



Medical Air Solutions, Inc.

Marietta, GA 30068, 800-645-1059, Fax 770-977-9964

Technology & Service

MAS Project: P-10-29-12

for

Our Lady of the Lake Regional Medical Center
Mary Bird Perkins Cancer Center

Client: 495 Essen Lane

Baton Rouge, LA 70808

Pharmacy Compounding Area Upgrade

Project Document Date: October 29, 2012

Project Participants

Project Coordinator

Mr. Chuck Dammon

Dammon A&E, Slidell, LA

(985) 649-5832

Medical Air Solutions, Inc.

Design/Supplier

Mr. Bob Wiltbank, V. P.

(770) 377-3884 Cell

(770) 977-1407 (Corporate)

(800) 645-1059 (Toll Free)

General Contractor (GC)

ARC Mechanical Ctrs., Slidell, LA

Mechanical Contractor

TBD by GC

Electrical Contractor

TBD by GC

Other Contractors

TBD by GC

Note: This is a preliminary work document that will be updated after the principle project participants perform a "walk-through" at the facility and confer with the personnel providing demolition and renovation in the remaining area or the second (2nd) floor.

This document identifies project participants and the responsibilities assigned to each to upgrade the present dedicated area for the compounding of sterile preparations (CSP). The responsibilities may overlap in certain areas and, in some cases, change, depending upon the items listed here. Please notify me, Chuck Dammon or the General Contractor if there are any errors or questions regarding the assignment of work tasks described here.

Bob Wiltbank

Medical Air Solutions, Inc.

(770) 377-3884 Engineering (Cellular - Primary)

(800) 645-1059 Toll Free Corporate Office

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1.0 General Responsibilities of Project Participants

- 1.1 **Dammon Engineering (DE)** – Mr. Chuck Dammon will perform design services and, with **MAS**, specification of selected equipment needed for this project. They will generate construction drawings and also update the hospital's "As-Built" CAD drawing(s) to reflect the changes to the physical plant.

He will also coordinate with the Hospital to schedule, if required, any safety orientation meetings such as Interim Life Safety Measures (ILSM) and/or Infection Control Risk Assessments (ICRA) to ensure safe working conditions and to ensure the work area in isolated from the any working area on the floor.

- 1.2 **General Contractor (GC)** – The GC will perform any needed demolition and some construction of the three (3) rooms being converted to the Compounding of Sterile Preparations (**CSP Area**). He, or his representative, will coordinate with the other participants in this project to perform the tasks required including all subcontractors. The general contractor (**GC**) for this project will supervise and coordinate with sub-contractors and **AMS** to complete the project.

*1.2.1 **Note that work being performed by the other trades and services companies (Electrical, Mechanical, Plumbing, flooring, painting, Sprinkler System, Roofing, et al), will be considered to be under the GC and their tasks will be listed under the GC label in this document.***

1.2.2 The **GC** will be responsible for permits or inspections.

- 1.3 **American Medical Systems, LLC (AMS)** – Mr. Mike Flood will supervise the installation of all **MAS** supplied equipment, instruments and materials coordinating with the General Contractor (**GC**) and other sub-contractors.
- 1.4 **Medical Air Solutions, Inc. (MAS)** – Mr. Bob Wiltbank will provide technical assistance to all participants before and during the renovation/construction phase. He will also perform commissioning and in-service upon completion of the project. For any question about delivery of **MAS** supplied items, please call Mr. Lee Hadin at (770) 977-1407 or (800) 645-1059.

2.0 Present Area Description

- 2.1 Refer to **Drawing P-10-29-12-1-1AE** which was supplied from the A&E's drawings. The area to be converted to a **CSP Area** include the following rooms designated in the drawing:
 - 2.1.1 **Kitchen, Conference Room and Library** – These rooms will be reconfigured for use as the **CSP Area**.

