- ALL ELECTRICAL EQUIPMENT SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH THE REQUIREMENT OF THE PHILIPPINE ELECTRICAL CODE.
- 2. ALL MATERIALS TO BE USED SHALL BE NEW AND OF THE APPROVED TYPE FOR BOTH LOCATION AND PURPOSE INTENDED.
- 3. WIRES AND CABLES TO BE USED SHALL BE UNDERWRITERS LABORATORY (UL) LISTED.
- MATERIALS AND EQUIPMENT TO BE USED (LIGHTING FIXTURES, BALLAST, FLUORESCENT TUBE, WIRING DEVICES, CIRCUIT BREAKERS, CONDUIT AND PIPES, ENCLOSURES, WIRES AND CABLES, ETC) SHALL HAVE IMPORTED COMMODITY CLEARANCE (ICC) LABEL FOR FOREIGN MADE PRODUCTS AND P.S. MARK FOR LOCAL IN NATURE OF THE BUREAU OF PRODUCT STANDARD (BPS).
- EMERGENCY LIGHTS SHALL BE CONNECTED TO THE NEAREST LIGHTING CIRCUIT PROVIDED WITH SINGLE OUTLET.
- 6. JUNCTION BOXES AND PULL BOXES GAUGE NO. 16 (MINIMUM) SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER REQUIRED AND NECESSARY AND SHALL BE INSTALLED AT CONVENIENT SPACE AND LOCATION TO FACILITATE WIRE PULLING EVEN IF THESE ITEMS ARE NOT SHOWN IN THE PLAN.
- PANEL BOARD SHALL BE FLUSH MOUNTED AND SHALL BE EQUIPPED WITH GROUND KIT TERMINALS WITH NUMBER OF TERMINALS EQUAL TO THE NUMBER OF BRANCH CIRCUITS.
- 8. ALL BRANCH CIRCUIT BREAKER SHALL BE BOLT-ON TYPE WITH 10 KAIC MINIMUM OR AS INDICATED IN THE LOAD SCHEDULE.
- ALL WORKS SHALL BE EXECUTED IN A WORKMANSHIP MANNER AND SHALL PRESENT A NEAT AND ORDERLY ACCEPTANCE. ALL WIRING SHALL BE CONCEALED AS MUCH AS POSSIBLE.

MOUNTING HEIGHTS:

10100141	11101	LICITIO.
PANELBOARD	1,83 M (6' 0")	FROM TOP OF PANEL TO FINISHED FLOOR LEVEL
HAND DRYER QUILLETS	1.30 M (4' 3'')	FROM CENTER OF OUTLET TO FINISHED FLOOR LEVEL
WALL	1.37 M (4' 8")	FROM CENTER OF DEVICE TO FINISHED FLOOR LEVEL

TO MDP @ PTB
ELECTRICAL ROOM

2 - 8.0mm² THW COPPER WIRE
1 - 5.5mm² THW COPPER WIRE
IN 25mmØ ELECTRICAL PVC PIPE

MAIN

20 AT

3

GROUND TERMINAL



SCHEDULE OF LOADS: PB: 230VOLTS, 1-PHASE, 2WIRE + G

CKT. No.	LOAD DESCRIPTION	NO. OF OUTLET	VOLTS	VA PER CIRCUIT	PHASE	AMP	CB RATING	SIZE OF WIRE	SIZE OF CONDUITS
1	LIGHTING/EXHAUST FAN OUTLET	29	230	1450	1	6.30	20AT, 2P	2-3.5mm² THHN/THWN-2 CU WIRE 1-3,5mm² THHN/THWN-2 CU WIRE (G)	15mmØ EMT CONDUIT
2	HAND DRYER OUTLET	1	230	1500	1	6.52	20AT, 2P	2-3.5mm² THHN/THWN-2 CU WIRE 1-3.5mm² THHN/THWN-2 CU WIRE (G)	15mmØ EMT CONDUIT
3	HAND DRYER OUTLET	1	230	1500	1	6.52	20AT, 2P	2-3.5mm² THHN/THWN-2 CU WIRE 1-3.5mm² THHN/THWN-2 CU WIRE (G)	15mmØ EMT CONDUIT
4	HAND DRYER OUTLET	1	230	1500	1	6.52	20AT, 2P	2-3.5mm² THHN/THWN-2 CU WIRE 1-3.5mm² THHN/THWN-2 CU WIRE (G)	15mmØ EMT CONDUIT
5	SPARE		230	1200	1	5.22	20AT, 2P		
	то .	TAL			1	31.08			

 $I_T = 31.08 \times 1.25$ $I_T = 38.85 \text{ A}$

FOR THE FEEDER CONDUCTOR:

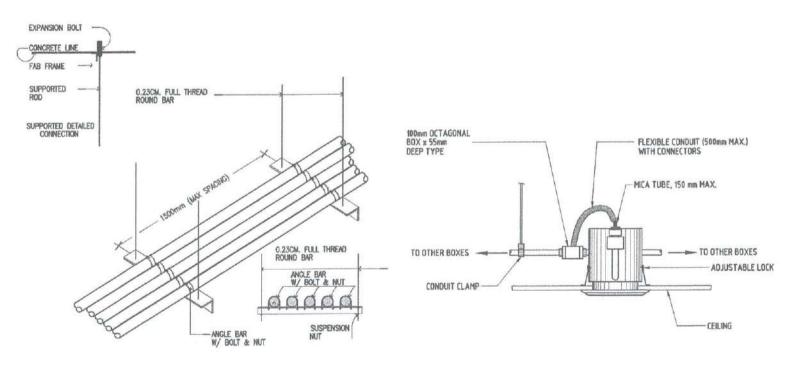
USE: 2 - 8.0mm² THHN/THWN-2 COPPER WIRE 1 - 5.5mm² THHN/THWN-2 COPPER WIRE IN 25mmØ ELECTRICAL PVC PIPE FOR THE FEEDER PROTECTION:

USE: 40AT, 100AF, 2-POLE, 230V, 10KAIC CB

PROPOSED COMMUNAL TOILET

SCHEDULE OF LOADS

E-02 SCALE:



CONDUIT ARRANGEMENT

RECESSED DOWNLIGHT







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CIVIL AVIATION AUTHORITY OF THE PHILIPPINE
AEROGROME DEVELOPMENT AND MANAGEMENT SERVICE
HAIA ROAD, 1200 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT

DESIGNED BY:	IDDD	
DRAWN BY	RUAJR	
CHECKED BY	EJDJR	

REVIEWED BY:



SUBMITTED BY:

ARNEL F BORLADO

RECOMMENDED APPROVAL



APPROVED:

	A	/	
	011		
CAPTAIN M	DEL.	KNTONIO L	TAMAY
	Dire to	General	

NOTES/REVISIONS

	150	

ROJECT:

BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF COMMUNAL TOILE

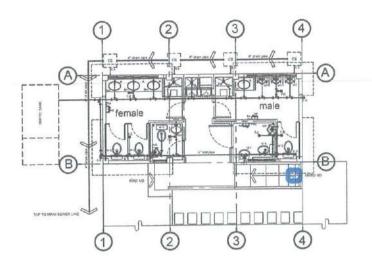
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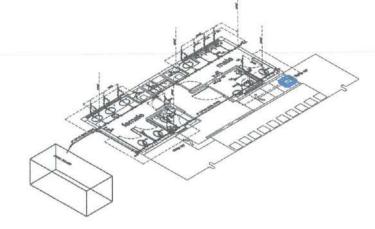
BORONGAN AIRPORT

SHEET CONTENTS:

GENERAL NOTES AND SPECIFICATIONS SCHEDULE OF LOADS SINGLE LINE DIAGRAM WIRING DETAILS

DRAWING SCALE:	SHEET NO	
AS SHOWN	E	02
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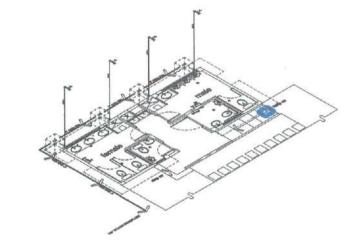




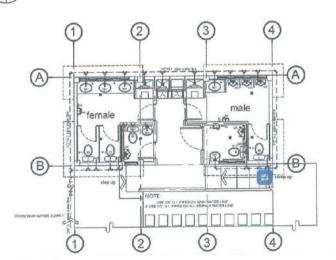
GROUND PLUMBING LAYOUT PLAN

PROPOSED COMMUNAL TOILET
GROUND PLUMBING ISOMETRIC PLAN

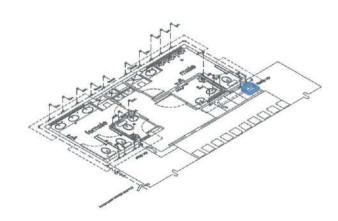
PROPOSED COMMUNAL TOILET
ROOF PLUMBING LAYOUT PLAN



FROOF PLUMBING ISOMETRIC PLAN







PROPOSED COMMUNAL TOILET
WATERLINE ISOMETRIC PLAN

GENERAL NOTES:

- IT IS NOT INTENDED THAT THE DRAWINGS SHALL SHOW EVERY PIPE FITTING, VALVE AND APPURTENANCE; ALL SUCH ITEMS WHETHER SPECIFICALLY MENTIONED OR NOT, OR INDICATED ON THE DRAWINGS SHALL BE FURNISHED AND INSTALLED IF NECESSARY TO COMPLETE THE SYSTEM TO THE SATISFACTION OF THE OWNER.
- ALL PLUMBING WORKS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISION OF THE NATIONAL PLUMBING CODE OF THE PHILIPPINES, THE REQUIREMENTS OF THE LOCAL PLUMBING INSPECTION OFFICE, PERTINENT PROVISIONS OF THE UNIFORM BUILDING CODE AND UNIFORM PLUMBING CODE.
- HORIZONTAL SANITARY SEWER PIPING SHALL BE RUN IN PRACTICAL ALIGNMENT AT A MINIMUM SLOPE OF 1% FOR PIPES 100mm@ & LARGER & 2% FOR 75mm@ & SMALLER
- ALL VENT PIPES SHALL BE FREE FROM DROPS OR SAGS AND SHALL BE SLOPED OR GRADED AS TO DRIP BACK BY GRAVITY TO THE DRAINAGE PIPE IT SERVES.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE, THAT IS, THE ACTUAL PIPE SIZES, LOCATIONS, DEPTHS, TOP AND INVERT ELEVATIONS OF ALL EXISTING PIPES AND RELATED STRUCTURES. THE CONTRACTORS SHALL PROVIDE THE NECESSARY EXCAVATIONS, BACKFILLING AND SURFACE RESTORATION OF THE AFFECTED AREAS IN THE LAYING OF SEWER, STORM DRAINAGE AND WATER
- 6. ALL DIMENSIONS AND PIPE SIZES ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
- THE DIGESTIVE CHAMBER OF SEPTIC TANK MUST BE WATERPROOF
- NO SEPTIC TANK SHALL BE CONSTRUCTED UNDER THE BUILDING.
- ALL PLUMBING INSTALLATIONS SHALL BE COORDINATED W/LICENSED SANITARY ENGINEER OR REGISTERED MASTER PLUMBER.
- ANY REVISIONS/CHANGES IN THE PLAN SHALL REQUIRE THE PRIOR APPROVAL OF OF THE LICENSED SANITARY ENGINEER OR REGISTERED MASTER PLUMBER.

MATERIAL'S SPECIFICATION:

WATER LINE PIPE

SHALL BE G.I. PIPE OR UPVC PIPE.

SOIL AND WASTE PIPE

- SHALL BE UPOLYVINYL CHLORIDE (UPVC) PIPE SERIES 1000 II, "EMERALD" BRAND OR
- APPROVED EQUAL.

 FITTING SHALL BE SOLVENT CEMENT JOINT CONFORMING TO ASTM D2564

VENT AND VENT STACK

- SHALL BE UPOLYVINYL CHLORIDE (UPVC) PIPE SERIES 1000 II, "EMERALD" BRAND OR APPROVED FOLIAL
- FITTING SHALL BE SOLVENT CEMENT JOINT CONFORMING TO ASTM D2564.

DOWNSPOUT

- SHALL BE UPOLYVINYL CHLORIDE (UPVC) PIPE SERIES 1000 II, "EMERALD" BRAND OR APPROVED EQUAL
- FITTING SHALL BE SOLVENT CEMENT JOINT CONFORMING TO ASTM D2584.

STORM DRAINAGE SYSTEM

- SHALL BE UPOLYVINYL CHLORIDE (UPVC) PIPE SERIES 1000 II, "EMERALD" BRAND OR
- APPROVED EQUAL
 FITTING SHALL BE SOLVENT CEMENT JOINT CONFORMING TO ASTM D2564.
 FOR OUTSIDE BUILDING, CONCRETE DRAIN PIPE (CDP), TONGUE AND GROOVE, MORTAR JOINTS,
- RE-INFORCED FOR 300mm@ AND LARGER.

f.d.	FLOOR DRAIN	
r.d.	ROOF DRAIN	
lav.	LAVATORY	
w.c.	WATER CLOSET	
vent	FIXTURE VENT	
vtc	VENT THRU CEILING	
C.O.	CLEAN OUT	
d.s.	DOWNSPOUT	
uri.	URINAL	
-	RAIN WATER DRAIN FLOW	
	BRANCH VENT	

lav.	LAVATORY	
w.c.	WATER CLOSET	
НВ	HOSE BIBB	
HD	HAND DRYER	
HS	HAND SANITIZER	
uri.	URINAL	
faucet	FAUCET	
	- WATER LINE	
(M)	WATER METER	
-44-	CHECK VALVE	
	GATE VALVE	
}>	FROM MAIN WATER LINE	





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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL/	DATE	
DESIGNED BY:	IDDD	IA	
DRAWN BY	E.V.B (jangz27)	100	
CHECKED BY:	EJDJR Z	1	



UBMITTED BY

ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMENDED APPROVAL:

ONIO L TAMAYO

IOTES/REVISIONS

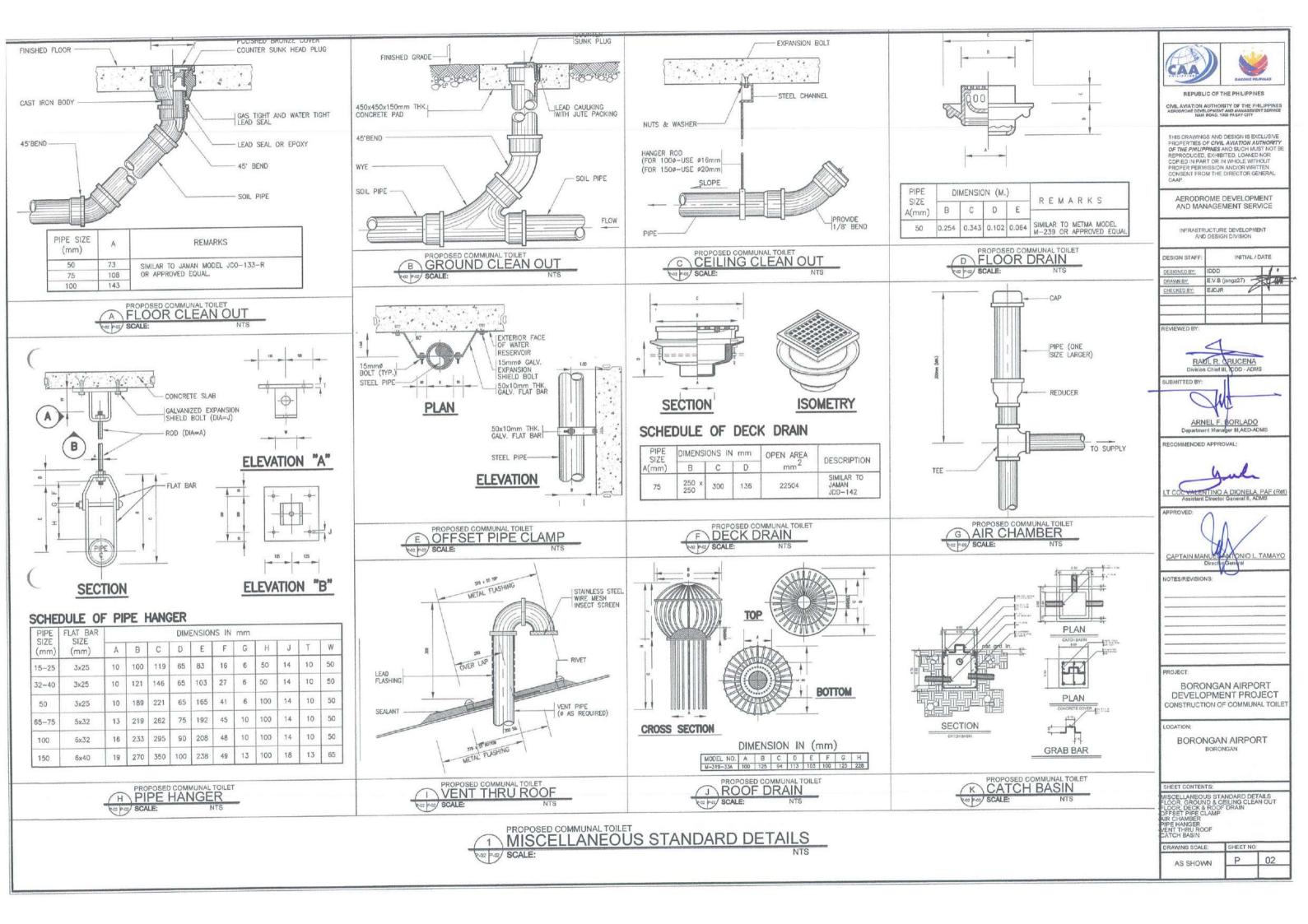
PROJECT

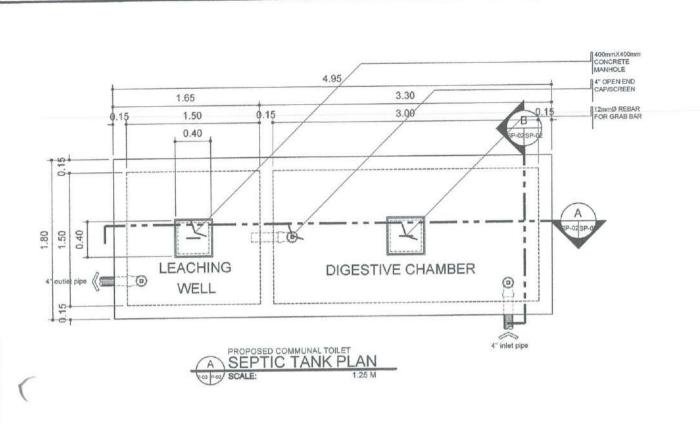
BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF COMMUNAL TOILE

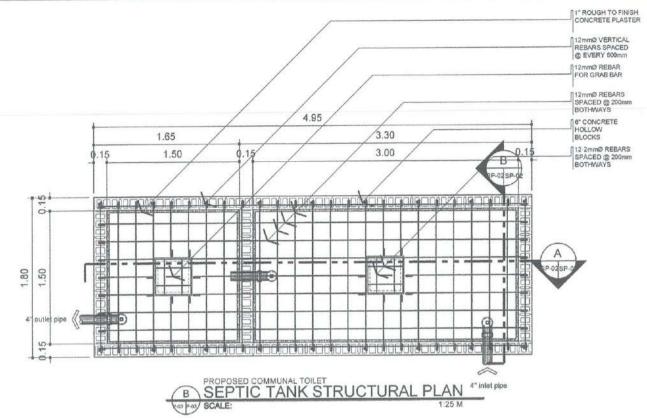
BORONGAN AIRPORT BORONGAN

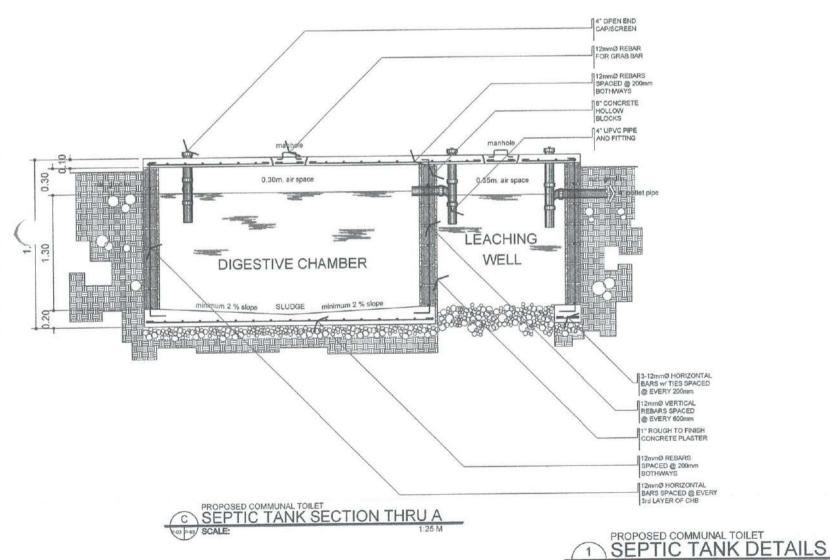
SHEET CONTENTS:

RAWING SCALE: AS SHOWN

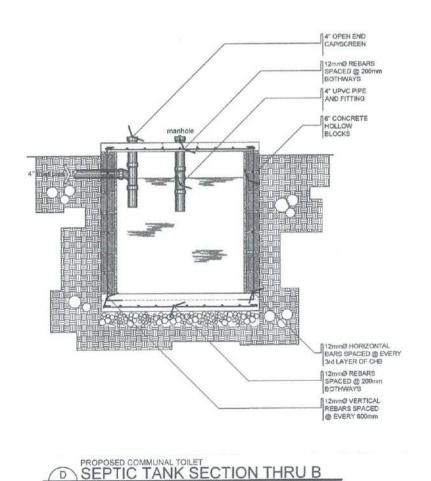








SCALE:





