Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246

NATIONAL TAB

Comfort. Under control.

Report: PRELIM
Function: Test, Adjust, & Balance
Date: 03/30/2023

PROJECT

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

742 W. HWY 27

LINCOLNTON, NC 28092

Client

TRS-SESCO LLC
721-A Park Centre Dr

Kernersville, NC 27284

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

RTU's (Roof Top Units) w/ Diffusers

Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

Kitchen Exhaust Hood & Associated Fans

Each kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow. . Any EF's that fell outside of this tolerance is noted throughout the report.

General Exhaust Fans w/ Grilles

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests

After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances of -0.02" wc to +0.02" wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

RTU's (Roof Top Units) w/ Diffusers

Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

Kitchen Exhaust Hood & Associated Fans

Each kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow. . Any EF's that fell outside of this tolerance is noted throughout the report.

General Exhaust Fans w/ Grilles

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests

After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances of -0.02" wc to +0.02" wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

Project Issue Information

Issue Name : EXISTING EF-3

Description : UNIT IS NOT OPERATIONAL BECAUSE IT IS NOT WIRED

Created By : National TAB **Assigned To :** National TAB - Will Turnbough

Status : Open

Originated Date : 03/30/2023 - Zack Epps - National TAB

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

Project Issue Information

Issue Name : EXISTING RTU-1

Description : NEEDS A MOTOR SHEAVE CHANGE. UNIT IS AT 17348 CFM ACTUAL OUT OF 26975 CFM DESIGN

Created By : National TAB **Assigned To :** National TAB - Will Turnbough

Status : Open

Originated Date : 03/30/2023 - Zack Epps - National TAB

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

Project Issue Information

Issue Name : EXISTING RTU-1 AND EXISTING RTU-2

Description : NO CONDENSATION DRAIN INSTALLED

Created By : National TAB **Assigned To :** National TAB - Will Turnbough

Status : Open

Originated Date : 03/30/2023 - Zack Epps - National TAB

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

Project Issue Information

Issue Name : NEW EF-4

Description : WHILE OBTAINING AMPS FROM THE UNIT, SWITCH WIRES TOUCHED THE METAL FRAME OF THE SWITCH AND SPARKED AND TURNED THE UNIT OFF ALONG WITH EF-2. WHEN THE UNIT TURNED OFF, EF-5 WHICH WAS INITIALLY NOT OPERATIONAL, TURNED ON. CONTACTED ELECTRICIAN AND IT COULD BE THAT EFS ARE WIRED TO EXISTING BREAKERS, ALSO TURNED OFF LIGHTS IN EXISTING RECEIVING ROOM

Created By : National TAB **Assigned To :** National TAB - Will Turnbough

Status : Open

Originated Date : 03/30/2023 - Zack Epps - National TAB

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

Project Issue Information

Issue Name : NEW RTU-3

Description : UNIT IS LOW ON DESIGN CFM. GOT 586 CFM ACTUAL OUT OF 900 CFM DESIGN. IS DIRECT DRIVE AND TRIED REWIRING TO OBTAIN INCREASE OF CFM BUT ONLY GAINED 36 CFM

Created By : National TAB **Assigned To :** National TAB - Will Turnbough

Status : Open

Originated Date : 03/30/2023 - Zack Epps - National TAB

NATIONAL TAB

AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		HOOD MAKE-UP		HOOD EXHAUST		GENERAL EXH.	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
RTU-1	SALES	25500	17348	19750	13685	5750	3663	22.5%	21.1%						
RTU-2	LOUNGE/OFFI	900	843	800	717	100	126	11.1%	14.9%						
RTU-3	FRONT OFFICE	900	586	800	586	100	0	11.1%	0.0%						
RTU-DB	DELI/BAKERY	2000	2051	1800	1829	200	222	10.0%	10.8%						
EF-2	RESTROOMS													675	0
EF-3	SEAFOOD PREP													675	0
EF-4	JANITOR AREA													200	191
EF-5	LOUNGE/OFFICES													300	305
EF-6	RACK OVEN													750	
HEF-1	KH-1											750	657		
HEF-2	KH-2											1155	1244		
TOTALS		29300	20828	23150	16817	6150	4011			0	0	1905	1901	2600	496

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	6150	4011
TOTAL EXHAUST	4505	2397
NET AIRFLOW	1645	1614

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	
SIDE	
REAR	
AVERAGE	**#DIV/0!**

FINAL CHECKS

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW:

PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C.

