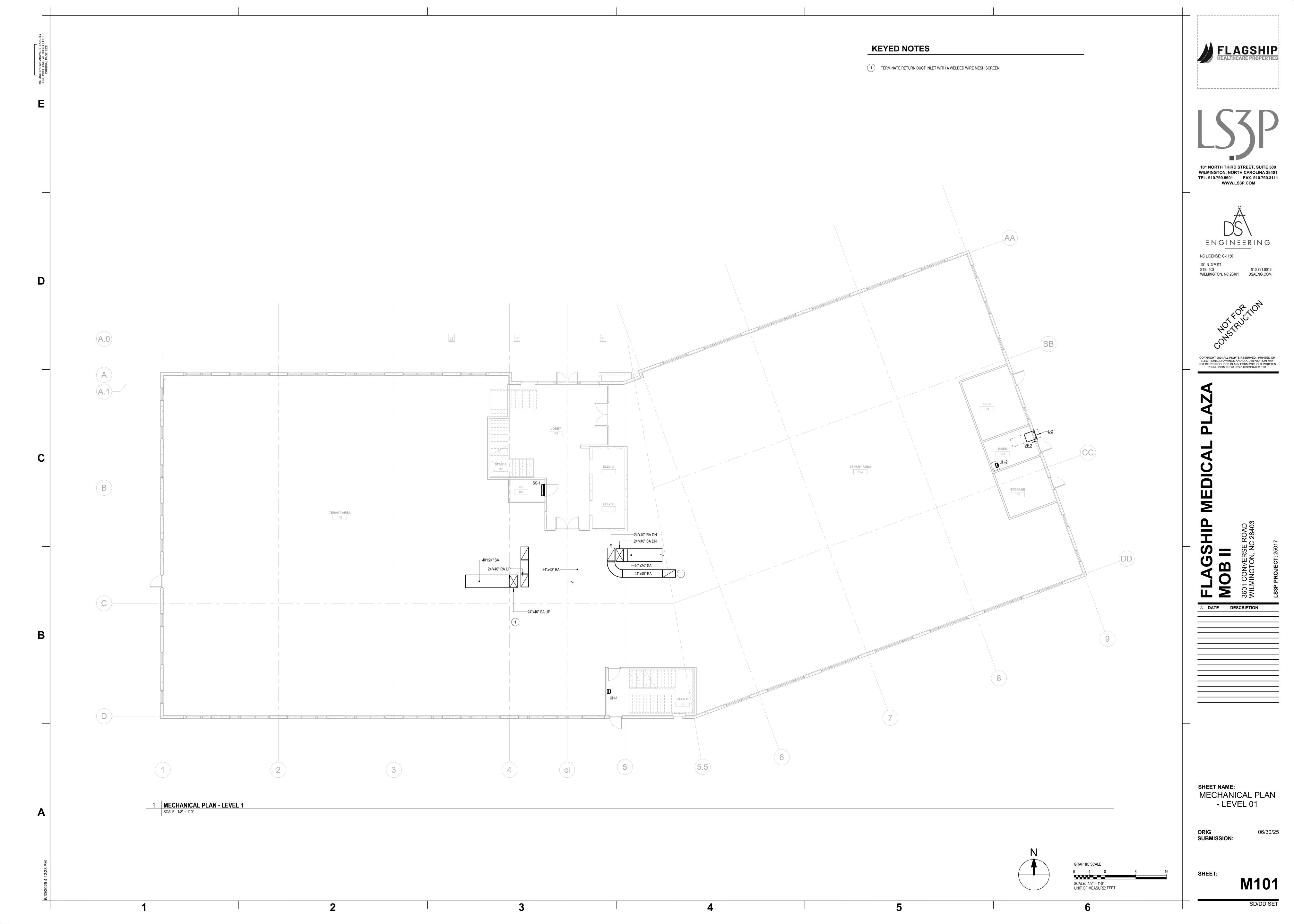


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