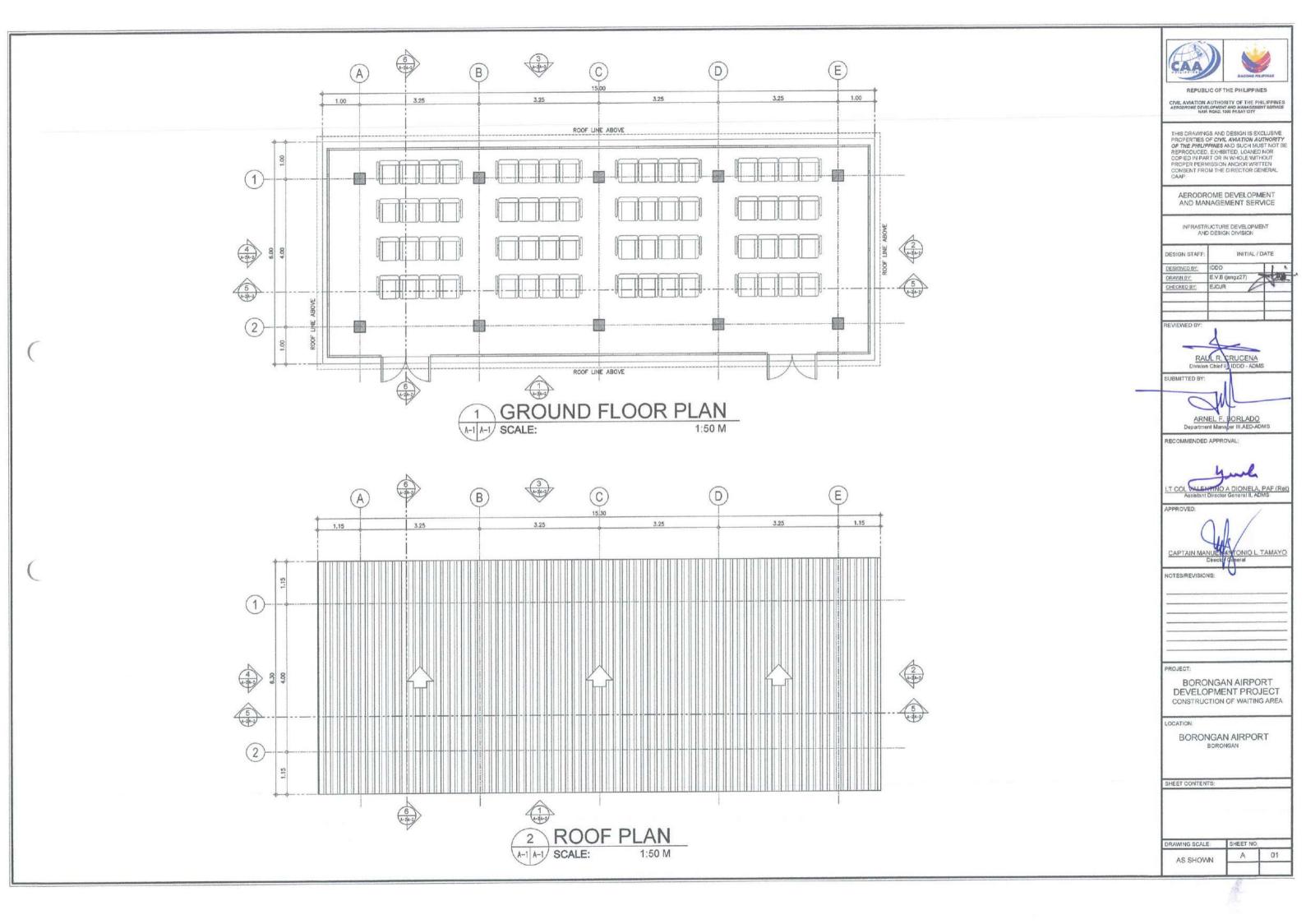
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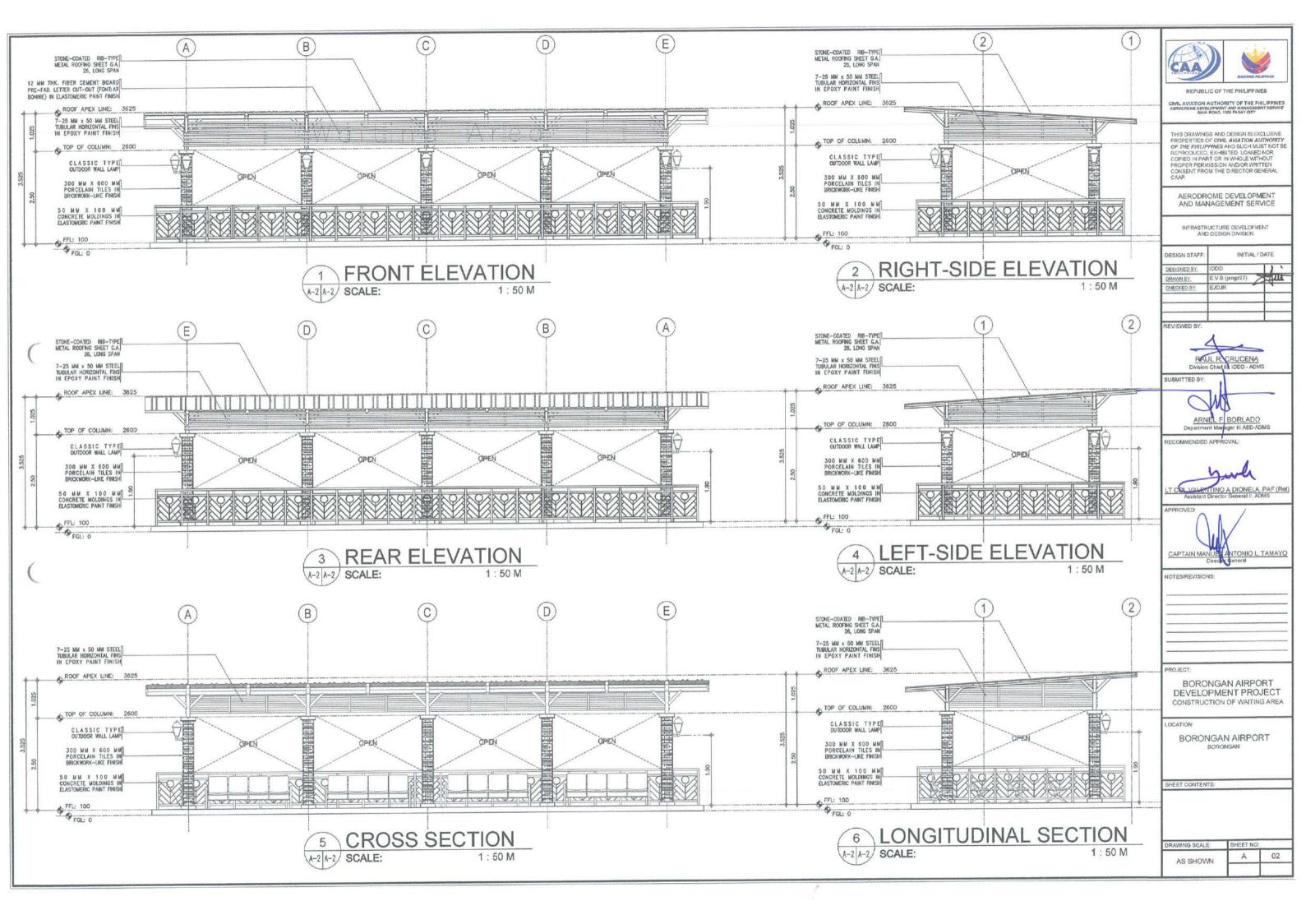
BORONGAN AIRPORT
DEVELOPMENT PROJECT
CONSTRUCTION OF COMMUNAL TOILET

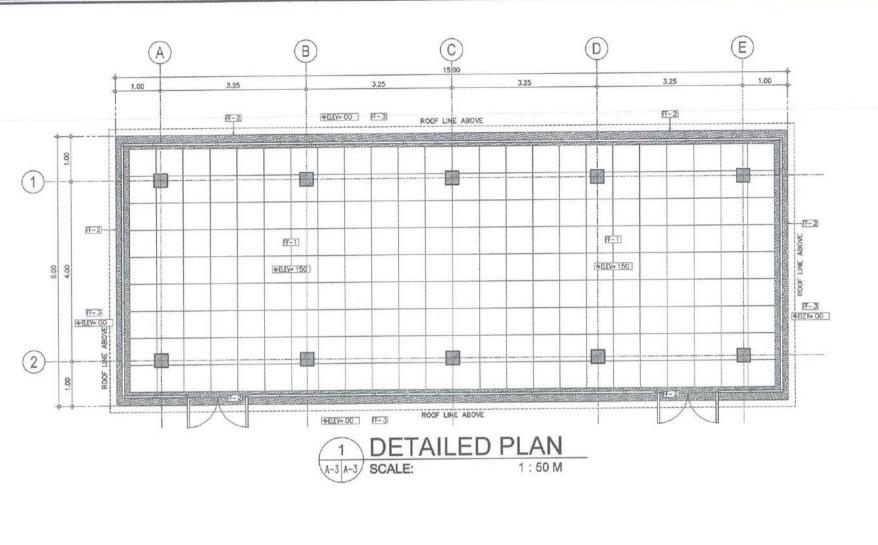
BORONGAN AIRPORT BORONGAN

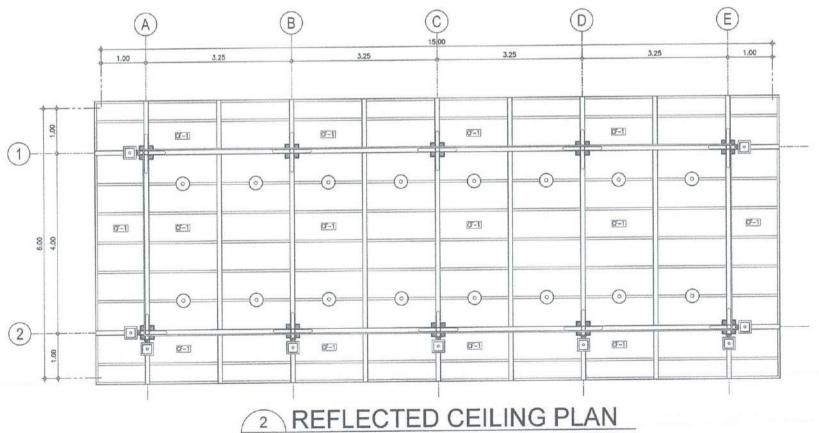
SHEET CONTENTS:
SEPTIC TANK DETAILS
SEPTIC TANK PLAN
SEPTIC TANK STRUCTURAL PLAN
SEPTIC TANK SECTION THRU AA
SEPTIC TANK SECTION THRU BB

AS SHOWN P 03









1:50 M

A-3 A-3 SCALE:

CAA

BAGONG PERP

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE			
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CHECKED BY	EJDJR			
		-		
		-		

REVIEWED BY

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SUBMITTED BY:

ARNEL F. BORLADO
Department Manager III.AED-ADMS

RECOMMENDED APPROVAL:

LT COL VALENTINO A DIONELA PAF (Ret

APPROVED:

TAIN MANUEL ANTONIO L TAMAYO

NOTES/REVISION

PROJECT:

BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF WAITING AREA

LOCATION

BORONGAN AIRPORT BORONGAN

SHEET CONTENTS:

AS SHOWN A 03

LEGEND

300 MM Ø SUSPENDED LIGHT ON POLYCARBONATE HALF DOME REFLECTOR
 WITH PARTIAL FROSTED GLASS COVER

CLASSIC TYPE OUTDOOR WALL LAMP

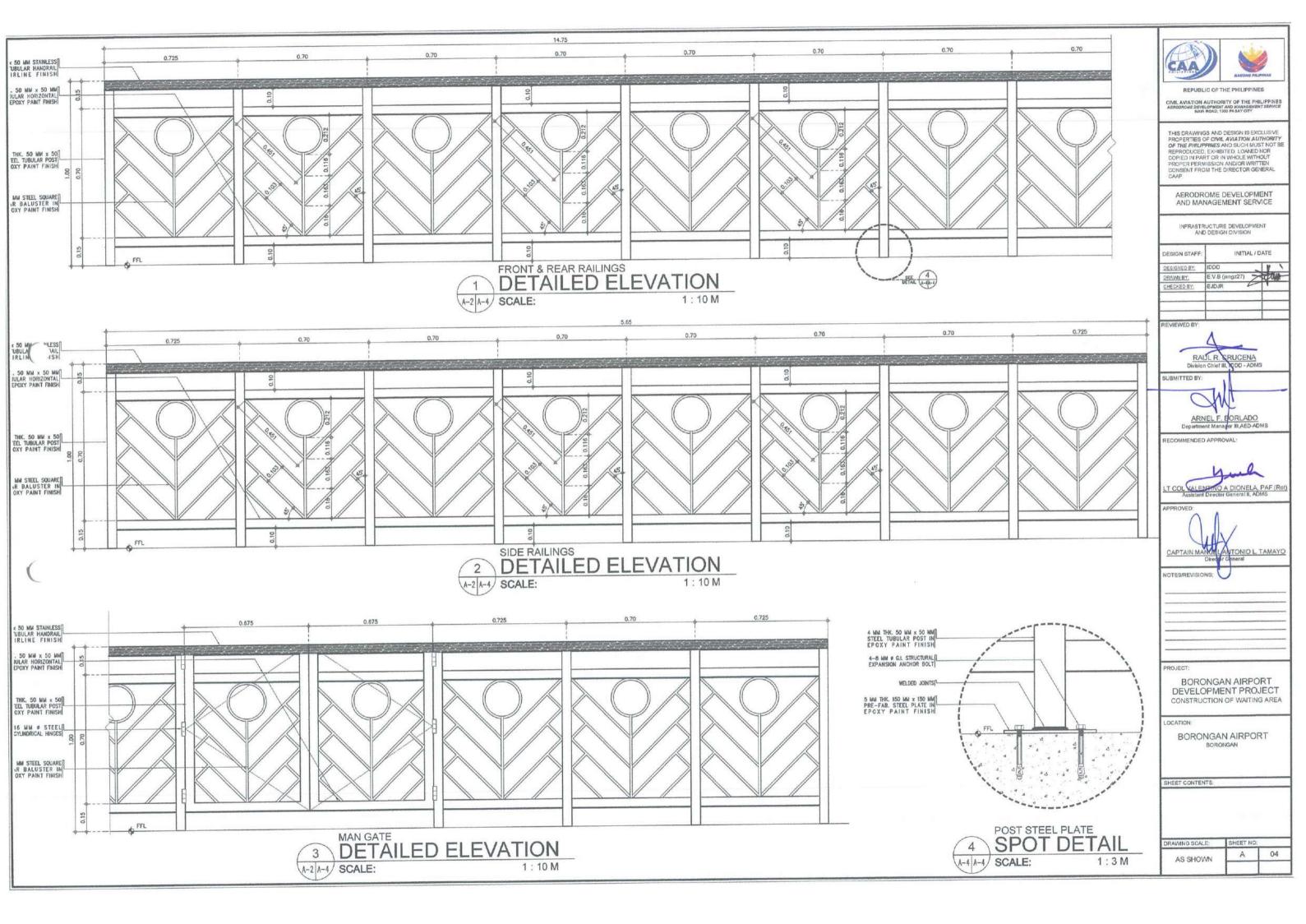
G FLOOR FINISHES

FF-1 600 MM X 600 MM HOMOGENEOUS PORCELAIN OUTDOOR FLOOR TILES IN RUSTIC FINISH
FF-2 PEBBLE WASHOUT FINISH
FF-3 FYISTING CONCRETE PAVEMENT

FF-3 EXISTING CONCRETE PAVEMENT

TAG CEILING FINISHES

CF-1 DOUBLE SIDED P.E. ROOF INSULATION ON HEXAGONAL WIRE MESH



CONSTRUCTION NOTES:

1.0 GENERAL NOTES:

- 1.1 The Contractor shall verify all dimensions and conditions at the site, and shall notify the Engineer of discrepancies between actual conditions and information shown on the drawings before proceeding with the work. This shall include the location and dimensions of grooves, reglets, sleeves, curbs, openings, embedded or attach items, etc. Refer to Architectural, Mechanical, Electrical and Plumbing Drawings.
- 1.2 All dimensions shall take precedence over scale shown on plans, sections or details. Notes and details on drawings shall take precedence over general notes and typical details.
- 1.3 The Contract, Structural Drawings and Specifications represent the finished structures. They do not indicate the method of construction unless so stated. The Contractor shall provide all necessary measures to protect the structures, adjacent properties, workmen and other persons during all phases of construction.
- 1.4 The Contractor shall immediately notify the Owner and/ or the Project In-charge of any condition which in his opinion might endanger the stability of the structures or cause distress in the structures.
- 1.5 Construction materials shall not be stored on poured floors. It is the General Contractor responsibility to ensure that the Sub-Contractor's are informed and do not violate this important requirements.
- 1.6 The Contractor shall provide temporary erection bracing and shoring for all the structural members as required for structural stability during all phases of construction.
- 1.7 The Contractor shall take all steps necessary to ensure the proper alignment of the structures after the installation of all structural and finish materials.

2.0 MATERIAL SPECIFICATION:

- 2.1 Mix Design shall conform to ACI 211.1 & ACI 301. The minimum compressive strength shall be: $Fc' = 24.00\,\text{Mpa}$ (3,500 Psi) Foundations, Columns Beams and Suspended Slabs. $Fc' = 24.00\,\text{Mpa}$ (3,500 Psi) Slab on fill, Graded Slabs.
- 2.2 Cement for the concrete shall conform to the requirements of the "Specifications for the Portland Cement" (ASTM C150, Latest Edition).

Fine Aggregates: Shall consist of natural porac sand. Fine aggregates shall consist of hard, tough, durable, uncoated particles. The stipulated percentage of fines in the sand shall be obtained either by the processing of natural sand or by the production of a suitably graded manufactured sand.

Coarse Aggregates: Shall consist of gravel, crushed gravel or rock, or a combination of gravel and crushed gravel or rock, as per approved by the Structural Engineer. The coarse aggregate, as delivered to the site shall have a uniform and suitable moisture content.

Footings ----- 1" or %" (25mm or 19mm)

R.C. Beams, Columns, Slabs, Wall Footings, Lintel Beams ----- %" (19mm)

- 2.3 Water used in mixing concrete shall be clean and free from injurious amounts of oils, acids, salts, alkalis, organic materials or other substances deleterious to concrete or steel.
- 2.4 Admixtures to be used in concrete shall be subjected to prior approval of the Structural Engineer.
- 2.5 The concrete slab on fill shall be laid on a prepared foundation consisting of a sub grade and granular fill with thickness of overlying slab except as indicated otherwise, sub grade shall be rolled, rammed and tamped to a thoroughly compacted foundation.
- 2.6 All concrete shall deposited, vibrated and cured in accordance with ACI Standard 318-95.
- 2.7 Concrete cover over reinforcing bars shall be as follows:

Footings and bottom of Footing Tie Beams ----- 75mm (cast against earth)
Beams and Columns ----- 40mm (to stirrups and ties)
Walls and Sides of Footing tie Beams ----- 50mm (cast against forms)
Equipment Foundation ----- 70mm

- 2.8 Before concrete is poured, checked with all trades to ensure proper placement of all openings, sleeves, curbs, conduits, etc. relative to the work.
- 2.9 Unless otherwise specified on plans, all reinforcing bars shall be deformed conforming to ASTM A706 with a minimum yield strength of reinforcement shall be enumerated below:

Footings/ footing Tie Beams ------ Fy = 60,000 Psi Columns/ Beams ----- Fy = 60,000 Psi Slabs (On grade and suspended) ----- Fy = 40,000 Psi

- 2.10 All reinforcing bars shall be clean of rust, grease or other materials which tend to impair bond.
- 2.11 Unless otherwise noted in the plans or specifications, Camber all R.C. Beams at least 6mm for every 4.5m of span except cantilevers which shall 18mm for every 3m of span. If there are two (2) or more layers of reinforcing bars, use 25mm diameter separators spaced at 900mm o.c., Top bars splices shall be located at midspan and both bar splices at column supports.
- 2.12 All reinforcing bars shall be accurately and securely placed before pouring concrete or applying mortar or grout.
- 2.13 Unless indicated otherwise, all beams terminating at the column shall have top and bottom bars extending to the far face of the column terminating in a standard 90 degrees hook length of anchorage not less than 600mm.
- 2.14 Lapped splices shall be staggered where possible.
- 2.15 Unless indicated otherwise, splicing of reinforcement shall be in accordance with ACI 318-95, Except that the minimum lap splice shall be 40 bar diameter but less than 600mm.
- 2.16 Vertical and Horizontal reinforcements for CHB shall be 10mm Ø at 600mm for all wall thickness. Lap splices shall be 300mm long (minimum).
- 2.17 Where CHB walls adjoin columns and beams, provide dowels on r.c. columns and beams prior to pouring to match CHB wall reinforcement. The dowels shall be 12mm bars at 400mm o.c., unless otherwise shown on the drawings.
- 2.18 Where columns and beams have been poured without the CHB wall dowels, provide 16mm Ø expansion bolts at 400mm o.c. These anchors shall be drilled and hammered in place. No chipping off of concrete columns and beams is allowed unless otherwise permitted by the Structural Engineer.
- 2.19 Welding electrodes and rods, conformed to AWS D1.1. Lap welded splice when used, shall develop a resistance equal to at least 125% of the tensile capacity of the bar being spliced. Butt welded splice when used, shall be considered 75% efficient. The remaining 50% capacity to develop 125% of the tensile capacity of the bar shall be provided for by an additional welded lap splice connection on the same joint.

Details of all welded splices shall be submitted by the contractor for approval by the Structural Engineer. Only certified welders shall be allowed to perform welding operations. These welders shall subject to the approval of the Project Manager.

2.20 Shop paint structural steel, except as modified herein. Do not Paint steel surfaces embedded in concrete, galvanized surfaces, or surfaces within ½" of the toe of the welds prior to welding. Prior to assembly, paint surfaces which will be concealed or inaccessible after assembly. Do not paint in foggy or rainy weather; when the ambient temperature is below 45 deg F or over 95 deg F; or when paint may be exposed to temperatures below 40 deg F within 48 hours after application, unless approved otherwise.

SSPC SP 6, Except as modified herein. SSPC SP 3 or SP 6 for steel surfaces exposed in spaces above ceilings, attic spaces, crawl spaces, furred spaces and chases. In addition, maintain steel surfaces free from rust, dirt, oil, grease and other contaminants through final assembly.

