

COORDINATION PURPOSES.

-ALL PRIME CONTRACTORS SHALL REVIEW THE FOOD SERVICE DRAWINGS, FS.1 THRU FS.7, AND ARE RESPONSIBLE FOR ALL WORK ITEMS CALLED OUT AS BEING BY THEIR SPECIFIC TRADE (IE: ELECTRICAL, PLUMBING, MECHANICAL, GENERAL, ETC.) & AS ADDITIONALLY NOTED IN THE 114000 SECTION OF THE CONTRACT SPECIFICATIONS. THE OWNER'S EQUIPMENT INSTALLER WILL NOT BE MAKING FINAL CONNECTIONS, ALL FINAL CONNECTIONS OF EQUIPMENT SHALL BE BY THE PRIME CONTRACTS UNDER THIS PROJECT. ALL PRIME CONTRACTORS ARE RESPONSIBLE FOR COORDINATION WITH ONE ANOTHER AND WITH THE OWNERS KITCHEN INSTALLER.

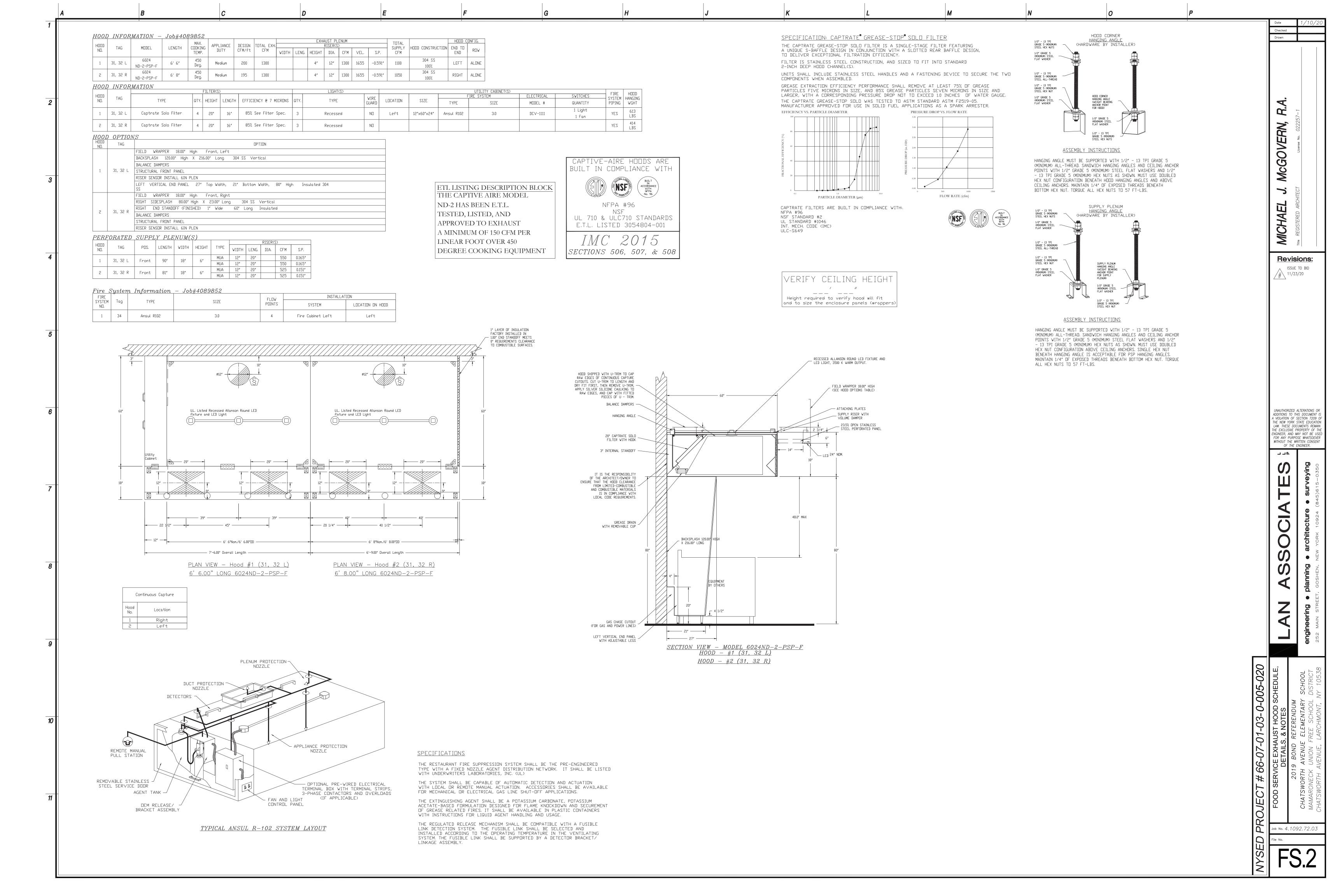
Revisions: ISSUE TO BID /#\ 11/23/20 UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209 O THE NEW YORK STATE EDUCATION ENGINEER, AND MAY NOT BE U FOR ANY PURPOSE WHATSOEN WITHOUT THE WRITTEN CONSEN OF THE ENGINEER. 10 H