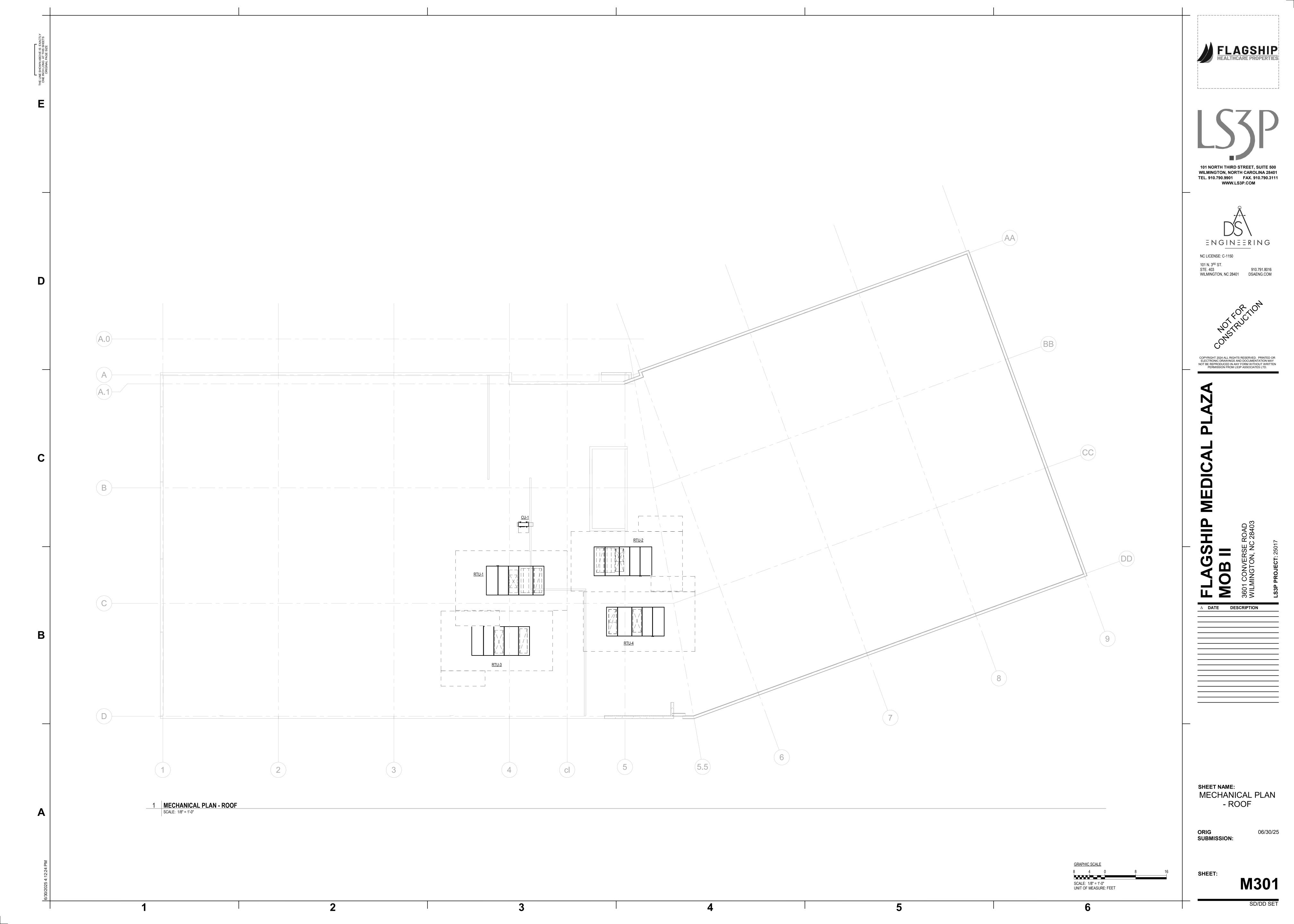
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