Immediately after cleaning, provide the metal surfaces with one coat of MIL SPEC DOD - P - 15328 pretreatment to a dry film thickness of 0.3 to 0.5 MIL FED SPEC TT - C - 490 pretreatment may be applied to SSPC SP 6 cleaned surfaces in accordance with FED SPEC TT - C - 490.

Immediately after the pretreatment coating has dried, apply primer to a minimum dry film thickness of 2.0 MIL. Repair damaged primed surfaces with an additional coat primer.





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AERODROME DEVELOPMENT

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

ESIGNED BY	IDDD		
	IDED		
YB MWAS	E.V.B	(jangz27)	×
HECKED BY:	EJDJ	₹	V
	+-		_
ECKED BY	EJDJI		

VIEWED BY:

RAUL R. CAUCENA
Division Chief III, IDDO - ADMS

ARNEL F. BORLADO
Department Manager III AED-ADMS

RECOMMENDED APPROVAL:



APPROVED:

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	0/
CAPTAIN MANUEL	TONIO L. TAMA

OTES/REVISIONS:

BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF WAITING AREA

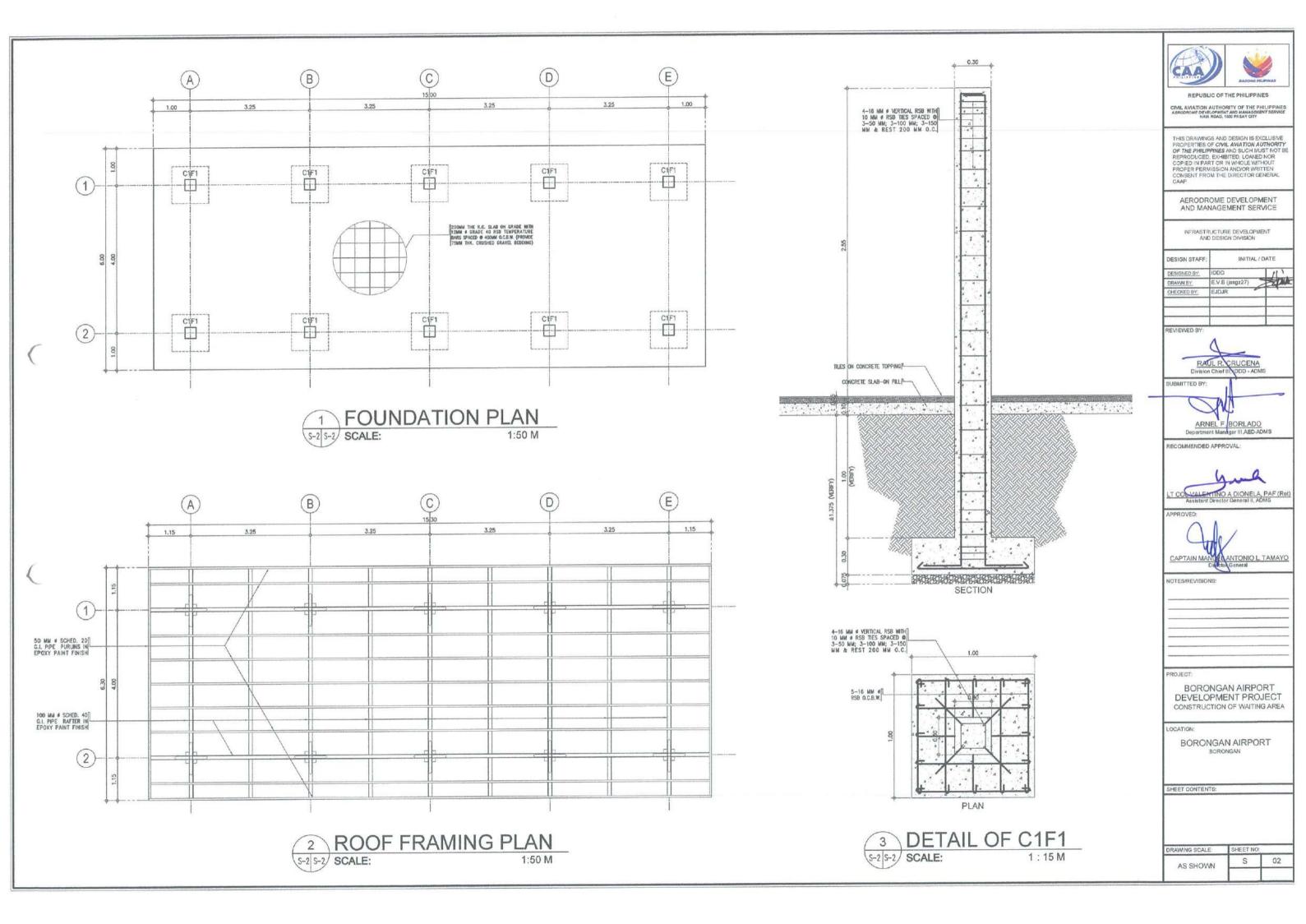
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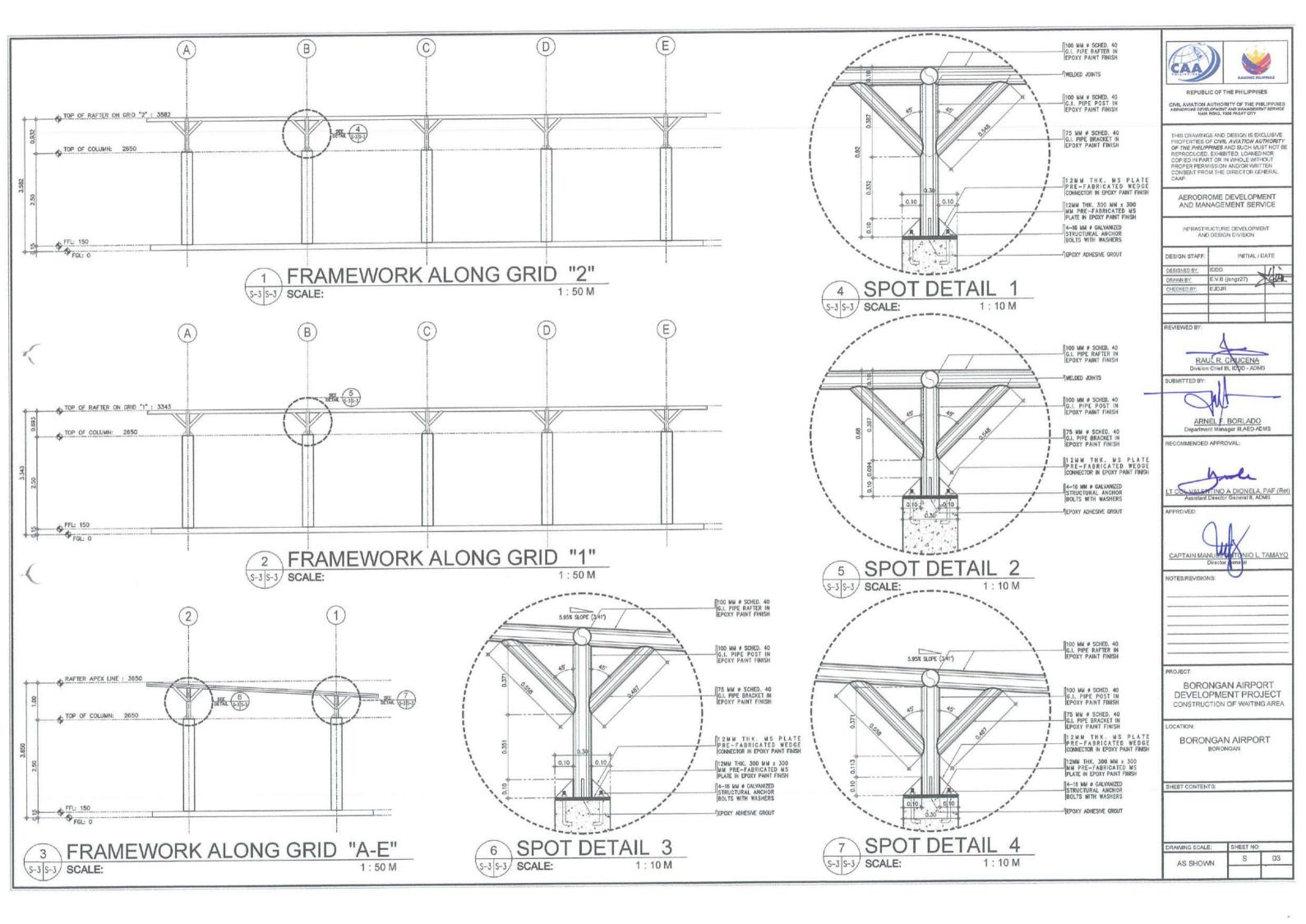
BORONGAN AIRPORT BORONGAN

SHEET CONTENTS:

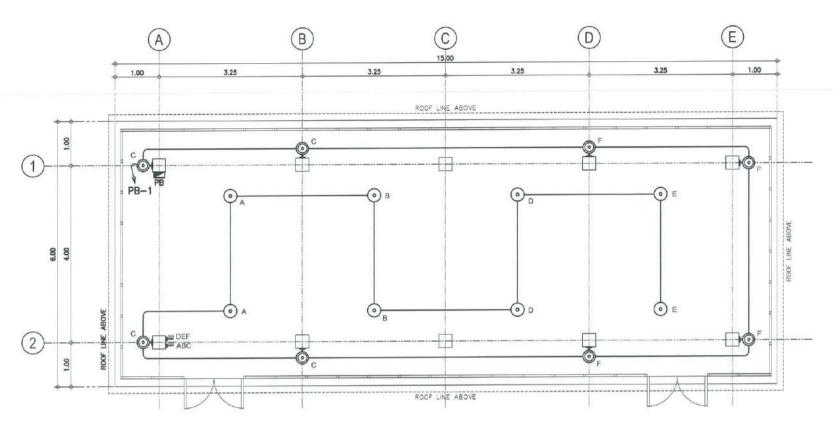
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AS SHOWN S 01

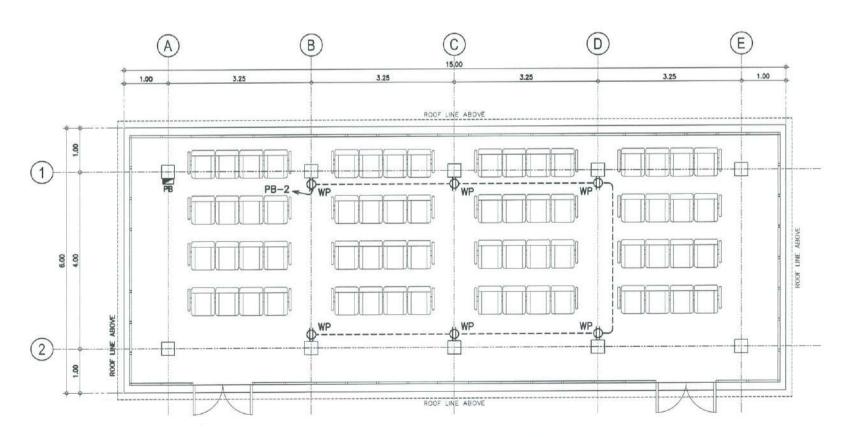




	LEGEND
SYMBOL	DESCRIPTION
0	22 WATTS E27 LED FLAT LAMP
©	18 WATTS LED WEATHERPROOF WALL LIGHT
⇔ WP	WEATHERPROOF DUPLEX UNIVERSAL OUTLET W/ GROUND, 16AMP
3	THREE-GANG SWITCH, 16AMP, WIDE SERIES
	PANEL BOARD



1 LIGHTING LAYOUT PLAN
E-1 E-1 SCALE: 1:50 M



POWER LAYOUT PLAN

SCALE:





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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGNED BY:	IDDD	
DRAWN BY:	RUAJR	
CHECKED BY:	EJDJR	\neg



ARNEL F BORLADO
Department Manager III,AED-ADMS

RECOMMENDED APPROVAL:



CAPTAIN MANUS ANTONIO L. TAMAYO
Director Coneral

NOTES/REVISIONS

PROJECT:

BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF WAITING AREA

OCATION:

BORONGAN AIRPORT BORONGAN

SHEET CONTENTS:

LEGENDS
 LIGHTING LAYOUT PLAN
 POWER LAYOUT PLAN

DRAWING SCALE: SHEET NO: 01 AS SHOWN

SCHEDULE OF LOADS: PB: 230VOLTS, 1-PHASE, 2WIRE + G

CKT.	LOAD DESCRIPTION	NO. OF OUTLET	VOLTS	VA PER CIRCUIT	PHASE	AMP	CB RATING	SIZE OF WIRE	SIZE OF CONDUITS
1	LIGHTING OUTLET	16	230	480	1	2.09	20AT, 2P	2-3.5mm² THHN/THWN-2 CU WIRE + 1-3.5mm² THHN/THWN-2 CU WIRE (G)	20mmØ EMT PIPE
2	CONVENIENCE OUTLET	6	230	1080	1	4.70	20AT, 2P	2-3,5mm² THHN/THWN-2 CU WIRE + 1-3.5mm² THHN/THWN-2 CU WIRE (G)	20mmØ EMT PIPE
3	SPARE		230	1000	1	4.35	20AT, 2P		
	Т	OTAL				11.14			

 $I_T = 11.14 \times 1.25$

 $I_T = 13.93 A$

FOR THE FEEDER CONDUCTOR:

USE: 2 - 5.5mm² THHN/THWN-2 COPPER WIRE

1 - 5.5mm² THHN/THWN-2 COPPER WIRE (G) IN 25mm ELECTRICAL PVC PIPE

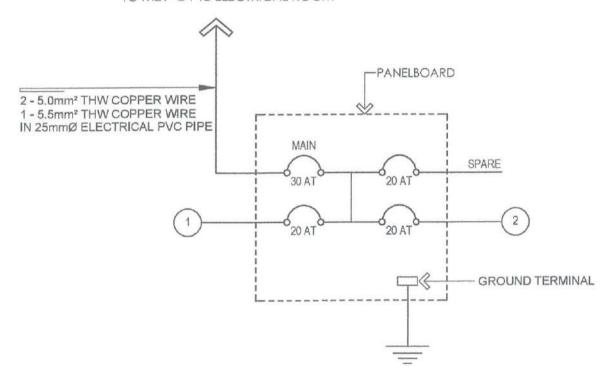
FOR THE FEEDER PROTECTION:

USE: 30AT, 100AF, 2-POLE, 230V, 10KAIC CB

1 SCHEDULE OF LOADS

E-2 E-2 SCALE: NTS

TO MDP @ PTB ELECTRICAL ROOM









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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT

DESIGNED BY:	IDDD	
DRAWN BY:	RUAJR	
CHECKED BY:	EJDJR	

REVIEWED BY



SUBMITTED BY:

ARNEL F, BORLADO

RECOMMENDED APPROVAL:



APPROVED:



NOTES/REVISIONS:

Attendance.		-	
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BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF WAITING AREA

LOCATIO

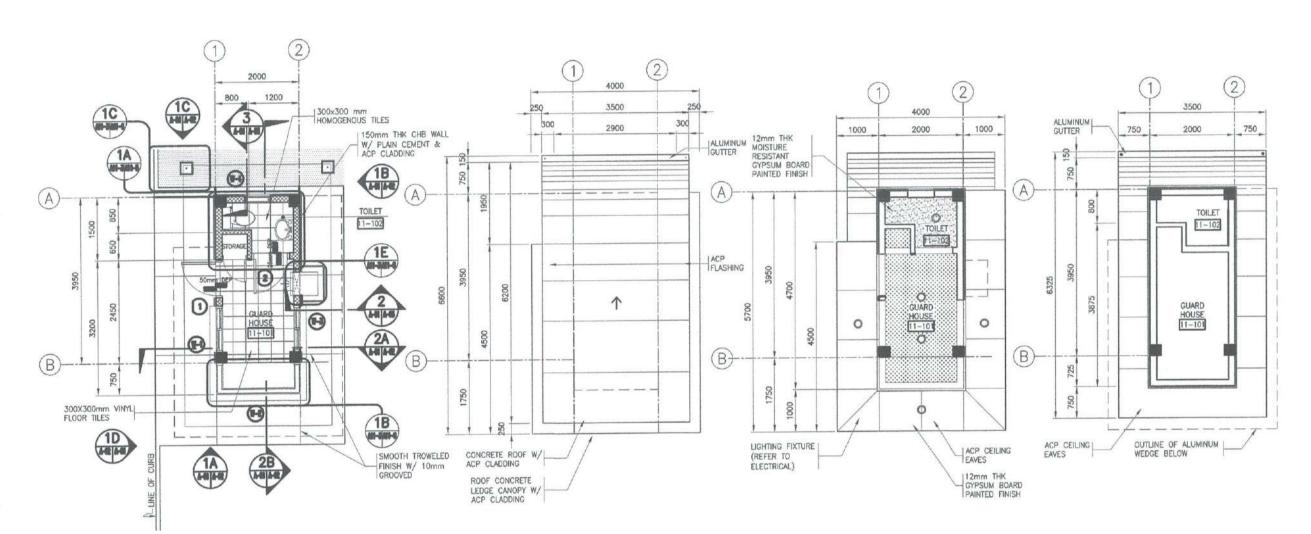
BORONGAN AIRPORT BORONGAN

SHEET CONTENTS:

SCHEDULE OF LOADS
 SINGLE LINE DIAGRAM

SINGLE LINE DIAGRAM

DRAWING SCALE:	SHEET NO	
AS SHOWN	E	02
110 0110111		



FLOOR PLAN A-01 A-01 SCALE:

ROOF PLAN A-01A-01 SCALE:

REFLECTED CEILING PLAN @ CANOPY A-01 A-01 SCALE: 1:50 M

REFLECTED CEILING 4 PLAN @ ROOF A-01 A-01 SCALE: 1:50 M





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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL/	DATE
DESIGNED BY:	IDDD	11
DRAWN BY	E.V.B (jangz27)	10W
CHECKED BY	EJDJR	T

RAULIR, CRUCENA Division Chief III, INDD - ADMS



RECOMMENDED APPROVAL





NOTES/REVISIONS:

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PROJECT:

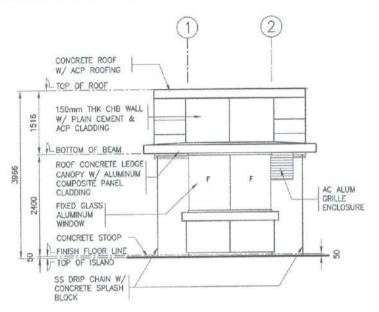
BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF GUARD HOUSE

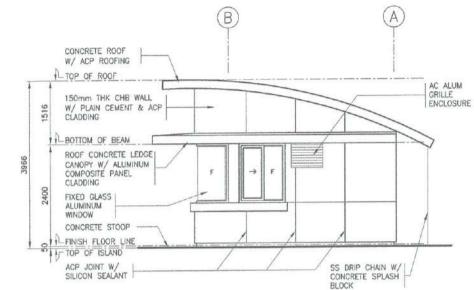
BORONGAN AIRPORT BORONGAN

SHEET CONTENTS:

FLOOR PLAN ROOF PLAN REFLECTED CEILING PLAN @ CANOPY REFLECTED CEILING PLAN @ ROOF

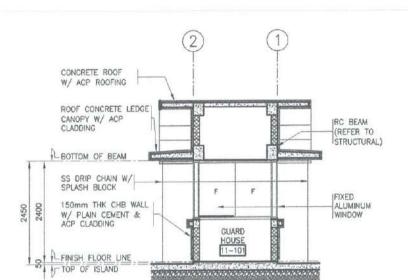
SHEET NO: DRAWING SCALE: Α 01 AS SHOWN





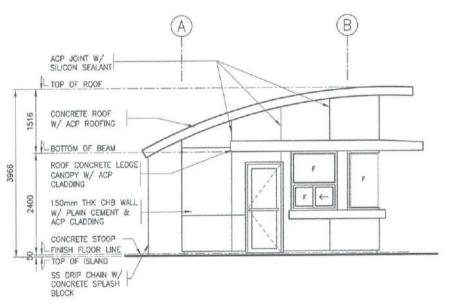
1B ELEVATION

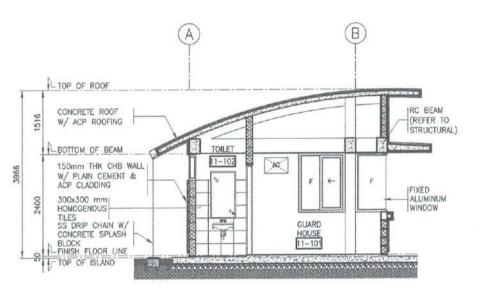
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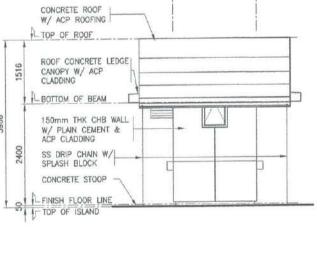






















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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

INITIAL	DATE
IDOD	JIL
E.V.B (jangz27)	ZXA
EJDJR Z	1
	+
	IDOD E.V.B (jangz27)

REVIEWED BY



SW.