3.0 Project Tasks in Order of Execution – Prior to Start Date

- 3.1 The execution of the demolition/renovation/construction may have some items being performed simultaneously. This list, and the order of execution, is not “carved in stone” especially in the construction phase of the project. The expeditious completion of the project may dictate field changes in the order of tasks. Refer to both the **A&E’s** and **MAS Drawing P-10-29-12-1-2** and the **MAS** written proposal.
- 3.2 The start date of the project will be dependent upon the delivery of the critical equipment and instruments. Delivery for some of this equipment can be up to eight (8) weeks. (These are not “off-the-shelf” items and it is advisable for **MAS** to order these as soon as possible)
- 3.3 The following abbreviations will be used:
 - 3.3.1 **DE** – Dammon Engineering
 - 3.3.2 **GC** – ARC Mechanical Contractors
 - 3.3.3 **AMS** – American Medical Systems, LLC
 - 3.3.4 **MAS** – Medical Air Solutions, Inc.
 - 3.3.5 **Client** – Our Lady of the Lake Regional Medical Center
- 3.4 The project should generally follow this timeline:
 - 3.4.1 **DE, MAS, GC** – Confirm with **Client** the area designated to be the **CSP Area** (with initial “walk-through”) and identify contractors & sub-contractors and suppliers of equipment, instruments and materials of construction
 - 3.4.2 **MAS** – Written proposal with line drawings being supplied to **Client** and **DE**. A quote from **MAS** equipment/instruments and services and services (including all sub-contractors and **DE** construction and as-built drawings and any other associated services. This renovation is to ensure the finished **CSP Area** will meet **USP General Chapter <797>**. See **Addendum I** for a list of supplied items. **MAS** line drawings will be updated after the walk-through is completed.
 - 3.4.3 **MAS, DE, Client** – Confer to define what architectural and engineering tasks are to be required, which are:
 - 3.4.3.1 Design dedicated HVAC recirculating system and associated ducting for the **CSP Area** from a procured air handling unit (AHU) to the fan powered ceiling **APS** in each room.
 - 3.4.3.2 Specify the number of roof penetrations required for exhaust ducting plus penetrations for **Hood unit #1** exhaust.
 - 3.4.3.3 Specify 304 SS exhaust grilles for AHU return.
 - 3.4.3.4 Confer with **Client** to ascertain whether the client requires cleanroom lighting units and, if so, specify and designate ceiling grid locations.
 - 3.4.3.5 Define locations for electrical outlets.
 - 3.4.4 **DE, GC** – Identify and procure the services of the sub-contractors which **GC** will or may need include but is not limited to:
 - 3.4.4.1 Mechanical contractor
 - 3.4.4.2 Electrical contractor
 - 3.4.4.3 Plumbing contractor
 - 3.4.4.4 Fire Sprinkler contractor
 - 3.4.4.5 Flooring and Painting contractors
 - 3.4.4.6 Roof Contractor (Usually the one holding the warranty)

4.0 Project Tasks in Order of Execution – Demolition/Site Prep

- 4.1 The execution of the demolition may have some items being performed simultaneously. This list, and the order of execution, is not “carved in stone” especially in the operating phase of the project. The expeditious completion of the project may dictate field changes in the order of tasks. Refer to the **MAS Drawing P-10-30-12-1-2** and the **MAS** written proposal.
- 4.2 **GC – Ceiling and Above Ceiling Area** – The following relate to the demo of the ceiling and the area above the existing ceiling. This will be accomplished if the GC for renovating the rest of the floor has not already done so:
 - 4.2.1 Existing lighting in all rooms should be wire hung from the roof beams to provide lighting for construction/renovation.
 - 4.2.2 Remove all unused ducting, piping and conduit.
- 4.3 **GC – Flooring** – The following relates to the entire floor of the **CSP Area**:
 - 4.3.1 Remove any floor obstructions and fill in any low areas in preparation for a heat welded vinyl covering.

5.0 Project Tasks in Order of Execution – Renovation/Construction

- 5.1 The installation of the **MAS** supplied equipment, instruments and building materials is performed by **AMS** but will need electrical, mechanical and other support. Refer to the **DE** engineering drawings and the **MAS** written proposal. As stated earlier, some of these tasks can be performed simultaneously.
 - 5.1.1 **GC – Floor Covering** – Install flooring in all rooms in the **CSP Area** with heat welded vinyl with coving. This task will be completed initially if the **MAS** cleanroom wall system is selected.
 - 5.1.1.1 If this flooring is installed first, care must be exercised that the flooring is protected during the rest of the project with drop cloths or other protective measures.
 - 5.1.2 **GC – AHU Connection** – Run main duct from AHU supply to the **CSP Area**.
 - 5.1.3 **GC – CSP Area Ducting** – Provide ducting to the area’s APS units and return ducting to the AHU including but not limited to:
 - 5.1.3.1 Supply ducting to the **CSP Area’s** APS units can be carbon steel.
 - 5.1.3.2 Exhaust/Return ducting can be carbon steel.
 - 5.1.3.3 All ducting joints must be sealed and the ducting insulated.
 - 5.1.3.4 The exhaust ducting for the chemo hood exhausted to the roof.
 - 5.1.3.5 All supply and return ducting must inspected for debris and cleaned before being put in service.
 - 5.1.4 **GC – Electrical, Light Switches** – Light switches for all rooms will be installed at a convenient location for the end user and have fire retardant gaskets behind the wall plates.
 - 5.1.5 **GC – Electrical, Outlets** – Duplex outlets will be required for the new workstations in the **Anteroom, Workroom, Buffer Zone 1** and **Buffer Zone 2**. The **Client** will advise **DE** and **GC** as to how many additional outlets are required in all rooms.
 - 5.1.5.1 The outlets must have fire retardant gaskets behind the wall plates.
 - 5.1.6 **AMS – Workstation Placement** – Move the new CSP workstations (**LAFW unit #1** and **Hood unit #1** and **Hood unit #2**) to **Buffer Zone 1** and **Buffer Zone 2**.