NOTES:

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

CheckList Information

Name :	TECH - SITE PICTURES	**Status :**	Submitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

STORE FRONT

STOREFRONT.jpeg

RTU-1

RTU-1.jpeg

RTU-2

RTU_2.jpeg

RTU-3

RTU-3.jpeg

RTU-DB

RTU-DB.jpeg

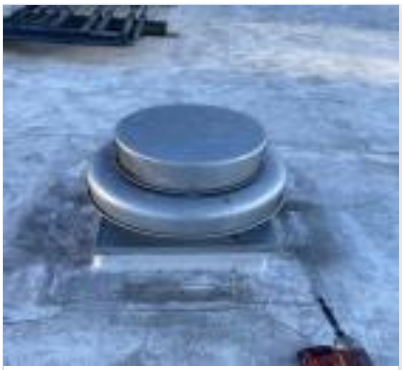
EF-1

EF-1.jpeg

EF-2

EF-2.jpeg

EF-3

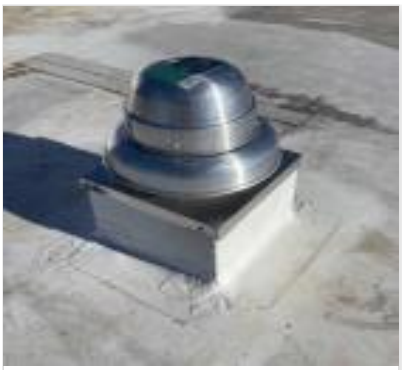


EF-3.jpeg

EF-4

EF-4.jpeg

EF-5



EF_5.jpeg

EF-6

HEF-1

HEF-1.jpeg

HD-1

HD-1.jpeg

Notes/Comments :

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

CheckList Information

Name :	TECH - STEP 1: INITIAL WALKTHROUGH	**Status :**	Submitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?	NO, GRILLES ON RTU-2 AND RTU-3 ARE SWAPPED BETWEEN SUPPLY AND RETURN
All hood filters installed and accounted for?	YES
Hoods are wired and have power?	YES
Hood is free of alarms?	YES
Thermostats have power?	YES
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	YES

Notes/Comments :

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

CheckList Information

Name :	TECH - STEP 2: UNIT DATA AND EVAL	**Status :**	Submitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

UNIT DATA AND EVALUATION WHILE GATHERING UNIT DATA CHECK THE FOLLOWING:

RTU's/AHU's	
Economizers are assembled and functional?	YES
DCV Max damper opening position is set to minimum?	YES
Free cooling enthalpy set point set for lowest setting (Typically "D")	YES
Motors are all operating below the FLA rating?	YES
Are belts tight?	YES
If direct drive unit is the speed controller working.	YES
Is gas piping installed and valves turned on?	YES
Unit free of noticeable noise and vibration	YES
EF's	
Rotation is correct?	YES
Belts are tight?	YES
Grease cup installed on hood fan?	YES
Hinge kit installed installed on hood fan?	YES
Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	YES

Flex conduit is long enough so that fan can be completely tilted back?	YES
There is no major leakage around base of fan?	YES
Is the motor operating below the motor FLA rating?	YES
For restroom fan(s) is the back draft damper installed and can it fully open?	YES
Unit free of noticeable noise and vibration?	YES
MUA	
Rotation is correct?	NA
Gas piping is installed and valves are in on position?	NA
Heater tested and is functional?	NA
Internal motorized damper is fully opening?	NA
Motor is operating below the FLA rating?	NA
Unit free of noticeable noise and vibration?	NA
HOODS	
Kitchen equipment installed in proper places?	YES
Can kitchen equipment be turned on for final smoke test?	YES
DOCUMENTATION	
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	YES

Notes/Comments :

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

CheckList Information

Name :	TECH - STEP 3: TEST, ADJUST AND BALANCE	**Status :**	Submitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting?	YES
Is space comfortable in all areas?	YES
Is the space free of ventilation noise?	YES
If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".	NA

Notes/Comments :

Comfort. Under control.

