

Project Title: Proposed Re-drilling of PS 9 Villa Del Sol Subdivision			Prepared By:	Project No.
Project Duration: Sixty (60) Calendar Days				
Owner: City of San Fernando Water District			Approved By:	Sheet No.
Location: Villa Del Sol, Brgy. Dolores, CSFP			Date:	

BREAKDOWN OF COST ESTIMATES

Item No.	DESCRIPTION	Quantity	Unit	MATERIALS		LABOR/EQUIPMENT		DIRECT COST	
				Unit Cost	Amount	Unit Cost	Amount	Unit Cost	Amount
1.00	GENERAL REQUIREMENTS								
1.10	Temporary Facility	15.00	sq.m.						0.00
1.20	Power and Water Supply (includes processing of application)	1.00	lot	-	-	-	-		0.00
1.40	PPEs	1.00	lot	-	-	-	-		0.00
1.50	Permits (all necessary clearances/permits like HOA, Barangay, Building Permit for Affected Structures subject for demolition during construction, NWRB, DPWH, TELECOM and INTERNET (if any) and other related agencies)	1.00	lot	-	-	-	-		0.00
	1.5.1 Plans and Drawings (blue printing, signed and sealed from professionals)	1.00	lot	-	-	-	-		0.00
	1.5.2 As-Built Plans (blue printing, signed and sealed from professionals)	1.00	lot	-	-	-	-		0.00
1.60	Mobilization/Demobilization (includes equipment, manpower, site clearing before and after drilling)	60.00	days	-	-	-	-		0.00
									0.00
2.00	DRILLING WORKS								
2.10	Site Preparation and Equipment Setting	1.00	lot						0.00
2.20	Drilling of pilothole including drilling for installation of 30 meters x 500mm (20") permanent conductor casing	244.00	meters						0.00
2.30	Geophysical borehole logging (electric resistivity)	1.00	lot						
2.40	Water conductivity test	244.00	meters						0.00
2.50	Reaming of pithole	244.00	meters						0.00
2.60	Installation of uPVC casing and screens	244.00	meters						0.00

Item No.	DESCRIPTION	Quantity	Unit	MATERIALS		LABOR/EQUIPMENT		DIRECT COST	
				Unit Cost	Amount	Unit Cost	Amount	Unit Cost	Amount
2.70	Furnishing and installation of casing centralizer every 12 meter interval	21.00	pieces						0.00
2.80	Furnishing and installation of gravel packing	220.00	meters						0.00
2.90	Development by backwashing	12.00	hours						0.00
3.00	Treatment of well sodium hexametaphosphate	1.00	ls						0.00
3.10	Development by high pressure water jetting	12.00	hours						0.00
3.20	Development by air-lifting	12.00	hours						0.00
3.30	Development by surging and bailing-out of sediments	12.00	hours						0.00
3.40	Step-drawdown pumping test	5.00	hours						0.00
3.50	Continuous constant discharge rate pumping test	72.00	hours						0.00
3.60	Furnishing and install well head cap, gravel fill pipe and water level sounding tube	1.00	lot						0.00
3.70	Well disinfection	1.00	ls						0.00
3.80	500mm (20") dia.x 6 meter spiral welded BI permanent conductor casing with minimum thickness of 6mm	5.00	pieces						0.00
3.90	250mm (10") dia.x 3 meter length uPVC Casing Pipe Corrosion Resistance, thickness = 17.60mm, submit sample for approval	130.00	meters						0.00
4.00	250mm (10") dia.x 3 meter length uPVC Screen Rib-Type Corrosion Resistance, thickness = 17.60mm, submit sample for approval	114.00	meters						0.00
									0.00
	ESTIMATED DIRECT COST								0.0000
	OCM (____% of EDC)								0.00
	PROFIT (____% of EDC)								0.00
	VAT (____%)								
	TOTAL CONSTRUCTION COST								0.00

Prepared and Recommended By:

AR. ROCKY M. DUNGCA, Uap

Division Manager

Planning and Development

Approved By:

ENGR. NELSON G. LINGAT

General Manager

Project Title: Supply, Delivery and Installation of Electro-Mechanical Equipment, Construction of Related Structure at PS 09 Villa Del Sol			Prepared By:	Project No.
Project Duration: Twenty (21) Calendar Days				
Owner: City of San Fernando Water District			Approved By:	Sheet No.
Location: Villa Del Sol, Brgy. Dolores, CSFP			Date:	

BREAKDOWN OF COST ESTIMATES

Item No.	DESCRIPTION	Quantity	Unit	MATERIALS		LABOR/EQUIPMENT		DIRECT COST	
				Unit Cost	Amount	Unit Cost	Amount	Unit Cost	Amount
1.00	GENERAL REQUIREMENTS								
1.10	Temporary Facility	20.00	sq.m	-	-	-	-	care of CSFWD	care of CSFWD
1.20	Power and Water Supply (includes processing of application)	1.00	lot	-	-	-	-	care of CSFWD	care of CSFWD
1.30	PPEs	1.00	lot	-	-	-	-		
1.40	Permits (Brgy. Clearance, Building Permit, Occupancy Permit)	1.00	lot	-	-	-	-	care of CSFWD	care of CSFWD
	1.4.1 Plans and Drawings (blue printing, signed and sealed from professionals)	1.00	lot	-	-	-	-		
	1.4.2 As-Built Plans (blue printing, signed and sealed from professionals)	1.00	lot	-	-	-	-		
1.50	Mobilization/Demobilization (includes equipment, manpower, site clearing before and after drilling)	21.00	days	-	-	-	-		
	Total I								0.00
2.00	ELECTRO-MECHANICAL EQUIPMENT								
2.10	40HP Stainless Steel Submersible Pump Model SP77-4 with Stainless Steel (AISI 3040) impeller, shaft and intermediate chamber. (subject may be changed after pump testing result) Specification - refer to bidding documents	1.00	unit					0.00	0.00
2.20	40HP Electric Submersible Motor, 460V, 3Phase, 60Hz, 3500 rpm. (subject may be changed after pump testing result) Specification - refer to bidding documents	1.00	unit					0.00	0.00
2.30	Variable Frequency Drive 440 vac. Specification - refer to bidding documents	1.00	unit					0.00	0.00
2.40	100mm diameter x 3.00 m heavy uPVC riser pipe (heavy duty) with L ring	40.00	pcs.					0.00	0.00
2.50	SS adaptor 400 x 400 x 100mm riser pipe adaptor SS top and bottom set heavy duty (NPT)	1.00	set					0.00	0.00
2.60	No.4 standard submersible XLPE flat cable PVC insulated 22.0mm2 x 3c, double jacketed	160.00	meters					0.00	0.00
2.70	Labor cost, testing	1.00	lot				0.00		0.00
	Total 2								0.00

