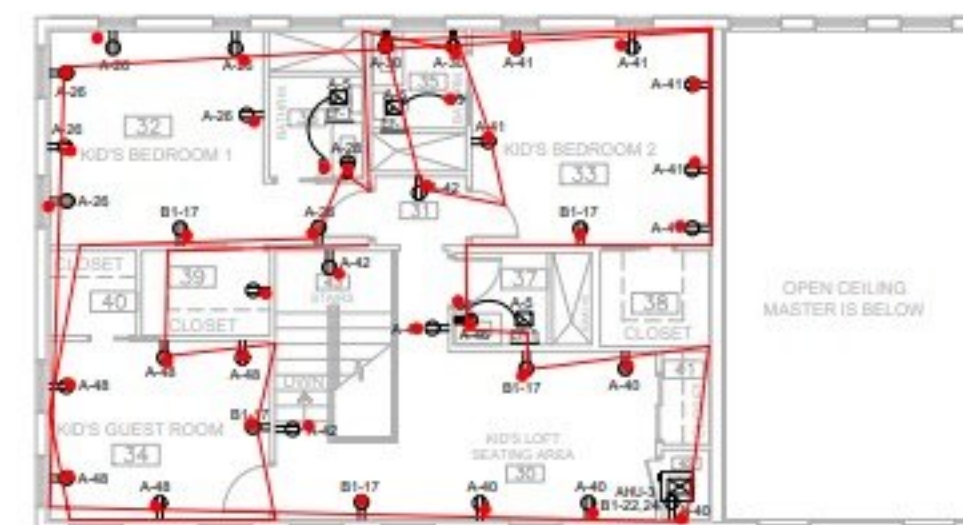


Legend

Description	Quantity	Unit
26: 1X4 LED FLAT PANEL, 40WATT	42	Count
26: 2#12, 1#12 GND CU WIRE SERVICE FOR LIGHTING	1,827.78	ft
26: 6" DIA LED DOWNLIGHT, 14.5 WATT	110	Count
26: 10" DIA LED EXTERIOR WALL SCONCE	3	Count
26: 12" DIA LED DOWNLIGHT	12	Count
26: 12" DIA LED DOWNLIGHT, 29 WATT	101	Count
26: 15" DIA EXTERIOR WALL SCONCE	3	Count
26: 17" DIA LED DOWNLIGHT	34	Count
26: 18" DIA LED DOWNLIGHT, 43 WATT	19	Count
26: CARBON MONOXIDE DETECTOR	2	Count
26: SINGLE POLE SWITCH	57	Count
26: SMOKE DETECTOR	11	Count

PROJECT NAME	SHAY FAMILY RESIDENCE
PROJECT ADDRESS	10719 Randolph Siding Road, Jupiter, FL 334

E1

[illegible]

1 POWER FIRST FLOOR PLAN
E-2 SCALE: 1/8" = 1'-0"

OBJECT NAME
SHAY FAMILY RESIDENCE

10719 Randolph Siding Road, Jupiter, FL 33478

[illegible]

CLIENT:

Drawn by: DA
Designed by: KM
Checked by: KM
SCALE

E2

NEW DISTRIBUTION PANEL SCHEDULE										DESIGNATION	MDP
										LOCATION	SEE PLANS
VOLTAGE	120/240V	1	PHASE	3	WIRE	AVAILABLE FAULT CURRENT	SHORT CIRCUIT RATING	22K AIC			
MAIN BUS SIZE	600A	AMPS	NEUTRAL:	100%		GROUND BUS:	YES	INTEGRAL MOUNTED SPD	YES		
MAIN BREAKER SIZE	500A	AMPS	MOUNTING:	SURFACE		(SEE SERVICE ENTRANCE LABELLED)	YES	NOTE:			
CIRCUIT NUMBER	LOAD SERVED		OVER CURRENT DEVICE			LOAD KVA	FEEDER SIZE		REMARKS		
			FRAME	TRIP	POLES						
1	PANEL A	200	200	200	2	34.88	SEE RISER DIAGRAM		THRU ATS		
2	PANEL B1	400	400	400	2	68.88	SEE RISER DIAGRAM				
3	PANEL D	200	200	200	2	45.00	SEE RISER DIAGRAM				
4	PANEL P	150	150	150	2	26.80	SEE RISER DIAGRAM				
5	EWB-1	150	150	150	2	38	200V, 100G IN 1 1/2" C				
6	PANEL C	60	60	60	2	8	SEE RISER DIAGRAM		EXISTING PANEL		
						116.67	TOTAL DEMAND LOAD KVA				
						483.62	TOTAL DEMAND AMPS				

