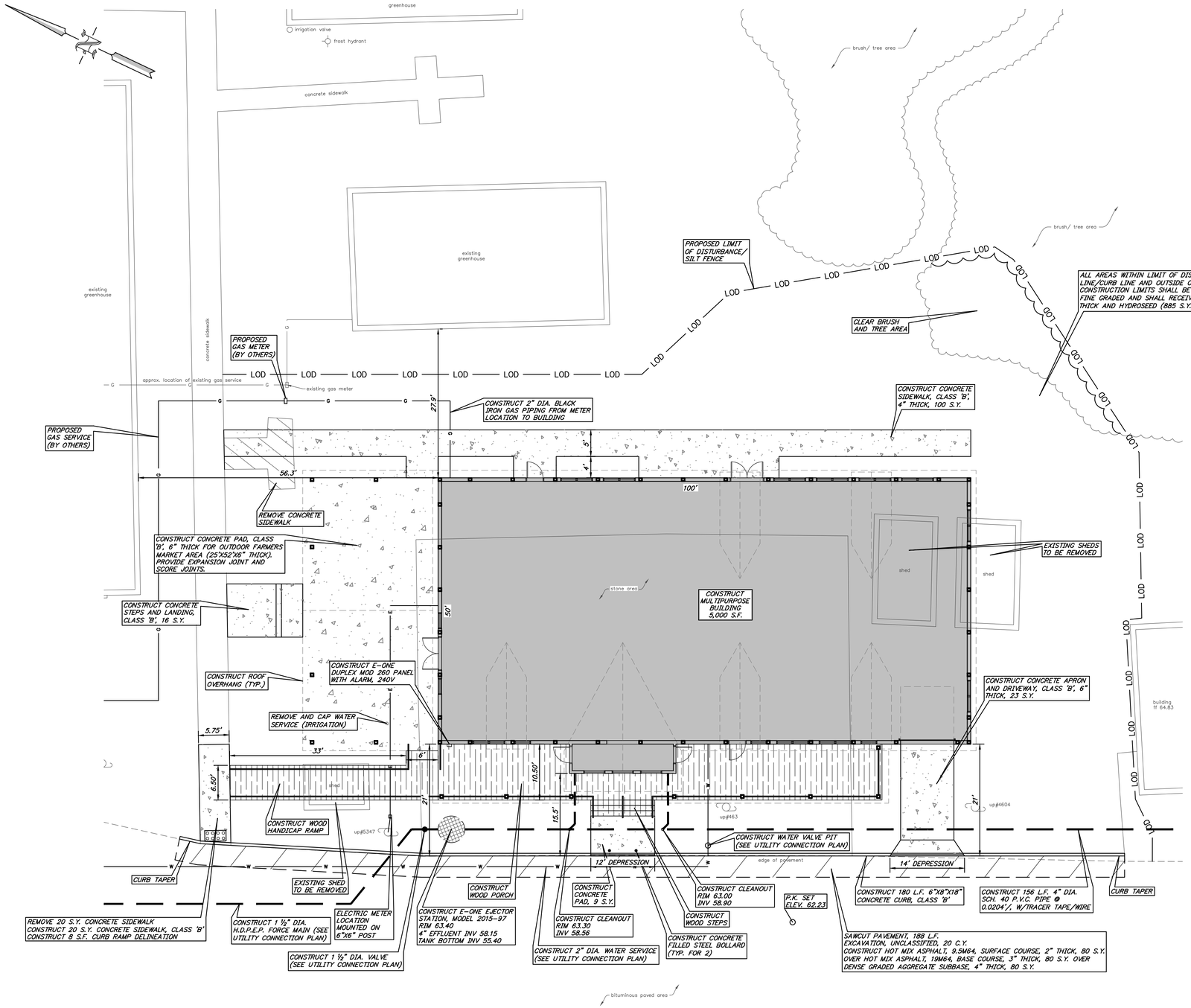

Graphic Scale:

1 Inch= 10 Feet

General Construction Notes:

1. The Contractor shall procure all required permits, licenses and inspections. Contractor shall be responsible for all charges and fees as well as, give notices necessary for all incidentals for project.
2. Excess excavated materials shall be delivered to a lawful site location, provided by the Contractor at his expense.
3. All construction debris (asphalt, concrete, etc.) must be removed from the project site prior to the end of each day to eliminate any potential hazards.
4. All areas disturbed by the Contractor, shall be returned to its original condition or better, by the Contractor, at his expense.
5. The location of all existing utility lines, mains, services, appurtenances must be verified by the Contractor prior to the commencement of construction. The Contractor shall perform test pits in the presence of the construction engineer. the Contractor shall relocate and/or relay electric, water and gas mains and services where necessary. The Contractor shall be responsible for the repair of any damage caused by his operations. He shall notify the respective utility company for location markout prior to any excavation and the performance of the above mentioned test pits.
6. The Contractor is required to perform the proper notification of New Jersey One-Call Center (formerly the garden state underground plant location service) prior to excavation for the purpose of identifying the location of underground facilities. This requirement is in accordance with the underground facilities protection act (p.l. 1994 c. 118). Any and all utilities not subscribing to the New Jersey One-Call Center shall be contacted individually. No work shall commence without proper notifications and verification of all markouts being performed.
7. All utility Contractors shall procure all required permits, licenses and inspections, pay all charges and give notices necessary for all incidentals to the due and lawful prosecution of the project.
8. The project Contractor shall coordinate with and work with the utility Contractor regarding the ordering of all utility services, utility service inspections and final utility connections.
9. The Contractor shall be responsible for properly backfilling and compacting all trenches. No trenches shall be left open after construction hours for the day. All construction areas are to be kept in a condition that allows for safe movement of all vehicular and pedestrian traffic.
10. All areas adjacent to newly installed concrete sidewalk, etc. shall be backfilled to finished grade prior to the end of the day to eliminate any potential hazards.
11. All areas of disturbance shall be graded so as to eliminate any mounds and/or depressions prior to the end of each day to eliminate any potential hazards.
12. Barricades, lighting devices and other traffic control devices shall be placed in accordance with and shall conform to section 110, new jersey department of transportation traffic control standard specifications for road and bridge construction, part 6 of the m.u.t.c.d. and work zone traffic control (u.s. department of transportation).
13. All concrete sidewalk designated for removal, shall be taken from the nearest joint, as necessary, to install proposed improvements.
14. Where no joints exist on concrete drives or sidewalk, the edge shall be sawcut along straight lines before excavation or paving.
15. Where the proposed paving meets the existing paving, the edge shall be cut vertically with a sharp tool, along straight lines. Once completed, the joint shall be properly sealed.
16. The Contractor shall be responsible for the construction stakeout of the project.
17. The project engineer will provide the location of two (2) building corners to establish the location of the building.
18. Inspections or failures to inspect any materials or workmanship by municipal or county officials shall in no way relieve the Contractor of his responsibilities to perform the work in accordance with applicable plans, specifications and laws.
19. A trash dumpster shall be provided on site during entire period of construction.
20. Contractor shall be responsible to remove any & all items on-site (above and underground) or relocate any & all items on-site to allow for the construction of the proposed site improvements shown on these plans. Any omissions of existing items on this plan shall not relieve the Contractor from his responsibility to remove/ relocate said items. Contractor must field visit site to familiarize themselves with project and verify all demolitions responsibilities.
21. All improvements must comply and be constructed in accordance with all applicable codes of the municipality planning department, county planning department and all other applicable state, county and local agencies.
22. The owner, or his representative, is to designate an individual responsible for construction site safety during the course of site improvements pursuant to N.J.A.C. 5:23-2.21 (e) of the N.J. Uniform Construction Code and CFR 1926.32 (1) (OSHA Competent Person).
23. Temporary 6' high chain link fencing shall be provided by the Contractor around the construction to secure the site during the project.

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
P: 856.547.6414 | F: 856.547.6416
Email@OneAnchor.com

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: 1" = 10'

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
PA-PE No. 036608-E
NJPE No. 32853
NJ PROFESSIONAL PLANNER No. 4076
KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE
BERLIN, NEW JERSEY 08009-2399
CERTIFICATE OF AUTHORIZATION #24GA28041300
phone: (856) 767-4111
fax: (856) 767-1091
www.keyengineers.com

DATE _____

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
SITE PLAN

Scale	1" = 10'	CAD File	
Drawn	GBF/TD	Contract No.	18869
Checked		Drawing No.	SP-1
Date	6/10/19		

0 5 10 15 20 50 100

Graphic Scale

scale: 1 inch= 20 feet

ANCHOR POINT ARCHITECTURE

Di Prinzio • Criniti • Desper

Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540

Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103

Main Office
523 S. White Horse Pike
Audubon, NJ 08106

P: 856.547.6414 | F: 856.547.6416

Email@OneAnchor.com

REV.	DATE	REVISION
1.	09/23/19	REVISED FOR RE-BID

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: 1" = 20' | DRWN. T.D. | CHKD. G.B.F.

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Project Title
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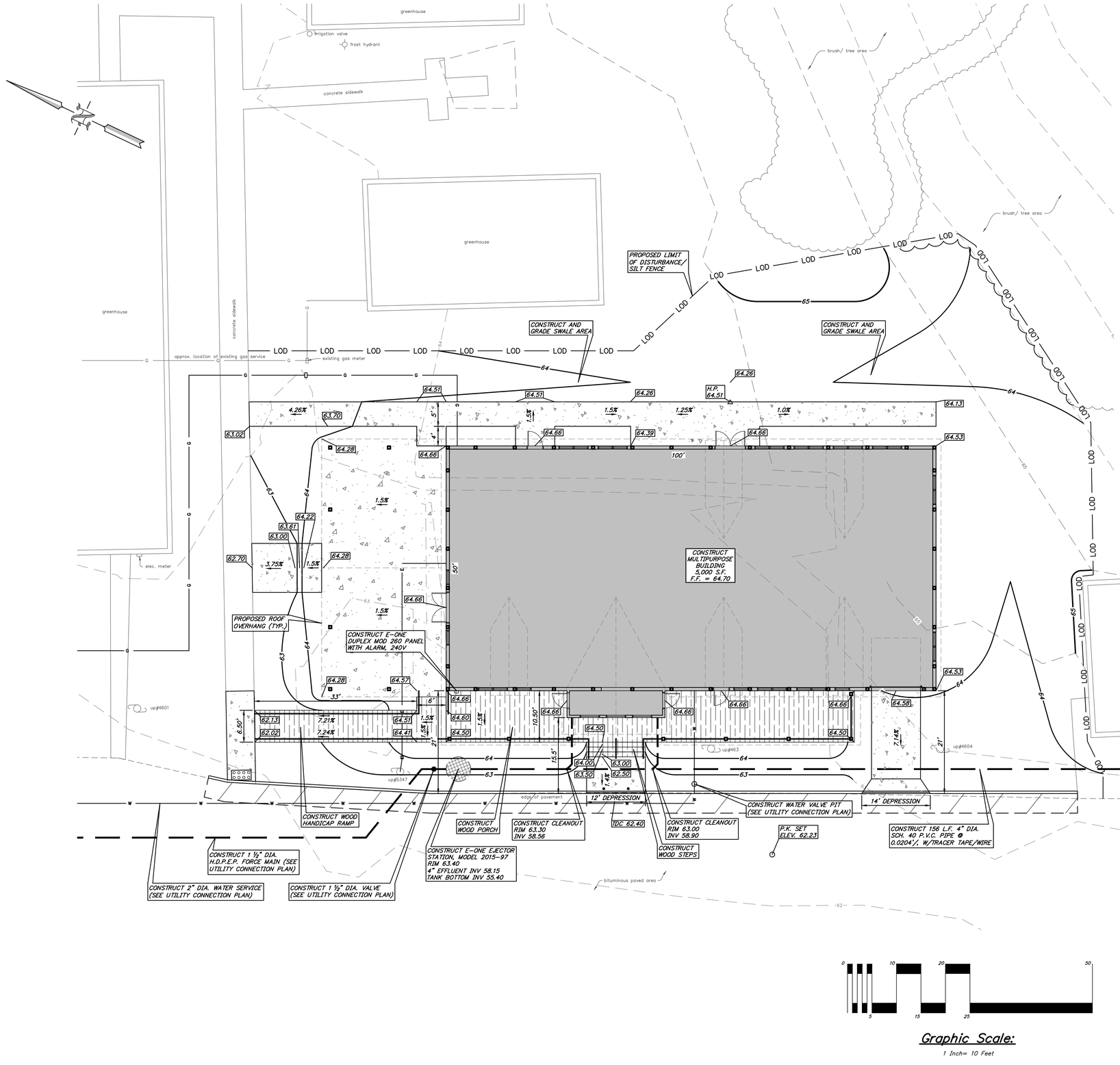
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
UTILITY CONNECTION PLAN

Scale	1" = 20'	CAD File	
Drawn	GBF/TD	Contract No.	18869
Checked		Drawing No.	SP-2
Date	6/10/19		



Grading/ Construction Notes

1. *Proposed Spot Grade Elevation:* 64.50
   Existing Contour Line: ~60~
   Proposed Contour Line: 60
2. *Benchmark:* P.K. Set in Bituminous Parking Lot Elev. 62.23
3. *All materials and installation shall comply with the New Jersey State Highway Department Specifications, 2007 as amended.*
4. *Where subgrade conditions are wet, springy or of such nature that surfacing would be inadvisable without treating the subgrade, the Municipal Engineer shall have the right to request additional excavation and the installation of a suitable subbase such as dense graded aggregate or recycled concrete.*
5. *The Contractor shall procure all required permits, licenses and inspections, pay all charges and fees and give notices necessary for all incidentals to the due and lawful prosecution of the project.*
6. *The location of all existing utility lines, mains, services, appurtenances must be verified by the contractor prior to the commencement of construction. The Contractor shall perform test pits in the presence of the Construction Engineer. The contractor shall relocate and/or relay electric, water and gas mains and services where necessary. The contractor shall be responsible for the repair of any damage caused by his operations. He shall notify the respective utility company for location markout prior to any excavation and the performance of the above mentioned test pits.*
7. *The Contractor is required to perform the proper notification of New Jersey One-Call Center (formerly the Garden State Underground Plant Location Service) prior to excavation for the purpose of identifying the location of underground facilities. This requirement is in accordance with the Underground Facilities Protection Act (P.L. 1994 c. 118). Any and all utilities not subscribing to the New Jersey One-Call Center shall be contacted individually. No work shall commence without proper notifications and verification of all markouts being performed.*
8. *No materials shall be placed or any disturbance permitted beyond the project property line or right-of-way without the written permission of the property owner directly involved.*
9. *The Contractor shall be responsible for clearing, grading, restoring, paving, topsoiling, fertilizing and seeding the areas disturbed by his activities.*
10. *Inspections or failures to inspect any materials or workmanship by Municipal or County Officials shall in no way relieve the Contractor of his responsibilities to perform the work in accordance with applicable plans, specifications and laws.*
11. *Contractor shall be required to strip all topsoil from proposed disturbed areas prior to the start of site grading. Stockpiling topsoil shall be utilized for the landscaping and basin areas. All excess topsoil shall remain the property of the developer.*
12. *Stormwater runoff from all roof drains must be diverted or collected so that the stormwater will not discharge on to any parking or walkway pavement surface, in order to eliminate icing hazards.*
13. *The Contractor shall provide and construct silt fence behind the proposed curb limits and along the south side of the proposed structure.*
14. *A concrete washout area shall be provided by the Contractor in accordance with the detail.*

Earthwork Summary

1. REMOVE STONE FROM PROPOSED BUILDING SITE: 150 C.Y.
2. FILL, COMPACT AND FINE GRADE W/SELECT BACKFILL, DESIGNATION I-11: 400 C.Y.

0 5 10 15 20 25 50

Graphic Scale:
1 Inch= 10 Feet

ANCHOR POINT ARCHITECTURE
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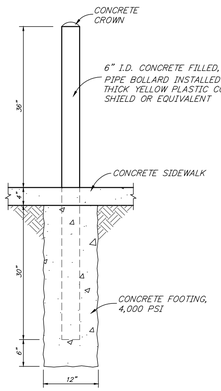
Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

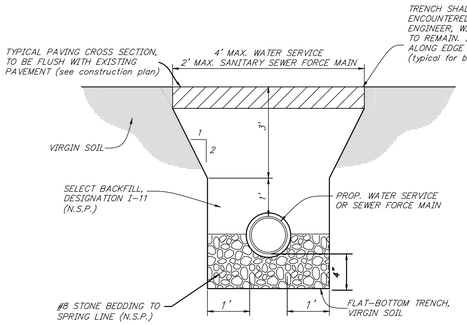
Drawing Title
GRADING PLAN

Scale	1" = 10'	CAD File	
Drawn	GBF/TD	Contract No.	18869
Checked		Drawing No.	SP-3
Date	6/10/19		



Steel Bollard Detail

not to scale

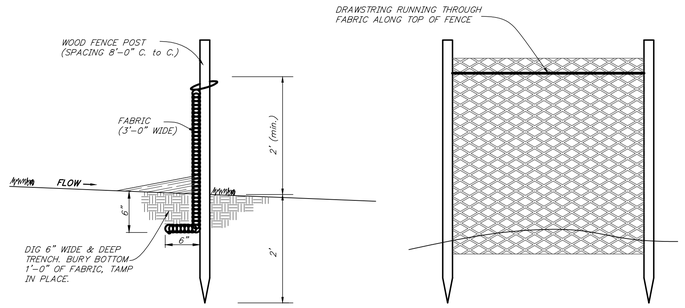


Trench Detail

not to scale

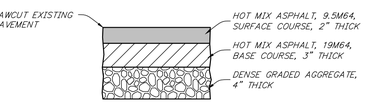
NOTE:

1. ALL TRENCH WORK REQUIRED SHALL BE IN ACCORDANCE WITH THE U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, 1990 (O.S.H.A. 226) AND 29 CFR, PARTS 1926.650 THROUGH 1926.652.
2. PIPE BACKFILL SHALL BE CAREFULLY PLACED AROUND AND HAND TAMPED UNDER, AROUND AND TO A POINT 1' ABOVE THE PIPE IN LAYERS NOT MORE THAN 6" TH. FROM THIS POINT TO THE SURFACE, THE BACKFILL SHALL BE MECHANICALLY TAMPED IN LAYERS NOT MORE THAN 1' TH. TO OBTAIN A MINIMUM OF 95% OF THE EXISTING BACKFILL MATERIAL SOIL DENSITY. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THEIR METHOD OF COMPACTION TO ACHIEVE THE MINIMUM SOIL DENSITY, IN WRITING, FOR REVIEW AND APPROVAL.
3. CONTRACTOR SHALL BE REQUIRED TO UTILIZE SELECT BACKFILL, DESIGNATION I-11 FOR BACKFILL MATERIAL (NO SPECIFIC PAYMENT)
4. TRENCH FILTER FABRIC, GEOTEXTILE STYLE NO. GS BY HANES GEO COMPONENTS OR PROPEX GEOTEX STYLE 200ST OR EQUIVALENT SHALL BE INSTALLED (NO SPECIFIC PAYMENT)
5. No. 8 STONE BEDDING SHALL BE PLACED 1 FOOT MINIMUM BELOW THE PIPE AND TO THE SPRING LINE OF THE PIPE. (NO SPECIFIC PAYMENT)



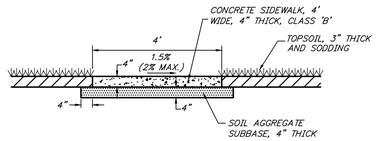
Silt Fence Detail

not to scale



Typical Paving Cross Section

not to scale

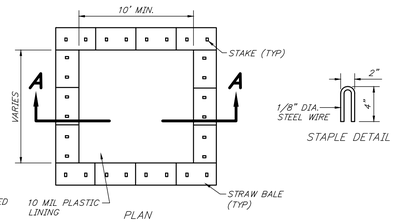


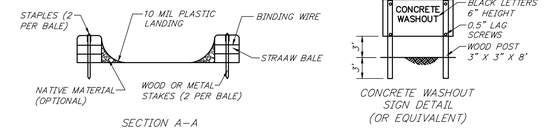
Concrete Sidewalk, 4" Thick, Class 'B' With Soil Aggregate Subbase, 4" Thick Detail

not to scale

NOTES:

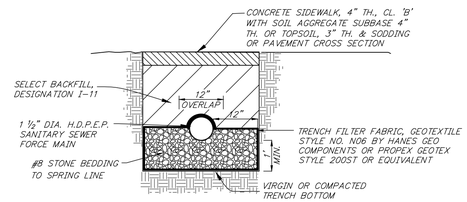
1. ACTUAL LAYOUT DETERMINED IN FIELD
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY
3. CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY PLACEMENT ON SITE
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS
5. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE
6. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN ACCEPTED WASTE SITE
7. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE DISTRICT





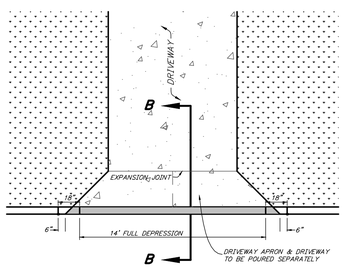
Concrete Washout Area Detail

not to scale



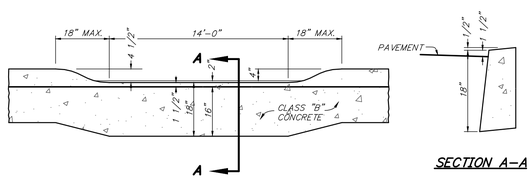
Sanitary Clean Out Lateral Trench Detail

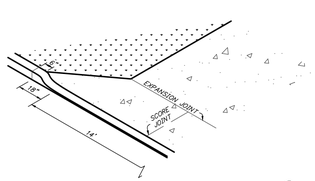
not to scale

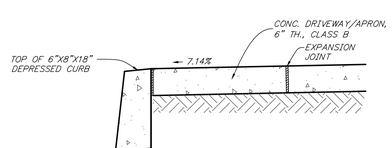


NOTES:

1. DRIVEWAY CURB DEPRESSION SHALL BE A TOTAL OF 4' WIDER THAN THE TOTAL DRIVEWAY WIDTH.



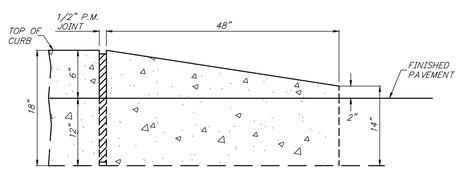




SECTION B-B

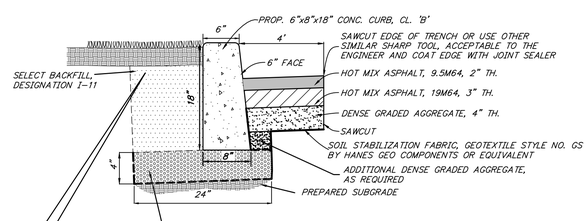
Concrete Driveway/Apron, 6" Thick, Class 'B' & Curb Depression Detail

not to scale



End Taper Detail

not to scale



DURING THE CONSTRUCTION OF THE CONCRETE CURBING, THE CONTRACTOR SHALL EXCAVATE A MINIMUM OF 4" BELOW THE BOTTOM OF THE PROPOSED CURBING AND INSTALL DENSE GRADED AGGREGATE, 4" THICK MINIMUM & TO THE LIMITS SHOWN. THE BACK SIDE OF THE CURB EXCAVATION SHALL RECEIVE SELECT BACKFILL, DESIGNATION I-11.