Item No.	DESCRIPTION	Quantity	Unit	MATERIALS		LABOR/EQUIPMENT		DIRECT COST	
				Unit Cost	Amount	Unit Cost	Amount	Unit Cost	Amount
3.00	DISCHARGE LINE ASSEMBLY TO MAINLINE								
3.10	18mm thk. x 400mm x 400mm steel plate with 150mm dia. fabricated elbow on the center with ring flange for discharge line (well seal)	1.00	assy						0.00
3.20	150mm dia. sleeve type coupling with harness	2.00	pcs.						0.00
3.30	150mm dia. flow meter	1.00	pc.						0.00
3.40	25mm dia. air release valve (plastic)	1.00	pc.						0.00
3.50	150mm dia. check valve with counterweight	1.00	pc.						0.00
3.60	0-200 psi pressure switch guage transmitter sensor	1.00	aasy						0.00
3.70	150mm dia. butterfly valve with handwheel	2.00	pcs.						0.00
3.80	150mm dia. sleeve type coupling (gi to gi)	1.00	pc.						0.00
3.90	150mm x 150mm dia. mech. tee	1.00	pc.						0.00
3.9.10	150mm dia. BI seamless pipe test line with orifice plate, 10mm dia. Manometer hose tap	1.00-1.50m	assy						0.00
3.9.20	19mm dia. hose bibb	1.00	assy						0.00
3.9.30	150mm x 45deg CI elbow (weldable)	4.00	pcs.						0.00
3.9.40	150mm x 150mm CI reducer	1.00	pc.						0.00
3.9.50	150mm dia.x 3.00m BI seamless pipe schedule 40	7.00	pcs.						0.00
3.9.60	0.20m x 0.20m x 1.80m concrete pedestal (see detail)	4.00	sets						0.00
3.9.70	Consumables, Labor cost, testing	1.00	lot						0.00
	Total 3								0.00
4.00	CHLORINATION								
4.10	Chloronitor Motor: Beta BT4b 0708 PVM 2000UA010000 7.10 lph at 7 bars (102 psi), 1-phase, 100-230 v 50/60Hz, 16 watts, IP 66, stroke rate: 180 spm PVDF material of dosing head; with Pure Teflon Diaphragm for Chlorine Dioxide use; with 2 functions setting for dosing pump rate adjustment via Stroke Frequencies from 0-180 spm and Stroke Length adjustments from 0-100% with increments of 10% ratings; with ready available input connections and controls for 2 Stage Level Float Switch and External control via contact or pulse; complete with standard accessories like - Foot valve w/strainer, PVT - Injection Valve, PVT - 5 meters PE (Discharge) tubing, 8mm x 5mm - 2 meters. Soft PVC (Suction) tubing, 8mm x 5 mm. Made in Germany Chemical Tank, 100-liter capacity made of transparent UV-stabilized PE material; with liter and gallon scale; mounting flange with integral sintered threaded bushes for manual or electric stirrers/mixers; with lockable screw crap cover and key; with drain plug. Size 500mm diameter x 760mm Ht. Est. Wt.: 10 kgs. PN:1001490. Made in Germany	1.00	set		0.00			0.00	0.00
4.20	Installation, testing	1.00	lot		0.00			0.00	0.00

Item No.	DESCRIPTION	Quantity	Unit	MATERIALS		LABOR/EQUIPMENT		DIRECT COST	
				Unit Cost	Amount	Unit Cost	Amount	Unit Cost	Amount
	Total 5								0.00
	ESTIMATED DIRECT COST								0.00
	OCM (___% of EDC)								0.00
	PROFIT (___% of EDC)								0.00
	VAT (___%)								
	TOTAL CONSTRUCTION COST								0.00

Prepared and Recommended By:

AR. ROCKY M. DUNGCA, Uap

Division Manager

Planning and Development

Approved By:

ENGR. NELSON G. LINGAT

General Manager

THIS SITE

PS 9 Villa Del Sol, Brgy.
Magliman, CSFP

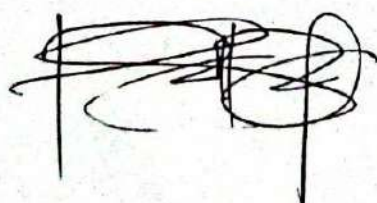


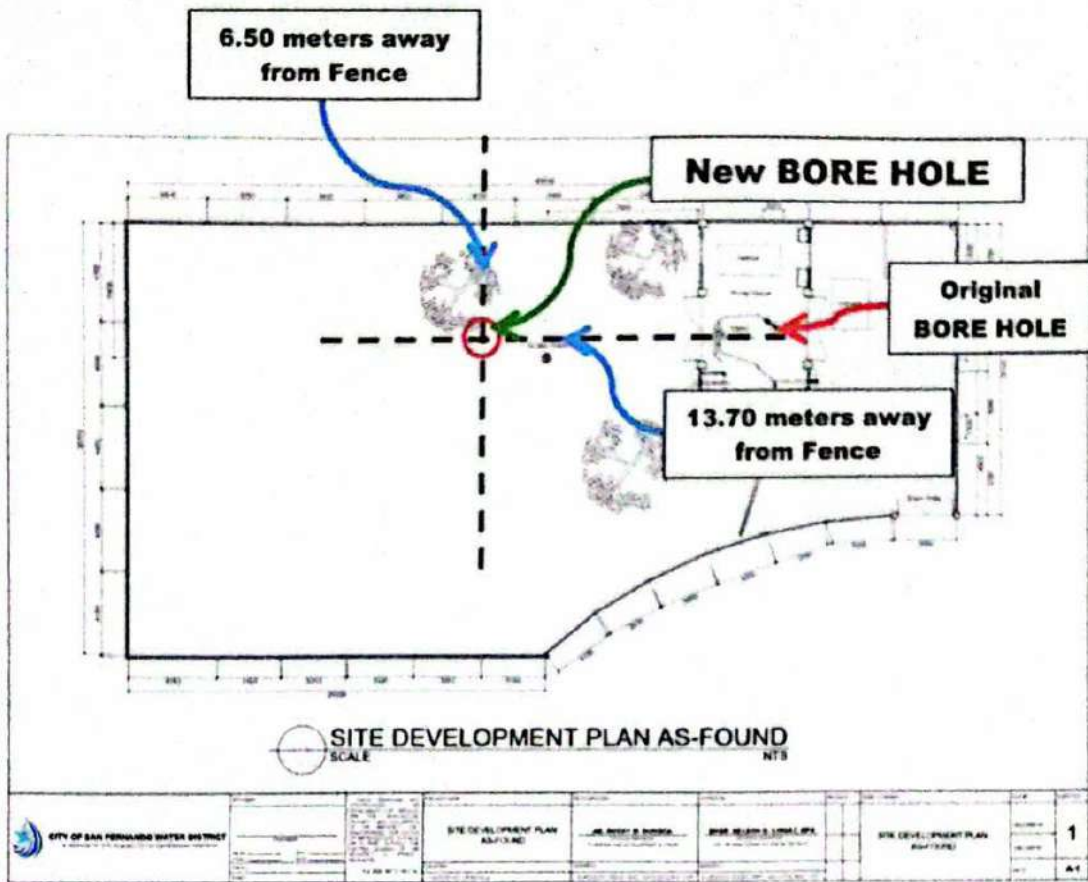
New BORE HOLE



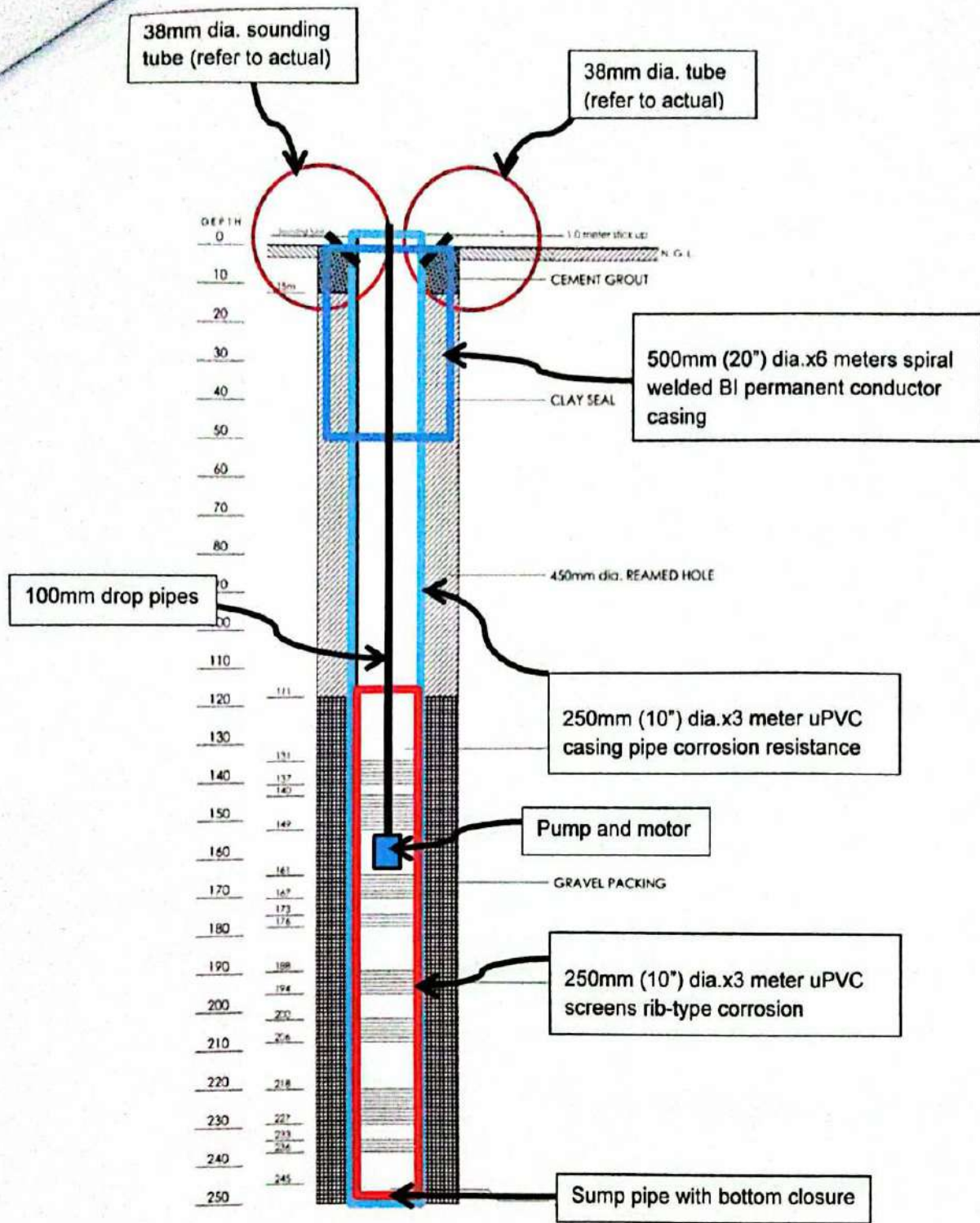
LOCATION MAP

Not To Scale





WELL POINT LOCATION

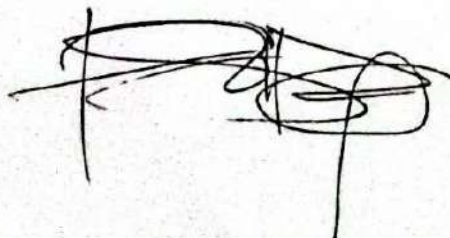