ARNEL F. BORLADO
Department Manager III,AED-ADI

RECOMMENDED APPROVAL:



APPROVED:

CAPTAIN MANUS	ANTONIO L TAMAYO
Direct	General
IOTES/REVISIONS	

BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF GUARD HOUSE

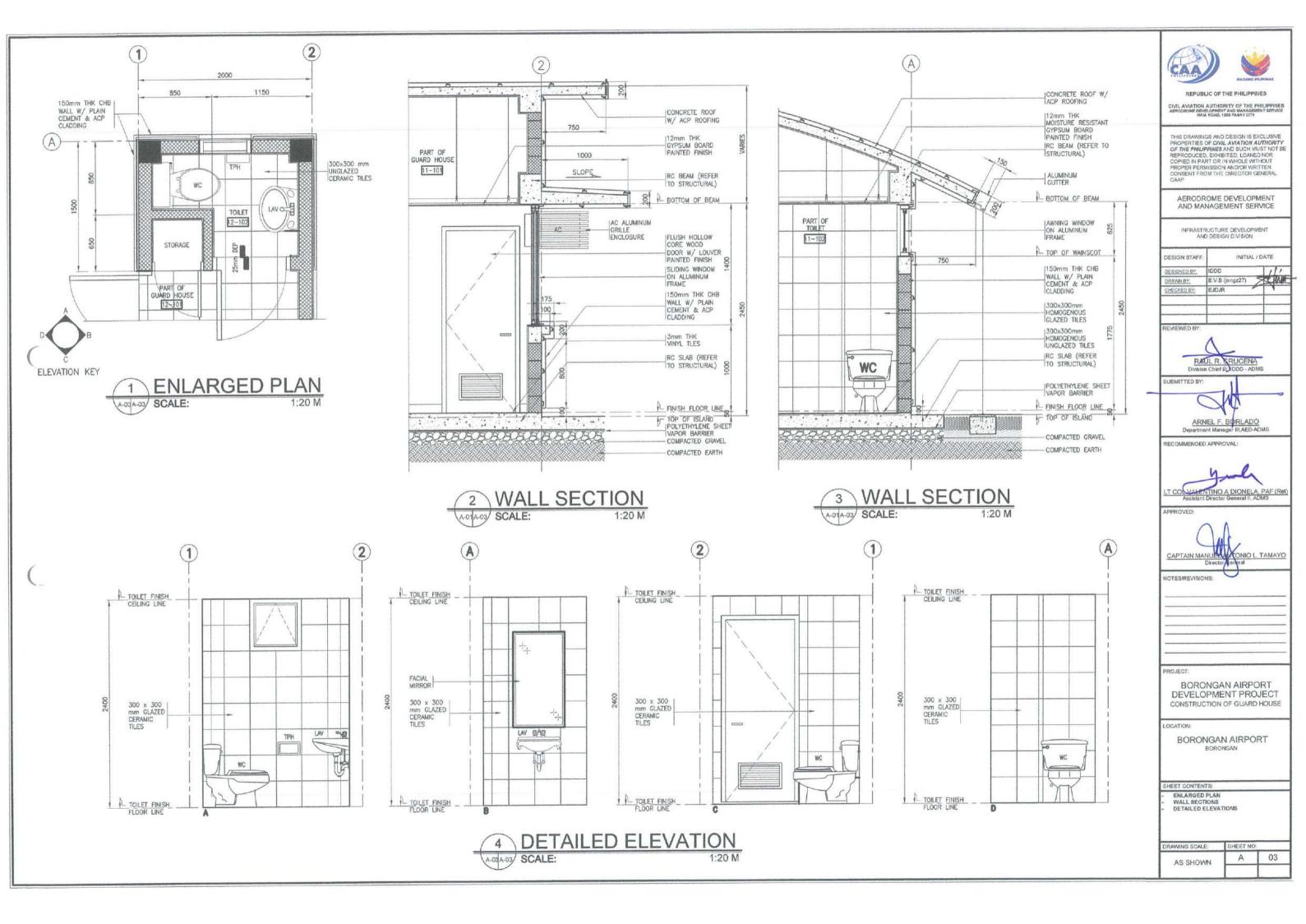
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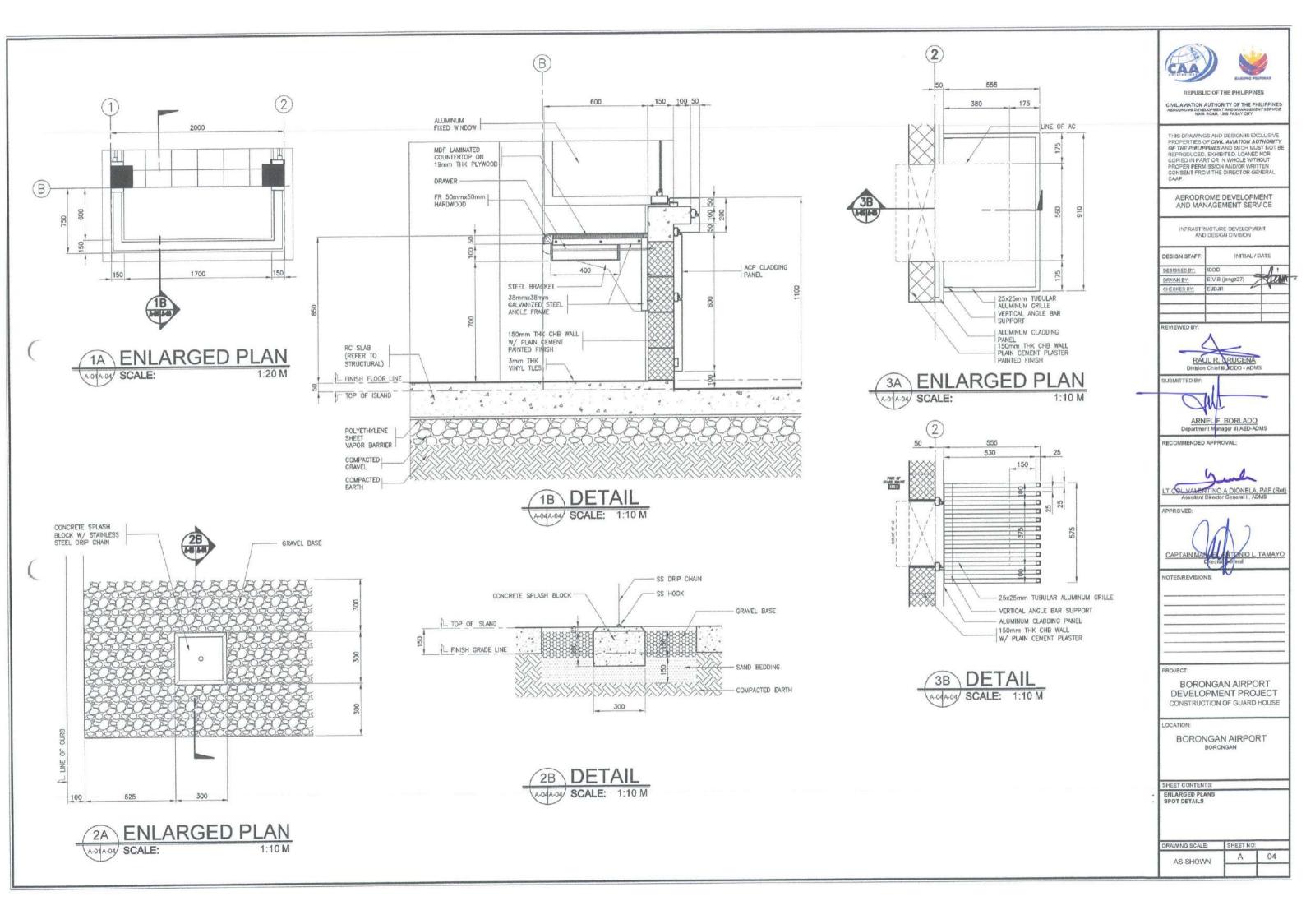
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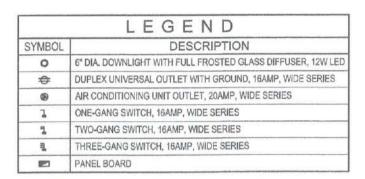
BORONGAN AIRPORT BORONGAN

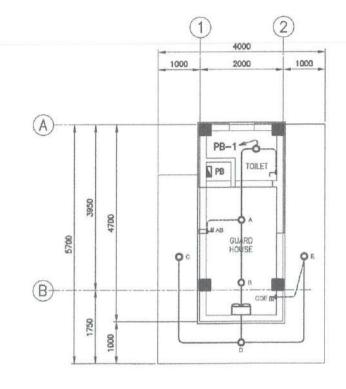
SHEET CONTENTS:

DRAWING SCALE:	SHEET NO	
	Ι Δ	02









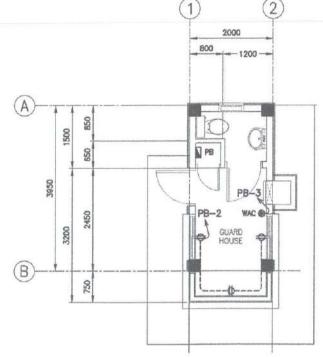


LIGHTING LAYOUT

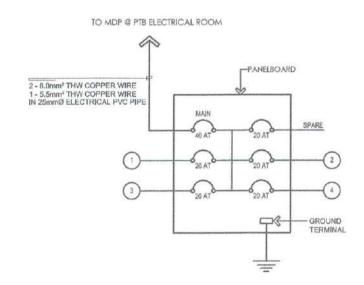
SCHEDULE OF LOADS: PR: 230VOLTS, 1-PHASE, 2WIRE + G

CKT.	LOAD DESCRIPTION	NO. OF OUTLET	VOLTS	VA PER CIRCUIT	PHASE	AMP	CB RATING	SIZE OF WIRE	SIZE OF CONDUITS
1	LIGHTING OUTLET	7	230	350	1	1.52	20AT, 2P	2-3,5mm² THHN/THWN-2 CU WIRE + 1-3,5mm² THHN/THWN-2 CU WIRE (G)	20mmØ uPVC PIPE
2	CONVENIENCE OUTLET	3	230	540	1	2.35	20AT, 2P	2-3.5mm² THHN/THWN-2 CU WIRE + 1-3.5mm² THHN/THWN-2 CU WIRE (G)	20mmØ uPVC PIPE
3	AIR CONDITIONING OUTLET	1	230	1500	1	6.52	20AT, 2P	2-3.5mm² THHN/THWN-2 CU WIRE + 1-3.5mm² THHN/THWN-2 CU WIRE (G)	20mmØ uPVC PIPE
4	SPARE		230	1000	1	4.35	20AT, 2P		
5	SPARE		230	1000	1	4.35	20AT, 2P		
	T 0 1	AL				19.09			
	I _T = 19.09 × 1.25 I _T = 23.87 A		.0mm² TH		COPPE			DR THE FEEDER PROTECTION: SE: 40AT, 100AF, 2-POLE, 230V, 10KAIC C	CB C















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AEROGROME DEVELOPMENT AND MANAGEMENT SERVICE
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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DRAWN BY RUAJR
ALTERNATION (BL) (C) (C) (C)
CHECKED BY. EJDJR



SUBMITTED BY

ARNEL F BORLADO
Department Marriager III, AED-ADMS

RECOMMENDED APPROVAL





	7	_	_

BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF GUARD HOUSE

LOCATION

BORONGAN AIRPORT

LEGENDS LIGHTING LAYOUT POWER LAYOUT SCHEDULE OF LOADS SINGLE LINE DIAGRAM

RAWING SCALE: SHEET NO: E 01 AS SHOWN

GENERAL NOTES :

- 1. IT IS NOT INTENDED THAT THE DRAWINGS SHALL SHOW EVERY PIPE FITTING, VALVE AND APPURTENANCE. ALL SUCH ITEMS WHETHER SPECIFICALLY MENTIONED OR NOT, OR INDICATED ON THE DRAWINGS SHALL BE FURNISHED AND INSTALLED IF NECESSARY TO COMPLETE THE SYSTEM TO THE SATISFACTION OF THE
- 2. ALL DIMENSIONS AND PIPE SIZES ARE IN MILLIMETERS EXCEPT OTHERWISE SHOWN. INDICATED METRIC EQUIVALENT USED ON THESE PLANS FOR PIPE SIZES:

1/2"	= 15mm	1 1/2"	= 40mm	3"	= 75mm
3/4"	= 20mm	2"	= 50mm	4"	= 100m
1 1/4"	= 32mm	2 1/2"	= 65mm		

- 3. ALL PLUMBING WORKS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISION OF THE NATIONAL PLUMBING CODE OF THE PHILIPPINES, THE REQUIREMENTS OF THE LOCAL PLUMBING INSPECTION OFFICE, PERTINENT PROVISIONS OF THE UNIFORM BUILDING CODE AND UNIFORM PLUMBING CODE.
- 4. ALL PLUMBING INSTALLATIONS SHALL BE COORDINATED WITH OTHER TRADES. ANY REVISION IN THE PIPING LAYOUT REQUIRED FOR PROPER EXECUTION OF OTHER TRADES SHALL BE WITH PRIOR APPROVAL OF THE ENGINEER.
- 5. HORIZONTAL SANITARY SEWER PIPING SHALL BE RUN IN PRACTICAL ALIGNMENT AT A MINIMUM SLOPE OF 1% FOR PIPES 100mmø & LARGER & 2% FOR 75mmø & SMALLER.
- VENT PIPES SHALL BE FREE FROM DROPS OR SAGS AND SHALL BE SLOPED OR GRADED AS TO URIP BACK BY GRAVITY TO THE DRAINAGE PIPE IT SERVES.
- 7. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE, SUCH AS, THE ACTUAL PIPE SIZES, LOCATIONS, DEPTHS, TOP AND INVERT ELEVATIONS OF ALL EXISTING PIPES AND RELATED STRUCTURES. THE CONTRACTORS SHALL PROVIDE THE NECESSARY EXCAVATIONS, BACKFILLING AND SURFACE RESTORATION OF THE AFFECTED AREAS IN THE LAYING OF SEWER, AND WATER SUPPLY LINES.
- 8. CONDENSATE DRAINAGE SYSTEM FOR AIRCONDITIONING EQUIPMENT INCLUDING PIPINGS, FITTINGS, SUPPORTS, ALL REQUIRED ACCESSORIES AND TAPPING POINTS SHALL BE PART OF MECHANICAL
- 9. PROVIDE VALVE BOX FOR EACH EMBEDDED GATE VALVE.
- 10. ALL PIPE SIZES INDICATED ON PLANS WERE SIZED ACCORDING TO THEIR INSIDE DIAMETER.

MATERIALS' SPECIFICATION:

COLD WATER LINE

(INSIDE OF BUILDING) - SHALL BE POLYPROPYLENE RANDOM (TYPE 3) PN 20; HIGH RESISTANCE TO PRESSURE AND TEMPERATURE, CONFORMING TO EN ISO 15874. SIMILAR TO GEORGE FISCHER, NELTEX, UNITEC PP-R PIPE OR APPROVED EQUIVALENT. (OUTSIDE OF BUILDING & EXPOSED) - SHALL BE HOT-DIPPED GALVANIZED IRON PIPE CONFORMING TO ASTM A53. SIMILAR TO SUPREME , SUPERIOR AND IPI PIPE SCHEDULE 40 OR APPROVED EQUIVALENT.

SOIL, WASTE AND VENT LINES

- SHALL BE UNPLASTICIZED POLYVINYL CHLORIDE (uPVC) PIPE CONFORMING TO ASTM D2729, SIMILAR TO NELTEX, MOLDEX OR EMERALD SERIES 1000 UPVC OR APPROVED EQUIVALENT.

LEGEND, SYMBOLS & ABBREVIATIONS:

WATER SUF	PPLY AND DIS	TRIBUTION SYSTEMS:	SOIL, WASTE	AND VENT	SYSTEMS:			
	- PCWL/IWL	POTABLE COLD WATER LINE		SP/WP	SOIL PIPE/V	WASTE PIPE		
	- NPCWL	NON-POTABLE COLD WATER LINE		VP/VBS	VENT PIPE/	VENT BELOW SLAB		
 ⊳4	— GV	GATE VALVE	 }	VTW	VENT THRU	WALL		
	— cv	CHECK VALVE		FD	FLOOR DRA	N		
	- RED/INC	REDUCER/INCREASER		FCO	FLOOR CLEA			
	— wм	WATER METER		700	TEOUT GELF	11001		
ABBREVIATI	ONS:							
0	AT	DIM.	DIMENSIONS		LVL	LEVEL	S	SLOPE
AC .	AIR CHAMBER	FGL	FINISHED GRADE	LINE	MAX.	MAXIMUM	SCHED.	SCHEDULE
APP.	APPROXIMATE	FIN.	FINISHED		mm	MILLIMETER	SHT.	SHEET
BLDG.	BUILDING	FLR.	FLOOR		MIN	MINIMUM	2ND.	SECOND
CCSK.	CONCRETE COL	INTER SINK FR.	FROM		#	NUMBER	STD.	STANDARD
CONC.	CONCRETE	GALV.	GALVANIZED		O.C.	ON CENTER	SQ.M	SQUARE METER
CONN.	CONNECTION	G.I.	GALVANIZED IRON	f	O.D.	OUTSIDE DIAMETER	T.E.	TOP ELEVATION
CONT.	CONTINUATION	G.I.P.	GALVANIZED IRON	PIPE	PN	NOMINAL PRESSURE	THK.	THICK
СНВ	CONC. HOLLOW	BLOCKS GRND.	GROUND		PVC	POLYVINYL CHLORIDE	TYP.	TYPICAL
Cu.M.	CUBIC METER	HOR.	HORIZONTAL		PROF.	PROOFING		
DIA /d/D	DIAMETER	I.E.	INVERT ELEVATION	4	R.C.	REINFORCED CONCRETE		

PLUMBING FIXTURE CONNECTION SCHEDULE (MINIMUM PIPE SERVICE CONNECTION)

DIAMETER

DIA./ø/D

PLUMBING FIXTURE	SYMBOL	WATER SUPPLY PIPE SIZE(mm)	WASTE/SOIL PIPE SIZE(mm)	TRAP SIZE(mm)
KITCHEN SINK	KS	15	50	38
LAVATORY	LAV	15	50	38
PANTRY SINK	PS	15	50	38
SERVICE SINK	SSK	15	75	50
SHOWER	SH	15	50	50
URINAL	UR	20	50	INTEGRAL
WATER CLOSET (FLUSH TANK)	wc	15	100	INTEGRAL
WATER CLOSET (FLUSH VALVE)	wc	32	100	INTEGRAL

FOUIVALENT PIPE SIZE FOR WATER PIPES

NOMINAL PIPE DIAMETER(mm)	POLYPROPYLENE RANDOM PPR (mm)	
15	20	
20	25	
25	32	
32	40 50	
40		
50	63	
63	75	
75	100	





REPUBLIC OF THE PHILIPPINES CIVIL AVIATION AUTHORITY OF THE PHILIPPINES AERODROME DEVELOPMENT AND MANAGEMENT SERVICE NAME ROAD, 1309 PASAY CITY

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AFRODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGNED BY:	IDDD	1
DRAWN BY	E.V.B (jangz27)	1
CHECKED BY:	EJDJR	



ARNEL F. BORLADO

RECOMMENDED APPROVAL



APPROVED



 	_	

PROJECT:

BORONGAN AIRPORT DEVELOPMENT PROJECT CONSTRUCTION OF GUARD POST

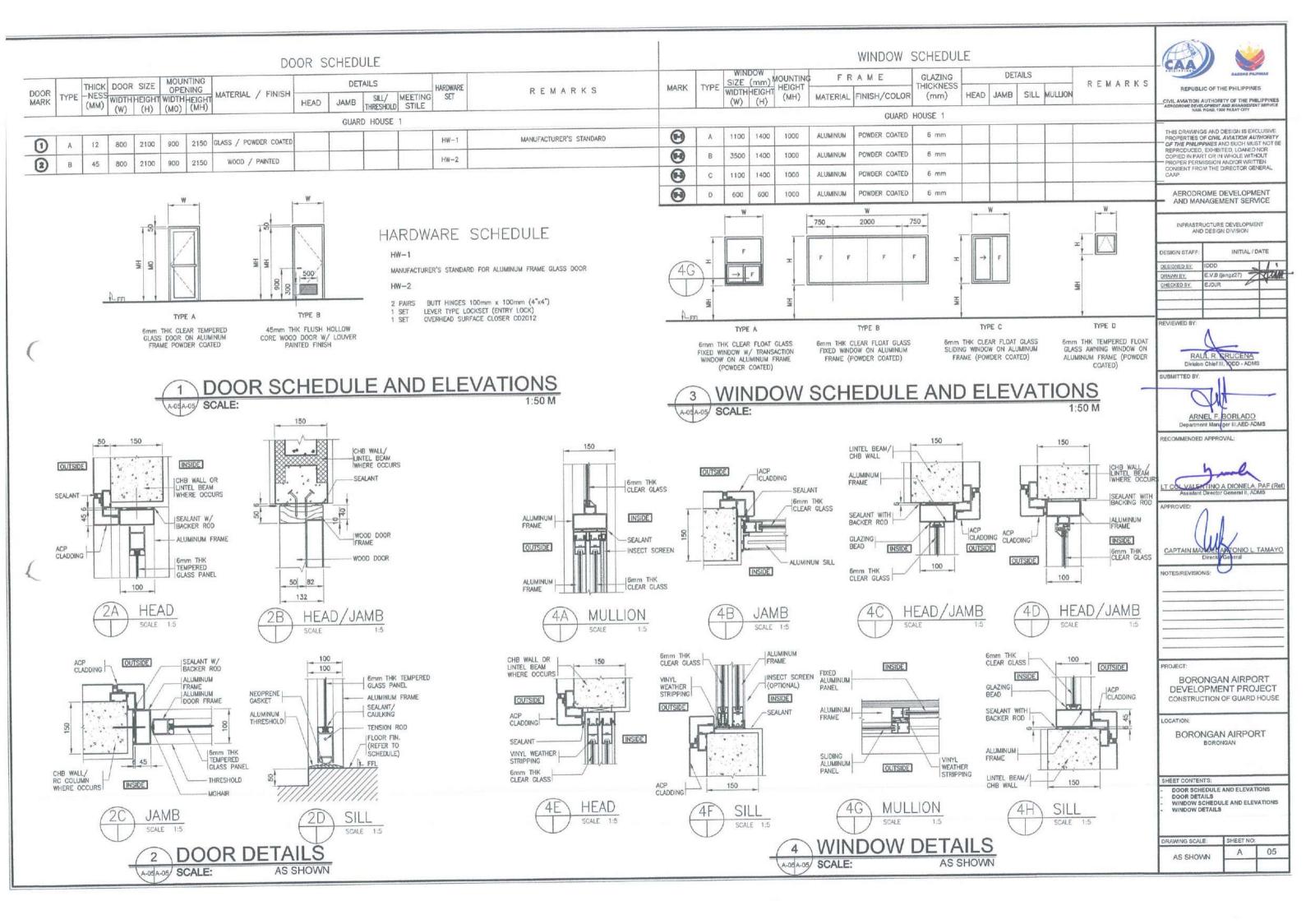
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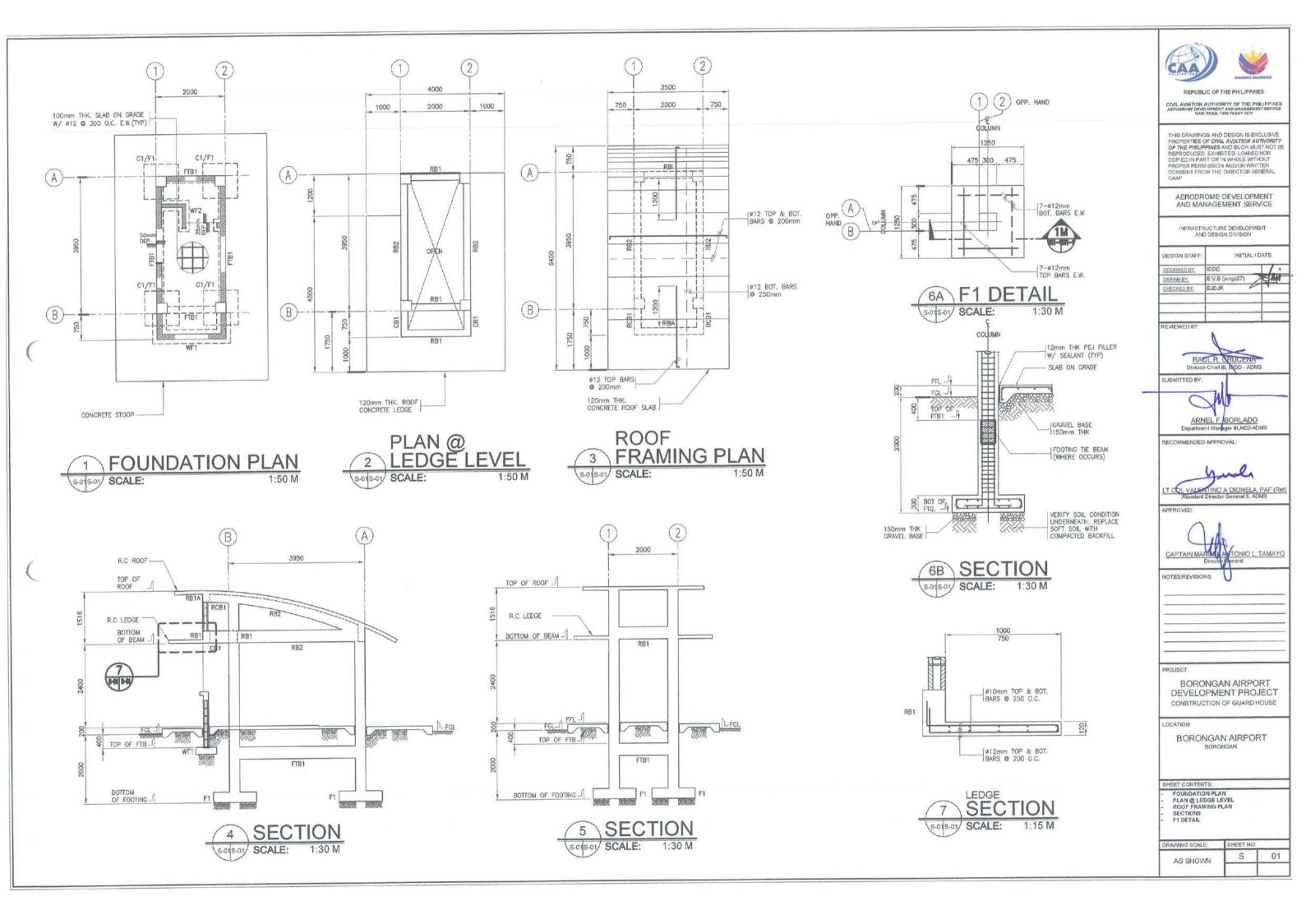
BORONGAN AIRPORT