03-27-23 FOOD LION #2856 - LINCOLNTON, NC

CheckList Information

Name :	TECH - STEP 4: FINAL TESTS	**Status :**	Submitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

FINAL TESTS	
HOOD CAPTURE TEST	
List equipment turned on for testing	FRYERS AND OVEN
List smoke candle type used	45 SECOND
Smoke test capture - Perimeter of hood	YES
Smoke test capture - Top of cooking surface	YES
WITNESS	
Date test was completed	03/30/2023
TAB tech name / Firm	ANTONIO FLORES AND ZACK EPPS
Site super name / Firm	SCOTT
Owner representative name / Firm (if Applicable)	TRS SESCO
Building pressure at front & back doors (All Systems On)	YES
ADDITIONAL	
Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	NA
Thermostats are programmed?	YES

Notes/Comments :

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RT-DB1 AREA:DELI/BAKERY

Unit Data		
	Design	**Actual**
MFG	TRANE	TRANE
Serial Num	-	223011734L
Model Num	TSC060	TSC060
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	16X37X1
Num Final Filter 1	-	4
Final Filter Size 1	-	16X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	GENTEQ
Frame	-	NL
Horsepower	1	1
Motor Rpm	-	1050
Phase	3	1
Rated Voltage	208	208
Rated Amperage	-	7.6

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	**Actual**
SF CFM	2000	2051
SF RPM	-	DD
RA CFM	1800	1829
OA CFM	200	222
RL Voltage	-	210
RL Amperage	-	6.7
SF Rotation	-	DD
RA Damper Position	-	100 OPEN
Min OA Damper Position	-	5 OPEN
Min OA Damper Type	-	ECONIMZER
OA Enthalpy Setpt	-	E

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.3727
Fan Suction SP	-	-0.5972
Fan Discharge SP	-	0.3246
Total ESP	-	0.6973
Fan Total SP	-	0.9218

General		
	Design	**Actual**
Fan Rotation Correct	-	YES CW
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Zack Epps

Notes:

National TAB

Project:03-27-23 FOOD LION #2856 - LINCOLNTON, NC

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

RT-DB1/DELI/BAKERY

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RT-DB1-SGRD1	DELI PREP	S4	-	500	1	60	252	521	104.2
RT-DB1-SGRD2	DELI PREP	S4	-	500	1	579	637	512	102.4
RT-DB1-SGRD3	DELI PREP	S4	-	500	1	606	674	510	102.0
RT-DB1-SGRD4	DELI PREP	S4	-	500	1	481	541	508	101.6

Completed By: Brianna Biggs on

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU1 AREA:SALES

Unit Data		
	Design	**Actual**
MFG	SEASONS 4	SEASONS 4
Serial Num	-	38260794255
Model Num	1SHK41-0664-ES150-27HR	1SHK41-0664-ES150-27HR
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num Final Filter 1	-	28
Final Filter Size 1	-	16X20X2
Num Final Filter 2	-	9
Final Filter Size 2	-	16X30X2

Motor Data		
	Design	**Actual**
Motor MFG	-	CROWN TRITON
Frame	-	256T
Horsepower	-	20
Motor Rpm	-	1775
Phase	3	3
Rated Voltage	208	230
Rated Amperage	-	49.6

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	7.375"
Motor Bore Size	-	1.4375"
Motor Sheave SetPt	-	5 TO
Fan Sheave Size	-	15.5"
Fan Sheave Bore	-	2.375
Belt CL Distance	-	44"
Num of Belts	-	2
Belt Size	-	5VX1250
Belt Alignment	-	CORRECT

Test Data		
	Design	**Actual**
SF CFM	26975	17348
SF RPM	-	800
RA CFM	19750	13684
OA CFM	5750	3663
RL Voltage	-	210.2, 210.2, 208.3
RL Amperage	-	33.7, 33, 32.5
SF Rotation	-	CCW
Min OA Damper Type	-	MANUAL HANDLE

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.6861
Fan Suction SP	-	-1.8091
Fan Discharge SP	-	0.5022
Total ESP	-	1.1883
Fan Total SP	-	2.3113

General		
	Design	**Actual**
Fan Rotation Correct	-	YES CCW
Unit Filters Clean	-	YES
Condensate Drain Installed	-	NO

Completed By: Zack Epps

Notes:

Comfort. Under control.

