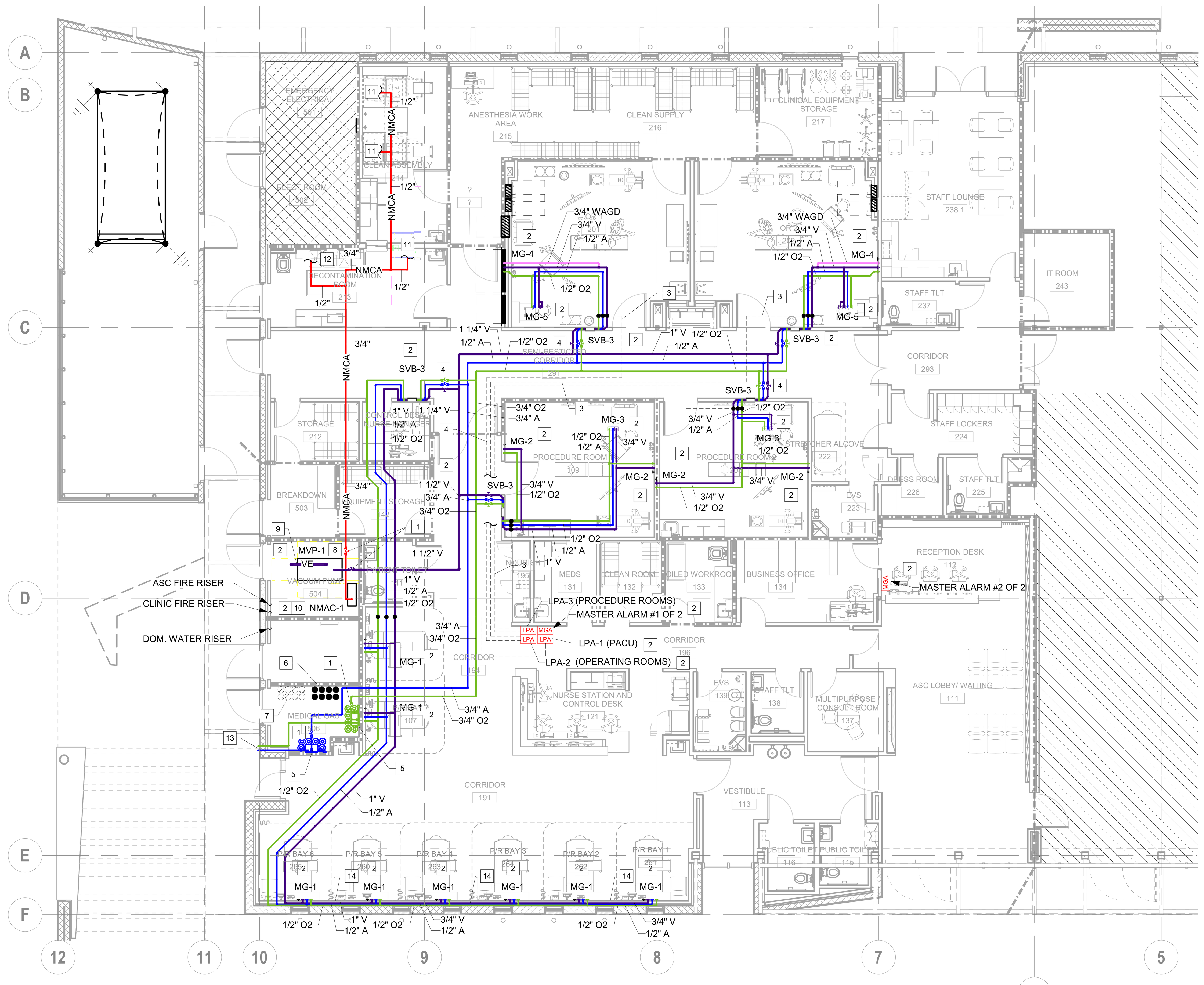

1 MEDICAL GAS - FLOOR PLAN

1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO MEDICAL GAS SCHEDULE ON SHEET MG000 FOR EXACT NUMBER OF MEDICAL GAS OUTLETS REQUIRED AT EACH MG-# LOCATION.

