PART 1 - GENERAL

1.1 SUMMARY OF SECTION

- .1 As summarized and described but not restricted to the following:
 - .1 Provide factory manufactured factory finished modular composite panel casework as indicated
 - .2 Provide countertops as indicated
 - .3 Provide all cabinet hardware and accessories

1.2 REFERENCES

- .1 American National Standards Institute (ANSI):
 - .1 ANSI A208.2-2009, Medium Density Fiberboard (MDF) for Interior Applications.
 - .2 ANSI/NPA A208.1-2009 Standards for particleboard
- .2 American Society for Testing and Materials International (ASTM):
- .3 Business and Institutional Manufacturers Association (BIFMA) Product Safety and Performance Standards and Guidelines
- .4 UL Environment, Greenguard Environmental Certification

1.3 SUBMITTALS

- .1 Product Data:
 - .1 Submit manufacturer's printed product literature, including installation instructions, specifications and data sheets.
- .2 Samples:
 - .1 Submit samples of finishes used in casework:
 - .1 Plastic Laminate Finishes
 - .2 ABS Edge banding
 - .3 MCP (Melamine Composite Panel)
 - .4 Solid Surface Countertop material
 - .5 Door and drawer pulls, if requested.
 - .2 Shop Drawings:
 - .1 Submit shop drawings in accordance with Section 01 33 00 Submittal Procedures.
 - .2 Incorporate plans, elevations, sections, and details for all casework in scale.
 - .3 No work shall be fabricated until the shop drawings have been reviewed and all related submittals and samples as required by the specification have been approved by the Consultant:

- .1 Shop drawings shall clearly indicate proposed edge finish based on Drawings and options specified by this Section.
- .2 Provide closure material between wall and cabinetry scribed to the wall surface.
- .3 Indicate details of construction, profiles, jointing, fastening and other related details.
- .4 Indicate locations of all service outlets in casework, typical and special installation conditions, and all connections, attachments, anchorage and location of exposed fastenings. Include all cabinet hardware attachment to the cabinet.
- .5 Indicate seaming locations for countertop materials.

.3 O&M Manual:

.1 Submit use and care information into product data manual.

1.4 TESTING REQUIREMENTS

- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of materials.
- .2 All products shall be Greenguard Gold certified and shall comply with BIFMA X7.1 emission standards.
- .3 All products shall be pre-tested and in compliance with BIFMA HCF 8.1-2017, Cleanability of Healthcare Furniture Standards.
- .4 All products shall be certified compliant with BIFMA LEVEL 2 standards.

1.5 MOCK-UPS

- .1 Construct mock-ups in accordance with Section 01 45 00 Quality Control.
- .2 Allow forty-eight (48) hours for review of mock-up by Consultant.
- .3 When accepted, mock-up will demonstrate minimum standard for Work. Mock-up may remain as part of finished work.
- .4 Provide one lower and upper unit for each typical casework for review.

1.6 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, handle, store and protect materials of this section in accordance with Section 01 61 00 Common Product Requirements.
- .2 Protect casework against dampness and damage during and after delivery,

provide protective plastic wrap completely covering the casework.

- .3 Store casework in ventilated areas, protected from extreme changes of temperature or humidity.
- .4 Do not deliver until painting and similar operations have been completed in installation areas.
- .5 Handle materials to prevent damage to finished surfaces. Protect the protective coverings to prevent physical damage or staining following installation for duration of project. Store in secure area on site away from general work area.
- .6 Casework to be installed after finished walls, but prior to or after finish flooring, at owners' election and direction.
- .7 Shop fabricate in lengths suitable for transport.
- .8 Ensure all cabinet hardware shop installed prior to delivery, with all extruding hardware installed internally, i.e. door/drawer pulls.
- .9 All units to be fully packaged suitable for commercial transportation.

1.7 SEQUENCING AND PHASING

.1 Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.8 QUALITY ASSURANCE / QUALITY CONTROL

- .1 Manufacturer to:
 - .1 Have minimum ten years of experience in the manufacture of similar custom laminated casework as specified.
 - .2 Be a current member of BIFMA in good standing.
- .2 Construct all casework in accordance with BIFMA standards, and certify compliance. Provide all relevant BIFMA test results.