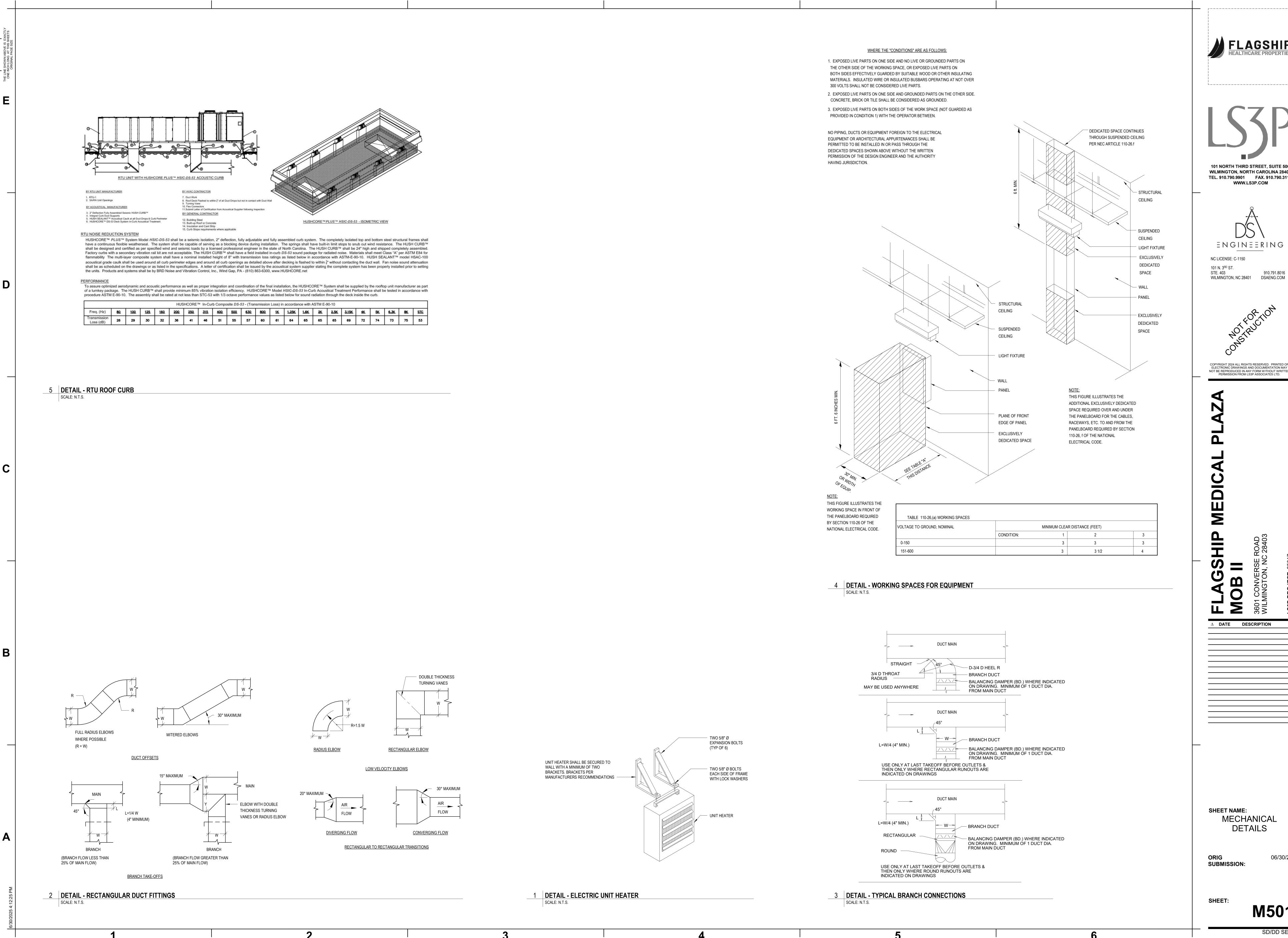
MECHANICAL **LEGENDS AND**