- 5.1.7 **GC – Hood unit #1 Exhaust Ducting** – Connect the CSP Chemo workstation exhaust ports to the dedicated exhaust duct in **Buffer Zone 2**.
- 5.1.8 **GC – Interior Room Walls** – Erect interior room walls per the DE engineering drawing to separate the rooms in the **CSP Area**.
- 5.1.9 **AMS – Sealed Cleanroom Ceiling** – Install Price **Unitee CR** sealed ceiling grid at the 8'-0" level
- 5.1.10 **AMS, GC – UVGI Units** – Mount the UVGI units on the walls in the **CSP Area** in the approximate locations on **DE** engineering drawings.
 - 5.1.10.1 The bottom of each unit should be mounted at the seven (7) foot level.
 - 5.1.10.2 The outlets for these units must have gaskets behind the wall plates or they can be hardwired (preferred).
 - 5.1.10.3 Each unit has an off/on switch.
- 5.1.11 **GC – Roof Penetrations** – Perform roof penetrations for the Chemo hoods exhaust as per the **DE** drawing.
- 5.1.12 **AMS – APS Installation** – Install 2' x 2' and 2' x 4' **APS** in the ceiling grid.
- 5.1.13 **GC – Ducting to APS** – Install ducting and any VAV (control dampers) in the ducting to the 2' x 2' and 2' x 4' **APS** above the ceiling grid.
 - 5.1.13.1 Any VAV units must be set to deliver a constant and consistent volume of air to the **CSP Area**.
- 5.1.14 **GC – Chemo Hood Exhaust Ducting** – Run ducting for the dedicated exhaust to the roof to exhaust to a safe area on the roof meeting OSHA's 25 foot rule.
- 5.1.15 **AMS – Return Grilles** – install the **GC** supplied 304 SS exhaust grilles (with built-in dampers) in the ceiling grid.
- 5.1.16 **GC – Ducting** – Run ducting from the exhaust grilles with dampers to the main return duct to the AHU.
- 5.1.17 **GC – Hands Free Sink and Eyewash** – Install sink/eyewash unit and connect water service to same.
- 5.1.18 **AMS – Room Pressure Monitor Boxes** – Install one box each in **Buffer Zone 1, Buffer Zone 2, Anteroom** and the **Workroom** for the flush wall mounted **TRRM** room pressure monitors and affix transformer NEMA 4 box on the wall above the ceiling.
- 5.1.19 **AMS – Room Pressure Monitors, Electrical** – Run 110/60/1 VAC power to the transformer in each NEMA 4 electrical box above each monitor in **Buffer Zone 1, Buffer Zone 2, Anteroom** and the **Workroom** and run four (4) 18 ga. plenum rated wires from the wall box to the electrical box above.
- 5.1.20 **AMS – APS Control Panel Boxes** – Install flush wall mounted control panel boxes next to the room pressure monitor in all rooms in the **CSP Area**.
- 5.1.21 **GC – APS Control Panels Wiring, Electrical** – Run 18 ga. seven (7) plenum rated wires from the "J" box for each **APS** to its Control Panel box in all **CSP Area** rooms. **AMS** will terminate wiring at each **APS**.
- 5.1.22 **AMS – Wires to APS Control Panel Boxes** – Terminate wires from all **APS** to their respective control module.

