1. GENERAL

1.01 SUMMARY

.1 Provide a complete system of empty conduits, terminal cabinets, plywood backboards, pull boxes and outlets for enclosure of wiring by Security Contractor.

1.02 RELATED REQUIREMENTS

.1 Section 26 05 33.13 – Conduit for Electrical Systems.

.2 Section 26 05 33.16 – Boxes for Electrical Systems.

.3 Section 27 05 28.00 - Pathways for Communications Systems

2. PRODUCTS

2.01 OUTLETS

.1 Wall and door outlets shall be single boxes, or 115 mm square boxes with plaster rings to suit single gang devices unless otherwise noted. Coordinate with Security Contractor.

2.02 CONDUITS

.1 Provide conduit in all walls, exposed areas, and inaccessible ceilings. All conduit work shall be concealed.

.2 Minimum conduit size shall be 21 mm diameter.

.3 Provide J hooks in accessible ceilings for plenum rated wiring.

.4 Minimum space requirements in pull boxes for 90 degree pulls, shall be as follows:

Maximum conduit size	Size of pull boxes in millimetres			For each additional conduit size increase width by:
	Width	Length	Depth	
21 mm	150 mm	300 mm	100 mm	50 mm
27 mm	200 mm	400 mm	150 mm	75 mm
35 mm	250 mm	450 mm	200 mm	75 mm
41 mm	300 mm	600 mm	250 mm	100 mm
53 mm	350 mm	750 mm	300 mm	125 mm

.5 Plywood backboards shall be minimum 1200 x 2400 mm, 19 mm thick, painted with 2 coats of fire retardant light grey enamel.

.6 Provide a minimum of 2 duplex receptacles on separate circuits at each backboard.

3. EXECUTION

3.01 INSTALLATION

.1 Vertically mount outlet boxes, unless noted otherwise, 300 mm to centre above floor, or 150 mm above counter top where shown at counters or benches.

.2 Fish conduit, clear blockages and outlet and clean out pull boxes at completion of installation. Leave conduit free of water or excess moisture. Install No. 12 gauge galvanized soft iron pull wire, or 3.2 mm (1/8") nylon pull cord continuously from outlet to outlet, through conduit and fasten at each box.

.3 Conduit bonds shall have a bending radius of not less than nine times conduit diameter. Ream out conduit and identify ends with green paint.

.4 Install additional steel pull boxes in such a manner that, throughout entire system, there shall be not more than two 90 degree or equivalent bends or more than 30 m in each run, so that wire or cables may be pulled in or withdrawn with reasonable ease. Minimum space requirements in pull boxes having one conduit each in opposite ends of the box, shall be as follows:

Maximum conduit size	Size of pull boxes in millimetres			For each additional conduit size increase width by:
	Width	Length	Depth	
21 mm	150 mm	300 mm	100 mm	50 mm
27 mm	200 mm	400 mm	150 mm	75 mm
35 mm	250 mm	450 mm	200 mm	75 mm
41 mm	300 mm	600 mm	250 mm	100 mm
53 mm	350 mm	750 mm	300 mm	125 mm

.5 Show as-installed conduit routing and location of all pull boxes on the record drawings, prior to project completion, for use by Security installer to facilitate wiring and equipment installation. Include above noted information on final record drawings at project completion.

End of Section