ELECTRICAL PANEL SCHEDULE													
NEW PANEL 'A': 200 AMPS, 120/240V, 1PH, MLO, 22KAIC													
NOTES	GEN KVA	HVAC	WIRE	TRIP POLE	CIRCUIT DESCRIPTION	CCT#	CCT#	CIRCUIT DESCRIPTION	TRIP POLE	WIRE	HVAC	GEN KVA	NOTES
1,4	-		#12	20-1	FIRST FLOOR LIGHTING	1	2	FIRST FLOOR LIGHTING	20-1	#12	-	1,4	
1,4	-		#12	20-1	GARAGE LIGHTING	3	4	MASTER RECEPTACLE	20-1	#12	-	1,4	
1,4	-		#12	20-1	SECOND FLOOR LIGHTING	5	6	MASTER BATH GFI	20-1	#12	-	1,5	
1,4	-		#12	20-1	GARAGE LIGHTING	7	8	EXTERIOR RECEPT	20-1	#12	-	4	
2	1.50		#12	20-1	MICROWAVE	9	10	SPARE	20-1	#12	-		
	10.0		#6	50-2	OVEN	11	12	SMALL APPLIANCE	20-1	#12	-		
						13	14	SMALL APPLIANCE	20-1	#12	-		
2	0.80		#12	20-1	DISHWASHER	15	16	LAUNDRY ROOM	20-1	#12	-		
2	0.80		#12	20-1	DISPOSAL	17	18	ENTRANCE - GL	20-1	#12	-		
2	0.80		#12	20-1	GARAGE DOOR	19	20	DINING - GL	20-1	#12	-		
2	0.80		#12	20-1	GARAGE DOOR	21	22	CORRIDOR - GL	20-1	#12	-		
4	-		#12	20-1	GARAGE RECEPTACLE	23	24	STORAGE RECEPT	20-1	#12	-		
	11.5		#6	60-2	CAR CHARGER	25	26	BEDROOM #3 - GL	20-1	#12	-		
						27	28	BATH - GFI	20-1	#12	-		
2	-		#10		DRIVEWAY RECEPTACLE	29	30	BATH - GFI	20-1	#12	-		
2	-		#10		DRIVEWAY RECEPTACLE	31	32	EXTERIOR RECEPT	20-1	#12	-		
2,5	-		#10		DRIVEWAY LIGHTING	33	34	EXTERIOR LIGHTING	20-1	#12	-		
2,5	-		#10		FRONT GATE	35	36	EXTERIOR LIGHTING	20-1	#12	-		
1,4	-		#12	20-1	GYM - GL	37	38	EXTERIOR RECEPT	20-1	#12	-		
1,4	1.50		#12	20-1	BATH #2 GFI	39	40	LOFT - GL	20-1	#12	-		
			#12	20-1	BEDROOM #2 - GL	41	42	CORRIDOR - GL	20-1	#12	-		
						43	44	EXTERIOR RECEPT	20-1	#12	-		
						45	46	BATH - GFI	20-1	#12	-		
						47	48	GUEST - GL	20-1	#12	-		
						49	50	RECIRCULATING PUMP	15				
						51	52						
						53	54						
	27.30	0.0											

5,024 SQ. FT. OF GENERAL POWER & LIGHTING @ 3W/SQFT

GENERAL LIGHTING AND RECEPTACLES
SMALL APPLIANCE BRANCH CIRCUITS (1 X 1.5 KVA)
LAUNDRY BRANCH CIRCUITS (1 X 1.5 KVA)
TOTAL LIGHTING AND RECEPTACLES
FIRST 3 KVA AT 100%
REMAINDER AT 35%
FASTENED IN PLACE APPLIANCES
DOUBLE OVENS
DRYER
TOTAL HEATING OR COOLING @ 100%
LARGEST MOTOR LOAD
TOTAL CALCULATED LOAD

NOTES:
1. AFCI PROTECTED
2. GFCI PROTECTED
3. HACR BREAKER
4. GENERAL LIGHTING AND RECEPTACLE LOAD
5. CIRCUIT CONTROLLED THRU TIME-CLOCK
6. GROUNDING CONDUCTOR SHALL BE BONDED TO GAS PIPING
DEMAND LOAD CALCULATED IN ACCORDANCE WITH NEC 2020 220.82