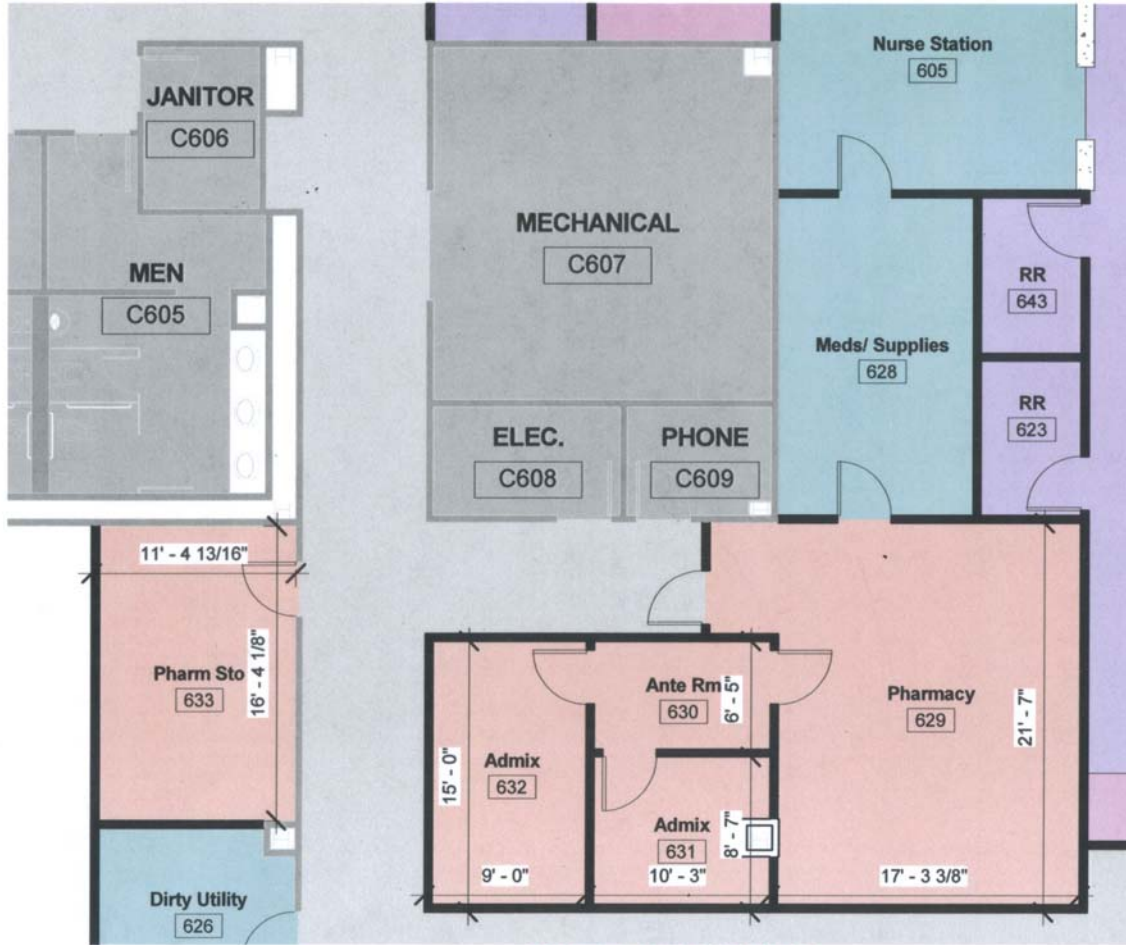
- 5.1.23 **AMS – Room Pressure Monitor Sensors** – Install pressure, temperature and relative humidity sensors in the ceiling of **Buffer Zone 1, Buffer Zone 2, Anteroom** and **Workroom** then run pitot tubes to same including the reference pressure point in the hallway.
- 5.1.24 **AMS – FRP Wall Covering** – Install the FRP panels on the all walls. (FRP = Fiberglass Reinforced PVC)
- 5.1.25 **AMS – Sealed Ceiling Panels** – Cut, when necessary, and install ceiling panels in the sealed ceiling systems in each room with hold-down clips.
- 5.1.26 **GC – Floor Covering** – Install flooring in all rooms in the **CSP Area** with heat welded vinyl if **MAS** cleanroom walls were not selected and hard walls were erected.
- 5.1.27 **AMS, Client** – Place desks as directed and affix wall shelving as directed by the Director of Pharmacy or his designate.

6.0 Project Tasks in Order of Execution – Commissioning

- 6.1 **DE, AMS, GC and MAS** – After installation is complete **MAS** and **AMS** will commission all elements in the **CSP Area** and will perform an initial balancing to ensure air changes and room pressures meet the USP <797> standard. Balancing by a LA licensed balancing company may be required (**DE** or **GC**)
- 6.2 **DE and/or GC** – Arrange for any inspections required.
- 6.3 **MAS** - Perform in-service for the pharmacy staff, facilities personnel and other personnel the **Client** feels need this information.

Please call me if you have additions or corrections. The one (1) and one (1) MAS line drawing is on the following pages.

