

TYPE	DESCRIPTION	SIZE	MANUFACTURER	MODEL NUMBER	GRATE	NOTES
FD-1	FLOOR DRAIN	SEE DWGS.	JR SMITH	2009Y		ROUND TOP, NOTE 2
FD-2	FLOOR DRAIN	SEE DWGS.	JR SMITH	2140Y	CAST IRON	PROVIDE TRAP PRIMER CONNECTION
FD-3	FLOOR DRAIN	6"			FRP	FOR POOL EQUIP. RM SUMP
FS-1	FLOOR SINK	SEE DWGS.	JR SMITH	3100Y-21		WITH 4" FUNNEL & TRAP PRIMER CONNECTION
FS-2	FLOOR SINK	SEE DWGS.	JR SMITH	3100Y		TRAP PRIMER CONNECTION
GD-1	GARAGE DRAIN	4"	JR SMITH	2450Y-M		
TD-1	TRENCH DRAIN	SEE DWGS.	JR SMITH	9930	9870-462-DGC	
LD-1	LINEAR DRAIN	2"	SCHLUTER KERDI			FOR SHOWERS, REFER TO ARCHITECTURAL
RD-1	ROOF DRAIN	SEE DWGS.	JR SMITH	1031Y	POLYETHYLENE DOME	IRMA ROOF, NOTE 1
ORD-1	OVERFLOW ROOF DRAIN	SEE DWGS.	JR SMITH	1037Y	POLYETHYLENE DOME	IRMA ROOF, NOTE 1
DN-1	DOWNSPOUT NOZZLE	SEE DWGS.	JR SMITH	1770	-	CAST BRONZE
HD-1	HUB DRAIN	SEE DWGS.				

NOTES:

- OMIT DOME WHERE DRAIN IS USED BELOW PEDESTAL PAVERS.
- PROVIDE TRAP PRIMER CONNECTION WHERE INDICATED ON DWGS. BY "TP" AT DRAIN SYMBOL.
- 1" AIR GAP REQUIRED AT ALL INSTANCES OF AN INDIRECT DRAIN DISCHARGING TO A FLOOR DRAIN OR FLOOR SINK. PROVIDE UNISTRUT OR SIMILAR PIPE SUPPORT AS NECESSARY TO GUARANTEE REQUIRED AIR GAP.

PLUMBING WATER SOFTENER SCHEDULE										
MARK	SERVICE	LOCATION	EXCHANGE CAPACITY (KGR @ SALT DOSAGE)	FLOW RATES PER TANK (NOTE 3)			PIPE SIZE (IN)	RESIN VOLUME FT3	MANUFACTURER & MODEL NO.	NOTES
				CONTINUOUS (GPM)	PEAK (GPM)	BACKWASH (GPM)				
WS-1	DOMESTIC WATER	WATER ENTRY	1500 @ 750	190	320		4	50	OULLIGAN HS-1504 DUPLEX	1, 2, 3, 4
NOTES: 1. ELECTRICAL: 120 V AC, 1 PH, 60 HZ. 2. LISTED EQUIPMENT MANUFACTURER IS THE BASIS OF DESIGN. OTHER MANUFACTURERS MEETING THE PERFORMANCE REQUIREMENTS ARE ACCEPTABLE. 3. PRESSURE LOSS 6 PSI @ CONTINUOUS FLOW. MAX PRESSURE LOSS 15 PSI @ PEAK FLOW. 4. PROVIDE MODBUS/BACNET CONNECTION FOR INTEGRATION WITH BMS.										

PLUMBING SAND OIL INTERCEPTOR SCHEDULE								
ITEM	DESCRIPTION	LOCATION & SERVICE	WATER CAPACITY GALLONS	CONNECTIONS INCHES			MANUF. & MODEL NO.	REMARKS
				INLET	OUTLET	VENT		
SOI-1	SAND OIL INTERCEPTOR	TOWER A, LVL P2	306	4	4	2	MFAB M5-20-4-C-HD	
SOI-2	SAND OIL INTERCEPTOR	TOWER B, LVL B	306	4	4	2	MFAB M5-20-4	ABOVE FLOOR INSTALLATION
SOI-3	SAND OIL INTERCEPTOR	TOWER C, EXTERIOR	500	4	4	2	REFER TO CIVIL DRAWINGS	
NOTES:								