Diffuser Supply (GRD)

RTU1/SALES

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	CART VESTIBULE	S1	-	450	1	237	237	237	52.7
SGRD2	CART VESTIBULE	S1	-	450	1	214	214	214	47.6
SGRD3	CART VESTIBULE	S1	-	450	1	339	339	339	75.3
SGRD4	CART VESTIBULE	S1	-	450	1	244	244	244	54.2
SGRD5	CART VESTIBULE	S1	-	450	1	319	319	319	70.9
SGRD6	CART VESTIBULE	S1	-	450	1	389	389	389	86.4
SGRD7	ENTRY	S1	-	900	1	432	432	432	48.0
SGRD8	ENTRY	S1	-	900	1	646	646	646	71.8
SGRD9	ENTRY	S1	-	900	1	504	504	504	56.0
SGRD10	ENTRY	S1	-	900	1	523	523	523	58.1
SGRD11	SALES	S1	-	600	1	461	461	461	76.8
SGRD12	SALES	S1	-	900	1	577	577	577	64.1
SGRD13	SALES	S1	-	900	1	582	582	582	64.7
SGRD14	SALES	S1	-	900	1	577	577	577	64.1
SGRD15	SALES	S1	-	900	1	520	520	520	57.8
SGRD16	SALES	S1	-	900	1	712	712	712	79.1
SGRD17	ABANDONED BAKERY PREP	S1	-	300	1	274	274	274	91.3
SGRD18	ABANDONED BAKERY PREP	S1	-	300	1	294	294	294	98.0
SGRD19	ABANDONED BAKERY PREP	S1	-	300	1	95	95	95	31.7
SGRD20	ABANDONED BAKERY PREP	S1	-	125	1	85	85	85	68.0
SGRD21	SALES	S2	-	750	1	343	343	343	45.7
SGRD22	SALES	S2	-	800	1	437	437	437	54.6
SGRD23	SALES	S3	-	500	1	448	448	448	89.6
SGRD24	SALES	S3	-	500	1	405	405	405	81.0
SGRD25	SALES	S2	-	600	1	392	392	392	65.3
SGRD26	SALES	S2	-	750	1	383	383	383	51.1
SGRD27	SALES	S2	-	750	1	461	461	461	61.5
SGRD28	SALES	S2	-	600	1	444	444	444	74.0
SGRD29	SALES	S3	-	500	1	399	399	399	79.8
SGRD30	SALES	S3	-	500	1	432	432	432	86.4
SGRD31	SALES	S2	-	600	1	191	191	191	31.8
SGRD32	SALES	S2	-	750	1	386	386	386	51.5
SGRD33	SALES	S2	-	750	1	418	418	418	55.7
SGRD34	SALES	S2	-	600	1	386	386	386	64.3
SGRD35	SALES	S3	-	500	1	398	398	398	79.6
SGRD36	SALES	S2	-	600	1	402	402	402	67.0
SGRD37	SALES	S2	-	600	1	369	369	369	61.5
SGRD38	SALES	S2	-	600	1	331	331	331	55.2
SGRD39	SALES	S2	-	600	1	425	425	425	70.8
SGRD40	WOMESN RR	S1	-	200	1	70	70	70	35.0
SGRD41	MENS RR	S1	-	100	1	77	77	77	77.0
SGRD42	MEAT PREP	S1	-	100	1	89	89	89	89.0
SGRD43	BAKERY PREP	S1	-	100	1	77	77	77	77.0

SGRD44	BAKERY PREP	S1	-	100	1	113	113	113	113.0
SGRD45	GROCERY STAGING	S1	-	400	1	224	225	225	56.3
SGRD46	GROCERY STAGING	S1	-	400	1	448	448	448	112.0
SGRD47	GROCERY STAGING	S1	-	400	1	185	185	185	46.3
SGRD48	GROCERY STAGING	S1	-	200	1	329	329	329	164.5
SGRD49	GROCERY STAGING	S1	-	200	1	-	-		-
SGRD50	PRODUCE PREP	S1	-	250	1	133	133	133	53.2
SGRD51	PRODUCE PREP	S1	-	250	1	128	128	128	51.2