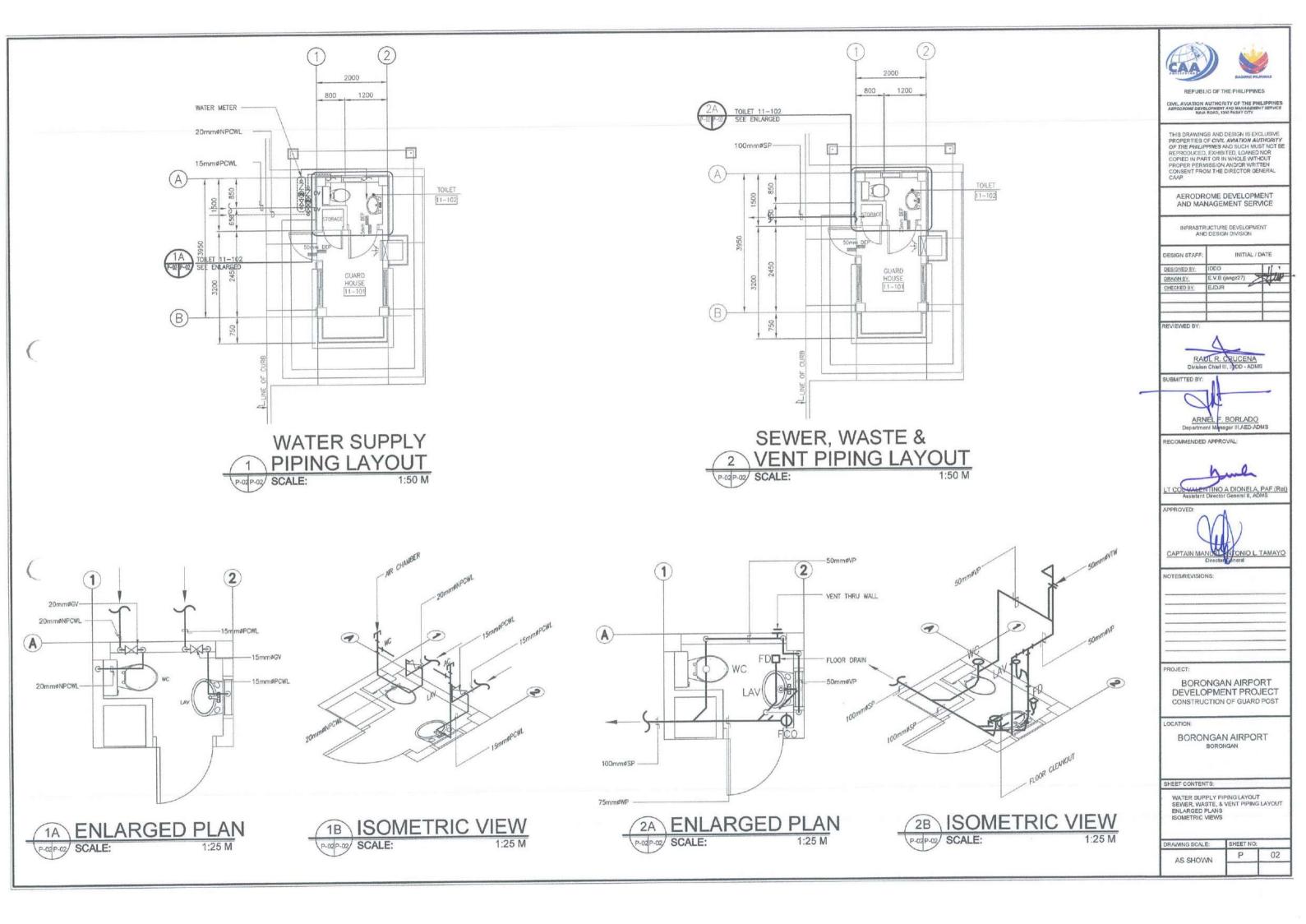
SHEET CONTENTS:

GENERAL NOTES LEGEND, SYMBOLS & ABBREVIATIONS MATERIALS' SPECIFICATIONS PLUMBING FIXTURE CONNECTION EQUIVALENT PIPE SIZE FOR WATER PIPES

DRAWING SCALE:	SHEET NO:		
AS SHOWN	Р	01	







GENERAL NOTES:

- ALL ELECTRICAL WORKS AND INSTALLATIONS SHALL COMPLY WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE WITH THE RULES AND REGULATIONS OF THE NATIONAL AND LOCAL AUTHORITIES CONCERNED IN THE ENFORCEMENT OF ELECTRICAL LAWS AND REGULATIONS OF THE UTILITY COMPANIES CONCERNED.
- ALL ELECTRICAL WORKS HEREIN SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY REGISTERED ELECTRICAL ENGINEER.
- ALL MATERIALS SHALL BE BRAND NEW AND SUBJECT FOR APPROVAL BY CAAP PROJECT IN-CHARGE.
- ALL WORKS SHALL BE EXECUTED IN A WORKMANSHIP MANNER AND SHALL PRESENT A NEAT AND ORDERLY ACCEPTANCE.
- PROVIDE STREETLIGHT PHOTOMETRIC TEST REPORT CERTIFIED BY DEPARTMENT OF ENERGY (DOE) TO VERIFY CLAIMS ON ENERGY RATINGS.

SPECIFICATIONS:

80 WATTS INTEGRATED SOLAR LED STREETLIGHT

WATTAGE

80 WATTS

SOLAR PANEL

18V/85W MONOCRYSTALLINE SILICON

BATTERY

12.8V/48AH BUILT-IN LIFEPO4 LITHIUM IRON BATTERY

LIGHT OUTPUT

8.800 LUMEN / 80 WATTS

LIFE TIME

50,000 HOURS 6500K

COLOR TEMP. LAMP MATERIAL

ALUMINUM ALLOY

BODY COLOR

WHITE

WORKING MODEL

MOTION SENSOR OR TIME CONTROL

CHARGING TIME

6-8 HOURS (BY SUN)

DISCHARGE TIME

3-5 RAINY DAYS, 12 HOURS PER NIGHT

IP RATING

CERTIFICATES

CE, ROHS, IP65

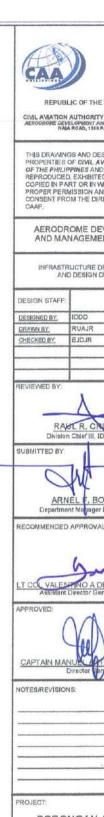
WARRANTY

2 YEARS

IP65

PRODUCT SIZE

1,340 x 430 x 50mm



LEGENDS SYMBOL: SYMBOL: DESCRIPTION: TWO (2) INTEGRATED SOLAR LED STREETLIGHT DESCRIPTION: ONE (1) INTEGRATED SOLAR LED STREETLIGHT IN SINGLE ARM LAMP POST IN DOUBLE ARM LAMP POST