PLUMBING FIXTURE CONNECTION SCHEDULE							
ITEM	FIXTURE	DESCRIPTION	CONNECTIONS				REMARKS
			S	V	CW	HW	
WC-1	WATER CLOSET	FLOOR SET, TANK TYPE	4"	2"	1/2"	-	RESIDENTIAL UNITS, NOTE 1.
WC-2	WATER CLOSET	FLOOR SET, FLUSH VALVE	4"	2"	1-1/2"	-	AMENITY/PUBLIC, NOTE 1.
L-1	LAVATORY	COUNTERSET, ADA	1-1/2"	1-1/2"	1/2"	1/2"	PROVIDE THERMOSTATIC MIXING VALVE FOR FAUCET, NOTE 1
S-1	SINK	COUNTERSET	2"	1-1/2"	1/2"	1/2"	PROVIDE THERMOSTATIC MIXING VALVE FOR FAUCET, NOTE 1 AND 2.
SH-1	SHOWER	SHOWER VALVE WITH STOPS, SHOWER HEAD, HAND SHOWER SYSTEM (ADA)	2"	1-1/2"	1/2"	1/2"	NOTE 1.
SH-2	SHOWER/BATH TUB COMBO	SHOWER VALVE WITH STOPS, SHOWER HEAD, HAND SHOWER SYSTEM (ADA)	2"	1-1/2"	1/2"	1/2"	NOTE 1.
BT-1	BATH TUB	FREE STANDING TUB	1-1/2"	1-1/2"	1/2"	1/2"	NOTE 1.
EW-1	ELECTRIC WATER COOLER		1-1/2"	1-1/2"	1/2"	-	NOTE 1.
MS-1	MOP SINK	CHICAGO 445-8975RWXCP FAUCET, FIAT MS2424 MOP BASIN W/ER8AAZ BUMPER GUARDS	3"	1-1/2"	1/2"	1/2"	
HB-1	HOSE BIBB	CHICAGO 952-XWCP	-	-	1/2"	-	
WH-1	WALL HYDRANT	WOODFORD B67	-	-	3/4"	-	NON-FREEZE
WB-1	WALL BOX	GRAY GRAY SSIB2AB	-	-	1/2"	-	FOR ICE MAKER OR COFFEE MAKER, WITH DCV-1 AT EACH CONNECTION
WWB-1	WASHER WALL BOX	WATTS ACC-SC-WB	2"	1-1/2"	1/2"	1/2"	AUTOMATIC SHUT OFF WITH LEAK SENSOR

NOTES:

1. REFERENCE OLSON KUNDIG SPECIFICATIONS APPENDIX A FOR MANUFACTURER AND MODEL OF FIXTURE AND TRIM AT EACH LOCATION.
2. PROVIDE 1/2" HW SHUT-OFF VALVE FOR EA. DISHWASHER CONNECTION AT LOCATIONS WITH DISHWASHER(S).

PLUMBING GAS WATER HEATER SCHEDULE																
MARK	SERVICE	LOCATION/ SERVICE	NATURAL GAS CHARACTERISTICS			ELECTRICAL CHARACTERISTICS					WATER CHARACTERISTICS				MANUFACTURER BASIS OF DESIGN	NOTES
			INPUT MBH	EFFICIENCY	PRESSURE IN- WC	AMPS	V	PH	HZ	A/C	TANK VOLUME GAL	RECOVERY CAPACITY GPH	EW'T DEG F	LWT DEG F		
B-1	DOMESTIC HOT WATER	BLDG B, LVL P2, ROOM P239	1500	97%		5.00	120	1	60		120	4409 GPH	40	140	RAYPAK XTERM 1505A	1, 2, 3, 4, 5, 6, 7, 8
B-2	DOMESTIC HOT WATER	BLDG B, LVL P2, ROOM P239	1500	97%		5.00	120	1	60		120	4409 GPH	40	140	RAYPAK XTERM 1505A	1, 2, 3, 4, 5, 6, 7, 8

NOTES:
1. PROVIDE WITH P & T VALVE.
2. 3/4" DRAIN CONNECTION.
3. 2-1/2" WATER CONNECTION.
4. 1-1/4" GAS CONNECTION.
5. SIZE: 50"X 31-1/8" X 67-1/8" TALL, SHIPPING WEIGHT: 1234 LBS
6. 8" DIA. FLUE.
7. SEE INSTALLATION MANUAL FOR LOW VOLTAGE WIRING REQUIREMENTS.
8. FOR OPERATION AT 8400' ELEVATION.