Completed By: Brianna Biggs on

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU2 AREA:LOUNGE/OFFICES

Unit Data		
	Design	**Actual**
MFG	ICP	ICP
Serial Num	-	C152410984
Model Num	PHD4240	PHD4240
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	7.5X7.25
Num Final Filter 1	-	1
Final Filter Size 1	-	20X30

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	0.5
Motor Rpm	-	NA
Phase	3	1
Rated Voltage	208	208
Rated Amperage	-	4.1

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	**Actual**
SF CFM	900	843
SF RPM	-	-
RA CFM	800	774
OA CFM	100	126
RL Voltage	-	123.4
RL Amperage	-	1.3
SF Rotation	-	CCW
RA Damper Position	-	100
Min OA Damper Position	-	2/3 OPEN
Min OA Damper Type	-	MANUAL PLATE

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.0905
Fan Suction SP	-	-0.2757
Fan Discharge SP	-	0.2053
Total ESP	-	0.2958
Fan Total SP	-	0.481

General		
	Design	**Actual**
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Zack Epps

Notes:

Diffuser Supply (GRD)

RTU2/LOUNGE/OFFICES

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	LOUNGE	S1	-	400	1	201	268	268	67.0
SGRD2	STORAGE OFFICE	S1	-	200	1	237	315	315	157.5
SGRD3	DEPT MANAGERS OFFICE	S1	-	300	1	210	260	260	86.7
SGRD4	DEPT MANAGERS OFFICE	S1		0	1	0	0	0	-

Completed By: Brianna Biggs on

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU3 AREA:FRONT OFFICES

Unit Data		
	Design	**Actual**
MFG	TRANE	TRANE
Serial Num	-	222015234L
Model Num	4TTC4030	4TTC4030
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num Final Filter 1	-	1
Final Filter Size 1	-	20X25

Test Data		
	Design	**Actual**
SF CFM	900	586
SF RPM	-	DD
RA CFM	900	586
RL Voltage	-	123.4
RL Amperage	-	1.7
SF Rotation	-	CCW
RA Damper Position	-	100 OPEN

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	0.5	NA
Motor Rpm	-	NA
Phase	3	NA
Rated Voltage	208	NA
Rated Amperage	-	NA

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.2135
Fan Suction SP	-	-0.5039
Fan Discharge SP	-	0.1661
Total ESP	0.60"	0.3796
Fan Total SP	-	0.67

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

General		
	Design	**Actual**
Fan Rotation Correct	-	
Unit Filters Clean	-	
Condensate Drain Installed	-	

Completed By: Zack Epps

Notes: NO OA HOOD, IT IS ALL RETURN. UNIT IS WIRED FOR HIGH SPEED AND IS STILL LOW ON FLOW: 586 CFM ACTUAL / 800 CFM DESIGN

Diffuser Supply (GRD)

RTU3/FRONT OFFICES

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
RTU3-SGRD1	ABANDONES PHARMACY	S1	-	200	1	128	136	136	68.0
RTU3-SGRD2	ABANDONES PHARMACY	S1	-	200	1	0	136	136	68.0
RTU3-SGRD3	STORE MANAGERS OFFICE	S1	-	150	1	0	124	124	82.7
RTU3-SGRD4	STORE MANAGERS OFFICE	S1	-	300	1	181	190	190	63.3

Completed By: Brianna Biggs on

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF1 AREA:MECHANICAL ROOM

Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	NA	NA
Serial Num	-	X05XX0890448F
Type	-	UPBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	US MOTORS
Frame	-	184T
Horsepower	-	1.5
Motor Rpm	-	870
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	7.0
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD

Test Data		
	Design	**Actual**
CFM	-	-
Fan RPM	-	-
Fan Rotation	-	-
Motor RPM	-	-
RL Voltage	-	-
RL Amperage	-	-
Suction ESP	-	-
Discharge ESP	-	-
Total ESP	-	-

Completed By: Zack Epps

Notes:

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF2 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	100C17DEC	100C17DEC
Serial Num	-	296SK1166300/0000701
Type	DOWNBLAST	DOWNBLAST
Configuration	HORIZONTAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	NL
Horsepower	0.25	0.25
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	3.4
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	675	-
Fan RPM	1664	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	DIAL
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	0.375"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