6"x8"x18" Conc. Curb w/ Select Backfill Designation I-11, and Dense Graded Aggregate (Detail and Cross-Section)

not to scale

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Di Prinzio • Criniti • Desper
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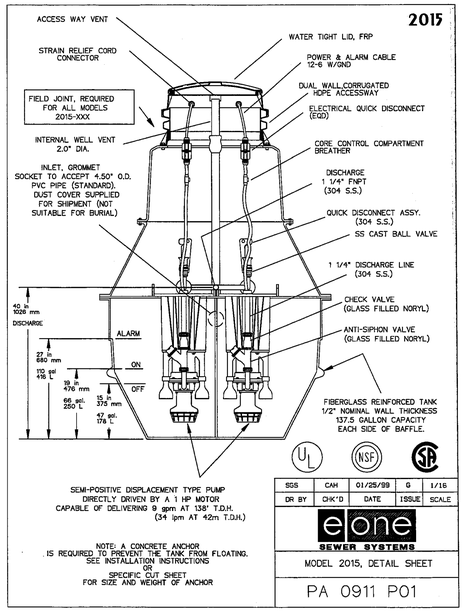
DATE

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
DETAILS

Scale	AS NOTED	CAD File	
Drawn	GBF/TD	Contract No.	18869
Checked		Drawing No.	SP-4
Date	6/10/19		



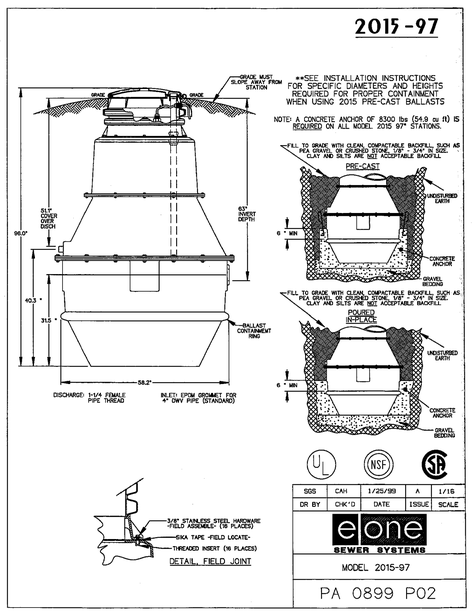
SGS	CAH	01/25/99	G	1/16
DR BY	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

MODEL 2015, DETAIL SHEET

PA 0911 P01

NOTE: PUMP STATION AND STATION DETAILS SHALL BE E-ONE SEWER SYSTEMS OR EQUIVALENT.

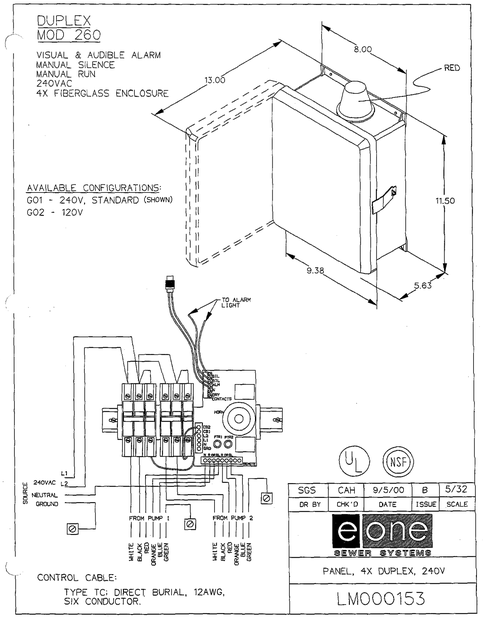


SGS	CAH	1/25/99	A	1/16
DR BY	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

MODEL 2015-97

PA 0899 P02



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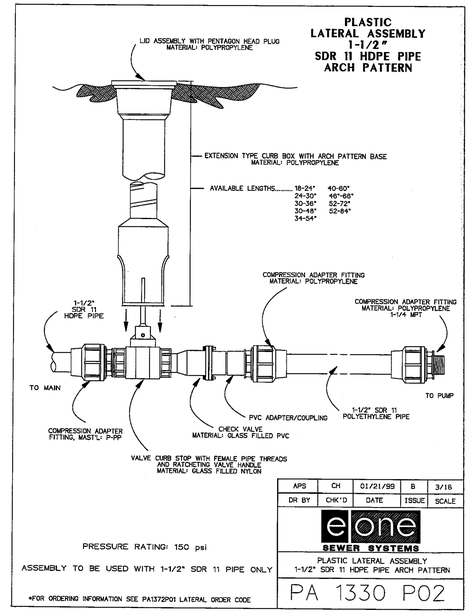
DR BY	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

PANEL, 4X DUPLEX, 240V

LM000153



PRESSURE RATING: 150 psi

ASSEMBLY TO BE USED WITH 1-1/2" SDR 11 PIPE ONLY

*FOR ORDERING INFORMATION SEE PA1372P01 LATERAL ORDER CODE

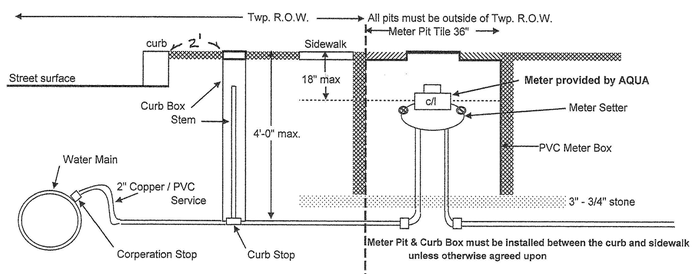
APS	CH	01/21/99	B	3/16
DR BY	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

PLASTIC LATERAL ASSEMBLY 1-1/2" SDR 11 HDPE PIPE ARCH PATTERN

PA 1330 P02

Large Meter Pit Installation 1- 1/2" - 2"



	1 1/2"	2"
Corperation Stop	FB1000-7	FB1000-7
Curb Stop	B44-777-G	B44-777-G
Curb Box	EA2-40-50	EA2-40-50
Stationary Rod	SROD-3	SROD-3
Meter Setter	V V 76 - 18B - 4466	V V 77 - 18B - 4477
Meter Pit	36"x36"	36"x36"
Meter Pit Lid		

FORD Products

Local Suppliers:

Kennedy Culvert	856.627.7000
RIO Supply	856.719.0081
HD Supply	856.753.5566
Waterworks Supply	609.567.6630

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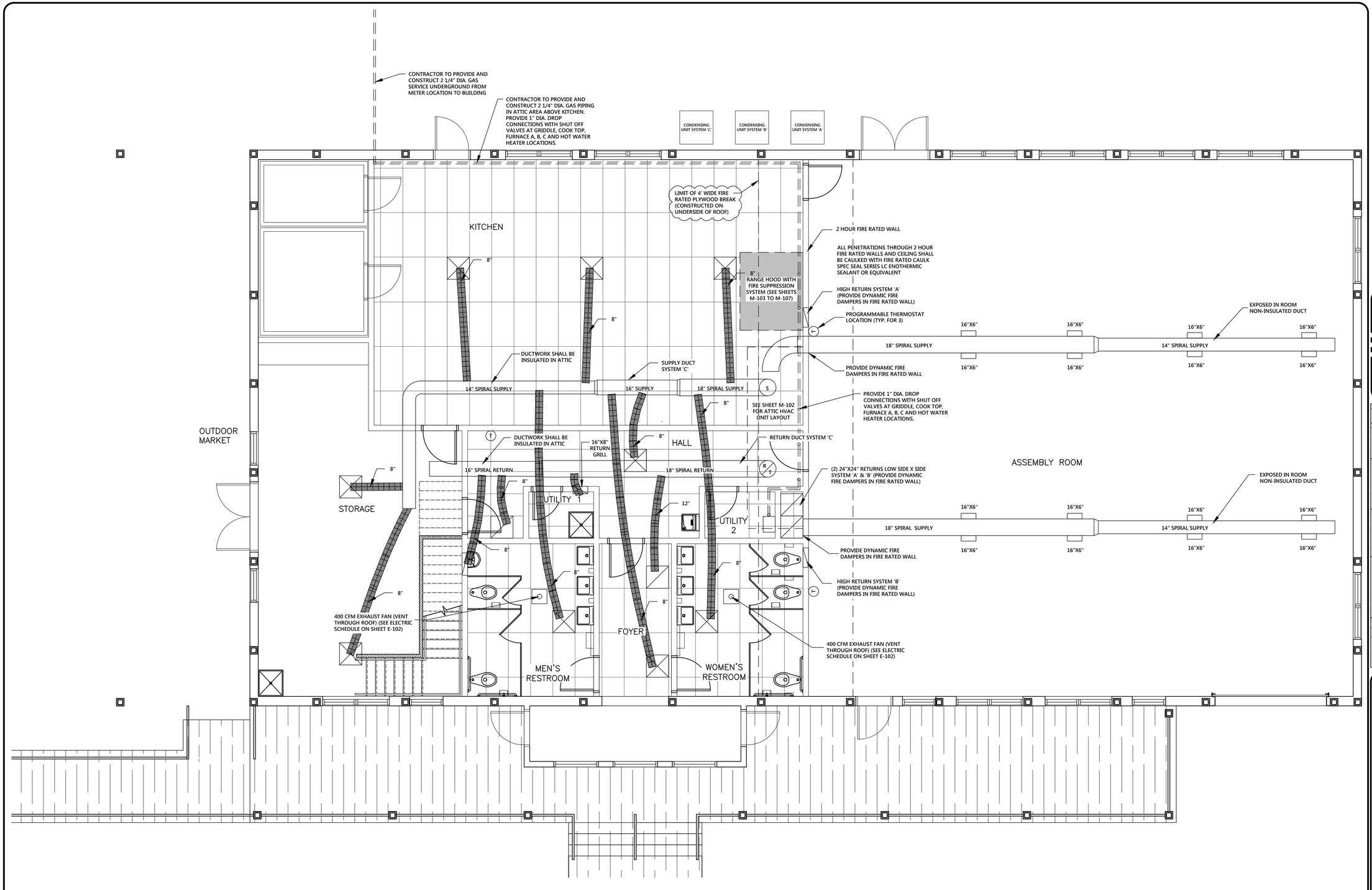
80 S. WHITE HORSE PIKE BERLIN, NEW JERSEY 08009-2399
CERTIFICATE OF AUTHORIZATION #24042804300
phone (856) 767-4111 fax (856) 767-1099
DATE

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
DETAILS

Scale	AS NOTED	CAD File	
Drawn	GBF/TD	Contract No.	18869
Checked		Drawing No.	SP-5
Date	6/10/19		



ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
P: 856.547.6414 | F: 856.547.6416
Email@OneAnchor.com

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: 1/4" = 1'

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
N.J.P.E. No. 32853 PA.P.E. No. 036608-E
NJ PROFESSIONAL PLANNER No. 4076

KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE
BERLIN, NEW JERSEY 08009-2399
CERTIFICATE OF AUTHORIZATION #24042804130
phone (856) 767-6111
fax (856) 753-1591
www.keyengineers.com

DATE

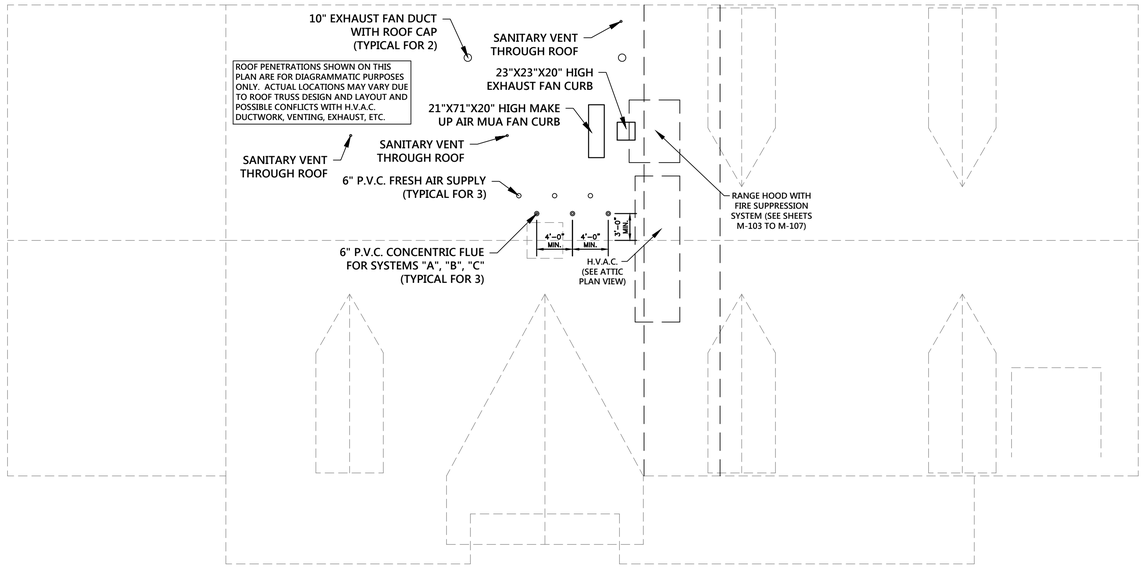
Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
MECHANICAL FLOOR PLAN

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. M-101
Date	

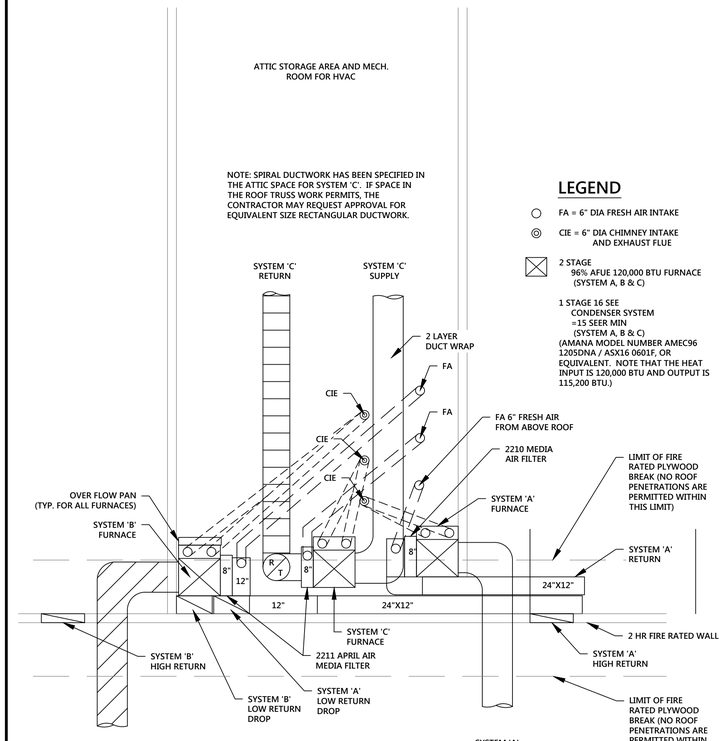
H.V.A.C. Unit Schedule

UNIT	MANUFACTURER	HEAT INPUT/OUTPUT	COOLING CAPACITY	EFFICIENCY	BLOWER MOTOR	ELEC. DATA
A	YORK, LENNOX, AMANA OR EQUIVALENT	115,200/120,000 BTU/HA	5 TONS	16 SEER	1 HP (5 SPEED)	208/230 V, 1 PH, 60 HZ, 50 AMP
B	YORK, LENNOX, AMANA OR EQUIVALENT	115,200/120,000 BTU/HA	5 TONS	16 SEER	1 HP (5 SPEED)	208/230 V, 1 PH, 60 HZ, 50 AMP
C	YORK, LENNOX, AMANA OR EQUIVALENT	115,200/120,000 BTU/HA	5 TONS	16 SEER	1 HP (5 SPEED)	208/230 V, 1 PH, 60 HZ, 50 AMP



Roof Plan View

scale: 1/8" inch= 1 foot



LEGEND

- ○ FA = 6" DIA FRESH AIR INTAKE
- ◎ CIE = 6" DIA CHIMNEY INTAKE AND EXHAUST FLUE
- ⊠ 2 STAGE 96% AFUE 120,000 BTU FURNACE (SYSTEM A, B & C)

1 STAGE 16 SEER CONDENSER SYSTEM =15 SEER MIN (SYSTEM A, B & C) (AMANA MODEL NUMBER AMEC96 1205DNA / ASX16 0601F, OR EQUIVALENT. NOTE THAT THE HEAT INPUT IS 120,000 BTU AND OUTPUT IS 115,200 BTU.)

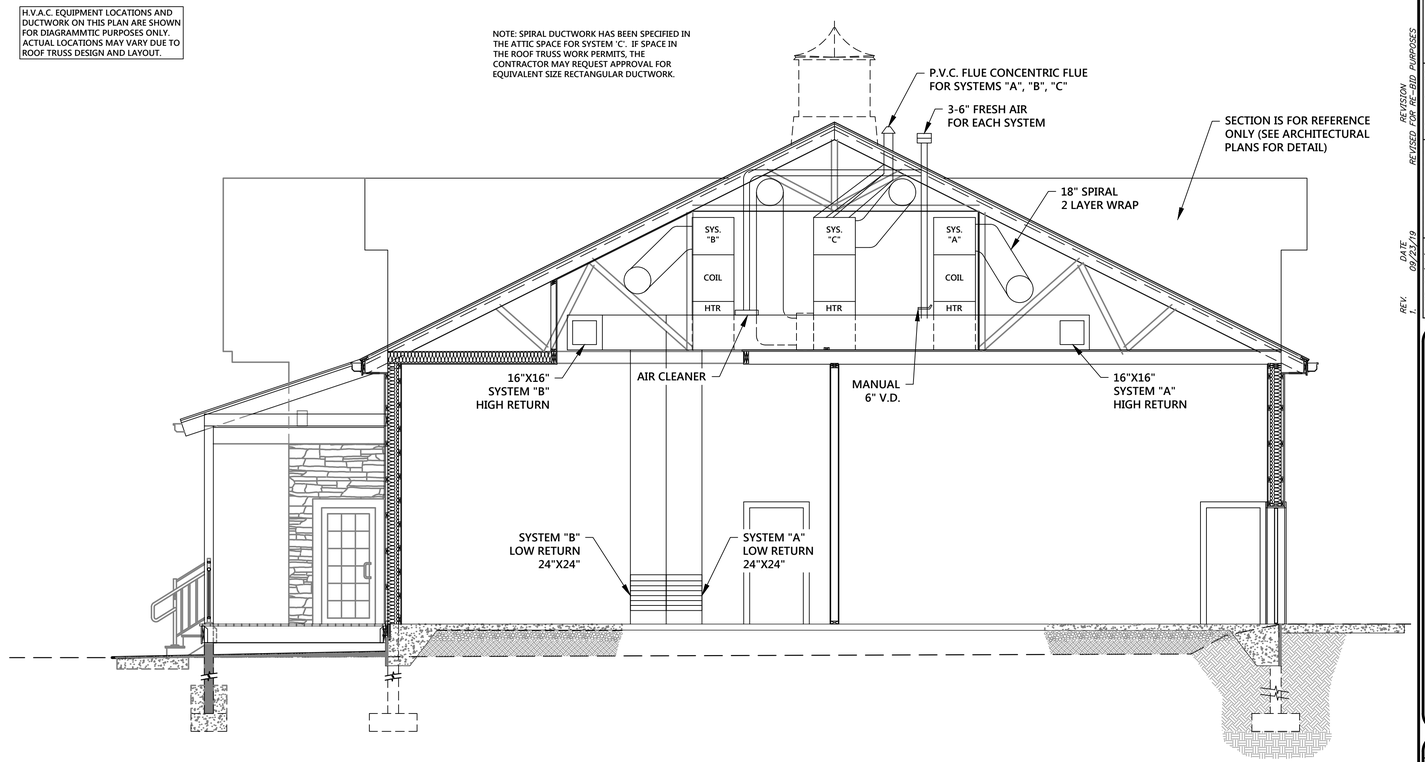
NOTES:

1. SYSTEM A & B SUPPLY AND RETURN DUCTWORK SHALL BE PROVIDED WITH AUTOMATIC DYNAMIC FIRE DAMPERS HAVING A FIRE RATING OF 1.5HRS. ROUND SPIRAL DUCT SUPPLIES SHALL BE PROVIDED WITH MODEL 75CR-DY, 1 ½ HR BY LLOYD INDUSTRIES OR EQUIVALENT. RETURN DUCTWORK SHALL BE PROVIDED WITH MODEL 75-DY, 1 ½ HR BY LLOYD INDUSTRIES OR EQUIVALENT.
2. EACH H.V.A.C. UNIT SHALL BE PROVIDED WITH A METAL CONDENSATE PAN TOGETHER WITH A MAGNETIC CONDENSATE OVERFLOW SWITCH, AQUAGUARD AG-1100+ OR EQUIVALENT.

