SECTION 11 78 00
MORTUARY EQUIPMENT

SPEC WRITER NOTES:
1. Delete between // ____ // if not applicable to project.
2. Delete other items or paragraphs in the section that are not applicable and renumber the paragraphs.

PART 1 - GENERAL

1.1 DESCRIPTION
This section specifies morgue equipment including // autopsy tables // and // autopsy sinks //.

1.2 RELATED WORK
A. Plumbing Connections: Section 22 11 00, FACILITY WATER DISTRIBUTION and // Section 22 13 00, FACILITY SANITARY SEWERAGE // Section 22 66 00, CHEMICAL-WASTE SYSTEMS FOR LABORATORY AND HEALTHCARE FACILITIES //.
B. Electrical Connections: Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS.
C. Electrical Devices: Section 26 27 26, WIRING DEVICES.

1.3 QUALITY CONTROL
A. Manufacturer Qualifications: Manufacturer regularly and presently manufactures morgue equipment.
B. Electrical Components and Devices: UL listed and labeled for intended use.

1.4 APPLICABLE PUBLICATIONS
A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
B. Scientific Equipment and Furniture Association (SEFA):
   2-10 .................... Recommended Practices for Installation of Scientific Laboratory Furniture and Equipment
   7-10 .................... Fixtures

1.5 SUBMITTALS
A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
B. Manufacturer's Literature and Data: Include illustrations and descriptions of morgue equipment.
C. Shop Drawings: Show details of installation, coordination with mechanical and electrical work, anchorage, and other work required for complete installation.

D. Field Test Reports: Indicate dates and times of tests and certify test results.

E. Operating Instructions: Comply with requirements in Section 01 00 00, GENERAL REQUIREMENTS.

PART 2 - PRODUCTS

2.1 MORGUE EQUIPMENT, GENERAL

A. Factory install service fixtures and electrical devices in locations shown on drawings.

B. Service Fixtures, General: Heavy-grade designed for mortuary use and complying with relevant requirements in SEFA 7.

C. Water Service Fixtures: With integral vacuum breaker and as follows:
   1. Female 10 mm (3/8 inch) threaded outlet for attachment of filter pumps, hose connectors, antihose nozzle or antisplash spout ends.
   2. Equip with goosenecks with minimum clearance of 191 mm (7-1/2 inches) between threaded outlet and tabletop. Bend gooseneck 180 degrees to direct water flow vertically into sinks. Attach gooseneck to base with adapter-type connection, which will permit field conversion of swing-type to fixed-type gooseneck and fixed-type to swing-type gooseneck.
   3. Unless otherwise indicated, provide water fixtures for manual operation with wrist-blade handles.

D. Gas, Air, and Vacuum Fixtures: Needle valves with stainless-steel replaceable cone and valve seat. Equip valve with a bonnet with exterior packing and packing gland designed to permit valve to be repacked while under pressure. Valves shall withstand a minimum pressure of 689 kPa (100 psi) without leakage. Equip valves with four-arm handles and hose ends.

E. Waste Disposal Unit: // 373-W (1/2-hp) // 560-W (3/4-hp) // heavy-duty commercial disposer, with vacuum breaker, standpipe, solenoid valve, waterproof control switch, starter, overload protection, trap with cleanout, and necessary fittings for a complete functional unit.

F. Aspirator: Electrical powered, equipped with "reverse-flow" feature for suction and flushing, 4-L (1-gal.) graduated bottle, transparent tubing and built-in vacuum breaker located above table rim.
G. Electrical Outlets: Hospital grade, weatherproof duplex electrical, 110 V, 60 cycle, single phase.

H. Down-Draft Exhaust: Double-cone assembly installed in autopsy tabletop; exhaust duct with filter extending from base of autopsy table through floor and extending to roof of building and attached to exhaust fan.

SPEC WRITER NOTE: Equipment described in article below corresponds to symbols "ME-803" and "ME-804" in "Room Equipment Guide."

2.2 AUTOPSY SINKS

A. Description: Fixed stainless-steel sinks with integral splash and drainboards.

B. Supports:

//1. Support gussets, backing plate, or in-wall carrier designed to support sink plus 91 kg (200 lb) when applied to front rim of sink.//

//2. Stainless-steel legs, gusset, cross rails, and adjustable feet.//

C. Drainboards: Pitched to sink with removable, perforated stainless-steel specimen/dissecting trays.

D. Acoustical Coating: Applied on underside of sink units.

SPEC WRITER NOTE: If waste disposal unit is used at sink, delete knee-controlled and hand-lever-controlled drain valve options in paragraph below.

E. Equip sinks with hot- and cold-water mixing faucet with wrist blades, swivel gooseneck spout, vacuum breaker, and // knee-controlled // hand-lever-controlled // drain valves with overflow.

F. Accessories:

1. Gas and air fixtures.
2. Waterproof duplex electrical outlet.
3. Aspirator, with reverse-flow feature.
4. Table flushing system.
5. Spray assembly with spray nozzle with control, vacuum breaker, 2438 mm (96 inch) long rubber hose with chrome-plated fittings for standard faucet thread.

2.3 AUTOPSY TABLES

A. Description: Stainless-steel table, in configuration indicated on drawings, with integral fittings and fixtures.

B. Where indicated, provide table capable of 180 degrees of rotation, and lockable in any position.

C. Vertical Adjustment of Working Height: From 813 to 965 mm (32 to 38 inches), electric powered (push-button control) / manual adjustment (hydraulic foot pedal).

D. Conceal supply and waste pipes in pedestal with access panel or door.

E. Adapt pedestal for double-cone down-draft exhaust system.

F. Slope table surface to drain. Equip drain with removable stainless-steel perforated cover/strainer.

G. Where indicated, provide sink basin with hot and cold water, swing gooseneck faucet, wrist-blade handles, and lever handle drain valve with overflow.

H. Accessories:
   1. Graduated scale in centimeters etched on front edge of table.
   2. Rubber // Teflon // Aluminum headrest.
   3. Gas and air fixtures.
   4. Removable and adjustable stainless-steel perforated or solid-body support slats.
   5. Perimeter flushing system.
   6. Spray assembly with spray nozzle with control, 2438 mm (96 inch) long rubber hose with chrome-plated fittings for standard faucet thread.
   7. Aspirator.
   8. Hospital-grade duplex electrical outlet.

SPEC WRITER NOTE: Show types, quantities, and locations of service fixtures required for each type of morgue equipment on drawings.

PART 3 - EXECUTION

3.1 INSTALLATION

Install morgue equipment according to manufacturer's written instructions and relevant requirements in SEFA 2.

3.2 TESTS

A. Field test installed units after service systems are pressurized for proper operation.
1. Operate each component of equipment. During and after testing, there shall be no evidence of leaks, electrical malfunction, or other symptom of failure.

2. For units that fail testing, make adjustments and corrections to installation, or replace units, and repeat tests until units operate properly.

3.3 PROTECTING AND CLEANING

A. Protect equipment from dirt, water, and chemical or mechanical injury during the remainder of the construction period.

B. At the completion of work, clean equipment as required to produce ready-for-use condition.

3.4 INSTRUCTIONS

Instruct personnel and transmit operating instructions in accordance with requirements in Section 01 00 00, GENERAL REQUIREMENTS.