Completed By: Brianna Biggs

Notes: SEE ISSUE

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF3 AREA:SEAFOOD PREP

Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	NA	NA
Serial Num	-	NA
Type	-	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	FASCO
Frame	-	NL
Horsepower	-	0.125
Motor Rpm	-	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.9
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	675	-
Fan RPM	-	DD
Fan Rotation	-	DD
Motor RPM	-	DD
System SetPt	-	-
RL Voltage	-	-
RL Amperage	-	-
Total ESP	-	-
Fan Inlet SP	-	-
Fan Discharge SP	-	-

Completed By: Zack Epps

Notes:

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF4 AREA:JANITOR AREA

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	90C17DEC	90C17DEC
Serial Num	-	296SK11663-00/0002001
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	NL
Horsepower	0.167	0.167
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	2.36
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	200	191
Fan RPM	1243	DD
Fan Rotation	-	DD
Motor RPM	-	DD
System SetPt	-	DIAL
RL Voltage	-	123
RL Amperage	-	NA
Total ESP	0.375"	-
Fan Inlet SP	-	-
Fan Discharge SP	-	-

Completed By: Brianna Biggs

Notes: SEE ISSUE

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF5 AREA:

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	100C17DEC	100C17DEC
Serial Num	-	296SK11663-00/0003301
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	NL
Horsepower	0.25	0.25
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	3.4
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	300	305
Fan RPM	1205	DD
Fan Rotation	-	DD
Motor RPM	-	DD
System SetPt	-	DIAL
RL Voltage	-	123
RL Amperage	-	NA
Total ESP	0.375"	0.1661
Fan Inlet SP	-	0.1661
Fan Discharge SP	-	ATM

Completed By: Zack Epps

Notes:

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: HEF1 AREA:RACK OVEN

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	VCRD150	VCRD150
Serial Num	-	296S192354-00/0000701
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	GENTEQ
Frame	-	NL
Horsepower	0.334	0.334
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	4.5
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	750	657
Fan RPM	1260	DD
Fan Rotation	-	DD
Motor RPM	-	DD
System SetPt	-	MAX
RL Voltage	-	123.2
RL Amperage	-	3.4
Total ESP	0.75"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	ATM

Completed By: Zack Epps

Notes:

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: HEF2 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU50HFA	DU50HFA
Serial Num	-	5357930
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	0.50	0.50
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	3.91
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	1155	1244
Fan RPM	1280	473
Fan Rotation	-	DD
Motor RPM	-	473
System SetPt	-	40P
RL Voltage	-	124
RL Amperage	-	2.8
Total ESP	0.50"	0.5684
Fan Inlet SP	-	-0.5684
Fan Discharge SP	-	ATM

Completed By: Zack Epps

Notes:

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: Kitchen Hood Type I

Comfort. Under control.

Asset: HD1 AREA:

Unit Data		
	Design	**Actual**
MFG	LBC	LBC
Model Num	NA	LRO-1E5
Job / Serial Num	-	S76592
Type	-	TYPE
Hood length	-	34.5"
Hood Width	-	46.5"

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	BAFFLED
Filter Size 1	-	16X16
Filter Qty 1	-	2
Filter AK factor size 1	-	1.62
Filter Total AK Area	-	3.24
Filter1 FPM	-	214
Filter2 FPM	-	192
Filter Ave FPM(corr)	-	203
CFM	750	657

Cooking Equipment		
	Design	**Actual**
Item 1	-	RACK OVEN

Completed By: Zack Epps

Notes: UNIT AT MAX SETPOINT ON DIAL

National TAB

Project: 03-27-23 FOOD LION #2856 - LINCOLNTON, NC

System/Unit: Kitchen Hood Type I

Comfort. Under control.