PLUMBING PUMP SCHEDULE										
ITEM	DESCRIPTION	LOCATION/ SERVICE	CAP GPM	TDH	MOTOR				MANUF. & MODEL NO.	REMARKS
					HP	RPM	V	PH		
ESP-1	ELEVATOR SUMP PUMP	TOWER A, ELEVATOR S1	50	22	0.50	3450	480	3	STANCOB SV500 XL MINDER	NOTES 1, 2, 3, 4
ESP-2	ELEVATOR SUMP PUMP	TOWER A, ELEVATOR T1	50	22	0.50	3450	480	3	STANCOB SV500 XL MINDER	NOTES 1, 2, 3, 4
ESP-3	ELEVATOR SUMP PUMP	TOWER A, ELEVATOR T2	50	22	0.50	3450	480	3	STANCOB SV500 XL MINDER	NOTES 1, 2, 3, 4
ESP-4	ELEVATOR SUMP PUMP	TOWER B, ELEVATOR T3	50	22	0.50	3450	480	3	STANCOB SV500 XL MINDER	NOTES 1, 2, 3, 4
ESP-5	ELEVATOR SUMP PUMP	TOWER B, ELEVATOR T4	50	22	0.50	3450	480	3	STANCOB SV500 XL MINDER	NOTES 1, 2, 3, 4
ESP-6	ELEVATOR SUMP PUMP	TOWER C, ELEVATOR T5	50	22	0.50	3450	480	3	STANCOB SV500 XL MINDER	NOTES 1, 2, 3, 4
BP-1	BOOSTER PUMP	TOWER B WATER ENTRY P239	366	275	154A	3569	480	3	GRUNDFOS HYDRO MPC-E ACRE 20-6	PROVIDE SPARE PUMP, NOTE 5
CP-1	CIRCULATING PUMP	TOWER B WATER ENTRY P239	31	35	1.00	-	208	1	BELL & GOSSET ECOCIRC XL B 65-130	LEAD-FREE, NOTE 2
CP-2	CIRCULATING PUMP	TOWER B WATER ENTRY P239	31	35	1.00	-	208	1	BELL & GOSSET ECOCIRC XL B 65-130	LEAD-FREE, NOTE 2
SEP-1	SEWAGE EJECTOR	TOWER A, LEVEL B	27	30	2.00	-	208	1	LIBERTY LSG202A	
SEP-2	SEWAGE EJECTOR	TOWER A, LEVEL B	27	30	2.00	-	208	1	LIBERTY LSG202A	
SEP-3	SEWAGE EJECTOR	TOWER A, MECHANICAL A017	27	30	2.00	-	208	1	LIBERTY LSG202A	
SEP-4	SEWAGE EJECTOR	TOWER A, MECHANICAL A017	27	30	2.00	-	208	1	LIBERTY LSG202A	
SEP-5	SEWAGE EJECTOR	TOWER B, DOMESTIC WATER SERVICE ROOM B013	50	40	1.50	-	208	1	LIBERTY XLE150	
SEP-6	SEWAGE EJECTOR	TOWER B, DOMESTIC WATER SERVICE ROOM B013	50	40	1.50	-	208	1	LIBERTY XLE150	
SEP-7	SEWAGE EJECTOR	TOWER B, SEWAGE EJECTOR ROOM B016	10	20	0.40	-	115	1	LIBERTY LE40	
SEP-8	SEWAGE EJECTOR	TOWER B, SEWAGE EJECTOR ROOM B016	10	20	0.40	-	115	1	LIBERTY LE40	
SEP-9	SEWAGE EJECTOR	TOWER B, ROOM B004	15	13	0.33	-	115	1	LITTLE GIANT WRS6-C	UNDER SINK