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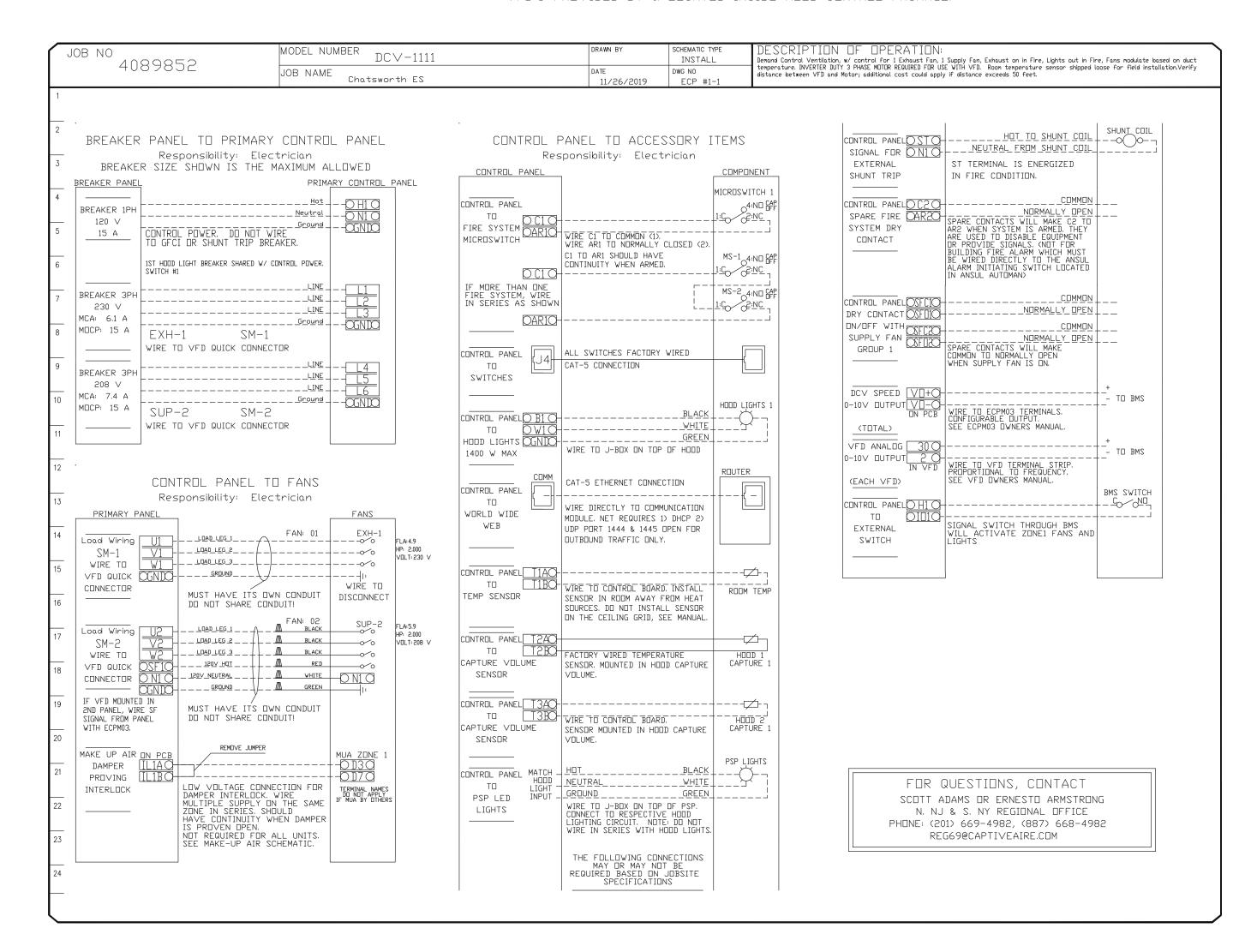
301ECT # 66-07-01-03-0-005-020 FOOD SERVICE EQUIPMENT PLAN & SCHEDULE