CSFWD TYPICAL WELL DESIGN

Not

To

Scale



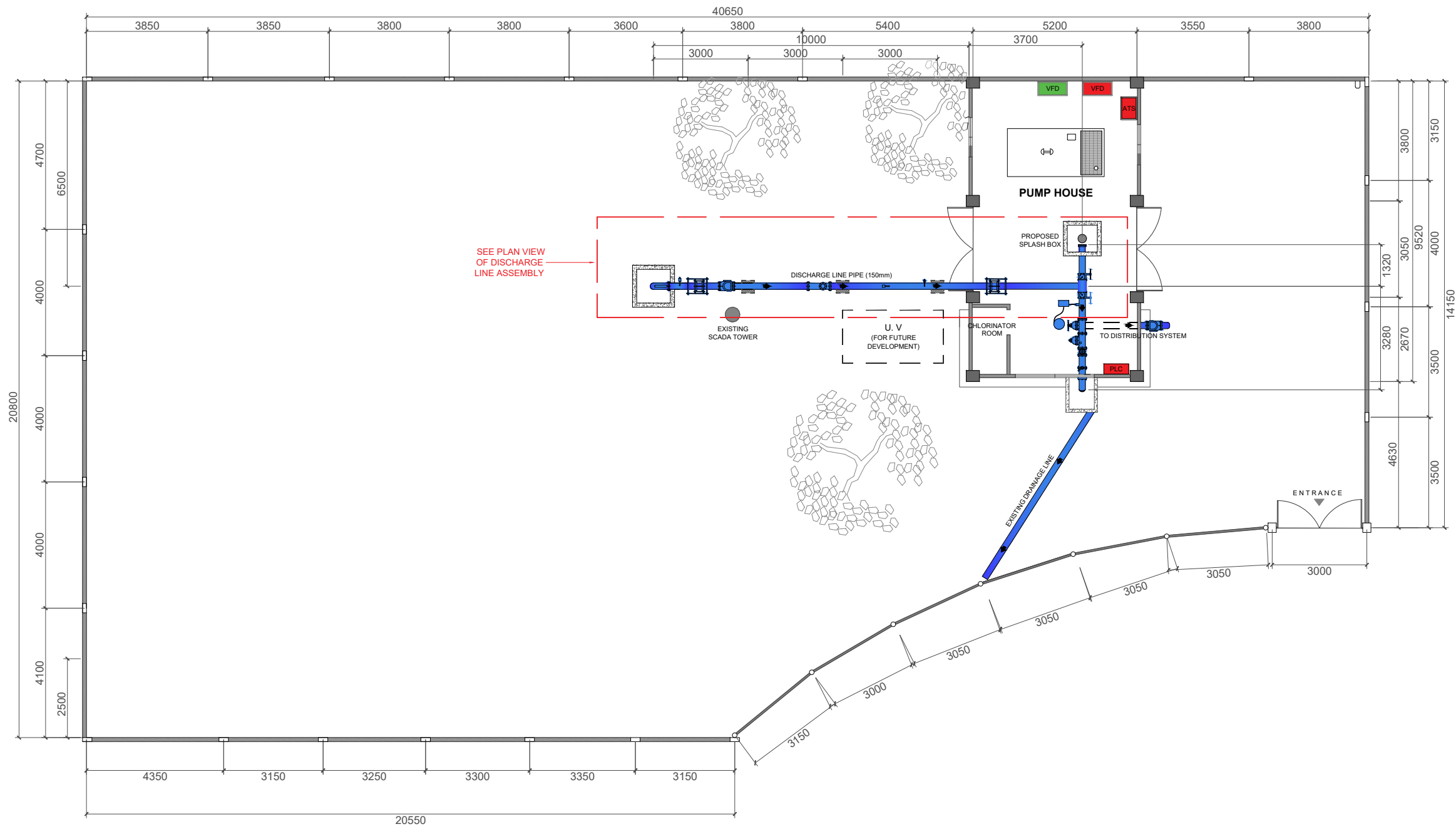
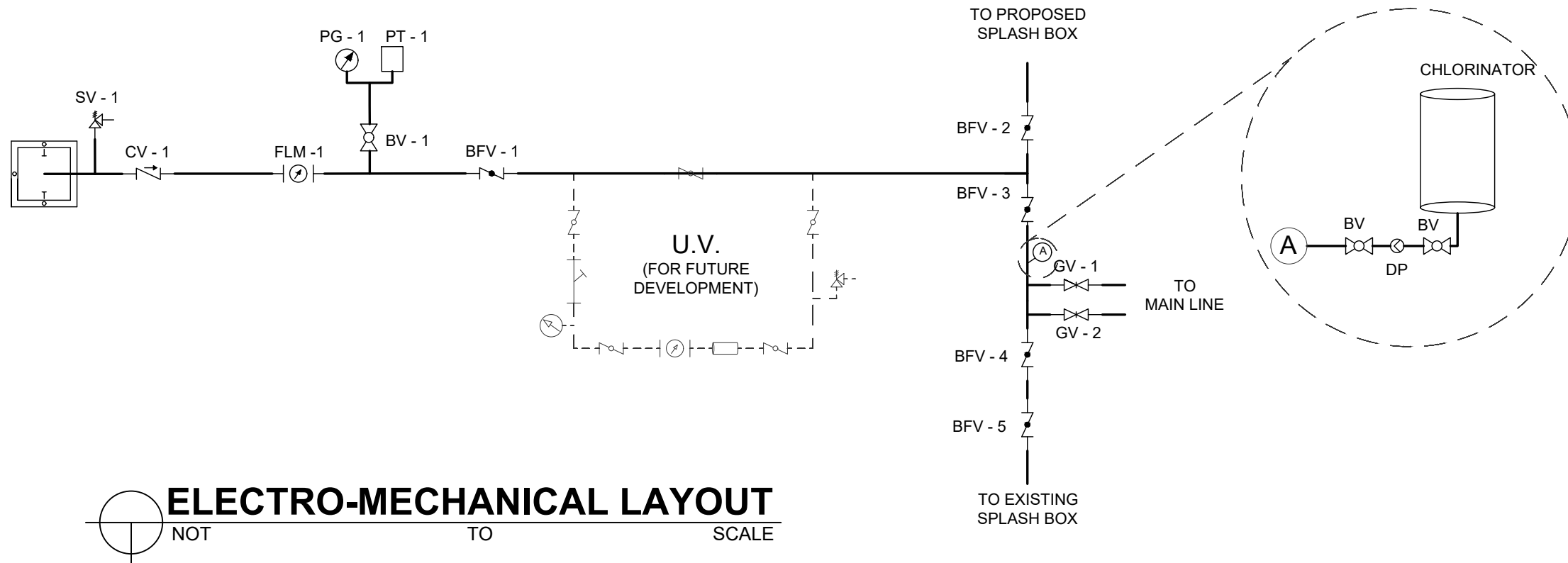


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M-2	ELECTRO MECHANICAL LAYOUT & DIAGRAM
M-3	DISCHARGE LINE ASSEMBLY
STRUCTURAL	
S-1	SPLASH BOX & CONCRETE PEDESTAL DETAIL