Asset: HD2 AREA:

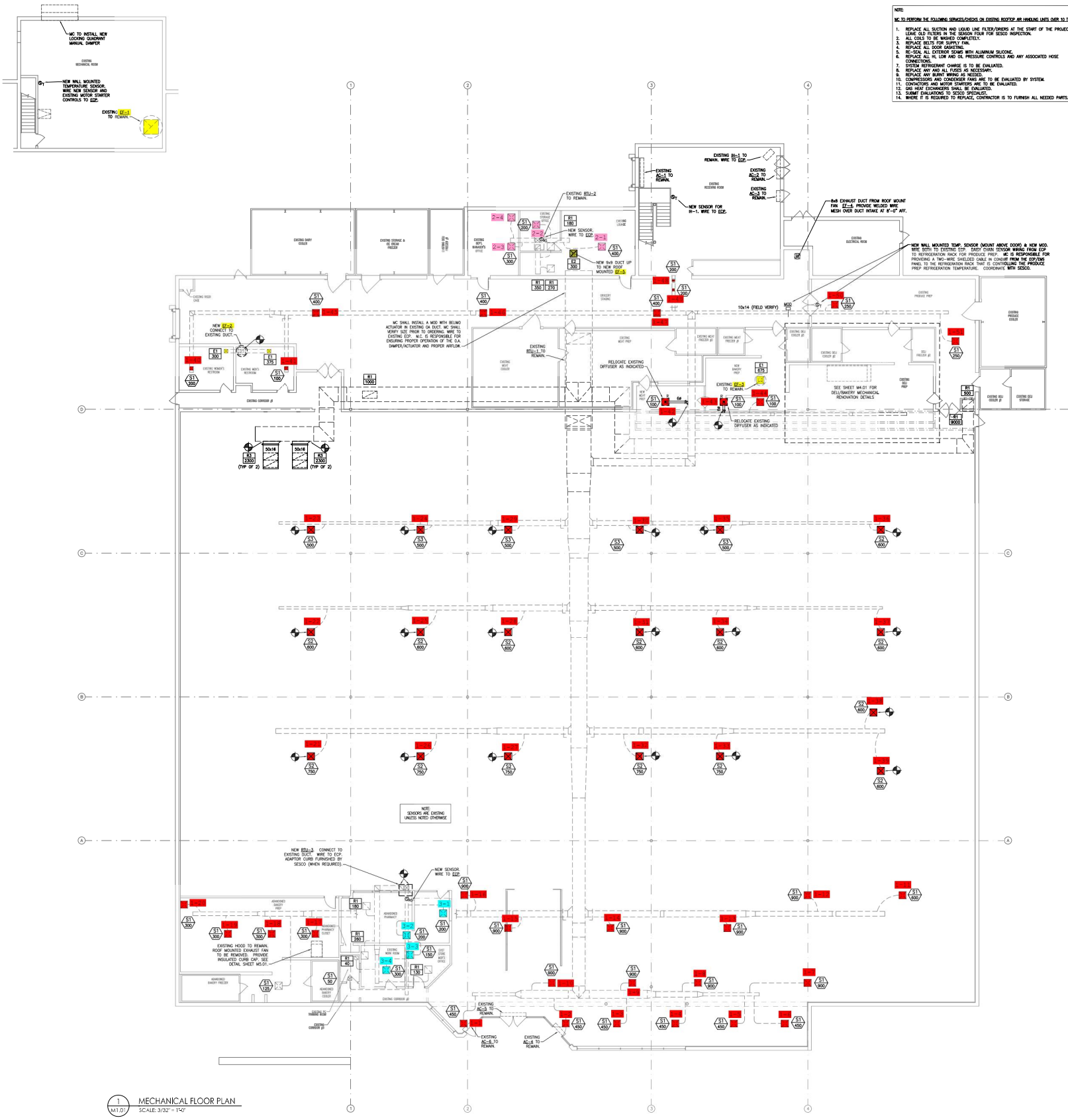
Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	V-ND-2	V-ND-2
Job / Serial Num	-	5357930
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	132	132"
Hood Width	54	54"

Test Data Exhaust		
	Design	**Actual**
Filter Type	BAFFLE	BAFFLE
Filter Size 1	16X16	16x16
Filter Qty 1	8	8
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	12.96	12.96
Filter1 FPM	-	80
Filter2 FPM	-	81
Filter3 FPM	-	97
Filter4 FPM	-	118
Filter5 FPM	-	104
Filter6 FPM	-	95
Filter7 FPM	-	97
Filter8 FPM	-	96
Filter Ave FPM(corr)	-	96
CFM	1155	1244