PROPER PERMISSION AND/OR WRITTEN CONSENT FROM THE DIRECTOR GENERA CAAR

AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

DESIGN STAFF:	INITIA	L/DATE
DESIGNED BY	IDDD	
DRAWN BY:	RUAJR	
CHECKED BY:	EJDJR	
-		_

ARNEL F. BORLADO

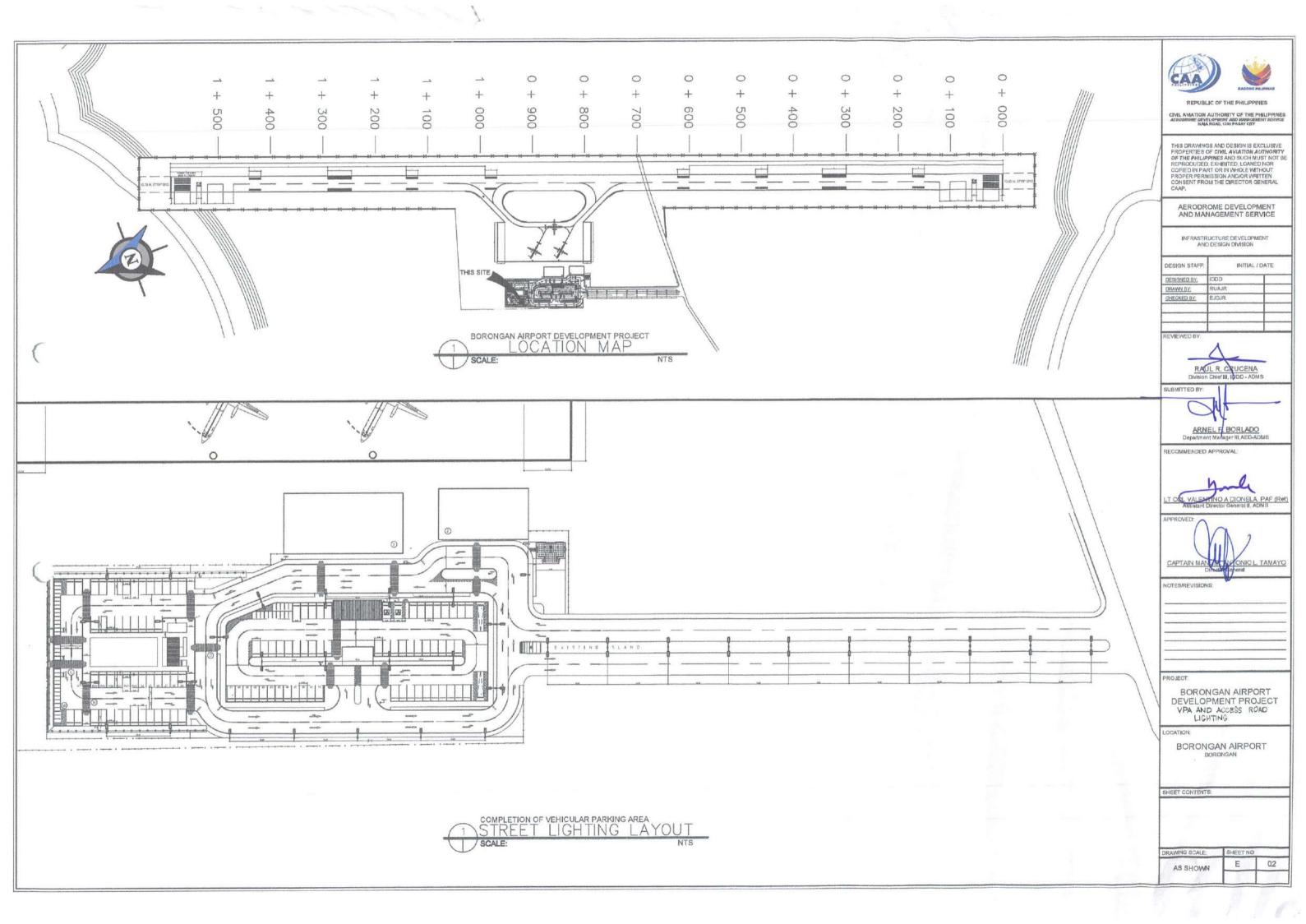


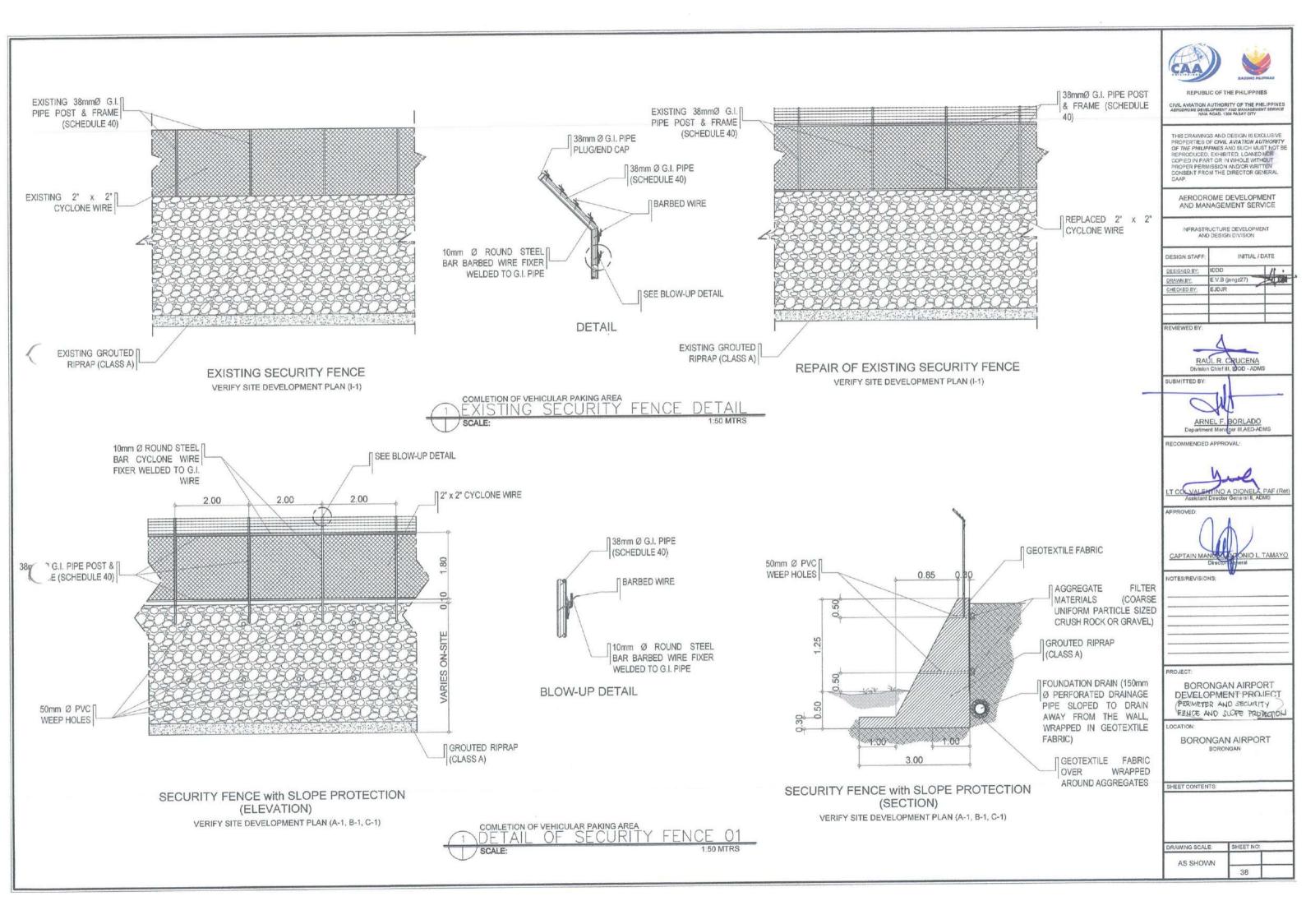
BORONGAN AIRPORT DEVELOPMENT PROJECT YPA AND ACCESS ROAD LIGHTING

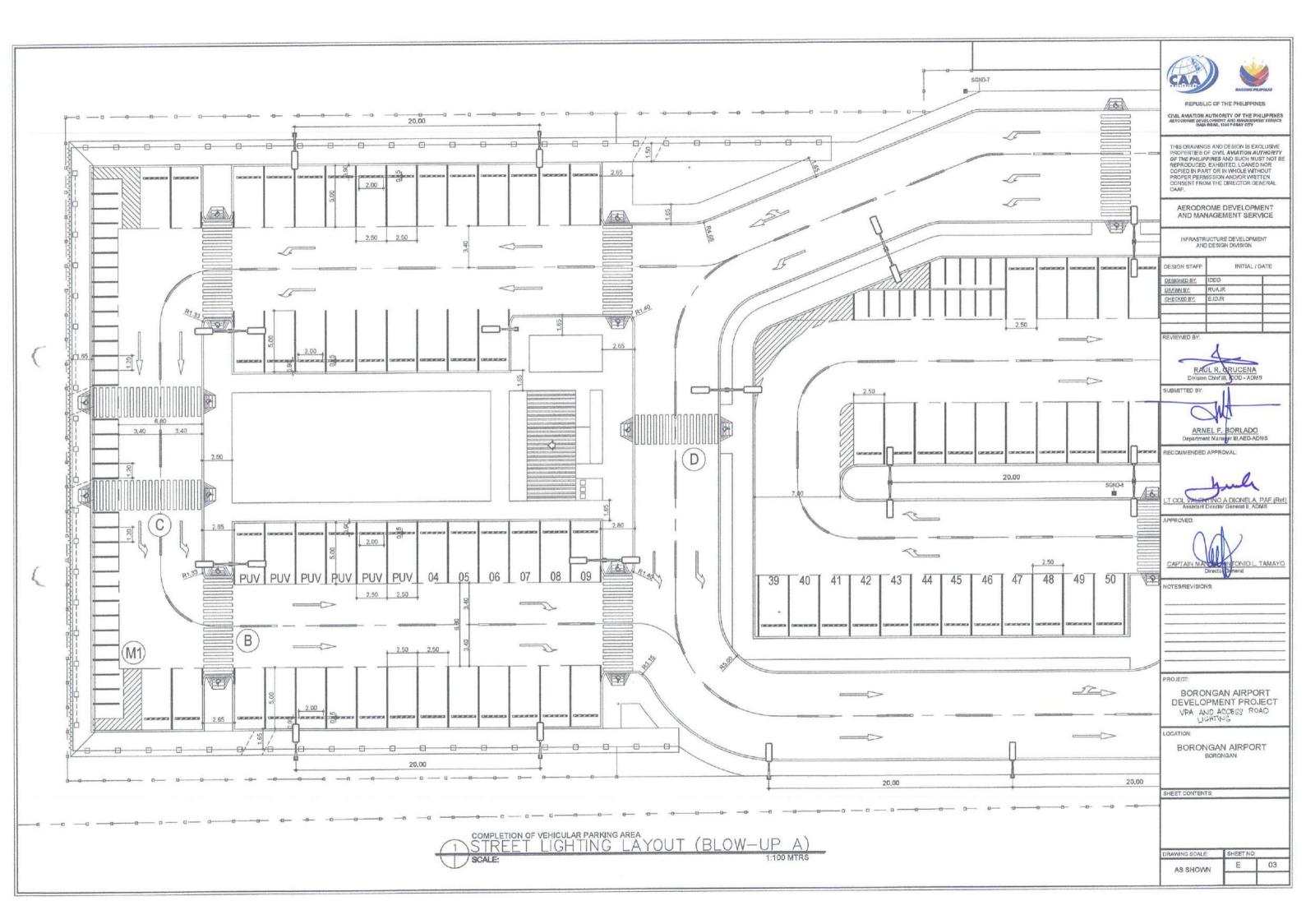
BORONGAN AIRPORT

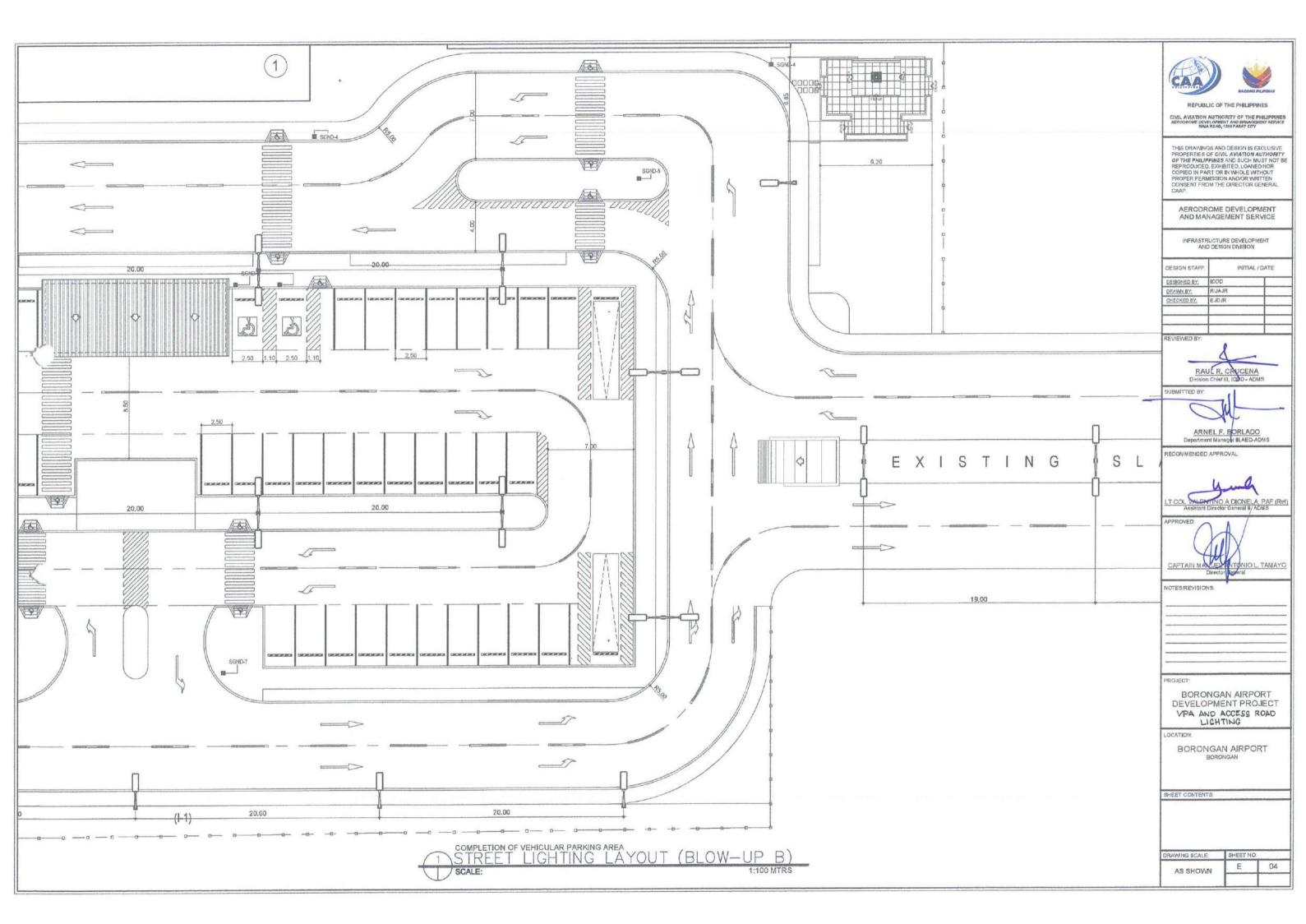
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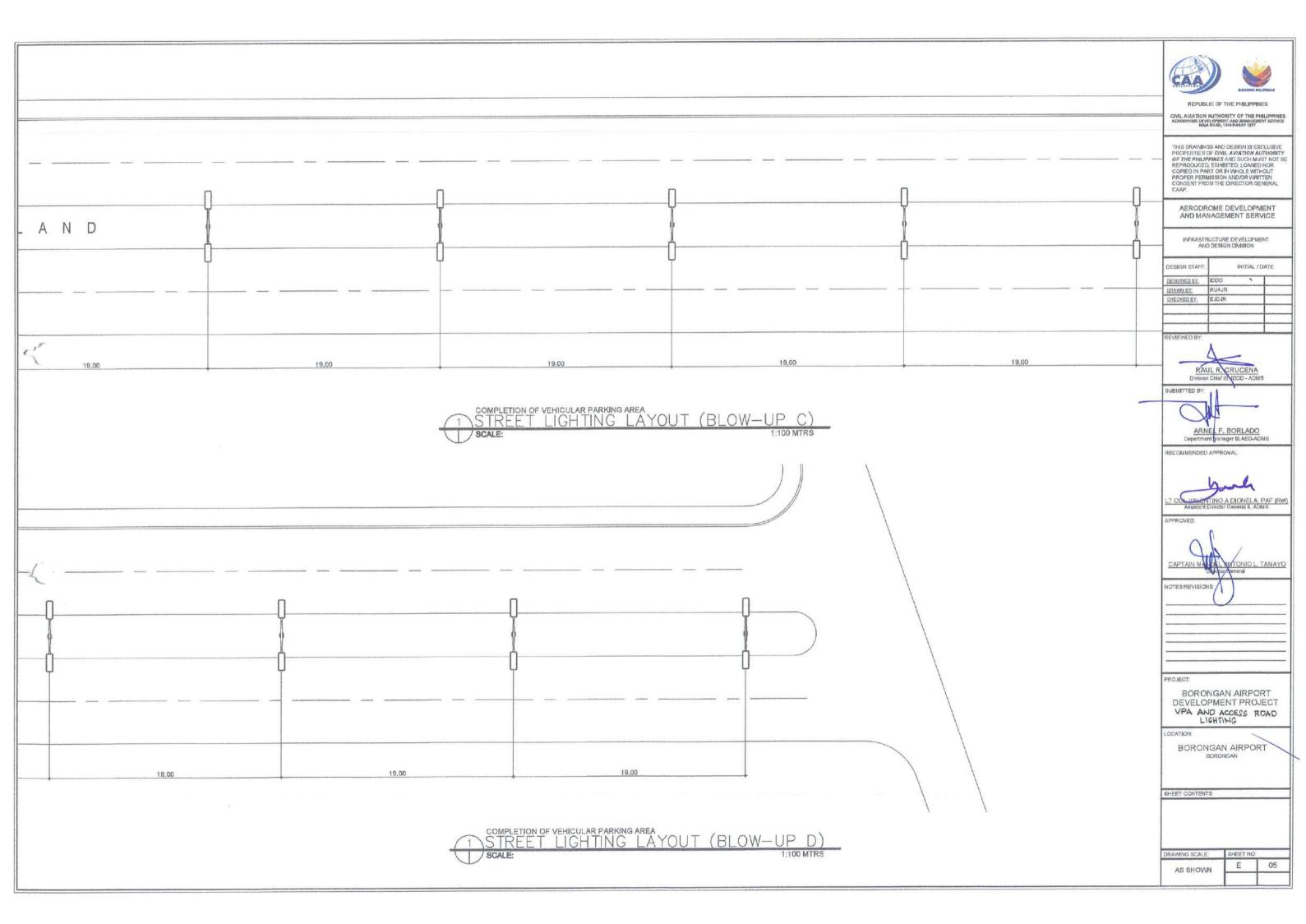
01 E AS SHOWN

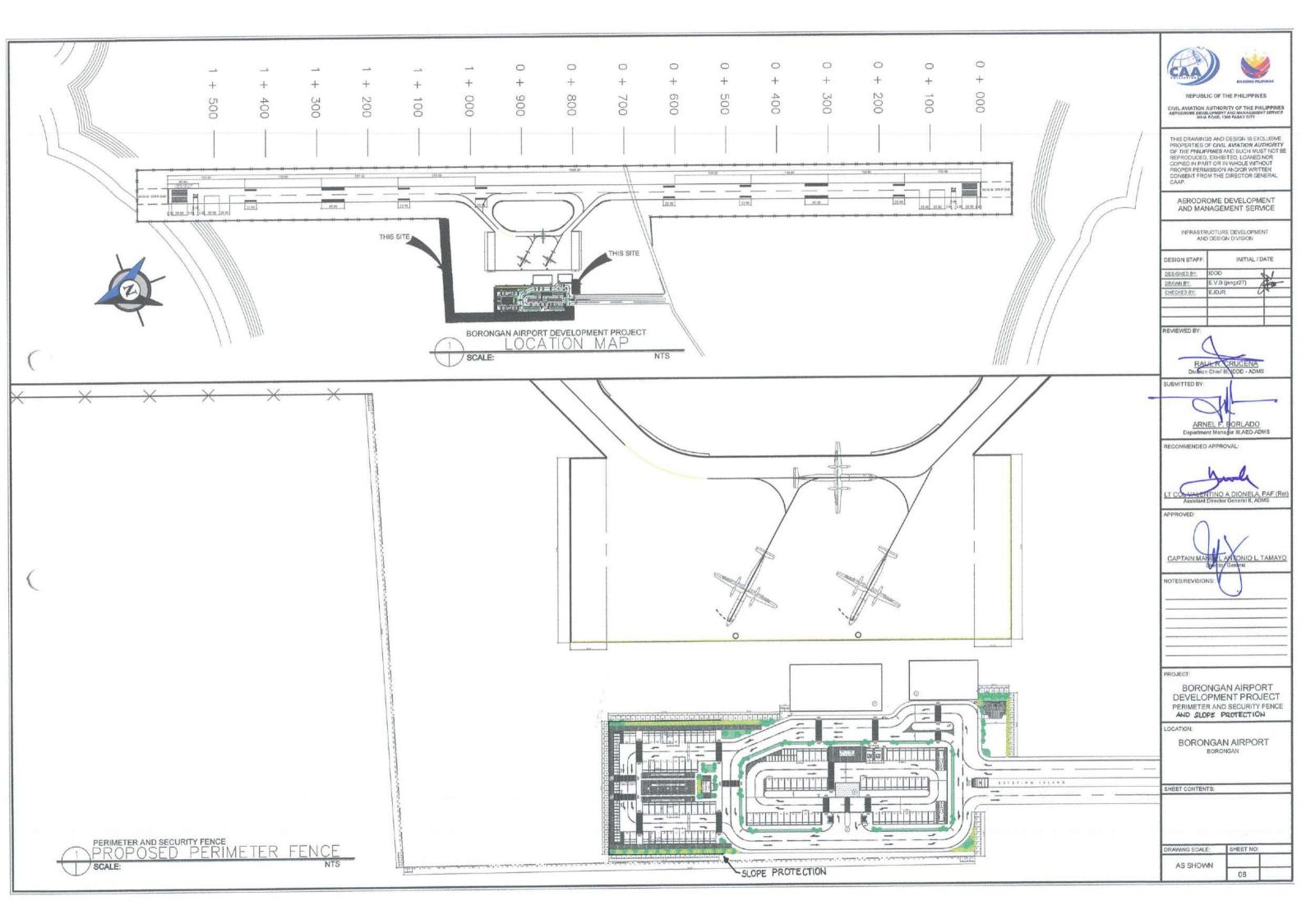


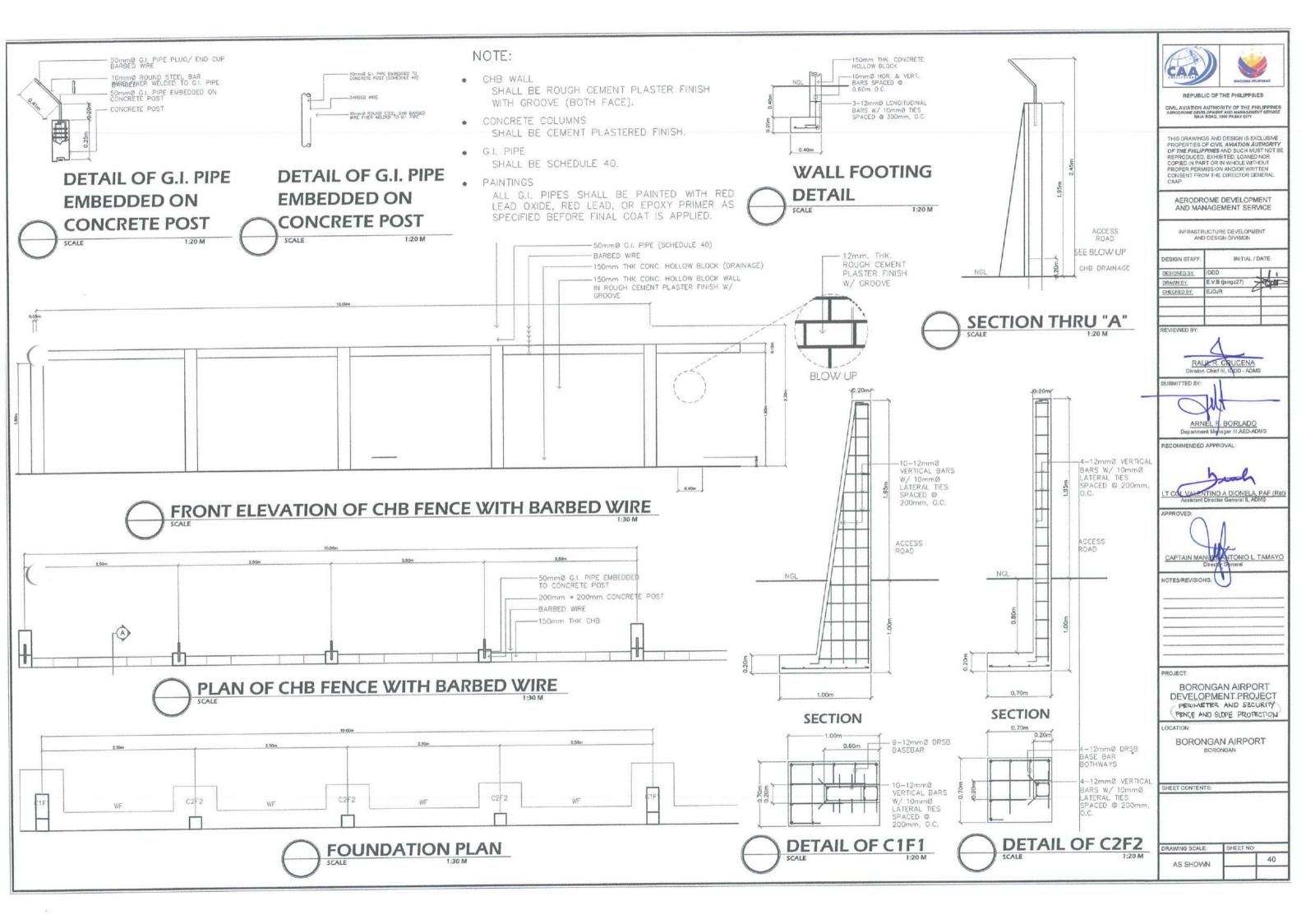


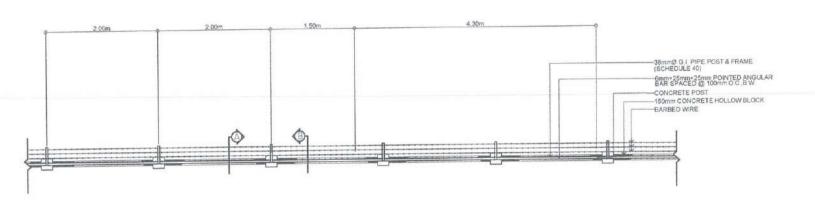




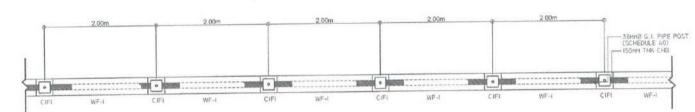




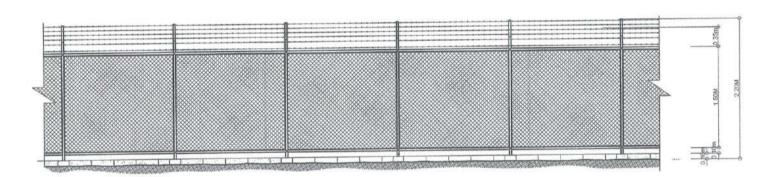




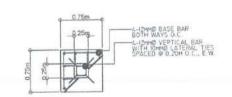




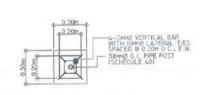
S-3 FOUNDATION PLAN



S-4 ELEVATION OF SECURITY FENCE

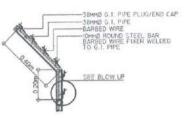


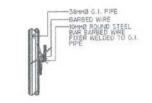








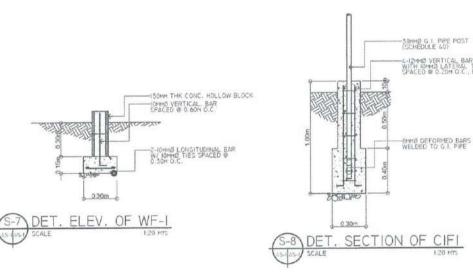




BLOW UP

DETAIL









REPUBLIC OF THE PHILIPPINES

CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
AEROOROME DEVELOPMENT AND MAMAGEMENT SERVICE
MAN ROLD, 1939 PASAY OTTY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

INTUAL	DATE
IDDD	1/1
E.V.B (jangz27)	1
EJDJR -	7
	E.V.B (jangz27)

REVIEWED BY:



ARNEL F. BORLADO

RECOMMENDED APPROVAL:



APPROVED:



NOTES/REVISION

_	_	_	_		۱

PROJECT:

BORONGAN AIRPORT
DEVELOPMENT PROJECT

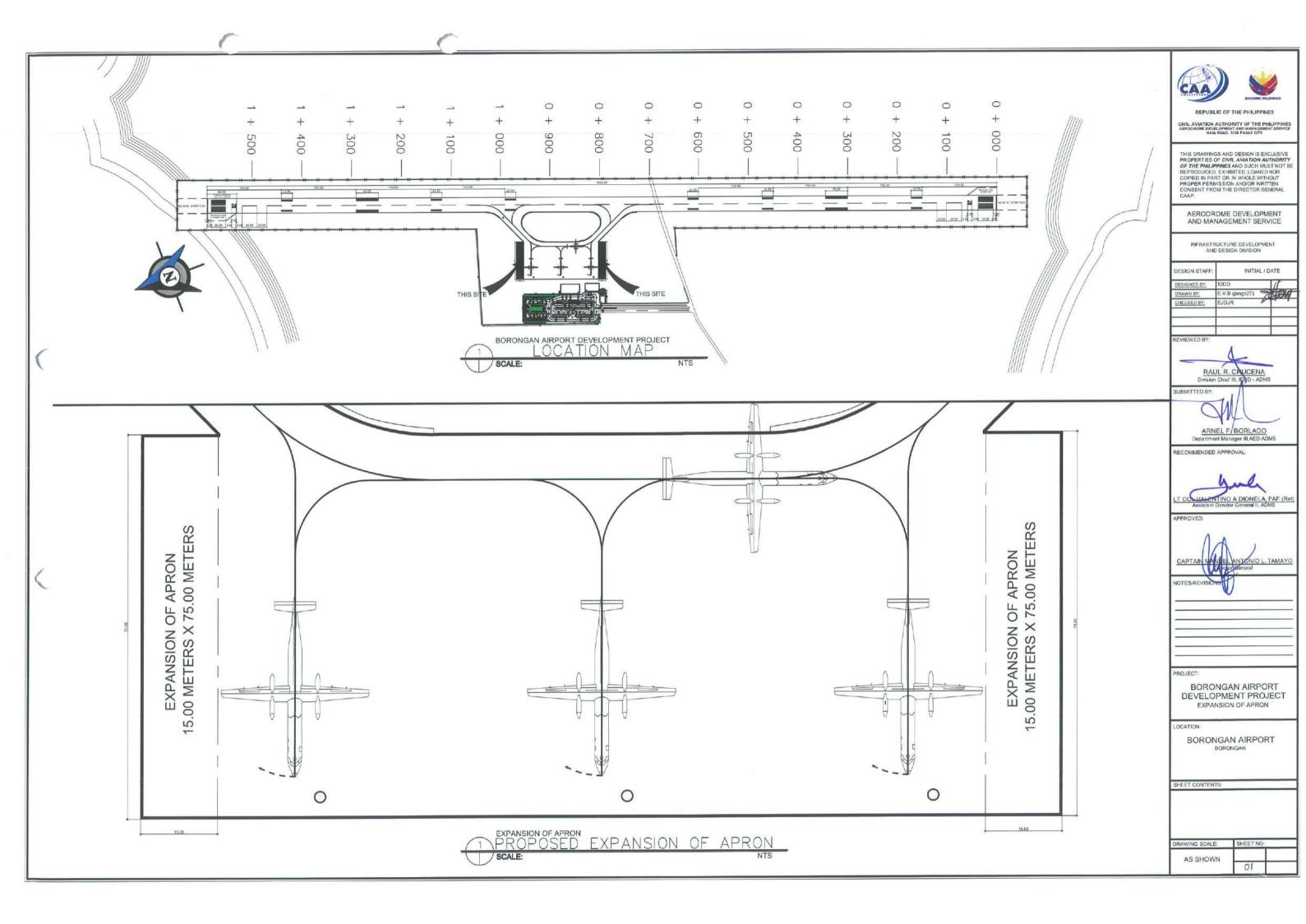
PERIMETER AND SECURITY
FENCE AND SUPE PROTECTION