PROPOSED SYSTEM LAYOUT
SCALE: 1:120

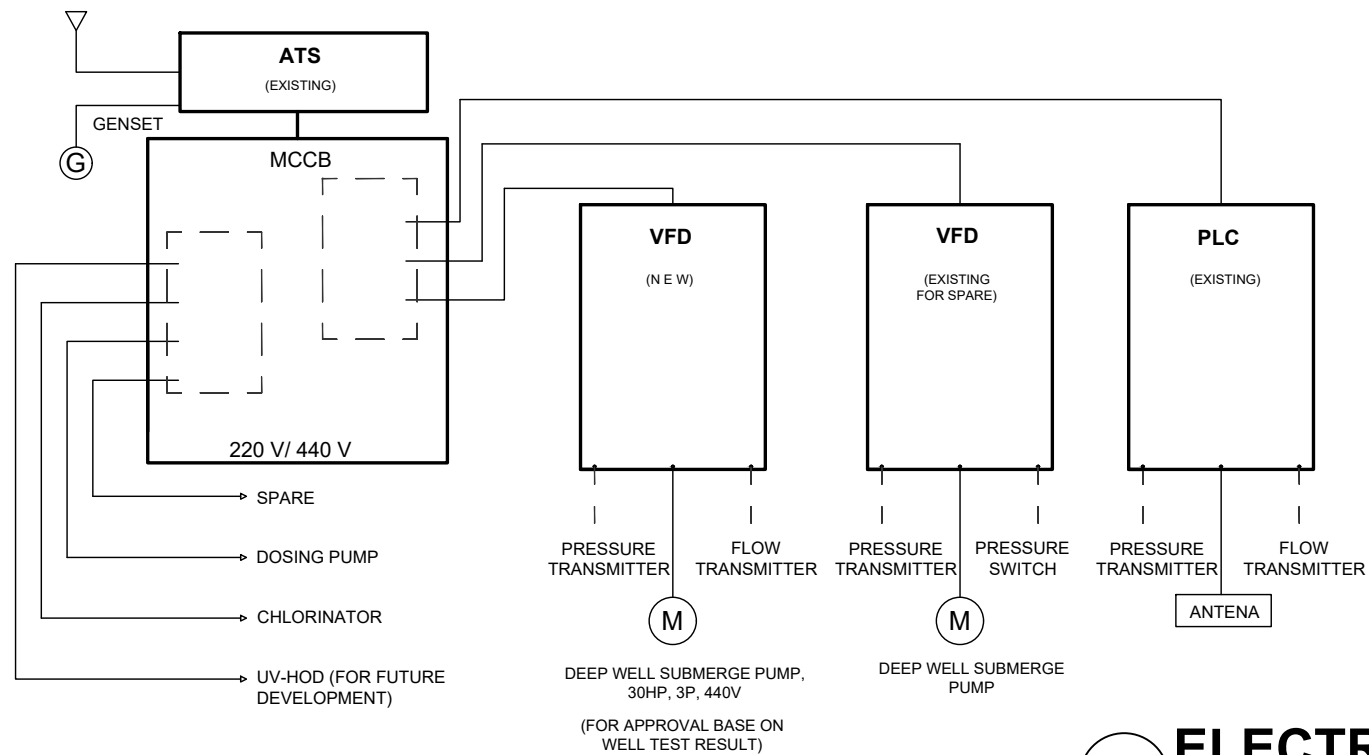
LEGEND:	
■	VFD (NEW)
■	PLC (EXISTING)
■	VFD (EXISTING)
■	ATS (EXISTING)

<p>CITY OF SAN FERNANDO WATER DISTRICT B. MENDOZA ST., STO. ROSARIO, CITY OF SANFERNANDO, PAMPANGA</p>	ENGINEER: JOSE S. GALICIA, JR., RME. <small>PRC NO: 0076960 DATE: 01-05-2026 PTR NO: PLACE: CITY OF SAN FERNANDO, PAMPANGA</small> POSITION: SR. PROJECT PLANNING & DEVELOPMENT OFFICER DIVISION: PLANNING AND DEVELOPMENT	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF THE ARCHITECT. ANY UNAUTHORIZED DUPLICATION OR REPRODUCTION, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT IS STRICTLY PROHIBITED. R.A. 9266, ART IV SEC 33.	PROJECT NAME: PROPOSED SYSTEM LAYOUT	RECOMMENDED: AR. ROCKY M. DUNGCA <small>DIVISION MANAGER PLANNING AND DEVELOPMENT DIVISION</small>	APPROVED: ENGR. NELSON G. LINGAT, DPA <small>GENERAL MANAGER CITY OF SAN FERNANDO WATER DISTRICT</small>	REVISION:	SHEET CONTENT: PROPOSED SYSTEM LAYOUT & TABLE OF CONTENTS	CAD BY:	SHEET NO.: 1
	LOCATION: VILLA DEL SOL, CITY OF SAN FERNANDO, PAMPANGA	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	DESIGNED BY:	1				
	CHECKED BY:	M-1							
	DATE:								



LEGEND	
SYMBOL	DESCRIPTION
	BALL VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	GEAR OPERATED BUTTERFLY VALVE
	GATE VALVE
	AIR RELEASE / SAFETY VALVE
	DIGITAL FLOW METER
	STRAINER
	PRESSURE TRANSMITTER
	DOSING PUMP
	INJECTION POINT
	BOOSTER PUMP
	PRESSURE GAUGE
	ULTRA VIOLET FILTRATION

ELECTRO-MECHANICAL LAYOUT
 NOT TO SCALE



ELECTRO-MECHANICAL DIAGRAM
 NOT TO SCALE



CITY OF SAN FERNANDO WATER DISTRICT
 B. MENDOZA ST., STO. ROSARIO, CITY OF SAN FERNANDO, PAMPANGA

ENGINEER:
JOSE S. GALICIA JR., RME
 ENGINEER
 PRC NO: 0079960 DATE: 01-05-2026
 PTR NO: _____ PLACE: CITY OF SAN FERNANDO, PAMPANGA
 POSITION: SENIOR PROJECT PLANNING OFFICER
 DIVISION: PLANNING & DEVELOPMENT