Legend		
Description	Quantity	Unit
26: NEW MDP, 60AMP, 2-POLE CB	1	Count
26: NEW MDP, 150AMP, 2-POLE CB	2	Count
26: NEW MDP, 200AMP, 2-POLE CB	2	Count
26: NEW MDP, 400AMP, 2-POLE CB	1	Count
26: PANEL-A, 20AMP, 1-POLE CB	37	Count
26: PANEL-A, 50AMP, 2-POLE CB	1	Count
26: PANEL-A, 60AMP, 2-POLE CB	1	Count
26: PANEL-A, 200AMP, 120/240V, 1PH MLO	1	Count
26: PANEL-B1, 20AMP, 1-POLE CB	15	Count
26: PANEL-B1, 20AMP, 2-POLE CB	2	Count
26: PANEL-B1, 30AMP, 2-POLE CB	1	Count
26: PANEL-B1, 50AMP, 2-POLE CB	1	Count
26: PANEL-B1, 60AMP, 2-POLE CB	5	Count
26: PANEL-B1, 400AMP, 120/240V, 1PH MCB	1	Count
26: PANEL-D, 20AMP, 1-POLE CB	9	Count
26: PANEL-D, 30AMP, 2-POLE CB	2	Count
26: PANEL-D, 40AMP, 2-POLE CB	1	Count
26: PANEL-D, 50AMP, 2-POLE CB	2	Count
26: PANEL-D, 200AMP, 120/240V, 1PH MCB	1	Count
26: PANEL-P, 15AMP, 2-POLE CB	1	Count
26: PANEL-P, 20AMP, 1-POLE CB	6	Count
26: PANEL-P, 20AMP, 2-POLE CB	1	Count
26: PANEL-P, 30AMP, 2-POLE CB	2	Count
26: PANEL-P, 35AMP, 2-POLE CB	1	Count
26: PANEL-P, 60AMP, 2-POLE CB	1	Count

ELECTRICAL PANEL SCHEDULE 'F'													
NEW PANEL 'F': 150 AMPS, 120/240V, 1PH, MLO													
NOTES	GEN KVA	HVAC	WIRE	TRIP POLE	CIRCUIT DESCRIPTION	CCT#	CCT#	CIRCUIT DESCRIPTION	TRIP POLE	WIRE	HVAC	GEN KVA	NOTES
2,3	3.6		#10	30-2	POOL RECIRCULATING PUMP	3	2	LANDSCAPING LIGHTS	20-1	#12	0.6	2,3,5	
						3	4	LANDSCAPING LIGHTS	20-1	#12	0.6	2,3,5	
2,3	1.3		#12	15-1	POOL FILTER	5	6	POOL DECK LIGHTS	20-1	#12	0.6	2,3,5	
						7	8	SPARE	20-1	#12			
2,3	3.6		#10	30-2	SPA RECIRCULATING PUMP	9	10	IRRIGATION PUMP	20-2	#12	2	3	
2,3,6	0.6		#12	20-1	GAS POOL HEATER	13	14	POOL HEAT PUMP	60-2	#6	10	3	
2,3,6	0.3		#12	20-1	SELENOID VALVE	15	16						
2,3	3.6		#6	35-2	WELL PUMP	17	18						
						19	20						
	13.00	0.00									0.00	13.80	
TOTAL GENERAL KVA												26.80 KVA	
TOTAL GENERAL AMPS												113.7 AMPS	
DEMAND LOAD CALCULATED IN ACCORDANCE WITH NEC 2020 220.82													