1. PROVIDE ISOLATION VALVES & CHECK VALVE


2. PROVIDE TIE-IN TO BAS

3. PROVIDE VENDOR CONTROLS AS REQUIRED FOR COMPLETE OPERATION

4. PROVIDE WITH HIGH WATER ALARM

5. PRODUCT TO COMPLY WITH NSF STANDARD 61

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PLUMBING TANK SCHEDULE							
MARK	SERVICE	LOCATION	TYPE	TANK VOL. (GAL.)	PRESSURE RATING (PSI)	MANUFACTURER # MODEL NO.	NOTES
BT-1	WATER SERVICE BREAK TANK	BLDG B, LVL P2, ROOM P239	VERTICAL	908	-	FLOWTHERM BT-908	10 GA. STAINLESS STEEL, NOTE 3
ET-1	WATER SERVICE EXPANSION TANK	BLDG B, LVL P2, ROOM P239	FULL ACCEPTANCE REPLACEABLE BLADDER	53	150 	AMTROL ST-447C	
HT-1	HYDRO-PNEUMATIC TANK	BLDG B, LVL P2, ROOM P239	REPLACEABLE BLADDER	53	150	GRUNDFOS GFXA-200	24" DIA X 43 1/2" H, NOTE 4
ST-1	DOMESTIC HOT WATER STORAGE	BLDG B, LVL P2, ROOM P239	VERTICAL	499	150	RAYPAK	GLASS LINING, 42" DIA x 92" H

NOTES:

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- LISTED EQUIPMENT MANUFACTURERS ARE THE BASIS OF DESIGN. OTHER MANUFACTURERS MEETING THE PERFORMANCE REQUIREMENTS ARE ACCEPTABLE.
- 120V POWER FOR SOLENOID FILL VALVE AND LEVEL SENSING TRANSDUCER. PROVIDE INLET PIPING CONNECTION WITHOUT FUNNEL AND AIR GAP WITH INLET DISCHARGES 12 INCHES ABOVE OVERTFLOW OUTLET
- PRODUCT COMPLY WITH NSF STANDARD 61

PLUMBING NATURAL GAS CONNECTION SCHEDULE									
ITEM	QTY	LOCATION	SERVICE	MBH INPUT		CONN SIZE (NPS)	REQUIRED MIN. INLET PRESSURE	MBH TOTALS	REMARKS
RESIDENTIAL FIREPLACE		LIVING ROOM	AMENITY	51.0			7" W.C.		4% DERATE FOR EACH 1000 FT ABV SEA LEVEL
RESIDENTIAL FIREPLACE		BEDROOM	AMENITY	44.0					
RESIDENTIAL FIREPLACE, EXTERIOR	1	PENTHOUSE DECK	AMENITY	75.0					UNIT B703 (TYPE K), EST MBH
RESIDENTIAL FIRE PITS	14	UNIT DECKS	AMENITY	69.0				966	
RESIDENTIAL BBQ	53	FUTURE	AMENITY	75.0			7" W.C.	3,600	
RESIDENTIAL STOVE	53	UNIT KITCHEN		97.0				5,141	
LANDSCAPE FIREPITS	2	POOL DECK	AMENITY	75.0				150	INCH=1"
LANDSCAPE FIRE FEATURE, CUSTOM	1	TOWER B PATIO	AMENITY	525.0				525	30' LONG FIRE PIT, EST MBH
LANDSCAPE FIRE FEATURE, CUSTOM	1	TOWER B PATIO	AMENITY						CIRCULAR FIRE PIT, EST MBH
POOL HEATER	1	TOWER B, PARKING LEVEL 2	AMENITY	1,900.0				1,900	
MECHANICAL BOILERS	1	TOWER A, LEVEL P2	TOWER A HEATING	3,600.0				3,600	
MECHANICAL BOILERS	1	TOWER B, LEVEL P1	TOWER B HEATING	3,600.0				3,600	
MECHANICAL BOILERS	1	TOWER C, LEVEL 1	TOWER C HEATING	3,600.0				3,600	
MECHANICAL BOILERS	1	TOWER B, LEVEL P1	SNOWMELT	14,400.0				14,400	
MECHANICAL UNIT HEATER	1	GARAGE ENTRANCE	TOWER A HEATING	437.0				437	
MECHANICAL UNIT HEATER	1	GARAGE ENTRANCE	TOWER B HEATING	437.0				437	
MECHANICAL UNIT HEATERS	1	GARAGE ENTRANCES	TOWER C HEATING	557.0				557	
PLUMBING BOILERS	2	TOWER B, PARKING LEVEL 2	DOMESTIC HOT WATER	1,500.0				3,000	
KITCHEN EQUIPMENT	1	TOWER A, LEVEL 1	RESTAURANT					961	RESTAURANT METER
LANDSCAPE FIRE PITS	2	RESTAURANT PATIO	AMENITY	75.0				150	RESTAURANT METER
GAS SERVICE								43,024	
NOTE: GAS SERVICE IS MEDIUM PRESSURE, 2 PSI. PROVIDE REGULATORS AND VENT PIPING FROM REGULATOR TO OUTDOORS FOR ALL GAS REGULATORS.									