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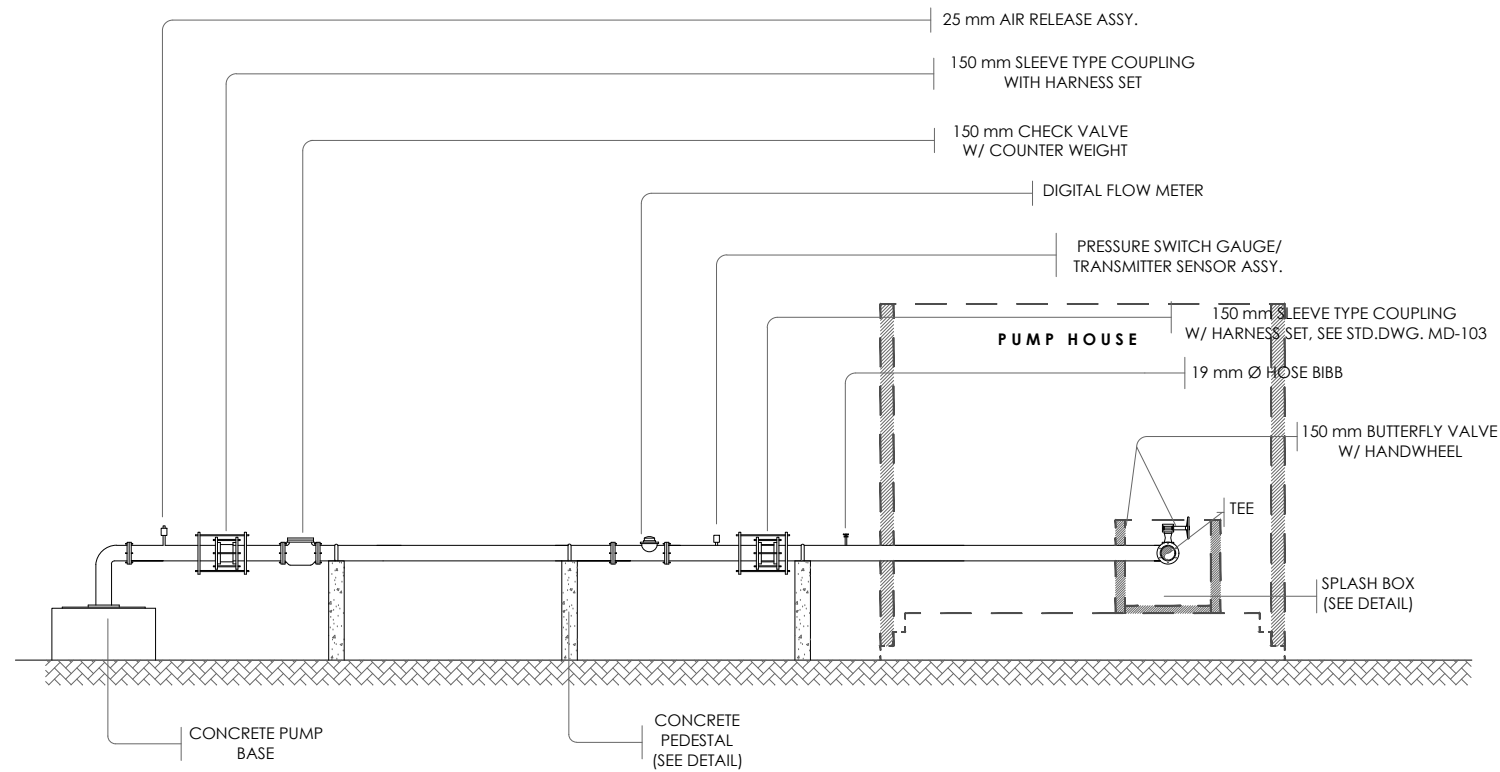
PROJECT NAME:
ELECTRO-MECHANICAL LAYOUT & DIAGRAM
 LOCATION:
 VILLA DEL SOL, CITY OF SAN FERNANDO, PAMPANGA

RECOMMENDED:
AR. ROCKY M. DUNGCA
 DIVISION MANAGER
 PLANNING AND DEVELOPMENT DIVISION
 ADDRESS:
 B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP

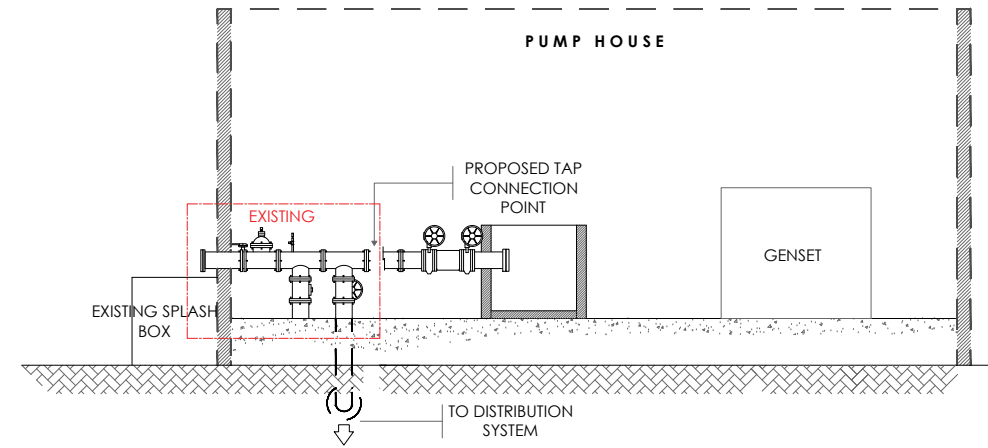
APPROVED:
ENGR. NELSON G. LINGAT, DPA
 GENERAL MANAGER
 CITY OF SAN FERNANDO WATER DISTRICT
 ADDRESS:
 B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP

REVISION:
 SHEET CONTENT:
ELECTRO-MECHANICAL LAYOUT & DIAGRAM

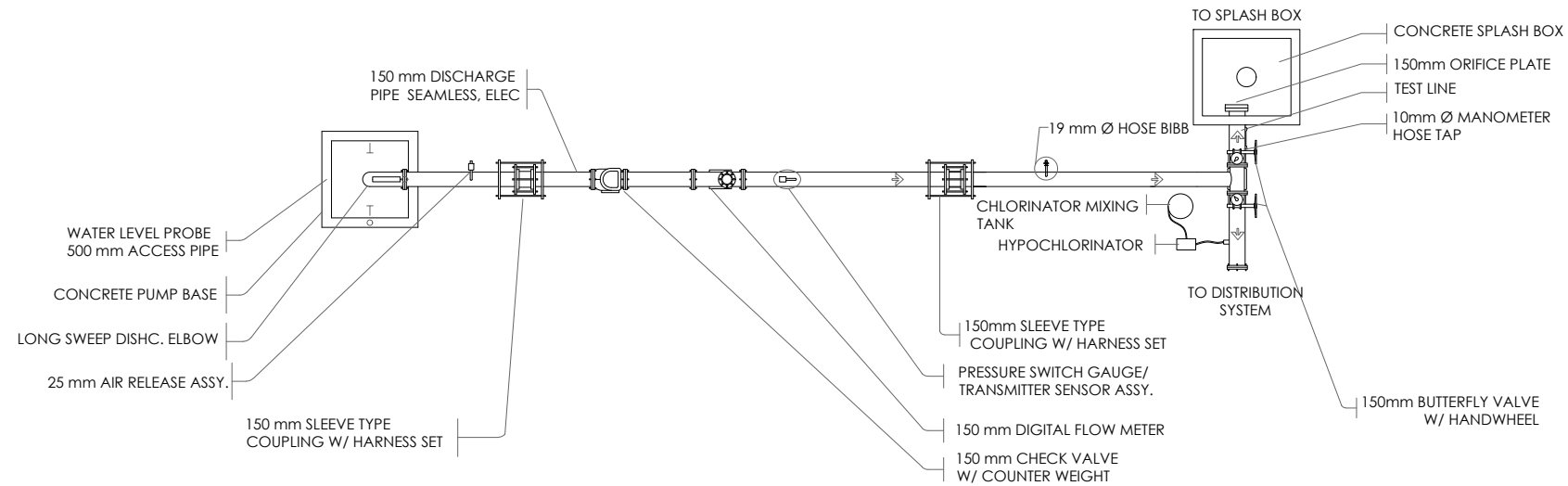
CAD BY:
 SHEET NO.
 DESIGNED BY:
2
 CHECKED BY:
 DATE:
M-2



SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE



PLAN VIEW
NOT TO SCALE



CITY OF SAN FERNANDO WATER DISTRICT
B. MENDOZA ST., STO. ROSARIO, CITY OF SAN FERNANDO, PAMPANGA

ENGINEER:
JOSE S. GALICIA, JR., RME.
ENGINEER
PRC NO: 0078960 DATE: 01-05-2028
PTR NO: PLACE: CITY OF SAN FERNANDO, PAMPANGA
POSITION: SR, PROJECT PLANNING & DEVELOPMENT OFFICER
DIVISION: PLANNING AND DEVELOPMENT

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R.A. 9266, ART IV SEC 33.

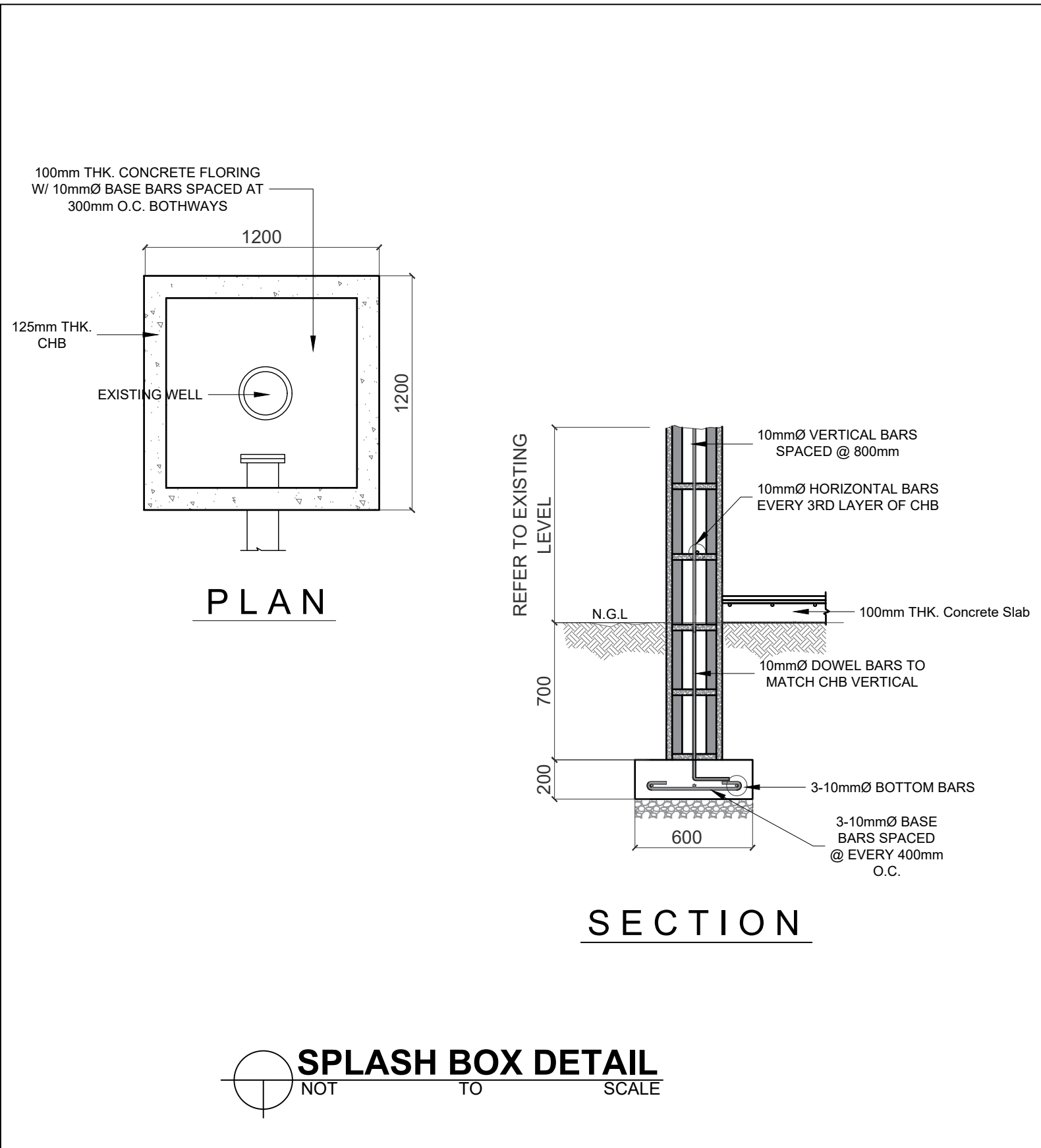
PROJECT NAME:
DISCHARGE LINE ASSEMBLY
LOCATION:
VILLA DEL SOL, CITY OF SAN FERNANDO, PAMPANGA