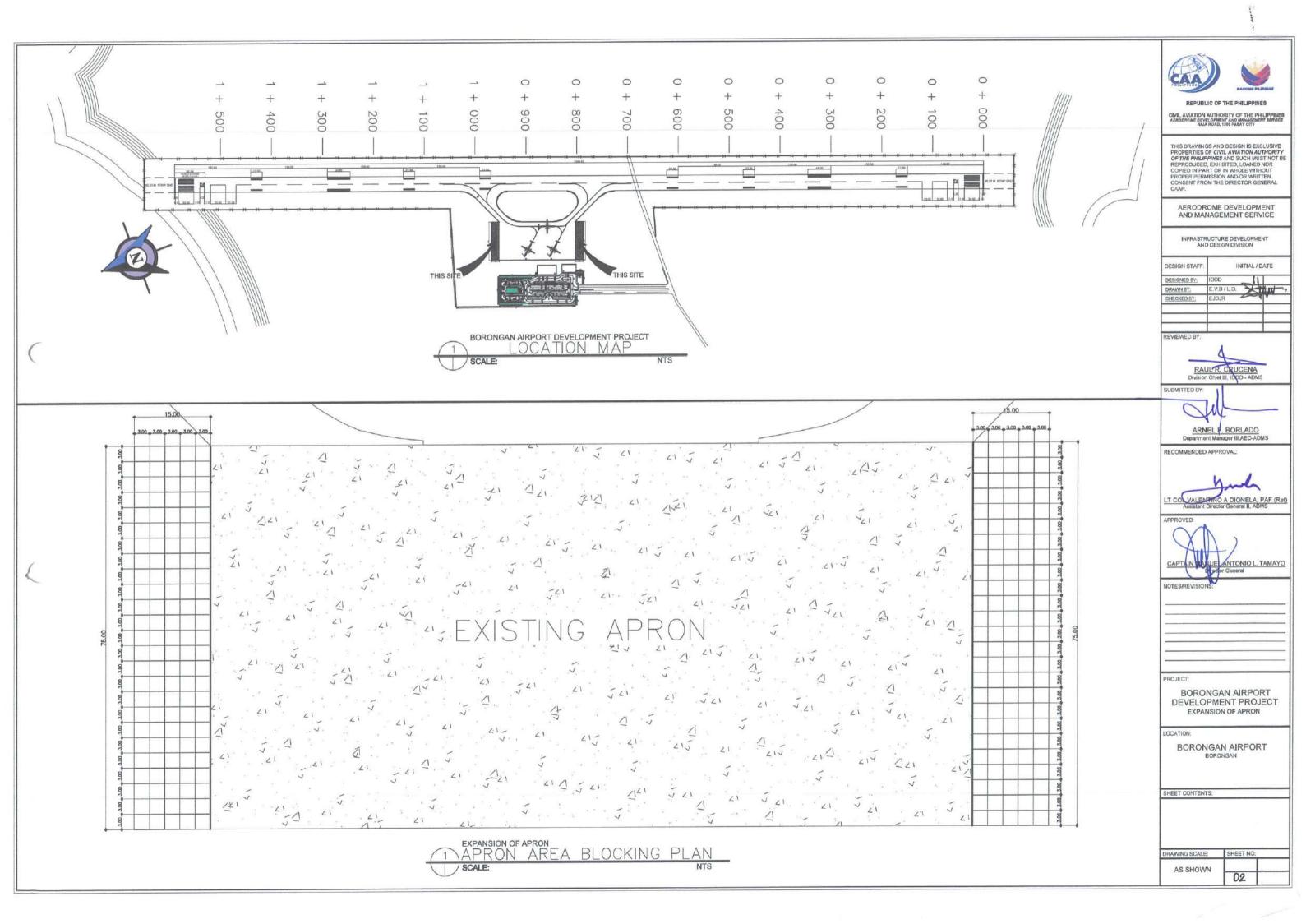
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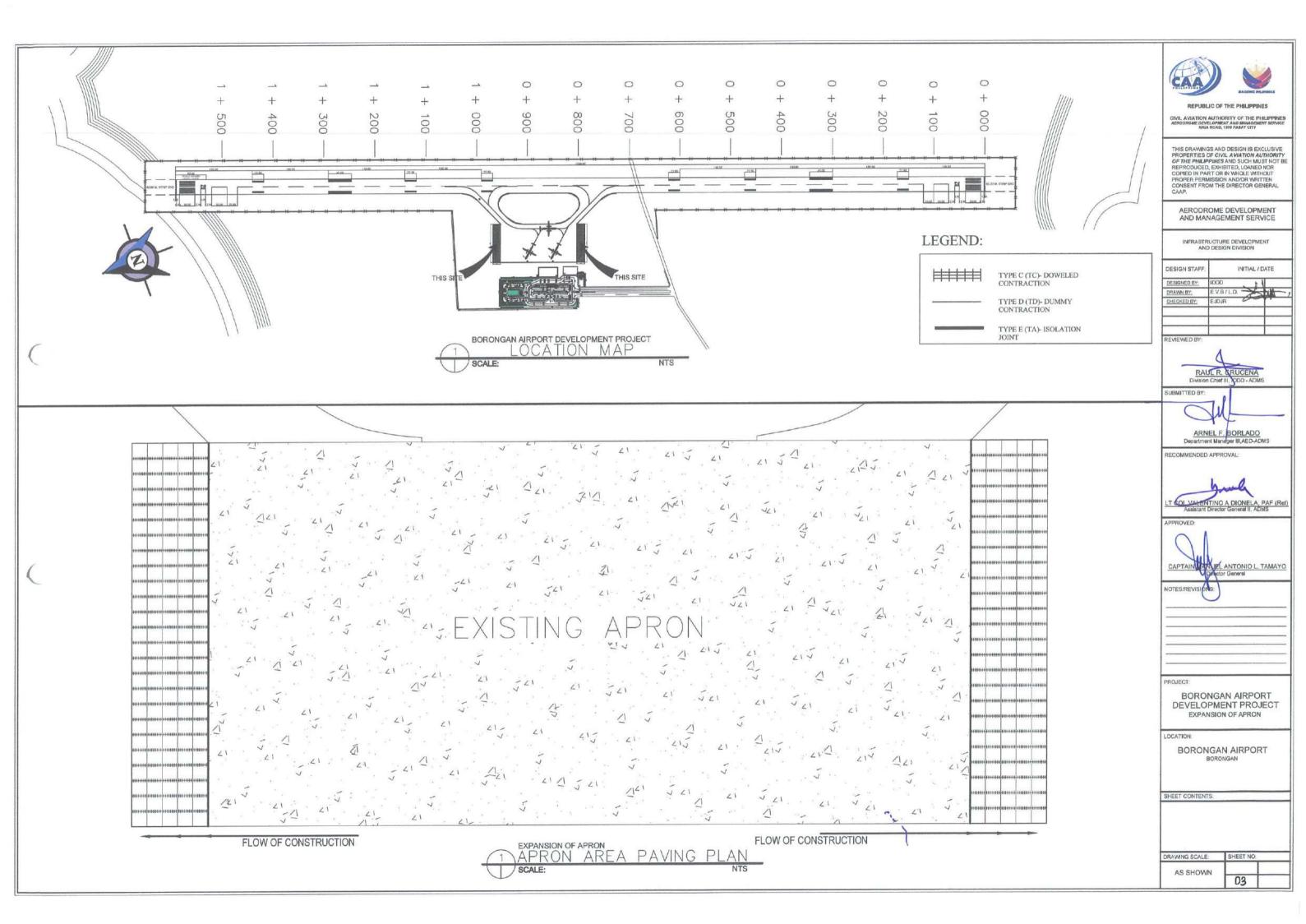
BORONGAN AIRPORT BORONGAN

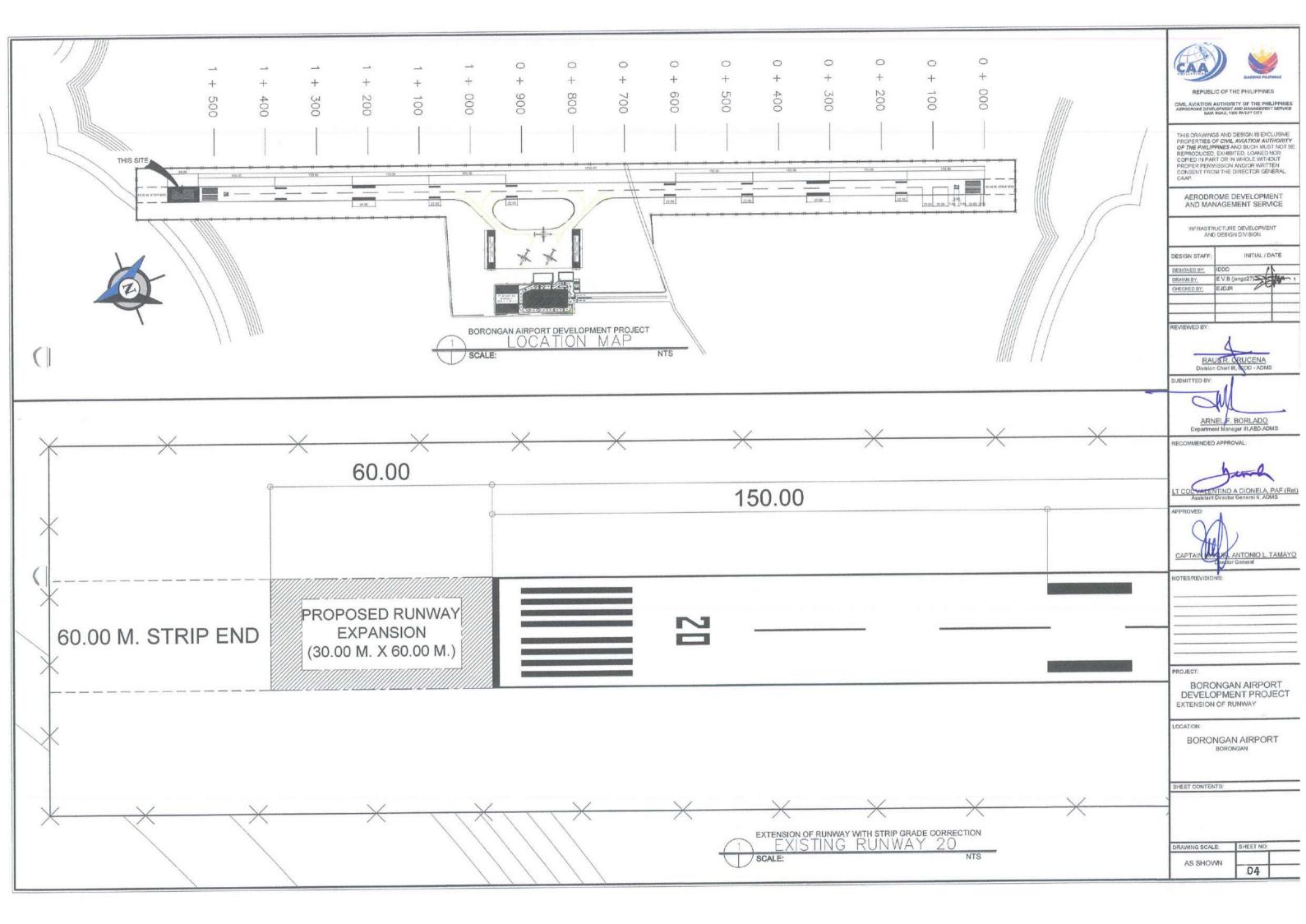
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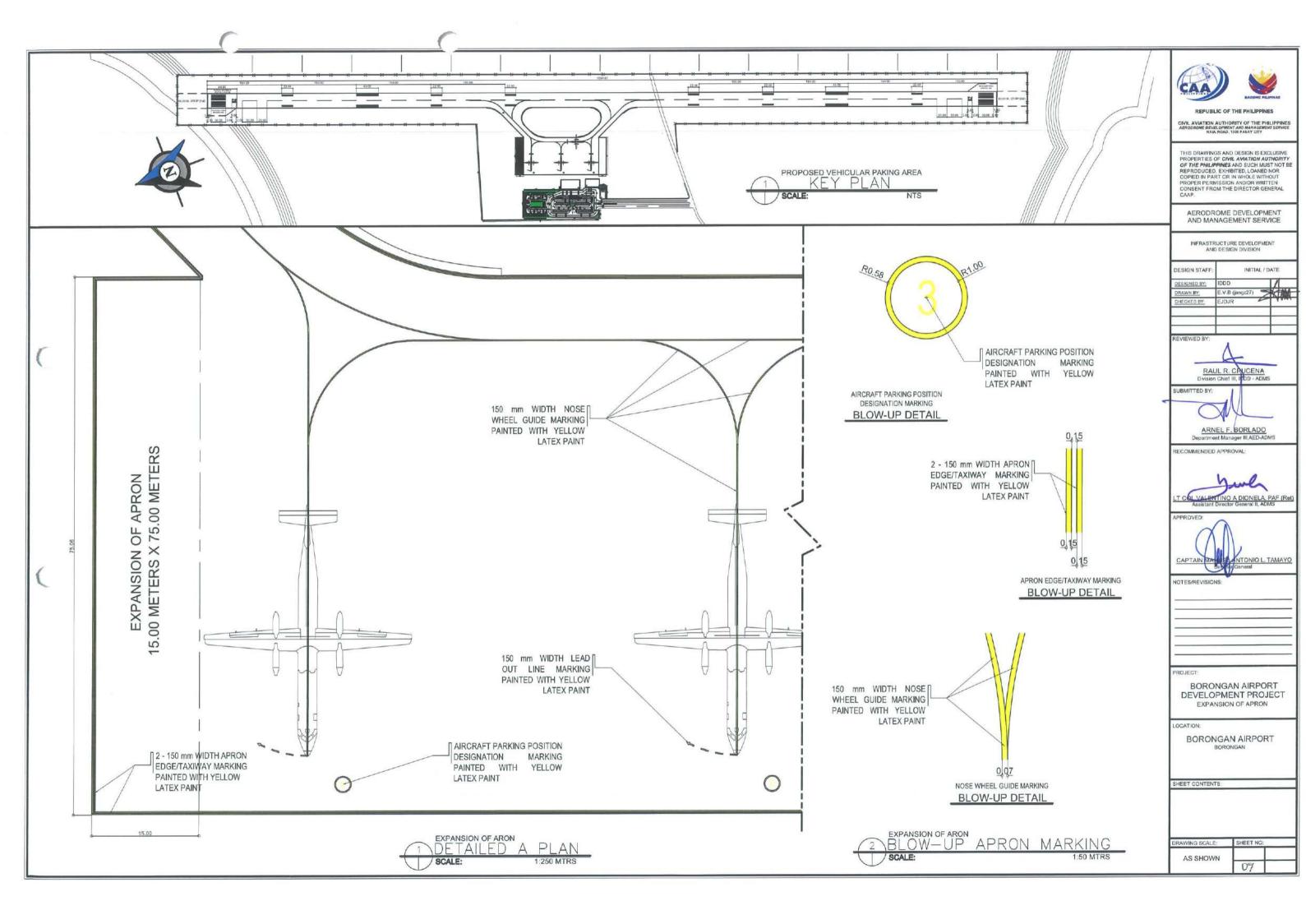
DRAWING SCALE:	SHEET NO:	
AS SHOWN	39	