Job No. 4.1092.72.03

FS.1



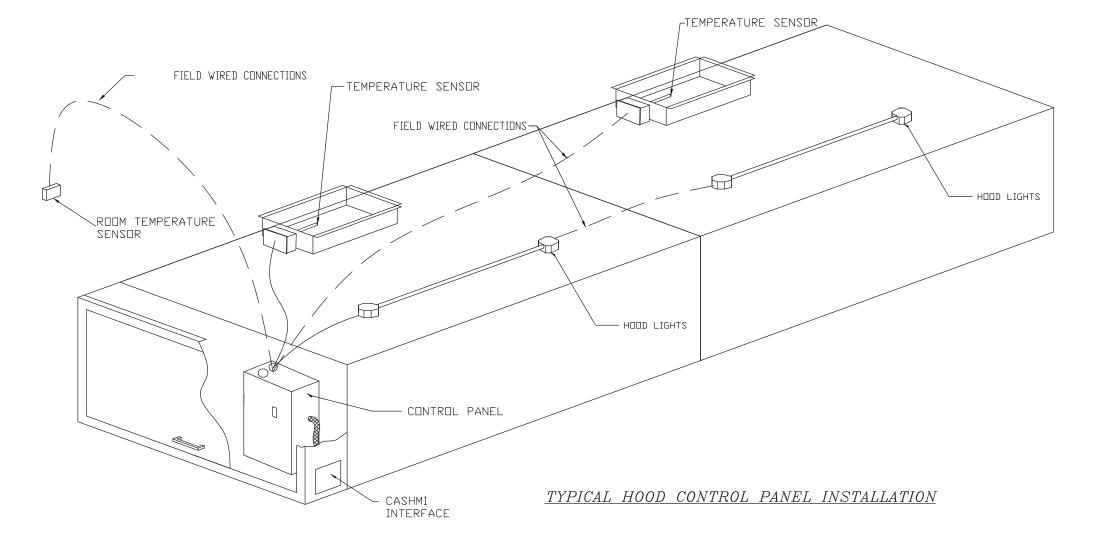
FAN MOTOR INFORMATION TO BE DETERMINED, INVERTER DUTY 3-PHASE MOTORS REQUIRED, FANS TO BE RUN OFF VFD'S PROVIDED BY & LOCATED INSIDE HOOD CONTROL PACKAGE.



Sequence of Operations:

The hood control panel is capable of operating in one or more of the following states at any given time:

- <u>Automatic:</u> The system operates based on the differential between room temperature and the temperature at the hood cavity or exhaust duct collar. Fans activate at a configurable temperature differential threshold. Depending on the job configuration each fan zone can be configured as static or dynamic. These terms refer to whether a variable motor (such as EC Motors or VFD driven motors) modulate with temperature. If the panel is equipped with variable speed fans and the zone is defined as "dynamic", these will modulate within a user-defined range based on the temperature differential. Panels equipped with variable speed fans and a fan zone defined as "static", fans will run at a set speed calculated for the drive. Demand control ventilation systems are capable of modulating exhaust and make up air fan speeds per the requirements outlined in IECC 403.2.8.
- Manual: The system operates based on human input from an HMI.
- Schedule: A weekly schedule can be set to run fans for a specified period throughout the day. There are three occupied times per day to allow for the user to set up a time that is suitable to their needs. Any time that is within the defined occupied time, the system will run at modulation mode and follow the fan procedure algorithm based on temperature during this time. During unoccupied time, the system will have an extra offset to prevent unintended activation of the system during a time where the system is not being occupied.
- Other: The system operates based on the input from an external source (DDC, BMS or hard-wired interlock)



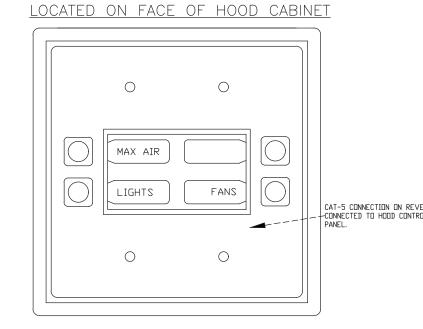
DEMAND CONTROL VENTILATION SYSTEM

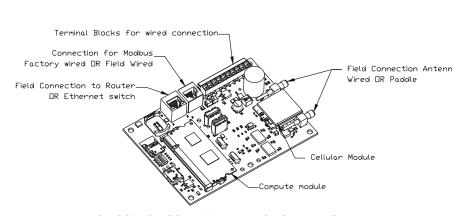
Controls shall be capable of reducing exhaust and supply airflow quantities by using a modulating speed control system. High and Low speeds shall be adjustable by variable frequency drives. A temperature switch in the exhaust duct shall control airflow set point. A MAX airflow override button shall be supplied with an adjustable timer.

Control shall be used in kitchen exhaust applications to reduce exhaust and supply air volumes while cooking appliances are idling.

The Demand Control Ventilation System complies with IMC 507.1.1 by interlocking with cooking appliances through means of a heat sensor to automatically activate exhaust fans during cooking operations.

HOOD CONTROL PACKAGE INTERFACE with LCD Screen





CASlink Monitor and Control

Hood control panel to support communications to cloud-based Building Hood Control Panel to allow cloud-based Building Management System to Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list. - Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building

MONITORING AND CONTROL POINTS LIST

DCV Packages	Function
Room Temperature	MONITOR
Duct Temperature(s)	MONITOR
MUA Discharge Temperature	MONITOR
Kitchen RTU Discharge Temperature	MONITOR
Fan Speed	MONITOR
ran Amperage	MONITOR
Fan Power	MONITOR
VFD Faults	MONITOR
Controller Faults	MONITOR
Fan Faults	MONITOR
Fan Status	MONITOR
PCU Faults	MONITOR
PCU Filter Clog Percentages	MONITOR
Fire Condition	MONITOR
CORE Fire System	MONITOR
Building Pressures	MONITOR
Prep Time Button	MONITOR & CONTROL
Fans Button	MONITOR & CONTROL
Lights Button	MONITOR & CONTROL
Wash Button	MONITOR & CONTROL

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