B. PRIOR TO ROUGH-IN, COORDINATE EXACT LOCATIONS OF MEDICAL GAS OUTLETS, INLETS, ALARM PANELS, AND/OR HOSE DROP ASSEMBLIES WITH ARCHITECTURAL DRAWINGS AND OWNER.

C. MEDICAL GAS AND VACUUM SYSTEMS ARE DESIGNED AS A CATEGORY 1 SYSTEM, AS DEFINED IN NFPA 99, CHAPTER 4.

D. PROVIDE ENGRAVED NAMEPLATE MOUNTED ON WALL ABOVE EACH ZONE VALVE BOX INDICATING AREA SERVED.

E. MEDICAL GAS PIPED DISTRIBUTION SYSTEMS SHALL BE CERTIFIED IN ACCORDANCE WITH ASSE 6010, PROFESSIONAL QUALIFICATION STANDARD FOR MEDICAL GAS SYSTEMS INSTALLER NFPA 99.

F. PROVIDE MED-GAS PIPING SUPPORT SYSTEM PER NFPA 99 2018 EDITION SECTION 5.1.10.11.4 AND TABLE 5.1.10.11.4.6.

G. INSTALL MEDICAL GAS PIPING PER THE REQUIREMENTS OF NFPA 99 SECTION 5.1.10.11.3.2 MED-GAS PIPING INSTALLATION RESTRICTIONS.

H. MEDICAL GAS PIPING SYSTEM SHALL NOT BE USE AS A GROUNDING ELECTRODE. NFPA 99 2018 EDITION SECTION 5.1.14.1.2.

I. PROVIDE 5-SIDED ENCLOUSE FOR ANY OUTLETS, INLETS, VALVE BOXES, OR ALARM PANELS INSTALLED IN A FIRE RATED WALL.

CODED NOTES:

1. PROVIDE MAIN LINE SHUT OFF VALVES AND HIGH-LO PRESSURE SWITCHES. MASTER ALARM SENSOR SHALL BE IMMEDIATELY DOWNSTREAM (FACILITY SIDE) OF MASTER SHUT OFF VALVES. LABEL TO INDICATE THE AREA SERVED. LOCK VALVES IN THE OPEN POSITION. THE OWNER SHALL PROVIDE THE LOCKS.

2. CLOSELY COORDINATE INSTALLATION AND ROUTING OF MEDICAL GAS OUTLETS, INLETS, PIPING, VALVES, PANELS, AND EQUIPMENT WITH ALL OTHER TRADES. PRIOR TO ROUGH-IN, REFER TO ARCHITECTURAL ELEVATIONS FOR OUTLET, INLET, AND SLIDE LOCATIONS. FIELD VERIFY EXACT LOCATIONS AND REQUIREMENTS. TYPICAL.

3. PROVIDE SENSING LINES FOR EACH GAS AND VACUUM LINE FROM POINT INDICATED TO ALARM PANEL.

4. PROVIDE SERVICE VALVES WITH LOCKING HANDLES AND LABELS TO INDICATE THE AREA SERVED. LOCK VALVES IN THE OPEN POSITION. THE OWNER SHALL PROVIDE THE LOCKS.

5. DIGITAL DUAL LINE REGULATOR AND MAIN OXYGEN & MEDICAL AIR MANIFOLDS WITH 2 EQUAL BANKS OF 4 CYLINDERS EACH BANK. REFER TO SPECIFICATIONS AND DETAIL. PROVIDE REDUCED FOOTPRINT GAS MANIFOLD ASSEMBLY TO ALLOW INSTALLATION OF CYLINDERS BELOW ALARM PANEL EQUIVALENT TO FIGURE 2 OPTIONAL SET-UP AS OFFERED BY AMICO. FIELD VERIFY EXACT LAYOUT AND SPACE REQUIREMENTS WITHIN THE MEDICAL GAS STORAGE ROOM AND PROVIDE UNISTRUT BACKING TO SECURE CYLINDERS TO WALL WITH INDIVIDUAL CHAINS FOR EACH CYLINDER.