Drawing P-10-30-12-1-1



MAS Drawing Designation P-09-01-12-1-1AE

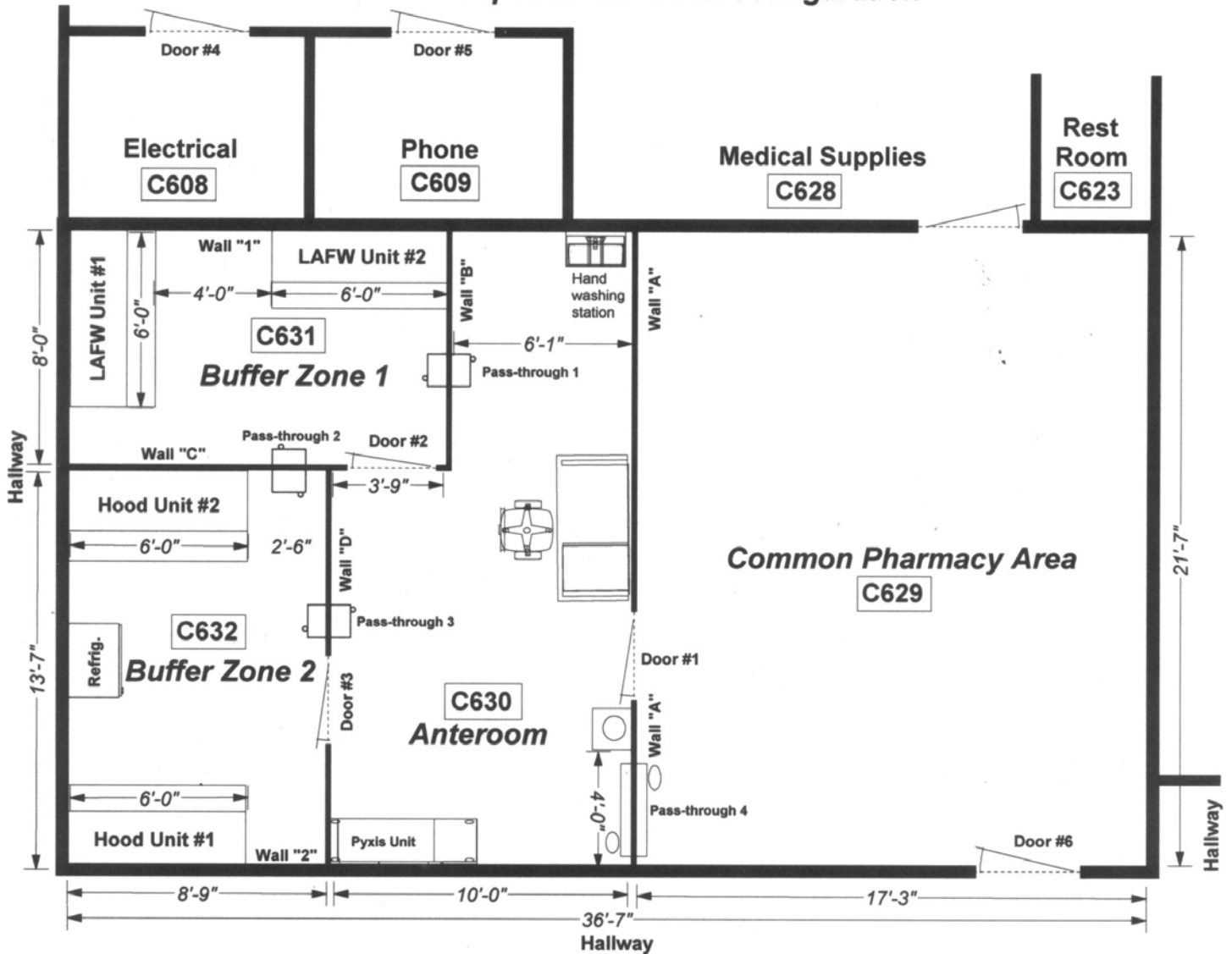


Mary Bird Perkins Cancer Center
Master Plan

Pharmacy		SD6x
Project number	1360	
Date	07/31/12	
Drawn by	FPN	
Checked by	FPN	Scale 1/8" = 1'-0"

Drawing P-09-01-12-1-2

Mary Bird Perkins Cancer Center Proposed CSP Area Configuration



Notes

1. This line drawing is MAS' design for optimum uses of the designated pharmacy area.
2. Walls "A", "B", "C" and "D" are cleanroom wall panels designed specifically for cleanroom use.
3. This is a conceptual drawing only.

Facility Address:

5000 Hennessey Blvd.
Baton Rouge LA 70808

Medical Air Solutions, Inc.
Drawing History

Drawing P-09-01-12-1-2	Author
Original: 08/27/2012	RHW
Revised:	
Revised:	
Revised:	