Attic Plan View

not to scale

H.V.A.C. EQUIPMENT LOCATIONS AND DUCTWORK ON THIS PLAN ARE SHOWN FOR DIAGRAMMTIC PURPOSES ONLY. ACTUAL LOCATIONS MAY VARY DUE TO ROOF TRUSS DESIGN AND LAYOUT.



Attic Elevation View

scale: 1/4" inch= 1 foot

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
P: 856.547.6414 | F: 856.547.6416
Email@OneAnchor.com

REV.	DATE	REVISION
1	09.23.19	REVISED FOR RE-BID PURPOSES

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: 1/4" = 1' | DRWN. T.D. | CHKD. G.B.F.

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
NJPE No. 32851
PA.PE No. 036608-E
NJ PROFESSIONAL PLANNER No. 4076
KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE
BERLIN, NEW JERSEY 08009-2399
CERTIFICATE OF AUTHORIZATION #24GA28041300
phone: (856) 767-4111
fax: (856) 767-1991
www.keyengineers.com

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Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
MECHANICAL DETAILS

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. M-102
Date	

HOOD INFORMATION – Job#3752589

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM							TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG.	
					TOTAL EXH. CFM	RISER(S)								END TO END	ROW
						WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.	S.P.			
1		5424 ND-2-PSP-F	7' 0"	600 Deg.	1400			4"	12"	1400	1783	-0.826"	1125	430 SS Where Exposed	ALONE	ALONE

PERFORATED SUPPLY PLENUM(S)

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)				
							WIDTH	LENG.	DIA.	CFM	S.P.
1		Front	96"	14"	6"	MUA	10"	24"		562	0.172"
						MUA	10"	24"		562	0.172"

HOOD INFORMATION

HOOD NO.	TAG	FILTER(S)					LIGHT(S)			UTILITY CABINET(S)					FIRE SYSTEM PIPING	HOOD HANGING WGHT
		TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM TYPE	FIRE SYSTEM SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY		
1		Captrate Solo Filter	5	16"	16"	85% See Filter Spec.	3	L55 Series E26	NO	Left	12"x54"x24"	Ansul R102	3.0	SC-111110FP	1 Light 1 Fan	YES	619 LBS

HOOD OPTIONS

HOOD NO.	TAG	OPTION
1		FIELD WRAPPER 18.00" High Front, Left, Right
		BACKSPLASH 80.00" High X 96.00" Long X 1.00" Wide Insulated 430 SS Vertical
		RIGHT QUARTER END PANEL 23" Top Width, 0" Bottom Width, 23" High 430 SS
		INSULATION FOR BACK OF HOOD
		LEFT VERTICAL END PANEL 27" Top Width, 21" Bottom Width, 80" High Insulated 430 SS
		SENSOR-CV

Fire System Information – Job#3752589

FIRE SYSTEM NO.	Tag	TYPE	SIZE	MAX FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		Ansul R102	3.0	11	Fire Cabinet Left	Left

GAS VALVE(S)

FIRE SYSTEM NO.	TAG	TYPE	SIZE	SUPPLIED BY
1		Mechanical	TBD	CaptiveAire Systems (or equivalent)

SPECIFICATIONS

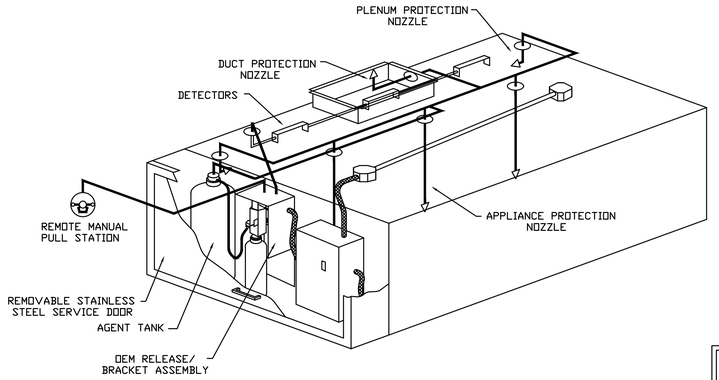
THE RESTAURANT FIRE SUPPRESSION SYSTEM SHALL BE THE PRE-ENGINEERED TYPE WITH A FIXED NOZZLE AGENT DISTRIBUTION NETWORK. IT SHALL BE LISTED WITH UNDERWRITERS LABORATORIES, INC. (UL) OR EQUIVALENT.

THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

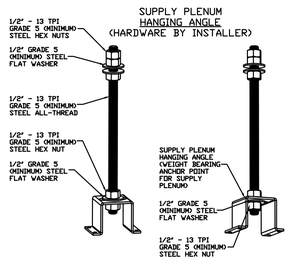
THE EXTINGUISHING AGENT SHALL BE A POTASSIUM CARBONATE, POTASSIUM ACETATE-BASED FORMULATION DESIGNED FOR FLAME KNOCKDOWN AND SECUREMENT OF GREASE RELATED FIRES. IT SHALL BE AVAILABLE IN PLASTIC CONTAINERS WITH INSTRUCTIONS FOR LIQUID AGENT HANDLING AND USAGE.

THE REGULATED RELEASE MECHANISM SHALL BE COMPATIBLE WITH A FUSIBLE LINK DETECTION SYSTEM. THE FUSIBLE LINK SHALL BE SELECTED AND INSTALLED ACCORDING TO THE OPERATING TEMPERATURE IN THE VENTILATING SYSTEM. THE FUSIBLE LINK SHALL BE SUPPORTED BY A DETECTOR BRACKET/ LINKAGE ASSEMBLY.

UPON ACTIVATION OF THE FIRE SUPPRESSION SYSTEM, THE MAKE-UP AIR FAN CONNECTED TO THE SYSTEM MUST SHUT DOWN, POWER TO ALL APPLIANCES AND OUTLETS UNDER THE HOOD MUST SHUT OFF, THE ASSOCIATED EXHAUST FAN MUST CONTINUE TO RUN, AND THE GAS SUPPLY TO THE APPLIANCES MUST BE INTERUPTED.

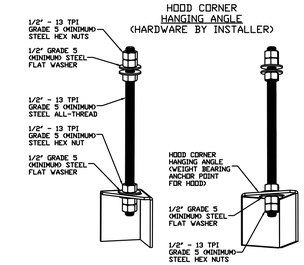


TYPICAL ANSUL R-102 SYSTEM LAYOUT



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



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SPECIFICATION: CAPTRATE® GREASE-STOP® SOLO FILTER (OR EQUIVALENT)

THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

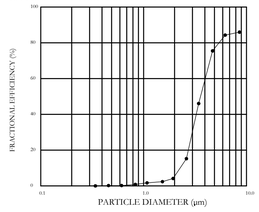
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

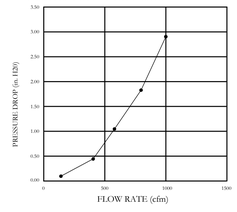
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05.

EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH.
NFPA #96
NSF STANDARD #2
UL STANDARD #1046
INT. MECH. CODE (IMC)
ULC-S649

PLEASE NOTE: THE HOOD MAY BE INSTALLED WITH A 0 INCH CLEARANCE TO COMBUSTIBLE MATERIALS IF CONSTRUCTED IN ONE OF THE FOLLOWING METHODS:
1 INCH LAYER OF INSULATION (TYPE 475) OWENS CORNING, JOHNS MANVILLE, OR 3M FIRE WRAP
1 INCH INSULATED BACKSPLASH
BACK-RETURN (BR) SUPPY PLENUM WITH 1 INCH LAYER OF INSULATION
THESE RATINGS APPLY TO TOP, ENDS, BACK AND FRONT OF THE EXHAUST HOOD

PLEASE NOTE: THE HOOD MAY BE INSTALLED WITH A 3 INCH CLEARANCE TO LIMITED COMBUSTIBLE MATERIALS IF CONSTRUCTED IN ONE OF THE FOLLOWING METHODS:
3 INCH FACTORY INSTALLED REAR UN-INSULATED STANDOFF
3 INCH FACTORY INSTALLED TOP WRAPPER / ENCLOSURE SYSTEM
3 INCH FACTORY INSTALLED END STANDOFF
BACK-RETURN (BR) SUPPY PLENUM
THESE RATINGS APPLY TO TOP, ENDS, BACK AND FRONT OF THE EXHAUST HOOD

FOR QUESTIONS, CALL
JEFF ERRICKSON OR STEVE BARGFREDE
S. NJ & DELAWARE SALES OFFICE
560 STOKES ROAD SUITE 13A7, MEDFORD NJ 08055
PHONE: (609) 654-8368
FAX: (919) 747-5604

FOR QUESTIONS, CALL THE:
NJ, DE, PA SALES DIVISION
560 STOKES ROAD MEDFORD, NJ 08055
PHONE: (866) 654-8368
FAX: (919) 747-5604

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH

NFPA #96 - 2014 EDITION
ETL LISTED TO UL-710 REQUIREMENTS
IMC 2012

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
P: 856.547.6414 | F: 856.547.6416
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DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: TD | CHKD. BY: GBF | SCALE: AS NOTED

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
PA.PE No. 036608-E
NJPE No. 32851
NJ PROFESSIONAL PLANNER No. 4076

DATE

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80 S. WHITE HORSE PIKE
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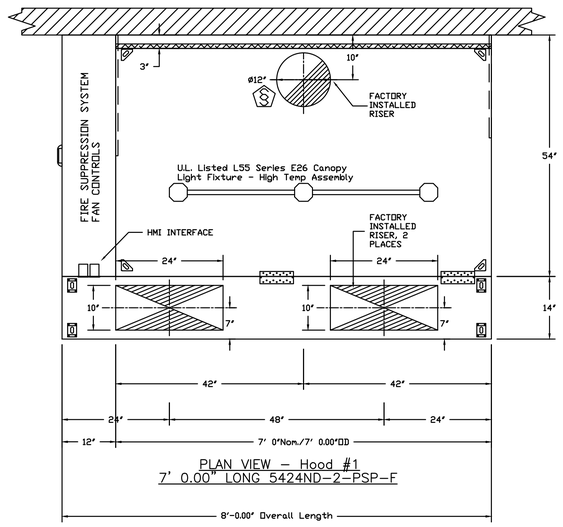
CERTIFICATE OF AUTHORIZATION #24GA28041300

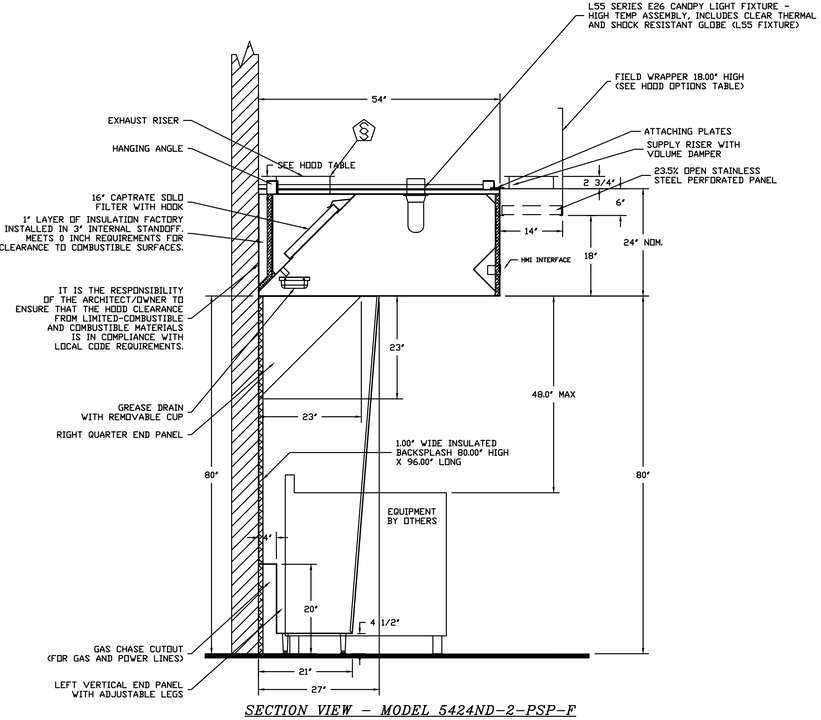
Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
RESTAURANT HOOD FIRE SUPPRESSION SYSTEM DETAIL 1

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. M-103
Date	



VERIFY CEILING HEIGHT
14'-7" BOTTOM OF TRUSS CORD
9'-6" SUSPENDED CEILING
Height required to verify that the hood will fit and to size the enclosure panels



SECTION VIEW - MODEL 5424ND-2-PSP-F

EXHAUST FAN INFORMATION - Job#3752589

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SONES
1		DU85HFA	1400	1.150	1268	0.750	0.4030	1	115	8.8	443 FPM	92	13.8

MUA FAN INFORMATION - Job#3752589

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP.	RPM	H.P.	B.H.P.	ø	VOLT	FLA	WEIGHT (LBS.)	SONES	BURNER EFFICIENCY(%)
2		A1-D.250-15D	15MF-1-MDD	A1-D.250	1000	1125	0.375	1339	1.000	0.3680	1	115	10.2	608	10.4	92

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
2		75476	69438	58 deg F	7 in. w.c. - 14 in. w.c.	Natural

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1		1 - Grease Box
		1 - ECM Wiring Package-Exhaust - Manual or 0-10VDC Reference Speed Control (NIDEC Motor)
2		1 - Motorized Backdraft Damper for A1-D Housing
		1 - Low Fire Start
		1 - Inlet Pressure Gauge, 0-35"
		1 - Manifold Pressure Gauge, -5 to 15" wc
		1 - ECM Wiring Package-Supply - Manual or 0-10VDC Reference Speed Control (NIDEC Motor)

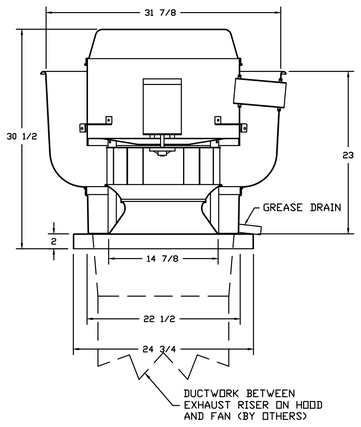
FAN ACCESSORIES

FAN UNIT NO.	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1		YES						
2							YES	

CURB ASSEMBLIES

NO.	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	36 LBS	Curb	23.000"W x 23.000"L x 20.000"H 1.000:12.000 Pitch Vented Hinged
2	# 2	63 LBS	Curb	21.000"W x 71.000"L x 20.000"H 1.000:12.000 Pitch Along Width, Right Insulated

FAN #1 DU85HFA - EXHAUST FAN



FEATURES:

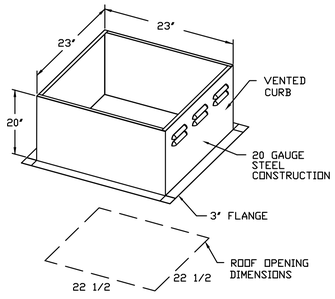
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

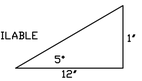
OPTIONS

GREASE BOX.
ECM WIRING PACKAGE-EXHAUST - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL (NIDEC MOTOR).



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE



VERIFY ROOF PITCH
6:12
Pitch required to correctly construct fan curbs

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
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CERTIFICATE OF AUTHORIZATION #24GA28041300

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Project Title
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CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
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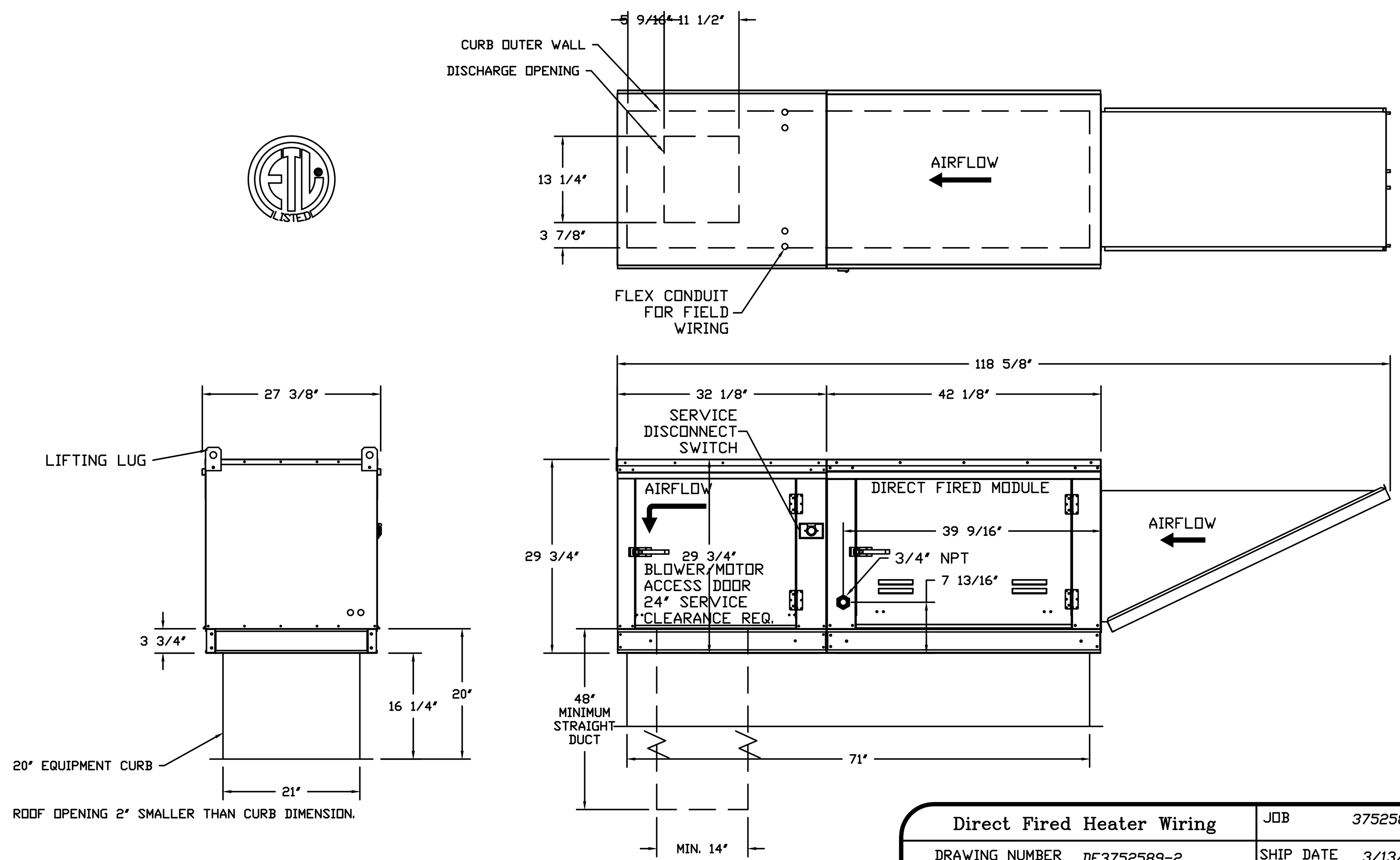
Drawing Title
RESTAURANT HOOD FIRE SUPPRESSION SYSTEM DETAIL 2

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. M-104
Date	



FAN #2 A1-D.250-15D - HEATER
1. DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 15" DIRECT DRIVE FAN
2. INTAKE HOOD WITH EZ FILTERS
3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT
4. MOTORIZED BACK DRAFT DAMPER 16" X 18" FOR SIZE 1 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, TFB120S ACTUATOR INCLUDED
5. LOW FIRE START. ALLOWS THE BURNER CIRCUIT TO ENERGIZE WHEN THE MODULATION CONTROL IS IN A LOW FIRE POSITION.
6. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
7. GAS PRESSURE GAUGE, -5 TO +15 INCHES WC., 2.5" DIAMETER, 1/4" THREAD SIZE
8. ECM WIRING PACKAGE AND MANUAL OR 0-10VDC CONTROL FOR SUPPLY EC MOTORS. RTC CONTROLLER. **DO NOT ORDER UNDER WARRANTY, SEE PART NUMBER "ECM-VCU-RTC"**.