6. FULLY SHADED CYLINDERS INDICATE SPACE RESERVED FOR STORAGE OF FULL CYLINDERS. (4)OXYGEN AND (4) MEDICAL AIR. LABEL AND SEGREGATE FULL CYLINDERS FROM EMPTY CYLINDERS STORED WITHIN THE SAME ENCLOSURE AS PER NFPA-99-11.6.5. FIELD VERIFY EXACT LAYOUT AND SPACE REQUIREMENTS. PROVIDE INDIVIDUAL CHAINS FOR EACH CYLINDER CHAINED TO THE WALL. PROVIDE LABEL ON WALL ABOVE CYLINDERS INDICATING "FULL CYLINDERS ONLY".

7. HATCHED CYLINDERS INDICATE SPACE RESERVED FOR STORAGE OF EMPTY CYLINDERS. LABEL AND SEGREGATE EMPTY CYLINDERS FROM FULL CYLINDERS STORED WITHIN THE SAME ENCLOSURE AS PER NFPA-99-11.6.5. FIELD VERIFY EXACT LAYOUT AND SPACE REQUIREMENTS. PROVIDE INDIVIDUAL CHAINS FOR EACH CYLINDER CHAINED TO THE WALL. PROVIDE LABEL ON WALL ABOVE CYLINDERS INDICATING "EMPTY CYLINDERS ONLY".

8. VERTICAL DUPLEX VACUUM PUMP (MVP-1) SET ON 4" HIGH HOUSEKEEPING PAD. REFER TO DETAIL. COORDINATE WITH HVAC DUCTWORK AND FLOOR DRAIN INSTALLATION. INSTALL EQUIPMENT ON 4" RAISED HOUSE PAD WITH VIBRATION ISOLATION PADS. REFER TO ARCHITECTURAL PLANS FOR SOUND ATTENUATION AT WALLS.

9. 2" VACUUM PUMP EXHAUST TO ROOF OR EXTERIOR WITH GOOSENECK AND SCREENED OPENING. INSTALL PER DETAIL AND NFPA 99. FIELD VERIFY EXACT ROUTING, LOCATION AND REQUIREMENTS. COORDINATE SIZE WITH MANUFACTURER. VACUUM EXHAUST MUST BE INSTALLED AT LEAST 25 FEET AWAY FROM ALL FRESH AIR INTAKES AND DOOR WAYS.

10. OIL-LESS NON-MEDICAL AIR COMPRESSOR MOUNTED ON VIBRATION ISOLATION PADS. PROVIDE ACCESSORIES NECESSARY TO SUPPLY NON-MEDICAL AIR QUALITY IN COMPLIANCE WITH ISO 8573-2:2010 CLASS 1.4.1. NON-MEDICAL AIR SUPPLIED FROM THIS COMPRESSOR SHALL NOT BE USED FOR ANY PATIENT CARE AND WILL ONLY BE UTILIZED FOR EQUIPMENT CONTROLS AND FOR BLOWING OUT SCOPES.

11. 1/2" NON-MEDICAL COMPRESSED AIR CONNECTION AT EQUIPMENT. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER CUTSHEETS. IF FINAL EQUIPMENT SELECTION DOES NOT REQUIRE COMPRESSED AIR, LABEL, VALVE AND CAP PIPING ABOVE CEILING.

12. 1/2" NON-MEDICAL COMPRESSED AIR OUTLET AT WALL OR CONNECTION TO THREE COMPARTMENT SINK AIR GUN, IF PROVIDED. FIELD VERIFY AND COORDINATE EXACT LOCATION WITH OWNER AND EQUIPMENT. LABEL NON-MEDICAL COMPRESSED AIR. PROVIDE PRESSURE REGULATOR FOR OUTLET AS REQUIRED.

13. RELIEF VENTS TO EXTERIOR WITH TURN DOWN AND METAL MESH SCREEN. REFER TO TANK CYLINDER MANIFOLD PIPING DETAIL.

14. INSTALL MEDICAL GAS PIPING HORIZONTALLY IN WALL OR CASEWORK BELOW GLASS/WINDOW. FIELD VERIFY EXACT ROUTING AND REQUIREMENTS.