RECOMMENDED:
AR. ROCKY M. DUNGCA
DIVISION MANAGER
PLANNING AND DEVELOPMENT DIVISION
ADDRESS:
B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP

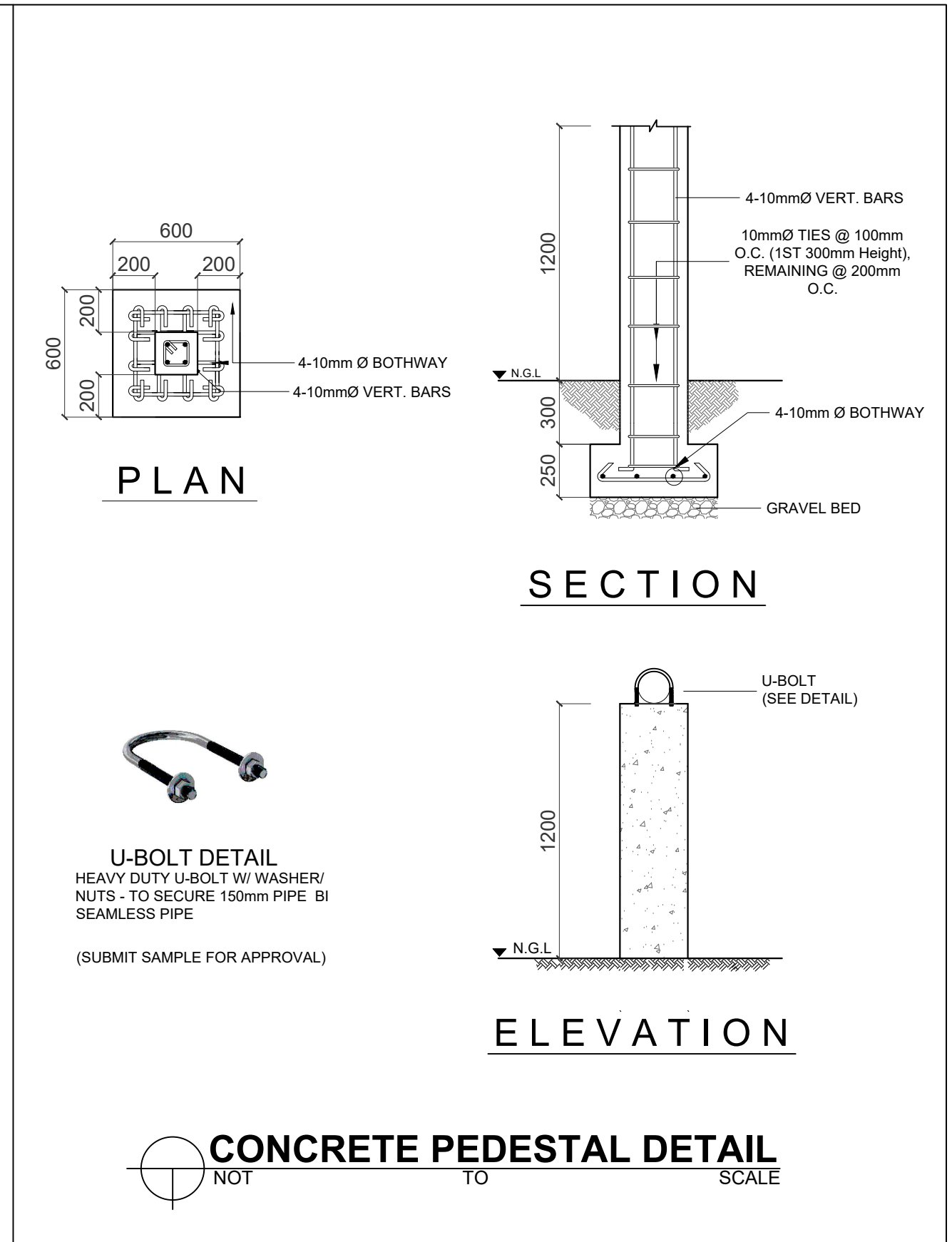
APPROVED:
ENGR. NELSON G. LINGAT, DPA
GENERAL MANAGER
CITY OF SAN FERNANDO WATER DISTRICT
ADDRESS:
B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP

REVISION:
SHEET CONTENT:
DISCHARGE LINE ASSEMBLY

CAD BY:
DESIGNED BY:
CHECKED BY:
DATE:
3
M-3



SPLASH BOX DETAIL
NOT TO SCALE



CONCRETE PEDESTAL DETAIL
NOT TO SCALE

<p>CITY OF SAN FERNANDO WATER DISTRICT B. MENDOZA ST., STO. ROSARIO, CITY OF SAN FERNANDO, PAMPANGA</p>	ARCHITECT: AR. ROCKY M. DUNGCA	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF THE ARCHITECT. ANY UNAUTHORIZED DUPLICATION OR REPRODUCTION, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT IS STRICTLY PROHIBITED. R.A. 9266, ART IV SEC 33.	PROJECT NAME: SPLASH BOX DETAIL & CONCRETE PEDESTAL DETAIL	RECOMMENDED: AR. ROCKY M. DUNGCA DIVISION MANAGER PLANNING AND DEVELOPMENT DIVISION	APPROVED: ENGR. NELSON G. LINGAT, DPA GENERAL MANAGER CITY OF SAN FERNANDO WATER DISTRICT	REVISION: 	SHEET CONTENT: SPLASH BOX DETAIL & CONCRETE PEDESTAL DETAIL	CAD BY:	SHEET NO. 1
	PRC NO. 0021874 DATE: 01-05-2028 PTR NO. 6621206 PLACE: CITY OF SAN FERNANDO, PAMPANGA		LOCATION: VILLA DEL SOL, CITY OF SAN FERNANDO, PAMPANGA	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	DESIGNED BY:	CHECKED BY:	DATE:	S-1
	POSITION: DIVISION MANAGER								
	DIVISION: PLANNING & DEVELOPMENT								