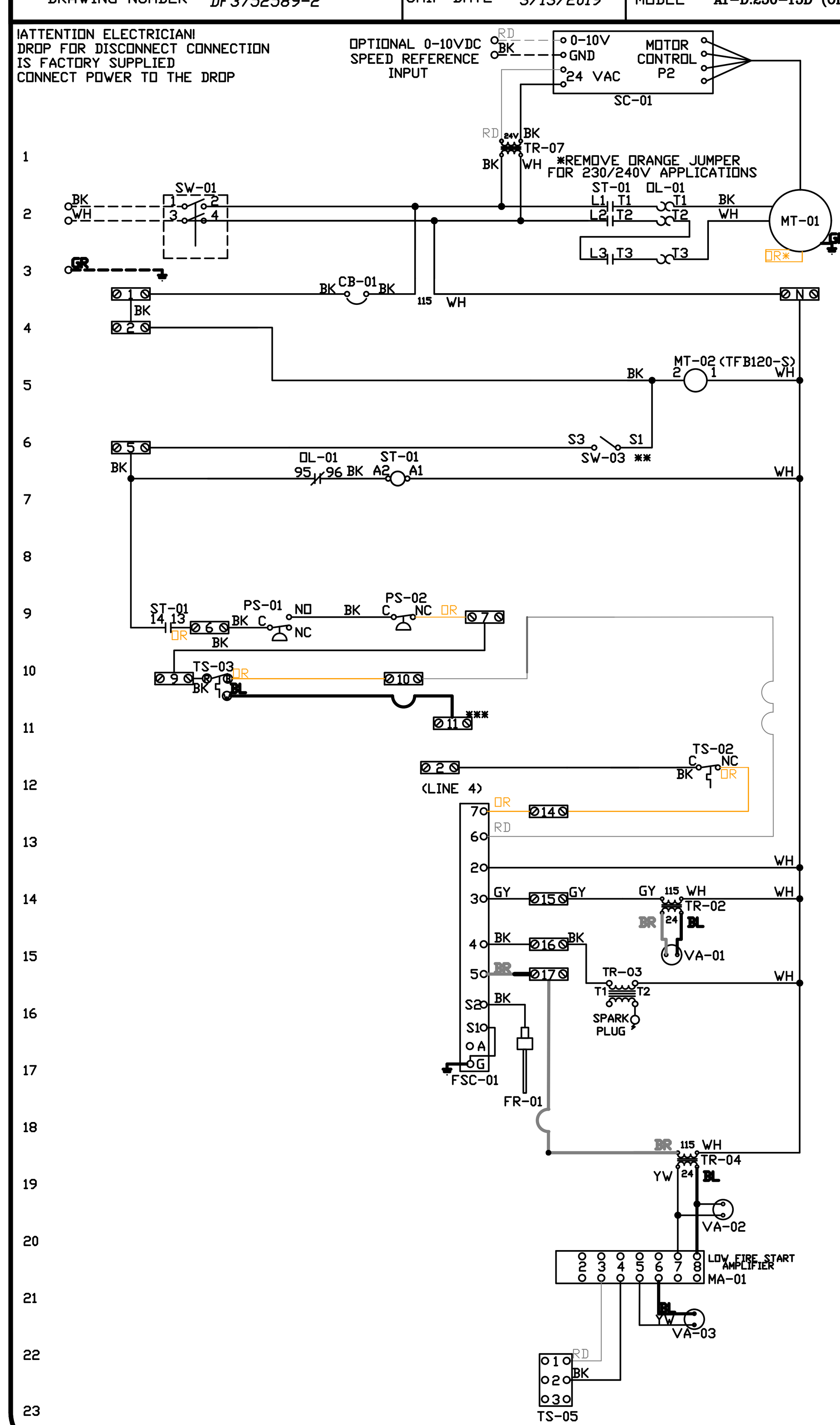
NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE UNLESS OTHERWISE SPECIFIED. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 14" x 14" x 48" LONG.

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 17°F. TEMP. RISE = 58°F.
BTUs CALCULATED OFF ACTUAL AIR DENSITY
OUTPUT BTUs AT ALTITUDE OF 0.0 ft. = 69709
INPUT BTUs AT ALTITUDE OF 0.0 ft. = 75771
OUTPUT BTUs AT ALTITUDE OF 108 ft. = 69438
INPUT BTUs AT ALTITUDE OF 108 ft. = 75476

Direct Fired Heater Wiring

Direct Fired Heater Wiring	JOB 3752589 - Camden County Multipurpose Bldg - Blackwood, NJ	
DRAWING NUMBER DF3752589-2	SHIP DATE 3/13/2019	MODEL A1-D.250-15D (OR EQUIVALENT)



Installed Options

Motorized Back Draft Damper

Discharge Temp. Control

Component Identification

Label	Description	Location
CB-01	Circuit breaker (2amp)	[3]
FR-01	Flame rod	[16]
FSC-01	Fireye FSC	[11-14]
MA-01	Modulating amplifier	[19]
MT-01	Supply motor	[2]
MT-02	Damper motor	[5]
OL-01	Supply motor overload	[2][7]
PS-01	Low Airflow Switch	[9]
PS-02	High Airflow Switch	[9]
SC-01	RTC-FSC-1	[1]
ST-01	Supply motor contactor	[2][7][9]
SW-01	Main disconnect switch	[2]
SW-03	Damper end limit switch	[4]
TR-02	Power transformer(20va)	[12]
TR-03	Ignition transformer	[14]
TR-04	Power transformer(20va)	[17]
TR-07	24VAC 20VA Transformer	[1]
TS-02	High temp limit switch	[10]
TS-03	Intake Air Sensor	[10]
TS-05	Discharge Air Sensor	[21]
VA-01	Pilot gas valve	[13]
VA-02	Main gas valve	[18]
VA-03	Modulating gas valve	[20]

MOTOR INFO

SUPPLY 1HP-115V-1P-10.2FLA
CONTACTOR: 100-C16D10
OVERLOAD: 193-T1AC12

ELECTRICAL INFORMATION

MOTOR/CTRL CIRCUIT MCA: 14.9A
MOTOR/CTRL CIRCUIT MOP: 25A

NOTES

---- DENOTES FIELD WIRING
—— DENOTES INTERNAL WIRING

** TERMINALS S4 AND S6 USED ON NF & AF SERIES ACTUATORS
*** TERMINAL 11 PROVIDES COOLING CONNECTION

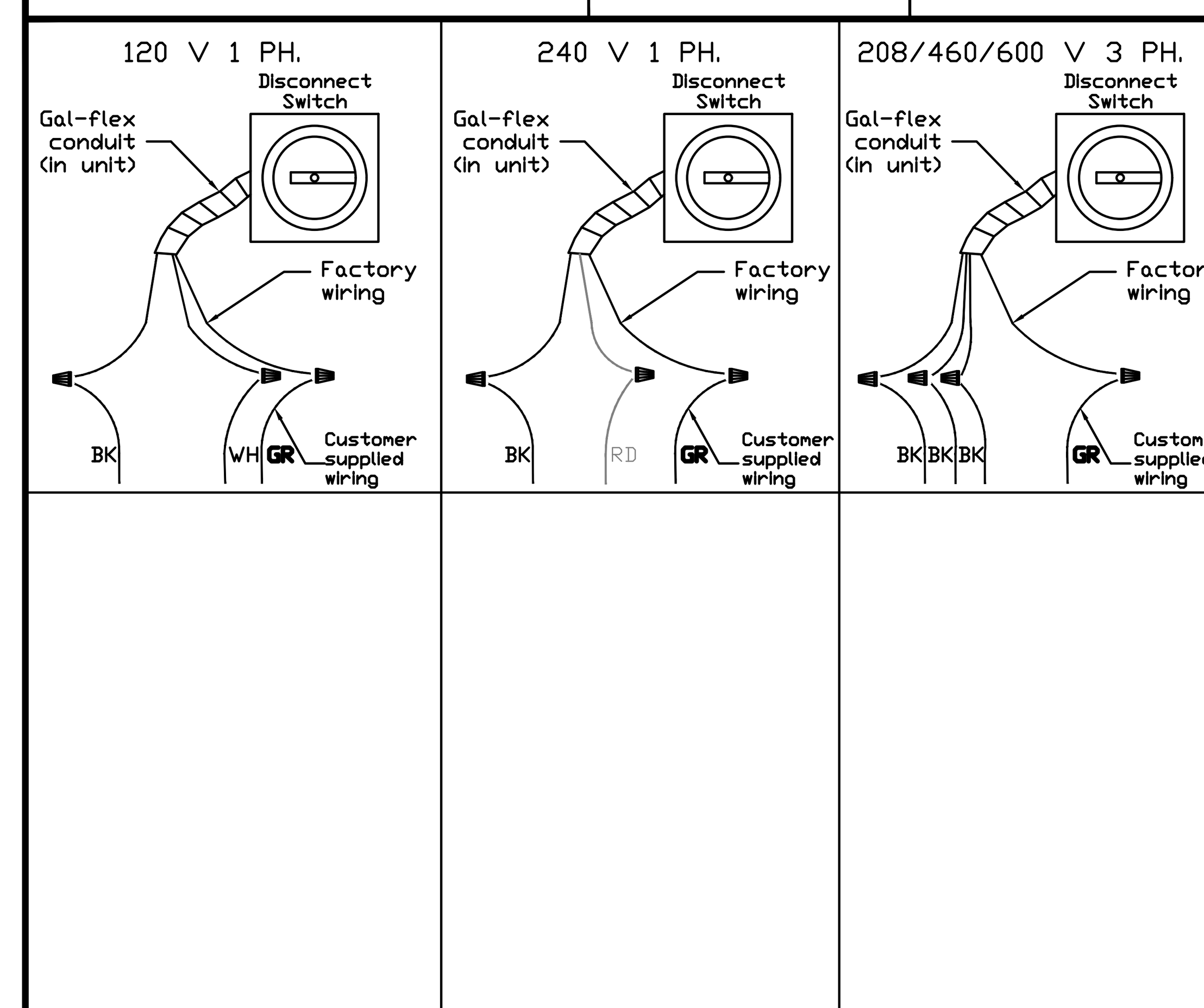
WIRE COLOR

BK-BLACK, BL-BLUE, BR - BROWN, OR - ORANGE, YW - YELLOW, GR - GREEN, GY - GRAY, [redacted], RD - RED, WH - WHITE, PK - PINK

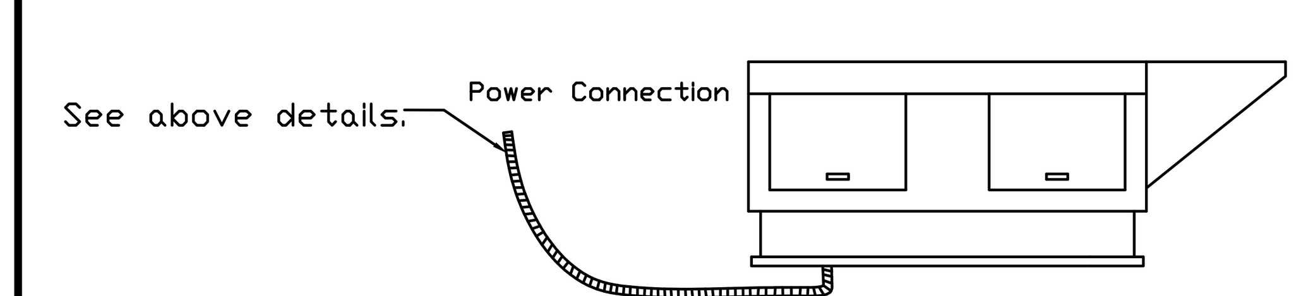
SOCKET STYLE "CLION" RELAY: NO 4 3, NC 2 1, COIL 8 7, COM 6 5

Installation Wiring

Installation Wiring	JOB 3752589 - Camden County Multipurpose Bldg - Blackwood, NJ	
DRAWING NUMBER RP3752589-2	SHIP DATE 3/13/2019	MODEL A1-D.250-15D (OR EQUIVALENT)



Installed Options



NOTES

WIRE COLOR

BK - BLACK, BL - BLUE, BR - BROWN, OR - ORANGE, RD - RED, WH - WHITE, YW - YELLOW, GR - GREEN, GY - GRAY, [redacted], PK - PINK

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
P: 856.547.6414 | F: 856.547.6416
Email@OneAnchor.com

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: AS NOTED

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
NJPE No. 32853 PA.PE No. 036608-E
NJ PROFESSIONAL PLANNER No. 4076
KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE
BERLIN, NEW JERSEY 08009-2399
CERTIFICATE OF AUTHORIZATION #24GA28041300
phone: (856) 767-6111
fax: (856) 753-1091
www.keyengineers.com

DATE ______

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
RESTAURANT HOOD FIRE SUPPRESSION SYSTEM DETAIL 3

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No.
Date	M-105
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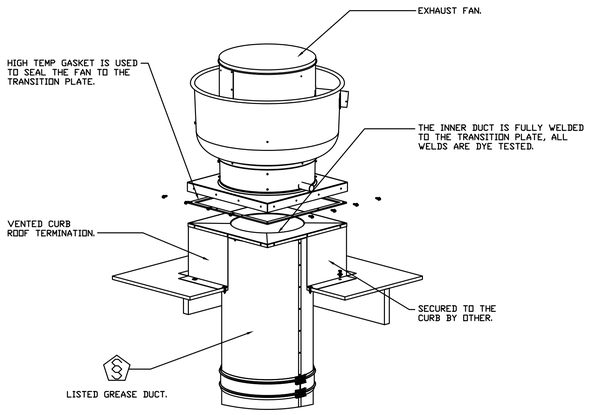
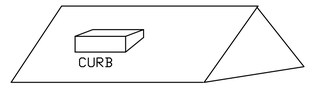
(S)	GREASE DUCT & CHIMNEY SPECIFICATIONS: PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL 'DW' ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL 'DW' IS LISTED TO UL-1978 AND IS INSTALLED USING 'V' CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL 'DW' DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURES INSTALLATION GUIDE. PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURES LISTING MODEL 'DW' HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16' PER 12', HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16' PER 12'. DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS. IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO CAPTIVEAIRE SYSTEMS MODEL 'DW- 2R, 2R TYPE HT, 3R, OR 3Z' ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.



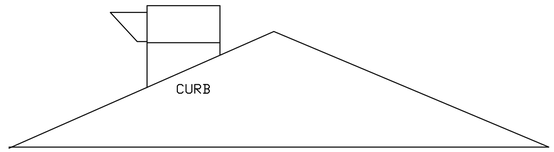
PITCHED ROOF FORM

CIRCLE ONE SITUATION ONLY

PARALLEL TO ROOF PEAK Pitched Along Width of Curb



PERPENDICULAR TO ROOF PEAK



Pitched Along Length of Curb

VERIFY ROOF PITCH

6:12

Pitch required to correctly construct fan curbs

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
P: 856.547.6414 | F: 856.547.6416
Email@OneAnchor.com

DATE: 06/10/19 | PROJECT No. 18-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: AS NOTED | Bar

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
NJPE No. 32853
PA.P.E No. 036608-E
NJ PROFESSIONAL PLANNER No. 4076
KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE
BERLIN, NEW JERSEY 08009-2399
phone:(856) 767-4111
fax:(856) 767-1991
e-mail:info@keyengineers.com
CERTIFICATE OF AUTHORIZATION #24GA28041300

DATE _____

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
RESTAURANT HOOD FIRE SUPPRESSION SYSTEM DETAIL 4

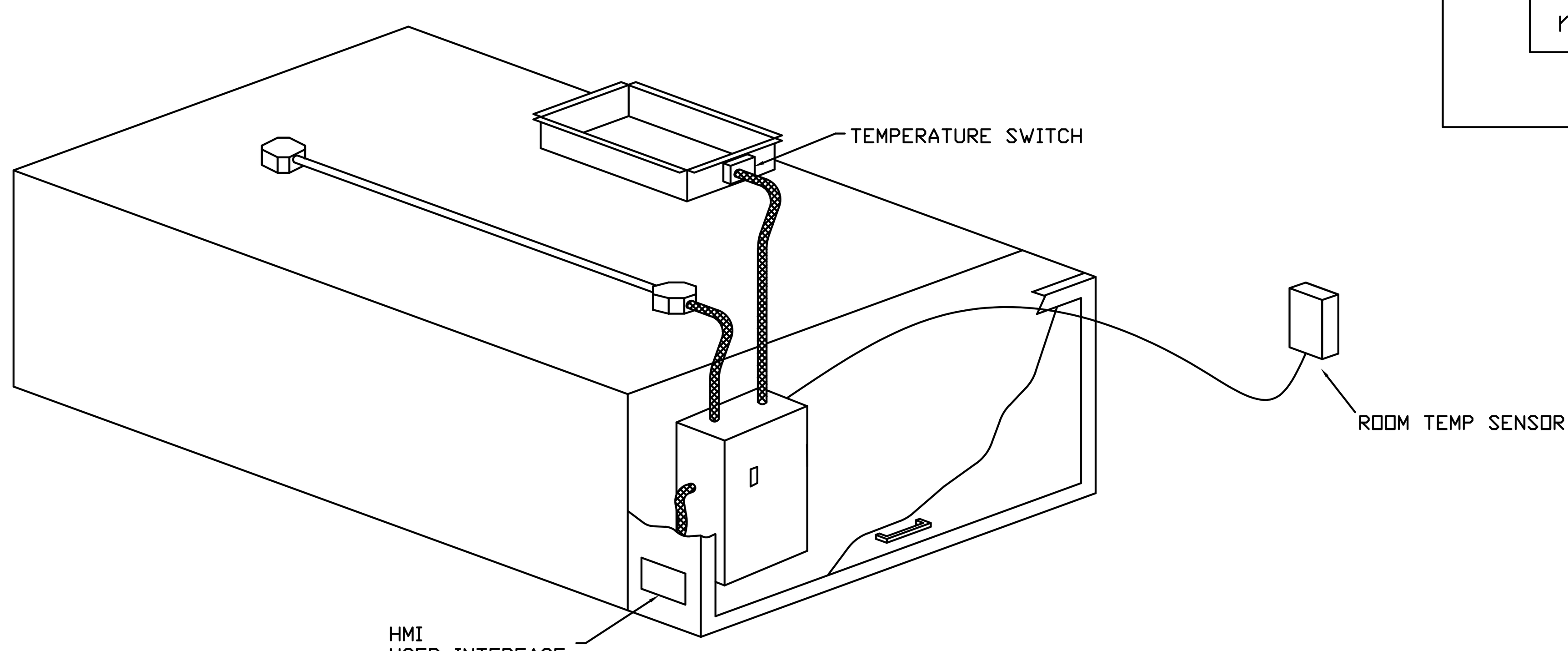
Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. M-106
Date	

ELECTRICAL PACKAGE – Job#3752589

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	Φ	H.P.	VOLT	FLA
1		SC-111110FP	Utility Cabinet Left	03 - Utility Cabinet Left	1 Light	Smart Controls Thermostatic Control	Exhaust	1	0.750	115	8.8
				Hood # 1	1 Fan		Supply	1	1.000	115	10.2

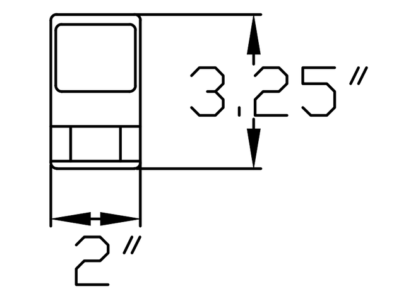
Duct mounted thermostats for use in automatically activating fans whenever cooking appliances are being used.

Switch closes on temperature rise. One thermostat and temerature controller per exhaust riser.