ELECTRICAL PANEL SCHEDULE 'B1'													
NEW PANEL 'B1': 400 AMPS, 120/240V, 1PH, MCB, 22KAIC													
NOTES	GEN KVA	HVAC	WIRE	TRIP POLE	CIRCUIT DESCRIPTION	CCT#	CCT#	CIRCUIT DESCRIPTION	TRIP POLE	WIRE	HVAC	GEN KVA	NOTES
2	0.8		#12	20-1	REFRIGERATOR	1	2	CJ-1	60-2	#6	7.2	3	
2	0.8		#12	20-1	REFRIGERATOR	3	4						
2	0.60		#12	20-1	HOOD	5	6	AHU-1	60-2	#6	10	3	
2	0.60		#12	20-1	MAKE UP AIR FAN	7	8						
1,4	1.5		#12	20-1	SMALL APPLIANCE	9	10	CJ-2	60-2	#6	5.2	3	
						11	12						
						13	14	AHU-2	60-2	#6	10	3	
						15	16						
						17	18	CJ-3	30-2	#8	7.2	3	
						19	20						
						21	22	AHU-3	60-2	#6	7.5	3	
						23	24						
						25	26	GEN BATTERY CHARGER	60-1	#12	0.3	1,2,3	
						27	28						
						29	30	CJ-4	20-2	#12	2	3	
						31	32	EF-4	10-1	#12	1	3	
						33	34						
						35	36						
						37	38						
						39	40						
						41	42						
GENERAL LIGHTING AND RECEPTACLES												4.00 KVA	
SMALL APPLIANCE BRANCH CIRCUITS (1 X 1.5 KVA)												1.50 KVA	
LAUNDRY BRANCH CIRCUITS (1 X 1.5 KVA)												1.50 KVA	
TOTAL LIGHTING AND RECEPTACLES												7.00 KVA	
FIRST 3 KVA AT 100%												3.00 KVA	
REMAINDER AT 35%												1.40 KVA	
FASTENED IN PLACE APPLIANCES												6.10 KVA	
DOUBLE OVENS												0.00 KVA	
DRYER												5.00 KVA	
TOTAL HEATING OR COOLING @ 100%												30.50 KVA	
LARGEST MOTOR LOAD												0.20 KVA	
TOTAL CALCULATED LOAD												68.88 KVA	287 AMPS
DEMAND LOAD CALCULATED IN ACCORDANCE WITH NEC 2020 220.82													

ELECTRICAL PANEL SCHEDULE 'D'													
NEW PANEL 'D': 200 AMPS, 120/240V, 1PH, MCB													
NOTES	GEN KVA	HVAC	WIRE	TRIP POLE	CIRCUIT DESCRIPTION	CCT#	CCT#	CIRCUIT DESCRIPTION	TRIP POLE	WIRE	HVAC	GEN KVA	NOTES
1.4	0.60			#12 20-3	GARAGE LIGHTING	1	2	EXTERIOR RECEPT	20-3	#12		1.0	4
1.4	0.60			#12 20-3	OUTDOOR LIGHTING	3	4	BATH GFI	20-3	#12		1.5	
1.4	0.60			#12 20-3	OUTDOOR LIGHTING	5	6	EXTERIOR RECEPT	20-3	#12		1.0	4
2	0.60			#12 20-3	GARAGE DOOR	7	8						
	5.0			#10 30-2	SPECIAL RECEPTACLE	9	10	EDWH-2	40-2	#8		2.5	3
						11	12						
2	0.60			#12 20-3	GARAGE DOOR	13	14						
4	1.00			#12 20-3	GARAGE RECEPTACLE	15	16						
						17	18						
	10.0			#6 50-2	BOAT STATION	19	20						
						21	22						
	10.0			#6 50-2	BOAT STATION	23	24						
						25	26						
	5.0			#10 30-2	SPECIAL RECEPTACLE	27	28						
						29	30						
						31	32						
						33	34						
						35	36						
						37	38						
						39	40						
						41	42						

DETAILED BREAKDOWN TAKEOFF & ACCURATE PRICING

DETAILED BREAKDOWN OF ITEMS												
Prepared for: SHAY FAMILY RESIDENCE												
Project ID: 10719 RANDOLPH SIDING ROAD, JUPITER, FL 33478												
Scope: ELECTRICAL												
Date: 7/25/2024												
							TOTAL LABOR HC	Hourly rate	TOTAL MATERIAL COST			
							1534.81	75.00	\$ 28,533.93			
												