1.9 EXTENDED WARRANTY

- .1 Provide twenty-five (25) year warranty for provision of casework from date of substantial completion.
- .2 Solid Surface Countertops: Provide ten (10) year warranty against defects in Material and two (2) years on installation.

PART 2 – PRODUCTS

2.1 Acceptable Manufacturers

.1 Groupe Lacasse.

2.2 PANEL MATERIALS

- .1 Composite Panel Material:
 - .1 Thermally Fused Melamine Panels (MCP): to ANSI A208.1
 - .1 Melamine Composite Panel (MCP): to NEMA LD3 #2005 Grade VGL, decorative plastic laminate thermally fused under heat and pressure to particle board core.
 - .1 M-2 Grade particleboard substrate with 100% recycled wood fiber .
 - .2 Plastic laminate fused to both faces.
 - .3 Laminated plastic adhesive: contact adhesive to CAN/CGSB071.20. Test for acceptable VOC emissions in accordance with ASTM D2369 and ASTM D2832.
 - .2 Finish:
 - .1 (**PL1**): High pressure plastic Laminate, tops only, finish chosen by consultant. Edgeband required from manufacturer's standard offering
 - .2 **(MCP):** Thermally fused laminate, cabinet bodies, finish chosen from casework manufacturer's full finish range.
 - .3 Approved TFL Manufacturer:
 - .1 Uniboard
 - .2 Tafasia

2.3 COUNTERTOPS

- .1 Solid Surface Countertops:
 - .1 Solid surface counter with front edge skirt, with integral backsplash and sidesplash at all wet areas unless noted otherwise.
 - .2 Countertop: 1/2" thick solid surface
 - .3 Countertop Size: width and depth as shown on drawings.
 - .5 Edge profile: 1 1/2" thick built-up bullnose edge.
 - .6 Standard of Acceptance: Corian Group A, or approved alternate.
- .2 Plastic Laminate Countertops
 - .1 Fabricate worktops from 1-1/8 inch thick core material with 1.5 mm ABS banding on all four (4) edges applied with laser edgebanding per Section 3.3.8.

2.4 CABINET HARDWARE

.1 Door Hinges:

- .1 135° Fully adjustable, concealed,
 110° degree, fully adjustable, concealed where requested.
- .2 Acceptable materials: Blum, Hettich, Salice
- .3 Soft Closing doors and drawers are standard and required.
- .2 Door "D" Pull and Drawer Pulls:
 - .1 128mm centers, 10mm diameter, metal with nickel finish. Standard of Acceptance: Richelieu #BP6211128195 or approved alternate.
- .3 Steel Drawer Slides: See Section 3.4.7
- .4 Locks: where indicated:
 - .1 Cabinet Locks: Olympus 777 complete with Schlage Full Size Interchangeable Cores. All locks to be keyed to 11111111 and turned over to Owner to re-key upon project completion.
- .5 Catch:
 - .1 Magnetic; Standard of Acceptance: Richelieu #BP52090
- .6 Door and Drawer Bumpers:
 - .1 Standard of Acceptance: Model BP303-11, clear, supplied by Richelieu, or approved equal.
- .7 Plastic Grommets:
 - .1 Richelieu or Hafele, plastic grommet, cover and case, or approved equal. Minimum 2". Colour specified by Consultant from standard range. Glove box openings: Mockett 6" plastic grommet cover.
- .8 Shelf Supports (Wood Shelves):
 - 1 Metal shelf supports, 5mm diameter, adjustable, for shelves behind doors
- .9 File System:
 - 4 sided railing system to accept filing 8½ x 11" and 8½ x 14" in all directions
- .10 Keyboard and Mouse Support:
 - .1 Owner supplied, Contractor installed.
- .11 CPU Holder:
 - .1 Owner supplied, Contractor installed.
- .12 Countertop support bracket:
 - .1 Heavy duty to 500 kg (1100 lb.)
 - .2 Standard of Acceptance: Hafele Hebgo Bracket
 - .1 Size to suit counter depth
 - .3 Epoxy coated grey colour.
 - .4 Space brackets to BIFMA requirements and bracket manufacture requirements for load capacity required