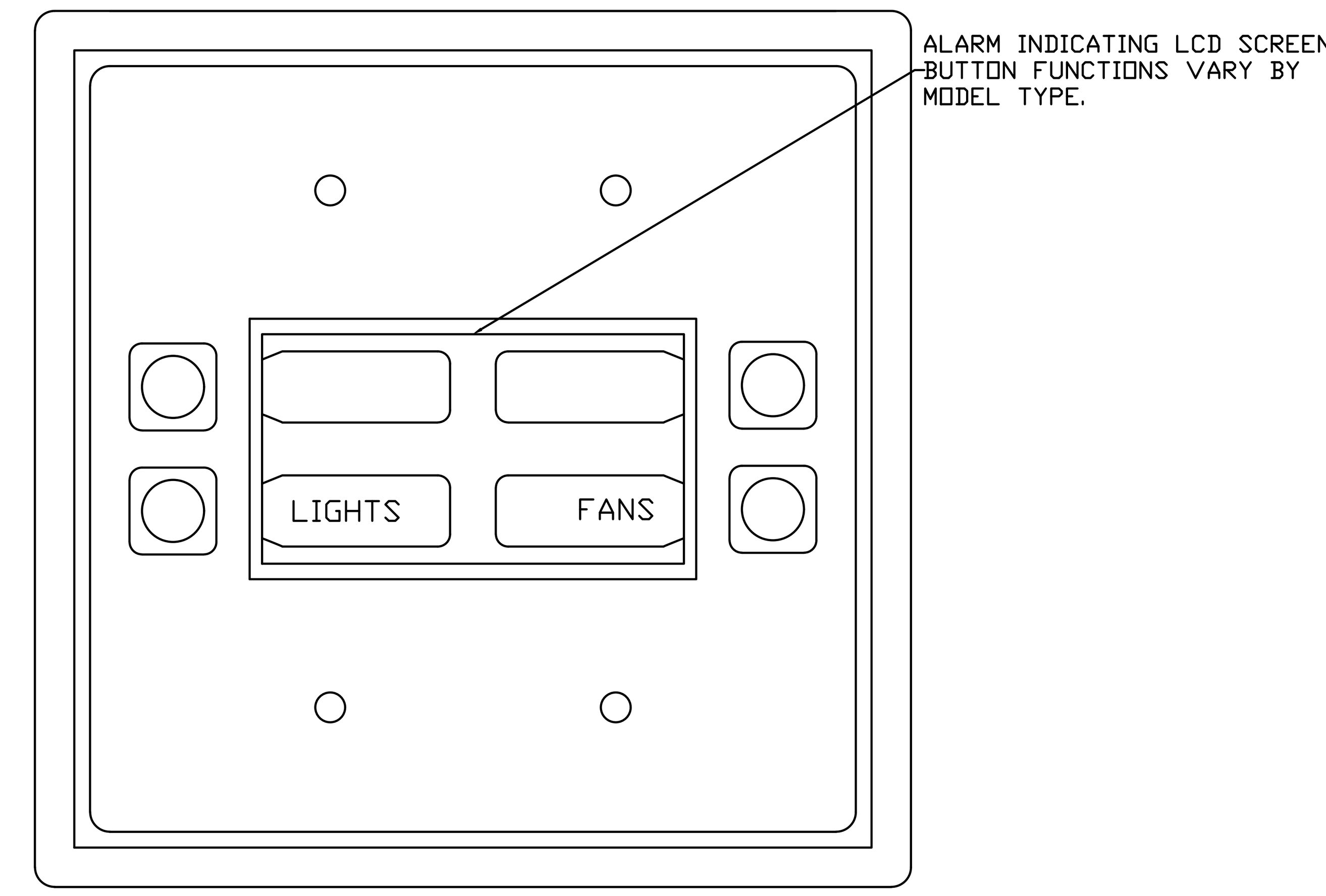


TYPICAL CONTROL PANEL (CABINET MOUNT)

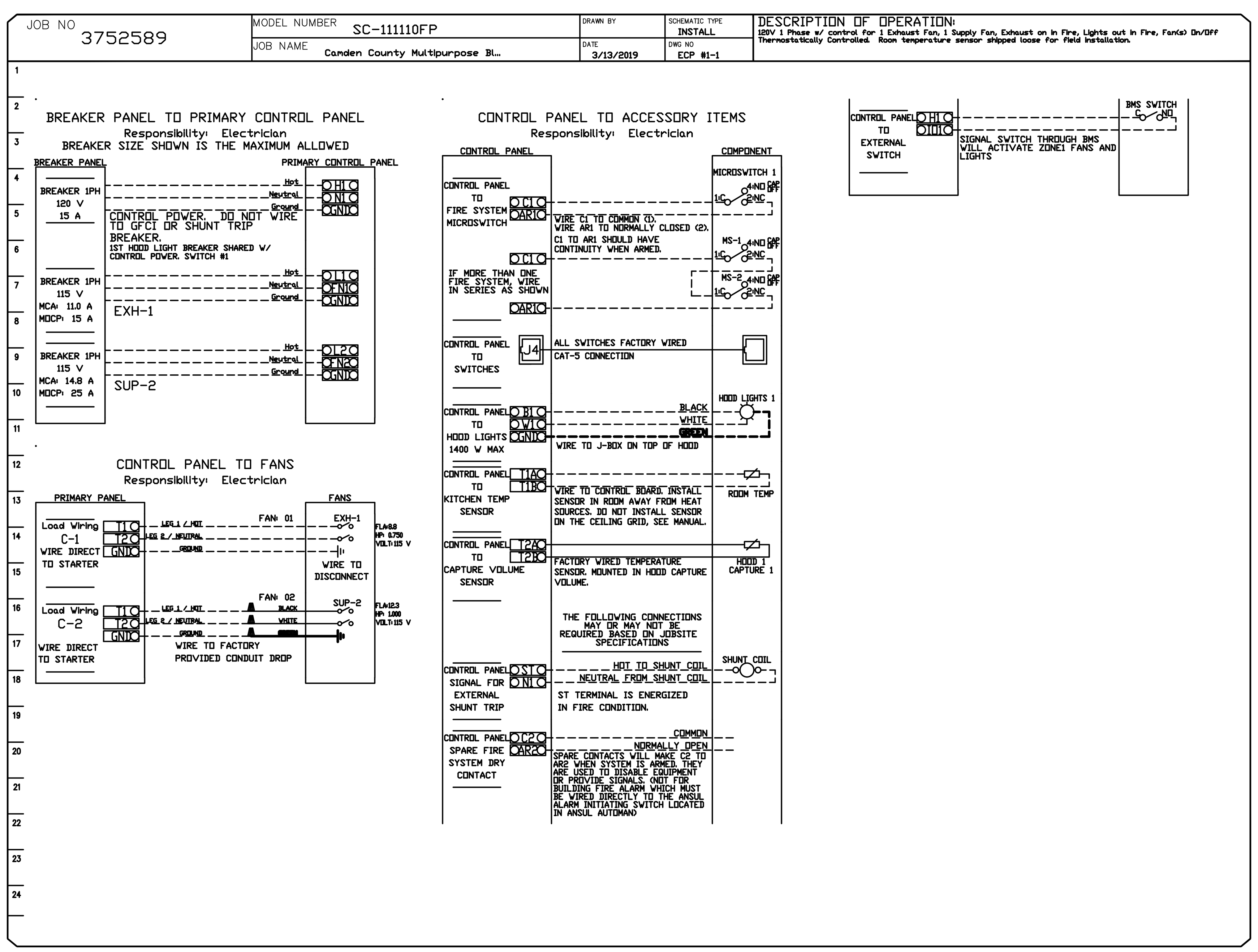
Room Override Thermostat

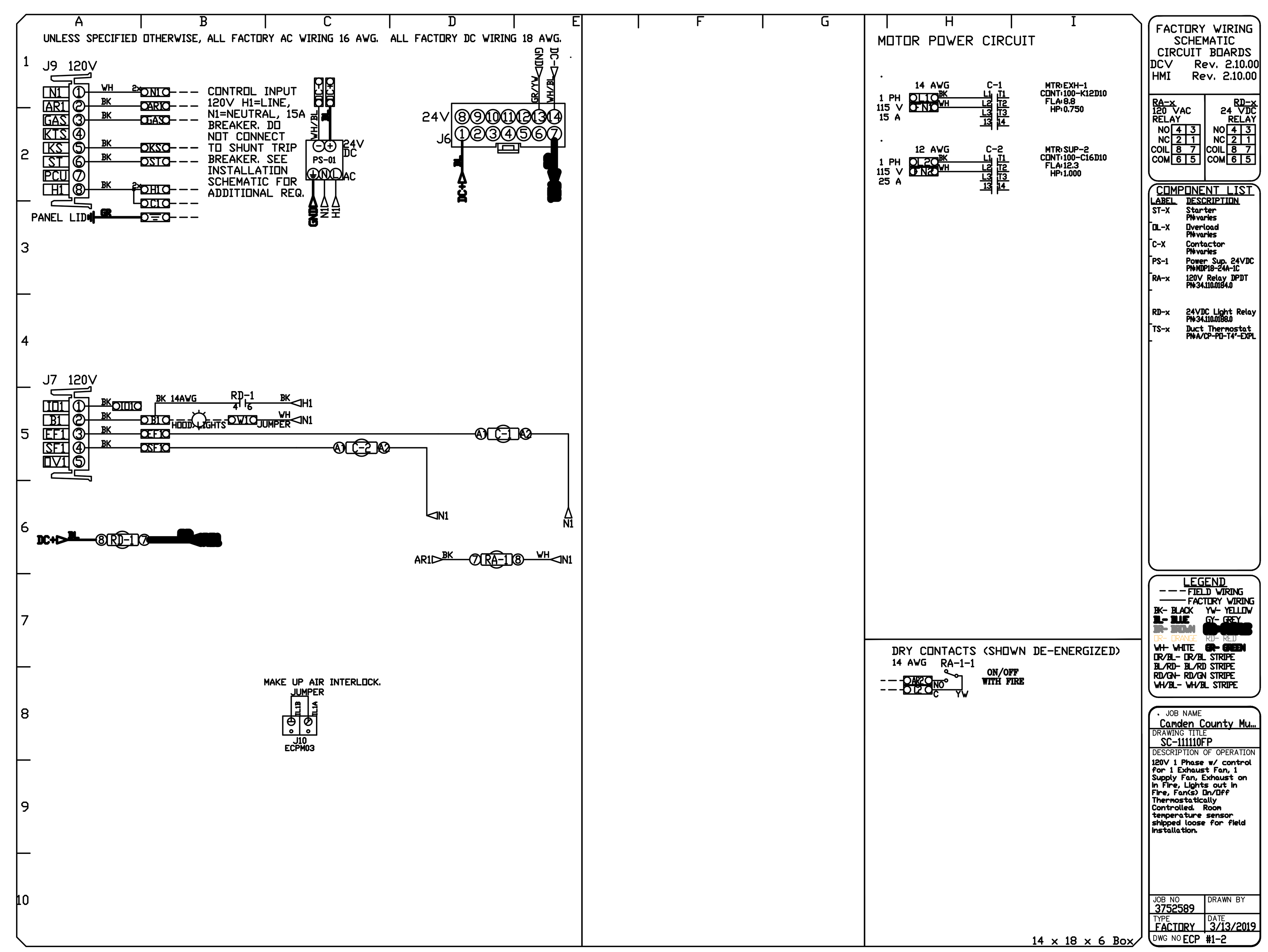


Provides room override based on temperature differential between the room and duct. Install on a wall in space but not directly under the hood or close to an appliance so the reading is accurate for space.



TOUCH SCREEN INTERFACE





ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Email@OneAnchor.com
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
P: 856.547.6414 | F: 856.547.6416

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: AS NOTED

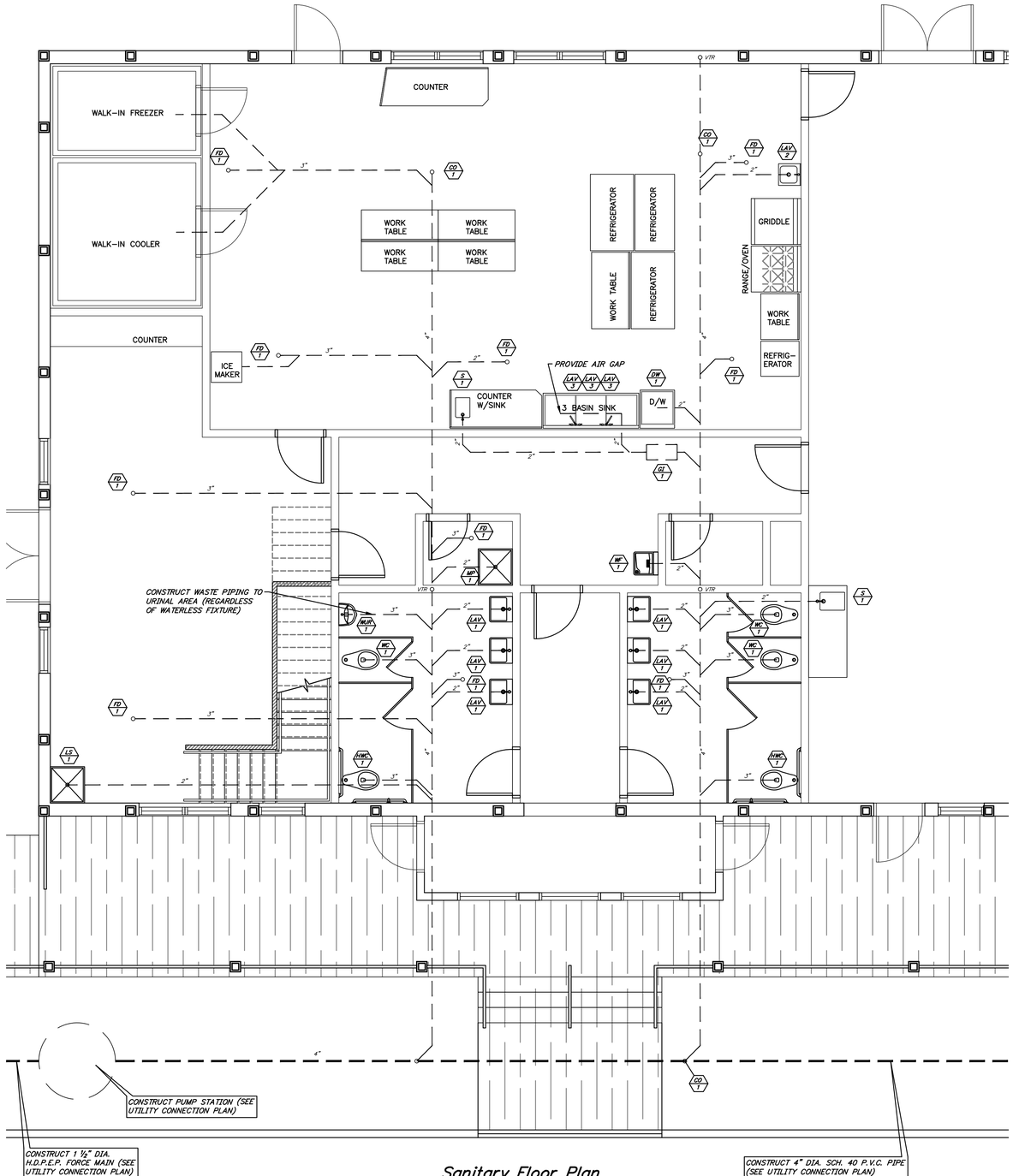
GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
NJPE No. 32853 PA PE No. 036608-E
NJ PROFESSIONAL PLANNER No. 4076
KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE
BERLIN, NEW JERSEY 08009-2309
CERTIFICATE OF AUTHORIZATION #24GA28041500

DATE

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
RESTAURANT HOOD FIRE SUPPRESSION SYSTEM DETAIL 5

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No.
Date	M-107



Sanitary Floor Plan

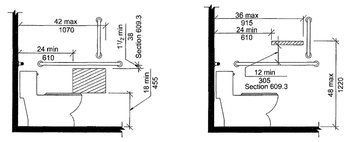
scale: 1/4" = 1'

General Notes – Plumbing

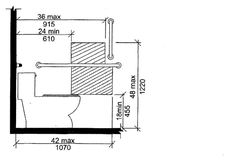
1. INSTALL PLUMBING FIXTURES NOTED AS "EQUIPPED & INSTALLED FOR HANDICAPPED USE." TO BE FULLY ACCESSIBLE TO PHYSICALLY HANDICAPPED PERSONS. COMPLY WITH AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PUBLICATION A117.1 – 2009 "ACCESSIBLE & USEABLE BUILDINGS & FACILITIES" AND/OR GOVERNING CODE.
2. CLEAN ALL LINES BEFORE INSTALLATION: INSTALL FIXTURES COMPLETE WITH ALL RELATED TRAPS, TRIM, ETC. EXPOSED PIPING TO BE CHROME–PLATED. PROVIDE STOP VALVES IN ALL WATER LINES AT EACH FIXTURE: PROVIDE VACUUM BREAKERS ON ALL FLUSH VALVES IF REQUIRED.
3. THESE DRAWINGS ARE DIAGRAMMATIC & INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS & WORK INCLUDED IN THE CONTRACT. FOR THE EXACT LOCATION & MOUNTING HEIGHT OF FIXTURES REFER TO FLOOR PLANS OR MANUFACTURER'S SPECIFICATIONS.
4. PLUMBING CONTRACTOR SHALL VERIFY ALL INVERTS PRIOR TO THE INSTALLATION OF WORK.
5. WASTE PIPING SHALL BE SCHEDULE 40 PVC WITH WELDED JOINTS. DOMESTIC PIPING SHALL BE COPPER.
6. ALL HOT & COLD WATER LINES SHALL BE INSTALLED WITH 1" FIBERGLASS WITH ALL SERVICE JACKET. ALL WATER LINES SHALL BE INSULATED.
7. ALL PIPING RUNS SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES PRIOR TO THE INSTALLATION OF SAME.
8. PROVIDE STOP VALVES ON ALL WATER SUPPLY BRANCHES TO ALL FIXTURES.
9. PLUMBING CONTRACTOR SHALL PROVIDE FINAL CONNECTIONS TO ALL EQUIPMENT REQUIRING PLUMBING CONNECTION
10. ALL PLUMBING WORK SHALL COMPLY WITH THE 2015 INTERNATIONAL PLUMBING CODE AND ALL APPLICABLE LOCAL, STATE & HEALTH CODES, & NATIONAL PLUMBING CODE. ALL MATERIALS, SANITARY PIPING, VENTS, AS APPROVED BY LOCAL AUTHORITIES.
11. DOMESTIC WATER PIPING SHALL BE LOCATED ABOVE SUSPENDED CEILING BUT BELOW ATTIC CEILING.
12. HOT WATER PIPING SHALL BE PROVIDED WITH A 1/2" DIA. RETURN LINE AND PUMP.

Plumbing Fixture Schedule

FIXTURE	MANUFACTURER SERIES NUMBER	WATER CLOSET AND URINAL					ACCESSORIES AND FEATURES
		BOWL TYPE	OUTLET	FLUSH VALVE	SEAT	CARRIER	
WC 1 / WHC 1	AMERICAN STANDARD CADET MODEL 2467.016	FLOOR MOUNTED ELONGATED	FLOOR	N/A	CENTOCO 5505TSCC W/COVER	N/A	EQUIPMENT & INSTALLATION FOR HANDICAPPED USE WHERE SHOWN 1.6 GPF W.C.
UR 1	SLOAN WES–4000	WATER FREE	N/A	N/A	N/A	N/A	EQUIPPED & INSTALLED FOR HANDICAPPED USE. AT A MAX OF 17 IN. A.F.F. AS SHOWN
FIXTURE	MANUFACTURER SERIES NUMBER	SINK / LAVATORY					ACCESSORIES AND FEATURES
		BOWL TYPE	FAUCET	SUPPLY PIPE	TRAP	CARRIER	
LAV 1	AMERICAN STANDARD 9141.011.020	14" x 14" x 4–1/2" CHINA	AMER. STAND. 7500.160.002	FLEX w/ KEY ANGLE STOP	CHROME PLATED BRASS	N/A	EQUIPMENT & INSTALLATION FOR HANDICAPPED USE. PROVIDE PIPE INSULATION JACKET
LAV 2	ADVANCE TABCO FE–1–1620–X	16" X 20" BOWL ONE TUB SINK	REGENCY WALL MOUNT FAUCET W/8" CENTERS	1/2", 1/2"	CHROME PLATED BRASS	N/A	
S 1	AMERICAN STANDARD 2258625223.3C	STAINLESS STEEL DROP IN	AMER. STAND. 4275551F15	1/2", 1/2"	N/A	N/A	
MP 1	FIAT PRODUCTS MODEL MSBIDTG	24" x 24" x 10"	COMMERCIAL 2 HANDLE WALL MT #830AA	1/2", 1/2"	3"		COMES WITH FAUCET, HOSE AND MOP HANGER
LS 1	ADVANCE TABCO 4–41–24–X	STAINLESS STEEL ONE COMPARTMENT SINK	T&S B–0231 WALL MOUNTED PANTRY FAUCET	1/2", 1/2"	CHROME PLATED BRASS		
FIXTURE	MANUFACTURER SERIES NUMBER	FLOOR DRAIN / STRAINER					ACCESSORIES AND FEATURES
		MATERIAL	TYPE	INLET	OUTLET	FREE AREA	
FD 1	WATTS DRAINAGE FD–100–A	EPOXY COATED CAST IRON	ROUND STRAINER	5"	2"	8 SQ. IN.	NICKEL BRONZE STRAINER, SEEPAGE OPENINGS, PROVIDE TRAP PRIMER FOR EACH FLOOR DRAIN (1/2" C.W.)
FIXTURE	MANUFACTURER SERIES NUMBER	CLEAN OUT					ACCESSORIES AND FEATURES
		MATERIAL	SIZE				
CO 1	WATTS DRAINAGE CO–200–R	EPOXY COATED CAST IRON	4"				5–1/8" ROUND ADJUSTABLE NICKEL BRONZE TOP AND NO HUB CONNECTION. MOUNT FLUSH w/ FLOOR.
FIXTURE	MANUFACTURER SERIES NUMBER	DISHWASHER					ACCESSORIES AND FEATURES
		MATERIAL					
DW 1	FAGOR (TO BE SELECTED BY OWNER)	STAINLESS STEEL					
FIXTURE	MANUFACTURER SERIES NUMBER	WATER FOUNTAIN					ACCESSORIES AND FEATURES
		MATERIAL					
WF 1	ELKAY MODEL LZSTL8WSSK	STAINLESS STEEL					INCLUDES WATER COOLER (LZSTL8WSSC), BOTTLE FILLER (LZWSR) AND FILTER
FIXTURE	MANUFACTURER SERIES NUMBER	GREASE INTERCEPTOR					ACCESSORIES AND FEATURES
		MATERIAL					
GI 1	SCHIER MODEL GBT	POLYETHYLENE					



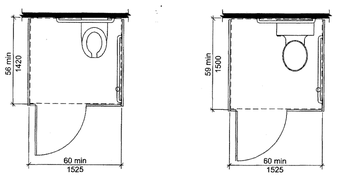
(a) Protruding Dispenser Below Grab Bar (b) Protruding Dispenser Above Grab Bar



(c) Recessed Dispenser

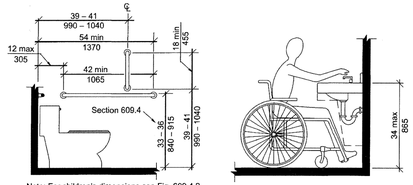
Note: For children's dimensions see Fig. 604.11.7 dispenser outlet location

FIG. 604.7
DISPENSER OUTLET LOCATION



(a) Wall-Hung Water Closet – Adult (b) Floor-Mounted Water Closet – Adult Wall-Hung and Floor-Mounted Water Closet – Children

FIG. 604.9.2
WHEELCHAIR ACCESSIBLE TOILET COMPARTMENTS

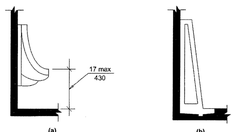


Note: For children's dimensions see Fig. 609.4.2

FIG. 604.5.1
SIDE WALL GRAB BAR FOR WATER CLOSET

FIG. 606.3
HEIGHT OF LAVATORIES AND SINKS

depth measured from the outer face of the urinal rim to the wall.