SR #	DESCRIPTION	QUANTIT Y	UNIT	WASTAGE	QUANTITY W/ WASTAGE	UNIT MANHOUR	LABOR HOUR	HOURLY WAGE	LABOR COST	UNIT MAT. COST	MATERIAL COST	SUB COST
DIV-1 GENERAL REQUIREMENTS												
1	Permits	1	LS	0%	1	0.000	0.00	\$ 75.00	\$ -	\$ -	\$ -	\$ -
2	Supervision anD Coordination	1	LS	0%	1	0.000	0.00	\$ 75.00	\$ -	\$ -	\$ -	\$ -
3	Submittals anD SHop Drawings	1	LS	0%	1	0.000	0.00	\$ 75.00	\$ -	\$ -	\$ -	\$ -
4	FinaL CLeaning	1	LS	0%	1	0.000	0.00	\$ 75.00	\$ -	\$ -	\$ -	\$ -
5	MobiLization Costs	1	LS	0%	1	0.000	0.00	\$ 75.00	\$ -	\$ -	\$ -	\$ -
6	Temporary Control & FaciLities	1	LS	0%	1	0.000	0.00	\$ 75.00	\$ -	\$ -	\$ -	\$ -
7	ScaffoLDing	1	LS	0%	1	0.000	0.00	\$ 75.00	\$ -	\$ -	\$ -	\$ -
											SUBTOTAL \$	
DIV-26 ELECTRICAL												
CONDUIT												
8	3/4" Emt Conduit	4460	LF	10%	4906	0.062	304.17	\$ 75.00	\$ 22,812.90	\$ 1.12	\$ 5,494.72	\$ 28,307.62
9	2" Emt Conduit	290	LF	10%	319	0.080	25.52	\$ 75.00	\$ 1,914.00	\$ 2.10	\$ 669.90	\$ 2,583.90
10	2-1/2" Emt Conduit	220	LF	10%	242	0.100	24.20	\$ 75.00	\$ 1,815.00	\$ 2.96	\$ 716.32	\$ 2,531.32
11	3" Emt Conduit	70	LF	10%	77	0.150	11.55	\$ 75.00	\$ 866.25	\$ 3.45	\$ 265.65	\$ 1,131.90
CONDUCTOR												
12	2#12, 1#12 Gnd Cu Wire Service For Lighting	2190	LF	10%	2409	0.040	96.36	\$ 75.00	\$ 7,227.00	\$ 0.48	\$ 1,156.32	\$ 8,383.32
13	2#12, 1#12 Gnd Cu Wire Service For Receptacle	1877	LF	10%	2065	0.040	82.59	\$ 75.00	\$ 6,194.10	\$ 0.48	\$ 991.06	\$ 7,185.16
14	2#10, 1#10 Gnd Cu Wire Service For Equipment	480	LF	10%	528	0.050	26.40	\$ 75.00	\$ 1,980.00	\$ 0.63	\$ 332.64	\$ 2,312.64
15	3#3/0 Awg 1#6 Cu Gnd Service From Mdp To Panel	75	LF	10%	83	0.075	6.19	\$ 75.00	\$ 464.06	\$ 1.12	\$ 92.40	\$ 556.46
16	3#1/0 Awg 1#6 Cu Gnd Service From Mdp To Panel,	210	LF	10%	231	0.073	16.86	\$ 75.00	\$ 1,264.73	\$ 1.10	\$ 254.10	\$ 1,518.83
17	2 Sets Of 3#250Mcm Feeder From Pole Mtd Transformer To Ct	200	LF	10%	220	0.100	22.00	\$ 75.00	\$ 1,650.00	\$ 28.45	\$ 6,259.00	\$ 7,909.00
18	3#600Mcm, 1#3 Gnd Cu Wire Service From Ats To Panel	35	LF	10%	39	0.200	7.70	\$ 75.00	\$ 577.50	\$ 48.80	\$ 1,878.80	\$ 2,456.30
19	3#600Mcm, 1#3 Gnd Cu Wire Service From Ats To Generator	18	LF	10%	20	0.200	3.96	\$ 75.00	\$ 297.00	\$ 38.80	\$ 768.24	\$ 1,065.24
GROUND												
20	Ground Bar	1	EA	0%	1	1.000	1.00	\$ 75.00	\$ 75.00	\$ 88.00	\$ 88.00	\$ 163.00
21	Neutral Bar	1	EA	0%	1	1.000	1.00	\$ 75.00	\$ 75.00	\$ 88.00	\$ 88.00	\$ 163.00
22	5/8"X10' Cu Ground Rod	1	EA	0%	1	1.000	1.00	\$ 75.00	\$ 75.00	\$ 111.00	\$ 111.00	\$ 186.00
23	1#6 Awg Cu Ground Bar	10	LF	10%	11	0.062	0.68	\$ 75.00	\$ 51.15	\$ 0.96	\$ 10.56	\$ 61.71