M001









101 NORTH THIRD STREET, SUITE 500 **WILMINGTON, NORTH CAROLINA 28401** TEL. 910.790.9901 FAX. 910.790.3111 WWW.LS3P.COM

ENGINEERING

NC LICENSE: C-1150 910.791.8016

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 Δ DATE DESCRIPTION

SHEET NAME: **MECHANICAL DETAILS**

SUBMISSION:

M501

SD/DD SET

06/30/25

PACKAGED ROOFTOP UNIT SCHEDULE SUPPLY FAN FILTER MERV RATINGS ELECTRIC SUPPLY OUTSIDE ESP OUTON DESIGNATION SERVICE TONNAGE MCA MOCP PHASE MAKE RTU-1 FIRST FLOOR 10,000 369.64 226.61 | 80.0 / 67.0 | 54.8 / 54.7 | 57.6 / 55.9 | 10.8 / 16.0 460/3 TRANE RTU-2 10,000 226.61 80.0 / 67.0 | 54.8 / 54.7 | 57.6 / 55.9 | 10.8 / 16.0 | FIRST FLOOR 80.0 / 67.0 | 54.4 / 54.3 | 57.2 / 55.5 | 10.5 / 15.0 | 10,500 402.24 287.17 RTU-3 SECOND FLOOR 460/3

287.17

80.0 / 67.0 | 54.4 / 54.3 | 57.2 / 55.5 |

PROVIDE UNIT WITH MANUFACTURER SUPPLIED VIBRATION ISOLATION ROOF CURB AND MOUNT TO ROOF DECK.

PROVIDE UNIT WITH STAINLESS STEEL DRAIN PAN WITH FACTORY OVERFLOW SWITCH. PROVIDE COMPLETECOAT CONDENSER COILS WITH CORROSION RESISTANT COATING THAT SHALL WITHSTAND ASTM B117 SALT SPRAY TEST FOR 1000 HOURS AND ASTM G85 A2

CYCLIC ACIDIFIED SALT FOG TEST FOR 2400 HOURS. PROVIDE UNIT WITH CONDENSER COIL HAIL GUARDS.

SECOND FLOOR

. PROVIDE CLOGGED FILTER SWITCH. PROVIDE MERV8 & MERV14 FILTERS WITH FILTER MONITOR.

. PROVIDE UNIT WITH DISCHARGE AIR TEMPERATURE SENSOR. PROVIDE UNIT WITH FACTORY MOUNTED CONVENIENCE OUTLET.

8. PROVIDE UNIT WITH MANUFACTURER'S STANDALONE CONTROLS PACKAGE AND BACNET BAS COMMUNICATION FOR INTEGRATION INTO BUILDING'S OPEN SOURCE BAS.

9. PROVIDE MANUFACTURER'S 1ST YEAR WHOLE UNIT PARTS & LABOR WARRANTY & 2ND-5TH YEAR COMPRESSOR PARTS ONLY WARRANTY. 10. PROVIDE REFRIGERANT R454B WITH 460 GWP. PROVIDE LEAK DETECTOR WITH BACNET POINT FOR LEAK DETECTION SYSTEM

BASIS OF DESIGN

WEIGHT (LBS)

4,603 (UNIT) /

310 (CURB)

4,603 (UNIT) /

310 (CURB)

4,695 (UNIT) /

310 (CURB)

4,695 (UNIT) /

310 (CURB)

NOTES

1,2,3,4,5,6,7,8,9,10,

11,12,13,14,15,16

1,2,3,4,5,6,7,8,9,10,

11,12,13,14,15,16

1,2,3,4,5,6,7,8,9,10,

1,2,3,4,5,6,7,8,9,10,

11,12,13,14,15,16

11,12,13,14,15,16

MODEL

TCD360D4

11. PROVIDE UNIT WITH SUPPLY FAN WITH BYPASS WITH FACTORY WIRED VFD DIAGNOSTICS 12. PROVIDE UNIT WITH FACTORY DISCONNECT WITH HIGH FAULT RATED 65,000A SCCR & FACTORY POWERED CONVENIENCE OUTLET

13. 100% MODULATING EXHAUST FAN WITH STATITRAC SPACE PRESSURE CONTROL 14. COMPARATIVE ENTHALPY ECONOMIZER WITH LOW LEAK FRESH AIR DAMPER & TRAQ OUTSIDE AIRFLOW MEASUREMENT