.13 Key Pads:

- .1 Multi-Code access lock for Health Care Cabinets
 Standard of acceptance: Numeris ATS/ATH/ATV series keypad
- .2 The electronic management key shall carry an architectural finish of U.S. BHMA 619 (brushed nickel).
- .3 The lock shall contain an LED light for visual feedback and a device for audible feedback.
- .4 The electronic device shall be operated by an ADA compliant key

.14 Vents:

.1 Rectangular vent. Minimum size: 4 5/8" x 3 5/8" should enclose the opening from the inside and the outside, max. material thickness 1", constructed black or grey metal.

.15 Closet Rods:

- .1 Material & Finish: Type 304 Stainless Steel
- .2 Wall Flange: 3" for 1-1/2" Diameter Tubing
 - .1 Standard of Acceptance: Richelieu # 510112170
- .3 Tubing: 1-1/2" Diameter Tubing
 - .2 Standard of Acceptance: Richelieu #01108170
- .4 Location: Millwork wardrobes
- .16 Folding Supports for flip down solid surface diaper shelf:
 - .1 Standard of Acceptance: Richelieu # 206122G
 - .1 Size to suit shelf depth

.17 Wall Cabinet Suspension System

To be constructed of a metal cleat mounted to the wall to spread the load between the cabinet and the wall. Cabinets to be internally adjustable.

- .18 Furniture Leveler in laminate integral base.
 - .1 Steel corner leveler with support lip under side panel that is screw mounted to side panel. This adjustable leveler has a minimum load capacity of 200 pounds per leveler. Provide minimum of four (4) levelers per cabinet. Leveler adjusts up to one (1) inch in height using a 4 mm hex driver. Leveler adjustment screw is to be accessible through 3/8" inch diameter hole in bottom of cabinet.

2.9 FASTENERS AND ACCESSORIES

- .1 All casework and furniture to be manufactured utilizing metal on metal connections such as a combination of threaded metal insert, machined steel dowel and metal cam wherever hardware can be visible or when a component could be subject to reconfiguration and/or replacement over time.
- .2 Nails and Staples Shall not be utilized in casework construction

PART 3 - EXECUTION

3.1 PREPARATION OF SUBSTRATE

- .1 Verify adequacy of backing and support framing. Casework shall not require wall blocking for overhead cabinets. Cabinets wall mounting cleat shall be able to reach proper amount of wall stud in order to properly spread the load.
- .2 Provide field measurements for casework before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying Work.

3.2 INSTALLATION

- .1 Fabricate casework to Quality Standards of the Business and Institutional Furniture Manufacturers Association (BIFMA), except where specified otherwise.
- .2 Install prefinished millwork at locations shown on drawings. Position accurately, level, plumb straight.
- .3 Fasten and anchor furniture securely. Provide heavy duty fixture attachments for wall mounted cabinets.
- .4 Scribe and cut as required to fit abutting walls and to fit properly into recesses and to accommodate piping, columns, fixtures, outlets or other projecting, intersecting or penetrating objects. All fillers and utility covers shall be mechanically fastened and removable.
- .5 At junction of counter back splash and adjacent wall finish, apply small bead of sealant.
- .6 Fit hardware accurately and securely in accordance with manufacturer's directions.
- .7 Install shelving.
- .8 Form joints to conceal shrinkage and adjusting.

3.3 FABRICATION

- .1 Factory fabricate and factory finish all casework items, ready for delivery to site in size easily handled packages and to ensure passage through building openings.
- .2 Construct all casework with metal on metal connections such as a combination

of threaded metal insert, machined steel dowel and metal cam wherever hardware can be visible or when a component could be subject to reconfiguration and/or replacement over time.

- .3 Shop install cabinet hardware for doors, shelves and drawers. Recess shelf standards unless noted otherwise.
- .4 Provide adjustable shelving unless otherwise noted.
- .5 Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes and other fixtures. Coordinate with Mechanical and Electrical.
- .6 Construction:
 - .1 Finish components in shop, under controlled conditions.
 - .2 Fabricate components in maximum size permissible for installation on site.
 - .3 Site fabrication and finishing shall be performed only on receipt of written approval of Shop Drawings.