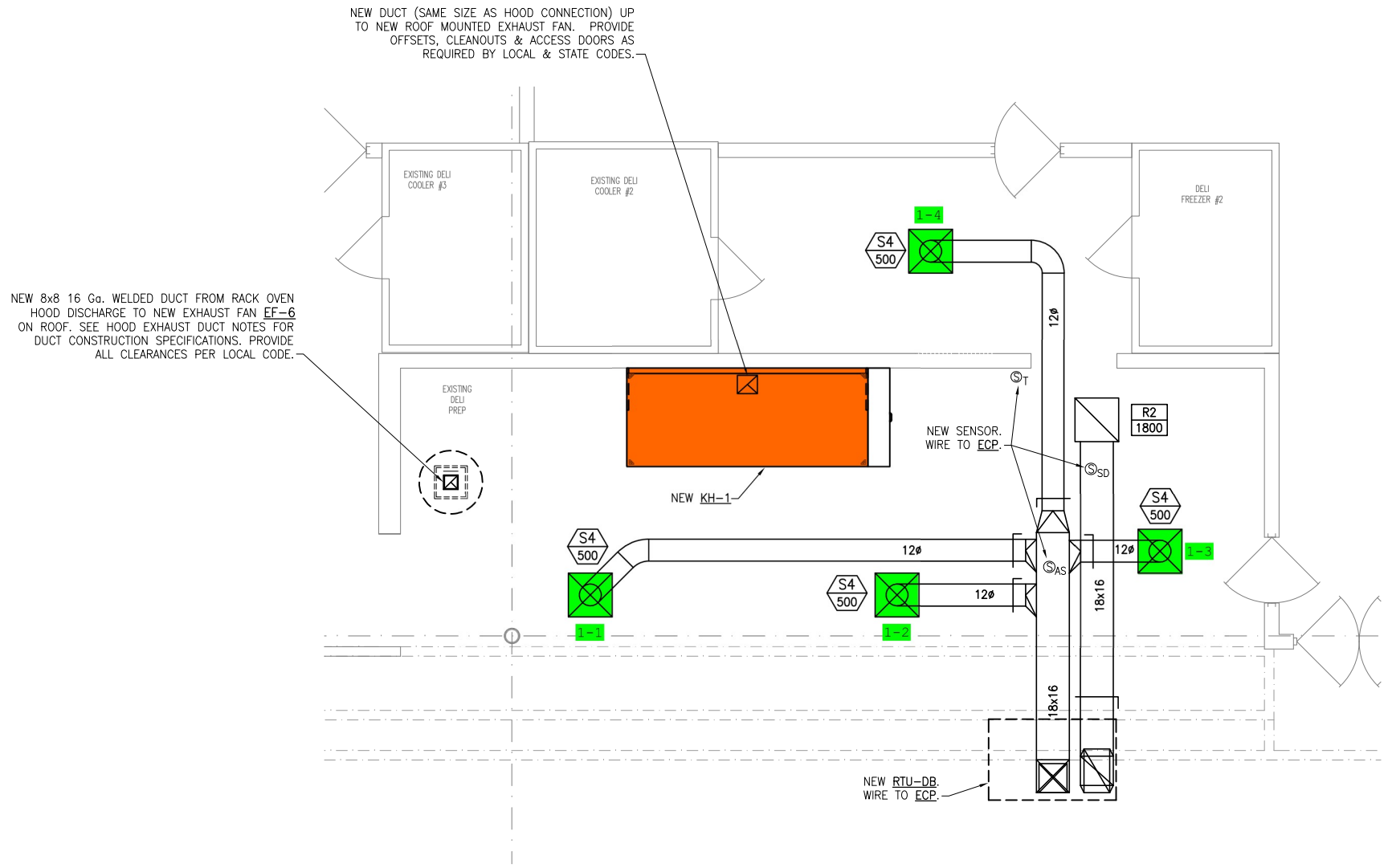
Cooking Equipment		
	Design	**Actual**
Item 1	-	FRYER
Item 2	-	ROTISSERIE OVEN

Completed By: Zack Epps

Notes:



1 MECHANICAL FLOOR PLAN
M1.01 SCALE: 3/32" = 1'-0"



1 M4.01 DELI/BAKERY MECHANICAL PLAN

SCALE: 1/4" = 1'-0"

Date: 3/31/2023