15. PROVIDE SINGLE WALL CONSTRUCTION WITH HINGED ACCESS DOORS

16. MINIMUM FULL LOAD EFFICIENCY: EER / PART LOAD EFFICIENCY IEER

ELECTRIC HEATER SCHEDULE										
DESIGNATION	SERVICE	MOUNTING	POWER (kW)	CAPACITY (BTU/H)	CURRENT (A)	ELECTRICAL (V / Ø /Hz)	INSTALLED WEIGHT	BASIS OF DESIGN	REMARKS	
UH-1	STAIR B	WALL	1.5	5,120	12.5	120 / 1 / 60	26 lbs.	MARKEL 3320/AFA	1,2,3	
UH-2	RISER ROOM	CEILING	2.2	7,506.7	11.0	208 / 1 / 60	27 lbs.	Q-MARK MUH0321	1,2,3	

NOTES:

. UNIT SHALL BE UL LISTED. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

3. PROVIDE WITH DISCONNECT SWITCH, MANUFACTURER'S MOUNTING FRAME, AND INTEGRAL THERMOSTAT.

	WALL MOUNTED VENTILATION FAN SCHEDULE											
DESIGNATION	TYPE	CFM	ESP	APPROX RPM	BHP	HP (MOTOR SIZE)	DRIVE	V/Ø/HZ	APPROX WEIGHT (LBS)	SONES	BASIS	REMARKS
VF-1	AXIAL	150	.2	1,389	0.02	-	DIRECT	120/1/60	18	3.6	GREENHECK SE1-8-440-VG	1,2,3
-	-	-	-	-	-	_	-	-	-	-	-	-

NOTES:
1. COORDINATE ROOF OPENING AND ROOF CURB WITH GENERAL CONTRACTOR.

2. PROVIDE WITH SINGLE-POINT POWER CONNECTION. PROVIDE WITH NEMA 4X DISCONNECT ENCLOSURE. 3. PROVIDE BACKDRAFT DAMPER.

LOUVER SCHEDULE										
DESIGNATION	LOCATION	TYPE	WIDTH (IN)	HEIGHT (IN)	DEPTH (IN)	MINIMUM FREE AREA	BASIS OF DESIGN	REMARKS		
L-1	ELEC 104	STATIONARY	24.0	24.0	4.0	50.0 %	RUSKIN ELF375DX	1,2		
-	-	-	-	-	-	-	-	-		

PROVIDE WITH PAINTED FINISH. COLOR SELECTED BY ARCHITECT.

2. LOUVER PERFORMANCE SHALL BE CERTIFIED IN ACCORDANCE WITH THE AMCA 511 CERTIFIED RATINGS WHEN TESTED IN ACCORDANCE WITH AMCA 500-L AIR PERFORMANCE AND WATER PENETRATION.

			INDOOR UI	NIT		OUT	TDOOR U	INIT					
DESIG.	SERVICE	TYPE	MOUNTING	AIRFLOW CFM		HEATING CAPACITY MBH	SEER	AMBIENT TEMP RATING °F	MCA	MOCP	ELECTRICAL V/Ø/HZ	BASIS OF DESIGN	REMARKS
CU-1/SS-1	IDF ROOM 102	SINGLE	HORIZ CABINET	375	12,200	NA	21.1	95	16	27	208/1/60	MITSUBISHI - PKA/PUY	1,2,3,4

SIZE AND INSTALL REFRIGERANT PIPING IN ACCORDANCE WITH MANUFACTURER;S WRITTEN INSTRUCTIONS BASED ON THE PROJECT SPECIFIC LAYOUT AND LENGTH OF REFRIGERANT PIPING. REFER TO SERIES DRAWINGS FOR ADDITIONAL INFORMATION.

INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE CONTROLS AND THERMOSTATS INCLUDING OPERATION MODES, BACKLIT DISPLAY, FAN SPEED AIRFLOW AND DIRECTION SETTINGS, AND 7 DAY/24 HOUR SCHEDULE

PROVIDE EQUIPMENT STAND FOR ROOF MOUNTING THE OUTDOOR CONDENSING UNIT.

101 NORTH THIRD STREET, SUITE 500 **WILMINGTON, NORTH CAROLINA 28401**



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 Δ DATE DESCRIPTION

SHEET NAME: **MECHANICAL** SCHEDULES

SUBMISSION:

SHEET:

M701