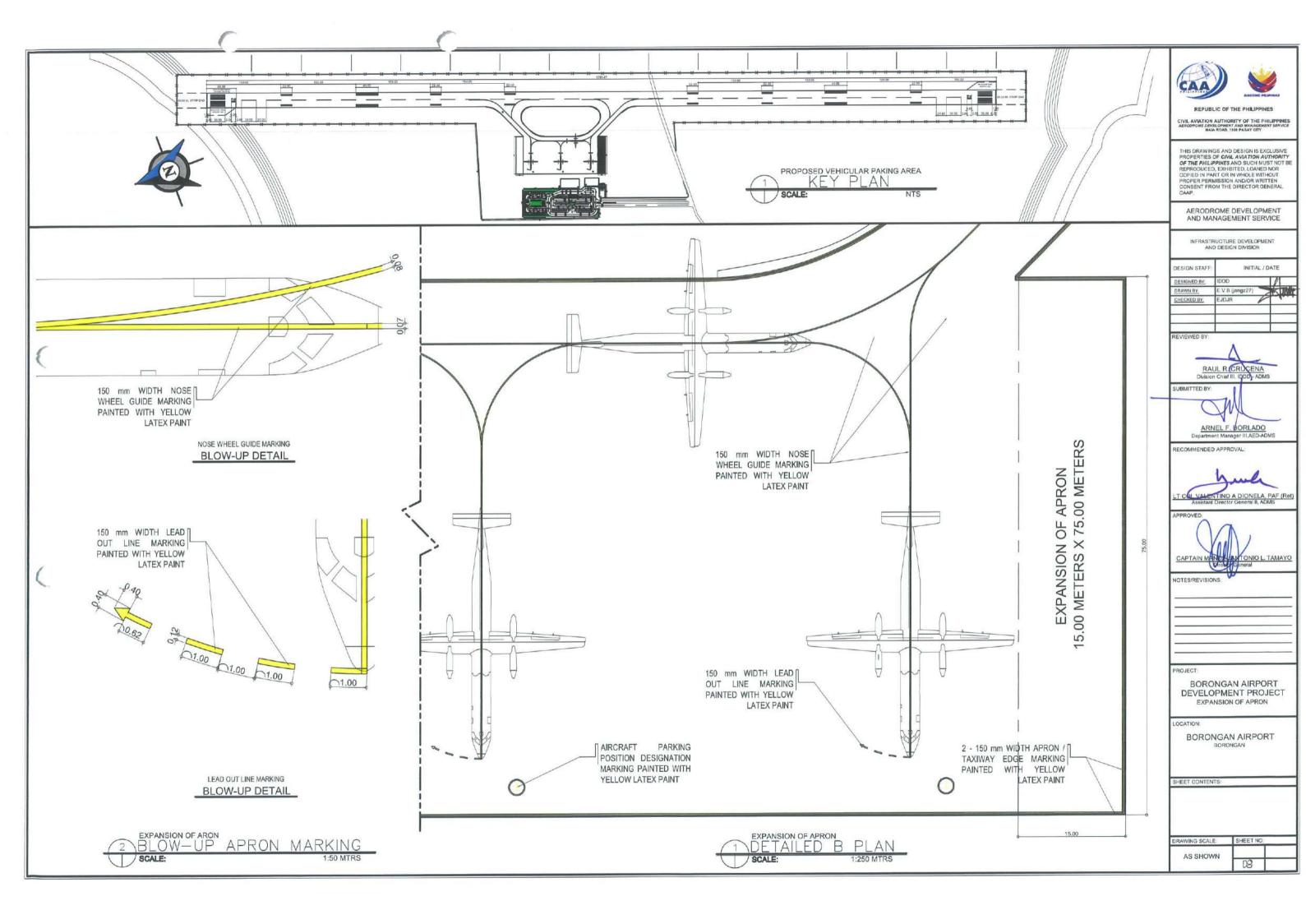


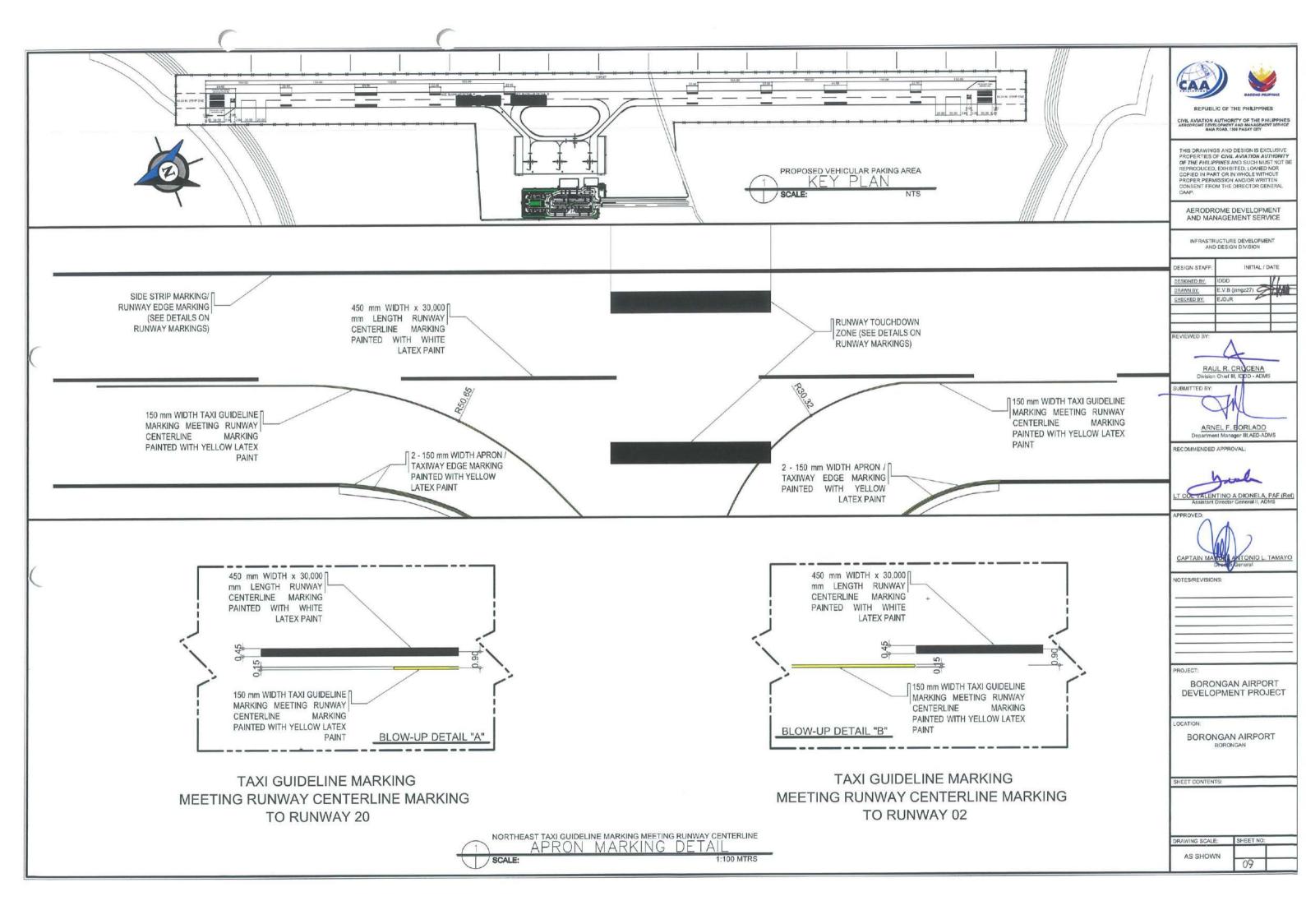


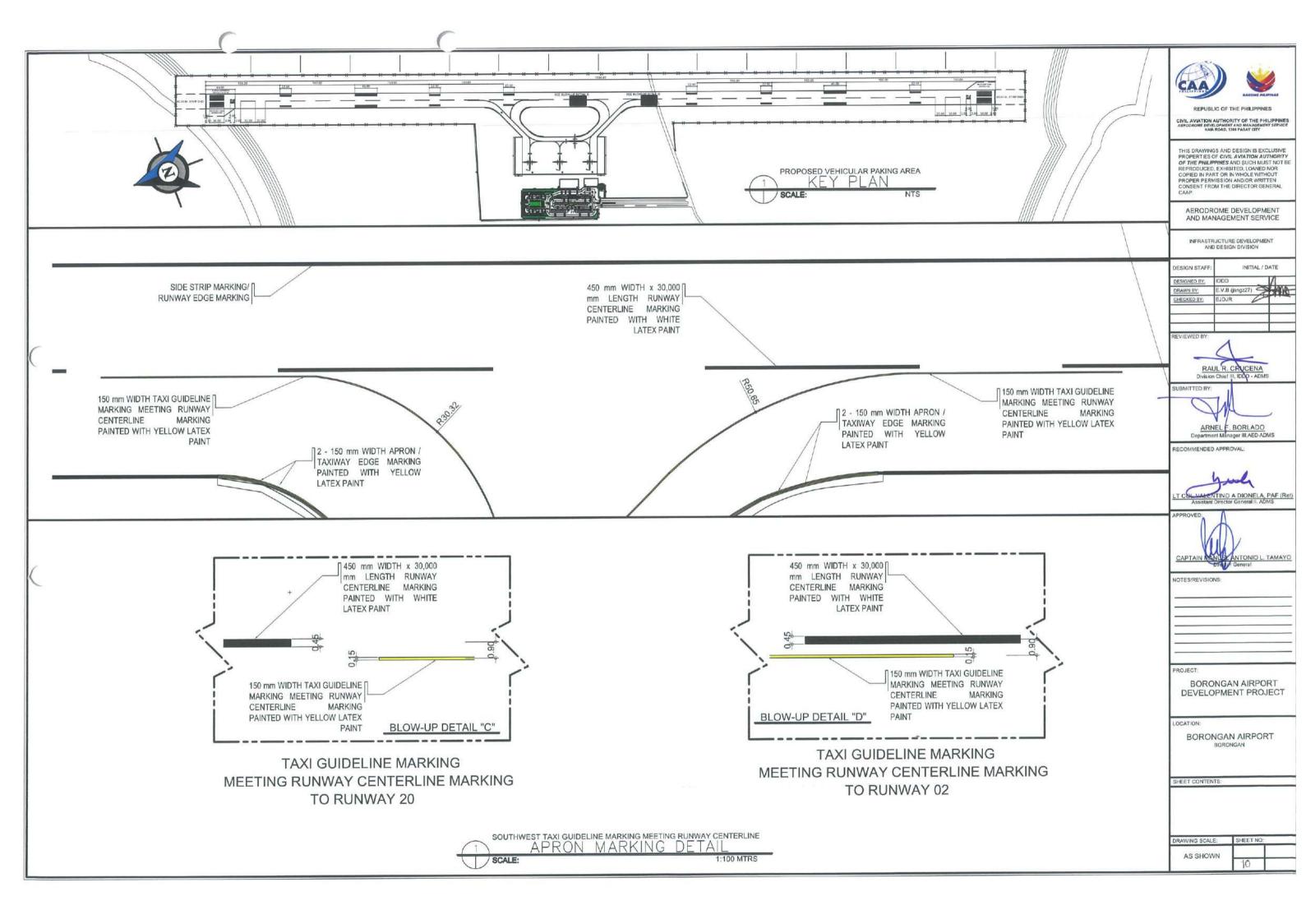


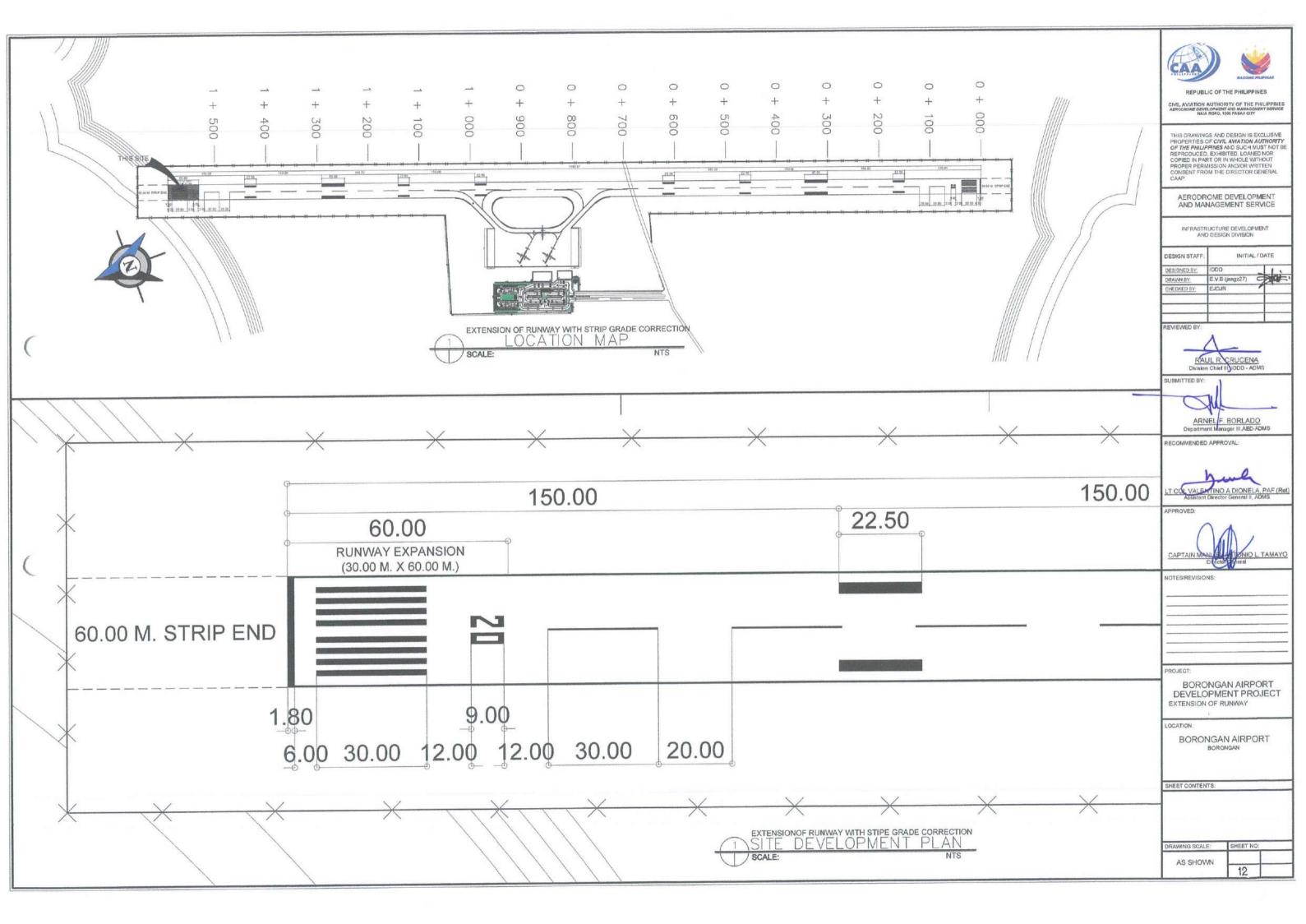


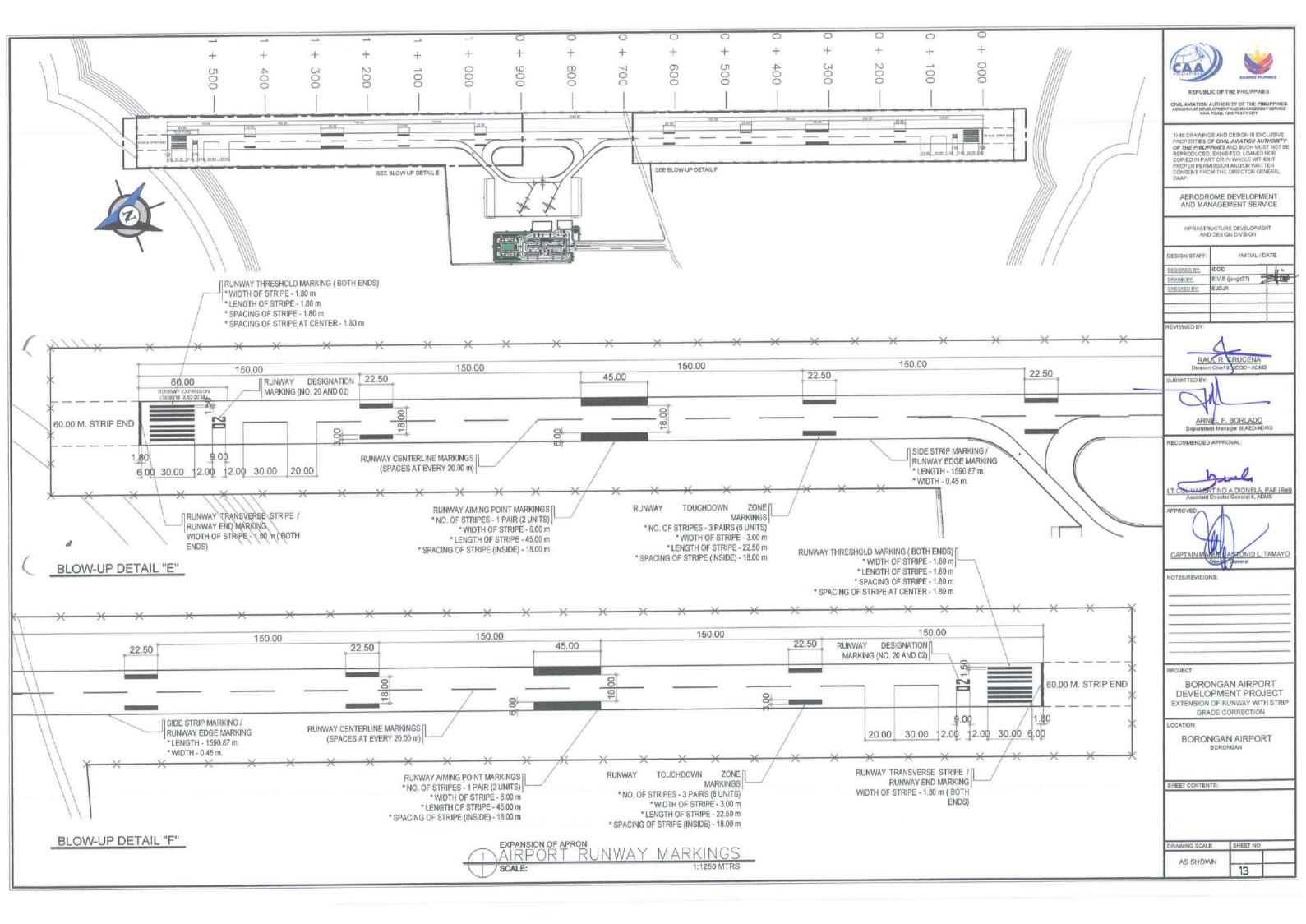


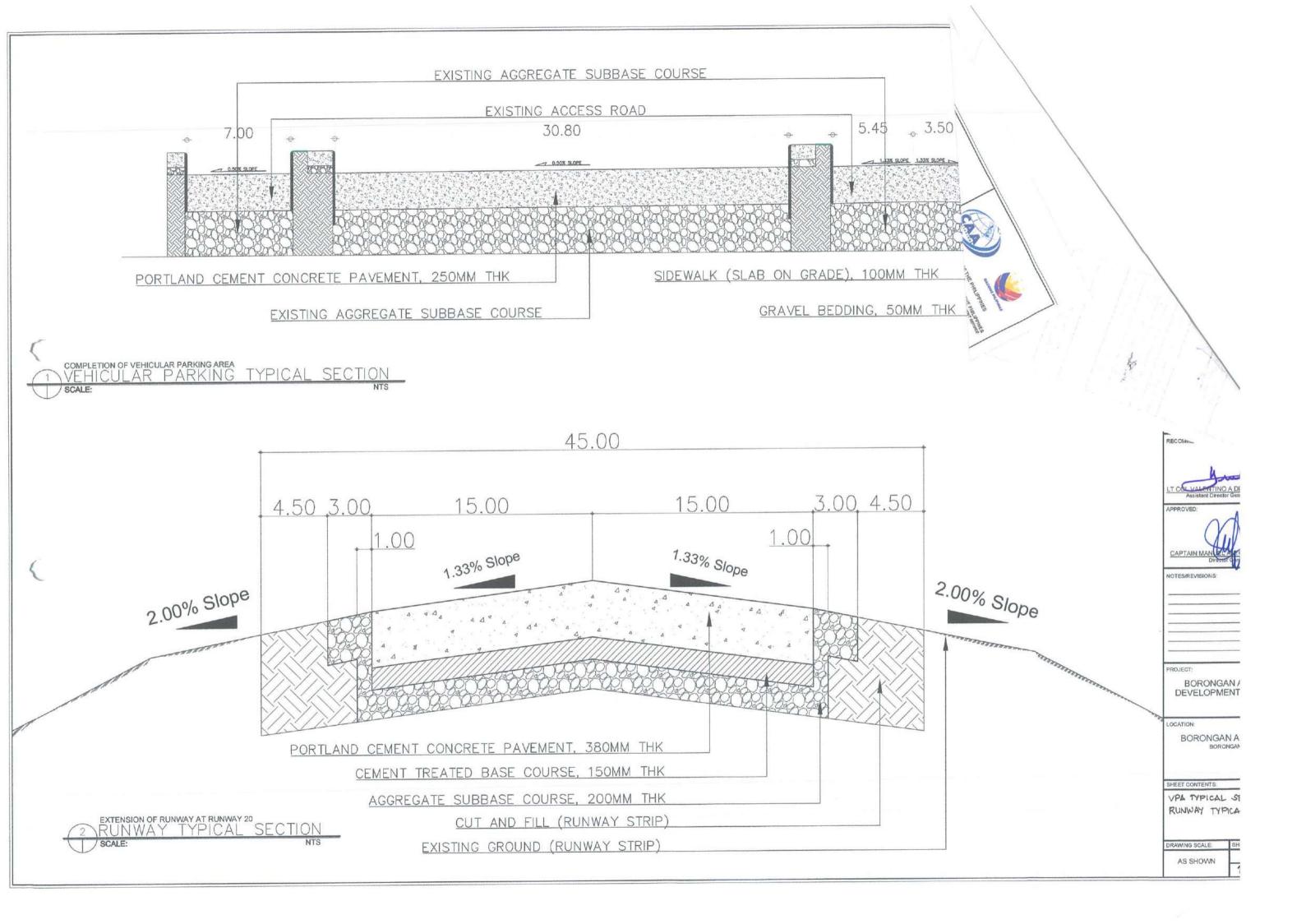


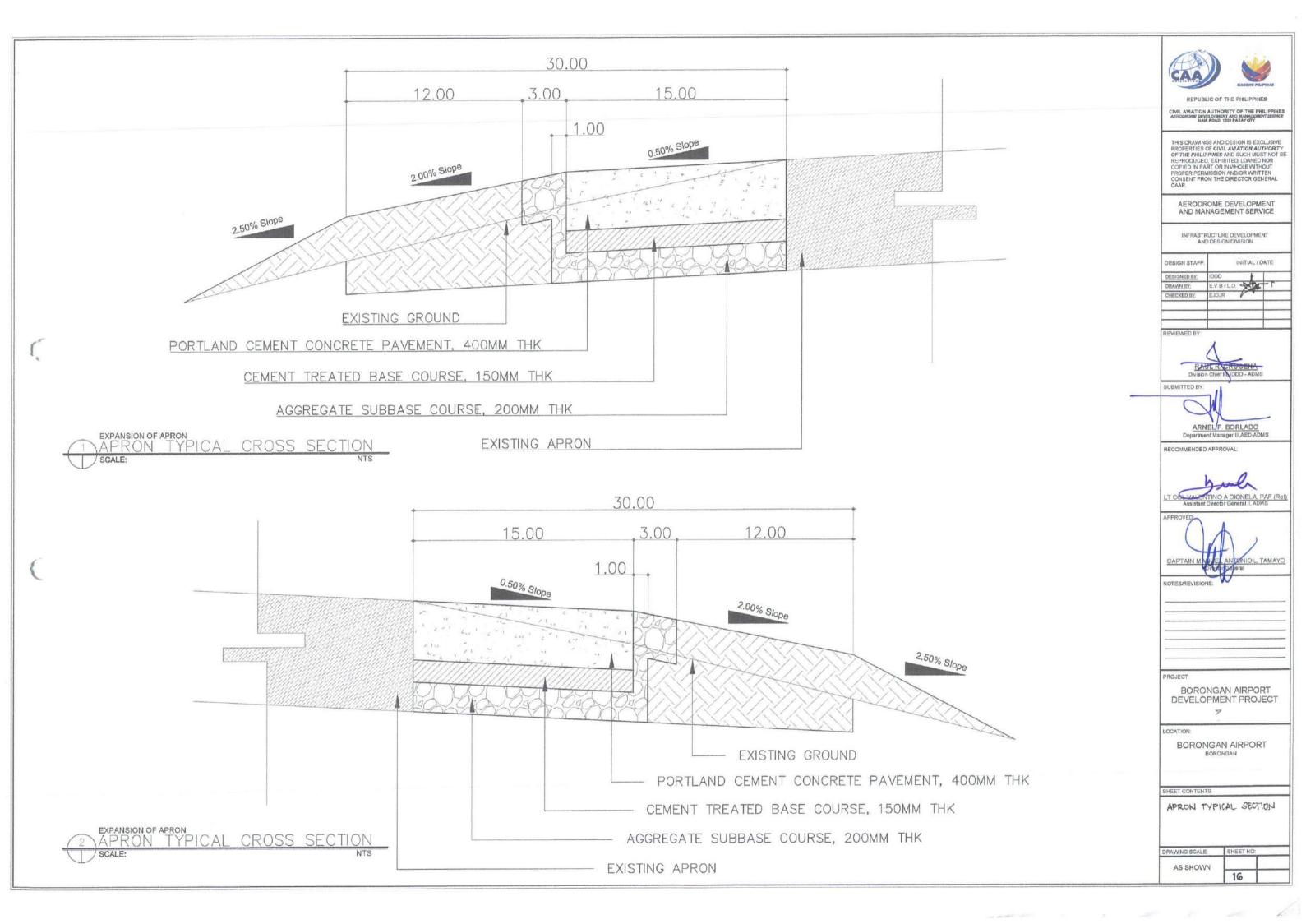


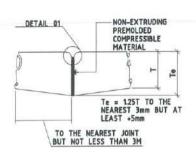




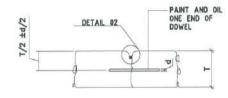




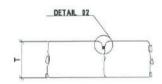




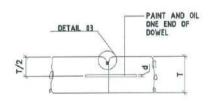
TYPE A (TA) - THICKENED EDGE (ISOLATION JOINT)



TYPE C (TC) - DOWELED CONTRACTION

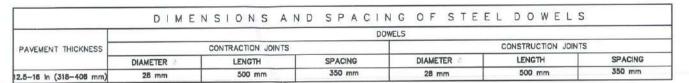


TYPE D (TD) - DUMMY CONTRACTION



TYPE E (TE) - DOWELED CONSTRUCTION

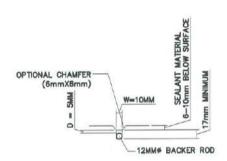




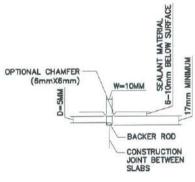
- 1. ALL STEEL DOWELS SHALL BE SUPPORTED AND HELD IN PLACE IN AN APPROVED ASSEMBLY.
- 2. ALL STEEL DOWELS SHALL BE OF GRADE 60 (60,000 pai / 414 MPa).
- 3. ALL FORMED JOINTS SHALL BE FINISHED WITH RADIUS OF 6mm OR 13mm.
- 4. ALL GROOVES OF CONTRACTION JOINTS SHALL BE SAWED WITHIN 24 HOURS.
- 5. WHERE PAYING OPERATIONS ARE DELAYED OR STOPPED, PROVIDE DOWELED CONSTRUCTION JOINT.
- 6. CONCRETE BLOCKING SHALL BE 3.0m BY 3.0m, UNLESS OTHERWISE GOVERNED BY ABUTTING EDGE.
- 7. ALL PAVING JOINTS SHALL BE FILLED WITH JOINT SEALANT AS SPECIFIED.
- 8. PROVIDE PIN HOLDERS EVERY 1.5M AT TRANSVERSE JOINTS



DETAIL 01

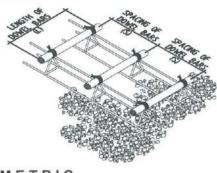


DETAIL 02

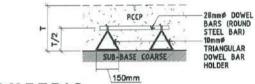


DETAIL 03

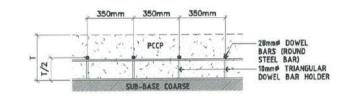




ISOMETRIC

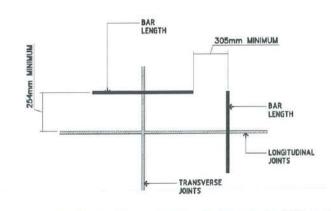


ISOMETRIC



SECTION

DOWEL BAR HOLDER



POSITION OF DOWELS AT EDGE OF JOINT

REPUBLIC OF THE PHILIPPINES

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

INITIAL / DATE
IDDD 1
E.V.B/LD
EJDJR DO



ARNEL F. BORLADO
Department Manager III, AED-ADM

RECOMMENDED APPROVAL

CAPTAIN MA

PROJECT

BORONGAN AIRPORT DEVELOPMENT PROJECT

BORONGAN AIRPORT

AS SHOWN