(a) Wall Hung Type (b) Stall Type

FIG. 605.2
HEIGHT OF URINALS

Accessible Bathroom Accessory Details

(taken from ICC A117.1–2009)
Not To Scale

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
P: 856.547.6414 | F: 856.547.6416
Email@OneAnchor.com

DATE: 06/10/19 | PROJECT No. 16–54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: 1/4" = 1'

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
N.J.P.E. No. 32853
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KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE
BERLIN, NEW JERSEY 08009–2399
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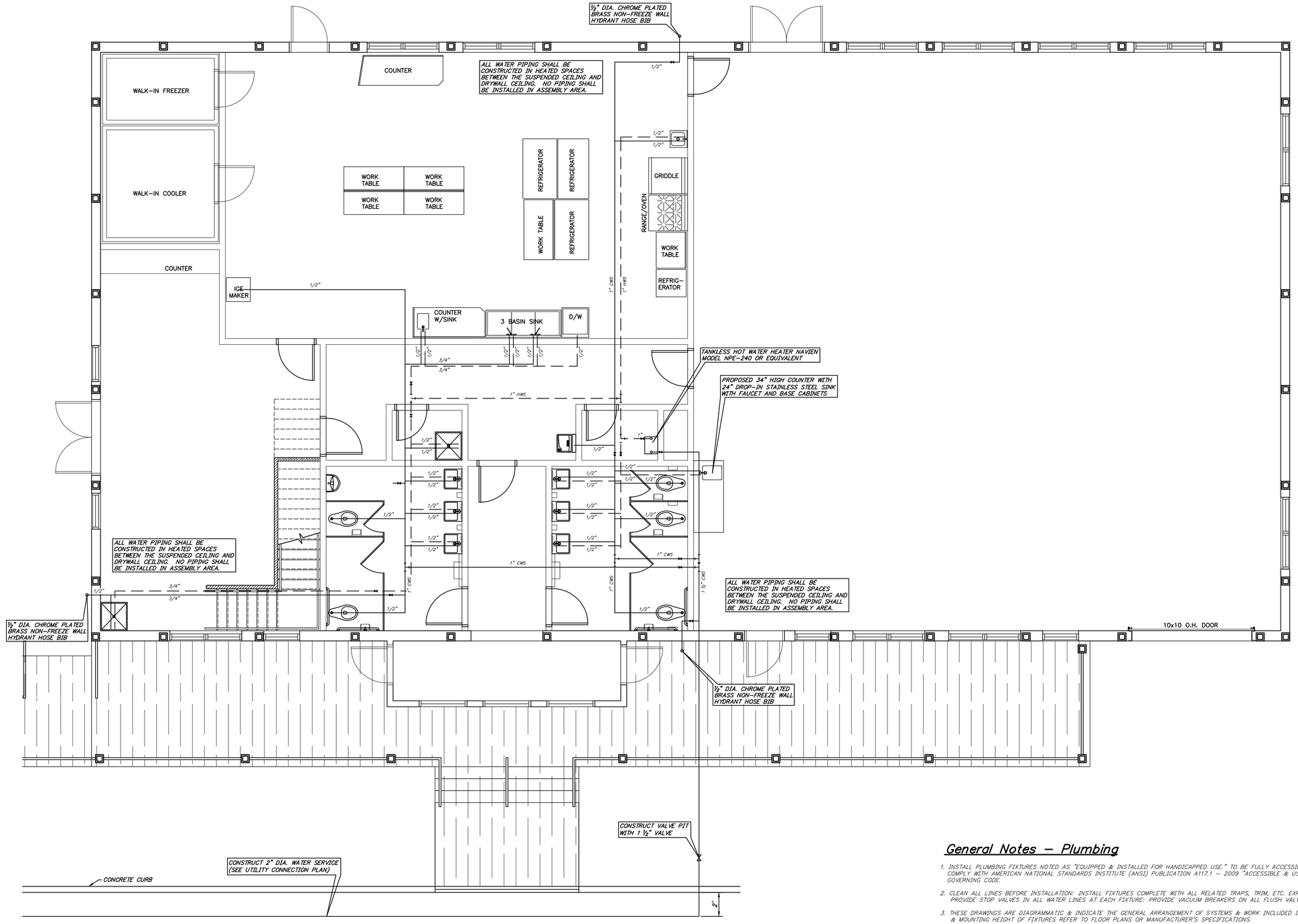
phone: (856) 767–4111
fax: (856) 753–1091
www.keyengineers.com

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012–0088

Drawing Title
SANITARY WASTE FLOOR PLAN

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. P-101
Date	



Domestic Water Floor Plan

scale: 1/4" = 1'

General Notes – Plumbing

1. INSTALL PLUMBING FIXTURES NOTED AS "EQUIPPED & INSTALLED FOR HANDICAPPED USE." TO BE FULLY ACCESSIBLE TO PHYSICALLY HANDICAPPED PERSONS. COMPLY WITH AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PUBLICATION A117.1 – 2009 "ACCESSIBLE & USEABLE BUILDINGS & FACILITIES" AND/OR GOVERNING CODE.
2. CLEAN ALL LINES BEFORE INSTALLATION: INSTALL FIXTURES COMPLETE WITH ALL RELATED TRAPS, TRIM, ETC. EXPOSED PIPING TO BE CHROME-PLATED. PROVIDE STOP VALVES IN ALL WATER LINES AT EACH FIXTURE: PROVIDE VACUUM BREAKERS ON ALL FLUSH VALVES IF REQUIRED.
3. THESE DRAWINGS ARE DIAGRAMMATIC & INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS & WORK INCLUDED IN THE CONTRACT. FOR THE EXACT LOCATION & MOUNTING HEIGHT OF FIXTURES REFER TO FLOOR PLANS OR MANUFACTURER'S SPECIFICATIONS.
4. PLUMBING CONTRACTOR SHALL VERIFY ALL INVERTS PRIOR TO THE INSTALLATION OF WORK.
5. WASTE PIPING SHALL BE SCHEDULE 40 PVC WITH WELDED JOINTS. DOMESTIC PIPING SHALL BE COPPER.
6. ALL HOT & COLD WATER LINES SHALL BE INSTALLED WITH 1" FIBERGLASS WITH ALL SERVICE JACKET. ALL WATER LINES SHALL BE INSULATED.
7. ALL PIPING RUNS SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES PRIOR TO THE INSTALLATION OF SAME.
8. PROVIDE STOP VALVES ON ALL WATER SUPPLY BRANCHES TO ALL FIXTURES.
9. PLUMBING CONTRACTOR SHALL PROVIDE FINAL CONNECTIONS TO ALL EQUIPMENT REQUIRING PLUMBING CONNECTION
10. ALL PLUMBING WORK SHALL COMPLY WITH THE 2015 INTERNATIONAL PLUMBING CODE AND ALL APPLICABLE LOCAL, STATE & HEALTH CODES, & NATIONAL PLUMBING CODE. ALL MATERIALS, SANITARY PIPING, VENTS, AS APPROVED BY LOCAL AUTHORITIES.
11. DOMESTIC WATER PIPING SHALL BE LOCATED ABOVE DROP CEILING BUT BELOW ATTIC CEILING.

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
Email@OneAnchor.com
P: 856.547.6414 | F: 856.547.6416

REV.	DATE	REVISION
1.	08/10/19	REVISED FOR RE-BID PURPOSES

DRWN. T.D. | CHKD. G.B.F.
BY: G.B.F. | SCALE: 1/4" = 1'

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
NJPE No. 32853
PA-PE No. 036608-E
NJ PROFESSIONAL PLANNER No. 4076

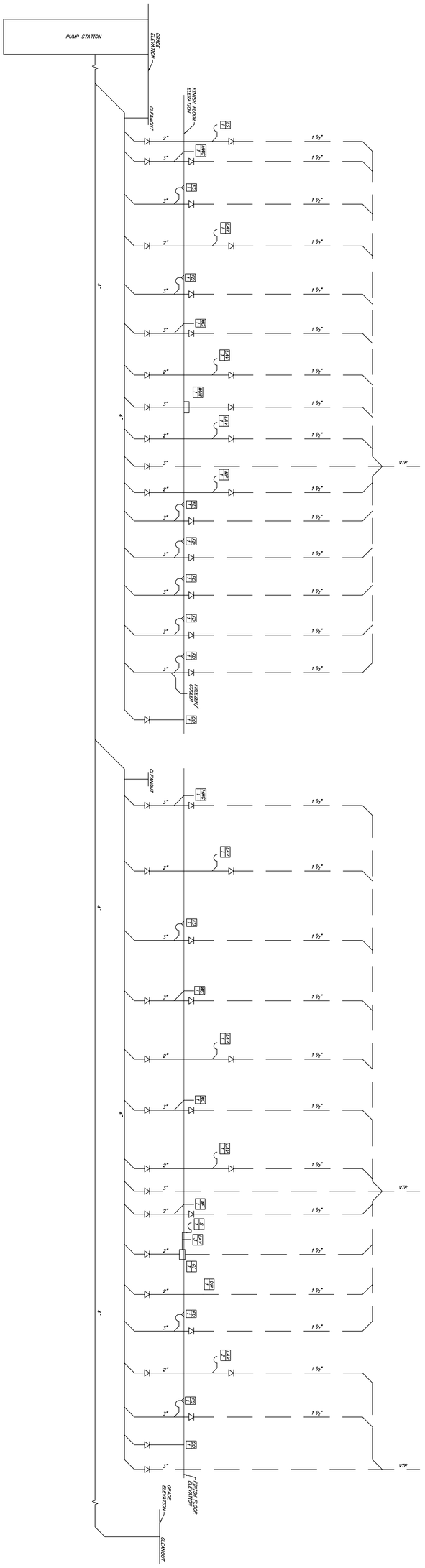
DATE _____

KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE
BERLIN, NEW JERSEY 08009-2399
CERTIFICATE OF AUTHORIZATION #24GA28041300
phone: (856) 767-4111
fax: (856) 753-1081
www.keyengineers.com

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
DOMESTIC PIPING FLOOR PLAN

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. P-102
Date	



Scale

Drawn

Checked

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CAD File

Contract No. 18869

Drawing No. P-103

3 of 3

Project Title

CAMDEN COUNTY

CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING

508 LAKELAND ROAD

BLACKWOOD, NEW JERSEY 08012-0088

SANITARY RISER DIAGRAM

Drawing Title

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: N.T.S.

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
NJPE No. 32853 PA.PE No. 036608-E
NJ PROFESSIONAL PLANNER No. 4076

KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE
BERLIN, NEW JERSEY 08009-2399
CERTIFICATE OF AUTHORIZATION #24GA28041350
phone:(856) 767-6111
fax:(856) 753-1091
www.keyengineers.com

DATE

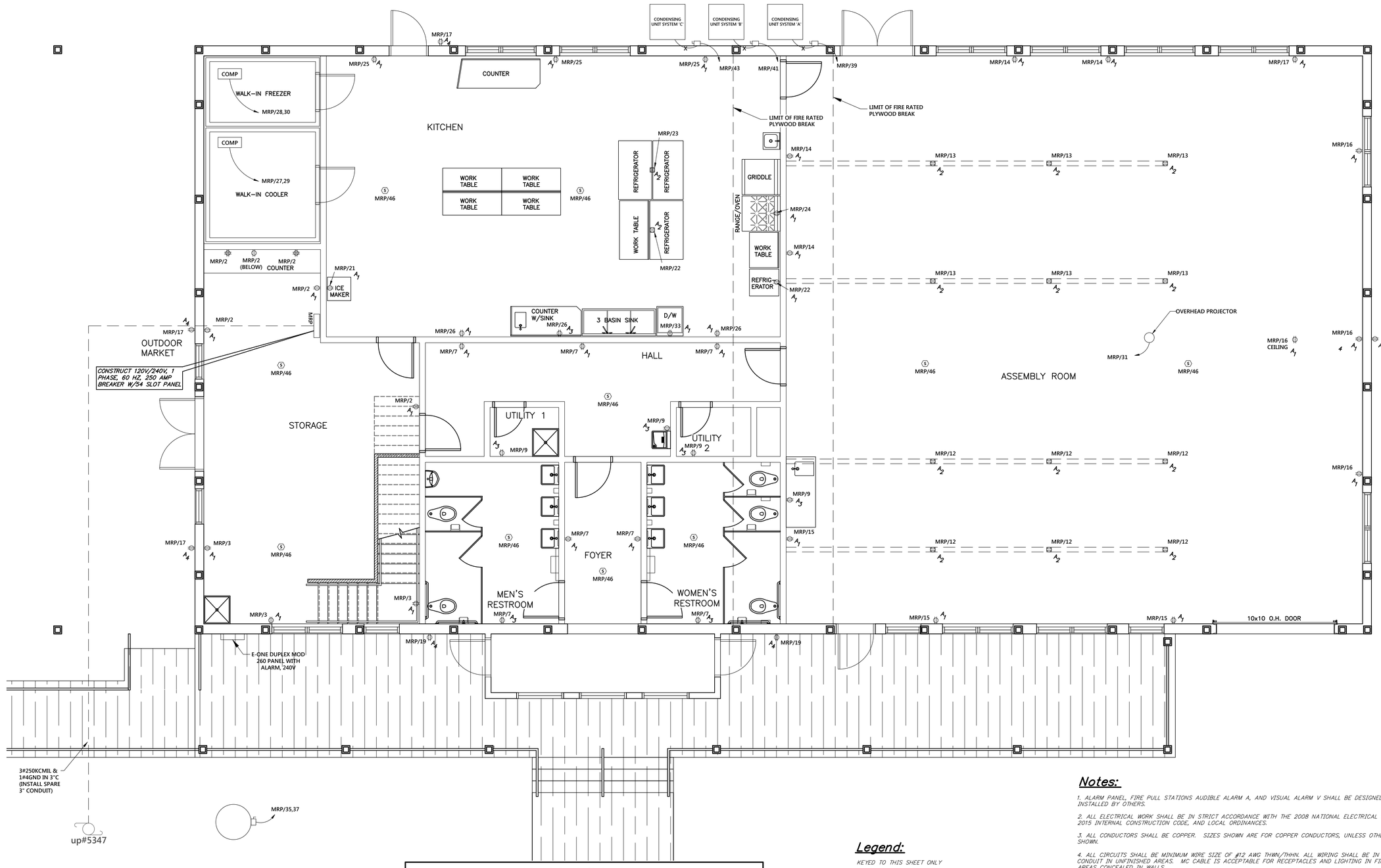
ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper

Main Office
523 S. White Horse Pike
Audubon, NJ 08106

Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540

Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103

Email@OneAnchor.com
P: 856.547.6414 | F: 856.547.6416



Electrical Schedule

KEY	MANUFACTURER	CATALOG NO.	DESCRIPTION	MOUNTING
A_1	LEVITON	T5825-W	DECORA 20-AMP TAMPER-RESISTANT DUPEX OUTLET OUTLET - WHITE	STANDARD WALL MOUNT
A_2	LEVITON		20-AMP COMMERCIAL GRADE SELF GROUNDING DUPEX OUTLET WITH FLOOR BOX FOR CONCRETE FLOOR CONSTRUCTION	FLOOR MOUNT
A_3	LEVITON	GFTR2-W	SMARTLOCK PRO 20 AMP SLIM TAMPER RESISTANT GFCI DUPLEX OUTLET - WHITE	STANDARD WALL MOUNT
A_4	LEVITON	GFWT2-W WM1V-GY	SMARTLOCK PRO 20 AMP SLIM WEATHER & TAMPER RESISTANT GFCI DUPLEX OUTLET - WHITE W/WEATHERPROOF COVER	STANDARD WALL MOUNT

* ALL MANUFACTURERS SPECIFIED ARE "OR EQUIVALENT"

Legend:

KEYED TO THIS SHEET ONLY

- A_1 — 20 AMP QUAD RECEPTACLE ABOVE COUNTER
- A_1 — 20 AMP RECEPTACLE
- A_2 — FLOOR MOUNTED 20 AMP RECEPTACLE
- A_3 — 20 AMP G.F.I. RECEPTACLE
- A_4 — 20 AMP G.F.I. RECEPTACLE W/WEATHERPROOF COVER
- AH — SINGLE PHASE GROUND MOUNTED AIR HANDLER
- ===== — ¾" DIA PVC CONDUIT FOR UNDER SLAB RECEPTACLE 1" DIA PVC CONDUIT FOR SPARE
- (S) — SMOKE DETECTOR, KIDDE 3 IN 1 LED STROBE AND CARBON MONOXIDE DETECTOR WITH 10 YEAR BATTERY 120 VOLT HARD WIRED SYSTEM BY CONTRACTOR

Notes:

1. ALARM PANEL, FIRE PULL STATIONS AUDIBLE ALARM A, AND VISUAL ALARM V SHALL BE DESIGNED AND INSTALLED BY OTHERS.
2. ALL ELECTRICAL WORK SHALL BE IN STRICT ACCORDANCE WITH THE 2008 NATIONAL ELECTRICAL CODE, THE 2015 INTERNAL CONSTRUCTION CODE, AND LOCAL ORDINANCES.
3. ALL CONDUCTORS SHALL BE COPPER. SIZES SHOWN ARE FOR COPPER CONDUCTORS, UNLESS OTHERWISE SHOWN.
4. ALL CIRCUITS SHALL BE MINIMUM WIRE SIZE OF #12 AWG THWN/THHN. ALL WIRING SHALL BE IN METAL CONDUIT IN UNFINISHED AREAS. MC CABLE IS ACCEPTABLE FOR RECEPTACLES AND LIGHTING IN FINISHED AREAS CONCEALED IN WALLS.
5. NO MORE THAN 6 RECEPTACLES SHALL BE WIRED TO A 20 AMP CIRCUIT BREAKER IN THE MAIN PANEL. MINIMUM CIRCUIT BREAKER SIZE SHALL BE 20 AMP.
6. ELECTRICAL CONTRACTOR SHALL INSTALL AND CONNECT POWER WIRING TO EQUIPMENT FURNISHED BY OTHERS AND SHALL WIRE LINE VOLTAGE THERMOSTATS FOR MECHANICAL EQUIPMENT AND LINE SIDE OF ALL STARTERS, RELAYS, AND CONTRACTORS FOR MECHANICAL EQUIPMENT.
7. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECT SWITCHES AS REQUIRED BY CODE WHETHER OR NOT THEY ARE INDICATED ON PLANS.
8. ELECTRICAL CONTRACTOR SHALL BALANCE THE LOADS IN EACH PANEL TO PROVIDE THE MOST EVEN DISTRIBUTION PRACTICAL.
9. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO BEGINNING WORK.
10. ELECTRICAL CONTRACTOR SHALL WIRE ALL EMERGENCY EXIT SIGNS AND EGRESS LIGHTS) AHEAD OF ALL SWITCHES IN THAT CIRCUIT SO AS NOT TO BE SWITCHED WITH LIGHTS. EMERGENCY LIGHT PACKS SHALL BE WIRED TO THE LIGHTING CIRCUITS.
11. THESE DRAWINGS ARE DIAGRAMATIC AND INDICATE GENERAL SCOPE OF WORK. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND MOUNTING HEIGHT OF FIXTURES, SWITCHES, RECEPTACLES, ETC. AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE APPROPRIATE CODE AND THE MANUFACTURERS INSTRUCTIONS.