24	1#1/0 Cu Grounding Conductor	10	LF	10%	11	0.070	0.77	\$ 75.00	\$ 57.75	\$ 1.02	\$ 11.22	\$ 68.97
LIGHTING FIXTURE												
25	10" Dia Exterior Wall Sconce	3	EA	0%	3	1.750	5.25	\$ 75.00	\$ 393.75	\$ -	\$ -	\$ 393.75
26	12" Dia Led Downlight	12	EA	0%	12	1.600	19.20	\$ 75.00	\$ 1,440.00	\$ -	\$ -	\$ 1,440.00
27	12" Dia Led Downlight, 29 Watt	101	EA	0%	101	1.250	126.25	\$ 75.00	\$ 9,468.75	\$ -	\$ -	\$ 9,468.75
28	15" Dia Exterior Wall Sconce	3	EA	0%	3	2.000	6.00	\$ 75.00	\$ 450.00	\$ -	\$ -	\$ 450.00
29	17" Dia Led Downlight	34	EA	0%	34	1.860	63.24	\$ 75.00	\$ 4,743.00	\$ -	\$ -	\$ 4,743.00
30	18" Dia Led Downlight, 43 Watt	19	EA	0%	19	1.960	37.24	\$ 75.00	\$ 2,793.00	\$ -	\$ -	\$ 2,793.00
31	1X4 Led Flat Panel, 40Watt	42	EA	0%	42	2.000	84.00	\$ 75.00	\$ 6,300.00	\$ -	\$ -	\$ 6,300.00
32	6" Dia Led Downlight, 14.5 Watt	110	EA	0%	110	1.500	165.00	\$ 75.00	\$ 12,375.00	\$ -	\$ -	\$ 12,375.00
LIGHTING CONTROL												
33	Single Pole Switch	57	EA	0%	57	0.550	31.35	\$ 75.00	\$ 2,351.25	\$ 14.00	\$ 798.00	\$ 3,149.25
34	Motor Rated Switch	8	EA	0%	8	0.850	6.80	\$ 75.00	\$ 510.00	\$ 22.00	\$ 176.00	\$ 686.00
POWER RECEPTACLE												
35	Duplex Receptacle	84	EA	0%	84	0.550	46.20	\$ 75.00	\$ 3,465.00	\$ 12.00	\$ 1,008.00	\$ 4,473.00
36	Duplex Receptacle-Gfi	26	EA	0%	26	0.290	7.54	\$ 75.00	\$ 565.50	\$ 65.00	\$ 1,690.00	\$ 2,255.50
37	Duplex Receptacle-Gfi-Wp	25	EA	0%	25	0.750	18.75	\$ 75.00	\$ 1,406.25	\$ 73.00	\$ 1,825.00	\$ 3,231.25
38	Ceiling Mounted Duplex Receptacle	2	EA	0%	2	0.800	1.60	\$ 75.00	\$ 120.00	\$ 24.00	\$ 48.00	\$ 168.00
39	Ceiling Mounted Duplex Receptacle-Gfi	4	EA	0%	4	1.000	4.00	\$ 75.00	\$ 300.00	\$ 64.00	\$ 256.00	\$ 556.00
40	Special Purpose Receptacle	6	EA	0%	6	0.950	5.70	\$ 75.00	\$ 427.50	\$ 32.00	\$ 192.00	\$ 619.50
DISCONNECT SWITCH												
41	30Amp, 2-Pole Fused Disconnect Switch-Wp	10	EA	0%	10	0.850	8.50	\$ 75.00	\$ 637.50	\$ 48.00	\$ 480.00	\$ 1,117.50
METER												
42	Ct, Current Transformer	1	EA	0%	1	3.000	3.00	\$ 75.00	\$ 225.00	\$ -	\$ -	\$ 225.00
43	Fpl Meter	1	EA	0%	1	3.500	3.50	\$ 75.00	\$ 262.50	\$ -	\$ -	\$ 262.50

\$ 143,645

[illegible]

GENERAL SUMMARY

Prepared for: SHAY FAMILY RESIDENCE
Project ID: 10719 RANDOLPH SIDING ROAD, JUPITER, FL 33478
Scope: ELECTRICAL
No. Of Floors: 3 BUILDINGS
Date: 25-Jul-24

CONSTRUCTION INC.



BUILDING GSF 20,800

DIVISION NO.		DESCRIPTION	TOTAL DIV. COST
1000	GENERAL REQUIREMENT		\$ -
26000	ELECTRICAL		\$ 143,645
TOTAL TRADE COST			\$ 143,645
OVERHEAD AND PROFIT		25%	\$ 35,911.22
MATERIAL MARKUPS		30%	\$ 43,093
TAX		10.000%	\$ 14,364
TOTAL TRADE COST			\$ 237,014