MEDICAL GAS OUTLETS PER 2018 FGI GUIDELINES

LOCATION	REQUIRED GASES	GASES PROVIDED
PROCEDURE ROOM	(1)O2*, (1)V*	(3)O2, (1)A, (3)V
OPERATING ROOMS**	(2)O2, (1)A*, (3)V	(2)O2, (1)A, (3)V, (1)WAGD
PHASE 1 PACU	(1)O2, (1)V	(1)O2, (1)A, (1)V

* USE OF PORTABLE EQUIPMENT IN LIEU OF A PIPED GAS SYSTEM SHALL BE PERMITTED.

** IF INHALATION ANESTHESIA WILL BE USED IN AN OPERATING ROOM OR CLASS 3 IMAGING ROOM, INSTALLATION OF A WASTE ANESTHETIC GAS DISPOSAL (WAGD) SYSTEM SHALL BE PROVIDED.

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TOTAL VOLUME OF GASES CONNECTED/ STORED IN MEDICAL GASES ROOM #506 (H-TYPE CYLINDERS)
OXYGEN: 2928 CUBIC FEET
MEDICAL AIR: 2772 CUBIC FEET

WALL LEGEND

	SMOKE PARTITION - SEAL ALL OPENINGS
	1-HOUR FIRE BARRIER - PROTECT ALL OPENINGS
	1-HOUR FIRE/SMOKE BARRIER - PROTECT ALL OPENINGS
	2-HOUR FIRE BARRIER - PROTECT ALL OPENINGS
	2-HOUR FIRE/SMOKE BARRIER - PROTECT ALL OPENINGS
	3-HOUR FIRE BARRIER - PROTECT ALL OPENINGS
	3-HOUR FIRE/SMOKE BARRIER - PROTECT ALL OPENINGS
	4-HOUR FIRE BARRIER - PROTECT ALL OPENINGS
	4-HOUR FIRE/SMOKE BARRIER - PROTECT ALL OPENINGS

WALLS WITH THE ABOVE SYMBOLS SHALL BE PROTECTED BY AN APPROVED U.L. LISTED FIRE DAMPER AND/OR COMBINATION SMOKE/FIRE DAMPER AS APPROPRIATE. ALL PIPING AND CONDUIT PENETRATIONS OF THE SAME WALLS SHALL ALSO BE APPROPRIATELY PROTECTED.

N

ICT
I.C. Thomasson Associates, Inc.
CONSULTING ENGINEERS
3031 N. ROCKY POINT DR. W., SUITE 750
TAMPA, FL. 33607
PHONE (813) 882-4415
WWW.ICTHOMASSON.COM
ICT PROJECT NO. 230427.00
FIRM CERTIFICATE OF AUTHORIZATION
FLORIDA REG. #CA-0001276
MECHANICAL ENGINEER
DAN A. NESMAN, P.E.
FLORIDA #54888
ELECTRICAL ENGINEER
PHILIP GARRETT, P.E.
FLORIDA #63289
AHCA OPC PROJECT #: 14/14961121-11912

SEAL

DANIEL ALLEN NESMAN LICENSE No 54888 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Daniel A. Nesman on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Digitally signed by Daniel Allen Nesman
DN: E=Dan.Nesman@SalasObrien.com, CN=Daniel Allen Nesman, O=I.C. Thomasson Associates, L=Nashville, S=TN, SERIALNUMBER=MAS20260116744091, C=US
Location: Tampa, FL
Contact Info: 8138824415
Date: 2026.08.03 15:03:35-04'00'

DEUK SPINE INSTITUTE

Surgery Center at Millenia, LLC

Hunton Brady ARCHITECTS

DATE	SUBMISSION	NO
12.12.2023	CONSTRUCTION DOCUMENTS	
08.07.26	CCD #2R	2

MEDICAL GAS FLOOR PLAN

PROJ. NO. H-23016.00
DRAWN DG
SHEET MG110A

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