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office
523 S. White Horse Pike
Audubon, NJ 08106
Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540
Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103
Email@OneAnchor.com
P: 856.547.6414 | F: 856.547.6416

REV	DATE	REVISION
1	08/10/19	REVISED FOR RE-BID PURPOSES
	09/23/19	

DRWN. T.D. | CHKD. G.B.F. | SCALE: 1/4" = 1'
DWG. BY: G.B.F. | CHKD. BY: T.D. | DRAWN BY: T.D. | PROJECT No. 16-54

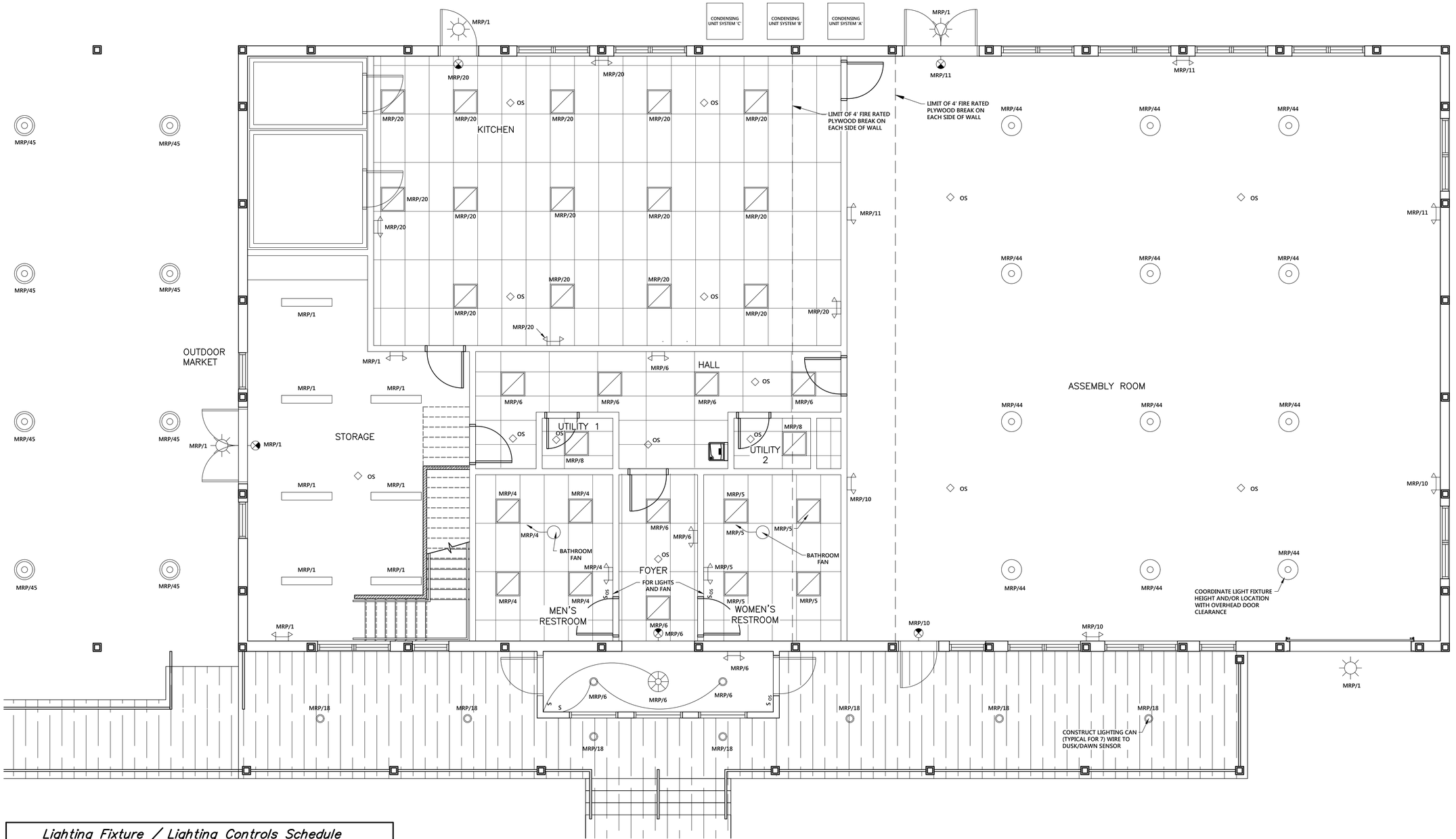
GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
PA.PE No. 036608-E
N.PE No. 32853 NJ PROFESSIONAL PLANNER No. 4076
KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE, BERLIN, NEW JERSEY 08009-2399
CERTIFICATE OF AUTHORIZATION #24GA28041300
phone (856) 767-4111 fax (856) 753-1091 www.keyengineers.com

DATE

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
ELECTRICAL POWER FLOOR PLAN

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. E-101
Date	



Lighting Fixture / Lighting Controls Schedule

KEY	MANUFACTURER	CATALOG NO.	DESCRIPTION	MOUNTING
▭	LITHONIA LIGHTING	2GTL2-33L-GZ10-LPB35	2' X 2' LED TROFFER	CEILING
○	BROAN	L400	400 CFM BATH FAN WITH CEILING GRILL	CEILING (REQUIRES 10" DIA. DUCT TO ROOF W/ROOF CAP)
▭	LITHONIA LIGHTING	GRD-LSL-8-80CR-5K-D-000LMF-0/80-MIN10-ZT-20V-SLT-F1-3CA-C110	4' LONG INDUSTRIAL LIGHT FIXTURE	CEILING (CHAIN HUNG)
⊏▭⊐	COOPER LIGHTING	PC2-10	POLY CARBONATE EMERGENCY LIGHT	WALL MOUNT (above door)
⊛	COOPER LIGHTING	PC4-RU	COMBINATION EMERGENCY / EXIT LIGHT	CEILING/WALL (above doors as shown)
S_{OS}	LEVITON	ODS10-I0W	WALL SWITCH OCCUPANCY SENSOR WITH 0-10V DIMMER	STANDARD WALL MOUNT
◇ OS	LEVITON	ODC10-MDW	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR	STANDARD CEILING MOUNT

KEY	MANUFACTURER	CATALOG NO.	DESCRIPTION	MOUNTING
✳	LEDS-C4	00-5297-Z5-23U	SUGAR PENDANT	CEILING
○	GE	LPS SERIES	LED ILLUMINATION PENDANT SUSPENDED W/MOONGLOW ACRYLIC REFRACTOR	CEILING
◎	INNERMOST	FOUNDRY 50, 02-BLACK	LED PENDANT SUSPENDED	CEILING
✳	SUNPARK	W2800, 30-FINISH	LED WALL SCONCE WITH DUSK/DAWN SENSOR	STANDARD WALL MOUNT
S	LEVITON		20 AMP SINGLE POLE TOGGLE WALL SWITCH	STANDARD WALL MOUNT
◯	HALO	H750 FOR WET LOCATION	INSULATED CEILING LED RECESSED HOUSING WITH 6" TRIM	CEILING

* ALL MANUFACTURERS SPECIFIED ARE "OR EQUIVALENT"

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Philadelphia 1700 Market St., Ste. 1005 Philadelphia, PA 19103
Princeton 300 Carnegie Center, Ste. 150 Princeton, NJ 08540
Main Office 523 S. White Horse Pike Audubon, NJ 08106
P: 856.547.6414 | F: 856.547.6416
Email@OneAnchor.com

GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
NJPE No. 32853 NJ PROFESSIONAL PLANNER No. 4076
PA.PE No. 036608-E

KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE BERLIN, NEW JERSEY 08009-2399
phone (856) 767-4111 fax (856) 753-1069
CERTIFICATE OF AUTHORIZATION #24GA28041300

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: TD | CHKD. BY: G.B.F. | SCALE: 1/4" = 1'

DATE _____

Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title
ELECTRICAL LIGHTING FLOOR PLAN

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. E-102
Date	

SECTION 1 - GENERAL REQUIREMENTS

1. GENERAL:
   1.1. ELECTRICAL EQUIPMENT, DEVICES, AND CONDUIT ROUTINGS ARE SHOWN ON DRAWINGS TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY AND MAY NOT INDICATE ALL EQUIPMENT AND DEVICES REQUIRED FOR A COMPLETE SYSTEM. THE ELECTRICAL CONTRACTOR (EC) SHALL PROVIDE ALL REQUIRED ELECTRICAL EQUIPMENT, DEVICES, WIRE, AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE INSTALLATION OF ELECTRICAL SYSTEMS WITH BUILDING STRUCTURE AND OTHER UTILITIES IN FIELD.
   1.2. CONTRACTORS BIDDING ON THE PROJECT SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH ALL JOB CONDITIONS PRIOR TO SUBMITTING BID. NO EXTRA COMPENSATION SHALL BE PAID FOR EXTRA WORK MADE NECESSARY BY THE CONTRACTOR'S FAILURE TO DO SO. ALL WORK REQUIRED TO ACCOMMODATE EXISTING CONDITIONS, WHETHER SHOWN ON CONTRACT DRAWINGS OR NOT, SHALL BE COORDINATED AND ALL COSTS TO DO SO SHALL BE INCLUDED IN THE BIDS. CONTRACTOR SHALL PAY EXTRA ATTENTION TO EXISTING CONDITIONS AFFECTING REMOVAL OF EXISTING EQUIPMENT AND THE ENTRANCE OF NEW EQUIPMENT.
   1.3. COORDINATE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES SO AS TO MINIMIZE INTERFERENCES AND TO MINIMIZE INTERRUPTION OF SERVICE IN ANY AREA.
   1.4. CONTRACTOR, UPON COMPLETION OF EACH DAYS WORK, SHALL REMOVE ALL TOOLS, MATERIALS, APPARATUS AND RUBBISH OF ANY SORT. PREMISES SHALL BE KEPT NEAT AND ORDERLY AND IN A "BROOM CLEAN" CONDITION.
   1.5. CUTTING SHALL BE DONE BY THIS CONTRACTOR AS REQUIRED FOR THE INSTALLATION OF ELECTRICAL WORK. CUTTING SHALL BE DONE BY COMPETENT MECHANICS. SURFACES SHALL BE PATCHED AND REFINISHED TO MATCH ORIGINAL SURFACE CONDITION.
   1.6. WORK SHALL NOT BE COVERED OR CONCEALED UNTIL IT HAS BEEN INSPECTED, TESTED AND APPROVED. ANY WORK THAT IS COVERED OR CONCEALED PRIOR TO INSPECTION AND TESTING SHALL BE UNCOVERED, AND AFTER IT HAS BEEN INSPECTED, TESTED, AND APPROVED, SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
   1.7. METALLIC MATERIALS SHALL BE PROTECTED AGAINST CORROSION. EQUIPMENT ENCLOSURES SHALL BE GIVEN A RUST-INHIBITING TREATMENT AND THE STANDARD FINISH BY THE MANUFACTURER. ALUMINUM SHALL NOT BE USED IN CONTACT WITH EARTH AND, WHERE CONNECTED TO DISSIMILAR METAL, SHALL BE PROTECTED BY APPROVED FITTINGS AND TREATMENT. FERROUS METALS NOT OF CORROSION-RESISTANT STEEL SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 OR ASTM A153 EXCEPT WHERE OTHER EQUIVALENT PROTECTIVE TREATMENT IS SPECIFICALLY APPROVED IN WRITING.
2. SCOPE OF WORK:
   2.1. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTAL CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS APPLY TO THIS SPECIFICATION.
   2.2. FURNISH ALL LABOR, EQUIPMENT, MATERIALS, SERVICES, TESTING, APPURTENANCES, AND PROGRAMMING REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, MANUFACTURER'S INSTRUCTIONS, AND CODES AND REGULATIONS IN FORCE.
   2.3. PROCURE ALL PERMITS AND INSPECTIONS AND PAY FOR SAME.
   2.4. THE ELECTRICAL WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
      2.4.1. POWER DISTRIBUTION SYSTEM
      2.4.2. LIGHTING SYSTEM
3. DEFINITIONS:
   3.1. WHEREVER THE WORD "PROVIDE" APPEARS ON THE DRAWINGS OR IN THE SPECIFICATIONS, IT SHALL MEAN FURNISH AND INSTALL WITH ALL REQUIRED WORK, MATERIALS, EQUIPMENT AND APPURTENANCES.
   3.2. WHEREVER THE WORD "FURNISH" OR "CONSTRUCT" APPEARS ON THE DRAWINGS OR IN THE SPECIFICATION, IT SHALL MEAN TO PURCHASE AND DELIVER TO THE INSTALLING CONTRACTORS DEVICES, EQUIPMENT AND ACCESSORIES AS SPECIFIED.
   3.3. WHEREVER THE WORD "INSTALL" APPEARS ON THE DRAWINGS OR IN THE SPECIFICATION, IT SHALL MEAN TO RECEIVE, HANDLE, INSPECT FOR PROPER CONDITION AND INSTALL WITH ALL REQUIRED ASSOCIATED WORK MATERIALS, EQUIPMENT AND APPURTENANCES.
4. SUBMITTALS:
   4.1. SUBMIT ONE (1) ELECTRONIC COPY OF SUBMITTALS FOR EACH TYPE OF PRODUCT.
   4.2. SUBMIT PRODUCT DATA FOR EACH TYPE OF PRODUCT. INCLUDE RATED CAPACITIES, WEIGHTS, DIMENSIONS, FEATURES, REQUIRED CLEARANCES, AND PERFORMANCE FOR EACH TYPE OF PRODUCT.
   4.3. SUBMIT SHOP DRAWINGS FOR EACH TYPE OF PRODUCT. INCLUDE DETAILED DIMENSIONED OUTLINE PLANS AND ELEVATIONS, AND WIRING DIAGRAMS FOR POWER, CONTROL, AND SIGNAL WIRING. WIRING DIAGRAMS SHALL DIFFERENTIATE BETWEEN MANUFACTURER-INSTALLED AND FIELD-INSTALLED WIRING.
5. QUALITY ASSURANCE:
   5.1. INSTALLER QUALIFICATIONS: PERSONNEL WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT THE WORK INDICATED, AND WHOM IS TRAINED AND CERTIFIED BY NFPA 70E AND OSHA REGULATION 29 CFR 1910.269.
   5.2. OBTAIN EACH TYPE OF PRODUCT THROUGH ONE SOURCE FROM A SINGLE MANUFACTURER.
   5.3. SUBJECT TO COMPLIANCE WITH REQUIREMENTS; PROVIDE PRODUCTS BY ONE OF THE MANUFACTURERS LISTED IN SECTION 2 ARTICLES HEREIN. SUBSTITUTIONS WILL NOT BE PERMITTED.
   5.4. LISTED AND LABELED AS DEFINED BY NFPA 70, ARTICLE 100, BY A TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED USE. LISTING AND LABELING AGENCY SHALL BE A NATIONALLY RECOGNIZED TESTING LABORATORY AS DEFINED BY OSHA REGULATION 1910.7.
   5.5. COMPLY WITH ASHRAE 90.1.
   5.6. COMPLY WITH NFPA 70.
   5.7. COMPLY WITH NFPA 70E.
   5.8. COMPLY WITH NFPA 72.
   5.9. COMPLY WITH NFPA 101.
6. OPERATION AND MAINTENANCE DATA:
   6.1. SUBMIT TWO (2) BOUND MANUALS CONTAINING COMPLETE TYPE WRITTEN INSTRUCTIONS ON OPERATION, CARE, AND MAINTENANCE FOR EACH TYPE OF PRODUCT. INCLUDE THE FOLLOWING:
      6.1.1. MANUFACTURER'S PRODUCT DATA SHEETS.
      6.1.2. WARRANTIES.
   6.2. SUBMIT A WRITTEN WARRANTY TO OWNER AGREEING TO REPAIR OR REPLACE PRODUCTS AND ASSOCIATED COMPONENTS THAT FAIL IN MATERIALS OR WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE. WARRANTY SHALL BE COMPREHENSIVE. NO DEDUCTIBLE SHALL BE ALLOWED FOR TRAVEL TIME, SERVICE HOURS, OR REPAIR PARTS.
7. RECORD DRAWINGS:
   7.1. KEEP ONE SET OF CONTRACT DRAWINGS ASIDE AT THE SITE. MARK ALL DEVIATIONS FROM CONTRACT DRAWINGS AND ANY DATA THAT IS PERTINENT FOR COMPLETION OF DOCUMENTS. AT COMPLETION OF PROJECT, TRANSFER MARKS TO A SET OF REPRODUCIBLE DRAWINGS AND DELIVER THIS SET OF DRAWINGS TO OWNER PRIOR TO FINAL ACCEPTANCE.

SECTION 2 - PRODUCTS

1. GROUNDING:
   1.1. EQUIPMENT GROUNDING CONDUCTORS: COPPER WITH GREEN-COLORED INSULATION.
2. HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS:
   2.1. STEEL SLOTTED SUPPORT CHANNEL: HOT DIPPED GALVANIZED 12-GAUGE THICK STEEL WITH HOLES 1-1/2 INCHES ON CENTER.
   2.2. HANGER RODS: THREADED HIGH TENSILE STRENGTH GALVANIZED CARBON STEEL WITH FREE RUNNING THREADS, WITH MINIMUM 1/4 INCH DIAMETER.
   2.3. BEAM CLAMPS: MALLEABLE IRON WITH TAPERED HOLE IN BASE AND BACK TO ACCEPT EITHER BOLT OR HANGER ROD. SET SCREW SHALL BE HARDENED STEEL.
   2.4. CONDUIT CLAMPS FOR TRAPEZE HANGERS: GALVANIZED STEEL, NOTCHED TO FIT TRAPEZE WITH SINGLE BOLT TO TIGHTEN.
   2.5. CONDUIT CLAMPS: ONE-HOLE MALLEABLE IRON FOR SURFACE MOUNTED CONDUITS.
   2.6. CABLE TIES: SELF-LOCKING HIGH STRENGTH NYLON WITH 185 DEGREE F TEMPERATURE RATING.
   2.7. FIRE STOPPING: UL CLASSIFIED AND/OR FM SYSTEM APPROVED AND TESTED TO THE REQUIREMENTS OF ASTM 814 AND UL 1479.
3. CONDUCTORS AND CABLES:
   3.1. INSULATED CURRENT CARRYING WIRE AND GROUNDING CONDUCTORS SHALL BE COPPER AND SHALL CONFORM TO NFPA 70.
   3.2. COPPER CONDUCTORS: COMPLY WITH NEMA WC 70.
   3.3. CONDUCTOR INSULATION: COMPLY WITH NEMA WC 70 FOR TYPES THHN-THWN.
   3.4. MULTICONDUCTOR CABLE: COMPLY WITH NEMA WC 70 FOR METAL CLAD, TYPE MC, WITH GALVANIZED INTERLOCKING STEEL ARMOR AND GREEN INSULATED COPPER GROUND WIRE.
   3.5. CONDUCTORS NO. 10 OR SMALLER SHALL BE SOLID COPPER WIRE. CONDUCTORS NO. 8 OR LARGER SHALL BE STRANDED COPPER WIRE.
   3.6. CONDUCTORS NOT SMALLER THAN 12 AWG FOR POWER CIRCUITS. CONDUCTORS NOT SMALLER THAN 14 AWG FOR CONTROL CIRCUITS.
   3.7. CONDUCTOR AND CABLE METHODS SHALL CONFORM TO THE FOLLOWING:
      3.7.1. BRANCH CIRCUITS: TYPE THHN/THWN, SINGLE CONDUCTORS IN RACEWAY.
      3.7.2. CONNECTION TO LIGHTING FIXTURES: METAL CLAD CABLE, TYPE MC, MAXIMUM LENGTH 6 FEET 0 INCHES.
4. RACEWAYS AND BOXES:
   4.1. RIGID STEEL CONDUIT: ANSI C80.1.
   4.2. ELECTRICAL METALLIC TUBING: ANSI C80.3.
   4.3. FLEXIBLE METALLIC CONDUIT: INTERLOCKED GALVANIZED STEEL.
   4.4. FITTINGS FOR CONDUIT: NEMA FB 1.
      4.4.1. EMT FITTINGS: STEEL COMPRESSION FOR 2 INCH AND SMALLER. STEEL SET-SCREW FOR 2-1/2 INCH AND LARGER. DIE-CAST NOT PERMITTED.
   4.5. SHEET METAL OUTLET AND DEVICE BOXES: NEMA OS 1.
   4.6. SHEET METAL PULL AND JUNCTION BOXES: NEMA OS 1.
   4.7. SLEEVES FOR RACEWAYS: ASTM A 53/A 53M, TYPE E, GRADE B, SCHEDULE 40, GALVANIZED STEEL, PLANE ENDS.
   4.8. RACEWAY AND BOX METHODS SHALL CONFORM TO THE FOLLOWING:
      4.8.1. INTERIOR LOCATIONS: EMT.
      4.8.2. INTERIOR BOXES: NEMA 250, TYPE 1.
      4.8.3. BOXES AND ENCLOSURES: NEMA 250, TYPE 1, EXCEPT USE NEMA 250.
      4.8.4. MINIMUM RACEWAY SIZE: 3/4-INCH TRADE SIZE.
5. WIRING DEVICES:
   5.1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
      5.1.1. HUBBELL, INC. WIRING DEVICES-KELLEMS.
      5.1.2. LEVITON MFG. COMPANY INC.
      5.1.3. PASS & SEYMOUR/LEGRAND.
   5.2. SWITCHES: HEAVY DUTY SPECIFICATION GRADE, RATED 120/277VAC, 20 AMP.
   5.3. DUPLEX RECEPTACLES: HEAVY-DUTY SPECIFICATION GRADE RATED 120VAC, 20 AMPS, NEMA 5-20R.
   5.4. GFCI RECEPTACLES: HEAVY -DUTY SPECIFICATION GRADE, FEED-THROUGH TYPE, DUPLEX RECEPTACLES.
   5.5. FINISH: GRAY PLASTIC.
   5.6. COVER PLATES: ONE PIECE TO SUIT WIRING DEVICES INSTALLED.
      5.6.1. FINISHED AREAS: STAINLESS STEEL WITH SMOOTH SATIN FINISH.
      5.6.2. UNFINISHED AREAS: GALVANIZED STEEL.
6. LIGHTING FIXTURES:
   6.1. LIGHTING FIXTURES: PROVIDE PRODUCT INDICATED ON DRAWINGS OR COMPARABLE PRODUCT BY ONE OF THE ALTERNATE MANUFACTURES.
   6.2. EXIT SIGNS: COMPLY WITH EPA ENERGY-STAR REQUIREMENTS FOR ENERGY CONSUMPTION.