.7 Fastening:

- .1 Position items of finished carpentry work accurately, level, plumb, true and fasten or anchor securely.
- .2 Design and select fasteners to suit size and nature of components being joined. Use proprietary devices as recommended by manufacturer.
- .4 Replace items of finish carpentry with damage to wood surfaces including hammer and other bruises.

.8 Edgebanding:

.1 Fasten edgeband to substrate utilizing laser edging process, a laser process that results in an integral and permanent bond between the edgeband and the substrate, with edgeband melted into the surface laminate to seal and eliminate visible lines and seams.

3.4 CASEWORK SCHEDULE

- .1 Casework Boxes:
 - .1 1" thick TFL Component Panels (MCP).
 - .2 Finish Colour: Refer to Part 2 Materials.
 - .3 Finish for edges, including concealed surfaces
 - .1 Solid high impact edgeband, ABS, 1.5mm thick
 - .2 machine applied
 - 3 trim face back and corners for a uniform appearance.
 - .4 Use low VOC Adhesive
 - .5 Finished casework shall have no exposed particleboard edges, including concealed surfaces
- .2 Gables, Tops, Rails, Backs and Bottoms (MCP):
 - .1 5/8" thick TFL Component Panels
 - .2 Finish Colour: Refer to Part 2 Materials.
 - .3 Typical exposed edges:

- .1 Solid high impact edgeband, ABS, 1.5mmthick
- .2 Laser applied
- .3 trim face back and corners for a uniform appearance.
- .3 Backs:
 - .1 5/8" thick Melamine Component Panels (MCP)
- .4 Shelves:
 - .1 Adjustable:
 - .1 1" thick MCP for all shelves. 1.5mm ABS laser edgeband on all 4 sides of shelves
 - .2 Fixed shelves:
 - .1 1" thick MCP for shelves up to 41" wide
 - .1 1.5mm ABS laser edgeband for all 4 sides
 - .2 secured at side ends and back
 - .3 Interior finish for all casework:
 - .1 Interior MCP to match exterior.
- .5 Doors Standard:
 - .1 5/8" thick TFL Component Panels (MCP) with 1.5mm ABS edges.
 - .2 Doors are surface mounted, flush overlay style.
- .6 Drawer Faces:
 - .1 5/8"thick TFL Component Panels (MCP) with 1.5mm ABS edges.
 - .2 Drawers are surface mounted, flush overlay style.
- .7 Drawer Boxes:
 - .1 Personal, box, storage and deep storage drawers use Grass Zargen integrated drawer slide and side. This drawer system consists of 16 gage steel sides in white epoxy powder coat finish with 5/8" melamine laminated bottom and back panels. Additional technical values:

a. Dynamic Load Capacity: 100 pounds.

b. Static Load Capacity: 125 pounds.

- c. Permanently lubricated nylon rollers.
- d. Parallel self-closing action.
- e. 16 gage steel construction.
- .2 File Drawers use a metal drawer side with melamine laminated bottom and back panels. This drawer system uses a side mounted Accuride full extension drawer slide. File bars are available for lateral filing.
 - a. Load Capacity: 150 pounds.
 - b. Metal ball bearing mechanism.
- .8 Toe Space:

- .1 Integrated to base cabinets, all faces sealed, no exposed wood or particleboard
- .2 4" high
- .3 Installed after flooring is completed.
- .9 Filler panels:
 - .1 No wider than 2" between walls.
 - .2 No less than 2 1/2" at corner cabinets.
 - .3 Scribes of 1/32" PVC.
 - .4 To match the adjacent finish.
- 10. Tack Board Surface:
 - .1 Covered with fabric with Crypton coating suitable for healthcare

3.5 PROTECTION AFTER WORK COMPLETED

.1 Protect casework from damage until final inspection.

3.6 CLEANING

- .1 Adjust doors, drawers, hardware, fixtures and other moving or operating parts to function smoothly and correctly.
- .2 Clean casework inside cupboards and drawers and outside surfaces.

END OF SECTION