SECTION 3 - EXECUTION

1. GROUNDING:
   1.1. GROUNDING SHALL BE IN ACCORDANCE WITH NFPA 70.
   1.2. THE NON-CURRENT CARRYING PARTS OF ALL ELECTRICAL EQUIPMENT SHALL BE GROUNDED TO THE EQUIPMENT GROUND SERVING THIS EQUIPMENT.
   1.3. INSTALL A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN CONDUITS WITH ALL BRANCH CIRCUITS AND FEEDERS. SIZE EQUIPMENT GROUNDING CONDUCTORS IN ACCORDANCE WITH NFPA 70. TERMINATE EACH END ON SUITABLE LUG, BUS, OR BUSHING.
   1.4. INSTALL SOLID CONDUCTORS FOR NO. 10 AWG AND SMALLER, AND STRANDED FOR NO. 8 AND LARGER.
2. HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
   2.1. SELECT SIZES OF COMPONENTS SO STRENGTH WILL BE ADEQUATE TO CARRY PRESENT AND FUTURE STATIC LOADS WITHIN SPECIFIED LOADING LIMITS. MINIMUM STATIC DESIGN LOAD USED FOR STRENGTH DETERMINATION SHALL BE WEIGHT OF SUPPORTED COMPONENTS PLUS 200 LBS.
3. CONDUCTORS AND CABLES:
   3.1. INSTALL SEPARATE NEUTRAL CONDUCTOR WITH EACH 120V AND 277V BRANCH CIRCUIT. SHARED NEUTRALS ARE NOT PERMITTED.
   3.2. CONDUITS SHALL BE COMPLETELY INSTALLED, WITH INTERIORS PROTECTED FROM WEATHER, BEFORE PROCEEDING WITH THE INSTALLATION OF CONDUCTORS AND CABLES.
   3.3. CONDUCTORS SHALL BE CONTINUOUS WITH SPLICES AND CONNECTIONS ONLY MADE IN OUTLET, JUNCTION, OR PULL BOXES.
   3.4. PHASE CONDUCTORS AND THE NEUTRAL CONDUCTOR OF EACH FEEDER OR BRANCH CIRCUIT SHALL BE CONTAINED IN A SINGLE CONDUIT OR PARALLELED IN SEPARATE CONDUITS TO AVOID OVERHEATING THE CONDUIT BY INDUCTION.
   3.5. SPLICES IN CONDUCTORS NO. 8 AND SMALLER SHALL BE MADE WITH INSULATED SPRING WIRE, CONNECTORS WITH PLASTIC CAPS, OR WITH CRIMP TYPE CONNECTORS AND COMPRESSION TOOLS TO ENSURE A SATISFACTORY MECHANICAL AND ELECTRICAL JOINT.
   3.6. SPLICES IN CONDUCTORS NO. 6 AND LARGER SHALL BE MADE WITH CRIMP-TYPE CONNECTORS AND COMPRESSION TOOLS OR WITH BOLTED CLAMP-TYPE CONNECTORS TO ENSURE A SATISFACTORY MECHANICAL AND ELECTRICAL JOINT.
   3.7. SPLICES SHALL BE WRAPPED WITH TAPE THAT HAS AN INSULATION AND TEMPERATURE RATING EQUIVALENT TO THAT OF THE CONDUCTOR.
   3.8. WHERE FEEDERS AND BRANCH CIRCUITS EXCEED 60 FEET (120V) OR 120 FEET (277 VOLT) TO CENTER OF LOAD, USE NO. 10 AWG WIRE TO THAT POINT. VOLTAGE DROP SHALL NOT EXCEED 2% FOR FEEDERS AND 3% FOR BRANCH CIRCUITS.
   3.9. HOME RUNS MAY BE COMBINED INTO A SINGLE CONDUIT. HOWEVER, MAXIMUM NUMBER OF CONDUCTORS SHALL MEET CONDUIT FILL AND DERATING REQUIREMENTS OF NFPA 70. DERATE CONDUCTORS WHERE MULTIPLE CONDUITS ARE INSTALLED. SEPARATE NEUTRALS SHALL BE INSTALLED AND CLASSIFIED AS A CURRENT CARRYING CONDUCTOR. DIVERSITY FACTOR FOR EACH CIRCUIT IS 100 PERCENT.
4. RACEWAYS AND BOXES:
   4.1. INSTALL RACEWAYS AT LEAST 6 INCHES AWAY FROM MECHANICAL PIPING.
   4.2. INSTALL RACEWAYS SUPPORTS ACCORDING TO NFPA 70 AND AS SPECIFIED HEREIN.
   4.3. RACEWAYS SHALL BE CONCEALED IN OR BEHIND WALLS OR ABOVE CEILINGS IN FINISHED AREAS.
   4.4. RACEWAYS SHALL BE FASTENED TO BOXES WITH TWO LOCKNUTS AND A BUSHING.
   4.5. CONDUIT AND BOXES SHALL NOT BE SUPPORTED FROM T-BAR CEILING WIRES.
   4.6. CONDUITS SHALL BE SECURELY FASTENED WITH HOT-DIPPED GALVANIZED STEEL SUPPORTS.
   4.7. CONDUITS SHALL BE CONTINUOUS FROM TERMINATION TO TERMINATION.
5. WIRING DEVICES:
   5.1. RECEPTACLE ORIENTATION: INSTALL GROUND PIN OF VERTICALLY MOUNTED RECEPTACLES UP, AND ON HORIZONTALLY MOUNTED RECEPTACLES TO THE RIGHT.
   5.2. DEVICE PLATES: DO NOT USE OVERSIZE OR EXTRA-DEEP PLATES. REPAIR WALL FINISHES AND REMOUNT OUTLET BOXES WHEN STANDARD DEVICE PLATES DO NOT FIT FLUSH OR DO NOT COVER ROUGH WALL OPENING.
   5.3. ARRANGEMENT OF DEVICES: UNLESS OTHERWISE INDICATED, MOUNT FLUSH, WITH LONG DIMENSION VERTICAL. GROUP ADJACENT DEVICES UNDER SINGLE, MULTIGANG WALL PLATE.
   5.4. RECEPTACLE IDENTIFICATION: IDENTIFY PANELBOARD AND CIRCUIT NUMBER FROM WHICH SERVED. USE HOT, STAMPED OR ENGRAVED MACHINE PRINTING WITH BLACK-FILLED LETTERING ON FACE OF PLATE, AND DURABLE WIRE MARKERS OR TAGS INSIDE OF BOXES.
6. LIGHT FIXTURES:
   6.1. INSTALL A MINIMUM OF TWO (2) INDEPENDENT SUPPORT WIRES FOR EACH LIGHTING FIXTURE MOUNTED IN GRID-TYPE SUSPENDED CEILINGS. LOCATE NOT MORE THAN 6 INCHES FROM FIXTURE CORNERS.

GENERAL PANELBOARD INFORMATION

PANEL: PANEL MRP
LOCATION: STORAGE
FED FROM: UTILITY POLE

120/240 VOLTS, 1 PHASE, 3 WIRE
MOUNTING: SURFACE [X]
COPPER BUS ONLY
ALL BREAKERS SHALL BE 20A U.O.N.

MAINS
BUS: 400 AMPS 10,000 AIC
LUGS ONLY: [ ] [X] MCB: 250 AMPS
FEED: [ ] TOP [X] BOTTOM

CIRCUIT NUMBER	EQUIPMENT SERVED	BREAKER AMPS	BREAKER POLES	LOAD KVA L2	LOAD KVA L1	Φ	LOAD KVA L1	LOAD KVA L2	BREAKER AMPS	BREAKER POLES	EQUIPMENT SERVED	CIRCUIT NUMBER
1	LIGHTING - STORAGE & OUTDOOR	20	1		0.30	L1	0.72		20	1	RECEPTACLE - STORAGE	2
3	RECEPTACLE - STORAGE, MEN'S RESTROOM	20	1	0.72		L2		0.18	20	1	LIGHTING - MEN'S RESTROOM	4
5	LIGHTING - WOMEN'S RESTROOM	20	1		0.18	L1	0.35		20	1	LIGHTING - HALL, FOYER	6
7	RECEPTACLE - HALL, FOYER	20	1	0.90		L2		0.10	20	1	LIGHTING - UTILITY 1 & 2	8
9	RECEPTACLE - UTILITY 1 & 2	20	1		0.72	L1	0.20		20	1	LIGHTING - ASSEMBLY (EMERGENCY)	10
11	LIGHTING - ASSEMBLY	20	1	0.20		L2		1.08	20	1	FLOOR RECEPTACLE - ASSEMBLY	12
13	FLOOR RECEPTACLE - ASSEMBLY (EMERGENCY)	20	1		1.08	L1	0.72		20	1	RECEPTACLE - ASSEMBLY	14
15	RECEPTACLE - ASSEMBLY	20	1	0.54		L2		0.54	20	1	RECEPTACLE - ASSEMBLY	16
17	RECEPTACLE - EXTERIOR	20	1		0.54	L1	0.50		20	1	OUTDOOR LIGHTS	18
19	RECEPTACLE - EXTERIOR	20	1	0.36		L2		0.53	20	1	LIGHTING - KITCHEN	20
21	ICEMAKER - KITCHEN	20	1		0.80	L1	1.40		20	1	REFRIGERATOR - KITCHEN	22
23	REFRIGERATOR - KITCHEN	20	1	1.40		L2		0.50	20	1	OVEN - KITCHEN	24
25	RECEPTACLE - KITCHEN	20	1		0.54	L1	0.54		20	1	RECEPTACLE - KITCHEN	26
27	WALK IN COOLER	30	2	2.88		L2		2.88	30	2	WALK IN FREEZER	28
29					2.88	L1	2.88					30
31	OVERHEAD PROJECTOR - ASSEMBLY	20	1	0.50		L2		3.40	50	2	AH UNIT SYSTEM 'A'	32
33	DISHWASHER - KITCHEN	20	1		1.20	L1	3.40					34
35	PUMP STATION	30	2	2.88		L2		3.40	50	2	AH UNIT SYSTEM 'B'	36
37					2.88	L1	3.40					38
39	AC UNIT SYSTEM 'A'	15	1	1.60		L2		3.40	50	2	AH UNIT SYSTEM 'C'	40
41	AC UNIT SYSTEM 'B'	15	1		1.60	L1	3.40					42
43	AC UNIT SYSTEM 'C'	15	1	1.60		L2		0.53	20	1	LIGHTING - ASSEMBLY	44
45	LIGHTING - MARKET	20	1		0.53	L1	0.20		20	1	SMOKE DETECTORS	46
47	SPARE	20	1			L2			20	1	SPARE	48
49	SPARE	20	1			L1			20	1	SPARE	50
51	SPARE	20	1			L2			20	1	SPARE	52
53	SPARE	20	1			L1			20	1	SPARE	54

PANELS SHALL BE EQUIPPED WITH BUSES FOR ALL CB'S AND SPACES SHOWN

[ ] 200% NEUTRAL BUS
[ ] ISOLATED GROUND BUS
[X] GROUND BUS

LINE TOTAL		
TOTAL CONN. KVA	61.08	
TOTAL CONN. AMPS	254.50	
DIV. AMPS	190.88	
SPARE CAP. %	15.17	

REMARKS

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper
Main Office: 523 S. White Horse Pike, Audubon, NJ 08106
Princeton: 300 Carnegie Center, Ste. 150, Princeton, NJ 08540
Philadelphia: 1700 Market St., Ste. 1005, Philadelphia, PA 19103
P: 856.547.6414 | F: 856.547.6416
Email@OneAnchor.com

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: N/A

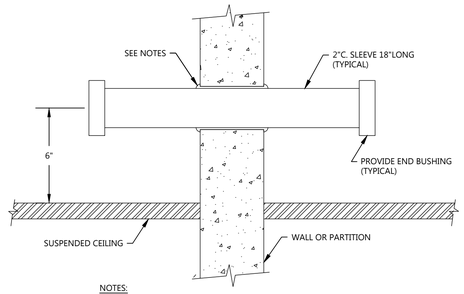
GREGORY BLASE FUSCO
PROFESSIONAL ENGINEER
NJPE No. 32853 PA.PE No. 036608-E
NJ PROFESSIONAL PLANNER No. 4076
KEY ENGINEERS, INC.
80 S. WHITE HORSE PIKE BERLIN, NEW JERSEY 08009-2399
CERTIFICATE OF AUTHORIZATION #24GA28041300
phone:(856) 767-4111 fax:(856) 767-1991 www.keyengineers.com

DATE _____

Project Title: CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
508 LAKELAND ROAD
BLACKWOOD, NEW JERSEY 08012-0088

Drawing Title: ELECTRICAL DETAILS 1

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. E-103
Date	

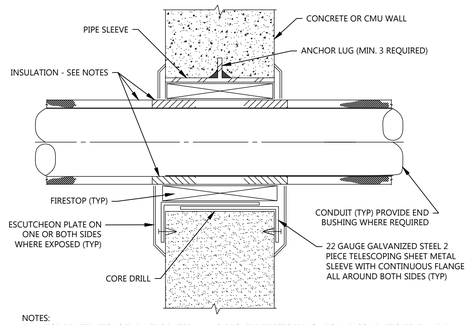


NOTES:

1. FOR PENETRATIONS THRU FIRE RATED WALLS, PROVIDE FIRESTOPPING AROUND CONDUIT SLEEVE AND IN SLEEVE AFTER INSTALLATION OF CABLES.
2. PROVIDE CALKING IN SLEEVE AFTER INSTALLATION OF CABLES IN ALL REQUIRED AREAS TO PREVENT AIR LEAKAGE.

1 DETAIL - WALL SLEEVE

NOT TO SCALE



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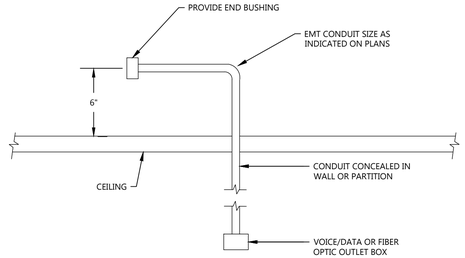
1. FOR PENETRATIONS THRU FIRE RATED WALLS, PROVIDE FIRESTOPPING AROUND CONDUIT SLEEVE AND IN SLEEVE AFTER INSTALLATION OF CABLES.
2. PROVIDE CAULKING IN SLEEVE AFTER INSTALLATION OF CABLES IN ALL REQUIRED AREAS TO PREVENT AIR LEAKAGE.

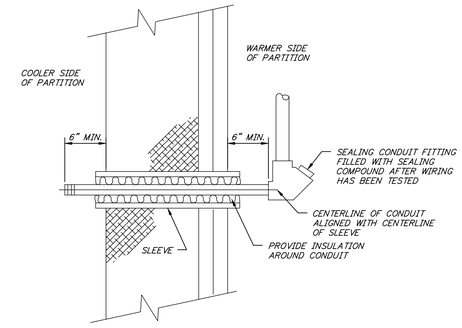
2 DETAIL - WALL SLEEVE

NOT TO SCALE



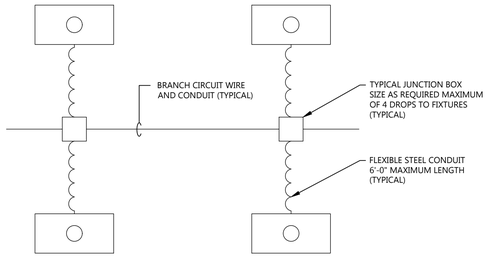
3 DETAIL - CONDUIT STUB-UP ABOVE CEILING

NOT TO SCALE



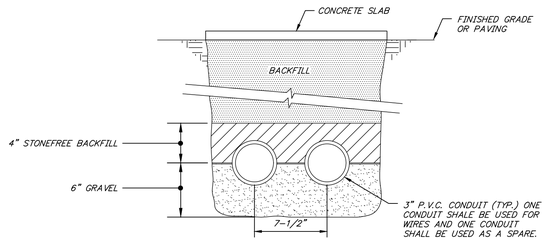
Conduit Seal In Areas With 20° Temperature Difference Detail

not to scale



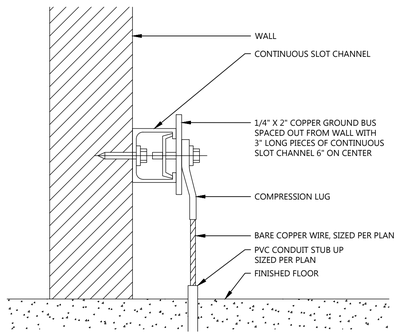
4 DETAIL - FIXTURE WIRING, INDIVIDUAL MOUNTING

NOT TO SCALE



Direct Bury Conduits Detail

not to scale



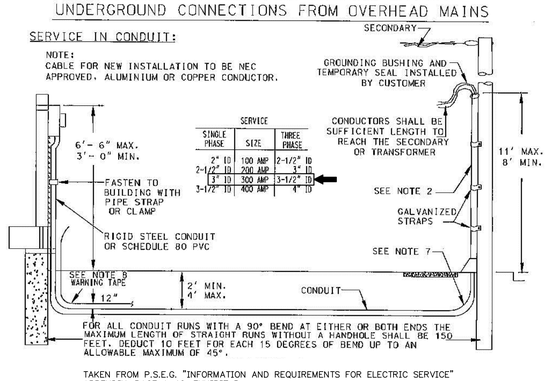
TYP. DETAIL - GROUND BUS BAR BONDING

NOT TO SCALE

SECONDARY DISTRIBUTION SERVICE ENTRANCE
UNDERGROUND CONNECTIONS FROM OVERHEAD MAINS

SERVICE IN CONDUIT:

NOTE:
CABLE FOR NEW INSTALLATION TO BE NEC APPROVED. ALUMINIUM OR COPPER CONDUCTOR.



SERVICE		
SINGLE PHASE	SIZE	THREE PHASE
2" ID	100 AMP	2-1/2" ID
2-1/2" ID	200 AMP	4" ID
3" ID	300 AMP	3-1/2" ID
3-1/2" ID	400 AMP	4" ID

TAKEN FROM P.S.E.G. "INFORMATION AND REQUIREMENTS FOR ELECTRIC SERVICE" APPENDIX, PAGE A-16, EXHIBIT 5

ANCHOR POINT ARCHITECTURE
Di Prinzio • Criniti • Desper

Main Office
523 S. White Horse Pike
Audubon, NJ 08106

Princeton
300 Carnegie Center, Ste. 150
Princeton, NJ 08540

Philadelphia
1700 Market St., Ste. 1005
Philadelphia, PA 19103

P: 856.547.6414 | F: 856.547.6416
Email@OneAnchor.com

REV.	DATE	REVISION
1	09/23/19	REVISED FOR RE-BID PURPOSES

DATE: 06/10/19 | PROJECT No. 16-54 | DRAWN BY: T.D. | CHKD. BY: G.B.F. | SCALE: N/A

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fax: (856) 767-1591
e-mail: info@keyengineers.com

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Project Title
CAMDEN COUNTY
CAMDEN COUNTY - PROPOSED MULTIPURPOSE BUILDING
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Drawing Title
ELECTRICAL DETAILS 2

Scale	CAD File
Drawn	Contract No. 18869
Checked	Drawing No. E-104
Date	